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outreach process for developing
THE SOUTHERN NEVADA STRONG REGIONAL PLAN
executive summary

DECEMBER 2014
outreach process for developing
THE SOUTHERN NEVADA STRONG REGIONAL PLAN
executive summary

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Boulder Highway will be great when...

- Bike paths exist
- There is a light rail running from downtown Boulder to
  North Boulder Park and Sports Complex
- It has a Splash Pad at Park that is handicapped accessible
- Lots of trees a walking path
- Safety in the area
- Safer and more

- Grocery Stores to shop in
- When we add more mass transit modes
- When it has lots of fun things to do.

Transit opportunities and vibrancy

Close shopping for groceries

When there are more good restaurants
Southern Nevada Strong (SNS) is a collaborative regional planning effort funded by a $3.5 million Sustainable Communities grant from the U.S. Department of Housing and Urban Development (HUD). SNS seeks to build a foundation for long-term economic success and community livelihood by better integrating reliable transportation, housing, and job opportunities throughout Southern Nevada.

The SNS planning process placed an extraordinary emphasis on community engagement to ensure broad, representative participation in determining a vision for the feature and the goals and strategies needed to get there. Outreach methods included both traditional and innovative approaches, and most activities were also conducted in Spanish to ensure participation by Spanish speaking community members. Activities were conducted between October 2012 and June 2014.

The SNS process began with in-depth research and analysis of current conditions, and then moved into the outreach phase, engaging local community, business and political leaders, and residents from across the valley to weigh-in on the future of the region. The end product of the process is a Regional Plan that highlights implementation strategies and priority projects to create the foundation for a strong and stable regional economy.

Through the outreach process, community members had very thorough participation in shaping the Regional Plan. Overall, there were more than 6,000 individual inputs during the three phases of public outreach. The process also yielded substantial feedback on the draft Regional Plan.

I THINK IT’S AN AMAZING OPPORTUNITY TO REVITALIZE EXISTING COMMUNITIES...
I AM REALLY IMPRESSED WITH SOUTHERN NEVADA STRONG’S GRASSROOTS EFFORT...
THANK YOU FOR TAKING TIME TO GATHER THE COMMUNITY’S INPUT.”

— SOUTHERN NEVADA STRONG PARTICIPANT
A. PROJECT TEAM AND PARTNERS

Southern Nevada Regional Planning Coalition

The City of Henderson staffed this project on behalf of the Southern Nevada Regional Planning Coalition (SNRPC). The project team represented the interests of the entire region, and worked with representatives from local governments and agencies throughout the valley. The final plan will be subject to adoption by the SNRPC and all member agencies involved in implementation.

Consortium Committee

The project is leveraged by resources and in-kind matching funds from 13 regional partners. In addition to SNRPC, the Consortium Partners include: the Cities of Henderson, Las Vegas, North Las Vegas, and Boulder City; Clark County; the Regional Transportation Commission (RTC); University of Nevada, Las Vegas (UNLV); Southern Nevada Regional Housing Authority (SNRHA); Southern Nevada Water Authority (SNWA); Clark County School District (CCSD); Southern Nevada Health District (SNHD); and the Conservation District of Southern Nevada (CDSN). A Consortium Committee, composed of Consortium Partner representatives, oversees the development of the development of the SNS Regional Plan and supporting activities, and acts as a key decision maker. All meetings of the Consortium Committee and SNRPC Board are open to the public.

Task Groups

The Consortium Committee is further supported by six Task Groups focusing on particular areas and incorporating public input into the process. The Task Groups comprise subject matter experts, representing public,
Professional Stakeholders and Agency Representatives

In addition to Consortium Committee and Task Group members, other professional stakeholders, representatives of community-based and advocacy organizations, and governmental and agency representatives were included in the process and their expertise sought through a variety of methods, including interviews, in-person meetings, briefings and one-on-one communications.

B. PUBLIC ENGAGEMENT PLAN

The purpose of the Public Engagement Plan (PEP) was to:
- identify the range of stakeholders and interested parties to provide input into the Regional Plan;
- describe methods that ensure broad participation, access to and influence in the process;
- identify the timing and sequence of activities; and establish a set of performance measures to evaluate the effectiveness of the process. The PEP was developed in collaboration with the SNS Project team by MIG, Inc., a planning, design and communications firm headquartered in Berkeley, California.

The PEP was developed to encompass a range of tools to reach diverse audiences. Methods were designed to “meet people where they are,” making it easy, convenient, and fun for people to participate. This included scheduling engagement activities...
at varying times and in ADA- and transit-accessible venues, and providing refreshments and childcare or children’s activities where appropriate. Process tools were designed to achieve three objectives: (1) outreach—raise awareness, get people interested and publicize opportunities; (2) educate about key issues and challenges and provide facts that help people make informed decisions; and (3) engage—not only obtaining input in the short term, but fostering long-term civic engagement and dialogue, and increasing the community’s capacity to influence public policy.

Targeted Outreach
In addition to stakeholders and the general public, the outreach process sought to engage a full range of stakeholder groups, including a focus on seeking out and considering the viewpoints of low-income and Spanish-speaking populations. Reaching these community members was very important to the process, since more than 30% of the population makes $35,000/year or less. Low-income and minority groups are often the most impacted by planning decisions and the SNS process was designed to ensure their needs would be identified and addressed. SNS team members Ramirez Group, Purdue Marion & Associates, and Sumnu Marketing assisted with targeted outreach. Engagement activities were tailored to match local and cultural preferences to the greatest extent possible. Outreach efforts were designed to reach participants that mirrored the demographics of the region or census area in which they took place, and participant data was routinely collected to assess how well an ethnically diverse population of residents was being reached and on what issues their perspective may differ from the broader public. Most outreach events and materials were designed to reach an audience whose primary language is Spanish and included translated materials (both in print and online) and interpreters or bilingual staff.

PEP Focus Groups
In December 2012 the SNS team planned and hosted a series of focus group sessions with local community members to get their feedback regarding effective ways to reach and engage the public in the development of the Regional Plan. The focus groups were designed to test specific messages and to identify the best methods to reach and engage the Las Vegas Valley population. The results were used to inform the PEP. Four focus groups were held – three in English and one in Spanish. Focus group applicants, recruited through a Craigslist ad and collaborations with local community organizations, were screened and asked a series of questions regarding their demographic characteristics, residence and employment status to ensure that the groups had a diverse mix of participants. Participants were offered a stipend payment of $40 for their time and thoughtful feedback, and refreshments were provided.
A. PARTICIPATION AND RESULTS

As intended in the PEP, community members from throughout the region participated in the outreach activities. Demographic questions included in all surveys and data collected at outreach events help to validate that participation by specific ethnic categories was proportional to the region’s population.

Community and stakeholder input received through Phases I and II of the outreach process, which took place from October 2012 through October 2013, informed the vision, goals and strategies outlined in the Regional Plan. Phase 3 of the process, taking place between November 2013 and June 2014, served to confirm and validate these conclusions.

Participants in the outreach process provided feedback on a wide variety of subjects, including:

- Issues of greatest concern to the community
- What they value in the community
- Challenges and opportunities in transportation, housing, economic development, environment, etc. near where they live and generally in the region
- What they like best about living in the region
- What they would like to see changed or improved
- Priority areas to be considered as “Opportunity Sites” for redevelopment and reinvestment and specific challenges, opportunities, concerns and possibilities in those areas
- Priorities for topics to be addressed in the Regional Plan
- Visual preferences for various community features
- Feedback on the draft Regional Plan

Key findings from the outreach activities are described in detail in separate documents, the Phase I, II and III SNS Outreach Summary Reports.

B. PARTICIPATION: BY THE NUMBERS

Since individual community members typically participated in a number of different outreach activities, many on numerous occasions, participation over the three phases of the outreach process can best be summarized in terms of total individual inputs per method. Overall, approximately 70,000 individual inputs were received, as follows:

- [List of specific counts for each method]
## OUTREACH PARTICIPATION BY THE NUMBERS

<table>
<thead>
<tr>
<th>OUTREACH ACTIVITY</th>
<th>APPROXIMATE NUMBER OF INPUTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNS Kick off and Summit events</td>
<td>400</td>
</tr>
<tr>
<td>QuickTap surveys (Phase I)</td>
<td>850</td>
</tr>
<tr>
<td>Online survey (Phases II and III)</td>
<td>5,000</td>
</tr>
<tr>
<td>Statistically Valid Phone Survey</td>
<td>1,000</td>
</tr>
<tr>
<td>Spanish-speaking intercept surveys at local events (Phase II)</td>
<td>1,000</td>
</tr>
<tr>
<td>Telephone Town Hall</td>
<td>5,000 (English and Spanish)</td>
</tr>
<tr>
<td>Facebook and Twitter</td>
<td>900</td>
</tr>
<tr>
<td>Open Houses and Visual Preference Surveys</td>
<td>550</td>
</tr>
<tr>
<td>Focus groups</td>
<td>150</td>
</tr>
<tr>
<td>Interviews with residents and community leaders</td>
<td>150</td>
</tr>
<tr>
<td>Task Group member inputs</td>
<td>680</td>
</tr>
<tr>
<td>Consortium Committee meeting inputs</td>
<td>150</td>
</tr>
<tr>
<td>Dynamic Documents review tool</td>
<td>80</td>
</tr>
<tr>
<td>Phase 3 Targeted Spanish Outreach</td>
<td>750 surveys</td>
</tr>
<tr>
<td>Capacity Building Events</td>
<td>400</td>
</tr>
<tr>
<td>E-blast Communication</td>
<td>2,600 subscribers</td>
</tr>
<tr>
<td>Targeted Mailers</td>
<td>8,000+ households</td>
</tr>
<tr>
<td>Targeted Flyer distribution</td>
<td>40,000+ households</td>
</tr>
<tr>
<td>Public Relations Impressions</td>
<td>Numerous</td>
</tr>
</tbody>
</table>
The outreach process utilized a wide variety of tools, including a dedicated project website; social media (Facebook and Twitter); press releases and media placements; email blasts and e-newsletters; comments submitted online; stakeholder interviews; statistically valid telephone surveys; a telephone town hall; online and iPad surveys; survey kiosks strategically placed throughout the region in low-income/low-access areas; community open houses; targeted and inclusive resident focus groups; tabling at public events; outreach toolkits; visual preference and priority-setting exercises; an urban ethnographic research partnership with UNLV; and capacity-building events.

A. ONGOING OUTREACH ACTIVITIES

Media Placements
Through ongoing press releases and active communications with local and regional media, the SNS outreach process received ample and frequent press coverage. Media sources that covered the process included the Las Vegas Review-Journal, Las Vegas Sun, El Tiempo, Channel 8 News Now, and Telemundo TV. The project also received national attention in such venues as the Smart Growth America website.

Capacity-Building Events
The process included a number of events and trainings intended to build internal staff skills and capacity at the agency level, as well as increase community members’ understanding of the issues involved and how the Regional Plan can move
outreach activities and methodology

forward. MIG, Inc. provided staff facilitation training for SNRPC and other agency staff in support of large workshops. Additionally, presentations by outside experts, coordinated by SNS and a variety of community partners, focused on case studies and successful solutions from similar communities facing the same issues. These included in-house presentations to SNS staff, events open to the community, and the SNS Summit held in February 2014. Subjects included:

- Innovative design, land use and transit-oriented development (TOD) for community development of opportunity sites
- How placemaking and TODs can spur economic development
- Case studies on cross-sector initiatives to revitalize challenged districts in other cities
- The crucial role of education in community development and working together to improve college and career-readiness for the region’s students
- Approaching economic development through coordinating planning at the regional level
- How public sector decisions can link economic growth with socioeconomic equity

B. PHASE I OUTREACH ACTIVITIES

The goal of Phase I outreach activities, conducted from October 2012 – June 2013, was to understand issues, concerns and general priorities for the Southern Nevada community. The outreach activities conducted included stakeholder interviews; the SNS Regional Kick-Off event; a random-sample telephone survey of residents; providing information and conducting surveys and map-based exercises at community events; email blasts and an e-newsletter; and an online survey.

Stakeholder Interviews

During October 2012 to December 2012, representatives from the SNS Project Team conducted interviews with a diverse group of stakeholders to begin a community-driven process to create a vision for the future of Southern Nevada. Interviews were conducted by members of the project team. Interviewees included representatives from local city and county government, regional service agencies, charitable organizations, and the business, healthcare and higher educational communities. Participants were asked a standard set of questions regarding what they liked best about the region, what they hoped would change and be improved in the future, what they hoped would stay the same and their vision for the future of the area.

Southern Nevada Strong Regional Kick-Off

On February 8, 2013, the SNRPC hosted the Regional Kick-Off for the SNS project. More than 150 invited local leaders attended the event in downtown Las Vegas. It included an introduction to the project; a keynote presentation by Shelley Poticha, National Director, Office of Sustainable Housing and Communities at the U.S. Department of Housing and Urban Development (HUD); and a panel discussion and presentations by local and national experts on various relevant topics.
The regional Kick-Off is described in greater detail in a separate document, the Southern Nevada Strong Regional Kick-Off Summary Report.

**Telephone Survey**

Between March 2-12, 2013, project consultants completed a statistically-valid telephone survey with 943 randomly-sampled Southern Nevada residents that were representative of the region’s demographics.

Telephone survey participants were asked questions regarding what they considered to be the issues of greatest concern to the community; what the important elements of the community are and their level of satisfaction with those elements; and a series of questions regarding what modes of transportation they use most frequently and their use of public transit.

**Email Blasts**

Periodic email blasts were sent out to familiarize community members with the project and promote opportunities to get involved. This included an E-Newsletter sent in March 2013, which included an introduction to SNS, a write-up on the Regional Kick-Off, and information on community outreach and engagement activities to come, as well as a report on the results of SNS’ first community outreach event. In order to compile the mailing list, SNS started with contact lists provided by the various partner agencies and Task Group members, then added to it as the outreach process continued.

**Outreach Events**

SNS project staff participated in a number of community events throughout the months of March through June 2013. At these events, project team members staffed an SNS table/booth and/or conducted intercept surveys, depending on the nature of the event. Staff handed out fact sheets and SNS-branded materials (pens, wrist bands and tote bags); used iPads to conduct brief surveys; and, at events where space was available, also conducted a map-based exercise to ask people where they live and to identify the challenges/opportunities in transportation, housing, economic development, environment, etc. near where they live and generally in the region. Project staff also recorded verbal input given during discussion with participants. Comments pertained both to
outreach activities and methodology

Online and iPad Surveys
Between February and May 2013, brief surveys were conducted with members of the public through two different methods. Participants had the option of taking the survey online, and SNS project team members also surveyed members of the public at outreach events using iPads with Quicktap software. The iPads offered respondents an opportunity to take the survey in either English or Spanish.

The questions on each version of the survey were slightly different, but both asked participants what they like best about living in the region; the most important issues facing Southern Nevada today; their desired future for the region; and a series of demographic questions, necessary to ensure broad, representative participation.

C. PHASE II OUTREACH ACTIVITIES

The goals of Phase II outreach activities, conducted from July to October 2013, were as follows:

- Gather stakeholder and community input on the Vision for the region; development types needed to better integrate housing, transportation and jobs; and priority areas to be considered for opportunity site analysis.
- Offer capacity building events to raise awareness about key issues and policy recommendations.
- Present to professional and community-based stakeholder groups and organizations to elevate awareness of the project and role of planning to strengthen economic competitiveness.
The outreach activities conducted included email blasts and the Summer 2013 e-newsletter; Open Houses and public outreach events; an online community outreach tool available at these events and also online; a land use and development visual preference survey administered at Open Houses; and an urban ethnographic research and capacity building project in partnership with UNLV.

Email Blasts and Summer 2013 E-Newsletter

During Phase II, SNS continued to send periodic email blasts to give updates and promote opportunities to participate, including a monthly drawing for a $50 Target card giveaway provided as an incentive for completing the online survey. A second E-Newsletter was sent out in August 2013 and included information about the online community engagement survey launch and open houses. Links to the Existing Conditions Report, Public Engagement Plan, and other accomplishments, and an article about the UNLV Urban Ethnographic Research Partnership were provided in the newsletter.

Open Houses

SNS hosted a series of 15 Community Open Houses between July and September 2013. At these events, attendees viewed a presentation on SNS and the Plan process, and participated in the Online Community Engagement Survey and Visual Preference Surveys. Each Open House included:

- Vision Statement voting
- iPad stations to review priorities for the Regional Plan and rank areas throughout the Valley that participants felt were best positioned to better connect transportation, housing, and job opportunities
- Photo preference surveys of land use and development choices for mixed use, residential, streetscapes, transit and community spaces
- Activities for children

Public Outreach Events

In addition to the Open Houses, SNS conducted 20 iPad events—five in English and fifteen in Spanish—and continued outreach efforts at more than 50 community events, meetings, speaking engagements and briefings with elected officials, reaching more than 2,500 local residents. SNS also continued to expand its reach on social media with 225 Facebook friends and nearly 300 Twitter followers.

Hispanic Outreach

SNS also conducted targeted outreach to the Hispanic community. Working with bilingual project staff and volunteers to gather input in Spanish and English from primarily Hispanic residents, SNS advertised the process and related community events.
events on Hispanic radio and in Spanish media; on Facebook and Twitter with posts from the project team and governmental officials; and with targeted email blasts to minority business contacts and participants in previous SNS-hosted Hispanic events. The team participated in outreach efforts at a variety of locations and events catering to the Hispanic community, including cultural fairs and festivals; swap meets; rallies; shopping and services catering to the community such as Hispanic groceries, beauty salons, local marketplaces and shopping malls; churches; and meetings of business, community or educational groups such as the Hispanic Student Union, Latin Chamber of Commerce, Latino Youth Leadership Alumni, the Clark County School District’s Latino Town Hall and the College of Southern Nevada’s Latino Student Mixer.

Online Community Engagement Survey and Results

From July 11 to October 14, 2013, a community survey was made available through the SouthernNevadaStrong.org website, and on iPads at Open Houses and public outreach events. The online tool, called MetroQuest, asked respondents to rank the initial priorities to become “elements” or chapters of the Regional Plan, and to give input on opportunity sites within the region that are most ripe for commercial redevelopment, housing and transportation investments. The survey received over 2,500 responses.

The survey asked respondents to rank potential priorities for topics that would be addressed in the plan, including Environment, Housing, Transportation, Public Engagement & Equity, Economic Development & Education and Healthy Communities. Respondents were asked to review the priorities and choose their top priority, least priority and favorite among the options. Respondents could also suggest additional ideas or expand on what was provided. They were also asked to prioritize the proposed opportunity sites, and the four top-ranked sites were chosen for more in-depth analysis during Phase III of outreach.

UNLV Urban Ethnographic Research Partnership

In June 2013, a sociology research team from Brown University conducted an ethnographic research training with a cross-disciplinary team of University of Las Vegas (UNLV) master- and Ph.D.-level students, led by Gianpaolo Baiocchi of New York University. Ethnographic research is a qualitative research method that emphasizes in-depth stakeholder interviews and careful listening to understand individual lived experiences. This is a common method of research in Sociology and Anthropology, allowing field observation, and the opportunity for students to build rapport with hard-to-reach audiences such as the homeless and other traditionally marginalized groups. SNS, in partnership with UNLV, asked researchers to interview grassroots community leaders in areas near the project’s preliminary opportunity sites.
to gain “on-the-ground” insight from community members. The research is meant as a strategy to go directly to the community to gather more detailed input than is typically feasible through formal surveying or public meetings. The students sought to learn what challenges and opportunities people living near the priority sites faced in the realms of transportation, quality and affordable housing, and job opportunities. This research supported the opportunity site analysis by shedding light on each community’s challenges in residents’ own words. The findings were also important to inform the scoping process for the opportunity site analysis, supported introduction of key policies in the Regional Plan, and provided a foundation to direct and support additional outreach to frame a vision that contemplates challenges faced by underrepresented members of the community.

D. PHASE III OUTREACH ACTIVITIES

The goals of Phase III outreach activities, conducted from February to June 2014, were as follows:

- Continue to educate the public about the SNS regional planning process and solicit input for the draft plan
- Gather stakeholder and community input including:
  - Preferred development types that will support the region’s ability to better connect housing, jobs and transportation;
  - Factors that influence people’s ability to find desirable housing in the region;
  - Improvements needed within four opportunity sites (areas to be considered for redevelopment and reinvestment);
  - Review comments on the draft Regional Plan; and
- General comments on concerns that might be addressed through this process.

![Outreach activities and methodology](image-url)
The outreach activities conducted included email blasts; a web-based visual preference survey and mapping exercise available online, at community events and at public kiosks; opportunity site workshops; a Telephone Town Hall; and focus groups.

Email Blasts
During Phase III, the SNS team continued to send out periodic email blasts to provide updates on project milestones and results and to promote opportunities for participation, including the online survey with monthly giveaways and the community workshops.

Online Community Engagement Survey and Results
From late February through May 2014, a second online community survey was made available through the SouthernNevadaStrong.org website, and on iPads at Open Houses and kiosks throughout the community. It included a visual preference survey on development types and a mapping exercise on opportunity sites. The survey was available online in English and Spanish and could be accessed at eleven kiosks at various locations throughout the region. iPads were provided at events and open houses.

The visual preference survey showed multiple styles of development for land uses including housing, job centers, parks and community, streetscapes and transportation, and asked respondents to indicate if they liked, disliked or were neutral on each.

The survey also asked participants to review the four opportunity sites: Boulder Highway at Gibson/Broadbent; downtown North Las
Vegas; the Maryland Parkway Corridor; and the Las Vegas Medical District. The selection of these four sites was informed by the results of Phase 2 outreach and the communities where the sites were located received additional planning funds to conduct more in-depth analysis. Participants were asked to provide comments on one or more opportunity sites in the following categories: safety concerns, public transit improvements, parks and recreation, transportation, community services and other. Respondents could also use the mapping tool to place markers in locations where they would like to see these improvements.

The community survey also included optional demographic questions designed to help ensure that the process had broad, representative participation. Participants were asked to identify their age, gender and race or ethnicity.

**Survey Kiosks**

In order to broaden access to the survey, survey kiosks were placed strategically in targeted locations serving diverse communities, including sites convenient to low-income community members whose online access may be somewhat limited. These sites were as follows:

- Southern Nevada Housing Authority
- Cambridge Community Center
- North Las Vegas City Hall
- Clark County Government Center
- Sky View YMCA, North Las Vegas
- Bonneville Transit Center
- YMCA on North Durango
- Las Vegas Urban League WIC Office
- Henderson City Hall
- Galleria Mall, Henderson
- Valley View Recreation Center, Henderson
- The Center, Las Vegas

**Opportunity Site Workshops**

During May 2014, SNS, together with local municipalities and partner agencies, hosted workshops to seek public input on the site possibilities for each of the four opportunity sites. These workshops were broadly publicized in both English and Spanish using a variety of methods, including newspaper listings, radio ads and interviews, postings on websites and social media, e-blasts, and postcards mailed to nearby households. Outreach was targeted to reach residents that would likely be most impacted by proposed changes in these four neighborhoods. The workshops were held in an open house format that allowed participants to move at their own pace through six stations while providing feedback and engaging in conversation with members of the project team.
At the open house stations, participants were oriented to the site and learned about the proposed goals for the project; reviewed statements summarizing the main themes of outreach conducted to date and indicated their level of agreement; evaluated imagery and concept drawings showing what the preliminary analysis indicated could likely succeed at the site; viewed maps which allowed them to comment on and identify aspects of each site such as assets, issues and opportunities in each area, important locations and also what they’d like to see added, and typical routes they use to get around; and were encouraged to provide their responses to the following statement: “(Opportunity Site)” will be great when…” The latter activity included the option to post a photo of themselves and their comment on the SNS Facebook page or just have their comment included in a collage. They were also able to review informational materials on the overall project and complete the online survey on iPads, and reminded of the opportunity to provide feedback on the SNS draft Regional Plan.

Telephone Town Hall

On May 29, 2014, SNS hosted a Telephone Town Hall (TTH) designed to allow participants to receive information about the process and respond to polling questions using their telephone key pad. Two town halls were conducted: one in English and another in Spanish. SNS dialed out to approximately 20,000 low-income and Spanish speaking residents to participate in the call. Over 4,800 people participated in the call, with approximately 200 responding to the polls, and their responses to the telephone polling questions were consistent with many of the findings from other outreach sources.
Focus Groups

In June of 2014, seven focus groups were conducted to collect information for the Regional Analysis of Impediments (RAI). The RAI is a study that is required in any area that receives federal funding for subsidized housing and assesses whether people have the freedom to choose where they live solely based on their budget or if other factors limit their choices.

Focus group participants included representatives from low-income minority households, families with children, single female heads of household, persons with Limited English Proficiency (LEP), persons with disabilities, and community- and faith-based organizations that serve the above mentioned groups. The survey questions were adapted from materials provided by HUD. Participants were screened in advance to ensure participants were representative of the requested demographics. Participants were offered a stipend payment of $40 for their time and thoughtful feedback, and refreshments were provided. Through these focus groups, SNS gained valuable insight into the challenges that low-income and minority families face when they are looking for housing in the Southern Nevada Region.

Review Comments on Draft Regional Plan

At all outreach activities throughout Phase 3, participants were reminded of the opportunity to review the draft Regional Plan, available for online review as a dynamic document. A variety of methods for giving input were provided, including iPads available at workshops and outreach events, and emails directly to SNS. A total of 80 comments were received from a wide range of stakeholders and community members, including residents, agency representatives, local government officials and members of the Consortium Committee.
- It is beautiful w/ landscaping
- A fantastic healthy grocery store (i.e. Trader Joe's or Whole Foods)
- Bike paths
- Higher end/you dine restaurants
- Cute, sunny breakfast restaurants
- Sandwich deli shops
- Upgrade curb appeal of current businesses
- Cute boutique shops
- Oh! and a couple of great bars or wine bars.
- Maybe an outdoor theater!
- One stop non-profit shop!!!
The SNS Team was highly successful in achieving its commitment to having an outreach process that achieved broad and representative participation. By “meeting people where they are” and creating multiple opportunities for low-income residents and Spanish speakers to participate, the SNS team brought the planning process to the community. Through SNS, many residents were introduced to the concept of public participation, and through sustained communications with participants the SNS process will encourage continued involvement in public decision making.
Appendix B – Phase 1 Outreach Summary
Southern Nevada Strong

Phase I Outreach Summary

May 2013
Southern Nevada Strong
Phase 1 Outreach Summary
Executive Summary

Between October 2012 and April 2013, the Southern Nevada Strong project team conducted a variety of outreach activities to inform stakeholders and the public about the project, and to solicit input regarding community issues, challenges and opportunities, and opinions about the future of Southern Nevada. The outreach effort was part of Phase 1 of the Southern Nevada Strong Public Engagement Plan, the Assessment of Existing Conditions. The outreach goal was to understand issues, concerns and general priorities for the Southern Nevada community.

The outreach activities conducted included stakeholder interviews; the Southern Nevada Strong Regional Kick-Off event; a random-sample telephone survey of residents providing information and conducting surveys and map-based exercises at community events; and an online survey.

Key Findings
The following themes emerged most frequently across input gathered through all outreach methods.

A. Positive Attributes of the Southern Nevada Region

Participants in all stakeholder and public engagement activities mentioned the following as attributes that make the Southern Nevada region a desirable place to live.

- Great weather and climate
- Access to outdoor recreation opportunities, high quality natural environment, parks and open spaces
- Excellent urban amenities and varied entertainment options for all ages, available 24/7
- Relatively affordable cost of living
- Central location
- Diverse community
- Strong sense of community and pioneer/entrepreneurial spirit

B. Concerns and Issues in the Southern Nevada Region

Stakeholders and the public identified the following issues as of most concern to the region.

- Need to diversify the economy and create more, better jobs in the region
- Education at all levels needs improvement, including workforce education
- Need for transportation improvements including improved transit options, relief of traffic congestion and increased traffic/pedestrian safety
- Environmental issues such as water supply, need for improved sustainability and use of sustainable energy, and pollution
● Need to address social issues including lack of funding for social services, poor health and limited health care options, homelessness and crime rate
● Lack of affordable housing, poor state of housing market and too many vacant/foreclosed homes

C. Vision for the Future of the Southern Nevada Region

Outreach participants’ vision for the future of the region included the following elements:

● A diversified economy with a wide range of job opportunities
● High quality educational systems and workforce education
● A multi-modal transit system that connects communities and is well-linked to regional and interstate connections
● A variety of housing options available for all preferences and income levels
● Increased public investment in social services and high quality health care
● Safe and engaged communities
● Adoption of green energy technologies and sustainable practices
I. Introduction

Between October 2012 and April 2013, the Southern Nevada Strong project team conducted a variety of education and outreach activities to inform stakeholders and the public about the project, and to solicit input regarding community issues, challenges and opportunities and opinions about the future of Southern Nevada. The outreach effort was part of Phase 1 of the Southern Nevada Strong Public Engagement Plan, the Assessment of Existing Conditions. The outreach goal was to understand issues, concerns and general priorities for the Southern Nevada community.

Southern Nevada Strong seeks to build a foundation for long-term economic success and community livelihood by better integrating reliable transportation, housing, and job opportunities throughout Southern Nevada. This collaborative regional planning effort is funded by a $3.5 million dollar Sustainable Communities grant from the U.S. Department of Housing and Urban Development (HUD).

II. Outreach Activities and Results

A. Stakeholder Interviews

During October 2012 to December 2012, representatives from the Southern Nevada Strong Project Team conducted interviews with a diverse group of stakeholders to begin a community-driven process to create a vision for the future of Southern Nevada. Interviews were conducted by members of the project team.

The interviewees were:

- Jeremy Aguero, Principal Analyst, Applied Analysis
- Mauricia M. Baca, Executive Director, Outside Las Vegas Foundation
- Ydoleena Yturralde, Council Liaison, on behalf of Ricki Y. Barlow, Las Vegas City Council, Ward 5
- Larry Brown, Clark County Commissioner, District C; Vice Chair, Clark County Commission
- Barbara Buckley, Executive Director, Clark County Legal Services; Former Speaker, Clark County Assembly, District No. 8
- Rod Davis, President/CEO, St. Rose Dominican Hospitals-Siena Campus
- Shawn Gerstenberger, Executive Associate Dean, School of Community Health Sciences, University of Las Vegas
- Timothy R. Hacker, City Manager, City of North Las Vegas
- Robert E. Lang, Director, Brookings Mountain West
- Debra March, Henderson City Council, Ward II
- John Marz, Henderson City Council, Ward III
Participants were asked a standard set of questions regarding what they liked best about the region, what they hoped would change and be improved in the future, what they hoped would stay the same and their vision for the future of the area. The key themes that emerged were as follows:

**Positive Attributes of the Southern Nevada Region (People and Places)**
- Proximity to high quality natural environment
- Central location and desirable climate (most of the year)
- Relatively affordable compared to other areas
- Has urban amenities along with easy access to the outdoors
- Constant drive and willingness to re-invent
- Pioneer and entrepreneurial spirit is strong
- Impacts of recession stimulated a willingness to do things differently
- Area is still forming; region has huge potential

**Concerns for the Region and Conditions that Need Change or Improvement**
- Education at all levels need improvement
- Need to diversify the economy; region is too dependent on tourism and gaming
- Limited public investment in social and community services (due to low tax rate)
- Regional performance on health indicators is low
- Need for improved transit
- Need for better educated work force and opportunities to retain local talent

**Vision for the Future**
- Vibrant place to live, work and play
- Diversified economy with range of job opportunities
- Strong tourism and convention economy
- Communities well-connected by multi-modal transit system
- Transit system linked to regional and interstate rail connections
- High quality education and health care systems
• Collaboration and cooperation between governments

The stakeholder interviews are described in greater detail in a separate document, the *Southern Nevada Strong Stakeholder Interview Summary Report*.

**B. Southern Nevada Strong Regional Kick-Off**

On February 8, 2013, the Southern Nevada Regional Planning Coalition (SNRPC) hosted the Regional Kick-Off for the Southern Nevada Strong project. More than 150 invited local leaders attended the event which took place from 12:00 – 5:00 p.m. at Meet Las Vegas, 233 South 4th Street in downtown Las Vegas. It included an introduction to the project, a keynote presentation, and a panel discussion and presentations by local and national experts on various relevant topics.

Project Director Stephanie Garcia-Vause served as the program moderator and the keynote speaker was Shelley Poticha, National Director, Office of Sustainable Housing and Communities at the U.S. Department of Housing and Urban Development (HUD). Featured speakers included: Dr. Gianpaolo Baiocchi, Assistant Professor at Brown University and soon to be directing civic engagement efforts at the Gallatin School at New York University as the Director of the Urban Democracy and Mayor Scott Smith from Mesa, Arizona.

There was also a panel presentation moderated by Jeremy Aguero, Principal Analyst with Applied Analysis, that featured representatives from each of the six Southern Nevada Strong Task Groups. These Task Groups comprise subject matter experts, representing public, non-profit and private sectors, in the six topic areas identified for in-depth planning and analysis: Economic Development and Education, Environment, Healthy Communities, Housing, Public Engagement and Equity, and Transportation.

The regional Kick-Off is described in greater detail in a separate document, the *Southern Nevada Strong Regional Kick-Off Summary Report*.

**C. Telephone Survey**

Between March 2-12, 2013, project consultants completed a telephone survey with 943 randomly-sampled Southern Nevada residents.

**Telephone Survey Participation**

In order to help ensure that the process has broad, representative participation, telephone survey participants were asked their race or ethnic identification and their age. Half of the telephone survey respondents described themselves as Caucasian; an additional 27% identified themselves as Hispanic/Latino. The remainder were African American/Black (11%) and Asian/Pacific Islander (6%), with an additional 6% who identified themselves as “Other,” “Don't Know,” or who chose not to answer the question. In terms of age, participants were evenly distributed across the spectrum between the ages of 18 and 75+.
Community Issues and Satisfaction with Community Elements

Telephone survey participants were asked questions regarding what they considered to be the issues of greatest concern to the community, as well as what the important elements of the community are and their level of satisfaction with those elements. Following are the survey’s key findings:

- Jobs, economy and schools trump all concerns
- More than 2/3 of respondents believe Southern Nevada is a good/excellent place to live

Other important community elements include:

- Availability of a variety of affordable housing types
- Reducing traffic congestion and shorter commute time
- Availability of places to safely walk and bike
- Access to healthy foods
- Access to parks trails and open space

Transportation and Transit Usage

Telephone survey participants were also asked a series of questions regarding what modes of transportation they use most frequently and about their use of public transit. The following summarizes their responses:

- Driving and walking are the most frequent modes of transportation
- 29% use public transit at least once a month
- Having a car and lack of convenience of public transit are main reasons people don’t use it more
- High percentage of people who never ride transit strongly favor public transit improvement efforts
- Providing safe routes to schools received the most support of transportation related ideas tested in the survey

D. Outreach Events

Southern Nevada Strong project staff participated in a number of community events throughout the months of March and April 2013. At these events, project team members staffed a Southern Nevada Strong table/booth and/or conducted intercept surveys, depending on the nature of the event. Staff handed out fact sheets and Southern Nevada Strong-branded materials (pens, wrist bans and tote bags); used iPads to conduct brief surveys; and, at events where space was available, also conducted a map-based exercise to ask people where they live and to identify the challenges/opportunities in transportation, housing, economic development, environment, etc. near where they live and generally in the region.

The table below lists the public events attended and details of outreach activities, attendance and participation.
<table>
<thead>
<tr>
<th>Event</th>
<th>Activities</th>
<th>Attendance</th>
<th>Participation</th>
</tr>
</thead>
</table>
| Workforce Development Fair<br>Rafael Rivera Community Center, Las Vegas<br>March 2, 2013 | • Table  
• Discussion with participants  
• Distribution of fact sheets and swag  
• iPad surveys  
• Map-based exercise | • Event advertised in El Tiempo and other outlets.  
• Job-seekers  
• Majority Spanish-speakers of Hispanic descent | • 80 participants stopped at table  
• 28 surveys completed |
| United Way “Earn It! Keep It! Save It!” Workshop<br>Bill and Lillie Heinrich YMCA, Las Vegas<br>March 16, 2013 | • Table  
• Discussion with participants  
• Distribution of fact sheets and swag  
• iPad surveys  
• Map-based exercise | • Approximately 100 attendees seeking assistance with their taxes | • 30 surveys completed  
• Approximately 25 tote bags, 10 pens and 2 flash drives distributed  
• 5-6 participants did mapping exercise |
| St. Baldrick’s Foundation 47th Annual St. Patrick’s Day Parade<br>South Water Street, Henderson<br>March 16, 2013 | • Intercept surveys along parade route  
• Distribution of pamphlets and swag  
• Discussion with participants | • All ages  
• Attendance in low thousands | • 46 surveys completed  
• 28 pens and 65 pamphlets distributed |
| United States Green Building Council Nevada Spring Mixer aka “The Big Show”<br>Element Hotel, Summerlin<br>March 21, 2013 | • Table  
• Discussion with participants  
• Distribution of fact sheets and swag  
• iPad surveys  
• Map-based exercise | • Professionals in energy efficient building materials industry and utility companies  
• Majority white, middle-aged, middle to upper-middle class | • 15 Surveys completed |
| Convene for Green<br>City Hall and Civic Plaza, North Las Vegas<br>April 4, 2013 | • Overview presentation  
• iPad surveys  
• Breakout session with mapping exercise | • Invited attendees – regional sustainability stakeholders  
• Approximately 200 at event | • 30 attendees at presentation  
• 6 surveys completed  
• 10 pamphlets, pens and bracelets distributed  
• 15 participants did mapping exercise |
| Henderson Heritage Parade and Festival<br>Henderson<br>April 6, 2013 | • Table  
• Discussion with participants  
• Distribution of fact sheets and swag  
• iPad surveys | • Promoted in City newsletters and mediums  
• Majority white, non-Hispanic | • 21 surveys completed  
• Approximately 23 pamphlets and 52 bracelets distributed |
<table>
<thead>
<tr>
<th>Event</th>
<th>Activities</th>
<th>Attendance</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFAN Aids Walk</td>
<td>• Booth&lt;br&gt;• Discussion with participants&lt;br&gt;• Distribution of fact sheets and swag&lt;br&gt;• Intercept surveys with iPad&lt;br&gt;• Incentivized gift card</td>
<td>• Event promoted through ads, web, radio, LGBT event venues, etc.&lt;br&gt;• Attendees included LBGT community, students and educators – large youth presence</td>
<td>• 39 surveys completed&lt;br&gt;• All 50 bags and pens and numerous brochures distributed</td>
</tr>
<tr>
<td>Passport to Immunizations and Health Fair</td>
<td>• Table&lt;br&gt;• Distribution of pamphlets and swag&lt;br&gt;• Discussion with participants&lt;br&gt;• Intercept surveys with iPad</td>
<td>• Mothers with young children or young (25-44) families&lt;br&gt;• Largely Hispanic/Latino and African American&lt;br&gt;• Event promoted on local radio</td>
<td>• 21 surveys completed&lt;br&gt;• 27 pamphlets, 47 pens, 50 bags and 100 bracelets distributed</td>
</tr>
<tr>
<td>Green Fest/Festival of Communities</td>
<td>• Table&lt;br&gt;• Distribution of pamphlets and swag&lt;br&gt;• Discussion with participants&lt;br&gt;• Intercept surveys with iPad&lt;br&gt;• Map-based exercise</td>
<td>• Large number of students, but also wide variety of ages and ethnicities represented&lt;br&gt;• Approximately 1,000 in attendance throughout day</td>
<td>• 75 surveys completed&lt;br&gt;• 100 bags and numerous pens and pamphlets distributed&lt;br&gt;• Filled one email sign-in sheet of people interested in receiving additional info&lt;br&gt;• 2 participants did mapping exercise</td>
</tr>
<tr>
<td>Marketing Table</td>
<td>• Table&lt;br&gt;• Distribution of pamphlets and swag&lt;br&gt;• Discussion with participants&lt;br&gt;• Intercept surveys with iPad</td>
<td>• Mostly college students aged 18-24&lt;br&gt;• Some professors and other adults as well</td>
<td>• 44 surveys completed&lt;br&gt;• 25 thumb drives and numerous bags, pamphlets and pens distributed&lt;br&gt;• Filled one email sign-in sheet of people interested in receiving additional info</td>
</tr>
</tbody>
</table>

The results of surveys from these events (plus one additional survey submitted independent of an outreach event) are detailed in the following section of this summary. Project staff also recorded verbal input given during discussion with participants. Comments pertained both to general conditions in the region and to site-specific challenges and opportunities. Following are the key themes that emerged during these discussions:

**Economy/Employment**
- Need for an increase in work opportunities including:
  - Construction and skilled trades
  - Education
  - Medical
  - Law and other professional
• Issues with current employers including:
  ▪ Low pay
  ▪ Decrease in hours
  ▪ Layoffs
  ▪ Discrimination
  ▪ Challenges for immigrants
• Some specific areas do have many jobs available for all educational levels
• Adoption of green technologies could spur economic growth

Transportation
• Improvements in public transportation needed including:
  ▪ More frequent service
  ▪ More convenient/efficient routes
  ▪ Better integration of route schedules
  ▪ Buses don’t meet scheduled times and/or do not stop
  ▪ Need designated lanes
  ▪ Improvements in safety on transit
  ▪ Better signage in general, signage in Spanish
• Traffic throughout the region is congested
• Repairs to streets and signage improvements needed in many locations
• Poor pedestrian/bike/skateboard safety due to various factors, including:
  ▪ Narrow sidewalks
  ▪ Crosswalks too far apart and poorly lit
  ▪ Streets in poor condition
  ▪ Inattentive drivers

Education
• Poor quality K-12 education
• Lack of funding
• Language barriers
• Overcrowded schools
• Teachers are not engaged in motivating students
• Lack of security in schools
• Underutilized school sites

Safety
• High crime rate
• High rate of homelessness
• Empty homes are a blight
• Lack of safety near downtown Las Vegas
• Poor pedestrian/bike/skateboard safety (as described under “Transportation” above)
• Better lighting needed in many areas
Need better police response and/or increased police presence in some areas

**Housing**
- Better housing options and more affordable housing needed
- Promote use of sustainable power and energy saving components; make them more affordable
- Too many vacant homes
- Housing in some areas is located too close to business hubs or being displaced by businesses

### E. iPad Survey Results

Throughout March and April 2013, Southern Nevada Strong project team members surveyed members of the public at outreach events using iPads with Quicktap software. As of May 8th a total of 326 surveys had been submitted via this method. These survey responses are detailed below.

**iPad Survey Participation**

iPad survey respondents were given an opportunity to take the survey in either English or Spanish. A large majority (94%) opted to complete the survey in English, but a small number (6%) chose to complete it in Spanish. (Note that this option had not yet been developed at the time of the first outreach event on March 2nd, so these numbers do not include the 28 surveys taken at that event.)

The first question on the iPad survey asked respondents’ zip code. Respondents came from all over the Southern Nevada region and represented the majority of zip codes in the area.

iPad survey participants were also asked how long they have lived in Southern Nevada. The majority of respondents have lived in the area long enough to have a good knowledge of conditions in the area. Sixty-three percent (63%) have lived in the region for ten years or more; this included a substantial number who have lived here thirty to sixty years. Of the remainder, a third (33%) were fairly evenly distributed over a period of one to nine years. Only 3% had lived in the area less than a year.

The final demographic question, necessary to help ensure that the process has broad, representative participation, asked iPad survey respondents how they describe themselves in terms of race or ethnic identity. Half (50%) described themselves as White (non-Hispanic); of the remainder, 24% identified themselves as Hispanic/Latino and 11% as African American/Black. Those identifying themselves as Asian, American Indian/Native American, Native Hawaiian/Other Pacific Islander and mixed-race made up the balance.

**What Do You Like Best About Living In This Region?**

The iPad survey asked what respondents like best about living in the region. While the format of the question does not allow the responses to be quantified, certain common themes clearly emerged, and are listed below in the approximate (descending) order of popularity. The weather, climate and/or natural environment was by far the most popular quality of life in the
region – it was mentioned by about half of respondents.

- Favorable weather and climate, agreeable natural environment
- Access to outdoor activities, parks and open spaces
- A variety of activities and entertainment for all ages
- Sense of community, community events (both general area and specific communities)
- The 24/7 lifestyle
- Excellent amenities such as shopping, restaurants, etc.
- Unique character of Las Vegas
- Diversity and open-minded attitude
- Access to local schools, University and/or colleges
- The people, proximity to friends and family
- Access to jobs (in general or current job)
- Reasonable cost of living

Most Important Issues for Southern Nevada

Next, the iPad survey asked what respondents would say is the most important issue facing Southern Nevada today. This was also an open-ended question, and as with the previous question, some common themes clearly emerged.

The poor economy, lack of jobs and unemployment was mentioned most frequently followed by environmental issues (particularly water) and schools/education. Responses are listed below in the approximate (descending) order of popularity:

- Poor economy, unemployment, lack of jobs and job diversity
- Environmental issues – water, sustainability, sustainable energy, pollution
- Poor state of schools and education
- Social issues such as homelessness, inequity, hunger and youth crime/drug abuse
- Lack of transportation and public transit options, traffic congestion, pedestrian safety
- Safety (crime/violence, gangs)
- Housing (lack of affordable housing, foreclosures, unstable market)
- Lack of social services, particularly healthcare

iPad survey participants were asked to select their top three from among a number of issues that were surfaced during the team’s initial research into existing conditions in the region. Two issues clearly emerged as most important to iPad survey respondents; the percentages of those choosing each issue as one of their top three are as follows:

- Creating new jobs: 70%
- Improving K-12 education: 56%
- Protecting the environment: 29%
- Providing housing that is affordable: 23%
- Attracting new businesses: 23%
Increasing public transit: 16%
Reducing traffic congestion: 16%
Providing social services: 15%
Improving my neighborhood: 14%
Developing downtown Las Vegas: 8%
Other: 4%

iPad survey participants were also questioned as to how they would rate their area of Southern Nevada as a place to live. The majority rated it as either good or excellent, as follows:

- Good: 45%
- Excellent: 37%
- Just Fair: 13%
- Poor: 5%

Finally, iPad survey participants were asked whether they think the quality of life in their area of Southern Nevada will improve, get worse or stay the same. As shown below, although expectations are somewhat tempered, the response was largely on the positive side.

- Somewhat better: 40%
- Stay the Same: 28%
- Much better: 18%
- Somewhat Worse: 13%
- Much Worse: 2%

F. Online Survey Results

Beginning in February 2013, an online survey was also made available through the SouthernNevadaStrong.org website. The questions on this survey were similar to those on the iPad survey, but not exactly the same, so these results are listed separately. As of May 8th a total of 32 surveys have been submitted via this method.

Survey Participation

Online survey respondents were asked how long they have lived in Southern Nevada. The majority - nearly three-quarters (72%) of respondents - have lived in the area 10 years or more.

The online survey also included a number of demographic questions, designed to help ensure that the process has broad, representative participation. Online survey participants were asked their race or ethnic identification, their total annual household income before taxes, and their age. A majority (91%) of online survey respondents identified themselves as White (non-Hispanic). Seventy-six (76%) of online survey respondents have an annual household income of $50,000 or above. In terms of age, 81% of respondents are between the ages of 35-64.
**What Do You Like Best About Living In This Region?**

Online survey participants were asked what they liked best about living in the region. The common themes that emerged from their responses are listed below in the approximate (descending) order of popularity. The agreeable weather was the most popular quality of life in the region, mentioned by over half of online survey respondents.

- Good weather
- Access to outdoor recreation and natural beauty
- Quality of life – spacious, dynamic, diverse, Las Vegas as a global city
- Amenities such as shopping, restaurants and entertainment
- Reasonable cost of living
- The 24/7 lifestyle
- Convenient location (proximity to California and Arizona, international airport)

**Desired Future for Southern Nevada**

The online survey asked participants to provide three to five words that describe their desired future for Southern Nevada. The common themes of their responses are listed below in approximate (descending) order of popularity.

- Strong, stable and growing economy
- Diversified businesses including: small, local business; high technology jobs; green jobs
- Improved transportation including: more public transit (rail); walkability/bikeability throughout cities; improved traffic and connectivity
- Environmental sustainability, including use of sustainable energy sources, clean air and water, and protection of natural areas
- Improved education at all levels, including K-12, multiple high-quality universities and workforce education
- A strong, safe, family-friendly community
- Increased diversity
- Innovative, vibrant and collaborative, exciting
- Smart development including: downtown development; infill; improved infrastructure; mixed-use
- Increased amenities including shopping, restaurants and public spaces

**Most Important Issues for Southern Nevada**

Finally, online survey participants were asked to select their top three from among a number of issues indentified as important in the region. Their responses were as follows:

- Improving K-12 education: 69%
- Creating more jobs: 56%
- Attracting new businesses: 47%
- Increasing public transit: 31%
- Protecting the environment: 22%
- Providing social services: 19%
- Developing downtown Las Vegas: 13%
- Other: 13%
- Reducing traffic congestion: 9%
- Providing housing that is affordable: 6%
- Improving my neighborhood: 6%
Appendix C – Phase 2 Outreach Summary
Southern Nevada Strong

Phase II Outreach Summary

October 2013
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Executive Summary

From July to October 2013, the Southern Nevada Strong project team conducted a variety of outreach activities to inform stakeholders and the public about the project, and to solicit input. The outreach effort was part of Phase 2 of the Southern Nevada Strong Public Engagement Plan, Vision and Goal Setting. The outreach goals were as follows:

- Gather stakeholder and community input on:
  - The Vision for the region
  - Development types needed to better integrate housing, transportation and jobs
  - Priority areas for developing identified “opportunity site analysis”—areas to be considered for redevelopment and reinvestment
- Offer capacity building events to raise awareness about key issues and policy recommendations.
- Present to professional and community-based stakeholder groups and organizations to elevate awareness of the project and role of planning to strengthen economic competitiveness.

The outreach activities conducted included the Summer 2013 e-newsletter; Open Houses and public outreach events; an online community survey tool available at these events via iPads and also online; a land use and development visual preference survey administered at Open Houses; and an urban ethnographic research and capacity building project in partnership with UNLV.

Key Findings

The following themes emerged most frequently across input gathered through all outreach methods.

A. Overall Findings

Based on the Phase 2 outreach, community members expressed the following:

- A desire to diversify the economy to ensure a wide variety of jobs are available for future generations.
- A variety of housing types and neighborhoods are available that appeal to a talented workforce.
- The need to improve educational attainment in the region and to better collaborate with all educational institutions.
- General support for the development types needed to better integrate housing, transportation and jobs.
- Support for streetscape improvements including bike lanes and pedestrian improvements.
- Support for open spaces and community gathering areas.
- Support for light rail.
B. Opportunity Sites

Participants also weighed in on which local Opportunity Sites they would like to see further analyzed. The Opportunity Sites were ranked in the following order of priority:

- Maryland Parkway
- Downtown North Las Vegas
- Fremont Street
- Las Vegas Medical District
- Boulder Highway
- Flamingo Road
- Historic West Las Vegas
- Henderson’s College District
- Stewart Avenue and Eastern Avenue
- Buena Vista Springs
- Pittman Neighborhood
- Pennwood Avenue

C. Visual Preferences

A visual preference survey is a common method for assessing public feedback on physical design alternatives. Participants were given dots to indicate whether they liked certain land use and development types based on their visual attributes. A full summary of images and preferences is provided starting on page 18 of this document.

Participants supported almost all visual examples, but were less supportive of the mixed income housing selection, public art, the streetscape picture with the mural and the streetcar option. The feedback provided during voting indicated that participants felt the examples of public art were too specific to a particular cultural theme, that it could be graffittied or otherwise vandalized, and that shade was more important to them than decor. It is possible that respondents reacted more to the specific example of public art than the concept itself, which will be pursued and assessed with additional prompts in the subsequent phase of outreach. As for the mural option, participants felt that murals would be vandalized with graffiti and not well-maintained. The negative reaction to the streetcar was characterized by participants in that it “did not look sophisticated enough” and “it looks like a tourist attraction.” Mixed income housing input was interpreted to mean a low income housing project would be placed in stable suburban neighborhoods, as has been the case with recent neighborhood stabilization-type projects in the region which have caused discontent. Participants felt that introducing vulnerable populations would cause disruption to stable neighborhoods. This feedback will be used to inform the subsequent phase of outreach and has also lead to a shift in messaging for mixed income housing.
These findings will drive Phase 3 outreach questions to delve deeper into attitudes and preferences toward different housing, streetscape, transit and community space types.

Southern Nevada Strong
Phase 2 Outreach Summary

I. Introduction

From July to October 2013, the Southern Nevada Strong project team conducted a variety of outreach activities to inform stakeholders and the public about the project, and to solicit input. The outreach effort was part of Phase 2 of the Southern Nevada Strong Public Engagement Plan, Vision and Goal Setting. The outreach goals were as follows:

- Gather stakeholder and community input on:
  - The Vision for the region
  - Development types needed to better integrate housing, transportation and jobs
  - Priority areas for developing identified “opportunity site analysis”—areas to be considered for redevelopment and reinvestment
- Offer capacity building events to raise awareness about key issues and policy recommendations.
- Present to professional and community-based stakeholder groups and organizations to elevate awareness of the project and role of planning to strengthen economic competitiveness.

Southern Nevada Strong seeks to build a foundation for long-term economic success and community livelihood by better integrating reliable transportation, housing, and job opportunities throughout Southern Nevada. This collaborative regional planning effort is funded by a $3.5 million dollar Sustainable Communities grant from the U.S. Department of Housing and Urban Development (HUD).

II. Outreach Activities and Results

A. Summer 2013 E-Newsletter

The Summer E-Newsletter was sent in August 2013 and included information about the online community survey launch and open houses. Links to the Existing Conditions Report, Public Engagement Plan, and other accomplishments, and an article about the UNLV Urban Ethnographic Research Partnership were provided in the newsletter. A full list of E-Newsletter contents follows.

E-Newsletter Contents
- Online Community Survey Announcement
- Open House Schedule
- A variety of accomplishments and links to products generated by the grant, including:
  - Existing Conditions Report
  - Metrics to Frame the Plan
• Public Engagement Plan
• Draft Housing Analysis
• Base Case Land Use Scenario
• Livability Assessment
• Draft Opportunity Sites
• Maps
• Phone Survey Results
• Facts and Figures
• Outreach and Events
• UNLV Urban Ethnographic Research Partnership Overview
• Partner Event Spotlight

B. Open Houses

Southern Nevada Strong hosted a series of 15 Community Open Houses between July and September 2013. At these events, attendees viewed a presentation on Southern Nevada Strong and the Plan process, and participated in the Online Community Survey and Visual Preference Surveys.

Each Open House included:

• Vision Statement voting;
• iPad stations to review priorities for the Regional Plan and rank areas throughout the Valley that participants felt were best positioned to better connect transportation, housing, and job opportunities;
• Photo preference surveys of land use and development choices; and
• Activities for children

Below is the full schedule of Open Houses.

**Fifth Street School**
401 S. Fourth St., Las Vegas
July 16, 2013
4:00-6:00 p.m.

**Culinary Academy**
710 Lake Mead Boulevard, North Las Vegas
July 29, 2013
3:00-5:00 p.m.

**Sahara West Library**
9600 W. Sahara Avenue, Las Vegas
August 3, 2013
2:30-4:30 p.m.

**Desert Breeze Community Center**
8275 Spring Mountain Road, Las Vegas
August 7, 2013
5:30-7:30 p.m.

**Paseo Verde Library**
280 S. Green Valley Parkway, Henderson
August 13, 2013
2:00-4:00 p.m.

**Elaine K. Smith Center**
700 Wyoming, Boulder City
August 15, 2013
2:00-4:00 p.m.

**Aliante Library**
2400 Deer Springs Road, North Las Vegas
August 31, 2013
12:00-2:00 p.m.

**Mary and Sam Boyd Boys and Girls Club**
1608 Moser Drive, Henderson
September 4, 2013
4:00-6:00 p.m.
Open House participants came from across the region, as shown in the map below. The results of surveys from these events are detailed in Sections D and E of this summary.

Map 1: Open House Participants by ZIP Code

C. Public Outreach Events

In addition to the Open Houses, Southern Nevada Strong conducted 20 iPad events—five in English and fifteen in Spanish—and continued outreach efforts at more than 50 community events, meetings, speaking engagements and briefings with elected officials, reaching more than 2,500 local residents. Southern Nevada Strong also continues to expand its reach on social media with 225 Facebook friends and nearly 300 Twitter followers.

Highlights from some of the Phase 2 outreach events are described below.

D. Hispanic Outreach

In addition to outreach to the broader community, Southern Nevada Strong conducted targeted outreach to the Hispanic community. Below is a list of events Southern Nevada Strong conducted with bilingual project staff and volunteers to gather input in Spanish and English from primarily Hispanic residents.
The SNS planning process and related community events were advertised to the Hispanic community in the following ways:

- Posts by the project team on Facebook and Twitter
- Posts by Senate Majority Leader Mo Denis on Facebook and Twitter
- A post by Senator Ruben Kihuen on Twitter
- An email blast from Miriam Hickerson, Ombudsman of Consumer Affairs for Minorities, to the Department of Business and Industry contact list
- An email from the project team to a targeted list of 1,371 contacts gathered from previous SNS-hosted Hispanic outreach events
- A radio spot on SNS on Noticias EXE 94.5 FM on September 20, 2013 featuring an interview with Lisa Corrado
- A print feature on SNS published on September 27, 2013 in El Tiempo

### E. Online Community Survey and Results

From July 11 to October 14, 2013, a community survey was made available through the SouthernNevadaStrong.org website, and on iPads at Open Houses and public outreach events. The online tool, called MetroQuest, asked respondents to rank the initial priorities that will become “elements” or chapters of the regional plan, and to give input on opportunity sites within the region that are most ripe for commercial redevelopment, housing and transportation investments. The survey received over 2,500 responses.
Survey Participation

Community members from throughout the region participated in the survey. The map below depicts the overall online survey participation by zip code. The five areas with the greatest concentration of respondents, listed in descending order, were:

- Downtown Las Vegas (89101 / 89106)
- North Las Vegas (89030 / 89031)
- Sunrise (89110 / 89115)
- Spring Valley/West Flamingo Road (89103)
- Henderson (89011)

Map 2: Survey Participants by ZIP Code
The community survey also included optional demographic questions designed to help ensure that the process had broad, representative participation. Participants were asked to identify their age, gender and race or ethnicity. The charts below show the breakdown of respondent demographics by race/ethnicity and age.

Approximately 36 percent of respondents identified as White (non-Hispanic), while another third (36 percent) identified as Hispanic/Latino. Twelve percent of participants identified as African American/Black. Four percent identified as Asian, 2 percent as Native Hawaiian/Pacific Islander, 2 percent as two or more races and 1 percent as Native American. In terms of age, a third of respondents (33 percent) were between the ages of 26 and 38. About 16 percent of participants were age 18 or younger, and 9 percent were between the ages of 19 and 25. Approximately 13 percent were between the ages of 56 and 65, and 5 percent were over 65.

**Figure 1: MetroQuest Demographics: Race/Ethnicity**

**Figure 2: MetroQuest Demographics: Age**
Priorities

The survey asked respondents to rank potential priorities for topics that would be addressed in the plan, including: Environment, Housing, Transportation, Public Engagement & Equity, Economic Development & Education and Healthy Communities. Respondents were asked to review the priorities, choose their top priority, least priority and favorite among the options. Respondents could also suggest additional ideas or expand on what was provided. The table below details the results of respondents’ ranking of the priorities.

### Economic Development/Education

*Diversifying the regional economy will provide a wider range of jobs and make us less vulnerable to booms and busts. Southern Nevada Strong aims to sustain and build on our current strengths and unique economy.*

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Thumbs Up</th>
<th>Thumbs Down</th>
<th>Favorite</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
</tr>
<tr>
<td>Provide a wider range of quality jobs</td>
<td>2067</td>
<td>82.3%</td>
<td>89</td>
</tr>
<tr>
<td>Develop and grow a competitive workforce</td>
<td>2137</td>
<td>86.0%</td>
<td>158</td>
</tr>
<tr>
<td>Support and revitalize struggling small businesses and commercial areas</td>
<td>2074</td>
<td>83.9%</td>
<td>199</td>
</tr>
<tr>
<td>Identify specific places that would benefit from redevelopment and improve economic conditions</td>
<td>2058</td>
<td>84.7%</td>
<td>240</td>
</tr>
<tr>
<td>Create dynamic communities that educated workers want to live in</td>
<td>1921</td>
<td>78.9%</td>
<td>241</td>
</tr>
</tbody>
</table>

### Environment

*Southern Nevada residents appreciate both our urban and natural amenities, including neighborhoods, parks and trails. Southern Nevada Strong will identify, protect and strengthen what we value about our community as it grows and evolves over time.*

| Priorities                                                                 | Thumbs Up | Thumbs Down | Favorite |
|                                                                          | Number    | Percent     | Number   | Percent  | Number   | Percent |
|                                                                          |           |             |          |          |          |         |
| Protect, conserve and enhance the region’s water resources                | 2053      | 82.6%       | 71       | 2.9%     | 361      | 14.5%   |
| Improve regional air quality                                              | 2079      | 87.4%       | 153      | 6.4%     | 146      | 6.1%    |
| Preserve and restore the natural environment, protect open space and promote renewable energy and recycling | 2009      | 83.3%       | 142      | 5.9%     | 261      | 10.8%   |
| Encourage stewardship of the land by promoting land use policies that promote responsible growth and development patterns | 1952      | 83.1%       | 257      | 10.9%    | 140      | 6.0%    |
| Increase public access to parks, trails, and other recreational amenities for all residents and visitors | 2022      | 84.1%       | 162      | 6.7%     | 221      | 9.2%    |
**Healthy Communities**

The Healthy Communities element aims to improve public health by developing guidelines for creating safer, more walkable neighborhoods and increasing safe access for cyclists and pedestrians and increase community access to fresh food and medical care.

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Thumbs Up</th>
<th>Thumbs Down</th>
<th>Favorite</th>
<th>Total Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Improve convenience to access healthcare services by increasing the number</td>
<td>2093</td>
<td>82.6%</td>
<td>247</td>
<td>9.7%</td>
</tr>
<tr>
<td>of facilities available and locating them where need is greatest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase convenience to and availability of healthy, affordable food</td>
<td>2080</td>
<td>80.7%</td>
<td>205</td>
<td>8.0%</td>
</tr>
<tr>
<td>options</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design neighborhoods to encourage walking and biking</td>
<td>2055</td>
<td>78.5%</td>
<td>179</td>
<td>6.8%</td>
</tr>
<tr>
<td>Improve transportation access for low-income people</td>
<td>2102</td>
<td>83.3%</td>
<td>251</td>
<td>9.9%</td>
</tr>
<tr>
<td>Increase convenience to get to facilities and services that serve youth,</td>
<td>2165</td>
<td>85.8%</td>
<td>150</td>
<td>5.9%</td>
</tr>
<tr>
<td>families, and seniors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Housing**

To create healthy and stable neighborhoods, we need to provide many types of housing for residents of all income levels – from apartments to homes on large lots.

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Thumbs Up</th>
<th>Thumbs Down</th>
<th>Favorite</th>
<th>Total Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct new residential development to existing and proposed mass transit</td>
<td>1868</td>
<td>80.2%</td>
<td>367</td>
<td>15.8%</td>
</tr>
<tr>
<td>corridors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prioritize development opportunities that fill in vacant lands in urban</td>
<td>1814</td>
<td>75.6%</td>
<td>294</td>
<td>12.3%</td>
</tr>
<tr>
<td>areas to reduce the pressure to develop on open space, on the fringe of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>town, or in rural areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locate housing near job centers and other services, such as retail,</td>
<td>1894</td>
<td>79.4%</td>
<td>252</td>
<td>10.6%</td>
</tr>
<tr>
<td>recreation and other amenities to decrease spending on transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create communities with a mix of uses</td>
<td>1937</td>
<td>80.9%</td>
<td>288</td>
<td>12.0%</td>
</tr>
<tr>
<td>Increase mixed income and affordable housing options throughout the region</td>
<td>1732</td>
<td>74.3%</td>
<td>437</td>
<td>18.7%</td>
</tr>
</tbody>
</table>
Public Engagement and Equity
In order to create a plan that is realistic and can be put into action, Southern Nevada Strong will engage and collaborate with a broad spectrum of people throughout the region.

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Thumbs Up</th>
<th>Thumbs Down</th>
<th>Favorite</th>
<th>Total Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate residents and businesses to support the implementation of the Southern Nevada Strong Regional Plan</td>
<td>2073 88.4%</td>
<td>164 7.0%</td>
<td>107 4.6%</td>
<td>2344</td>
</tr>
<tr>
<td>Ensure Southern Nevada remains a welcoming place for people from diverse backgrounds, future generations and with varying degrees of mobility and independence</td>
<td>1963 81.3%</td>
<td>133 5.5%</td>
<td>319 13.2%</td>
<td>2415</td>
</tr>
<tr>
<td>Innovate and improve government-led public engagement efforts to make it easier for people to participate in decision making</td>
<td>2001 84.1%</td>
<td>187 7.9%</td>
<td>190 8.0%</td>
<td>2378</td>
</tr>
<tr>
<td>Build neighborhood and community-based leaders to represent local communities in regional decision making</td>
<td>1891 79.2%</td>
<td>220 9.2%</td>
<td>277 11.6%</td>
<td>2388</td>
</tr>
</tbody>
</table>

Transportation
Improving transportation is another essential element to strengthening our regional economy and quality of life. Reducing traffic and keeping us all moving supports the growth of these industries and our job market.

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Thumbs Up</th>
<th>Thumbs Down</th>
<th>Favorite</th>
<th>Total Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design or retrofit communities and streets to improve safety and ease of movement for pedestrians, cyclists and vehicles</td>
<td>2024 83.2%</td>
<td>169 6.9%</td>
<td>241 9.9%</td>
<td>2434</td>
</tr>
<tr>
<td>Reduce both vehicle and pedestrian fatalities by reducing speed limits and designing streets and communities with people in mind</td>
<td>1551 65.8%</td>
<td>693 29.4%</td>
<td>112 4.8%</td>
<td>2356</td>
</tr>
<tr>
<td>Develop a safe, high quality comprehensive transportation system that allows travelers choices including reliable and convenient mass transit, walking, cycling, and driving</td>
<td>2079 83.0%</td>
<td>161 6.4%</td>
<td>266 10.6%</td>
<td>2506</td>
</tr>
<tr>
<td>Provide a transportation system that address the needs of our low-income communities</td>
<td>1915 81.8%</td>
<td>316 13.5%</td>
<td>110 4.7%</td>
<td>2341</td>
</tr>
<tr>
<td>Pursue a high speed, mass transit system, such as light rail or similar technology, that rivals other metropolitan regions in the nation, beginning along segments with greatest potential for success</td>
<td>1616 66.0%</td>
<td>416 17.0%</td>
<td>415 17.0%</td>
<td>2447</td>
</tr>
</tbody>
</table>
Comments Regarding Priorities

Surveys submitted to Southern Nevada Strong via MetroQuest included over 700 comments. A little more than half of these were general comments submitted at the end of the survey, and slightly less than half were made in direct response to the Priorities statements, with the remaining comments relating to the suggested Opportunity Sites. The comments are summarized below.

TRANSPORTATION AND TRANSIT

Transportation or transit options were the subject of nearly a quarter of all comments, most of them in response to the Transportation priorities but also in the context of Healthy Communities, Environment and specific opportunity sites.

Public Transit

Many of these comments stressed the need for improved public transit options. Some specified that accessibility and affordability of transit must be improved for vulnerable populations such as low-income, students, seniors and the disabled. Others noted that improved transit options are needed for everyone in order to cut down on traffic congestion and travel time and protect the environment.

A number of respondents noted they believe that current transit services and amenities are in need of improvement. They specifically called out the RTC’s lack of courteous and responsive customer service, buses not running on schedule, and routes that are inefficient and/or do not conform to usage patterns. The need for more bus stops with better shade/shelter, location and safety features was also noted. Several would like to see rail (conventional or high-speed), light rail or monorail that serves to connect other transportation modes with the entire region, including downtown, the airport, the medical district and all areas of the city. This would assist both residents and visitors with getting to/from jobs, services, and entertainment and recreation options. A few respondents noted concerns that funding for transit improvements be put to appropriate and effective use, as has not always been the case in the past.

Traffic Improvements

Several respondents also commented on the need for better roadway design to reduce traffic congestion, and noted that they considered aspects of the current design to have miscalculated traffic flows, leading to more congestion. Suggestions for enabling traffic to bypass congestion, particularly on I-15 and the Strip, included locating new popular destinations outside downtown, building an underground highway toll system, and increasing lanes so space can be designated for smaller motorized vehicles. It was also suggested that businesses can also help by staggering shifts and exploring more work-at-home options.

Comments also urged the consideration of cleaner transportation and transit alternatives such as electric vehicles, pedi- or bike-taxis, or rental scooters (with appropriate designated lanes).

Some respondents commented on the need for improving connections to the region and other areas of the country in general, both through public transit and also road improvements.
Traffic Safety
Several respondents commented that reducing speed limits alone will not decrease vehicle and pedestrian fatalities - education and better enforcement of laws regarding speeding, jaywalking, cell phone usage while driving, drunk driving, etc. are also needed. Designing streets and communities for more safety, with features such as crosswalks or pedestrian bridges, better timed traffic lights, safer intersections with greater visibility, wider boulevards and sidewalks, improved lighting, etc., will help as well. Several noted their opinion that reducing speed limits and designing streets/communities with people in mind should be treated as separate issues.

Walkability/Bikeability
The issues of improving walkability and bikeability, as well as designing safe streets and creating accessibility for all including the disabled, were mentioned in response to both the Transportation and Healthy Communities priorities. Comments noted that creating or improving more walking/biking paths would only be useful if services such as stores and professional offices are within walking/biking distance, so the design of the entire community must be taken into account. These paths must also connect to transit.

Concern was expressed regarding pedestrian/bicycle safety on roads. Although a handful of respondents felt that bicycles or motorized cycles do not belong on roads, several others suggested safer, more inclusive street design and safety education would help improve safety. Others also mentioned that the extreme weather presents challenges to pedestrian and bicycle travel, and suggested that appropriate landscaping and water friendly design with shade structures be incorporated.

ENVIRONMENT
Parks and Trails
Respondents also made suggestions for increasing connectivity and walkability/bikeability in the context of public access to parks and trails. Some respondents wanted to see not only more interconnected park trails, but also more parks in general. They would like parks to incorporate amenities such as sustainable landscaping and solar-powered shade structures, recreational facilities or community centers with organized activities, sports areas, workout/activity stations, community centers, family play areas, picnic areas, safe restrooms, and dog-friendly areas. A number of respondents suggested that in addition to traditional parks, disused urban spaces, empty strip malls, etc. could be re-purposed as mini-parks, green-walls or desert gardens. Some would also like to prioritize natural open space areas as well as designed parks, perhaps working in partnership with the BLM. However, just a few respondents expressed their opinion that the area already has enough parks and access to parks/trails, and that they are concerned about providing adequate law enforcement for safety in existing parks. Respondents also noted the need for cleaning, maintenance and sustainable landscape management in all parks.

Water
Several respondents stated their concern regarding protecting, conserving and enhancing the region’s water resources in the context of future development. Some felt this was a more important issue than other improvements, and that the problem must be solved before
promoting additional growth. Ensuring water supply and maximizing the efficiency of water usage through such methods as greywater collection for current users must be considered before the needs of potential future users. They noted that realistic goals must be set, and that past patterns of growth and number of building permits issued are not sustainable. It was also noted that “enhancement” of water supplies cannot include creating pipelines to draw water from other locations.

**Recycling and Sustainable Energy Use**

A number of respondents urged promotion and support for recycling and the use of sustainable energy sources and technologies. They would like to see increased use of solar power and other sustainable energy sources in new buildings, homes and shade structures, and also for the use of these technologies to be made more affordable, with programs to support energy efficiency assessments and upgrades for current buildings and homes. Several also urged the use of alternative and recycled materials in construction. They suggested measures such as setting specific standards for energy efficiency and LEED square footage in the region, and educating the public on these issues. They also recommended retrofitting and re-purposing available storefronts and buildings to help eliminate sprawl.

Several respondents noted that incentives might be provided to encourage the use of sustainable water and energy practices.

**HOUSING**

Relatively few respondents commented directly regarding residential housing; they tended instead to address the priorities stated in the Housing element in terms of both residential and business development (see below). Several of those who did expressed the need to build lasting housing that is appropriate for the climate and desert setting, rather than cheap, inefficient housing that will simply serve to create the slums of the future. Comments called for assistance with refinancing at reasonable rates or with renovating the exteriors of older homes in order to help revitalize neighborhoods, and suggested that the county partner with various agencies and CBOs to build homes for first-time or second-chance home buyers. The fact that there are so many in need of homes and/or jobs could be blended with the need to build or rebuild communities. Some noted that new housing should be concentrated near existing services and schools. Alternatively, several suggested that developers (or other interests partnering with developers) should develop schools, community centers, parks, and infrastructure such as flood retention along with housing in order to help create complete, healthy communities. Respondents also expressed that the impact of new housing on traffic and transportation must be considered. Developers must be required to incorporate the best interests of the community in their plans. Some respondents were in favor of mixed income housing to create more dynamic communities; others expressed concern about the effect of mixed income housing on neighborhood quality and property values.

**ECONOMIC DEVELOPMENT/EDUCATION**

*Economic Development and Jobs*

Respondents had a wide variety of suggestions regarding diversification of jobs in the region. These included exploring creating incentives to draw new industries such as medical,
manufacturing, high-tech and biotech, but also diversifying with the area’s current strengths and industries, such as tourism, hospitality, construction and mining, in mind. Tax incentives, designated business zones, and an overall economic improvement strategy will help create a better environment for something different to happen. Non-traditional job opportunities such as working online might also be explored. It was also noted that business education for business owners might help small businesses thrive, although a few expressed concern that continuing to support struggling businesses financially is a waste of resources. Both diversifying with new industries and large businesses and supporting struggling small business were mentioned as necessary to create a dynamic economy in both urban and rural areas.

However, several respondents also pointed out that the area will continue to need jobs for those who are already here, especially those who are not highly educated, older residents with experience but lacking degrees, and others who are trying to enter or re-enter the workforce. The current workforce needs to be taken care of along with drawing new workers in.

A number of respondents, in the context of Economic Development, as well as Housing and the Environment, noted the problems caused by past unregulated growth and expressed concerns about unsustainable levels of growth in the region.

**Education**

Many respondents noted that the economy cannot be improved and diversified without improving education in the area, including K-12, higher education, and workforce education. A focus on improving education will both help keep current residents here and draw new people in, as well as diversifying the economy by attracting new businesses and increasing jobs that value more education. The perception of poor quality education keeps many businesses away, especially those that rely on a better-educated workforce. Several respondents also urged education at all levels regarding personal financial planning to help improve residents’ economic well-being.

Several respondents noted that this element lacked priorities that pertain specifically to improving education and school districts. They called for increases in funding and emphasis on education which would lead to decreases in class size and dropout rates. It was suggested that the thriving gaming industry might be called upon to help support schools and libraries. Respondents would like to see both workforce education—specifically mentioning the medical field, among others—and improved education for its own sake, particularly in terms of promoting English proficiency, math and science.

Respondents also mentioned the need for general enrichment programs for children, especially low income and at-risk kids. Starting early on, and also engaging and educating parents on how to navigate the educational system, will help build better citizens and a better prepared workforce. Comments suggested programs such as Head Start, arts and athletic activities.

**REVITALIZATION AND REDEVELOPMENT**

Specific priorities for revitalization and redevelopment were mentioned in the survey under both the Housing and Economic Development/Education headings, and many comments on these issues considered the two elements as one.
“Cleaning up” and revitalizing residential and business areas was mentioned both in the context of specific opportunity areas and the entire region. Several respondents urged the renovation and reuse of existing vacant properties rather than building new; some suggested that infill should occur only after revitalization of existing facilities and businesses is successful. Once again, some echoed the concern that was also mentioned in the context of Environment and Healthy Communities - that there isn’t room for more growth, and instead the focus needs to be on improvements for what is already here. Others stated that there are opportunities for infill and revitalization throughout urban areas, particularly in downtown areas—the revitalization that has taken place so far has been successful and should be continued. They suggested incentivizing infill by setting realistic impact fees for developers. Several also supported revitalization efforts be focused in older areas of the city as well as newer areas, and along commuter corridors where people tend to drive through rather than stop. Many would like to see spending occurring throughout the valley, rather than just in opportunity sites, in order to improve everyone’s environment. However it occurs, revitalization efforts must avoid displacing current businesses and residents.

HEALTHY COMMUNITIES

Respondents commenting on the priorities for Healthy Communities emphasized that accessibility to services and amenities must be improved for everyone, including all income groups, non-English speakers, single parents, those living in rural areas of the county, people of all educational levels, and those facing challenges such as homelessness, mental health issues or domestic violence. This includes suggestions already summarized under the headings of Transportation, Housing and Education. Increased support from the county for organizations that are already involved in providing these services, plus engagement from the public, particularly those who are better off, will also help. Another suggestion was outreach efforts to promote and educate healthy lifestyles. This would include education regarding insurance options, legal and financial counseling and aid to support the accessibility of medical care. Community gardens could be encouraged to promote healthy eating. Some respondents also noted that more skilled health care providers and specialists are needed in the region, and would hopefully be drawn by the economic and other community improvements being proposed.

Comments also called for increased amenities and services, both in the various opportunity sites or wherever they live within the region. Grocery stores, banks, other shopping options including local businesses and chain stores, community centers and sports facilities, entertainment and cultural options are needed. Better connections to transportation will help, but it was noted that it is better to have these options within walking distance, making the connection to design for increased walkability throughout the region.

Safety

A few respondents commented on the need to consider safety as a part of creating healthy communities, and also in the context of Housing and Transportation. Along with increased security presence and community coordination with law enforcement (such as block watch programs and meetings) they suggested measures such as better lighting, call boxes and video cameras at bus stops. They noted that it will not be possible to revitalize neighborhoods and reuse abandoned properties if safety concerns are not addressed.
PUBLIC ENGAGEMENT AND EQUITY

A large number of respondents expressed their appreciation of the Plan project and goals, their thanks for the opportunity to give their input, and their desire to become further involved. However, many others called out perceived challenges and issues with the Plan process and the outreach being conducted.

The complexity and perceived difficulty of making these changes led to many respondents expressing that they were unable to choose between priorities and/or opportunity sites. Some felt that the goals and statements were too broad or lacked specifics regarding potential trade-offs, funding and implementation, making them difficult to approve. Several noted that in-depth discussion within the communities will be necessary to make truly informed decisions. They suggested that this will require broader outreach utilizing cultural competence, and more use of non-traditional, grassroots outreach methods.

Concerns were expressed by several respondents regarding their perception of challenges working with local government. Some respondents noted their opinion that the community, private enterprise and the free market can be better relied upon to make improvements than the government.

Opportunity Sites

Next, survey respondents were asked to rank the opportunity sites important to them and to the region. This input contributed to the selection of sites that will be further considered for analysis of redevelopment and reinvestment potential.

The survey included a map of the region with each potential opportunity site identified, as well as a description of each site. Respondents were able to choose three areas, neighborhoods or corridors identified on the map that they thought should be prioritized for new jobs, housing and transit improvements.

Survey respondents ranked the opportunity sites as follows:

<table>
<thead>
<tr>
<th>Opportunity Sites</th>
<th>Rank</th>
<th># of Times Ranked (1st, 2nd, 3rd place)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland Parkway</td>
<td>1</td>
<td>317</td>
</tr>
<tr>
<td>Downtown North Las Vegas</td>
<td>2</td>
<td>301</td>
</tr>
<tr>
<td>Fremont Street</td>
<td>3</td>
<td>295</td>
</tr>
<tr>
<td>Medical District</td>
<td>4</td>
<td>268</td>
</tr>
<tr>
<td>Boulder Highway</td>
<td>5</td>
<td>244</td>
</tr>
<tr>
<td>Flamingo Road</td>
<td>6</td>
<td>229</td>
</tr>
<tr>
<td>Historic West Las Vegas</td>
<td>7</td>
<td>219</td>
</tr>
<tr>
<td>Henderson’s College District</td>
<td>8</td>
<td>208</td>
</tr>
<tr>
<td>Stewart Avenue and Eastern Avenue</td>
<td>9</td>
<td>127</td>
</tr>
<tr>
<td>Buena Vista Springs</td>
<td>10</td>
<td>109</td>
</tr>
<tr>
<td>Pittman Neighborhood</td>
<td>11</td>
<td>88</td>
</tr>
<tr>
<td>Pennwood Avenue</td>
<td>12</td>
<td>82</td>
</tr>
</tbody>
</table>
F. Visual Preference Survey and Results

At each of the Open Houses, a Visual Preference Survey was conducted to determine community members’ preferences for land use and development options. Participants viewed display boards featuring a series of images illustrating different kinds of development, and asked to provide their opinion of each image by applying colored dots to indicate the following three options:

- Green = I like it!
- Yellow = I’m willing to consider it.
- Red = I don’t like it.

The overall results of the Visual Preference Survey were as follows:

**Mixed Use Option #1: Commercial/Retail**

![Mixed Use Option #1: Commercial/Retail]  

**Mixed Use Option #2: Retail/Residential**

![Mixed Use Option #2: Retail/Residential]
Residential Option #1: Single-Family Home

Residential Option #2: Townhouses
Residential Option #3: Apartment/Condo

Residential Option #4: Apartment/Condo
Residential Option #5: Senior Housing

Residential Option #6: Mixed-Income Housing
Streetscape Option #1: Bike Lane

Streetscape Option #2: Public Art
Streetscape Option #3: Structured/Landscaped

Streetscape Option #4: Landscaped with Pedestrian Amenities
Transit Option #1: Bike Share

Transit Option #2: Streetcar
Transit Option #3: Bus

Transit Option #4: Light Rail
Community Spaces Option #1: Park with Baseball Field

Community Spaces Option #2: Park with Soccer Field
Community Spaces Option #3: Park with Trail

Community Spaces Option #4: Park with Open Space Area
Community Spaces Option #5: Park with Seating

Community Spaces Option #6: Park with Picnic Tables
Community Spaces Option #7: Park with Playground

Community Spaces Option #8: Playground with Public Art
G. UNLV Urban Ethnographic Research Partnership

In June 2013, a sociology research team from Brown University conducted an ethnographic research training with a cross-disciplinary team of University of Las Vegas (UNLV) master- and Ph.D.-level students. The training was led by Gianpaolo Baiocchi of New York University, who also served as a speaker at Southern Nevada Strong’s kick-off event. Ethnographic research is a qualitative research method that emphasizes in-depth stakeholder interviews and careful listening to understand individual lived experiences. This is a common method of research in Sociology and Anthropology, allowing field observation, and the opportunity for students to build rapport with hard-to-reach audiences such as the homeless and other traditionally marginalized groups. Southern Nevada Strong, in partnership with UNLV, asked researchers to interview grassroots community leaders in areas near the project’s preliminary opportunity sites to gain “on-the-ground” insight from community members. The research is meant as a strategy to go directly to the community to gather more detailed input than is typically feasible through formal surveying or public meetings. The students sought to learn what challenges and opportunities people living near the priority sites faced in the realms of transportation, quality and affordable housing, and job opportunities. This research will support the opportunity site analysis by shedding light on each community’s challenges in residents’ own words. The findings will also be important to inform the scoping process for the opportunity site analysis, will support introduction of key policies in the regional plan, and will provide a foundation to direct and support additional outreach to frame a vision that contemplates challenges faced by underrepresented members of the community.
Appendix D – Phase 3 Outreach Summary
Southern Nevada Strong

Phase III Outreach Summary

July 2014
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Southern Nevada Strong
Phase 3 Outreach Summary
Executive Summary

From November to June 2014, the Southern Nevada Strong project team conducted a variety of outreach activities to inform stakeholders and the public about the project and to solicit input. The outreach effort was part of Phase 3 of the Southern Nevada Strong Public Engagement Plan. The outreach goals were as follows:

- Continue to educate the public about the Southern Nevada Strong regional planning process and solicit input for the draft plan
- Gather stakeholder and community input including:
  - Preferred development types that will support the region’s ability to better connect housing, jobs and transportation;
  - Factors that influence people’s ability to find desirable housing in the region;
  - Improvements needed within four opportunity sites (areas to be considered for redevelopment and reinvestment);
  - Review comments on the draft regional plan; and
  - General comments on concerns that might be addressed through this process

The outreach activities conducted included: a web-based visual preference survey and mapping exercise available online, at community events and at public kiosks; community workshops; a Telephone Town Hall; and focus groups.

Throughout all three phases of the outreach process, the project team received over 8,000 individual inputs from participants through the various outreach methods. The process also yielded substantial input on the draft regional plan.

Key Findings

The outreach findings continue to validate the plan’s vision and goals and provide more fine-grained detail regarding community preferences, issues and concerns. The following themes emerged most frequently across input gathered through all outreach methods.

A. Overall Findings

Based on the Phase 3 outreach activities, through the results of various outreach methods, community members expressed the following:

- Support for a variety of housing types and job centers that are not too dense or resource-intensive
- Desire for more options for traveling within the region, including walkable neighborhoods and improved public transit
- Support for streetscape improvements including bike lanes and pedestrian improvements
- Support for open spaces and community gathering areas, particularly those that provide shade for visitors
• Support for light rail, bus rapid transit and the modern streetcar
• Desire for improved safety, including reduced crime and fewer vehicle conflicts

B. Visual Preferences

To achieve the goals outlined in the Southern Nevada Strong Regional Plan, communities will need to plan and design neighborhoods differently to better connect housing, jobs and transportation in the region. Southern Nevada Strong outreach activities included a visual preference survey to determine the level of support for the different building types that could be used to achieve these goals. Participants were shown a variety of residential, commercial and business developments. Participants indicated whether they liked certain land use and development types based on their visual attributes. A full summary of images and preferences is provided starting on page 7 of this document.

Participants supported almost all visual examples, with less support for row townhomes, live/work units and four-story mixed-use structures. Among job center options, large-scale office buildings were less popular. There was strong support for play and community amenities, streetscape improvements and transportation options, with the exception of bus service. Overall, there was support for a variety of housing options that supported a range of incomes and were within easy reach of workplaces and amenities. Participants indicated support for job centers that were people-friendly and not isolated, as well as outdoor spaces that were not resource-intensive and were climate-appropriate. Residents had some concerns about the cost and infrastructure required for some transportation options, but showed strong support for a wider range of transportation options connecting major nodes and throughout the region.

These findings will be used to help the public understand that different development types will be needed to advance the goals and strategies in the plan. The data can also help agency partners, land use planners and developers understand the development types that will more likely be supported by the public.

C. Opportunity Sites

Participants also weighed in on which type of improvements they would like to see within four local opportunity sites which included: North Las Vegas Downtown, Las Vegas Medical District, Maryland Parkway and Boulder Highway/Gibson & Broadbent. They were could also specify where improvements were needed within each, using an online mapping tool.

The most common improvements across all four opportunity sites were safety concerns, public transit and transportation. The Las Vegas Medical District had strong support for parks and recreation improvements and respondents supported community services improvements in Downtown North Las Vegas. Safety concerns included both crime and conflicts between vehicles and other modes of traffic.

At the community workshops held to get input on each of the four opportunity sites, participants gave feedback regarding their level of agreement with general statements reflecting the main themes of the outreach conducted to date and their opinions of various site possibilities. These results will inform plans for improvements at the opportunity sites.
Southern Nevada Strong Phase 3 Outreach Summary

I. Introduction

From November to June 2014, the Southern Nevada Strong (SNS) project team conducted a variety of outreach activities to inform stakeholders and the public about the project, and to solicit input. The outreach effort was part of Phase 3 of the Southern Nevada Strong Public Engagement Plan. The outreach goals were as follows:

- Continue to educate the public about the Southern Nevada Strong regional planning process and solicit input for the draft plan
- Gather stakeholder and community input including:
  - Preferred development types that will support the region’s ability to better connect housing, jobs and transportation;
  - Factors that influence people’s ability to find desirable housing in the region;
  - Improvements needed within four opportunity sites (areas to be considered for redevelopment and reinvestment);
  - Review comments on the draft regional plan; and
  - General comments on concerns that might be addressed through this process

The outreach activities conducted included: a web-based visual preference survey and mapping exercise available online, at community events and at public kiosks; community workshops; a Telephone Town Hall; and focus groups.

Southern Nevada Strong seeks to build a foundation for long-term economic success and community livelihood by better integrating reliable transportation, housing, and job opportunities throughout Southern Nevada. This collaborative regional planning effort is funded by a $3.5 million Sustainable Communities grant from the U.S. Department of Housing and Urban Development (HUD).

II. Outreach Activities and Results

A. Online Community Engagement Survey and Results

From late February through May 2014, a community survey was made available through the SouthernNevadaStrong.org website, and on iPads at Open Houses and kiosks throughout the community. The online tool, called MetroQuest, included a visual preference survey on development types and a mapping exercise on opportunity sites. The survey was available online in English and Spanish and could be accessed at eleven kiosks at various locations throughout the region. iPads were provided at events and open houses. The survey period was late February through the end of May.

The visual preference survey showed multiple styles of development for several land uses and asked respondents to indicate for each if they liked, disliked or were neutral on each. Using the MetroQuest software, survey participants viewed a series of images illustrating different kinds of
development, and asked to provide their opinion of each image by choosing one of the following three options:

- Thumbs up = Like
- Thumbs down = Dislike
- X = Neutral

The survey also asked participants to review the four opportunity sites. The selection of these four sites was informed by the results of Phase 2 outreach. For one or more sites, survey respondents would indicate where they would like to see improvements and what type of improvements. The four opportunity sites were:

- Maryland Parkway
- Downtown North Las Vegas
- Las Vegas Medical District
- Boulder Highway, Gibson & Broadbent

The types of improvements participants could comment on included:

- Safety concerns
- Access issues
- Transportation
- Public transit improvements
- Community services
- Parks and recreation
- Other

**Survey Participation**

Community members from throughout the region participated in the survey. The map below depicts the overall online survey participation by ZIP code. The five areas with the greatest concentration of respondents, listed in descending order, were:

- Downtown Las Vegas (89101)
- Paradise (89119, 89121)
- North Las Vegas (89030, 89031, 89115)
- Las Vegas (89108)
- Sunrise Manor (89110)
The community survey also included optional demographic questions designed to help ensure that the process had broad, representative participation. Participants were asked to identify their age, gender and race or ethnicity. The charts below show the breakdown of respondent demographics by race/ethnicity and age.

Slightly less than one third (31 percent) of respondents identified as White (non-Hispanic), while about another third (29 percent) identified as Hispanic/Latino. Eighteen percent of participants identified as African American/Black. Three percent identified as Asian, 2 percent as Native Hawaiian/Pacific Islander, 4 percent as two or more races and 1 percent as Native American. In terms of age, about one-fourth of respondents (26 percent) were between the ages of 26 and 38. Fourteen (14) percent were between the ages of 19 and 25. Approximately 12 percent were between the ages of 56 and 65. About 9 percent of participants were age 18 or younger, and 4 percent were over 65. Women participated more than men, with 59% participation.
**Figure 1: MetroQuest Demographics: Race/Ethnicity**

- **Hispanic/Latino**: 29%
- **White (Non-Hispanic)**: 31%
- **African American/Black**: 18%
- **American Indian/Native American**: 2%
- **Asian**: 3%
- **Two or More Races**: 4%
- **Other**: 8%
- **Prefer not to answer**: 4%

**Figure 2: MetroQuest Demographics: Age**

- **26-38**: 26%
- **19-25**: 14%
- **56-65**: 12%
- **39-55**: 35%
- **0-18**: 9%
- **65+**: 4%
Visual Preference Survey and Results
Survey participants were asked to indicate whether they liked, disliked or had a neutral opinion of images in the following categories: housing, job centers, parks and community, streetscape and transportation. Participants were also encouraged to make comments explaining their responses. Below is a brief summary of participants' responses and comments by category.

Housing
The single family home was the housing image most liked by survey respondents (87%). Specifically, respondents liked the design of the single family home, and the landscaping and separation of sidewalk from the roadway in front of the house. However, some expressed concern about its large lawn and the water-intensive landscaping. Many others noted that this is not a “typical” Las Vegas home and that this type of property is out-of-reach for many residents.

Of the remaining housing image choices, three and four story mixed use were favored by more than half of respondents (66% and 56%), with the two story live-work and row townhouse images liked by slightly more than half of the respondents (52% each).

Those who preferred the mixed use options noted their support of mixed use in general, particularly if it allowed easy access to work and amenities, particularly for pedestrians. Some respondents and liked the visual design and landscaping, as well as separation from the street and ample space for pedestrians/bicyclists. However, there were others who didn’t like combining residential with retail uses and thought that mixed use creates an artificial environment. They were also concerned about apparent lack of energy efficiency, too much grass used in landscaping, and inadequate parking, access to transit, and space for pedestrians. Several respondents also commented that the row townhomes had too many people living close together. Others supported the idea of townhomes and live/work spaces but did not care for the design. Several people commented that mixed-use housing should include or provide more affordable housing units.

Housing Option #1: Single Family Home

```
<table>
<thead>
<tr>
<th></th>
<th>Like</th>
<th>Dislike</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Home</td>
<td>87%</td>
<td>5%</td>
<td>8%</td>
</tr>
</tbody>
</table>
```

Housing Option #2: Three Story Mixed Use

```
<table>
<thead>
<tr>
<th></th>
<th>Like</th>
<th>Dislike</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Story Mixed Use</td>
<td>66%</td>
<td>17%</td>
<td>17%</td>
</tr>
</tbody>
</table>
```
Housing Option #3: Four Story Mixed Use

Housing Option #4: Two Story Live Work

Housing Option #5: Row Townhouses
**Job Centers**
The job center images were all liked by more than half of the respondents. Small and large downtown employment images were liked by 65% and 66% of respondents, respectively. Responses for other options were as follows: small scale office (64%), large scale office (64%) and light manufacturing (56%).

A few respondents commented favorably on the design and walkability of the downtown employment centers, and the idea of building centers to attract more jobs. The majority of comments, however, addressed concerns such as: lack of pedestrian/bike accessibility and insufficient separation from the street; inappropriate landscaping for the climate—either unsustainable plantings and/or lack of shade; and energy-inefficiency. Several people noted that these places should be more inviting and have less empty space. Many people were concerned with insufficient parking for the downtown options.

**Job Center Option #1: Light Manufacturing**

**Job Center Option #2: Small Scale Office**

**Job Center Option #3: Large Scale Office**
Parks and Community
The images in this category were all strongly supported. The shaded playground and creative space images were the most popular, liked by more than 90% of respondents. Sports activities and the nature trail were supported by more than 80%, while 75% of respondents supported the urban plaza.

Respondents supported the shaded playground because shade is a must for the desert environment and particularly important for children—this would make it easier for them to play outdoors. A few comments noted that it’s important to design playgrounds so that they are shaded all day and to use natural materials as much as possible. A few respondents emphasized the importance of maintenance and upkeep of these spaces.

Respondents commented that the creative space images were eye-catching and looked fun, appealing to both children and adults and supportive of creative play.

They also liked the idea of sports activities for promoting a healthy lifestyle and fostering community, and they liked that many different sports were accommodated. However, several respondents expressed concern about the use of water required. There was also a suggestion that underutilized sports areas at local schools should be used rather than build large new fields.

Respondents strongly supported the idea of nature trails, but were concerned that they be landscaped appropriately for the desert, including adequate shade. They wanted to make sure safety was considered—a few suggested emergency call boxes and a CPTED (Crime Prevention Through Environmental Design) analysis. Some who were not supportive of trails
were concerned about whether these trails would be used frequently enough used to justify the cost of maintenance.

Several liked the idea of an urban plaza, but were concerned about it being right for the climate. They wanted to see more shade, water-smart trees, misters and appropriate groundcover to mitigate the heat.

**Parks and Community Option #1: Nature Trail**

![Nature Trail Image]

<table>
<thead>
<tr>
<th>Nature Trail</th>
<th>Dislike</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like</td>
<td>85%</td>
<td>8%</td>
</tr>
<tr>
<td>Dislike</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>

**Parks and Community Option #2: Shaded Playground**

![Shaded Playground Image]

<table>
<thead>
<tr>
<th>Shaded Playground</th>
<th>Dislike</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like</td>
<td>91%</td>
<td>6%</td>
</tr>
<tr>
<td>Dislike</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

**Parks and Community Option #3: Sports Fields**

![Sports Fields Images]

<table>
<thead>
<tr>
<th>Sports Fields</th>
<th>Dislike</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like</td>
<td>88%</td>
<td></td>
</tr>
<tr>
<td>Dislike</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Neutral</th>
<th>9%</th>
</tr>
</thead>
</table>

Streetscape
The structure shade was among the most highly supported images (89%) in the survey, again revealing the importance of shade in Nevada. The image of a transit center was also highly supported (84%), but several commented that the image in the survey needed more shade and that the metal seating looked uncomfortable and would get too hot in the sun. Concerns about safety and energy use were also noted.

Respondents liked the image of pedestrian improvements (80%), although some comments reflected that some people do not understand what is meant by “pedestrian improvements” based on this image. They commented that they supported the idea of wider sidewalks that are not close to the traffic, as well as more crosswalks. They liked how plantings were integrated as a buffer between the street and sidewalk. There were a few concerns noted about maintenance and the tables in the photo promoting loitering.

The landscape shade option was supported by 73% of respondents. Some commented favorably on the landscape shade image and liked the sidewalk furniture, wide walkway and how it was planted. Several people mentioned the need to balance sidewalk space with appropriate landscaping and shade. Several noted safety concerns including being too close to the road, and shade trees hiding pedestrian traffic, making it dangerous for those crossing the street.
Comments on the public art photo array were mixed (image liked by 73%). Though several commented on how much they loved the idea of public art and how it identifies place, they cautioned that it must be appropriate for the location, placed where it is secure and should use the work of local artists. Others noted that taste in art is very subjective; public art doesn’t appeal to everyone. A few thought it was a waste of public money.

**Streetscape Option #1: Structure Shade**

![Structure Shade](image1)

<table>
<thead>
<tr>
<th>Structure Shade</th>
<th>Dislike 4%</th>
<th>Neutral 7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like</td>
<td></td>
<td>89%</td>
</tr>
</tbody>
</table>

**Streetscape Option #2: Landscape Shade**

![Landscape Shade](image2)

<table>
<thead>
<tr>
<th>Landscape Shade</th>
<th>Dislike 12%</th>
<th>Neutral 15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like</td>
<td></td>
<td>73%</td>
</tr>
</tbody>
</table>

**Streetscape Option #3: Public Art**

![Public Art](image3)

<table>
<thead>
<tr>
<th>Public Art</th>
<th>Dislike 11%</th>
<th>Neutral 16%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like</td>
<td></td>
<td>73%</td>
</tr>
</tbody>
</table>
Transportation
Most transportation images were well received by respondents. Images of light rail, modern streetcar and bus rapid transit (BRT) were liked by participants (85%, 81% and 80%). The bike lane was also received favorably by 80% of respondents.

The bus image received significantly less support, with just under one half of respondents (49%) expressing support. Many comments reflected concern with current bus service, including level of service, frequency, schedules and over-crowding.

Light rail throughout the area—not just downtown, but cross town and to the airport—was supported by many comments, although some thought the high cost is not justified. Some commenters noted that this would be a good option between “nodes” within the city.

Although the modern streetcar image received a very high number of “likes,” and a few positive comments, most comments stated concerns. Several thought the streetcar looked like it was running too close to vehicles and pedestrians, while others were concerned it did not offer enough flexibility. Some respondents cautioned that the BRT must be a truly express service. One commented that BRT needed more bike racks. Several also commented that transit options should be low-emission.
Many supported bike lanes, stating that they are needed all over town, and liked the very visible lane marking shown in the image. However, several noted that they need to be wide and separated from vehicle traffic and not used by pedestrians. They expressed concern that local drivers are not considerate of bicycle traffic.

Transportation Option #1: Bus

Transportation Option #2: Light Rail

Transportation Option #3: Bus Rapid Transit
Transportation Option #4: Bike Lane

Like 80%
Dislike 8%
Neutral 12%

Transportation Option #5: Modern Streetcar

Like 81%
Dislike 8%
Neutral 11%
**Opportunity Site Results**

Participants were asked to provide comments on one of four opportunity sites in the following categories: safety concerns, public transit improvements, parks and recreation, transportation, community services and other. Respondents could also use the mapping tool to place markers in locations where they would like to see these improvements.

The following is a brief summary of the comments in each category by opportunity site and the distribution of the improvement makers. Please note that comments for transportation and public transit have been combined due to the overlap and mix of modes mentioned by respondents.

**Boulder Highway**

Site markers indicate that the primary improvements needed in this area are for safety, public transit improvements, and transportation as shown in the table below. A total of 953 markers were placed for this opportunity site. The majority of markers were located at the intersection of Boulder Highway, Gibson and Broadbent.

**Figure #3: Boulder Highway Opportunity Site Markers**
Safety Concerns: Comments indicate that the area would benefit from safety improvements such as improved lighting and more crosswalks. Jaywalking was a significant issue and it was suggested that some physical improvements might be needed to curtail these activities and improve safety for all users.

Safety concern markers most often reflected crime, vehicle/pedestrian conflicts and the need for crosswalks.

Transportation and Public Transit Improvements: There were suggestions to increase bus service by adding new routes and additional bus stops and make the area more bike-friendly. Light rail was mentioned along with a park and ride closer to the Galleria to facilitate commuter express transit.

A majority (81%) of transit improvement markers focused on bus service, including additional routes and stops and improvements to stops and shelters.

Parks and Recreation: There were suggestions to add a pool/splash pad and more trails near the wetlands park.

Community Services: There were suggestions to provide child care and mental health services.

Access Issues: There were several suggestions to improve access, connecting 215 to the 515 and connecting Sloan to Vegas Valley.
Las Vegas Medical District

Site markers indicate that the primary improvements needed in this area are for safety, parks and recreation and public transit improvements, as shown in the table below. A total of 1107 markers were placed for this opportunity site. Markers were relatively evenly distributed throughout the site, with the exception of the northern-most blocks.

Figure #4: Las Vegas Medical District Markers
Safety Concerns: Respondents were concerned about jaywalking and drivers exceeding the speed limit. The majority of safety concern markers were focused on vehicle and pedestrian conflicts (33%) and crime (28%).

Transportation and Public Transit Improvements: Respondents want increased and more frequent transit service and improved bus stops. One participant suggested reinstating the old 401 bus route that connected the area to government. It was also suggested that light rail would be a logical addition to Charleston Boulevard. Some concerns were expressed about how Project Neon would impact the area.

A majority (70%) of transit improvement markers focused on bus service, including additional routes and stops and improvements to stops and shelters.

Parks and Recreation: The addition of a park would a great addition to the area, and support wellness as promoted by the medical facilities. The old health district parking lot was suggested as a possible location.

Community Services: There were suggestions to provide a job training center that is run by UNLV. The proximity to existing medical facilities would make it a good location for additional services such as mental health services and services for the homeless.

Access Issues: Project Neon was identified as a major impediment for bicyclists and pedestrians. Sidewalk improvements are needed in the area for pedestrians. There were several suggestions to improve access, connecting 215 to the 515 and connecting Sloan to Vegas Valley.
Other: The site generated numerous comments in this category, with some participants commenting positively on the area and other identifying the need for improvements and an overall “facelift” to the area.

Downtown North Las Vegas
Site markers indicate that the primary improvements needed in this area are for safety, parks and recreation and community services, as shown in the table below. A total of 1,838 markers were placed for this opportunity site. Markers were relatively evenly distributed throughout the site, with many markers centered along Las Vegas Boulevard.

Figure #5: Downtown North Las Vegas Opportunity Sites Markers
Safety Concerns: There were numerous comments about safety in the area—many residents feel unsafe. The presence of homeless was intimidating for some. Also unsafe crosswalks and insufficient lighting were also identified as making the area feel less safe.

Parks and Recreation: A central park was suggested along with areas to support exercise.

Transportation and Public Transit Improvements: Respondents wanted improved bus shelters that were safe, included wayfinding information and were better distributed throughout the area. It was suggested the team consider adding shuttle buses to loop around the downtown area. Light rail could also be integrated—connecting from Boulder Highway to the airport down Maryland Parkway to the Strip, then downtown and on to downtown North Las Vegas.

It was suggested that widening sidewalks along Lake Mead Boulevard would be helpful. New road striping and a mid-block crosswalk near McCall Elementary School and the park on Donna would be helpful. One commenter suggested raising the speed limit.

Community Services: Few comments were received. One participant suggested providing signage so people could better locate services.

Access issues: The only comment made centered on the need for major repairs to local roads and highways.

Other: One commenter suggested giving some parcels away to developers to stimulate improvements in the area. Other suggested that more stores, signage and lighting could help improve the area.
Maryland Parkway
Site markers indicate that the primary improvements needed in this area are for safety, with relatively even support for parks and recreation, public transit and transportation improvements. A total of 1,395 markers were placed for this opportunity site. Markers were relatively evenly distributed throughout the site along Maryland Parkway, with the exception of the north end.

Figure #5: Maryland Parkway Markers
Safety Concerns: The area where Maryland splits into Maryland and 13th Street was identified as a dangerous location. There were comments about crime and panhandlers in the area. Some crosswalks were considered unsafe. One respondent suggested eliminating the pedestrian bridge due to its lack of use. They also called out numerous pedestrian vehicle conflicts that occurred.

Transportation and Public Transit Improvements: Respondents wanted improved bus stops with more shade and better “real-time” information about the buses. There were also suggestions to add: a park and ride facility, and a center bus-only transitway. Several respondents suggested light rail for the area, as well.

Bike lanes and elevated crosswalks would help improve conditions for pedestrians and bicyclists. Some crosswalks also needed improvements.

Parks and Recreation: It was suggested there be continuing work on Circle Park to make it fully functional. There were safety concerns expressed about the existing parks and adults loitering. The soccer field should be improved.

Community Services: Services for the homeless were suggested.

Other: This site attracted a number of comments in this category. Some participants urged that the area should be cleaned up and made more appealing. It was suggested that a fiber-optic communication program be installed the length of the parkway. Landscaping would be a valuable addition. And as a university corridor, it should be enhanced to help attract more students and faculty to the area.
B. Opportunity Site Workshop Surveys and Results

In May of 2014, SNS conducted four community workshops to seek public input on the site possibilities for the four opportunity sites. The workshops were held in an open house format that allowed participants to move at their own pace through six stations while providing feedback and engaging in conversation with members of the project team. During the workshops, participants were surveyed regarding:

- Their level of agreement with general statements reflecting the main themes of the outreach conducted to date; and
- Their opinion of whether various images for site possibilities, based on the preliminary analysis, would be the appropriate for each site.

Below is a summary of participants’ responses. Note that for the outreach statements, green dots indicate that respondents agree with the statement; yellow dots indicate neutrality; red dots indicate that respondents disagree with the statement.

**Boulder Highway**

**Outreach Statements**

1. The Boulder Highway opportunity site is close to major facilities and good infrastructure. (25 green dots, 1 yellow dot)
2. We should explore ways to improve Boulder Highway so that it is safer and easier for people to walk and bike. (25 green dots, 1 yellow dot, 1 red dot)
3. Narrowing Boulder Highway so there is more room for bikes, pathways and transit should be considered. (10 green dots, 3 yellow dots, 12 red dots)
4. The area would benefit from improved transit service. (19 green dots, 5 yellow dots, 3 red dots)
5. The feasibility of light rail in this area should be explored. (14 green dots, 6 yellow dots, 8 red dots)
6. The Boulder Highway could use more housing that serves different income levels. (6 green dots, 6 yellow dots, 15 red dots)

**Site Possibilities**

**Retail:**
- Mixed-uses with ground floor retail—3
- Single-tenant commercial—4
- Larger scale shopping with a mix of services—12

Respondents commented that they preferred 1- and 2-story buildings to preserve the view and smaller scale businesses.

**Housing:**
- Two-story condominiums—5
- Two-story condominiums and apartments—5
• Three- to four-story apartments—1

Respondents expressed concerns that owner occupied housing is needed since renters don’t respect property as much.

Open Space:
• Public plazas with water features—9
• Larger open spaces and pathways—5
• Small open spaces and landscaping—3

Mobility:
• Four-lane street with median and separated sidewalk—7
• Two-way bus transit lanes—1
• Off-street shared-use pathway—7

**Las Vegas Medical District**

Outreach Statements
1. We should consider expanding the Medical District’s southern boundaries and better connecting facilities adjacent to the district, including METRO, Smith Center, Government Center. (10 green dots, 4 yellow dots, 0 red dots)
2. We should consider adding a medical school and opportunities for clinical research education. (12 green dots, 1 yellow dot, 0 red dots)
3. Medical services should be available 24/7 to accommodate the 24/7 Las Vegas community. (11 green dots, 2 yellow dots, 0 red dots)
4. We need more housing choices and amenities with easy access to hospitals for on-call residents. (13 green dots, 1 yellow dot, 0 red dots)
5. The Medical District needs additional services and amenities including child care, parking that is closer together, and wayfinding improvements. (13 green dots, 1 yellow dot, 0 red dots)

Site Possibilities

Retail:
• Small scale multi-tenant (Neighborhood retail)—2
• Single-tenant (Neighborhood retail)—0
• Mixed-use (District supportive)—12
• Entertainment/retail (District supportive)—10

Housing:
• Two-story townhouses—4
• Four- to five-story condominiums—4
• Multi-story apartments—4
• Multi-story student housing—5
Office:
- One- to two-story medical offices—1
- Multi-story medical office with ground floor retail—10
- Multi-story medical office—3

Several participants commented that they'd like to see a multi-story office with ground floor retail as the core of the district, with more restaurants and coffee shops along with a full medical school. Participants also suggested that one- to two-story medical offices be located along Charleston.

Underpass:
- Non-motorized underpass—4
- Visual interest underpass—5
- Shared motorist/non-motorist underpass—12

Pedestrian/Bike Circulation:
- Separated pathways—4
- Bike lanes and separated sidewalks—11
- Marked crossings and pedestrian refuges—8

Open Space:
- Murals and public art—12
- Central gathering area and spray ground—7
- Landscaped plazas—10

Parking:
- Integrated parking structure (parking on top level)—10
- Multi-story parking structure with ground floor offices—7
- Multi-story parking structure with design façade—3

Participants suggested that the integrated parking structure mimic the style of other local buildings.

Downtown North Las Vegas

Outreach Statements
1. Downtown North Las Vegas is the gateway to our City—it needs to serve as a true destination and be something we are proud of. (14 green dots, 4 yellow dots, 0 red dots)
2. Safety improvements are critical. More lighting, better transit shelters and more security are some of the ways we can achieve this. (14 green dots, 1 yellow dots, 0 red dots)
3. A community plaza and local parks are important amenities that can help improve the area. (13 green dots, 4 yellow dots, 0 red dots)
4. We need to encourage local businesses and grow services that meet the needs of people who already live here. As the downtown becomes more vibrant, we will be able to attract businesses and visitors from outside the city. (*16 green dots, 2 yellow dots, 0 red dots*)

**Getting Around North Las Vegas**
During the Downtown North Las Vegas workshop, participants were asked to view a map listing options for ways to get around and were asked to identify which they used by placing dots under those options. First, they were asked to identify the streets that they typically use to get to and from North Las Vegas, and responded as follows:

- Carey Ave.—6
- North Fifth Street—3
- Lake Mead Blvd.—6
- Las Vegas Blvd.—6
- Other Street—5 (I-15, Civic Center)

Next, participants were asked to place a dot under the modes of transportation they typically rely on to get to and from North Las Vegas, and identified the following:

- Drive Alone—12
- Carpool—3
- Walk or Bike—5
- Take the Bus—3

**Site Possibilities**

**Market Space:**
- Outdoor market space—10
- Indoor market—6

One participant made a note regarding the Nevada cottage food law restricting food product sales, possibly referring to the earlier comment made about restaurants being allowed to serve food outside.

**Mixed use:**
- Retail and apartments/condos with outdoor seating—10
- Retail and offices—8

**Retail:**
- Single-tenant—7
- Small scale multi-tenant—3
Housing:
- Single family detached—8
- Two-story condominiums—7

Open Space:
- Plaza with spray ground—11
- Plaza with landscaping—8

A participant expressed the need for community space hosting activities such as boxing, soccer, singing and cultural events.

Streetscape:
- North Fifth Street—5
- Las Vegas Boulevard (South)—9
- McDaniel Street—10
- Lake Mead Boulevard—5
- Gateway Signage—6

One participant noted that bricks alone aren’t sufficient to communicate to drivers that they must slow down for approaching crossings; other features are needed to help make this obvious.

Maryland Parkway

Outreach Statements
1. Maryland Parkway has a lot to offer to the region and its surrounding neighborhoods. With the airport located at one end and hospitals, UNLV, and residential communities in between, its assets are rich and varied. (34 green dots, 1 yellow dot, 4 red dots)
2. Maryland Parkway would benefit from activities that improve its streets, including widening sidewalks, adding landscaping and shade, and integrating public art and other amenities. (32 green dots, 6 yellow dots, 0 red dots)
3. Maryland Parkway would benefit from having better and more frequent transit service, dedicated bike lanes and intersection improvements that make it safer for pedestrians. (38 green dots, 6 yellow dots, 6 red dots)
4. Maryland Parkway is a series of distinctive neighborhoods that include a variety of housing types. The area would benefit from better integrating student housing and including more housing that is affordable to a wider range of income levels. (27 green dots, 7 yellow dots, 2 red dots)

Site Possibilities

Housing (9 dots on whole category):
- Two-story townhouses—8
- Multi-story condominiums—8
- Multi-story apartments—6
• Multi-story student housing—6

Retail (4):
• Services—5
• Neighborhood serving retail—8
• Cafes and convenience dining—13
• Shopping centers with internal circulation—10

Mixed Use (12):
• Housing above retail—7
• Office above retail—6
• Office and housing above retail—4
• Mixed use development wrapping parking structure—9

Public Art (12):
• Public art integrated into transit stations—6
• Cultural trail with art installations—7
• Gateway monuments and sculptures—6
• Mosaic tiles in sidewalks—3

Pedestrian Amenities (13):
• In sidewalk multi-use pathway—9
• Covered transit stops with furnishings—11
• Sidewalk shade structure—6
• Highly visible and decorative crossing—12

C. Telephone Town Hall

On May 29, 2014, SNS hosted a Telephone Town Hall (TTH) designed to allow participants to receive information about the process and respond to polling questions using their telephone key pad. Two town halls were conducted: one in English and another in Spanish. SNS dialed out to approximately 20,000 low-income and Spanish speaking residents to participate in the call. Approximately 200 people participated and their responses to the telephone polling questions were consistent with many of the findings from other outreach sources.

D. Focus Groups

In June of 2014, seven focus groups were conducted to collect information for the Regional Analysis of Impediments (RAI). The RAI is a study that is required in any area that receives federal funding for subsidized housing and assesses whether people have the freedom to choose where they live solely based on their budget or if other factors limit their choices.

Focus group participants included: representatives from low-income minority households, families with children, single female heads of household, persons with Limited English
Proficiency (LEP), persons with disabilities and community- and faith-based organizations that serve the above mentioned groups. The survey questions below were adapted from materials provided by HUD. Participants were screened in advance to ensure participants were representative of the requested demographics.

SNS gained valuable insight into the challenges that low-income and minority families face when they are looking for housing in the Southern Nevada Region. Some participants had found their current housing with support from the Southern Nevada Regional Housing Authority. Several participants expressed concerns for safety where they lived; they had difficulty moving to a safer location due to higher costs and the application process. A key finding was that most landlords require that applicants pay an application fee to cover the costs of a background check. The fee was applied to each adult who will live in the residence. An applicant may end up paying $50 - $100 per location. This incentivizes the landlord to accept as many applications as possible for a property. Some participants explained they felt they continue to be penalized for poor rental history that is more than a decade old. When asked to describe their neighborhood, several participants spoke positively about where they lived, noting their location was well-served by transit and had recreation and community facilities nearby.

Consistent with SNS outreach findings, many of these participants expressed support for increased public transit and community amenities and investments that would improve safety for pedestrians and reduce neighborhood crime.

E. Review Comments on Draft Regional Plan

At all outreach activities throughout Phase 3, participants were reminded of the opportunity to review the draft regional plan, available for online review as a dynamic document. A variety of methods for giving input were provided, including: iPads available at workshops and outreach events; and emails directly to Southern Nevada Strong. A total of 68 comments were received from a wide range of stakeholders and community members, including residents, agency representatives, local government officials and members of the Consortium Committee.
Appendix E – Public Engagement Plan
Southern Nevada Strong

Sustainable Communities Regional Planning Process
Public Engagement Plan

February 2013
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Southern Nevada Strong
Sustainable Communities Regional Planning Process
Public Engagement Plan

I. Introduction / Approach

The City of Henderson, on behalf of the Southern Nevada Regional Planning Coalition (SNRPC), has developed this Public Engagement Plan (PEP) to guide public involvement efforts and increase participation by stakeholders and the general public in developing a Regional Plan for Sustainable Development (RPSD). The intent of the RPSD is to guide the SNRPC and local governments as to the physical development of the region through investments in infrastructure and amenities, land use policies and other catalytic programs and projects.

The purpose of the Public Engagement Plan is to:

- Identify the range of stakeholders and interested parties who will provide input into the Regional Plan;
- Describe outreach, education and engagement methods that will ensure that a broad spectrum of stakeholders and the general public have access to, and influence in, the planning process;
- Identify the timing and sequence of activities in relation to planning milestones; and
- Establish a set of performance measures by which the effectiveness of the public engagement program may be evaluated.

APPROACH

The PEP encompasses a range of tools to reach the diverse audiences. Methods are based on research conducted for state and regional transportation agencies and are designed to “meet people where they are.” The objective is to make it easy, convenient, and fun for people to participate.

Process tools are designed to achieve three (3) objectives:

**Outreach** — These are the tools used to raise awareness, get people interested and publicize education and engagement opportunities.

- Branding
- Communications and messaging
- Media Relations
- Website
- Social media

**Educate** — These are the tools used to inform and educate people about the key planning issues and challenges and provide a foundation of facts that help people make informed decisions. These tools will be updated regularly throughout the project.
Engage — These are the tools used to obtain input and foster dialogue with stakeholders and the public.

- Interviews
- Briefings
- Focus groups
- Web-based tools
- Telephone Town Halls
- Surveys
- Interactive community workshops
- Open houses
- Community toolkits

The tools are designed to help stakeholders and the public weigh in at specific points where their input can influence the process. The public outreach, education and engagement activities will be accomplished through the “Southern Nevada Strong” project brand. For the purposes of the Public Engagement Plan, these terms may be used interchangeably. Also, communications with the media will be required throughout the Plan. These activities are discussed more specifically in the communications strategy.
II. Goals, Guiding Principles and Performance Measures for the Public Engagement Program

A. GOALS

The public engagement program will offer opportunities for the public and key community, business and civic leaders, as well as the staff and elected officials of local agencies and jurisdictions, to be involved in the RPSD process. In particular, the program will seek out and consider the viewpoints of minority, low-income and limited-English proficiency (LEP) populations in the course of conducting public outreach and involvement activities. Specific goals and outcomes for the Public Engagement Process include:

- **Build Relationships**
  Create opportunities for stakeholders and the general public to meet and engage with others interested in helping to improve economic and social conditions in the region.

- **Create Opportunities for Inclusive Participation**
  Invite all to come to the table to influence the content of the RPSD and the future of the Southern Nevada region by providing multiple and varied opportunities for meaningful input.

- **Inform Decision-Making**
  Provide stakeholder and public input that reflects local values, is useful and relevant, and informs decision making related to the RPSD.

- **Build Long-Term Capacity for Civic Engagement**
  Help those engaged through this process to stay involved and increase their capabilities to communicate not only concerns and issues, but proposed solutions and strategies necessary to realize the Plan.

**Outreach to Agency Partners and Decision-Makers**

- **Build Staff Awareness of RPSD**
  Foster staff and decision-makers’ understanding of the RPSD process and provide opportunities for their involvement.

- **Include Staff in Outreach and Engagement Activities**
  Involve staff in PEP process as leaders, facilitators and observers.

- **Consult, Communicate and Collaborate**
  Ensure that the RPSD reflects best practices, professional and technical expertise with regard to housing, transportation, land use, economic development, environmental quality and social equity. Foster new and leverage existing relationships. Create a shared understanding of and commitment to the Regional Plan and its implementation as a guiding framework for sustainable development.
B. GUIDING PRINCIPLES

The PEP is based on the following principles:

- **Inclusive, Flexible, Scalable and Tailored**
  The Project Team will proactively reach out and engage a full range of stakeholder groups, including low-income, minority and limited-English proficiency (LEP) populations from within the region. Activities will also be timed to address the 24 hour economy of the region. The public participation process will accommodate engagement in a variety of settings, for both individuals and different size groups, and will be tailored to match local and cultural preferences to the greatest extent possible.

- **High-Touch and High-Tech**
  We know that many people respond to the personal touch. Outreach toolkits allow trained project representatives to go out into the community and reach people in small group settings and in their preferred language. Many of these same materials will be adapted to the digital environment – e.g., interactive surveys, a web-based priority setting exercise or a “choose your preferred scenario” exercise. Adapting these same tools to the iPad and smartphone will help reach thousands of users, especially those who typically don’t attend or prefer not to attend traditional meetings.

- **Clear, Focused and Understandable**
  Activities will have a clear purpose and use for the input, and will be described in language that is easy to understand.

- **Trustworthy and Respectful**
  Information provided will be accurate and trustworthy, and all feedback received will be given careful and respectful consideration.

- **Transparent in Impact and Responsive**
  The Project Team will communicate the results of the public’s input in terms of the impact on decisions at a broad summary level, providing the major themes, the decisions reached and rationale for the decisions.

- **Authentic and Meaningful**
  The Project Team will support public participation as a dynamic and meaningful activity that requires teamwork and commitment at all levels of the organization.

C. PERFORMANCE MEASURES

The public engagement program will be assessed according to its ability to reach specific participant groups and achieve targeted objectives. These are:

- **Accessibility** of the outreach process to serve diverse geographic, language and ability needs;
- **Extent**, or reach, of the process in involving and informing as many members of the public as possible;
- **Diversity** of participants in the outreach process, and its ability to reflect the broad range of ethnicities, incomes and special needs of the region;
• **Impact** of public outreach and involvement on the Regional Plan and on the SNRPC Board’s actions; and
• **Satisfaction** with the outreach process expressed by participants.

**Outreach Targets and Measurements**

**Accessibility**

• All formal meetings will be held in ADA accessible locations.
• All formal meetings (workshops and open houses) will be held at venues that are served by public transit 100% of the time.
• All formal meetings (workshops and open houses) have translated materials and interpretive services that allow participation by Spanish-speaking residents.
• Web-site has translation feature that allows translation into Spanish (and other languages as technology permits).
• Engagement activities will be scheduled at varying times to allow participation by those with work schedules influenced by a 24 hour economy.

**Extent, or reach, of the process**

• Southern Nevada Strong will be publicized broadly using an array of methods that allows one percent of residents in the region to participate in some outreach activity.
• An electronic mailing list of at least 15,000 names will be developed to facilitate direct electronic communications.
• Participation goals will be set for the following individual methods at each phase of the project:
  ▪ Web and print surveys
  ▪ Outreach toolkit responses
  ▪ Workshop and Open House attendance
  ▪ Web usage
  ▪ Facebook usage

**Diversity of participants**

• The participation, considered collectively on a percentage basis for all methods, will mirror the demographics of the region and/or the specifics of the targeted area or community.
• Efforts will be made to reach 30% of the population that identifies as Hispanic. We assume that these participants may prefer to communicate in Spanish, so translated materials and interpreters or bi-lingual staff will be available at in-person events.
• Outreach activities will routinely collect participant data to help assess how well we are reaching an ethnically diverse population of residents.
Impact of public outreach and involvement on the Regional Plan and on the SNRPC Board’s actions

- Impact will be measured based on the Plan and Board’s ability to respond to public comment. This will be evaluated based on a review of the number of comments received on the Plan and the Board’s response.
- This will also be measured based on surveys or questionnaires that help determine an increase in knowledge and understanding of the regional issues.

Satisfaction with the outreach process expressed by participants

- Participant satisfaction will be determined based on evaluations conducted as part of the engagement activities.
III. Methods by Targeted Group

Stakeholder and public input is critical to the process. The PEP seeks to recommend the right method to the right audience. Please assume that methods to reach the general public apply to all groups. In this section, we are highlighting the additional or selected methods needed to reach the following community groups and organizations.

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<td></td>
<td>- Unions</td>
<td>- One on one communications</td>
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<td>- Major landowners</td>
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<td>- Major Employers</td>
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<td></td>
<td>- Other</td>
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</table>
IV. Phase-Based Engagement Activities

The Public Engagement Program is organized into phases that relate to milestones in the Plan development process. Some of the public engagement activities will provide feedback on and/or input to multiple Plan milestones.

PHASE 1: ASSESSMENT OF EXISTING CONDITIONS

Task 1A: Phase 1 Outreach

Initial outreach activities will be conducted by phone, e-mail and in-person contact with key individuals identified by staff and consultant team members. An extended list of stakeholders will be created, with the contact information coded by affiliation and interest group and other factors. The outreach list will be updated regularly throughout the project.

Task 1B: Phase 1 Education

Initial education materials include the creation of a basic fact sheet and project description to help get the project underway.

Task 1C: Stakeholder Interviews

The Project Team will identify a group of 30 to 40 opinion leaders, community representatives and advocates to participate in face-to-face interviews. These conversations will include the set of questions listed above in Task 1A, and will ensure that both the Existing Conditions Report and the Vision Document will incorporate input from these key constituents. A report summarizing the findings will be prepared.

Task 1D: Web Survey of Stakeholders

The Project Team will identify a group of about 50 opinion leaders, community representatives and advocates to receive a web-based survey seeking their input on a community vision and key issues and concerns. The web survey is designed to supplement the information collected through the stakeholder interviews. A summary of the results will be incorporated into the stakeholder interview summary.

Task 1E: Digital Engagement

The Project Team will create a dedicated website for the RPSD process that will provide a home for digital engagement activities and support the implementation of activities using social media. The site url is www.SouthernNevadaStrong.org. The site will include a description of the goals, objectives, roles, responsibilities, milestones and activities associated with the Plan development process. It will provide links to relevant documents, including background studies, technical and demographic data and reports. There will be notifications of events and public participation activities, agendas and minutes from the meetings and workshops conducted in the process; and there will be opportunities for stakeholders and the general public to provide input.
and feedback at critical junctures throughout the program. A landing page will be created to provide basic information while the site is in development.

There will be a soft launch of the site in December 2012, and it will continue to be populated in advance of the formal project launch in February 2013.

**Task 1F: Consortium Committee**

The Project Team will convene the first meeting of the Consortium Committee. The meeting will focus on group confirmation of the Consortium charter and operating principles and direction on public engagement activities such as the project brand and logo.

**Task 1G: Task Groups**

Six Task Groups will be established by the Project team, with the chairperson appointed by the SNRPC Board. Task Groups are comprised of subject matter experts in the following fields: Economic Development, Transportation, Healthy Communities, Environment, Housing and Public Engagement. The purpose of the Task Groups is to refine, synthesize and prioritize input received through the public engagement process and data analysis to help the Project Team create the content that will constitute chapters of the RPSD for consideration by the Consortium Committee. Each Task Group will have a charter, schedule, leadership structure, and staff and consultant support. The Task Group will be launched in January 2013 and their activities will be closely aligned with the Public Engagement Plan. Throughout their work schedule, they will also be given the opportunity to suggest topics or questions on which they would like to receive input.

**Task 1H: Results Documentation**

The results of each of the activities conducted above will be documented and analyzed to present the key findings in a manner that allows for results across methods to be compiled, presented and compared. The documentation also serves to provide input to the Project Team and transparency to the process. The participation activities will also be quantified and presented in a manner that allows for use in the Public Engagement evaluation.

**PHASE 2: VISION AND GOAL SETTING**

**Task 2A: Phase 2 Outreach**

Outreach activities will focus on publicizing the Regional Forum to be held on February 8, 2013. This will be accomplished by a “save-the-date” e-mail sent to a group of 300+ community leaders in early December. More targeted invitations will be sent by mail, e-mail and telephone in early January 2013. The goal is to have about 200 participants from a broad array of interests at this event. This event will also serve as a launch for the project’s Facebook page. A social media strategy will be developed to support and enhance the outreach. This is described in Task 2C in the section below.
**Task 2B: Phase 2 Education**

Education materials for this phase include a description of the Regional Forum, including the agenda, highlighted speakers and the desired goals and outcomes. This information will be incorporated into the invitation (all formats), with more detailed information posted on the website. Project documents related to content that will be discussed at the forum, such as the Existing Conditions report, will be posted on the project website.

**Task 2C: Social Media Strategy**

A social media strategy will be developed to launch the project Facebook page and to provide guidance and direction on how social media will support the outreach, education and engagement activities needed for this and future phases of the project.

**Task 2D: Regional Forum**

The Project Team will sponsor a region-wide event on February 8 that will serve to launch the RPSD process in a very visible and participatory manner. Attendees will come from the full range of stakeholders, advocacy groups and community organizations, and will engage in a highly interactive agenda, culminating in a call to action that will spur commitment to ongoing participation. This half-day event is scheduled for February 8, 2013. A summary report documenting the results will be prepared and posted on the project website.

**Task 2E: Digital Engagement (Web-based Tools)**

In concert with the formal launch, the project website will prominently feature a digital engagement activity to get those visiting the website involved right away. The activity will be designed to solicit responses to the following topics and questions:

- What do you value about your community today?
- What do you consider to be the assets of the Southern Nevada region?
- What do you believe are the major issues the region faces for the future?
- What is your vision for the future of the Southern Nevada region?

Along with providing response to closed and open-ended questions, participants will be able to geo-locate their responses on a map of the region. This will generate a rich visual database of information from a broad spectrum of residents and stakeholders.

**Task 2F: Telephone Research Survey**

A statistically valid telephone survey will be conducted to collect baseline information about people’s opinions related to key issues and services in the community. Calls will be made to approximately 600-800 residents, with oversampling done to ensure participation of low-income and Spanish-speaking residents and cell-phone only households.
**Task 2G: Telephone Town Hall**

A telephone town hall will be conducted to engage the broader community and introduce the public to the planning process. The calls will provide an opportunity for participants to ask questions and respond to polling questions during the call.

**Task 2H: Briefings and Presentations**

The Project team will begin conducting briefings and making presentations to stakeholders and agency representatives as needed.

**Task 2I: Results Documentation**

The results of each of the activities conducted above will be documented and analyzed to present the key findings in a manner that allow for results across methods to be compiled, presented and compared. The results will be used to help the Project Team craft a draft vision and goals statement.

**PHASE 3: METRIC DEVELOPMENT**

**Task 3A: Phase 3 Outreach**

Outreach activities will focus primarily on communications with Task Group members. This will be done by phone and e-mail to ensure their attendance at their group’s meetings.

**Task 3B: Phase 3 Education**

Education materials for this phase include technical reports, public participation results and other background information. Reports and reference documents may also be posted on the project website.

**Task 3C: Task Groups**

The Task Groups will identify a set of strategies and metrics – i.e., the top priority outcomes or issues that can be measured through the planning process – that will serve as an evaluation framework for the Plan and implementing strategies.

**Task 3D: Consortium Committee**

The Consortium Committee will meet to review and accept the goals and desired future as recommended by the Task Groups. The Committee also confirms the goals and desired future and recommend to the Board for their adoption.

**Task 3E: SNRPC Board**

The SNRPC will receive and adopt goals and desired future.
**Task 3F: Results Documentation**

The process for coming to agreement on the goals and desired future will be documented, along with the results of the Consortium Committee meeting.

**PHASE 4: SCENARIO DEVELOPMENT**

**Task 4A: Phase 4 Outreach**

Outreach activities will focus on publicizing the opportunities to solicit public input on the scenarios. Activities will be publicized in both English and Spanish and include print and electronic notifications, web and social media postings, and communications channels available through the agency partners.

**Task 4B: Phase 4 Education**

Educational efforts will focus on creating visually-appealing, short and easy to understand materials that help explain how the vision and goals for the region can be advanced, through a range of policies, projects and programs. These ideas will be packaged into a set of alternative scenarios that can be modeled and evaluated in future phases.

**Task 4C: Task Group – Meetings 1 &2-Phase 4**

Early in this phase, the Task Groups will meet with the consultant team to develop and refine goals, priorities and metrics and provide input into the scenario planning options.

**Task 4D: Workshop with Baseline Scenario**

A series of workshops will be held to engage key stakeholders, local agency staff and the general public in providing feedback to inform the development of alternative scenarios. A scenario is basically a map that shows how a community vision could be achieved depending on the land use policies, transportation investments, economic development initiatives, environmental resource policies and other topics emphasized in the process. A baseline scenario will be shared with the group to show current conditions and how future growth would play out in the absence of this process. Each workshop will involve a presentation and facilitated discussion groups to engage participants in a dialogue around the following themes:

- **Land Use**: Location and type of residential, commercial, civic uses
- **Transportation**: Improvements to transit, bicycle, pedestrian and auto infrastructure and connectivity
- **Economic Development**: Incentives for attracting and retaining local and regional businesses; enhancing workforce preparedness
- **Environmental Resources**: Programs to protect and enhance open space, water and natural resources
- **Community Development**: Strengthening neighborhoods through education, partnerships and public investment
Workshop objectives include:

- Inform participants about how the Vision and Goals can be achieved through alternative scenarios with varied results;
- Gather participant input, refinements and preferences regarding the scenarios; and
- Clarify next steps and further opportunities for input.

The first workshop with a baseline scenario will be conducted with Consortium Committee members. This meeting will be publicly noticed. This will be followed up by a similar workshop that targets the participation of professional stakeholders and agency staff. This workshop will be by invitation and conducted during the day. Following this, 2-4 public workshops will be held in different locations throughout the region to engage the public and get their feedback.

**Task 4E: Events / Toolkit / Project Champion Presentations**

To reach those who are unable or don’t choose to attend the community workshops, the Consortium will create a portable, scalable version of the workshop activity described above into a toolkit of materials in both print and digital formats. These toolkits, consisting of background information, maps and images, a discussion guide and feedback forms, will be used to support a series of conversations held at local venues, hosted by local community partners. The toolkit can also be adapted and formatted for deployment on iPads and smartphones. We believe that both the “high touch and high tech” versions of the kit can attract participation by a wide range of users, and engage and attract those who are new to technology. These activities will also be adapted so they can be integrated into community events throughout the region.

Members of the Project Team, Consortium Committee, Task Groups, agency staff and organizational representatives will be trained in the use of the toolkit. Collectively, they will be identified in the process as “Project Champions.” The kit will be deployed in a targeted manner to ensure participation by a cross section of residents in the region. Materials will be translated into Spanish to ensure participation from Spanish-speaking residents. Results will be compiled and analyzed.

**Task 4F: Digital Engagement**

The Project Website will host a variation of the toolkit as described above. The interface will be adapted for use on an iPad, smart phone and computer. This adaption of the toolkit allows individuals to participate at a time convenient for them.

**Task 4G: Workshops to Present Goals and Three Alternatives for Desired Future**

Workshops will be held to present the goals that were developed through the public engagement activities conducted and to present the three alternatives that show how the vision might be achieved. The workshops conducted include: a workshop with the Task Group members, a joint work session with the Consortium Committee and SNRPC Board, and 2-4 public workshops.
**Task 4H: Web Survey**

A web survey will be conducted to get community input on the goals and three alternatives. The availability of the survey will be publicized broadly through a variety of methods.

**Task 4I: Targeted Meetings**

Targeted meetings will be conducted to reach and solicit input from low-income, minority and Limited-English speaking residents. These meetings will be conducted by staff and Project Champions, especially those with bi-lingual abilities.

**Task 4J: Task Group Meeting 3 — Phase 4**

The Task Groups will meet again during this phase to hear the results of the public input and continue to develop the goals, priorities and metrics.

**Task 4K: Consortium Committee**

The Consortium Committee will be fully briefed on the process for scenario development and confirm the preferred scenario for adoption by the Board.

**Task 4L: SNRPC Board**

The Board will review and adopt the preferred scenario.

**Task 4M: Results Documentation**

The results of the public engagement activities will be documented and summarized in a manner that allows convenient use by the Project Team. It will also allow the results to be compared based on the tool used, demographics, language and other factors.

**Task 4N: E-Updates on Plan**

Short electronic updates will be provided on the Plan throughout the process and at key milestones.

**PHASE 5: DEMONSTRATION PROJECT STUDIES**

**Task 5A: Phase 5 Outreach**

Activities will be conducted to publicize a series of local community meetings and gatherings in the project area. Meetings will be publicized through print and on-line methods and through coordination with organizations and agencies within the project area.
Task 5B:  Phase 5 Education

Education activities will focus on providing information about the demonstration projects, why they were selected and the desired outcomes.

Task 5C:  Task Groups

The Task Groups will review a list of potential projects that have been suggested by business, civic and community stakeholders, and identify a set of these that can serve as part of a demonstration program to demonstrate positive impact on the priority issues and indicators. The demonstration projects should help test the planning scenarios and the capability for collaborative action in a variety of communities within the region.

Task 5D:  Consortium Committee

The Consortium Committee will receive a recommendation from the Task Group regarding the demonstration projects and approve the selection.

Task 5E:  Community Meetings: Pilot Projects

The Consortium Committee will sponsor a series of meetings within the communities in which the demonstration projects will be implemented. The meetings will describe the projects’ scope, objectives and relation to the regional planning process, as well as provide a forum for community networking and input on the implementation and evaluation effort.

Task 5F:  Results Documentation

The results of the community activities regarding the demonstration projects will be documented.

PHASE 6:  IMPLEMENTATION STRATEGIES

Task 6A:  Phase 6 Outreach

Outreach activities will focus on publicizing digital engagement activities designed to get input on the proposed strategies. The web activity will be promoted through print and electronic media.

Task 6B:  Phase 6 Education

Education activities will focus on helping to communicate the importance of the strategies in addressing regional needs and the need to prioritize to help ensure greater success. Information will be pushed out through the project website and print and electronic communications used throughout the process.
**Task 6C: Task Groups**

Using any early results from the pilot program studies, along with technical and community evaluation of the planning scenarios, the Task Groups will identify a set of recommended implementation strategies for inclusion in the RPSD. These strategies will be those with a high likelihood of being funded and implemented, based on community capacity, participation and leadership.

**Task 6D: Digital Engagement**

The digital engagement framework for this phase will serve as a transparent communication about the pilot projects and scenario evaluation processes, and will present the proposed implementation strategies for the Regional Plan. Key stakeholders and the general public will have the opportunity to register support for and comment on the proposed strategies, as well as to learn about opportunities to participate in implementation activities.

**Task 6E: Results Documentation**

The results of the digital engagement activities will be compiled, analyzed and presented for use by the Project Team and Task Groups.

**PHASE 7: IDENTIFY AND PRIORITIZE PROJECTS**

**Task 7A: Phase 7 Outreach**

Outreach activities will focus on publicizing digital engagement activities designed to prioritize projects for inclusion in the Plan. These activities may be combined with those in Task 6 to accomplish this at the same time.

**Task 7B: Phase 7 Education**

Education activities will focus on communicating the importance of the prioritized projects in addressing regional needs, and the need to prioritize to help ensure greater success. These activities may be combined with those in Task 6 to be accomplished at the same time. Information will be pushed out through the project website and print and electronic communications used throughout the process.

**Task 7C: Task Groups**

The Task Groups will consider a set of projects that can support the implementation strategies. These will be prioritized according to effectiveness measured against the Plan goals and regional indicators, as well as the criteria of community readiness, and leveraging existing efforts and resources.
**Task 7D: Consortium Committee**

The Consortium Committee will review and approve the proposed prioritized projects for inclusion in the Plan.

**Task 7E: Digital Engagement**

The project website will be updated to present the prioritized projects, again offering the opportunity for further comment and support.

**Task 7F: Results Documentation**

The prioritization process and the results will be documented and shared with decision makers and the public.

**PHASE 8: DEVELOPMENT OF RPSD REPORT**

**Task 8A: Phase 8 Outreach**

A wide array of activities will be conducted to publicize the completion of the Draft Plan and its availability for review. The availability of the Draft Plan will be formally noticed through SNRPC and other public agency procedures. The Plan completion will be announced through web and social media channels and in coordination with the media. The goal of the noticing will be to direct interested parties to review and comment on the Draft Plan. Comments can be provided in a variety of formats including: on-line, by mail and through public events.

**Task 8B: Phase 8 Education**

Education activities will focus on the role and benefits of the Plan and helping to explain the significance of this effort and potential opportunities for the region. These messages will be distributed through the variety of communication channels used throughout the process.

**Task 8C: Task Groups**

Each Task Group will complete their chapter of the Draft RPSD Report for integration into one complete report. The full document will incorporate assessments of cost considerations; potential policy, regulatory and statutory changes; level of public support; level of support from elected officials and local jurisdictions; as well as other factors that will determine the likelihood of broad-based regional support for sustainable development implementation.

**Task 8D: Consortium Committee**

The Consortium Committee will meet to discuss and receive the Draft RPSD Report. A recommendation to release the draft for public review will be requested from the group.
Task 8E: Digital Engagement

The project website will be updated to present the Draft RPSD Report, and to announce opportunities to join the community dialogue to review the Plan, strategies and actions. There will be a “virtual open house” to walk users through the Plan, review exhibits and illustrations, learn about the proposed strategies, projects, policies and programs that affect specific communities within the region, and offer feedback.

Task 8F: Regional Sustainable Development Open Houses

The Consortium will sponsor a series of Open Houses to present the results of the planning process, and to acknowledge the agency, stakeholder and community collaborations that informed the work. The event will include a presentational video showcasing some of the process highlights and key implementation strategies. There will also be a “call to action” inviting continued collaboration and community-building as the Plan is circulated for review and comment.

Task 8G: Agency Partner and Jurisdictional Meetings

The Project Team will conduct a series of work sessions with agency partners and local jurisdictions to present the Draft Regional Plan and to solicit feedback. The purpose of the meetings will be to refine the strategies and build support for Plan implementation.

Task 8H: Interviews and Small Group Meetings

The Project Team will meet with key individuals and organizations that have been active in the process and may have some concerns and comments regarding the draft. These individual and small group meetings will provide an opportunity for candid conversation and an opportunity for proposed refinements to the Draft Regional Plan.

Task 8I: Results Documentation

The documentation for this phase will focus on compiling and organizing the comments and feedback received on the Plan so they can be used by the Project Team to develop the final RPSD.

PHASE 9: REGIONAL ADOPTION OF RPSD REPORT

Task 9A: Phase 9 Outreach

Consortium Committee members, elected official and decision makers will be notified through public noticing procedures about the availability of the report and pending approval process.
**Task 9B: Phase 9 Education**

Information regarding stakeholder and public support for the RPSD report will be shared through the project website and other available channels.

**Task 9C: Consortium Committee**

Consortium Committee will recommend approval of the document to SNRPC Board.

**Task 9D: SNRPC Board**

The SNRPC Board will adopt the Final RPSD.

**Task 9E: Results Documentation**

Committee and Board activities to adopt the Plan will be documented.
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Appendix F – Phone Survey Presentation
SOUTHERN NEVADA
Resident Issue Survey

Survey Conducted: March 2-12, 2013

DRAFT WORK PRODUCT

320-557

Fairbank, Maslin, Maullin, Metz & Associates - FM3
Public Opinion Research & Strategy

SANTA MONICA • OAKLAND • MADISON • MEXICO CITY
Methodology

- Survey conducted March 2-12, 2013
- Interviews conducted by telephone with 943 Clark County, Nevada residents ages 18 and older
- Residents were sampled using Random Digit Dial methodology of landlines and cell phones, including oversamples of residents ages 65 and older, Latinos in zip codes with at least 50 percent Latino population, and residents in zip codes with a median household income below $33,000 per year
- Margin of error for the full sample is plus or minus 3.3 percent at the 95 percent confidence interval; the margin of error for population subgroups will be higher
3. In what year were you born?

- 18-24: 11%
- 25-29: 9%
- 30-34: 10%
- 35-39: 10%
- 40-44: 10%
- 45-49: 9%
- 50-54: 8%
- 55-59: 7%
- 60-64: 7%
- 65-74: 8%
- 75+: 7%
- Refused/Don’t know: 4%
4. With which racial or ethnic group do you identify yourself: Hispanic or Latino, White or Caucasian, Black or African-American, Asian or Pacific Islander, or some other ethnic or racial background?
Key Findings

- Jobs, economy and schools, trump all concerns, followed by public safety (crime, drugs and gangs), housing and water issues.

- Greatest disparity between the importance and satisfaction ratings, with the availability of good paying jobs and the quality of local public schools receiving highest importance ratings and lowest satisfaction ratings.
Key Findings

- Secondarily, among Latinos and less affluent households there is disparity between importance and satisfaction with the availability of a variety of affordable housing options to buy or rent.

- In general, residents comparatively rate the availability of places to get physical exercise, the availability of a variety of housing options to buy or rent, and the overall physical appearance of the community among the elements with which they are most satisfied.
Key Findings

- In general, Latinos rate all community elements higher in importance than other groups examined; however, seniors (65+) tend to provide higher satisfaction ratings on many of the elements compared to the other groups.

- Among those who have an opinion, majorities of all demographic groups and residents of the three largest cities examined perceive their neighborhood gets its fair share, with smaller percentages living in zip codes less than 33K and residents living in North Las Vegas agreeing with the statement.
Key Findings

- Driving in a car and walking are the most frequent modes of transportation, but slightly more than one-quarter of residents (29%) use public transit at least once a month.

- Having a car and the lack of convenience of public transit are the overwhelming reasons why residents do not use public transit more often or ever.

- Most residents are receptive to policies that make public transit more convenient, but they were not asked how the Regional Transportation Commission (RTC) should fund improvements.
Key Findings

- High percentages of residents who never ride public transit strongly favor public transit improvement efforts.

- Providing more safe routes for children to get to and from schools received most support of any transportation-related idea tested, suggesting the issue of safety should be pursued in future research and community outreach.
Majorities across subgroups think Southern Nevada is either an excellent or good place to live, with seniors the most likely to say so.

![Bar Chart]

Overall sample
- Excellent: 21%
- Good: 46%
- Just Fair: 24%
- Poor: 9%
- Total Excellent/Good: 66%
- Total Fair/Poor: 33%

Seniors (65+)
- Excellent: 32%
- Good: 48%
- Just Fair: 15%
- Poor: 6%
- Total Excellent/Good: 80%
- Total Fair/Poor: 19%

Latinos
- Excellent: 17%
- Good: 54%
- Just Fair: 23%
- Poor: 6%
- Total Excellent/Good: 71%
- Total Fair/Poor: 29%

Those in median household income zips under $33K
- Excellent: 21%
- Good: 47%
- Just Fair: 21%
- Poor: 10%
- Total Excellent/Good: 69%
- Total Fair/Poor: 31%

Individual household income $30K or less
- Excellent: 15%
- Good: 47%
- Just Fair: 27%
- Poor: 11%
- Total Excellent/Good: 62%
- Total Fair/Poor: 38%

5. Generally speaking, how would you rate Southern Nevada as a place to live: is it an excellent place to live, a good place, just fair, or a poor place to live?
Jobs, unemployment, and the economy top the list of most important issues facing Southern Nevada, especially among Latinos and residents in lower-income areas.

<table>
<thead>
<tr>
<th>(Open-ends) Issues</th>
<th>Overall Sample</th>
<th>Seniors (65+)</th>
<th>Latinos</th>
<th>Median Household Income Zips Under $33K</th>
<th>Individual Household Income $30K Or Less</th>
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<td>1%</td>
<td>2%</td>
<td>N/A</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Drivers/Car accidents</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>N/A</td>
</tr>
<tr>
<td>Elderly/Disabled issues</td>
<td>N/A</td>
<td>1%</td>
<td>N/A</td>
<td>N/A</td>
<td>1%</td>
</tr>
<tr>
<td>Weather</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>None/Nothing</td>
<td>2%</td>
<td>1%</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
<td>5%</td>
<td>8%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>DK/NA/Refused</td>
<td>3%</td>
<td>3%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
</tr>
</tbody>
</table>
Importance of Community Elements

<table>
<thead>
<tr>
<th>Community Elements</th>
<th>Overall Sample</th>
<th>Seniors (65+)</th>
<th>Latinos</th>
<th>Median Household Income Zips Under $33K</th>
<th>Individual Household Income $30K Or Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>The availability of good paying jobs</td>
<td>6.2</td>
<td>5.8</td>
<td>6.4</td>
<td>6.3</td>
<td>6.1</td>
</tr>
<tr>
<td>The quality of local public schools</td>
<td>5.9</td>
<td>5.6</td>
<td>6.3</td>
<td>6.0</td>
<td>6.1</td>
</tr>
<tr>
<td>The overall physical appearance of the community</td>
<td>5.8</td>
<td>5.9</td>
<td>5.9</td>
<td>5.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Access to healthy food options</td>
<td>5.7</td>
<td>5.8</td>
<td>6.0</td>
<td>5.6</td>
<td>5.8</td>
</tr>
<tr>
<td><em>The availability of a variety of affordable housing options to buy or rent</em></td>
<td>5.7</td>
<td>5.6</td>
<td>6.1</td>
<td>5.8</td>
<td>5.9</td>
</tr>
<tr>
<td>The ability to get to the places you need or want to go without traffic and congestion</td>
<td>5.5</td>
<td>5.6</td>
<td>6.0</td>
<td>5.5</td>
<td>5.7</td>
</tr>
</tbody>
</table>

7. I am now going to mention a list of elements of a community some people in Southern Nevada say are important. Please tell me how important that community element is to you as a Southern Nevada resident. We will use a scale of one to seven, where one means NOT AT ALL IMPORTANT and seven means VERY IMPORTANT. You can use any number between one and seven. If you have no opinion or don't know about a feature I mention, you can tell me that too. *Split Sample
7. I am now going to mention a list of elements of a community some people in Southern Nevada say are important. Please tell me how important that community element is to you as a Southern Nevada resident. We will use a scale of one to seven, where one means NOT AT ALL IMPORTANT and seven means VERY IMPORTANT. You can use any number between one and seven. If you have no opinion or don’t know about a feature I mention, you can tell me that too. *Split Sample

<table>
<thead>
<tr>
<th>Community Elements</th>
<th>Overall Sample</th>
<th>Seniors (65+)</th>
<th>Latinos</th>
<th>Median Household Income Zips Under $33K</th>
<th>Individual Household Income $30K Or Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>*The availability of a variety of housing options to buy or rent</td>
<td>5.5</td>
<td>5.3</td>
<td>5.7</td>
<td>5.7</td>
<td>5.7</td>
</tr>
<tr>
<td>*The availability of places to safely walk and bike</td>
<td>5.5</td>
<td>5.2</td>
<td>5.8</td>
<td>5.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Short commute times to the places you need or want to go</td>
<td>5.4</td>
<td>5.6</td>
<td>5.9</td>
<td>5.5</td>
<td>5.6</td>
</tr>
<tr>
<td>*The availability of places to get physical exercise</td>
<td>5.3</td>
<td>5.4</td>
<td>5.8</td>
<td>5.3</td>
<td>5.4</td>
</tr>
<tr>
<td>Access to parks, trails, and open space</td>
<td>5.3</td>
<td>5.2</td>
<td>5.7</td>
<td>5.3</td>
<td>5.5</td>
</tr>
<tr>
<td>The availability of public transportation alternatives to driving a car</td>
<td>5.2</td>
<td>5.1</td>
<td>5.8</td>
<td>5.7</td>
<td>5.8</td>
</tr>
<tr>
<td>The ability to walk to places you need or want to go</td>
<td>5.0</td>
<td>4.9</td>
<td>5.5</td>
<td>5.2</td>
<td>5.4</td>
</tr>
</tbody>
</table>
Satisfaction with Community Elements

<table>
<thead>
<tr>
<th>Community Elements</th>
<th>Overall Sample</th>
<th>Seniors (65+)</th>
<th>Latinos</th>
<th>Median Household Income Zips Under $33K</th>
<th>Individual Household Income $30K Or Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>*The availability of places to get physical exercise</td>
<td>5.1</td>
<td>5.4</td>
<td>4.9</td>
<td>4.9</td>
<td>5.1</td>
</tr>
<tr>
<td>*The availability of a variety of housing options to buy or rent</td>
<td>5.0</td>
<td>5.1</td>
<td>5.0</td>
<td>4.7</td>
<td>4.8</td>
</tr>
<tr>
<td>The overall physical appearance of the community</td>
<td>4.9</td>
<td>5.5</td>
<td>4.8</td>
<td>4.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Access to parks, trails, and open space</td>
<td>4.9</td>
<td>5.0</td>
<td>4.9</td>
<td>4.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Access to healthy food options</td>
<td>4.8</td>
<td>5.3</td>
<td>4.7</td>
<td>4.7</td>
<td>4.9</td>
</tr>
<tr>
<td>Short commute times to the places you need or want to go</td>
<td>4.7</td>
<td>5.0</td>
<td>4.8</td>
<td>4.6</td>
<td>4.7</td>
</tr>
</tbody>
</table>

8. I am going to mention each element of a community again. This time I would like you to tell me how satisfied you are personally with this element of your community in Southern Nevada. Again, we will use a scale of one to seven. This time one means NOT AT ALL SATISFIED with the feature and seven means you are VERY SATISFIED. You can use any number between one and seven. If you have no opinion or don't know about a feature I mention, you can tell me that too. *Split Sample
8. I am going to mention each element of a community again. This time I would like you to tell me how satisfied you are personally with this element of your community in Southern Nevada. Again, we will use a scale of one to seven. This time one means NOT AT ALL SATISFIED with the feature and seven means you are VERY SATISFIED. You can use any number between one and seven. If you have no opinion or don't know about a feature I mention, you can tell me that too. *Split Sample

<table>
<thead>
<tr>
<th>Community Elements</th>
<th>Overall Sample</th>
<th>Seniors (65+)</th>
<th>Latinos</th>
<th>Median Household Income Zips Under $33K</th>
<th>Individual Household Income $30K Or Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>*The availability of places to safely walk and bike</td>
<td>4.5</td>
<td>4.6</td>
<td>4.8</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>The ability to get to the places you need or want to go without traffic and congestion</td>
<td>4.5</td>
<td>4.4</td>
<td>4.5</td>
<td>4.4</td>
<td>4.5</td>
</tr>
<tr>
<td>*The availability of a variety of affordable housing options to buy or rent</td>
<td>4.4</td>
<td>4.9</td>
<td>4.6</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>The ability to walk to places you need or want to go</td>
<td>4.4</td>
<td>4.4</td>
<td>4.8</td>
<td>4.4</td>
<td>4.5</td>
</tr>
<tr>
<td>The availability of public transportation alternatives to driving a car</td>
<td>4.4</td>
<td>4.4</td>
<td>4.7</td>
<td>4.4</td>
<td>4.6</td>
</tr>
<tr>
<td>The quality of local public schools</td>
<td>3.7</td>
<td>3.9</td>
<td>4.4</td>
<td>3.6</td>
<td>4.1</td>
</tr>
<tr>
<td>The availability of good paying jobs</td>
<td>3.6</td>
<td>3.9</td>
<td>3.9</td>
<td>3.7</td>
<td>3.7</td>
</tr>
</tbody>
</table>
Mean Importance and Satisfaction Rating Comparisons of Community Elements

- Low Importance, High Satisfaction
- High Importance, High Satisfaction
- High Importance, Low Satisfaction
- Low Importance, Low Satisfaction
### Mean Importance and Satisfaction Rating Comparisons of Community Elements

<table>
<thead>
<tr>
<th><strong>High Satisfaction (Y), Low Importance (X)</strong></th>
<th><strong>High Satisfaction (Y), High Importance (X)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>M. The availability of places to get physical exercise</td>
<td>J. The availability of a variety of housing options to buy or rent</td>
</tr>
<tr>
<td>G. Access to parks, trails, and open space</td>
<td>A. Access to healthy food options</td>
</tr>
<tr>
<td>F. Short commute times to the places you need or want to go</td>
<td>H. The overall physical appearance of the community</td>
</tr>
<tr>
<td>K. The availability of places to safely walk or bike</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Low Satisfaction (Y), Low Importance (X)</strong></th>
<th><strong>Low Satisfaction (Y), High Importance (X)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>D. The ability to walk to places you need or want to go</td>
<td>L. The availability of a variety of affordable housing options to buy or rent</td>
</tr>
<tr>
<td>B. The availability of public transportation alternatives to driving a car</td>
<td>E. The quality of local public schools</td>
</tr>
<tr>
<td></td>
<td>I. The availability of good paying jobs</td>
</tr>
<tr>
<td></td>
<td>C. The ability to get to the places you need or want to go without traffic and congestion</td>
</tr>
</tbody>
</table>
Majorities overall agree that their neighborhood gets its fair share; but fewer than half of residents in lower-income zip code areas agree.

9. Please tell me if you agree or disagree with the following statement: “my neighborhood gets its fair share.”
Henderson residents are far more likely to agree their neighborhood gets its fair share.

9. Please tell me if you agree or disagree with the following statement: my neighborhood gets its fair share.
Seven in ten overall drive a car daily; about a third walk, and far fewer use public transit, ride a bike, or drive a motorcycle, scooter, or some other similar vehicle.

- **Driving in a car**: 71% daily, 11% few times/week, 13% few times/month, 8% about once a month, 7% never/don't know/na.

- **Walking**: 29% daily, 23% few times/week, 16% few times/month, 11% about once a month, 21% never/don't know/na.

- **Riding public transit, such as a local bus**: 8% daily, 6% few times/week, 7% few times/month, 8% about once a month, 71% never/don't know/na.

- **Riding a bicycle**: 8% daily, 9% few times/week, 9% few times/month, 71% never/don't know/na.

- **Driving a motorcycle, moped, scooter, or other similar vehicle**: 88% daily, 7% never/don't know/na.

10. I am going to mention some methods that residents in your area use to get around to go to work, school, errands and/or other places in the course of an average day or month. Please tell me how frequently in the last month you used that method to get to where you had to go. Would you say daily, a few times a week, a few times a month, about once a month, or never?
Henderson residents are the most likely to drive daily or a few times a week, and the least likely to walk.

Driving a car, walking, riding public transit daily/few times a week by City

- **Henderson**: 93% driving, 48% walking, 3% riding public transit
- **Las Vegas/Uninc. Clark County**: 81% driving, 82% walking, 15% riding public transit
- **North Las Vegas**: 76% driving, 59% walking, 22% riding public transit

10d/a/c. I am going to mention some methods that residents in your area use to get around to go to work, school, errands and/or other places in the course of an average day or month. Please tell me how frequently in the last month you used that method to get to where you had to go. Would you say daily, a few times a week, a few times a month, about once a month, or never?
Half of respondents said they never use public transit because they have a car, others mentioned a lack of bus routes nearby or because of the bus schedule/time.

<table>
<thead>
<tr>
<th>Reason For Not Using Public Transit</th>
<th>Overall Sample</th>
<th>Seniors (65+)</th>
<th>Latinos</th>
<th>Median Household Income Zips Under $33K</th>
<th>Individual Household Income $30K Or Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have a car</td>
<td>51%</td>
<td>45%</td>
<td>61%</td>
<td>48%</td>
<td>50%</td>
</tr>
<tr>
<td>Bus schedule/Time</td>
<td>17%</td>
<td>9%</td>
<td>21%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>No bus stop/Route nearby</td>
<td>13%</td>
<td>15%</td>
<td>7%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Inconvenient</td>
<td>6%</td>
<td>6%</td>
<td>4%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Age/Disabled</td>
<td>4%</td>
<td>9%</td>
<td>2%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>Safety</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Everything is close/Can walk</td>
<td>2%</td>
<td>1%</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Friends/Family drive/Carpool</td>
<td>2%</td>
<td>6%</td>
<td>1%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Expense</td>
<td>1%</td>
<td>N/A</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Don’t know bus route</td>
<td>1%</td>
<td>N/A</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Dirty</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Familiarity</td>
<td>N/A</td>
<td>1%</td>
<td>1%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Too crowded</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2%</td>
<td>N/A</td>
</tr>
<tr>
<td>Use occasionally</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Not needed</td>
<td>9%</td>
<td>16%</td>
<td>4%</td>
<td>16%</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>1%</td>
<td>N/A</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>DK/NA/Refused</td>
<td>1%</td>
<td>2%</td>
<td>N/A</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Sample Size</strong></td>
<td><strong>665</strong></td>
<td><strong>231</strong></td>
<td><strong>115</strong></td>
<td><strong>152</strong></td>
<td><strong>167</strong></td>
</tr>
</tbody>
</table>

11. In a few words of your own, why do you not use public transit to get to where you need to go? (Multiple answers accepted; Open-ended, grouped responses) (Responses by 1% or more)
A plurality of infrequent public transit users identified issues related to bus routes and times as a reason they don’t use public transit more often.

<table>
<thead>
<tr>
<th>Reason For Not Using Public Transit</th>
<th>Overall Sample</th>
<th>Seniors (65+)</th>
<th>Latinos</th>
<th>Those In Median Household Income Zips Under $33K</th>
<th>Individual Household Income $30K Or Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have a car</td>
<td>30%</td>
<td>11%</td>
<td>42%</td>
<td>34%</td>
<td>23%</td>
</tr>
<tr>
<td>Bus schedule/Time</td>
<td>23%</td>
<td>18%</td>
<td>28%</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td>No bus stop/Route nearby</td>
<td>15%</td>
<td>12%</td>
<td>7%</td>
<td>9%</td>
<td>13%</td>
</tr>
<tr>
<td>Use occasionally</td>
<td>7%</td>
<td>25%</td>
<td>6%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Friends/Family drive/Carpool</td>
<td>7%</td>
<td>1%</td>
<td>11%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Age/Disabled</td>
<td>6%</td>
<td>22%</td>
<td>4%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Too crowded</td>
<td>5%</td>
<td>N/A</td>
<td>3%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Everything is close/Can walk</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Expense</td>
<td>4%</td>
<td>2%</td>
<td>2%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Safety</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Don’t know bus route</td>
<td>2%</td>
<td>N/A</td>
<td>N/A</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Dirty</td>
<td>1%</td>
<td>5%</td>
<td>N/A</td>
<td>N/A</td>
<td>2%</td>
</tr>
<tr>
<td>Inconvenient</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>3%</td>
<td>N/A</td>
</tr>
<tr>
<td>Not needed</td>
<td>8%</td>
<td>6%</td>
<td>3%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>N/A</td>
<td>2%</td>
</tr>
<tr>
<td>DK/NA/Refused</td>
<td>2%</td>
<td>N/A</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

| Sample Size                        | 199            | 38            | 61      | 78                                              | 77                                       |
Majorities support each of the transportation-related ideas tested in the survey; nearly all residents favor providing more safe routes for children to get to and from schools.

- **Providing more safe routes for children to get to and from schools**: 95% favor, 3% oppose.
- **Establishing new transit routes that connect communities to jobs**: 89% favor, 6% oppose.
- **Providing more pedestrian walkways**: 86% favor, 9% oppose.
- **Increasing local bus service to work and shopping areas**: 85% favor, 8% oppose.
- **Increasing the frequency of rapid bus service**: 84% favor, 9% oppose.

---

13. I would like to mention a list of transportation related ideas being considered in Southern Nevada. Please tell me whether you would favor or oppose that particular idea.
Increasing the number of places served by rapid buses:
- Strong Favor: 61%
- Moderate Favor: 21%
- Somewhat Favor: 5%
- Strong Oppose: 10%
- Don't know/NA: 10%
- Total Favor: 82%
- Total Oppose: 8%

Increasing the frequency of local bus service:
- Strong Favor: 59%
- Moderate Favor: 22%
- Somewhat Favor: 6%
- Strong Oppose: 9%
- Don't know/NA: 9%
- Total Favor: 81%
- Total Oppose: 10%

Establishing light rail transit:
- Strong Favor: 56%
- Moderate Favor: 21%
- Somewhat Favor: 7%
- Strong Oppose: 11%
- Don't know/NA: 11%
- Total Favor: 77%
- Total Oppose: 18%

Providing more bike lanes:
- Strong Favor: 52%
- Moderate Favor: 26%
- Somewhat Favor: 9%
- Strong Oppose: 8%
- Don't know/NA: 5%
- Total Favor: 78%
- Total Oppose: 17%

Establishing light rail transit, which is like a subway above ground:
- Strong Favor: 47%
- Moderate Favor: 22%
- Somewhat Favor: 8%
- Strong Oppose: 17%
- Don't know/NA: 7%
- Total Favor: 69%
- Total Oppose: 25%

13. I would like to mention a list of transportation related ideas being considered in Southern Nevada. Please tell me whether you would favor or oppose that particular idea.
Solid majorities are supportive of the transportation ideas, but Henderson residents are somewhat less supportive of each.

**Support for transportation ideas by City**

- **Places Served by Buses**
  - Henderson: 74%
  - Las Vegas/Uninc. Clark County: 83%
  - North Las Vegas: 84%

- **Frequency of Local Bus Service**
  - Henderson: 69%
  - Las Vegas/Uninc. Clark County: 83%
  - North Las Vegas: 86%

- **Bike Lanes**
  - Henderson: 65%
  - Las Vegas/Uninc. Clark County: 81%
  - North Las Vegas: 80%

- **Light Rail Transit**
  - Henderson: 60%
  - Las Vegas/Uninc. Clark County: 78%
  - North Las Vegas: 84%

- **"Above Ground Subway"**
  - Henderson: 14%
  - Las Vegas/Uninc. Clark County: 11%
  - North Las Vegas: 14%
### Percentage Strongly Favoring Transportation Ideas by Transit Riders

(Ranked by Strongly Favor)

<table>
<thead>
<tr>
<th>Transportation Idea</th>
<th>Overall Sample</th>
<th>Public Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing more safe routes for children to get to and from schools</td>
<td>83%</td>
<td>85%</td>
</tr>
<tr>
<td>Establishing new transit routes that connect communities to jobs</td>
<td>69%</td>
<td>70%</td>
</tr>
<tr>
<td>Providing more pedestrian walkways</td>
<td>66%</td>
<td>68%</td>
</tr>
<tr>
<td>Increasing local bus service to work and shopping areas</td>
<td>66%</td>
<td>79%</td>
</tr>
<tr>
<td>Increasing the frequency of rapid bus service</td>
<td>61%</td>
<td>83%</td>
</tr>
<tr>
<td>Increasing the number of places served by rapid buses</td>
<td>61%</td>
<td>64%</td>
</tr>
<tr>
<td>Increasing the frequency of local bus service</td>
<td>59%</td>
<td>67%</td>
</tr>
<tr>
<td>Establishing light rail transit</td>
<td>56%</td>
<td>67%</td>
</tr>
<tr>
<td>Providing more bike lanes</td>
<td>52%</td>
<td>58%</td>
</tr>
<tr>
<td>Establishing light rail transit, which is like a subway above ground</td>
<td>47%</td>
<td>49%</td>
</tr>
</tbody>
</table>

| Sample Size: 472                                                                     |                |                |
| Public Transit: 138                                                                   |                |                |
| Never: 333                                                                           |                |                |

13. I would like to mention a list of transportation related ideas being considered in Southern Nevada. Please tell me whether you would favor or oppose that particular idea. (Open-ended, grouped responses)
Most think they have the opportunity to voice their concerns on major community decisions that affect their lives; residents with household incomes of $30,000 or less are divided.

14. Do you feel that you have the opportunity to voice your concerns on major community decisions that affect your life?
Across groups, residents indicated they are likely to voice their concerns if they had the opportunity.

15. If you had the opportunity to voice your concerns on major community decisions that affect your life, how likely would you be to voice those concerns? On a scale of one to seven, use a one if you would be NOT AT ALL LIKELY and a seven if you would be VERY LIKELY to voice those concerns.
City/Regional Demographics

- Las Vegas/Uninc. Clark County: 73%
- Henderson: 14%
- North Las Vegas: 11%
- All Other: 2%
For more information, contact:

Richard Bernard
Bernard@FM3research.com
2425 Colorado Ave., Suite 180
Santa Monica, CA 90404
Phone (310) 828-1183
Fax (310) 453-6562

Nicole Willcoxon
Nicole@FM3research.com
Additional Demographic Slides
### Most Important Issues Facing Southern Nevada Today by Large Cities

*(Multiple Responses Accepted)*

<table>
<thead>
<tr>
<th>Issue</th>
<th>Overall Sample</th>
<th>Larger Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample Size</td>
<td>Las Vegas/Uninc. Clark County</td>
</tr>
<tr>
<td>Jobs/Unemployment</td>
<td>42%</td>
<td>43%</td>
</tr>
<tr>
<td>Education/Schools</td>
<td>31%</td>
<td>30%</td>
</tr>
<tr>
<td>Economy</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Crime/Drugs/Gangs</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Housing</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Water issues</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Sample Size</td>
<td>943</td>
<td>688</td>
</tr>
</tbody>
</table>

6. What would you say are the one or two most important issues facing Southern Nevada today? (Multiple answers accepted; Open-ended, grouped responses)
## Most Important Issues Facing Southern Nevada Today by Parental Status

*(Multiple Responses Accepted)*

<table>
<thead>
<tr>
<th>Issue</th>
<th>Overall Sample</th>
<th>Parental Status (Children under 19 in Household)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Dads</td>
</tr>
<tr>
<td>Jobs/Unemployment</td>
<td>42%</td>
<td>42%</td>
</tr>
<tr>
<td>Education/Schools</td>
<td>31%</td>
<td>26%</td>
</tr>
<tr>
<td>Economy</td>
<td>13%</td>
<td>15%</td>
</tr>
<tr>
<td>Crime/Drugs/Gangs</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Housing</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Water issues</td>
<td>6%</td>
<td>2%</td>
</tr>
</tbody>
</table>

| Sample Size            | 943            | 197  | 220  | 270          | 243           |

6. What would you say are the one or two most important issues facing Southern Nevada today? (Multiple answers accepted; Open-ended, grouped responses)
### Most Important Issues Facing Southern Nevada Today by Language of Interview

(Multiple Responses Accepted)

<table>
<thead>
<tr>
<th>Issue</th>
<th>Overall Sample</th>
<th>Language of Interview</th>
<th>All English</th>
<th>Latino Spanish</th>
<th>Latino English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs/Unemployment</td>
<td>42%</td>
<td>40%</td>
<td>58%</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>Education/Schools</td>
<td>31%</td>
<td>33%</td>
<td>15%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Economy</td>
<td>13%</td>
<td>14%</td>
<td>10%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Crime/Drugs/Gangs</td>
<td>12%</td>
<td>10%</td>
<td>26%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>9%</td>
<td>9%</td>
<td>7%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Water issues</td>
<td>6%</td>
<td>7%</td>
<td>1%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Sample Size</td>
<td>943</td>
<td>843</td>
<td>100</td>
<td>154</td>
<td></td>
</tr>
</tbody>
</table>

6. What would you say are the one or two most important issues facing Southern Nevada today? (Multiple answers accepted; Open-ended, grouped responses)
### Most Important Issues Facing Southern Nevada Today by Ethnicity (White/Latino by Ages 18-49/50+)

(Multiple Responses Accepted)

<table>
<thead>
<tr>
<th>Issue</th>
<th>Overall Sample</th>
<th>Ethnicity by Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>White Ages 18-49</td>
</tr>
<tr>
<td>Jobs/Unemployment</td>
<td>42%</td>
<td>39%</td>
</tr>
<tr>
<td>Education/Schools</td>
<td>31%</td>
<td>34%</td>
</tr>
<tr>
<td>Economy</td>
<td>13%</td>
<td>17%</td>
</tr>
<tr>
<td>Crime/Drugs/Gangs</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Housing</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>Water issues</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Sample Size</strong></td>
<td><strong>943</strong></td>
<td><strong>254</strong></td>
</tr>
</tbody>
</table>

### Question 6

6. What would you say are the one or two most important issues facing Southern Nevada today? (Multiple answers accepted; Open-ended, grouped responses)
## Importance of Community Elements by Large Cities

<table>
<thead>
<tr>
<th>Community Elements</th>
<th>Overall Sample</th>
<th>Las Vegas/Uninc. Clark County</th>
<th>Henderson</th>
<th>North Las Vegas</th>
</tr>
</thead>
<tbody>
<tr>
<td>The availability of good paying jobs</td>
<td>6.2</td>
<td>6.2</td>
<td>6.0</td>
<td>6.3</td>
</tr>
<tr>
<td>The quality of local public schools</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>6.1</td>
</tr>
<tr>
<td>The overall physical appearance of the community</td>
<td>5.8</td>
<td>5.8</td>
<td>5.8</td>
<td>5.6</td>
</tr>
<tr>
<td>Access to healthy food options</td>
<td>5.7</td>
<td>5.7</td>
<td>5.6</td>
<td>5.6</td>
</tr>
<tr>
<td>*The availability of a variety of affordable housing options to buy or rent</td>
<td>5.7</td>
<td>5.7</td>
<td>5.8</td>
<td>5.9</td>
</tr>
<tr>
<td>*The availability of a variety of housing options to buy or rent</td>
<td>5.5</td>
<td>5.6</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>The ability to get to the places you need or want to go without traffic and congestion</td>
<td>5.5</td>
<td>5.5</td>
<td>5.6</td>
<td>5.7</td>
</tr>
<tr>
<td>*The availability of places to safely walk and bike</td>
<td>5.5</td>
<td>5.5</td>
<td>5.3</td>
<td>5.5</td>
</tr>
<tr>
<td>Short commute times to the places you need or want to go</td>
<td>5.4</td>
<td>5.4</td>
<td>5.2</td>
<td>5.5</td>
</tr>
<tr>
<td>*The availability of places to get physical exercise</td>
<td>5.3</td>
<td>5.3</td>
<td>5.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Access to parks, trails, and open space</td>
<td>5.3</td>
<td>5.4</td>
<td>5.4</td>
<td>5.1</td>
</tr>
<tr>
<td>The availability of public transportation alternatives to driving a car</td>
<td>5.2</td>
<td>5.3</td>
<td>4.6</td>
<td>5.6</td>
</tr>
<tr>
<td>The ability to walk to places you need or want to go</td>
<td>5.0</td>
<td>5.0</td>
<td>4.7</td>
<td>5.3</td>
</tr>
<tr>
<td><strong>Sample Size</strong></td>
<td><strong>942</strong></td>
<td><strong>688</strong></td>
<td><strong>132</strong></td>
<td><strong>104</strong></td>
</tr>
</tbody>
</table>

7. I am now going to mention a list of elements of a community some people in Southern Nevada say are important. Please tell me how important that community element is to you as a Southern Nevada resident. We will use a scale of one to seven, where one means NOT AT ALL IMPORTANT and seven means VERY IMPORTANT. You can use any number between one and seven. If you have no opinion or don't know about a feature I mention, you can tell me that too. *Split Sample
8. I am going to mention each element of a community again. This time I would like you to tell me how satisfied you are personally with this element of your community in Southern Nevada. Again, we will use a scale of one to seven. This time one means NOT AT ALL SATISFIED with the feature and seven means you are VERY SATISFIED. You can use any number between one and seven. If you have no opinion or don’t know about a feature I mention, you can tell me that too. *Split Sample

<table>
<thead>
<tr>
<th>Community Elements</th>
<th>Overall Sample</th>
<th>Las Vegas/Uninc. Clark County</th>
<th>Henderson</th>
<th>North Las Vegas</th>
</tr>
</thead>
<tbody>
<tr>
<td>*The availability of places to get physical exercise</td>
<td>5.1</td>
<td>5.0</td>
<td>5.5</td>
<td>5.0</td>
</tr>
<tr>
<td>*The availability of a variety of housing options to buy or rent</td>
<td>5.0</td>
<td>5.0</td>
<td>5.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Access to parks, trails, and open space</td>
<td>4.9</td>
<td>4.9</td>
<td>5.2</td>
<td>4.8</td>
</tr>
<tr>
<td>The overall physical appearance of the community</td>
<td>4.9</td>
<td>4.9</td>
<td>5.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Access to healthy food options</td>
<td>4.8</td>
<td>4.8</td>
<td>5.1</td>
<td>4.6</td>
</tr>
<tr>
<td>Short commute times to the places you need or want to go</td>
<td>4.7</td>
<td>4.7</td>
<td>4.9</td>
<td>4.6</td>
</tr>
<tr>
<td>The ability to get to the places you need or want to go without traffic and congestion</td>
<td>4.5</td>
<td>4.4</td>
<td>4.7</td>
<td>4.4</td>
</tr>
<tr>
<td>*The availability of places to safely walk and bike</td>
<td>4.5</td>
<td>4.5</td>
<td>4.9</td>
<td>4.4</td>
</tr>
<tr>
<td>The availability of public transportation alternatives to driving a car</td>
<td>4.4</td>
<td>4.5</td>
<td>4.1</td>
<td>4.5</td>
</tr>
<tr>
<td>*The availability of a variety of affordable housing options to buy or rent</td>
<td>4.4</td>
<td>4.4</td>
<td>4.9</td>
<td>4.3</td>
</tr>
<tr>
<td>The ability to walk to places you need or want to go</td>
<td>4.4</td>
<td>4.4</td>
<td>4.3</td>
<td>4.5</td>
</tr>
<tr>
<td>The quality of local public schools</td>
<td>3.7</td>
<td>3.6</td>
<td>3.7</td>
<td>3.8</td>
</tr>
<tr>
<td>The availability of good paying jobs</td>
<td>3.6</td>
<td>3.6</td>
<td>3.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Sample Size</td>
<td>940</td>
<td>686</td>
<td>132</td>
<td>103</td>
</tr>
</tbody>
</table>
### Percentage Strongly Favoring Transportation Ideas by City

*(Ranked by Strongly Favor)*

<table>
<thead>
<tr>
<th>Transportation Idea</th>
<th>Overall Sample</th>
<th>Las Vegas/Uninc. Clark County</th>
<th>Henderson</th>
<th>North Las Vegas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing more safe routes for children to get to and from schools</td>
<td>83%</td>
<td>83%</td>
<td>88%</td>
<td>88%</td>
</tr>
<tr>
<td>Establishing new transit routes that connect communities to jobs</td>
<td>69%</td>
<td>71%</td>
<td>69%</td>
<td>65%</td>
</tr>
<tr>
<td>Providing more pedestrian walkways</td>
<td>66%</td>
<td>69%</td>
<td>64%</td>
<td>57%</td>
</tr>
<tr>
<td>Increasing local bus service to work and shopping areas</td>
<td>66%</td>
<td>67%</td>
<td>56%</td>
<td>76%</td>
</tr>
<tr>
<td>Increasing the frequency of rapid bus service</td>
<td>61%</td>
<td>63%</td>
<td>47%</td>
<td>73%</td>
</tr>
<tr>
<td>Increasing the number of places served by rapid buses</td>
<td>61%</td>
<td>63%</td>
<td>47%</td>
<td>68%</td>
</tr>
<tr>
<td>Increasing the frequency of local bus service</td>
<td>59%</td>
<td>60%</td>
<td>48%</td>
<td>63%</td>
</tr>
<tr>
<td>Establishing light rail transit</td>
<td>56%</td>
<td>57%</td>
<td>48%</td>
<td>66%</td>
</tr>
<tr>
<td>Providing more bike lanes</td>
<td>52%</td>
<td>54%</td>
<td>42%</td>
<td>57%</td>
</tr>
<tr>
<td>Establishing light rail transit, which is like a subway above ground</td>
<td>47%</td>
<td>47%</td>
<td>39%</td>
<td>51%</td>
</tr>
</tbody>
</table>

**Sample Size**

<table>
<thead>
<tr>
<th></th>
<th>Overall Sample</th>
<th>Las Vegas/Uninc. Clark County</th>
<th>Henderson</th>
<th>North Las Vegas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample Size</strong></td>
<td>472</td>
<td>344</td>
<td>66</td>
<td>52</td>
</tr>
</tbody>
</table>

13. I would like to mention a list of transportation related ideas being considered in Southern Nevada. Please tell me whether you would favor or oppose that particular idea.
13. I would like to mention a list of transportation related ideas being considered in Southern Nevada. Please tell me whether you would favor or oppose that particular idea.

<table>
<thead>
<tr>
<th>Transportation Idea</th>
<th>Overall Sample</th>
<th>Residence Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing more safe routes for children to get to and from schools</td>
<td>83%</td>
<td>81%</td>
</tr>
<tr>
<td>Establishing new transit routes that connect communities to jobs</td>
<td>69%</td>
<td>65%</td>
</tr>
<tr>
<td>Providing more pedestrian walkways</td>
<td>66%</td>
<td>61%</td>
</tr>
<tr>
<td>Increasing local bus service to work and shopping areas</td>
<td>66%</td>
<td>61%</td>
</tr>
<tr>
<td>Increasing the frequency of rapid bus service</td>
<td>61%</td>
<td>51%</td>
</tr>
<tr>
<td>Increasing the number of places served by rapid buses</td>
<td>61%</td>
<td>58%</td>
</tr>
<tr>
<td>Increasing the frequency of local bus service</td>
<td>59%</td>
<td>52%</td>
</tr>
<tr>
<td>Establishing light rail transit</td>
<td>56%</td>
<td>48%</td>
</tr>
<tr>
<td>Providing more bike lanes</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>Establishing light rail transit, which is like a subway above ground</td>
<td>47%</td>
<td>42%</td>
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</table>

<table>
<thead>
<tr>
<th>Sample Size</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Overall Sample</td>
<td>472</td>
</tr>
<tr>
<td>Own</td>
<td>259</td>
</tr>
<tr>
<td>Rent</td>
<td>202</td>
</tr>
</tbody>
</table>
### Percentage Strongly Favoring Transportation Ideas by Age

*(Ranked by Strongly Favor)*

<table>
<thead>
<tr>
<th>Transportation Idea</th>
<th>Overall Sample</th>
<th>Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing more safe routes for children to get to and from schools</td>
<td>83%</td>
<td>88% 76%</td>
</tr>
<tr>
<td>Establishing new transit routes that connect communities to jobs</td>
<td>69%</td>
<td>71% 67%</td>
</tr>
<tr>
<td>Providing more pedestrian walkways</td>
<td>66%</td>
<td>68% 64%</td>
</tr>
<tr>
<td>Increasing local bus service to work and shopping areas</td>
<td>66%</td>
<td>69% 63%</td>
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<tr>
<td>Increasing the frequency of rapid bus service</td>
<td>61%</td>
<td>65% 57%</td>
</tr>
<tr>
<td>Increasing the number of places served by rapid buses</td>
<td>61%</td>
<td>63% 60%</td>
</tr>
<tr>
<td>Increasing the frequency of local bus service</td>
<td>59%</td>
<td>60% 58%</td>
</tr>
<tr>
<td>Establishing light rail transit</td>
<td>56%</td>
<td>60% 51%</td>
</tr>
<tr>
<td>Providing more bike lanes</td>
<td>52%</td>
<td>55% 47%</td>
</tr>
<tr>
<td>Establishing light rail transit, which is like a subway above ground</td>
<td>47%</td>
<td>50% 42%</td>
</tr>
</tbody>
</table>

**Sample Size**

<table>
<thead>
<tr>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>472</td>
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<tr>
<td>278</td>
</tr>
<tr>
<td>174</td>
</tr>
</tbody>
</table>

13. I would like to mention a list of transportation related ideas being considered in Southern Nevada. Please tell me whether you would favor or oppose that particular idea. (Open-ended, grouped responses)
## Percentage Strongly Favoring Transportation Ideas by Ethnicity

*(Ranked by Strongly Favor)*

<table>
<thead>
<tr>
<th>Transportation Idea</th>
<th>Overall Sample</th>
<th>Latino</th>
<th>White</th>
<th>Non-whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing more safe routes for children to get to and from schools</td>
<td>83%</td>
<td>91%</td>
<td>80%</td>
<td>88%</td>
</tr>
<tr>
<td>Establishing new transit routes that connect communities to jobs</td>
<td>69%</td>
<td>79%</td>
<td>64%</td>
<td>76%</td>
</tr>
<tr>
<td>Providing more pedestrian walkways</td>
<td>66%</td>
<td>67%</td>
<td>65%</td>
<td>69%</td>
</tr>
<tr>
<td>Increasing local bus service to work and shopping areas</td>
<td>66%</td>
<td>76%</td>
<td>60%</td>
<td>74%</td>
</tr>
<tr>
<td>Increasing the frequency of rapid bus service</td>
<td>61%</td>
<td>72%</td>
<td>55%</td>
<td>69%</td>
</tr>
<tr>
<td>Increasing the number of places served by rapid buses</td>
<td>61%</td>
<td>73%</td>
<td>54%</td>
<td>70%</td>
</tr>
<tr>
<td>Increasing the frequency of local bus service</td>
<td>59%</td>
<td>69%</td>
<td>50%</td>
<td>68%</td>
</tr>
<tr>
<td>Establishing light rail transit</td>
<td>56%</td>
<td>62%</td>
<td>50%</td>
<td>62%</td>
</tr>
<tr>
<td>Providing more bike lanes</td>
<td>52%</td>
<td>61%</td>
<td>44%</td>
<td>60%</td>
</tr>
<tr>
<td>Establishing light rail transit, which is like a subway above ground</td>
<td>47%</td>
<td>53%</td>
<td>41%</td>
<td>53%</td>
</tr>
</tbody>
</table>

### Sample Size

| Sample Size | 472 | 127 | 236 | 226 |

13. I would like to mention a list of transportation related ideas being considered in Southern Nevada. Please tell me whether you would favor or oppose that particular idea.
Appendix G – Scenario Planning Memorandum
MEMORANDUM

TO: SOUTHERN NEVADA STRONG
FROM: FREGONESE ASSOCIATES
SUBJECT: PREFERRED SCENARIO & BASELINE SCENARIO RESULTS, SOUTHERN NEVADA STRONG
DATE: JANUARY 3, 2014

To inform the Southern Nevada Strong regional scenario planning process, Fregonese Associates is building two land use scenarios that describe possible land use patterns in the future. Each scenario describes one possible future in which people might live and work, the types of housing and jobs that might be available, and how people might get around. Given the many possible ways a community might grow, scenario planning can help better inform the decisions to be made at present despite the uncertainties of the future.

As a first step, we created a “Baseline Scenario” to describe how land use patterns would change if existing trends continued. The baseline scenario shows where current trends are likely to lead the region, assuming no zoning or policy changes and a continuation of past development patterns. The baseline scenario sets the benchmark for comparing an alternative scenario. An alternative scenario was designed to test a preferred future land use pattern. This scenario is called the “Preferred Scenario” and is based on the vision developed by Southern Nevada Strong. The two scenarios are evaluated on how they perform in meeting Southern Nevada Strong priorities.

This document describes the process for developing the baseline scenario and preferred scenario. It includes the results and key findings from both scenarios. An accompanying PowerPoint presentation provides additional detail about both scenarios as well as maps.

Scenario Development Process

The baseline scenario was built using the Envision Tomorrow Suite of Planning Tools, a set of urban planning tools that are used to 1) model the development of buildings on a site-by-site basis and 2) create and evaluate multiple land use scenarios by spatially distributing virtual future development. Through scenario planning, the choices and consequences of alternative futures can be compared using a variety of land use metrics, resource usage and transportation and environmental impact. The scenario development process starts with three steps, described below:

1) DEVELOP SCENARIO BUILDING BLOCKS

The foundation of the scenario is a set of “prototypical” buildings typical of the Las Vegas region. The library of buildings includes a broad range of types, from large lot single-family homes, townhomes, and high rise residential buildings to small commercial spaces, strip commercial retail buildings, and a variety of industrial buildings. After we have established a library of buildings, we create “development types,” by combining
streets, open space, and different types of buildings. These development types are illustrative of the range of development patterns that the region could experience during the planning horizon. The development types range in intensity from large lot and suburban neighborhoods, industrial areas, to mixed-use town centers and central business districts. Based on developer input and local research, we calibrate the set of development types to local Clark County conditions. Average densities are based on Fregonese Associate’s experience working in regions throughout the Southwest, U.S., and Southern California.

Using Envision Tomorrow within ArcGIS, we apply these development types onto the scenario layer. In designing the baseline scenario, we emphasized development types that are single use (which matches existing trends). An alternative or preferred scenario will likely use a broader diversity of development types. Figure 1 shows a summary of development types used in the baseline scenario and the local assumptions related to future land use in Southern Nevada.

**Figure 1. Southern Nevada Strong Development Types**

<table>
<thead>
<tr>
<th>Development Type Name</th>
<th>Housing Units / Gross Acre</th>
<th>Jobs / Gross Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Center</td>
<td>65.2</td>
<td>110.8</td>
</tr>
<tr>
<td>City Residential</td>
<td>69.3</td>
<td>9.6</td>
</tr>
<tr>
<td>Mixed-Use Corridor</td>
<td>13.3</td>
<td>29.4</td>
</tr>
<tr>
<td>Town Center</td>
<td>11.0</td>
<td>33.2</td>
</tr>
<tr>
<td>Town Neighborhood</td>
<td>20.8</td>
<td>4.0</td>
</tr>
<tr>
<td>Small Downtown</td>
<td>7.1</td>
<td>32.9</td>
</tr>
<tr>
<td>Neighborhood Center</td>
<td>12.1</td>
<td>7.0</td>
</tr>
<tr>
<td>Compact Neighborhood</td>
<td>10.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Townhome Neighborhood</td>
<td>10.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Suburban Multifamily</td>
<td>14.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Master Planned Community</td>
<td>6.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Single Family Neighborhood</td>
<td>8.1</td>
<td>-</td>
</tr>
<tr>
<td>Suburban Residential</td>
<td>6.4</td>
<td>-</td>
</tr>
<tr>
<td>Large Lot Residential</td>
<td>3.8</td>
<td>-</td>
</tr>
<tr>
<td>Rural Residential</td>
<td>0.9</td>
<td>-</td>
</tr>
<tr>
<td>Office District</td>
<td>-</td>
<td>61.5</td>
</tr>
<tr>
<td>Suburban Office Park</td>
<td>1.5</td>
<td>36.2</td>
</tr>
<tr>
<td>Regional Retail</td>
<td>21.3</td>
<td>20.6</td>
</tr>
<tr>
<td>Arterial Commercial</td>
<td>16.3</td>
<td>14.1</td>
</tr>
<tr>
<td>Major Resort / Casino District</td>
<td>425.8</td>
<td>212.6</td>
</tr>
<tr>
<td>Neighborhood Resort / Casino District</td>
<td>192.8</td>
<td>100.3</td>
</tr>
<tr>
<td>Industrial Flex</td>
<td>-</td>
<td>12.3</td>
</tr>
<tr>
<td>Industrial and Warehousing</td>
<td>-</td>
<td>8.3</td>
</tr>
<tr>
<td>College Campus</td>
<td>0.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Medical Campus</td>
<td>-</td>
<td>59.9</td>
</tr>
</tbody>
</table>

*Note – The College Campus development type is very low density. Feedback at the workshop indicated the desire to represent the future college campuses (UNLV in the North and NSU in the South) true to their actual geographic size. To make this possible the density of the development type “College Campus” had to be lowered to reflect the future employment predicted for those sites. To reduce the density a large amount of open space and park was added to this development type.

Source: Fregonese Associates
2) DETERMINE PHYSICAL CONSTRAINTS

To determine the scenario base layer, we started with the buildable land layer in GILIS 2012 (provided by Clark County and SNS), which includes everything coded as vacant and agricultural land. We removed all of the following constrained or built up lands:

- Open water
- Riparian land
  - Open water (25 foot riparian buffer)
  - Rivers and washes (25 foot buffer on either side)
- Wetlands plus 25 foot buffer
- Slopes greater than 25%
- Parks and open space
- Floodways
- Constrained lands (provided by Southern Nevada Strong)

The result was a scenario base layer with all vacant buildable land in Clark County which totals 766,461 – 15% of the entire County. Within the Disposal Boundary, there are 88,657 buildable vacant acres, or 27% of the area within the boundary. Vacant buildable land are parcel that have not development or improvements such as parking lots.

3) ESTABLISH POLITICAL AND DEMOGRAPHIC ASSUMPTIONS

After establishing physical constraints for the region, we refined a set of assumptions that drive land use patterns: population, future employment, housing split, and the location of development.

POPULATION FORECAST

Each scenario is designed with the goal to reach a target population and employment forecast. The baseline scenario uses the UNLV Forecast Report for Clark County, Nevada, 2012-2050. Although the report includes forecast data for years up to 2050, the Southern Nevada Strong horizon year is 2035. The population is anticipated to be 866,000 in 2035. The Envision Tomorrow model uses housing units as an input, rather than population. An average household size of 2.5 (provided by ECONorthwest) resulted in a target of 344,390 housing units for 2035.

LOCATION OF DEVELOPMENT

We assumed little redevelopment of parcels, except in areas such as Downtown Las Vegas, along the Strip, and the Las Vegas Medical District. These are areas that have seen redevelopment in recent years and the baseline scenario assumes that trend will continue. In addition, we added more industrial jobs to underutilized industrial land in North Las Vegas. There is a limited amount of vacant land available for industrial growth within the Disposal Boundary. Using underutilized industrial land will allow for more industrial growth within the urbanized area.

HOUSING SPLIT

Most forecasts expect that shifts in household age, household composition, and income will cause the housing market in Clark County to change from the trends it evidenced over the last decade and more. ECONorthwest’s housing forecast described two alternative variations of how housing preferences could change in the future. Based on shifting demographic trends, the region’s residents will have different preferences for housing types in the future, but this could change based on key factors that affect housing demand. The baseline scenario assumed that the region’s population would have preferences in line with Shift A, outlined in Figure 2. Shift A assumes that the foreclosure crisis resolves sooner, personal incomes continue to grow, and that people who grow older in or move to Clark County generally prefer and can afford to own and live in single-family detached housing.
Envision Tomorrow has three housing categories: Single Family, Townhomes, and Multifamily. Figure 3 translates ECO’s housing split to match the Envision categories. To meet the forecast shown in Figure 3, predominately single use development types were used in the baseline scenario. For instance, single family subdivision and suburban multifamily are two development types that match closely to the building types on the ground in the Las Vegas Region.

**Figure 2. Shift A – ECO housing type forecast**

<table>
<thead>
<tr>
<th>Housing Type</th>
<th>% of total housing units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Detached</td>
<td>60%</td>
</tr>
<tr>
<td>Single Family Attached &amp; 2-4 units</td>
<td>15%</td>
</tr>
<tr>
<td>Multifamily with 5+ units</td>
<td>25%</td>
</tr>
</tbody>
</table>

ECO housing unit forecast 2035 - Shift A.

**Figure 3. Baseline scenario housing split**

<table>
<thead>
<tr>
<th>Housing Type</th>
<th>% of total housing units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Detached</td>
<td>60%</td>
</tr>
<tr>
<td>Single Family Attached</td>
<td>11%</td>
</tr>
<tr>
<td>Multifamily</td>
<td>29%</td>
</tr>
</tbody>
</table>

Source: Fregonese Associates, based on ECONorthwest analysis

**Employment Split**

The UNLV forecast anticipates 547,530 new jobs in Clark County by 2035. The UNLV report includes job and industry type. RTC (Regional Transportation Commission of Southern Nevada) provides a TAZ (transportation analysis zone) level of employment forecast data. Figure 4 shows the incremental growth in jobs in the baseline scenario in the following categories: retail, office, industrial, and hotel/hospitality. The percentage the incremental growth of each job type forecasted in the RTC was applied to the overall employment forecast from UNLV for 2035.

**Figure 3. Percentage of incremental growth in jobs by employment type**

<table>
<thead>
<tr>
<th>Employment Type</th>
<th>Percentage Share of Total New Jobs</th>
<th>Number of New Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>17%</td>
<td>94,344</td>
</tr>
<tr>
<td>Office/Other*</td>
<td>51%</td>
<td>276,001</td>
</tr>
<tr>
<td>Industrial</td>
<td>8%</td>
<td>44,362</td>
</tr>
<tr>
<td>Hotel</td>
<td>24%</td>
<td>132,857</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>547,564</td>
</tr>
</tbody>
</table>

*The “other” jobs were included in the office category.

4) DESIGN THE SCENARIOS

**The Base Case Scenario**

We used the following to inform the design of the baseline scenario:

*General Plans and Future Land Use*, provided by Southern Nevada Strong, were from multiple jurisdictions. They include jurisdictions within the incorporated area which are Las Vegas, Henderson, North Las Vegas, Boulder City and Clark County. As well as jurisdictions in the unincorporated area which are Enterprise, Laughlin, Lone Mountain, Northeast County, Northwest County, south County (west), South County (east), Spring Valley, Summerlin South, Sunrise Manor, Whitney and Winchester/Paradise. Map 1 was created by compiling these jurisdictions’ future land use plans. When applying the scenario to the landscape, the development type was matched with a corresponding base general plan type. For instance, we painted commercial development types on areas planned for commercial and different residential types on planned residential areas based on the best fit for density and type.

*Community Master Plan* concepts, when available online, guided the design of large vacant areas.
Disposal Boundary. As a first priority, all painting occurred within the disposal boundary. Only after exhausting options within the boundary or the indication of growth according to Future Land Use Plans did we locate new development outside of the boundary.

Aerial imagery makes it possible to see current development trends at a detailed scale. After looking at the best fit of a development type based on future land use plans, we took a closer look at what is on the ground today and what sites appear to be vacant. For instance, by using aerial imagery, it is possible to place future development in a pattern that is adjacent to current developments.

Highlights of the Base Case scenario:

- Outward shift in housing toward the edge of the region
- Areas of higher density housing are located on the edge of the urbanized area
- Strengthening of corridor employment areas and along the Strip and downtown
- New employment centers on edges of existing development centers
Map 1. Baseline Scenario

Source: Fregonese Associates.
The Preferred Scenario

The SNS process included many opportunities for the public and planning professionals to weigh in on their priorities for the region. Public and professional input helped determine the objectives for the preferred scenario, these inputs include:

- Stakeholder and public outreach results
- Input received by planners and developers
- Participants from various municipalities and local governments
- Maps with detailed information from each jurisdiction
- Additional information received via emails in the weeks following the workshops
- Discussions about comprehensive plan updates with local planners
- Economic analysis on how CEDS target industries and a focus on fostering entrepreneurship could impact preferences for future place types
- Task group priorities and results of literature reviews in ECONorthwest issue briefs
- Local investment plans
- Priority road and transit investments

Highlights of the preferred scenario:

- Less land consumption
- More housing is located in centers and along primary transit corridors
- More multi-family units in future than currently exist
  - 2012: 31% multifamily
  - Incremental Growth between 2013-2035: 39% multifamily
  - 2035: 33% multifamily
- Strengthening the strip and town centers via redevelopment of underutilized parcels into mixed-use development types
- Improving existing employment centers and building more diverse employment types
- Better use of existing school and park amenities, potential to expand or build within existing neighborhoods
- New infrastructure costs are less: fewer road miles to build and maintain, less new greenfield land to service
- Jobs/housing proximity improvements
- Reduced usage of resources (energy, water)
Map 2. Preferred Scenario

Source: Fregonese Associates.
Key Findings on Indicator Performance

Using a series of informed assumptions based on national and local data, we evaluate each scenario for its individual impact on the region’s housing mix, transportation network, environmental features, open space, natural areas, and economic development. Using the building prototype as the basis for evaluation allows us to measure indicators that were previously difficult to calculate, such as the amount of water consumed, the number of and type of employees, order-of-magnitude fiscal impacts, and even the total area of rooftops or parking lots.

We use indicators during the development and evaluation of the scenarios within Envision Tomorrow to communicate the benefits, impacts and tradeoffs of different policy choices and investments. Indicators enable Envision Tomorrow users to tie the scenario results to community values and guiding principles.

As scenarios are tested and refined, we compare and evaluate them based on their indicator performance. Indicators may be related to new or emerging community goals or issues such as transit access, housing costs, or agricultural land preservation. In practice, this approach allows the public to visualize their region’s future and track progress over time.

The Fiscal Impact Model is an additional tool that requires a supplemental process (see Appendix A of this memo). It is a stand-alone spreadsheet that relies on regional assumptions to establish a baseline of current data and a Scenario Spreadsheet for the development program of alternative scenarios. We use this indicator to estimate the net fiscal impact to local governments of different development scenarios. It shows that there are opportunities to expand the tax base without needing to expand existing services. We can evaluate scenarios based on estimates of the positive future revenue they produce that can be invested in the community and used to leverage private investments.

URBANIZED LAND AND IMPERVIOUS SURFACES

Urbanized acres represent the amount of developed land in each scenario. Each scenario has numbers for total urbanized acres in the scenario and incremental new urbanized acres. We can divide urbanized acres into new incremental urbanized acres on vacant land, or urbanization through redevelopment. The number of urbanized acres gives a sense of how much land would be developed under each scenario. Each prototype building contains site-level impervious surface from building footprints and parking as well as its streets and civic use. These elements are automatically summarized into an impervious surface coverage percentage for each development type. Impervious surface can have a negative impact on the health of a region. Instead of soaking in and filtering through the soil, rainwater runs off impervious surfaces, washing many polluting substances such as pesticides and oils into groundwater.

Under the baseline scenario, the region would see about 67,000 acres of new residential and employment lands development by 2035. This is comparable to building another city the size of Henderson. Within the Disposal Boundary, there are currently 88,657 vacant buildable acres - approximately 27% of the total area within the disposal boundary. Of the available buildable acres in the disposal boundary, the Base Case scenario uses 75% of these acres, or 67,038 acres of new growth. Figure 5 shows the acreage of new development and of new impervious surface under the baseline and preferred scenarios. The Baseline Scenario produces more developed acres and more impervious surface than the Preferred Scenario.
EMPLOYMENT MIX

Jobs are calculated based on building types in each scenario, typical of the jobs categories used for transportation models. Envision Tomorrow separates the jobs into retail, office, industrial, hotel, education, public/civic. For these scenarios, education jobs are included in office in jobs. From the Baseline and Preferred Scenarios, there is a small shift from hotel and hospitality jobs to an increase in office/other. The shift is slightly higher for the Preferred Scenario.
Figure 5. New jobs by type, Baseline and Preferred scenarios (the only notable difference is the slight shift to more office jobs in the Preferred scenario while the Baseline scenario has slightly more industrial jobs)
Source: Fregonese Associates

Figure 6. New jobs by type, Baseline and Preferred scenarios (Existing represents the current jobs by type, the Baseline and Preferred represent the incremental future jobs by type)
Source: Fregonese Associates

INDUSTRIAL LANDS
INDUSTRIAL LANDS

Future land use plans have designated an insufficient amount of industrial land to accommodate forecasted industrial jobs. Furthermore, there is not enough undeveloped, industrially-designated land within the disposal boundary to accommodate the forecast. As a result, approximately 22,000 industrial jobs, covering an area of over 2,600 acres, were placed on land outside of the disposal boundary near Apex in the Base Case. The Baseline and the Preferred Scenario must use land outside of the Disposal Boundary to accommodate the industrial employment forecast.

HOUSING MIX

Housing mix indicates whether the housing in an area is single-family, townhouse, or multi-family. This measures the variety of housing types provided, as well as the density typical of new housing types. Each development type is defined as a certain mix of building types. Therefore, each development type contains a certain mix of single-family homes, townhomes, and multi-family homes. We multiplied the number of acres of each development type in each scenario by the single-family, townhome, and multi-family percentages in each development type to arrive at the number of new single-family, townhome, and multi-family households in each scenario.

The Preferred Scenario offers more multi-family housing and townhomes by 2035. In addition to more diverse housing options, the increase in townhomes and multifamily residential provides more areas with a higher number of housing units per acre. Fourteen units per acre is considered a threshold for possible transit lines. The Preferred Scenario offers 50% of housing within mixed use areas while the Baseline Scenario offers 24% within mixed use areas. Most of the housing within the baseline is in a traditional suburban format. Development types that are considered mixed use include city center, city residential, mixed use, corridor, town center, town neighborhood, small downtown, neighborhood center, compact neighborhood and townhome neighborhood. The mixed use indicator refers to a horizontal as well as vertical mixed use.
Figure 7. Future Housing Mix under the Baseline and Preferred Scenarios (Incremental)
Source: Fregonese Associates

Figure 8. Housing Mix under the Baseline and Preferred Scenarios
Source: Fregonese Associates
Figures 9 and 10: Housing units by net residential acres.
Source: Fregonese Associates

**JOBS HOUSING BALANCE**

The ratio of jobs to households in the various subareas within a region or city can be an important indicator of the health of a region. If a large mismatch exists between employment and housing in one or more subareas, then significant in-commuting and out-commuting will occur, putting pressure on the transportation system and adding to household transportation costs. The ratio measures all housing relative to all jobs, not necessarily jobs where the persons in the households are employed. As jobs are a surrogate for destinations, this indicator is measuring person-destination match. The Preferred Scenario offers more housing and jobs in close proximity to each other.
DEVELOPMENT TYPES

Under the Preferred Scenario, new housing unit locations shift from the single family, suburban and large lots that dominate the Baseline Scenario, towards towns, neighborhoods, mixed use, city residential and town centers. Similarly, under the Preferred Scenario there are fewer jobs in the suburbs than in the Baseline Scenario but more jobs in mixed use areas, town centers and major resorts. It is important to note that these are not based on behavior changes, but rather land use differences between the two scenarios.

Figure 11: Jobs Housing Balance ratio for Existing, Baselines and Preferred Scenarios.
Source: Fregonese Associates

![Jobs Housing Balance ratio](image)

Figure 12: Distribution of housing units throughout different development types for the Baseline and Preferred Scenarios.
Source: Fregonese Associates

![Distribution of housing units](image)
WATER USEAGE

Internal water consumption (see Figure 15) and waste water collection, storage and treatment (see Figure 16) have major financial and environmental impacts. Water bills can make up a large proportion of household utility costs. A major driver of water use by households is watering yards and other landscaped areas (see Figure 17). Reduction of water consumption and waste water production can help reduce both household and municipal costs. Excessive water consumption and excessive waste water can put a strain on water supplies and infrastructure, especially in the Southern Nevada Region, which, like many other areas in the Southern US, is faced with water scarcity. Internal water consumption and waste water production are calculated by using national averages for water consumption per household by housing type and per employee by employment type for each scenario, calibrated for the Southern Nevada Region. Internal water consumption by households and employees is therefore a key measure of sustainability. Under the Preferred Scenario, households demand, waste and need (see Figure 18) the least amount of water. (The measurements in the figures below are all in gallons.)
Figure 15: Water Need per household for Baseline and Preferred Scenarios.
Source: Fregonese Associates

ROADS

The Preferred Scenario requires slightly fewer roads to be constructed than the Baseline Scenario. With fewer roads needed under the Preferred Scenario, road costs are lower and there less new impervious surface.

Figure 16: New road miles needed under the Baseline and Preferred Scenarios
Source: Fregonese Associates
AFFORDABILITY

The scenarios contain a range of housing types, and are compared to a profile of housing needs, by income, tenure, and preference. Both Scenarios include an average wage of about $44,000 per household. The Preferred Scenario offers more affordable housing options than the Baseline. The household income needed to afford the average home is 16% lower for the Preferred Scenario. The Preferred Scenario offers more lower cost housing options with a greater number of townhomes and multifamily options to choose from.
Environmental indicators applied in the Scenarios include energy and water consumption and waste water and solid waste. The Preferred Scenario has an overall lower impact on the environment than the Baseline. The Preferred Scenario will consume 17% less land than the Baseline and has 14% less impervious surface. The biggest water savings in the Preferred Scenario can be attributed to a decrease in water used for landscaping. The Preferred uses over a third less water than the Baseline Scenario. Overall the Preferred Scenario is more environmental friendly.

Internal water consumption and waste water collection, storage and treatment have major financial and environmental impacts. Water bills can make up a large proportion of household utility costs. A major driver of water use by households is watering yards and other landscaped areas. Reduction of water consumption and waste water production can help reduce both household and municipal costs. Excessive water consumption and excessive waste water can put a strain on water supplies and infrastructure, especially in the Southern Nevada Region, which, like many other areas in the Southern US, is faced with water scarcity. Internal water consumption and waste water production are calculated by using national averages for water consumption per household by housing type and per employee by employment type for each scenario, calibrated for the Southern Nevada Region. Internal water consumption by households and employees is therefore a key
measure of sustainability. Under the Preferred Scenario, households demand, waste and need the least amount of water.

<table>
<thead>
<tr>
<th></th>
<th>Preferred vs. Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Use (1000 BTU/Yr)</td>
<td>-11.0%</td>
</tr>
<tr>
<td>Carbon Emissions (Tons/Yr)</td>
<td>-11.0%</td>
</tr>
<tr>
<td>Landscaping Water Use (G/Day)</td>
<td>-36.3%</td>
</tr>
<tr>
<td>Internal Water Consumption (G/Day)</td>
<td>-15.6%</td>
</tr>
<tr>
<td>Waste Water (G/Day)</td>
<td>-12.9%</td>
</tr>
<tr>
<td>Solid Waste (lbs/Day)</td>
<td>-16.4%</td>
</tr>
</tbody>
</table>

**Figure 21: The percent difference in various environmental indicators between the Preferred and Baseline Scenarios**  
Source: Fregonese Associates

**TRANSIT**

The Preferred Scenario supports transit oriented development based on net residential units per acre. Under the Preferred Scenario there are 47% more housing units within one mile of high capacity transit lines and 86% more housing units within a quarter mile of high capacity transit lines than under the baseline scenario.

<table>
<thead>
<tr>
<th>Housing Units</th>
<th>Existing</th>
<th>Baseline</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within a quarter mile of high capacity transit</td>
<td>21%</td>
<td>9%</td>
<td>16%</td>
</tr>
<tr>
<td>Within one mile of high capacity transit</td>
<td>51%</td>
<td>27%</td>
<td>37%</td>
</tr>
</tbody>
</table>

**Figure 22: The percent difference in various environmental indicators between the Preferred and Baseline Scenarios**  
Source: Fregonese Associates

Close proximity to parks/open space and schools are important for families and adults. Living close to a park will increase the likelihood of an individual to enjoy it and will increase the overall health of the community. The Preferred Scenario offers 21% more housing units within a quarter mile of a park or open space and one-third more housing units within of a quarter mile of a public school than the Baseline Scenario.

<table>
<thead>
<tr>
<th>Housing Units</th>
<th>Existing</th>
<th>Baseline</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks and open space within a quarter mile</td>
<td>58%</td>
<td>29%</td>
<td>33%</td>
</tr>
<tr>
<td>Parks and open space within one mile</td>
<td>89%</td>
<td>86%</td>
<td>88%</td>
</tr>
<tr>
<td>Public schools within a quarter mile</td>
<td>23%</td>
<td>7%</td>
<td>9%</td>
</tr>
</tbody>
</table>
Figure 23: Percentage of residences in close proximity to parks and schools in the Preferred and Baseline Scenarios (Both the Preferred and Baseline scenarios are showing only the incremental units within close proximity to parks/open space and schools, while the Existing represents the current housing units proximity to parks/open space and schools)
Source: Fregonese Associates

TRAVEL BEHAVIOR

Vehicle miles traveled (VMT) (see Figure 27), mode split (see Figure 28), and trip length (see Figure 29) are not only determinants of air quality and public health, they also reflect a region’s urban form. Fregonese Associates employed the Envision Tomorrow Household 7D model to gauge the land use impacts each scenario had on travel behavior. While the preferred scenario showed some improvement in VMT reduction over the baseline scenario, the Household 7D model indicated that both scenarios underperformed existing conditions. Despite this, the number of trips relative to existing conditions was reduced somewhat by the land use changes in the preferred scenario. Similarly, transit, bicycle and walk trips per capita increased slightly in the preferred scenario when compared to existing conditions.

While the preferred scenario’s increase in per capita VMT over existing conditions may seem counterintuitive, there are several key land use factors that can be attributed to the increase. First, as noted above, trips per capita decrease indicating not more, but longer auto trips on average. The decrease in auto trips is accompanied by an increase in VMT which yields average trip length of 5.3 miles in the preferred scenario and 4.2 miles in existing conditions. This is the result of a sharp rise in population density, relatively far from the region’s core. While much of the region’s population benefits from improved transit and land use in the core, those living in new planned communities on the fringe must engage in longer auto trips to reach employment thus driving up per capita VMT in the region (see Figure 30).

![Daily VMT per Capita](chart)

**Figure 24: Average Daily per Capita VMT for Home-Based Trips**
Source: Fregonese Associates
Figure 25: Mode Split for Home-Based Trips
Source: Fregonese Associates

Figure 26: Average Auto Trip Length
Source: Fregonese Associates
Fiscal Impacts

The purpose of the Fiscal Impact Tool (FIT) is to consider the short and long-term changes in revenue and spending associated with municipal services, environmental protection, economic development, transportation, and infrastructure. A very real challenge is that many projects and services are paid for on the local level, and in any given scenario, some communities may see more success than others. For this reason, the fiscal impact analysis must ultimately tell a regional story that underscores the collective gains of multi-jurisdictional cooperation.

Overall, the Preferred Scenario makes more fiscal sense. The capital outlay of the Preferred Scenario is $400 million less over 25 years compared to the Base Case Scenario. Moreover, while the Base Case scenario generates slightly more revenue over the scenario horizon (see Figure 27), this gain is overshadowed by total

Map 4: Percent Change in Average Daily Household VMT
Source: Fregonese Associates
expenditures as compared to the Preferred Scenario. This results in a slightly better revenue-to-cost ratio for the Preferred Scenario (Figure 28) though expenditures still exceed revenues over the forecast horizon.

---

**25-Year Revenues and Expenditures**

![25-Year Revenues and Expenditures](source)

*Figure 27: 25-Year Revenues and Expenditures*

*Source: Fregonese Associates*

---

**Revenue-to-Cost Ratio**

![Revenue-to-Cost Ratio](source)

*Figure 28: Revenue-to-Cost Ratio*

*Source: Fregonese Associates*
Appendix A: Applying the Federal Reserve Board’s Fiscal Impact Tool to ET+ (Accompanying this memo is an excel spreadsheet that contains information referenced in this section of the document)

Overview

The FIT is a stand-alone spreadsheet that integrates with the scenario spreadsheet outputs. The latest version of its fiscal impact tool is modeled after the Federal Reserve Board’s “Fiscal Impact Tool”. It includes FIPS-driven fiscal lookup tables for the entire U.S. It circumvents irregularities of local budget reporting and makes fiscal analysis efficient and standardized. The inputs include local tax rates and municipal population as well as scenario outputs relating to population, employment, and property value of new construction. The app uses this to calculate both projected future revenue and increases to per capita operations and maintenance costs. The ratio of total revenues and total costs allows users to compare current conditions and multiple future development scenarios.

Linkages between ET and the FIT

The fiscal impact of a scenario is broadly determined by two categories: location and development type. Locational factors include a differentiation in taxing structures in incorporated vs. unincorporated areas, presence of existing infrastructure, and the value of existing structures in a given area. The revenues and expenditures incurred by development in unincorporated areas can vary dramatically from those incurred within municipal boundaries, thus the FIT draws a hard line between the two. Users of the tool are prompted to adjust the share of revenue attributed to the county, and the share of ongoing expenditures borne by it. Moreover, a distinction is made between the cost of redevelopment (development on existing developed land) and green-field development (development on vacant land). Costs are assumed to be higher on vacant land as greater infrastructure investments would likely have to occur. In order to account for the loss of existing tax base through abandonment or redevelopment, the approximate value of existing structures is tracked when a user “paints” over them. While locational factors can tell us a lot about the costs of developing in a certain area, they only give us half the picture.

The style of development, i.e. what development types are painted, also plays a significant role in fiscal impact. Those engaged in local public finance know that there can be vast differences in the revenues and expenditures gleaned from different styles of construction. Single-family subdivisions rarely yield as much revenue as denser multifamily housing and expenditure considerations can differ between office, industrial, and retail uses. A range of development type attributes are tracked in Envision Tomorrow and are then fed to the FIT. Information related to the new population being added to a scenario, the value of all new construction, and the cost of providing new infrastructure are unique to each development type.

The stand-alone FIT spreadsheet is linked to the Envision Tomorrow Scenario spreadsheet so when a user paints a development type, the fiscal impact of that development type is seen immediately. The user can also track individual input variables in order to gain a better understanding of the unique fiscal conditions that are influencing model outputs.

The Fiscal Impact Tool relies on the following outputs from Envision Tomorrow:
• **Population**

• **Development Mix (Sq Ft) – Based on building types**
  - Residential
  - Retail
  - Office
  - Industrial
  - Public/Civic
  - Educational
  - Hotel/Hospitality

• **Employment Mix – Based on development type density and employment mix**
  - Retail
  - Office
  - Industrial
  - Public/Civic
  - Educational
  - Hotel/Hospitality

• **Housing Units – based on development type density and housing mix**

• **Project Value - based on building types**
  - Residential
  - Commercial

• **Infrastructure Costs – based on streets assumptions for each development type**
  - Roads
  - Water Lines
  - Sewer Lines

**Tool Customizations**

**Functional Population**

In order to assess the impact of population and activity increase in an area, it is not adequate to simply consider new residential population or even residents plus workers. Rather, it is important to take into considerations the variable demands that different resident and employment groups make on local infrastructure based on their commute and travel habits. The FIT uses a method called “functional population” — to rationally attribute demand by land use and estimate aggregate demand for a community.

Functional population is the equivalent number of people occupying a space within a community on a 24-hour-per-day, seven-day-per-week basis.

**Scenario Ramp-up**
It is not within the scope of the FIT to make assumptions as to when exactly within the scenario horizon development will take place. This is an important factor to consider as it impacts the net present valuation of development. In the absence of more nuanced assumptions, a smooth ramp-up of scenario expenditures and revenues was assumed - for example, over a period of 30 years – 3.3% per year.

Variable Tax Rates

The issue of varying tax structures across jurisdictions was not approached lightly. Each scenario was modeled at the county-aggregate level. This means that the complete fiscal impact of each scenario was considered for the county as a whole – including cities, villages, townships, and other unincorporated areas. Very early on, we encountered the issue of reporting the varying tax rates of many different jurisdictions as one value. Since the model only allows for a single county and municipal rate for each tax category (sales, income, and property), a weighted average method was used.

We improved upon the county level data provided through the 2010 Census of Governments by using publicly-available data provided to us by staff associated with the Southern Nevada Strong project. Fregonese Associates compiled this information into cut sheet of tax rates, revenues, and expenditures for the region’s largest jurisdictions. These were then weighted by population to provide weighted tax rates for the municipalities in each county.

Income Tax

Income tax structures can vary across a region. For the purposes of this analysis we made a broad assumption that main differences would occur between incorporated and unincorporated areas. As a result, we made the assumption that any scenario development occurring outside existing city or village boundaries would subject to a separate income tax rate. As a proxy for this, we used the municipal population ratio – the ratio of residents residing in incorporated areas to those residing in unincorporated areas – and assumed that this ratio would remain constant into the future. This ratio was then used to create an effective income tax rate, weighted by population.

Future income tax revenue was projected as follows:

- [annual average wage by sector] x [scenario employment by sector] * [weighted average income tax rate]
- Weighted average based on municipal population ratio – incorporated v.s. unincorporated population in county

Sales Tax

Sales tax revenue for each scenario was based on the total payroll in each scenario, an assumption about the percent of consumer dollars spent subject to sales tax, and an assumption about the amount of sales tax leakage out of each county. This led us to calculate future sales tax revenue as follows:

- Annual sales tax revenue = [Total payroll in scenario] x [% consumer dollars spent subject to sales tax]-[Leakage out of county]
- Leakage out of county based on workers working in the county but living elsewhere
• Payroll based on County Business Patterns (CBP) data and scenario employment by sector

County Business Patterns Data: [http://www.census.gov/econ/cbp/]

**Property Tax**

Given the variable millage rates for commercial and residential property, we broke out future property tax revenue projections accordingly. Assessment ratios, based on local research, were set at 35% for all property types. Again, a weighted average was used to account for the variability in millage rates between different jurisdictions. Future property tax revenue was calculated as follows:

- Annual scenario property tax revenue = \([\text{market value of scenario construction}] \times [\text{millage rate}] \times [\text{assessment ratio}]\)

**Capital Outlays**

Envision Tomorrow tracks capital outlays for new infrastructure in the following categories:

- Roads – lane miles of new roadway
- Utilities – miles of overhead electric
- Water/Sewerage – lineal feet of pipe

Each development type has associated road land miles per vacant acre assumptions. The utility, water, and sewerage factors listed above track with miles of new roadway. Assumptions were made for each development type as to the percent of new roads built within that development type that would likely be publicly financed.

<table>
<thead>
<tr>
<th>Development Type</th>
<th>% Publicly Financed</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Center</td>
<td>100%</td>
</tr>
<tr>
<td>City Residential</td>
<td>80%</td>
</tr>
<tr>
<td>Mixed-Use Corridor</td>
<td>80%</td>
</tr>
<tr>
<td>Town Center</td>
<td>90%</td>
</tr>
<tr>
<td>Town Neighborhood</td>
<td>80%</td>
</tr>
<tr>
<td>Small Downtown</td>
<td>80%</td>
</tr>
<tr>
<td>Neighborhood Center</td>
<td>75%</td>
</tr>
<tr>
<td>Compact Neighborhood</td>
<td>80%</td>
</tr>
<tr>
<td>Suburban Multifamily</td>
<td>80%</td>
</tr>
<tr>
<td>Master Planned Community</td>
<td>35%</td>
</tr>
</tbody>
</table>
Capital outlays from the FIT are extremely sensitive to the per mile and lane-mile costs associated with different infrastructure types. These cost figures are also notoriously difficult to track down as they vary based on location, time of year, and terrain. The table below lists our assumptions for the Southern Nevada Strong project.

<table>
<thead>
<tr>
<th>New Infrastructure Capital Costs</th>
<th>Source</th>
<th>Unit</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Roadway</td>
<td>Arkansas DOT</td>
<td>Lane Mile</td>
<td>$2,250,000</td>
</tr>
<tr>
<td>Streetscape</td>
<td>-</td>
<td>Lineal Foot</td>
<td>$-</td>
</tr>
<tr>
<td>Sewerage</td>
<td>Donald E. Pelissier, City of Henderson</td>
<td>Lineal Foot</td>
<td>$100</td>
</tr>
<tr>
<td>Utilities - above-ground</td>
<td>Western Mass. Electric Company</td>
<td>Mile</td>
<td>$600,000</td>
</tr>
<tr>
<td>Water Lines</td>
<td>Donald E. Pelissier, City of Henderson</td>
<td>Lineal Foot</td>
<td>$120</td>
</tr>
</tbody>
</table>

**Operations and Maintenance**

Baseline assumptions for operations and maintenance (O&M) costs come from the Census of Governments (2010) data that resides in the FIT. These baseline assumptions for total O&M costs are tracked in the following expenditure categories:

- Education
- Hospitals
- Roads
- Police
- Fire
- Parks
- Sewerage
- Solid Waste
- Utilities

For each of the above expenditure categories, the total expenditure is divided by the functional population residing within the county to produce a “per functional capita” effective expenditure rate. Future O&M is assumed unchanged unless there is an increase in the yearly capital expenditure associated with a given O&M category. This is based on the broad assumption that increases in the size and complexity of built infrastructure will inherently increase maintenance costs. For example, if average yearly capital outlay for utilities increases over the scenario horizon, then there will be a proportionate increase in O&M costs for utilities. Future O&M is calculated as follows for each expenditure category:

- Future per capita O&M = [Baseline per capita O&M] x [% change in average annual capital outlay]
Appendix H – Target Industries Memorandum
Industry Sectors and Placemaking: Technical Analysis in Support of Regional Scenario Planning in Southern Nevada

August 2013

Prepared for:
Southern Nevada Strong
About this report

ECONorthwest completed this project under contract to Southern Nevada Strong. Southern Nevada Strong’s purpose in commissioning this study was to evaluate the ways in which an ongoing regional land use planning process can support a regional economic development strategy. Becky Steckler, Lorelei Juntunen, and Emily Picha prepared this report. ECONorthwest is solely responsible for its content.

This project is partially funded by a federal Sustainable Communities Initiative Grant.

ECONorthwest gratefully acknowledges the substantial assistance provided by staff at Fregonese Associates. Many other firms, agencies, and staff contributed to other research that this report relied on.

ECONorthwest specializes in economics, planning, and finance. Established in 1974, ECONorthwest has over three decades of experience helping clients make sound decisions based on rigorous economic, planning and financial analysis.

Throughout the report we have identified our sources of information and assumptions used in the analysis. Within the limitations imposed by uncertainty and the project budget, ECO and Southern Nevada Strong have made every effort to check the reasonableness of the data and assumptions and to test the sensitivity of the results of our analysis to changes in key assumptions. ECO and Southern Nevada Strong acknowledge that any forecast of the future is uncertain. The fact that we evaluate assumptions as reasonable does not guarantee that those assumptions will prevail.

For more information about ECONorthwest, visit our website at www.econw.com.

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1 Introduction

To more clearly focus its land use planning on increasing regional economic competitiveness, Southern Nevada Strong (SNS) is evaluating target industry needs and using those needs as a key input to building a preferred scenario for future land use patterns. ECONorthwest (ECO) is under contract with SNS to, among other tasks, develop a methodology and findings to support such a preferred scenario. This report provides the technical details of a methodology that translates a group of target industries to the “place types” – or on-the-ground combinations of uses and amenities – that the employees of those target sectors might prefer. These place types form the basis of the preferred scenario for future development patterns, which is different from the land use patterns and place types that are currently available in Southern Nevada.

To better understand the types of places that workers in key industries may prefer, this analysis provides a socioeconomic analysis of three of the seven target industries identified in the draft Comprehensive Economic Development Strategy (May 2013)—Healthcare, Business IT Ecosystems, and Global Banking. Combined with a literature review and interviews of economic development professionals from around the country, this analysis will help guide the scenario planning process, which aims to identify land use patterns which will make Southern Nevada more competitive for attracting firms and skilled workers in the target industries.

2 Overview of approach

For a variety of reasons, including a lack of economic diversification and rampant speculation in the housing market, the Southern Nevada region was hit harder by the most recent recession than most other regions around the country. In an effort to strengthen its communities and economy, the region is working together to develop the first coordinated regional strategy for job growth, the Comprehensive Economic Development Strategy (CEDS). A parallel effort, supported by the U.S. Housing and Urban Development (HUD) Department, is creating the first regional land use plan to support reliable transportation, housing, and job opportunities for Southern Nevada’s future.

The CEDS recognizes that if Southern Nevada is going to thrive and be more economically resilient and competitive, it must adapt to take advantage of existing regional strengths and address regional economic challenges. Leaders throughout the region will need to adopt strategies that allow Southern Nevada to compete nationally and internationally for new businesses and talented workers. At the same time, the SNS recognizes that to be more competitive, leaders must pursue a variety of strategies, including investing in land use,
infrastructure, and education, all of which are necessary to support population and job growth and encourage a diversified economy. This research connects the two efforts together.

In an effort to coordinate economic development strategies outlined in the draft CEDS with the land use scenario planning activities of Southern Nevada Strong, SNS project leaders asked ECONorthwest to research two questions:

*What land use changes will best prepare the region for competing for businesses and talented workers in the CEDS target industries? How might placemaking efforts support entrepreneurs and small businesses in Southern Nevada?*

This analysis consists of a literature review, interviews with human resources and economic development professionals, and a quantitative analysis of industry concentrations. This information helps tell the story about how a comprehensive approach to targeting key economic sectors can benefit the entire Southern Nevada region, as described by the goals in the CEDS.

As one of several inputs to a preferred scenario, this analysis focuses on the neighborhoods and amenities that employees in the target industries are likely to demand. Other inputs include a set of priorities and goals created by a group of community partners that have been engaged to support this planning process, the results of public polling and outreach, population projections, market analysis, and land use analysis that identifies constraints and total land supply for various uses. Other parts of the scenario planning process will address the total supply of employment land needed, the density at which they should be developed, and where those lands should be located.

### 3 Target industries

The CEDS document identifies several target industry clusters that previous studies have shown have high potential for growth in Southern Nevada, namely:

- Gaming, Tourism, and Conventions
- Business IT Ecosystems
- Clean Technology
- Healthcare and Life Sciences
- Logistics, Manufacturing, and Distribution

---

1 Much of the literature on the connection between target industry recruitment successes and place-based approaches is “gray literature”; there are few peer-reviewed, statistically-significant studies that quantitatively identify a connection between these variables with a rigorous research
- Defense and Unmanned Aerial Systems
- Global Finance, Banking and Business Services

Many of these target industries were first identified in the 2011 report by Brookings Mountain West, entitled Unify, Regionalize, Diversify: An Economic Development Agenda for Nevada. Subsequently, the State of Nevada outlined the same industries in its Economic Development Plan, entitled Moving Nevada Forward: A Plan for Excellence in Economic Development. In 2012, the Las Vegas Regional Economic Development Coalition was formed to create a region-specific economic development plan for Southern Nevada. The CEDS is a product of those efforts.

The SNS plan has a different but related focus—development patterns and placetypes—which will be articulated as a preferred scenario for future development. Though the preferred scenario will not (and cannot, in any reasonable planning horizon) change entirely the nature of land use in the region, it will show concentrations of growth in different locations, and may also change development patterns in some areas. The preferred scenario will support all target industries, but not all of the target industries require substantial changes to the built environment. This analysis assumes that some industries will be supported by the existing transportation network and supply of employment lands that are not changed in the preferred scenario, and emphasizes the target industries that require changes in land use patterns in order to create a competitive advantage for the region over other regions.

The table below provides a brief overview of each CEDS target industry, and an explanation of why some were chosen for the analytical purpose of this report.
<table>
<thead>
<tr>
<th>CEDS Industry</th>
<th>Brief Overview of Industry</th>
<th>Connection to preferred scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaming, Tourism, and Conventions</td>
<td>Hotels, restaurants, convention centers, theatres, and golf courses are all staples of the tourism sector</td>
<td>Supported by parts of the preferred scenario that do not differ from current land use</td>
</tr>
<tr>
<td>Logistics, Manufacturing, and Assembly</td>
<td>Manufacturing, logistics, trucking, warehousing, and distribution</td>
<td>Requires consideration of land supply, addressed in other parts of the scenario planning process</td>
</tr>
<tr>
<td>Health Care and Life Sciences</td>
<td>Institutional healthcare facilities, (hospitals, clinics, labs) private medical practices, and residential treatment facilities (group housing, including rehabilitation, assisted living, and nursing care centers). Spas and wellness facilities, in some cases, also provide healthcare services</td>
<td>A focus of this analysis.</td>
</tr>
<tr>
<td>Business and IT Ecosystems</td>
<td>Technology and e-commerce infrastructure, including data management and security, software production, and customer service related to e-commerce.</td>
<td>A focus of this analysis.</td>
</tr>
<tr>
<td>Clean Technology</td>
<td>Utilities, research and development, solar, wind, geothermal, and biomass electric generation, water conservation technology, environmental assessment and green construction services</td>
<td>Some parts of this industry are supported by existing land use patterns (ie manufacturing). Other parts (ie research and software design) are similar to IT Ecosystems.</td>
</tr>
<tr>
<td>Defense and Unmanned Aerial Systems</td>
<td>Active duty military and civilian military employees, defense and security contractors, research and development</td>
<td>Some parts of this industry are not an urban land use; those parts of the industry that can be supported in urban environments (ie, research and system design) are similar to IT Ecosystems.</td>
</tr>
<tr>
<td>Global Finance, Banking, and Business Services</td>
<td>Financial institutions, business services related to trade, intangible business services</td>
<td>A focus of this analysis.</td>
</tr>
</tbody>
</table>
4 Future workers

To understand how land use patterns need to evolve to support the region’s efforts to attract new businesses and workers in these industries, we must first understand who is likely to be employed in these industries and what their preferences might be.

Currently, the region’s concentration of employment in most of these target industries is lower than would be expected based on national averages. The University of Nevada Las Vegas projects a total of about 550,000 new jobs by 2035. If the CEDS implementation process is successful in increasing the concentration of employment so that it is equal to national averages, the region would need to employ about 100,000 new employees in the target industries, or 20% of all new employment (with the remaining employment coming from the broader base of all industries in the region). This provides some sense of the scale of transition that the successful implementation of the CEDS may require. What might those 100,000 workers demand from their community environments?

Table 1 explores the demographic characteristics of workers in target industries.

Table 1. “Typical industry worker” Employment, Wage, and demographic information for Nevada and Las Vegas-Paradise, MSA, 2011 (Q3, Q4) and 2012 (Q1, Q2)

<table>
<thead>
<tr>
<th></th>
<th>All industries</th>
<th>Healthcare</th>
<th>Business IT Ecosystems</th>
<th>Banking and finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Yearly Wage</td>
<td>$43,869</td>
<td>$52,266</td>
<td>$55,943</td>
<td>$61,441</td>
</tr>
<tr>
<td>Male or female?</td>
<td>Male (51%)</td>
<td>Female (75%)</td>
<td>Male (64%)</td>
<td>Female (65%)</td>
</tr>
<tr>
<td>Have at least some</td>
<td>50%</td>
<td>62%</td>
<td>54%</td>
<td>66%</td>
</tr>
<tr>
<td>College or Associates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most common average age</td>
<td>25 - 44 (46%)</td>
<td>35-44 (25%)</td>
<td>25-34 (24%)</td>
<td>25-34 (26%)</td>
</tr>
</tbody>
</table>

Source: Data from LED Extraction Tool, US Census; Analysis by ECONorthwest 2013

Overall, target industry workers earn more, are more highly educated, and are (on average) slightly older. They are the kind of workers who can make choices about where they live. If the CEDS is to be successful in attracting these industries, it must include actions that support a future composition of employees in the Las Vegas region will be different than the current composition.

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2 Analysis by ECONorthwest. Details of methodology in full body of report.
5 Competing regions

The Las Vegas region is often compared to other regions that have large tourist economies or similar land use patterns, such as Orlando, Florida and Phoenix, Arizona. In this analysis, we are interested in understanding the regions with which Las Vegas is likely to compete for workers and businesses in target industries, rather than what regions have similar economic or land use patterns.

To inform this discussion, ECONorthwest completed an analysis of the economic composition of regions around the country to identify those that have high concentrations of employment in the three industries under evaluation for the Las Vegas region. Industry concentrations are typically measured with “location quotients”, or LQs. An LQ of “1” means that the concentration of the industry in the region is equal to the concentration in the nation. Any concentration over “1” can be interpreted as more highly concentrated than would be expected based on national averages.

Table 2 below shows the results. In general, the regions that have high concentrations in CEDS target industries are a very different list than those that are typically compared to Las Vegas.

<table>
<thead>
<tr>
<th>MSA</th>
<th>Sum of LQ</th>
<th>Health LQ</th>
<th>Business IT Eco LQ</th>
<th>Banking LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madison, WI MSA</td>
<td>4.38</td>
<td>1.04</td>
<td>1.75</td>
<td>1.58</td>
</tr>
<tr>
<td>Columbia, MO MSA</td>
<td>4.32</td>
<td>1.49</td>
<td>1.09</td>
<td>1.74</td>
</tr>
<tr>
<td>Boston-Cambridge-Quincy, MA-NH MSA</td>
<td>3.94</td>
<td>1.15</td>
<td>1.36</td>
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Source: County Business Patterns, 2011; analysis by ECONorthwest, 2013.

There are many reasons that these regions have employment concentrations in these industries that are not directly related to development patterns. High concentrations of employment in health care, for example, are often correlated with strong research hospitals at universities. Business IT ecosystems firms might be attracted to low energy costs or the presence of a particularly skilled workforce. Competing successfully for new industries will require the full range of actions that are described in the CEDS document, and strong regional partnerships that are focused on implementation.
For this analysis, however, we are most interested in understanding the place-based characteristics that improve competitiveness for new workers, so that land use plans can support the economic development activities that are outlined in the CEDS. To help to understand what place-based characteristics made these regions successful in attracting new employment, ECO conducted interviews with economic development and human resources (HR) professionals. They described the type of amenities that new employees are typically looking for in their neighborhoods and their urban environments when making choices about where to live. The results of these interviews are combined with the results of the other analysis in the key findings section below, and are detailed in the full body of the report.

6 Key findings

Based on the literature review and the profile of comparable metropolitan areas with strong employment in the target sectors, employees with higher educational levels and higher than average wages in the target sectors may be looking for the following amenities and community characteristics:

- **Vibrant mixed-use downtown and commercial areas that are within walking distance of homes.** The three top comparable MSAs all have vibrant downtowns and strong neighborhood commercial areas (for Madison and Boston). The downtown areas were all adjacent to the major regional university and often encompass more than one institution of higher learning. All of these areas concentrate restaurants, entertainment, art, retail, and event space.

  Multiple studies have shown that in many other communities, people are willing to pay more for amenities that are within easy walking distance. A study by the National Association of Realtors found that people want to be within walking distance of: (a) grocery stores, (b) pharmacies, (c) hospital, and (d) restaurants.³

- **Multi-family, rental housing within closer proximity to mixed-use commercial areas for younger workers (Gen Y).** National studies by ULI⁴

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⁴ *Housing in American: the Next Decade* by John McIlwain, Urban Land Institute, 2010.
and the National Association of Realtors\(^5\) support the finding that younger people are delaying household formation and buying and either living with parents longer or renting longer.

- **Homes close to public transit.** The literature overwhelmingly supports the fact that homes built close to public transit commanded a price premium. However, that does come with some caveats. The most significant price premiums come with commuter rail, then light rail, then BRT more so than bus alone, experience a price premium.\(^6\)

- **Suburban-style development.** While national surveys see an increased demand for higher-density housing, employees that are married and in middle incomes (more than $25,000 and less than $100,000) indicated that they prefer traditional suburban-type development. There is likely to continue to be strong demand for this development type in Southern Nevada.\(^7\)

- **Quality communities close to employment areas and quality schools.** Commute times are one of the top variables for determining where to live (especially within larger metropolitan areas). The desire for quality schools or safe neighborhoods is often more important for workers with children and women living on their own.

- **Walkable neighborhoods.** There is strong evidence that people will pay a premium for better walkability, with interesting places to walk to. The National Association of Realtors survey showed that people value neighborhoods with good pedestrian facilities (regardless of if you could walk somewhere interesting), implying that walking for exercise may important to people, and as long as they can still have a detached, single-family home with some privacy from neighbors.

- **Open space and parks.** A separate study\(^8\) that reviewed over 60 published articles found that people value most types of open space, but that value depends on the size of the area, proximity to homes, the type

---

\(^5\) The 2011 Community Preference Survey: What Americans are looking for when deciding where to live by Belden Russonello & Stewart for the National Association of Realtors, March 2011.


\(^7\) The 2011 Community Preference Survey: What Americans are looking for when deciding where to live by Belden Russonello & Stewart for the National Association of Realtors, March 2011.

of open space, and the methods used to conduct the analysis. In addition, open space and parks may be more valuable in urban settings, where residents do not benefit from natural space in more abundance in rural areas.

**Key findings specific to target industries**

**Healthcare**

- **An increased demand in housing clustered within easy commute distance of hospitals and other major medical service providers.** The Southern Nevada region is forecast to have an additional 88,600 healthcare employees, which is 16% of all new workers by 2035, without implementing a specific strategy to recruit them. Many of these new workers will come from different parts of the country and bring their families (if they have them). They are likely to prefer to maximize their housing investment and choose communities with housing types and neighborhood amenities that are located as close to their places of employment.

- **Many healthcare leaders promote wellness, and have become partners with municipalities to build “healthy communities” like those championed by the Centers for Disease Control.** Health care organizations and partner organizations, like the Centers for Disease Control, the National Association of County and City Health Officials, and the American Planning Association have expressed an increasing interest in the role planning has on community health. By designing healthy communities, Southern Nevada can become a partner with Healthcare workers in making residents healthier.

- **Healthcare employees may desire more parks, trails, bicycle paths and other infrastructure for active transportation, for themselves and their patients.** While healthcare employees health generally mirrors that of the public, they do tend to exercise more, which may have implications for designing communities with multiple active transportation options. In addition, healthcare providers often promote active transportation to their patients to try to encourage them to exercise more.

---

9 CBER

**Business IT Ecosystems**

- **Increased demand for high-quality multi-family (condominium) housing in downtown and mixed-use commercial areas.** Interviews suggest that high tech workers across the country are generally younger and may have a higher interest in living in vibrant downtowns and commercial areas with a mix of great food, entertainment, art, and other amenities. Certainly, the Downtown Project, a $350 million effort by Zappos and its CEO, Tony Hsieh, to attract tech startups to Downtown Las Vegas illustrates this point. To become truly sustainable, these areas would need to include not only restaurants and bars, entertainment, and events, but also grocery stores, pharmacies, dry cleaners, and other services that people use on a day-to-day basis.

**Global Banking and Finance**

- **Demand for communities with high amenities.** There was little research on the specific amenities that those working in banking and finance desire. Indeed, there is no evidence that bankers have desires that are unique, and instead will likely want the most amenity they can afford. If they have children, then this may mean locating in a community with good school districts. If they are young and childless, then it may mean they will choose to live closer to cultural and recreational attractions, work, and shopping. Some in the global finance and banking arena may prefer suburban lifestyles, but in closer proximity to office space.
- **Employment likely to be clustered in downtown high rises.**

**Entrepreneurs and Small Businesses**

While not part of the CEDS study, this research considers the needs of small businesses and entrepreneurs, which make up a large part of any economy’s base employment and can be an engine for job growth. Findings:

- **Communities with “third places” and meeting spaces for easy networking of entrepreneurs and small business owners.** One study\(^\text{11}\) found that entrepreneurs value trusted sources for key information and often don’t have the time to do detailed research, even if good information is readily available. Building and encouraging the development of “third places,” locations outside of work and home for people to meet and exchange ideas could help foster entrepreneurs and small business owners.

---

\(^{11}\) *Energizing an Ecosystem: Brewing 1 Million Cups* by Jared Konczal and Yasuyuki Motoyama, Kauffman Foundation, March 2013. P 4-5.
• **Reducing the concentration of big box retail may help support small businesses.** While there are conflicting findings regarding the impact of big box retail on small business, small businesses that compete directly with big box retailers may be more likely to close when a new big box retailer locates in close proximity (up to four miles). 12

• **Stripmalls may provide good locations for small businesses.** 13 Stripmalls in aging suburban locations often have lower rents, good exposure and access, and plenty of parking, making it more affordable for small entrepreneurial businesses, especially immigrant business owners that want to cluster close to immigrant neighborhoods.

### 7 Implications for the preferred scenario

While many actions will be necessary to increase the concentration of employment in the CEDS target industries that are not place-based, a more intentional approach to developing the kind of places that workers want in the future can improve the region’s chances of success. This means:

• A focus on a vibrant downtown
• Neighborhoods with walkable centers
• Successful schools located proximate to the neighborhoods that need them
• Suburban development that’s well located relative to major employment centers
• Access to high quality health care options for all residents, and a focus on “healthy lifestyle” amenities, such as open space and trails that connect neighborhoods
• A focus on commercial development types that can support and perhaps cluster medical services

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Appendix I – Existing Conditions Report
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CHAPTER 1 – INTRODUCTION

The following report is intended to describe current conditions in the Southern Nevada region. It is focused on findings relating to key areas such as: the economy and jobs, housing, transportation, the environment, and community health. The report identifies areas of strength and areas that can be improved upon in the region. The goal of the report is to inform the broader efforts of the Southern Nevada Strong, the SCI Grant project.

Southern Nevada Strong is a regional planning effort focused on the sustainable development of Southern Nevada. Residents and local leaders will identify a vision and aspirations for the region, explore potential scenarios and establish a direction for our future. This project is supported by a $3.5 million grant from the Partnership for Sustainable Communities – a joint effort between the Department of Housing and Urban Development, the Department of Transportation, and the Environmental Protection Agency. The Partnership seeks to help communities nationwide take an integrated approach to improving livability. The effort is leveraged by $1.5 million in local in-kind contributions.

1.1 REGIONAL LOCATION & GEOGRAPHY

One county and four cities form the Southern Nevada region: Clark County, Las Vegas, Henderson, North Las Vegas and Boulder City (see Figure 1). These communities constitute the Las Vegas-Paradise Metropolitan Statistical Area (MSA). MSA is a term developed by the federal Office of Management and Budget to describe metropolitan regions with a population over 50,000 and a high degree of economic integration. In Clark County, the MSA boundary is the same as the Clark County boundary.

Most data in this report use the MSA as the geographic reference. Some data use the Census defined urban area boundary, which is most closely aligned with the BLM disposal boundary. In an effort to provide as much detail as possible, most maps use the Southern Nevada urban area map (see Figure 2).

The Southern Nevada region is located in the Mojave Desert and bordered in the east by the States of Utah and Arizona and west by the State of California. The region’s natural waterway is the Colorado River, which lies 30 miles to the southeast. The region is served by Interstate 15, which connects to the Southern California metro area to the south and the Salt Lake City metro area to the north. US Highway 93 connects the region to the Phoenix metro area to the south and Reno metro area to the north. The Union Pacific rail line connects Los Angeles-Long Beach with Salt Lake City and Union Pacific’s transcontinental line to the eastern United States. McCarran International Airport is the major airport serving the region.
Figure 1: Southern Nevada Region

Source: SNRPC (2012)
1.2 PEER REGIONS

For the most part, peer regions used for comparisons throughout this report include Mountain West Metropolitan Areas. Regions from the Mountain West were selected for comparison because the Mountain West is unique from the rest of the Nation in that it is experiencing some of the “fastest population growth and economic and demographic transition” (Brookings, 2008), Comparisons were made when data were available. If data were not available at the Metropolitan Area level, then county data were utilized when available. For the Economy section, peer regions included other US Metropolitan Areas with similar tourism characteristics (ex. Orlando).
CHAPTER 2 – DEMOGRAPHICS

Findings Summary

POPULATION GROWTH AND PROJECTIONS

- Southern Nevada experienced an average annual growth rate of 5.2 percent from 2000-2007 and a slow (1.5 percent) growth rate from 2008-2011.
- While population growth is projected to be positive in Southern Nevada 2014-2025, the rate of growth will be slower than in the past decade.
- The Hispanic population as a percentage of the total population in the region is projected to surpass the White population around 2030.
- The median age (in years) in the region increased by 3.2 percent between 2000 and 2010.
- The 65+ age group is projected to increase as a percentage of the total population from 2015-2050 while other age groups are projected to decrease.

INCOME

- Residents have a higher median household income ($56,258) and a lower percentage of people living below the poverty level (11.7 percent) compared to the national median household income ($51,914) and poverty level (13.8 percent).

EDUCATION

- Compared to peer regions, Southern Nevada has a lower percentage of residents with a Bachelor’s degree or graduate/professional degree.
- Nevada graduation rates are the lowest in the nation (56.3 percent). Clark County School District graduation rates are lowest for Hispanic (59.8 percent) and Black students (57.6 percent), who make up a majority of the student population at 55 percent combined.
Key Findings

2.1 POPULATION CHANGE

The region’s population increased dramatically between 1990 and 2010. Clark County grew by 163 percent between 1990 and 2010, from 741,459 to 1,951,269. Based on US Census estimates, the population of Southern Nevada reached the highest level in 2011 at 1,969,975 people. This represented a 1 percent population increase from 2010 (US Census, 2012).

Table 1: Population Growth, 1990-2010

<table>
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<tr>
<th></th>
<th>1990</th>
<th>2000</th>
<th>2010</th>
<th>% Change, 1990 - 2010</th>
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<tr>
<td>Clark County</td>
<td>741,459</td>
<td>1,375,765</td>
<td>1,951,269</td>
<td>163%</td>
</tr>
</tbody>
</table>


The region will continue to grow over the next two decades, but at a slower rate than that of the 1990 – 2010 period. Population projections released by the University of Nevada at Las Vegas’ Center for Business and Economic Research (CBER) in June 2012 show that the region will continue to see moderate population growth in the coming decades. However, the growth rate will be lower than that between 1990 and 2010. Going forward, the region’s growth rate is projected to decline to 2 percent by 2020 and approach 1.1 percent by 2035. The region’s population will increase by nearly 20 percent each decade (see Table 2). Most of the growth is expected as a result of new employment opportunities and net in-migration.

Table 2: Population Projections, 2010-2030

<table>
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<tr>
<th></th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
<th>Change, 2010 - 2030</th>
<th>% Change, 2000 - 2010</th>
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<tr>
<td>Clark County</td>
<td>1,951,269</td>
<td>2,365,000</td>
<td>2,699,000</td>
<td>747,731</td>
<td>38%</td>
</tr>
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</table>

Source: CBER, Population Forecast (2012)

Over the next two decades, the region is expected to see a large increase in the Hispanic population as a percentage of the total population. The increase in the Hispanic population corresponds with a decrease in the White population, with relatively no change in population for Black and other ethnic groups (Figure 3). By 2030, the Hispanic population is projected to be a higher percentage of the population than the White population. This forecast incorporates the same assumptions utilized by national population forecasts. The Hispanic share of the population will increase because of
lower median age within childbearing years, than the overall population, higher birth
rates than the overall population and new immigrants and their children will account for
the majority of population growth through the next few decades.

2.2 HOUSEHOLD TYPE

The region’s percentage of traditional family households has declined. In 2000, over 66 percent of the region’s households were family households (i.e., composed of persons related to each other biologically or by marriage). Married couples comprised more than 48 percent of the region’s households and almost 22 percent were the traditional married with children type. In 2010, however, family households decreased to 65.4 percent, married couples to 45 percent, and married with children households to 19.9 percent (see Table 3). This decrease was accompanied by growth in single-person households and non-family households: non-family households rose from 33.7 percent to 34.6 percent and single-person households rose from 24.5 percent to 25.3 percent.

<table>
<thead>
<tr>
<th>Household Type</th>
<th>Percentage of Regional Households, 2000</th>
<th>Percentage of Regional Households, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>66.3%</td>
<td>65.4%</td>
</tr>
<tr>
<td>Married Couple</td>
<td>48.7 %</td>
<td>45%</td>
</tr>
<tr>
<td>Married with Children (subset of “Married couple”)</td>
<td>21.7 %</td>
<td>19.9%</td>
</tr>
<tr>
<td>Nonfamily</td>
<td>33.7%</td>
<td>34.6%</td>
</tr>
<tr>
<td>Single-Person</td>
<td>24.5 %</td>
<td>25.3%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, Decennial Data (2000 & 2010)
2.3 POPULATION BY AGE

The number of households with residents aged 55 and older increased in the past decade. Growth during the past decade reflected the aging of the baby boomer generation with the largest rates of increase occurring among the older age groups (see Figure 4 for change between 2000 and 2010). Between 2000 and 2010, the highest growth rates of all age cohorts were those aged 85 and older (87 percent) and 55 to 64 (67 percent). Overall, the 65+ age group is projected to increase as a percentage of the total population from 2015 (15 percent) to 2050 (23 percent).

Figure 4: Change in Age Cohorts, 2000-2010

![Age Cohorts Chart]

Source: US Census Bureau, Decennial Data (2000 & 2010)

2.4 AGE PROJECTIONS

While the 65+ age group is projected to have a 10 percent increase as a percentage of the total population from 2015 to 2050, all other age groups are projected to decrease. Although still the largest overall component of total population, the 25-64 age group is anticipated to have the greatest decrease at 7 percent.
2.5 RACIAL AND ETHNIC DIVERSITY

The region is becoming more racially and ethnically diverse. Between 2000 and 2010, all of the region’s non-white populations increased. The Hispanic population grew by over 88 percent, representing almost 30 percent of the region’s total population. The Black population grew by 56 percent, representing 10 percent of the region’s total population. The Asian population grew by over 127 percent, representing 8.5 percent of the region's total population. Minorities now make up 52 percent of the region’s total population (an increase from 39.8 percent in 2000) representing a majority, minority. Similar trends are occurring across the nation. Over the last decade, minorities, especially Hispanics and Asians, accounted for the majority of the nation’s population growth.
Table 4: Changes in Race/Ethnic Composition, 2000-2010

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic White</td>
<td>828,669</td>
<td>935,955</td>
<td>12.9%</td>
<td>60.2%</td>
<td>48.0%</td>
<td>-12.3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>302,143</td>
<td>568,644</td>
<td>88.2%</td>
<td>22.0%</td>
<td>29.1%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Black</td>
<td>124,885</td>
<td>194,821</td>
<td>56.0%</td>
<td>9.1%</td>
<td>10.0%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Asian</td>
<td>72,547</td>
<td>165,121</td>
<td>127.6%</td>
<td>5.3%</td>
<td>8.5%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Other</td>
<td>47,521</td>
<td>86,728</td>
<td>82.5%</td>
<td>3.5%</td>
<td>4.4%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Total population</td>
<td>1,375,765</td>
<td>1,951,269</td>
<td>41.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: US Census Bureau, Decennial Data (2000 & 2010)
Figure 6: 2010 Black Population by Census Tract

Figure 7: 2010 Hispanic Population by Census Tract

% Hispanic
- Less Than 1%
- 1% - 10%
- 10.1% - 25%
- 25.1% - 50%
- 50.1% - 88.21%

2.6 HOUSEHOLD INCOME

The majority of the region’s households have annual incomes less than $50,000. In 2010, 51 percent of the region’s households earned less than $50,000 annually, and 33.7 percent earned less than $35,000 (see Table 5).

<table>
<thead>
<tr>
<th>Annual Household Income</th>
<th>% of Total Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $25,000</td>
<td>21.4%</td>
</tr>
<tr>
<td>$25,000 to $34,999</td>
<td>12.3%</td>
</tr>
<tr>
<td>$35,000 to $49,999</td>
<td>17.1%</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>24.6%</td>
</tr>
<tr>
<td>$75,000 to $99,999</td>
<td>16.1%</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>15.2%</td>
</tr>
<tr>
<td>$150,000 or more</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, American Community Survey 5-Year Estimate (2010)

Annual household incomes are higher for White and Asian households compared to Black and Hispanic households. In 2010, 24.6 percent of Asian households and 21.6 percent of White households had incomes higher than $100,000 (see Table 6). In comparison, 10.5 percent of Black and 19.8 percent of Hispanic households had incomes higher than $100,000. Conversely, 44.5 percent of Black and 36.9 percent of Hispanic households had incomes less than $35,000 annually. By comparison, 28.7 percent of White and 26.1 percent of Asian households have household incomes less than $35,000 annually.

<table>
<thead>
<tr>
<th>Annual Household Income</th>
<th>White</th>
<th>Asian</th>
<th>Black</th>
<th>Other</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $24,999</td>
<td>18.00%</td>
<td>17.20%</td>
<td>31.10%</td>
<td>18.90%</td>
<td>21.60%</td>
</tr>
<tr>
<td>$25,000 - $34,999</td>
<td>10.70%</td>
<td>8.90%</td>
<td>13.40%</td>
<td>7.00%</td>
<td>15.30%</td>
</tr>
<tr>
<td>$35,000 - $49,999</td>
<td>14.80%</td>
<td>14.10%</td>
<td>15.30%</td>
<td>16.00%</td>
<td>18.10%</td>
</tr>
<tr>
<td>$50,000 - $74,999</td>
<td>21.00%</td>
<td>21.00%</td>
<td>19.90%</td>
<td>26.80%</td>
<td>22.40%</td>
</tr>
<tr>
<td>$75,000 - $99,999</td>
<td>13.80%</td>
<td>14.40%</td>
<td>9.60%</td>
<td>16.00%</td>
<td>11.90%</td>
</tr>
<tr>
<td>$100,000 - $149,999</td>
<td>13.40%</td>
<td>15.80%</td>
<td>7.40%</td>
<td>10.60%</td>
<td>7.90%</td>
</tr>
<tr>
<td>$150,000 or more</td>
<td>8.20%</td>
<td>8.50%</td>
<td>3.10%</td>
<td>4.70%</td>
<td>2.90%</td>
</tr>
</tbody>
</table>

Figure 8: 2010 Median Household Income by Census Tract

EDUCATIONAL ATTAINMENT

Working age people have lower levels of educational attainment compared to peer regions. The region has a high number of working age people with a high school degree. In addition, the region has fewer working age people with a Bachelor’s degree or a graduate/professional degree compared to peer regions. This could be due to low education requirements of many of the major occupations in the regions primary industry, gaming and hospitality.

Table 7: Highest Level of Educational Attainment, Population 25 and Older, 2010

Educational attainment is higher for White and Asian populations and lower for Hispanic and Black populations. Among the population 25 and older, Asian (38.5 percent) and White (21.5 percent) have completed a Bachelor’s degree or higher (see Table 8). By comparison, Black (16.2 percent) and Hispanic (8.2 percent) residents have completed a bachelor’s degree or higher.
Table 8: Educational Attainment, Population 25 and Older by Race/Ethnicity, 2010

<table>
<thead>
<tr>
<th>Highest Educational Attainment</th>
<th>White</th>
<th>Asian</th>
<th>Black</th>
<th>Other</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-School Diploma or Equivalent</td>
<td>26.2%</td>
<td>20.1%</td>
<td>29.4%</td>
<td>27.3%</td>
<td>26.1%</td>
</tr>
<tr>
<td>Associate's Degree</td>
<td>6.7%</td>
<td>9.2%</td>
<td>7.9%</td>
<td>12.1%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>14.1%</td>
<td>29.8%</td>
<td>10.4%</td>
<td>5.0%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Master's Doctoral or Professional Degree</td>
<td>7.4%</td>
<td>8.7%</td>
<td>5.8%</td>
<td>3.5%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

*US Census, American Community Survey, 5-year (2008-2010)*
Nevada high school graduation rates are the lowest in the nation. Failure to complete high school has a direct impact on a person’s income potential and quality of life (Tyler & Owens, 2010). Based on data from the US Department of Education, Nevada had the lowest high school graduation rate (56.3 percent) in 2008-2009 (Figure 10) as compared to 75.5 percent nationally. The state with the second lowest graduation rate was Mississippi at 62 percent.

Figure 10: Average Graduation Rate for US States, 2009


High school graduation rates and dropout rates vary by race/ethnicity in the Clark County School District. High school graduation rates for the Class of 2010 were the lowest for Native American/Alaskan Native (59.5 percent), Black (57.6 percent) and Hispanic (59.8 percent) students. The highest graduation rates were for Asian (82.3 percent) and White (76.4 percent) students (Figure 11). High School dropout rates for the Class of 2010 in Clark County were the highest rate among Native American/Alaskan Native (7.2 percent), Hispanic (5.5 percent) and Black (6.2 percent) and the lowest for Asian (3.1 percent) and White (3.85 percent) students (Figure 12) (Nevada Department of Education, 2012).
**Students score low in national reading and math assessments.** According to the 2011 National Center for Educational Statistics study titled “National Assessment of Educational Progress”, Nevada was 41st in average 8th grade math scores, 44th in average 8th grade reading scores, and 44th in average 8th grade science scores. Fourth grade average scores had Nevada ranked 39th in math and 44th in reading in 2011.

<table>
<thead>
<tr>
<th>State Test Score Rankings, 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Assessment of Educational Progress Scores</td>
</tr>
<tr>
<td>Math 4th grade</td>
</tr>
<tr>
<td>Nevada</td>
</tr>
</tbody>
</table>

*Source: National Center for Educational Statistics, National Assessment of Educational Progress (2012)*
The foreclosure crisis significantly changed economic conditions in Clark County, with over 58,000 foreclosures recorded since 2007. According to the Brookings Institute, Las Vegas experienced one of the largest decreases in housing values. Home values dropped 59.5 percent from the peak in 2006 to the second quarter of 2012, compared with a national average of 26.7 percent (S&P/Case-Shiller, 2012). The housing bubble burst and the resultant economic recession and widespread job losses make it difficult for all homeowners to remain in and maintain their housing, particularly low income households. The inflation in housing price was much larger in Southern Nevada from 2003 to 2006 than in much of the US; consequently, the subsequent decline in values was large as well (S&P/Case-Shiller, 2011). Moreover, Southern Nevada had a disproportionately high number of high risk loans, resulting in exceedingly high foreclosure rates. This has forced many homeowners to walk away from homes they can no longer afford.
Key Findings

3.1 HOUSING VALUES, SALES, & RENTALS

Since 2006, median home values have decreased 60.4 percent. The median home value was estimated at $134,315 in the second quarter of 2012. This figure was lower than the national median of $181,100. These values represent a 60.4 percent decrease regionally and 15.7 percent nationally from 2006 values. The falling housing market has affected a multitude of issues, including the foreclosure rate, fiscal budgets of state and local governments, the school system, and the economy; all of which are discussed throughout this report.

<table>
<thead>
<tr>
<th>Housing prices</th>
<th>Southern Nevada</th>
<th>NV</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median home value</td>
<td>$134,315*</td>
<td>$116,850</td>
<td>$181,100**</td>
</tr>
<tr>
<td>Percent change from 2006 (median existing home price)</td>
<td>-60.4*</td>
<td>-57.0***</td>
<td>-15.7***</td>
</tr>
</tbody>
</table>

Source: *CBER-LIED (2012); **HUD (2012), ***FHFA (2012)

The majority of mortgage holders have negative equity in their homes. According to the New York Federal Reserve, 85 percent of all mortgage holders in Las Vegas have negative equity in their homes (Haughwout, Peach, and Tracy, 2010; Shaulis et al, 2012). This has considerable negative consequences as research has shown that once individuals are underwater in their homes they are more likely to default.

Median rental rates are higher than the national average. The region’s median gross rent is $986, 15 percent higher than the median cost nationally of $855. In addition, median gross rent in the region is higher than other metropolitan areas with similar median housing values, such as Phoenix ($883) and St. Louis ($734) (US Census, ACS 2010).

3.2 HOUSING UNITS

Single-family units comprise the bulk of the region’s housing stock. In 2010, 62.7 percent of the region’s housing units were single-family homes. This is less than the national average of 67.1 percent (see Table 11).
### Table 11: Housing Units by Type, 2010

<table>
<thead>
<tr>
<th>Housing units</th>
<th>Las Vegas</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single family</td>
<td>62.7%</td>
<td>67.2%</td>
</tr>
<tr>
<td>Multi-unit structures</td>
<td>33.4%</td>
<td>26.2%</td>
</tr>
<tr>
<td>Mobile homes</td>
<td>3.9%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

*Source: US Census Bureau, ACS 3-Year Estimates (2008-2010)*

**The region has a higher than average rate of vacant housing units.** The percent of vacant units in the region is higher than the United States (Table 12). In 2012, 16.9 percent of housing units were vacant, compared with 13 percent nationally in 2010. The majority of vacant units were condominiums (18.2 percent), followed by apartments (13.1 percent), townhouses (12.3 percent) and single family units (10.5 percent). The substantial amount of vacant units is concerning, as vacant units become vandalized or dilapidated, attract crime, contribute to neighborhood decline, and pose a threat to public safety (GAO, 2011). Additionally, the cost burden of inspecting vacant units and mitigating unsafe conditions falls on local governments, which are already overburdened.

### Table 12: Vacant Housing Units by Type, 2010

<table>
<thead>
<tr>
<th>Vacancy</th>
<th>Las Vegas</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant housing units</td>
<td>16.9%**</td>
<td>13.1%*</td>
</tr>
<tr>
<td>Vacant condominiums</td>
<td>18.2%**</td>
<td></td>
</tr>
<tr>
<td>Vacant apartments</td>
<td>13.1%*</td>
<td></td>
</tr>
<tr>
<td>Vacant townhouses</td>
<td>12.3%**</td>
<td></td>
</tr>
<tr>
<td>Vacant single family units</td>
<td>10.5%**</td>
<td></td>
</tr>
</tbody>
</table>

*Source: *US Census Bureau, ACS (2010) and **CBER-LIED (2012)*

**The region has a lower than average rate of owner occupancy.** The percentage of residents who own their housing units in the region is lower than the United States. According to the 2010 Census, 55 percent of occupied units are owner-occupied, compared with 65 percent nationally. Figure 13 shows the distribution of housing tenure by Census Tract.
Figure 13: Owner Occupied Housing by Census Tract

Source: US Census Bureau, ACS 5-Year (2006-2010)
The region has a relatively new housing stock. The 2010 American Community Survey indicates that the majority of the region’s housing units (63 percent) were built after 1990. This is much higher than the national average of 28.5 percent. In addition, only 8 percent of homes in Southern Nevada were built prior to 1970, compared to 41 percent of homes nationally.

3.3 HOUSING AFFORDABILITY

Housing costs are unaffordable for half of renters and half of owners. Affordable housing costs generally are considered to be less than 30 percent of household income. Under this definition of affordability, 53 percent of renters and 46 percent of owners with a mortgage dedicate greater than 30 percent of their household income on housing (see Figure 14). This is concerning, as households which spend greater than 30 percent of household income on rent are considered to have a housing-cost burden (US Census, ACS 2010).

![Figure 14: Housing Affordability, 2010](source: US Census Bureau, ACS (2010))

3.4 HOMELESSNESS

In 2011, over 9,000 residents in the region were homeless. According to the 2011 HUD Homeless Census, 9,432 Clark County residents were homeless in 2011. This is a 29 percent decrease from the 2009 Homeless Census. According to the Homeless Census, 63 percent of sheltered homeless were males and 37 percent were females. The race/ethnic distribution was 47 percent White, 29 percent Black, 12 percent Hispanic/Latino, and 5 percent Asian/Pacific Islander.

The primary reason cited for homelessness was job loss (50 percent), followed by alcohol or drug use (27 percent), argument or family/friend asked to leave (17 percent).
family or domestic violence (16 percent), illness or medical problem (13 percent), and mental health issue (13 percent).

The impacts of Homelessness go beyond the burden of providing shelter and food. Homeless individuals have higher rates morbidity and mortality. One study found that homeless individuals had an age of adjusted mortality rate nearly four times that of the general population (Hibbs et al., 1994). Homeless individuals are more likely to suffer from mental illness, malnutrition, and preventable infectious diseases such as tuberculosis (TB), Hepatitis C, and HIV (Beijer & Fazel, 2012). Homelessness is also taxing on the healthcare system, as individuals have hospital stays 36 percent longer than the general population (Salit et al, 1998). HUD Secretary Shaun Donovan has stated that the cost of homelessness is about $40,000 per person per year (including social services such as jails and shelter costs) (The Daily Show, March 2012). Much of this burden falls ultimately on the taxpayer. Preventing homelessness is a much more cost effective alternative.
Findings Summary

REGIONAL COMMUTING
• The majority of residents commute to work alone and own a vehicle; however, carpool and transit use is greater than the national average.

HIGHWAY CONGESTION
• Commuters in 2012 spend more hours in traffic delays than in 2000.
• Freeway congestion has increased 35 percent since 2000.

HIGHWAY INFRASTRUCTURE
• Nevada has more highway miles per resident than Utah or Colorado but fewer than Arizona.

TRANSPORTATION COSTS
• Transportation costs are unaffordable for the average household.
• Combined housing and transportation costs are also unaffordable.

TRANSPORTATION OPTIONS
• Carpool and transit usage is higher than the national average.
• Though the region has not invested in commuter rail or light rail, it has invested in Bus Rapid Transit.

ACCESS TO TRANSIT
• 86 percent of residents live within ¾ mile of transit.
• Residents can reach about 44 percent of jobs in the region via transit in 90 minutes.

WALKABILITY
• The region has poor connectivity and has a lower walkscore than other Mountain West metro areas.
• Low income neighborhoods are more walkable than high income neighborhoods.
Key Findings

4.1 REGIONAL COMMUTING

The majority of residents commute to work alone and own a vehicle. Workers in the region depend heavily on a personal vehicle for travel. In 2010, 89 percent of trips were made using a personal vehicle (Table 13). The rate of vehicle ownership, in turn, is high, with 92 percent of occupied housing units having a vehicle available. As shown in the figure below, commute trips to work are overwhelmingly by private auto. Today the average travel time in the region to work is 24 minutes (American Community Survey, 1-Year, 2010).

Table 13: Transportation to Work and Vehicle Availability, 2010

<table>
<thead>
<tr>
<th></th>
<th>Las Vegas Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Labor Force (Employed, Age 16+)</td>
<td>872,794 people</td>
</tr>
<tr>
<td>Car</td>
<td>681,984 78.9%</td>
</tr>
<tr>
<td>Carpool</td>
<td>90,905 10.5%</td>
</tr>
<tr>
<td>Transit</td>
<td>32,457 3.8%</td>
</tr>
<tr>
<td>Walk</td>
<td>13,496 1.6%</td>
</tr>
<tr>
<td>Other</td>
<td>16,865 2.0%</td>
</tr>
<tr>
<td>Worked at Home</td>
<td>28,538 3.3%</td>
</tr>
<tr>
<td>Mean Travel Time to Work</td>
<td>24.3 minutes</td>
</tr>
<tr>
<td>Occupied Housing Units</td>
<td>698,955 units</td>
</tr>
<tr>
<td>Households without a Vehicle</td>
<td>55,394 7.9%</td>
</tr>
</tbody>
</table>

Source: U.S. Census (2010)
4.2 HIGHWAY CONGESTION

Commuters spend more hours in traffic delays than in 2000. According to the Texas Transportation Institute, the average time spent delayed in traffic by a commuter during peak commute periods rose from 21 to 28 hours per year between 2000 and 2010. By comparison, the average for all urban communities in the U.S. was 34 hours. For urban areas similar to Las Vegas (population between 1 and 3 million), including Salt Lake City and Denver, the average was 31 hours (Schrank & Lomax).

Freeway congestion has increased 35 percent since 2000. One way to measure congestion is to compare the ratio of total usage to total capacity (i.e. miles of vehicle travel per lane mile). This measure compares the demand for travel relative to the supply of road space.

According to the Texas Transportation Institute, the number of vehicle miles traveled daily on Las Vegas’ freeways rose 35 percent between 2000 and 2010 to 10.53 million. Between 2000 and 2010, the number of available land miles of freeway increased from 415 to 566. As a result, Las Vegas’ ratio of miles of vehicle travel per lane mile climbed to 18,600 in 2010, up from 16,500 in 2000 (Schrank et al, 2011). Measured this way, Las Vegas is second after Phoenix, in congestion among cities in the Mountain West (see Figure 15).

![Figure 15: Daily Freeway Miles per Lane, 2011](image)

Source: Texas Transportation Institute (2011)

4.3 HIGHWAY INFRASTRUCTURE

Nevada’s highway system is more connected than Arizona’s and Colorado’s but less connected than Utah’s. The amount of interstate highway miles per permanent resident measures Nevada’s relative connectedness compared with other Mountain
West states (Figure 16). This number will increase as new roads are added (i.e. the creation of Interstate 11). However, the number does not change as new lanes are added to an existing roadway. Population growth has been outpacing the expansion of the interstate highway system, which has caused this number to decrease over time.

**Figure 16: Interstate Highway Miles per Million Residents, by Year**

Transportation costs in the region are unaffordable for the average household. The Center for Neighborhood Technology (CNT) states that spending 15 percent of income on transportation is considered affordable. The average percent of income spent on transportation in Southern Nevada is 24 percent (Table 14). They also include all other travel that is part of the household daily routine. The methods for the cost model are drawn from peer reviewed research findings on the factors that drive household transportation costs.

4.4 TRANSPORTATION COSTS

**Transportation costs in the region are unaffordable for the average household.** The Center for Neighborhood Technology (CNT) states that spending 15 percent of income on transportation is considered affordable. The average percent of income spent on transportation in Southern Nevada is 24 percent (Table 14). They also include all other travel that is part of the household daily routine. The methods for the cost model are drawn from peer reviewed research findings on the factors that drive household transportation costs.
Table 14: Metro Area Transportation Costs

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>Ave HH Income</th>
<th>Ave Pct of Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Las Vegas</td>
<td>$56,080</td>
<td>24%</td>
</tr>
<tr>
<td>Phoenix</td>
<td>$54,713</td>
<td>26%</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>$57,682</td>
<td>25%</td>
</tr>
<tr>
<td>Denver</td>
<td>$59,932</td>
<td>22%</td>
</tr>
</tbody>
</table>

Source: Center for Neighborhood Technology (2011)

Combined housing and transportation costs in the Southern Nevada are also unaffordable. According to the Center for Neighborhood Technology, spending 45 percent of income on combined housing and transportation costs is considered affordable. In the region, 53 percent of residents spend greater than 45 percent of their income on combined housing and transportation costs (Table 15). Forty five percent of the median household income equates to about $25,236 annually or $2,103 each month.

Table 15: Metro Area Housing & Transportation Costs

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>Ave HH Income</th>
<th>Ave Pct of Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Las Vegas</td>
<td>$56,080</td>
<td>53%</td>
</tr>
<tr>
<td>Phoenix</td>
<td>$54,713</td>
<td>52%</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>$57,682</td>
<td>50%</td>
</tr>
<tr>
<td>Denver</td>
<td>$59,932</td>
<td>49%</td>
</tr>
</tbody>
</table>

Source: Center for Neighborhood Technology (2011)

4.5 TRANSPORTATION OPTIONS

Carpool and transit usage in the region is higher than the national average. The use of carpooling and transit in the Southern Nevada is comparable with other metro areas in the West and higher than the nation. In 2010, 10.5 percent of trips are made using carpool and 3.8 percent are made using transit. Among these metro areas, Phoenix has the highest rate of carpool use at 11.8 percent and Denver has the highest rate of transit use at 4.1 percent.
Though the Las Vegas region has not invested in commuter rail or light rail, it has invested in Bus Rapid Transit. Commuter rail, light rail, and bus rapid transit (BRT) are three high capacity public transport options used throughout the United States. Commuter rail operates primarily between a city center and suburban areas and serves commuters. Light rail typically operates on a fixed guideway separated with dedicated stations and electric rail cars to provide higher capacity and speed than bus service. BRT uses buses to provide faster, more efficient service than an ordinary bus line by operating with dedicated travel lanes, specialized buses, and strategic scheduling.

The Salt Lake City metro area provides the most commuter rail service (44 mi) of any city in the Mountain West. It connects the suburban communities along the Wasatch Front to Salt Lake City. In addition, it has 83 miles of planned rail in the region. The Denver metro area also has plans to provide over 90 miles of commuter rail by 2016.

The Salt Lake metro area also provides the most light rail (35.3 mi) service in the Mountain West. Phoenix (20 mi) and Denver (34.9 mi) have substantial light rail systems in place with significant expansions in the construction or planning phases. Of additional note is that in Denver, Salt Lake and Phoenix, light rail connects the airport to the central business district as well as suburban neighborhoods.

Southern Nevada has the most existing (115 mi) and planned (44 mi) BRT of any other Mountain West metro area. According to the Institute for Transportation and Development Policy, the region’s BRT system ranks as one of the top 5 BRT systems in the County (ITDP, 2011).
### Table 16: High Capacity Public Transport Investments in the Mountain West

<table>
<thead>
<tr>
<th>Region</th>
<th>Commuter Rail</th>
<th>Light Rail</th>
<th>Bus Rapid Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing (mi)</td>
<td>Additional Planned (mi)</td>
<td>Existing (mi)</td>
</tr>
<tr>
<td>Phoenix</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Denver</td>
<td>0</td>
<td>93.4</td>
<td>34.9</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>44</td>
<td>83</td>
<td>35.3</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Sources: Valley Metro Regional Public Transportation Authority; Regional Transportation District; Utah Transit Authority; Southern Nevada Regional Transportation Commission (2012).

### 4.6 ACCESS TO TRANSIT

86 percent of Southern Nevada residents live within ¾ mile of transit. In 2011, the Brookings Institution published an analysis of data from transit providers across the country. This analysis assessed the nation’s 100 largest metropolitan areas. The report revealed that transit access in Las Vegas is much higher than the US metro average (see Figure 18). In terms of peer regions, the percent of working age residents within ¾ mile of a transit stop (86 percent) is more than the Denver metro area (84 percent) and less than Salt Lake City (89 percent).

**Figure 18: Share of Residents with Access to Transit, 2011**

![Figure 18: Share of Residents with Access to Transit, 2011](source: Brookings Institution (2011))
In addition, 98 percent of working-age residents in low income neighborhoods live within ¾ mile of a transit stop (Figure 19). This is the highest across income groups with 84 percent of middle income and 77 percent of high income residents having the same access to transit.

![Figure 19: Resident Access to Transit, by Income, 2011](image)

*Note: Low Income: under 80% Area Median Income (AMI); High Income: over 120% AMI
Source: Brookings Institution (2011)*

Las Vegas metro residents can reach about 44 percent of jobs in the region via transit in 90 minutes. Job access differs across the Mountain West, from 27 percent in Phoenix to 59 percent in Salt Lake City. These figures reflect variable transit coverage levels and service frequencies, as well as variable levels of employment and population density.

![Figure 20: Share of Jobs Accessible by Transit, 2011](image)

*Source: Brookings Institution (2011)*
Job location within a metro area affects how many jobs are accessible via transit. In addition, the distribution of different types of industries within a region may affect the kinds of jobs residents can reach via transit. As a result, the degree to which transit systems “match” workers and the jobs for which they are most qualified depends on a range of factors that vary across metro areas.

The 2011 Brookings Report classifies major industries by the average educational attainment of their workers. High skill industries include finance, business and legal services, and public administration. Middle skill industries include wholesale trade and manufacturing and low skill industries include construction, personal services, and hospitality. In the region, the typical working-age resident can reach 61 percent of low skill jobs, 43 percent of middle skill and 29 percent of high skill jobs within 90 minutes via transit. By comparison, in all Western metro areas, the typical commuter can access 31 percent of low-skill industry jobs, and 35 percent of high-skill industry jobs.

![Figure 21: Job Access via Transit to Residents by Skill, 2011](source: Brookings Institution (2011))

4.7 WALKABILITY

Most places in the region are considered car-dependent and have lower walkscores than other places in the Mountain West. According to the website Walkscore.com, most of the cities and places in the region are auto-dependent. Walkscore measures the walkability of a place based on proximity to nearby amenities such as restaurants, stores, schools, parks and entertainment. For example, a score between 24 and 49 is considered car-dependant because few amenities are located within walking distance. A score between 50 and 69 is considered somewhat walkable because some amenities are located within walking distance, and a score above 70 is considered highly walkable.
Las Vegas (43), Henderson (39), North Las Vegas (42) and Enterprise Township (31) all score as car-dependent. However, Spring Valley Township (51) and Paradise Township (57) score as somewhat walkable. Other mountain west city centers are somewhat walkable, yet the suburbs are auto-dependent, similar to the Southern Nevada region. Phoenix (45) scores as car-dependent and Salt Lake City (58) and Denver (60) score as somewhat walkable. Table 17 shows all region and comparative walkscores.

This is significant to the sustainability of Southern Nevada, as walking offers both health benefits and is a more sustainable form of transportation. Increasing the amount of time spent walking decreases the likelihood of chronic diseases such as heart disease, diabetes, and obesity. Further, walking promotes better psychosocial health by way of increased levels of social capital and an increased sense of community (Leyden, 2003; Lund, 2003).

Low income neighborhoods are significantly more walkable than high income neighborhoods. In a stratified random sample of twelve neighborhoods, those with a median household income of less than $42,000 lived in a significantly more walkable neighborhood than households with a median income greater than $70,000 (Coughenour, C., 2012). This demonstrates an overall better combination of street

<table>
<thead>
<tr>
<th>Walkscore (Out of 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Las Vegas</td>
<td>49 auto-dependent</td>
</tr>
<tr>
<td>Henderson</td>
<td>39 auto-dependent</td>
</tr>
<tr>
<td>North Las Vegas</td>
<td>42 auto-dependent</td>
</tr>
<tr>
<td>Enterprise Township</td>
<td>31 auto-dependent</td>
</tr>
<tr>
<td>Paradise Township</td>
<td>57 somewhat walkable</td>
</tr>
<tr>
<td>Spring Valley Township</td>
<td>51 somewhat walkable</td>
</tr>
<tr>
<td>Phoenix, AZ</td>
<td>45 auto-dependent</td>
</tr>
<tr>
<td>Tempe, AZ</td>
<td>62 somewhat walkable</td>
</tr>
<tr>
<td>Mesa, AZ</td>
<td>43 auto-dependent</td>
</tr>
<tr>
<td>Scottsdale, AZ</td>
<td>42 auto-dependent</td>
</tr>
<tr>
<td>Salt Lake City, UT</td>
<td>58 somewhat walkable</td>
</tr>
<tr>
<td>West Jordan, UT</td>
<td>34 auto-dependent</td>
</tr>
<tr>
<td>West Valley City, UT</td>
<td>41 auto-dependent</td>
</tr>
<tr>
<td>Sandy, UT</td>
<td>45 auto-dependent</td>
</tr>
<tr>
<td>Denver, CO</td>
<td>60 somewhat walkable</td>
</tr>
<tr>
<td>Aurora, CO</td>
<td>48 auto-dependent</td>
</tr>
<tr>
<td>Lakewood, CO</td>
<td>53 somewhat walkable</td>
</tr>
<tr>
<td>Arvada, CO</td>
<td>46 auto-dependent</td>
</tr>
</tbody>
</table>

connectivity, diverse destinations or mixed use, greater concentration of housing units, and smaller building set-backs and parking lots in low income neighborhoods.

**Southern Nevada is one of the most dangerous metro areas for walking.** The region has many unique urban design characteristics which result in an unsafe pedestrian environment. It has developed along a grid-design with numerous high-speed arterial streets, which is where pedestrian crashes most frequently occur (Transportation for America, 2011). The urban area was designed to accommodate the automobile, typical of the time when the community was developed. Streets were designed for speed and capacity accompanied by a dense but disconnected neighborhoods. As a consequence, the development pattern presents a hazardous environment for pedestrians. Transportation for America ranks the most dangerous metropolitan areas for walkers each year, and in 2011 ranked Las Vegas the sixth most dangerous with an annual average of 2.5 pedestrian deaths per 100,000 people.

### 4.8 VISITOR TRANSPORTATION

**Over half of visitors reach the region by car.** The Las Vegas Convention and Visitor’s Authority produces an annual Las Vegas Visitor Profile Study. This study provides an ongoing assessment of Las Vegas visitor behavior over time. According to the 2011 Report, 44 percent of visitors to Las Vegas arrived by air, up from 41 percent in 2010, while 56 percent arrived by ground transportation, down from 59 percent in 2010 (GLS Research, 2011).

![Figure 22: Visitor Transportation to Las Vegas, 2007-2011](source)

*Figure 22: Visitor Transportation to Las Vegas, 2007-2011*

Source: Las Vegas Convention and Visitors Authority (2012)
4.9 AIR TRAVEL AND CARGO SERVICES

McCarran Airport receives over 40 million passengers a year. In 2011, McCarran Airport received 40,560,285 passengers (Figure 23), making it one of the busiest airports in the Country. (Air Traffic Report, 2011). McCarran is served by an extensive list of airlines that includes Aeromexico, Air Canada, AirBerlin, AirTran, Alaska, Allegiant, American, ArkeFly, British Airways, Condor, Copa, Delta, Frontier, Great Lakes, Hawaiian, jetBlue, Korean Air, MagniCharters, Omni, Phillipine Airlines, Southwest, Spirit Airlines, Sun Country, Sunwing, Thomas Cook, Unites, US Airways, Virgin America, Virgin Atlantic, Viva aerobus, Volaris, WestJet, and XL Airways.

![Figure 23: Airport Passenger Traffic, 2011](image)

Source: Airports Council International – North America (2011)

McCarran receives less air cargo than its Mountain West counterparts. In 2011, McCarran Airport handled 85,494 metric tonnes of cargo (Air Traffic Report, 2011). By comparison, Denver, Phoenix and Salt Lake handled nearly triple this amount, demonstrating the clear dominance of a visitor-based economy versus shipping, trade, and logistics. In late 2010, the 200,000 square foot Marnell Air Cargo Center opened, next to the Terminal 3 expansion. The $29 million center on 19 acres houses FedEx, UPS, and Southwest freight operations among others.
Figure 24: Airport Cargo Traffic, 2011

Source: Airports Council International – North America (2011)
CHAPTER 5 – ENVIRONMENT

Findings Summary

WATER
- Annual rainfall averages less than 4 inches per year.
- The region only draws about 3 percent of the Colorado River’s total flow, but that accounts for almost 97 percent of the region’s entire supply.
- US Geologic Survey analysis concludes that water flows to the area will be lower by 2050.

AIR
- Between 2008 and 2010, the region had 24 days in which the ozone levels and 2 days in which the particulate pollution were considered dangerous.
- Criteria pollutants have declined consistently in the region since the mid 1990’s.

BROWNFIELDS
- Approximately 165 brownfield sites exist in the region; however, none are designated as Superfund sites.

BIODIVERSITY
- The region has a high level of biodiversity.

LAND COVER
- Developed land cover is mostly low (31.8 percent) and medium (35.7 percent) intensity.

CLIMATE AND TEMPERATURE
- The region’s climate is characterized as a desert climate, arid and warm.
- Southern Nevada has a 30-year average of 24 winter days with low temperatures at or below 32°F.
5.1 WATER

Southern Nevada is located in one of the most arid regions of North America. However, water was the feature that initially attracted people to the area. The natural springs of Las Vegas, Spanish for “the meadows,” made it a watering stop for nomadic Native Americans, Spanish and American traders, Mormon settlers and the Los Angeles & Salt Lake Railroad. As Las Vegas transformed from a train depot to a city, pressure on the water supply increased (UNLV Digital Collections, 2012).

Since annual rainfall averages less than four inches per year, Southern Nevada depends upon the Colorado River for its water supply. The region only draws about 3 percent of the Colorado River’s total flow, but that accounts for almost 97 percent of the region’s entire supply. Residents are provided water from the Colorado River via Lake Mead. Water is drawn from Lake Mead and sent to one of two treatment centers, Alfred Merritt Smith or River Mountain Treatment Center (Southern Nevada Water Authority (SNWA), 2012). The other 3 percent of Lake Mead’s inflow comes from groundwater, the Virgin and Muddy Rivers and the Las Vegas Wash.

Southern Nevada’s use of return flow credits – recycling of wastewater – extends the use of Colorado River water. Southern Nevada is allowed to use more water than its allocation of Colorado River water, as long as water is return back to the river. As an example, in 2012 Nevada’s allocation was 300,000 acre feet. Based on return flow volume of 215,000 acre feet, Nevada’s full diversion was 515,000 acre feet.

The Colorado is the only major surface water source in the American Southwest, and through the construction of thirteen dams, was the first river on Earth to come under complete human control. The river is the primary water source for 25 million people and irrigates 2.5 million acres of farmland in seven states and Mexico (SNWA, 2012). Table 18 shows the amount of water from the Colorado River utilized by Colorado, Utah, Wyoming, New Mexico, Arizona, California, Nevada and Mexico.
Table 18: Colorado River Apportionment, 2012

<table>
<thead>
<tr>
<th>Allocation</th>
<th>Million Acre-Feet Per Year (MAFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upper Basin</strong></td>
<td></td>
</tr>
<tr>
<td>Colorado</td>
<td>3.9 MAFY</td>
</tr>
<tr>
<td>Utah</td>
<td>1.7 MAFY</td>
</tr>
<tr>
<td>Wyoming</td>
<td>1 MAFY</td>
</tr>
<tr>
<td>New Mexico</td>
<td>0.85 MAFY</td>
</tr>
<tr>
<td><strong>Lower Basin</strong></td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>2.85 MAFY</td>
</tr>
<tr>
<td>California</td>
<td>4.4 MAFY</td>
</tr>
<tr>
<td>Nevada</td>
<td>0.3 MAFY</td>
</tr>
<tr>
<td><strong>Additional Allocations</strong></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>1.5 MAFY</td>
</tr>
</tbody>
</table>

TOTAL 16.5 MAFY

Source: Southern Nevada Water Authority (2012)

Construction of the Hoover Dam, which began in 1931 and created Lake Mead, ensured a water source for Southern Nevada. Lake Mead, with a surface area of 157,900 acres (at full pool) and a 29-million-acre-ft storage capacity, is the largest reservoir in North America. In addition to being the main source for water for the region, Lake Mead is a water-based recreational area which hosts more than 8 million people per year and a critical habitat for many species (National Park Service, Lake Mead, 2012). Lake Mead and the Colorado River receive most of their water supply from snow melt in the Rocky Mountains (SNWA, 2012).

Because 97 percent of the drinking water for Southern Nevada comes from the Colorado River (via Lake Mead) with a small percentage coming from the Las Vegas Wash, there is potential for contamination from the lake that includes: urban chemicals (fertilizers and pesticides), industrial activities and wildlife (SNWA, 2012). Because there is little agricultural activity upstream of the region, there is limited drinking water exposure to farm-related contaminants. Based on surface water assessments water quality at the Southern Nevada Water System intakes is within state and federal-drinking water standards except for microbiological contaminants naturally found in all surface waters, even before undergoing treatment, (SNWA, 2012).
Potential contaminating activities with the highest vulnerability rating (chance for contamination of drinking water intake) include: septic systems, golf courses/parks, storm channels, gasoline stations, auto repair shops, construction and wastewater treatment plant discharges (SNWA, 2012). According to the SNWA:

Based on water-quality data (prior to treatment) and the results of the vulnerability analysis of potential contaminating activities, the drinking water intakes are at a moderate level of risk for volatile organic (VOC), synthetic organic carbon (SOC), microbiological and radiological contaminants and at a high level of risk for inorganic (IOC) contaminants. All of the Las Vegas Valley governmental agencies coordinate their watershed management programs to minimize the vulnerability risk to Lake Mead. (SNWA, 2012)

The Southern Nevada Water System is tested for more than 100 regulated and unregulated substances drinking water each month (SNWA, 2012). A summary of the Las Vegas Valley Water District (LVVWD) Quality report in 2012 showed that the region’s water did not exceed the maximum contaminant level set by the Environmental Protection Agency (EPA) for any of the substances tested (SNWA, 2012).

In 1999, the Nevada Legislature passed Assembly Bill 284, requiring the SNWA to add fluoride to Southern Nevada's municipal water supply beginning in March 2000. In November 2000, Clark County residents voted to continue fluoridation of their municipal water supply. Low levels of fluoride, about 0.3 milligrams per liter (mg/L), occur naturally in Southern Nevada's water supply. Per regulations developed by the Nevada State Health Division and administered by the Nevada Department of Environmental Protection, SNWA adds 0.5 mg/L of fluoride to bring the level within the required range of 0.7 - 1.2 mg/L in the municipal water supply. These levels are considerably lower than the federal Safe Drinking Water Act limit of 4.0 mg/L and the Nevada secondary standard of 2.0 mg/L. (SNWA, 2012)

The US Bureau of Reclamation forecasts that Colorado River flows will be lower by 2050. Most climate models predict a drier, hotter Southwest with more variable precipitation. Water use will remain a fundamental challenge to sustainability in the region. Water stress will increase even if demand remains constant. The US Department of the Interior, Bureau of Reclamation (2012) projects that the Colorado River’s “mean annual flows are projected to continue to decrease over time (from -7.5 percent around 2025 to -10.9 percent around 2055, to -12.4 percent around 2080) as compared to the 1906–2007 mean”. Additionally, drought or low levels of snow and precipitation in the Rocky Mountains has caused Lake Mead's water level has dropped approximately 100 feet since 2000 (Las Vegas Valley Water District, 2012). Because of this, the LVVWD has adopted a number of water conservation programs to help curb the demand for water. Additionally, the SNWA has sufficient resources available or in development to meet future demands until 2060 (see Infrastructure Section).
An additional issue of interest is the elevation of Lake Mead. In 2009, Lakes Mead and Powell were 52 percent of their total combined capacity. This was the result of annual average inflow more than two-thirds below normal. Lake Mead’s elevation dropped 133 feet from a peak of elevation of 1,214 to 1,081 feet. If the elevation dropped below 1,075 feet, federal officials could declare a shortage and cut Nevada’s river allocation by 6 percent. The decrease in lake level also impacts drinking water intakes that serve Southern Nevada, the lowest of which is at 1,000 feet. In 2011, wetter seasons and increased inflow to the Colorado River raised the elevation of Lake Mead to 1,127 feet.

5.2 AIR

From 2008 to 2010, the American Lung Association measured ozone and particle pollution (PM) in 277 metropolitan areas across the US. They created a list of the 25 best and 25 worst cities for ozone and PM pollution. Southern Nevada did not rank in the top 25 (best) or bottom 25 (worst) cities for ozone or PM pollution. The region had 24 days between 2008 and 2010 where ozone concentrations were unhealthy for sensitive groups and 2 days where particulate matter was unhealthy for sensitive groups. The region received a score of F and B, respectively in these two categories. An ‘F’ score represents 9 days or more over the standard: 10 orange days or 9 total including at least 1 or more red, purple or maroon. A ‘B’ score means 1 to 2 over the standard with no red, purple or maroon days (orange = unhealthy for sensitive groups, red = unhealthy, purple = very unhealthy, and maroon = hazardous). Results for non-attainment days between 2008 and 2010 are shown in Table 19.

<table>
<thead>
<tr>
<th></th>
<th>Ozone Orange</th>
<th>Ozone Red</th>
<th>Ozone Purple</th>
<th>Particulate Orange</th>
<th>Particulate Red</th>
<th>Particulate Purple</th>
</tr>
</thead>
<tbody>
<tr>
<td>Las Vegas</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Explanation of Colors: Orange: Individuals with respiratory disorders are likely to be affected by high levels of ozone and individuals with respiratory disorders and heart disease are likely to be affected by high levels of particulates. Red: Members of the general population may experience adverse effects, and individuals in sensitive populations may experience serious health effects. Purple: All individuals may experience serious health effects.


Part of Southern Nevada’s air quality challenge arises from its natural geography: the mountains surrounding the valley create a bowl, tending to trap exhaust over the metropolis for long periods. Thermal inversions are also common which trap pollutants. Additionally, its location at the center of a great desert means no oceans; large lakes or dense forests exist nearby to naturally filter pollution out of the air (known as ecosystem services). However, Nevada uses less coal for electrical production than the U.S. as a whole (under 16 percent for Nevada, but over 40 percent for the U.S. in 2011) and the
state’s use of coal has declined dramatically since 2000, resulting in improved air quality (EPA.gov, 2012)

Carbon monoxide (CO) levels peaked in the mid 1970’s which resulted in the region being designated a CO nonattainment are in 1978 by the EPA. In response to this designation, Clark County and Nevada “adopted and implemented new air quality plans and control measures, including state and local wintertime gasoline fuel requirements. These measures helped reduce the number of exceedances of the CO standard from over 40 each year in the mid-1980s to less than 5 by the mid-1990s. The last recorded exceedances of the CO air quality standard occurred in 1998” (EPA, 2012).

Each year the Clark County Department of Air Quality and Environmental Management issues the Annual Network Plan Report. This report provides air quality data for Clark County. Levels of criteria pollutants are:

- City of Las Vegas
  - Annual average CO concentration is 0.56 ppm
  - Annual average O$_3$ concentration is 0.053 ppm
  - Annual average PM$_{10}$ concentration is 24.93 µg/m$^3$
  - Average PM$_{2.5}$ concentration is 7.42 µg/m$^3$
  - Annual average NO$_2$ concentration is 0.013 ppm.

- City of Henderson
  - Annual average PM$_{10}$ concentration is 14.48 µg/m$^3$
  - Average PM$_{2.5}$ concentration is 5.56 µg/m$^3$

(Clark County Department of Air Quality and Environmental Management, 2011)

Based on this information, Clark County has zero CO exceedance days, zero NO$_2$ exceedance days, one PM$_{2.5}$ exceedance day (because of fireworks) and zero PM$_{10}$ exceedance days in 2010 (CCDAQEM, 2011).

There are two primary sources of allergens in Clark County: fruitless mulberry which pollinates in March and European olive which pollinates in April. Clark County banned further planting of these trees after April 1, 1991 (except certified low-pollinating varieties) because of their higher levels of pollen (CCDAQEM, 2011).

As shown in Figures 25 – 29, criteria pollutants have declined since the mid 1990’s.
Figure 25: Carbon Monoxide Trends, 1998-2010

Source: Clark County Department of Air Quality, Annual Network Plan Report (2011)

Figure 26, 1995-2010: Ozone Trends

Source: Clark County Department of Air Quality, Annual Network Plan Report (2011)
Figure 27: NO2 Trends, 1998-2010

Source: Clark County Department of Air Quality, Annual Network Plan Report (2011)

Figure 28: PM 10 Trends, 1999-2010

Source: Clark County Department of Air Quality, Annual Network Plan Report (2011)
5.3 BROWNFIELDS

According to the Nevada Department of Environmental Protection (2012), brownfields are “sites that are currently being underutilized because of real or potential contamination.” Approximately 165 brownfield sites exist in the region. However, there are no Superfund designated sites. There have been projects focused on re-developing Brownfields in the region. Two examples are:

- **Symphony Park**, a 61 acre mixed use neighborhood in downtown Las Vegas is being developed on a former brownfield and is LEED Gold certified for Neighborhood Development. It includes the recently constructed nearly $470 million Smith Center for the Performing Arts. The Las Vegas Valley currently has more LEED-certified buildings, per capita, than any metropolitan area in the US.

- **Nellis Solar Plant**, a 14-megawatt (MW) solar energy site serving Nellis Air Force Base, is built on a former brownfield.

- **Landwell**, a 2,200 acre master-planned community will accommodate 30,000 residents on a reclaimed industrial site in Henderson.
5.4 BIODIVERSITY

The region has a high level of biodiversity. With 3,800 plant and animal species, Nevada ranks between 4th and 10th overall in various measures of biodiversity (Nature Serve, 2002; Fenstermaker, 2009). Clark County, which includes Mount Charleston (part of the Spring Mountain Range which reaches almost 12,000 ft in elevation) and Lake Mead, consists of 11 ecosystems and 209 species (including plants and animals). Table 20 includes the ecosystems along with the number of species in each system. Threats that are common to many of these ecosystems include: human disturbance (recreation, urbanization, rural and urban development, foot traffic), non-native and invasive species, fire (mega fire), over grazing, climate change, decreased pollinators, altered air quality, and desert dumping (Adaptive Management Report for Clark County Nevada, 2008).

Table 20: Clark County Ecosystems

<table>
<thead>
<tr>
<th>Ecosystem</th>
<th>Number of Species (Including Plant &amp; Animal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>14</td>
</tr>
<tr>
<td>Desert Riparian</td>
<td>14</td>
</tr>
<tr>
<td>Alpine</td>
<td>11</td>
</tr>
<tr>
<td>Bristle Cone Pine</td>
<td>24</td>
</tr>
<tr>
<td>Mix Conifer</td>
<td>34</td>
</tr>
<tr>
<td>Pinyon Juniper</td>
<td>33</td>
</tr>
<tr>
<td>Sagebrush</td>
<td>20</td>
</tr>
<tr>
<td>Blackbrush</td>
<td>10</td>
</tr>
<tr>
<td>Mojave Desert Scrub</td>
<td>22</td>
</tr>
<tr>
<td>Salt Desert Scrub</td>
<td>17</td>
</tr>
<tr>
<td>Mesquite Catclaw Acacia</td>
<td>10</td>
</tr>
</tbody>
</table>


5.5 LAND COVER

A majority of the region’s land cover is arid shrubland. The majority of Clark County (85.4 percent) land coverage is classified as shrubland (US Department of Agriculture, 2011). The majority of the remaining land is covered by development (5 percent), the open water of Lake Mead (1.5 percent), the evergreen forest of the Spring Mountain Range and Mount Charleston (5.4 percent) or barren (2.2 percent).
### 5.6 AGRICULTURE

Clark County has limited agriculture areas, with most located in Moapa Valley and Virgin Valley outside the Las Vegas urban area. Agricultural data for Clark County are included in Table 22.

#### Table 22: Agricultural Summary Data, 2009

<table>
<thead>
<tr>
<th>Agricultural Data for Clark County, 2009</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average size of farms</td>
<td>272 acres</td>
</tr>
<tr>
<td>Average value of agricultural products sold per farm:</td>
<td>$67,207</td>
</tr>
<tr>
<td>The value of nursery, greenhouse, floriculture, and sod as a percentage of the</td>
<td>27.33%</td>
</tr>
<tr>
<td>total market value of agricultural products sold</td>
<td></td>
</tr>
<tr>
<td>The value of livestock, poultry, and their products as a percentage of the</td>
<td>61.03%</td>
</tr>
<tr>
<td>total market value of agricultural products sold</td>
<td></td>
</tr>
<tr>
<td>Average total farm production expenses per farm</td>
<td>$67,826</td>
</tr>
<tr>
<td>Average market value of all machinery and equipment per farm</td>
<td>$54,791</td>
</tr>
<tr>
<td>The percentage of farms operated by a family or individual</td>
<td>89.33%</td>
</tr>
<tr>
<td>Average age of principal farm operators</td>
<td>55 years</td>
</tr>
<tr>
<td>Vegetables</td>
<td>62 harvested acres</td>
</tr>
<tr>
<td>Land in orchards</td>
<td>107 acres</td>
</tr>
</tbody>
</table>

*Source: Clark County (2009)*

### 5.7 CLIMATE AND TEMPERATURE

The region’s climate is a key advantage for location. The region’s climate is characterized as a desert climate, arid and warm. However, Southern Nevada does have four distinct seasons (Clark County Department of Air Quality and Environmental Management, Annual Network Plan Report, 2011). Figure 30 shows the average monthly high and low temperatures for the region (theweatherchannel.com, 2012).
Summer daily high temperatures typically exceed 100°F with extremely low relative humidity (19-24 percent June-August). The highest recorded temperature in the area was 118°F in 1931. Although relative humidity in the summer months is typically low, it can increase for several weeks with subtropical flow from the south (typically in July and August). The subtropical flow can produce severe thunderstorms that result in flash flooding (CCDAQEM, 2011).

Winter months are typically mild and pleasant with average highs around 60°F. Accumulating snow is rare in Las Vegas; however snowfall of an inch or more occurs once every four to five years (CCDAQEM, 2011). Although the average low temperature during the winter months is 39°F, freezing temperatures occur each year. The region has a 30-year average of 24 days with low temperatures at or below 32°F (CCDAQEM, 2011). The lowest recorded temperature as 8°F in 1963. The mountains surrounding the region have an annual snowfall of 5 to 10 feet. Spring and fall season are mild, however sharp temperature changes can occur (CCDAQEM, 2011).

Strong winds are one of the greatest weather hazards in the region. Winds over 50 miles per hour can occur. High winds in the winter and spring can “generate widespread areas of blowing dust and sand” (CCDAQEM, 2011).

Precipitation amounts in the region are low (yearly average of 4 inches). According to the CCDAQEM (2011), “Pacific storms occasionally produce rainfall in Las Vegas, but in general, the Sierra Nevada Mountains of California and the Spring Mountains immediately west of Las Vegas act as effective barriers to” rainfall. Figure 31 shows the average precipitation amounts in Southern Nevada in inches. February is typically the wettest month.
The region’s average temperature (as measured at McCarran Airport) has risen four degrees in four decades. The term "heat island" describes urban, developed areas that are hotter than nearby rural areas. The annual mean air temperature of a city with 1 million people or more can be 1.8–5.4°F warmer than surrounding areas with lower population density. In the evening, the difference can be as high as 22°F (EPA, 2012). “Heat islands can affect communities by increasing summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heat-related illness and mortality, and water quality” (EPA, 2012).

The temperature increase has corresponded to the population increase. As more people have moved to the region, there has been a greater demand for roads, highways, residential and commercial buildings. These new surfaces absorb and radiate heat which has resulted in an increase in the average temperature (City of Las Vegas, 2010). The region’s average temperature (as measured at McCarran Airport) has risen four degrees in four decades (City of Las Vegas, 2010).

Landsat satellite images have been used to evaluate the heat island effects in the region. Results from this imagery show that non-urban areas have higher temperatures than low to medium-density urban areas and lower temperatures than high-density urban areas (City of Las Vegas, 2010). Urban land use and land cover in low to medium-density urban areas create a daytime cooling effect from new landscape and vegetation. High-density urban areas are more likely to have hardscape which creates a ‘heat island’. Landsat satellite imagery shows ‘hot characteristics’ for the Strip and downtown areas (City of Las Vegas, 2010). These areas are comprised of tall commercial buildings (which reduce airflow) that are surrounded by parking lots, roads and highways and use air conditioners (which produce additional heat). New developments on the west side of town do not show ‘heat island’ characteristics due to newer construction materials (stucco and clay/fiber tile roofs) and larger quantities of
vegetation and landscape. Heat islands can be mitigated through the use of trees and vegetation, green roofs, cool roofs and cool pavement (EPA, 2012).
Findings Summary

HEALTHCARE

- Clark County has a low physician to population ratio compared to other counties in Nevada and in the US.
- Clark County has a primary care physician to population ratio of 1:1,244 while the national benchmark for this ratio is 1:631.
- In 2009, 24.9 percent of residents under age 65 had no health insurance, while 18.1 percent under 19 had no insurance. These are the highest rates of uninsured in the Mountain West and among the highest in the nation.
- Since 2002, there has been a 70.1 percent increase in Medicaid enrollment and a 23.8 percent increase in Nevada Check-up in Clark County.
- Middle-income households (400 percent of federal poverty level) were more likely to be uninsured (21.9 percent of adults, 16.9 percent of children) than lower-income households (138 percent of federal poverty level) (9.5 percent of adults and 7.9 percent of children).

COMMUNITY HEALTH

- Compared to other Mountain West Metropolitan areas, the region had the highest rate of diabetes (9 percent) and people reporting fair or poor health (17.4 percent).
- In 2009, 22.1 percent of residents smoke compared to the US median of 17.3 percent.
- Residents were less likely to exercise (76.3 percent) compared to other Mountain West communities and had higher rates of heavy alcohol consumption (5.1 percent).
Key Findings

6.1 HEALTHCARE

Nevada operates at about 64 percent of health care resources compared to other states (Brookings, 2011). Additionally, studies suggest that medium- and high-income Nevada residents routinely leave the state for specialty care and surgical procedures (Brookings, 2011). Hamilton (2004) found that more than 50 percent of Nevada residents seek care in California and Arizona for surgical procedures. Given unmet demand, there are opportunities for employment in the healthcare sector. Based on a Brookings Report (August, 2012) the Health Diagnosing and Treating Practitioners had the highest number of job openings in Southern Nevada (5,723 open positions).

The region has 15 hospitals. Of these hospitals, 9 are for-profit hospitals, 3 are not-for-profit hospitals, a county/non-profit and two Veteran’s Administration (VA) hospitals. There are a total of 3,435 hospital beds in Clark County (not including the VA) (Frontier, 2011). Occupancy rates vary among the hospitals and rang from 46.6 percent at Mountain View and 90.6 percent at St. Rose Siena Campus (Table 23). Occupancy rates for all of Clark County Hospitals was 64.6 percent compared to 67.8 percent in the US (Nevada Healthcare Quarterly Report, 2012, American Hospital Association Survey of American Hospitals, 2011)

COMMUNITY HEALTH, continued

- Residents reported the lowest utilization of mammography (69.9 percent), colonoscopy (60.5 percent), flu vaccinations (65+) (59.4 percent) and pneumonia vaccinations (65+) (64 percent) in the Mountain West.
- Leading causes of death in the region that were not leading causes of death in the nation were lung cancer, pedestrian deaths, prostate and breast cancers.
- The Black population had a higher mortality rate than other race/ethnicities in Southern Nevada and in the nation.
- In 2009, Clark County ranked 1st of Nevada Counties for violent crimes (786.1 /100,000) and second for property crimes (3,059.2 /100,000 population).
## Table 23: Hospital Occupancy, 2011

<table>
<thead>
<tr>
<th>Clark County Hospitals</th>
<th>Occupancy %</th>
<th>US Hospitals</th>
<th>Occupancy %</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Profit Hospitals</td>
<td></td>
<td>For Profit US Hospitals – ’09</td>
<td>57.7</td>
</tr>
<tr>
<td>Centennial Hills Hospital Medical Center</td>
<td>56.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desert Springs Hospital Medical Center</td>
<td>46.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mountain View Hospital</td>
<td>84.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Vista Hospital</td>
<td>69.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern Hills Hospital and Medical Center</td>
<td>49.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Valley Hospital Medical Center</td>
<td>74.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summerlin Hospital Medical Center</td>
<td>57.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunrise Hospital and Medical Center</td>
<td>61.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valley Hospital Medical Center</td>
<td>58.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>County Hospitals</td>
<td></td>
<td>State-local Government US Hospitals – ‘09</td>
<td>65.0</td>
</tr>
<tr>
<td>University Medical Center of Southern Nevada</td>
<td>68.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Profit Hospitals</td>
<td></td>
<td>Non-profit US Hospitals – ’09</td>
<td>67.4</td>
</tr>
<tr>
<td>St. Rose Dominican Hospitals - Rose de Lima Campus</td>
<td>70.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Rose Dominican Hospitals - San Martin Campus</td>
<td>64.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Rose Dominican Hospitals - Siena Campus</td>
<td>90.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Clark County</strong></td>
<td><strong>64.62</strong></td>
<td><strong>Total US</strong></td>
<td><strong>67.8</strong></td>
</tr>
</tbody>
</table>

The region has a low physician to population ratio compared to other counties in Nevada and in the US. Clark County has a primary care physician to population ratio of 1:1,244 while the national benchmark for this ratio is 1:631 (County Health Rankings, 2012). Clark County has 77 licensed MD’s and DO’s per 100,000 population compared to 114 in Carson City and 91 in Washoe County.

Preventable hospital stays are measured by the hospital discharge rate for diagnoses that should have been handled in an ambulatory setting. Clark County had 61/1000 preventable hospital stays per year while the national benchmark is 49/1000 per year. The number equals the rate per 1,000 Medicare enrollees. The measure may also represent the population’s tendency to overuse the hospital as a main source of care” (County Health Rankings, 2012).

Medically underserved areas for primary care and Dentistry have been identified in the central corridor of the city and in outlying census tract (Map X & Map X). Medically Underserved Areas are geographic areas (contiguous county areas or smaller) that reach a certain score or lower on the Index of Medical Underservice (IMU), which is a summary of weighted values for four characteristics: 1) the ratio of primary medical care physicians per 1,000 population, 2) infant mortality rate, 3) percentage of the population with incomes below the poverty level, and 4) percentage of the population age 65 or over. The same criteria can be applied to underserved population groups within an area of residence to declare a Medically Underserved Population (MUP).
Figure 32: Primary Medical Care Shortage Areas

Source: NV Office of Rural Health (2012)
Figure 33: Dental Health Professional Shortage Areas

Source: NV Office of Rural Health (2012)
Many residents report failing to seek medical care due to concerns about cost. According to the Centers for Disease Control and Prevention, 18 percent of Clark County residents reported that they did not see a doctor when they needed to in the past 12 months due to cost. This percentage has increased since 2005 and remains higher than the national percentage. A slightly higher proportion of Clark County residents had their routine medical exam in 2010 compared to 2005 (61.4 percent and 58.8 percent, respectively); however this proportion is lower than the US proportion (67.4 percent in 2010) (CDC, BRFSS data 2010 and 2005).

<table>
<thead>
<tr>
<th>Table 24: Access to Healthcare, 2005-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
</tr>
<tr>
<td>Clark County %</td>
</tr>
<tr>
<td>A time in the past 12 months when they needed to see a doctor but could not because of cost</td>
</tr>
<tr>
<td>Routine Check-up in the past 12 months</td>
</tr>
<tr>
<td>Visited a dentist, dental hygienist or dental clinic within the past year</td>
</tr>
</tbody>
</table>

Source: Center for Disease Control and Prevention, BRFSS 2005 & 2010

The region’s adults have lower rates of health insurance coverage that those in the Mountain West and the nation as a whole. According to the US Census Bureau, in 2009, 24.9 percent of the region’s residents under age 65 had no health insurance, while 18.1 percent under age 19 had no insurance. These are some of the highest rates in the nation and the highest rates compared to other metropolitan areas in the Mountain West (Table 25). The US average for uninsured in 2009 was 17 percent for people under 65. Nevada’s rate for uninsured is double California’s rate. By comparison: Massachusetts has the lowest rates: 4.6 percent of people under 65, and only 2.1 percent of those under 18. In addition, the US average for uninsured was 8.6 percent for people under age 19 and Nevada’s rate was 18.1 percent.
Table 25: Percent Uninsured, 2010

<table>
<thead>
<tr>
<th>City, State (MSA)</th>
<th>Uninsured &lt; 65 years</th>
<th>Uninsured &lt; 19 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuquerque, NM (MSA)</td>
<td>19.8%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Denver, CO (MSA)</td>
<td>21.6%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Las Vegas, NV (MSA)</td>
<td>24.9%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Phoenix (MSA)</td>
<td>20.2%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Salt Lake City, UT (MSA)</td>
<td>17%</td>
<td>11.4%</td>
</tr>
<tr>
<td>US Average*</td>
<td>15.1%</td>
<td>8.6%</td>
</tr>
</tbody>
</table>

Sources: U.S. Census Bureau Small Area Health Insurance Estimates (2009), *U.S. Census, American Community Survey 3-Year Estimate 2008-2010

Enrollment in state healthcare programs has increased since 2002. There was a 70.1 percent increase in Medicaid enrollment and a 23.8 percent increase in Nevada Check-ups in Clark County since 2002. Clark County and Nevada both saw increases in the percentage of Medicaid and Nevada Check-up enrollments in 2010 compared to 2002. The percent change was more dramatic in Clark County with 23.8 percent change in Nevada Check-ups compared to 8.6 percent increase in Nevada (see Table 26).

Table 26: Enrollment in Nevada Medicaid and Nevada Check-up

<table>
<thead>
<tr>
<th></th>
<th>Clark County</th>
<th>Nevada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid Enrollment - % of population, 2010</td>
<td>12.7%</td>
<td>12.3%</td>
</tr>
<tr>
<td>% change in Medicaid enrollment 2002 to 2010</td>
<td>70.1%</td>
<td>63.1%</td>
</tr>
<tr>
<td>Nevada Check-up - % of population, 2010</td>
<td>4.6%</td>
<td>4.8%</td>
</tr>
<tr>
<td>% change in Nevada Check-up enrollment 2002 to 2010</td>
<td>23.8%</td>
<td>8.6%</td>
</tr>
</tbody>
</table>

Source: Nevada Office of Rural Health, 2011

Middle-income households are more likely to be uninsured than lower-income households. In 2009, the region’s middle income households had lower rates of health insurance coverage than those with household incomes closer to the poverty level ($22,050 for a family of four in 2009). More than 21.9 percent of residents under 65 in households earning at or below 400 percent above poverty level ($88,200 for a family of four) were uninsured, compared with 9.5 percent of those in households earning 138 percent above poverty level ($30,429 for a family of four). This gap closed slightly with households earning 250 percent above poverty level ($55,125 for a family of four): nearly 17 percent of these individuals were uninsured.

As demonstrated in Table 27, the higher rates of uninsured are similar for residents under 19.
Table 27: Uninsured by Percent Federal Poverty Level

<table>
<thead>
<tr>
<th>Clark County Uninsured</th>
<th>% Uninsured &lt; 65 years</th>
<th>% Uninsured &lt; 19 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>All residents without health insurance coverage</td>
<td>24.9%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Living in household at or below 138% of federal poverty level*</td>
<td>9.5%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Living in household at or below 200% of federal poverty level*</td>
<td>14.1%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Living in household at or below 250% of federal poverty level*</td>
<td>16.9%</td>
<td>13.9%</td>
</tr>
<tr>
<td>Living in household at or below 400% of federal poverty level*</td>
<td>21.9%</td>
<td>16.9%</td>
</tr>
</tbody>
</table>

*2009 federal poverty level: family of four: $22,050

Source: U.S. Census Bureau Small Area Health Insurance Estimates (2009)
Males age 18-24 have the highest rates of being uninsured in the region. Forty-five percent of men age 18-24 lack health care coverage in Southern Nevada while 38 percent of women in the same age bracket lack health insurance. The rates uninsured residents are highest for both men and women between the ages of 18 and 54 years.

Table 28: People without Health Insurance by Gender and Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total Population</th>
<th>Percent without Health Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total:</td>
<td>1,929,325</td>
<td></td>
</tr>
<tr>
<td>Male:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 6 years:</td>
<td>85,987</td>
<td>15.3</td>
</tr>
<tr>
<td>6 to 17 years:</td>
<td>163,792</td>
<td>18.4</td>
</tr>
<tr>
<td>18 to 24 years:</td>
<td>86,878</td>
<td>45.3</td>
</tr>
<tr>
<td>25 to 34 years:</td>
<td>144,369</td>
<td>39.1</td>
</tr>
<tr>
<td>35 to 44 years:</td>
<td>143,627</td>
<td>29.1</td>
</tr>
<tr>
<td>45 to 54 years:</td>
<td>131,922</td>
<td>23.1</td>
</tr>
<tr>
<td>55 to 64 years:</td>
<td>104,565</td>
<td>16.5</td>
</tr>
<tr>
<td>65 to 74 years:</td>
<td>65,440</td>
<td>2.2</td>
</tr>
<tr>
<td>75 years and over:</td>
<td>37,655</td>
<td>2.3</td>
</tr>
<tr>
<td>Female:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 6 years:</td>
<td>82,535</td>
<td>14.0</td>
</tr>
<tr>
<td>6 to 17 years:</td>
<td>156,119</td>
<td>17.6</td>
</tr>
<tr>
<td>18 to 24 years:</td>
<td>86,618</td>
<td>38.4</td>
</tr>
<tr>
<td>25 to 34 years:</td>
<td>143,420</td>
<td>31.4</td>
</tr>
<tr>
<td>35 to 44 years:</td>
<td>139,064</td>
<td>24.3</td>
</tr>
<tr>
<td>45 to 54 years:</td>
<td>129,222</td>
<td>23.2</td>
</tr>
<tr>
<td>55 to 64 years:</td>
<td>111,014</td>
<td>16.7</td>
</tr>
<tr>
<td>65 to 74 years:</td>
<td>69,875</td>
<td>3.6</td>
</tr>
<tr>
<td>75 years and over:</td>
<td>47,223</td>
<td>2.3</td>
</tr>
</tbody>
</table>

**Source:** American Community Survey (2009-2011)

The Patient Protection and Affordable Care Act (PPACA) will extend Medicaid coverage to adults under the age of 65 with incomes equal to or less than 133 percent of the federal poverty level. Projection for Nevada by the Kaiser Commission show that the PPACA could decrease the number of uninsured adults living at 133 percent of the federal poverty level or lower by 47 percent to 72.7 percent in 2019 based on the projection model utilized. Medicaid enrollment is projected to increase by 61.7 percent to 88.6 percent in 2019 compared to the baseline in 2009 based different projection models. State spending on Medicaid would increase by 2.9 percent to 5.2 percent while federal spending would increase by 49.8 percent to 59.3 percent, again, based on the projection model selected (Kaiser Commission, 2010).

Nevada has the lowest per capital investment in public health funding. Spending per capita on public health in the state of Nevada was $3.45 per person in fiscal year 2010-2011. This amount ranked the state of Nevada as 51st for funding of public health (Healthyamerica.org).
6.2 HEALTHY PEOPLE

Nearly one-quarter of the region’s children live in poverty, which puts them at risk for unhealthy behaviors and health problems. Research has established a link between income and health (Marmott, 2006). People who live in poverty have a greater risk of unhealthy behaviors and chronic diseases. Poverty impacts a family’s ability to provide healthy food, safe shelter and access to pediatric health care for children, which could ultimately increase the risk of health problems and risky health behaviors in adulthood (Marmott, 2006). In 2010, the Census estimated that 22.2 percent of families with children under the age of 18 were living in poverty. This rate was slightly higher than the national average.

Table 29: Percentage of Children Living in Poverty, 2010

<table>
<thead>
<tr>
<th>City, State (County)</th>
<th>Pct of Families with Children Under Age 18 living in poverty</th>
<th>Pct of Families with Children Ages 5-17 living in poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuquerque, NM (Bernalillo)</td>
<td>23.9%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Denver, CO (Denver)</td>
<td>30.8%</td>
<td>27.3%</td>
</tr>
<tr>
<td>Las Vegas, NV (Clark)</td>
<td>22.2%</td>
<td>20.1%</td>
</tr>
<tr>
<td>Phoenix (Maricopa)</td>
<td>23.5%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Salt Lake City, UT (Salt Lake)</td>
<td>17.8%</td>
<td>16.3%</td>
</tr>
<tr>
<td>US Average</td>
<td>21.6%</td>
<td>19.8%</td>
</tr>
</tbody>
</table>


Compared to other Mountain West Metropolitan areas, Southern Nevada had the highest rates of diabetes and people reporting fair or poor health. In the region, 9 percent of people reported being diagnosed with diabetes and 17.4 percent would rate their general health as fair or poor; these rates were the highest in the Mountain West. Rates of diabetes increased from 7.2 percent in 2005 to 9 percent in 2010. Compared to other Mountain West Metropolitan Areas, Southern Nevada had similar rates of asthma and people reporting disabilities; however, rates of asthma did increase in 2010 compared to 2005. The region had the second highest rate of CVD. However, this rate was lower than the US average (CDC, BRFSS, SMART 2010, 2005).
### Table 30: Chronic Disease and Conditions, 2010

<table>
<thead>
<tr>
<th>City, State (MSA) 2010</th>
<th>Diabetes</th>
<th>Asthma</th>
<th>CAD</th>
<th>Fair or Poor Health</th>
<th>People with Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denver, CO (MSA)</td>
<td>5.4%</td>
<td>9.9%</td>
<td>2.8%</td>
<td>9.8%</td>
<td>18.9%</td>
</tr>
<tr>
<td>Las Vegas, NV (MSA)</td>
<td>9%</td>
<td>9.3%</td>
<td>3.9%</td>
<td>17.4%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Phoenix (MSA)</td>
<td>7.1%</td>
<td>9.6%</td>
<td>3.6%</td>
<td>13.1%</td>
<td>18.3%</td>
</tr>
<tr>
<td>Salt Lake City, UT (MSA)</td>
<td>6.6%</td>
<td>10.1%</td>
<td>2.8%</td>
<td>12.3%</td>
<td>19.4%</td>
</tr>
<tr>
<td>US median</td>
<td>8.7%</td>
<td>9.1%</td>
<td>4.1%</td>
<td>14.7%</td>
<td>21.2%</td>
</tr>
<tr>
<td>Las Vegas, NV (MSA), 2005*</td>
<td>7.2%</td>
<td>6.8%</td>
<td>4.4%</td>
<td>17%</td>
<td>19%</td>
</tr>
</tbody>
</table>

*Source: Center for Disease Control and Prevention, BRFSS data 2010, *2005, **2007*

**The region’s adult residents have higher chronic disease risk factors than other Mountain West regions.** Southern Nevada residents were less likely to exercise compared to other Mountain West communities and had high rates of heavy alcohol consumption, tied for first with Denver although, for both of these behaviors, the rates improved in the region since 2005 (CDC yr, BRFSS yr, SMART 2010, 2005). In 2009, 22.1 percent of Southern Nevada residents were smokers compared to the US median of 17.3 percent (CDC, BRFSS, 2010). Nevada’s rate for smoking is the highest of any Western state, and among the top 8 highest rates of any state (Center for Disease Control, 2010). Nevada’s $0.80 per pack cigarette tax is low, ranking 34th among US states (CDC, 2011).
Table 31: Chronic Disease Risk Factors, 2010

<table>
<thead>
<tr>
<th>City, State (MSA), 2010</th>
<th>Heavy Drinker</th>
<th>Current Smoker</th>
<th>Overweight</th>
<th>Obese</th>
<th>Exercise</th>
<th>5 Servings Fruit/Veg*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denver, CO (MSA)</td>
<td>5.1%</td>
<td>14.6%</td>
<td>37.4%</td>
<td>19.6%</td>
<td>83.8%</td>
<td>24.3%</td>
</tr>
<tr>
<td>Las Vegas, NV (MSA)</td>
<td>5.1%</td>
<td>22.1%</td>
<td>37.3%</td>
<td>23.1%</td>
<td>76.3%</td>
<td>23.9%</td>
</tr>
<tr>
<td>Phoenix (MSA)</td>
<td>4.5%</td>
<td>14.8%</td>
<td>41.1%</td>
<td>22.8%</td>
<td>81.5%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Salt Lake City, UT (MSA)</td>
<td>4%</td>
<td>10.8%</td>
<td>34.6%</td>
<td>23.6%</td>
<td>81.7%</td>
<td>23.2%</td>
</tr>
<tr>
<td>US Average</td>
<td>5.0%</td>
<td>17.3%</td>
<td>36.2%</td>
<td>27.5%</td>
<td>76.1%</td>
<td>23.4%</td>
</tr>
<tr>
<td>Las Vegas, NV (MSA) 2005</td>
<td>6.5%</td>
<td>23.5%</td>
<td>37.1%</td>
<td>21%</td>
<td>71.3%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Center for Disease Control and Prevention, BRFSS data 2010, 2005, *2009

The region’s youth have higher rates of risky behaviors than peer regions. Youth Risk Behavior Survey is conducted every two years by the Center for Disease Control and Prevention. The survey includes national and Clark County data monitoring six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and young adults enrolled in grades 9 – 12 at the time of the survey including: tobacco use, alcohol and other drug use, sexual risk behaviors, unhealthy dietary behavior and physical inactivity. Results from the 2009 survey appear in Table 32. 15.4 percent of Clark County youth reported smoking at least one day in the past 30 days compared to 19.5 percent of national youth. Among students who currently smoke, 8.9 percent of Clark County children smoke 10 or more cigarettes per day compared to 7.8 percent of students in the nation. 4.2 percent of the region’s students report using chewing tobacco, snuff or dip compared to 8.9 percent of students in the nation. Significantly fewer Clark County students reported drinking at least one alcoholic drink within the last 30 days (36.7 percent) compared to the national students (41.8 percent). 47.8 percent of the region’s students reported that they have had sex and 37 percent reported that they did not use a condom during their last sexual intercourse, neither of which were significantly different than national students. Significantly fewer Clark County students reported being physically active for 60 minutes, 5 days per week (57.6 percent) compared to National students (63 percent). Significantly more students reported eating 5 or more servings of fruit and vegetables (82.5 percent) compared to national students (77.7 percent). Twelve percent of all students were considered to be obese however 12.9 percent in Clark County of the region’s students were considered to be overweight, whereas 15.8 percent of national students were considered to be overweight. Significantly more high school students in Clark County had been offered, sold or given illegal drugs at school (38.8 percent) or have ever used methamphetamines (5.9 percent) compared to the nation (22.7 percent and 4.1 percent, respectively); however, Clark County students were not significantly
more likely to use marijuana, cocaine or inhalants. The region’s students were more likely to have seriously considered (18.2 percent) or attempted (10.0 percent) suicide than students in the nation (13.8 percent and 6.3 percent, respectively).

### Table 32: Risky Health Behaviors of High School Students, Clark County and the Nation

<table>
<thead>
<tr>
<th></th>
<th>Clark County</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking at least 1 day in past 30</td>
<td>15.4%</td>
<td>19.5%</td>
</tr>
<tr>
<td>Currently smoke 10 or more per day</td>
<td>8.9%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Chew tobacco</td>
<td>4.2%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Currently use marijuana</td>
<td>20.5%</td>
<td>20.8%</td>
</tr>
<tr>
<td>Ever used cocaine</td>
<td>7.7%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Ever used inhalants</td>
<td>12.4%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Ever used methamphetamines</td>
<td>5.9%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Offered, sold, given illegal drugs at school</td>
<td>38.8%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Overweight</td>
<td>12.9%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Obese</td>
<td>12.3%</td>
<td>12.0%</td>
</tr>
<tr>
<td>1 alcoholic drink in past 30 days</td>
<td>36.7%</td>
<td>41.8%</td>
</tr>
<tr>
<td>Ever had sex</td>
<td>47.8%</td>
<td>46.0%</td>
</tr>
<tr>
<td>Did not use condom during last intercourse</td>
<td>37%</td>
<td>38.9%</td>
</tr>
<tr>
<td>Physically active 60 minutes, 5 days/week</td>
<td>57.6%</td>
<td>63%</td>
</tr>
<tr>
<td>Eating 5 or more fruit &amp; vegetables</td>
<td>82.5%</td>
<td>77.7%</td>
</tr>
<tr>
<td>Seriously considered suicide</td>
<td>18.2%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Attempted suicide</td>
<td>10.0%</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

*Source: Youth Risk Behavior Surveillance, 2009*

Residents report low utilization of preventive health exams and vaccinations. Southern Nevada residents reported the lowest utilization of mammography, colonoscopy, flu vaccinations (65+) and pneumonia vaccinations (65+) in the Mountain West and the second lowest utilization of Pap test. Compared to 2005, Southern Nevada residents’ utilization of colonoscopy, flu vaccination (65+) and pneumonia vaccination (65+) were higher in 2009 (Table 33).
<table>
<thead>
<tr>
<th>City, State (County)</th>
<th>Pap test 18+ Past 3 yrs</th>
<th>Mammogram 50+ Past 2 yrs</th>
<th>PSA 40+ Past 2 yrs</th>
<th>Colono-scopy 50+ Ever</th>
<th>Flu 65+ Past yr</th>
<th>Pneumonia 65+ Ever</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuquerque, NM (MSA)</td>
<td>83.6%</td>
<td>79.4%</td>
<td>54.6%</td>
<td>65.7%</td>
<td>74%</td>
<td>72.8%</td>
</tr>
<tr>
<td>Boise, ID (ADA)</td>
<td>77.1%</td>
<td>71.7%</td>
<td>50.5%</td>
<td>62.2%</td>
<td>61.6%</td>
<td>70.2%</td>
</tr>
<tr>
<td>Colorado Springs, CO (MSA)</td>
<td>77.5%</td>
<td>77.7%</td>
<td>46.8%</td>
<td>65.3%</td>
<td>69.5%</td>
<td>72.3%</td>
</tr>
<tr>
<td>Denver, CO (MSA)</td>
<td>81.3%</td>
<td>73.6%</td>
<td>50.5%</td>
<td>67.5%</td>
<td>76.4%</td>
<td>75.7%</td>
</tr>
<tr>
<td>Las Vegas, NV (MSA)</td>
<td>79%</td>
<td>69.9%</td>
<td>51.6%</td>
<td>60.5%</td>
<td>59.4%</td>
<td>64%</td>
</tr>
<tr>
<td>Ogden, UT (MSA)</td>
<td>76.4%</td>
<td>74%</td>
<td>53.2%</td>
<td>72.6%</td>
<td>71.4%</td>
<td>65.2%</td>
</tr>
<tr>
<td>Phoenix (MSA)</td>
<td>83.3%</td>
<td>78.6%</td>
<td>51.8%</td>
<td>64.4%</td>
<td>68.8%</td>
<td>73.7%</td>
</tr>
<tr>
<td>Provo-Orem, UT (MSA)</td>
<td>63.3%</td>
<td>73.3%</td>
<td>48.4%</td>
<td>68.9%</td>
<td>64.4%</td>
<td>68%</td>
</tr>
<tr>
<td>Salt Lake City, UT (MSA)</td>
<td>78.8%</td>
<td>72.2%</td>
<td>49.9%</td>
<td>71.5%</td>
<td>70.2%</td>
<td>73.6%</td>
</tr>
<tr>
<td>Tucson, AZ (MSA)</td>
<td>84.9%</td>
<td>79.6%</td>
<td>56.2%</td>
<td>71.1%</td>
<td>69.1%</td>
<td>75.3%</td>
</tr>
<tr>
<td>U.S. average</td>
<td>81.3%</td>
<td>77.9%</td>
<td>53.2%</td>
<td>65.2%</td>
<td>67.5%</td>
<td>68.8%</td>
</tr>
<tr>
<td>Las Vegas, NV (MSA) 2005</td>
<td>82.9%</td>
<td>74.1%</td>
<td>53%</td>
<td>55%</td>
<td>54.1%</td>
<td>69.5%</td>
</tr>
</tbody>
</table>

Source: Center for Disease Control and Prevention, BRFSS data (2010)

**Heart disease and cancer are the leading causes of death in the region.** The ten leading causes of death in Clark County and in the Nation are listed in Table 34. The top 3 causes of death in Clark County and the Nation were the same in 2008 (heart disease, malignant neoplasm, and chronic lower respiratory disease). Clark County residents were more likely to die from lung cancer, pedestrian deaths, prostate and breast cancers (Nevada State Health Division 2008, CDC, 2008).
Table 34: Leading Causes of Death in Clark County and the Nation, 2008

<table>
<thead>
<tr>
<th>Clark County</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Heart Disease</td>
<td>Heart Disease</td>
</tr>
<tr>
<td>2 Malignant Neoplasm</td>
<td>Malignant Neoplasm</td>
</tr>
<tr>
<td>3 Chronic Lower Respiratory Disease</td>
<td>Chronic Lower Respiratory Disease</td>
</tr>
<tr>
<td>4 Lung Cancer</td>
<td>Stroke</td>
</tr>
<tr>
<td>5 Stroke</td>
<td>Accident (unintentional injury)</td>
</tr>
<tr>
<td>6 Pedestrian Deaths</td>
<td>Alzheimer's disease</td>
</tr>
<tr>
<td>7 Prostate Cancer</td>
<td>Diabetes</td>
</tr>
<tr>
<td>8 Breast Cancer</td>
<td>Flu and pneumonia</td>
</tr>
<tr>
<td>9 Kidney Disease</td>
<td>Kidney Disease</td>
</tr>
<tr>
<td>10 Flu and Pneumonia</td>
<td>Intentional self-harm (suicide)</td>
</tr>
</tbody>
</table>

Sources: Nevada State Health Division 2008, CDC, 2008

Age adjusted mortality rate is lower in Clark County than Nevada as a whole (782.2 per 100,000 compared to 808.1 per 100,000) in 2008. The black population had a higher age adjusted mortality rate than other race/ethnicities in Clark County, Nevada and the Nation (Table 35) (Nevada State Health Division 2008, CDC, 2008). In 2009, Nevada had a higher mortality rate than any other Mountain West State (Table 36) (CDC, 2011)

Table 35: Mortality Rates, 2008

<table>
<thead>
<tr>
<th>Rate per 100,000 people</th>
<th>Clark County</th>
<th>Nevada</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White</td>
<td>783.9</td>
<td>818.4</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>1032.8</td>
<td>1034.7</td>
</tr>
<tr>
<td></td>
<td>Native American</td>
<td>493.8</td>
<td>650.3</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>701.2</td>
<td>690.7</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>723.2</td>
<td>684.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>782.2</td>
<td>808.1</td>
</tr>
</tbody>
</table>

Sources: Nevada State Office of Rural Health (2011), CDC (2009)
Table 36: Age Adjusted Mortality Rates, 2009

<table>
<thead>
<tr>
<th>Location</th>
<th>Age Adjusted Mortality Rate per 100,000 People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevada</td>
<td>789.6</td>
</tr>
<tr>
<td>Utah</td>
<td>699.0</td>
</tr>
<tr>
<td>Colorado</td>
<td>677.8</td>
</tr>
<tr>
<td>New Mexico</td>
<td>748.0</td>
</tr>
<tr>
<td>Arizona</td>
<td>688.9</td>
</tr>
<tr>
<td>Idaho</td>
<td>744.9</td>
</tr>
<tr>
<td>US</td>
<td>740.0</td>
</tr>
</tbody>
</table>


There are 16 food deserts in Clark County. The USDA qualifies a food desert as a census tract in which at least 33 percent of the population or a minimum of 500 people live more than 1 mile from a supermarket or large grocery store. There are 10 census tracts in the Las Vegas urban area that meet the criteria for a food desert (see Figure 34) and 16 tracts in all of Clark County (USDA ERS, 2012b). It is a national goal to eliminate all food deserts by 2017, as lack of access to healthy food contributes to a poor diet, obesity, and other related chronic diseases such as heart disease and diabetes. Efforts to meet this goal have been made through the Fresh Food Financing program. They include tax credits to supermarket projects in food deserts and USDA loans and grants to programs which increase access to locally produced food, such as farmers markets (USDA, 2012).
Figure 34: Food Deserts, 2012

Source: USDA ERS (2012b)
Convenience and fast food outlets are more accessible than grocery stores in the region. There are a total of 289 grocery stores, supermarkets, and club stores in Clark County which equates to 0.148 stores per 1,000 residents; there are 593 convenience stores or 0.303 stores per 1,000 residents, and 1,089 fast food outlets or 0.58 outlets per 1,000 residents (USDA ERS, 2012). Of all restaurants in Clark County, 59 percent are classified as fast food by the North American Industrial Classification System. This is much higher than the national benchmark of 25 percent. Though these numbers are similar to other counties in the Mountain West (see Table 37) it is concerning that there are twice as many conveniences stores and nearly four times as many fast food outlets than there are grocery stores. When people have access to grocery stores they are less likely to be overweight, but when they have better access to convenience stores they are more likely to be overweight (Morland, Roux, & Wing, 2006).

### Table 37: Food Outlets per 1,000 Individuals, 2012

<table>
<thead>
<tr>
<th></th>
<th>Clark County, NV per 1,000</th>
<th>Maricopa County, AZ per 1,000</th>
<th>Salt Lake County, UT per 1,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grocery, supermarkets, &amp; club stores</td>
<td>0.148</td>
<td>0.158</td>
<td>0.159</td>
</tr>
<tr>
<td>Convenience stores</td>
<td>0.303</td>
<td>0.257</td>
<td>0.278</td>
</tr>
<tr>
<td>Fast food outlets</td>
<td>0.580</td>
<td>0.564</td>
<td>0.524</td>
</tr>
</tbody>
</table>

Source: USDA ERS (2012)

The number of food insecure households in Clark County is higher than the national average and other Mountain West Counties. Food insecurity is defined as lack of access, at times, to enough food for a healthy and active life for all household members (Feeding America, 2012). In Clark County 17.5 percent of households are food insecure. This is higher than the national average and of other Mountain West Counties (see Table 38) (Feeding America, 2012; USDA ERS, 2012c). Figure 35 shows the percentage of the population which is food insecure by zip code. Food insecurity is a concern because it is linked to numerous negative health effects such as increased body mass index (BMI), poorer self reported health status and lower mental health scores (Stuff et al., 2004; Olson, 1999).

### Table 38: Households with Food Insecurity, 2011

<table>
<thead>
<tr>
<th></th>
<th>Percent of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark County, NV</td>
<td>17.5%</td>
</tr>
<tr>
<td>Denver County, CO</td>
<td>17.1%</td>
</tr>
<tr>
<td>Maricopa County, AZ</td>
<td>16.1%</td>
</tr>
<tr>
<td>Salt Lake County, UT</td>
<td>14.9%</td>
</tr>
<tr>
<td>Nation</td>
<td>14.9%</td>
</tr>
</tbody>
</table>

Source: USDA ERS (2012c); Feeding America (2012)
Figure 35: Food Insecurity by Zip Code, 2011

Three Square (2011)
The number of food insecure children in Clark County is higher than the national average and other Mountain West Counties. Households with children experience food insecurity at a significantly higher rate than the population (Feeding America, 2012b). 26.9 percent of children in Clark County are food insecure (Feeding America, 2012). Table 39 contrasts the percent of food insecure children in Clark County to the nation and other mountain west counties. Further, 55 percent of children in Clark County School District are enrolled in free and reduced price meal programs based on family income (Three Square, 2012). Food insecurity is a particularly serious issue for children, as it can pose long term health effects. Research has found that food insecurity impacts cognitive development, and is associated with negative academic and psychosocial outcomes (Feeding America, 2012b; Alaimo, Olson, Frongillo, 2001).

**Table 39: Percent of Food Insecure Children, 2010**

<table>
<thead>
<tr>
<th></th>
<th>Percent Food Insecure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark County, NV</td>
<td>26.9%</td>
</tr>
<tr>
<td>Denver County, CO</td>
<td>25.6%</td>
</tr>
<tr>
<td>Maricopa County, AZ</td>
<td>24.8%</td>
</tr>
<tr>
<td>Salt Lake County, UT</td>
<td>19.6%</td>
</tr>
<tr>
<td>Nation</td>
<td>21.6%</td>
</tr>
</tbody>
</table>

*Source: Feeding America (2012)*

**Violent Crime.** In 2009, Clark County ranked 1st of Nevada Counties for violent crimes (786.1 /100,000) and second for property crimes (3,059.2 /100,000 population) (Nevada State Office of Rural Health, 2011). Clark County remains above the national violent crime rate in 2009 which was 429.4 / 100,000 and parity with that national property crime rate was 3,036 / 100,000 (US Department of Justice, 2009)

### 6.3 PARKS & RECREATION FACILITIES

The region has fewer park acres per capita than the nationally recommended level. Southern Nevada has 4,946 park acres of regional and local parks located in four jurisdictions (excluding federal and state lands). The overall average is 2.6 park acres per 1,000 residents. The National Recreation and Parks Association recommends 10 park acres per 1,000 residents. The goals adopted by Clark County and the cities of Las Vegas and North Las Vegas is 2.5 acres per 1,000 residents and the city of Henderson’s goal is 5.5 acres per 1,000. The current amount of park acres per 1,000 residents by jurisdiction is 1.93 acres for the county, 3.2 acres for the city of Las Vegas, 3.7 acres for the city of North Las Vegas, and 2.9 acres for the city of Henderson. Each jurisdiction in the region is responsible for maintaining and operating the parks within its limits. A study examining all park acres in Clark County found that census tracts with
larger populations are more likely to have a park and high income census tracts are more likely to have a greater amount of park acres (Coughenour & Pharr, in press).

Southern Nevada contains over 4 million acres of federal and state lands, which offer a variety of recreation opportunities. The region’s network of parks, open space recreation areas is one of its strongest assets. Most of these areas are state or federally owned. Lake Mead National Recreation area is the fifth most visited national park with 7 million visitors each year and offers water recreation, fishing, boating, cycling, camping and hiking. A total of 587,000 acres of the recreation area is within Clark County (NPS, 2012). The Desert National Wildlife Range (DNWR) is the largest wildlife refuge in the lower 48 states, encompassing 6 mountain ranges and expanding 50 miles wide and 59 miles north. The DNWR includes 493,000 acres within Clark County. The primary purpose is to protect the desert bighorn sheep, though the area offers hiking, bird and nature viewing, and hunting. Spring Mountain National Recreational Area (Mount Charleston), which is part of the Humboldt-Toiyabe National Forest includes 252,518 acres within Clark County. The Spring Mountains offer seasonal snow capped mountains for snow recreation, hiking, hunting, camping, rock climbing, biking, and bird and nature viewing (USDA, 2012d). Red Rock National Conservation, draws more than one million visitors each year. It has 195,819 acres which offer hiking trails, rock climbing, horseback riding, biking, picnic areas, nature observing and a visitor center with exhibit rooms and a book store (Bureau of Land Management (BLM), 2012). In addition, there are over 2.5 million additional acres of federal lands in Clark County which are utilized by residents for recreational purposes.

Clark County has numerous state parks as well. The 42,059 acre Valley of Fire State Park is Nevada’s oldest state park. In addition to hiking, camping, and a visitor’s center, it contains areas of petrified wood and 3,000 year old Indian petroglyphs (Department of Conservation and Natural Resources, 2012). The 2,336 acre Big Bend of the Colorado State Park is on the shores of the Colorado River in the Southern tip of Clark County and offers water recreation, fishing, boating, camping and hiking (Department of Conservation and Natural Resources, 2012). Spring Mountain Ranch State Park contains 520 acres and features a historical ranch house, an outdoor theatre, natural springs, hiking, and nature viewing. The Old Las Vegas Mormon Fort is a state park and sits on 3 acres which houses an adobe fort built by the first permanent non-native settlers, Mormon missionaries. The site is within downtown Las Vegas and contains a visitor’s center depicting the history of the site and historic artifacts (Department of Conservation and Natural Resources, 2012). Table 40 shows the number of acres by type for parks and open space in Clark County.
Table 40: Public Parks and Open Space Acreage, 2012

<table>
<thead>
<tr>
<th>Park Type</th>
<th>Total Park Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Park</td>
<td>1,528,337</td>
</tr>
<tr>
<td>State Park</td>
<td>44,918</td>
</tr>
<tr>
<td>Regional Park (50 acres or more)</td>
<td>96,477</td>
</tr>
<tr>
<td>Community Park (13 to 50 acres)</td>
<td>1,297</td>
</tr>
<tr>
<td>Neighborhood park (2 to 12 acres)</td>
<td>1,038</td>
</tr>
<tr>
<td>Pocket Parks (less than 2 acres)</td>
<td>22</td>
</tr>
<tr>
<td>Additional BLM acres</td>
<td>2,704,181</td>
</tr>
<tr>
<td><strong>Total Acreage</strong></td>
<td><strong>4,376,270</strong></td>
</tr>
<tr>
<td><strong>Acres of Park and Open Space Per Capita</strong></td>
<td><strong>2.2</strong></td>
</tr>
</tbody>
</table>

*BLM = Bureau of Land Management

Source: City of Henderson (2012); City of Las Vegas (2012); City of North Las Vegas (2012); Clark County (2012); SNRPC (2006); Department of Conservation and Natural Resources (2012); USDA (2012d), NPS (2012); BLM (2012)

The region has **179 miles of off road, multiuse trails, combined**. The City of Henderson has a total of 66 miles of multi-use trails, Las Vegas has 45 miles of multi-use trails, Clark County has 39 miles of developed trails and 20 miles in development, North Las Vegas has 29 miles of developed trails and has an additional 10 miles under construction (anticipated completion winter 2013). The amount of total trail miles in Southern Nevada is comparable or greater than similar mountain west cities such as Phoenix, AZ which reports 200 miles of urban trails (City of Phoenix, 2012) and Denver, CO which reports about 80 miles or urban trails (City of Denver, 2012). One study examined the number of trail heads in the region and found that low income areas have access to fewer urban trails when compared to high income areas (Coughenour, in press).
<table>
<thead>
<tr>
<th>Urban Trail Systems</th>
<th>Total Mileage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Las Vegas</td>
<td>179</td>
</tr>
<tr>
<td>Phoenix</td>
<td>200</td>
</tr>
<tr>
<td>Denver</td>
<td>80</td>
</tr>
</tbody>
</table>


There are 180 miles of bike lanes, 100 miles of bike paths, and 80 miles of bike routes throughout the region. Bike lanes are defined as a portion of the roadway which is separated from vehicular traffic by marked pavement. Bike paths are shared use paths which are physically separated from vehicular traffic by open space or a physical barrier, and a bike route is a shared roadway which is designated by signage as a preferred route for bike use (see Figure 36).
Figure 36: Bicycle Network

Current Bicycle Facilities
- Red: Existing On Street Bicycle Lane
- Blue: Existing Off Street Bicycle Lane

Source: RTC of Southern NV (2012)
There are a total of **41 recreational facilities in Clark County**. The City of Henderson has 8 recreational facilities, including 1 senior center; Las Vegas has 15 recreational facilities, including 7 senior centers; Clark County has 13 recreational facilities, including one senior center, and North Las Vegas offers 3 recreational facilities. And Boulder City has 1 recreation center and 1 swimming pool complex.
Figure 37: Recreational Facilities

Places of Interest

- Recreation Centers

*Source: Clark County, Cities of Henderson, Las Vegas, North Las Vegas (2012)*
6.4 EDUCATION

Clark County ranks last in per pupil spending in Nevada. In 2009, Clark County School District ranked 17th out of 17 Nevada counties in per pupil public expenditures on education with $8,246 spent per pupil. The average US per pupil expenditures was $10,297 (National Center for Educational Statistics, 2012).

Table 42: Public Expenditures on Education per Pupil, 2009

<table>
<thead>
<tr>
<th>Dollars per Pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esmeralda County</td>
</tr>
<tr>
<td>Eureka County</td>
</tr>
<tr>
<td>Storey County</td>
</tr>
<tr>
<td>Pershing County</td>
</tr>
<tr>
<td>Lincoln County</td>
</tr>
<tr>
<td>Mineral County</td>
</tr>
<tr>
<td>White Pine County</td>
</tr>
<tr>
<td>Nye County</td>
</tr>
<tr>
<td>Humbolt County</td>
</tr>
<tr>
<td>Lander County</td>
</tr>
<tr>
<td>Elko County</td>
</tr>
<tr>
<td>Douglas County</td>
</tr>
<tr>
<td>Churchill County</td>
</tr>
<tr>
<td>Lyon County</td>
</tr>
<tr>
<td>Carson County</td>
</tr>
<tr>
<td>Washoe County</td>
</tr>
<tr>
<td><strong>Clark County</strong></td>
</tr>
</tbody>
</table>

Source: Nevada Office of Rural Health (2011)
**Clark County has one of the highest pupil to teacher ratios in the nation.** Clark County School District experienced budget cuts due to the economic recession. Cuts have resulted in increased pupil/teacher ratios. Compared to the 100 largest school districts in the US, Clark County School District has the thirteenth highest median pupil/teacher ratios (National Center for Educational Statistics, 2010).

<table>
<thead>
<tr>
<th>School District</th>
<th>Pupil/Teacher Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granite District, UT</td>
<td>22.8</td>
</tr>
<tr>
<td>Alpine District, UT</td>
<td>22.7</td>
</tr>
<tr>
<td>Jordan District, UT</td>
<td>22.2</td>
</tr>
<tr>
<td>Garden Grove Unified, CA</td>
<td>21.8</td>
</tr>
<tr>
<td>Capistrano Unified, CA</td>
<td>21.7</td>
</tr>
<tr>
<td>Davis District, UT</td>
<td>21.6</td>
</tr>
<tr>
<td>Corona Norco Unified, CA</td>
<td>20.8</td>
</tr>
<tr>
<td>Santa Ana Unified, CA</td>
<td>20.4</td>
</tr>
<tr>
<td>Prince Wm County Public Schools, VA</td>
<td>19.4</td>
</tr>
<tr>
<td>Elk Grove Unified, CA</td>
<td>19</td>
</tr>
<tr>
<td>Chesterfield County Public Schools, VA</td>
<td>18.8</td>
</tr>
<tr>
<td>Columbus City, OH</td>
<td>18.7</td>
</tr>
<tr>
<td><strong>Clark County School District, NV</strong></td>
<td><strong>18.6</strong></td>
</tr>
<tr>
<td>Washoe County School District, NV</td>
<td>18.6</td>
</tr>
<tr>
<td>San Bernardino City Unified, CA</td>
<td>18.5</td>
</tr>
</tbody>
</table>

*Source: National Center for Educational Statistics (2010)*

**The majority of Clark County School District (CCSD) funding is generated from local school support taxes.** CCSD funding is generated from 3 sources: locally generated funding (local school support tax and property/mining tax), state obligated revenues, and ‘outside’ revenue. Clark County School District typically receives 48 percent of its State-guaranteed funding from a local school support tax and nearly 13 percent from property/mining taxes, with the State making up the remaining 39 percent of its guaranteed basic support level (FY 2008 figures) (The Nevada Plan for School Finance, 2011). The additional ‘outside’ revenues are generated from specifically generated local school funding revenue sources (property/mining tax, a governmental services tax, franchise fees, unrestricted federal revenues, and interest and other local revenues dedicated to education). Monies are then distributed to each school on a per pupil basis (Nevada State Department of Education, 2009).
The region has nine public and private universities or colleges. The largest institution by enrollment is the College of Southern Nevada (CSN) with 40,000 students. CSN has three campuses throughout the region and offers mostly 2 year degrees as well as 3 bachelor degrees. The University of Nevada, Las Vegas (UNLV) is the second largest institution, a public university with 22,100 undergraduate students and 5,400 graduate and professional students. UNLV also has the only Law School in NV, William S. Boyd School of Law, and the only dental school (DDS or DMD degree), the School of Dental Medicine. Other public institutions include Nevada State College. Private institutions of higher education include Touro University, National University, Roseman University of Health Sciences, DeVry University, International Academy of Design and Technology, and a branch campus of the University of Phoenix (Clark County, 2012). The University of Phoenix has two campuses in Southern Nevada. Figure 38 shows the location of each.

There are six career and technical institutions in Southern Nevada. These include Anthem Institute and Pima Medical Institute, both offer career focused training in the healthcare field, Kaplan College which offers training in the healthcare field and criminal justice, Everest College which offers training in the healthcare field, business, and paralegal, ITT Technical Institute which offers training in information and electronic technology, drafting, business, and criminal justice, and Le Cordon Bleu College of Culinary Arts (Clark County, 2012; Anthem Institute, 2012; Pima Medical Institute, 2012; Everest College, 2012; Kaplan College, 2012; ITT Technical Institute, 2012). Figure 38 shows the location of each.
Figure 38: Universities, Colleges, Career and Technical Institution Locations

Source: City of Henderson (2012)
6.5 LIBRARIES

There are a total of 24 libraries throughout Southern Nevada. Libraries provide important resources to the community including free access to books and information resources as well as technology that supports work, school, and recreational activities. According to the Las Vegas-Clark County Library District, there are 14 libraries in Las Vegas and urban unincorporated Clark County. In Henderson, Henderson Libraries operates six libraries and in North Las Vegas, the North Las Vegas Library District operates three libraries. In addition, there is a non-circulating library at the Springs Preserve which allows visitors to access materials while on site. Figure 39 shows the distribution of libraries in the region.
Figure 39: Library Locations

Places of Interest

library

Source: Las Vegas-Clark County Library District, Henderson Libraries, North Las Vegas Library District (2012)
CHAPTER 7 – DEVELOPMENT PATTERNS

Findings Summary

LAND USE
- The region has a significant amount of vacant land.
- Residential uses are found on 36 percent of the region’s land.

ZONING
- The region lacks consistent zoning tools that allow mixed use developments.

GROWTH AREAS
- Urban growth expansion is contained by large federal land holdings.

DENSITY
- The region is the 5th most densely developed urban area in the country.
- Southern Nevada is a dense but auto-oriented urban area.

Key Findings

7.1 LAND USE

The region has a significant amount of vacant land. According to the SNRPC’s regional land use database (GILIS), vacant land covers 37.8 percent of the region’s land area within the BLM disposal boundary (see Table 44). Residential uses are found on 36 percent of the region’s land. 30.6 percent is dedicated to single-family residential and 5.6 percent is multi-family residential (see Figure 40). Commercial (11.2 percent), Public/Quasi-Public/Institutional (22.1) which includes government and nonprofit uses like parks and public facilities, and Industrial (3.3 percent) uses constitute other major land uses.
Table 44: Regional Land Use Area, within the BLM disposal boundary, by Type

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Acres</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant</td>
<td>104,673</td>
<td>37.8%</td>
</tr>
<tr>
<td>Single Family Residential</td>
<td>84,679</td>
<td>30.6%</td>
</tr>
<tr>
<td>Multi Family Residential</td>
<td>15,122</td>
<td>5.5%</td>
</tr>
<tr>
<td>Industrial</td>
<td>9,148</td>
<td>3.3%</td>
</tr>
<tr>
<td>Commercial</td>
<td>31,138</td>
<td>11.2%</td>
</tr>
<tr>
<td>Public/Quasi-Public/Institutional</td>
<td>30,650</td>
<td>11.1%</td>
</tr>
<tr>
<td>Agricultural, Wildlife and Natural Resources</td>
<td>1,595</td>
<td>0.6%</td>
</tr>
<tr>
<td>Total</td>
<td>277,005</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Southern Nevada Regional Planning Coalition (2010)
7.2 ZONING

The region lacks consistent zoning tools that allow mixed use developments. Provisions for creating small lot residential developments exist but are inconsistently implemented across the region (see Table 45). This affects urban development patterns and induces growth away from existing neighborhoods. As a result, the region has been unsuccessful at fulfilling the potential for mixed use development: neighborhoods that blend a mix of housing sizes, safe pedestrian walk areas, and shops and restaurants within a few blocks’ walk. Until the zoning for mixed use is corrected, development will be unable to capitalize on the transit investments that can enable the sustainable development provided in other metro areas.

Effective mixed-use regulations play a key role in developing desirable neighborhoods. For example, establishing a maximum setback from a street and/or property line enables the creation of safe pedestrian walking areas in front of buildings that face the street. In contrast, typical development allows large parking lots to isolate buildings from one another. In addition, proximity to transit can allow building occupants to travel without the use of a car and developers to construct fewer expensive parking spaces per unit. Development incentives, such as parking reductions (lower construction costs) or density increases (more saleable units), can encourage developers to construct mixed use developments and increase the supply available to meet market demand.

<table>
<thead>
<tr>
<th>Table 45: Variation in Mixed Use Zoning Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density Requirements</td>
</tr>
<tr>
<td>Height Requirements</td>
</tr>
<tr>
<td>Proximity to Transit Requirements</td>
</tr>
<tr>
<td>Maximum Setback Requirements</td>
</tr>
<tr>
<td>Development Incentives</td>
</tr>
</tbody>
</table>

Sources: Clark County, City of Henderson, City of Las Vegas, City of North Las Vegas, City of Denver, CO.
7.3 GROWTH AREAS

Urban growth expansion is contained by large federal land holdings. Within Clark County, 90 percent of the land is administered by six Federal agencies: Bureau of Land Management (BLM), National Park Service, US Fish and Wildlife, USDA Forest Service, Bureau of Reclamation, and the US Air Force (including Nellis Air Force Base and Nellis Air Force Range. The Federal Land Policy and Management Act authorizes the Federal government to sell or exchange land. Land that is suitable for sale or exchange is identified as suitable for disposal within an area designated as BLM’s disposal boundary. Land must be nominated by a local government, who upon receiving interest from a developer will nominate the number of acres and parcels based on interest from the developers. This process results in large metropolitan developments where large developers dictate growth patterns and few small developers can afford infrastructure on a per acre basis. Once auctioned, these lands are available for private development. Though the region does not have an official urban growth boundary, some argue that the disposal boundary serves as such.
Figure 41: Projected Growth Areas, 2010

Source: RTC Land Use Forecast (2010)
7.4 DENSITY

The Las Vegas urban area is the 5th most densely developed urban area in the country. The US Census estimate of urban density is calculated by dividing the population of the metropolitan statistical area by the total land area. These figures include vacant areas which lower the overall values, but are nationally comparable.

According to the Census, the densest urban areas with a population greater than 1,000,000 in population were Los Angeles, San Francisco, San Jose, New York and Las Vegas (see Table 46).

Table 46: Comparison of Urban Density

<table>
<thead>
<tr>
<th>Urban Area</th>
<th>Population</th>
<th>Land Area (square miles)</th>
<th>Density (people per square mile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Las Vegas</td>
<td>1,886,011</td>
<td>417</td>
<td>4,525</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>1,021,243</td>
<td>278</td>
<td>3,675</td>
</tr>
<tr>
<td>Denver</td>
<td>2,374,203</td>
<td>668</td>
<td>3,554</td>
</tr>
<tr>
<td>Phoenix</td>
<td>3,629,114</td>
<td>1147</td>
<td>3,165</td>
</tr>
</tbody>
</table>

Source: U.S. Census (2010)

The region has a greater share of its population living in the urban areas than other Mountain West metro areas. An urban area comprises a densely settled core of census tracts and/or census blocks that meet minimum population density requirements, along with adjacent territory containing non-residential urban land uses as well as territory with low population density included to link outlying densely settled territory with the densely settled core (Census, 2010). According to the 2010 Census (see Table 47), 97 percent of the region’s population lives within the urbanized area. This is a greater share than Denver (93 percent), Salt Lake City (91 percent) and Phoenix (87 percent).

Table 47: Urbanized Populations, 2010

<table>
<thead>
<tr>
<th></th>
<th>Urban Population</th>
<th>MSA Population</th>
<th>Pct Urbanized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Las Vegas</td>
<td>1,886,011</td>
<td>1,951,269</td>
<td>97%</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>1,021,243</td>
<td>1,124,197</td>
<td>91%</td>
</tr>
<tr>
<td>Denver</td>
<td>2,374,203</td>
<td>2,543,482</td>
<td>93%</td>
</tr>
<tr>
<td>Phoenix</td>
<td>3,629,114</td>
<td>4,192,887</td>
<td>87%</td>
</tr>
</tbody>
</table>

The region is a dense, yet auto-oriented urban area. The region’s high density is partly due to the federally imposed urban growth boundary (BLM disposal boundary) which prevents it from developing Atlanta-like sprawl.

However, with no built form that promotes walkability and transit use, Las Vegas is dense but without urban purpose. Part of this is due to the master planned community dominance which segregates retail from residential development by gates and large block walls (Lang and LeFurgy, 2004) and the scale of boulevards which are high-speed multi-lane surface streets that discourage walkability.
Key Findings

8.1 WATER AND SEWER FACILITIES

The region has sufficient capacity for the treatment and delivery of water. The water treatment and delivery capacity is currently 900 million gallons per day. There are two water treatment facilities in Southern Nevada (see Figure 42). The Alfred Merritt Smith Water Treatment Facility is located in Boulder City and has the capacity to treat and deliver 600 million gallons of water per day. The River Mountains Water Treatment Facility is located in Henderson and has the capacity to treat and deliver 300 million gallons per day, with the ability to expand to 600 million gallons per day.
There are three potable water providers in the region. The Southern Nevada Water Authority (SNWA) is responsible for treatment, delivery, acquisition, and management of long term water resources. The SNWA is a cooperative agreement among seven agencies in Southern Nevada, Big Bend Water District, the cities of Boulder City, Henderson, Las Vegas, North Las Vegas, Clark County Water Reclamation district, and Las Vegas Valley Water District. In Southern Nevada there are three potable water providers, the City of Henderson, North Las Vegas, and the Las Vegas Valley Water District. The City of Henderson provides water to its residents, the city of North Las Vegas provides water to its residents, adjacent portions of Las Vegas and unincorporated Clark County, and the Las Vegas Valley Water District provide water to Las Vegas and portions of unincorporated Clark County (SNWA WRP, 2009).

Southern Nevada currently operates at 30 percent of potable water system capacity. The system has a capacity of 900 million gallons per day and currently the yearly average amount used is 300 million gallons per day. Southern Nevada’s per capita water consumption is about 133 gallons per capita per day when factoring in residential uses, businesses, resorts, schools, parks, and streetscapes (after accounting for the capture and reuse of indoor water). Residential use independently is about 75 gallons per capita per day (SNWA, 2012).
The region has sufficient water resources available or in development to meet future demands until 2060. To keep up with demand until 2060, current and in development resources include Nevada’s basic apportionment of the Colorado River, Las Vegas Valley ground water rights, continued conservation efforts, development of intentionally created surpluses (ICS) of water, development of in state ground water and non-Colorado River sources.Projected demand, current and future water resources are depicted in Figure 43.

**Figure 43: Projected Water Demands, Current and Future Resources**

![Graph showing projected water demands, current and future resources](image)

*Source: SNWA Water Resource Plan (2009)*

Southern Nevada has an additional capacity for wastewater treatment, as the region currently uses 72 percent of total existing capacity: There are four wastewater agencies in the region. The cities of Las Vegas, Henderson, and North Las Vegas provide wastewater service to their residents, and the Clark County Water Reclamation District provides wastewater service to unincorporated Clark County. Southern Nevada has 28 percent of regional capacity remaining. See Table 48 for jurisdictional breakdowns.
Table 48: Regional Wastewater Capacity

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>System Capacity (in millions of gallons per day [MGD])</th>
<th>Amount Currently Being Used (MGD)</th>
<th>Percent of Capacity Currently Being Used</th>
<th>Amount Remaining (MGD)</th>
<th>Percent of Capacity Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark County</td>
<td>150</td>
<td>95</td>
<td>63%</td>
<td>55</td>
<td>37%</td>
</tr>
<tr>
<td>Henderson</td>
<td>40</td>
<td>22</td>
<td>55%</td>
<td>18</td>
<td>45%</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>66</td>
<td>52</td>
<td>79%</td>
<td>14</td>
<td>21%</td>
</tr>
<tr>
<td>North Las Vegas</td>
<td>25</td>
<td>17</td>
<td>68%</td>
<td>8</td>
<td>32%</td>
</tr>
<tr>
<td>Regional Total</td>
<td>281</td>
<td>186</td>
<td>66%</td>
<td>95</td>
<td>34%</td>
</tr>
</tbody>
</table>

Source: Clark County Water Reclamation District (2012); City of Henderson (2012); Clark County Water Reclamation District (2012)

The region has achieved substantial reductions in water use through conservation. As shown in Figure 44, residents account for 59% of water use. Most of this water is used consumptively for outdoor landscaping. Thus, conservation efforts are best directed toward management of outdoor water use. Since its creation in 1991, the SNWA has introduced a number of conservation efforts and programs. City and County governments have adopted a number of codes, regulations, and incentives aimed at water conservation and they are described in Table 49. These efforts have been effective and resulted in significant reductions of water use. Between 2002 and 2008, consumptive water use decreased by 21 billion gallons annually, from 350 gallons per capita per day to 250 gallons per capita per day. SNWA and member agencies hope to continue conservation and have set a goal to reduce water use to 199 gallons per capita per day by 2035 (SNWA WRP, 2009).
Figure 44: Municipal Metered Water Use by Sector, 2007

- Residential (Single-Family): 44.5%
- Residential (Multi-Family): 14.5%
- Commercial/Industrial: 14.4%
- Resorts: 6.3%
- Golf Courses: 7.6%
- Schools/Government/Parks: 5%
- Common Areas: 5.2%
- Other: 2.5%

Source: SNWA Water Resource Plan (2009)
<table>
<thead>
<tr>
<th>Codes and regulations</th>
<th>&quot;Water smart&quot; incentive programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrictions on watering landscape during the hottest times of the day in summer</td>
<td>Rebates for residential and commercial properties to convert to water-efficient</td>
</tr>
<tr>
<td>months</td>
<td>landscaping</td>
</tr>
<tr>
<td>Regulations mandating commercial vehicle washes to capture water so it can be</td>
<td>Rebates of up to half the cost of replacing inefficient irrigation controllers</td>
</tr>
<tr>
<td>treated and reused</td>
<td>to “smart” irrigation controllers</td>
</tr>
<tr>
<td>Prohibition of turf installation in new residential front yards and limitations of</td>
<td>Rebates for business customers retrofitting existing equipment for approved water</td>
</tr>
<tr>
<td>50 percent coverage for turf in back yards</td>
<td>efficient technologies</td>
</tr>
<tr>
<td>Limiting commercial misting systems to only summer months</td>
<td>Rebates of up to half the cost of a pool cover</td>
</tr>
<tr>
<td>Budgeting of golf course water allotment</td>
<td>Water smart car wash incentives encouraging residents to use smart water car washes</td>
</tr>
<tr>
<td></td>
<td>over home washing</td>
</tr>
<tr>
<td>Barring water waste including water runoff into streets and non-compliance with</td>
<td>Partnerships with landscaping contractors whose projects meet specific criteria to</td>
</tr>
<tr>
<td>lawn watering schedules</td>
<td>conserve water</td>
</tr>
<tr>
<td>Tiered rate charges which increase as rate of use increases</td>
<td>Certification of new homes as water smart, ensuring they can save as much as 75,000</td>
</tr>
<tr>
<td></td>
<td>gallons/year</td>
</tr>
<tr>
<td></td>
<td>Partnership with local restaurants to only serve water upon request</td>
</tr>
</tbody>
</table>

Source: SNWA Water Resource Plan (2009)
8.2 BROADBAND SERVICE

Southern Nevada has excellent broadband coverage. According to the National Telecommunications and Infrastructure Administration (NTIA), 99.3 percent of residents have access to DSL and cable, and 99.9 percent have access to wireless technologies. Through a national initiative, the NTIA and Federal Communications Commission created a database of broadband availability across the United States. Data is collected twice a year in the availability, speed, and location of broadband services, as well as the broadband services that community institutions including schools, libraries and hospitals use.

8.3 ENERGY

Average energy consumption and cost per household in Nevada is slightly lower than the national average. According to the U.S. Energy Information Administration (EIA) Residential Energy Consumption Survey (RECS) of 2009, Nevada’s per household energy consumption was 85.4 MBTUs, slightly lower than the U.S. average of 89.6 MBTUs. When compared to the total average of all western states, NV is slightly higher in energy consumption. Table 50 compares NV’s household energy consumption to other western states. Cost of energy per household in NV is $1,805 per
year, slightly lower than the U.S. average of $2,024. NV energy costs are higher than the average of all western states. See Table 50 for energy costs per year of other western states (EIA RECS, 2009).

<table>
<thead>
<tr>
<th>NV/NM</th>
<th>National</th>
<th>Western states</th>
<th>CO</th>
<th>AZ</th>
<th>CA</th>
<th>UT, ID, MT, WY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average household energy consumption in MBTUs</td>
<td>85.4</td>
<td>89.6</td>
<td>73.0</td>
<td>102.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average household energy expenditures in 2009</td>
<td>$1,805</td>
<td>$2,024</td>
<td>$1,570</td>
<td>$1,555</td>
</tr>
</tbody>
</table>

Source: EIA RECS (2009)

**Nevada generates the majority of its electricity from natural gas.** NV generates 67 percent of its electricity from natural gas; this is significantly greater than the national average of 24 percent (EIA, 2012). The second most common source of electricity in NV is coal at 20 percent. This figure is lower than the national average of 45 percent (EIA, 2012).
The region has two energy utilities that service the metro area. Electricity is provided by NV Energy, the largest energy supplier in NV. Southwest gas provides natural gas service.
Findings Summary

ECONOMIC PERFORMANCE & EMPLOYMENT
- The region experienced economic losses during the Great Recession.
- In Southern Nevada, peer regions and in the US, workers with lower levels of education experienced higher levels of unemployment.
- Unemployment rates in the region exceeded national and peer region unemployment rates between 2008 and 2012.

WORKER CHARACTERISTICS
- The total number of people in the labor force in the region was larger in 2010 compared to 2000 with a peak in 2007 and a decline 2008 through 2010.
- Southern Nevada’s working age population is slightly older than the peer regions, but not the nation.
- The region’s working age population have lower levels of educational attainment compared to peer regions.

INDUSTRY STRUCTURE
- The majority (82%) of businesses are small business with less than 10 employees.
- Ten of the fifteen largest employers in Clark County are privately owned casinos.
- Construction; leisure and hospitality; trade, transportation and utilities; and professional and business service sectors experienced the greatest job loss during the recession.
- The Education and Health Services sectors did not experience a decrease in the number of employees during the recession.
- With the economic recession, Clark County experienced a decrease in the tourism sector; however, activity in this sector increased in 2011 compared to 2010.

RESEARCH & DEVELOPMENT
- Nevada and Clark County lag other states and the nation in innovation and R&D activity


**Key Findings**

**9.1 ECONOMIC PERFORMANCE**

The region experienced economic losses during the recent recession. In 2010, the gross domestic product of Las Vegas MSA was $89.8 billion, making it the 33rd-largest US metropolitan area in terms of total economic output. Like the rest of the nation, the regional economy has begun growing again, but growth rates have not yet recovered to its 2007 level (in constant dollars) (see Figure 47). In the second quarter of 2012, Las Vegas MSA gross product is 11.0 percent less than the peak in 2007 (Brookings Mountain West, 2012). In this same quarter, Salt Lake is 6.7 percent and Denver is 2.2 percent above their peaks and Phoenix is 5.8 percent below its peak.

![Figure 47: GDP by Metro Area, 2006-2010](source)

Source: US Bureau of Economic Analysis, 2006-2010

---

**OCCUPATIONAL GROWTH & SKILL REQUIREMENTS**

- All occupational categories are projected to have positive growth between 2010 and 2020 with a combined growth projection of 11.4% during the decade.
- Occupations requiring only on-the-job training or a high school diploma account for more than 80 percent if the region’s jobs.
When compared to other metro areas (see Figure 48), the regional economy does not perform as well. In 2010, per capita GDP was 10 percent below the national average for metro areas and below all four peer regions.

![Figure 48: 2010 Per Capita GDP by Metro Area](image)

Unemployment rates in the region exceeded national and peer region unemployment rates between 2008 and 2012. Southern Nevada was hit hard during the economic recession that started in 2008. Nevada had the highest state unemployment rates of any state between 2008 and 1st quarter 2012 (US Bureau of Labor Statistics, 2012). High unemployment rates and slow economic recovery can be linked to the region’s heavy reliance on consumption-based industry sectors (construction, tourism and gaming, retail) which are disproportionately impacted by swings in the economy (The Brookings Institute, 2011).
In Southern Nevada, peer regions and in the US, workers with lower levels of education experienced higher levels of unemployment. Between 2008-2010, people with less than a high school degree experienced an unemployment rate of 14.1 percent in Southern Nevada while people with a Bachelor’s degree or higher had an unemployment rate of 5.7 percent (Figure 50). This was consistent with unemployment rates by educational attainment in Orlando, Denver and the US (American Community Survey 3-Year Estimate 2008-2010). In addition, for those with a Bachelor’s degree, the rate of unemployment is higher in Southern Nevada than peer regions, making the returns for education lower relative to the other regions.
9.2 WORKER CHARACTERISTICS

The total number of people in the labor force in the region was larger in 2010 compared to 2000, with a peak in the labor force in 2007 and a decline in 2008-2010. The total number of people in the labor force in Southern Nevada grew substantially between 2000 and 2007 to a height of 928,000 people in 2007. In 2009 and 2010, the labor force declined to 826,900 and 803,600, in 2009 and 2010 respectively, concurrent with the economic recession in the US. However, compared to 2000, there were over 100,000 more people in the labor force in 2010.

**Figure 51: Labor Force for All Industries**

Source: Department of Employment Training and Rehabilitation (2012)
The region’s working age population is slightly older than peer regions but not the nation. People in the 55 to 64 age group are expected to retire over the next decade. The percent of people in this age group is higher (16.3 percent) than in peer regions; however lower than in the nation (18.4 percent).

Table 51: Working Age Population by Age

<table>
<thead>
<tr>
<th>Age Brackets</th>
<th>Las Vegas</th>
<th>Denver</th>
<th>Orlando</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 to 19 years</td>
<td>8.1%</td>
<td>6.4%</td>
<td>9.2%</td>
</tr>
<tr>
<td>20 to 24 years</td>
<td>9.9%</td>
<td>11.4%</td>
<td>13.2%</td>
</tr>
<tr>
<td>25-44 years</td>
<td>45.4%</td>
<td>50.3%</td>
<td>43.4%</td>
</tr>
<tr>
<td>45 to 54 years</td>
<td>20.3%</td>
<td>17.5%</td>
<td>20.2%</td>
</tr>
<tr>
<td>55 to 64 years</td>
<td>16.3%</td>
<td>14.5%</td>
<td>13.9%</td>
</tr>
</tbody>
</table>


Working age people have lower levels of educational attainment compared to peer regions. The region has a higher number of working age people with a high school degree or less. In addition, the region has fewer working age people with a Bachelor’s degree or graduate/professional degree compared to peer regions. This could be due to the low education requirements of many of the major occupations in the region’s primary industry, gaming & hospitality (see Table 52).

Table 52: Educational Attainment of Working Age People, 2008-2010

<table>
<thead>
<tr>
<th></th>
<th>Denver, CO (MSA)</th>
<th>Las Vegas, NV (MSA)</th>
<th>Phoenix, AZ (MSA)</th>
<th>Salt Lake City, UT (MSA)</th>
<th>Tucson, AZ (MSA)</th>
<th>Orlando, FL (MSA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school grad</td>
<td>11%</td>
<td>16.5%</td>
<td>14.5%</td>
<td>10.8%</td>
<td>13.2%</td>
<td>13%</td>
</tr>
<tr>
<td>High school graduate</td>
<td>22.3%</td>
<td>29.9%</td>
<td>24.3%</td>
<td>24.6%</td>
<td>23.6%</td>
<td>29.5%</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>21.7%</td>
<td>24.8%</td>
<td>25.0%</td>
<td>25.8%</td>
<td>25.6%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>7.3%</td>
<td>7.2%</td>
<td>8.1%</td>
<td>8.6%</td>
<td>8.0%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>24.5%</td>
<td>14.5%</td>
<td>18.2%</td>
<td>19.9%</td>
<td>17.6%</td>
<td>18.7%</td>
</tr>
<tr>
<td>Graduate or professional</td>
<td>13.1%</td>
<td>7.2%</td>
<td>9.9%</td>
<td>10.4%</td>
<td>12.0%</td>
<td>8.6%</td>
</tr>
</tbody>
</table>

## 9.3 Industry Structure

Ten of the fifteen largest employers in Clark County are privately owned casinos. The remaining top five large employers are either local or state government and include: Clark County School District, Clark County, University of Nevada Las Vegas, Las Vegas Metropolitan Policy and University Medical Center (see Table 53). It is also important to note that in total, casinos provide less than 7 percent of all employment in the region.

### Table 53: Top 15 Largest Employers in Clark County, 2012

<table>
<thead>
<tr>
<th>Company</th>
<th>Employment</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark County School District</td>
<td>30,000 to 39,999 employees</td>
<td>Elementary and Secondary</td>
</tr>
<tr>
<td>Clark County</td>
<td>7,500 to 7,999 employees</td>
<td>Executive and Legislative</td>
</tr>
<tr>
<td>Wynn Las Vegas</td>
<td>7,500 to 7,999 employees</td>
<td>Casino/Hotel</td>
</tr>
<tr>
<td>Bellagio</td>
<td>7,500 to 7,999 employees</td>
<td>Casino/Hotel</td>
</tr>
<tr>
<td>MGM Grand</td>
<td>7,500 to 7,999 employees</td>
<td>Casino/Hotel</td>
</tr>
<tr>
<td>Aria Report &amp; Casino</td>
<td>6,500 to 6,999 employees</td>
<td>Casino/Hotel</td>
</tr>
<tr>
<td>Mandalay Bay Resort and Casino</td>
<td>6,500 to 6,999 employees</td>
<td>Casino/Hotel</td>
</tr>
<tr>
<td>University of Nevada, Las Vegas</td>
<td>5,500 to 5,999 employees</td>
<td>Colleges and Universities</td>
</tr>
<tr>
<td>Las Vegas Metropolitan Police</td>
<td>5,000 to 5,499 employees</td>
<td>Police Protection</td>
</tr>
<tr>
<td>Caesar's Palace</td>
<td>5,000 to 5,499 employees</td>
<td>Casino/Hotel</td>
</tr>
<tr>
<td>The Venetian Casino Resort</td>
<td>4,000 to 4,499 employees</td>
<td>Casino/Hotel</td>
</tr>
<tr>
<td>Mirage Casino-Hotel</td>
<td>4,000 to 4,499 employees</td>
<td>Casino/Hotel</td>
</tr>
<tr>
<td>University Medical Center</td>
<td>3,500-3,999 employees</td>
<td>Hospital</td>
</tr>
<tr>
<td>Cosmopolitan of Las Vegas</td>
<td>3,500-3,999 employees</td>
<td>Casino/Hotel</td>
</tr>
<tr>
<td>Palazzo Casino Resort</td>
<td>3,500-3,999 employees</td>
<td>Casino/Hotel</td>
</tr>
</tbody>
</table>

*Source: Department of Employment Training and Rehabilitation, 2012*
Construction; leisure and hospitality; trade, transportation and utilities; and professional and business service sectors experienced the greatest job loss during the recession. As shown in Figure 52, each of the sectors with the exception of construction has experienced a leveling off or slight recovery in 2010-2011. The greatest recovery is seen in the leisure and hospitality sector. The government and construction sectors continued to lose employees in 2010-2011.

The Education and Health Services Sector did not experience a decrease in the number of employees during the recession. The Education and Health Services Sector added 8400 jobs between 2007 and 2011 and grew steadily throughout the recession (Department of Employment Training and Rehabilitation, 2012).

Figure 52: Employment Trends, 2002-2011

Table 54 shows employment trends by North American Industry Classification System (NAICS) codes in Southern Nevada from 2010 to 2011 (US Census. Local Employment Dynamics, 2012). Employment sectors with the largest growth during this year (2010-2011) were: Amusement, Gambling, and Recreation Industries (41 percent), Accommodation (24 percent), Hospitals (25 percent), Transit and Ground Passenger Transportation (23 percent), and Personal and Laundry Services (16 percent). Employment sectors with the largest decline during this period included: Specialty Trade Contractors (-26 percent), Ambulatory Health Care Services (-7 percent), Merchant
Southern Nevada Strong Existing Conditions Report | January 2013

Wholesalers, Nondurable Goods (-6 percent), General Merchandise Stores (-6 percent), Motor Vehicle and Parts Dealers (-6 percent) and Social Assistance (-5 percent).

**Table 54: Employment Trends by NAICS Codes, 2010 to 2011**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All NAICS subsectors</td>
<td>709,582</td>
<td>2,514</td>
<td>4.48</td>
</tr>
<tr>
<td>721 Accommodation</td>
<td>166,019</td>
<td>2,070</td>
<td>24.36</td>
</tr>
<tr>
<td>722 Food Services and Drinking Places</td>
<td>73,788</td>
<td>584</td>
<td>7.07</td>
</tr>
<tr>
<td>561 Administrative and Support Services</td>
<td>52,858</td>
<td>332</td>
<td>5.66</td>
</tr>
<tr>
<td>541 Professional, Scientific, and Technical Services</td>
<td>34,622</td>
<td>-10</td>
<td>-0.39</td>
</tr>
<tr>
<td>621 Ambulatory Health Care Services</td>
<td>31,014</td>
<td>-171</td>
<td>-7.08</td>
</tr>
<tr>
<td>238 Specialty Trade Contractors</td>
<td>25,575</td>
<td>-629</td>
<td>-25.90</td>
</tr>
<tr>
<td>452 General Merchandise Stores</td>
<td>18,825</td>
<td>-87</td>
<td>-5.84</td>
</tr>
<tr>
<td>448 Clothing and Clothing Accessories Stores</td>
<td>17,122</td>
<td>-30</td>
<td>-1.40</td>
</tr>
<tr>
<td>622 Hospitals</td>
<td>15,748</td>
<td>175</td>
<td>25.42</td>
</tr>
<tr>
<td>551 Management of Companies and Enterprises</td>
<td>15,221</td>
<td>-87</td>
<td>-8.08</td>
</tr>
<tr>
<td>445 Food and Beverage Stores</td>
<td>14,256</td>
<td>-19</td>
<td>-1.83</td>
</tr>
<tr>
<td>522 Credit Intermediation and Related Activities</td>
<td>13,743</td>
<td>80</td>
<td>9.10</td>
</tr>
<tr>
<td>485 Transit and Ground Passenger Transportation</td>
<td>12,558</td>
<td>245</td>
<td>23.04</td>
</tr>
<tr>
<td>531 Real Estate</td>
<td>12,479</td>
<td>50</td>
<td>4.43</td>
</tr>
<tr>
<td>624 Social Assistance</td>
<td>11,500</td>
<td>-60</td>
<td>-5.47</td>
</tr>
<tr>
<td>713 Amusement, Gambling, and Recreation Industries</td>
<td>11,292</td>
<td>445</td>
<td>41.80</td>
</tr>
<tr>
<td>812 Personal and Laundry Services</td>
<td>9,594</td>
<td>183</td>
<td>16.22</td>
</tr>
<tr>
<td>423 Merchant Wholesalers, Durable Goods</td>
<td>9,413</td>
<td>-8</td>
<td>-1.27</td>
</tr>
<tr>
<td>441 Motor Vehicle and Parts Dealers</td>
<td>8,917</td>
<td>-42</td>
<td>-5.63</td>
</tr>
<tr>
<td>424 Merchant Wholesalers, Nondurable Goods</td>
<td>7,212</td>
<td>-26</td>
<td>-6.00</td>
</tr>
</tbody>
</table>

*Source: US Census. Local Employment Dynamics (2012)*
In Nevada, Tourism, Gaming and Entertainment accounts for more than 350,000 jobs and 24 percent of state employment (Brookings, 2011). With the economic recession, Clark County experienced a decrease in the Tourism Index as measured by UNLV’s Center for Business and Economic Research (CBER) and shown in Figure 53 (Kennelly, 2012). CBER’s Tourism Index takes into account gaming revenues, McCarran airport passenger travel, hotel/motel room occupancy and related measures.

![Figure 53: Tourism Index, 1990 – 2012](image)

The Tourism, Gaming and Entertainment Sector probably will not see a boom similar to the 2001-2007 cycle (Brookings, 2011); however, activity in this area increased in 2011 compared to 2010 (Table 55) (Las Vegas Convention and Visitors Authority, 2012).

<table>
<thead>
<tr>
<th>Visitor Statistics</th>
<th>2011</th>
<th>% Change from 2010 to 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor Volume</td>
<td>38,928,708</td>
<td>4.30%</td>
</tr>
<tr>
<td>Occupancy Rate</td>
<td>84%</td>
<td>3.40%</td>
</tr>
<tr>
<td>Average Daily Room Rate</td>
<td>105</td>
<td>10.70%</td>
</tr>
<tr>
<td>Total Room Nights</td>
<td>45,654,165</td>
<td>5.30%</td>
</tr>
<tr>
<td>Total En/Deplaned Passengers</td>
<td>41,479,814</td>
<td>4.30%</td>
</tr>
<tr>
<td>Gaming Revenue</td>
<td>9,222,906,000</td>
<td>3.50%</td>
</tr>
<tr>
<td>Room Tax / LVCVA’s Portion</td>
<td>194,329,584</td>
<td>18.60%</td>
</tr>
</tbody>
</table>

*Source: Las Vegas Convention and Visitors Authority, 2012*
9.4 RESEARCH & DEVELOPMENT

Nevada and Clark County lag other states and the nation of innovation and R&D activity (Brookings, 2011). Per capita, “federal R&D spending in Nevada is less than one-third the national average and stands at $115 per person, but the state receives higher than average R&D funding from the Department of Energy and Environmental Protection Agency” (Brookings, 2011). Compared to other universities and colleges, the University of Nevada, Reno ranks 126th and the University of Nevada, Las Vegas (UNLV) ranks 191st in terms of R&D expenditures. Between 2008 and 2009, UNLV experienced a decline in R&D expenditures of 22.9 percent (National Science Foundation, 2010).

Table 56: Research and Development Expenditures at University of Nevada, 2010

<table>
<thead>
<tr>
<th>Rank</th>
<th>Institution</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Avg. Annual % Change FY02-FY09^</th>
<th>% Change FY08-FY09**</th>
</tr>
</thead>
<tbody>
<tr>
<td>126</td>
<td>U. NV, Reno</td>
<td>66,721</td>
<td>80,553</td>
<td>83,552</td>
<td>95,579</td>
<td>98,917</td>
<td>95,809</td>
<td>102,073</td>
<td>106,378</td>
<td>4.22%</td>
<td>8.49%</td>
</tr>
<tr>
<td>191</td>
<td>U. NV, Las Vegas</td>
<td>30,527</td>
<td>42,205</td>
<td>45,429</td>
<td>48,343</td>
<td>57,031</td>
<td>56,034</td>
<td>50,775</td>
<td>39,148</td>
<td>-22.90%</td>
<td>4.03%</td>
</tr>
</tbody>
</table>

Source: National Science Foundation (2010)

9.5 INDUSTRY CLUSTERS & ECONOMIC DEVELOPMENT POTENTIAL

Nevada is dominated by service based sectors which provided slow to no growth during the recession. These sectors include tourism and gaming, construction and real estate and retail trade. Sectors which have the strongest growth potential and pay higher wages are in knowledge and technology sectors and include financial services, life sciences and medicine, aerospace and defense, IT services, and energy and environment. Figure 54 displays an overview of Nevada Industries in the second quarter of 2011 (Brookings, 2011). It is important to note that 2006-2011 reflects the period from the top to the bottom of the recession, and the growth figures reflect those industries that outperformed during the recession as opposed to normal growth in the region.
Figure 54: Overview of Nevada Industries, 2011

How to Interpret the Industries Bubble Chart

- The size of each industry’s “bubble” represents the employment size for that cluster in Q2 2011.
- The color of the bubble represents the supersector categorization of each industry: knowledge- and technology-based industries (blue), traditional and manufacturing industries (green), and service industries (orange).
- The horizontal axis represents employment growth expressed as a compound annual growth rate (CAGR) from 2006 to 2011. Industries falling to the right of the midpoint have a positive employment growth rate, and industries falling to the left of the midpoint have a negative employment growth rate.
- The vertical axis represents average annual pay in Q2 2011. Industries falling above the midpoint have an average annual pay that is greater than the overall average for Nevada ($48,077), and those falling below the midpoint have average annual pay levels falling below the state average.
- Thus, the industries that fall in the first quadrant (upper right-hand side) are higher-wage/higher-growth (e.g., Medicine and Life Sciences, Financial Services), and the industries that fall in the third quadrant (lower left-hand side) are lower-wage/negative-growth (e.g., Construction and Real Estate, Retail Trade).

Source: Brookings (2011)
9.6 OCCUPATIONAL GROWTH & SKILL REQUIREMENTS

Occupations requiring only on-the-job training or a high school diploma account for more than 80 percent if the region’s jobs. In Southern Nevada, 38.2 percent of occupations require less than a high school diploma and 43.1 percent require a high school diploma or equivalent (Table 57). Jobs requiring some college to a doctoral/professional degree account for 18.6 percent employment.

<table>
<thead>
<tr>
<th>Educational Requirement</th>
<th>Number of Employment Opportunities</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td>306,733</td>
<td>38.2%</td>
</tr>
<tr>
<td>High school diploma or equivalent</td>
<td>346,366</td>
<td>43.1%</td>
</tr>
<tr>
<td>Postsecondary non-degree award</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>26,887</td>
<td>3.3%</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>35,450</td>
<td>4.4%</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>68,720</td>
<td>8.6%</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>5,161</td>
<td>0.6%</td>
</tr>
<tr>
<td>Doctoral or professional degree</td>
<td>13,760</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

Source: Department of Employment Training and Rehabilitation (2012)

All broad category occupational categories are projected to have positive growth between 2010 and 2020 with a combined growth projection of 11.4 percent during the decade. Table 58 shows projected job growth in Southern Nevada from 2010 to 2020 (Department of Employment Training and Rehabilitation, 2012). All broad category occupations combined are projected to have an 11.4 percent growth during this decade; however, several sectors are anticipated to continue to decline. The top three occupations with the highest projected growth include construction and extraction (2.4 percent), healthcare support (1.6 percent), and healthcare practitioners and technical (1.5 percent).
Table 58: Employment Projections by Broad Category Occupational Category, 2010-2020

<table>
<thead>
<tr>
<th>Occupation/Title</th>
<th>2010 Employment</th>
<th>Percent of All Occupations-Year 2010</th>
<th>2020 Employment</th>
<th>Percent of All Occupations-Year 2020</th>
<th>2010-2020 Percent Change</th>
<th>Average Annual Growth Rate</th>
<th>Annual Cumulative Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>38,844</td>
<td>4.6%</td>
<td>41,471</td>
<td>4.4%</td>
<td>6.8%</td>
<td>0.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Business and Financial Operations</td>
<td>26,723</td>
<td>3.2%</td>
<td>30,838</td>
<td>3.3%</td>
<td>15.4%</td>
<td>1.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Computer and Mathematical</td>
<td>10,115</td>
<td>1.2%</td>
<td>11,620</td>
<td>1.2%</td>
<td>14.9%</td>
<td>1.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Architecture and Engineering</td>
<td>8,582</td>
<td>1.0%</td>
<td>9,369</td>
<td>1.0%</td>
<td>9.2%</td>
<td>0.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Life, Physical, and Social Science</td>
<td>2,940</td>
<td>0.3%</td>
<td>3,271</td>
<td>0.3%</td>
<td>11.3%</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Community and Social Services</td>
<td>8,470</td>
<td>1.0%</td>
<td>9,226</td>
<td>1.0%</td>
<td>8.9%</td>
<td>0.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Legal</td>
<td>6,202</td>
<td>0.7%</td>
<td>6,608</td>
<td>0.7%</td>
<td>6.5%</td>
<td>0.7%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Education, Training, and Library</td>
<td>31,753</td>
<td>3.8%</td>
<td>34,079</td>
<td>3.6%</td>
<td>7.3%</td>
<td>0.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Arts, Design, Entertainment, Sports, and Media</td>
<td>15,265</td>
<td>1.8%</td>
<td>16,882</td>
<td>1.8%</td>
<td>10.6%</td>
<td>1.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Healthcare Practitioners and Technical</td>
<td>33,459</td>
<td>4.0%</td>
<td>38,927</td>
<td>4.1%</td>
<td>16.3%</td>
<td>1.6%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Healthcare Support</td>
<td>17,333</td>
<td>2.1%</td>
<td>20,410</td>
<td>2.2%</td>
<td>17.8%</td>
<td>1.8%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Food Preparation and Serving Related</td>
<td>127,013</td>
<td>15.1%</td>
<td>142,995</td>
<td>15.2%</td>
<td>12.6%</td>
<td>1.3%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Building and Grounds Cleaning and Maintenance</td>
<td>56,282</td>
<td>6.7%</td>
<td>61,501</td>
<td>6.6%</td>
<td>9.3%</td>
<td>0.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Personal Care and Service</td>
<td>58,224</td>
<td>6.9%</td>
<td>66,895</td>
<td>7.1%</td>
<td>14.9%</td>
<td>1.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Sales and Related</td>
<td>91,333</td>
<td>10.8%</td>
<td>98,776</td>
<td>10.5%</td>
<td>8.1%</td>
<td>0.8%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Farming, Fishing, and Forestry</td>
<td>329</td>
<td>0.0%</td>
<td>349</td>
<td>0.0%</td>
<td>6.1%</td>
<td>0.6%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Construction and Extraction</td>
<td>43,182</td>
<td>5.1%</td>
<td>54,438</td>
<td>5.8%</td>
<td>26.1%</td>
<td>2.6%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair</td>
<td>28,886</td>
<td>3.4%</td>
<td>32,997</td>
<td>3.5%</td>
<td>14.2%</td>
<td>1.4%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Production</td>
<td>21,680</td>
<td>2.6%</td>
<td>23,943</td>
<td>2.6%</td>
<td>10.4%</td>
<td>1.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Transportation and Material Moving</td>
<td>55,753</td>
<td>6.6%</td>
<td>62,411</td>
<td>6.7%</td>
<td>11.9%</td>
<td>1.2%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Total All Occupations</td>
<td>842,544</td>
<td>100.0%</td>
<td>938,273</td>
<td>100.0%</td>
<td>11.4%</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

Source: Department of Employment Training and Rehabilitation (2012)
In addition to broad category projections, DETR also provides detailed category (North American Industry Classification System) NAICS occupation projections for 2012 through 2020. Table 59 shows the top 20 fastest growing occupations, those with the greatest change in the number of employees in 2020 compared to 2012. With the exception of registered nurse, all other occupations typically require less than a high school diploma or a high school diploma (or equivalent). This indicates that based on the current economic make-up and growth projections, the region’s economy and labor force will look the same in 2020 as it does today.
Table 59: Projected Fastest-Growing Occupation Changes, 2012-2020

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Occupation Title</th>
<th>Change in Employment 2012-2020</th>
<th>2010-2020 Percent Change</th>
<th>Average Annual Growth Rate</th>
<th>Typical Education Needed for Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>353021</td>
<td>Combined Food Preparation and Serving Workers, Including Fast Food</td>
<td>3,462</td>
<td>19.2%</td>
<td>1.9%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>353031</td>
<td>Waiters and Waitresses</td>
<td>2,735</td>
<td>11.1%</td>
<td>1.1%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>393011</td>
<td>Gaming Dealers</td>
<td>2,490</td>
<td>16.5%</td>
<td>1.6%</td>
<td>High school or equivalent</td>
</tr>
<tr>
<td>412031</td>
<td>Retail Salespersons</td>
<td>2,276</td>
<td>9.0%</td>
<td>0.9%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>372012</td>
<td>Maids and Housekeeping Cleaners</td>
<td>2,031</td>
<td>12.5%</td>
<td>1.3%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>352014</td>
<td>Cooks, Restaurant</td>
<td>1,968</td>
<td>18.9%</td>
<td>1.9%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>291111</td>
<td>Registered Nurses</td>
<td>1,706</td>
<td>17.3%</td>
<td>1.7%</td>
<td>Associate’s degree</td>
</tr>
<tr>
<td>439061</td>
<td>Office Clerks, General</td>
<td>1,595</td>
<td>10.3%</td>
<td>1.0%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>434051</td>
<td>Customer Service Representatives</td>
<td>1,516</td>
<td>17.8%</td>
<td>1.8%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>339032</td>
<td>Security Guards</td>
<td>1,483</td>
<td>11.3%</td>
<td>1.1%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>537062</td>
<td>Laborers and Freight, Stock, and Material Movers, Hand</td>
<td>1,394</td>
<td>14.6%</td>
<td>1.5%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>399021</td>
<td>Personal and Home Care Aides</td>
<td>1,342</td>
<td>38.9%</td>
<td>3.9%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>472031</td>
<td>Carpenters</td>
<td>1,174</td>
<td>19.2%</td>
<td>1.9%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>372011</td>
<td>Janitors and Cleaners, Except Maids and Housekeeping Cleaner</td>
<td>1,167</td>
<td>6.1%</td>
<td>0.6%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>533041</td>
<td>Taxi Drivers and Chauffeurs</td>
<td>1,162</td>
<td>12.6%</td>
<td>1.3%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>353011</td>
<td>Bartenders</td>
<td>1,103</td>
<td>13.2%</td>
<td>1.3%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>412011</td>
<td>Cashiers</td>
<td>997</td>
<td>6.2%</td>
<td>0.6%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>472061</td>
<td>Construction Laborers</td>
<td>944</td>
<td>25.1%</td>
<td>2.5%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>433031</td>
<td>Bookkeeping, Accounting, and Auditing Clerks</td>
<td>914</td>
<td>11.1%</td>
<td>1.1%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>414012</td>
<td>Sales Representatives, Wholesale and Manufacturing, Except Transportation</td>
<td>902</td>
<td>18.6%</td>
<td>1.9%</td>
<td>High school diploma or equivalent</td>
</tr>
</tbody>
</table>

Source: Department of Employment Training and Rehabilitation, 2012

Table 60 shows the detailed category NAICS occupation projections for 2012 through 2020 for the top 20 occupations with the greatest projected decrease in the number of employees in 2020 compared to 2012 (Department of Employment Training and Rehabilitation, 2012). The majority of these occupations typically require a high school diploma (or equivalent) with the exception of Architectural and Civil Drafters, which requires an Associate’s degree.
Table 60: Projected Fastest-Declining Occupation Changes, 2012-2020

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Occupation Title</th>
<th>Projected Change in Employment 2012-2020</th>
<th>Projected 2010-2020 Percent Change</th>
<th>Projected Average Annual Growth Rate</th>
<th>Typical Education Needed for Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>536021</td>
<td>Parking Lot Attendants</td>
<td>-566</td>
<td>-22.6%</td>
<td>-2.3%</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>432011</td>
<td>Switchboard Operators, Including Answering Service</td>
<td>-369</td>
<td>-26.1%</td>
<td>-2.6%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>433041</td>
<td>Gaming Cage Workers</td>
<td>-260</td>
<td>-14.3%</td>
<td>-1.4%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>412012</td>
<td>Gaming Change Persons and Booth Cashiers</td>
<td>-247</td>
<td>-13.7%</td>
<td>-1.4%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>435053</td>
<td>Postal Service Mail Sorters, Processors, and Processing Mach</td>
<td>-198</td>
<td>-40.3%</td>
<td>-4.0%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>434071</td>
<td>File Clerks</td>
<td>-101</td>
<td>-13.2%</td>
<td>-1.3%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>533022</td>
<td>Bus Drivers, School</td>
<td>-96</td>
<td>-8.9%</td>
<td>-0.9%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>419099</td>
<td>All Other Sales And Related Workers</td>
<td>-88</td>
<td>-7.6%</td>
<td>-0.8%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>339091</td>
<td>Crossing Guards</td>
<td>-81</td>
<td>-12.6%</td>
<td>-1.3%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>435051</td>
<td>Postal Service Clerks</td>
<td>-78</td>
<td>-39.9%</td>
<td>-4.0%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>433071</td>
<td>Tellers</td>
<td>-69</td>
<td>-2.2%</td>
<td>-0.2%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>391012</td>
<td>Slot Key Persons</td>
<td>-51</td>
<td>-10.4%</td>
<td>-1.0%</td>
<td>High school diploma or equivalent</td>
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<tr>
<td>434131</td>
<td>Loan Interviewers and Clerks</td>
<td>-43</td>
<td>-7.2%</td>
<td>-0.7%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>119051</td>
<td>Food Service Managers</td>
<td>-42</td>
<td>-2.0%</td>
<td>-0.2%</td>
<td>High school diploma or equivalent</td>
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<tr>
<td>371011</td>
<td>First-Line Supervisors/Managers of Housekeeping and Janitor</td>
<td>-39</td>
<td>-1.7%</td>
<td>-0.2%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>359099</td>
<td>Food Preparation and Serving Related Workers, All Other</td>
<td>-31</td>
<td>-1.6%</td>
<td>-0.2%</td>
<td>Less than high school</td>
</tr>
<tr>
<td>439011</td>
<td>Computer Operators</td>
<td>-26</td>
<td>-12.0%</td>
<td>-1.2%</td>
<td>High school diploma or equivalent</td>
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<tr>
<td>519151</td>
<td>Photographic Process Workers and Processing Machine Operators</td>
<td>-22</td>
<td>-10.3%</td>
<td>-1.0%</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>173011</td>
<td>Architectural and Civil Drafters</td>
<td>-19</td>
<td>-5.5%</td>
<td>-0.6%</td>
<td>Associate's degree</td>
</tr>
<tr>
<td>439022</td>
<td>Word Processors and Typists</td>
<td>-17</td>
<td>-13.2%</td>
<td>-1.3%</td>
<td>High school diploma or equivalent</td>
</tr>
</tbody>
</table>

Source: Department of Employment Training and Rehabilitation (2012)
CHAPTER 10 – REFERENCES:

Demographics


Housing


**Transportation**


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Development Patterns


Infrastructure


Economic Development


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CHAPTER 11 – ACKNOWLEDGEMENTS

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Assistance from the following Southern Nevada Strong staff members is also appreciated:
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Rose Fuscaldo, Administrative Assistant, SNRPC
Appendix J – Livability Assessment
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<tbody>
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<td>Table 1.2 – Fact Based Indicators</td>
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<td>Table 1.3 – Goal Based Indicators</td>
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<td>Table 3.1 – Livability Principle #1:</td>
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<td>Table 3.3 – Livability Principle #3:</td>
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<table>
<thead>
<tr>
<th>APPENDIX A</th>
<th>Sources for Selected Indicators</th>
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<tbody>
<tr>
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</tr>
<tr>
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<td>Master Regional Scorecard</td>
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ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>APA</td>
<td>American Planning Association</td>
</tr>
<tr>
<td>ED</td>
<td>Economic Development</td>
</tr>
<tr>
<td>EPA</td>
<td>US Environmental Protection Agency</td>
</tr>
<tr>
<td>DOT</td>
<td>US Department of Transportation</td>
</tr>
<tr>
<td>FBI</td>
<td>Fact Based Indicator</td>
</tr>
<tr>
<td>FY</td>
<td>Fiscal Year</td>
</tr>
<tr>
<td>GBI</td>
<td>Goal Based Indicator</td>
</tr>
<tr>
<td>HUD</td>
<td>US Department of Housing and Urban Development</td>
</tr>
<tr>
<td>LP</td>
<td>Livability Principle</td>
</tr>
<tr>
<td>NDOT</td>
<td>Nevada Department of Transportation</td>
</tr>
<tr>
<td>RLS</td>
<td>Regional Livability Score</td>
</tr>
<tr>
<td>RPSD</td>
<td>Regional Plan for Sustainable Development</td>
</tr>
<tr>
<td>RTC</td>
<td>Regional Transportation Commission of Southern Nevada</td>
</tr>
<tr>
<td>SNRPC</td>
<td>Southern Nevada Regional Planning Coalition</td>
</tr>
<tr>
<td>TOD</td>
<td>Transit Oriented Development</td>
</tr>
<tr>
<td>USDOT</td>
<td>US Department of Transportation</td>
</tr>
</tbody>
</table>

Cover Photo:

Courtesy of the Regional Transportation Commission of Southern Nevada
INTRODUCTION

PROJECT BACKGROUND

IN NOVEMBER 2011, THE SOUTHERN NEVADA REGIONAL PLANNING COALITION (SNRPC) WAS AWARDED A $3.5 MILLION GRANT FROM THE PARTNERSHIP FOR SUSTAINABLE COMMUNITIES – A JOINT EFFORT BETWEEN THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD), THE DEPARTMENT OF TRANSPORTATION (DOT), AND THE ENVIRONMENTAL PROTECTION AGENCY (EPA). The Partnership seeks to help communities nationwide take an integrated approach to improving livability. The project, Southern Nevada Strong, will provide a comprehensive regional framework for growth and development in Southern Nevada by integrating economic development, employment, housing, transportation, the environment, and community health components. For the purpose of the Regional Plan for Sustainable Development (RPSD), the Southern Nevada region includes 4 incorporated cities and Clark County, listed below in Table 1.1.

<table>
<thead>
<tr>
<th>Entity</th>
<th>Document Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Boulder City</td>
<td>Boulder City Master Plan</td>
</tr>
<tr>
<td>City of Henderson</td>
<td>City of Henderson Comprehensive Plan</td>
</tr>
<tr>
<td>City of Las Vegas</td>
<td>City of Las Vegas 2020 Master Plan</td>
</tr>
<tr>
<td>City of North Las Vegas</td>
<td>City of North Las Vegas Comprehensive Plan</td>
</tr>
<tr>
<td>Clark County</td>
<td>Clark County Comprehensive Plan</td>
</tr>
</tbody>
</table>

*City of Mesquite not included

One of the activities of Southern Nevada Strong is to implement a regional scenario planning tool to provide local governments and stakeholders with an innovative visualization tool to promote quality design and encourage implementation. Scenario Planning models a range of potential futures at a variety of scales, whether for regional visioning, comprehensive planning, or site planning. The tools provides decision makers, experts, and the public more information on what these futures might mean for their communities. Informed by public outreach, groups of scenarios are created in a range between a “no action scenario” which represents the status quo and a variety of alternatives based on specific priorities. The alternative scenarios explore the impacts of policy options such as diversifying housing choices and improving transit service. These scenarios are created by analyzing available data relevant to the geographic area being studied (Lincoln Institute, 2012). This livability assessment will be part of the data used in determining the scenarios.

For the purposes of this document, livability is based on priorities determined by the Partnership for Sustainable Communities, including lowering household transportation costs, reducing air pollution and stormwater runoff, decreasing infrastructure costs, preserving historic properties and sensitive lands, reducing the time spent in traffic, being more economic resilient, and meeting market demands for different types of housing at different price points. Degrees of livability are assessed based on the quality and comprehensiveness of policies explicitly identified by the local government’s comprehensive plan.
In order to provide valid data for the scenario planning effort, a necessary early step is to evaluate how well each of the jurisdictions’ planning policies align with livability. The comprehensive or master plan (herein referred to as comprehensive plan) from each of the five jurisdictions listed above will be analyzed for strengths and challenges to sustainable practices. The Partnership for Sustainable Communities created six livability principles to assist in the coordination of federal agencies. The livability principles are listed in the section below. These livability principles were used to create criteria to assess each jurisdiction’s comprehensive plan. While each jurisdiction within Southern Nevada can work individually to improve livability in the region, there are many issues that require regional collaboration – the more our local policies align, the higher the potential for regional benefit.

**HUD’S LIVABILITY PRINCIPLES**

1. **Provide more transportation choices.**
   Develop safe, reliable and economical transportation choices to decrease household transportation costs, reduce our nation’s dependence on foreign oil, improve air quality, reduce greenhouse gas emissions and promote public health.

2. **Promote equitable, affordable housing.**
   Expand location- and energy-efficient housing choices for people of all ages, incomes, races and ethnicities to increase mobility and lower the combined cost of housing and transportation.

3. **Enhance economic competitiveness.**
   Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers as well as expanded business access to markets.

4. **Support existing communities.**
   Target federal funding toward existing communities—through such strategies as transit-oriented, mixed-use development and land recycling—to increase community revitalization, improve the efficiency of public works investments, and safeguard rural landscapes.

5. **Coordinate policies and leverage investment.**
   Align federal policies and funding to remove barriers to collaboration, leverage funding and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

6. **Value communities and neighborhoods.**
   Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

**METHODOLOGY**

**Content Analysis**

Analyzing each comprehensive plan was done utilizing the widely used method captured in Richard Norton’s (the chair of the Urban and Regional Planning Departments at the University of Michigan) article on evaluating master plans and zoning codes, content analysis. According to Norton, the approach for content analysis is similar to developing a set of close-ended questions for a survey and then administering the survey; specifically, it, “involves preparing an evaluation protocol by defining categories for analysis and then having one or more evaluators or
‘coders’ use that protocol to read and score the written communication” (Norton, 2008, p. 433). This Livability assessment uses selected indicators, described in the section below, as the evaluation protocol to be analyzed.

Content analysis has historically been utilized as a means to analyze novels, journal articles, and other written media in order to assess the message being expressed by the respective document. Content analysis is a, “set of methods for analyzing the symbolic content of any (written) communication. The basic idea is to reduce the total content of a communication...to set a set of categories that represent some characteristics of a research interest” (Singleton & Straights, 1999, p. 383).

Two members of the project team scored each document independently using the above criteria. The research team then convened to compare scores. The scores of the research team were compared to create a reliability score. A reliability score is calculated by adding up the indicators the research scored the same on and dividing that by the total number of indicators. A reliability score, (the percentage of time that the two researchers scored the indicators the same way), of 80% or above is considered acceptable (Miles & Huberman, 1994). When a reliability score of 80% was not achieved while coding each respective plan, the research team convened and discussed their dissimilarities until they came to an agreement on each of the indicators where they differed (Evans-Cowley & Gough, 2009). The reliability score of 84.2% was achieved by the research team for this assessment.

Once the plans were scored by the research team, the scores from each of the indicators were standardized by dividing the sum of scores by the maximum possible score and multiplying by 100, creating a percentage score. A high regional score represented a higher level of community commitment toward achieving that given indicator. The final steps involved creating regional livability scores. The first step was to create a score for each of HUD’s six Livability Principles (LP$_1$ through LP$_6$) by summing the percentage scores for each of the fact based indicators (fbi) and goal based indicators (gbi) and dividing it by the number of indicators within each livability principle (four); the second step was to create an overall regional livability score (RLS) by adding the percentage scores for each livability principles (LP) and dividing it by the total number of livability principles overall (6) (See Figure 1.1 below) (Conroy & Berke, 2004).

**FIGURE 1.1—CALCULATING REGIONAL LIVABILITY SCORES**

Step 1 : $LP_i = \frac{[(fbi_1 + fbi_2)] + [gbi_1 + gbi_2]}{4}$

Step 2 : $RLS = \frac{[LP_1 + LP_2 + LP_3 + LP_4 + LP_5 + LP_6]}{6}$

**Indicator Selection**

To date, the APA has recognized two entities for their work on similar assessment efforts, the Mississippi Gulf Coast region and the East Alabama Regional Planning and Development Commission. This assessment is modeled after those efforts. Using the Mississippi Gulf Coast and the East Alabama Regional Planning and Development Commission Comprehensive Plan review documents for guidance, a total of 24 indicators were chosen—four for each of HUD’s six livability principles—to be used to evaluate each plan. For each livability principle, there are two “fact” based indicators and two “goal” based indicators. The fact based indicators are measurable and, assist in providing adequate information upon which goals can be set. The goal based indicators are more general and deal with goals and policies that are included in comprehensive/master plans (Evans-Cowley, 2011).
A total of 36 indicators were originally selected for this assessment (three fact based and three goal based for each livability principle). The project team selected two fact based and two goal based indicators for each of the six livability principles, for a total of 24 indicators. Table 1.2 and 1.3 list the selected indicators.

Appendix A provides a complete breakdown on the reference documents from which each of the indicators were selected.

<table>
<thead>
<tr>
<th>Table 1.2 – Fact Based Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HUD Livability Principle</strong></td>
</tr>
<tr>
<td>Provide More Transportation Choices</td>
</tr>
<tr>
<td>Promote Equitable, Affordable Housing</td>
</tr>
<tr>
<td>Enhance Economic Competitiveness</td>
</tr>
<tr>
<td>Support Existing Communities</td>
</tr>
<tr>
<td>Coordinate Policies &amp; Leverage Investments</td>
</tr>
<tr>
<td>Value Communities &amp; Neighborhoods</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 1.3 – Goal Based Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HUD Livability Principle</strong></td>
</tr>
<tr>
<td>Provide More Transportation Choices</td>
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</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>HUD Livability Principle</th>
<th>Goal Based Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinate Policies &amp; Leverage Investments</td>
<td>Encourage Multi-Jurisdiction Approaches to Redevelopment and Energy Efficiency</td>
</tr>
<tr>
<td></td>
<td>Integrated Regional Approach to Transportation</td>
</tr>
<tr>
<td>Value Communities &amp; Neighborhoods</td>
<td>Promote Districts with Distinct Characters &amp; a Diverse &amp; Rich Mixture of Uses</td>
</tr>
<tr>
<td></td>
<td>Create Walkable Neighborhoods</td>
</tr>
</tbody>
</table>

Comprehensive Plan Scoring System

The comprehensive plans were scored using a point-scoring method found in multiple plan evaluation documents. Each plan was scored in relation to the selected indicators on a scale of zero to two. A score of zero was given if the indicator was completely absent in the plan. A score of one was given if the indicator was present in the plan but not described in detail; and a score of two was given if the indicator was discussed in detail or was mandated by the respective plan. For example, if a plan did not mention “vehicle miles traveled” a zero would be entered in the score sheet. If the plan briefly mentions the goal of reducing vehicle miles traveled, then a one would be scored. If the plan has a detailed description of how the reduction of vehicle miles traveled can be achieved, then a two would be scored (Norton, 2008; Berke & Conroy, 2000; Evans-Cowley & Gough, 2009).

Data Limitations

One of the limitations of this method of analysis is the scope and selection of regulatory documents that are assessed. The general goals and policies of the comprehensive plan for each jurisdiction were evaluated in this study. If the jurisdictions have a special area plan (such as a downtown plan) or plan that deals with a single topic (such as transportation) that address specific livability principles separately, it is not captured in this assessment. Each of the jurisdictions has specialized plans that either cover a small geographic area within the entity or a specialized topic. For example, North Las Vegas also has a “Downtown Master Plan” to complement its comprehensive plan; and Clark County has a Transportation Plan within Volume 2 of the Comprehensive Plan. Volume 1 in the Clark County Comprehensive Plan is titled “General Subjects” and is part of this analysis. Volume 2 includes geographically specific Land Use Plans and the Transportation Plan. The City of Las Vegas 2020 Master Plan is considered Phase 1 of a two phase preparation. Phase 1, which is analyzed below, is the policy document that drives the content of Phase 2. Phase 2 is a series of elements, special area plans, and long-term land use designations that are updated individually on an annual basis. Plans such as the North Las Vegas Downtown Master Plan, Volume 2 of the Clark County Comprehensive Plan, and Phase 2 of the Las Vegas 2020 Master Plan were not included because they have a narrower focus than the comprehensive plans and may only highlight a single livability principle.

An additional limitation to this method is that it does not assess the accuracy or timeliness of data reflected in the Comprehensive Plans. This can result in a higher score if a plan maintains a particular principle, but may not be an accurate or relevant policy in the current environment.
SCORECARD RESULTS

INTRODUCTION

THIS CHAPTER SHOWCASES THE REGION’S SUCCESS IN PROMOTING SOUND PLANNING PRACTICES WITHIN LOCAL GOVERNMENT COMPREHENSIVE PLANS. The following results include a regional scorecard for each of the Livability Principles and successful examples. This section also includes an analysis of the gaps between the local government comprehensive plans and the indicators.

PROVIDE MORE TRANSPORTATION CHOICES

<table>
<thead>
<tr>
<th>Table 3.1 – Livability Principle #1: Provide More Transportation Options</th>
<th>Average Regional Score Per Indicator (0 min – 100 max)</th>
<th>Livability Principle Regional Score (0 min – 100 max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fact Based Vehicle Miles Traveled</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Proportion of Households Within ¼ Mile of Public Transit</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Goal Based Encourage TOD and Transit Friendly Development</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Create Safe Environments for Walking and Biking</td>
<td>80</td>
<td>57.5</td>
</tr>
</tbody>
</table>

North Las Vegas Promotes TOD

Chapter 5 of The North Las Vegas Comprehensive Plan focuses on both principles of design and residential density evaluation criteria. Within the chapter is a section specifically dedicated to TOD located around proposed and future transit station locations for both Bus Rapid Transit and Light Rail Transit development. Included in the TOD section are numerous photos of successful existing TOD developments located in different parts of the United States.

The TOD section also includes five principles to be applied to TOD and each principle includes an action plan detailing how the principle can be achieved. For example, Principle #3 is titled The Station Area Development Plan Focuses the Most Dense, Compact Development Closest to the Station and the action plan states that, “The development within a designated station area is compactly designed with higher densities closer to the station area. Typically, the most intense activity is focused within a ¼ mile of a station.”

Boulder City Creates a Safe Environment for Walking & Biking

There are multiple instances within the Boulder City Master Plan where policies promote the safety of pedestrians and cyclists. For example, in Chapter 2, a section titled “A Balanced Multi-Modal Transportation System” states that the City should strive for a balanced transportation system which will allow for safe and efficient facilities for pedestrians and bicyclists. This will be achieved by addressing current and future mobility needs through appropriate land use decisions.
Later in the document, the section on Special Planning Area Policies presents a list of policies for the Highway 93 Corridor-West (Uptown) area. Policy U5: Pedestrian Circulation and Linkages, on page 92, promotes pedestrian safety:

As sites within the corridor redevelop, the city should encourage the incorporation of detached sidewalks and planting buffers to establish a safe and inviting environment for pedestrians. Detached sidewalks will improve pedestrian safety, encourage pedestrian activity, and reduce the need for business patrons to drive from business to business thereby reducing traffic. Providing adequate pedestrian connections to future existing and future residential areas south of Nevada Highway should also be addressed.

### PROMOTE EQUITABLE, AFFORDABLE HOUSING

<table>
<thead>
<tr>
<th>Table 3.2 – Livability Principle #2: Promote Equitable, Affordable Housing</th>
<th>Average Regional Score Per Indicator (0 min – 100 max)</th>
<th>Livability Principle Regional Score (0 min – 100 max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fact Based Allocation of Affordable Housing Stock</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Demographic Analysis of Residents</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Goal Based Provide Energy-Efficient Housing Options For All Incomes</td>
<td>30</td>
<td>51.3</td>
</tr>
<tr>
<td>Offer Density Bonuses and Flexible Zoning Standards to Encourage Construction of Affordable Housing</td>
<td>55</td>
<td></td>
</tr>
</tbody>
</table>

**North Las Vegas Provides Detailed Data on Affordable Housing Stock**

Appendix B is the Existing Conditions section of the North Las Vegas Comprehensive Plan. This section contains a breakdown of the homeownership versus home rental rates in North Las Vegas and how that relates to home affordability. It is pointed out that in 2000 32% of homeowners and 40% of renters in North Las Vegas have exceeded the HUD recommended 30% of monthly income dedicated to housing costs.

Later in Appendix B is a section that presents an inventory of the affordable housing in North Las Vegas. To ensure that the data is up to date, this specific section is updated every 5 years. The affordable housing section includes population projections, current and prospective need for affordable housing, an analysis of characteristics of land most suitable for development of affordable housing, and references the HUD Consolidated Plan Consortium FY 2010-2014 Strategic Plan for a full inventory of affordable housing in North Las Vegas.

**Henderson Promotes Density Bonuses & Flexible Zoning Standards to Encourage Affordable Housing**

Chapter 2 of the City of Henderson Comprehensive Plan lists 5 principles for building community through balanced land use. Policy 3.D. is titled Community Workforce Housing as a Viable Option and promotes incentive programs such as density bonuses, streamlined development permit processes, inclusionary programs, allowances for "granny flats", and administrative approvals in an effort to ensure that workforce housing is available in various locations throughout the city. The plan defines workforce housing as housing suitable for working families and individuals for households earning between 80% and 120% of an area's median income. An incentive program for workforce housing is also promoted later in the document, under Priority Actions in the Action Plan chapter. Policy 3.E. promotes similar incentives for affordable housing.

Adopting these incentives would create an opportunity for workforce and affordable housing to be incentivized to make it more viable to private sector developers and would allow for a more streamlined permitting process for developers.
ENHANCE ECONOMIC COMPETITIVENESS

Table 3.3 – Livability Principle #3: Enhance Economic Competitiveness

<table>
<thead>
<tr>
<th>Fact Based</th>
<th>Average Regional Score Per Indicator (0 min – 100 max)</th>
<th>Livability Principle Regional Score (0 min – 100 max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of Current Job Centers</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Unemployment Rates</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Goal Based</td>
<td></td>
<td>52.5</td>
</tr>
<tr>
<td>Expand Economic Opportunities to Spur Redevelopment or Infill</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Diversify Economic Competition</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

The City of Las Vegas Identifies the Location of Existing Job Centers
Providing a detailed description of job center locations within each respective jurisdiction provides important information to developers. It also helps planners estimate job and population growth and provides other local government agencies information to assist them in providing the best possible services to their constituency. In the opening chapter of the Las Vegas 2020 Master Plan, there is a section dedicated to existing conditions, which includes a map and a discussion regarding the location of current job centers within the city.

The map identifies job center locations among traffic analysis zones and shows that the primary locations for employment in the city are in downtown Las Vegas and Summerlin. The plan estimates that 28% of all jobs in the city are with the City of Las Vegas. Furthermore, the plan anticipates growth in the northwestern portion of the city, along with downtown and Summerlin. While providing this information in such a detailed manner meets the selected indicator, this section has not been updated since 1999 and is outdated.

Boulder City Supports the Expansion of Economic Opportunity by Promoting Redevelopment & Infill
Southern Nevada’s economy is primarily dependent on the service industry and other industries ancillary to the service industry. Diversifying the local economy is viewed as an important way to help the region recover from the downturn experienced during the great recession. One way that land use planning can assist in the effort to expand economic opportunity is to promote redevelopment and infill development. Redevelopment and infill can promote economic opportunity in two ways. First, promoting infill and redevelopment can capitalize on Generation Y’s lifestyle desire for mobility while fitting into the existing urban framework without requiring new infrastructure. Second, it provides additional variety of housing types. Companies looking to relocate typically look for locations that offer a wide variety housing choices, including higher density residential housing with close proximity to proposed or existing transit lines.

The Economic Development chapter of the Boulder City Master Plan, Policy ED 3: Encourage Infill and Redevelopment, promotes infill and redevelopment activities in targeted areas as a means for spurring reinvestment and stabilizing declining or underutilized properties; particularly in the Central Business District, the Highway 93 corridor and the city’s manufacturing district. Policy ED 4: Redevelopment Area, furthers these efforts by encouraging and assisting in redevelopment areas to include a broader variety of businesses that appeal to both tourists and residents.
SUPPORT EXISTING COMMUNITIES

Table 3.4 – Livability Principle #4: Support Existing Communities

<table>
<thead>
<tr>
<th>Fact Based</th>
<th>Average Regional Score Per Indicator (0 min – 100 max)</th>
<th>Livability Principle Regional Score (0 min – 100 max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Housing Data</td>
<td>60</td>
<td>45</td>
</tr>
<tr>
<td>Standards That Allow Redevelopment of Formerly Single-Use Buildings into Multi-Use</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Goal Based</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourage Structured Incentives for Urban Infill and/or TOD</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Differentiate Policies for Infill and Redevelopment Versus New Development to Minimize Natural Resource Destruction and Provide Energy Economies</td>
<td>55</td>
<td></td>
</tr>
</tbody>
</table>

Clark County Promotes Standards that Allow Redevelopment of Formerly Single-Use Buildings into Multi-Use

The transitioning of single-use buildings into multi-use (also referred to as mixed-use) buildings can assist in lessening the dependence on automobiles, stimulating economic development in areas that were previously underutilized, and allows people to work, shop and enjoy recreation close to where they live. Allowing residential uses in buildings that were historically commercial and allowing commercial and retail uses on the street level of existing multi-family development achieve this goal.

The Growth Management section of the Clark County Comprehensive Plan presents policies which promote mixed-use standards, and promote transitioning single-use developments into multi-use. Policy #10 encourages the redevelopment of infill sites with new and additional uses that allow them to function as walkable, mixed-use districts. Policy #14 encourages mixed-use development that provides the ability to revitalize older commercial corridors with infill residential uses.

North Las Vegas Encourages Differentiating Policies for Infill and Redevelopment versus New Development to Minimize Natural Resource Destruction

Supporting development within the urban core by promoting infill and redevelopment in areas with existing infrastructure is a tool by which local governments can reduce development on natural lands. This type of development could produce a significant reduction in regional stormwater runoff, take advantage of existing roads and utility infrastructure, and leave large areas of open space undeveloped for both recreational opportunities and open space protection.

The North Las Vegas Comprehensive Plan encourages development within established areas of the city throughout the document. Goal 5.4 Infill Policies and Design Guidelines in the Guiding Principles section states that the city will establish infill policies to address barriers to redevelopment activity within existing, established areas of the city and will discourage non-contiguous development.
COORDINATE POLICIES & LEVERAGE INVESTMENT

Table 3.5 – Livability Principle #5: Coordinate Policies and Leverage Investments

<table>
<thead>
<tr>
<th>Fact Based</th>
<th>Average Regional Score Per Indicator (0 min – 100 max)</th>
<th>Livability Principle Regional Score (0 min – 100 max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Sustainable Infrastructure Practices</td>
<td>10</td>
<td>42.5</td>
</tr>
<tr>
<td>Identify Benefits of Coordinated Investments</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Goal Based</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourage Multi-Jurisdictional Approaches to Redevelopment and Energy Efficiency</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Integrated Regional Approach to Transportation</td>
<td>80</td>
<td></td>
</tr>
</tbody>
</table>

Clark County Recognizes the Benefits of Regionally Coordinated Investments

Aligning federal policies and funding at the regional level helps remove barriers to regional collaboration, assists in leveraging funding and increases accountability and effectiveness at all levels of government. Coordinating investments throughout Southern Nevada is only successful with buy-in from all local governments.

The Clark County Comprehensive Plan has multiple instances where regional coordination is promoted with federal, state, and local governmental entities. Policy #3 in the Species Protection section states that Clark County should coordinate land uses and disposal areas with Federal agencies to reduce environmental and habitat impacts within protected areas. Policy #3 in the Growth Management section promotes pursuing coordination of development policies between the entities of the region. Policy #5 in the Natural and Man-Made Hazards section states that local, regional, state, and federal governments should coordinate investments to provide protection against natural and man-made hazards.

The City of Las Vegas Promotes an Integrated Regional Approach to Transportation

Advancing regional transportation planning through the development of regional transportation networks and the expansion of transportation choices supports long-term regional success and community livelihood by providing citizens multiple integrated transportation options consistent throughout the entire region.

Goal #7 in the Las Vegas 2020 Master Plan, within the Regional Coordination chapter, promotes coordination by the City of Las Vegas with other government entities and agencies regarding issues of regional significance. Policy 7.3.5 states that the City must work with the Southern Nevada Regional Transportation Commission (RTC), the Nevada Department of Transportation (NDOT), and local governmental entities in the region to ensure that the roadway network is planned and developed to meet the needs of the anticipated population growth in the region, and provide for multimodal transportation opportunities.
The City of Henderson Requires New Development to Connect to Existing or Planned Walkways

Requiring new development to connect to existing or planned walkways, greenways, and hiking trails benefits all people within a community. A compact, walkable neighborhood encourages physical activity and helps protect the environment by conserving fossil fuel when we reduce the miles we drive. Walkable neighborhoods are also safer for children, allowing them to walk or bike to school, the park, and library. Walkable neighborhoods allow seniors access to daily exercise by walking. Walkable neighborhoods also have been proved to create more opportunities to get to know people in the neighborhood.

The City of Henderson Comprehensive Plan has multiple policies that call for new development to connect to existing walkways, greenways, and hiking trails. This includes policies for commercial, residential and public open space planning. Principle 3 within the chapter titled Quality Development states that commercial areas will be vibrant and attractive places; Policy 3.C Transit-Supportive Design states that new development should include transit-supportive design features, including amenities to enhance the pedestrian environment and clearly marked pedestrian routes between buildings, transit facilities and stops. Principle 5 within the same chapter declares that mixed-use development be thoughtfully designed and of high quality. Policy 5.F Pedestrian Connectivity encourages mixed-use developments to be designed to allow for a continuous pedestrian system. Later in the chapter, Principle 7 promotes public spaces designed to accommodate people. Policy 7.B Connected Public Spaces states that trails and walkways connect public spaces as destinations for pedestrians and bicyclists.

Boulder City Promotes Districts with Distinct Character and a Mixture of Uses

Promoting the unique characteristics of districts within a community gives residents of these communities a strong sense of place by having a unique district within a region. Providing a mixture of uses within these unique districts allows residents the opportunity to live, work, shop, and recreate all within their existing communities. Therefore, having districts with distinct character and a mixture of uses can instill local pride as well as stimulate economic development in the region.

The Boulder City Master Plan promotes districts with distinct character and a mixture of uses. There are unique policies included in the plan for a variety of existing districts located in the city. These districts include the Central Business District, The Historic District, The Downtown District, The Commercial District, and The Old Airport Subarea District. In the Land Use chapter of the plan there is a table that lists land use categories, primary and secondary uses within the category, and characteristics of the category. The Central Business District lists a variety of civic, cultural, retail, commercial, business, hotel, professional offices, and financial institutions as primary uses; and lists
characteristics such as traditional downtown urban fabric in a compact, vibrant setting with a pedestrian-friendly scale.

Policy #2, titled Mix of Uses, in the Central Business District section states that a mix of uses including retail, restaurant, employment, commercial, office, and civic uses should continue to be encouraged in the downtown; and that retail and restaurant uses be encouraged at the street level to promote pedestrian activity and vitality.
STRENGTHS AND OPPORTUNITIES

REGIONAL LIVABILITY SCORE

Using the formula established in Figure 1.1, a regional livability score of 52.7 was attained for the comprehensive plans of Southern Nevada. A more detailed breakdown of the scorecards found in Chapter 2 indicate there is a wide variation by which the livability principles are represented in the comprehensive plans of the region. Some of the indicators are represented throughout the region, while one of the indicators was not represented in any of the plans analyzed (food security). Below is a breakdown of the existing strengths of the region’s comprehensive plans and an examination of the areas where the plans could be improved to more closely represent the Livability Principles.

EXISTING STRENGTHS

Promoting Districts with Distinct Character and Diverse Mixture of Uses
The region’s comprehensive plans scored a perfect 100 in regards to promoting districts with distinct character and a diverse and rich mixture of uses. Each of the analyzed plans addresses this indicator in detail by providing names of existing districts within the respective jurisdiction and promoting a mixture of uses within these districts.

Encouraging the Creation of Walkable Neighborhoods
With a score of 95, the creation of walkable neighborhoods is a clearly stated goal in the region’s comprehensive plan. As the region rapidly developed, planning for and creating pedestrian friendly development was sometimes an afterthought, but the region’s comprehensive plans now have in place numerous goals and policies which encourage new development to create walkable neighborhoods and provide a network of connections between these neighborhoods.

Supporting TOD and Transit Friendly Development
Promoting TOD and transit friendly development is a constant theme throughout the plans of the region. The region scored 90 out of 100 in promoting TOD in the comprehensive plans. Excluding Boulder City, the included jurisdictions scored perfectly on this indicator. The outlying location of Boulder City, outside of the Las Vegas Valley, makes the promotion of transit friendly development less of a requirement.

Goal Based Indicators
As stated in Chapter 1, the goal based indicators are more general and deal with goals and policies that are included in comprehensive plans, and overall the regional plans scored very high on the goal based indicators. The overall average score of all indicators is 52.7, but the goal based indicators scored 67.9, 15% higher than the average. This means that the regional comprehensive plans do a good job in promoting the Livability Principles through goal based policies.

OPPORTUNITIES FOR IMPROVEMENT

Promoting Access to Healthy Food
One of the stated goals that HUD encourages through the Sustainable Communities program is increasing the proportion of housing units that have high access to quality fresh foods. In December 2012, the American Planning
Association (APA) published a study titled, “Healthy Planning, An Evaluation of Comprehensive and Sustainability Plans Addressing Public Health”. The study stated that “food access” is one of the top 10 most-cited public health topics indentified in sustainability plans. The results of the APA study showed that a major weakness of the 22 plans that were analyzed is the weak coverage of policies promoting access to food. Only 8.8% of the comprehensive plans analyzed and 22.2% of the Sustainability Plans analyzed had policies relating to food access, food safety, food security, healthy eating, and nutrition (American Planning Association, 2012). Therefore, a goal based indicator about households being within one mile of healthy food was selected.

None of the comprehensive plans analyzed had any policies regarding access to healthy food; and moving forward it is recommended that policies be drafted to promote access to healthy food. The APA study had a list of policies relating to food access from jurisdictions around the country; some of these policies could be incorporated into the local comprehensive plans.

**Encouraging Regional Sustainable Infrastructure Practices**

The scenario planning effort that follows this exercise will provide a variety of economic growth possibilities and anticipated responses to each of them. This will be done by showing current and projected land uses, as well as infrastructure investments. So analyzing the current state of the regional comprehensive plans in encouraging regional sustainable infrastructure practices is important data to collect. Only two of the comprehensive plans analyzed had any policies or goals related to regional sustainable infrastructure practices, and neither of those plans had very detailed goals and policies in this regard; therefore the plans scored only a 10 on this indicator.

**Outdated Demographic, Employment, and Housing Data**

Many of the factual based indicators that were selected for this analysis required quantifiable data such as a demographic analysis of residents, unemployment rates, location of current job centers, and existing housing data. The scoring of the plans on these indicators was around average, but the data provided in most of the plans has not been updated since the comprehensive plan was originally published. Southern Nevada had a period of massive growth in the 1990s and early-to-mid 2000s, and a well documented economic downturn in the late 2000s which saw the population decline for the first time in almost 90s years. In a region with such extreme growth followed by the first population decline in decades, this type of data can become outdated quickly. Much of the outdated demographic, employment and housing data included in the regional comprehensive plans was from the late 1990s and early 2000s. Only the North Las Vegas Comprehensive Plan had updated the information, in 2009, provided within the document since the date of original publishing (2006). One of the plans provided a map showing where the job centers were located, a demographic analysis of residents, and information regarding unemployment rates. The jobs map and demographic data were from 1999 and the unemployment data was from 1990, making it all severely outdated. It is suggested that each entity impose a regulation that data such as this be updated at least every 5 years, if not more often.

**Fact Based Indicators**

While the goal based indicators scored high, the fact based indicators scored much lower. As stated above, the fact based indicators are used to assess factual basis issues, which in turn assist in providing adequate information upon which goals can be set. Fact based indicators scored 37.5 overall, 15% below the overall average of all indicators. This low score is partially due to the outdated data, detailed in the section above, included in many of the plans. Updating the demographic, employment, and housing data within the plans would help increase the overall fact
based indicator score, as would including goals and policies in the two lowest scoring indicators—access to fresh food and regional sustainable infrastructure practices.

**CONCLUSION**

As detailed above, there is a wide variety in the scoring of the indicators. Some indicators are included in each of the regional comprehensive plans and some of the indicators were completely absent from the plans. This means that there is an opportunity to improve the promotion of the Livability Principles through revision of each of the comprehensive plans analyzed and through the Regional Plan for Sustainable Development.
REFERENCES


Appendix K –
Supporting the Education Imperative
1. Background

In the Southern Nevada region, statistically valid surveying and stakeholder interviews have revealed that quality education and good jobs consistently rank among the top two highest priorities for Southern Nevadans. To ensure that the Regional Plan works directly to support these two priorities, the project team hosted an event in July of 2013 entitled **Supporting the Education Imperative: The Role of Community Development**. The team invited an expert speaker on educational attainment data and strategies (John Tapogna from ECONorthwest) to discuss recent research and case studies that highlight ways to support schools and education through place-based, community development policies. The presentation attracted nearly 200 community stakeholders. This white paper follows that presentation and provides additional, specific policy and other strategies to pursue through the Southern Nevada Strong regional planning process.

2. Purpose

The purpose of this document is to support the Regional Plan by outlining the connection between healthy, complete neighborhoods and educational outcomes in the K-12 and higher education systems. The Regional Plan will support the Comprehensive Economic Development Strategy (CEDS), adopted in 2013. The CEDS, which has adopted a multi-pronged agenda that focuses on government advocacy, regional collaboration among educational institutions and businesses while supporting efforts to attract talent, identifies educational attainment as among the most foundational obstacles that the Southern Nevada region faces as it achieves long-term economic growth and stability.¹

The CEDS recognizes that fostering a better match between the skills base in the region’s workforce and future industry needs will improve the region’s economic competitiveness. Doing this requires that the region focus on improving educational attainment at all levels and for all students. This document identifies the ways in which the Regional Plan (which sets a vision for changes in regional development patterns and land use) can support CEDS implementation, so that both work together to improve educational attainment.

**Figure 1** shows the relationship among education/workforce training, economic development, and communities.

- A community with a talented and flexible workforce and an appealing environment attracts diverse, value-adding industries that provide well-paying jobs.

- As income increases, communities generate revenues for excellent schools, quality public services, and public

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¹ Southern Nevada Comprehensive Economic Development Strategy, 2013
facilities, which in turn attract a talented and flexible workforce.

- The more prosperous communities are, the more they tend to invest in education.

To foster economic growth, Figure 1 suggests the importance of considering a range of economic, housing, health, social, and education policies, because all are inter-related. In a time of rising inequality and low social mobility, improving the quality of and access to education has the potential to increase equality of opportunity for people in Southern Nevada.

This document summarizes what we know about structural changes in the future economic base, the kind of workforce that the region will need to meet its economic development goals, and what is currently known about the achievement gap. It has the following sections:

- What kind of workforce does Southern Nevada need to be competitive?
- What is the reality of educational attainment in in Southern Nevada today?
- What role might community development play in supporting educational attainment?
- What policies or activities might the region consider?

3. What kind of workforce will Southern Nevada need in the future?

Globalization and technological changes have caused work patterns worldwide to shift. In the U.S., many jobs have moved overseas, and mechanization has reduced the number of well-paying, middle-class jobs. This technological change has contributed to sustained gains in GDP per capita, while simultaneously reducing the availability of middle-class jobs. Many middle-skill jobs that provided work for generations of high school graduates have been eliminated, while high-skill and low-skill jobs have been on the rise.²

Job growth has been concentrated in occupations that feature non-routine tasks. “The middle-skill jobs that survive will combine routine technical tasks with abstract and manual tasks in which workers have a comparative advantage — interpersonal interaction, adaptability and problem-solving.”³ Labor economist Lawrence Katz has referred to those who fruitfully combine the foundational skills of a high school education with specific vocational skills as the “new artisans.”

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³ Autor & Dorn
The need to boost the quality of education is increasing rapidly as a result of technology and innovation. If the supply of skilled workers able to use the technology exceeds the demand, then the wage premium for those skills falls. If the supply of skilled workers is less than the demand, the wage premium rises. In addition, routine work that is done repeatedly in the same way will be replaced by technology if it has not been already. In short, when technology improves, the most successful employees are those who know how to use it, but those employees must be able to keep up with the pace of technological change to stabilize their wages.

To begin to address these and other interrelated economic development challenges, the Southern Nevada region has recently adopted its first ever CEDS: a collaborative regional effort that seeks to “increase cooperation in the community resulting in greater capital investment, talent recruitment, and innovation in technology and entrepreneurship.” The strategy seeks to broaden the base of the regional economy while strengthening its core industries, while also addressing workforce development needs. The CEDS identified five key target sectors that “emphasize those jobs with higher earning potential across all skill levels, focus on the more realistic growth opportunities with less focus on the more daunting challenges, and capitalize on geography and location and build on existing local capacities and assets”.

- Tourism, Gaming, and Entertainment
- Health and Medical Services
- Business IT Ecosystems
- Clean Energy
- Logistics and Operations

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6 Unify, Regionalize, Diversify Revisited: Refining the Brookings Institute Framework.
The CEDS (and this white paper) recognize that among the keys to success in these industries is developing a workforce that is not just adaptable to new technologies, but knowledgeable and entrepreneurial enough to develop new technologies.

4. **What is the reality of educational attainment in Southern Nevada today?**

While the research in this white paper does not constitute a comprehensive scan of all the region’s educational programs and attainment data (there are undoubtedly bright spots and successes that are worthy of notice), overall, the patterns are troubling for a region that is looking to increase its competitiveness for future jobs growth. Three major patterns suggest that increased investment in the region’s schools will be critical to its ability to create a resilient economy in the future:

1. Educational attainment lags behind national averages, limiting the region’s competitive advantages for future job growth.
2. Inequities in access to educational opportunities reduce social mobility.
3. Patterns of spending on educational programs suggest that the State and the region have not committed to investments in its educational future at the same level as other communities have.

4.1 **Educational attainment**

Right now, Southern Nevadans as a whole are not keeping pace with national averages for educational attainment, and therefore are not likely to compete well. Figure 3 shows that in Clark County about 15% of working-age adults have not completed high school, 30% have only a high school diploma, 33% have completed some college or an associate’s degree, 15% have a bachelor’s degree, and 7% have a graduate degree.

**Figure 3. Education Attainment for adults age 25 and over the U.S., Nevada, and Clark County, 2012**

<table>
<thead>
<tr>
<th>Category</th>
<th>U.S.</th>
<th>Nevada</th>
<th>Clark County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate degree</td>
<td>11%</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>29%</td>
<td>34%</td>
<td>33%</td>
</tr>
<tr>
<td>Some college</td>
<td>28%</td>
<td>29%</td>
<td>30%</td>
</tr>
<tr>
<td>High school graduate</td>
<td>14%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>(includes equivalency)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: U.S. Census Bureau, ACS 1-Year Estimates 2012*

Enrollment data for Clark County parallels the U.S. in most educational categories except higher
education.

• A larger share of U.S. residents is enrolled in higher education programs (8%) than in Clark County (6%). As employers continue to increase their educational and/or certification requirements for workers. If there is a perceived shortage of highly educated workers in the region, it will be considered at a competitive disadvantage.\(^8\)

• Educational attainment levels for Nevada’s population echo the same trends seen in the current enrollment statistics. A smaller share of state and county residents (22%) has 4-year degrees as compared to the U.S. average (28%).

4.2 Inequality

Nationally, the difference in the achievement gap between high- and low-income students is at an all-time high, and the region is not immune from these problems. The difference in test scores between the families at the 10\(^{th}\) and 90\(^{th}\) percentiles indicates an achievement gap equivalent to about 3 years of educational experience. Between 1970 and 1998, the achievement gap grew by 40%.\(^9\) Researchers have found several trends in the experience of young children in families of different income levels that may affect the achievement gap in the long run:

• **Language in the home.** In one study, the number of words spoken to children varied significantly by family status. On average for the study group, families receiving welfare services spoke significantly fewer words to their children than a working-class family. Similarly, working-class families spoke fewer words to their children than professionals. Not only did the number of words vary, but also the type of words used. Lower-income families used more directive words and commands, while higher income families used questions and more interpretative language.\(^10\)

• **Spending.** High-income families spent about seven times more on their children than low-income families, a gap that has continued to widen since the 1970s. The higher the individual’s income, the more they tend to invest in education.\(^11\)

Research and media have identified inequality in access to education as a significant issue for Southern Nevada. For example, Education Week’s "Chance for Success" index named Nevada as the worst place in America for a child to grow up and hope to become "successful." At about the same time, a Brookings Institution report showed significant income disparities between schools in the Las Vegas valley, indicating a severe concentration of poverty geographically, that lead to decreased educational opportunities. The region has one of the lowest graduation rates and standardized test score averages in the nation. Inequality reduces social mobility and limits the talent pool for current and potential future employers.

A 2012 Brookings Institution report compared regional zoning data with school test score data. When comparing standardized test scores across schools in Las Vegas in 2010 and 2011, only 23% of students were low-income in the top-quintile schools, compared to 78% at the bottom quintile schools. The average annual housing cost for the top quintile was $15,381, compared to

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\(^8\) TIP Strategies. Las Vegas Regional Economic Assessment. 2012.
\(^9\) The Hamilton Project, Brookings. Reardon, 2011.
\(^10\) Meaningful Differences in the Everyday Experience of Young American Children. Hart and Risley, University of Kansas.
\(^11\) The Hamilton Project, Brookings. Duncan and Murnane, 2011
the bottom quintile at $6,840. About 68% of those in the top quintile own their home, while only 43% in the bottom quintile do.12

Table 1. Comparison of students within top and lowest performing schools across the Las Vegas valley measured by standardized test scores

<table>
<thead>
<tr>
<th></th>
<th>Top Quintile Schools</th>
<th>Bottom Quintile Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-income</td>
<td>23%</td>
<td>78%</td>
</tr>
<tr>
<td>Average housing cost</td>
<td>$15,381</td>
<td>$6,840</td>
</tr>
<tr>
<td>Home ownership</td>
<td>68%</td>
<td>43%</td>
</tr>
<tr>
<td>Black students</td>
<td>10%</td>
<td>17%</td>
</tr>
<tr>
<td>Hispanic students</td>
<td>20%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Source: Brookings Institution, 2012

In the Las Vegas metro area, about 34% of low-income students would have to change their zip codes to achieve an equal distribution of low-income students across schools. Housing costs near high-scoring elementary schools are 2.2 times higher than housing costs near low-scoring schools. The average middle/high income student attends a school that ranks 22% higher on state exams than an average low-income student attends. In effect, families are paying for better education by paying for more expensive housing in higher valued neighborhoods. This trend is not uncommon nationally. However, given distortion in the housing market resulting from an unusually deep drop in market values in the most recent recession, which has disproportionately affected lower income families, the problem is exacerbated in the Las Vegas Valley.

For many reasons, including poverty, children in Las Vegas’ low-income communities, particularly those who are Black, Latino, and speak English as a second language, face incredible odds for achieving educational success. Berliner (2009) identified six out-of-school factors: (1) low birth-weight and non-genetic prenatal influences on children; (2) inadequate medical, dental, and vision care, often a result of inadequate or no medical insurance; (3) food insecurity; (4) environmental pollutants; (5) family relations and family stress; and (6) neighborhood characteristics. He suggests these factors are “common among the poor” and limit what schools can accomplish on their own.13

4.3 Disinvestment in education

This section presents data and research that show that: (1) the region’s income (which is a key indicator of revenues available to local governments for all government spending) is falling relative to the nation; (2) as a result, revenues to local and State governments are falling; and (3) Nevada has always trailed the nation in spending on education, but given declining revenues, that spending is falling further behind. The combined effect is that, without intervention, even fewer financial resources are available to Nevada schools in the future, so that they can effectively prepare students for the jobs of the future.

Figure 4 shows Nevada personal income per capita expressed as a share of the U.S. average from 1929 to 2011. Nevada’s per capita personal income has historically been high relative to national averages, but has declined as a share of the U.S. average from the 1940s until the

13 The Las Vegas Promise Neighborhood Initiative: A Community-Based Approach to Improving Educational Opportunity and Achievement, 2013
2000s. However, it did not fall below the average until 2008, and the trend is continuing downward.

**Figure 4. Nevada personal income per capita expressed as a share of the U.S. average, 1929-2011**

![Chart showing Nevada personal income per capita expressed as a share of the U.S. average, 1929-2011.](image)

Source: ECONorthwest, using data from …

Figure 5 shows combined state and local revenues expressed as a share of personal income in Nevada from 1977 to 2011. In general, both have remained stable when measured as a share of personal income, but given that personal income is declining (see Figure 4), in real dollar terms, the revenues are also declining.
Figure 5. State and local revenue expressed as a share of personal income, Nevada, 1977-2011

Source: ECONorthwest, using data from …

Figure 6 shows education expenditures expressed as a share of personal income in Nevada and the U.S. from 1977 to 2011. The share that the nation and Nevada residents contribute to education has grown slowly since the 1980s, but Nevada residents consistently spend about 1% less on education than the U.S. average. Again, because personal income is declining, in real dollar terms, the amount available for education has also declined.
Figure 6. Education expenditures expressed as a share of personal income, Nevada and U.S. 1977-2011

Source: ECOnorthwest, using data from …

Figure 7 shows the education expenditures per capita in Nevada and the U.S. from 1977 to 2011. Nevada residents increased their expenditures from a low point of $1,300 in 1984 to more than $2,400 in 2008. On average, other places in the U.S. consistently spent more on education, rising from a low point about $1,500 in 1982 to more than $2,900 in 2008. Nevada’s education spending has declined even more starkly than the nation’s as a whole since the 2008 recession.
5. What role might community development play in supporting educational attainment?

One of the key purposes of this white paper is to suggest ways that the regional plan (which sets a vision for community development and identifies policy and other implementation steps help the region move toward that vision) can support the CEDS as it addresses the economic development imperatives it has identified. If improvements to workforce development and educational attainment are one of the CEDS imperatives, what role does community development play in achieving those improvements?

First, there is substantial anecdotal and observed evidence that higher quality communities (when measured in terms of property values) produce higher educational attainment outcomes. Some related data for the Southern Nevada region are presented earlier in this white paper. However, the causal pathways that link community development efforts (interventions that improve the quality of place, such as improved pedestrian access, high amenity open space, or improvements to streetscape) with improvements in measurable student achievement gains have not been well-established in literature. There is no clear evidence that, for example, building a new park or creating a new mixed-use community center will necessarily lead to improvements in graduation rates in adjacent schools.

The literature does, however, tell a compelling story that the achievement gap is established primarily outside of the K-12 schools—in families and communities. As an illustration of this point: family income does not play a role in attainment at very early childhood stages. Early childhood longitudinal survey data suggests that no significant gap in cognitive ability exists among children under the age of one across families of different incomes. Instead, significant
cognitive improvements emerge with an additional month of age and for female children in higher income families, suggesting that the differences in later life attainment begin not in the schools, but in the households and communities of very young children.\textsuperscript{14} As such, interventions that improve a community and create value for adjacent properties are investments in the “platform” on which educational attainment grows.

This section of the white paper provides additional data and information regarding the interaction among the community learning environment, the achievement gap, and educational attainment.

5.1 Studies on the achievement gap

Opportunities to decrease the gap exist both inside and around the K-12 schoolhouse. Within the classroom, researchers have completed few studies with experimental design, at least in part because ethical issues arise when researchers regarding access even to the experimental interventions designed to improve educational outcomes. According to the literature, early investments in children tend to pay off the most, because the ability to acquire skills at any age depends on skills acquired at earlier ages.\textsuperscript{15}

\textit{Inside the schoolhouse}

To date, interventions within K-12 schools have done little to appreciably increase or decrease the gap, as shown in Error! Reference source not found.. For example, kids who are behind in 3\textsuperscript{rd} grade tend to stay the same distance behind through the continuation of their schooling. The literature finds that the most effective interventions are programs aimed at early learners, like full-day kindergarten and The Reading Recovery Program, used throughout New Zealand, and having an exceedingly effective teacher. Though many efforts focus on increasing spending per student, studies show that just increasing spending by 10% per student with no specific direction does not produce an effect.

\textit{Figure 8. Effect size of selected in-school interventions}

\textsuperscript{14} The Hamilton Project, Brookings. Fryer and Levitt, 2013.
\textsuperscript{15} J. Heckman
Figure 8. Effect size of selected in-school interventions


Around the schoolhouse

The achievement gap is established primarily outside of K-12 schools within families and communities. There has been substantial research documenting the significant impact poverty, neighborhood context, and related out-of-school factors such as housing, food security, health care, and family supports have on student learning and achievement. These indicate a more profound effect on student outcomes than in-school interventions and are shown in Figure 9.

16 The Las Vegas Promise Neighborhood Initiative: A Community-Based Approach to Improving Educational Opportunity and Achievement, 2013
6. **What policies or activities might region consider?**

While it cannot address all of the issues that have been identified in this white paper, the regional plan, which is focused on identifying strategies that improve community character, access, and equity, can improve the educational environment in the communities. It should work collaboratively with CEDS implementation and focus on strategies that: (1) increase opportunities for people of all ages to access educational opportunities; and (2) invest in communities with low performing schools to improve the educational environment in the community.

1. **Enhance multi-modal transportation opportunities, prioritizing low-income neighborhoods**

One of the most specific and direct strategies to connect people to opportunity is by improving transportation between areas that are most socioeconomically disadvantaged and areas that provide services and supports. This should include transit service, with a focus on frequency and reliability, as well as improved bicycle and pedestrian access and auto access.

*Policy examples:*
• **Create safer routes to schools.** Make investments to promote access to a variety of educational opportunities. Safe Routes to School programs are ubiquitous around the country. The program promotes the practice of bicycling and walking to and from school. Research shows a positive relationship between physical activity and grade point average, rate of learning, and classroom behavior.\(^{17}\)

• **Identify disconnected communities.** Increase transit service.

• **Concentrate new housing along transit corridors with existing service.**

2. **Encourage diverse mixed-income housing and neighborhoods, with a focus on urban infill development**

Encourage a mix of incomes within developments and within neighborhoods to decrease income disparities between schools. Diverse housing products create communities that are attractive and accessible to a wide range of income levels and family composition. Additionally, to attract high-quality teachers (an intervention known have a significant affect on learning for all students), the region’s neighborhoods should provide the amenities and housing options that teachers will desire. The region should make strategic investments in existing neighborhoods that bolster a community’s chance to succeed and lead to new private investments. The current development pattern reflects more opportunities on outer ring suburbs and a policy focus on education will require incentives and an emphasis on urban revitalization.

**Policy examples:**

• **Perform context mapping.** Another effective way to identify areas of concerns is to use a context tool. By mapping demographic indicators like share of individuals receiving free and reduced priced lunch with facility indicators like their seismic stability. It can also help illustrate the spatial relationship between facilities that are important to learning outside of the schoolhouse and the schoolhouse.

• **Review the impacts of restrictive zoning on educational achievement.** Restrictive zoning discourages inexpensive housing, driving economic segregation. Nationwide, housing costs near high-scoring public schools are about $11,000 more per year than near low-scoring public schools. Eliminating exclusionary zoning in most metro areas would reduce the housing cost gap and thereby reduce the test-score gap by an estimated 4% to 7%.\(^{18}\) Research suggests that economically disadvantaged students in schools with low levels of economically disadvantaged students perform better on standardized tests than those in schools with high levels of economically disadvantaged students.\(^{19}\)

**Further research**

• What is the effect of being low-income/minority on a student? How does that affect their ability to learn? How can that be connected to land use issues?


Access to basic services: food, healthcare, other stress/trauma (adverse childhood experiences study)

Parental support - How do you maximize time parents have available to support children? Do low-income parents have all the tools and knowledge they need to support their child effectively? Is there space available to teach them?

3. **Create economic development opportunities within neighborhoods.**

In addition to connecting disadvantaged communities to access to regional opportunities, localized employment near existing housing areas is also effective. Community development corporations and neighborhood based economic developers are especially well positioned to assess the worker profile of residents in disadvantaged neighborhoods and target efforts in local neighborhoods.

**Policy examples:**

- **Explore the concept of Promise Neighborhoods.** Promise neighborhoods are a place-based strategy for education reform that aims to significantly improve the educational and developmental outcomes of children and youth in our most distressed communities, and to transform those communities. Funded by the U.S. Department of Education, the Promise Neighborhoods model was inspired largely by Harlem Children's Zone (HCZ) - perhaps one of the most popularized examples of a community-based approach to educational improvement and reform. One goal of the program is to develop the local infrastructure of systems and resources needed to sustain and scale up proven, effective solutions across the broader region beyond the initial neighborhood. The proposed neighborhood in Southern Nevada is the Clark County School District Prime 6 Schools Attendance Zone, located in historic West Las Vegas, as the target neighborhood.

- **Employ the Strive tool.** Strive is a framework of civic infrastructure that helps to support individuals from cradle to career. Strive helps pull individuals from various community groups together to develop a vision, evidence-based decisions, and align actors with similar programs. A toolkit provides Strive participants with a way to estimate the likelihood that a 7th grader will graduate from high school, enroll in a 2-year post-secondary institution, or enroll in a post-secondary 4-year institution based on their 7th grade standardized test math score. The tool can help communities identify who they are serving now and help them think strategically about where they want to focus their efforts in the future.

**Further research**

- What are land use policies that can encourage safe neighborhoods with reduced crime?
- How can we foster the kind of infrastructure that encourages safe passage to school via bike, foot, and transit?
- What is the broad inventory of learning spaces (e.g., schools, pre-K centers, libraries, museums, playgrounds) across the metropolitan area?
  - How are these spaces distributed?
  - Where is birth-to-five programming offered across the region?

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20 The Las Vegas Promise Neighborhood Initiative: A Community-Based Approach to Improving Educational Opportunity and Achievement, 2013
• How do participation rates vary among eligible learners? What are the barriers to participation?
• Is the nature of programming different across geography? Is it evidence-based?
  ◦ How is the inventory distributed relative to where young learners live, both today and 10 years from now?
  ◦ If you look at your highest needs and most challenged schools, where are the head start centers and pre K facilities in relationship to those challenged schools?
  ◦ Where are high schools in relation to colleges and places to gain technical skills?
  ◦ What the spatial relationship between high schools and postsecondary institutions? How does that affect collaboration and opportunities for dual enrollment and other methods of accelerated learning?

4. **Thoughtful school and service siting**

Nevada faced significant increases in school enrollment (1.6%) in 2011. If enrollments continue to grow rapidly, how can the placement of educational facilities impact achievement? Schools should be located adjacent to public facilities and Pre-K, health, social, and educational services that support healthy families. Currently school siting policy should be revamped to consider spatial relationships and access to opportunity.

**Policy examples:**

• **Co-locate schools.** Some areas are locating schools and other learning facilities near other community resources to capitalize on community skillsets and knowledge. For example, in Jenkins, Oklahoma, Grace Living built two classrooms inside its facility and arranged for the school district to rent the space. Results were mutually beneficial, with better health outcomes for the elderly and improved reading skills for the children. An aviation high school in Seattle Washington located its facility right next to the Boeing Fields and the Museum of Flight. The location allows for easy and frequent interaction between students and mentors in the field. Portland, Oregon is considering locating a pharmacology and life sciences institute near the Oregon Health Sciences University.

**Future research**

• How can we think about learning places much more flexibly then we did in the past?
• How is technology integrated into community centers, libraries, etc.? Internet, space for devices/to use devices, etc.
• For afterschool programs:
  ◦ Regionally, how much is spent on afterschool programming?
  ◦ How many different agencies deliver it?
  ◦ Does it appear enrollees are making more progress in school than non-enrollees?
  ◦ Who is served and who is missed?

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Appendix L –
Resilient Communities & Distressed Neighborhoods
Resilient Communities and Distressed Neighborhoods:

The Findings of the Southern Nevada Strong
Ethnography Research Summer Clinic

Draft: 10/26/2013

Gianpaolo Baiocchi, Diana Graizbord, Johnnie Lotesta, Michael Rodríguez-Muñiz
Introduction

The following report is the result of a 10-week research study undertaken by a team of fourteen graduate students from the University of Nevada Las Vegas. The research was organized by the Southern Nevada Strong coalition in partnership with UNLV’s Department of Public Health. Southern Nevada Strong (SNS) is a collaborative regional planning initiative funded by a $3.5 million dollar grant from the U.S. Department of Housing and Urban Development’s (HUD) Sustainable Communities Program. Specifically, SNS seeks to build a foundation for long-term economic success and community livelihood by better integrating transportation, housing, and economic development. To this end, the SNS regional planning process involves in-depth research to assess the current conditions and needs of the Southern Nevada region, as well as a multi-year, community-engaged planning process to propose collaborative, innovative and sustainable solutions to meet these needs. Both these projects are organized around the pursuit of seven “livability principles” that SNS hopes to achieve through the planning process: transportation, affordable housing, economic competitiveness, community, policy and investment coordination, value existing communities and neighborhoods. The result of the SNS regional planning process will be a regional plan that will highlight solutions to the region’s needs, as well as implementation strategies and priority projects.

The Southern Nevada Strong regional planning initiative is staffed by the City of Henderson on behalf of the Southern Nevada Regional Planning Coalition (SNRPC), the project’s governing body. The Southern Nevada Strong Ethnography Research Summer Clinic was organized at the initiative of SNS in partnership with UNLV. The purpose of the Ethnography Research Summer Clinic was to contribute to SNS’s research on current community conditions, needs, and opportunities for growth through detailed observation of key “opportunity areas” in the Southern Nevada region and in-depth interviews with community residents and stakeholders. SNS’ commitment to community-engaged regional planning calls for research that increases the range of voices participating in the discussion of regional needs and possibilities for growth. The Ethnography Research Summer Clinic and the present report are an attempt to employ ethnographic methods for the purpose of incorporating such voices.

Developing the Reports

The chapters of this report were authored by a team of UNLV graduate students based on a summer’s worth of research in each of the twelve “opportunity sites,” or focus areas. The four of us – Gianpaolo Baiocchi, Diana Graizbord, Johnnie Lotesta, and Michael Rodríguez-Muñiz – provided what might be thought of as the “technical assistance” that made this report possible. We worked with the SNS team and our UNLV partners to help identify and recruit UNLV graduate students with demonstrated research experience and extensive knowledge of the Las Vegas valley. Once selected, we worked closely with the selected students during an intensive “crash course” in urban ethnographic research to prepare them for the demands of this project.

During the week-long course students were introduced to the principles of urban theory and urban planning while gaining hands-on experience in ethnographic research methods. Throughout the course students practiced creating effective research designs centered around the SNS guiding principles, as well as collecting, and analyzing ethnographic data. At the end of the course, students were assigned individual research sites and divided into four working groups based on prevalent
themes associated with each of the SNS focus areas. Each one of us worked with a specific working group, providing guidance and feedback as they entered communities, took field notes, conducted interviews, developed analytic memos based on their ongoing research, and prepared and finalized their chapters.

We also developed and provided students with a research toolkit that included a summary of the major issues and themes covered in the course; a detailed description of the SNS project and its operative principles; an ethnographic data collection guide; and an interview guide directed at addressing each of the major themes. Working with our UNLV partners, we developed a detailed schedule to guide the students’ work throughout the remainder of the summer. Students were asked to spend approximately 10 hours per week in their field site conducting ethnographic observation on alternate days and times in order to capture as much of the life of the field site as possible. After each field site visit, students were asked to immediately type-up detailed field notes and post them in a shared folder. By the fourth week, students were asked to begin formal interviews and post interview notes and transcriptions. Each student conducted approximately 10 interviews with carefully selected actors who represented different perspectives or underrepresented groups.

The four of us periodically reviewed field and interview notes and encouraged students to look over each other’s work in order to identify emergent themes relevant to the SNS process. Students also discussed these themes and field work-related challenges during periodic conference calls with us and our UNLV partners.

In the course of their fieldwork, students were asked to write four descriptive and analytic memos. In the first memo, students were asked to create a detailed and descriptive ‘map’ of their assigned field site and to identify potential “focus” areas within that site (i.e. particular organizations, locations, or activities of interest) for deeper immersion. In the second memo, students were asked to discuss potential interviewees or relevant groups of actors specific to their field site, provide background information on these actors, the kinds of information and perspectives could they provide, and discuss access to these individuals and groups. Halfway through the research project, students were asked to draft a third memo in which they began to identify patterns, common issues and themes within the observational and interview data. The final memo due close to the end of the field research period asked students to begin to connect emergent themes to SNS objectives and principles, and to begin to describe areas for further research. Each of these memos was purposefully designed to feed into the final report and to encourage students to analyze their observation notes, interview data and memos throughout the research process.

In the final weeks, students began to draft the chapters included here. We provided guidance to each student-author as they developed these chapters, giving detailed feedback on chapter drafts. While we provided a template and worked with them closely on their reports, we encouraged individual approaches to report writing. Ultimately, they are each the author of their respective chapters. Each of the chapters preserves the uniqueness of each research site, as well as its author’s (or pair of authors) own ethnographic sensibilities and writing style.
Ethnography, or research based on the up-close observation of and conversation with people and communities has not, to our knowledge, featured prominently in any of the other Sustainable Communities projects. In fact, it remains rather underutilized in urban planning. As a recent report from the General Accounting Office (2003) suggests, ethnography has to date played a very small role in policy implementation or design, and yet it holds promise. The GAO reports makes clear – just as we hope this Southern Nevada Strong ethnographic report makes clear – that ethnographic methods offer something different from focus groups, GIS, and phone surveys. But what is this “something”?

Ethnography is a method of research best suited for capturing, in a rich and textured manner, descriptions of localized meanings, interactions, and relationships as they unfold over time. Often placing researchers intimately close to community life, this method is especially attentive to the lived contexts of activity, as well as the perspectives, aspirations, and concerns of individuals and communities. Indeed, ethnography, at its best, is a foray into the messy worlds of people and the meanings they assign to the world around them. By following their gaze and their trajectories across social worlds, we gain access to information difficult or impossible to gain using other approaches.

Though today ethnography is a widely-accepted approach in the disciplines of Sociology and Anthropology, ethnography is in principle at odds with dominant approaches in Public Policy today and its gold standards of evaluation. If policy analysis tends to seek generalities, ethnography is best equipped to identify specifics. Some of the most cutting edge methods in Public Policy, for example, rely on quasi-experimental designs, in which statistics or actual manipulations are used to simulate the conditions of a laboratory. Here, clearly defined “control” and “experimental” groups are used to uncover underlying causal mechanisms. There is no denying that quantitative and experimental methods continue to provide useful data, but the picture they provide is incomplete and can flatten nuances and dynamics of importance to community residents and the planning process.

What, then, can ethnography contribute to a planning exercise? First, ethnography can reveal the meanings that people assign to places and forces around them. People’s own understandings of neighborhoods, physical spaces, and even social processes around them ought to be of crucial significance. To an extent greater than interviews and focus groups, ethnography allows for unspoken understandings to be documented and analyzed. Second, ethnography provides insights into the daily activity and practices of individuals and groups. It can answer questions about how families specifically use public parks or concretely respond to insufficient transportation or social services, or even how people build community in the midst of poverty. Third, by taking into account both what people do and say, ethnography elevates the everyday knowledge and experiences of community residents. It provides the planning process with the “expertise” of those that will be most affected by development initiatives. It thus provides an important avenue for local groups to participate in planning. Finally, ethnography has the potential to un settle “accepted wisdom” about local dynamics. For example, even something as seemingly self-evident as what a neighborhood’s boundaries are can become especially complicated under an ethnographic gaze. Moreover, ethnography can help craft more nuanced understandings of “community,” or specific populations,

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1 One notable exception is the work of Xavier Briggs (2010), which used ethnographic and survey-based research (among other methods) to assess the impacts of HUD’s Moving to Opportunity program on low-income individuals and communities.
such as “Hispanics” or “immigrants”. Relatedly, ethnographic tools help researchers pick up on and trace sources of differences, as well as tensions across and among groups and neighborhoods.

**The Findings: Community, Insecurity, and Access to Housing and Food**

The research process deployed researchers to twelve very different sites in Southern Nevada. They range from a historic African American neighborhood (West Las Vegas) to an area surrounding a public housing project (Buena Vista), to an area of relative residential stability (Pittman), to areas that comprise large stretches of highway (the Maryland Parkway corridor). Each was chosen because they represent areas of potential investment. In each of the areas, researchers identified specific focus areas for more detailed observation, met residents, and became familiar with issues of import to community residents. Researchers kept the sustainable communities principles in mind but were also instructed to be attentive to issues of importance in the area, as described by residents themselves. Despite the wide diversity of sites, researchers identified several common themes.

It is also important to note the backdrop against which the research took place. The research took place in the aftermath of a recession that hit areas like Southern Nevada especially hard. The collapse of the “housing bubble” hit the region especially hard, as housing development has been such an important part of the non-gaming local economy. Although not all of the areas we studied had large numbers of foreclosures, all of them felt the impact of the housing crisis in one way or another. The lack of funding for social services, the fiscal crisis of some communities, homelessness, all can be linked back to the collapse of housing. Many of the areas we studied were economically distressed. The fact that the research took place during the summer - a physically punishing time of the year when at-risk families are usually most distressed, and many of the social issues were magnified.

First was the constant presence of community. Community is a much invoked (and often abused) concept in the social sciences and in urban planning. It generally refers to the social networks that bind together a neighborhood. To speak of community is to speak of sources of mutual support but also to a sense of community and common purpose that shapes the experience of residents. Southern Nevada is made up of relatively recent neighborhoods, is marked by high levels of transience and in-migration, and many of the areas under study were economically and socially distressed. Despite that, residents almost always spoke to our researchers about a sense of community and common purpose. This was most present in the relatively demarcated and stable areas, like West Las Vegas and Pittman, but was still present almost universally. Researchers identified this as present in unexpected places - social service agencies, around ethnic markets, but also in places like public facilities, schools, religious centers, and community centers. These may not all be thriving communities, but they are definitely present. A crucial issue for the regional plan will be to find ways to identify and engage communities as they are, and identifying modes of engagement and questions that are salient to them. One issue for subsequent research that was not possible to fully address in the short time period is that community, even in a relatively small and demarcated area, can be multi-faceted. Starting engagement with existing stakeholders may be unavoidable, but new Latino immigrants, for example, are not necessarily always present in some of the older standing community organizations.

A second theme - not directly related to the jurisdiction of Southern Nevada Strong but absolutely central to residents’ understandings of the places they live, was insecurity or the issue of crime and safety more specifically. Throughout the research, in informal conversations and in interviews,
residents brought up crime and safety again and again. Recent research on Las Vegas has shown that perceptions of crime correlate with satisfaction with neighborhoods (Dassopoulos et al 2012), and the research here confirms that. But our finding is more specific, and perhaps more troubling. The researchers were not asking about crime, but about community and the community’s prospects. That insecurity was so clearly associated with residents’ understandings of the communities they live in should make the issue a priority for the regional plan or at least allied efforts. That the issue of insecurity is not jurisdictionally related to the planning effort is in a way, made moot by the fact that residents themselves understand their communities as plagued by crime. A sustainable, long-term effort for the improvement of these areas should not underestimate this dimension.

A third theme that ties the reports together was the lack of access to services. Transportation, in particular, was an issue of particular concern to residents, but throughout the reports there are references to the need for greater access to social services - particularly for homelessness and mental health services. In some of the most distressed areas, this translated into a sense of being left behind. This was most graphically illustrated in the report on Buena Vista Springs, where police use one of the empty buildings as urban warfare practice. One health clinic administrator called BVS a “resource desert” while a public sector worker sorrowfully describes BVS as “the oldest ward and the forgotten ward” of his city.

A fourth issue that recurred was the lack of access to affordable housing and to fresh food. These are, of course, two issues that will not come as a surprise. One of the effects, nationally, of the housing crisis has been the reduction in available affordable housing, and Nevada is among the most distressed. If the statistical data needed any supporting evidence, the individual reports here provide it in volumes. In nearly every neighborhood, residents spoke of and related stories of hardship and of the need to affordable housing. Similarly, what is termed as food insecurity - the lack of adequate access to food for a healthy lifestyle, has been documented as being on the rise in the state (Nevada Department of Health and Human Services 2013), with as many as 15% of households in the state being food insecure. Access to healthy food is a complex issue, and it involves the incomes of poor families, the delivery of social services like food stamps, policies like free school meals, education, as well as the availability of nearby grocery stores selling fresh foods at affordable prices. It also involves the broader economy and the difficulties of production and transport of food in a challenging physical environment like Southern Nevada. As with housing, the ethnographic reports point to the importance of not only emergencial measures, like homeless shelters and emergency food provision, but to the importance of long-term planning around these issues for the health and success of these communities.

The Individual Chapters

West Las Vegas

Mark Selvaggio gives a richly textured picture of the historic West Las Vegas neighborhood. Once a successful African-American community, the Westside is a neighborhood rich in history since the early 20th-century migration of African Americans from the South. During the era of Jim Crow Laws, African Americans were forced to live in the Westside, their homes separated from whites and the thriving downtown Fremont Street casinos by railroad tracks. The neighborhood was once home to a number of successful black-owned businesses, but has been in steady decline since the 1970s. Nonetheless, the research shows that residents still maintain a strong sense of community and cohesion. A number of issues concern residents: transportation and access to downtown, housing
issues, economic opportunity, homelessness, and access to food. The report leaves off with important suggestions for subsequent research, including on the new, emerging Latino community in the Westside.

**Downtown North Las Vegas**

Kali Bertelsen and Atenia Ruiz, in their report, describe another economically challenged area in Downtown North Las Vegas. One of the oldest formally established areas in Southern Nevada, the city of North Las Vegas was incorporated in 1946. Therefore, we may reasonably determine that the majority of residents live at or below federal poverty level. Emergent themes discovered during the course of fieldwork include the impact of transience; poverty; limited access to health care; food options and recreation resources; poor pedestrian safety; economic opportunity challenges with respect to families, job-seekers, and small business owners; homelessness; weak social networks and support; and concerns of Hispanic residents.

**Buena Vista Springs**

Buena Vista Springs Apartments is a public housing project located on roughly 18 acres of in the center of Southern Nevada on the corner of Martin Luther King Boulevard and Carey Avenue. The report by Jenny Heineman and Atenia Ruiz describes the complex and surrounding area. The picture they present is a contradictory one: a strong community/social agency presence in the area, and a strong civic-minded formal network within the community. On the other hand, this area was described as “forgotten” by the rest of the city. It lacks grocery stores, retail stores, and restaurants. The lack of access to transportation and elder care were cited as problems in the district, as were instances of gang violence.

**The Medical District**

The medical district is a relatively small quadrangle dominated by the medical facilities located there. Jennifer Stevens, in her report, describes the district and its challenges. Despite being relatively well-served by transit, most employees of the medical facilities relied on their own vehicles, and viewed the area relatively negatively as a potential housing site. Of particular concern were homelessness, crime/safety, and mental illness. Stevens describes a revolving door for the mentally ill who arrive at the doors of emergency room facilities, Lack of access to mental health services means that emergency rooms are often a last resort for the mentally ill.

**Fremont Street Corridor**

Matthew Martinez provides a detailed account of life in the Fremont Street corridor. Fremont Street is the birthplace of Las Vegas’ tourism industry, but today exists in the shadow of the “Strip.” As Martinez notes, the area carries a stigma due to its widespread association with “high crime, illicit economic activity, decay, and abandonment.” Similar to other sections of the city, however, Fremont has experienced increased economic activity and investment in recent years. In his ethnographic project, Martinez focuses on three major issues: 1) the perceptions of the area held by residents, particularly with respect to crime and safety; 2) the lack of services and amenities for longtime residents; and 3) local reflections of recent development. On this latter point, Martinez finds that residents view economic investment positively, but are unsure if new development is geared towards the needs of existing residents.
Eastern Avenue and Stewart
Adrian Castrejon examines the Eastern Avenue and Stewart Avenue, an area populated by a large number of Spanish-speaking and immigrant residents. Castrejon anchors his research in two well-respected community organizations: the Rafael Rivera Community Center and the East Las Vegas Community Center. In distinctive ways, these organizations strive to improve social conditions for residents. Largely a low-income and working class area, Castrejon’s report reveals that local residents are deeply troubled by the prevalence of crime and specifically drug related activity. Moreover, residents identify housing, or more specifically the lack of quality housing, as a major challenge. Despite these and other challenges (e.g. access to quality produce and employment); the analysis reveals that the Eastern Avenue and Stewart area is home to numerous social services agencies and parks.

Pittman Neighborhood
In Pittman Neighborhood, Khaye Rufin finds a vibrant, active community life. Wells Park, situated in the center of the neighborhood, is visited daily by area residents of all ages. Mothers bring their children to the park to play or take swim lessons at the community pool; teenagers meet with friends, and elderly residents walk throughout the park. In her interviews and observations, Rufin found the park to be one of the community amenities most valued by area residents, as well as a central point of community activity and social interaction. The Sam and Mary Boyd Boys and Girls Club provides activities for youth and resources to low-income families in the area, many of which are single parent, female-headed households. Rufin found a less-visible community space in the Desert Sands RV Park General Store, one of the few retail outlets serving residents of the area. While Rufin found that residents generally enjoyed living in Pittman neighborhood and were actively engaged in the community, she also observed a great opportunity for economic growth. In her observations and interviews, Rufin noted that there were few businesses in the area and no retail, grocery, or food stores in close proximity. As a result, residents often must commute both to work and access basic necessities, creating a desire among some residents for more local stores and businesses. Finally, Rufin noticed some residents had a concern for neighborhood safety, and suggests that further research should be done in this area.

Gibson Road
In her observations of Gibson Road, Erin Sheehy pays special attention to the spatial organization of the neighborhood, considering how this influences individuals’ use of and relationships to the neighborhood. The Gibson Road neighborhood is a combination of industrial warehouses, corporate offices, retail spaces, schools, and residential developments. Gibson road itself is a four-lane street and a major thoroughfare for people traveling through and visiting the auto and fast-food businesses in the area. Sheehy finds that many people walk or bike around Gibson neighborhood, but missing pieces of sidewalk, ill-placed crosswalks, and inadequate bike lanes, combined with heavy vehicle traffic, can make pedestrian and bike travel difficult and in some cases dangerous. The economic downturn led to some home foreclosures, decreased home values, and a desire for more affordable rental housing in the area. Furthermore, Sheehy sees opportunity for business development in Gibson, especially businesses that could cater to students who come to take classes at the neighborhood’s three universities: Tuoro University, ITT Technical Institute and the University of Phoenix. Finally, Sheehy suggests that further analysis should be conducted during the
school year to better understand how Lorna Kesterson Elementary School influences the life in the neighborhood during the school year.

**Pennwood Avenue**

The Pennwood Avenue neighborhood is a small, primarily residential neighborhood with a prominent Latino population. The largest single structure in the neighborhood is Clark County High School, a top-performing Nevada public high school with three magnet programs: AMSAT, AOF, and TEACH. Due in part to these magnet programs, the school has a diverse student population and draws in students from across the Las Vegas region. In her observations of Pennwood Avenue, Shannon Steiner found that the neighborhood's connectivity to other areas plays a significant role in the way the neighborhood functions. For example, Steiner finds that businesses in the neighborhood cater primarily to tourists and workers of the Las Vegas Strip and are not as concerned with local clientele. Meanwhile, local residents voice interest in retail stores with fresh produce and businesses that would cater more directly to their needs. Steiner suggests future research should look closer at the role of Clark County High School in the neighborhood, as well as how the nature of the neighborhood might change during the school year.

**Maryland Parkway Corridor**

Rachel MacFarlane provides a detailed ethnographic account of the Maryland Parkway corridor, a 7-mile stretch of road described as host to the largest non-gaming employment centers in Las Vegas. MacFarlane also notes the diversity of the communities along the corridor, describing the corridor as one of the most racially-diverse in the city. For this study MacFarlane divides the corridor into four distinct areas: the UNLV area, the Cambridge area between Flamingo and Sahara, the Huntridge area and the Cashman area. MacFarlane focuses on the perceptions and meanings residents attach to their daily lives and experiences in each of these. While each area is described as distinct in terms of economic activity and population, MacFarlane develops cross-cutting issues identified by residents all along the corridor: low-paying jobs, concerns with safety, the high cost and irregularity of bus transportation, and run-down and outdated housing. Residents of the diverse communities that line the along the corridor identify churches, ethnic shops, open-space and parks as engendering a sense of community. MacFarlane identifies the need for better quality public housing, especially for people with disabilities at the northern and southern ends of Maryland Parkway, and increased low-cost transportation, but warns that any interventions need to be sensitive to the needs of people with disabilities and to diverse ethnic communities.

**Boulder Highway Corridor**

David Olsen provides an ethnographic account of the Boulder Highway Corridor, a 14-mile stretch running northwest to southeast just east of the Las Vegas Strip. Olsen describes the corridor as dotted with small businesses, shops and casinos catering to mostly senior residents, and with low-income and age-restricted housing communities. Given the expanse of the corridor Olsen focused the study on five areas: the Whitney Township, the Desert Sands RV Park, the Heritage Park Senior facility, the College of Southern Nevada and its surroundings, and the six-way intersection at Nellis, Flamingo, and Boulder Highways. Observation and interviews at each of these locations provide unique insights into the needs and lives of community members, business owners, and service providers. Olsen also identifies a number of issues affecting residents and business owners across the length of the corridor: pedestrian safety and access to regular and low-cost transportation.
services. These issues are particularly pressing for the mostly low-income, elderly, disabled and homeless pedestrians and public transit users. Residents and business owners interviewed also expressed a concern over drug activity along the length of the corridor and a general lack of economic opportunities. This study also reveals the importance of senior and recreational centers in providing services, shelter from the heat, and a sense of community for residents and homeless alike. Olsen suggests greater attention be paid to RV parks along the length of the corridor, where low income and elderly residents struggle with access to city life and are relatively isolated.

**Flamingo Street Corridor**

Nicholas Baxter provides an ethnographic account of the Flamingo Street a busy corridor stretching east to west across the Las Vegas valley. Flamingo Street is described as home to diverse local and small businesses and an important thoroughfare for Las Vegas residents both to and from work on the Strip or on Flamingo Street itself. Baxter divides Flamingo Street into four spatially and socially distinct areas: Boulder Highway to Spencer Street, Spencer Street to Koval Street, the Strip, and Industrial Street to the west side of Las Vegas through the Spring Valley and Summerlin. He finds corner strip malls, local bars, bus stops along with the Spring Valley Community Center and Park are as significant gathering places for residents and people who work on the corridor. Interviews and observations reveal residents’ concerns with the lack of adequate transportation and pervasive homelessness. Residents also expressed a desire for investment and support for community spaces including parks, community centers and libraries.
References


Appendix M –
Clark County Housing Market Analysis 2012-2035
1. Summary

Southern Nevada Strong contracted with ECONorthwest to assess housing demand and preferences in the Southern Nevada region. The purpose of the analysis was to estimate future housing demand by unit type and consider changes in demographics and employment growth that could have implications for future demand. It is intended to inform a larger sustainability planning process.

Recent housing market

Since 2000, population and housing growth in Clark County have outpaced the U.S. Low housing prices, driven by relatively low construction costs and available land, drew people to the 284,000 new homes (75% of which were single-family detached) built since 2000. During the nationwide housing boom, construction activity and prices increased rapidly in Clark County. When the national housing market fell, Clark County’s housing market fell more severely than the rest of the nation. By 2013, median sales prices had decreased to $150,000, below the 2003 median sales price. The rapid price decrease put many households who purchased homes between 2003 and 2007 in a position where they owed more on their mortgage than their home is worth, which contributed to a spike in foreclosure activity. At this time, while new construction and sales of homes are still occurring, the housing market in Southern Nevada remains in a state of relative distortion. Foreclosure and investment activity pricing have caused a disconnect from direct consumer demand for different housing types, and uncertainty regarding timing for market stabilization and growth affects development and consumer decision-making.¹

Future trends

While distortion in the current market complicates efforts to project housing supply and demand, the fundamental factors that most strongly correlate with housing choice remain unchanged: age of the head of household, size of the household, and income. ECONorthwest’s analysis found that the following trends related to these factors might affect future housing demand in Clark County by 2035 and cause shifts in baseline trends:

- The foreclosure crisis will continue to affect demand over the next two to five years. The most significant impact that foreclosures will have is to decrease the percentage and

¹ Anecdotal evidence (collected via a roundtable with housing developers held in March of 2013) and the data in the remainder of this report support this summary of recent market condition.
number of homeowners. As credit restrictions decrease and individual credit scores recover, previous homeowners who are now renting will look to re-enter the housing market, changing the demand dynamic as recovery occurs.

- **Growth in retirees.** People over 65 will make up 20% of the population in 2035 (up from 12% in 2012). The aging of the population will decrease demand for single-family detached units and increase demand for housing types specific to seniors, such as assisted living facilities.

- **Growth in Echo Boomers.** Echo boomers, who were between the age of 15 and 28 in 2012, are one of the fastest growing groups nationally and in Clark County. In the earlier part of the planning period, they will prefer rental housing. In the later years, some may choose to purchase homes, including small single-family detached housing, townhouses, or condominiums.

- **Growth in the Hispanic population.** A third of the County’s population will be Hispanic by 2035, which will increase demand for more affordable housing for families, such as townhouses, affordable single-family detached units, or larger apartments.

- **A projected increase in real personal income** may support demand for homeownership, especially of single-family detached units. However, the employment forecast shows growth in higher-wage sectors (e.g., Health Care or Construction) but also growth in lower-wage sectors (e.g., Retail Trade or Arts and Entertainment). This suggests that the County will continue to have demand for both higher-cost housing and lower-cost housing.

- **Housing preferences and transportation costs** will affect the location of housing demand. Two of the groups forecast to grow the most, retirees and Echo Boomers, may generally prefer to live in areas where urban services (e.g., shopping) are easily accessible. In addition, gasoline prices are forecast to remain at existing levels or to increase through 2035.

**Forecasting housing demand**

To evaluate how future demographics could change demand for housing, ECONorthwest developed two forecasts of housing demand based on: (1) a continuation of historical trends, and (2) a change in housing demand based on expected changes in demographics. The forecasts illustrate a range of reasonable possible futures since each describes a likely outcome of housing supply and demand.

Based on a set of assumptions detailed in Section 6, Clark County is forecast to have 344,392 new housing units over the 2012 to 2035 period. These units will be built more slowly, with about nearly 15,000 units permitted per year, compared with the average of nearly 26,000 new dwellings permitted annually between 2000 and 2011. Table 1 shows a breakdown of the assumptions for the three potential forecasts.
Table 1. Assumptions by forecast

<table>
<thead>
<tr>
<th>% of Total Housing Units</th>
<th>% Owner-occupied</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline – “Current Trends Continue”</strong></td>
<td><strong>Shift A – “Smaller Change”</strong></td>
</tr>
<tr>
<td>SF detached</td>
<td>64%</td>
</tr>
<tr>
<td>SF att. &amp; 2-4 units</td>
<td>13%</td>
</tr>
<tr>
<td>MF with 5+ units</td>
<td>23%</td>
</tr>
<tr>
<td>Total Homeownership</td>
<td>54%</td>
</tr>
</tbody>
</table>

Source: ECONorthwest, 2013.

Figure 1. Housing distribution by forecast type

Shift A is more likely if:
The foreclosure crisis resolves sooner. Housing prices decrease less. Personal incomes continue to grow. People who grow older in or move to Clark County generally prefer and can afford to own and live in single-family detached housing.

Shift B is more likely if:
The foreclosure crisis takes longer to resolve. Personal income stagnates or decreases in real dollars. Housing preferences change so that renting attached housing is preferable. Owning a single-family house is not financially attainable.

Source: ECONorthwest, 2013.

Relevance for short term development patterns

- Single-family homes will continue to dominate new construction activity, until demand decreases for these units.
- Given that many baby boomers are starting to retire, there may be latent demand for alternative housing types for seniors already living in the Southern Nevada region.
Relevance for long term development patterns

- Increasing population diversity could spur demand for less common housing types, including some that have limited availability in Southern Nevada currently. These include both owner-occupied and renter-occupied attached single-family homes.
- Specialized housing that caters to specific populations may be more in-demand. This could include assisted care, active living communities, homes for extended families, etc.
- Increasing transportation costs and available land within urbanized areas could increase the demand for infill development that is close to existing services. Successful development will require the region to overcome existing barriers to infill development.

Relevance for economic development

- The population and employment projections that underlie this analysis project that employment will grow faster than the population over the planning period. This could indicate changes in spending power, housing demand, and land needs for employment uses within the community. It also suggests that the region should focus on economic development activities aimed at increasing employment opportunities.
- The Health Care and Social Assistance sector is forecast to experience the largest growth rate (a 112% increase). There may be opportunities for housing close to medical facilities.
- Southern Nevada lost a significant number of construction jobs after construction activity slowed during the housing crisis. The construction sector is expected to double the number of jobs through 2035.
- A clearer understanding of where and how industries might grow could improve planning activities in the region by: (1) allowing the region to plan for an appropriate supply of industrial lands; (2) allowing the planning and development community to consider the housing preferences of future workers.
2. Introduction

The Southern Nevada Regional Planning Consortium (SPRPC) contracted with Fregonese Associates and ECONorthwest to assist with the creation of development scenarios as part of Southern Nevada Strong, a regional strategy for sustainable development. The goal of the project is to build a foundation for long-term economic success and community livelihood by better integrating reliable transportation, safe and affordable housing, and job opportunities throughout Southern Nevada.

To inform this work, ECONorthwest conducted technical analysis of housing demand and preferences in the Southern Nevada region. The purpose of the analysis was to estimate future housing demand and consider changes in employment growth that could have implications for future housing demand. The analysis was designed to:

- Understand how population growth and changes in population growth may affect housing demand in Clark County through in-migration of population from outside the region, changes in the region’s ethnic composition, and changes in the region’s age distribution.
- Examine the relationships between age, income, and ethnicity to understand how the expected demographic changes may affect the types of housing developed in the future.

The basis for this analysis is the University of Nevada’s long-term forecast for overall population growth, which describes expected changes in the age distribution and ethnicity of the population in the future. The forecast also describes changes in employment growth that may have implications for future housing demand.

This memorandum examines the housing market conditions in Clark County, considering changes in the housing market since 2000 with a focus on the factors that are most closely linked to housing choice: income, age, and household composition. It presents two forecasts of future housing demand in Clark County: (1) demand based on current conditions and housing choice and (2) potential changes in demand based on expected demographic and economic changes in Clark County. The primary purpose of these forecasts is to provide information to Fregonese Associates in support of developing scenarios for future development in Clark County.

Organization of this memorandum

This memorandum is organized into the following sections:

- **Factors affecting housing choice** describes the primary demographic and economic factors that affect housing choice: income, age, and household composition.
- **Housing market conditions in Clark County** presents a brief summary of Clark County’s housing market relative to Nevada and discusses changes in the housing market since 2000. This section summarizes potential effects of demographic and economic factors on future housing choice.
• **Housing forecast** presents two forecasts of housing demand in Clark County. One forecast assumes that housing conditions change relatively little from existing and historical conditions, besides continued recovery from the housing market crash. An alternative forecast assumes that housing demand will shift as a result of changing demographics, especially the aging of the population and growth in Hispanic population.

• **Appendices:**
  - Appendix A presents a summary of data as well as data tables and charts that describe the housing market in Clark County and selected cities within the County.
  - Appendix B presents a framework necessary to understand the factors that affect housing choice. This framework is the basis for the approach ECONorthwest used to forecast potential changes in housing growth in Clark County through 2035.

3. **Factors affecting housing choice**

This section presents a brief summary of the factors that affect housing choice. See Appendix B for a longer discussion of these factors.

Analysts typically describe housing demand as the *preferences* for different types of housing (i.e., single-family detached or apartment), and the *ability to pay* for that housing (the ability to exercise those preferences in a housing market by purchasing or renting housing; in other words, income or wealth).

One way to forecast housing demand is with detailed analysis of demographic and socioeconomic variables. With a fine-grained analysis and sufficiently complex data set, the analysis might find that each household has a unique and measurable set of preferences for housing. But no region-wide housing analysis can build from the preferences of every individual household. Instead, most housing market analyses describe *categories* of households and assume that households have similar preferences.

Many demographic and socioeconomic variables affect housing choice. These include: age of householder, household composition (e.g., married couple with children or single-person household), size of household, ethnicity, race, household income, and accumulated wealth (e.g., real estate or stocks). However, the literature about housing markets finds that age of the householder, size of the household, and income are most strongly correlated with housing choice.

---

2 In addition to not being able to measure the preferences of all existing households (now and in the future); one could not know what specific households would be migrating to the region.

3 The research in this memorandum is based on numerous articles and sources of information about housing, including:

• **Age of householder** is the age of the person identified (in the Census) as the head of household. Households make different housing choices at different stages of life. For example, a person may choose to live in an apartment when they are just out of high school or college, but if they have children, they may choose to live in a single-family detached house.

• **Size of household** is the number of people living in the household. Younger and older people are more likely to live in single-person households. People in their middle years are more likely to live in multiple person households (often with children).

• **Income** is the household income. Income is probably the most important determinant of housing choice. Income is strongly related to the type of housing a household chooses (e.g., single-family detached, duplex, or a building with more than five units) and to household tenure (e.g., rent or own). A review of census data that analyzes housing types by income in most cities shows that as income increases, households are more likely to choose single-family detached housing types. Consistent with the relationship between income and housing type, higher income households are also more likely to own than rent.

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AARP. Home and Community Preferences of the 45+ Population. 2010.
ECONorthwest’s analysis of 2000 Census Public Use Microdata Sample (PUMS) data for Oregon and counties within Oregon.
U.S. Census data for 1990, 2000, and American Community Survey data.
3.1 National trends affecting housing mix

The national demographic trends that will affect housing demand across the U.S., as well as Nevada and Clark County, are:

- **Aging of the baby boomers.** By 2035, the youngest baby boomers will be over 70 years old. By 2035, people 65 years and older are projected to account for about 21% of the U.S. population, up from about 12% of the population in 2000.

- **Growth in echo boomers.** Echo boomers are a large group of people (Generation Y) born from the late-1970’s to early 2000’s, with the largest concentration born between 1982 and 1995. By 2035, echo boomers will all be older than 40 years old, with the oldest echo boomers over 50 years old. The echo boomers will form households and enter their prime earnings years during the 20-year planning period.

- **Increase in diversity.** The Hispanic population is the fastest growing ethnic groups in the U.S. By 2035, first and second-generation Hispanics are projected to account for about 23% of the U.S. population, an increase from about 13% of the U.S. population in 2000. Growth in the Hispanic population will be the result of natural increase (more births than deaths) and immigration from other countries. About 90% of the County’s working-age population growth through 2035 will be accounted for by immigrants and their U.S.-born children.4


4. Trends affecting housing growth and change in housing mix in Clark County

Tables 2-4 summarize the factors affecting housing choice in Clark County through 2035.
Table 2. Baby boomers (Age in 2012: 46 to 65 years old; Age in 2035: 71 to 90 years old)

<table>
<thead>
<tr>
<th>Demographic trends</th>
<th>Baby boomers are the fastest growing segment of the County’s population.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• People over 65 are forecast to grow from 12% of the County’s population in 2012 to 20% in 2035.</td>
</tr>
<tr>
<td></td>
<td>• Growth in people over 65 years old in Clark County will result in growth of nearly 330,000 people in this age group in the County or 40% of population growth over the 2012 to 2035 period.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age of household head</th>
<th>Clark County’s older householders are more likely to be homeowners.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Homeownership peaks for householders 65 to 74. More than 74% of householders 65 to 74 are homeowners</td>
</tr>
<tr>
<td></td>
<td>• Homeownership begins to decrease for householders over 75 years old. About 71% of householders over 75 in Clark County are homeowners.</td>
</tr>
<tr>
<td></td>
<td>• A majority of people over 45 years old express an interest in remaining in their home or in their community as long as possible.(^5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Household size and composition</th>
<th>Household size decreases with age after the household head reaches age 55 in Clark County.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• About 66% of households with householders 55 to 64 years old have two or more persons.</td>
</tr>
<tr>
<td></td>
<td>• About 61% of households with householders 65 to 74 years old have two or more persons.</td>
</tr>
<tr>
<td></td>
<td>• About 53% of households with householders 75 years and older have two or more persons.</td>
</tr>
<tr>
<td></td>
<td>• Growth in households with householders 65 years and older will result in growth in single-person households. More than one-third of households 65 years and older were single-person households in 2000 and 2011. Nearly half of households 75 years and older were single-person in 2000 and 2011.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Household income</th>
<th>Clark County’s household income peaks between age 45 to 64.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Household income decreases after age 65; median income for households age 45 to 64 was $53,307 compared to $39,555 for people age 65 and older.</td>
</tr>
<tr>
<td></td>
<td>• Households with householders over age 65 have lower than average household income, about 78% of the County’s median household income.</td>
</tr>
<tr>
<td></td>
<td>• Lower income does not necessarily result in greater problems with housing affordability or lower homeownership rates for people over age 65 because some householders over age 65 have paid off their mortgage. For households who have paid off their mortgage, lower income does not necessarily result in lower disposable income or affect their ability to continue to own their home.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential effect on housing demand</th>
<th>The major impact of the aging of the baby boomers on demand for new housing will be through demand for housing types specific to seniors, such as assisted living facilities. Baby boomers will make a range of housing choices in Clark County:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Many will choose to remain in their homes as long as they are able.</td>
</tr>
<tr>
<td></td>
<td>• As their health fails, some will choose to move to group housing, such as assisted living facilities or nursing homes.</td>
</tr>
<tr>
<td></td>
<td>• Some may downsize to smaller single-family homes (detached and attached) or multi-family units. These will be a mixture of owner and renter units.(^6)</td>
</tr>
<tr>
<td></td>
<td>• Some may choose to move to retirement or age-restricted communities.</td>
</tr>
</tbody>
</table>

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\(^5\) Multiple studies show that people over age 45 prefer to stay in their home or community as long as possible, including multiple surveys by AARP (see [http://www.aarp.org/research/surveys](http://www.aarp.org/research/surveys)). The AARP survey *Home and Community Preferences of the 45+ Population* shows that 85% of respondees want to stay in their current residence and community as long as possible.

\(^6\) The AARP survey *Approaching 65: A Survey of Baby Boomers Turning 65 Years Old* of people 65 years old shows that about 15% of responding households are planning to downsize to smaller homes over the next few years.
Table 3. Echo Boomers (Age in 2012: 15 to 28 years old; Age in 2035: 40 to 51 years old)

| Demographic trends | • Echo boomers are one of the fastest growing segments of Clark County’s population.  
• By 2035, forecasts are that there will be approximately 280,000 additional people aged 25-64.  
• Growth in people 25 to 64 years year old will result in about 34% of total population growth over the 2012 to 2035 period. |
| Age of household head | • About 84% of householders age 25 and 67% of householders age 25 to 34 were renters in Clark County.  
• Homeownership rates increase for householders age 35 to 44. About 33% of householders aged 25-34. The rate jumps to 45% between 35 and 44. |
| Household size and composition | • Household size increases until the household head reaches 54 years old.  
• More than three-quarters of households between with heads of household between 15 and 54 years old had two or more persons in 2000 and 2011.  
• In 2000, the share of one-person households increased from about 20% for households younger than 44 years old to about one-quarter of households 45 to 64 years old. This pattern appears to be true in 2011. |
| Household income | • Younger households have lower income on average in Clark County.  
• About one-third of households under 25 (which includes college students) had income less than $25,000, while 71% had an income less than $50,000.  
• About 49% of households between 25 and 44 had income of less than $50,000.  
• Households between 25 and 44 years have higher than average income, at about 105% of Clark County’s median household income. |
| Effect of trends on household choice | Growth in echo boomers will result in increased demand for all housing types in Clark County. Recent research hypothesizes that echo boomers may make different housing choices than their parents as a result of the on-going recession and housing crisis. This suggests that echo boomers will prefer to rent and will prefer to live in multi-family housing, especially in large cities. Other studies suggest that the majority of echo boomers prefer to own a single-family home. Our conclusion based on review of recent research is that the majority of echo boomers are not likely to make fundamentally different housing choices than previous generations as they age and have families, though a relatively larger portion of them may ultimately prefer smaller homes with fewer square feet that are closer to urban centers.  
• Echo boomers are likely to choose to rent a multi-family unit when they are under 30 years. Though some may prefer this type of unit, it is also likely to be necessitated by lower income.  
• As they establish careers, receive increased incomes, and form families, a large share of echo boomers in Clark County will likely choose to live in an owner-occupied single family house.  
• Recent articles suggest that echo boomers who prefer single-family units may prefer (or only be able to afford) smaller single-family units.  
• Some echo boomers may prefer to live in housing closer to the economic center(s) of Clark County as a result of economic necessity, especially if gasoline continues to be comparatively expensive, or through lifestyle choices. |

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7 Information about household size and composition by age for Echo Boomers is a combination of 2000 Census data and 2011 American Community survey. The 2010 Decennial Census and 2011 American Community Survey group people aged 15 to 54 into one group, making analysis of housing size information impossible.

8 Examples of such research include Housing in America: The New Decade from the Urban Land Institute or The Rise of the Non-Traditional Household from Multi-family Trends.

9 A national survey of Echo Boomers in 2010 shows that: two-thirds of Echo Boomers expect to own their home by 2015, that nearly two-thirds expect to live in a single-family home, one-quarter expects to live in an apartment or condominium. These results are from the Urban Land Institute study Generation Y: America’s New Housing Wave.
Table 4. Change in ethnic composition

<table>
<thead>
<tr>
<th>Demographic trends</th>
<th>The Hispanic population is the fastest growing ethnic group in Clark County. It is expected to grow at twice the rate of total population growth between 2012 and 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• The Hispanic population grew from 22% of the population in Clark County in 2000 to 29% in 2010.</td>
</tr>
<tr>
<td></td>
<td>• By 2035, 33% of Clark County’s population is expected by be Hispanic.</td>
</tr>
<tr>
<td></td>
<td>• Nationally, about half of Hispanic population growth is expected to be the result of immigration (people moving to the U.S.) and half from growth of second-generation immigrants (people born in the U.S. to first generation immigrants)</td>
</tr>
<tr>
<td>Age of household head</td>
<td>Clark County’s Hispanic population has a different age structure than the overall population. In 2012 median age for Hispanics in Clark County was 26 years, compared to 35 years for all residents of Clark County. In the U.S., the average age of first generation Hispanic immigrants was 41, compared with the average of 37 years. The average age of second generation Hispanic immigrants in the U.S. was 28.</td>
</tr>
<tr>
<td>Household size and composition</td>
<td>Hispanic households are more likely to have children and have more persons per household but they are less likely to be homeowners.</td>
</tr>
<tr>
<td></td>
<td>• 44% of Hispanic households in Clark County had children under 18 years, compared with the County average of 30% of households.</td>
</tr>
<tr>
<td></td>
<td>• About 14% of Hispanic households had more than one occupant per room, compared with 5% of all households in Clark County.</td>
</tr>
<tr>
<td></td>
<td>• Average household size for Hispanic households in Clark County was 3.7 persons per household, compared with the County average of 2.7 persons per household.</td>
</tr>
<tr>
<td></td>
<td>• About 46% of Hispanic households are owners, compared with an ownership rate of 57% for all households in Clark County.</td>
</tr>
<tr>
<td></td>
<td>• Nationally, about 43% of first generation Hispanic households own their homes and 50% of second generation Hispanic households own their homes.</td>
</tr>
<tr>
<td>Household income</td>
<td>Hispanic households in Clark County have lower than average income, with household income of $39,100, which was 81% of median income ($48,200). The following national housing trends are likely to apply to immigrant households in Clark County:</td>
</tr>
<tr>
<td></td>
<td>• First generation Hispanic households generally have lower income, in part as a result of their relatively young age and as result of generally lower educational achievement.</td>
</tr>
<tr>
<td></td>
<td>• Second generation Hispanics generally have higher incomes and educational attainment than first generation Hispanics but lower than the U.S. average.</td>
</tr>
<tr>
<td></td>
<td>• In 2012, the national median household income for first generation Hispanic households was $34,600, compared to $48,400 for second generation Hispanic households, compared with the U.S. average of $58,200.</td>
</tr>
<tr>
<td>Potential effect on housing demand</td>
<td>Growth in Hispanic households may result in increased demand for lower cost single-family and multi-family housing in Clark County.</td>
</tr>
<tr>
<td></td>
<td>• Housing affordability is a problem for many households in Clark County. Affordability is likely to be a more common problem for Hispanic households, especially first generation Hispanic immigrants, because immigrants have lower income on average.</td>
</tr>
<tr>
<td></td>
<td>• First generation Hispanic immigrants are likely to choose multi-family housing, in part because that is what they can afford.</td>
</tr>
<tr>
<td></td>
<td>• Homeownership increases the longer immigrants stay in the U.S. Longer-term first generation immigrants and second-generation immigrants may become home owners, depending on their ability to afford owning a home.</td>
</tr>
<tr>
<td></td>
<td>• Homeownership increases for second-generation immigrant households.</td>
</tr>
</tbody>
</table>

---

10 This table contains information from the U.S. Census 2010 and 2011 American Community Survey. Information at the national (U.S.) level about Hispanics in this section is from the Pew Research Center report Second-Generation Americans: A Portrait of the Adult Children of Immigrants.
5. Housing conditions in Clark County

This section summarizes key information about Clark County’s housing market, which will affect development in Clark County over the 2012 to 2035 period.

5.1 Housing tenure and mix

Figure 2 shows tenure in Clark County, Nevada, and the largest cities in Clark County for 2000 and 2011. Homeownership rates in Clark County declined from 59% in 2000 to 54% in 2011. This change is consistent with the statewide decline in homeownership from 61% to 56% in 2011. This change is also consistent with the national trend in declining homeownership rates.

Homeownership rates declined in Las Vegas (59% in 2000 to 52% in 2011), North Las Vegas (70% in 2000 to 58% in 2011), and Henderson (71% in 2000 to 64% in 2011).

Figure 2. Tenure, Nevada, Clark County, and selected cities, 2000 and 2011

Table 5 shows vacancy rates in Clark County and the largest cities in Clark County for 2010. Overall vacancy rates in 2010 were about 15% for the County, compared to 11.4% for the U.S. and 14.3% for Nevada. Clark County’s recent vacancy rates are higher than historical rates, with a countywide vacancy rate of 11% in 2005 and 8.5% in 2000.

Table 5. Vacancy rates, 2010, Clark County and select cities

<table>
<thead>
<tr>
<th></th>
<th>Clark County</th>
<th>Las Vegas</th>
<th>North Las Vegas</th>
<th>Henderson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total housing units</td>
<td>840,343</td>
<td>243,701</td>
<td>76,073</td>
<td>113,586</td>
</tr>
<tr>
<td>Total occupied</td>
<td>715,365</td>
<td>211,689</td>
<td>66,499</td>
<td>101,314</td>
</tr>
<tr>
<td>Total vacant</td>
<td>124,978</td>
<td>32,012</td>
<td>9,574</td>
<td>12,272</td>
</tr>
<tr>
<td>Vacancy rate</td>
<td>14.9%</td>
<td>13.1%</td>
<td>12.6%</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

Source: Decennial Census 2000 H004; American Community Survey 2011 B25003

Source: U.S. Census 2010 SF1 H3.
Figure 3 shows the mix of housing in Clark County and the largest cities in Clark County for 2011. About two-thirds of housing in Clark County was single-family detached (including mobile and manufactured housing). North Las Vegas and Henderson had the largest percentage of single-family detached housing, at 76% and 73% of housing respectively.

![Figure 3. Housing type, occupied housing units, 2011, Clark County and select cities](image)

Source: American Community Survey 2011 B25032.

Figure 4 shows housing mix by type of housing and tenure in Clark County in 2000 and 2011. More than 85% of owner-occupied units were single-family detached units in 2000 and 2011. The share of single-family detached rental units increased from 19% in 2000 to 35% of renter-occupied units in 2011. This increase may be a side effect of the housing market conditions.

![Figure 4. Housing type by tenure, occupied housing units, 2000 and 2011, Clark County](image)
The key conclusions about housing tenure and mix are:

- Vacancy rates are cyclical and generally fluctuate between 4% and 8% in urban areas with a healthy housing market. Vacancy rates in multifamily housing are generally higher than in single-family housing in a healthy housing market. Clark County’s vacancy rates appear to be high relative to vacancy rates during the last decade, consistent with vacancy rates in Nevada and the U.S.

- The decline in homeownership rates is consistent with problems in the regional housing market, with increased in foreclosure activity and housing prices declines.

- The majority of housing in Clark County is single-family detached housing. The majority of housing developed over the 2000 to 2011 period was also single-family detached housing.

- The decline in homeownership rates and increased share of renters living in single-family detached housing is consistent with other evidence (including anecdotal evidence from interviews) that single-family detached housing was overbuilt during the recent housing market bubble.

### 5.2 Development trends

Figure 5 shows residential building permits issued between 2000 and 2011 in Clark County. Over the 11-year period, more than 284,000 residential building permits were issued, averaging 25,800 permits issued annually. The number of permits issued peaked between 2003 to 2005, with more than 35,000 permits issued each of these years. Between 2009 and 2010, about 5,000 permits were issued each year, substantially below the average number of permits issued annually over the past 11 years. Nearly three-quarters of permits issued were for single-family units, with about one-quarter issued for multifamily units.

About half of the permits for all housing were issued in Las Vegas, North Las Vegas, and Henderson. More than half of the permits for multifamily housing were issued in Las Vegas.
5.3 Housing costs and foreclosure activity

Figure 6 shows housing prices from the Case Shiller Home Price Index for the Las Vegas region. The Case-Shiller home price index shows that Clark County’s housing prices increased gradually between 1987 and 2003. Between 2003 and late 2006, housing prices more than doubled. This change in price is consistent with other large urban housing markets in the U.S.
Table 6 shows median sales price for single-family detached housing sold in Clark County selected months in 2003, 2007, and 2013. Between 2003 and 2007, the median sales prices nearly doubled from $187,250 to $300,000. By 2013, median sales prices decreased to $150,000, below the 2003 median sales price.

Table 6. Median sales price, single-family detached housing, Clark County, April 2003, April 2007, and February 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Median Sales Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>$187,250</td>
</tr>
<tr>
<td>2007</td>
<td>$300,000</td>
</tr>
<tr>
<td>2013</td>
<td>$150,000</td>
</tr>
</tbody>
</table>

Change 2003 to 2011
- Dollar: -$37,250
- Percent Change: -20%

Change 2007 to 2011
- Dollar: -$150,000
- Percent Change: -50%

Source: National Association of Realtors, Greater Las Vegas Association of Realtors

Figure 7 shows that median sales prices for single-family detached housing in Clark County, Las Vegas, North Las Vegas, and Henderson increased over the 2011 to 2013 period. Median sales prices were consistently highest in Henderson (at nearly $200,000 in 2013) and lowest in North Las Vegas (at about $130,000 in 2013).

Figure 7. Median sales price, single-family detached housing, Las Vegas, North Las Vegas, and Henderson, selected months in 2011, 2012, and 2013

Source: National Association of Realtors, Greater Las Vegas Association of Realtors
Figure 8 shows cost burden for Nevada and Clark County. Cost burden is a measure of housing affordability, based the HUD standard that says that housing is affordable if it costs no more than 30% of a household’s gross income. About 53% of all households in Clark County are cost-burdened (i.e., pay more than 30% of their gross income for housing costs), with 54% of renter-households and 38% of owner-households being cost-burdened. In comparison, 43% of all households in Nevada are cost burdened, with 52% of renter-households and 35% of owner-households being cost-burdened.

Figure 8. Housing Costs as a percent of monthly household income by tenure in 2011, Nevada and Clark County

![Cost Burden for Nevada and Clark County](image)

Source: American Community Survey 2011 B25091 and B25070.

Figure 9 and Figure 10 show information about foreclosure filings in Clark County. Notice of foreclosure sales were down 39% year over year from February 2012. However, notices of default were up 102% during the same period. Notices of default are the leading indicator for notice of sales, so it is likely that this number will increase in 2013.

Preforeclosures increased 11% in from January to February 2013. This is indicative of the trend of increasing notice of sales. There were 0.8 foreclosure cancellations for every sale (3rd party or back to the bank). Since February 2012 the ratio has dropped by 13% to 0.67 cancellations per sale.

The combination of fewer cancellations and increasing preforeclosures will likely lead to an increase in the number of foreclosures in 2013. Bank owned properties (REO) decreased 50% in the past year. As the numbers of REO decrease, the market will stabilize as the supply of low priced inventory decreases.
The key conclusions about housing costs and foreclosure activity are:

• Clark County’s housing market had a larger-price bubble than the national housing market and it is taking longer for the Clark County housing market to recover from the dramatic increase and decrease in prices between 2003 and 2013.

• The rapid price changes put many households who purchased homes during the housing bubble (mostly between 2003 and 2007) in a position where they owe more on their mortgage than their home is worth. This contributed to the spike in foreclosure activity.

• In the short term, increased foreclosures have caused housing prices to drop and have increased the supply of houses listed for sale.

• The spike in foreclosures caused by the bursting of the housing bubble will likely not have a significant impact on the long-term demand for housing.

• The most significant impact the foreclosure crisis will have on future housing demand is through the decrease in the percentage and number of homeowners. Previous homeowners who are now renting will look to re-enter the housing market in the future as credit restrictions decrease and individual credit scores recover.

• Housing affordability, specifically for renters, is a problem despite recent decreases in rental rates. Approximately half of Clark County’s renter households are cost-burdened; rents would have to drop significantly to be affordable for most renter households.
6. Housing forecast

The prior sections describe Clark County’s housing market, present forecasts for change in population and employment, and discuss expected demographic changes. Tables 2-4 in Section 4 describe how the key factors affecting housing demand may affect Clark County’s housing market over the next two decades. This section presents two forecasts of housing demand based on: (1) a continuation of historical trends, and (2) a change in housing demand based on expected changes in demographics.

6.1 Continuation of historical trends

The analysis of historical and current housing market condition leads to a baseline forecast of new housing units likely to be built in Clark County during the 2012 to 2035 period. Table 7 shows an estimate of that housing in Clark County based on recent data. The forecast is based on the following assumptions:

- Population will increase by 866,000 people from 2012 to 2035. This forecast of population is consistent with the University of Las Vegas’ Center for Business and Economic Research forecast of population, *Population Forecasts: Long-Term Projections for Clark County, Nevada, 2012-2050*.
- The average household size will remain at 2.71 persons per household.
- Vacancy rates for all housing types will decrease to 9.0%, consistent with more typical vacancy rates in Clark County.

Based on these assumptions, Clark County will have 344,392 new dwelling units over the 2012 to 2035 period.\textsuperscript{11} This forecast shows that the County will have fewer dwellings permitted per year, nearly 15,000, compared with the average of nearly 26,000 new dwellings permitted annually between 2000 and 2011. This change is consistent with the population forecasts’ assumption that future growth will be substantially slower than recent historical growth.

<table>
<thead>
<tr>
<th>Table 7. Forecast for growth in housing, Clark County, 2012 to 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>Change in persons</td>
</tr>
<tr>
<td>minus Change in persons in group quarters</td>
</tr>
<tr>
<td>equals Persons in households</td>
</tr>
<tr>
<td>Average household size</td>
</tr>
<tr>
<td>New occupied DU</td>
</tr>
<tr>
<td>times Aggregate vacancy rate</td>
</tr>
<tr>
<td>equals Vacant dwelling units</td>
</tr>
<tr>
<td><strong>Total new dwelling units (2012-2035)</strong></td>
</tr>
<tr>
<td><strong>Average DU per year</strong></td>
</tr>
</tbody>
</table>

Source: ECONorthwest, 2013

\textsuperscript{11} The forecast of new units does not account for dwellings that will be demolished. This analysis does not factor those units in; it assumes they will be replaced at the same site.
Table 8 shows the distribution of these dwelling units by structure type for the 2012 to 2035 period. The distribution is based on the existing distribution of housing by type in Clark County (see Figure A-21). Table 8 shows that Clark County would need:

- **Single-family detached (including manufactured and mobile homes):** 220,411 new dwelling units
- **Single-family attached and 2-4 (including townhouses/row houses, duplexes, and tri- and quad-plexes):** 44,771 new dwelling units
- **Multi-family with 5+ units:** 79,210 new dwelling units

### Table 8. Forecast for Growth in Housing by Type of Structure, Clark County, 2012 to 2035

<table>
<thead>
<tr>
<th>Dwelling Units by Structure Type</th>
<th>Estimate of Housing Units (2012-2035)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total new dwelling units 2012-2035)</td>
<td>344,392</td>
</tr>
<tr>
<td>Dwelling units by structure type</td>
<td></td>
</tr>
<tr>
<td>Single-Family Detached</td>
<td></td>
</tr>
<tr>
<td>Percent single-family</td>
<td>64%</td>
</tr>
<tr>
<td><strong>equals</strong> Total new single-family DU</td>
<td>220,411</td>
</tr>
<tr>
<td>Single-family Attached and 2-4 Units</td>
<td></td>
</tr>
<tr>
<td>Percent single-family attached and 2-4 units</td>
<td>13%</td>
</tr>
<tr>
<td><strong>equals</strong> Total single-family attached and 2-4 Units</td>
<td>44,771</td>
</tr>
<tr>
<td>Multifamily with 5+ Units</td>
<td></td>
</tr>
<tr>
<td>Percent multifamily with 5+ Units</td>
<td>23%</td>
</tr>
<tr>
<td><strong>equals</strong> Total multifamily with 5+ Units</td>
<td>79,210</td>
</tr>
<tr>
<td>Total new dwelling units</td>
<td>344,392</td>
</tr>
</tbody>
</table>

Source: ECONorthwest, 2013

Table 9 allocates new units by structure type and tenure, assuming:

- The same distribution of housing by type in Table 8.
- Continuation of the Clark County’s current tenure, with 54% of housing owner-occupied and 46% renter occupied.
- Continuation of the distribution of structures by tenure (e.g., 75% of single-family detached housing was owner-occupied and 25% was renter-occupied in 2011).

Table 9 shows that Clark County will need:

- **Owner-occupied:** 185,265 units. The majority of this housing will be single-family detached (164,814 units).
- **Renter-occupied:** 159,127 units. Rental units will be divided among multi-family with five or more units, single-family detached, and single-family attached and 2-4 units per structure.
Table 9. Forecast for growth in housing by type of structure and tenure, Clark County, 2012 to 2035

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>Owner-Occupied New DU by Type</th>
<th>Percent by Type</th>
<th>Renter-Occupied New DU by Type</th>
<th>Percent by Type</th>
<th>Total New DU by Type</th>
<th>Percent of Total DU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family Detached</td>
<td>164,814</td>
<td>75%</td>
<td>55,597</td>
<td>25%</td>
<td>220,411</td>
<td>64%</td>
</tr>
<tr>
<td>Single-family Attached and 2-4 Units</td>
<td>14,256</td>
<td>32%</td>
<td>30,515</td>
<td>68%</td>
<td>44,771</td>
<td>13%</td>
</tr>
<tr>
<td>Multifamily with 5+ Units</td>
<td>6,195</td>
<td>8%</td>
<td>73,015</td>
<td>92%</td>
<td>79,210</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Total dwelling units</strong></td>
<td><strong>185,265</strong></td>
<td><strong>54%</strong></td>
<td><strong>159,127</strong></td>
<td><strong>46%</strong></td>
<td><strong>344,392</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: ECONorthwest, 2013

Table 10 shows a rough estimate of future housing demand by income range. This estimate is based on the current distribution of households among income segments and the median family income in Clark County in 2012. Table 10 shows that about one-third of households will be low or very-low income and about one-third will have nearly- or above-average income.

<table>
<thead>
<tr>
<th>Market Segment by Income</th>
<th>Income range</th>
<th>Number of Households</th>
<th>Percent of Households</th>
<th>Financially Attainable Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (120% or more of MFI)</td>
<td>$85,680 or more</td>
<td>84,044</td>
<td>23%</td>
<td>All housing types; higher prices</td>
</tr>
<tr>
<td>Upper Middle (80%-120% of MFI)</td>
<td>$57,120 to $85,680</td>
<td>40,907</td>
<td>11%</td>
<td>All housing types; lower values</td>
</tr>
<tr>
<td>Lower Middle (50%-80% of MFI)</td>
<td>$35,700 to $57,120</td>
<td>109,360</td>
<td>30%</td>
<td>Manufactured on lots; single-family attached; duplexes</td>
</tr>
<tr>
<td>Low (30%-50% or less of MFI)</td>
<td>$21,420 to $35,700</td>
<td>73,167</td>
<td>20%</td>
<td>Manufactured in parks</td>
</tr>
<tr>
<td>Very Low (Less than 30% of MFI)</td>
<td>Less than $21,420</td>
<td>55,870</td>
<td>15%</td>
<td>Apartments; manufactured in parks; duplexes</td>
</tr>
</tbody>
</table>

Source: ECONorthwest, 2013.

6.2 Two variations to the forecast of housing demand

Shifts in household age, household composition, and income can cause the housing market in Clark County to change from the trends it evidenced over the last decade and more. This section assesses how potential changes in these factors might change demand for housing by type of housing and tenure in Clark County relative to the historical demand described above.
The future is inherently uncertain, so any single forecast of long-run social phenomena (like housing production) is unlikely to prove correct over time. The variations in this section hold population growth, household size, and vacancy assumptions constant from Table 7. The variations assume that Clark County will add 344,392 new dwelling units over the 2012 to 2035 period. The forecasts that follow adjusts the baseline forecast shown in Table 8 based on an assessment of expected variation in some of the key factors that affect housing demand.\textsuperscript{12}

Table 11 and Table 12 present two alternative forecasts for growth:

**Shift A: Smaller Change assumes**

- A decrease in the amount of single-family detached housing produced though 2035 (from 64% to 60%)
- An increase in the amount of single-family attached and 2-4 unit (from 13% to 15%) and multi-family with 5+ units (23% to 25%)
- A decrease in homeownership from 54% to 52%
- No change tenure by structure type (e.g., 75% of single-family housing is still assumed to be owner-occupied)

**Shift B: Larger Change assumes**

- A decrease in the amount of single-family detached housing produced though 2035 (from 64% to 55%)
- An increase in the amount of single-family attached and 2-4 unit (from 13% to 16%) and multi-family with 5+ units (23% to 29%)
- A decrease in homeownership from 54% to 50%
- An increase in homeownership rates for single-family attached and 2-4 unit (from 32% to 35%) and multi-family with 5+ units (8% to 12%)

Table 11. Two alternative forecasts for growth in housing by type of structure, Clark County, 2012 to 2035

<table>
<thead>
<tr>
<th>Dwelling Units by Structure Type</th>
<th>Shift A: Smaller Change</th>
<th>Shift B: Larger Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total new dwelling units 2012-2035)</td>
<td>344,392</td>
<td>344,392</td>
</tr>
<tr>
<td>Dwelling units by structure type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-Family Detached</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent single-family</td>
<td>60%</td>
<td>55.0%</td>
</tr>
<tr>
<td>\textit{equals} Total new single-family DU</td>
<td>206,635</td>
<td>189,416</td>
</tr>
<tr>
<td>Single-family Attached and 2-4 Units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent single-family attached and 2-4 units</td>
<td>15%</td>
<td>16.0%</td>
</tr>
<tr>
<td>\textit{equals} Total single-family attached and 2-4 Units</td>
<td>51,659</td>
<td>55,103</td>
</tr>
<tr>
<td>Multifamily with 5+ Units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent multifamily with 5+ Units</td>
<td>25%</td>
<td>29.0%</td>
</tr>
<tr>
<td>\textit{equals} Total multifamily with 5+ Units</td>
<td>86,098</td>
<td>99,874</td>
</tr>
<tr>
<td>Total new dwelling units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>\textit{equals} Total new dwelling units</td>
<td>344,392</td>
<td>344,393</td>
</tr>
</tbody>
</table>

Source: ECONorthwest, 2013

\textsuperscript{12} We have not attempted to account for the possibility of another boom / bust cycle in our projections, but have just UNLV’s projections as the basis for our analysis, as it is the most-used population forecast in the region.
The factors that may affect housing demand, resulting in a housing demand similar to Shift A or Shift B, include the following:

- **Continuation of the foreclosure crisis** will affect demand over the next two to five years. While foreclosure rates have decreased recently, the data indicate that foreclosure rates may increase in Clark County over the next months or years. A continuation of the high rates of foreclosures may affect housing demand in the following ways:
  - A continuation and delay of resolution of the backlog of houses in foreclosure may continue to depress housing prices. It is unclear if housing prices have reached a bottom, as some of the data suggest, or may decrease as a result of additional foreclosures.
As long as foreclosures continue at a historically high rate, some households will continue to rent, either by choice or by necessity.

As homeowners become more confident in the housing market, foreclosures become less common, and financing becomes more available, some renter households will choose to purchase a home. Homeownership will be more affordable as a result of low prices. This trend appears underway in Clark County, but it is unclear if it will continue.

If foreclosures continue or increase, the homeownership rate could decrease further. It appears that the homeownership rate is stable and has increased recently.

These factors will affect Clark County’s housing market for the next few years but will fade as the housing market continues to recover and as households become willing and able to purchase housing. The forecasts in

Table 11 and Table 12 assume that these issues have been factored into the population forecast and will not substantially affect Clark County’s housing market in the long-term.

- **Growth in retirees.** Clark County’s population is aging and the share of retirees is expected to increase from 12% of the population in 2012 to 20% of the population in 2035. Growth in retirees will be from two groups: (1) people who currently live in Clark County who age into retirement and (2) people who move to Clark County after retirement. These groups may have different housing needs.

  - People living in Clark County before (and after) retirement will make a variety of housing choices, as described in Tables 2 through 4. The majority may choose to age in place (i.e., continue to live in their current home), until they move into assisted living or a nursing home because of ill health. Some retirees in Clark County will choose to downsize into a smaller dwelling or move into an adult retirement community. The majority of people in this group will likely continue to be homeowners for as long as they are able.

  - People moving to Clark County after retirement will also make a variety of housing choices. Their housing choices may be similar to other retirees. Some may choose to purchase a single-family home or condominium or move into an adult retirement community. Housing in either of these cases is likely to be relatively small, both in terms of lot size and size of units. Some people in this group may choose to rent housing, such as a small single-family unit, a townhouse, or an apartment.

  - Overall, growth in retirees is likely to decrease demand for single-family detached units and decrease homeownership rates, especially as retirees begin to sell their existing dwellings and seek different housing types.

- **Growth in Echo Boomers.** Echo Boomers will enter adulthood and their prime earning years during the next two decades. As they form households, they will
initially need affordable rental housing. As income increases, some Echo Boomers will choose to become homeowners, if they are able to afford to do so.

The Echo Boomers are likely to increase demand for rental housing, such as townhouses or apartments. In the later years of the planning period, some Echo Boomers may choose to purchase housing, such as small single-family detached housing, townhouses, or condominiums.

- **Growth in Hispanic population.** Clark County’s Hispanic population is expected to grow twice the rate of total population growth between 2012 and 2035 in Clark County. By 2035, Hispanics will account for 33% of the County’s population. Growth in Hispanic population will be from two groups: (1) first generation immigrants and (2) second and third (and older) generation immigrants. These groups may have different housing needs.

  - First generation immigrants generally have lower income and larger households than second and third generation or the County’s average population. First generation immigrants are more likely to be renters and are more likely to need larger, more affordable housing (given larger household sizes and lower income).

  - Second generation and later immigrants have household characteristics that are more similar to the national average, with higher household income and smaller household sizes. Even so, second generation and later Hispanic immigrant households have lower income and higher household sizes than the national average. These households are also more likely to be renters than the national average, although homeownership rates approach 50% for second-generation Hispanic immigrants.\(^\text{13}\)

  - Overall, the Hispanic population is likely to increase demand for more affordable housing for families, such as townhouses, affordable single-family detached units, or apartments. Growth in the Hispanic population may decrease homeownership rates slightly but not substantially.

The overall effect of these three groups is an increased demand for a wider variety of housing types, such as small single-family detached units, townhouses, duplexes, or apartments. Growth in these groups is likely to decrease homeownership rates, but not substantially.

Other factors that may affect housing demand over the next two decades are:

- The projected increase in real personal income may support demand for homeownership, especially of single-family detached units.

- Housing preferences and transportation costs will affect the location of housing demand (e.g., in an urban area or in a rural area). There are a number of reasons to expect that

more new development will occur in urban areas, rather than in exurbs or rural areas. Two of the groups forecast to grow the most, retirees and Echo Boomers, generally prefer to live in areas where urban services (e.g., shopping) are easily accessible. In addition, gasoline prices are forecast to remain at existing levels or to increase through 2040. Increases in transportation costs make living beyond urban areas less affordable, especially for households that work in the urban areas.

The forecasts in Table 11 and Table 12 present two alternatives for future housing demand in Clark County. The smaller change in Shift A is more likely if:

1. The foreclosure crisis resolves sooner.
2. Housing prices decrease less.
3. Personal incomes continue to grow.
4. People who grow older in or move to Clark County generally prefer and can afford to own and live in single-family detached housing.

The larger change in Shift B is more likely if:

1. The foreclosure crisis takes longer to resolve.
2. Personal income stagnates or decreases in real dollars.
3. Housing preferences change so that renting attached housing is preferable.
4. Owning a single-family house is not financially attainable.

7. Conclusions

Despite the current economic crisis and distortion in the current Clark County housing market, the region is projected to continue to grow over the coming decades. That population will require the construction of additional housing units to accommodate it. The projections of housing units in this report illustrate a range of likely outcomes for mixes of housing types and tenures, given what is currently known and assumed about the demographic makeup of the new population. The way in which this growth is accommodated will affect the quality of life for new and current Clark County residents into the future, and should be considered in the larger planning and economic development efforts.
Appendix A.

Housing market conditions in Clark County

Except where noted, data in this section is based on U.S. Census data. Appendix A presents the data in charts and tables.

Demographic changes

Clark County’s recent population growth outpaced the U.S. and Nevada

- Between 1990 and 2011, the average annual growth rate of the population for Clark County was 4.8%. The growth rate was larger than the 1.1% increase for the U.S. and 4.0% in Nevada.


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>AAGR</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>U.S.</td>
<td>248,709,873</td>
<td>62,877,943</td>
<td>24%</td>
<td>62,877,943</td>
<td>24%</td>
</tr>
<tr>
<td>Nevada</td>
<td>1,201,833</td>
<td>1,498,718</td>
<td>125%</td>
<td>2,720,028</td>
<td>4.0%</td>
</tr>
<tr>
<td>Clark County</td>
<td>741,459</td>
<td>1,209,810</td>
<td>163%</td>
<td>1,969,975</td>
<td>4.8%</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>258,295</td>
<td>325,461</td>
<td>126%</td>
<td>589,317</td>
<td>4.0%</td>
</tr>
<tr>
<td>North Las Vegas</td>
<td>47,707</td>
<td>169,254</td>
<td>355%</td>
<td>219,020</td>
<td>7.5%</td>
</tr>
<tr>
<td>Henderson</td>
<td>64,942</td>
<td>192,787</td>
<td>297%</td>
<td>260,068</td>
<td>6.8%</td>
</tr>
<tr>
<td>Boulder City</td>
<td>12,567</td>
<td>2,456</td>
<td>20%</td>
<td>15,166</td>
<td>0.9%</td>
</tr>
<tr>
<td>Mesquite</td>
<td>1,871</td>
<td>13,405</td>
<td>716%</td>
<td>15,423</td>
<td>10.6%</td>
</tr>
</tbody>
</table>


Note: AAGR is average annual growth rate.

Table A-14. Median age, Nevada, Clark County, and select cities, 2000 and 2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Nevada</th>
<th>Clark County</th>
<th>Las Vegas</th>
<th>North Las Vegas</th>
<th>Henderson</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>35.0</td>
<td>34.4</td>
<td>34.5</td>
<td>28.8</td>
<td>35.9</td>
</tr>
<tr>
<td>2010</td>
<td>36.3</td>
<td>35.5</td>
<td>35.9</td>
<td>30.6</td>
<td>39.6</td>
</tr>
</tbody>
</table>

Change 2000 to 2010

| Years | 1.3 | 1.1 | 1.4 | 1.8 | 3.7 |

Figure A-12. Population by age, Nevada, Clark County, and select cities, 2010

Source: U.S. 2010 SF1 P12.

Forecast for population growth

• From 2012 to 2035, the population of Clark County is forecast to increase from 1,982,000 to 2,848,000. The population forecast shows Clark County growing at less than half of the rate that the County grew between 1990 and 2011, with an average annual growth rate of 1.59% over 2012 to 2035.

• The population forecast shows that approximately the same number of residents will be added to Clark County in the next 20 years as in the previous 20-year period. The growth rate between 2012 and 2035, however, is expected to be 1.6% per year, compared to 4.8% annually between 1990 and 2011.

---

14 All information about population forecasts for Clark County in this report is based on the Population Forecasts: Long-Term Projections for Clark County, Nevada, 2012-2050 from University of Nevada Las Vegas’ Center for Business and Economic Research.
Migration is forecast to account for majority of the population growth in Clark County through 2030

- From 2012 through 2030, Clark County’s population is expected to increase by 34% to 2.7 million people. Migration is forecast to account for 446,000 additional residents, which is 65% of the expected growth.

- Economic migrants (those who migrate to the area to seek employment) are forecast to account for 16% of new residents, although there is expected to be a net negative migration for economic reasons beginning in 2022.

- The majority of in-migrants through 2030 are forecast to be international (60%), with retirees currently living in the U.S. will make up 24% of the total.

Clark County’s median age and percentage of the population aged 65 and over is increasing

- The median population age in Clark County increased only slightly from 34.4 years in 2000 to 35.5 in 2010.

- For the period between 2012 and 2035, the population segment aged 65 and over is forecast to grow more than any other group. In 2012, residents aged 65 and older made up 12% of the total population; this number is expected to increase to 20% in 2035.

- The population group between 25 and 64 years is forecast to grow by 280,000, which represents a smaller growth rate than other age categories. As a result, the share of population in this age category is forecast to decrease from 53% to 48% of the population from 2012 to 2035.
The Hispanic population is forecast to be largest ethnic group in Clark County by 2035

- Between 2000 and 2010, the number of Hispanics increased 88%, which is equivalent to an average annual growth rate of 6.53%.
- Moderate growth is expected for the black and white populations of Clark County from 2012 to 2035. The white population is expected to have an average annual growth rate of 0.23% compared to 0.7% for the black population.
- In 2035, the population in Clark County is expected to be 44% Hispanic, 36% white, 8% black, and 12% other.

Table A-15. Population by ethnicity in 2000 and 2010, Nevada, Clark County, and select cities

<table>
<thead>
<tr>
<th></th>
<th>Nevada</th>
<th>Clark County</th>
<th>Las Vegas</th>
<th>North Las Vegas</th>
<th>Henderson</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 Total</td>
<td>1,998,257</td>
<td>1,375,765</td>
<td>478,434</td>
<td>115,488</td>
<td>175,381</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>393,970</td>
<td>302,143</td>
<td>112,962</td>
<td>43,435</td>
<td>18,785</td>
</tr>
<tr>
<td>Percent Hispanic or Latino</td>
<td>19.7%</td>
<td>22.0%</td>
<td>23.6%</td>
<td>37.6%</td>
<td>10.7%</td>
</tr>
<tr>
<td>2010 Total</td>
<td>2,700,551</td>
<td>1,951,269</td>
<td>583,765</td>
<td>216,961</td>
<td>257,729</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>716,501</td>
<td>568,644</td>
<td>183,859</td>
<td>84,134</td>
<td>38,377</td>
</tr>
<tr>
<td>Percent Hispanic or Latino</td>
<td>26.5%</td>
<td>29.1%</td>
<td>31.5%</td>
<td>38.8%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Change 2000-2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>322,531</td>
<td>266,501</td>
<td>70,897</td>
<td>40,699</td>
<td>19,592</td>
</tr>
<tr>
<td>Percent Hispanic or Latino</td>
<td>82%</td>
<td>88%</td>
<td>63%</td>
<td>94%</td>
<td>104%</td>
</tr>
</tbody>
</table>

Conclusions about demographic changes

- Clark County’s population is expected to continue growing but at a slower rate than the last two decades. This suggests that demand for housing will continue but at a slower rate.

- The majority of growth is expected to result from in-migration, specifically international migrants and retirees.

- Clark County’s population is expected to be older, with more retirees, and a larger share will be Hispanic. These demographic changes suggest changes in demand for housing over the next two decades, as described in Table 1.

Employment

Jobs in Clark County are forecast to increase faster than population through 2035

- From 2012 to 2035, the number of jobs is forecast to increase by 46%, which represents a 2.0% average annual growth rate. This is greater than the forecast 1.59% average annual growth rate for the population in the same time period.

- With a 112% increase, the Health Care and Social Assistance sector is forecast to experience the largest growth rate, followed by the construction sector, which is expected to double the number of jobs through 2035.

- The farming sector is expected to lose 26% of the total workers through 2035, which is the highest loss among all sectors. Since the farm sector is the smallest sector in the Clark County economy, the nominal number of jobs lost is expected to be only 60,000.
• All segments of the Clark County workforce are expected to add jobs, except for the federal government, manufacturing, utilities and farm sectors, which are predicted to have fewer jobs in 2035 than are currently employed in the sector.

Table A-16. Employment forecast by sector, Clark County, 2012 and 2035

<table>
<thead>
<tr>
<th>Sector</th>
<th>2012</th>
<th>2035</th>
<th>Change 2012 to 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>percent</td>
<td>AAGR</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>79.06</td>
<td>167.66</td>
<td>88.60</td>
</tr>
<tr>
<td>Construction</td>
<td>54.16</td>
<td>108.19</td>
<td>54.04</td>
</tr>
<tr>
<td>Professional and Technical Services</td>
<td>53.98</td>
<td>91.38</td>
<td>37.41</td>
</tr>
<tr>
<td>Other Services, Except Govt</td>
<td>47.77</td>
<td>78.96</td>
<td>31.19</td>
</tr>
<tr>
<td>Educational Services</td>
<td>10.37</td>
<td>16.39</td>
<td>6.02</td>
</tr>
<tr>
<td>State and Local - Government</td>
<td>82.32</td>
<td>128.40</td>
<td>46.08</td>
</tr>
<tr>
<td>Admin and Waste Services</td>
<td>77.60</td>
<td>115.62</td>
<td>38.02</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>32.63</td>
<td>48.46</td>
<td>15.83</td>
</tr>
<tr>
<td>Forestry, Fishing, Other</td>
<td>0.30</td>
<td>0.43</td>
<td>0.13</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>61.88</td>
<td>88.04</td>
<td>26.16</td>
</tr>
<tr>
<td>Government - All Sectors</td>
<td>107.55</td>
<td>151.17</td>
<td>43.62</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>256.81</td>
<td>347.43</td>
<td>90.61</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>39.48</td>
<td>53.28</td>
<td>13.81</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>71.75</td>
<td>95.06</td>
<td>23.31</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>111.39</td>
<td>142.31</td>
<td>30.92</td>
</tr>
<tr>
<td>Mining</td>
<td>2.22</td>
<td>2.64</td>
<td>0.42</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>23.63</td>
<td>26.47</td>
<td>2.84</td>
</tr>
<tr>
<td>Information</td>
<td>12.83</td>
<td>14.33</td>
<td>1.51</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>16.23</td>
<td>17.42</td>
<td>1.20</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>24.73</td>
<td>23.57</td>
<td>(1.16)</td>
</tr>
<tr>
<td>Federal Civilian - Government</td>
<td>12.00</td>
<td>10.94</td>
<td>(1.06)</td>
</tr>
<tr>
<td>Federal Military - Government</td>
<td>13.22</td>
<td>11.84</td>
<td>(1.39)</td>
</tr>
<tr>
<td>Utilities</td>
<td>3.09</td>
<td>2.53</td>
<td>(0.56)</td>
</tr>
<tr>
<td>Total</td>
<td>1,194.98</td>
<td>1,742.51</td>
<td>547.53</td>
</tr>
</tbody>
</table>

Source: Population Forecast: Long-term Projections for Clark County, Nevada 2012-2050

Conclusions about employment changes

• Some of the people who move to Clark County will do so for employment. The region will create more jobs than population increases through 2035.

• The employment forecast shows growth in higher-wage sectors (e.g., Health Care or Construction) but also growth in lower-wage sectors (e.g., Retail Trade or Arts and Entertainment). This suggests that the County will continue to have demand for both higher-cost housing and lower-cost housing.
Income

Real personal income is forecast to double in Clark County through 2035

- Real personal income, accounting for inflation, is expected to increase by 108% in Clark County from 2012 to 2035. This represents an annual average growth rate of 3.24%.

- Real per capita income is expected to increase by 45% through 2035, which represents an annual average growth rate of 1.62%.

The age group between 45 and 64 had the highest median income level in 2011

- In Clark County for 2011, the median income level for people in the 45-64 age bracket was $53,307, the median dropped to $50,580 for the 25-44 age group and even further to $39,555 for people over the age of 65.

The median income for white workers was roughly 40% higher than black and Hispanic workers for Clark County in 2011

- In Clark County for 2011, the median income for a white employee was $53,768 compared to $39,096 for Hispanics and $37,107 for blacks.

Table A-17. Median income for households and families in 2011, Nevada, Clark County, and select cities

<table>
<thead>
<tr>
<th>Population</th>
<th>Nevada</th>
<th>Clark County</th>
<th>Las Vegas</th>
<th>North Las Vegas</th>
<th>Henderson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>$48,927</td>
<td>$48,215</td>
<td>$46,995</td>
<td>$50,006</td>
<td>$60,453</td>
</tr>
<tr>
<td>Families</td>
<td>$56,544</td>
<td>$55,766</td>
<td>$54,664</td>
<td>$51,525</td>
<td>$70,400</td>
</tr>
</tbody>
</table>

Source: American Community Survey 2011 S1903.

Figure A-16. Household income in 2011, Nevada, Clark County, and select cities

Source: American Community Survey 2011 B19001.
Conclusions about changes in income

- Growth in personal income will result in increases in disposable income and more money available for housing expenditures. During the 1990s and early 2000s, housing costs outpaced income growth. By 2011, income growth and change in housing cost over the last decade had evened out, with income keeping pace with housing cost.

- It is unclear whether housing prices will grow at a similar rate as personal income over the next two decades or whether, similar to the pattern that created the housing bubble, housing prices will outpace change in personal income.

- Younger and Hispanic households generally have lower incomes than older, white households. These households may struggle to afford ownership costs, unless their incomes increase to closer to the County averages.

Household characteristics

Household size was similar for owner occupants and renters in Clark County

- The average household size was 2.7 for both the County and the state in 2010. Owner-occupied households had 2.7 people on average, while renters had 2.5.

- In 2010, households in the County were almost evenly distributed between families with children (35%), families with no children (31%) and non-family households (34%).
Table A-20. Average household size of occupied housing units by tenure in 2010, Clark County and select cities

<table>
<thead>
<tr>
<th>Household Type</th>
<th>Clark County</th>
<th>Las Vegas</th>
<th>North Las Vegas</th>
<th>Henderson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Average household size</td>
<td>2.7</td>
<td>35%</td>
<td>2.7</td>
<td>36%</td>
</tr>
<tr>
<td>Owner-occupied units</td>
<td>2.7</td>
<td>37%</td>
<td>2.7</td>
<td>38%</td>
</tr>
<tr>
<td>Renter-occupied units</td>
<td>2.5</td>
<td>41%</td>
<td>2.7</td>
<td>42%</td>
</tr>
</tbody>
</table>

Source: U.S. Census 2010 SF1 H12.

North Las Vegas had a higher concentration of families with children than Clark County and state averages:

- Average household size in North Las Vegas in 2010 was higher than the County average, at 3.2 persons per household for owner-occupied units, and 3.4 for renter-occupied units.
- North Las Vegas had a similar percentage of families with no children (28%) compared to Clark County, but a higher percentage of families with children (48%) and fewer non-family households (23%).

Table A-21. Household composition in 2010, Clark County and select cities

<table>
<thead>
<tr>
<th>Household Type</th>
<th>Clark County</th>
<th>Las Vegas</th>
<th>North Las Vegas</th>
<th>Henderson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Households with children</td>
<td>249,397</td>
<td>35%</td>
<td>75,313</td>
<td>36%</td>
</tr>
<tr>
<td>Married-couple family</td>
<td>153,650</td>
<td>21%</td>
<td>45,700</td>
<td>22%</td>
</tr>
<tr>
<td>Female householder, no husband present</td>
<td>64,188</td>
<td>9%</td>
<td>19,945</td>
<td>9%</td>
</tr>
<tr>
<td>Male householder, no wife present</td>
<td>31,559</td>
<td>4%</td>
<td>9,668</td>
<td>5%</td>
</tr>
<tr>
<td>Family households without children</td>
<td>221,802</td>
<td>31%</td>
<td>64,359</td>
<td>30%</td>
</tr>
<tr>
<td>Married-couple family</td>
<td>168,067</td>
<td>23%</td>
<td>48,238</td>
<td>23%</td>
</tr>
<tr>
<td>Female householder, no husband present</td>
<td>33,306</td>
<td>5%</td>
<td>10,233</td>
<td>5%</td>
</tr>
<tr>
<td>Male householder, no wife present</td>
<td>20,429</td>
<td>3%</td>
<td>5,888</td>
<td>3%</td>
</tr>
<tr>
<td>Nonfamily households</td>
<td>244,166</td>
<td>34%</td>
<td>72,017</td>
<td>34%</td>
</tr>
<tr>
<td>Total Households</td>
<td>715,365</td>
<td>100%</td>
<td>211,689</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: U.S. Census 2010 SF1 P20.

From 2000 to 2011, households with two or more people had the largest decrease in home ownership:

- From 2000 to 2011, homeownership for one-person households increased by 1%, but homeownership for two or more person households decreased by 7%.
- People between the ages of 15 and 54 were responsible for the entire decrease in homeownership among two or more person households, dropping by 7% in Clark County. People over age 55 had no change in homeownership.
Figure A-17. Income by age of householder in 2011, Clark County and Nevada

Source: American Community Survey 2011 B19037.

Figure 18. Household size by age in 2011, Nevada, Clark County, and select cities

Source: American Community Survey 2011 B25116.

Figure A-19. Households by tenure and age of householder in 2011, Clark County and Nevada

Source: American Community Survey 2011 B25007
Figure A-20. Tenure by household size and age of householder in 2011, Clark County and Nevada

Source: American Community Survey 2011 B25116.

**Housing characteristics**

**Recent housing vacancy rates were higher than usual in Clark County**

- Overall vacancy rates in 2010 were about 15%, compared with 11% in 2005 and 8.5% in 2000.
- Vacancy rates in the U.S. in 2010 were 11.4% and 14.3% for Nevada. In comparison, vacancy rates in 2000 were 9% for the U.S. and 9.2% for Nevada.

**Multi-family homes had the highest vacancy rate outside of the City of Las Vegas**

- In 2011, Clark County had a larger percentage (14.9%) of vacant housing units compared to the Las Vegas average of 13.1%.
- In 2011, 13% of multi-family homes and 10.5% of single-family homes in Clark County were vacant.

**Homeownership rates declined through 2011**

- Homeownership rates in Clark County declined from 59% in 2000 to 54% in 2011. This change is consistent with the statewide decline in homeownership from 61% to 56% in 2011. This change is also consistent with the national trend in declining homeownership rates.
- Homeownership rates declined in Las Vegas (59% in 2000 to 52% in 2011), North Las Vegas (70% in 2000 to 58% in 2011), and Henderson (71% in 2000 to 64% in 2011).
Figure A-21. Housing type by tenure, occupied housing units, 2000 and 2011, Clark County

Source: American Community Survey 2011 B25032.

Figure A-22. Tenure, Nevada, Clark County, and selected cities, 2000 and 2011

Source: Decennial Census 2000 H004; American Community Survey 2011 B25003

Table A-22. Vacancy rates, 2010, Clark County and select cities

<table>
<thead>
<tr>
<th></th>
<th>Clark County</th>
<th>Las Vegas</th>
<th>North Las Vegas</th>
<th>Henderson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total housing units</td>
<td>840,343</td>
<td>243,701</td>
<td>76,073</td>
<td>113,586</td>
</tr>
<tr>
<td>Total occupied</td>
<td>715,365</td>
<td>211,689</td>
<td>66,499</td>
<td>101,314</td>
</tr>
<tr>
<td>Total vacant</td>
<td>124,978</td>
<td>32,012</td>
<td>9,574</td>
<td>12,272</td>
</tr>
<tr>
<td>Vacancy rate</td>
<td>14.9%</td>
<td>13.1%</td>
<td>12.6%</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

Source: U.S. Census 2010 SF1 H3.
In 2011, the majority of the owner-occupied housing stock in Clark County was two or three bedroom homes

- 61% of the housing stock in 2011 was single-family detached homes in Clark County. 85% of owner occupied homes were single family, 64% of this group were made up of two or three bedroom structures.

North Las Vegas had a greater drop in homeownership rates than Clark County from 2000 to 2011

- Homeownership rates decreased in North Las Vegas from 70% in 2000 to 58% in 2011. In comparison, homeownership rates decreased in Clark County from 59% in 2000 to 52% in 2011.

- Homeownership rates for one-person households in North Las Vegas increased by 2% from 2000-2011. This increase was offset by the 15% reduction in owner occupied households with two or more people.

North Las Vegas had higher percentage of single-family detached rental units than Clark County in 2011

- Single-family detached renter occupied units were the largest share of the rental market in North Las Vegas (50%), compared to 33% in Clark County for 2011.

- The majority (56%) of renter occupied units in North Las Vegas were built after 2000; the largest category of unit breakdown was two or three bedrooms, representing 64% of the total.

Single-family detached housing accounts for the majority of housing in Clark County

- In 2011, 64% of housing was single-family detached (including manufactured and mobile homes), with 13% of housing in attached structures with four or fewer units and 23% in attached structures with five or more units.

### Table A-23. Vacancy rates by type of housing, 2000 to 2011, Clark County

<table>
<thead>
<tr>
<th>Year</th>
<th>Single Family</th>
<th>Mobile Home</th>
<th>Multi-family</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2.0%</td>
<td>6.4%</td>
<td>6.5%</td>
</tr>
<tr>
<td>2001</td>
<td>2.6%</td>
<td>7.3%</td>
<td>6.2%</td>
</tr>
<tr>
<td>2002</td>
<td>2.6%</td>
<td>7.3%</td>
<td>6.2%</td>
</tr>
<tr>
<td>2003</td>
<td>2.6%</td>
<td>8.0%</td>
<td>7.2%</td>
</tr>
<tr>
<td>2004</td>
<td>3.6%</td>
<td>4.5%</td>
<td>5.6%</td>
</tr>
<tr>
<td>2005</td>
<td>2.8%</td>
<td>6.6%</td>
<td>6.4%</td>
</tr>
<tr>
<td>2006</td>
<td>3.8%</td>
<td>5.5%</td>
<td>6.9%</td>
</tr>
<tr>
<td>2007</td>
<td>4.3%</td>
<td>3.1%</td>
<td>6.9%</td>
</tr>
<tr>
<td>2008</td>
<td>6.4%</td>
<td>8.4%</td>
<td>6.8%</td>
</tr>
<tr>
<td>2009</td>
<td>5.2%</td>
<td>7.1%</td>
<td>11.4%</td>
</tr>
<tr>
<td>2010</td>
<td>5.8%</td>
<td>8.0%</td>
<td>11.5%</td>
</tr>
<tr>
<td>2011</td>
<td>10.5%</td>
<td>11.6%</td>
<td>13.1%</td>
</tr>
</tbody>
</table>

Source: U.S. Census 2010 SF1 H3.
• The share of single-family detached housing increased from 59% to 64% between 2000 and 2011. The share of attached housing decreased by 4% over the same period.
• 89% of ownership units were single-family detached in 2011, up from 87% in 2000.
• In 2011, about two-thirds of renters lived in attached housing and one-third in single-family detached housing.
• Since 2000, rental of single-family housing increased, from 19% to 35% of rental units in 2011.

Figure A-23. Housing type, occupied housing units, 2011, Clark County and select cities

Source: American Community Survey 2011 B25032.
The number of residential building permits issued decreased rapidly after 2005

- Between 2000 and 2011, more than 284,000 residential building permits were issued, averaging 25,800 permits issued annually.
- The number of permits issued peaked from 2003 to 2005, with more than 35,000 permits issued in each of these years.
- Between 2009 and 2010, about 5,000 permits were issued each year, substantially lower than the average number of permits issued annually over the past 11 years.
- Nearly three-quarters of permits issued were for single-family units, with about one-quarter issued for multi-family units.
- About half of the permits for all housing were issued in Las Vegas, North Las Vegas, and Henderson.
- More than half of the permits for multi-family housing were issued in Las Vegas.
Appendix A: Housing market conditions

Table A-25. Residential building permits issued, 2000 to 2011, Clark County and selected cities

<table>
<thead>
<tr>
<th>Year</th>
<th>Clark County</th>
<th>Las Vegas</th>
<th>North Las Vegas</th>
<th>Henderson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SF</td>
<td>MF</td>
<td>SF</td>
<td>MF</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>% Total</td>
<td>SF</td>
<td>MF</td>
</tr>
<tr>
<td>2000</td>
<td>21,282</td>
<td>4,942</td>
<td>4,750</td>
<td>1,134</td>
</tr>
<tr>
<td>2001</td>
<td>21,871</td>
<td>7,836</td>
<td>4,295</td>
<td>880</td>
</tr>
<tr>
<td>2002</td>
<td>22,148</td>
<td>7,008</td>
<td>4,454</td>
<td>1,110</td>
</tr>
<tr>
<td>2003</td>
<td>27,354</td>
<td>9,378</td>
<td>6,861</td>
<td>2,322</td>
</tr>
<tr>
<td>2004</td>
<td>31,741</td>
<td>4,654</td>
<td>6,200</td>
<td>1,720</td>
</tr>
<tr>
<td>2005</td>
<td>30,479</td>
<td>8,758</td>
<td>4,271</td>
<td>2,287</td>
</tr>
<tr>
<td>2006</td>
<td>21,590</td>
<td>12,138</td>
<td>2,998</td>
<td>2,204</td>
</tr>
<tr>
<td>2007</td>
<td>13,310</td>
<td>10,779</td>
<td>2,356</td>
<td>547</td>
</tr>
<tr>
<td>2008</td>
<td>5,840</td>
<td>6,697</td>
<td>1,085</td>
<td>1,613</td>
</tr>
<tr>
<td>2009</td>
<td>3,777</td>
<td>1,911</td>
<td>744</td>
<td>381</td>
</tr>
<tr>
<td>2010</td>
<td>4,623</td>
<td>851</td>
<td>926</td>
<td>362</td>
</tr>
<tr>
<td>2011</td>
<td>3,817</td>
<td>1,330</td>
<td>814</td>
<td>114</td>
</tr>
<tr>
<td>Total</td>
<td>207,832</td>
<td>76,282</td>
<td>39,754</td>
<td>14,674</td>
</tr>
<tr>
<td>% Total</td>
<td>73%</td>
<td>27%</td>
<td>73%</td>
<td>27%</td>
</tr>
<tr>
<td>Average</td>
<td>17,319</td>
<td>6,357</td>
<td>3,313</td>
<td>1,223</td>
</tr>
</tbody>
</table>

Source: U.S. Census

Figure A-24. Residential building permits issued, 2000 to 2011, Clark County

Conclusions about housing characteristics

- Vacancy rates generally cycle between 4% to 8% in urban areas in a healthy housing market. Vacancy rates in multi-family housing are generally higher than in single-family housing in a healthy housing market. Clark County’s vacancy rates appear to
be high relative to vacancy rates during the last decade, consistent with vacancy rates in Nevada and the U.S.

- The decline in homeownership rates is related to an increase in foreclosure activity and declines in housing prices (discussed later in this section).
- The majority of housing in Clark County is single-family detached housing. The majority of housing developed over the 2000 to 2011 period was also single-family detached housing.
- The decline in homeownership rates and increased share of renters living in single-family detached housing is consistent with other evidence (including anecdotal evidence from interviews) that single-family detached housing was overbuilt during the recent housing market bubble.

**Housing costs**

**Housing prices in Clark County changed rapidly between 2003 and 2009**

- The Case-Shiller home price index shows that Clark County’s housing prices increased gradually between 1987 and 2003. Between 2003 and late 2006, housing prices more than doubled. This change in price is consistent with other large urban housing markets in the U.S.
- Starting in 2006, Clark County’s housing prices decreased by more than half. Prices peaked in April 2006, then dropped to the price level of approximately 1996, when the market bottomed out in January 2012. The price decrease in Clark County was substantially larger than in other large urban housing markets in the U.S.
- Housing prices stabilized in 2010, then decreased in 2011 before bottoming out in early 2012. Prices have been consistently increasing (seasonally adjusted) starting in February 2012.
Appendix A: Housing market conditions

Figure A-25. Case-Shiller Home Price Index, Las Vegas, 1987 to 2013

Table A-26. Median sales price, single-family detached housing, Clark County, April 2003, April 2007, and February 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Median Sales Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>$187,250</td>
</tr>
<tr>
<td>2007</td>
<td>$300,000</td>
</tr>
<tr>
<td>2013</td>
<td>$150,000</td>
</tr>
</tbody>
</table>

Change 2001 to 2011
- Dollar: -$37,250
- Percent Change: -20%

Change 2007 to 2011
- Dollar: -$150,000
- Percent Change: -50%

Source: National Association of Realtors, Greater Las Vegas Association of Realtors
Figure A-26. Median sales price, single-family detached housing, Las Vegas, North Las Vegas, and Henderson, selected months in 2011, 2012, and 2013

Source: National Association of Realtors, Greater Las Vegas Association of Realtors

Median sales prices peaked in 2007 and appear to be stabilizing in 2013

- In 2007, median sales prices for single-family detached housing peaked at about $300,000 in Clark County and by early 2013, had decreased to about $150,000, a 50% decrease.

- Median sales prices for all housing prices decreased to less than $150,000 in mid-2009 and appeared to stabilize at about $150,000 by early 2013.

- Median sales prices for single-family detached housing in Las Vegas, North Las Vegas, and Henderson followed the same pattern as the County, with the highest median prices in Henderson.
Figure A-27. Median Sales Price and Number of Sales, Las Vegas, January 2000 to January 2013

**Median Sales Price**

Las Vegas, NV | All properties | All years

<table>
<thead>
<tr>
<th>Year</th>
<th>Median Sales Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 2000</td>
<td>$108K</td>
</tr>
<tr>
<td>Jan 2001</td>
<td>$118K</td>
</tr>
<tr>
<td>Jan 2002</td>
<td>$120K</td>
</tr>
<tr>
<td>Jan 2003</td>
<td>$146K</td>
</tr>
<tr>
<td>Jan 2004</td>
<td>$225K</td>
</tr>
<tr>
<td>Jan 2005</td>
<td>$275K</td>
</tr>
<tr>
<td>Jan 2006</td>
<td>$225K</td>
</tr>
<tr>
<td>Jan 2007</td>
<td>$257K</td>
</tr>
<tr>
<td>Jan 2008</td>
<td>$259K</td>
</tr>
<tr>
<td>Jan 2009</td>
<td>$209K</td>
</tr>
<tr>
<td>Jan 2010</td>
<td>$209K</td>
</tr>
<tr>
<td>Jan 2011</td>
<td>$211K</td>
</tr>
<tr>
<td>Jan 2012</td>
<td>$220K</td>
</tr>
<tr>
<td>Jan 2013</td>
<td>$240K</td>
</tr>
</tbody>
</table>

Source: Trulia.com

**Number of Sales**

Las Vegas, NV | All properties | All years

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 2000</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2001</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2002</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2003</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2004</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2005</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2006</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2007</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2008</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2009</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2010</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2011</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2012</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan 2013</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Source: Trulia.com

Table A-27. Median value of owner-occupied housing units, Nevada, Clark County, and select cities, 2001 and 2011

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2011</th>
<th>Change 2000 to 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Nevada</td>
<td>$142,000</td>
<td>$158,000</td>
<td>$16,000       11%</td>
</tr>
<tr>
<td>Clark County</td>
<td>$139,500</td>
<td>$153,800</td>
<td>$14,300       10%</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>$137,300</td>
<td>$153,200</td>
<td>$15,900       12%</td>
</tr>
<tr>
<td>North Las Vegas</td>
<td>$156,000</td>
<td>$124,200</td>
<td>-$31,800      -20%</td>
</tr>
<tr>
<td>Henderson</td>
<td>$123,000</td>
<td>$192,900</td>
<td>$69,900       57%</td>
</tr>
</tbody>
</table>

Source: American Community Survey 2011 B25075.
Figure A-28. Value of owner-occupied housing units, Nevada, Clark County, and select cities, 2000

Source: U.S. Census 2000 SF3 H84.

Figure A-29. Value of owner-occupied housing units, Nevada, Clark County, and select cities, 2011

Source: American Community Survey 2011 B25075.

Figure A-30. Ratio of value to household income for owner-occupied housing units, Nevada, Clark County, and select cities, 2011

Source: American Community Survey 2011 B25100.
Appendix A: Housing market conditions

Median contract rent has decreased in Clark County since 2008

- Median contract rent in Clark County increased 27% from 2000 to 2011, from $648 to $818. The peak in contract rent was in 2008, with a median contract rent for Clark County of $899.
- For the same period in North Las Vegas, rents increased 55%.
- In 2000, median nominal rent was lower in North Las Vegas ($556) compared to Clark County ($648). By 2011, rent was higher in North Las Vegas ($864) than the median rent in Clark County ($818).

### Table A-28. Median contract rent, Nevada, Clark County, and select cities, 2000 through 2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Nevada</th>
<th>Clark County</th>
<th>Las Vegas</th>
<th>North Las Vegas</th>
<th>Henderson</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$630</td>
<td>$648</td>
<td>$632</td>
<td>$556</td>
<td>$779</td>
</tr>
<tr>
<td>2005</td>
<td>$747</td>
<td>$772</td>
<td>$765</td>
<td>$769</td>
<td>$876</td>
</tr>
<tr>
<td>2006</td>
<td>$786</td>
<td>$822</td>
<td>$784</td>
<td>$825</td>
<td>$952</td>
</tr>
<tr>
<td>2007</td>
<td>$842</td>
<td>$874</td>
<td>$821</td>
<td>$935</td>
<td>$1,012</td>
</tr>
<tr>
<td>2008</td>
<td>$866</td>
<td>$899</td>
<td>$861</td>
<td>$933</td>
<td>$1,071</td>
</tr>
<tr>
<td>2009</td>
<td>$849</td>
<td>$883</td>
<td>$858</td>
<td>$959</td>
<td>$1,034</td>
</tr>
<tr>
<td>2010</td>
<td>$811</td>
<td>$842</td>
<td>$819</td>
<td>$867</td>
<td>$916</td>
</tr>
<tr>
<td>2011</td>
<td>$800</td>
<td>$818</td>
<td>$803</td>
<td>$864</td>
<td>$943</td>
</tr>
</tbody>
</table>

**Change 2000 to 2011**

<table>
<thead>
<tr>
<th>Amount</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>$170</td>
<td>27%</td>
</tr>
<tr>
<td>$170</td>
<td>26%</td>
</tr>
<tr>
<td>$171</td>
<td>27%</td>
</tr>
<tr>
<td>$308</td>
<td>55%</td>
</tr>
<tr>
<td>$164</td>
<td>21%</td>
</tr>
</tbody>
</table>


Renter households are the most likely to be cost-burdened

- About 53% of all Clark County households are cost-burdened (i.e., pay more than 30% of their gross income for housing costs). 54% of renter-households and 38% of owner-households are cost-burdened.
- In comparison, 43% of all households in Nevada are cost burdened, with 52% of renter-households and 35% of owner-households being cost-burdened.
Figure A-30 shows cost burden for Nevada and Clark County. Cost burden is a measure of housing affordability, based the HUD standard that says that housing is affordable if it costs no more than 30% of a household’s gross income.

Figure A-31. Housing Costs as a percent of monthly household income by tenure in 2011, Nevada and Clark County

![Graph showing cost burden for Nevada and Clark County](image-url)

Source: American Community Survey 2011 B25091 and B25070.

Table A-29. Median household income, owner-occupied housing value, and gross rent in 1999 and 2011, Clark County and Nevada

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Clark County</th>
<th>Nevada</th>
<th>Change 1999-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median HH Income</td>
<td>$44,616</td>
<td>$44,581</td>
<td>8%</td>
</tr>
<tr>
<td>Median Owner Value</td>
<td>$139,500</td>
<td>$142,000</td>
<td>10%</td>
</tr>
<tr>
<td>Median Gross Rent</td>
<td>$716</td>
<td>$699</td>
<td>34%</td>
</tr>
<tr>
<td>Ratio of Housing Value to Income</td>
<td>3.1</td>
<td>3.2</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Table A-30 shows a rough estimate of housing affordability in Clark County by income level in 2012. This table is based on American Community Survey data about income, value of owner units, and cost of rent. This table uses HUD standards for housing affordability, which say that housing is affordable if it costs no more than 30% of a household’s gross income. The table also uses HUD’s estimates for fair market rents in Clark County.

Clark County has a deficit of housing affordable to lower-income households. More than one-fifth of Clark County’s households are unable to afford the cost of renting a studio apartment ($691). About one-third of Clark County’s households are unable to afford the cost of a one-bedroom unit ($864). These findings are consistent with the fact that more than half of Clark County’s renters are cost-burdened.

Clark County has a surplus of housing affordable to households with income between $75,000 and $150,000. This suggests that some households are living in housing that costs less than they could afford, according to HUD standards.

Table A-30. Rough estimate of housing affordability, 2012, Clark County

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Number of HH</th>
<th>Percent</th>
<th>Affordable Monthly Housing Cost</th>
<th>Crude Estimate of Affordable Purchase Owner-Occupied Unit</th>
<th>Est. Number of Owner Units</th>
<th>Est. Number of Renter Units</th>
<th>Surplus (Deficit)</th>
<th>HUD Fair Market Rent (FMR) in 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $10,000</td>
<td>42,600</td>
<td>7%</td>
<td>$0 to $250</td>
<td>$0 to $25,000</td>
<td>10,496</td>
<td>3,608</td>
<td>28,496</td>
<td>Studio: $691</td>
</tr>
<tr>
<td>$10,000 to $14,999</td>
<td>30,353</td>
<td>5%</td>
<td>$250 to $375</td>
<td>$25,000 to $37,000</td>
<td>5,454</td>
<td>0</td>
<td>20,315</td>
<td>1 bdrm: $864</td>
</tr>
<tr>
<td>$15,000 to $24,999</td>
<td>68,211</td>
<td>11%</td>
<td>$375 to $625</td>
<td>$37,500 to $62,500</td>
<td>18,525</td>
<td>30,532</td>
<td>19,154</td>
<td>2 bdrm: $1,064</td>
</tr>
<tr>
<td>$25,000 to $34,999</td>
<td>77,270</td>
<td>12%</td>
<td>$625 to $875</td>
<td>$62,500 to $87,500</td>
<td>33,075</td>
<td>80,612</td>
<td>36,417</td>
<td>3 bdrm: $1,568</td>
</tr>
<tr>
<td>$35,000 to $49,999</td>
<td>102,706</td>
<td>16%</td>
<td>$875 to $1,250</td>
<td>$87,500 to $125,000</td>
<td>62,226</td>
<td>103,332</td>
<td>62,852</td>
<td>4 bdrm: $1,881</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>132,808</td>
<td>21%</td>
<td>$1,250 to $1,875</td>
<td>$125,000 to $187,500</td>
<td>87,492</td>
<td>52,616</td>
<td>34,876</td>
<td>5 bdrm: $2,281</td>
</tr>
<tr>
<td>Las Vegas-Paradise MSA MFI: $71,400</td>
<td>31,293</td>
<td>5%</td>
<td>More than $3,750</td>
<td>More than $375,000</td>
<td>31,884</td>
<td>31,293</td>
<td>51,057</td>
<td>6 bdrm: $2,681</td>
</tr>
</tbody>
</table>

Total: 637,740 | 100%  | 341,829 | 295,911 | 0 | Studio: $691 | 1 bdrm: $864 | 2 bdrm: $1,064 | 3 bdrm: $1,568 | 4 bdrm: $1,881 |

Source: American Community Survey 2011 B19001, B25075, and B25063
Foreclosure activity

Foreclosure activity has decreased over the last year; the trend, however, appears to be reversing based on the most recent data

- Notice of foreclosure sales were down 39% year over year from February 2012. However, notices of default were up 102% during the same period. Notices of default are the leading indicator for notice of sales, so it is likely that this number will increase in 2013.
- Preforeclosures increased 11% in from January to February 2013. This is indicative of the trend of increasing notice of sales. There were 0.8 foreclosure cancellations for every sale (3rd party or back to the bank). Since February 2012 the ratio has dropped by 13% to 0.67 cancellations per sale.
- The combination of fewer cancellations and increasing preforeclosures will likely lead to an increase in the number of foreclosures in 2013.
- Bank owned properties (REO) decreased 50% in the past year. As the numbers of REO decrease, the market will stabilize as the supply of low priced inventory decreases.

Figure A-32. Foreclosure filings in Clark County

![Foreclosure filings in Clark County](image1)


Figure A-33. Foreclosure outcomes in Clark County

![Foreclosure outcomes in Clark County](image2)

Figure A-34. Foreclosure inventories in Clark County


Figure A-35. Foreclosure filings by year built, Clark County


Figure A-36. Foreclosure filings by estimated market value, Clark County

Conclusions about housing costs and foreclosure activity

• Clark County’s housing market had a larger-price bubble than the national housing market and it is taking longer for the Clark County housing market to recover from the dramatic increase and decrease in prices between 2003 and 2013.

• The rapid price changes put many households who purchased homes during the housing bubble (mostly between 2003 and 2007) in a position where they owe more on their mortgage than their home is worth. This contributed to the spike in foreclosure activity.

• In the short term, increased foreclosures have caused housing prices to drop and have increased the supply of houses listed for sale.

• The spike in foreclosures caused by the bursting of the housing bubble will likely not have a significant impact on the long-term demand for housing.

• The most significant impact the foreclosure crisis will have on future housing demand is through the decrease in the percentage and number of homeowners. Previous homeowners who are now renting will look to re-enter the housing market in the future as credit restrictions decrease and individual credit scores recover.

• Housing affordability, specifically for renters, is a problem despite recent decreases in rental rates. Approximately half of Clark County’s renter households are cost-burdened; rents would have to drop significantly to be affordable for most renter households.
Many factors affect housing markets and housing choice

Economists view housing as a bundle of services for which people are willing to pay some price: shelter certainly, but also proximity to other attractions (jobs, shopping, recreation), amenities (type and quality of fixtures and appliances, landscaping, views), prestige, and access to public services (quality of schools).

Because it is impossible to maximize all these services and simultaneously minimize costs, households must, and do, make tradeoffs. What they can get for their money is influenced by both economic forces and government policy. Different households will value what they can get differently. They will have different preferences, which in turn are a function of many factors like income, age of the head of the household, number of people and children in the household, number of workers and job locations, number of automobiles, and so on.

These points explain why forecasting what types of housing will be built is so complex and uncertain:

- The housing choices of individual households are influenced by dozens of factors.
- Those factors interact in complex ways.
- Individual households may weight (value) the factors in very different ways. Those preferences may be correlated with certain socioeconomic and demographic characteristics, but they are not dictated by them.
- What people say they want and what they can and will actually pay may be very different.
- Housing demand in a given region is the result of the individual decisions of thousands of households.

The complexity of a housing market is a reality, but it does not obviate the need for some type of forecast of future housing demand, and of the implications of that housing demand for land demand and consumption. Such forecasts are inherently uncertain. Their usefulness for public policy often derives more from the explanation of their underlying assumptions about the dynamics of markets and policies than from the specific estimates of future demand and need. This section attempts to provide such an explanation.

Housing as a bundle of goods

Starting broadly, residential choice means the choice of both a housing location and a housing type. Factors relating to location include travel times (to work, shopping, recreation, education), views, neighborhood characteristics, quality of public services (especially, for many families,
Housing type comprises many attributes, the most important of which are structure type (e.g., single-family, multi-family) and size, lot size, quality and age, price, and tenure (own/rent). All of these attributes—what real estate economists refer to as the bundle of goods that one purchases when making a housing choice—affect residential choice.

Consider in more detail some of the location and structure characteristics that households evaluate:

- **Access to work.** For a large majority of U.S. households, at least one member of each household, and often two members, commutes to work daily. Fundamental to early and (to a significant extent) prevailing theories of urban economics and location theory is the tradeoff between travel time and land value (which for households means residential land value). There is no doubt other factors influence location decisions, or that the auto gives households considerable flexibility in choosing a location, but access to work remains an important determinant of household location.

- **Access to shopping, recreation, friends.** About 70% of all household travel in the U.S. is for non-work purposes. People travel from their homes to shopping, recreation, education, and other neighborhoods. Households value access to a variety of destinations.

- **Public services.** Households value a variety of public services, some of which vary by location. The quality and price of water, sewer, drainage, and power service typically vary little within a metropolitan area. The quality of other public services, especially schools and public safety (police and fire protection) can often vary substantially, and can have a large impact on a household’s location decision.

- **Neighborhood characteristics.** Characteristics of residential neighborhoods—character of development, income, age, and size of households, environmental quality—vary substantially within a metropolitan area, and are important to households. Most households have had the experience of settling for a smaller, less-well maintained unit in order to get housing they can afford in a location they (and others) desire.

- **Land and improvements.** As with businesses, the desire for space varies by household, and households are willing to trade-off space for other attributes, such as accessibility and amenities. Some families, for example, are willing to pay more for space, and use less of it, in areas with especially good schools.

### Six categories of factors that determine the type and amount of new housing

Six categories of factors that determine the type and amount of new housing

At ECONnorthwest, we combined our knowledge of economic theories about housing demand with practical experience with local housing markets and policies to identify six categories of factors that affect the amount and type of housing built in a community and can be summarized into six categories (which we refer to as “the six P’s”):

- **Population.** Even if none of the subsequent factors changed, housing demand will change, all else being equal, if population (i.e., the number of households) changes. Population grows either when people move to a region (in-migration) or through natural
increase (births minus deaths). The demographic characteristics (e.g., age) of new population affect housing demand.

- **Purchasing power.** Even without population growth, if an existing population were to suddenly get richer, it might spend more on housing—housing demand would increase. The amount that a household can spend on housing is predominantly dependent on household income and wealth, but the availability of mortgage financing also affects housing choice.

- **Preferences.** Households have preferences about: (1) types of housing (e.g., single-family detached or apartments), (2) housing amenities (e.g., fireplaces or multiple-car garages), (3) and locational amenities (e.g., distance from work, quality of schools, or access to shopping). Housing preferences are linked to demographic characteristics and purchasing power.

- **Prices (and costs) of housing.** Households have money to pay for housing, and preferences about the kind of housing they want to pay for. Prices tell them how much of what they want they can afford to get. If there are reasons to believe, for example, that the real price of residential land or housing construction will be rising, then one would expect housing developers and purchasers to begin to economize on lot size (land) or built space. Development costs describe the costs of building a house, including construction costs, land costs, and public services and infrastructure. Costs are strongly related to prices, but are not identical. For example, in a strong market with excess demand, a developer may be able to command a price that is in excess of development costs and a standard rate of return. In addition, certain advances in the technology of building housing or infrastructure may reduce costs.

- **Prices of housing compliments.** One important compliment for housing is transportation. For example, choices to purchase housing in suburban locations was influenced by the price of travel: if it had been very much higher, fewer households could have afforded to move to suburban locations. Telecommunications is a compliment for proximity and is a technology whose prices have dropped substantially in the last three decades.

- **Policy.** Governments affect the housing market through policies and actions that encourage or discourage development of certain types of housing in certain locations.

**The relative importance of different factors**

The literature is inconclusive on the relative weight of site and structure characteristics in housing location choice in the U.S. Based on a household survey, Wachs, et. al. (1993) concluded “…commuting distance is likely to be a secondary consideration in choosing where to live; housing costs, quality of schools, and safety from crime were anticipated generally to play a much larger role.” Geographic scale plays a large role in the appropriateness of this statement. If one is looking at neighborhoods that represent an overall difference of five minutes in travel time, service and housing attributes will probably dominate residential locational choice. Within a larger metropolitan region travel time will play a much more substantial role.
Levine (1998) concluded commute time was a dominant determinant of residential location at the regional scale, and that provision of affordable housing near employment concentrations can influence residential location decisions for low-to-moderate income single-worker households. He noted, however, that the jobs-housing balance does not decrease travel times or increase travel speeds, but that relaxation of suburban regulation intended to lead to improved matches between home and workplace is seen as enhancing the range of households’ choices about residence and transportation.

The relative importance of many of these factors to different households is different. Some like the excitement, diversity, and opportunities of an urban location; others like the quiet and security of a suburban cul-de-sac. Some may want a big yard; some want no maintenance responsibilities. Children and pets make a difference. Similar tradeoffs apply for own vs. rent; close-in vs. far out; amount of space and quality vs. price.

**Considerations in modeling future housing demand**

**Definitions: demand, absorption, need**

The term “demand” gets used to mean two different but related things, which can create confusion analytically and in public discussion. In economic text books, “demand” is the ubiquitous downward-sloping demand curve: the estimated amount of some good or services that consumers will purchase at different prices. The greater the price, the less they purchase. But “demand” gets used commonly and in the press to mean not the demand curve, but the intersection of supply and demand curves at some quantity for a given price. In real estate, that use of the term demand would be equivalent to the term “absorption.”

Sometimes analysts introduce yet a third variation: “potential demand,” which is a very squishy term. It is not the demand that one observes historically in the market place or that one expects to observe in the future. Rather, it is some bigger amount of demand—not predicted to occur necessarily—but apparently out there potential under some set of demand and supply conditions that are not specified.

In the context of housing markets, what one observes when looking at past and current housing conditions is the intersection of the forces of housing supply and demand at prevailing prices: in other words, absorption. As noted in the prior section, there are many factors that go into determining that intersection. Analysts will often divide these, as we do here, into factors that tend to have more influence on the demand side (e.g., growth in population, households, and income), and those that tend to have more influence on the supply side (e.g., the cost of materials, construction, and land).

15 Further definitions: absorption is similar but not identical to “new construction.” New construction is probably the variable of primary interest. Over the longer run, absorption and new construction will be approximately equal. In the short run, units can get built but not sold (absorbed). Building permit data is directly about new construction and indirectly and approximately about absorption.
Thus, in this memorandum we use the term “demand” in two ways: (1) to refer to a category of factors that influence the amount of housing, by type, that has been or is likely to be absorbed in the Clark County market, and (2) the historical and forecasted amount of that absorption.

Consistent with the first use of the term, we discuss characteristics of households that create or are correlated with preferences for different types of housing, and the ability to pay for that housing (the ability to exercise those preferences in a housing market by purchasing or renting housing; in other words, income or wealth).

The ability to pay is essential to the definition of housing demand. Housing market analysis often do not make a clear distinction between demand and need:

- **Housing need** can be defined broadly or narrowly. At its broadest, all households need shelter. For analysis, however, most studies use narrower definitions that distinguish between: (1) households that are financially able to purchase or rent housing at an “affordable” price, consistent with the requirements of their household characteristics, and (2) households that cannot find and afford such housing. Households in the second category have need: they are either unhoused, in housing of substandard condition, overcrowded, or paying more than their income and federal, state, or local standards say they can afford.

- **Housing market demand** is what households demonstrate they are willing to purchase in the market place. Growth in population means growth in the number of households and implies an increase in demand for housing units. That demand is met, to the extent it is, primarily by the construction of new housing units by the private sector based on its judgments about the types of housing that will be absorbed by the market.

Figure B-1 distinguishes between housing needs that are unmet and those that are met via market transactions. Housing need is the total number of housing units required to shelter the population. In that sense, housing need is approximately the number of households: every household needs a dwelling place. Some housing need is met through market transactions without much government intervention because households have the income to demand (purchase) housing services (as owners or renters). That demand is shown in the box on the right. Other households, however, have needs unmet, usually because they lack the resources to purchase housing services (financial need), but also because of special needs (though, even here, the issue is still one of financial resources).
Further confusing the discussion is that most households with needs (ones that do not have the financial resources to purchase or rent what society deems as minimally acceptable housing) are actually part of the effective demand overall: they are being housed somewhere. Most, however, are not part of the effective demand for new housing units (though a few are because they either receive income supplements or housing cost and price are reduced by other government programs).

Forecasting demand based on component factors

A simple way to forecast new housing units (i.e., units built or absorbed, one definition of demand) is to project historical trends into the future. That technique gets criticized as “driving by looking in the rear-view mirror,” but for long-run forecasting it can be equally or more reliable than much more sophisticated forecasting techniques. Why?

For growing metropolitan areas (Clark County is in this class), it is typical to see long-run, average growth rates for population and employment in the range of 1.0% to 1.5%. Since housing stock is highly correlated with population, it is not surprising that new housing gets added annually at the rate of about 1% of total housing stock. In any given year, these numbers can vary in the aggregate and by type of housing. But over a 20-year forecasting period, the historical data typically show a long-run (secular) upward trend containing short-run (cyclical) peaks and troughs.

The other way to forecast new housing construction/absorption is as a function of the factors that cause it to occur (like the ones discussed in the prior section). If one could do the measurement fine enough, one might find that every household has a unique set of preferences for housing. But no regional housing analysis can expect to build from the preferences of individual households. Thus, most housing market analyses that get to this level of detail try

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16 Not only could one not measure the preferences of all existing households; one could not know what specific households would be migrating to the region.
to describe categories of households on the assumption that households in each category will share characteristics that will make their preferences similar.

Three household characteristics are strongly correlated with choices about residential location and housing type: age of the household head, size of the household, and income. Even if these were the only three significant variables influencing housing preferences (they are not), and if they each only had four subcategories (e.g., age of head 18-30, 31-40, 41-55, 55+) they would lead to 64 different household types (4*4*4). This idea is illustrated in Figure B-2.

**Figure B-2. Illustration of combinations of factors influencing housing choice**

![Illustration of combinations of factors influencing housing choice](image)

It is difficult, at best, to allocate households to each of the 64 different housing types. Simpler forecasting techniques allow a reasonable estimate of the total number of housing units that will be needed based on expected population increases and the basic relationships between the variables shown in Figure B-2.

More rigorous specifications of factors that drive housing choice are also possible. Economists have developed what they refer to as **hedonic price models** of the housing market, which is jargon for models that try to estimate the contribution of each key component in a house's bundle of services to its market price. The housing demand variables in a hedonic price model are typically price of housing, price of other goods and services (because some of them are compliments for goods and services in the housing bundle: e.g., auto and transit travel is a compliment for residential locations next to trip destinations), the financial resources of consumers (income and wealth), preferences, and the number of households.\(^{17}\) The model must also account for housing supply variables, such as the price of desirable housing characteristics.

Figure B-3 shows factors that influence housing cost. A more complete model would have to be disaggregated by type of housing product (e.g., single-family dwelling, multi-family), and type

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\(^{17}\) Complicating the picture further is that for a large percentage of households, housing is not only a consumption good, but also an investment. Thus, housing choice depends also on one's assessment of future capital gains in the housing market.
of household with effective demand for those products (e.g., by household size, age of household head, income).

Figure B-3. Factors affecting housing price

The purpose of the discussion so far has been to give some background on the kinds of factors that influence housing choice, and in so doing, to convey why the number and interrelationships among those factors ensure that any generalization about housing choice will be wrong, at least in part. Given that caveat, we proceed to make some of those generalizations.

Figure B-4 illustrates a common pattern for how one’s life cycle intersects with housing choice. Many other patterns exist, but the one shown is common. The point is that housing needs and preferences change for a person or a household over time, and, on average, they change in predictable ways.

The main demographic and socioeconomic variables that may affect housing choice and preference for multi-family or compact single-family housing are: age of householder, household composition (e.g., married couple with children or single-person household), size of
household, ethnicity, race, household income, or accumulated wealth (e.g., real estate or stocks). The literature about housing markets identify the following household characteristics so those most strongly correlated with housing choice are: age of the householder, size of the household, and income.  

- **Age of householder** is the age of the person identified (in the Census) as the head of household. Householder age affects housing type and tenure. Households make different housing choices at different stages of life. Mobility is substantially higher for people aged 20 to 34. People in that age group will also have, on average, less income and fewer children than people in the next older age bracket. All of these factors mean that younger households are much more likely to be renters. Renters are more likely to be in multi-family housing. Figure B-5 shows this general pattern and also shows that it is not absolute: some young people own single-family houses and some old people rent. This trend holds true for Clark County.

- **Size of household** is the number of people living in the household. The size of the household is related to the age of the householders. Younger and older people are more likely to live in single-person households and people in their middle years are more likely to live in multiple person households (often with children). In Clark County, households older than 75 years are the most likely to be single-person households (about half of households older than 75 years). About 20% of households younger than 54 years are single-person households. Between age 55 and 74, about one-third of households are single-person households.

- **Income** is the household income. Income is probably the most important determinant of housing choice. Income is strongly related to the type of housing a household chooses (e.g., single-family detached, duplex, or a building with more than five units) and to household tenure (e.g., rent or own). Figure B-6 shows how age and income relate to housing type and tenure in the U.S. (1990). It illustrates a substantial preference for single-family housing and ownership when incomes allow that choice, regardless of age. A review of census data that analyzes housing types by income in most cities will show that as income increases, households are more likely to choose single-family detached housing types. Consistent with the relationship between income and housing type, higher income households are also more likely to own than rent. This trend appears to hold true for Clark County.

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18 See the end of this appendix for citations to some of the literature supporting these generalizations.
Figure B-4. The intersection of life cycles and housing careers


Figure B-5. Tenure and household type by age of household head


Figure B-6: Composition of owner and renter tenures for U.S. households, 1990

In summary, the data illustrate what more detailed research has shown and what most people understand intuitively:

- Household life cycles and housing choice interact in ways that are predictable in the aggregate.
- Age of the household head is correlated with household size and income.
- Household size and age of household head affect housing preferences.
- Income affects the ability of a household to afford a preferred housing type.

Thus, simply looking at the long wave of demographic trends can provide good information for estimating future housing demand. The connection between socioeconomic and demographic factors, on the one hand, and housing choice, on the other, is often described informally by giving names to households with certain combinations of characteristics: the "traditional family," the "never-marrieds," the "dinks" (dual-income, no kids), the "empty nesters."
% High School Grad or Less Year 2010

- 50% - 59%
- 60% - 69%
- 70% - 79%
- 80% - 94%

Note: This map is offered as a general reference guide only. Neither warranty of accuracy is intended nor should any be assumed.
Chinese LEP Per 100 Acres

- 5 And Less
- 6-20
- 21-50
- 51-100
- 101-177

Urban Boundary

Source: U.S. Census 2010

Note: This map is offered as a general reference guide only. Neither warranty of accuracy is intended nor should any be assumed.

City of Henderson on behalf of SNRPC
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ZIP Code Geography

Health Data

Urban Boundary
USDA Food Deserts 2008-2010(Tracts)
Food Deserts within ZIP Codes

Source: USDA

Revised: October 04, 2012
Source: Boulder City Government,
Clark County Government,
City of Las Vegas Government,
City of North Las Vegas Government,
City of Henderson Government,
The Regional Transportation Commission of Southern Nevada
and University of Nevada Las Vegas
Based on Projected Coordinate System:
NAD83, StatePlane NV East FIPS 2701 Feet
Note: This map is offered as a general reference guide only. Neither warranty of accuracy is intended nor should any be assumed.
Social Indicator Map

2010 Census Tracts data

Social Indicator Map
1) 50% or more Minority Population
2) % Population w/ No Vehicle
3) 150% Below Poverty
4) % High School Grad or Less (50% and more)

50% or more Minority Population is the baseline for analyzing Composite Indicators. Approach based on the SANDAG methodology.
Tagalog LEP Per 100 Acres

5 and Less

6 - 20

21 - 40

41 - 75

76 - 135

Urban Boundary

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