



# STAFF REPORT

**Report To:** Board of Health

**Meeting Date:** June 1, 2017

**Staff Contact:** Nicki Aaker (naaker@carson.org)

**Agenda Title:** For Possible Action: Presentation and possible action to provide feedback to staff on Carson City Health and Human Services (CCHHS) Community Health Needs Assessment and the identified unmet needs effecting the health of the community.

**Staff Summary:** This CCHHS Community Health Needs Assessment (CHNA) process was conducted using four assessments associated with the Mobilizing for Action through Planning and Partnerships (MAPP) process - (1) Community Themes and Strengths, (2) Local Public Health System, (3) Community Health Status, and (4) Forces of Change. For the Community Themes and Strengths Assessment, CCHHS partnered with Carson Tahoe Health and Carson Valley Medical Center to examine the results of community surveys that were conducted within each organization's service areas (that included Carson City) and resulted in each organization's Community Health Needs Assessment. The Local Public Health System Assessment measured the functionality of the public health system that was completed with four sessions in which various partners attended. The Community Health Status Assessment consists of data presented for each county in a quad-county region, in addition to state and national data where available. The Forces of Change Assessment (FoC) was completed by means of two small work group meetings, followed by a broad stakeholder survey. The purpose of the FoC was to begin to help stakeholders identify and document the assets and other factors in our community that influence the ability of stakeholders to implement programs and services that address community health, both in the present and in the future. The result of all four assessments gives CCHHS a multi-dimensional view of the current status of Carson City's community health.

**Agenda Action:** Formal Action/Motion

**Time Requested:** 20 minutes

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## **Proposed Motion**

I move to provide \_\_\_\_\_ feedback, as direction to staff regarding the Community Health Needs Assessment.

## **Board's Strategic Goal**

Quality of Life

## **Previous Action**

The first Community Health Needs Assessment was presented to the Board of Health Plan June 2012.

## **Background/Issues & Analysis**

One of the requirements for Public Health Accreditation is to participate in or conduct a collaborative process resulting in a comprehensive community health assessment at least every five years.

## **Applicable Statute, Code, Policy, Rule or Regulation**

Public Health Accreditation Domain 1

**Financial Information**

Is there a fiscal impact?  Yes  No

If yes, account name/number:

Is it currently budgeted?  Yes  No

Explanation of Fiscal Impact:

**Alternatives**

N/A

**Board Action Taken:**

Motion: \_\_\_\_\_

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_

Aye/Nay

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Vote Recorded By)

# Carson City Community Health Needs Assessment (CHNA) 2017

DRAFT FOR PREVIEW

AND COMMENT

May 2017



University of Nevada, Reno  
School of Medicine  
Office of Statewide Initiatives

DRAFT

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## Special Thanks to the 2017 CHNA Planning and CHIP Committees:

Organization	Planning Committee Representative
<b>Carson City Health and Human Services</b>	Nicki Aaker, MPH, RN, <i>CCHHS Director</i> Dustin Boothe, MPH, <i>Disease Control and Prevention Division Manager</i> Valerie Cauhape, MA, <i>Public Health Educator, Accreditation Coordinator (2013-2017)</i> Ali Garcia, <i>Disease Investigator</i> Jeanne Freeman, <i>Public Health Preparedness Division Manager</i> Taylor Radtke, <i>Public Health Preparedness Planner, Public Information Officer, Accreditation Coordinator (2017-present)</i> Cortney Bloomer, MPH, <i>Western Nevada Safe Routes to School Coordinator</i>
<b>Carson City Senior Center</b>	Michael Salogga, <i>Business Manager</i>
<b>Carson Tahoe Behavioral Health</b>	Susie Whitman, <i>Community Liaison</i>
<b>Carson Tahoe Health</b>	Laurie Burt, <i>Marketing Specialist</i> Mary Mang, MHA RN, CPHQ, <i>System Director Quality and Outcomes Management</i> Pam Puckett, <i>Director of Integrated Care</i> Diane Rush, <i>Marketing Director</i> Syndi Skilling, <i>Diabetes Health Educator</i>
<b>Carson Valley Medical Center</b>	Shannon Albert, <i>Director of Development and Outreach</i>
<b>Friends In Service Helping (FISH)</b>	Jim Peckham, <i>Executive Director</i>
<b>Nevada Public Health Foundation</b>	Rota Rosachi, MSW, <i>Executive Director</i>
<b>Partnership Carson City</b>	Kathy Bartosz, <i>Executive Director</i> Hannah McDonald, <i>Assistant Director</i>
<b>United Latino Community</b>	Omar Anaya, <i>Director</i> Luis Medina, <i>Community Health Worker</i>
<b>University of Nevada, Reno, Office of Statewide Initiatives</b>	Laima Etchegoyhen, MPH, <i>Health Services Research Analyst</i> John Packham, Ph.D., <i>Director of Health Policy Research</i>

For a complete list of participants in the Local Public Health System Performance Assessment, please see Appendix B (p.66).



# Section I: Introduction

## Background and Purpose

Community Health Needs Assessments (CHNAs) provide organizations with a snapshot of the health status of the community being served. By understanding the current health needs of the community, organizations can identify and target specific health-related issues to improve upon through novel or improved programs and services. Additionally, this information allows organizations to better focus resources to address areas of greatest need.

## Nevada Service Areas of Carson City Health and Human Services, Local Primary Care Facilities, and Other Partner Organizations

Carson City Health and Human Services (CCHHS) is the local-level health authority for the Consolidated Municipality of Carson City, Nevada. As such, the focus of this CHNA is on providing a comprehensive assessment for Carson City. While CCHHS is not the overall public health authority overseeing the neighboring jurisdictions of Douglas County, Lyon County, and Storey County, some of our programs and services have delegated authority to provide public health services in these counties. Additionally, the two local hospital systems with which CCHHS partners on many projects, Carson Tahoe Health and Carson Valley Medical Center, also have service areas which extend into each of these counties. Many of CCHHS' non-profit partner organizations also implement health programming in counties outside of Carson City. Thus, this CHNA includes data for a quad-county region that includes Carson City, Douglas County, Lyon County, and Storey County.

It should be noted that data are sometimes not available for each county, or data may be collected in different ways within each county, depending on the organization from which the data came. Thus, while information may be provided for Carson City, similar information may not be available for the entire quad-county region.

**Table 1:** Total Population of Carson City, Douglas County, Lyon County, Storey County and the State of Nevada

Region	2000*	2012*	2015**
<b>Carson City</b>	52,551	54,616	54,080
<b>Douglas County</b>	41,429	41,016	47,118
<b>Lyon County</b>	34,841	51,264	51,557
<b>Storey County</b>	3,393	3,939	3,942
<b>Nevada</b>	2,023,394	2,750,307	2,790,136

\*US Census Bureau (<https://www.census.gov/quickfacts/table/PST045216/00>, April 5, 2017)

\*\*Data published in the Carson City Health and Human Services' Quad-County Core Health Indicators, 2017. Please see Appendix A for more information.

In order to fully understand the health issues facing community members, it is important to first evaluate how many people are in our community. Additionally, some social factors such as gender, race, and income, and may contribute to an individual’s health. It is then important to measure how many of our community members may be affected by some of these Social Determinants of Health. Table 2 outlines some of these factors as demographics. For more information regarding the Social Determinants of Health, please see Section VII (p.27).

**Table 2:** Population Demographics of Quad-County Region\*

Demographic	Carson City	Douglas County	Lyon County	Storey County	Nevada
Population Density (population per square mile), 2015	382.1	66.2	26.7	15.3	24.6
Number of Female Population, 2015	27,694	24,392	25,802	386**	1,418,491
Number of Male Population, 2015	25,087	23,680	26,178	2,044**	1,463,570
Number of Population Identifying as Hispanic, 2016	10,708	6,124	8,400	230	824,835
Number of Population Identifying as Black, 2016	313	286	521	12	241,520
Number of Population Identifying as Native American, 2016	1,385	1,111	1,584	55	32,351
Number of Population Identifying as Asian, 2016	1,140	1,324	927	55	261,239
Number of Population Identifying as White, 2016	38,725	39,742	43,230	3,770	1,524,088
Estimated Median Household Income, 2014	\$50,108	\$58,940	\$47,143	\$64,835	\$52,205
Unemployment: number and percent of population 16+ unemployed but seeking work, 2014	5,516 (10.2%)	4,947 (10.5%)	5,208 (10.1%)	355 (9%)	135,137 (9.8%)
Population in Poverty: number and percent of population in poverty, 2013	9,940 (19.3%)	4,861 (10.3%)	7,039 (13.7%)	186 (8.4%)	430,447 (15.4%)

\*Data from the Carson City Health and Human Services: Primary and Secondary Data Sets, 2016. Please see Appendix A for more information.

\*\*Secondary data estimates; accuracy is not guaranteed.

## CHNA Process and Components

This CHNA process completed by CCHHS and its community partners through 2016-2017 more closely followed the Mobilizing for Action through Planning and Partnerships (MAPP) process than the assessment completed in 2012. However, since most of the work to complete the CHNA was undertaken by an existing workgroup, the early stages of the MAPP process (the “Organizing” and “Visioning” stages) were not completed in full so as to not place undo time and work burdens on the existing workgroup. However, the four MAPP assessments were implemented in full in order to avoid the major gaps identified in the 2012 process. The assessments, and their related activities are outlined below.

1. **Community Themes and Strengths Assessment:** Two community surveys (see Section II: Community Member Assessments) were disseminated to gather input on individual health status as well as personal views of the overall community’s health. Paper and online surveys were implemented by Carson Valley Medical Center, while a telephone survey was implemented by Carson Tahoe Health. More information about the Community Themes and Strengths Assessment is provided in Section II (p.5).
2. **Community Health Status Assessment:** A data set was compiled by CCHHS staff using the Nevada Core Health Indicators (v. 1.0) which showcases data on a variety of health outcomes for the quad-county region, as well as the state and national levels where available (see Section III: Community Health Status Data). More information about the Community Health Status Assessment is provided in Section III (p.7).
3. **Local Public Health System Performance Assessment (LPHSPA):** LPHSPA processes bring representatives from a broad spectrum of community groups together to discuss how well local organizations work together to address community health needs and other public health services. LPHSPAs were conducted in both Carson City and Douglas County in 2016. More information about the LPHSPA assessment is provided in Section IV (p.11).
4. **Forces of Change Assessment (FoC):** A Forces of Change Assessment was conducted in Carson City among members of the CHNA and Community Health Improvement Plan workgroup (the same workgroup is associated with both processes) and additional invitees. More information about the FoC assessment is provided in Section V (p.16).

In addition to the four MAPP assessments, information was collected for this CHNA based upon the results of CCHHS’ review report from the Public Health Accreditation Board (Section VI, p.24), the Social Determinants of Health and vulnerable populations (Section VII, p.27), community assets (Section VIII, p.29), and both state and local performance rankings (Section IX, p.32). The purpose of this document is to present the results of the four MAPP assessments and all other information gathered. Section X (“Common Themes and Next Steps”) outlines major findings and includes suggested next steps for community health organizations.

## Section II: Community Member Assessments

### Community Surveys

As a part of the Mobilizing for Action through Planning and Partnership (MAPP) process, information is gathered from community members through surveys or other means to find out what the community’s perceptions are in regards to their health priorities, resources, and perceived barriers. Although objective data regarding community health status (as in Section III, p.7) is an important way of determining a community’s overall health, gaining insight directly from community members can be a way of identifying factors that may be either directly or indirectly contributing to or creating barriers to community health. This also presents an opportunity to identify unintended outcomes of health programs or policies that have previously been implemented in the community.

While Carson City Health and Human Services (CCHHS) needed to use results of a community survey to complete the MAPP process, two local hospital systems, Carson Tahoe Health, and Carson Valley Medical Center) had already planned community-wide surveys for their service areas. Instead of implementing a third survey, CCHHS worked with Carson Tahoe Health (CTH) and Carson Valley Medical Center (CVMC) on both of their surveys, thus reducing the likelihood of survey fatigue among the population.

Both CTH and CVMC have overlapping service areas, including most of the quad-county region identified for this assessment process. The table below contrasts specific information about each hospital’s survey processes.

	Carson Tahoe Health (CTH)	Carson Valley Medical Center (CVMC)
<b>Hospital Location</b>	Carson City, NV (County: Carson City)	Gardnerville, NV (County: Douglas County)
<b>Organization Contracted for Survey Development, Implementation, and Data Analysis</b>	Professional Research Consultants	University of Nevada, Reno (UNR), School of Medicine, Office of Statewide Initiatives
<b>CCHHS Role</b>	Survey question review and feedback	Survey question review and feedback, Aided in survey dissemination and collection
<b>Basis of Survey</b>	Behavioral Risk Factor Surveillance System (BRFSS)	UNR CHNA Tool
<b>Survey Dissemination Modality</b>	Telephone	Paper and electronic
<b>Means of Documenting Results</b>	2016 Community Health Needs Assessment Report	2016 Douglas County Community Health Needs Assessment

## Vulnerable Populations

It can be very difficult to reach many populations that may be particularly vulnerable to any negative effects associated with changes to the health status of the community. Some factors that influence a population’s vulnerability include, but are not limited to: language barriers, insurance status, homelessness, and age. Because these populations are difficult to reach in general, and both surveys were limited in the number of questions that could be asked of respondents, it is uncertain how many respondents may belong to a “vulnerable population” group. For more information on vulnerable populations, see Section VII (p.27).

## Survey Results

The information presented in the table below summarizes the results of both survey processes and the priority areas found within each hospital’s CHNA. The priority areas listed here were identified and informed through use of the community surveys, as well as other community health status indicators and information collected from partner organizations. For more details regarding the results of these surveys, sample sizes, and limitations, please see the CHNAs completed for Carson Tahoe Health (<https://www.carsontahoe.com/community-health-needs-assessment>) and Carson Valley Medical Center ([http://cvmchospital.org/about\\_us/health\\_needs\\_assessment.aspx](http://cvmchospital.org/about_us/health_needs_assessment.aspx)).

Carson Tahoe Health (CTH) Priority Areas Identified	Carson Valley Medical Center (CVMC) Priority Areas Identified
<ul style="list-style-type: none"> <li>• Access to Healthcare Services</li> <li>• Cancer</li> <li>• Dementia, including Alzheimer’s Disease</li> <li>• Diabetes</li> <li>• Heart Disease and Stroke</li> <li>• Infant Health and Family Planning</li> <li>• Injury and Violence</li> <li>• Mental Health</li> <li>• Nutrition, Physical Activity, and Weight</li> <li>• Oral Health</li> <li>• Potentially Disabling Conditions</li> <li>• Respiratory Diseases</li> <li>• Substance Abuse</li> </ul>	<ul style="list-style-type: none"> <li>• Access to Healthcare Services               <ul style="list-style-type: none"> <li>○ Insurance Coverage</li> <li>○ Transportation</li> <li>○ Availability of services outside of business hours</li> <li>○ Language and cultural barriers</li> </ul> </li> <li>• Substance Abuse and Safety               <ul style="list-style-type: none"> <li>○ Drug and alcohol use and abuse</li> <li>○ Gambling</li> <li>○ Crime associated with drug and alcohol abuse</li> </ul> </li> </ul>

## Section III: Community Health Status Data

### Nevada Core Health Indicators

The Nevada Core Health Indicators (v. 1.0) is a list of suggested health status data which is available to any organization through various state and federal agencies. The Nevada Core Health Indicators (NCHI) list was developed by a group of representatives from state and local public health agencies in Nevada who had noted a consistent lack of comparable data being collected and reported among organizations in the community. The list itself includes many indicators from a broad spectrum of health outcomes, including communicable diseases, chronic diseases, maternal and child health, mental health, and lifestyle and behavioral outcomes.

### Data Collection Process

The NCHI tool itself consists of a list of suggested health indicators and identifies some sources where data can be collected. A CCHHS staff member used the NCHI and developed a regional listing and all associated data sources to find the most current data published by each source. In some instances the data source identified in the NCHI tool was either no longer available or no longer offered the data associated with that health indicator. In these cases other sources of data were sought out and the reference source was altered to reflect these changes. The completed document resulting from this effort, "Carson City Health and Human Services Quad-County Core Health Indicators", has been inserted into Appendix A for reference and may be found at the Carson City Health and Human Services website (<http://gethealthycarsoncity.org/about-us/data/>). Although the document published in Appendix A examines a quad-county region (Carson City, Douglas County, Lyon County, and Storey County), and compares data from the included counties against that at the statewide and national levels, this section will concentrate on Carson City data.

### Carson City Areas of Strength

The points below are some of the areas where Carson City community members may be positively benefiting from factors that impact health, or are directly experiencing better health outcomes than residents of neighboring communities. It should be noted that no tests of statistical significance have been completed on the data presented below. Please see the Limitations section for more details.

### Socioeconomic and Environmental Factors

- Food environment index - index of factors that contribute to a health food environment on a scale of 0 (worst), to 10 (best), 2016: **7.5** (*Douglas County: 6.8; Lyon County: 6.2; Storey County: 8.1; Statewide: 7.5; National data unavailable*)
- Commute time - percent of workers who commute in their car alone, with a commute more than 30 minutes per day, 2016: **17.5%** (*Douglas County: 32.7%; Lyon County: 46.7%; Storey County: 49.6%; Statewide: 28.4%; National data unavailable*)

### **Vaccinations**

- Percent of adults 65+ who had reported having had the flu shot in the past year, 2015-2016: **62%** (Douglas County: 48%; Lyon County: 48%; Storey County: 13%; Statewide: 59%; National: 63.5%)
- Percent of adults 65+ who received at least one pneumonia vaccination in the past year, 2015-2016: **70%** (Douglas County: 62%; Lyon County: 60%; Storey County: 16%; Statewide: 72.5%; National: 70.1%)

### **Reportable Conditions**

- Syphilis - total number of cases including primary and secondary: **<5** (Douglas County: <5; Lyon County: <5; Storey County: <5; Statewide: 774)
- Tuberculosis - incidence per 100,000 population: **0** (Douglas County: <5; Lyon County: <5; Storey County: 0; Statewide: 85;)
- Measles, Mumps, and Rubella - number of cases each, 2016: **0, 0, 0** (Douglas County: 0, <5, 0; Lyon County: 0, 0, 0; Storey County: 0, 0, 0)

### **Substance Use and Abuse**

- Alcohol-related crashes - percent, 2016: **26.7%** (Douglas County: 45.2%; Lyon County: 46.8%; Storey County: 50%; Statewide: 33.6%)

### **Cancers**

- Early colorectal cancer diagnosis - total invasive cancer per diagnosis, 2009-2013: **45.1%** (Douglas County: 42.5%; Lyon County: 42.6%; Storey County: 16.7%; Statewide: 40.1%)

### **Areas for Improvement**

Unfortunately, there are also many areas where the community members of Carson City are experiencing poorer health as indicated in the Quad-County Core Health Indicators (QCCHI). Please see the Limitations section for more details. Below are some of the major areas for improvement. It should be noted that no tests of statistical significance have been completed on the data presented below.

### **Socioeconomic and Environmental Factors**

- Population in poverty, percent and number of community members, 2014: **19.3%, 9,940** (Douglas County: 10.3%, 4,861; Lyon County: 13.7%, 7,039; Storey County: 8.4%, 186; Statewide: 15.4%, 430,447; National: 15.5%, 48,208,380)
- Free & reduced school lunches, percent and number of students qualifying, 2015: **51.2%, 3,952** (Douglas County: 33.6%, 2,039; Lyon County: 56.4%, 4,616; Storey County: 46.9%, 23; Statewide: 59.8%, 260,899)
- Reported violent crimes, per 100,000 violent crimes by type, 2015: **181** (Douglas County: 90; Lyon County: 134; Storey County: 31; Statewide: 22,466)
- Food insecurity, percent and number of food insecure individuals, 2016: **15.4%, 7,805** (Douglas County: 5.5%, 2,742; Lyon County: 12%, 6,591; Storey County: 2.5%, 101; Statewide: 15.4%, 451,954)

- High school graduation rate - percent of cohort graduating high school in four years, 2013: **75.9%** (Douglas County: 85%; Lyon County: 78.6%; Storey County: 89.9%; Statewide: 67.3%; Nationwide: 81%)

### **Substance Use and Abuse**

- Tobacco use - percent of adults who are current smokers, 2016: **17.3%** (Douglas County: 15.3%; Lyon County: 17.4%; Storey County: 14%; Statewide: 17%)
- Drug use - percent of adults who have used illicit drugs, 2014: **9.1%** (Douglas County: 9.1%; Lyon County: 9.1%; Storey County 2.5%; Statewide: 9.1% National: 8.3%)

### **Lifestyle Factors**

- Obesity - total percentage of adults who were overweight or obese based off BMI, 2015: **68.7%** (Douglas County: 63.9%; Lyon County: 70.2; Statewide: 64.7%; Nationwide: 65.3%)

### **Maternal and Child Health Factors**

- Women receiving prenatal care in their first trimester - percent, all ages included, 2015: **50.5%** (Douglas County: 63.6%; Lyon County: 61.2%; Storey County: 78.9%; Statewide: 69.8%)
- Teen pregnancy rate - sum of live births, fetal deaths, and abortions, per 1,000 female population aged 15 to 19, 2014: **50.7** (Douglas County: 17.1; Lyon County: 36.8; Storey County: 0; Statewide: 36.5; Nationwide: 52.4)

### **Limitations**

There were several health-related factors that were not described or included in the Areas of Strength or Areas of Improvement above. Possible reasons for this include: several of the factors were not dissimilar from other regional or statewide data; or while Carson City data may have indicated a possible improvement over regional or statewide outcomes, the burden of disease was still too high to be considered an area of strength. It must be noted that any dissimilarities mentioned above have *not been analyzed for statistical significance*.

While the greatest effort was made to include the most recent data available, it should be noted that it is common for several years to lapse between the time of data collection and publication in reputable sources. Furthermore, not all health data is collected on an annual basis. Since the factors that affect community health are broad and dynamic, data that is several years old may not represent the exact current health status of the community. However, this data is not without merit, as it gives community members and other interested stakeholders an approximation of the health status of the community and allows for trend analyses.

Among reportable conditions, one is cautioned that the data provided only reflects the number of cases reported by providers among patients that had received testing. While the State of Nevada mandates in NAC 441A and NRS 441A that providers report all positive cases, it is possible that differences among counties may be attributed to the prevalence of testing for reportable conditions among infected persons differing among communities.



Additionally, there are several areas within the NCHI that, although were included in the tool itself, are not currently being collected at the local, state, or national level. Thus, although these factors may affect community health, there may not be published data available from reputable sources currently available to include in this or related documents. There were also many factors for which the NCHI tool outlined both the number and rate per 100,000 population to be included in the final document, and only rate or number data was available. In future updates of the “Quad-County Core Health Indicators” published by CCHHS that use the NCHI, the descriptors will be altered to provide more clarity as to which measure is being presented (rate, number, etc.).

DRAFT

## Section IV: Local Public Health System Performance Assessment

### Purpose

The Local Public Health System (LPHS) is a network of organizations in a community or region who work together towards the common goal of improving community health and wellness. The LPHS may be comprised of non-profit health-related organizations, hospitals and other clinical care providers, the designated provider of local public health services (such as a local health department), social service agencies, organizations overseeing local parks and recreation programs, emergency service agencies, other local governmental agencies, local civic leaders, service and civic organizations, local media outlets, educational institutions, and many others. The purpose of the Local Public Health System Assessment (LPHSPA) is to convene representatives from these organizations to evaluate the status of the function of the LPHS at a point in time. This evaluation includes highlighting the LPHS' strengths, identifying service gaps, and lays the foundation for plans to leverage system strengths and address areas of improvement.

### Process

An earlier version of the LPHSPA was completed as a part of the activities related to the Carson City Community Health Assessment published in 2012. However, instead of completing the assessment tool associated with the National Public Health Performance Standards Program (Centers for Disease Control and Prevention, 2015), the workgroup instead developed a qualitative report focusing on the discussions among the LPHSPA participants. Through this earlier process, there was no consensus vote documented as to the level of activity and performance of the LPHS by measure, standard, or essential service. Although there is valuable information regarding the functionality of the LPHS in the previous assessment report, the results of the 2012 is not comparable to the 2016 assessment described below.

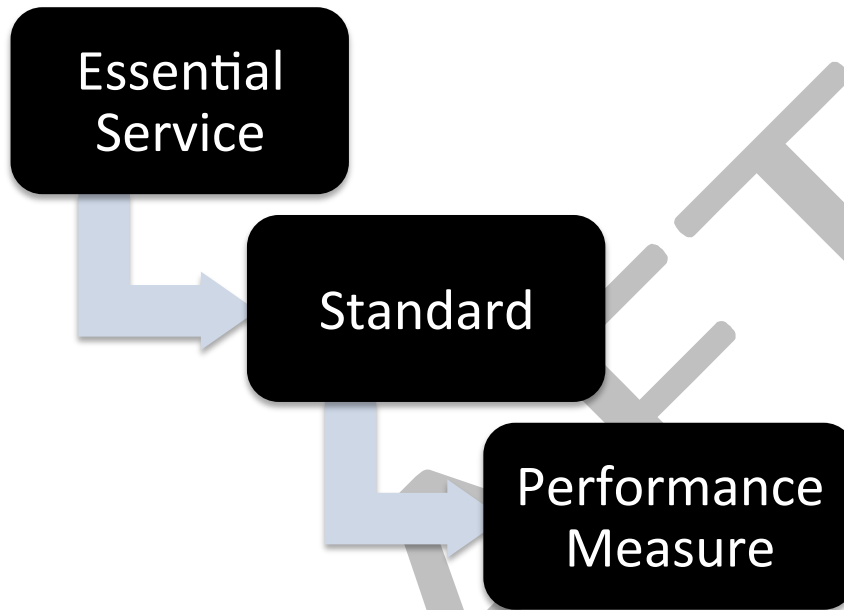
The Local Public Health System Performance Assessment Instrument (LPHSPAI) was developed as a joint effort between the National Association of City and County Health Officials (NACCHO) and the Centers for Disease Control and Prevention (CDC) to serve as a tool for state, local, and governing public health entities to use as a part of the National Public Health Performance Standards Program (CDC, 2015). This tool was chosen due to having been utilized previously in neighboring communities including Douglas County and Lyon County. Given the length of the LPHSPAI, it was agreed that the Essential Services be broken up and spread out over four separate meetings. The LPHSPA meeting dates, location, and Essential Services evaluated can be found in the table below:

Meeting Date	Meeting Time and Location	Essential Services Evaluated	Assessment Meeting Theme	Target Audience
<b>October 10, 2016</b>	8:00 AM – 11:30 AM Carson City Community Center	2, 5, and 6	Community Health Planning and Policies, Epidemiology, Public Health Preparedness, and Public Health Ordinances & Laws	Public Health Organizations, Hospitals, Other Primary Care, Community Based Organizations, Public Health Laboratories, Tribal Health, City Management, District Attorney, Emergency Services, City Governance, and others.
	1:00 PM – 2:45 PM Carson City Community Center	1 and 3	Community Data Collection and Sharing, and Public Health Information & Education	Public Health Organizations, Public Information Officers, Community Based Organizations, Data Collection Programs, Hospitals, Other Primary Care, Tribal Health, Emergency Services, City Governance, and others.
<b>October 11, 2016</b>	8:00 AM – 11:30 AM Carson City Community Center	4, 7 and 9	Community Organization Partnerships and Programs, Referral Systems, and Program Evaluation	Community Based Organizations, Public Health Organizations, City Governance, Tribal Health, University of Nevada, Western Nevada College, Hospitals, Other Primary Care, and others.
	1:00 PM – 3:00 PM Carson City Community Center	8 and 10	Community Health Workforce Development, Research, and Use of Best Practices	Public Health Organizations, Community Based Organizations, Hospitals, Other Primary Care, Tribal Health, University of Nevada, Western Nevada College, Local Employment Agencies, and others.

Throughout the assessment process, it is important to ensure that organizations from a spectrum of public health areas of practice are represented. In an attempt to be respectful of the time of representatives attending the LPHSPA meetings, the essential services were grouped into likely target audience groups. For example, the planning committee grouped the Essential Services evaluated during the first meeting (October 10, 2016) to target local public health professionals, representatives from emergency services and public health preparedness, health-promoting non-profits, and health care providers. Likewise, the remaining Essential Services were grouped together and evaluated during the subsequent meetings in a manner that would best suit those invited to attend. Although these target audiences were identified, LPHSPA invitees were encouraged to attend any or all of the meetings of their choosing.

The assessments themselves were presented via Microsoft PowerPoint, and included an introduction to the concepts behind the LPHS and how each network was involved in the LPHS, the purpose of the assessment meeting, and an introduction section for each Essential Service. The introduction of each Essential Service utilized selected discussion questions to open up forum-style discussions in order to allow participants to explore the strengths and areas for improvement within

that Essential Service. After this introduction, the process was repeated through group discussion by each standard to ensure that all participants understood the context and heard others’ feedback as to how these standards and performance measures are addressed within the LPHS. Discussions were recorded by the designated note-taker and were included in the LPHSPA. After these discussions, the participants were asked to score the LPHS’ functions for a set of performance measures under each standard.



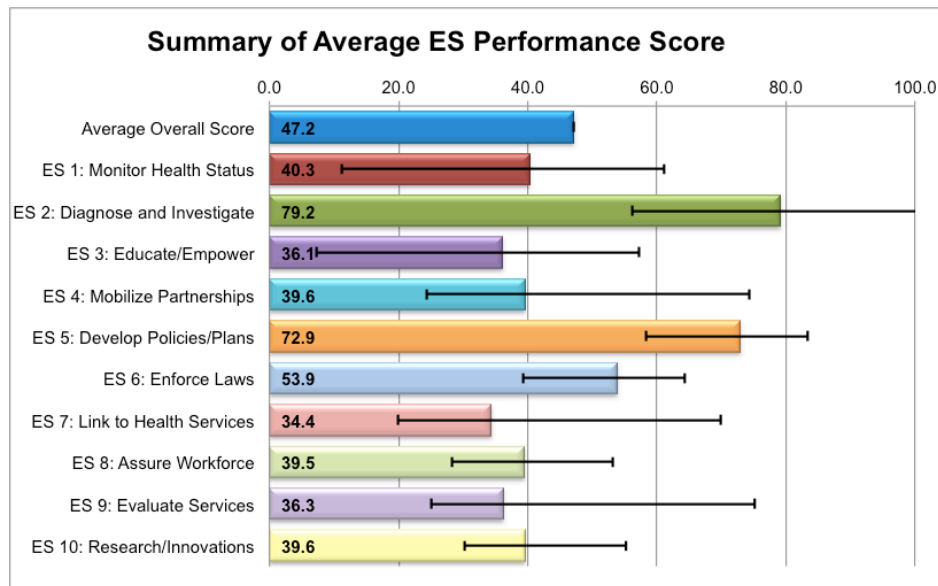
The scoring system asked the participants to score the LPHS on the performance measures on the bases of the following categories of functionality: Optimal Activity, Significant Activity, Moderate Activity, Minimal Activity, and No Activity. These categories are detailed in the table below.

<b>Optimal Activity (76-100%)</b>	Greater than 75% of the activity described within the question is met.
<b>Significant Activity (51-75%)</b>	Greater than 50%, but no more than 75% of the activity described within the question is met.
<b>Moderate Activity (26-50%)</b>	Greater than 25%, but no more than 50% of the activity described within the question is met.
<b>Minimal Activity (1-25%)</b>	Greater than zero, but no more than 25% of the activity described within the question is met.
<b>No Activity (0%)</b>	0% or absolutely no activity.

The presentation slides were linked to software allowing each attending to score the measure simultaneously and anonymously. The category that received the largest number of votes among participants was recorded as the measure’s score.

## Assessment Results

The table below summarizes the average score of each of the Ten Essential Services as voted upon during the LPHSPA meetings.



Performance Scores for each Essential Service indicated on the x-axis of the above chart show the average percentage of optimal functionality and activity among its performance measures, as voted upon by attendees. The black bars describe the range of category scores received within that Essential Service.

## Areas of Strength

Three areas of public health practice that scored the highest among the 10 Essential Services include:

### 1. Essential Service 2

<b>ES 2: Diagnose and Investigate</b>	<b>79.2</b>
2.1 Identification/Surveillance	66.7
2.2 Emergency Response	83.3
2.3 Laboratories	87.5

### 2. Essential Service 5

<b>ES 5: Develop Policies/Plans</b>	<b>72.9</b>
5.1 Governmental Presence	75.0
5.2 Policy Development	66.7
5.3 CHIP/Strategic Planning	75.0
5.4 Emergency Plan	75.0

**3. Essential Service 6**

<b>ES 6: Enforce Laws</b>	<b>53.9</b>
6.1 Review Laws	50.0
6.2 Improve Laws	41.7
6.3 Enforce Laws	70.0

**Areas for Improvement**

The following areas of public health practice represent the three Essential Services that were scored the lowest by participants in the LPHSPA process. The Essential Services below are ranked by greatest need for improvement.

**1. Essential Service 7**

<b>ES 7: Link to Health Services</b>	<b>34.4</b>
7.1 Personal Health Service Needs	31.3
7.2 Assure Linkage	37.5

**2. Essential Service 3**

<b>ES 3: Educate/Empower</b>	<b>36.1</b>
3.1 Health Education/Promotion	25.0
3.2 Health Communication	25.0
3.3 Risk Communication	58.3

**3. Essential Service 9**

<b>ES 9: Evaluate Services</b>	<b>36.3</b>
9.1 Evaluation of Population Health	25.0
9.2 Evaluation of Personal Health	40.0
9.3 Evaluation of LPHS	43.8

**Discussion**

There is room for improvement within the LPHS across all essential services. The pre-existing Community Health Improvement Plan (CHIP) committee works together to address various community health issues, and may be one resource to decide upon how to best address these disparities.

Further details regarding the outcomes of the LPHSPA process are included in Appendix B.

## Section V: Carson City Forces of Change Assessment

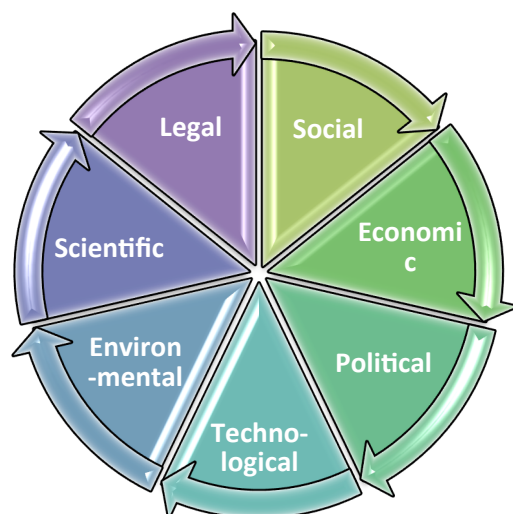
The fourth assessment in the MAPP process is the “Forces of Change” (FoC) assessment. The purpose of the FoC is to look ahead and discuss what factors may be influencing the ability of the LPHS to address health disparities, both currently and in the future.

### Methods

The Carson City FoC Assessment was divided into two meetings attended by the CHNA workgroup and other Carson City community organization representatives. The first meeting focused on identifying factors that influence social and behavioral health, while the second meeting focused on identifying factors that may influence acute and chronic physical health. Each meeting began with a review of findings from the three previous assessments, and then walked participants through a series of small group brainstorming and discussion activities, followed by larger group brainstorming and discussions. The brainstorming activities asked participants to identify and consider factors related to seven categories:

- **Social factors**, including the proportion of community members of varying socioeconomic status, proportion of minority groups, educational outcomes, and others.
- **Economic factors**, including the health of the community’s economy, job market, types of jobs available to job seekers, housing market, unemployment rate, and others.
- **Political factors**, including political climates at the local, state, and federal levels, and how those influence community health programs at all three levels.
- **Legal factors**, including any past or upcoming changes at the local, state, and federal levels.
- **Technological factors**, including community members’ access to personal technological devices, computer literacy, internet access, and others.
- **Environmental factors**, including the effects of weather events, potential impacts of climate change, pollution, and other factors that affect the physical environment.
- **Scientific factors**, including medical and scientific innovations, community members’ science literacy, and other scientific influences.

After each small group brainstormed and discussed potential influencing factors in each of these seven categories, their results were shared with the larger group in a round-robin format to a longer list. Group discussion then commenced to elaborate about the details of each possible influence identified. At the end of each meeting, a comprehensive list of results was put together, which was reviewed at the next workgroup meeting to begin planning for the Community Health Improvement Plan (CHIP).



## Forces Of Change Assessment Results

The brainstorm results underwent qualitative coding and review to identify common themes discussed throughout the FoC assessment process, resulting in 15 total Forces of Change identified. These Forces are identified below in descending order of frequency of topic discussion.



**Access to healthcare** services was a reoccurring topic of conversation throughout the FoC process. Due to the expansion of Medicaid, much of the discussions included the need for access to local primary care providers, dental health, behavioral health, and many specialists for residents who may be utilizing Medicaid or Medicare as their medical insurance. Although there may be providers in the area who accepted Medicaid or Medicare, it was discussed that many of these providers are not taking on new Medicaid/Medicare patients, largely due to the poor reimbursement by the Centers for Medicaid and Medicare (CMS) that physicians receive for services billed.



**Education and workforce training** or preparation was also discussed throughout the process. It was felt by the group that many community members may not be able to find jobs that provide adequate pay or benefits due to low educational attainment or lack of training. Additionally, the relationship between educational outcomes and the health and science literacy of the community were discussed, particularly in the context of how this may affect how the public prioritizes health in public policy and governmental decisions. The public's ability to decipher between reputable scientific information and that which is not evidence-based was also discussed in the context of how this may affect personal health decisions, such as vaccination, use of tobacco products, and others.

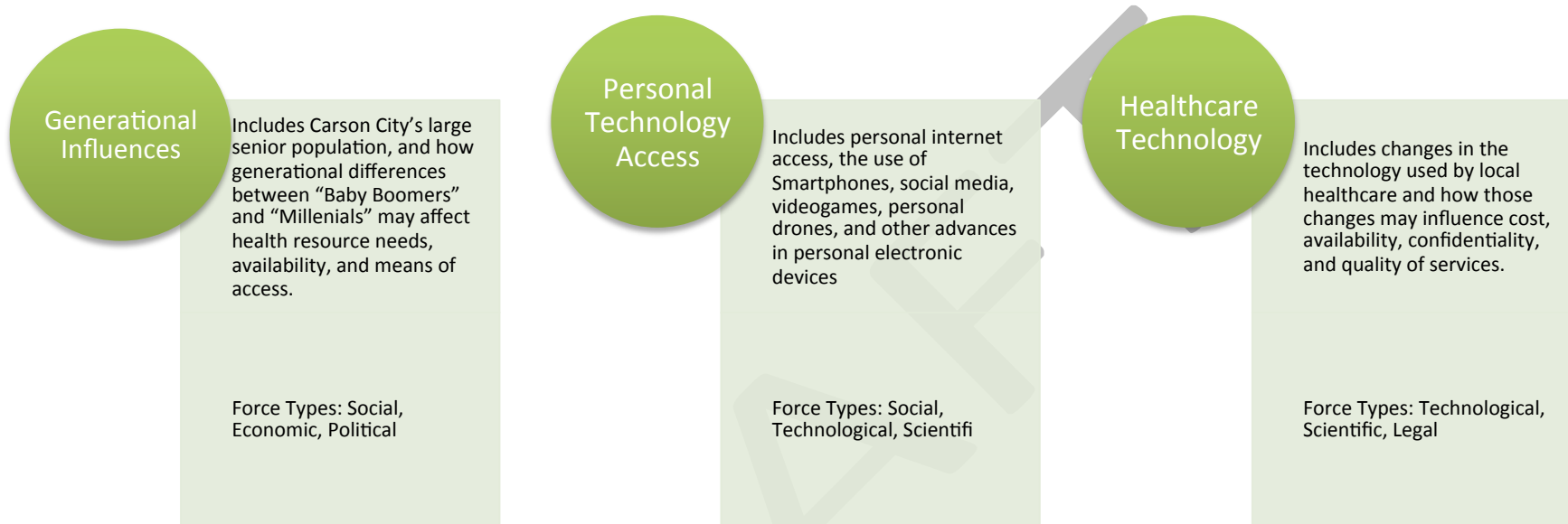


Like many other communities, **substance abuse** continues to be a concern in Carson City. The nationwide crisis related to prescription opioid addiction and abuse continues to be an influence in health policy and program development locally and statewide. Additionally, the recent **legalization of marijuana** in Nevada will likely have many impacts on local economies, including additional job availability due to retail sales, as well as loss of jobs due to positive drug tests as human resource policies grapple with how to appropriately handle implications of

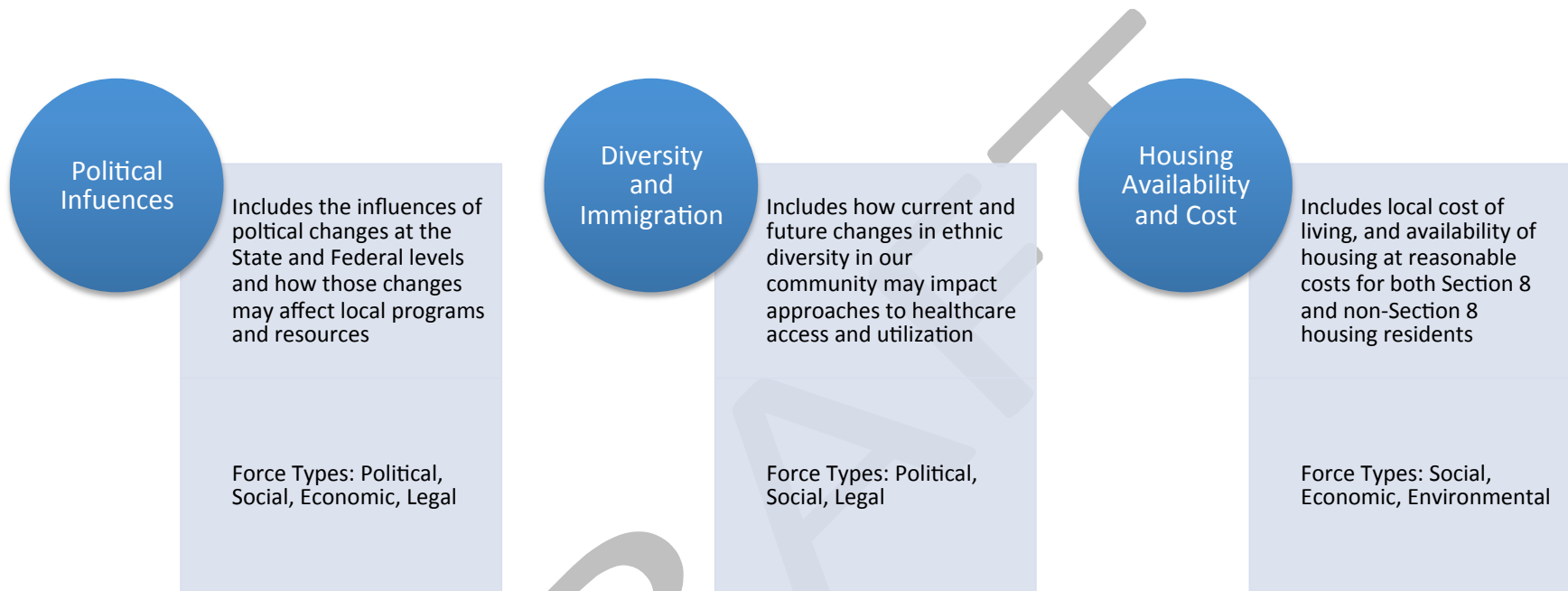
recreational marijuana use. Policies regarding regulation and retail sales of marijuana will also have impacts on law enforcement, and may require additional community education and outreach approaches that can be aided by local health organizations.

Discussions regarding **food access and type** of food that is available included conversations about the lack of access to inexpensive healthy foods that may be experienced by some community members, particularly those with limited mobility or who are unable to find transportation to a supermarket, and may have to depend on whatever food is available at convenience stores or fast food restaurants that are in close proximity to their residence. On the other hand, access to **public recreation sites** may provide positive influences to community health and quality of life by giving community members the opportunity to enjoy public outdoor spaces while engaging in physical activity. Aspects of Carson City's **built environment** were also discussed, and although it was mentioned that current infrastructure to ensure safe pedestrian and bicycle travel around Carson City may still be inadequate in areas, organizations such as Carson City Public Works are working with other organizations to complete infrastructure improvement projects that create a safe and equitable environment for non-motorized travel. Improvements to the built environment could also greatly improve many residents' mobility and access to services, jobs, and potentially even non-emergent healthcare services, in addition to increasing opportunities for residents to participate in physical activity.

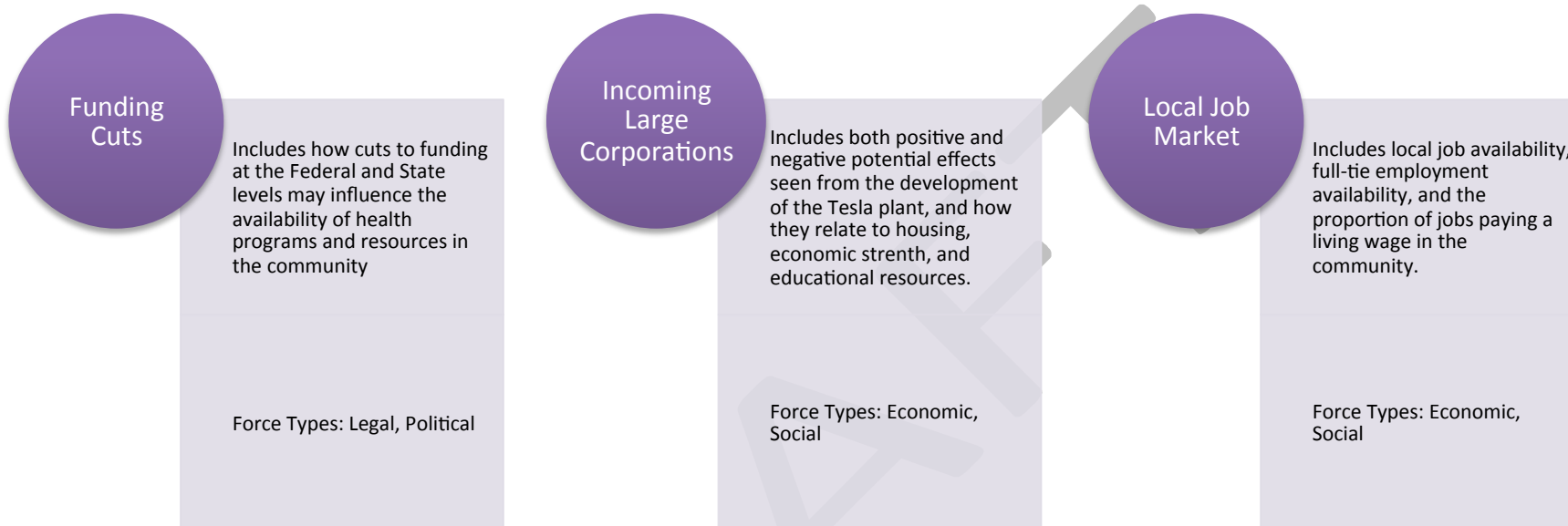
**Generational issues** were discussed, namely those resulting from Carson City's current status as having an older population (largely "Baby Boomers"), and any conflicts that may result from an influx of younger people ("Millennials") coming into the area as a result of Tesla and other companies opening sites in the region. It was hypothesized that this may shift the type of health services that are needed in the community, as well as how they are accessed. Additional issues related to generational differences and community health include how health information is communicated to the public; computer literacy and use for information seeking may vary greatly among these groups, and thus is an influence in health education and communication. This ties in with **personal technology access**, defined here as the use of personal computers, smartphones, and other technological advances that may influence how healthcare or health information is accessed by community members. Technology such as smartphones not only increases access, but also creates additional considerations in content creation; health organizations' websites need to be compatible with smartphone formats in order to optimize user-friendliness, and may increase costs. However, with improvements in the use of telemedicine and related advances in **healthcare technology**, there are increased opportunities to capitalize on these innovations to connect with clients and community members who may otherwise be physically unable to speak to a healthcare provider via Skype or other means. Although it remains to be seen if these and other technological changes will actually change healthcare access, it remains that these are considerations that may influence the future of service delivery, quality, confidentiality, and cost in the community in the future.



Other topics related to recent innovations in **healthcare technology** included the implementation of electronic medical record (EMR) systems within healthcare organizations. Although EMRs have often been billed as a means of resolving communication problems among providers in ensuring patient information is delivered safely and in real-time, there are still issues creating difficulties in communication; the most prominent of these being that many EMR platforms do not interface with one another, and thus information cannot be shared seamlessly among different healthcare organizations. For example, if a private physician's office uses an EMR system that is different than that of a local hospital system, information may not be relayed between the two in an efficient manner if the private physician's patient is admitted to that hospital. Although there are means of communication and data sharing in place, the interfacing of the systems that would optimize the sharing of patient records has not yet been consistent among EMR platforms.



The FoC was conducted at the beginning of 2017, following the 2016 election cycle. Because of this, **political influences** were discussed at length that would potentially affect the future of the Affordable Care Act, as well as other potential **funding cuts** or changes that would change the ability of current grant-funded health programs to continue operation at the federal, state and local levels. Related to this were discussions of how shifts in political influences at the federal level may affect community **diversity and immigration** in the future, and how that may affect the utilization of services that are open to all community members, regardless of immigration status. These conversations discussed how heightened fear of deportation may keep some non-citizens from accessing preventative care, which may result in increased and unnecessary utilization of emergency rooms, which may shift the cost burden to other users.



**Housing availability and cost** was discussed by the group in the context of rising housing prices and a low volume of rental housing available in comparison to local need. As housing prices increase throughout the region, it becomes increasingly difficult for persons of lower socioeconomic status (SES) to access safe and affordable housing. This puts additional financial burden on families who may already be struggling, which may in turn reduce their ability to access preventative healthcare among other resources, potentially decreasing overall health and quality of life. Increases in the cost and availability of housing were largely attributed to the **incoming large corporations** to the area and to other improvements in the **local job market** over the last couple of years. Although there are many economic benefits to large technological companies such as Tesla coming to the area, such as anticipated increase in the availability of well-paying jobs and other stimulating factors to economic growth, a potential population influx may also put a strain on the health resources currently available. Other aspects of the **local job market** is also anticipated to grow in order to support the increased population working at tech companies who are moving to the area, which may provide a large benefit to those who may be seeking service-industry jobs. However, it remains to be seen how many of these positions will

come to fruition, and if so, how the combination of wages, availability of full-time employment and benefits may or may not counteract the rising cost of living in the area.

DRAFT

## Section VI: Public Health Accreditation Board – Site Visit Findings

On February 9-10, 2016, CCHHS hosted representatives from the Public Health Accreditation Board (PHAB) for an organization-wide site visit. The purpose of the site visit was to compare the documentation CCHHS had submitted to PHAB to demonstrate conformity with the daily operations and functionality of the organization. Over the course of two days, the site visit team interviewed members of the CCHHS Accreditation team regarding the documentation, as well as having group interviews with partner organizations and Carson City Board of Health, without CCHHS representatives present.

Two months later, CCHHS and PHAB simultaneously received the site visit report, which discussed the organization’s strengths and opportunities for improvement. The three greatest strengths and weaknesses as described by the site visit team are listed below:

### Three Areas of Strength:

1. “The whole is greater than the sum of its parts.” CCHHS, having undertaken a Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP) as a function of efforts towards accreditation, had convened a group of community stakeholders and partners that had often previously functioned independently. This on-going collaboration served to increase the public health capacity available for the Carson City community.
2. “The organization’s guiding documents, i.e., its CHA, CHIP and Strategic Plan, were “living documents” rather than those placed on the shelf upon completion. Regular review and updates were performed through the work of staff and community partners. Through the use of its program management system and quality improvement efforts, priorities were being addressed, both internally and externally.
3. “A thorough and effective workforce development process had been implemented to ensure staff were well trained.”

### Three Opportunities for Improvement:

1. “It was an acknowledged area for improvement that data could be better collected, analyzed and disseminated to the community than what was currently performed.
2. “CCHHS, through numerous collaborations and coalitions, had been instrumental in developing the local public health infrastructure. Given the relative absence of State support (CCHHS relied exclusively on grants from the Nevada Public and Behavioral Health Department and general funds from Carson City/County.), such infrastructure was lacking. In this development process, CCHHS and its partners had identified community needs and priorities based primarily upon existing data and available resources. What was not readily evident was the degree to which the voices of community members contributed to these priorities. CCHHS would be benefitted by improving efforts to ensure those being affected

by its programs were provided the opportunity to constructively contribute to the decision-making process.

3. “Whereas accreditation had made evident the need to improve internal processes, it was not always apparent systems were in place to both address deficiencies (e.g., gaps in healthcare services) identified and ensure accountability. CCHHS would benefit from improving efforts to ensure timely follow-up of these issues.”

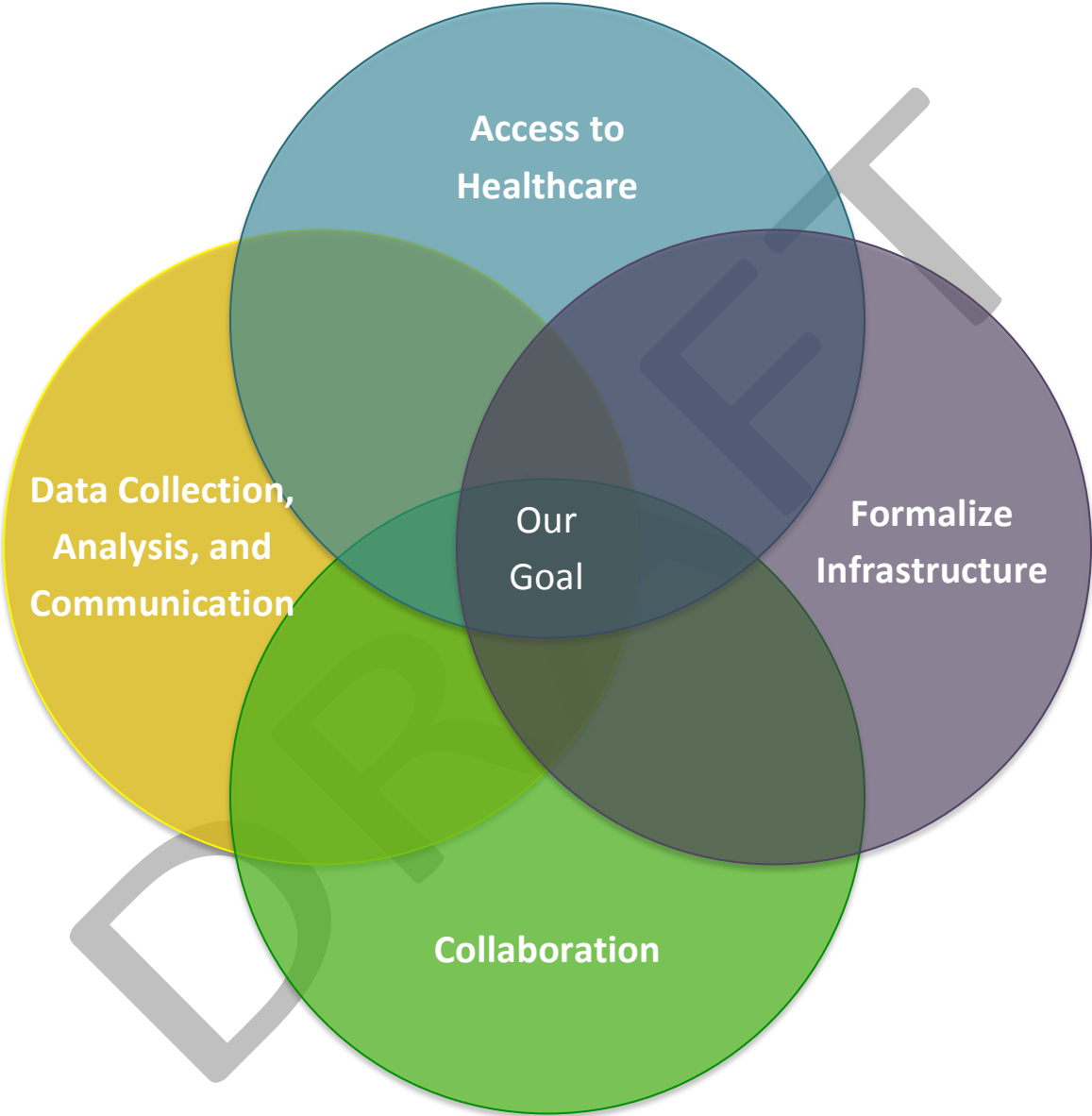
Additionally, it is the convention of PHAB that upon granting accreditation to a health department, the health department is given specific measures to address over the following five years for which the organization has been accredited. CCHHS was given the following measures to address between May 2016 and June 2021:

Measure*	Measure Description*	Intention for Improvement
<b>Measure 1.3.1 A</b>	“Analyze and draw conclusions from public health data”	Improve data collection processes so that they may be appropriately analyzed, and thus used to inform health program decisions.
<b>Measure 2.1.4 A</b>	“Work collaboratively through established governmental and community partnerships on investigations of reportable/disease outbreaks and environmental public health issues”	Improve the utilization of formal MOU/MOAs with other health agencies for the purposes of disease investigation and data reporting
<b>Measure 7.2.1 A</b>	“Convene and/or participate in a collaborative process to establish strategies to improve access to healthcare services”	Develop or collaborate with an existing committee of community partners to address access to healthcare in the community
<b>Measure 7.2.2 A</b>	“Collaborate to implement strategies to increase access to health care services”	Work with the abovementioned committee to develop systems of referrals, MOUs/MOAs, or other formalized systems to improve healthcare access for all community members.
<b>Measure 12.3.2 A</b>	“Track actions taken by the governing entity”	Create a formal system for documenting two-way communication with the Carson City Board of Health (BOH) that also includes the documentation of direction given to CCHHS by the BOH, as well as CCHHS’ progress on those directives.

\*From the Public Health Accreditation Board Standards and Measures, Version 1.0 (2011)



From the results of the site visit report, as well as the measures assigned by PHAB for CCHHS to address, four broad areas for improvement can be identified: improved data collection, analysis, and communication; formalization of infrastructure; access to healthcare; and collaboration with all community groups. All four of these areas tie together to help improve CCHHS' delivery of programs and services that address community health.



As a means of continuous quality improvement (CQI), CCHHS is moving forward to address all four areas in collaboration with its partner organizations over the next few years. As such, objectives to address these areas will be included in future renditions of the Carson City Community Health Improvement Plan (CHIP) and the CCHHS Strategic Plan.

## Section VII: Social Determinants of Health and Vulnerable Populations

### The Social Determinants of Health

The Social Determinants of Health (SDOH) include social demographics such as educational attainment, household income, race, and ethnicity that may affect the health of an individual, and in large enough numbers, the health of a population (Centers for Disease Control and Prevention, 2017). The tables below outline some of these factors that may affect the health of the communities within the quad-county region.

Demographic	Carson City	Douglas County	Lyon County	Storey County	Nevada
<b>Number of Population Identifying as Hispanic, 2016</b>	10,708	6,124	8,400	230	824,835
<b>Number of Population Identifying as Black, 2016</b>	313	286	521	12	241,520
<b>Number of Population Identifying as Native American, 2016</b>	1,385	1,111	1,584	55	32,351
<b>Number of Population Identifying as Asian, 2016</b>	1,140	1,324	927	55	261,239
<b>Number of Population Identifying as White, 2016</b>	38,725	39,742	43,230	3,770	1,524,088

Demographic	Carson City	Douglas County	Lyon County	Storey County	Nevada
<b>Unemployment: number and percent of population 16+ unemployed but seeking work, 2014</b>	5,516 (10.2%)	4,947 (10.5%)	5,208 (10.1%)	355 (9%)	135,137 (9.8%)
<b>Population in Poverty: number and percent of population in poverty, 2013</b>	9,940 (19.3%)	4,861 (10.3%)	7,039 (13.7%)	186 (8.4%)	430,447 (15.4%)
<b>Children in Poverty: number of children 18 and under in poverty (2014)</b>	2,960	1,405	2,329	67	144,947

## Carson City's Vulnerable Populations

During the development of the 2012 Carson City Community Health Assessment, it was discovered that CCHHS and other partners had little data regarding vulnerable populations within the jurisdiction. For the purposes of this assessment, “vulnerable populations” include those that may have either physical ailments or social influences that may put them at a disadvantage in regards to either accessing health care or having increased healthcare needs. The table below outlines information regarding the number of persons and barriers to health experienced by this population within the quad-county region, Washoe County, and Nevada as a whole.

<b>Vulnerable Populations</b>	<b>Carson City</b>	<b>Douglas County</b>	<b>Lyon County</b>	<b>Storey County</b>	<b>Washoe County</b>	<b>Nevada</b>
<b>Total Population</b>	54,482	47,259	51,657	3,929	435,019	2,798,636
<i>65+ Years</i>	10,018	11,096	9,735	1,034	60,654	380,706
<i>Under 5 Years</i>	2,847	1,984	2,952	108	26,896	178,808
<i># of Women 15 to 50 years who had a birth in the past 12 months</i>	473	449	485	8	5,832	35,569
<b>Population</b>	52,581	46,896	51,338	3,905	432,043	2,763,700
<i>With a Disability</i>	11,273	7,307	9,821	922	50,374	348,040
<i>&lt;18 Years with a Disability</i>	1,619	458	876	44	3,458	27,158
<i>18 - 64 Years with a Disability</i>	5,784	3,305	5,201	509	27,089	186,834
<i>65+ Years with a Disability</i>	3,870	3,544	3,744	369	19,827	134,048
<b>Foreign Born</b>	6,376	3,547	3,671	92	64,339	537,252
<b>Languages Spoken at Home</b>						
<i>Population 5 Years and Over</i>	51,635	45,275	48,705	3,821	408,123	2,619,828
<i>English Only</i>	41,008	40,669	42,095	3,655	312,193	1,832,907
<i>Language other than English</i>	10,627	4,606	6,610	166	95,930	786,921
<i>-Speak English less than "very well"</i>	4,572	1,540	2,317	15	37,698	318,830
<i>Spanish</i>	8,626	3,192	5,482	39	69,009	547,574
<i>-Speak English less than "very well"</i>	3,825	1,176	2,064	3	28,306	229,677
<b>Veteran Status</b>						
<i>Civilian Veterans</i>	5,356	5155	6,281	541	34,778	220,332

(U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates)

In addition, it is important to understand not just how many people may be classified as “vulnerable” within the community, but where the vulnerable populations are located within specific areas of CCHHS’ jurisdiction and that of its partner organizations. Maps from the CDC “Social Vulnerability Index (SVI) Mapping Dashboard” (CDC, 2014) can be found in Appendix C. In addition, CCHHS is exploring potential partnerships with other organizations to improve the ability to pinpoint specific neighborhoods or other service areas of the quad-county region which house the most vulnerable population subgroups with the greatest healthcare and public health needs. Also, there is currently no data publicly available regarding the specific healthcare needs of these populations in the context of the quad-county region.

## Section VIII: Community Assets

### Healthcare Providers

As listed in the Quad-County Core Health Indicators (see Appendix A), the number of healthcare providers per 100,000 population are listed in the table below.

<b>Healthcare Professionals</b>						
<b>Dental Health Providers</b>	Carson City (2014)	Douglas County (2014)	Lyon County (2014)	Storey County (2014)	Nevada (2014)	National (2014)
<i>Per 100,000 – dentists &amp; dental hygienists</i>	63.9	58.1	18.8	0	54.9	55.9
<b>Primary Care Providers</b>	Carson City (2014)	Douglas County (2014)	Lyon County (2014)	Storey County (2014)	Nevada (2014)	National (2014)
<i>Per 100,000 – primary care physicians (MDs &amp; DOs), PAs &amp; APNs</i>	136.9	66.4	136.9	66.4	86.3	79.3
<b>Licensed Mental Health Professionals</b>	Carson City (2016)	Douglas County (2016)	Lyon County (2016)	Storey County (2016)	Nevada (2016)	National (2016)
<i>Per 100,000 – psychiatrists, psychologists and social worker</i>	Psychiatrists – 7.3 Psychologists – 30.8 Social Workers – 54.4	Psychiatrists – 2.1 Psychologists – 10.4 Social Workers – 16.7	Psychiatrists – 0 Psychologists – 7.4 Social Workers – 11.1	Psychiatrists – 0 Psychologists – 0 Social Workers – 0	Psychiatrists – 6.8 Psychologists – 13.4 Social Workers – 24.0	Psychiatrists – NA Psychologists – 47.7 Social Workers – 43.5
<b>Nursing Professionals</b>	Carson City (2016)	Douglas County (2016)	Lyon County (2016)	Storey County (2016)	Nevada (2016)	National (2016)
<i>Per 100,000 – RNs, LPNs, CRNAs, RN-EMS &amp; CNAs</i>	APN – 45.3 LPN – 91.3 RN – 975.2 RN-EMS – 1.8 CRNA – 1.8 CNA – 513	APN – 56.4 LPN – 56 RN – 797.9 RN-EMS – 8.4 CRNA – 2.1 CNA – 219.3	APN – 11.1 LPN – 97.5 RN – 501.7 RN-EMS – 9.2 CRNA – 0 CNA – 427.9	APN – 49.4 LPN – 49.6 RN – 468.9 RN-EMS – 0 CRNA – 0 CNA – 123.4	APN – 41 LPN – 105.2 RN – 806.4 RN-EMS – 5 CRNA – 3.3 CNA – 282.0	APN – 56.4 LPN – 21.8 RN – 0 RN-EMS – 0 CRNA – 0 CNA – 0

(Source: Please see Appendix A: “Quad County Core Health Indicators, 2017)

It should be noted that none of the counties in the quad-county region have populations nearing 100,000, so the number of providers listed in the table above does not reflect the actual number of providers available. Additionally, this data is collected using residential addresses for persons

maintaining licensure, and thus not all providers in this data set may be actively practicing, or if they are, they may be practicing in communities outside their county of residence.

### Community Hospitals, VA Hospitals, and Tribal Health Centers

The table below outlines the hospitals and located in each of the quad-county areas.

Indicator	Carson City	Douglas County	Lyon County	Storey County
<b>Number of Community Hospitals by County Location (Nevada State Office of Rural Health, 2017)</b>	1	1	1	0
<b>Number of Federally Qualified Health Center Sites (FQHC) by County (Nevada Health Centers, 2017)</b>	2	0	0	2
<b>Veteran’s Health Administration Sites by County (VA.gov)</b>	0	1	0	0
<b>Counties within quad-county region served by Washoe Tribal Health Center (Nevada State Office of Rural Health, 2017)</b>	*	*	*	*
<b>Counties within quad-county region served by Yerington Paiute Tribal Health Clinic (Nevada State Office of Rural Health, 2017)</b>			*	
<b>Counties within quad-county region served by Pyramid Lake Health Clinic (Nevada State Office of Rural Health, 2017)</b>			*	
<b>Counties within quad-county region served by Fallon Tribal Health Clinic (Nevada State Office of Rural Health, 2017)</b>			*	

### Mental and Behavioral Healthcare Providers

In January of 2017, Carson Tahoe Behavioral Health, the behavioral health division of Carson Tahoe Health, opened a Behavioral Health Crisis Center in Carson City, NV. The purpose of this facility is to serve community members that are experiencing a mental health, substance abuse, or related crisis, but are not suffering from a physical condition that would be appropriate for treatment in an emergency room. Services offered at the crisis center include psychiatry, counseling, case management, and nursing. This facility has 10 beds to house patients until an appropriate long-term treatment can be determined. Having a crisis center in Carson City increases the proximity to care for many community members within the quad-county region, improving access to emergency behavioral and mental health care.

### Alternative Healthcare Providers

Some community members may prefer to access non-traditional healthcare to ensure their overall wellness. Although there is no known local organization that is currently collecting information regarding the prevalence and availability of alternative healthcare providers in the area, a search of local business listings has yielded the information listed in the table below.

County	# of Chiropractic Offices	# of Acupuncture Offices	Other Alternative Medicine Providers	Total
<b>Carson City</b>	26	1	1	28
<b>Douglas County</b>	4	1	4	9
<b>Lyon County</b>	2	0*	0*	2
<b>Storey County</b>	0*	0*	0*	0*

\*No businesses were listed providing these services at the time of publication.

### Community Parks and Recreation Facilities

Public parks and recreation facilities provide all community members with spaces to enjoy their place of residence. The table below outlines the number of recreation facilities available to the public for each county in the quad-county region.

County	# of Neighborhood Parks, Public Open Spaces, and Sports Complexes	# of Aquatic Facilities and Public Pools
<b>Carson City</b>	47	1
<b>Douglas County</b>	9	1
<b>Lyon County</b>	16	0*
<b>Storey County</b>	4	1

\*No data available

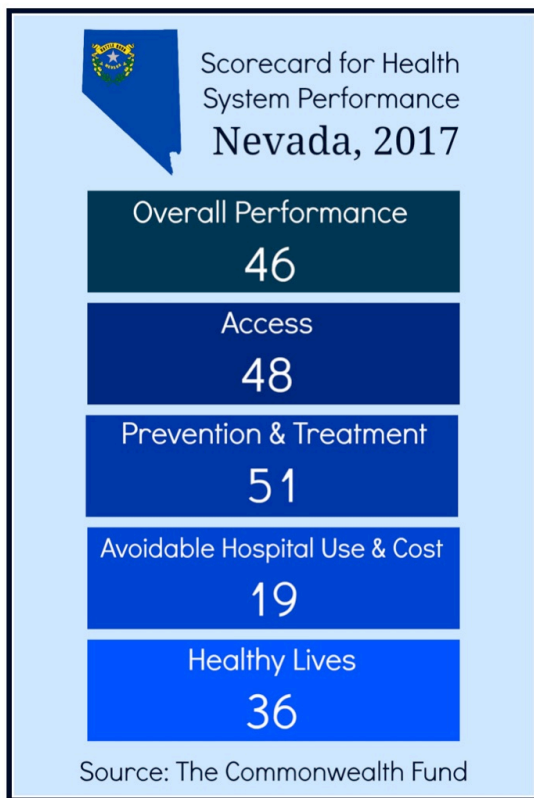
### Discussion

Although there are some barriers and negative influences to health experienced by residents of Carson City and the surrounding communities, there are also many positive resources that can be a benefit to community health. Carson City residents have access to a large variety of public recreation facilities and open spaces, which can help provide inexpensive or free opportunities to participate in physical activity or general enjoyment. In addition, Carson City has a variety of health centers and providers to help address varying needs within the community. All of these assets work together to positively influence community health.

## Section IX: State and Local Performance Rankings

### Commonwealth Fund Scorecard: Nevada

The Commonwealth Fund Scorecard on State Health System Performance uses the most recent data available to rank each state's healthcare system on five aspects of performance: Access to Healthcare, Prevention and Treatment, Avoidable Hospital Use and Cost, Healthy Lives, and an Overall score. A total of 40 measures are used to determine a state's ranking in these five areas. Nevada's scorecard is outlined in the table below.



It should be noted that a "healthcare system" is not the same as a "public health system". While a public health system consists of a broad variety of partners ranging from law enforcement, to behavioral health, to social services, to public health and healthcare providers, the World Health Organization describes healthcare systems as a system of organizations delivering direct patient healthcare services (WHO, 2017). Thus the nature of a healthcare system is much more narrow than a public health system in terms of the types of organizations included. For more information about Nevada's Scorecard, please visit:

<http://www.commonwealthfund.org/interactives/2017>

### County Health Rankings

The County Health Rankings, an annual project funded by the Robert Wood Johnson Foundation and authored by the University of Wisconsin - Madison, ranks all counties by state on various health indicators and

outcomes. This ranking helps give communities an idea of their overall health in comparison to other counties in their state.

**Health Outcomes** describe the current health status of counties. This includes a county's overall morbidity (burden of disease) and mortality (burden of fatality). Health indicators that are used to determine the ranking of a county's Health Outcomes include:

- Length of Life
- Quality of Life

**Health Factors** are current health behaviors and conditions that affect Health Outcomes later down the road. Health indicators that are used to determine the ranking of a county’s Health Factors include:

- Health Behaviors (tobacco use; diet and exercise; alcohol and drug use; and sexual activity)
- Clinical Care (access to care; and quality of care)
- Social and Economic Factors (education; employment; income; family and social support; and community safety)
- Physical Environment (air and water quality; and housing and transit)

In the tables below, the county health rankings for Carson City, as well as its neighboring counties, are provided starting in 2012. Washoe County and Clark County (whose public health services are provided under the jurisdiction of Washoe County Health District, and Southern Nevada Health District, respectively) are provided for reference.

Health Outcomes: Overall County Health Rankings 2012-2017, Regional to Carson City and other Population Centers (Of 17 Total Counties)						
County	2017 Rank	2016 Rank	2015 Rank	2014 Rank	2013 Rank	2012 Rank
Carson City	12	12	4	5	8	12
Douglas County	3	1	2	3	3	1
Lyon County	14	14	11	7	7	5
Storey County	11	10	7	2	1	9
Washoe County	4	5	3	4	6	4
Clark County	6	6	6	8	9	10

Health Factors: Overall County Health Rankings 2012-2017, Regional to Carson City and other Population Centers (Of 17 Total Counties)						
County	2017 Rank	2016 Rank	2015 Rank	2014 Rank	2013 Rank	2012 Rank
Carson City	10	11	7	10	7	9
Douglas County	1	1	1	1	1	1
Lyon County	15	13	13	13	13	12
Storey County	4	6	9	5	3	4
Washoe County	3	3	4	7	5	5
Clark County	12	12	12	12	12	13

It should be noted that data collection and analysis takes time; thus the data upon which the rankings are based are usually at least 2-3 years old before they are included in the County Health Rankings. Additionally, because some data may see a great deal of variance from year to year due to various factors, some of the health indicators use data that is averaged over more than one year. For example, “Length of Life” (one of the two Health Outcomes measures) is determined through the



collection of data for the three latest years that data are available for the chosen indicator, and then averaged. The county ranking for Health Outcomes is then based off of data from “Length of Life” and “Quality of Life”.

Instead of being limited to just the healthcare system, the work of all organizations within a local public health system contribute to a county’s Health Factors, which then result in changes in the county’s Health Outcomes later down the road. For more information on the County Health Rankings, please visit [www.CountyHealthRankings.org](http://www.CountyHealthRankings.org).

## Discussion

Both the Commonwealth Fund Scorecard on State Health System Performance and the County Health Rankings give stakeholders an idea of how well our systems are performing. However, these publications do have some limitations. First, it should be noted that the Scorecard evaluates and ranks the performance of direct patient healthcare systems at the state level, whereas the County Health Rankings are based on data that can be affected by the broader public health system. This means that the work of non-traditional healthcare providers and other allied health professionals may not be taken into consideration in the state-level rankings. Additionally, the Scorecard is based upon statewide measures, whereas the County Health Rankings take county level data into consideration. This means that in a state like Nevada where the majority of the total population is housed in two counties (neither of which are included in the quad-county region of this publication’s interest), publications like the County Health Rankings provide more accurate information about the health-related services and assets available in each county.

Although both publications have their limitations, both may act as valuable tools for benchmarking performance over time, as well as evaluating where the State and counties may look to focus coordinated efforts to improve healthcare and related programs to improve community health.

## Section X: Common Themes and Next Steps

### Common Findings

When all four assessments are taken as a whole, some issues re-appear in the findings on repeated occasions, while others may come to the surface only once or twice, but are closely related to other singular issues. The themes that appeared among the findings from all assessment processes are discussed below.

### Access to Healthcare

The results from the assessments included in this document outline various types of issues that reduce community members' access to healthcare. These include a lack of physicians accepting new Medicare/Medicaid patients, difficulties in accessing preventative and specialty care (largely relating to insurance coverage), and difficulties physically accessing care due to issues relating to personal transportation. It was also discovered that a need for improved and formalized referral systems and communication among health providers may improve access.

### Behavioral Health and Substance Abuse

Both mental health and behavioral health remain issues in the community, with specific concern relating to behavioral health in the context of the abuse of illicit substances and prescription drugs. Although work is being done to address these matters, at the time of this assessment, the need for these services in the community remains high.

### Data Collection and Analysis

Although the previous Carson City Community Health Improvement Plan (CHIP) addressed data collection and dissemination at the state and local levels, and much improvement has been seen, there is still need for further improvements in collection, analyses and sharing of data at the local level. Improvements in these processes could result in not only improved data for long-term assessment purposes, but would also benefit the specific programs or organizations involved in that they may be better prepared to conduct programmatic evaluations. Such evaluation processes ensure public funds are being used efficiently and are directed towards programs that make the largest impact on their intended outcomes.

Also, a gap remains with the lack of data collected from the community's most vulnerable populations, including those who are "hard to reach". These population subgroups include community members that are experiencing acute or chronic homelessness, do not speak English or are a member of another minority group, or lower socioeconomic status. These data collection processes could include qualitative means such as focus groups or in-person interviews, in addition to more conventional quantitative means, such as surveys.

### Community Health and Science Literacy

For assessment purposes, this term was used to describe community members' collective understanding of personal health, as well as how that understanding is impacted by scientific innovations and evidence-based literature. During partner organization-level assessments, it was

discussed that a lack of understanding of personal health topics, such as immunization, hand washing, proper nutrition, appropriate preventative care measures, and others negatively contribute to overall community health. In addition, assessment results included the need to address low science literacy, or lack of understanding of scientific processes and principles. It was theorized that lower science literacy among some community members may contribute to distrust in medical or scientific organizations that are working to educate the public in regards to appropriate healthcare practices.

### **Built Environment**

For the purpose of this assessment, “Built Environment” includes the ways in which City roadways, sidewalks, walking paths, and other features of the city that are not natural affect community member transportation. Although Carson City’s infrastructure has seen improvements over the last several years, there is still work to be done to ensure that all community members have equal access to safe walkways and bikeways during other non-motorized transportation. Difficulty in transportation may lead to decreased access to healthcare, jobs, places to procure healthy foods, and many other factors that may affect health. However, the built environment takes time and is costly; thus progress towards improvements is anticipated to be slow.

### **Physical Activity**

Health outcomes such as heart disease, stroke, obesity, type II diabetes, and many other conditions continue to be consistent issues in Carson City. However, appropriate physical activity (PA) and nutrition may help many community members avoid these outcomes. Unfortunately, physical activity levels reported among adults and adolescents remain low (see Appendix A).

### **Nutrition**

Food insecurity and access to nutritious foods for all community members are issues that were also revealed through this assessment process. As discussed in Section III of this document, the percentage of Carson City residents living in poverty and students eligible for free or reduced lunches remains higher than neighboring counties.

### **Public Health Infrastructure and Workforce Development**

Although this area ties in with needed improvements in data collection processes mentioned above, further resources are needed to provide the current and future public health workforce of the community to meet the expanding demands of the field. This would include education and training in areas such as program planning and evaluation, quality improvement, data collection, public health sciences, biostatistics, research methods, and others that may be more specific to their area of work.

### **General Education and Community Workforce Development**

In addition to the need for improved education regarding health and sciences, many of the socioeconomic factors that negatively influence health of Carson City community members may be tied back to the relationship between the current job market and the workforce available. Although affecting education and workforce development is not a conventional public health practice, members of the broader local public health system are often in a position to collaborate on projects related to educational and job readiness issues.

### **Housing and Cost of Living**

Like education and workforce, the availability of adequate housing that does not put undue financial strain on families may affect health; specifically, this financial burden may decrease community members' ability to access healthcare when needed. In a similar manner, affordable housing needs may be addressed through the more broad spectrum of partners within the local public health system rather than healthcare providers and public health agencies, although it may strongly affect health in an indirect manner.

Although there were several issues revealed through the assessments, the above themes represent those that were found to be common across various assessment processes. While these themes are by no means exhaustive, the list above represents priority areas that may be addressed by the local public health system within the life cycle of the community health needs assessment (three to five years).

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## Next Steps

Prior to the publication of this assessment, the long-standing Community Health Improvement Plan (CHIP) committee has met to discuss preliminary assessment results and potential goals and objectives to address many of the areas mentioned. However, it should be noted that some of the areas of need that were identified in this assessment may not be addressed in the next rendition of the CHIP; some priority areas may be outside the scope of work or resources of the current CHIP committee, and thus may be addressed at a later time when additional resources are available.

Any questions regarding this assessment or the CHIP may be directed in the following manner:

### **Carson City Health and Human Services**

900 E. Long Street  
Carson City, NV 89706  
(775) 887-2190  
info@carson.org

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## Section XI: References

- Carson City Health and Human Services (2017). *Carson City Health and Human Services: Quad-County Core Health Indicators*. Carson City, Nevada.
- Carson Tahoe Health (2016). *2016 Community Health Needs Assessment Report: Primary Service Area*. Carson City, NV: Professional Research Consultants
- Carson Valley Medical Center (2016). 2016 Douglas County Community Health Needs Assessment (CHNA): Executive Summary. Gardnerville, NV: Carson City Health and Human Services.
- Centers for Disease Control and Prevention (2015). *Community Health Status Indicators: Information for Improving Community Health*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Atlanta, Georgia.
- Centers for Disease Control and Prevention (2015). *National Public Health Performance Standards Program*. Accessed March 31, 2017: <https://www.cdc.gov/nphpsp/>
- Centers for Disease Control and Prevention (2014). Agency for Toxic Substances and Disease Registry: “The Social Vulnerability Index”. Accessed April 20, 2017: <https://svi.cdc.gov>
- Centers for Disease Control and Prevention (2017). The Social Determinants of Health: Know What Affects Health. Accessed April 28, 2017: <https://www.cdc.gov/socialdeterminants/>
- The Commonwealth Fund (2017). The Commonwealth Fund Scorecard on State Health System Performance. Retrieved from: <http://www.commonwealthfund.org/interactives/2017/mar/state-scorecard/> (March 2017).
- Tabor Griswold, PhD, John Packham, PhD, Anastasia Gunawan, MPH, Laima Etchegoyhen, MPH, Troy Jorgensen, BS, and Christopher Marchand, MPH (2017). Nevada rural and frontier health data book – eighth edition. Nevada State Office of Rural Health
- U.S. Census Bureau (2016). 2011-2015 American Community Survey 5-Year Estimates. Retrieved May 19, 2017: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>
- U.S. Census Bureau (2016). Quick Facts. Retrieved April 5, 2017: <https://www.census.gov/quickfacts/table/PST045216/00>
- University of Wisconsin, Population Health Institute (2017). *County Health Rankings and Roadmaps: 2017 Nevada Summary Report*. Madison, Wisconsin.
- Veterans Health Administration (2015). Locations, Nevada. Accessed April 5, 2017: <https://www.va.gov/directory/Guide/state.asp?STATE=NV&dnum=ALL>
- World Health Organization (2017). Health Systems. Retrieved April 4, 2017: [http://www.who.int/topics/health\\_systems/en/](http://www.who.int/topics/health_systems/en/)

## Appendix A: Quad-County Core Health Indicators (2017)



### Disease Control and Prevention Division

# Quad-County Core Health Indicators (2017)

#### Points of Contact

Alessandra Garcia  
Public Health Investigator  
Office: (775)283-7207  
Email: [agarcia@carson.org](mailto:agarcia@carson.org)

Dustin Boothe, MPH, RHES  
Epidemiologist  
Office: (775) 283-7220  
Fax: (775) 887-2195  
Email: [dboothe@carson.org](mailto:dboothe@carson.org)

Date of Last Revision: March 2017

# **Carson City Health & Human Services | Quad-County Core Health Indicators 2017**

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## ***Introduction:***

Public health departments and other entities complete regular assessments of community health in order to meet requirements by the Public Health Accreditation Board (PHAB) and other accrediting bodies. In order to simplify this process and make data more comparable between local and state agencies, a statewide workgroup has completed a Nevada Core Health Indicators list. The Indicators list identifies a minimum set of data that streamlines what all local governments, state governments and community partners should include when conducting community health assessments. Additional data can always be included, but these core indicators are meant to contribute to a comprehensive picture of the health of the community and state and possibly act as a catalyst for action.

This document is meant to be a companion document to the Nevada Core Health Indicators Table and Resource Document – v 1.0\*, in order to provide more detail for the actual data collection process. For each indicator, information is provided on measurement, source and year.

Carson City Health & Human Services (CCHHS) contributes to the Nevada Core Health Indicators list by providing primary and secondary data to the Nevada Division of Public & Behavioral Health and other public health data collection agencies. This document serves as a comprehensive list of primary and secondary data collected by CCHHS and other community partners as of March 2017 for the Carson City, Douglas County, Lyon County and Storey County region. This region is often referred to as the “Quad-County”.

\*The Nevada Core Health Indicators Table and Resource Document can be found at the Nevada Division of Public & Behavioral Health’s Website: [dphh.nv.gov](http://dphh.nv.gov).

***NOTE: The data in this document comes from many different sources and is not necessarily comparable; however, these numbers give an estimate on our community’s current health status.***



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Note: These domains align with those identified in the Nevada Core Health Indicators Table and Resource Document – v 1.0.

# Carson City Health & Human Services | Quad-County Core Health Indicators 2017

## Population & Demographic Data:

Demographic Characteristics						
<b>Overall Population</b> <i>Estimated Population</i>	<b>Carson City</b> (2015) <sup>1</sup>	<b>Douglas County</b> (2015) <sup>1</sup>	<b>Statewide</b> (2015) <sup>1</sup>	<b>National</b> (2015) <sup>1</sup>	<b>Lyon County</b> (2015) <sup>1</sup>	<b>Storey County</b> (2015) <sup>1</sup>
	54,080	47,118	2,790,136	318,857,056	51,557	3,942
<b>Population Change</b> <i>Net change</i>	<b>Carson City</b> (2015) <sup>1</sup>	<b>Douglas County</b> (2015) <sup>1</sup>	<b>Statewide</b> (2015) <sup>1</sup>	<b>National</b> (2015) <sup>1</sup>	<b>Lyon County</b> (2015) <sup>1</sup>	<b>Storey County</b> (2015) <sup>1</sup>
	55,274 vs 54,772	46,997 vs 48,208	2.7 million vs 2.8 million	281.4 million vs 308.7 million	51,980 vs 51,789	4,010 vs 3,912
<b>Population Density</b> <i>Population per square mile</i>	<b>Carson City</b> (2015) <sup>1</sup>	<b>Douglas County</b> (2015) <sup>1</sup>	<b>Statewide</b> (2015) <sup>1</sup>	<b>National</b> (2015) <sup>1</sup>	<b>Lyon County</b> (2015) <sup>1</sup>	<b>Storey County</b> (2015) <sup>1</sup>
	382.1	66.2	24.6	87.4	26.7	15.3
<b>Population by Sex and Age</b> <i>Population by sex (M/F), then by age, separated into age categories</i>	<b>Carson City</b> (2015) <sup>1</sup>	<b>Douglas County</b> (2015) <sup>1</sup>	<b>Statewide</b> (2015) <sup>1</sup>	<b>National</b> (2015) <sup>1</sup>	<b>Lyon County</b> (2015) <sup>1</sup>	<b>Storey County</b> (2015) <sup>1</sup>
	<b>M- 25,087</b> <b>F- 27,694</b>	<b>M- 23,680</b> <b>F- 24,392</b>	<b>M- 1,463,570</b> <b>F- 1,418,491</b>	<b>M - 151.8 million</b> <b>F - 157 million</b>	<b>M - 26,178</b> <b>F - 25,802</b>	<b>M - 2,044</b> <b>F - 386</b>
	0 to 4 Years - 2,896 5 to 9 Years - 3,954 10 to 14 Years - 3,406 15 to 19 Years - 3,267 20 to 24 Years - 2,450 25 to 29 Years - 4,283 30 to 34 Years - 1,937 35 to 39 Years - 2,594 40 to 44 Years - 3,175 45 to 49 Years - 4,024 50 to 54 Years - 2,840 55 to 59 Years - 2,732 60 to 64 Years - 5,251 65 to 69 Years - 2,698 70 to 74 Years - 2,547 75 to 79 Years - 1,795 80 to 84 Years - 1,179 85 Years & over - 1,753	0 to 4 Years - 1,871 5 to 9 Years - 2,386 10 to 14 Years - 2,544 15 to 19 Years - 2,928 20 to 24 Years - 2,213 25 to 29 Years - 2,629 30 to 34 Years - 1,985 35 to 39 Years - 2,421 40 to 44 Years - 2,373 45 to 49 Years - 2,929 50 to 54 Years - 3,480 55 to 59 Years - 3,999 60 to 64 Years - 4,163 65 to 69 Years - 3,842 70 to 74 Years - 3,276 75 to 79 Years - 2,326 80 to 84 Years - 1,331 85 Years & over - 1,306	0 to 4 Years - 178,511 5 to 9 Years - 201,254 10 to 14 Years - 190,445 15 to 19 Years - 183,667 20 to 24 Years - 195,656 25 to 29 Years - 194,340 30 to 34 Years - 186,068 35 to 39 Years - 201,541 40 to 44 Years - 196,206 45 to 49 Years - 196,848 50 to 54 Years - 191,449 55 to 59 Years - 177,913 60 to 64 Years - 162,991 65 to 70 Years - 138,241 70 to 74 Years - 108,724 75 to 79 Years - 70,248 80 to 84 Years - 42,851 85 Years of Age & Over - 38,10	<b>&lt;18 - 74.2 million</b> <b>18 to 44 - 112.9 million</b> <b>45 to 64 - 81.5 million</b> <b>&lt;65 - 40.3 million</b>	Under 5 Years - 3,404 5 to 9 Years - 3,511 10 to 14 Years - 3,652 15 to 19 Years - 3,532 20 to 24 Years - 2,361 25 to 29 Years - 2,719 30 to 34 Years - 3,009 35 to 39 Years - 3,162 40 to 44 Years - 3,315 45 to 49 Years - 3,790 50 to 54 Years - 3,926 55 to 59 Years - 3,768 60 to 64 Years - 3,616 65 to 69 Years - 3,126 70 to 74 Years - 2,188 75 to 79 Years - 1,411 80 to 84 Years - 885 85 Years & Over - 605	Under 5 Years - 174 5 to 9 Years - 178 10 to 14 Years - 193 15 to 19 Years - 230 20 to 24 Years - 136 25 to 29 Years - 140 30 to 34 Years - 159 35 to 39 Years - 186 40 to 44 Years - 214 45 to 49 Years - 356 50 to 54 Years - 442 55 to 59 Years - 422 60 to 64 Years - 442 65 to 69 Years - 323 70 to 74 Years - 197 75 to 79 Years - 111 80 to 84 Years - 61 85 Years and over - 46

# Carson City Health & Human Services | Quad-County Core Health Indicators 2017

## Population & Demographic Data:

Demographic Characteristics						
<b>Race</b> Population, separated into categories	Carson City (2016) <sup>1</sup>	Douglas County (2016) <sup>1</sup>	Statewide (2016) <sup>1</sup>	National (2016) <sup>1</sup>	Lyon County (2016) <sup>1</sup>	Storey County (2014) <sup>3</sup>
<b>White</b>	38,725	39,742	1,524,088	No data available	43,230	3,770
<b>Black</b>	313	286	241,520		521	12
<b>Native Am.</b>	1,385	1,111	32,351		1,584	55
<b>Asian</b>	1,140	1,324	261,239		927	55
<b>Hispanic</b>	10,708	6,124	824,835		8,400	230

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# Carson City Health & Human Services | Quad-County Core Health Indicators 2017

## Socioeconomic, Quality of Life, and Environmental Factors:

<b>Income, Employment &amp; Poverty</b>						
<b>Household Income</b> <i>Estimated median household income</i>	<b>Carson City</b> (2014) <sup>1</sup>	<b>Douglas County</b> (2014) <sup>1</sup>	<b>Statewide</b> (2014) <sup>1</sup>	<b>National</b> (2014) <sup>1</sup>	<b>Lyon County</b> (2014) <sup>1</sup>	<b>Storey County</b> (2014) <sup>1</sup>
	\$50,108	\$58,940	\$52,205	\$53,482	\$47,143	\$64,835
<b>Family Income</b> <i>Estimated median family income</i>	<b>Carson City</b> (2014) <sup>1</sup>	<b>Douglas County</b> (2014) <sup>1</sup>	<b>Statewide</b> (2014) <sup>1</sup>	<b>National</b> (2014) <sup>1</sup>	<b>Lyon County</b> (2014) <sup>1</sup>	<b>Storey County</b> (2014) <sup>1</sup>
	\$61,776	\$67,109	\$65,443	\$64,719	\$53,352	\$68,981
<b>Unemployment</b> <i># and % of population 16+ unemployed but seeking work</i>	<b>Carson City</b> (2014) <sup>1</sup>	<b>Douglas County</b> (2014) <sup>1</sup>	<b>Statewide</b> (2014) <sup>1</sup>	<b>National</b> (2015) <sup>2</sup>	<b>Lyon County</b> (2014) <sup>1</sup>	<b>Storey County</b> (2014) <sup>1</sup>
	5,516 10.2%	4,947 10.5%	135,137 9.8%	7,900,000 5.1%	5,208 10.1%	355 9%
<b>Children in Poverty</b> <i>children 18 and under in poverty</i>	<b>Carson City</b> (2014) <sup>1</sup>	<b>Douglas County</b> (2014) <sup>1</sup>	<b>Statewide</b> (2014) <sup>1</sup>	<b>National</b> (2014) <sup>1</sup>	<b>Lyon County</b> (2014) <sup>1</sup>	<b>Storey County</b> (2014) <sup>1</sup>
	2,960	1,405	144,947	<b>No data</b>	2,329	67
<b>Population in Poverty</b> <i># and % of population in poverty</i>	<b>Carson City</b> (2014) <sup>1</sup>	<b>Douglas County</b> (2014) <sup>1</sup>	<b>Statewide</b> (2014) <sup>1</sup>	<b>National</b> (2014) <sup>1</sup>	<b>Lyon County</b> (2014) <sup>1</sup>	<b>Storey County</b> (2014) <sup>1</sup>
	9,940 19.3%	4,861 10.3%	430,447 15.4%	48,208,380 15.5%	7,039 13.7%	186 8.4%
<b>Economic Security</b>						
<b>Bankruptcy</b> <i>Personal bankruptcy filings per 1,000 population</i>	<b>Carson City</b> (2016) <sup>1</sup>	<b>Douglas County</b> (2016) <sup>1</sup>	<b>Statewide</b> (2016) <sup>1</sup>	<b>National</b> (2016) <sup>1</sup>	<b>Lyon County</b> (2016) <sup>1</sup>	<b>Storey County</b> (2016) <sup>1</sup>
	2.6	1.9	3.2	2.5	2.9	.7
<b>Food Insecurity</b> <i># and % of food insecure individuals</i>	<b>Carson City</b> (2016) <sup>1</sup>	<b>Douglas County</b> (2016) <sup>1</sup>	<b>Statewide</b> (2016) <sup>1</sup>	<b>National</b> (2016) <sup>1</sup>	<b>Lyon County</b> (2016) <sup>1</sup>	<b>Storey County</b> (2016) <sup>1</sup>
	7,805 15.4%	2,742 5.5%	451,954 15.4%	<b>No data available</b>	6,591 12%	101 2.5%
<b>Free &amp; reduced school lunches</b> <i># and % of students qualifying</i>	<b>Carson City</b> (2015) <sup>1</sup>	<b>Douglas County</b> (2015) <sup>1</sup>	<b>Statewide</b> (2015) <sup>1</sup>	<b>National</b> (2015) <sup>1</sup>	<b>Lyon County</b> (2015) <sup>1</sup>	<b>Storey County</b> (2015) <sup>1</sup>
	3,952 51.2%	2,039 33.6%	260,899 59.8%	<b>No data available</b>	4,616 56.4%	23 46.9%

<b>Education</b>						
<b>High School Graduation Rate</b>	<i>Carson City (2013)<sup>1</sup></i>	<i>Douglas County (2013)<sup>1</sup></i>	<i>Statewide (2013)<sup>1</sup></i>	<i>National (2013)<sup>1</sup></i>	<i>Lyon County (2013)<sup>1</sup></i>	<i>Storey County (2013)<sup>1</sup></i>
<i>Cohort graduating high school in four years (%)</i>	75.9	85	67.3	81	78.6	89.9
<b>Educational Attainment</b>	<i>Carson City (2016)<sup>1</sup></i>	<i>Douglas County (2016)<sup>1</sup></i>	<i>Statewide (2016)<sup>1</sup></i>	<i>National (2016)<sup>11</sup></i>	<i>Lyon County (2016)<sup>1</sup></i>	<i>Storey County (2016)<sup>1</sup></i>
<i>Educational attainment of of persons age 25 &amp; older (%)</i>	<b>Bachelors - 20.4</b> <b>Masters - 8.0</b>	<b>Bachelors - 25.6</b> <b>Masters - 9.3</b>	<b>Bachelors - 22.5</b> <b>Masters - 7.7</b>	<b>No data available</b>	<b>Bachelors - 15.9</b> <b>Masters - 5.7</b>	<b>Bachelors - 20.7</b> <b>Masters - 7.7</b>
<b>Family and Social Support</b>						
<b>Children in single-parent homes</b>	<i>Carson City (2016)<sup>1</sup></i>	<i>Douglas County (2016)<sup>1</sup></i>	<i>Statewide (2016)<sup>1</sup></i>	<i>National (2016)<sup>1</sup></i>	<i>Lyon County (2016)<sup>1</sup></i>	<i>Storey County (2016)<sup>1</sup></i>
<i>Children that live in a single-parent household (%)</i>	39.5	29	36.6	<b>No data available</b>	30.2	34.4
<b>Registered voters who vote</b>	<i>Carson City (2016)<sup>1</sup></i>	<i>Douglas County (2016)<sup>1</sup></i>	<i>Statewide (2016)<sup>1</sup></i>	<i>National (2016)<sup>1</sup></i>	<i>Lyon County (2016)<sup>1</sup></i>	<i>Storey County (2016)<sup>1</sup></i>
<i>Active voters in the designated region</i>	31,615	35,548	1,679,254	<b>No data available</b>	34,891	3,036
<b>Safety and Security</b>						
<b>Reported Violent Crimes</b>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
<i>Per 100,000 violent crimes by type</i>	181	90	22,466	<b>No data available</b>	134	31
<b>Reported Property Crimes</b>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
<i>Per 100,000 property crimes by type</i>	1,008	911	84,898	<b>No data available</b>	804	97

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## *Socioeconomic, Quality of Life, and Environmental Factors:*

<b>Built Environment and Access</b>						
<b>Food Environment Index</b>	<i>Carson City (2016)<sup>1</sup></i>	<i>Douglas County (2016)<sup>1</sup></i>	<i>Statewide (2016)<sup>1</sup></i>	<i>National (2016)<sup>1</sup></i>	<i>Lyon County (2016)<sup>1</sup></i>	<i>Storey County (2016)<sup>1</sup></i>
<i>Index of factors that contribute to a healthy food environment on a scale of 0 (worst) to 10 (best)</i>	7.5	6.8	7.5	<b>No data available</b>	6.2	8.1
<b>Commute Time</b>	<i>Carson City (2016)<sup>1</sup></i>	<i>Douglas County (2016)<sup>1</sup></i>	<i>Statewide (2016)<sup>1</sup></i>	<i>National (2016)<sup>1</sup></i>	<i>Lyon County (2016)<sup>1</sup></i>	<i>Storey County (2016)<sup>1</sup></i>
<i>Among workers who commute in their car alone, with a commute more than 30 minutes a day(%)</i>	17.5	32.7	28.4	<b>No data available</b>	46.7	49.6

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## Environmental Safety

<b>⚙️ Food Safety Inspections</b>	<i>Carson City (2016)<sup>3</sup></i>	<i>Douglas County (2016)<sup>3</sup></i>	<i>Statewide (2016)</i>	<i>National (2016)</i>	<i>Lyon County (2016)</i>	<i>Storey County (2016)</i>
<i># of inspections per jurisdiction</i>	685	617	<b>No data available</b>	<b>No data available</b>	<b>No data available</b>	<b>No data available</b>
<b>⚙️ Critical Food Safety Violations</b>	<i>Carson City (2016)<sup>3</sup></i>	<i>Douglas County (2016)<sup>3</sup></i>	<i>Statewide (2016)</i>	<i>National (2016)</i>	<i>Lyon County (2016)</i>	<i>Storey County (2016)</i>
<i># of critical violations per permitted facilities</i>	59	163	<b>No data available</b>	<b>No data available</b>	<b>No data available</b>	<b>No data available</b>
<b>Radon</b>	<i>Carson City (2014)<sup>2</sup></i>	<i>Douglas County (2014)<sup>2</sup></i>	<i>Statewide (2014)<sup>2</sup></i>	<i>National (2014)<sup>2</sup></i>	<i>Lyon County (2014)<sup>2</sup></i>	<i>Storey County (2014)<sup>2</sup></i>
<i>Homes that exceed EPA action level (%)</i>	37.5	36.5	44.6	2.5	68	69
<b>Public Drinking Water Safety</b>	<i>Carson City (2016)<sup>1</sup></i>	<i>Douglas County (2016)<sup>1</sup></i>	<i>Statewide (2016)<sup>1</sup></i>	<i>National (2016)<sup>1</sup></i>	<i>Lyon County (2016)<sup>1</sup></i>	<i>Storey County (2016)<sup>1</sup></i>
<i>Population served by community water systems not meeting health-based drinking water standards (%)</i>	<b>No data available</b>	1	<b>No data available</b>	<b>No data available</b>	1	0

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# Carson City Health & Human Services | Quad-County Core Health Indicators 2017

## Health Resources Availability:

<b>Healthcare Professionals</b>						
<b>Dental Health Providers</b> <i>Per 100,000 – dentists &amp; dental hygienists</i>	<i>Carson City (2014)<sup>2</sup></i>	<i>Douglas County (2014)<sup>2</sup></i>	<i>Statewide (2014)<sup>2</sup></i>	<i>National (2014)<sup>2</sup></i>	<i>Lyon County (2014)<sup>2</sup></i>	<i>Storey County (2014)<sup>2</sup></i>
	63.9	58.1	54.9	55.9	18.8	0
<b>Primary care providers</b> <i>Per 100,000 – primary care physicians (MDs &amp; DOs), Pas &amp; APNs</i>	<i>Carson City (2014)<sup>2</sup></i>	<i>Douglas County (2014)<sup>2</sup></i>	<i>Statewide (2014)<sup>2</sup></i>	<i>National (2014)<sup>2</sup></i>	<i>Lyon County (2014)<sup>2</sup></i>	<i>Storey County (2014)<sup>2</sup></i>
	136.9	66.4	86.3	79.3	30.0	0
<b>Licensed Mental Health Professionals</b> <i>Per 100,000 – psychiatrists, psychologists and social worker</i>	<i>Carson City (2016)<sup>1</sup></i>	<i>Douglas County (2016)<sup>1</sup></i>	<i>Statewide (2016)<sup>1</sup></i>	<i>National (2016)<sup>1</sup></i>	<i>Lyon County (2016)<sup>1</sup></i>	<i>Storey County (2016)<sup>1</sup></i>
	<i>Psychiatrists – 7.3 Psychologists – 30.8 Social Workers – 54.4</i>	<i>Psychiatrists – 2.1 Psychologists – 10.4 Social Workers – 16.7</i>	<i>Psychiatrists – 6.8 Psychologists – 13.4 Social Workers – 24.0</i>	<i>Psychiatrists – NA Psychologists – 47.7 Social Workers – 43.5</i>	<i>Psychiatrists – 0 Psychologists – 7.4 Social Workers – 11.1</i>	<i>Psychiatrists – 0 Psychologists – 0 Social Workers – 0</i>
<b>Nursing Professionals</b> <i>Per 100,000 – RNs, LPNs, CRNAs, RN-EMS &amp; CNAs</i>	<i>Carson City (2016)<sup>1</sup></i>	<i>Douglas County (2016)<sup>1</sup></i>	<i>Statewide (2016)<sup>1</sup></i>	<i>National (2016)<sup>1</sup></i>	<i>Lyon County (2016)<sup>1</sup></i>	<i>Storey County (2016)<sup>1</sup></i>
	<i>APN – 45.3 LPN – 91.3 RN – 975.2 RN-EMS – 1.8 CRNA – 1.8 CNA – 513</i>	<i>APN – 56.4 LPN – 56 RN – 797.9 RN-EMS – 8.4 CRNA – 2.1 CNA – 219.3</i>	<i>APN – 41 LPN – 105.2 RN – 806.4 RN-EMS – 5 CRNA – 3.3 CNA – 282.0</i>	<i>APN – 56.4 LPN – 21.8 RN – 0 RN-EMS – 0 CRNA – 0 CNA – 0</i>	<i>APN – 11.1 LPN – 97.5 RN – 501.7 RN-EMS – 9.2 CRNA – 0 CNA – 427.9</i>	<i>APN – 49.4 LPN – 49.6 RN – 468.9 RN-EMS – 0 CRNA – 0 CNA – 123.4</i>



<b>Substance Abuse</b>						
<b>Tobacco use – adults</b>	<i>Carson City (2016)<sup>1</sup></i>	<i>Douglas County (2016)<sup>1</sup></i>	<i>Statewide (2016)<sup>1</sup></i>	<i>National (2016)<sup>1</sup></i>	<i>Lyon County (2016)<sup>1</sup></i>	<i>Storey County (2016)<sup>1</sup></i>
<i>Adults who are current smokers (%)</i>	17.3	15.3	17	<b>No data available</b>	17.4	14
<b>Tobacco use – adolescents</b>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
<i>Students who are current cigarette users (%)</i>	9.8	9.8	7.2	22.4	15.6	15.6
<b>Drug Use – adults</b>	<i>Carson City (2014)<sup>1</sup></i>	<i>Douglas County (2014)<sup>1</sup></i>	<i>Statewide (2014)<sup>1</sup></i>	<i>National (2014)<sup>1</sup></i>	<i>Lyon County (2014)<sup>1</sup></i>	<i>Storey County (2014)<sup>1</sup></i>
<i>Adults who have used illicit drugs (%)</i>	9.1	9.1	9.1	8.3	9.1	2.5
<b>Binge drinking – adults</b>	<i>Carson City (2016)<sup>1</sup></i>	<i>Douglas County (2016)<sup>1</sup></i>	<i>Statewide (2016)<sup>1</sup></i>	<i>National (2016)<sup>1</sup></i>	<i>Lyon County (2016)<sup>1</sup></i>	<i>Storey County (2016)<sup>1</sup></i>
<i>Adults who are heavy drinkers (%)</i>	19.5	19.2	17.6	<b>No data available</b>	17.8	17.7
<b>Binge drinking – adolescents</b>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
<i>Students who had five or more drinks in a row (%)</i>	16.5	16.5	15.3	6.8	20.5	20.5
<b>Alcohol-related motor vehicle incidents</b>	<i>Carson City (2016)<sup>1</sup></i>	<i>Douglas County (2016)<sup>1</sup></i>	<i>Statewide (2016)<sup>1</sup></i>	<i>National (2016)<sup>1</sup></i>	<i>Lyon County (2016)<sup>1</sup></i>	<i>Storey (2016)<sup>1</sup> County</i>
<i>Alcohol-related crashes (%)</i>	26.7	45.2	33.6	<b>No data available</b>	46.8	50

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## Health Behaviors:

<b>Lifestyle</b>						
<b>Nutrition – adolescents</b>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
<i>HS students who ate vegetables 3x or more a day (%)</i>	12.2	14.2	11.5	<b>Data not available</b>	12.6	12.6
<b>Nutrition – adults</b>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
<i>Adults who ate vegetables one or more a day (%)</i>	79.6	78.7	80.8	77.9	85.5	<b>Data not available</b>
<b>Obesity – adults</b>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
<i>Adults who were overweight or obese (total) based off of BMI (%)</i>	68.7	63.9	64.7	65.3	70.2	<b>Data not available</b>
<b>Obesity – adolescents</b>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
<i>Students who were overweight (%)</i>	11.6	11.6	11.4	13.7	15.4	15.4
<b>Exercise – Adults</b>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
<i>Adults aged 20 and over reporting no leisure-time physical activity (%)</i>	17.9	15.9	20.7	23	24.8	23.9
<b>Exercise – adolescents</b>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
<i>Students who were active for at least 60 minutes every day of the week (%)</i>	30.8	30.8	20.7	<b>Data not available</b>	27.8	27.8
	31.5	31.5	38.3	<b>Data not available</b>	32	32

**Lifestyle (Continued)**

<b>Sleep - Adults</b> <i>Adults who got 7+ hours of sleep (%)</i>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
	67.1	72.3	62.7	65.8	61.8	<b>Data Not Available</b>
<b>Sleep - adolescents</b> <i>of students who got 8+ sufficient sleep (%)</i>	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
	30.6	30.6	22.5	<b>Data Not Available</b>	22.8	22.8

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## Health Behaviors:

<b>Protective Factors</b>						
<b>Seatbelt use – adults</b> Adults who wore a seat belt when riding in or driving a car (%)	Carson City (2015) <sup>1</sup>	Douglas County (2015) <sup>1</sup>	Statewide (2015) <sup>1</sup>	National (2015) <sup>1</sup>	Lyon County (2015) <sup>1</sup>	Storey County (2015) <sup>1</sup>
	82.5	88.6	89.3	86.4	87.4	<b>Data Not Available</b>
<b>Seatbelt use – adolescents</b> Students who almost never wore a seatbelt (%)	Carson City (2015) <sup>1</sup>	Douglas County (2015) <sup>1</sup>	Statewide (2015) <sup>1</sup>	National (2015) <sup>1</sup>	Lyon County (2015) <sup>1</sup>	Storey County (2015) <sup>1</sup>
	9.8	9.8	6.2	<b>Data not Available</b>	11.8	11.8
<b>Bicycle helmet use – adolescents</b> High school students who wore a helmet when riding a bicycle (%)	Carson City (2015) <sup>1</sup>	Douglas County (2015) <sup>1</sup>	Statewide (2015) <sup>1</sup>	National (2015) <sup>1</sup>	Lyon County (2015) <sup>1</sup>	Storey County (2015) <sup>1</sup>
	78.9	78.9	85	<b>Data not Available</b>	93.7	93.7
<b>Bicyclist and Pedestrian Deaths</b> Fatalities as of current data	Carson City (2014-15) <sup>2</sup>	Douglas County (2014-15) <sup>2</sup>	Statewide (2014-15) <sup>2</sup>	National (2014-15) <sup>2</sup>	Lyon County (2014-15) <sup>2</sup>	Storey County (2014-15) <sup>2</sup>
	2	2	72	<b>Data not Available</b>	3	0
<b>Condom Use – adolescents</b> Students who used a condom the last time they had sex (%)	Carson City (2015) <sup>1</sup>	Douglas County (2015) <sup>1</sup>	Statewide (2015) <sup>1</sup>	National (2015) <sup>1</sup>	Lyon County (2015) <sup>1</sup>	Storey County (2015) <sup>1</sup>
	53.7	53.7	56.9	<b>Data not Available</b>	49.0	49.0

<b>Screening</b>						
<b>Pap Smear</b> Women 18+ reported having within last 3 years (%)	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
	72.9	59.2	73.1	75.2	68.5	<b>Data not available</b>
<b>Mammography</b> Women 40+ reported having within last 2 years (%)	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
	62.6	64.2	56.2	63	55	53.6
<b>Colorectal Screening</b> Men 50+ reported ever having sigmoidoscopy/colonoscopy (%)	<i>Carson City (2015)<sup>1</sup></i>	<i>Douglas County (2015)<sup>1</sup></i>	<i>Statewide (2015)<sup>1</sup></i>	<i>National (2015)<sup>1</sup></i>	<i>Lyon County (2015)<sup>1</sup></i>	<i>Storey County (2015)<sup>1</sup></i>
	66.7	63.5	63	69.3	63.5	63.5

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## Maternal and Child Health:

<b>Pregnancy</b>						
<b>Pregnancy Rate</b> <i>Sum of live births, fetal deaths, abortions – women 15-44 years</i>	<i>Carson City (2014)<sup>2</sup></i>	<i>Douglas County (2014)<sup>2</sup></i>	<i>Statewide (2014)<sup>2</sup></i>	<i>National (2014)<sup>2</sup></i>	<i>Lyon County (2014)<sup>2</sup></i>	<i>Storey County (2014)<sup>2</sup></i>
	70.6	53.9	76.3	<b>Data not available</b>	65.4	26.7
<b>Birth Rate</b> <i>Sum of live births among 15-44 years old per 1,000 female population</i>	<i>Carson City (2015)<sup>2</sup></i>	<i>Douglas County (2015)<sup>2</sup></i>	<i>Statewide (2015)<sup>2</sup></i>	<i>National (2015)<sup>2</sup></i>	<i>Lyon County (2015)<sup>2</sup></i>	<i>Storey County (2015)<sup>2</sup></i>
	61.1	45.9	62.0	<b>Data not available</b>	60.7	36.2
<b>Low birth weight</b> <i>Infants weighing less than 2,500 grams per 1,000 live births. All ages included (%)</i>	<i>Carson City (2015)<sup>2</sup></i>	<i>Douglas County (2015)<sup>2</sup></i>	<i>Statewide (2015)<sup>2</sup></i>	<i>National (2015)<sup>2</sup></i>	<i>Lyon County (2015)<sup>2</sup></i>	<i>Storey County (2015)<sup>2</sup></i>
	8	7.5	8.5	<b>Data not available</b>	10.2	10.5
<b>Abortion rate</b> <i>Count of abortions per 1,000 female population</i>	<i>Carson City (2014)<sup>2</sup></i>	<i>Douglas County (2014)<sup>2</sup></i>	<i>Statewide (2014)<sup>2</sup></i>	<i>National (2014)<sup>2</sup></i>	<i>Lyon County (2014)<sup>2</sup></i>	<i>Storey County (2014)<sup>2</sup></i>
	5.8	3.9	13.5	<b>Data not available</b>	7.2	*
<b>Women receiving prenatal care</b> <i>Women who received prenatal care in 1<sup>st</sup> trimester. All ages included (%)</i>	<i>Carson City (2015)<sup>2</sup></i>	<i>Douglas County (2015)<sup>2</sup></i>	<i>Statewide (2015)<sup>2</sup></i>	<i>National (2015)<sup>2</sup></i>	<i>Lyon County (2015)<sup>2</sup></i>	<i>Storey County (2015)<sup>2</sup></i>
	50.5	63.6	69.8	<b>Data not available</b>	61.2	78.9
<b>Neonatal Mortality</b> <i>Total infant deaths before first 28 days of life per 1,000 live births</i>	<i>Carson City (2015)<sup>2</sup></i>	<i>Douglas County (2015)<sup>2</sup></i>	<i>Statewide (2015)<sup>2</sup></i>	<i>National (2015)<sup>2</sup></i>	<i>Lyon County (2015)<sup>2</sup></i>	<i>Storey County (2015)<sup>2</sup></i>
	*	*	5.3	<b>Data not available</b>	*	*
<b>Post neonatal mortality</b> <i>Total infant deaths between 28 days and 11 months per 1,000 live births</i>	<i>Carson City (2015)<sup>2</sup></i>	<i>Douglas County (2015)<sup>2</sup></i>	<i>Statewide (2015)<sup>2</sup></i>	<i>National (2015)<sup>2</sup></i>	<i>Lyon County (2015)<sup>2</sup></i>	<i>Storey County (2015)<sup>2</sup></i>
	*	*	2	<b>Data not available</b>	*	*
<b>Infant mortality</b> <i>Total infant deaths under 1 year of age per 1,000 live births</i>	<i>Carson City (2015)<sup>2</sup></i>	<i>Douglas County (2015)<sup>2</sup></i>	<i>Statewide (2015)<sup>2</sup></i>	<i>National (2015)<sup>2</sup></i>	<i>Lyon County (2015)<sup>2</sup></i>	<i>Storey County (2015)<sup>2</sup></i>
	*	*	5.3	<b>Data not available</b>	*	*

### Pregnancy (Continued)

<b>Child Mortality</b> Rate of all deaths ages 1-12 per 1,000	<i>Carson City</i> (2015) <sup>2</sup>	<i>Douglas</i> <i>County</i> (2015) <sup>2</sup>	<i>Statewide</i> (2015) <sup>2</sup>	<i>National</i> (2015) <sup>2</sup>	<i>Lyon County</i> (2015) <sup>2</sup>	<i>Storey County</i> (2015) <sup>2</sup>
	*	*	18.2	<b>Data not available</b>	*	*
<b>Maternal Mortality Rate</b> Sum of deaths attributable to pregnancy, defined in Chapter O of ICD-10	<i>Carson City</i> (2014 & 2015) <sup>2</sup>	<i>Douglas County</i> (2014 & 2015) <sup>2</sup>	<i>Statewide</i> (2014 & 2015) <sup>2</sup>	<i>National</i> (2014 & 2015) <sup>2</sup>	<i>Lyon County</i> (2014 & 2015) <sup>2</sup>	<i>Storey County</i> (2014 & 2015) <sup>2</sup>
	0	0	7	<b>Data not available</b>	0	0
<b>Teen Pregnancy</b>						
<b>Teen Pregnancy Rate</b> Sum of live births, fetal deaths, and abortions among 15 to 19 years old per 1,000 female population	<i>Carson City</i> (2014) <sup>2</sup>	<i>Douglas</i> <i>County</i> (2014) <sup>2</sup>	<i>Statewide</i> (2014) <sup>2</sup>	<i>National</i> (2014) <sup>2</sup>	<i>Lyon</i> <i>County</i> (2014) <sup>2</sup>	<i>Storey County</i> (2014) <sup>2</sup>
	50.7	17.1	36.5	52.4	36.8	0
<b>Teen birth rate</b> Sum of live births among 15 to 19 years old per 1,000	<i>Carson City</i> (2015) <sup>2</sup>	<i>Douglas</i> <i>County</i> (2015) <sup>4</sup>	<i>Statewide</i> (2015) <sup>2</sup>	<i>National</i> (2015) <sup>4</sup>	<i>Lyon</i> <i>County</i> (2015) <sup>2</sup>	<i>Storey County</i> (2015) <sup>4</sup>
	13.9	11.9	11.5	<b>Data not available</b>	7.2	0

\*Rate considered to be too unstable or unreliable for analysis.

# Carson City Health & Human Services | Quad-County Core Health Indicators 2017

## Health Status:

<b>General Health Status</b>						
<b>Health Status</b> <i>Reporting fair or poor health status (%)</i>	<i>Carson City (2015)<sup>3</sup></i>	<i>Douglas County (2015)<sup>3</sup></i>	<i>Statewide (2015)<sup>3</sup></i>	<i>National (2015)<sup>3</sup></i>	<i>Lyon County (2015)<sup>3</sup></i>	<i>Storey County (2015)<sup>3</sup></i>
	33.8	40.2	36.6	35.7	46.0	<b>Data Not Available</b>
<b>Sick Days</b> <i>Reported poor physical health in past 30 days (%)</i>	<i>Carson City (2011-2014)<sup>3</sup></i>	<i>Douglas County (2011-2014)<sup>3</sup></i>	<i>Statewide (2011-2014)<sup>3</sup></i>	<i>National</i>	<i>Lyon County</i>	<i>Storey County</i>
	<b>0:</b> 64.1 <b>1-9:</b> 19.6 <b>10+:</b> 16.2	<b>0:</b> 61.7 <b>1-9:</b> 25.9 <b>10+:</b> 12.3	<b>0:</b> 65.6 <b>1-9:</b> 20.6 <b>10+:</b> 13.8	<b>Data Not Available</b>	<b>Data Not Available</b>	<b>Data Not Available</b>
<b>Mental Health</b>						
<b>Poor Mental Health - Adults</b> <i>Mean number of individuals reporting mentally unhealthy status in the last 30 days.</i>	<i>Carson City (2015)<sup>3</sup></i>	<i>Douglas County (2015)<sup>3</sup></i>	<i>Statewide (2015)<sup>3</sup></i>	<i>National (2015)<sup>3</sup></i>	<i>Lyon County (2015)<sup>3</sup></i>	<i>Storey County (2015)<sup>3</sup></i>
	9.8	10.8	10.8	10.8	12.3	<b>Data Not Available</b>
<b>Poor Mental Health - Adolescents</b> <i>Students who felt sad or hopeless for two weeks or more in a row (%)</i>	<i>Carson City (2015)<sup>3</sup></i>	<i>Douglas County (2015)<sup>3</sup></i>	<i>Statewide (2015)<sup>3</sup></i>	<i>National (2015)<sup>3</sup></i>	<i>Lyon County (2015)<sup>3</sup></i>	<i>Storey County (2015)<sup>3</sup></i>
	30.1	30.1	34.5	<b>Data not available</b>	37.1	37.1
<b>Suicidal Tendencies</b> <i>High school students who ever lived with someone who was depressed, mentally ill, or suicidal (%)</i>	<i>Carson City (2015)<sup>3</sup></i>	<i>Douglas County (2015)<sup>3</sup></i>	<i>Statewide (2015)<sup>3</sup></i>	<i>National (2015)<sup>3</sup></i>	<i>Lyon County (2015)<sup>3</sup></i>	<i>Storey County (2015)<sup>3</sup></i>
	29.9	29.9	30.4	<b>Data not available</b>	34.9	34.9



<b>Mortality</b>						
<b>Top 5 causes of death</b>	<b>Carson City (2016)<sup>3</sup></b>	<b>Douglas County (2016)<sup>3</sup></b>	<b>Statewide (2016)<sup>3</sup></b>	<b>National (2016)<sup>3</sup></b>	<b>Lyon County (2016)<sup>3</sup></b>	<b>Storey County (2016)<sup>3</sup></b>
	1. Malignant Neoplasms 2. Diseases of the Heart 3. Chronic Lower Respiratory Disease 4. Alzheimer's disease 5. Cerebrovascular Disease	1. Diseases of the Heart 2. Malignant Neoplasms 3. Chronic Lower Respiratory Illness 4. Alzheimer's Disease 5. Accidents	1. Diseases of the Heart 2. Malignant Neoplasms 3. Chronic Lower Respiratory 4. Accidents 5. Cerebrovascular Disease	<b>No data available</b>	1. Diseases of the Heart 2. Malignant Neoplasms 3. Lower Respiratory Disease 4. Cerebrovascular Disease 5. Diabetes Mellitus	1. Malignant Neoplasms 2. Diseases of the Heart 3. Lower Respiratory Disease 4. Cerebrovascular Disease 5. Diabetes Mellitus
<b>Vaccinations</b>						
<b>Child Immunization</b> Children (19-35 months) receiving HP 2020 recommended vaccination series* (%)	<b>Carson City (2015)<sup>3~</sup></b>	<b>Douglas County (2015)<sup>3~</sup></b>	<b>Statewide (2015)<sup>3~</sup></b>	<b>National (2015)<sup>3~</sup></b>	<b>Lyon County (2015)<sup>3~</sup></b>	<b>Storey County (2015)<sup>3~</sup></b>
	49.3	55.8	71.3	72.2	63.1	53.8
<b>Adults 65+ reporting immunized for flu</b> % of Adults aged 65+ who presorted having had the flu shot in past year	<b>Carson City (2015-2016)<sup>3~</sup></b>	<b>Douglas County (2015-2016)<sup>3~</sup></b>	<b>Statewide (2015)<sup>3~</sup></b>	<b>National (2015)<sup>3~</sup></b>	<b>Lyon County (2015-2016)<sup>3~</sup></b>	<b>Storey County (2015-2016)<sup>3~</sup></b>
	62	48	59.7	63.5	48	13
<b>Adults 65+ immunized for pneumonia</b> Residents aged 65+ who received at least one pneumonia vaccination in past year (%)	<b>Carson City (2016-2017)<sup>3~</sup></b>	<b>Douglas County (2016-2017)<sup>3~</sup></b>	<b>Statewide (2015)<sup>3~</sup></b>	<b>National (2015)<sup>3~</sup></b>	<b>Lyon County (2016-2017)<sup>3~</sup></b>	<b>Storey County (2016-2017)<sup>3~</sup></b>
	70	62	72.5	70.1	60	16

~ Nevada Division of Public & Behavioral Health would like to remind the viewer that this data is conveyed over TWO different systems, therefore, the data cannot be considered accurate. \* The shots recommended are the following: DTaP, Polio, MMR, Hib, Hepatitis B, Varicella, and Pneumococcal

# Carson City Health & Human Services | Quad-County Core Health Indicators 2017

## Reportable Conditions:

<b>Disease Cases (Confirmed and Probable)</b>						
<b>⚙ Syphilis</b> Total Cases including Primary and Secondary	<i>Carson City</i> (2015) <sup>3</sup>	<i>Douglas</i> <i>County (2015)</i> <sup>3</sup>	<i>Statewide</i> (2015) <sup>3</sup>	<i>National</i> (2015) <sup>3</sup>	<i>Lyon County</i> (2015) <sup>3</sup>	<i>Storey County</i> (2015) <sup>3</sup>
	<5	<5	774	<b>Data not available</b>	<5	<5
<b>⚙ Gonorrhea</b> Total Cases	<i>Carson City</i> (2016) <sup>3</sup>	<i>Douglas</i> <i>County (2016)</i> <sup>3</sup>	<i>Statewide</i> (2016) <sup>3</sup>	<i>National</i> (2016) <sup>3</sup>	<i>Lyon County</i> (2016) <sup>3</sup>	<i>Storey County</i> (2016) <sup>3</sup>
	24	14	4,382	<b>Data not available</b>	17	<5
<b>⚙ Chlamydia</b> Total Cases	<i>Carson City</i> (2016) <sup>3</sup>	<i>Douglas</i> <i>County (2016)</i> <sup>3</sup>	<i>Statewide</i> (2016) <sup>3</sup>	<i>National</i> (2016) <sup>3</sup>	<i>Lyon County</i> (2016) <sup>3</sup>	<i>Storey County</i> (2016) <sup>3</sup>
	296	82	14,647	<b>Data not available</b>	136	<5
<b>⚙ Tuberculosis</b> Incidence and number per 100,000 population	<i>Carson City</i> (2015) <sup>3</sup>	<i>Douglas</i> <i>County (2015)</i> <sup>3</sup>	<i>Statewide</i> (2015) <sup>3</sup>	<i>National</i> (2016) <sup>3</sup>	<i>Lyon County</i> (2015) <sup>3</sup>	<i>Storey County</i> (2015) <sup>3</sup>
	0	<5	85	<b>Data not available</b>	<5	0
<b>⚙ HIV</b> New Infection Diagnosis	<i>Carson City</i> (2016) <sup>3</sup>	<i>Douglas</i> <i>County (2016)</i> <sup>3</sup>	<i>Statewide</i> (2016) <sup>3</sup>	<i>National</i> (2016) <sup>3</sup>	<i>Lyon County</i> (2016) <sup>3</sup>	<i>Storey County</i> (2016) <sup>3</sup>
	<5	<5	485	<b>Data not available</b>	<5	<5
<b>⚙ Bacterial Meningitis</b> Case counts	<i>Carson City</i> (2016) <sup>4</sup>	<i>Douglas</i> <i>County (2016)</i> <sup>4</sup>	<i>Statewide</i> (2016) <sup>4</sup>	<i>National</i> (2016) <sup>4</sup>	<i>Lyon County</i> (2016) <sup>4</sup>	<i>Storey County</i> (2016) <sup>4</sup>
	<5	0	7	<b>Data not available</b>	0	0

<b>Vaccine Preventable Diseases (Confirmed and Probable)</b>						
⊛ <b>Mumps</b> Case counts	<i>Carson City</i> <i>(2016)<sup>4</sup></i>	<i>Douglas</i> <i>County (2016)<sup>4</sup></i>	<i>Statewide</i> <i>(2016)<sup>4</sup></i>	<i>National</i> <i>(2016)<sup>4</sup></i>	<i>Lyon County</i> <i>(2016)<sup>4</sup></i>	<i>Storey County</i> <i>(2016)<sup>4</sup></i>
	0	<5	<b>Data not available</b>	<b>Data not available</b>	0	0
⊛ <b>Rubella</b> Case counts	<i>Carson City</i> <i>(2016)<sup>4</sup></i>	<i>Douglas</i> <i>County (2016)<sup>4</sup></i>	<i>Statewide</i> <i>(2016)<sup>4</sup></i>	<i>National</i> <i>(2016)<sup>4</sup></i>	<i>Lyon County</i> <i>(2016)<sup>4</sup></i>	<i>Storey County</i> <i>(2016)<sup>4</sup></i>
	0	0	<b>Data not available</b>	<b>Data not available</b>	0	0
⊛ <b>Measles</b> Case counts	<i>Carson City</i> <i>(2016)<sup>4</sup></i>	<i>Douglas</i> <i>County (2016)<sup>4</sup></i>	<i>Statewide</i> <i>(2016)<sup>4</sup></i>	<i>National</i> <i>(2016)<sup>4</sup></i>	<i>Lyon County</i> <i>(2016)<sup>4</sup></i>	<i>Storey County</i> <i>(2016)<sup>4</sup></i>
	0	0	<b>Data not available</b>	<b>Data not available</b>	0	0

*\*These totals are for all other counties in Nevada, excluding Carson, Clark, Douglas, Lyon, and Washoe counties*

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# Carson City Health & Human Services | Quad-County Core Health Indicators 2017

## Reportable Conditions:

<b>Cancers</b>						
<b>Early Cervical Cancer Diagnosis</b>	<i>Carson City (2009-2013)<sup>3</sup></i>	<i>Douglas County (2009-2013)<sup>3</sup></i>	<i>Statewide (2009-2013)<sup>3</sup></i>	<i>National (2009-2013)<sup>3</sup></i>	<i>Lyon County (2009-2013)<sup>3</sup></i>	<i>Storey County (2009-2013)<sup>3</sup></i>
Total invasive cancer per diagnosis (%)	0	33.3	40.9	<b>Data not available</b>	27.3	33.3
<b>Late Stage Cervical Cancer Diagnosis</b>	<i>Carson City (2009-2013)<sup>3</sup></i>	<i>Douglas County (2009-2013)<sup>3</sup></i>	<i>Statewide (2008-2012)<sup>3</sup></i>	<i>National (2009-2013)<sup>3</sup></i>	<i>Lyon County (2009-2013)<sup>3</sup></i>	<i>Storey County (2009-2013)<sup>3</sup></i>
Total invasive cancer per diagnosis (%)	100	66.7	59.1	<b>Data not available</b>	72.7	66.7
<b>Early Breast Cancer Diagnosis</b>	<i>Carson City (2009-2013)<sup>3</sup></i>	<i>Douglas County (2009-2013)<sup>3</sup></i>	<i>Statewide (2009-2013)<sup>3</sup></i>	<i>National (2009-2013)<sup>3</sup></i>	<i>Lyon County (2009-2013)<sup>3</sup></i>	<i>Storey County (2009-2013)<sup>3</sup></i>
Total invasive cancer per diagnosis (%)	65.5	64.3	62.3	<b>Data not available</b>	63.2	68.8
<b>Late Stage Breast Cancer Diagnosis</b>	<i>Carson City (2009-2013)<sup>3</sup></i>	<i>Douglas County (2009-2013)<sup>3</sup></i>	<i>Statewide (2009-2013)<sup>3</sup></i>	<i>National (2009-2013)<sup>3</sup></i>	<i>Lyon County (2009-2013)<sup>3</sup></i>	<i>Storey County (2009-2013)<sup>3</sup></i>
Total invasive cancer per diagnosis (%)	54.9	57.1	59.9	<b>Data not available</b>	57.4	83.3
<b>Early Prostate Cancer Diagnosis</b>	<i>Carson City (2009-2013)<sup>3</sup></i>	<i>Douglas County (2009-2013)<sup>3</sup></i>	<i>Statewide (2009-2013)<sup>3</sup></i>	<i>National (2009-2013)<sup>3</sup></i>	<i>Lyon County (2009-2013)<sup>3</sup></i>	<i>Storey County (2009-2013)<sup>3</sup></i>
Total invasive cancer per diagnosis (%)	81.1	83.7	86.2	<b>Data not available</b>	86.0	66.7

<b>Cancers (Continued)</b>						
<b>Late Stage Prostate Cancer Diagnosis</b> Total invasive cancer per diagnosis (%)	<i>Carson City (2009-2013)<sup>3</sup></i>	<i>Douglas County (2009-2013)<sup>3</sup></i>	<i>Statewide (2009-2013)<sup>3</sup></i>	<i>National (2009-2013)<sup>3</sup></i>	<i>Lyon County (2009-2013)<sup>3</sup></i>	<i>Storey County (2009-2013)<sup>3</sup></i>
	100	66.7	59.1	<b>Data not available</b>	72.7	66.7
<b>Early Colorectal Cancer Diagnosis</b> Total invasive cancer per diagnosis (%)	<i>Carson City (2009-2013)<sup>3</sup></i>	<i>Douglas County (2009-2013)<sup>3</sup></i>	<i>Statewide (2009-2013)<sup>3</sup></i>	<i>National (2009-2013)<sup>3</sup></i>	<i>Lyon County (2009-2013)<sup>3</sup></i>	<i>Storey County (2009-2013)<sup>3</sup></i>
	45.1	42.9	40.1	<b>Data not available</b>	42.6	16.7
<b>Late stage colorectal cancer diagnosis</b> Total invasive cancer per diagnosis (%)	<i>Carson City (2009-2013)<sup>3</sup></i>	<i>Douglas County (2009-2013)<sup>3</sup></i>	<i>Statewide (2009-2013)<sup>3</sup></i>	<i>National (2009-2013)<sup>3</sup></i>	<i>Lyon County (2009-2013)<sup>3</sup></i>	<i>Storey County (2009-2013)<sup>3</sup></i>
	54.9	57.1	59.9	<b>Data not available</b>	57.4	83.3

*It should be noted that Nevada was not included in US rates because they did not meet high-quality standards for one or more years during 2007-2011 according to the North American Association of Central Center Registries.*

# **Carson City Health & Human Services | Quad-County Core Health Indicators 2017**

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## ***Citations given in MLA format:***

<sup>1</sup> "County Data Map: University of Nevada School of Medicine." *County Data Map: Statewide Initiatives: University of Nevada School of Medicine*. February 2017.

<sup>2</sup> *Nevada Rural and Frontier Data Book*. 2014. University of Nevada School of Medicine. UNSOM Rural Health Report. February. 2017.

<sup>3</sup> *Office of Public Health Informatics and Epidemiology – Reported Statistics Carson/Douglas NV 2014*. Excel. March 2017.

<sup>4</sup> *SR2: Counts of Reportable Diseases by County for Selected Time Frame (12/28/2015 - 01/02/2017)*. National Electronic Disease Surveillance System (NEDSS) Base System, 18 Feb. 2016. Web. 18 Feb. 2017.

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∴ Indicates **primary** data that has been collected by Carson City Health and Human Services

--\* Indicated due to only having 15 deaths documented in the last 3 years, accountable pregnancy-related deaths are occurring in the two urban counties of the state (Washoe and Clark counties)

~ Nevada Division of Public and Behavioral Health would like to remind the viewer that this data is conveyed over **two** different systems, therefore, the data cannot be considered accurate

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## Appendix B: Results of the 2016 Carson City LPHSPA

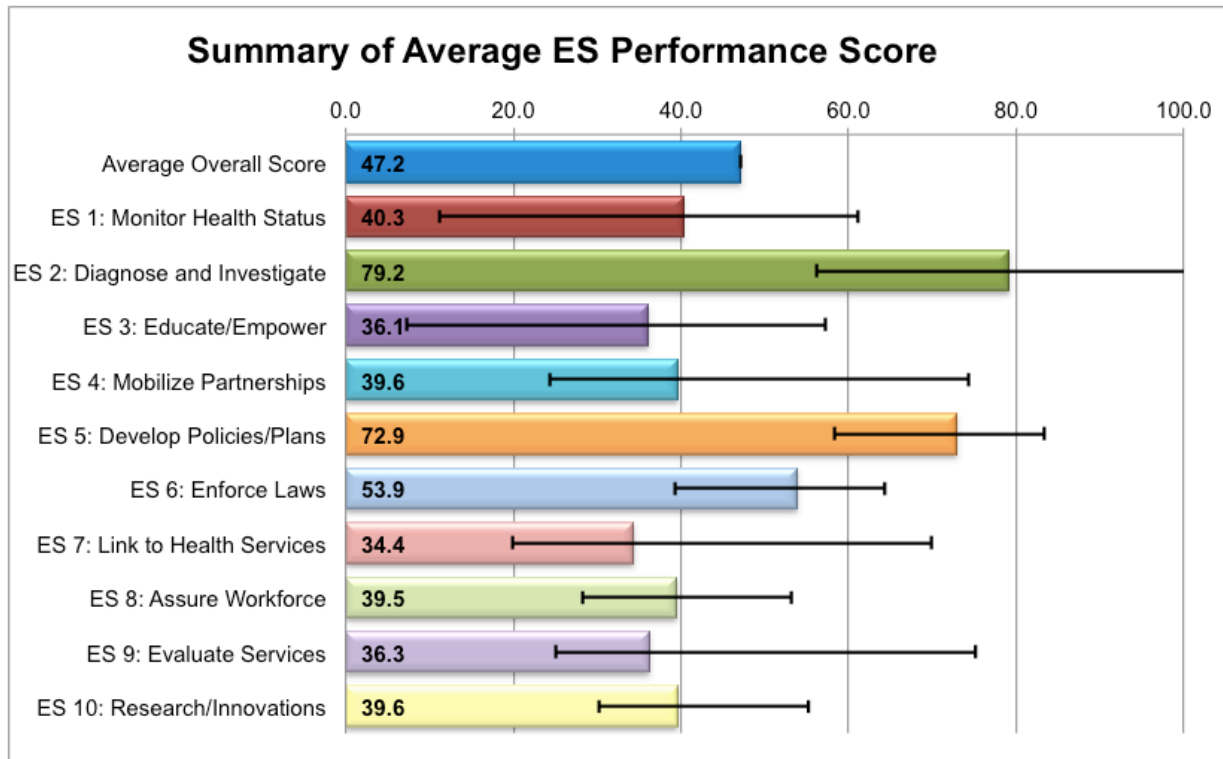
### Attending Organizations

Meeting	Organizations Represented by Attendees
<b>Meeting #1:</b> <b>October 10, 2016</b> <b>Essential Services 2, 5 and 6</b>	Friends In Service Helping (FISH) Westcare Carson Tahoe Health Carson City Health and Human Services District Attorney's Office Carson City Manager Carson Tahoe Continuing Care Washoe Tribe Head Start Carson City Public Works Empres Healthcare Nevada Division of Public and Behavioral Health Ron Wood Family Resource Center Carson City Emergency Management Carson City Board of Supervisors (Board of Health) Carson City Parks and Recreation Carson City Fire Department Nevada Public Health Foundation Carson City Juvenile Services University of Nevada, Reno Carson City School District Carson City Sheriff's Office
<b>Meeting #2:</b> <b>October 10, 2016</b> <b>Essential Services 1 and 3</b>	Carson City Health and Human Services Carson City Board of Supervisors (Board of Health) Carson Tahoe Health Carson City Emergency Management Friends In Service Helping (FISH) Nevada Public Health Foundation Empres Healthcare Carson Washoe TANF Nevada Division of Public and Behavioral Health Carson City Parks and Recreation University of Nevada, Reno Westcare Carson City Sheriff's Office Carson City School District Muscle Powered



Meeting	Organizations Represented by Attendees
<b>Meeting #3:</b> <b>October 11, 2016</b> <b>Essential Services 4, 7 and 9</b>	Carson City Public Works Carson City Health and Human Services Carson Washoe TANF Carson Tahoe Health Carson City Emergency Management Carson City Fire Department Carson City Juvenile Services Nevada State Medicaid Nevada Health Centers Carson City School District Western Nevada College Carson City Sheriff's Office Nevada Public Health Foundation Washoe Tribe Head Start JOIN The Children's Cabinet Food For Thought Carson City Parks and Recreation University of Nevada, Reno Nevada Division of Public and Behavioral Health Carson Tahoe Cancer Center Carson City Kiwanis Friends In Service Helping (FISH) Carson City Board of Supervisors (Board of Health) Empres Health
<b>Meeting #4:</b> <b>October 11, 2016</b> <b>Essential Services 8 and 10</b>	Carson City School District Carson Tahoe Cancer Center Nevada State Medicaid Carson High School HOSA Nevada Division of Public and Behavioral Health Carson City Health and Human Services University of Nevada, Reno JOIN Empres Health Carson Tahoe Health Carson City Board of Supervisors (Board of Health) Friends In Service Helping (FISH) Carson City Human Resources

## Results by Essential Service



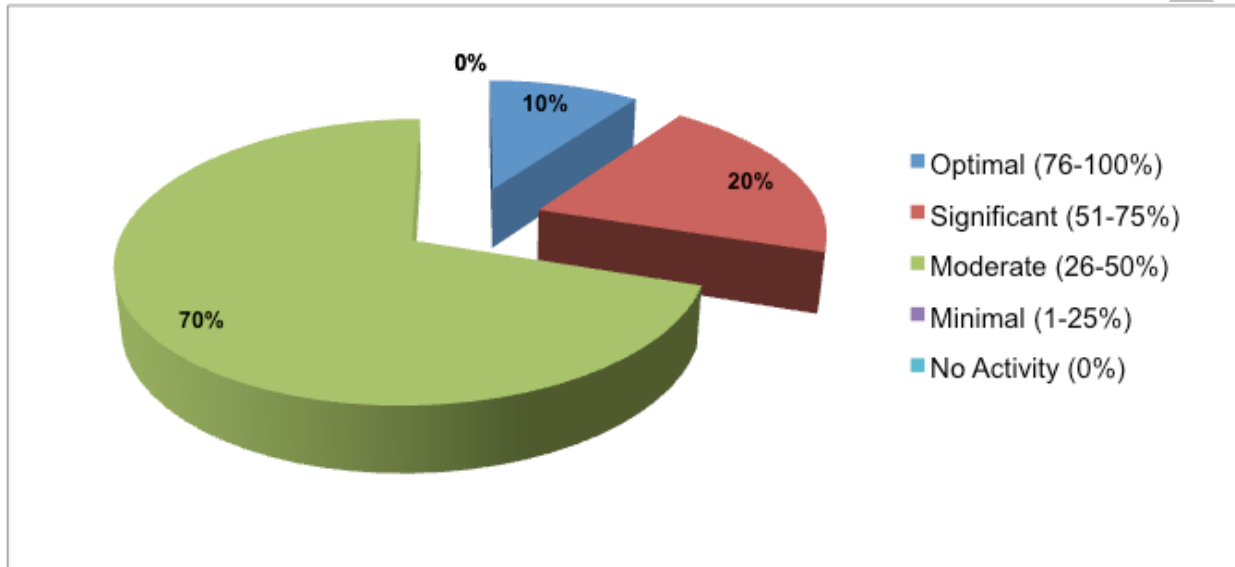
## Results by Performance Standard

Model Standards by Essential Services	Performance Scores
<b>ES 1: Monitor Health Status</b>	<b>40.3</b>
1.1 Community Health Assessment	58.3
1.2 Current Technology	25.0
1.3 Registries	37.5
<b>ES 2: Diagnose and Investigate</b>	<b>79.2</b>
2.1 Identification/Surveillance	66.7
2.2 Emergency Response	83.3
2.3 Laboratories	87.5
<b>ES 3: Educate/Empower</b>	<b>36.1</b>
3.1 Health Education/Promotion	25.0
3.2 Health Communication	25.0
3.3 Risk Communication	58.3
<b>ES 4: Mobilize Partnerships</b>	<b>39.6</b>
4.1 Constituency Development	37.5
4.2 Community Partnerships	41.7

<b>Model Standards by Essential Services</b>	<b>Performance Scores</b>
<b>ES 5: Develop Policies/Plans</b>	<b>72.9</b>
5.1 Governmental Presence	75.0
5.2 Policy Development	66.7
5.3 CHIP/Strategic Planning	75.0
5.4 Emergency Plan	75.0
<b>ES 6: Enforce Laws</b>	<b>53.9</b>
6.1 Review Laws	50.0
6.2 Improve Laws	41.7
6.3 Enforce Laws	70.0
<b>ES 7: Link to Health Services</b>	<b>34.4</b>
7.1 Personal Health Service Needs	31.3
7.2 Assure Linkage	37.5
<b>ES 8: Assure Workforce</b>	<b>39.5</b>
8.1 Workforce Assessment	25.0
8.2 Workforce Standards	66.7
8.3 Continuing Education	35.0
8.4 Leadership Development	31.3
<b>ES 9: Evaluate Services</b>	<b>36.3</b>
9.1 Evaluation of Population Health	25.0
9.2 Evaluation of Personal Health	40.0
9.3 Evaluation of LPHS	43.8
<b>ES 10: Research/Innovations</b>	<b>39.6</b>
10.1 Foster Innovation	31.3
10.2 Academic Linkages	50.0
10.3 Research Capacity	37.5
<b>Average Overall Score</b>	<b>47.2</b>
<b>Median Score</b>	<b>39.6</b>

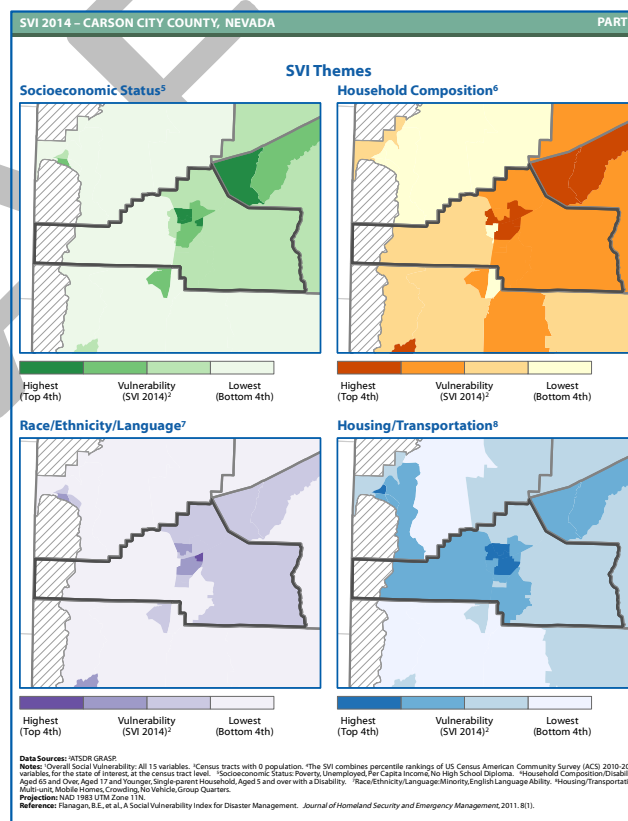
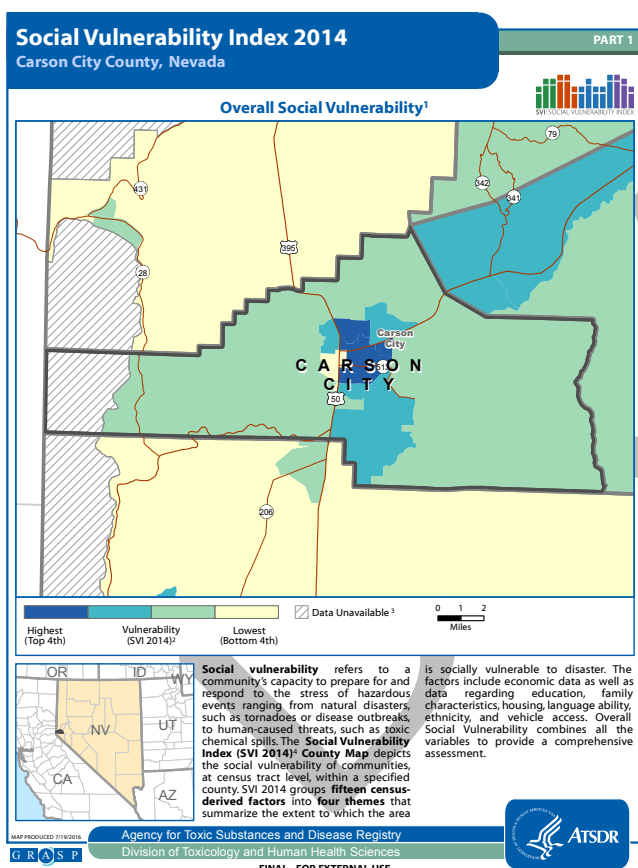
### Essential Service Percentage Scoring by Activity Category

The graph below represents what percentage of the systems Essential Services were scored by participants into each activity category.



# Appendix C: Social Vulnerability Reports for Carson City, Douglas County, Lyon County, and Storey County

All data from the Centers for Disease Control and Prevention, Agency for Toxic Substances and Disease Registry, "Social Vulnerability Index (SVI) Mapping Dashboard" (2014), <https://svi.cdc.gov/map.aspx>, Retrieved April, 2017

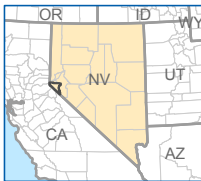
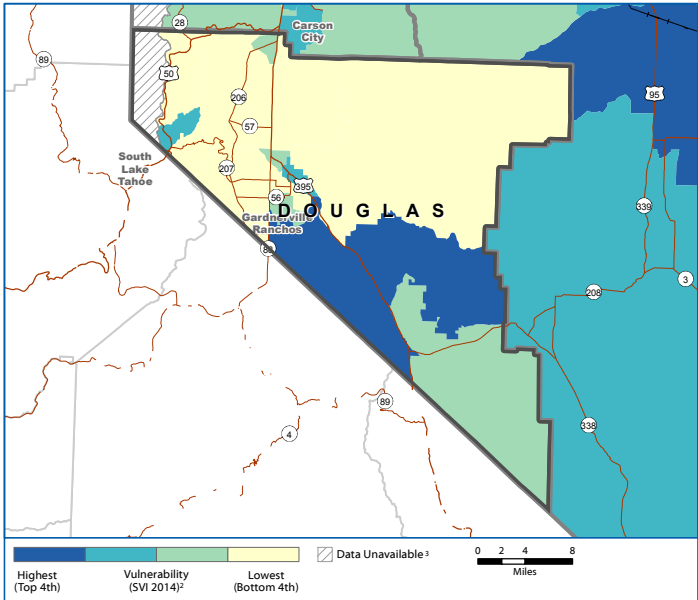


# Social Vulnerability Index 2014

## Douglas County, Nevada

PART 1

### Overall Social Vulnerability<sup>1</sup>



**Social vulnerability** refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The **Social Vulnerability Index (SVI 2014)<sup>4</sup> County Map** depicts the social vulnerability of communities, at census tract level, within a specified county. SVI 2014 groups **fifteen census-derived factors** into **four themes** that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.



Agency for Toxic Substances and Disease Registry  
Division of Toxicology and Human Health Sciences



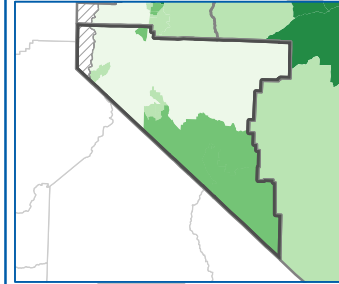
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SVI 2014 - DOUGLAS COUNTY, NEVADA

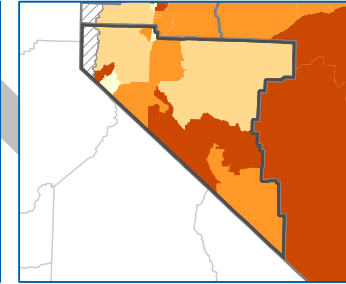
PART 2

### SVI Themes

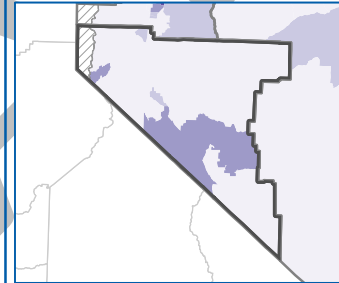
#### Socioeconomic Status<sup>5</sup>



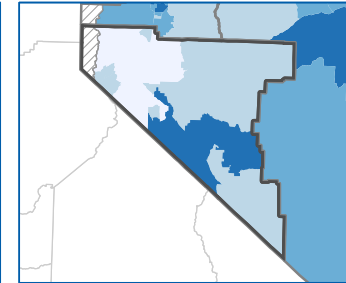
#### Household Composition<sup>6</sup>



#### Race/Ethnicity/Language<sup>7</sup>



#### Housing/Transportation<sup>8</sup>



**Data Sources:** ATSDR GRASP.  
**Notes:** <sup>1</sup>Overall Social Vulnerability: All 15 variables. <sup>2</sup>Census tracts with 0 population. <sup>3</sup>The SVI combines percentile rankings of US Census American Community Survey (ACS) 2010-2014 variables, for the state of interest, at the census tract level. <sup>4</sup>Socioeconomic Status: Poverty, Unemployed, Per Capita Income, No High School Diploma. <sup>5</sup>Household Composition/Disability: Aged 65 and Over, Aged 17 and Younger, Single-parent Household, Aged 5 and over with a Disability. <sup>6</sup>Race/Ethnicity/Language: Minority, English Language Ability. <sup>7</sup>Housing/Transportation: Multi-unit, Mobile Homes, Crowding, No Vehicle, Group Quarters.  
**Projection:** NAD 1983 UTM Zone 11N.  
**Reference:** Flanagan, B.E., et al. A Social Vulnerability Index for Disaster Management. *Journal of Homeland Security and Emergency Management*, 2011, 8(1).

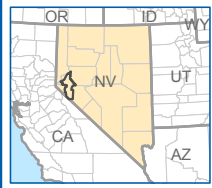
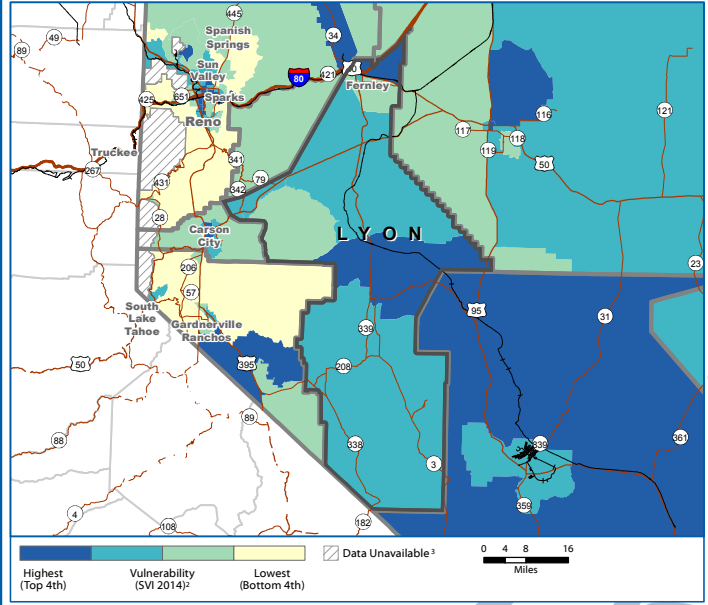
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# Social Vulnerability Index 2014

Lyon County, Nevada

PART 1

## Overall Social Vulnerability<sup>1</sup>



**Social vulnerability** refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The **Social Vulnerability Index (SVI 2014)<sup>4</sup> County Map** depicts the social vulnerability of communities, at census tract level, within a specified county. SVI 2014 groups **fifteen census-derived factors into four themes** that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.



Agency for Toxic Substances and Disease Registry  
Division of Toxicology and Human Health Sciences



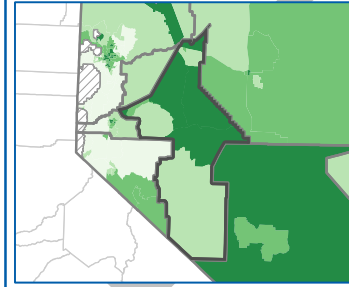
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# SVI 2014 - LYON COUNTY, NEVADA

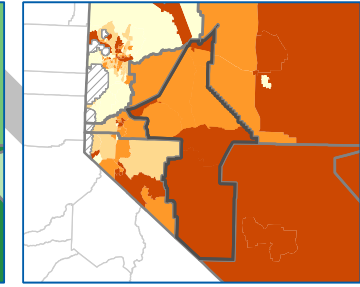
PART 2

## SVI Themes

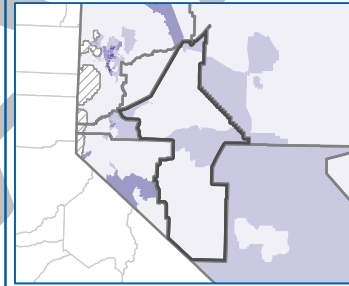
### Socioeconomic Status<sup>5</sup>



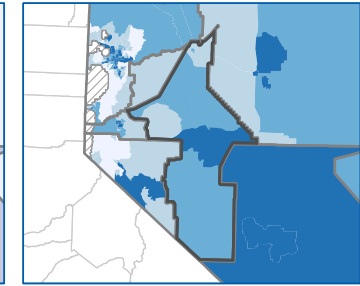
### Household Composition<sup>6</sup>



### Race/Ethnicity/Language<sup>7</sup>



### Housing/Transportation<sup>8</sup>



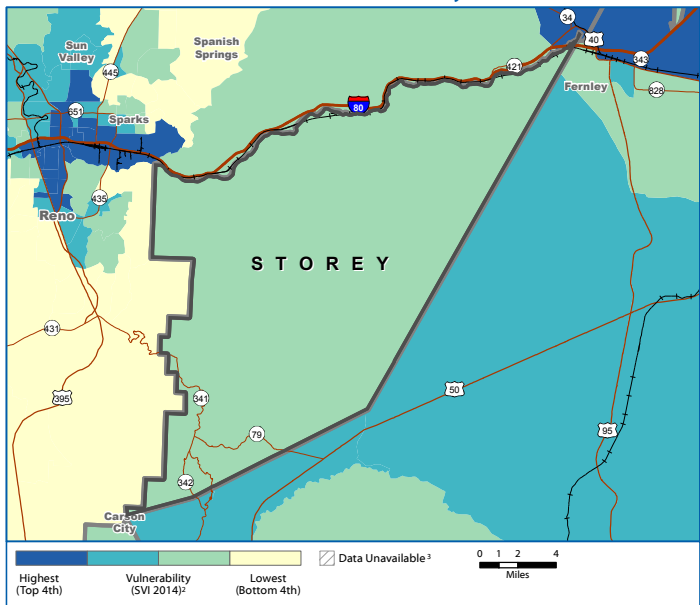
**Data Sources:** ATSDR GRASP.  
**Notes:** <sup>1</sup>Overall Social Vulnerability; All 15 variables. <sup>2</sup>Census tracts with 0 population. <sup>3</sup>The SVI combines percentile rankings of US Census American Community Survey (ACS) 2010-2014 variables for the state of interest, at the census tract level. <sup>4</sup>Socioeconomic Status: Poverty, Unemployed, Per Capita Income, No High School Diploma. <sup>5</sup>Household Composition: Disability, Aged 65 and Over, Aged 17 and Younger, Single-parent Household, Aged 5 and over with a Disability. <sup>6</sup>Race/Ethnicity/Language: Minority, English Language Ability. <sup>7</sup>Housing/Transportation: Multi-unit, Mobile Homes, Crowding, No Vehicle, Group Quarters.  
**Projection:** NAD 1983 UTM Zone 11N.  
**Reference:** Flanagan, B.E., et al. A Social Vulnerability Index for Disaster Management. *Journal of Homeland Security and Emergency Management*, 2011, 8(1).

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**Social Vulnerability Index 2014**  
Storey County, Nevada

PART 1

**Overall Social Vulnerability<sup>1</sup>**



**Social vulnerability** refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The **Social Vulnerability Index (SVI 2014)<sup>4</sup> County Map** depicts the social vulnerability of communities, at census tract level, within a specified county. SVI 2014 groups **fifteen census-derived factors** into **four themes** that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.



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Division of Toxicology and Human Health Sciences

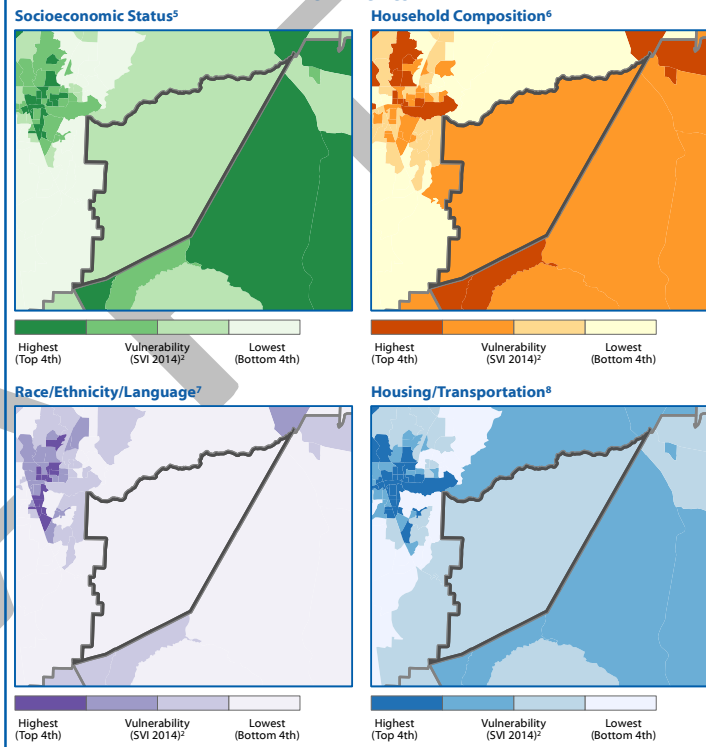


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SVI 2014 - STOREY COUNTY, NEVADA

PART 2

**SVI Themes**



**Data Sources:** ATSDR GRASP.  
**Notes:** <sup>1</sup>Overall Social Vulnerability: All 15 variables. <sup>2</sup>Census tracts with 0 population. <sup>3</sup>The SVI combines percentile rankings of US Census American Community Survey (ACS) 2010-2014 variables for the state of interest, at the census tract level. <sup>4</sup>Socioeconomic Status: Poverty, Unemployed, Per Capita Income, No High School Diploma. <sup>5</sup>Household Composition: Disability, Aged 65 and Over, Aged 17 and Younger, Single-parent Household, Aged 5 and over with a Disability. <sup>6</sup>Race/Ethnicity/Language: Minority, English Language Ability. <sup>7</sup>Housing/Transportation: Multi-unit, Mobile Homes, Crowding, No Vehicle, Group Quarters.  
**Projection:** NAD 1983 UTM Zone 11N.  
**Reference:** Flanagan, B.E., et al. A Social Vulnerability Index for Disaster Management. *Journal of Homeland Security and Emergency Management*, 2011, 8(1).

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