

COUNTY OF SAN BERNARDINO

COUNTY OF SAN BERNARDINO COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY (CEDS) 2017 FIVE-YEAR PLAN



Submitted to:
U.S. DEPARTMENT OF COMMERCE
ECONOMIC DEVELOPMENT ADMINISTRATION
by:
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1. EXECUTIVE SUMMARY

The 2017 San Bernardino County Five-Year Comprehensive Economic Development Strategy (CEDS) documents the economic and political landscape that shapes local economic development efforts in San Bernardino County and its 24 incorporated cities. A CEDS report complies with the U.S. Economic Development Administration's (EDA) eligibility requirements for public works and technical assistance grants. Moreover, the CEDS can support federal or state grant applications submitted by the County or one of the cities, and the document can function as a true strategic plan that can help the county deliver business attraction, expansion and retention services.

Socioeconomic Trends

This report incorporates past trends and current data that describe San Bernardino County's socioeconomic trends. Some highlights are listed below:

Demographic Trends

- San Bernardino County added 125,000 new people since 2010, which accounts for a 0.8% annual population growth rate;
- The county's current population has expanded to 2.17 million;
- San Bernardino County's population is young, with a median age of 32.5, or 3.3 years younger than California's median age of 35.8;
- Hispanics have become the majority population in San Bernardino County with 52.5 percent of residents being of Hispanic origin;
- San Bernardino County ranks 6th in the U.S. for percentage of households in which Spanish is the primary language spoken at home, with 33.8 percent of county households speaking primarily Spanish compared to 28.8 percent of California residents that do so.

Economic Trends

- San Bernardino County's job base is larger today than it was in 2007 just prior to the recession;
- The manufacturing and construction sectors lead the job losses since 2007;
- Goods movement comprised of wholesale trade, transportation and warehousing is San Bernardino County's largest job growth since the end of the recession, with nearly 25,000 new jobs created between 2011 and 2015;
- Other significant growth sectors since 2011 include health care, leisure and hospitality, retail, and administrative support;

- Average salaries for San Bernardino County jobs increased from \$32,000 in 2003 to a non-inflation adjustment of \$42,600 in 2015, a 29.2 percent positive change;
- Median household income in 2016 was \$54,496, compared to \$61,792 in the southern California region;
- Median household income increased by \$12,430 (though these dollars are not adjusted for annual inflation) between 2000 and 2016.

Economic Development Opportunities

The body of the report includes an economic development strengths, weaknesses, opportunities and threats (SWOT) analysis that identify the county's economic development opportunities listed below.

- Encourage innovation and entrepreneurship in water conservation, renewable energy and the business application of new technologies throughout Southern California;
- Encourage creative and less costly solutions for flood control and storm drainage systems;
- Create more dense urban mixed use environments that encourage walkability and public transit use;
- Encourage the continued expansion of the health care industry;
- Establish a regional effort to attract and diversify the mix of businesses that will elevate wages;
- Continue collaborating solutions that match workforce readiness efforts with the skills required by established employers;
- Capitalize on opportunities for Ontario and San Bernardino International Airports to capture some of the air cargo traffic from LAX;
- Support the development of new solar and wind farms;
- Support initiatives to build rooftop solar on the many large industrial and commercial buildings;
- Capitalize on opportunities to market the Auto Club Speedway in Fontana;
- Promote Big Bear Lake, Joshua Tree National Park and the Mojave National Preserve as underutilized visitor destinations.

Economic Development Goals and Strategies

Seven regional economic development goals were identified through a process of reviewing existing documents, a CEDS Strategy Committee meeting, research findings and stakeholder interviews throughout San Bernardino County. The goals listed below apply to the entire county and cut across the jurisdictional boundaries of individual cities.

1. Expand Job Creation;
2. Improve Employment Access for Existing Residents;
3. Increase Household Incomes and Wages;

4. Improve Educational Attainment and Workforce Training;
5. Improve Backbone Infrastructure and Broadband Access
6. Support Initiatives to Fund Backbone Infrastructure Improvements;
7. Encourage Sustainable Development.

Benchmarks and Performance Measures

Economic development activities initiated by San Bernardino County and the 24 cities can measure outcomes and document progress towards accomplishing the regional economic development goals. The benchmarks will focus on the broader quantifiable information that focuses on results rather than activities as described in the body of the report.

Economic Resilience

San Bernardino County continues to focus on the ability to adapt to sudden acute shocks such as potential wildfire, earthquakes, mass shootings, floods, international trade wars, new financial crises, and potential long term drought. Strategies to strengthen San Bernardino County's economic resiliency are described in the body of the report.

2. INTRODUCTION AND APPROACH

2.1 What is the San Bernardino County Comprehensive Economic Development Strategy (CEDS)?

A comprehensive economic development strategy (CEDS) is designed to bring together the public and private sectors to create an economic roadmap that diversifies and strengthens the regional economy. The CEDS provides analysis that serves as a guide to establishing regional goals and objectives, a plan of action, investment priorities and funding sources. The CEDS is intended to provide San Bernardino County with the flexibility to adapt to global economic conditions and fully utilize the region's unique advantages to maximize opportunities for residents, by attracting new investment and jobs, along with benchmarks that can be used to evaluate the region's economic development progress.

The Five-Year CEDS report complies with the U.S. Economic Development Administration's eligibility requirements for disaster recovery, public works, planning and technical assistance grants. The Five-Year CEDS report can also support funding applications to other federal and state agencies that may be submitted by the County or any of its 24 cities.

Most importantly, the Five-Year CEDS can be a true strategic planning document that describes San Bernardino County's strengths, weaknesses, opportunities and threats. The strategic planning aspect of the CEDS can improve collaborations between the incorporated cities and the county, facilitate the improvement of public and private partnerships, and assist with collaborative efforts to strengthen and diversify San Bernardino County's economy.

2.2 CEDS Planning Process

The 2017 Five-Year CEDS was obtained through input from a broad range of public and private sector regional stakeholders. Interviews were conducted with the city manager or their staff representative in 20 of the 24 cities.¹ The interviews gathered information about local economic development initiatives, private sector investments and each jurisdiction's capacity to implement their economic development initiatives. Follow up email exchanges clarified the information obtained during the initial interview.

¹ See Appendix A for list of persons interviewed

Additional community input was obtained from the CEDS Strategy Committee assembled by San Bernardino County staff on May 4, 2017. See Appendix B for a list of committee members.

3. SOCIOECONOMIC TRENDS

San Bernardino County has benefitted from a number of economic research studies, forecasts and plans that describe the local economic conditions, past trends, opportunities, and workforce gaps and challenges. The Southern California Association of Governments produced a profile of San Bernardino County's demographic and economic trends.² The San Bernardino County Workforce Development Board funded an Economic Trends and Forecast Study for 2014-15 which yielded some useful information.³ The UCR School of Business Administration commissioned a 2015 forecast study for San Bernardino County.⁴ Findings from the three key reports and data collected from the California Employment Development Department and the U.S. Census American Community Survey are summarized below.

3.1 Economic Trends

Some key findings from various data sources and reports indicate:

- San Bernardino County lost nearly 68,000 jobs during the great recession between 2007 and 2011. This was a time period when 8.7 million jobs were lost in the U.S., the national GDP contracted by 5.1 percent and California lost approximately 1.15 million private sector jobs;
- Job losses have been regained with 98,000 new jobs created between 2011 and 2015;
- San Bernardino County's job base is larger today (705,600 jobs) than it was in 2007 (675,300 jobs) just prior to the recession;
- Manufacturing sector took a big hit with a loss of nearly 18,000 jobs between 2007 and 2011;
- Manufacturing employment partially recovered with nearly 8,000 new jobs created between 2011 and 2015;
- The 54,300 manufacturing jobs in San Bernardino County today is fewer than the 64,200 manufacturing jobs in 2007 that existed prior to the recession. Between 2007 and 2015 manufacturing jobs decreased by 16 percent. The manufacturing sector includes food, apparel, metal, fossil fuel materials,

² SCAG profile of San Bernardino County, 2015

³ The State of the San Bernardino County Economy; Economic Trends and Forecasts: Quarter 3-2014 to Quarter 2-2015. Prepared by Chmura Economics & Analytics.

⁴ Economic Outlook: Focus on San Bernardino. Prepared by Christopher Thornberg, Phd.

machinery, computer and electronic products, and transportation equipment in the County;

- Nearly 20,000 construction jobs were lost between 2007 and 2015, which decreased by 36.9 percent;
- Goods movement, comprised of wholesale trade and transportation and warehousing, is San Bernardino County's largest growth sector since the end of the recession, with nearly 25,000 new jobs created between 2011 and 2015;
- Other significant growth sectors since 2011 include: health care with 19,000 new jobs, leisure and hospitality with 13,100 new jobs, 8,000 new retail jobs and 6,900 administrative support jobs.

Wages and Income

- Average salaries for San Bernardino County jobs increased from \$32,000 in 2003 to a non-inflation adjustment of \$42,600 in 2015;
- Public Administration occupations paid the highest average annual salary of \$64,100 per job;
- The Leisure-Hospitality sector paid only \$18,400 per job;
- The average wage earned in San Bernardino County was significantly below California's average wage of \$56,200;
- Median household income in 2016 was \$54,496, compared to \$61,792 in the southern California region;
- Approximately 47 percent of households earned less than \$50,000 annually, while only 22 percent of households earned \$100,000 or more in 2016;
- Median household income increased by \$12,430, (though these dollars are not adjusted for annual inflation) between 2000 and 2016.

Commute to Work

- Fifty-four percent of San Bernardino County citizens commute out of the county for work. Only 46 percent of county residents work and live in the county;
- Eighty-one percent of the workforce drives alone to work and has a mean travel time of 32 minutes.

3.2 Demographic Trends

Key demographic findings are listed below.

Population Growth Trends

- San Bernardino County added 125,000 new residents since 2010, which accounts for a 0.8 percent annual population growth rate;
- The county's current population has expanded to 2.17 million people;
- Population growth rates in San Bernardino are similar to California's annual growth rate of 0.9 percent.

Population by Age

- San Bernardino County's population is young, with a median age of 32.5, or 3.3 years younger than California's median age of 35.8;
- Sixty percent of San Bernardino County residents are between 20 and 64 years old;
- The remaining 40 percent of San Bernardino County's residents are either younger than 20 years old, or older than 65 years, and thus may not be participating in the labor force in ways that are currently measured.

Population by Ethnicity

- Hispanics have become the majority population in San Bernardino County with 52.5 percent of residents being of Hispanic origin;
- Hispanics accounted for only 39.2 percent of the population in 2000;
- Non-Hispanic Caucasians account for less than 30 percent of San Bernardino County's population, down from 44 percent in 2000;
- Non-Hispanic Asian population increased from 4.6 percent in 2002 to 6.7 percent;
- Non-Hispanic Black population decreased from 8.8 percent in 2000 to 8.1 percent.

Languages Spoken

- San Bernardino County ranks 6th in the U.S. for percentage of households in which Spanish is the primary language spoken at home; 33.8 percent of County households speaking primarily Spanish compared to 28.8 percent of California residents that speak Spanish as their primary language.

Household Size

In 2016, of all households in the County, approximately:

- 18 percent were single-person;
- 60 percent had 3 or fewer people;
- 23 percent had 5 or more people.

Levels of Educational Attainment

- Total K-12 public school enrollment for schools within San Bernardino County increased by 27,477 students, or about 7.3 percent between 2000 and 2016;
- In 2016, 78.6 percent of the population 25 years and over completed high school or higher, an increase of 4.8 percent from graduation rates in 2000. In comparison, 81 percent of California residents completed high school;
- In 2016, 18.8 percent of the population 25 years and over completed a Bachelor's degree or higher, up 2.9 percent from the 2000 level. The percentage of college graduates in San Bernardino County is close to the 20 percent state average.

Housing Conditions

- Home rentals was at 37.5 percent, and home ownership rate was at 62.5 percent in 2016;
- Home ownership rates decreased by 2 percent between 2000 and 2016 as the share of renters increased by the same amount;
- Permits were issued to develop nearly 120,000 new housing units between 2000 and 2016;
- The median sales price of existing homes increased from \$128,000 in 2000 to \$284,000 in 2016.

4. SWOT ANALYSIS

A summary of San Bernardino County's economic development strengths, weaknesses, opportunities and threats (SWOT) are described below.

4.1 Strengths

San Bernardino County's economic development assets or strengths are listed below.

Strategic Business Location

- Strategic location supporting the goods movement industry, which is a key component of San Bernardino County and the region's economy;
- The area's strategic location has attracted at least 6 Amazon fulfillment centers with approximately 6.4 million square feet of built space that employs approximately 6,000 workers;
- Other retailers have indicated interest in building fulfillment centers in San Bernardino County.

Excellent Transportation Access

- Unparalleled freeway infrastructure;
- Excellent freight and rail systems that allow local manufacturers and import-processing operations to ship long-haul cargo at lower costs compared to using trucks. The county is home to Burlington Northern Santa Fe (BNSF) rail yards in San Bernardino and Barstow. Both BNSF north/south tracks and Union Pacific east/west tracks move significant amount of goods through the Colton Crossing, which is one of the busiest at-grade crossings in the U.S;
- Several airports offer transportation gateways through the Ontario and San Bernardino International Airports that connect San Bernardino County to other U.S. and International destinations. Ontario International Airport (ONT) is the only other viable airport in Southern California capable of supporting transoceanic flights and relieving the congestion at Los Angeles International Airport (LAX).

Education and Workforce Readiness

- Great school systems in some communities can attract new residents and businesses;

- Good post-secondary education systems with 6 publicly funded Community College campuses are available to San Bernardino County residents. Campuses at San Bernardino Valley College, Chaffey College in Rancho Cucamonga, Victor Valley College in Victorville, Crafton Hills College in Yucaipa, Barstow College, and Copper Mountain College in Joshua Tree serve 63,000 full and part time students;
- California State University, San Bernardino that serves 21,000 students also functions as an important educational, cultural and sporting event venue;
- The Loma Linda School of Medicine attracts students from all over the world with its emphasis in bio-medical technologies, transplantation research, nuclear medicine and prosthetics;
- Presence of extensive training programs for logistics workers.

Cultural Diversity

- Cultural diversity is a great asset in a global economy; San Bernardino County has a very diverse demographic mix.

Local Hospitals and Health Care Facilities

- Good hospitals and health care facilities help attract new residents and businesses.

Tourism Destinations

- Outstanding tourism destinations include Big Bear Lake, Joshua Tree National Park and the Mojave National Preserve.

4.2 Weaknesses

San Bernardino County's economic development weaknesses are listed below.

Quality of Life Weaknesses

- Traffic congestion, poor air quality and relatively low-income earning potential are perceptions held by local residents and new business prospects.

Low Incomes and Lack of Spending Capacity

- Higher unemployment and poverty rates than the region or State;
- Lower wages than those earned in the region and state constrain economic development and the impact of induced spending.

Workforce Constraints

- Language barriers among some workers may affect job readiness for higher paying occupations;
- Low school performance in some communities is a barrier to advanced training and job placement;
- Lack of training opportunities for jobs and occupations with career ladder advancement potential;
- Brain drain among young, skilled and educated workers results in some employers being unable to fill jobs with qualified workers;
- A lack of training in critical thinking skills results in “dead-end” jobs for workers.

Lack of Economic Diversity

- Business mix is weighted toward goods movement and logistics, which puts a strain on the transportation systems. The region would benefit from a more diverse business mix;
- Environmental constraints associated with the Bureau of Land Management (BLM) and other federal lands limit the development of solar and wind farms on San Bernardino County’s vast areas of open space.

Infrastructure Constraints

- Nearly every city has significant water delivery and wastewater treatment delivery deficiencies with no clear mechanisms to finance improvements. Developments cannot be approved without a proven supply of water;
- Significant flood control and storm drainage deficiencies are spread throughout the County. Many of the flood control constraints are among cross-jurisdictional boundaries and require funding assistance from San Bernardino County;
- Traffic congestion in general and at specific interchanges severely constrain growth;
- Inadequate passenger rail service.

Community Leadership Constraints

- Lack of local government funding leads to a lack of staff capacity to implement local economic development initiatives;
- Business engagement is affected by the lack of a unified voice;

- Corporate leadership is constrained by the lack of corporate headquarters and business commitment in the region.

4.3 Opportunities

San Bernardino County's economic development opportunities are listed below. The following actions would enhance the region's abilities to engage in meaningful economic and social engagement.

- Encourage innovation and entrepreneurship in water conservation, renewable energy and the business application of new technologies throughout Southern California;
- Encourage creative and less costly solutions to flood control and storm drainage systems;
- Create more dense urban mixed use environments that encourage walkability and public transit use such as the current (Transient Oriented Development) TOD initiatives in Rancho Cucamonga, Upland, and City of Big Bear Lake;
- Encourage the continued expansion of the health care industry and ancillary research and development enterprises;
- Establish a regional effort to attract and diversify the mix of businesses that will elevate wages and create job growth and career paths;
- Continue collaborating on training and solutions that match workforce readiness efforts with the skills required by area employers;
- Freight congestion may create opportunities for Ontario and San Bernardino International Airports to capture some of the air cargo traffic from LAX. The geographic location of ONT makes it a possible transit point for people traveling between Asia and South America;
- Support the development of new solar and wind farms that can utilize the county's existing high-voltage lines that transfer power from distant locations to the Greater Los Angeles Basin. Many of the existing lines serve out-of-state utilities providing the potential for those utilities to purchase renewable energy from San Bernardino County;
- Support initiatives to build rooftop solar on the many large industrial and commercial buildings, thereby providing the business tenants with a locally grown supply of their own electricity. Changes to building codes may be necessary to encourage green-ready construction so owners can more easily switch to renewable energy;

- The nationally recognized Auto Club Speedway in Fontana provides marketing opportunities geared towards a regional and national market;
- Big Bear Lake, Joshua Tree National Park and the Mojave National Preserve are underutilized destinations that could attract more visitors from throughout the U.S. as well as global visitors.

4.4 Threats

San Bernardino County's threats to economic development and sustainability are listed below.

- Continued lack of funding for backbone infrastructure that includes water, sewer, flood control, storm drains and roadway improvements;
- Resumption of drought forcing additional water supply restrictions;
- New economic downturn or recession;
- Continued low educational attainment in both K-12 and higher education;
- Ongoing job displacement from automation, robotics and other labor saving technologies;
- Ongoing brain drain leading to the loss of the young creative class, requiring an effort to recruit trained workers, skilled engineers and other professionals;
- Large numbers of low income residents and a wide gap of income distribution;
- Political shock that disrupts the expansion of health care services and/or international trade;
- Continued degradation of San Bernardino County's natural areas that may discourage tourism and reduce the quality of life for residents;
- Lack of local government funding to plan and implement the economic development initiatives.

5. ECONOMIC DEVELOPMENT GOALS

Seven regional economic development goals are described below that cut across San Bernardino County's jurisdictional boundaries. The goals build upon the 2012 CEDS goals with new input obtained from the current CEDS Strategy Committee meeting, individual stakeholder interviews and updated data analysis. The regional economic development goals are distinctly different from the economic development goals adopted by individual communities, which are shaped by each jurisdiction's geography, historical economic base, demographic mix and other local factors.

Goal #1: Expand Job Creation

Creating new jobs at a faster rate than population growth is one of the most important regional economic development goals. This goal is being accomplished, with San Bernardino County now third in the nation in annual employment growth among the top 50 U.S. counties with the most employees, based on the latest data from the U.S. Census Bureau's 2015 County Business Patterns.

Goal #2: Improve Employment Access for Existing Residents

Local economic development initiatives should improve the capacity for local residents to access new jobs through education, job training and more information that matches job seekers with employers looking for skilled workers. The county's official unemployment rate is 6.4 percent, which is significantly lower than the 13.5 percent rate during the 2010 peak of the recession. Stakeholders consider it a priority to train, place and assist unemployed and discouraged workers to access the new jobs created, reducing the need to recruit workers from outside the county.⁵

Goal #3: Increase Household Incomes and Wages

Wages and incomes earned by San Bernardino County residents lag behind the State of California due to local historical trends, geographic setting and an industry mix that is skewed toward low wage paying jobs. San Bernardino County's median income average \$54,300 per household compared to the average Southern California household incomes that average \$61,800. Wages earned follow a similar pattern as the average San Bernardino County job paid \$42,600 compared to \$56,200 of wages earned per job throughout California.⁶

⁵ California Employment Development Department data

⁶ California Employment Development Department data

Goal #4: Improve Educational Attainment and Workforce Training

New labor saving technologies that require an educated and adaptive workforce are being utilized in nearly every sector of the economy. San Bernardino County lags slightly behind the State of California in preparing its workforce for the labor market as 21 percent of San Bernardino County adults did not complete high school and only 19 percent have earned a Bachelor's Degree from a college or university. Employers are increasingly interested in employees that can be trained to a higher skill level meaning that training and education must be expanded to build a base of skills that matches employment opportunities across all ages and skill levels. Efforts should include various school districts and school boards, the San Bernardino County Superintendent of Schools, the Workforce Development Board, seven Community College campuses, Cal State San Bernardino University and others.

Goal #5: Improve Backbone Infrastructure and Broadband Access

Strengthening San Bernardino County's economy is seriously constrained by a lack of backbone infrastructure improvements needed to create shovel ready sites available for new business prospects. Water and sewer lines need to be extended to available sites in advance of development throughout the county. Expensive flood control systems need to be constructed and storm drain improvements are required in advance of developing available sites. Roadway and interchange improvements are needed prior to developing key sites relieving congestion from key freeway interchanges, particularly in the High Desert.

Economic development is also constrained by poor access to broadband services, particularly in rural areas and small towns spread throughout the county's 20,000 square miles. Many areas of the county have no available high-speed internet. Businesses are increasingly reliant on fast global communications.

Goal #6: Support Initiatives to Fund Backbone Infrastructure Improvements

The elimination of Redevelopment Agencies led to a significant loss of tax increment revenues among San Bernardino County's local governments. The loss of redevelopment combined with the recession significantly reduced resources available to fund infrastructure and other revitalization improvements. It is imperative that San Bernardino County's local governments support efforts to acquire federal infrastructure improvement grants, as well as state initiatives to fund infrastructure improvements. The County could consider supporting local cities and establish an Enhanced Infrastructure Finance District (EIFD) or a Community Revitalization and Investment Authority (CRIA) that provides local governments with a new tax increment financing tool that can fund infrastructure improvements.

Goal #7: Encourage Sustainable Development

Resources and funding are scarce due to a combination of complex reasons, which means that resources should be used wisely in order to obtain maximum return on investment. Sustainable development can be encouraged through the use of locally sourced renewable energy such as rooftop solar, weatherization, and charging stations for EV vehicles. Community gardens, sustainable agriculture, water conservation, smart growth land uses, and creative infrastructure improvement solutions are also sustainable development options.

6. ECONOMIC DEVELOPMENT INITIATIVES

Regional and local economic development initiatives provide the actions that translate into economic vitality within San Bernardino County and its 24 cities. Economic development is the tool that creates the environment, ecosystem and quality of life for local residents and businesses. The primary goals of economic development initiatives are to expand job opportunities for local residents, create revenue to fund municipal services and facilitate economic growth and prosperity.

The U.S. Economic Development Administration (EDA) offers a number of programs to support investment and create jobs. These include funding for backbone infrastructure; encouraging manufacturers to relocate back to the United States; support for innovation and entrepreneurship, and access to financial opportunities and investment promotion. EDA has been a longtime advocate for economic development and a partner with local governments, providing resources, expertise and tools to help communities strengthen their economic base.

The economic development initiatives within each of the San Bernardino County cities and the projects that extend across jurisdictional boundaries are described below with more detailed descriptions in Appendices C, D, E and F.

6.1 High Desert Economic Development Initiatives

Economic development initiatives of Apple Valley, Barstow, Hesperia, Twentynine Palms and Victorville are summarized below with more detail in Appendix C.

Town of Apple Valley

The Town of Apple Valley has a single economic development initiative described below that should be included in the CEDS. More information about this initiative can be found in Appendix C.

Project Jupiter Infrastructure Improvements

The Project Jupiter Infrastructure Improvement initiative will design and construct street improvements to support the development of a new 1.3 million square foot distribution center that will be anchored by Big Lots. This project will attract approximately \$115 million of new private investment, creating 300 construction jobs and 400-500 permanent jobs in the logistics and distribution sector. Additional benefits include: \$2.8 million in permit/fee payments, \$2.3 million of street construction and improvement costs, more than \$600,000 in increased property taxes and the cornerstone for development in North Apple Valley. The Town will seek EDA funding for offsite improvements that are not paid for by development.

City of Barstow

The City of Barstow has three economic development initiatives that should be included in the CEDS. More information about the three initiatives can be found in Appendix C.

Spanish Trail Infrastructure Enhancement Project

The Spanish Trail Specific Plan, adopted by the Barstow City Council, would allow the 110 acre site to be developed with up to 800,000 square feet of new retail, a hotel, residential and public uses that will include several other features to attract residents and visitors. This project is a key component of the city's economic development strategy. It is expected that 1,400 construction jobs, 1,000 permanent jobs, \$2.4 million of additional local sales tax revenue and additional property tax revenues would result with the completion of this project. Project implementation remains constrained by a funding gap to expand water, sewer and storm drainage services to the project area.

Wastewater Treatment Plant Improvements

To support new business and residential growth, the city's wastewater treatment plant must be upgraded. The upgrade of this facility will continue Barstow's economic and job growth. So far, the city has received a \$2.5 million EPA grant to upgrade the facility.

Barstow Outlet Center Infrastructure Improvements

Located halfway between Los Angeles and Las Vegas, the Barstow Outlet Center is a successful economic development venture. Interest in expanding the Outlet Center is strong, but water, sewer and storm drainage systems are sub-par. Water, sewer and storm drain infrastructure improvements would allow the Outlet Center to expand, generate new jobs and improve the city's fiscal base.

City of Hesperia

The City of Hesperia has identified six initiatives that should be included in the CEDS. More information about the initiatives can be found in Appendix C.

Extension of Water and Sewer Services East of Highway 395

Extending the water and sewer infrastructure west of Highway 395 opens up 200+ acres of land for distribution center and manufacturing uses, creating new jobs for residents who commute to other communities. This will join two main transportation corridors allowing additional goods movement and other uses.

Interstate 15 Corridor Water and Sewer Improvements

The addition of critical water and sewer infrastructure will stimulate development near Rancho Road in Hesperia. Challenging topography because of prior Union Pacific rail use has made it difficult to support commercial development of retail and restaurants, which could otherwise be attracted to the area. Over 100 acres of vacant land could be developed, creating approximately 2,000 jobs and \$177 million of private development.

Mariposa Road Widening Project

Widening of Mariposa Road to three lanes will relieve traffic congestion and sites to be developed for a hospital or other commercial uses. This project will create new jobs, income and wealth for the residents of Hesperia. Developers have indicated an interest in locating medical offices and possibly a hospital in the area.

Rancho Road Widening Project (Phase 3)

The Rancho Road Widening Project is a partnership between the City of Hesperia and San Bernardino County. Widening a five-mile long portion of Rancho Road from two to four lanes would require constructing a new bridge over the Southern California Aqueduct and widening an at-grade road crossing. By improving access to I-15, freight movement and traffic for existing and planned commercial and residential development will be accommodated. Phases 1 and 2 have been completed.

Main Street Aqueduct Bridge Widening

The city would like to construct a new clear span bridge accommodating three lanes of traffic in each direction. This will expedite freight movement, improve safety response times and improve storm water flow. Completion of this project will allow for additional development of vacant land and job creation as a result of commercial enterprise development.

Sewer, Water and Street Improvements for the G Avenue Rail Park

The city-owned rail lead track was completed in 2012 but two unimproved roads and the lack of wet utilities infrastructure has prevented development by companies who seek rail service for their operations. The implementation of this initiative will provide infrastructure for companies seeking rail access, which will unlock 40 acres for development opportunities and job creation.

City of Twentynine Palms

The City of Twentynine Palms has a single economic development initiative described below that should be included in the CEDS. More information about this initiative can be found in Appendix C.

Project Phoenix

Project Phoenix is a city initiative to construct public parking, infrastructure improvements and a multi-purpose public building to be used for recreation, cultural and/or special event space in the downtown core. The initiative also proposes to develop new commercial space that will create job opportunities for local residents and develop a downtown center that would address local retail leakage.

City of Victorville

The City of Victorville has three economic development initiatives that should be included in the CEDS. More information about the three initiatives can be found in Appendix C.

Construction of New Hangars at the Southern California Logistics Airport (SCLA)⁷

SCLA is a business and industrial park that attracts logistics, manufacturing, aircraft repair and flight-testing companies. Boeing and GE Aviation are currently located there. Hangar construction at this site will create vitally needed employment with companies engaged in logistics and aircraft repair. The city has partnered with Stirling Development to prepare a Master Plan for the project area. The city is in the position to attract investment now that roles and responsibilities are clearly defined.

SCLA Old Golf Course Infrastructure Improvements

The city has an opportunity to attract new industrial and logistic uses if water, sewer and other infrastructure improvements can be implemented. New industrial and logistics tenants will complement airport operations and provide jobs and revenue for city and other local residents which will expand the economic base. SCLA has control over the old golf course site. They are currently seeking funding to improve infrastructure services to the site in advance of attracting new tenants.

Old Town Revitalization Project

Victorville's 500 acre downtown is blighted and in need of revitalization to attract retail and service businesses and needed goods and services for local residents. Located on historic Route 66, a specific plan revision will address obsolete infrastructure and buildings. Revitalization of the downtown would be a dynamic business development tool and increase the local quality of life.

⁷ Former George Air Force Base.

6.2 East Valley Economic Development Initiatives

Economic development initiatives of the Cities of Big Bear Lake, Colton, Highland, Rialto, San Bernardino and Yucaipa, are summarized below with more detail in Appendix D.

City of Big Bear Lake

The City of Big Bear Lake has a single economic development initiative described below. More information about this initiative can be found in Appendix D.

Moonridge Corridor Improvements

The Rathbun Corridor Sustainability Plan area will be developed along the Moonridge Corridor; it's currently used for parking during ski season and does not have a strong identity. With the planned improvements, this area can be the core of economic activity and has the potential to feature retail spaces, restaurants, office and residential uses. This will enhance Big Bear Lake as a visitor destination, create jobs and enhance the city's economic base.

City of Colton

The City of Colton has identified seven economic development initiatives. Significant infrastructure challenges obstruct the city's ability to attract and retain manufacturing and other industrial uses, several of the projects in Colton address the infrastructure changes that must occur to ensure that the city has an environment that will sustain and attract economic activity. More information about the initiatives can be found in Appendix D.

Hub City Health Care and Innovation Centre

The proposed project is a public/private partnership with the California University of Science and Medicine and the Arrowhead Regional Medical Center. Jobs created by the Centre would be high wage and highly skilled, which positions Colton as an attractive location for this type of manufacturing sector that provides both jobs and point of sale, sales tax revenue. The proposed facility will create programs to advance public health education and skills training programs to fill critical healthcare staffing needs to serve additional patients covered by the Affordable Care Act. The Innovation Centre will also provide office space for the research and development of medical devices. The project is constrained by the need to fund significant storm drain improvements.

Project 3-5 Storm Drain Improvements

Project 3-5 drainage area alleviates upstream alluvial watershed from San Bernardino, Rialto and unincorporated areas of San Bernardino County. A plan has been prepared; funding the improvements will be a partnership between Colton, Rialto and San

Bernardino County. The storm drain improvements will alleviate flooding north of I-10 by connecting the existing 108” diameter storm drain running under the I-10 Freeway and along Rancho Avenue to an existing open channel that drains into the Santa Ana River. The improvements are needed in advance of developing the HUB City Health Care and Innovation Centre and Cal-Med’s 100,000 square foot classroom building that will provide medical office space, retail space and new housing.

Project 3-8 Storm Drain Improvements

Additional storm drain improvements to the Colton portion of the Rialto Channel are required to handle storm water runoff on the west side of the Hub City Centre Specific Plan Area. The planned improvements will allow development of Colton’s 250 acre Hub City Health Care and Innovation Centre as well as medical offices, retail and housing, which will provide new high wage jobs. The city is studying the feasibility of establishing an Enhanced Infrastructure Finance District (EIFD) to fund storm drain and other infrastructure improvements.

Pellissier Ranch Infrastructure Improvements

The 1,400-acre Pellissier Ranch Area was annexed in 1991 without any reliable water or sewer services, and development of this area has been constrained by the lack of needed water and sewer services. Expanding capacity to deliver wastewater treatment services will allow residential and commercial/industrial development. A public/private partnership or an Enhanced Infrastructure Finance District (EIFD) or EDA grant could help finance improvements.

Mt. Vernon Avenue (Union Pacific Railroad) Bridge Widening Project

The Mount Vernon Bridge is the only crossing over the Union Pacific Railroad Line for a significant distance in either direction. With a single lane in both directions and no safe pedestrian walkway, widening is needed. The bridge widening project will facilitate the growth of industry and marketability of retail south of the I-10 Freeway. The widening of this crossing over the Union Pacific Railroad Line is included in the city’s Capital Improvement Program, but full funding has not been secured.

Mt. Vernon Avenue Santa Ana River Bridge Widening Project

The Mount Vernon Bridge over the Santa Ana River is undersized and obsolete. To assist the free flow of traffic, the widening will enhance the north/south access across the rail yard and river and will tie together two major retail areas, creating jobs and revenue for the city.

Agua Mansa Road Widening (Phase 3)

The city proposes to widen the road to accommodate traffic through one of Colton’s last remaining industrial areas and will assist in attracting industrial job-creating uses to

this area. Issues with the sucker fish have had an impact on the cost and feasibility of the proposed improvements.

City of Highland

The City of Highland has two economic development initiatives that should be included in the CEDS. More information about the initiatives can be found in Appendix D.

Highland 3rd & 5th Street Corridor Expansion

Highland is in an excellent position to capture its share of the regional industrial growth by expanding industrial and business park uses along the 5th Street corridor, taking advantage of convenient access to SR-30 and I-10. The city is currently working with the City of San Bernardino and the Airport Authority to prepare a specific plan that will guide industrial development.

Historic District Revitalization

The Highland Historic District includes the city's original town site along with packing houses built along the railroad and the historic commercial core on Palm Avenue. Many of the old buildings burned down, but the historic character of the district remains, presenting an opportunity to create a new destination for a mix of business, commercial, entertainment, and residential uses. Successful revitalization will require planning and streetscape improvements in advance of economic development.

City of Rialto

The City of Rialto has three economic development initiatives. More information can be found in Appendix D.

IBM Advanced Transportation and Logistics Analytical Center (ATLAC)

The establishment of an ATLAC to track and coordinate goods movement shipments from the Ports of Los Angeles and Long Beach will provide real time routing and time of use data to help optimize existing transportation infrastructure. Completion of this project is anticipated to create 20 full time jobs, additional technology firms and logistics businesses.

Community Based Educational Facility

The development of an Advanced Technology and Training Center (ATTC) in partnership with the San Bernardino Community College District and the Professional Development Center would provide a variety of educational programs necessary to place workers into new jobs in San Bernardino County.

Rialto Airport Infrastructure Improvements

The Renaissance Rialto Specific Plan will guide the development of 1,500 acres including the former Rialto Airport facilities and the surrounding area. The centerpiece of the project area will develop the Renaissance Marketplace with a movie theater, shops and restaurants. Project implementation is anticipated to produce nearly 15,000 jobs, attract 5,000 new residents and add more than \$7 million in city general fund revenue. However, project implementation is constrained by the need for major drainage improvements, sanitary sewer lines and other infrastructure improvements.

City of San Bernardino

The City of San Bernardino has a single economic development initiative described below to be included in the CEDS. More information about this initiative can be found in Appendix D.

Downtown Development Project

The city entered into an exclusive negotiation agreement with a consortium of private companies to redevelop the former Carousel Mall, which has only a few tenants left. The dead mall has lost its anchor stores leaving behind an empty parking lot on this key 2nd Street site adjacent to Interstate 215. The City Council authorized exclusive negotiating rights to two developers that want to turn the area into a mixture of retail outlets, restaurants, offices and residential units as well as live-and-work structures. Theater Square with Regal Cinemas as the anchor tenant would be the central feature of the revitalization effort, which will open up the mall, create an urban plan plaza and change the street system. The city anticipates attracting significant private financing but public funding will be needed to kick start the project and attract private investment.

City of Yucaipa

The City of Yucaipa has two economic development initiatives. More information can be found in Appendix D.

Yucaipa Innovation Center

The proposed project would develop a new 30,000 square foot innovation center facility on the Crafton Hills Community College Campus that would be a partnership between the Yucaipa-Calimesa School District, Crafton Hills College, University of the Redlands, Cal State San Bernardino, San Bernardino County EDA and the Workforce Development Board. The Center will focus on entrepreneurial training and business innovation. This project will encourage local business start-ups and a business incubator for “would-be” entrepreneurs.

Freeway Corridor Business Park Infrastructure Improvements

The city would like to establish a business park in two (2) phases on approximately 50-acres of vacant land adjacent to the Live Oak Canyon Road interchange along Interstate 10. The site is located within the Freeway Corridor Specific Plan area and the property owner is willing to develop the site. However, backbone infrastructure must be improved in advance of developing the project area.

6.3 West Valley Economic Development Initiatives

Economic development initiatives of the Cities of Fontana and Rancho Cucamonga are summarized below with more detail in Appendix E.

City of Fontana

The City of Fontana has two economic development initiatives. More information about the initiatives can be found in Appendix E.

Ventana at Duncan Canyon Specific Plan Implementation

The city prepared a specific plan to guide the development of a master planned mixed-use community that will include an outlet mall, entertainment center, Class A Office buildings and a full service hotel. Plan implementation will transform the vacant and underutilized sites into a destination that will create jobs in business and professional services, administrative support, hospitality and retail sales. The city entered into discussions with a developer about the next steps toward plan implementation.

Downtown Area Plan Implementation

The Downtown Area Plan presented a vision of how to make Downtown Fontana more walkable, access public transit, improve livability and transform the area into a destination. Planned development of new office buildings, shopping and entertainment, a parking structure and mixed-use family housing will transform downtown into a commercial and entertainment center. This plan is being discussed and will be added to the General Plan for 2017.

City of Rancho Cucamonga

The City of Rancho Cucamonga has two economic development initiatives described below. More information about the initiatives can be found in Appendix E.

Broadband Expansion

Rancho Cucamonga Municipal Utilities owns an active underground communications conduit that does not cover the entire city. A broader network of publically owned broadband conduit will help make the city competitive with local service providers by

offering lower prices and more reliability. The city's current broadband system is limited, which has been a disincentive to business causing some companies to locate in areas where the cable is reliable and more affordable. The planned expansion will allow the city to provide broadband services to 3,500 new businesses. Projections indicate that the financing plan for this project indicates that the expansion could generate as much as \$80 million in the next five years.

Empire Yards Concept Plan Implementation

The city prepared a Specific Plan to redevelop the area surrounding the Metrolink Station with a mix of uses including new housing, retail, a theater, a school and a parking structure. Plan implementation will create a transit oriented development site that will attract business and residents who will live and work in a denser, walkable urban environment. New residents and businesses will be located near rail with good transit access to the entire region. The city is in the early stages of negotiation with a developer to implement the plan

6.4 Cross Jurisdictional Projects

Fifteen economic development initiatives have been identified that cut across jurisdictional boundaries among San Bernardino County and one or more cities. More detail about each project can be found in Appendix F.

7. BENCHMARKS AND PERFORMANCE MEASURES

Economic development activities initiated by San Bernardino County and the 24 cities can be measured with benchmarks that document progress toward accomplishing the regional economic development goals. The benchmarks should measure results rather than activities. Internally, however, the County may want to gauge this type of activity-based information to understand the necessary staff hours required to accomplish objectives.

Benchmarks need to be relevant, useful and sustainable based on available, reliable data that can accurately measure performance at stated intervals. The data should be collected and reported on an annual basis in a way that is understood by county staff, businesses, and the public and local government partners. The data collection effort should not be a burden on staff, but rather a part of the effort to understand how the county and local cities can measure their ability to facilitate development and other economic development objectives. However, some staff time will be needed to communicate with each local government jurisdiction and collect primary data that measure other goal accomplishments such as improving backbone infrastructure, job creation or workforce placement into available jobs. The recommended benchmarks described below are intended to track progress in accomplishing the economic development goals.

7.1 Goal #1 Benchmarks: Measure Job Creation

The California Employment Development Department publishes employment by industry data that can track San Bernardino County's job creation progress. Tracking employment data will provide the information needed to compare San Bernardino County job creation results with the neighboring counties, the southern California region and the State of California.

7.2 Goal #2 Benchmarks: Measure Efforts to Improve Employment Access for Existing Residents

The benchmarks to measure efforts to improve employment access are more complex because the data is not easily available; however, monitoring the annual average unemployment rate is one simple method of measuring the effectiveness of residents to find employment. As a reference point San Bernardino County's 2016 unemployment rate was 5.7 percent, down from the 2015 rate of 6.4 percent. In comparison, California's 2016 unemployment rate was 5.4 percent, down from the 2015 rate of 6.2 percent.

Given the lack of data, San Bernardino County could consider meeting with the various EDD Job Centers, college placement offices and the network of non-profit job training and placement organizations to create a data collection system that can measure the success of placing San Bernardino County job seekers into actual jobs.

7.3 Goal #3 Benchmarks: Measure Wage and Household Income Changes

The California Employment Development Department publishes data on total annual payroll and average weekly wages paid that can track San Bernardino County's progress at raising incomes over time. The data will allow the County of San Bernardino and the CEDS Strategy Committee to compare San Bernardino County wages paid over time with wages paid in the neighboring counties and the State of California.

As a reference point the 2015 average annual wage paid in San Bernardino County was \$45,040, which increased to \$46,020 paid in 2016. In comparison, the 2015 average annual wage paid throughout California was \$54,920, which increased to \$56,250 by 2016. The numbers should be adjusted for inflation to accurately measure progress.

7.4 Goal #4 Benchmarks: Measure Changes in Educational Attainment and Workforce Training Outcomes

The U.S. Census American Community Survey (ACS) reports educational attainment progress on an annual basis. The ACS data can measure the percentage of San Bernardino County adults (age 25+) that completed high school compared to the percentage of adults that completed high school in the neighboring counties and the State of California. The data can also measure the percentage of San Bernardino County adults that have earned a college degree compared to the percent of adults that have earned a college degree in the neighboring counties and the State of California.

High school graduation rates for San Bernardino County residents can be quantified and reviewed on a yearly basis and compared to California and the neighboring county's graduation rates. By also following college or advanced degree data for residents, this goal can be evaluated to determine the impact of economic development activity.

As a reference, 21 percent of San Bernardino County adults did not complete high school (2015) and 19 percent have earned a Bachelor's Degree from a college or university. In comparison, 18.2 percent of California adults did not graduate from high school and 19.8 percent earned a Bachelor's Degree from a college or university.

The County should also consider meeting with the network of job training and placement agencies to collect data that can measure job training and placements successes.

7.5 Goal #5 Benchmarks: Measure Backbone Infrastructure and Broadband Access Improvements

Designated industrial areas should have shovel ready sites that are adequately subdivided and zoned with access to wastewater treatment, storm drainage, adequate water supply and roadways that connect sites to regional transportation networks. This requires good backbone infrastructure systems, but measuring progress with improving backbone infrastructure will require a ground up data collection effort since this type of information is not available on-line or via other secondary sources. CEDS projects should be monitored yearly to determine the impact of infrastructure projects on job growth, industrial and manufacturing business development and other economic development measures. Six suggested benchmarks are described below:

Shovel Ready Sites

An inventory of the available business sites that are properly zoned and have adequate infrastructure services should be documented and periodically updated. The data can be collected through annual contacts with the 24 cities.

Wastewater Treatment

Shovel ready commercial and industrial sites have access to adequate wastewater treatment. This information can be documented in the initial inventory of shovel ready sites, but the performance measures can also track the capacity of treatment plants to support new business connections, any potential growth constraints that are in place, and the capacity to expand the plant to support new industrial and commercial connections.

Storm Drainage

Shovel ready sites must have adequate storm drainage to prevent periodic flooding. The performance measures can track the capacity of each city's storm drainage systems to support new growth and any ongoing improvements.

Water Supply

Shovel ready sites must have access to an adequate supply of water and some prospects require high levels of water quality. The performance measures can track the capacity of each city's water supply systems to support new growth along with improvements that are being made to the water supply.

Roadway Improvements

A number of highway interchange projects are underway that improve backbone infrastructure. These improvements can be measured and reported on an annual basis for the individual cities.

Broadband Access

San Bernardino County's local government agencies could endeavor to improve broadband access for existing and new business establishments. Access to broadband could be measured by tracking efforts to expand municipal fiber-optic networks in the cities. By researching data on the number of business connections that are served by large telecommunications providers such as AT&T, Comcast, Verizon and others, the data could measure access to privately funded broadband service across the county, and serve as a baseline for growth.

7.6 Goal #6 Benchmarks: Measure Efforts to Fund Backbone Infrastructure Improvements

The loss of redevelopment was a significant financial blow to local government's ability to finance backbone infrastructure improvements. However, there are new tools that can measure progress funding backbone infrastructure. Three suggested benchmarks are described below.

EDA Infrastructure Grants

The County should track EDA and other Federal grants that have been obtained by individual cities or the county, and how those grants were used. Documenting the success of San Bernardino County's local governments to access and use federal grants for infrastructure is a measure of success.

Backbone Infrastructure Funding Tools

The State Legislature passed new legislation (AB 313), which allows cities to fund infrastructure improvements by creating new districts with tax increment financing authority. The City of Rialto is in the process of forming an EIFD with other San Bernardino County cities considering the same. The number of districts formed can be measured.

Track Bonds Issued to Fund Infrastructure

Cities will have the authority to issue bonds to fund infrastructure improvements in advance of accruing tax increment revenue. Bonds issued for these purposes can be measured.

7.7 Goal #7 Benchmarks: Measure Sustainable Development Initiatives

Sustainable development is a relatively new and sometimes controversial topic, which includes renewable energy, weatherization, agriculture, water conservation, smart growth land uses, and creative infrastructure improvement solutions that are sustainable development options.

For simplicity purposes, the County should measure the establishment of new renewable energy projects on an annual basis. This can be accomplished in collaboration with the County Planning Department and BLM, which will regulate the establishment of new facilities on public lands.

8. ECONOMIC RESILIENCE

San Bernardino County's ability to survive and adapt to sudden acute shocks such as earthquakes, floods, disease outbreaks, other extreme weather events or unexpected economic shocks such as the 2008 financial crises is a measure of economic resilience. The most likely natural and man-made shocks that San Bernardino County may need to adjust are described below.

8.1 Potential Economic Shocks

Potential Wildfires

The increasing risk of catastrophic wildfire is directly related to the drought. It has the potential to destroy structures both in cities and in unincorporated communities, along with entire ecosystems, vast swaths of vegetation in the mountains, wildlife and other recreational amenities, which are all greatly valued by San Bernardino County residents and out-of-area visitors. Large forested areas around Big Bear Lake and Lake Arrowhead are at risk of burning.

Earthquakes

Earthquakes are an ongoing risk anywhere in California, and certainly more so in Southwestern San Bernardino County.

Man Made Shocks

Mass shootings are becoming more common throughout the U.S., and communities need to prepare to respond as these events can happen anywhere. The City of San Bernardino experienced a mass shooting December 2, 2015. The attack had connections to international terrorism which left 14 dead and 23 injured, and was considered one of the deadliest attacks on American soil since 9/11. The attack traumatized people throughout the city and county and was a direct assault on county employees in the Department of Public Health's Environmental Health Services Division.

A second shooting occurred at the North Park Elementary on April 11, 2017, which was an outcome of a domestic dispute. This shooting left 3 dead and generated significant negative publicity for San Bernardino.

International Trade Wars

The recent national backlash against trade and globalization could have a severe and adverse effect on San Bernardino County's economy if the federal government was to adopt protectionist policies and our trading partners retaliate against U.S. exports. An anti-trade backlash could significantly affect the flow of goods in and out of the

Southern California ports, which could cause a loss of business income and jobs among San Bernardino County's goods movement cluster.

Financial Crises 2.0

A new financial crisis could be another sudden economic shock that may result in a rapid loss of jobs and revenues available to local governments.

Potential Long Term Drought

Resumption of drought conditions would bring water supply and quality back to the top of the list of potential environmental constraints to new business development in San Bernardino County.

8.2 Strategies to Strengthen San Bernardino County's Economic Resiliency

San Bernardino County's economic resiliency can be strengthened by implementing initiatives that diversify the economy, conserve the water supply, embrace renewable energy, strengthen the image, and build a resilient workforce that can better shift between jobs or industries when their core employment is threatened by changes to the economy, automation or political priorities. Possible strategies to be considered are described below.

Coordinate Protection for Large Wildfires

Fighting large wildfires is a team sport. San Bernardino County, the State of California and the special fire districts should have a coordinated plan to fight a large wildfire that may hit the San Bernardino Mountains.

Earthquake Preparedness

The County's Office of Emergency Services should be pro-active in educating residents and businesses on how to prepare for the next earthquake. In addition, there should be a coordinated effort with FEMA and the State Office of Natural Disasters on how to respond to the next earthquake.

Response to Man Made Disasters

San Bernardino County is taking action preparing for the possibility of future mass shootings or terrorist attacks with a well-organized response plan. The County has initiated a study on how to respond to the next event, and anticipates the study to be released in the future.

Response to Political or Economic Shocks

San Bernardino County will have no input into national or international events that may lead to trade wars, a new financial crises or other type of economic shock. The most effective remedy at the local level is to pursue economic diversification making San Bernardino County less reliant on international trade and goods movement.

Response to Long Term Drought

Although we had a significant amount of rain this past year, drought is most likely to return due to long-term climate change. The most effective response is to continue water conservation among households and business establishments.

Appendix A

List of Persons Interviewed

| Contact | Title | City or Business |
|-----------------|-----------------------------------|---------------------------|
| Marissa Rivera | Economic Development Manager | San Bernardino County |
| Andi Cannon | Economic Development Coordinator | San Bernardino County |
| Monique Carter | Economic Development Coordinator | San Bernardino County |
| Arthur Morgan | Economic Development Manager | City of Colton |
| Christy Elshof | Project Manager | City of Colton |
| Rod Yahnke | Economic Development Manager | City of Hesperia Economic |
| Lisa LaMere | Management Analyst | City of Hesperia Economic |
| Orlando Acevedo | Director of ED and Housing | Town of Apple Valley |
| Brad Miller | Town Engineer | Town of Apple Valley |
| Sophie Smith | Director of Economic Development | City of Victorville |
| Paul Toomey | Director of Community Development | City of Yucaipa |
| Chris Kennedy | Economic Development Manager | City of Chino |
| Rob Steel | Economic Development Manager | City of Rialto |
| Bradley Gates | Business Operations Director | City of Ontario |
| Mark Persico | Director of Community Development | City of San Bernardino |
| Konrad Bolowich | Assistant City Manager | City of Loma Linda |
| Jerry Edgett | Project Specialist | City of Fontana |
| David Edgar | Deputy City Manager | City of Fontana |
| Cruz Esparza | Economic Development Director | City of Redlands |

| Contact | Title | City or Business |
|-----------------|------------------------------------|--------------------------|
| Harold Duffey | City Manager | City of Grand Terrace |
| Thailin Martin | Administrative Aide | City of Montclair |
| Frank Luckino | City Manager | City of Twentynine Palms |
| Lawrence Mainez | Community Development Director | City of Highland |
| Doug Story | Development Services Specialist | City of Upland |
| Brad Merrell | Consulting City Engineer | City of Barstow |
| Margaret Carter | Economic Development Administrator | City of Barstow |
| Andrew Mellon | Principal Planner | City of Big Bear Lake |
| Janice Etter | City Planner | City of Big Bear Lake |
| Robert Dalquest | Planning Director | City of Big Bear Lake |
| James Miller | Community Development Director | City of Big Bear Lake |
| Flavio Nunez | Management Analyst | City of Rancho Cucamonga |

Appendix B

CEDS Committee Members

Strategy Committee Members

| | |
|------------------------|---|
| Bart Crego | Local 783 |
| Steve Tyrrell | Mitsubishi Cement |
| Alan Braggins | DSN-Chaffey College |
| Brad Williams | Apple Valley Unified School District |
| Scot Williams | San Bernardino County Superintendent of Schools |
| Lynne Kennedy | San Bernardino County Superintendent of Schools |
| Anita Tuckerman | Stirling Development |
| Julie Pehkonen | Riverside Community College |
| Jessica Rodriguez | Goodwill Southern California |
| Matt Wells | Snowline School District |
| Lori Clifton | Robar Enterprises |
| Susanne Mata | San Bernardino County |
| Jon Novak | Pattons Corporation |
| Debra Mustain | San Bernardino County Superintendent of Schools |
| Lisa Kiplinger Kennedy | DSN-Victor Valley College |
| Jay Fiene | Cal State University San Bernardino |

Appendix C

High Desert Initiatives

APPLE VALLEY ECONOMIC DEVELOPMENT INITIATIVES

| Town of Apple Valley | | | | |
|---|--|---|---|---|
| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| Project Jupiter Infrastructure Improvements | <p>Design and construction of various street improvements to support the development of a new 1.3 million square foot distribution center to be located on 106 acres in the North Apple Valley Industrial Specific Plan (NAVISP) area.</p> <p>Street improvements along Lafayette Street, Dachshund Road, and Navajo Road include: travel lanes, curb, gutter, sidewalk, water and landscape from Navajo Road to Dachshund Road and from Dachshund Road to Dale Evans Parkway.</p> <p>This is a “choker” corridor, which currently restricts needed development in the area.</p> | <p>The proposed project will attract approximately \$115 million of new private investment that will create 300 construction jobs and up to 500 permanent jobs in logistics and distribution sector. Additional benefits will include:</p> <ul style="list-style-type: none"> • More than \$2.8 million of permit and fee payments • \$2.3 million of street construction and improvement costs • More than \$600,000 of annual property tax payments • Installation of utility and water services to the project area and adjacent properties • Endorsement of the North Apple Valley Industrial Specific Plan area as a viable location for other industrial users | <p>Total street improvements are estimated at \$2.3 million. The Town’s contribution for public right-of-way improvements is estimated at \$1.25-1.5 million.</p> <p>The Town would contribute \$265,000 from the Transportation Impact Fee credit otherwise paid by the Project and an estimated \$965,000 from available NAVISP Infrastructure Funds. An estimated \$225,000 for Dachshund Road improvements will be deferred until such time as the EDA grant is awarded. The proposed tenant of the distribution center is contributing \$1.2 million to the offsite costs. The Town will seek EDA funding for offsite improvements that are not paid for by development.</p> | <p>Big Lots is the prospective anchor tenant of the distribution center. The Town expects groundbreaking by Fall 2017.</p> <p>The project was delayed by litigation initiated by environmental and labor advocacy groups. In addition, the Town is pursuing acquisition of the local water district and will deliver water service to the site.</p> |

BARSTOW ECONOMIC DEVELOPMENT INITIATIVES

| City of Barstow | | | | |
|---|---|--|--|--|
| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| <p>Spanish Trail Infrastructure Enhancement Project</p> | <p>The Spanish Trail Specific Plan, adopted by the Barstow City Council, would allow the 110 acre site to be developed with up to 800,000 square feet of new retail, a hotel, residential and public uses that will include several other features to attract residents and visitors.</p> <p>The park will include pedestrian and bicycle pathways, benches and drought-resistant landscaping. The Spanish Trail Visitors Center will be a 1,000 square foot structure located at the center of the project area. The center will provide visitors with information concerning the history of the Old Spanish Trail, the City of Barstow and Route 66. This project is a key component of the City’s economic development strategy.</p> | <p>The economic impacts of the project are estimated as follows:</p> <ul style="list-style-type: none"> • \$ 140 million construction investment • \$ 56 million construction payroll • 1,400 construction jobs • 1,000 permanent jobs • \$ 2.4 million annual local sales tax revenue • \$ 868,000 City/Fire District property tax revenue annually | <p>Phase 1 development of 55 acres will include a \$3.6 million developer contribution for the park, park & ride, and the interpretive center.</p> <ul style="list-style-type: none"> • Developing the Park is estimated to cost \$750,000 • Costs of the visitor’s center, including land acquisition and construction, are estimated at \$290,000 • The Spanish Trail Interpretive Pathway is estimated to cost \$450,000 | <p>The City is negotiating with a developer to build phase 1 of the project. The developer will incur the costs of the park and interpretive center in exchange for the right to develop commercial and residential uses on the site.</p> <p>Project implementation remains constrained by a funding gap to expand water, sewer and storm drainage services to the project area.</p> |

| | | | | |
|--|---|--|---|--|
| <p>Wastewater Treatment Plant Improvements</p> | <p>The City’s wastewater treatment plant needs to be upgraded in order to support new business and residential growth. The original facility was built in 1968, and it was upgraded in recent years, but the demand for services continues to outpace the plant’s capacity.</p> | <p>Wastewater treatment plant improvements are necessary to continue Barstow’s job growth.</p> | <p>Costs of improvements are undetermined at this time</p> | <p>The City received a \$2.5 million grant from EPA to upgrade the facility, which required a \$1 million city match. Additional upgrades are now required</p> |
| <p>Barstow Outlet Center Infrastructure Improvements</p> | <p>The Barstow Outlet Center is the City’s economic engine located along I-15, halfway between Los Angeles and Las Vegas. The demand to expand the center is strong but the City lacks the water, sewer and storm drainage systems required to accommodate the expansion.</p> | <p>Providing infrastructure services that would allow the outlet center to expand will generate new jobs and significantly improve the City’s fiscal conditions.</p> | <p>Costs of expanding infrastructure services are unknown</p> | <p>The City has been fielding requests to expand the supply of built commercial space at the outlet center. Costs of improvements and funding sources are unknown at this time</p> |

HESPERIA ECONOMIC DEVELOPMENT INITIATIVES

| City of Hesperia | | | | |
|--|--|--|--|--|
| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| Extension of Sewer Service to West of U.S. Highway 395 | The city would like to extend sewer lines from Mesa Linda to west of U.S. Highway 395 along Main Street. Currently, the closest sewer line is at Main Street and Mesa Linda east of the Oro Grand Wash. A lift station will be required to extend the sewer line under the wash. | Extending sewer infrastructure west of Highway 395 would open up 200+ acres of land for distribution and manufacturing uses, creating new jobs for residents that currently commute long distances. The area west of Highway 395 is zoned for commercial and industrial uses. A distribution center and manufacturing are the probable uses. | \$35 million to extend sewer infrastructure to west of Highway 395. Funding sources are unknown. | City is seeking funding to extend sewer service to this significant industrial area at the juncture of two major transportation corridors. |
| Interstate 15 Corridor Water and Sewer Improvements | <p>The City of Hesperia proposes to construct critical water and sewer infrastructure that will encourage development in and around Hesperia’s new Ranchero Road and I-15 Interchange, completed in February 2015, to the southern city boundary.</p> <p>The project encompasses the construction of new sewer lines and lift stations due to ground elevations and challenges posed by the presence of the Union Pacific rail line.</p> | <p>This project will support future commercial development of retail, entertainment and eateries which is estimated at build-out to absorb over 100 acres of vacant land now unable to support development due to the lack of existing infrastructure.</p> <p>The City of Hesperia estimates completion of this project will</p> | Estimated total project cost: \$24 - \$30 million. | Water and sewer studies were completed in March 2016; funding has not yet been identified for design and construction. |

| | | | | |
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| | The extensions of water lines are also needed, requiring pump stations, a pressure reducing station, domestic water booster pumps and fire pumps. | stimulate over 1 million square feet of development, 2,000 jobs and \$177.6 million in private investment. | | |
| Mariposa Road Widening Project | The city proposes that Mariposa Road be widened to a minimum of three lanes, including turn pockets. Widening of this I-15 frontage road will relieve traffic congestion and present the opportunity for a hospital or other commercial development. It is expected traffic studies will show the future use will far exceed the capacity of the existing two-lane Mariposa Road. | The proposed project will create new jobs, income and wealth for the residents of Hesperia; further reducing congestion anticipated from a future 55,000 High Desert member/patient and 200 employee medical campus, as well as from projected population growth. | Cost estimates are unknown. | Interest has been expressed in building a hospital and medical office buildings adjacent to a widened Mariposa Road. |
| Ranchero Road Widening Project (Phase 3) | The Ranchero Road Widening Project is a partnership between the City of Hesperia and San Bernardino County. The project goal is to widen a five-mile stretch of Ranchero Road from two to four lanes between I-15 and the Phase 1 undercrossing at the BNSF Railway. The project would also include the construction of a new bridge over the Southern California Aqueduct and widening of an at-grade railroad crossing. | The Project will provide improved access to I-15, facilitate freight movement, and accommodate traffic for existing and planned commercial and residential development in the area. It will also alleviate traffic congestion on the adjacent I-15/Oak Hill Road and I-15/Main Street interchanges. This improvement will greatly enhance access to and from the southernmost east-west corridor | The widening of the roadway, Aqueduct Bridge and rail crossing, the final part of the three-phase Ranchero Road Corridor Project, is expected to cost approximately \$35 million. Funding improvements is a partnership with the City of Hesperia; San Bernardino County; the San Bernardino County Transportation Authority (SBCTA), from which | The City of Hesperia has completed Phases 1 and 2 of the Ranchero Corridor Project including an undercrossing at the Burlington Northern Santa Fe (BNSF) Railway to connect west and east portions of Ranchero Road. Full funding has yet to be secured for Phase 3. |

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| | | through the City. | approximately \$20 million already has been committed. Additional funding could be sought from private developers who want to build new residential and commercial space within the project area. | |
| Main Street Aqueduct Bridge Widening | The proposed project will construct a new clear span bridge adjacent to the existing bridge, accommodating three lanes of traffic in each direction. | Proposed project will expedite freight movement, improve safety response times for emergency vehicles and improve storm water flow. This project will allow for further development of vacant land and job creation for commercial enterprises on the west side of the City. | The estimated \$16 million cost of this project is to be funded by a combination of Local Transportation Funding (Article 8) and other funding as available. | Design work is expected to be complete in 2017. Construction will be delayed until funding sources are secured. |
| Sewer, Water and Street Improvements for the G Avenue Rail Park | The city-owned rail lead track was completed in 2012, however, within this 110-acre Rail Park, two unimproved roads and wet utilities infrastructure are lacking, which has prevented development by companies requiring rail service. | This project will provide water and sewer infrastructure and complete street improvements to approximately 40 acres at the northernmost area of the rail park; at the southernmost portion of the park, will provide complete street improvements as well as extend sewer service to another 40 acres. | Cost estimates for this project are \$2 million. | Funding has not been identified. |

TWENTYNINE PALMS ECONOMIC DEVELOPMENT INITIATIVES

| City of Twentynine Palms | | | | |
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| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| Project Phoenix | <p>Project Phoenix is a city initiative to construct public parking, infrastructure improvements and a multi-purpose public building to be used for recreation, cultural and/or special event space on approximately 15 acres in the City Center.</p> <p>The proposed development plan would encourage the construction of public parking, infrastructure improvements, along with an approximately 30,000-square-foot multi-purpose public building with potential for recreation, cultural and/or special event space and new commercial space.</p> | <p>New commercial space developed in the Project Phoenix area can create jobs for local residents and develop a downtown center that would attract community residents to spend their money locally.</p> | <p>The Project Phoenix public improvement costs are unknown.</p> | <p>In April 2011, the former Twentynine Palms Redevelopment Agency (Agency) initiated Project Phoenix by issuing Housing and Non Housing Tax Allocation Bonds to build a community center and affordable housing, along with needed public infrastructure and parking improvements, in the downtown area.</p> <p>Unresolved issues between the City and the State of California about the disposition of properties owned by the former Redevelopment Agency have delayed project implementation. However, the Agency is now dissolved and the city is cleared to spend the bond proceeds to build the project. The city is moving forward with all aspects of pre-development planning work.</p> |

VICTORVILLE ECONOMIC DEVELOPMENT INITIATIVES

| City of Victorville | | | | |
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| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| Construct New Hangars At The Southern California Logistics Airport | The Southern California Logistics Airport (SCLA) is a business and industrial park that can attract logistics, manufacturing, aircraft repair and flight testing companies. To date, SCLA is home to global companies including Boeing and GE Aviation. SCLA has become a part of the global supply of Boeing Aircraft as well. The increased demand for services fills all SCLA's hangar, creating the demand for additional hangar space. | Hangar construction at SCLA creates vitally needed employment opportunities with firms engaged in logistics and aircraft repair. Successful reuse of the former GAFB helps the City of Victorville to financially recover from land transfer and need for infrastructure improvements. | Approximately \$15 million to develop a 70,000 to 90,000 square foot hangar. Funding sources have not been identified. | The city has partnered with Stirling Development to Master Plan the SCLA. The city retains control over the existing airplane hangars, the runways and general aviation uses, while Stirling manages the development of non-aviation related sites. The city is now in the position to attract investment in a new hangar now that roles and responsibilities are clearly defined. |
| SCLA Old Golf Course Infrastructure Improvements | The city has an opportunity to attract new industrial and logistics uses if water, sewer and other infrastructure improvements can be extended to the site in advance of new development. New industrial and logistics tenants will complement airport operations and will provide jobs and revenue for city and other local residents and will expand the city's economic base. | Completion of this project will result in increased opportunities to site companies that complement the airport operations and will provide needed jobs and revenue. | Funding has not been secured to deliver water, sewer and other infrastructure services to the site at this time. | SCLA now has control over the old golf course site. They are currently seeking funding to improve infrastructure services to the site in advance of attracting new tenants. |

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| <p>Old Town Revitalization Project</p> | <p>The 500 acre downtown area is blighted and in need of revitalization. Downtown is located on a key transportation access along historic Route 66. Architecture and infrastructure is outdated. A Specific Plan revision that would address outdated infrastructure and structures on 7th Street is being completed. The utilities should be placed underground and upgrade the public infrastructure.</p> | <p>Revitalization of the downtown would provide Victorville with a vibrant downtown that becomes a vibrant location for visitors and residents.</p> | <p>Funding has been secured to revise the specific plan, but not to fund undergrounding the utilities and improving public infrastructure services in the downtown area.</p> | <p>Funding has been secured to revise the 1999 Specific Plan. The city will pursue tools such as Business Improvement District formation and Enhanced Infrastructure Financing District funding to support the required infrastructure improvements.</p> |
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Appendix D

East Valley Economic Development Initiatives

BIG BEAR LAKE ECONOMIC DEVELOPMENT INITIATIVES

| City of Big Bear Lake | | | | |
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| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| Moonridge Corridor Improvements | <p>The core of economic activity within the Rathbun Corridor Sustainability Plan area will be developed along the Moonridge Corridor, which is currently used for parking in the ski season and struggles to establish a strong identity as a destination. The sustainability plan concentrates economic development along the Moonridge Road area adjacent to the proposed multi-use creek-side trail.</p> <p>The Moonridge Center will feature more retail spaces, restaurants, office and residential spaces. Proposed amenities and additions include a redesigned roadway with planted medians, bike lanes, a roundabout, sidewalks and trail gateways. Examples of proposed new businesses are bike-oriented retail and a hotel.</p> | Moonridge Corridor improvements will enhance the City of Big Bear Lake as a desirable winter and summer visitor destination, create jobs and expand the fiscal base. | Costs of improvements are unknown at this time. | The Rathbun Corridor Sustainability Plan, which obtained significant public improvement, was completed in February, 2017. Implementation of the conceptual improvements will require additional planning and engineering studies and funding. |

COLTON ECONOMIC DEVELOPMENT INITIATIVES

| City of Colton | | | | |
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| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| Hub City Centre Health Care Innovation Center | The proposed project will be an innovation/incubation center located near the Arrowhead Regional Medical Center (ARMC), possibly co-located with ARMC or the California University of Science and Medicine (CalMed). The proposed facility will create programs to advance public health education and skills training programs to fill critical healthcare staffing needs to serve additional patients covered by the Affordable Care Act. The innovation center will also provide office space for the research and development of medical devices. | It is expected that the jobs created as a result of the programs and initiatives of the innovation center would be high wage, highly skilled jobs. | The proposed innovation center may receive some funding from California University of Science and Medicine (Cal Med) and the Arrowhead Regional Medical Center particularly for public health initiatives. However, other funding will still be needed for ongoing maintenance of the Center. In addition, the public sector will need to fund the storm drainage and retention basin improvements in advance of developing the new facility. Approximately \$30 million of estimated costs for the building and infrastructure improvements are needed. | California University of Science and Medicine (Cal Med) has closed escrow on approximately 22-acre site owned by the former Colton RDA, east of ARMC in preparation of the development of the CalMed campus, dorms, and classroom buildings. Seven acres of the site must be dedicated for storm drainage infrastructure and 3-acres must be used for a detention basin, until mitigation of the drainage issues caused by the lack of completion of the 3 – 5 Storm Drain Improvement Project. Location of CalMed, and/or the Innovation Center on this site is hampered by the requirement to dedicate land to storm water detention. |
| Project 3-5 Storm Drain Improvements | San Bernardino County, the City of Colton and the City of Rialto adopted a regional storm drain plan that needs to be implemented in order to alleviate upstream alluvial watershed. The | The improvements sought will allow development of the possible location of the Health Care Innovation Center (See Above). Storm drain | The cost of the required storm drain improvements is \$5.4 million. | Colton is preparing an application for an EDA Grant to partially fund the improvements. Gap funding sources have yet to be identified. |

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| | <p>regional alluvial fan includes incorporated and unincorporated areas of Colton east of Pepper Avenue and the 22-acres site for the proposed CalMed site as well as the possible site of the Innovation Center. The storm drain improvements will alleviate flooding north of I-10 by connecting the existing 108” diameter storm drain running under the I-10 Freeway and along Rancho Avenue to an existing open channel that drains into the Santa Ana River.</p> | <p>improvements will also facilitate the development of CalMed’s 100,000 square foot classroom building, which will also attract additional medical office space, retail space and new housing located within walking distance of ARMC. The project will also allow ARMC to free up its approximately 3 acre detention basin for a parking structure to handle traffic to ARMC and CalMed.</p> | | |
| <p>Project 3-8 Storm Drain Improvements</p> | <p>Additional storm drain improvements to the Colton portion of the Rialto Channel are required to handle storm water runoff on the west side of the Hub City Centre Specific Plan Area. The Innovation Center along with planned medical office space, retail and housing will require on-site detention basins without the infrastructure improvements.</p> | <p>The improvements sought will allow development of Colton’s 250-acre Hub City Centre Health Care Innovation Center, which will provide new jobs that pay good wages generating wealth and income for the City of Colton.</p> | <p>Estimated costs to complete the storm drain improvements are undetermined at this time.</p> | <p>The City is studying the feasibility of establishing an Enhanced Infrastructure Financing District (EIFD) to fund storm drain and other infrastructure improvements. But it will take an extended amount of time to establish the district and build up the increment needed to fund the improvements. Sources of potential grant funds are unknown at this time.</p> |
| <p>Pellissier Ranch Infrastructure Improvements</p> | <p>The 1,400-acre Pellissier Ranch Area was annexed in 1991 without any reliable water or sewer services, and development of this area has been constrained by the lack of infrastructure.</p> | <p>Expanding capacity to deliver wastewater treatment services to the Pellissier Ranch area would create an opportunity</p> | <p>A new sewer lift station is estimated to cost \$3.9 million and \$2.5 million to extend water lines to the area.</p> | <p>Plans have been developed and a new sewer line has been installed along Agua Mansa Road; however, funding for an upgraded sewer treatment facility and underground lines throughout the</p> |

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| | The area needs a new sewer lift station, gravity and force main sewer lines and water lines in advance of allowing new development. The wastewater treatment plant capacity also needs to be expanded. | for residential and commercial development. | | Pellissier Ranch Area are needed. A public private partnership agreement could help finance improvements to this site, as could an EIFD or EDA Grant. |
| Mt. Vernon Avenue UPRR Bridge Widening Projects | The Mount Vernon Bridge is the only crossing over the Union Pacific Railroad Line for a significant distance in either direction. With a single lane in both directions and no safe pedestrian walkway, widening is needed. | The two lane crossing over the Union Pacific Railroad Line is hampering the growth of industry and marketability of retail south of the I-10 Freeway in Colton. | Estimated total project cost: \$11.5 million. | Improvements are included in the City's Capital Improvement Plan (CIP), but full funding is not secure. |
| Mt. Vernon Avenue Santa Ana River Bridge Widening Project | The Mount Vernon Bridge over the Santa Ana River is also undersized and obsolete. The bridges are separate, but very close together and both must be widened to assist the free flow of traffic, pedestrians and bicycles. | The widening of both the UPRR and Santa Ana Bridges is necessary to enhance the north/south access across the rail yard and the river will tie together two major retail areas for the city's citizens. | Estimated total project cost: \$28 million. | Measure I funds, and other transportation funds are planned, but full funding is not available for either bridge project. |
| Agua Mansa Road Widening (Phase 3) | The city proposes to widen Agua Mansa Road between the Rialto Channel east to Rancho. | Widening of the road to accommodate traffic through one of Colton's last remaining industrial areas will attract industrial job-creating uses to this area. | The approximate cost of the project is \$4-5 million and additional unknown costs to study the environmental impact that improvements would have on the Sucker Fish that lives in the Rialto channel. | The design, engineering and construction of a four-lane road with a fourteen-foot median and replacement of the two land existing bridge are complete. The road is now widened from Riverside Avenue east, stopping at the bridge over the Rialto Channel. |

HIGHLAND ECONOMIC DEVELOPMENT INITIATIVES

| City of Highland | | | | |
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| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| Highland 3 rd & 5 th Street Corridor Expansion | Highland is in an excellent position to capture its share of the regional industrial growth. The General Plan allows for the expansion of industrial/business park uses along the 5th Street corridor. This area benefits from convenient access to SR-10 and I-10 and can build on the momentum created by the multi-phased industrial development occurring immediately south adjacent to the San Bernardino International Airport. | Expansion of Highland’s industrial/ business park base will benefit the City of Highland from increased access, visibility and development, industrial/business park development will also provide an important opportunity for job creation and revitalization in southern areas of Highland. | Water and sewer infrastructure is available in the area and will be served by East Valley Water District. Additional infrastructure needs include, storm drainage, freeway interchange improvements (SR210), and permanent roadway striping. The costs associated with these additional infrastructure needs are estimated to be \$40 million. | The City of Highland in cooperation with the City of San Bernardino, San Manuel Band of Mission Indians, East Valley Water District and the Inland Valley Development Agency (IVDA) is preparing a specific plan (called the Airport Gateway Specific Plan) to guide industrial development. |
| Revitalize The Highland Historic District | The Highland Historic District is a historic district that was added to the State and National Register of Historic Places in 2001. The district includes the city's original town site, which was platted in 1891. The district includes the numerous packing houses built along the railroad as well as the city's historic commercial core on Palm Avenue. | Revitalizing the Highland Historic District would create jobs, add to the City’s fiscal stability, and create a renewed sense of place at the heart of the city. | Successful revitalization will require planning and streetscape improvements in advance of economic development. Planning may cost \$100,000 but no funding source has been identified. In terms of street improvements (such as on-street parking, decorative street lighting and furniture, curb/gutter and | An effort to revitalize the historic district is conceptual at this time; however there is an agreement in place with the City of San Bernardino to cover design costs. |

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| | <p>Some of the old buildings were recently demolished due to significant structural fatigue, but the historic character of the district remains, presenting an opportunity to create a new destination for a mix of business, commercial, entertainment and residential destination.</p> | | <p>sidewalks, and new round-a-bout at the Palm and Pacific intersection) is estimated to cost \$2.5 million. The city could apply for grant funding, such as HSIP and ATP.</p> | |
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RIALTO ECONOMIC DEVELOPMENT INITIATIVES

| City of Rialto | | | | |
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| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| IBM Advanced Transportation and Logistics Analytical Center (ATLAC) | The City of Rialto would develop an ATLAC to track and coordinate goods movement shipments from the Ports of Los Angeles and Long Beach into and out of the Inland Empire Ports. The ATLAC will provide real time routing and time of use data to help optimize existing transportation infrastructure and implement congestion management pricing. The project may also include installation of high-speed fiber optic cables to accelerate transmission of data to users. | The ATLAC would occupy 20,000 square feet of space on a 3-acre site that will create approximately 20 full time jobs. Project implementation may also attract additional technology firms and logistics establishments. | Approximately \$5 million to develop the facility. City intends to contribute land as local match. | Project is conceptual. |
| Community Based Educational Facility | The City of Rialto would develop an Advanced Technology and Training Center (ATTC) to be located in the downtown/Rialto Civic Center in partnership with the San Bernardino Community College District (SBCCD) and the Professional Development Center (PDC). The centrally located ATTC would provide a variety of educational | The training would provide the skills necessary to place workers into new jobs created within San Bernardino County. | Project development costs and funding sources are unknown. | Project is conceptual. |

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| | <p>programs to service the local population, including:</p> <p>English as a Second Language (ESL), job skills training and continuing education programs will allow local residents to obtain necessary job skills and pursue careers in logistics, health care and construction trades. The facility would be centrally located, linked to transportation services, and it would provide patrons with childcare, career counseling, job placement and other support services.</p> | | | |
| <p>Rialto Airport Infrastructure Improvements</p> | <p>The city prepared the Renaissance Rialto Specific Plan to guide the development of 1,500 acres that includes the former Rialto Airport. The Renaissance Marketplace, a shopping center containing a movie theater, small shops and restaurants is the centerpiece of the Specific Plan area, which is strategically located adjacent to the SR-210 freeway.</p> <p>The city selected a developer (LHR) to develop 1,250 residential units along with 1.5 million square feet of new business space on 550 acres of the</p> | <p>At build out, the total Specific Plan should produce nearly 15,000 jobs, 5,000 new residents and net revenues to the City General Fund in excess of \$10 million annually.</p> | <p>Regional storm drain Improvements are estimated to cost \$60 million.</p> | <p>The city raised \$30 million to complete the relocation of Airport tenants, demolish the improvements, remediate known hazardous substances, and construct backbone infrastructure. The City is seeking funding to implement the remaining improvements.</p> <p>Two users have developed facilities on the westernmost Airport properties (Niagara Bottling and Medline Industries). Monster Beverage is currently constructing a 1.1 million square foot facility and a 615,000 square foot fulfillment center is also</p> |

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| | <p>Specific Plan area. Private landowners including Panattoni, Prologis, DCT, Target and CapRock Partners have already commenced or completed development on other sites within the Specific Plan.</p> <p>The area currently lacks major drainage facilities, sanitary sewer lines and other infrastructure.</p> <p>Improvements are required to support the full build out of the Specific Plan area.</p> | | | <p>under construction. Another 650,000 square foot fulfillment center is scheduled to commence construction in June 2017. The 450,000 commercial center commenced construction in March 2017.</p> |
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SAN BERNARDINO ECONOMIC DEVELOPMENT INITIATIVES

| City of San Bernardino | | | | |
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| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| Downtown Development Project | <p>The city entered into an exclusive negotiation agreement with a consortium of private companies to redevelop the former Carousel Mall, which has only a few tenants left. The dead mall has lost its anchor stores leaving behind an empty parking lot on this key 2nd Street site adjacent to Interstate 215.</p> <p>The City Council authorized exclusive negotiating rights to two developers that want to turn the area into a mixture of retail outlets, restaurants, offices and residential units as well as live-and-work structures. Theater Square with Regal Cinemas as the anchor tenant would be the central feature of the revitalization effort, which will open up the mall, create an urban plan plaza and change the street system.</p> | <p>The successful redevelopment of the Carousel Mall will transform downtown into an entertainment destination, increase property values, generate positive fiscal revenues for the city and create new jobs.</p> <p>In addition, attracting a Regal Theater as an anchor tenant would attract consumers from the region to downtown San Bernardino, creating additional demand for sit down restaurants and other amenities that can take advantage of freeway proximity.</p> | <p>The city estimates that it will cost \$42 million to demolish the Carousel Mall, level the site, complete street work and install utilities to the redeveloped project area.</p> <p>The city anticipates significant private financing but public funding will be needed to kick start the project and attract private investment.</p> | <p>The City Council has entered into an agreement with a developer to redevelop the site, and the redevelopment effort is exempt from CEQA review.</p> <p>The most immediate development plan intends to capitalize on foot traffic from the nearby Regal Cinema multiplex and California Theatre of the Performing Arts at 4th and E Streets, across the street and north of the mall.</p> |

YUCAIPA ECONOMIC DEVELOPMENT INITIATIVES

| City of Yucaipa | | | | |
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| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| Yucaipa Innovation Center | The proposed project would develop a new innovation center facility (approximately 30,000 SF) adjacent to the Crafton Hills Community College Campus in Yucaipa. The Innovation Center would be a partnership between the Yucaipa-Calimesa School District, Crafton Hills College, University of Redlands, Cal State, TET, San Bernardino County EDA and the Workforce Development Board. This partnership will focus on entrepreneurial development, workforce training, and business innovation that will blend with the functions of the existing Business Incubator Center, located in the former Police Station that would move its offices and business operations to the proposed Innovation Center. | <p>An innovation center would encourage local entrepreneurship and job creation by people that live and do business in Yucaipa. The proposed new facility would also provide space that allows the business incubator to expand and serve more business start-ups.</p> <p>The workforce training program is intended to provide direct employment opportunities with local manufacturing and other vocational skills based companies.</p> | <p>The estimated cost to construct the Innovation Center is \$20 million. Approximately \$15 million of the project funding to construct are to be provided through a partnership with the Yucaipa-Calimesa Joint Unified School District, Crafton Hills Community College, and the City of Yucaipa.</p> <p>\$5 million shortfall to be requested through an EDA application.</p> | The city hired a consultant to prepare a market analysis for the Incubator/Innovation Center along with a Phase 2 feasibility study, which should be completed by mid-2017. |

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| <p>Freeway Corridor Business Park Infrastructure Improvements</p> | <p>The city would like to establish a business park in two (2) phases on approximately 50-acres of vacant land adjacent to the Live Oak Canyon Road interchange along Interstate 10. The site is located within the Freeway Corridor Specific Plan area and the property owner is willing to develop the site. The first phase consists of the development of 43 acres including the backbone infrastructure.</p> | <p>Establishment of a new business park in Yucaipa would create basic jobs, generate positive fiscal revenues for the city and reduce the need to commute elsewhere to work.</p> | <p>The project area needs access to water and wastewater treatment in advance of attracting new business. A lift station will need to be installed along with 2,500 feet of gravity line. Water service delivery will require the installation of a water tank.</p> <p>The costs of improvements are unknown to date. The city is considering forming a Community Service District (CSD) or an Enhanced Infrastructure Finance District (EIFD) as a tool to fund the required water and sewer improvements.</p> | <p>The city responds to numerous inquiries for business sites by manufacturing, logistics and distribution establishments but adequate sites are not available. The Specific Plan is completed and the city is in discussion with the property owners on how to finance improvements.</p> |
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Appendix E

West Valley Economic Development Initiatives

FONTANA ECONOMIC DEVELOPMENT INITIATIVES

| City of Fontana | | | | |
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| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| Ventana At Duncan Canyon Specific Plan Implementation | The City of Fontana intends to implement the Ventana at Duncan Canyon Specific Plan by attracting private investment to develop a master planned “mixed-use” community on the project site, which is located adjacent to the I-15 Freeway. The City would like the site development to include an: <ul style="list-style-type: none"> • Outlet Mall • Entertainment Center • “Class A” Office Buildings - encompassing more than 100,000 sq. ft. and 5-story or greater • Full-Service Hotel (National Brand; 5-story or greater) | Implementation of the Specific Plan would help transform the vacant and underutilized sites into a high-quality “destination” type development along the I-15 Freeway. Companies attracted to the site would create jobs in business and professional services, administrative support, hospitality and retail sales. The number of jobs within each business sector can be estimated when specific proposals to develop the site have been submitted. | Information about cost estimates and funding sources wait for developer proposals to be received. The need or desire for federal funding to assist improvements is unknown at this time. | The city entered into an ENA with Majestic Realtor that will include a few timelines for deliverables based on clear direction given to them by City Council and staff. This meeting with City Council & staff will be mid-October 2017. All parties will be discussing next steps & revisions to the plan. |

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| <p>Downtown Area Plan Implementation</p> | <p>The Downtown Area Plan was prepared in 2016 as a vision to support initiatives that make Downtown Fontana more walkable, connects to public transit, improves livability and transforms the area into a destination. The Downtown Area Plan supports the development of:</p> <ul style="list-style-type: none"> • New Office Buildings (Multi-Story) • Shopping and Entertainment • Structured Parking • Infrastructure Improvements • Mixed-Use Multi-Family Housing | <p>Implementation of the Downtown Area Plan may transform downtown into a commercial and entertainment destination, increase property values, and generate positive fiscal revenues.</p> <p>New office buildings will attract day-time employees that will spend a portion of their salaries on food and commercial products in the downtown area.</p> | <p>This plan is being discussed and will be added to the General Plan for 2017. At this time, there are no site plans or estimates of the public improvement cost.</p> | <p>Eight city-owned parcels within the Downtown Specific Plan area have been identified for commercial, residential or mixed use. A proposal to develop four parcels is under consideration.</p> <p>Infrastructure improvements, new parking structures, transit oriented development and other aspects of downtown revitalization are in the planning stages. Sources of funding the improvements are unknown.</p> |
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RANCHO CUCAMONGA ECONOMIC DEVELOPMENT INITIATIVES

| City of Rancho Cucamonga | | | | |
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| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| Broadband Expansion | The Rancho Cucamonga Municipal Utilities (RCMU) owns and operates extensive underground telecommunications conduit and fiber-optic cable. The city owned conduit and cable covers only 10 percent of the city, leaving large areas of empty space available to serve. | <p>A broader network of publically owned broadband provides the city with the flexibility to offer lower cost and better service than Verizon, AT&T, Comcast and other well-known retailers of broadband services to business. Under the current system some new business prospects have found alternative locations away from Rancho Cucamonga because the existing broadband providers lacked the capacity to expand service.</p> <p>The planned expansion will allow the city to provide broadband services to 3,500 new businesses.</p> | <p>The Fiber Master Plan includes a financial element suggesting that the city could invest upwards of \$20 million to fund a fiber build out of its network, expanding its reach to nearly 75 miles of routes of Rancho Cucamonga’s major corridors and business districts.</p> <p>The financing plan suggests that the expansion plan will generate \$80 million of cash flow to the city over the next 20 years.</p> | <p>The city has prepared a Fiber Master Plan to identify opportunities within the community that could make use of existing broadband assets while providing a roadmap for further expansion of the existing network.</p> <p>The financial advisor has recommended that the city to take prudent steps to form partnerships and alliances where possible and to make strategic investments in these network assets once the proper governance, business and financial models have been agreed to by participating parties.</p> <p>The city is looking for grant seed money of up to \$12 million to kick off the effort.</p> |

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| <p>Empire Yards Concept Plan Implementation</p> | <p>The city prepared a Specific Plan to redevelop the area surrounding the Metrolink Station with a mix of uses including new housing, retail, a theater, a school and a parking structure.</p> | <p>Implementation of the Specific Plan will create a transit oriented development site that will attract business and residents who will live and work in a denser, walkable urban environment. New residents and businesses will be located near rail with good transit access to the entire region.</p> | <p>Costs of improvements are undetermined at this time. The improvements will include a new parking structure, a realignment of utility poles and other improvements.</p> | <p>The city is in the early stages of negotiation with a developer to implement the plan.</p> |
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Appendix F

Cross Jurisdictional Projects

SAN BERNARDINO COUNTY CROSS-JURISDICTIONAL PROJECTS

| San Bernardino County Cross-Jurisdictional Projects | | | | |
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| Project | Description | Economic and Employment Impacts | Approximate Cost and Funding Source | Status |
| <p>Promise Scholars Program</p> | <p>The Promise Scholars program is a partnership between Chaffey College, Ontario-Montclair School District, Chaffey Joint Union HSD, and Cal State San Bernardino and designed to prepare students for a college education.</p> | <p>A great need exists for a program in San Bernardino County that motivates students to attend college, and give them the skills necessary to successfully transition into the workforce. Goals are to have each student involved in the Promise Scholars program complete their high school education and attend a college/university or vocational/trade school; ease access to higher education; increase the number of students who complete high school and attend college; and to better equip a workforce with job skills that are dependent on Science, Technology, Engineering, and Mathematics (STEM) to meet the demands for high technology jobs. The program will result in an increase of County residents</p> | | <p>Nearly 9,000 students served in 2015-16.</p> <p>12th grade:</p> <ul style="list-style-type: none"> • Over 600 parents of 12th graders participated in Financial Aid (FAFSA – Free Application for Federal Student Aid) Workshops at Colony, Chaffey, and Ontario High Schools. There has been an 18% increase in FAFSA completion rates from the baseline year. Nearly 550 students are set to receive a Promise Scholars Scholarship in the fall of 2016. <p>9th grade:</p> <ul style="list-style-type: none"> • Over 1,300 students learned about their personality strengths and related careers to explore. <p>8th grade:</p> <ul style="list-style-type: none"> • Approximately 2,200 students visited a university campus and learned about planning and |

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| | | <p>that are prepared for the jobs of the 21st century.</p> | | <p>preparing for college.</p> <p>6th grade:</p> <ul style="list-style-type: none"> Over 2,300 students had volunteer Business Leaders make presentations to their class on their college and career pathways. <p>5th grade:</p> <ul style="list-style-type: none"> Over 2,300 students visited their first college (community college) so they begin to imagine themselves in college. |
| <p>DNA Vaccine Development And Commercialization Project at Loma Linda University</p> | <p>SEKRIS Corporation (SEKRIS) is a privately held company founded in 2009 to commercialize a platform technology that has been under development since 1995 at Loma Linda University (LLU). SEKRIS secured an exclusive worldwide license from LLU for all intellectual property pending or granted as well as the technology platform to commercialize vaccine products. The strategy for commercialization of the vaccine entails product development, testing, manufacturing and distribution. The term "platform technology" refers to the wide breadth of potential applications for this discovery. This</p> | | | <p>SEKRIS has entered into an agreement with Aldevron, LLC to initiate manufacturing of the DNA product candidate for pre-clinical and clinical testing. SEKRIS has also entered discussions with Stanford University to initiate a collaborative study testing the SEKRIS vaccine product candidate for prevention of rejection of transplanted islet cells. Positive results from this study will expand the utility of the SEKRIS vaccine beyond patients who were recently diagnosed with Type 1 diabetes to include patients who have been living with the disease and require islet transplantation to regain the ability to produce endogenous insulin. SEKRIS anticipated completing the</p> |

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| | <p>encompasses autoimmune diseases (e.g., Type 1 diabetes, multiple sclerosis, lupus, and many others) as well as diseases (immune-mediated inflammatory disorders or "IMIDs") that consist of an inflammatory component at some point during their progression (e.g., cancer, asthma, allergies, and transplant rejection).</p> | | | <p>study protocol in September 2016.</p> |
| <p>Organ Transplantation Technology at Loma Linda University Medical Center</p> | <p>Loma Linda University Medical Center is researching transplant technology through collaborative endeavors with bio-medical companies in San Bernardino County. The SEKRIS Corporation is in the process of commercializing a platform technology that has been under development since 1995 at Loma Linda University ("LLU"). The University has granted an exclusive worldwide license to SEKRIS to commercialize the DNA Vaccine which is the first of several products to be produced under the platform technology.</p> | <p>This collaboration will allow further development of this promising technology and set the stage for future collaboration for clinical trials.</p> | | <p>SEKRIS recently completed a round of funding to initiate a collaborative study with Massachusetts General Hospital/Harvard. This study will expand the existing preliminary data that SEKRIS has in skin grafting for application of the technology for islet transplants and heart transplants. The study protocol has been completed and we are completing the Material Transfer Agreement. Upon execution of this agreement, the study will be initiated. In the interim, SEKRIS has contracted Aldevron, LLC to manufacture the DNA product for testing.</p> |

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| <p>AG Hemostatic Patch Commercialization at Loma Linda University</p> | <p>KOAG Medical, Inc. (KOAG) has entered into an exclusive licensing agreement with Loma Linda University to develop and commercialize a unique hemostatic agent. The hemostatic agent is very effective and efficient in arresting bleeding without reliance on the normal coagulation system. The hemostatic agent is a by-product of the seafood industry delivered via a microfibrillar sponge that can arrest bleeding faster than any product on the market. The company utilized a high molecular weight chitosan which allows for the manufacture of a patch that is made of a loose microfibrillar mesh fiber. This allows for easier handling and is lighter in weight. The patch not only stops bleeding due to its adhesive qualities, but in many instances it may obviate the need for addition treatments, such as placement of sutures.</p> | | | <p>Through a research agreement with Chitogen, Inc., SEKRIS has obtained hemostatic patches for preclinical and clinical testing. We are currently conducting clinical studies to determine the efficacy of the hemostatic patches in controlling hemorrhage in dental surgical procedures.</p> |
| <p>Glen Helen Rehabilitation Facility Access Road</p> | <p>Reconstruct the access road for the Glen Helen Rehabilitation Facility, which will also serve as an alternate access road to the Rosena Ranch</p> | <p>This project will impact the local economy by first and foremost creating jobs that are desperately needed. Secondly, the project</p> | <p>Estimated total project cost: \$7 million. To date, the county has invested \$417,000 to complete a drainage study</p> | <p>Environmental clearance for this project is currently underway. Due to the difficulties in getting environmental approval on the proposed pipes and</p> |

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| | <p>development.</p> | <p>impacts the local economy through the suppliers of materials needed to complete the project. Institution Road leads to both the San Bernardino County Sherriff's Training Facility and the Glen Helen Rehabilitation Facility. It is imperative that access to both facilities remain available throughout the year. The Sherriff's Training Facility also features the Public Safety Internship Academy that targets High School students interested in a career in law enforcement or public safety.</p> | <p>and begin the design phase for this project and has allocated an additional \$6 million from the County's General Fund. The county's \$417,000 investment thus far translates to the creation of 5 jobs. Preliminary work for the drainage study, such as surveying and field reviews began in January 2006.</p> | <p>culverts, and the high cost of building a bridge, an option is to reconstruct the road with concrete dip crossing where floodwater flows. The cost for this option is \$2.5 million, and if approved, construction may occur in 2017.</p> |
| <p>Rock Springs Road Bridge Project</p> | <p>Widen the existing road to four lanes, and construct a four-lane road bridge across the Mojave River on the Rock Springs Road alignment. The funding request is to implement the environmental documentation through Plans, Specifications and Estimates (PS&E). A Request for Proposal has been issued for engineering and environmental services and a contractor selected.</p> | | <p>Estimated total project cost: \$32 million. To date, the county has contributed \$901,300 of the estimated \$1.9 million cost toward the environmental clearance and design phase of the project.</p> | <p>The county's investment represents the creation of 12 jobs. The project is currently in the design phase, which began in September 2010, and has received environmental clearance. The design phase is expected to be completed in December 2015.</p> |

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| <p>Cedar Avenue/I-10 Interchange Project</p> | <p>Located in the unincorporated county area between the cities of Fontana and Rialto, the Cedar Avenue/I-10 Interchange is one of several interchanges serving logistics terminals along this reach of I-10 and experiences longer delays than all other interchanges in the county. The Cedar Avenue/ I-10 Interchange project will make operational and safety improvements, reconstructing the Cedar overpass to add additional lanes, widen and realign the ramps, and realign local streets as required by the improved interchange configuration. The proposed improvement will relieve congestion on the interchange, which at times is so severe it creates traffic queues on the mainline I-10.</p> | <p>The county’s investment represents the creation of 17.7 jobs. Initial work for this phase began in April 2002.</p> | <p>Estimated total project cost: \$62 million. To date, the county has invested \$1,356,900 on the project and has completed the environmental clearance phase of this region’s top priority freeway interchange project.</p> | <p>The county entered into a cooperative agreement with Caltrans under which Caltrans will complete the design phase at a cost of \$4,000,000. The design phase is currently under way.</p> |
| <p>Barstow/Daggett Airport Infrastructure Upgrades</p> | <p>The proposed project would replace underground piping that provides domestic water and sewer collection. High-volume water to be used for fire suppression, including meeting requirements for aircraft storage and/or maintenance will also be installed. A water storage system capable of providing the</p> | | <p>Estimated total project cost: \$5 million.</p> | <p>To date, no work has been completed on this project.</p> |

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| | required flow, pressure and volume is also part of the project. | | | |
| Reconstruct Institution Road | Reconstruct Institution Road, which provides access to the Glen Helen Rehabilitation Facility, the San Bernardino County Sheriff's Training Facility and the Rosena Ranch development. The Sheriff's Training Facility also features the Public Safety Internship Academy that targets High School students interested in a career in law enforcement or public safety. | This project will impact the local economy by first and foremost creating jobs that are desperately needed. Secondly, the project impacts the local economy through the suppliers of materials needed to complete the project. The county's \$468,752 investment thus far translates to the creation of 6 jobs. | To date, the county has invested \$468,752 to complete a drainage study and begin the design phase for this project and has allocated an additional \$6 million from the County's General Fund. | Preliminary work for the drainage study, such as surveying and field reviews began in January 2006. Environmental clearance for this project is complete. Due to the difficulties in getting environmental approval on the proposed pipes and culverts, and the high cost of building a bridge, the county will reconstruct the road with concrete dip crossing where flood water flows. Construction is expected to occur in 2018. |
| National Trails Highway Bridge Replacement Project | This project will design and replace 1930's era-timber trestle bridges that are significantly beyond their design life. The National Trails Highway has been nominated as a World Heritage Site. Tourists and open-road travelers from around the globe come to the county to drive on this historic roadway. This corridor also serves as a key transportation link to and from | To date, the County's \$3,397,000 investment thus far translates to the creation of 43 jobs. Project implementation will improve the efficient transportation of goods from the ports through the county and out to the California/Nevada State line. The delays in deliveries caused by the outage of | \$221 million estimated costs. To date, the county has invested \$3,397,000 for preliminary engineering work to replace some of the National Trails Highway bridges and create a 10-year delivery plan to reconstruct the timber bridges along the entire corridor. The county has committed | Completion of the preliminary engineering work, which began in July 2003, has been complicated by the historic nature of the bridges, which requires extensive coordination and consultation with several state and federal regulatory agencies. Completion dates for the preliminary engineering will vary for each individual bridge. The bridges over Dola Ditch and Lanzit Ditch are currently under construction and are expected to be completed in |

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| | <p>United States Marine Bases and functions as an access route to national parks, Bureau of Land Management recreational areas, BNSF railroad line, and utility corridors.</p> | <p>Interstate 40 forces downstream inefficiencies that result in time delays and lost revenues.</p> | <p>\$10,000,000 in General Funding to the project.</p> | <p>2017.</p> |
| <p>Needles Highway-Project 1</p> | <p>Complete construction improvements to Needles Highway between “N” Street within the City of Needles, north to the Nevada State Line. The amount requested is to initiate construction on specific safety improvements that will integrate with future construction of the complete project.</p> | <p>The impact of this project is similar to the National Trails Highway project. As a major thoroughfare, Needles Highway serves travelers year round. Safety improvements will benefit travelers for years to come. The local job impact and capital impact for the area will be significant.</p> | <p>\$80 Million estimated costs.</p> | <p>To date, the County has invested \$6,445,000 toward the preliminary engineering work and environmental clearance for this project, representing the creation of 82 jobs. The preliminary engineering phase of this project began in January 2002, which required extensive cultural studies and review for, among other things, potential impact to sovereign nations. The environmental process was completed in August 2014 and the first two phases of construction should be completed by 2018.</p> |
| <p>Needles Highway-Project 2</p> | <p>Realign and construct Needles Highway within the City of Needles between Interstate 40 and the northern city limit (which adjoins the Fort Mojave Indian Reservation Boundary) to a two-lane road to minimize horizontal</p> | <p>The impact of this project is directly associated with the safety of travelers on the highway. The jobs created and capital impact will be significant but is eclipsed by the increased safety of travelers.</p> | <p>\$15 million estimated costs.</p> | <p>Right of Way acquisition is complete and construction of portions of the project is ongoing.</p> |

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| | curves and vertical dips, provide drainage improvements and add turn pockets at intersections. | | | |
| Rock Springs Road Bridge Project | Reconstruct the two-lane road bridge across the Mojave River on the Rock Springs Road alignment to prevent the river from topping over the road during floods. | Flood prevention. | \$22 million estimated costs. | <p>To date, the County has contributed \$1,585,300 of the estimated \$1.9 million cost toward the environmental clearance and design phase of the project. The county's investment represents the creation of 20 jobs.</p> <p>This project is currently in the design phase, which should be completed in 2017. The land acquisition phase is anticipated to begin in 2017, with construction to begin in 2020, dependent upon Federal Highway Bridge Program funding availability.</p> |

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| <p>La Mesa-Nisqualli-Yucca Loma Corridor Road Connection Project</p> | <p>The Town of Apple Valley, City of Victorville and County of San Bernardino have developed a project to connect Yucca Loma Road, Yates Road and Green Tree Boulevard from Apple Valley Road to Hesperia Road. This project will provide an alternate east/west corridor in the Victor Valley Region. The project includes construction of the four-lane Yucca Loma Bridge over the Mojave River in the Town of Apple Valley, widening of Yates Road to four lanes in the county area and construction of the Green Tree Boulevard in Victorville. The new roadway and bridges will carry vehicles, bicyclists and pedestrians across the Mojave River and the BNSF railroad tracks.</p> | <p>For the Yates Road widening project, one component of the corridor, the county has contributed \$2,737,580 to date. The county investment thus far represents the creation of 34 jobs.</p> | <p>\$101 million estimated costs.</p> | <p>Construction for Yates Road, Yucca Loma Road, and the Yucca Loma Bridge is now complete. The remaining county component of the corridor is a minority share of the Green Tree Blvd extension, which falls primarily within the City of Victorville. The Green Tree Blvd component of the project is currently in the design phase. Construction of the Green Tree Boulevard extension is tentatively scheduled to start in 2018.</p> |
| <p>High Desert Corridor Improvements</p> | <p>The High Desert Corridor Joint Powers Authority – comprising San Bernardino and Los Angeles Counties, along with five High Desert cities – has joined with LA Metro, the San Bernardino County Transportation Authority and other regional agencies to provide a</p> | <p>The rail component could connect Anaheim, Los Angeles, the Central Valley, the High Desert and Las Vegas. The freeway would provide an alternative goods movement corridor to mitigate congestion in the Los Angeles Basin and Inland</p> | <p>Fully developed, \$8 billion. However, phasing of the rail component is expected first at \$3.5 billion and two lanes at a time for the freeway at \$2 billion per lane, to be funded with a combination of private investment along with</p> | <p>The environmental clearance was completed and certified by the Federal Highway Administration, the Federal Railroad Administration and Caltrans in June 2016. In late spring of 2017, an investor-grade High Speed Rail Ridership and Revenue Forecast was completed and released to the public.</p> |

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| | <p>multipurpose corridor to connect a freeway, a high-speed rail connection, a bikeway and a green energy element in Antelope Valley with Victor Valley.</p> <p>The wide right of way could provide generation and/or transmission of renewable energy. The project is envisioned as a Public Private Partnership (P3), relying on both the private sector and government for funding and operation.</p> | <p>Empire.</p> <p>Using federal formulae, the rail component of High Desert Corridor will create 12,000 jobs over four years. The highway fully built will create 16,000 construction jobs over five years. Before construction, more than 100 engineering and consultant jobs have been created. After construction, tourism, logistics, manufacturing, industrial, retail and housing development will be stimulated around the Victorville rail station and freeway off-ramps.</p> | <p>federal, state and local revenue. Rail construction will be funded with 60 percent private investment and 40 percent public, with operations and maintenance fully self-sustaining. Funding for the freeway is unknown, but estimated to be at least 50 percent funded by tolls, 20 percent funded by Enhanced Infrastructure Financing Districts, and 30 percent funded by Measure M for the first phase.</p> | <p>The forecast analyzed the potential ridership and revenue for a connection between Anaheim, Los Angeles and Las Vegas. The report found high demand for such a service, which could generate 3 million annual round trips by 2021, rising to 11 million in 2035 with the full corridor open. Revenues are forecast to be \$600 million in 2025 for service between Palmdale and Las Vegas, and up to \$1 billion in 2035 for Anaheim/Los Angeles to Las Vegas. It is anticipated the ridership and revenue forecast will attract private investment.</p> |
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