INTRODUCTION

The city of Las Vegas is dedicated to providing residents, visitors, and the business community the highest quality service possible. In order to administer these services, the city of Las Vegas operates 19 distinct departments geographically located throughout the city. With an increasing population, it is imperative that public facilities are well planned in order to meet the city's future service goals.

As a component of the 2020 Master Plan, the Public Facilities and Services Element is intended to not only satisfy NRS requirements, but also to provide a comprehensive document that will assist with the long range planning efforts of future facilities that are needed to maintain acceptable levels of services as the city continues to grow. This element provides a baseline of detailed information that will aid in the decision making process that determine the City's funding priorities for capital projects.

Ideally, this element will be used in conjunction with other existing elements to guide policy and funding decisions regarding future public facilities. While conditions are constantly changing, it is the intent of this element to identify future facility needs in order to maintain superior service to all Las Vegas citizens.

Legislation

The Nevada Revised Statutes (NRS) Sections 278.150 through 278.160 outline the required components of an entity's master plan. State law requires that governing entities in counties with a population of over 700,000 people adopt a master plan to address a list of subjects set forth in section 278.160 of the Nevada Revised Statutes. In 2013, the Nevada State Legislature approved Senate Bill 55 which consolidated the 19 previously required plans into eight elements. One of the elements is a public facilities and services element, which may include:

(1) An economic plan showing recommended schedules for the allocation and expenditure of public money to provide for the economical and timely execution of the various components of the plan.
(2) A population plan setting forth an estimate of the total population which the natural resources of the city, county or region will support on a continuing basis without unreasonable impairment.
(3) Provisions concerning public buildings showing the locations and arrangement of civic centers and all other public buildings, including the architecture thereof and the landscape treatment of the grounds thereof.
(4) Provisions concerning public services and facilities showing general plans for sewage, drainage and utilities, and rights-of-way, easements and facilities therefore, including, without limitation, any utility projects required to be reported pursuant to NRS 278.145.
(5) A schools facilities plan showing the general locations of current and future school facilities based upon information furnished by the appropriate county school district.

This document will address four of the five subject areas as recommended by NRS. The population plan identified in subsection two will be addressed in conjunction with a future element update.

Relationship to the Master Plan

The city of Las Vegas 2020 Master Plan consists of a series of goals, objectives and policies within its elements. The 2020 Master Plan was approved in September of 2001, and it provides a broad policy structure intended to direct the actions of the city regarding land use and development for the period from 2000 to 2020. The individual elements are intended to provide a more specific direction, through detailed analysis and recommended actions, as to how the city should respond to certain land use issues. The intent of the Public Facilities and Services Element is to identify the existing city facilities and infrastructure to determine future needs within the city of Las Vegas. This element can be used in conjunction with other elements to determine future needs and help guide policy in areas such as funding, land acquisition, and land use.

The three planning sectors identified by the 2020 Master Plan are referenced throughout this element and are as follows:

> *The Centennial Hills Sector* – This sector has the same geographic boundaries as the "Newly Developing" 2020 Master Plan Strategy Area. This area is bounded by the city limits to the north and Cheyenne Avenue to the south. This portion of the city has been experiencing rapid commercial and residential growth in recent years.
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> *The Southeast Sector* - This sector includes the "Neighborhood Revitalization" and the "Downtown Reurbanization" 2020 Master Plan Strategy Areas. This sector is located along portions of Jones and Rainbow Boulevards to the west, Cheyenne Avenue to the north, and the city limit boundaries to south and east. The Southeast Sector is comprised of many of the city's more mature areas. Much of the Southeast Sector is built out, and future growth in the area will most likely consist of infill development and neighborhood revitalization.
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> *The Southwest Sector* - Located along Cheyenne Avenue to the north, portions of Rainbow and Jones Boulevard to the east, and the city limit boundaries to the west and south. Many of the city's more recently developed areas such as Summerlin and the Lakes are located within the Southwest Sector Plan.

The 2020 Master Plan outlines broad policies, while each individual element builds on those policies and provides specific direction as to how the city should accommodate particular land use issues.

The Master Plan policies are organized into seven themes developed by the Master Plan Steering Committee. Realization of these policies requires long-term planning commitments integrated with the strategic plan and Capital Improvement Plan. The following goals, objectives, and policies from the Las Vegas 2020 Master Plan provide the policy framework and direction for the development of all publicly owned land and city facilities.

Downtown Reurbanization

GOAL 1: The Downtown area will emerge as the preeminent hub of business, residential, government, tourism and gaming activities in the City of Las Vegas and as a major hub of such activities in the Las Vegas Valley.

OBJECTIVE 1.3: To recognize the role of gaming, tourism and entertainment as a principal focus of Downtown Las Vegas, while at the same time to expand the role of other commercial, government and cultural activities in the Downtown core.

POLICY 1.3.3: That the role of the Downtown as the preeminent center of government activities in the Las Vegas Valley be continued and strengthened.

OBJECTIVE 1.4: To retain, where viable, historical structures which represent the architectural, cultural and social legacy of the City of Las Vegas.

POLICY 1.4.1: That the buildings within the greater Downtown area which have been identified on the City's inventory of historic structures be adaptively reused where financially viable. Flexibility in terms of the reuse of these buildings should be encouraged, provided that the reuse does not have undesirable impacts on surrounding sites.

POLICY 1.4.2: That the City develop guidelines for reuse of historical structures, including the scope of modifications and the use and extent of exterior business signage.

OBJECTIVE 1.5: To bring cultural, entertainment and sports facilities that will draw patrons from across the Las Vegas Valley to the Downtown area, to provide another dimension to the attraction of Downtown Las Vegas.

POLICY 1.5.2: That the City explore the potential viability of a major sports entertainment center for the City of Las Vegas.

POLICY 1.5.3: That an Arts District be promoted as a center of cultural and arts activities within the Downtown.

OBJECTIVE 1.7: To ensure that educational and training opportunities appropriate to the population and workforce in the Downtown are developed. Such educational opportunities are intended to apply to grades K-12, as well as colleges, universities, and trade and vocational schools.

POLICY 1.7.1: That the City cooperate with regional and private educational institutions to bring education providers, as well as other technical, vocational and other appropriate training providers into Downtown campus locations, while encouraging a diversity of higher education.

Neighborhood Revitalization

GOAL 2: Mature neighborhoods will be sustained and improved through appropriate and selective high quality redevelopment and preservation.

OBJECTIVE 2.3: To prepare, adopt and implement special area plans and neighborhood plans where more detailed planning is needed. These special area plans shall conform to and implement the Master Plan and address land use and other issues specific to that area. Neighborhood plans shall be prepared in conformance with the neighborhood planning process.

POLICY 2.3.7: That the Las Vegas Redevelopment Plan continue to be used as a means of promoting the development of commercial areas near the Downtown, as identified within the Redevelopment Area, in order to optimize the vitality of these areas, and to support the role of the Downtown as the regional center for finance, business, and governmental services, entertainment and recreation, while retaining gaming and tourism.

POLICY 2.3.8: That the Las Vegas Technology Park continue to provide opportunities for high technology and medical-related research and industry for the western part of Las Vegas.

POLICY 2.3.9: That the Spectrum Business Park continue to provide opportunities for light industrial and office activities supporting eastern Las Vegas.

OBJECTIVE 2.4: To ensure that the quality of existing residential neighborhoods within the City of Las Vegas is maintained and enhanced.

POLICY 2.4.7: That the City maintain and renovate its public infrastructure within existing residential neighborhoods as needed.

OBJECTIVE 2.5: To broaden and improve the range and types of professional and technical education and training to serve the citizens of Las Vegas and the Las Vegas Valley.

POLICY 2.5.1: That the City cooperate with regional and private educational institutions to bring higher educational opportunities to the city.

POLICY 2.5.2: That the City cooperate with regional and private educational institutions to bring vocational and technical training to the city.

Newly Developing Areas

GOAL 3: Newly developing areas of the city will contain adequate educational facilities, and recreational and open space and be linked to major employment centers by mass transit, including buses, and by trails.

OBJECTIVE 3.4: To ensure that adequate portions of the lands released for urban development by the Bureau of Land Management (BLM) are developed for recreational and educational public facilities, transit facilities and fire stations, that will benefit the city.

OBJECTIVE 3.7: To ensure that educational opportunities for the growing population and workforce in the newly developing areas of the city are developed.

POLICY 3.7.1: That the City cooperate with regional and private educational institutions to bring education providers, as well as other higher educational opportunities, and vocational and technical training, to these outlying areas.

Economic Development

GOAL 4: The economy of the city of Las Vegas, while continuing to be strongly based on the gaming and tourism industries, will broaden to include other business sectors that can take advantage of the locational, climatic and work force advantages offered by Las Vegas.

OBJECTIVE 4.1: To improve the economic resource base within the City by diversifying the range of business opportunities.

POLICY 4.1.9: That the City continue to encourage and promote a business retention strategy with regard to the business which currently operate within the city of Las Vegas.

Cultural

GOAL 5: A full range of cultural enrichment opportunities is available to all citizens of Las Vegas.

OBJECTIVE 5.1: To provide more cultural enrichment opportunities for all citizens of Las Vegas.

POLICY 5.1.2: That the City work with private interests and with other levels of government to develop museums.

POLICY 5.1.3: That existing programs which offer dance, ballet, symphony and other forms of artistic expression be encouraged to continue and to grow.

POLICY 5.1.4: That the City actively work with private and public interests to develop additional venues suitable for artistic expressions.

POLICY 5.1.5: That the City support the placement of, and establish and follow a policy to set aside funds for, art in public places.

OBJECTIVE 5.2: To promote cultural awareness and pride within the city.

POLICY 5.2.1: That the City assist with efforts to publicize artistic and cultural activities and events within the city and the City will provide public forums for these cultural activities and events, and where appropriate, in cooperation with entities such as the University of Nevada, Las Vegas, the Clark County Library District, and local arts groups.

OBJECTIVE 5.3: To support and encourage the creativity and innovation of our citizens.

POLICY 5.3.1: That the City support and assist in the development of new programs which provide incentives for the development and expansion of arts and cultural activities, particularly those which demonstrate an identifiable local context.

OBJECTIVE 5.4: To support and encourage civic pride and corporate responsibility through the use of public/private partnerships in the development of facilities and programs for public art and culture.

POLICY 5.4.1: That the City actively seek corporate involvement in the planning and development of venues for public art, the availability of land for arts and cultural activities, and the development of programming of displays and performances for these venues.

Fiscal Management

GOAL 6: The City of Las Vegas will link capital improvement programming and maintenance and operations programming with long range planning.

OBJECTIVE 6.1: To ensure that capital and operating expenditures are planned and scheduled in accordance with long range planning commitments.

POLICY 6.1.1: That the City monitor and coordinate capital improvement and operating/ maintenance expenditures with long range planning.

POLICY 6.1.2: That the City develop and maintain an approach to fiscal management that focuses on long term life cycle solutions.

POLICY 6.1.3: That additions of expenditure items to the annual budget be approved only with the deletion of items of corresponding value from the list of prioritized expenditures.

POLICY 6.1.4: That the City establish and follow a policy to set aside funds for public art and architecture.

POLICY 6.1.5: That the City repair and maintain its infrastructure in older areas at a pace which optimizes costs and benefits.

POLICY 6.1.6: That the City, where possible use public/private partnerships to pay for public capital improvements.

Regional Coordination

GOAL 7: Issues of regional significance, requiring the City of Las Vegas to coordinate with other government entities and agencies within the Valley, will be addressed in a timely fashion.

OBJECTIVE 7.1: To ensure that the natural resources of the City, particularly those that directly support an enhanced quality of life for its residents, are protected.

POLICY 7.1.3: That the City work with the Las Vegas Valley Water District to ensure that the quality of the city's drinking water remains high, while maintaining an adequate water supply at reasonable cost.

POLICY 7.1.4: That the City support initiatives for the recycling of gray water for non-potable uses and support efforts to maximize water reclamation and aquifer recharge efforts by both the public and private sectors, where such efforts are not likely to result in excessively high groundwater tables. The City shall support the protection of ground water by limiting the locations of potential pollution sources from areas of ground water recharge and pumping.

POLICY 7.1.5: That the City take the necessary steps to monitor and evaluate the quality of stormwater discharge, and ensure measures are taken to improve the quality where appropriate.

POLICY 7.1.6: That the City coordinate with utility companies and other involved agencies to plan routes and locations for future utilities and to upgrade infrastructure in older areas.

OBJECTIVE 7.2: To ensure that arroyos, washes and watercourses throughout the City are integrated with urban development in a manner that protects the integrity of the watershed and minimizes erosion.

POLICY 7.2.1: That the City work with the Clark County Regional Flood Control District and the local development industry to integrate natural stream channels and drainage courses into urban development in as natural a state as possible.

POLICY 7.2.2: That since arroyos, washes and watercourses in their natural state represent visual and possibly recreational amenities for adjacent neighborhoods, that such areas not be rechanneled or replaced with concrete structures except where required for bank stability or public safety.

POLICY 7.2.3: That the areas along the edges of hard-lined flood control facilities and along natural drainage courses be utilized as areas for public trails and walkways, with landscaping and other features which enhance the appearance of these areas.

POLICY 7.2.4: That the City ensure that development is designed to include measures to mitigate the impact of periodic flooding on those structures.

OBJECTIVE 7.3: To ensure that public safety problems are fully and adequately identified and that long term solutions are identified and implemented by the respective local government departments and agencies vested with those responsibilities.

POLICY 7.3.1: That the Las Vegas Metropolitan Police Department uphold its mandate in cooperation with the government of Clark County and the City.

POLICY 7.3.2: That the City continue to provide efficient and cost effective services and facilities for fire prevention, fire suppression, hazardous material control and emergency medical care for the City of Las Vegas and assist Clark County as deemed appropriate in the provision of these services for County islands and County areas north of Cheyenne Avenue and west of Decatur Boulevard.

OBJECTIVE 7.5: To ensure that educational opportunities are fully developed to meet the needs of the city's expanding population.

POLICY 7.5.1: That the City cooperate with the Clark County School District and other public and private institutions to provide appropriate education, including technical, vocational and other training opportunities for local residents.

OBJECTIVE 7.6: To ensure that joint use of public facilities is pursued to provide efficient and cost effective services and facilities.

POLICY 7.6.1: That the City coordinate with other public agencies in the Las Vegas Valley to pursue the design and construction of public facilities to have multiple uses.

Funding Public Buildings and Facilities

A capital improvement project is defined as a building, structure facility or physical improvement to any land, apparatus, or equipment for such an improvement; or any undertaking to construct, renovate, improve, equip, furnish, or acquire any of the foregoing, provided the title will rest with the city of Las Vegas. Improvements to existing structure are considered capital projects when there is an extension of useful life or change in the function of the structure. Sources of funding for public buildings and facilities in the five-year Capital Improvement Plan include the following:

Bonds- General obligation bonds and revenue bonds already issued, to be used for new parks and recreation projects, public safety facilities and city facility projects. New Clean Renewable Energy Bonds (NCREB) and Qualified Energy Conservation Bonds (QECB) are bonds issued in

conjunction with installment-purchase agreements for energy conservation and renewable energy projects to be secured by a security interest in the property.

Contributions - Businesses or individuals who either wish to fund special projects or want a particular benefit, e.g., road surfacing and drainage projects, may contribute to partially fund a project.

Clark County Regional Flood Control District (CCRFCD) – Reimbursement received from CCRFCD, funded from a voter approved ¼ cent increase in sales tax to repay bonds issued to design and construct flood control projects.

Fund Balance (FB) - Reserve monies accumulated from prior years' appropriations to pay for work-in-progress projects.

Grants – Grants and Federal monies received from (1) Community Development Block Grant programs, (2) HOME Grant programs and (3) American Recovery and Reinvestment Act (ARRA) grants.

Impact Fees – Fees that are imposed on new development to finance costs of capital improvements or facility expansions necessitated by new development.

Local Governments (GOVTS) – Project costs to be reimbursed by other governmental entities per any interlocal agreements as authorized by the Nevada Revised Statues.

Nevada Department of Transportation (NDOT) – Reimbursements received from NDOT paid from tax revenue for traffic safety programs and for federal programs such as Congestion Mitigation Air Quality (CMAQ) and Surface Transportation Program (STP).

Regional Transportation Commission (RTC) – Reimbursements for street construction projects received from RTC bond proceeds. The debt is repaid with gasoline the motor vehicle fuel and sales tax.

Residential Construction Tax (RCT) – A tax that is imposed on the construction of new apartment houses and residential dwelling units to pay for constructing capital improvements in certain park districts.

Room Tax – Monies received from the State of Nevada for a legislatively imposed 1% motel/hotel room tax to be used exclusively for transportation projects.

Service Fees – Charges that are assessed to individuals based on their usage of special services.

Southern Nevada Public Lands Management Act (SNPLMA) – Proceeds from public land sales to be used to fund the development of parks, trails, recreational facilities, and natural areas.

Special Assessments (Assessments) - Payments that are collected from property owners to repay bonds issued to pay for the cost of improvements to a property, such as pavement, curbs, gutters, streetlights, and driveways. These improvements are usually done at property owners' requests.

The CIP process begins early in the year when each department submits individual project requests to the Department of Public Works, who then develops a comprehensive list of projects and prepares estimates. The submittals are reviewed and balanced to the Department of Finance's five year funding forecast. Meetings are then held with the City Manager, Chiefs and senior staff to determine the final priority of the projects, which are then aligned with the five-year revenue plan.

CAPITAL IMPROVEMENT/ECONMIC ELEMENT

Capital Improvement Plan Purpose

The city of Las Vegas Capital Improvement Plan is the city's multiyear planning document that identifies and prioritizes expenditures for a variety of public improvements. The CIP identifies individual project scopes, schedules and funding, and provides order and continuity to the repair, replacement, construction or expansion of the city's capital assets. The CIP is funded on an annual basis and includes revenues from other government entities, bond issues, charges for services, and transfers from other city of Las Vegas funds.

The CIP process begins early each year when each department submits individual project requests to the Department of Finance's Budget and Finance Division. Each request is evaluated for completeness and accuracy, fiscal impact, and available funding sources. The CIP is then compared with the City's Master Plan, which is the primary document used to guide future growth and development. All projects must be previously adopted by the City Council as part of the City's Master Plan before receiving funding within the CIP committee. Recommendations are then submitted to the City Manager.

CIP Program Descriptions:

Public Safety – Improvements to the detention center, construction and acquisition of fire apparatus, training facilities and future fire stations, and traffic improvements.

Public Works – Infrastructure improvements to the City's street system, sidewalks, public landscape, special improvement districts and flood and sanitary sewer conveyance systems.

Culture and Recreation – Renovation to existing parks, recreation and senior citizen facilities, and construction of additional parks, trails and recreation centers to meet the public's increasing demand for recreational services and a performing arts center.

Economic Development – Projects aimed at attracting businesses and revitalizing specified areas of the City, and providing assistance to people with low to moderate incomes.

General Government – New facilities and major renovations and upgrades to the existing City Hall and satellite facilities.

Sanitation – Water Pollution Control Facility expansion, major sewer lines and interceptors.

The Capital Improvement Plan Process

One of the principal findings of the Las Vegas 2020 Master Plan policy document adopted in 2000 was the need to link capital improvement programming and operating and maintenance programming budgets with long range planning as contained in the Master Plan. This linkage is necessary to efficiently coordinate the planning and construction of infrastructure and the development of services in anticipation of new development, or in the future, of urban redevelopment. To achieve a high level of coordination, the Master Plan highlighted the need to have staff in place to provide a dedicated link between the Master Plan and the City departments and relevant agencies vested with developing this infrastructure and with providing these services.

To be included in the Capital Improvement Plan, a project must go through the city's Capital Improvement Project Committee and be reviewed based on priorities contained in the Master Plan. The purpose of this process is to reduce the number of submittals and allocate the limited resources available to the most worthy projects, making the CIP a valuable planning tool rather than a project wish list. Execution of the various components of the plan is the NRS stated purpose of the Economic Element of the Master Plan.

The basic steps in proposing a project for inclusion in the City's Five Year CIP in conformance with the Master Plan are as follows:

1. Identify Need and Project Sponsor – The project has been identified as the best alternative and the sponsor prepares the CIP Approval package.
2. Prepare Submittal – The project sponsor with the concurrence of their department management prepares the submittal package to Public Works for placement on the CIP Committee agenda and presents the project to the Committee. It is required of the applicant to identify the Master Plan elements where the proposed project is shown.
3. Present to the Committee – Upon review, the CIP Committee may approve, deny or return the proposal to the sponsor for re-submittal, possibly with advice to revise, supplement or shelve.
4. Approval – If approved by the CIP Committee, the project becomes eligible for: (All of these actions are pending final approval by the City Council.)
    a) inclusion in the Five Year CIP
    b) funding of the project from city revenue sources
    c) approval of project interlocal agreements for the project's development, and
    d) approval to apply for grant funding and other outside funding sources

The project sponsoring department is the city department whose mission will most be benefited or affected by the project, regardless of who first identified the need or who controls the funding. The sponsor is never an elected official even if they championed the project. The following is a list of the city departments and the projects they are eligible to sponsor:

- Department of Planning – Trails, trailheads, urban pathways, streetscapes, and sidewalk projects.
- Leisure Services – All parks and facilities they operate including recreation/community center, senior centers, pools, golf courses, community schools, track break centers, and museums.
- Public Works – All streets, storm drainage, right-of-way utilities, traffic improvements, sanitation projects, trails and trailheads.
- Field Operations – All facility maintenance, repair and scheduled upgrade or replacement projects.
- Fire and Rescue – Fire stations and emergency training and response facilities.
- Detention and Enforcement – Detention facilities and all security upgrade projects.
- Office of Business Development – Certain economic development projects.
- Neighborhood Services - Certain economic development projects.
- Information Technologies – IT infrastructure projects.
- City Manager's Office – Special projects.
- All Departments – New construction and remodels of facilities occupied by their staff, materials, or equipment.
- Other Organizations – Occasionally outside organizations, such as the Metropolitan Police Department for their substations.

Existing Conditions

Growth

Since 2002, the population of the city of Las Vegas has grown from 520,936 to 594,294, an increase of 14.1 percent. More than 95 percent of the population increase during the ten-year span has occurred west of Decatur Blvd. Overall, the City has added one new resident every 72 minutes, around the clock between July 2002 and July 2012. To accommodate the additional residents, a new housing unit was completed, on average, every 2 hours and 14 minutes, around the clock during the ten-year span. Between 2002 and 2012, the density per square mile of the City's population decreased from 4,539 persons per square mile to 4,459 persons per square mile. Conversely, dwelling units per acre increased, going from 1,760.5 per square mile to 1,809.3 per square mile. The reason for the conflicting changes in population and dwelling units is due to the increase in vacant units that occurred due to the economic recession. Population flattened while housing units under construction were being completed.

Table 1 – City of Las Vegas Population Density

Year	Population	Dwelling Units	Population per Sq Mile	Dwelling Units per Sq. Mile	Area (Sq.Miles)
2002	520,936	202,047	4,539.1	1,760.5	114.8
2012	594,294	241,150	4,459.0	1,809.3	133.3
Difference 2012-2002	73,358	39,103	(80.1)	48.9	18.5

Source: City of Las Vegas Department of Planning

When compared to cities of similar population, Las Vegas has substantially higher population density. Even when compared with the 10 most populous cities in the United States, Las Vegas' population density ranks sixth among them, ahead of cities such as San Diego, Houston and Phoenix. Within the Las Vegas Valley, the city of Las Vegas is easily the most densely populated incorporated city. When Unincorporated Townships are included, the City still ranks among the most densely populated areas in the Valley.

Table 2 – Population Density of Las Vegas Valley Cities and Towns

City/Town	State	Population	Area	Density (Sq. Mile)	% Difference from Las Vegas
Las Vegas	NV	594,294	133	4,459.0	
Henderson	NV	269,243	105	2,561.0	-42.6%
North Las Vegas	NV	224,003	98	2,285.3	-48.8%
Boulder City	NV	15,901	208	76.3	-98.3%
Enterprise	NV	164,335	66	2,477.5	-44.4%
Paradise	NV	186,405	42	4,408.8	-1.1%
Spring Valley	NV	186,571	35	5,276.3	18.3%
Winchester	NV	31,918	5	6,969.0	56.3%
Sunrise Manor	NV	198,336	31	6,414.5	43.8%
Whitney	NV	39,260	20	1,948.4	-56.3%

Source: CLV & Clark County Annual Population Estimate 2012

Las Vegas is expected to continue to grow in the future. The most recent projections showed Las Vegas as having a 2015 population of approximately 621,000 and a 2020 population of 675,000. The projections also showed Las Vegas absorbing an average of 825 vacant acres per year between 2010 – the base year – and 2015. That figure is slightly lower than the average amount of vacant acreage absorbed between 2002 and 2012.

Non-residential development has continued to see growth during the past ten years. Since 2002, 2,422 acres of land has been absorbed by commercial, industrial, utility and public uses. Non-residential land has been absorbed at a rate of 1.3 acres per day, every day, during the past ten years.

The city of Las Vegas has also grown physically since 2002, going from 114.8 square miles to its present size of 133.3 square miles, an increase of 16 percent. The overwhelming majority of the

added area due to annexations during the past ten years, 96.6 percent, has occurred in Centennial Hills.

Infrastructure Conditions

The city of Las Vegas will continue to see increases in population and the amount of vacant land absorbed. Vacant land is currently the single largest existing land use in the City with approximately 24,000 acres. The majority of the vacant land in the City (64.1%) is in Centennial Hills followed by the Southwest with 32.8 percent. Only 3.1% of the vacant land in the City is located in the Southeast area. The discrepancies in the amount of vacant land between the Planning Areas indicate areas with vastly different capital investment needs in the future.

To further illustrate this point, the age of structures, residential and non-residential, needs to be examined. The age of the structures can be an indicator of the age of the infrastructure in the area and/or a reflection of applicable standards at the time the infrastructure was put in place.

In Centennial Hills, 44 percent of the residential units were built in 2002 or after. Conversely, in the Southeast, 4.6 percent of the residential units have been built during the same time. It's a similar scenario for non-residential development. In Centennial Hills more than half of the non-residential units have been built since 2002. In the Southeast, 6.0 percent of the non-residential development has occurred during the past ten years.

Perhaps as important for capital planning as the development that has occurred during the past decade is the development that took place 25 or more years ago. In the Southeast, 86.5 percent of the residential structures are 25 years old or more. In Centennial Hills that number is 7.3 percent. For non-residential development, 86.7 percent of the structures in the Southeast were built in 1987 or earlier. In Centennial Hills that number is 13.2 percent. That seemingly high number is likely due to the presence of Floyd Lamb Park and Commercial/Industrial structures along Rancho Drive, which at one time was the main route to the Las Vegas Valley's northwest and points beyond.

Capital Improvement Expenditures, FY09 – FY13

As stated previously, the amount of CIP expenditures varies from year to year. Between FY 09 and FY13, the City averaged spending $600.6 million on CIP projects. The high mark for expenditures was $718.0 million in FY 11, the low was 388.1 million spent in FY 13. On average, $212.4 million was spent on Public Works programs during the five-year span. During the same time, an average of $177.7 million was spent on Culture and Recreation programs. The expenditures for CIP projects from FY09 through FY 13 are shown in Table 3.

Table 3 - CIP Expenditures FY 09 – FY 13 (in millions of dollars)

Program	FY 09	FY 10	FY 11	FY 12	FY 13	Total	Average
General Government	16.3	22.8	113.1	113.5	39.4	305.1	61.0
Public Safety	16.8	24.7	43.0	47.9	34.2	166.6	33.3

Sanitation	78.5	79.7	122.4	104.8	132.8	518.2	103.6
Public Works	311.2	293.5	192.0	154.1	111.1	1,061.9	212.4
Culture and Recreation	232.7	246.5	237.5	105.1	66.9	888.7	177.7
Economic Development and Assistance	17.6	20.6	10.0	10.7	3.7	62.6	12.5
Total	673.1	687.8	718.0	536.1	388.1	3,003.1	600.6

Table 4 – CIP Expenditures, Percent of Total FY 09 – FY 13

Program	FY 09	FY 10	FY 11	FY 12	FY 13	Average
General Government	2.42%	3.31%	15.75%	21.17%	10.15%	10.16%
Public Safety	2.50%	3.59%	5.99%	8.93%	8.81%	5.55%
Sanitation	11.66%	11.59%	17.05%	19.55%	34.22%	17.26%
Public Works	46.23%	42.67%	26.74%	28.74%	28.63%	35.36%
Culture and Recreation	34.57%	35.84%	33.08%	19.60%	17.24%	29.59%
Economic Development and Assistance	2.61%	3.00%	1.39%	2.00%	0.95%	2.08%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Capital Improvement Funding Sources, FY09 – FY 13

Similar to CIP expenditures, funding sources for CIP projects vary from year to year. During the five year span nearly 44 percent of the funds for programs came from "Other Governments" by far the largest source. Included within this source are funds from the RTC, CCRFCD, FHWA and SNPLMA. Various bonds and revenues from the fund balance account for the next largest sources of funds since FY 09. Funding sources for CIP projects within the city of Las Vegas between FY 09 and FY 13 are shown in Table 5.

Table 5 – CIP Projects Funding Sources, FY 09 – FY 13 (in millions of dollars)

Funding Sources	FY 09	FY 10	FY 11	FY 12	FY 13	Total	Average
Other Governments	390.2	354.0	256.5	176.0	145.7	1,322.4	264.5
Fees	80.1	80.5	123.2	105.0	133.2	522.0	104.4
Fund Balance	54.1	75.4	68.5	108.7	75.7	382.4	76.5
Bonds	61.0	134.8	110.6	86.1	5.9	398.4	79.7
Taxes	32.1	35.9	10.3	23.8	11.3	113.4	22.7
Special Assessments	5.6	6.4	4.6	4.4	4.6	25.6	5.1
Contributions	50.0	0.8	144.3	32.1	11.7	238.9	47.8
Unfunded	-	-	-	-	-	-	-

Total Funding Sources	673.1	687.8	718.0	536.1	388.1	3,003.1	600.6

Table 6 - CIP Funding Sources, Percent of Total FY 09 – FY 13

Funding Sources	FY 09	FY 10	FY 11	FY 12	FY 13	Average
Other Governments	57.97%	51.47%	35.72%	32.83%	37.54%	44.03%
Fees	11.90%	11.70%	17.16%	19.59%	34.32%	17.38%
Fund Balance	8.04%	10.96%	9.54%	20.28%	19.51%	12.73%
Bonds	9.06%	19.60%	15.40%	16.06%	1.52%	13.27%
Taxes	4.77%	5.22%	1.43%	4.44%	2.91%	3.78%
Special Assessments	0.83%	0.93%	0.64%	0.82%	1.19%	0.85%
Contributions	7.43%	0.12%	20.10%	5.99%	3.01%	7.96%
Total Funding Sources	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Within these sources are clearly defined resources for funding CIP projects. Many of the funding resources are dependent upon economic conditions and components of population growth and experience fluctuations as a result. Some existing resources for CIP funding, their purpose, and the average annual amount of funding FY 09 – FY 13, are as shown below. Some funding sources are not used every year and/or are new and did not exist for the entire six-year span.

- Bonds – General obligation bonds or revenue bonds already issued which are used for parks and recreation projects, public safety facilities and city facility projects. (FY09 –13, $158.2 million)
- Car Rental Tax – Two percent tax imposed on short-term passenger car rentals which must be used to construct, equip, operate and/or maintain a performing arts center. (FY09 –13, $4.8 $5.5 million)
- Contributions – Businesses or individuals who either wish to fund special projects or want a particular benefit, e.g., road surfacing and drainage projects are partially funded with contributions to have the project completed. (FY09 –13, $232.0 million)
- Clark County Regional Flood Control District (CCRFCD) – Reimbursement received from CCRFCD, funded from a voter approved ¼ cent increase in Sales Tax to repay bonds issued to design and construct flood control projects. (FY09 – 13, $290.6 million)
- Fund Balance (FB) – Reserve monies accumulated from prior years' appropriations for work-in-progress projects. (FY09 –13,$88.5 million)
- Future Bonds – General obligations bonds or revenue bonds to be issued in the future per the CIP recommendation. (FY09 –13, $145.0 million)
- Grants – Federal monies received from: (FY 09 – 13, $5.5 million)
    1. Community Development Block Grant (CDBG) programs.
    2. HOME Grant programs.
- Impact Fees – Imposed on new development to finance costs for constructing capital improvements or facility expansions necessitated by new development. (FY09 –13, $6.1 million)

- Land Sales – Sales of City-owned lots within industrial and business parks. (FY 09 –13, $40.0 million)
- Local Governments (GOVTS) – Reimbursements from other government entities per interlocal agreements. (FY 09 –13, $1.75 million)
- Nevada Department of Transportation (NDOT) – Reimbursements received from NDOT paid from tax revenue for traffic safety programs, as well as gasoline tax revenues for roadway maintenance. (FY 09 –13, $37.1 million)
- Regional Transportation Commission (RTC) – Reimbursements for street construction and flood control projects received from RTC bond proceeds. The debt is repaid with gasoline taxes. (FY 09 –13, $471.1 million)
- Residential Construction Tax (RCT) – Imposed on the construction of new apartment houses and residential dwelling units to pay for constructing capital improvements in particular districts. (FY09–13, $10.8 million)
- Room Tax – Monies received from the State of Nevada for a legislatively imposed 1% motel/hotel room tax to be used exclusively for transportation projects. (FY 09 –13, $11.4 million),
- Service Fees – Charges to individuals based on their usage on special services. (FY09–13, $201.6 million)
- Southern Nevada Public Lands Management Act (SNPLMA) – Public land sales to fund the development of parks, trails and natural areas. (FY09–13, $120.5 million)
- Special Assessments (Assessments) – Amounts received from certain property owners to defray all or part of the cost of capital improvement projects deemed to benefit those owners' properties. (FY09–13, $25.0 million)

According to the City's Five-Year Capital Improvement Plan FY2014 –2018, for Las Vegas to fund the necessary expansion of facilities over the next several years, management will need to consider future bond issues. The City has a legal debt limitation not to exceed 20% of the total assessed valuation of the taxable property within the City boundaries. Currently, the City debt is approximately 4.2% of assessed valuation. Bond issues can go to a vote of the people and, therefore, be repaid by an increase to property taxes or repaid by a designated revenue or user fee.

ANALYSIS

Five-Year Capital Improvement Plan, FY 2014 –2018

The City's Five Year CIP represents a compilation and analysis of capital needs anticipated between FY 2014 and FY 2018. This plan includes construction of new facilities and the renovation of existing facilities including city facilities, parks, transportation infrastructure, and flood control.

There is a demand for government services, facilities, and capital investments to keep current with existing challenges. Capital investments are critical in providing safe neighborhoods, acceptable transportation corridors, protection from flooding, sufficient waste water treatment capacity, adequate parks, and quality recreation facilities for Las Vegas residents. In addition,

the City must look forward to evaluate and identify facilities that serve the public, such as customer service offices and community centers.

The Five-Year CIP is a guide for future projects and improvements in the City. As such it is subject to change and revision as various council initiatives change. Years two through five represent the opinions of department heads and City management in determining identifiable long-term needs for the City. The Mayor and Council have prioritized the numerous projects proposed and only those with probable funding are reflected in the plan.

Capital Improvement Expenditures, FY 2014 –2018

Expenditures during the next five years are anticipated to average $236.4 million per year. Expenditures beyond the first fiscal year of the CIP are not appropriated or in any way obligated or assured. A more realistic figure would be the average expenditures over the first three Fiscal Years, FY14 through FY16, where the average expenditures will total about $348 million per year. CIP projects in the near-term are an existing known need and short-term funding is more easily determined and likely to occur. During the first three years of the CIP, Public Works and Culture and Recreation projects will account for just over 64 percent of the expenditures. The projected expenditures for CIP projects from FY 14 through FY18 are shown in Table 7.

Table 7 - CIP Expenditures FY 14 – FY 18 (in millions of dollars)

Program	FY 14	FY 15	FY 16	FY 17	FY 18	Total	Average
General Government	35.0	14.9	7.3	7.2	7.1	71.5	14.3
Public Safety	45.4	13.9	1.3	0.4	29.2	90.2	18.0
Sanitation	112.1	74.2	34.7	22.6	18.1	261.7	52.3
Public Works	105.5	67.1	26.0	35.5	17.3	251.4	50.3
Culture and Recreation	51.5	228.8	225.6	-	-	505.9	101.2
Economic Development and Assistance	1.3	-	-	-	-	1.3	0.3
Total	350.8	399.0	294.9	65.7	71.7	1,182.0	236.4

Table 8 – CIP Expenditures, Percent of Total FY 14 – FY 18

Program	FY 14	FY 15	FY 16	FY 17	FY 18	Average
General Government	9.98%	3.73%	2.48%	10.96%	9.90%	6.05%
Public Safety	12.94%	3.48%	0.44%	0.61%	40.73%	7.63%
Sanitation	31.96%	18.60%	11.77%	34.40%	25.24%	22.14%
Public Works	30.07%	16.82%	8.82%	54.03%	24.13%	21.27%
Culture and Recreation	14.68%	57.34%	76.50%	0.00%	0.00%	42.80%
Economic	0.37%	0.00%	0.00%	0.00%	0.00%	0.11%

Development and Assistance						
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Capital Improvement Funding Sources, FY 2014 –2018

Expenditures for the five-year CIP are based upon existing sources of funds and their anticipated revenue. The funds generated vary due to fluctuations in activities such as residential construction, gas and sales tax collected, changes in assessments, and the services for which the City can charge a fee. At this point, the City is anticipating continued consistent funding from Service Fees, with average annual contributions of, $74.0 million during the next three years. CCRFCD is expected to fund an average of $27.2 million during the same time. Bonds and Future Bonds are not expected to have a major role in funding during the next five years, $5.3 million per year. This could change, however, as there are currently no bond issues beyond FY 15. As previously stated, the city of Las Vegas Public Works Department feels that for the City to meet its future need to expand facilities, it will need to issue additional bonds or identify alternate funding sources such as federal grants. Funding sources for CIP projects within the city of Las Vegas between FY 14 and FY 18 are shown in Table 9.

Table 9 – CIP Projects Funding Sources, FY 14 – FY 18 (in millions of dollars)

Funding Sources	FY 14	FY 15	FY 16	FY 17	FY 18	Total	Average
Other Governments	124.1	63.7	23.2	32.8	15.5	259.5	51.9
Fees	112.1	74.2	34.7	22.6	18.1	261.8	52.4
Fund Balance	67.3	4.8	1.0	0.3	0.2	73.6	14.7
Bonds	15.6	10.9	-	-	-	26.5	5.3
Taxes	17.3	1.5	0.4	0.1	-	19.3	3.9
Special Assessments	8.4	2.7	3.2	2.7	1.8	18.8	3.8
Contributions	5.8	13.8	7.4	7.2	7.1	41.3	8.3
Unfunded	0.2	227.2	225.0	-	29.0	481.3	96.3
Total Funding Sources	350.8	399.0	294.9	65.7	71.7	1,182.0	236.4

Table 10 - CIP Funding Sources, Percent of Total FY 14 – FY 18

Funding Sources	FY 14	FY 15	FY 16	FY 17	FY 18	Total
Other Governments	35.38%	15.98%	7.88%	50.00%	21.67%	21.95%
Fees	31.96%	18.61%	11.76%	34.39%	25.30%	22.15%
Fund Balance	19.18%	1.21%	0.35%	0.43%	0.26%	6.23%
Bonds	4.45%	2.74%	0.00%	0.00%	0.00%	2.25%
Taxes	4.93%	0.38%	0.12%	0.16%	0.00%	1.63%
Special Assessments	2.39%	0.69%	1.09%	4.05%	2.53%	1.59%
Contributions	1.65%	3.47%	2.51%	10.96%	9.84%	3.49%

Unfunded	0.06%	56.93%	76.29%	0.00%	40.39%	40.72%
Total Funding Sources	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

CIP Project Schedule, FY 2014 –2018

There are approved requests for funding for projects within the 2014 – 2018 Capital Improvement Plan. Within those funding requests are separate projects. The difference between the number of requests and the number of projects is that some projects are on-going maintenance and/or renovations at City facilities and require a funding application for each year of activity. Others are projects that require more than one fiscal year to complete such as the public/private Performing Arts Center which also require multiple funding requests. Current requests for funds for a project total $1.18 billion. The majority of that funding, approximately $1.05 billion, is for the fiscal years 2014 through 2016. Beyond those years it is difficult to determine the amount of funding that will be available from sources that rely on activity to generate funds such as Service Fees, Residential Construction Tax, and Car Rental Tax.

Restricted Funds

Southern Nevada Public Lands Management Act (SNPLMA)

The SNPLMA was adopted by the 105th Congress in October of 1998 as Public Law 105-263 (PL 105-263). It allows the United States Department of the Interior's Bureau of Land Management (BLM) to sell public land within a specific disposal boundary around the Las Vegas Valley. The initial disposal boundary was established in 1998 and encompassed approximately 474.9 square miles. The original boundaries were expanded in 2002 and now cover 517.5 square miles. The revenue derived from land sales is split between the State of Nevada General Education Fund (5%), the Southern Nevada Water Authority (10%), and a special account available to the Secretary of the Interior for:

- Parks, Trails, and Natural Areas
- Capital Improvements
- Conservation Initiatives
- Multi-Species Habitat Conversation Plans (MSHCP)
- Environmentally Sensitive Land Acquisitions
- Lake Tahoe Restoration Act Projects
- Hazardous Fuels Reduction
- Eastern Nevada Landscape Restoration

SNPLMA funds are allocated annually in "rounds." The Department of Planning and Department of Public Works role in the SNPLMA process has been to identify projects and determine their worthiness for receiving a nomination for funds. If a project is deemed worthy, the departments initiate the application process and provide pertinent information and justification for receiving SNPLMA funds. The city of Las Vegas did not participate in the first round. In rounds two through thirteen, the City received approximately $247.8 million in funds. There were 39 projects and three planning studies receiving SNPLMA funds.

SNPLMA funds have been used for new construction, renovations and improvements for the City's parks, open space, and trail system. They have been used extensively in the City's trail system, particularly in the Downtown and eastside areas where the Cultural Corridor, Las Vegas Wash, and Cedar Avenue Trails have become examples of projects that have improved the quality of life, increased safety, and solidified infrastructure for Las Vegas residents. Funding received is identified on Table 11

Table 11. - City of Las Vegas SNPLMA Allocation by Round

	Number of Projects Funded	Funding Received
Round 1	-	-
Round 2	1	$ 2,200,000
Round 3	7	$ 26,286,000
Round 4	5	$ 16,684,000
Round 5	6	$ 91,998,720
Round 6	12	$ 84,115,000
Round 7	2	$ 18,040,000
Round 8	1	$ 2,860,000
Round 9	1	$ 2,497,000
Round 10	1	$ 1,540,000
Round 11	2	$ 550,000
Round 12	-	-
Round 13	1	$ 260,000
Round 14	-	-
Planning Studies	3	745,000
Total	39	$ 247,775,720

Tax Increment Finance (TIF) rebate

The city of Las Vegas Redevelopment Agency (RDA) offers Tax Increment Finance rebates for residential, retail, hotel and mixed-use projects located within the City's Redevelopment Area. The Redevelopment Area consists of approximately 3,800 acres that generally includes downtown Las Vegas, as well as portions of West Las Vegas and along Eastern Avenue. In 2012 RDA 2 was created encompassing areas along west Sahara Avenue and west Charleston Boulevard (both from I-15 to Decatur Boulevard) and Decatur Boulevard (from Sahara Avenue to US-95). RDA 2 is approximately 1,000 acres in size.

Tax Increment is defined as the increased property taxes generated due to new development on a site. The TIF program uses tax money from the difference in the originally assessed property value and the new, enhanced property value to pay for eligible qualified expenditures. Up to 41 percent of the Tax Increment can be rebated annually to a property developer for eligible

qualified expenditures to a construction project. Eligible expenditures may include constructing streets, curbs, gutters, water lines, storm drainage facilities, traffic signals, paving, sidewalks, flood control improvements, utilities, other infrastructure costs and more. While the term for TIF rebate assistance is negotiable, the rebate cannot extend past the life of the agency or more than 20 years. The RDA's maturity date, required by Nevada state law, is in the year 2031.

Visual Improvement Program (VIP)

The VIP was established to encourage the rehabilitation of Downtown Las Vegas' commercial, industrial and mixed-use properties which can enhance the physical appearance of the area and improve the overall economic viability of the City's downtown core. These goals and objectives of rehabilitation can be accomplished by encouraging commercial, industrial and mixed-use property owners along with long-term tenants to reinvest in and renovate their properties. The VIP is intended to improve the aesthetic nature of properties and to assist in bringing them up to current building and property code standards. In addition, the program intends to act as a catalyst for observers within the community to consider rehabilitation of their own properties with or without participation in the VIP.

To ensure that the city of Las Vegas Redevelopment Agencies investment in the project is maximized, the applicant is required to provide a 100% matching contribution to the granted funds. All qualified exterior improvements must be pre-approved and must be visible from the public right-of-way.

Qualified exterior improvements that will be considered include:

- Painting
- Doorways
- Signage
- Awnings
- Cleaning
- Lighting
- Landscaping
- Parking Lots
- Tuck Pointing
- Facade Repair
- Window Repair
- Window Tinting

The Visual Improvement Program is intended to provide a property owner and/or business owner financial assistance for undertaking the exterior rehabilitation and renovation of commercial, industrial or mixed-use properties located in the city of Las Vegas Redevelopment Areas. All commercial, industrial and mixed-use properties within one of the Redevelopment Areas are eligible for assistance. The city of Las Vegas Redevelopment Agency will rebate any pre-approved qualified exterior improvements undertaken by the applicant. Commercial VIP participants may qualify for a maximum of $50,000. Since the inception of the VIP in 2005 a total of $3,251,595 has been invested in projects.

Special Improvement Districts (SID)

A SID is a device whereby the City acts as the agent for property owners to construct streets, sidewalks, curbs and gutters, sewers, streetlights, and other local improvements. It is the only mechanism the law provides for having public improvements made in an area when 1) the property owners in the area desire the improvement, but some or all of them cannot pay in cash, or 2) when the majority of property owners in the area want an improvement and the minority does not want to pay its fair share. The basic purpose of a SID is to afford a property owner the opportunity of using their property as collateral for financing their prorated share of the proposed improvement and allows payment of this indebtedness at a low rate of interest which is based on the Bond Buyers Index of 20 Municipal Bonds most recent publication of rates. Property owners have the option of paying for the costs of the improvement within 30 days or may extend their payments over a period of 2 to 30 years.

Business Improvement District (BID)

A BID provides improvements and activities – such as sidewalk cleaning, trash collection, graffiti removal, security, marketing and events – to a commercial district. Its purpose is to supplement, not replace, government services. BIDS are based on a benefit assessment model whereby property owners in a given area agree to assess themselves additional revenues that will be used for services in that area. These revenues are not managed by the city but by property owners themselves. A BID is formed by the private sector, which in most cities must show that a majority of those who will pay the assessment are in support, usually through filing a positive petition with the city council. The BID board of directors is made up of district property and business owners who set the policies and oversee operations. The board hires professional staff to manage the district on a daily basis. Currently, Fremont Street East is the lone BID in the City.

Quick Start Program (QSP)

Under the Quick Start Program, qualified applicants will be reimbursed up to $50,000 toward the cost of rehabilitating older buildings in the city's Redevelopment Areas to bring them up to current building and fire code standards. Applicants will be reimbursed for costs associated with code compliance, infrastructure issues such as utility and structural upgrades and review fees in the city's two redevelopment areas. Matching funds from the business are required at a 4-to-1 private-to-public ratio.

Community Development Block Grant (CDBG)

CDBG is a grant program administered by the U.S. Department of Housing and Urban Development on a formula basis for entitlement communities. This grant allots money to cities and counties for housing rehabilitation and community development, including public facilities and economic development and allocations are illustrated on table 12.

Table 12. - Community Development Block Grant Allocations

Program	2009	2010	2011	2012	2013
Single Family	200,000	400,000	250,000	250,000	-

Rehabilitation					
East Las Vegas Community Center Bond Payment	1,044,731	1,046,875	1,041,009	-	-
Stupak Community Center Bond Payment	1,545,175	1,520,725	1,521,625	1,520,725	1,518,025
Rebuilding Together - Single Family Rehab	125,000	125,000	125,000	125,000	125,000
James Seastrand Helping Hands - Single Family Rehab	10,000	10,000	10,000	10,000	10,000
CLV Future CDBG Construction Projects	265,863	192,069	389,188	1,595,690	736,279
CDBG Administration and Fair Housing (20% Max)	1,013,744	1,013,744	1,026,714	1,108,128	827,478
Code Enforcement	-	-	-	100,000	300,000
Opportunity Village	72,000	-	-	-	-
WestCare	31,900	-	-	-	-
Total	4,308,413	4,308,413	4,363,536	4,709,543	3,516,782

The city of Las Vegas is an entitlement community grantee which utilizes its Community Development Block Grant (CDBG) funding to develop viable communities by providing decent housing, a suitable living environment, and opportunities to expand economic opportunities, principally for low- and moderate-income persons. HUD awards grants to entitlement community grantees to carry out a wide range of community development activities directed toward revitalizing neighborhoods, economic development, and providing improved community facilities and services.

Centennial History Grant

The Centennial History Grant program was established in 2005 as part of the celebration of the 100 anniversary of the founding of the city of Las Vegas. Grant monies come from the sale of a specialized license plate featuring the famous "Welcome to Fabulous Las Vegas" sign designed by Betty Willis in 1959. The plates were designed and prepared by the Nevada Department of Motor Vehicles in cooperation with the Nevada Department of Cultural Affairs. Since 2005 these funds helped pay for public events that celebrated the history of Las Vegas.

The grant program is administered by the Las Vegas Commission for the Centennial. Per NRS 482.37903 grant projects much "relate to the commemoration of the history of the City of Las Vegas, including, without limitation, historical markers, tours of historic sites and improvements to or restoration of historic buildings or structures." Projects may include: rehabilitation of historic sites, structures and archeological resources, cultural heritage and tourism, oral history, historic survey, documentation, museums and archives, and education. The rehabilitation of properties, including the historic downtown U.S. Post Office and Courthouse (now the Las

Vegas Museum of Organized Crime and Law Enforcement), La Concha Motel lobby, Floyd Lamb Park at Tule Springs, and the Historic Westside School have all received funding from the Centennial History Grant program.

Issues

The major issue with CIP projects for the City is the continued ability to fund them adequately. With the decrease of available funds from sources based upon activity or variable tax rates, alternative sources such as an increase in fees for services, increased tax rates, federal grants, or issuance of bonds must be considered. The following are issues pertinent to the City's ability to carry out the Five-Year Capital Improvement Plan Projects:

- Future revenue – Sources based on construction activity and population growth have slowed. Both have increased recently but are still nowhere near levels seen prior to the economic downturn.
- Fees – Fallout from the slowing construction is less available fee based revenue. Fees may need to be increased and/or assessed to a broader range of services.
- Taxes – Decrease in assessed valuation of property means less property tax revenue generated. Decreases in retail sales and gasoline consumption mean less tax revenue from these sources as well.
- Prioritization – Revenue shortages may require a reassessment of CIP project priorities. Projects that do not maintain public welfare and/or provide essential services may need to be reprioritized.
- Bonds – Revenue shortages and limitations on taxes may require the City to issue bonds to fund CIP projects.
- Debt Limitation - The City has a debt limitation of 20% of assessed valuation with current debt at 4.2% of assessed valuation. Assessed valuation has declined, causing the debt ratio to increase without incurring any additional obligations. However, even if assessed valuation were reduced by an additional 50%, the current debt would only increase to 8.4%.
- Fund Balance – As other revenue sources decline the Fund Balance is used increasingly and reduced, putting the future status of works in progress in jeopardy.

IMPLEMENTATION

The Master Plan outlines a vision for the City's future that can only be implemented incrementally over time. To remain relevant and useful throughout the planning period, long-range planning efforts must be integrated closely with the City's strategic plan and capital improvement programming. Linking long-range planning with the capital improvement program balances competing expenditures and coordinates scheduling to provide cost efficient and timely public improvements.

The appropriation, allocation, and scheduling of funds for infrastructure and improvement projects is of critical importance for the continued growth and vitality of the city of Las Vegas.

The prioritization of capital improvement projects establishes a hierarchy of need coordinated with the availability of funds. Sound infrastructure and public facilities are essential for the safety and convenience of residents and the provision of high quality services to residents and visitors alike. The recommendations set forth encourage decision makers to provide support for the maintenance and expansion of infrastructure and the continued improvements that will benefit the residents and businesses within the city of Las Vegas as well as visitors to the City.

CIP1. Consider issuing any and all available bonds to finance future CIP projects. Bonds may assure future revenue availability for projects in years four and five of the CIP and provide financial stability throughout the duration of the Five Year CIP.

CIP2. Utilize restricted funding such as CDBG and RDA in public improvements to the maximum extent possible so as to implement improvements, increase property values and encourage private investment.

CIP3. Assure projects that maintain public welfare and/or essential services, such as police & fire services and infrastructure such as roadways, flood control and sanitary sewer systems are given the highest priority and adequately funded.
plans, community or special area plans.

CIP4. Examine fees charged to determine if they adequately cover costs of services.

CIP5. Examine fees from other government agencies on an annual basis for applicability.

CIP6. Evaluate possibility of assigning fees to a broader range of services.

CIP7. Examine types of services where fees are applied from other government agencies.

CIP8. Audit existing services to determine if applying fees would be appropriate to cover labor and material costs.

CIP9. Seek public/private “sponsorships” for funding public art and activity nodes.

CIP10. Seek partnerships with developers and encourage them to donate land that the City can develop into parks, trails and open space, particularly in developing areas.

CIP11. Explore options to provide incentives to developers for including and developing open space in their residential projects.

CIP12. Continue to add parks and open space to City inventory as prioritized in the 2020 Master Plan Parks and Recreation Element

PUBLIC FACILITIES ELEMENT

Introduction

The existence and delivery of adequate infrastructure is the foundation of the lifestyle that Las Vegas residents and visitors enjoy. One of the most important functions of the city is to assure sufficient public facilities are provided to meet the needs of all people and developed lands within the city. Ensuring the highest quality of life mandates that existing facilities be maintained, improved, and expanded to accommodate urban development and economic growth. Recognizing the need for adequate public infrastructure is necessary for continued growth. It is critical to link development to infrastructure and to ensure new development doesn't overburden the existing infrastructure. Federal and state laws, as well as a series of planning and policy documents, guide the city of Las Vegas' activities related to stormwater and sanitary sewer issues.

Federal Law

Federal water quality legislation includes the Federal Water Pollution Control Act (FWPCA), also known as the Clean Water Act. In 1972, amendments to FWPCA prohibited the discharge of any pollutant to water within the United States from a source unless authorized by the National Pollutant Discharge Elimination System (NPDES) permit. The NPDES mandates that plans and programs for stormwater management be developed, adopted, and implemented to assure that municipalities "effectively prohibit non-stormwater discharge into the storm drain and require controls to reduce the discharge of pollutants from stormwater systems into waters of the United States to the maximum extent possible." The NPDES Municipal Separate Storm Sewer System (MS4) permit covers: discharges into receiving waters of the United States within the city of Henderson, city of Las Vegas, city of North Las Vegas, Clark County Regional Flood Control District (CCRFCD), and Clark County not including Boulder City, Laughlin, Mesquite, NDOT, and Nellis Air Force Base. The focus of the MS4 Permit for the Clark County Regional Flood Control District is on the discharge of municipal stormwater runoff into "Las Vegas Wash, its tributaries, and other waters of the United States." The permit is valid for five years, with annual updates provided (if necessary) to address changes either in proposed program elements, in conditions cited in the permit area, or both. The city of Las Vegas' compliance with federal requirements will be discussed in more detail in a later section.

Nevada State Engineer jurisdiction over all wells tapping into artesian water or water in definable underground aquifers. The 1939 Nevada Underground Water Act grants the State Engineer total jurisdiction over all groundwater in the state. Nevada water law follows the doctrine of prior appropriation, or "first in time, first in right," meaning the first person to file on a water resource for beneficial use is typically considered first for a permanent right to the water, subject to the Nevada State Engineer's determination of available unappropriated water. Obtaining a permit to develop groundwater or surface water consists of completing an application, having the Nevada State Engineer act on the application, and then issuing the permit or denying the application.

Las Vegas Valley Water District

The Las Vegas Valley Water District (LVVWD) delivers water to the city of Las Vegas through its distribution systems, which includes pumps, reservoirs, and pipelines. They construct and maintain the water distribution system for the city of Las Vegas and portions of unincorporated Clark County. A number of documents, developed with the cooperation of the city of Las Vegas and other local jurisdictions, help guide policy and outline current and future plans for provisions of water within the greater Las Vegas metropolitan area. These guiding documents are summarized below

Southern Nevada Water Authority Water Resource Plan

In 1996, the Southern Nevada Water Authority (SNWA) Water Resource Plan was first adopted. The plan addresses southern Nevada's current and future water resources, via demand forecasting, conservation measures and goals, and environmental issues that can influence the timing and delivery of available water resources. The plan is reviewed annually and updated as needed.

Las Vegas Wash Comprehensive Adaptive Management Plan

The Las Vegas Wash Comprehensive Adaptive Management Plan was developed in January 2000. The Plan focuses on the implementation of engineering solutions to address water quality, erosion control, and wetlands restoration concerns in the Las Vegas Wash.

Las Vegas Valley 208 Water Quality Management Plan

The Federal Water Pollution Control Act Amendments of 1972 and 1977 require control of all sources of water pollution in order to meet the goals of the Act. Section 208 of the Act

State Law

The Office of the State Engineer in the Nevada Division of Water Resources regulates all ground water and surface water resources (other than the federally regulated Colorado River) within the State. The General Water Law Act of 1913 gives therequires the development of an integrated regional water quality management program to deal with water pollution sources. In May of 1975, the Nevada State Legislature passed Assembly Bill 468 mandating certain duties and power to counties, thus designating the Clark County Board of Commissioners (BCC) as the Area-Wide Water Quality Management Planning Organization. In 1997, the BCC approved an amended plan, titled the Las Vegas Valley 208 Water Quality Management Plan Amendment (208 Plan). The main purposes of the amendment were:

- Revise the 1990 208 Plan Amendment
- Include effects of sustained regional growth and development
- Revise stormwater permitting to a more inclusive nonpoint section
- Provide water-quality planning to a horizon year of 2020

As a wastewater discharger within the Clark County, Nevada, the city of Las Vegas continues to work with other wastewater entities, including the Clark County Water Reclamation District, the city of Henderson, and city of North Las Vegas to ensure a proactive, integrated approach to water quality management.

Valley-Wide Reuse Plans

In addition to federal and state laws, Las Vegas uses separate policy approaches to implement water reclamation systems. The Las Vegas City Council adopted Ordinances 3502 (May 2, 1990), 3519 (July 18, 1990), and 3582 (June 5, 1991) to encourage the conservation of water by banning artificial lakes, restricting irrigation, limiting landscaped turf, and restricting the irrigation of golf course to reclaimed, non-potable water. All indoor wastewater that is directed to the sanitary sewer system is recycled on a community-wide basis, either as Reclamation Water or as return flow credits to Lake Mead.

Existing Conditions

Re-use/Reclamation water

Southern Nevada reclaims 100 percent of its collected wastewater, returning most of it to Lake Mead, thereby contributing to an increased water allotment for Nevada under the return flow credit scheme. This means wastewater that is collected from homes and business flowing into the public sewage system is "renewed", and therefore not contributing to a net water use. Only water that is used outdoors for irrigation purposes or wastewater generated on properties with an Individual Sewage Disposal System (ISDS, or septic tank), is not reclaimed and contributes to net water use.

1. Potable/non-potable: Potable water is fit for human consumption, while non-potable water cannot be safely consumed.
2. Direct/indirect: Direct reuse occurs when water leaving treatment facilities is transmitted without interruption to the end-user destination, while indirect reuse occurs when treated effluent is first released in a larger body of water or aquifer, from where it is later retrieved and retreated for use.
3. Though reclaimed water is not treated to the extent necessary for human consumption, it still has many uses such as:

    • Urban: landscape irrigation such as golf courses and parks, toilet flushing
    • Agricultural: irrigation of crops, both food and nonfood
    • Recreational: fishing and boating
    • Environmental: sustaining river flows or creating/maintaining wetlands
    • Industrial: power plants and cooling towers
    • Temporary applications: construction and dust control uses

Even though most recycled or reclamation water is used as non-potable water, it has the potential to fill most water demands, depending on the level of treatment to ensure the quality of water

meets federal and state requirements. The greater the chance the water will be used for human consumption, the greater the level of treatment required.

Water Treatment in Las Vegas

Wastewater treatment facilities in Las Vegas are ranked in the top seven percent in the nation (illustrated in Figure 1) because of the rigorous cleaning processes and quality of treatment utilized within these facilities.

Reclaimed water in Las Vegas is of high quality and goes through rigorous cleaning for several reasons: environmental protection, return flow credit, and potable water conservation. Naturally, the level of treatment and reclamation system used is based on the intended use. There are several ways to reclaim water in the city, which are broadly grouped into three separate categories and distinguished by size and location: centralized, decentralized, and on-site. These are illustrated in Figure 2 and described in more detail below.

Figure 1: Ranking
Figure 2: Las Vegas Water Systems

Centralized Reclamation

A centralized wastewater treatment plant is the largest reclamation approach that includes centralized waste water collection systems conveying wastewater for an entire urban area and may involve reclaiming and distributing effluent through the same region. Clark County Water Reclamation District (CCWRD), the city of Henderson, the city of North Las Vegas and the city of Las Vegas run centralized wastewater treatment and reclamation facilities for the Las Vegas Valley. The city's centralized facility is the Water Pollution and Control Facility (WPCF), located on Vegas Valley Drive on the Las Vegas Wash in unincorporated Clark County (Map 1).

Map 1: Water Pollution Control Facilities

The WPCF started operations in 1958, and can currently treat up to 91 MGD of wastewater generated by residents and businesses in the City of Las Vegas. Public Works Environmental Division staff continually monitors wastewater discharge from businesses to prevent toxic chemicals from entering the plant and possibly passing through it. Highly treated reclaimed water from the WPCF is either discharged to Lake Mead via the Las Vegas Wash or diverted for non-potable reuse for such uses as golf courses, parks, and power plants.

Decentralized Reclamation

Decentralized plants receive sewage from residences and businesses in their vicinity and deliver treated water for direct non-potable reuse to nearby customers and public facilities such as golf courses, schools, and parks. These types of facilities utilize small-scale dual-distribution systems to deliver the reclaimed water to potential users. Two such existing plants within the city of Las Vegas are the Bonanza Mojave Water Resource Center, and the Durango Hills Water Resource Center.

The Bonanza Mojave Water Resource Center is a one million gallon a day facility owned and operated by the city of Las Vegas. The facility became operational in May 1999 and has the capacity to produce approximately 11,120 AFY of reclaimed water that is currently used to irrigate the Desert Pines Golf Course and Park. The facility is expected to be taken out of service in the future as a cost-benefit analysis determined that the cost to pump reclaimed wastewater from the WPCF was significantly cheaper than the cost to operate the Bonanza Mojave facility.

The Durango Hills Water Resource Center (also known as the Northwest Water Resource Center) is a collaborated project between the city of Las Vegas and Las Vegas Valley Water District (LVVWD). The facility collects and treats wastewater flow from municipal sewer interceptors and produces recycled water as illustrated in Figure 3

Figure 3: Durango Hills Water Resource Center System

Built on 100 acres of city owned property between Gowan Road and Cheyenne Avenue, the 13-acre facility is surrounded by 87 acres of recreational amenities. The 10 MGD satellite reuse facility is capable of providing more than 11,200 AFY of reclaimed water for golf courses, schools, and parks. Every gallon of water recycled means one less gallon of drinking water pumped from the LVVWD's treatment plant. The facility became operational on July 6, 2001, and cost approximately $37 million, one of the largest public works projects ever undertaken by the city. The city of Las Vegas owns and operates the Durango Hills Water Resource Center, while the LVVWD constructed and operates the recycled water distribution system, comprised of one main pump station, a storage reservoir, some 17 miles of pipelines, two remote booster-pumping stations, and four recharge wells. The recycled water is used to irrigate Highland Falls, Eagle Crest, TPC at Summerlin, TPC at the Canyons, Badlands, Canyon Gate, and Angel Park golf courses.

The Role of the City

The development and management of water resources within Clark County, Nevada has been delegated to the Southern Nevada Water Authority. In 1991, seven local water agencies formed the Southern Nevada Water Authority (SNWA) to address water issues on a regional basis, rather than an individual water purveyor basis. This includes securing water resources via the Colorado River Compact, which was reworked as the Colorado River Basin Agreement and approved in December 2007. The city of Las Vegas plays an important role in water resource management through the operation of wastewater treatment plants, which contribute to return flow credits for Colorado River water use. Moreover, the city is in the process of developing a stormwater management program along with each of the cities within the Las Vegas Valley and the Clark County Regional Flood Control District as well as participates on regional planning committees. The city's involvement in water conservation efforts are discussed in the Conservation element of the 2020 Master Plan.

Projects

Some milestones in history pertaining to wastewater collection system projects are listed in Table 13 below.

Table13: Milestones in History

Year	Occurrence
1912	First sewage system in Las Vegas links the streets of Fremont, Main, Fifth Street, Clark, Lewis, and Stewart, and ends on the outskirts of town, with a pipe discharging into the desert near Bonanza and Ninth Street
1931	First wastewater treatment plant is built on 15th Street and Harris Avenue
1941	Plant moves further east to a site at Eastern Avenue and Harris Avenue
1948	New 7.5 MGD plant is built at Manning Street and Harris Avenue
1955	City of Las Vegas purchases 160 acres of land for a water treatment plant on Vegas Valley Drive
1958	First wastewater treatment unit at the city's new Water Pollution Control Facility goes into operation
1968	Second separate wastewater treatment unit comes on line, expanding capacity to 30 MGD
1981	Additional chemicals are introduced into the disinfection treatment mix. Plant capacity increases to 41 MGD
1991	The third and fourth plants come on line, increasing capacity to 66 MGD
1994	New infiltration facility comes online. Later this year, newly activated sludge plant is put into service to meet stricter permit limits as needs increase
1997	Sodium hypochlorite replaces chlorine gas for wastewater disinfection, eliminating the need to store gaseous chlorine on site
1999	Ferric chloride replaces alum as a flocculent, resulting in savings on chemicals while decreasing odors
2003	Began use of Biological Nutrient Removal methods, increasing capacity with fewer chemical costs
2004	Water Pollution Control facility treats an average of 63 MGD, with the capacity to treat up to 91 MGD
2008	Treatment plant effluent channels are covered and highly treated effluent is conveyed in pipelines.
2010	Treatment plant security project completed including additional electronic monitoring, fencing, and gate security.
2011	City of North Las Vegas completes their treatment plant and starts to treat their own sewage. City of Las Vegas treated sewer flows drop to 45 MGD.
2012	Odor Control upgrade project completed converting from a chemical odor treatment system to a more modern and environmentally friendly renewable technology, bark chip media odor scrubbing.
2013	Three megawatt solar power generating station adjacent to the sewer treatment plant completed that makes energy equivalent to 25% of the power consumed at the sewer treatment plant.

Treatment Facility Projects

Treatment Facility improvement projects are forecasted through the city's five-year Capital Improvement Plan and are identified in the city's Capital Improvement Plan FY 2013-17 (Table 14).

Table 14: Sewage Treatment Plant Projects

Project Title	Estimated Completion Date	Estimated Cost	Funding Source
Bonanza-Mojave WRC SCADA / Control System	06/30/2015	$400K	Service Fees
CLV-CCWRD Sludge Project	06/30/2014	$10M	Service Fees
CLV-CNLV Flow Control Gate	06/30/2015	$500K	Service Fees
Compliance Directed Projects	06/30/2017	$2.5M	Service Fees
Dewatering Building Equipment Rehab	06/30/2017	$10M	Service Fees
Reuse Facility Plan Projects	06/30/2013	$15.4M	Service Fees
SCADA / Control System Upgrades	06/30/2013	$10M	Service Fees
WPCF BNR Rehab	06/30/2013	$1.0M	Service Fees
WPCF Compressor Building	06/30/2013	$1.5M	Service Fees
WPCF Corrosion Control	06/30/2013	$8.0M	Service Fees
WPCF Digester Rehab	06/30/2014	$5.5M	Service Fees
WPCF Electrical Upgrades & Headworks Bypass	06/30/2015	$25.5M	Service Fees
WPCF Energy Efficiency & Equipment Replacement	06/30/2014	$2.0M	Service Fees
WPCF Flare	06/30/2013	$3.0M	Service Fees
WPCF Gas Scrubbing	06/30/2013	$3.2M	Service Fees
WPCF MC-CER	06/30/2013	$9.0M	Service Fees
WPCF Nitrification Dewatering Wells	06/30/2013	$2.0M	Service Fees
WPCF NTP Modifications	06/30/2013	$1.0M	Service Fees
WPCF Odor Control Project	06/30/2013	$20.1M	Service Fees
WPCF Plants 3&4 Primaries and Secondary's Rehab	06/30/2015	$1.0M	Service Fees
WPCF Plants 5&6 Primary Rehab	06/30/2014	$1.0M	Service Fees
WPCF Receiving Area Update	06/30/2013	$900K	Service Fees
WPCF Reduced Loading	06/30/2014	$18.6M	Service Fees
WPCF Sludge Blending and Pumping	06/30/2013	$2.65M	Service Fees
WPCF Solar Power	06/30/2013	$6.9M	Service Fees

WPCF TWAS Rehab	06/30/2013	$5.0M	Service Fees

Funding/Financing

All costs associated with the water treatment plants are paid through service fees and a portion of a voter-approved one-quarter cent sales tax.

SEWER SYSTEMS

The city of Las Vegas has two types of sewer systems: sanitary and storm sewers (see Figure 4). Sanitary wastewater systems convey wastewater from toilets, showers, and sinks into the city's wastewater treatment facility. Once there, wastewater flows through three levels of filtration treatment before being discharged into the Las Vegas Wash and eventually Lake Mead. In contrast, the stormwater system is intended to route rainwater quickly off the streets during rainstorms. Unfortunately, it also carries all urban runoff including chemicals, trash, and other pollutants, which go straight into the Las Vegas Wash. Both types of sewer systems are discussed in subsequent sections

Figure 4: Two systems of Drainage

Sanitary Sewer System

The Department of Public Works developed the first sanitary sewer master plan in 1951. This report provided plans for the city limits of Las Vegas and for the newly developing area known as the "Strip." In 1959 the sanitary sewer master plan was updated via a report to reflect growth trends in southern Nevada. The report was updated in 1963 and represents the basis for how our current sanitary sewer system is built. In 1974, an amendment to the previous report addressed long-range system needs, including increasing line diameter sizes, identifying collection line locations, and deleting the collection system detail for North Las Vegas. Additionally, the report reflected EPA funding requirements and required a different analysis of the sewerage system, placing emphasis on industrial waste, inflow and infiltration, and rate studies. In 1980, an Action Plan was prepared that was similar to the 1974 report, which focused on regulatory and economic analysis of the city sewer system. The report included expected annexations and improvements to the system regardless of the number of annexations.

A 1982 report on the sanitary sewer system reflected changing technologies and sophistication associated with detailed collection systems analysis. This analysis included the process of relating land use designations to population and flow projections. There were two conclusions drawn from the prior master and action plans: First, the plans evolved from building a system capable of meeting projected populations to a perspective of monitoring and analyzing the system for its relationship to directions of growth, design criteria, and financing. Second, the system capacity is based upon projections far greater than actual growth because the city must also accept all sewage flows from North Las Vegas in addition to its own wastewater.

The most recent update to the Wastewater Collection System Master Plan was concluded in March 2013. Updates to this plan include additional service areas outside of the current city boundaries due to sewer service to unincorporated county islands. Flows from North Las Vegas have been removed from the study, because North Las Vegas opened its own Water Pollution Control Facility in 2011.

Role of the City of Las Vegas

The city of Las Vegas constructs, operates, and maintains the sewer collection system, along with treating and discharging treated water back into the Las Vegas Wash. Solid waste is managed and maintained through a franchise agreement with Republic Services of southern Nevada.

Projects

The city of Las Vegas updated its Wastewater Collection System Master Plan in March 2013. The Department of Public Works uses the plan to size sewer mains for new development and to forecast rehabilitation, replacement, and expansion of its sanitary sewers. The sanitary sewer system is also an important link in the ability of the SNWA to obtain return flow credits because the sanitary sewer system water is treated at the city's wastewater treatment facility where the water is returned to Lake Mead or the treated water is used for irrigation. Table 15 identifies the projects forecasted through the city's five-year Capital Improvement Plan.

Table 15: CIP projects 2013-2017

Project Title	Estimated Completion Date	Estimated Cost	Funding Source
Antelope – Westcliff Relief Sewer	06/30/2013	$623K	Service Fees
Bonneville Underpass Rehab	06/30/2015	$1.80M	Service Fees
Charleston Blvd Repair/ Replacement	06/20/2013	$2.68M	Service Fees
Downtown Interceptor Phase 2 Rehab	06/30/2015	$5.40M	Service Fees
Durango Hill WRC Relief Sewer	06/30/2013	$658K	Service Fees
Huntridge Sewer Rehab	12/31/2012	$142K	Service Fees
Main/Commerce Couplet	06/30/2013	$30K	Service Fees
Minor Sewer Modifications Related to RTC Projects	06/30/2017	$1.0M	Service Fees
Oakey Meadows Phase 2B	06/30/2013	$242K	Service Fees
Rampart Blvd Diversion – Alta/Cheyenne	06/30/2014	$3.30M	Service Fees
Sahara-Arden Sewer Repair/Replacement	06/30/2014	8.80M	Service Fees
Sahara/Oakey Interceptor	06/30/2017	$3.13M	Service Fees

Phase 3 Rehab			
Sandhill Relief Sewer-Owens Avenue Interceptor Rehab	06/30/2016	$5.44M	Service Fees
Sewer Over-sizing and Extension Agreements	06/30/2017	$2.5M	Service Fees
Sewer Rehab	06/30/2017	$4.0M	Service Fees
Sewer Rehab Group A: Sandhill/Lamb	06/30/2015	$5.39M	Service Fees
Sewer Rehab Group B: Grand Central, Main, Carson, Ogden, Cedar, Alleyways	06/30/2014	$3.21M	Service Fees
Sewer Rehab Group C: Foremaster, Charleston, 25th, 15th	06/30/2014	$2.86M	Service Fees
Sewer Rehab Group E: Alta-Valley View, Rancho-Tonopah	06/30/2014	$1.68M	Service Fees
Sewer Rehab Group F: Rancho, Smoke Ranch, Gowan, Craig, Alexander	06/30/2014	$2.07M	Service Fees
Sewer Rehab Group H: Lake Mead, Rancho to Rampart	06/30/2013	$8.73M	Service Fees
Sewer Rehab Group I: Oakey, Peccole, Summerlin	06/30/2016	$7.12M	Service Fees
Sewer Rehab Group J: Ann, Rio Vista, Bradley, Jones, Elkhorn	06/30/2016	$2.09M	Service Fees
Sewer Rehab Group K: Arville Street Relief Sewer	06/30/2017	$2.42M	Service Fees
Sewer Rehab Group L: Sahara, Durango, Peccole ranch, Charleston	06/30/2017	$6.28M	Service Fees
Sewer Rehab Group M: Desert Inn, the Lakes, Durango, Sahara	06/30/2017	$1.80M	Service Fees
Sewer Rehab Group N: Cheyenne, Buffalo, Sun City	06/30/2015	$4.55M	Service Fees
Valley View Sewer Rehab	12/31/2012	$510K	Service Fees
Vegas Drive – Rancho/I-15 Repair/Replacement	06/30/2013	$5.46M	Service Fees
Vegas Drive Relief Sewer Phase I – Shadow Mountain to Parkchester	06/30/2013	$2.11M	Service Fees

Vegas Drive Relief Sewer Phase II/Rehab Group G	06/30/2015	$5.36M	Service Fees

Funding/Financing

The sanitary sewer collection system serves Las Vegas, portions of unincorporated Clark County, and portions of North Las Vegas. All costs associated with the sanitation operation, including debt service on bonds, .are paid from the Sanitation Enterprise Fund, which is funded entirely through service fees and connection fees collected from properties connected to the public sewer

Stormwater (Drainage) System

Las Vegas is located in the Mojave Desert, an arid environment and notably one of the driest regions of the country, with an average of 4.49 inches of rainfall per year. Historically, Las Vegas has experienced destructive rainstorms between the months of July and September, when moist, unstable air from the Gulf of Mexico is exerted upward by the hot air currents. This meteorological phenomenon results in severe thunderstorms with intense rainfall. Steep mountain slopes and rockhard desert grounds repel rainwater, causing a rapid flow that amasses in the lower elevations of the urbanized valley. In the early days of Las Vegas, storm drains were nonexistent. Floodwaters from infrequent storms were allowed to run through the streets and desert with devastating results. Floods have been reported in the area as far back as 100 years. The U.S. Soil Conservation Service compiled a report titled, "History of Flooding, Clark County, Nevada 1905-1975," that documented 194 different flooding events resulting in damage to both private and public facilities. One such flood occurred on July 23, 1923, when floodwaters flowed through almost every building in the city, including those located on Fremont Street, resulting in damages estimated at $25,000. As the city grew, so did the problems with flooding and their associated costs. Since 1960, the Las Vegas area has experienced at least 12 floods totaling over one million dollars in damages each, 23 separate flash flood events, and 33 related deaths.

In May 1963, the city of Las Vegas prepared a master plan for the Stormwater Disposal, but insufficient funding prevented the plan from being implemented. After flooding from the storms of July 1975 and August 1983, the city recognized the need for detention basins. In 1985, the Nevada State Legislature passed a bill permitting the creation of local districts for the control of floods. The Clark County Regional Flood Control District (CCRFCD) was formed in early 1986 by county ordinance. The responsibilities charged to CCRFCD included developing a comprehensive flood control master plan to alleviate flooding in the valley, regulating land use in flood hazardous areas, and funding the construction of flood control facilities.

The CCRFCD Las Vegas Valley Master Plan Update (MPU) is the guiding document that sets the agenda for countywide stormwater drainage systems and facilities. The MPU is required by NRS 543.596 to be updated at a minimum every five years and the latest version was adopted by the Las Vegas City Council in 2013. The city has developed and adopted three subsidiary master plans (neighborhood studies) working in conjunction with the CCRFCD MPU. These studies concentrate on more localized and detailed comprehensive hydrologic analysis and storm drain

facility plans for specific areas within city limits. Specific and detailed technical information pertaining to flood control drainage systems can be accessed in the CCRFCD MPU and/or one of the city's three Neighborhood Studies. Below is a brief outline of the three neighborhood flood control master plans. It should be noted that these neighborhood flood control master plans have not been adopted by ordinance, but are used as a policy guideline for the Public Works Department.

Northwest Neighborhood Flood Control Master Plan

The Northwest Neighborhood Flood Control Master Plan, Volume I, was developed in December 1997. The purpose of the plan was to present a localized "comprehensive hydrologic analysis and storm drain facility plan for an approximately 30 square mile study area." The study area is bounded by Elkhorn Road to the north, Hualapai Way and U.S. 95 to the west, Alexander Road and Lake Mead Boulevard to the south, and Decatur Boulevard and Rancho Road to the east and can be viewed on Map 2. The study provided a detailed existing and future condition hydrology and neighborhood drainage plan.

Map 2: Northwest Neighborhood Study Phase 1

Northwest Neighborhood Flood Control Master Plan Phase 2

The Northwest Neighborhood Flood Control Master Plan Phase 2 was prepared by in June 1998. The purpose of the plan provided a comprehensive hydrologic analysis and storm drain facility plan that encompasses approximately 24 square miles bounded by Moccasin Road to the north, Sheep Mountain Road and Mainwal Boulevard to the west, Elkhorn Road and Horse Drive to the south, and Decatur Boulevard to the east and can be viewed on Map 3. The result of the drainage analysis is "a flood control collection and conveyance system incorporating a network of existing and proposed facilities to reduce the risk of flood hazards to both public and private property located within this developing neighborhood."

Map 3: Northwest Neighborhood Study Phase 2 Vicinity and Watershed

Central Neighborhood Flood Control Master Plan

The Central Neighborhood Flood Control Master Plan was prepared in March 2005. The study area encompasses approximately 28 square miles bounded by Lake Mead Boulevard to the north, Durango Drive to the east, Desert Inn Road to the south, and the Las Vegas Wash to the west and is illustrated on Map 4. The HEC-1 (Hydrologic Engineering Center) analysis (DOS program used to determine the runoff from a site during a rainfall) for the study conforms to the 2002 MPU models, but is more detailed, the sub-basins are generally smaller (for 10-year only), and the analysis includes numerous flow splits to more accurately estimate street and facility flows. These flows are then used to determine the need for local drainage facilities and collectors for the 2002 MPU facilities. The results of the analysis and conceptual design provide the city with a complete and comprehensive storm drainage analysis for the neighborhood.

Map 4: Central Neighborhood Study Vicinity and Watershed

Flood control has become more than just the protection of structures and the safe movement of water to a final discharge point. It has become a land use matter because many of the detention basins are being created as joint-use facilities. Detention basins are now being designed to provide open space with sports fields. These facilities can be used for recreational facilities the majority of the time and are closed to recreational uses during storm events. Ultimately, creating joint-use detention basins represents effective management of City resources through coordinated planning and fiscal management. Specific examples of using flood control facilities for recreation areas include soccer fields at Buckskin Basin Park and linear parks, which also provide access to larger open spaces and a framework for trails at Peccole Park and Pueblo Park.

The city of Las Vegas currently has a finite number of regional drainage channels and storm drains as well as 15 detention basins in and around the city. As demand continues to grow within the city, the Department of Public Works has programmed an additional 25 miles of channels and storm drains within the next 10 years, with the ultimate goal of expanding the system to 243 miles of regional channels and storm drains.

Municipal Separate Storm Sewer Permit

In accordance with National Pollutant Discharge Elimination System (NPDES) requirements under the Clean Water Act (CWA), a regional Municipal Separate Storm Sewer (MS4) permit has been issued to the Clark County Regional Flood Control District (the city of Las Vegas is a co-permittee) allowing for municipal discharges into federal listed impaired water bodies (waters of the United States). The permit is issued every five years and is scheduled to expire in February 2015.

Developed to address the MS4 permit requirements, the Las Vegas Valley Stormwater Management Plan (SWMP) sets forth a regional stormwater runoff plan. The key element of the SWMP is the implementation of Best Management Practices (BMPs) by each municipality to address stormwater quality and quantity within their area of jurisdiction through the reduction of stormwater contaminants prior to entering the public storm system. Principal concerns by EPA/NDEP are sedimentation and the potential for construction, industrial activities, and existing and new development to carry and release inorganic and organic material into the valley watershed.

In September 2005, the EPA conducted a program audit of the Las Vegas Valley Storm Water Management Program. The current MS4 permit requires temporary pollution prevention methods to reduce erosion and sediment transport during construction activities as well as the capture and treatment of sediments in detention basins throughout the Las Vegas Watershed. However, the EPA's audit findings determined the performance of these approaches to be deficient. The EPA also cited the following insufficiencies and inadequacies of other program requirements:

1. Construction site stormwater runoff management:
   • Inadequate construction site inspection and enforcement program
   • Lack of erosion and sediment control regulations

2. Post Construction stormwater runoff management:
   • Lack of ordinance to minimize water quality effects of new development

• No requirement for permanent Best Management Practices (BMP) for new development and redevelopment

3. Industrial site storm runoff management:
   • No list of industrial sites that could contribute significant pollution

4. Stormwater runoff management related to operation and maintenance of treatment systems and controls:
   • Inadequate plan for sediment removal from regional detention basins

To avoid potential penalties for noncompliance with the MS4 requirements, the city of Las Vegas Department of Public Works and the Building and Safety Department developed a new stormwater management program to more effectively lessen the potential release of pollutants into the Las Vegas watershed.

Modifications to the SWMP and individual municipality stormwater management programs required additional methods to improve water quality long-term. Several working groups were formed of which the city is represented [Stormwater Quality Management Committee (SQMC), Development Guidelines Working Group (DGWG), Stormwater Stakeholders Working Group (SSWG), Construction Guidelines Working Group (CGWG)] and identified new stormwater management goals and objectives as related to construction management, new and significant redevelopment, and existing detention basin facilities. Additionally, these groups developed a new stormwater management plan that is regional in approach and will serve as a policy and regulatory mechanism to identify appropriate BMPs for a desert environment, maintenance responsibilities, and public outreach efforts. An extension of the MS4 Permit was submitted to the EPA to allow for the completion and city council adoption of the stormwater management plan, which was issued February 2010. The EPA is scheduled to conduct another audit of the current MS4 permit in the spring of 2014.

SIGNIFICANT DRAINAGE PROJECTS

Significant projects completed by the city that have greatly contributed to reducing flood zone hazards and the potential of both property damage and loss of life are mentioned in the following paragraphs. Additionally, the city works with developers of master planned communities to integrate arroyos, washes, and watercourses with urban development that protects the integrity of the watershed in its most natural state, while incorporating recreational amenities within the areas. Examples of these cooperative measures can be found at the Buckskin Detention Basin, Peccole Park, Arbors Park, Pueblo Park, in Kyle Canyon, and other areas within the Summerlin master-planned community.

Washington Avenue and Conveyance System

In the 1990s, Washington Avenue east of I-15 had an open channel. When stormwaters filled the channel, residents anxiously watched as floodwater rose above the channel, draining into their neighborhoods. To eliminate the damage and risks associated with flooding, the city of Las Vegas Public Works Department constructed three (3) 12-foot by 8-foot reinforced concrete

boxes in 1998, to safely convey floodwaters and removed approximately 1,000 residents from the flood zone. Photos 1-4 depict before and after photos of Washington
Avenue.

Photos 1-4

Freeway Channel System

The Freeway Channel System was an extension of the Washington Avenue Conveyance System to protect Downtown Las Vegas and to assist in reducing flooding that historically affected the Charleston Boulevard Underpass (photos 5-10). The project began in April 2000 and was completed in 2002 at a cost of $36.2 million, the largest single project funded by the Regional Flood Control District and the largest ever built by the city. The project consists of large reinforced concrete boxes, extending over five (5) miles from Sahara Avenue to Bonneville Avenue. The trunk line includes triple 14-foot by 10-foot reinforced concrete boxes (Photo 10).

Photo 5-10

Gowan South Detention Basin

The Gowan South Detention Basin Expansion/Sports Complex project was completed in 2002. It combined the existing Gowan Detention Basin with the Buckskin Detention Basin and expanded it to include a park and baseball field complex. The project consisted of removing approximately 300,000 cubic yards (CY) of material from the basin. The excavation, earthwork, and major drainage improvements were funded through the Regional Flood Control District at a cost of $2.7 million. The detention basin capacity increased from 400 to 600 acre-feet, and nine ball fields were constructed with seven (7) being above the 25-year flow and the other two (2) above the 100-year flow (see Figures 15-16).

Peccole Park & Pueblo Park

Both Peccole Park and Pueblo Park are examples of drainage channels that also function as open space and parkland. These parks are able to be used the majority of the time and are only subject to flooding during rain events. Flood control channel parks have significantly increased the open space within master-planned communities like Peccole Ranch and Summerlin.

Photo 13-14

Las Vegas Wash Middle Branch – Elkhorn/Decatur Storm Drain

The Elkhorn/Decatur Storm Drain System was an extension of the Las Vegas Wash Middle Branch System which provides flood protection to the northwest portion of Las Vegas when entire systems are complete. This first phase of the system included 14,250-ft of storm drain along Decatur Boulevard and Elkhorn Road. The Decatur Boulevard system is from CC215 to Whispering Sands and the Elkhorn Road system is from Decatur Boulevard to Torrey Pines Drive. The second phase was completed and included an additional 3,000 ft of storm drain within Elkhorn Road from Torrey Pines Drive to Rainbow Boulevard. The third phase is now completed in Rainbow Boulevard from Elkhorn Road to Grand Teton Drive. The fourth phase

will construct storm drain in Grand Teton Drive from Rainbow Boulevard to Durango Drive. The fourth phase of the system is programmed to be completed by end of Fiscal Year 2015.

Photos 14-15

North and South Environmental Enhancement Areas at Floyd Lamb Park

The North and South Environmental Enhancement Areas at Floyd Lamb Park is a multi-use facility located in the northwest portion of Las Vegas. The main function of this facility is to provide flood protection to the northwest area by serving as detention basins but also to serve as a park with trails. This facility is constructed to have combined storage volume of 567 acre-feet for detention basins along with 17,000 feet of storm drain pipes. The trail and park portion of the detention basins included four miles of trail, 41 shade structures, 22 picnic tables, landscape features, 60 park benches and three pedestrian bridges. The project was completed in March of 2012 with total construction cost of $28.2 million.

Photos 16-18

PROPOSED PROJECTS

In cooperation with the Clark County Regional Flood Control District (CCRFCD), the city anticipates constructing several conveyance systems and water detention basins that are part of the CCRFCD master plan and are an integral part of the valley-wide flood control system. In order to meet the demands placed upon the city's stormwater drainage systems, the Department of Public Works has forecasted projects that are necessary for the expansion and proper operation of the city's stormwater systems. Through the city's 2013-2017 Capital Improvement Plan, anticipated stormwater system projects have been identified in Table 15.

Table 15: Storm Drainage Capital Improvement Projects

Project Title	Estimated Completion Date	Estimated Cost	Funding Source
Angel Park North – Detention Basin	06/30/2015	$9.1 M	CCRFCD
Ann Road Channel West-Rainbow Blvd	06/30/2015	$4.4 M	CCRFCD
Arville Storm Drain	06/30/2016	$281K	CCRFCD
Boulder Highway Sahara Avenue – Mojave to Boulder	06/30/2015	$271K	CCRFCD
Brent Drainage System – Floyd Lamb Park to Durango	06/30/2018	$4.1M	CCRFCD
Brent Drainage System – North and South Environmental Enhancement Area - Floyd Lamb Park to Durango	06/30/2015	$1.9M	CCRFCD
Buckskin Storm Drain	06/30/2015	$363K	CCRFCD
Centennial Parkway Channel	06/30/2018	$9.0M	CCRFCD

West – US95, CC215 to Deer Springs			
Centennial Parkway Channel West – US95, CC215 to Elkhorn	06/30/2018	$3.5M	CCRFCD
Centennial Parkway Channel West – US95, Elkhorn to Durango	06/30/2017	$685K	CCRFCD
Concord Storm Drain	06/30/2015	$481K	CCRFCD Contributions
Drainage Contribution Projects	06/30/2014	$500K	Fund Balance
Flamingo Wash - Boulder Highway North – Main Street	06/30/2014	$285K	CCRFCD
Freeway Channel – Washington – MLK to Rancho	06/30/2016	$8.2M	CCRFCD
Gowan Outfall – El Capitan branch, Lone Mountain to Washburn	06/30/2017	$347K	CCRFCD
Gowan Outfall – Lone Mountain – Rancho to Decatur	06/30/2014	$814K	CCRFCD
Gowan Outfall – Rancho, Craig to Alexander	06/30/2020	$471K	CCRFCD
Las Vegas Wash – Charleston to Cedar	06/30/2015	$40K	CCRFCD
Las Vegas Wash – Decatur & Elkhorn	06/30/2014	$3.9M	CCRFCD
Las Vegas Wash – Grand Teton System	06/30/2015	$15.8M	CCRFCD
Mesquite Storm Drain – Rancho Manor to US95	06/30/2017	$507K	CCRFCD
Nominal Drainage – Unallocated	06/30/2017	$500K	Fund Balance
Oakey – Meadows Storm Drain Design	06/30/2015	$606K	CCRFCD
Oakey – Meadows Strom Drain Phase 2	06/30/2014	$573K	CCRFCD
Oakey – Meadows Strom Drain Phase 3	06/30/2017	$11.8M	CCRFCD
Oakey Storm Drain – Cahlan to Barnard	06/30/2014	$260K	CCRFCD
Owens System (Vegas Dr. Storm Drain) – Michael/Rancho AKA Vegas Dr. Storm Drain Rancho to Shadow Mountain	06/30/2015	$9.9M	CCRFCD
Rancho Road System – Grand Canyon to Hualapai	06/30/2017	$257K	CCRFCD
Rancho System – CC215 to	06/30/2015	$8.5M	CCRFCD

Elkhorn			
Rancho System – Fort Apache to Grand Canyon	06/30/2016	$3.3M	CCRFCD
Sierra Trails Storm Drain - Rainbow to Oakey Detention Basin	06/30/2018	$410K	CCRFCD
Stewart Avenue Storm Drain – Marion Street	06/30/2015	$500K	CCRFCD

FLOOD CONTROL PROGRAMS

The National Flood Insurance Program (NFIP) is administered by the Federal Emergency Management Agency (FEMA), which establishes rules and requirements to deal with assorted issues involving flood insurance and hazard mitigation. All six local governments in Clark County currently participate in NFIP and apply revised uniform regulations for the control of drainage per state statute. Participating in NFIP requires that communities adopt flood hazard maps and flood plain regulations prepared by and in compliance with FEMA.

Initiated in 1990, the Community Rating System (CRS) is a voluntary program that recognizes community flood plan management activities that exceed FEMA requirements. The program objectives are to reward insured residents for their community's continued involvement, while providing an incentive for new flood protection activities. By participating in the program, flood insurance premium rates are reduced, thereby reflecting the reduced flood risk resulting from the community activities and goals of CRS. These goals include: (1) reducing flood losses; (2) facilitating accurate insurance rating; and (3) promoting awareness of flood insurance.

Nationwide, over 22,000 communities participate in NFIP, and nearly 1,273 communities have verified Community Rating System (CRS) Programs. A Class 1 rating requires the most credit points from 18 activities, and therefore gives the greatest premium discount, while a Class 10 identifies a community that does not participate in the CRS and, therefore, receives no discount. The city of Las Vegas holds a rating as a Class 5 community, placing them in the top eight percent (8%) of participating communities across the United States; nationally only 12 communities have a higher rating than the city of Las Vegas.

Role of the city of Las Vegas

The Department of Public Works reviews applications and plans to ensure new development and redevelopment contains infrastructure to control storm flows and integrates with regional flood control systems. Additionally, they manage the National Pollutant Discharge Elimination System (NPDES) program, which implements the 1990 Clean Water Act. The NPDES mandates that plans and programs for stormwater management be developed, adopted, and implemented to assure that municipalities "effectively prohibit nonstormwater discharge into the storm drain and require controls to reduce the discharge of pollutants from stormwater systems to waters of the United States to the maximum extent possible." The Department of Public Works Environmental Division ensures the city meets NPDES requirements.

Funding/Financing

The city has established a five-year capital improvement program for storm drainage projects that account for detention basins as well as collection and runoff systems to alleviate and/or prevent localized flooding.

Table 16: Capital Improvement Plan Expenditures for Flood Water Conveyance Systems

Five-Year Summary	
2013	$32,770,780
2014	$36,139,388
2015	$29,796,557
2016	$10,664,531
2017	$23,007,207
Total	**$132,382,463**

The quarter-cent sales tax is the primary revenue source for Clark County Regional Flood Control (CCRFCD). These funds are applied to projects contained in an approved master plan. The City is the "lead agency" in the design and construction of CCRFCD projects within its hydrographic area; the CCRFCD funds facilities at the regional level. Local flood control funding and priorities as well as development review fall within the purview of the city. The city coordinates its funding needs with those of the CCRFCD based on three levels of analysis:

- Nominal Drainage Projects represent scattered, inexpensive improvements, generally not exceeding $20,000.

- City-funded Flood Control projects target larger projects within planning areas up to two square miles.

Typically, these projects consists of smaller, but more numerous storm drains to safely convey flood waters through city neighborhoods to the Clark County Regional Flood Control master planned facilities. These types of storm drains are not available for Regional Flood Control District funding, but are specifically targeted for local flood control in five-year plans. Regionally funded projects are not funded by the city. These improvements are typically projects funded by the CCRFCD master plan, which affect the city, along with providing the large outfalls for the smaller city funded storm drains.

UTILITIES

The city of Las Vegas relies on the continual supply of affordable energy resources and telecommunications from private companies to maintain the standard of living to which our community is accustomed. The utility infrastructure continues to expand with growth and new development in the city and surrounding areas. Utilities such as power, gas, water, cable, and telecommunications within the city of Las Vegas are all supplied by either private or quasi-

public companies. The city of Las Vegas does not own the rights to any of these utilities, the city possesses franchise agreements for use of city rights-of way.

The city currently has franchise agreements with utility companies such as Nevada Power, Southwest Gas, Cox Communications, Las Vegas Valley Water District, and several telecommunication and cable companies to utilize city-owned right-of-way and easements located within the city of Las Vegas. The exact duration of the agreements vary, but normally have up to 15-year duration. Once an agreement is established, the city grants the franchisee the right to rent, use, and occupy right-of-way within the corporate limits of the city. The utility company must comply with applicable ordinances, rules, regulations, specifications, and be granted the appropriate permits and approvals prior to installing equipment within city right-of-way. In fiscal year 2011-2012, franchise fees collected for utilities totaled approximately $29 million, as illustrated in Table 17.

Table 17: City of Las Vegas Franchise Fees Collected – Fiscal Year 2011-2012

Franchise	**Fees Collected**
Gas utility	$5,700,000
Electric utility	$27.970,000
Sanitation utility	$3,911,775
Telephone utility	$9,000,000
Garbage collection	$3,100,000
Cable Television	$6,726,600
Ambulance	$402,919
Total	**$28,841,294**

Most utilities are located underground within the public right-of-way with the exception of various utility boxes (electrical, gas, water, phone, cable, mail) and overhead power transmission lines. With the exception of utility transmission line requests of 15,000 volts (15 kv) or larger (UMC 19.12), utilities are not required to go through a public hearing. At the 2013 legislative session, AB 239 passed which reduces a local entity's oversight on the location of utility transmission lines. The bill directs local entity's to approve all transmission lines located within an established utility corridor administratively, and all others through the approval of a Special Use Permit by the Planning Commission. The applicant may then appeal the Planning Commission's decision to the Public Utilities Commission of Nevada if the applicant believes that the Commission did not act in a timely manner, or if they feel aggrieved by conditions imposed with the use permit. Map 5 depicts the location of above transmission line corridors.

RIGHTS OF WAY/EASEMENTS

Right-of-way is the total width of the linear segment of land required for road paving and for placement of future utilities and infrastructure (gas, water, telephone, and electric facilities). The right-of-way also includes landscaping, sidewalks, and curb and gutter. Arterial roads (primary thoroughfares), in the city of Las Vegas, are generally located at one-mile intervals along

selection lines and major collector roads (secondary thoroughfares) are traditionally located at half-mile intervals along quarter-section lines.

The subdivision and site development plan review process provides for the dedication of right-of-way for all street system improvements by property owners. The property owner is responsible for "half-street" improvements of master planned, arterial streets that are located immediately adjacent to a proposed development. This includes the construction of travel lanes, parking lanes, sidewalks, curbs, gutters, and streetlights. Additionally, developers are required to construct, at minimum, 32-foot, two-way, paved roadways to link subdivisions to existing roadways if linkage is not already available per Regional Transportation Commission Uniform Standard Drawing 209 and 209.1 to comply with EPA requirements related to PM10 non-attainment areas for dust and other particulate matter. An easement is a right granted from a property owner to another for a portion of the owner's land for a specific use.

An easement is a right granted from a property owner to another for a portion of the owner's land for a specific use. Utility easements (gas, electric, sewer, water, telephone, etc) are strips of land used by utility companies for the purpose of installing and maintaining utility lines and structures. As with utility easements, storm drain easements are permanent and run with the land. Property designed as an easement still belongs to the property owner; however, the owner gives up certain rights, such as the right to build permanent structures (additions, decks, fences, etc.) within the easement, thereby permitting utility companies to have the right to access that portion of the land designated as a utility easement.

Role of the city of Las Vegas

The city coordinates with private utility companies to ensure the adequate provision of electricity, natural gas, water, and telecommunication infrastructure to existing and new development. The Public Works Department inspects work performed by utility companies to ensure compliance with Public Utilities Commission of Nevada rules and regulations, as well as the city's franchise agreements with the utility companies.

IMPLEMENTATION

Water reclamation/treatment, sanitary sewer planning, and storm water management fall under the purview of the Public Works Department. The recommendations below were developed from an analysis detailed in previous sections of this element and are intended to be comprehensive, taking into account the public service and facility needs of residents and visitors, current conditions, and future service and facility expenditures. As a vision of the future, it is recognized that the Master Plan must be flexible and adjustments made periodically to adapt to changing political, economic, and social conditions. Recommendations relating to services and facilities are provided below.

PF1. Align plans and policies to support public services and facilities to ensure that all stormwater conveyance systems, structures, and maintenance practices are consistent with the CCRFD 2008 Master Plan Update, federal mandates and NPDES Permit standards.

PF2. Incorporate those sections of the Clark County Regional Flood Control District (CCRFCD) Master Plan update into the city of Las Vegas Central and Northwest Neighborhood Flood Control Master Plans such that they complement each other and they reflect current drainage conditions and future facility locations.

PF3. Align local and regional practices with current NDEP water quality directives by adopting a revised stormwater management master plan that reflects the best management practices (BMPs) for a construction site and post construction program to reduce non-point source pollution as mandated by the Environmental Protection Agency and the Nevada Department of Environmental Protection in order for the city to maintain its Municipal Separate Storm Sewer System (MS4) Permit.

PF4. Provide a user-friendly document to guide staff, developers, and other entities through the MS4 permit process within the city of Las Vegas.

PF6. Title 19 to require compliance with the requirements of NRS 278.145.

PF7. Title 19 to require a special use permit for utility transmission lines and natural gas distribution lines not located within the public right-of-way

PF8. Develop a long-term and all-inclusive master plan to eliminate aerial utilities by relocating them underground within the city of Las Vegas, especially within the Downtown Centennial Plan area.

PF9. The city shall coordinate utility installations within the public right-of-way during pavement and utility rehabilitation projects and when new rights-of-way are developed.

PF10. Develop and adopt a master plan to relocate existing overhead utilities underground and amend Title 19 to require infill and redevelopment projects to relocate overhead utilities underground.

PF11. Develop methods to screen or locate other utility appurtenances underground or within an alley.

PF12. Continue to support and participate in public services and facilities planning through working groups as identified in Appendix 2 and committee membership.

PF13. The city comments on issues regarding public services and facilities through its membership on several committees and active participation in working groups. Strategies addressing key issues and concerns pertaining to water reclamation, treatment facilities, sanitary and storm drain systems, and utilities are paramount to shaping the city's future.

PF14. Cooperate with the SNWA, local entities, and developers to improve and/or expand water treatment facilities, sanitary and storm drain systems, and utility projects.

PF15. Support and promote the Stormwater Stakeholder Working Group initiatives, thereby ensuring recommended NDEP program enhancements are feasible, executable, and supported by the community.

PF16. Conduct site specific cost/benefit analysis that considers environmental, community, economic and financial factors associated with expanding the use of reclaimed water at new public facilities within the city of Las Vegas.

PF17. Maximize reclaimed water use by increasing the capacity and number of reclaimed water distribution systems on a community basis, instead of an individual property basis.

PF18. Provide reclaimed water for irrigation to public facilities such as parks and golf courses when a site-specific cost benefit analysis determines that it is the most financially feasible alternative.

PF19. Continue to coordinate the planning and development and development of water distribution facilities with other agencies.

PF20. Implement improvements to the sanitary sewer system as identified in the Wastewater Collection System Master Plan Update which will increase the capacity to deliver more wastewater to the existing water reclamation facilities, in order to provide an increased supply of reclaimed water for irrigation uses and an increased supply of reclaimed water to be returned to Lake Mead via return flow credits.

PF21. Maximize the amount of residential indoor wastewater that is reclaimed on a community basis by increasing the number of properties serviced by a community wastewater collection system (sanitary sewer) and reducing the number of properties serviced by individual sewage disposal systems (septic tanks). To achieve the desired results, the city will continue to enforce applicable sections of the Nevada Administrative Code as deemed appropriate by the Department of Public Works.

PF22. Maximize the amount of commercial/industrial indoor wastewater that is reclaimed on a community basis by supporting requirements for all commercial/industrial development to connect to the sanitary sewer system.

PUBLIC BUILDINGS ELEMENT

Public Buildings

The purpose of the Public Buildings section of the Public Facilities and Services Element is to inventory and assess the present and future needs of public buildings and facilities given various population trends, level of service goals, and administrative space needs. Several aspects of city buildings and facilities are analyzed and recommendations are provided based on the future needs and service requirements of particular city functions.

Design

The design concepts of public buildings are intended to exemplify the desired architectural elements within the community. Public buildings with civic stature, quality materials, and prominent settings project a sense of permanence and human scale that express the dignity and importance of public institutions. The designs of existing community buildings vary from Neo-Classical and Mission style cultural facilities to Contemporary and Post Modern police stations. As a result of this variety of styles, all public building projects require a case by case architectural review rather than adopting one generic architectural standard to encompass all public projects. Aside from meeting minimum zoning requirements (from which the City is typically exempt), the only citywide standards for public building design and landscaping are contained within the Public Works Capital Project Management Division's "Design Standards for Parks, Buildings, & Parking Facilities" document. While this document has design standards concerning matters varying from finish materials to flooring, it does not address aesthetic nuances of buildings other than to restrict inappropriate building materials. Rather than dictating architectural style, these standards are intended to provide for the evaluation of operating and material costs, replacement part stocking, insuring that features are included beyond what is required by existing and potential future building codes, and to insure safe, low maintenance, and sustainable public buildings.

In addition to the baseline standards noted above, the City adopted a Green Building Program resolution in 2006 (discussed in detail below) that will affect the way public buildings are designed. The City of Las Vegas expects all new projects to demonstrate innovative design that achieves increased levels of environmental sustainability, in addition to maintaining all standards currently in place.

Sustainability in Public Buildings

Sustainability is a way to ensure that future generations enjoy the same quality of life as is presently enjoyed. The City's Sustainability Initiative was created to support sustainable practices for energy, water, waste, and transportation in the City of Las Vegas and the region. Improvements that the City has taken already have increased the City's efficiency and productivity, and have improved quality of life better by reducing long-term costs and providing economic and environmental benefits.

The Las Vegas City Council has adopted numerous supporting policies, beginning with the 2006 U.S. Mayor's Climate Protection Resolution and Green Building Resolution, and culminating in the 2008 Sustainable Energy Strategy that set sustainability targets for City operations, City codes, and the community. Aided in part by leveraged investments from City funds and the American Recovery and Reinvestment Act the Office of Sustainability, multiple departments, contractors, consultants, and the community the City have achieved substantial cost savings and resource conservation:

• More than 5.5 megawatts of renewable energy, including creatively designed solar covered parking structures at 30 City facilities
• Energy improvements to more than 1 million square feet of public buildings

• Introduction of recycling at all parks and City facilities
• Over eight acres of water saving turf conversions

As a result of these improvements, the City has reduced annual energy consumption by more than 15%, saved 400 million gallons of water since 2008, increased recycling rates to more than 50%, and saved more than $9.6 million in energy costs since 2010. The cost savings are being reinvested into additional energy, water, and recycling upgrades to City.

One way the City can ensure sustainability can continue to be integrated into City operations is by incorporating it into the design of public facilities and buildings. "Green building" is a term referring to the concepts and approaches to the design and construction of buildings and facilities to utilize and conserve energy, water, and material resources more efficiently. Green buildings typically follow guidelines that:

- Consider of the impact of buildings and development projects on the local, regional, and global environment;
- Use natural and manmade resources efficiently;
- Protect the surrounding environment
- Conserve and reuse water;
- Maximize the use of local resources;
- Optimize energy performance with efficient equipment and systems;
- Incorporate natural daylighting and ventilation; and
- Minimize construction waste

Green building practices can ease the impact building construction and maintenance have on the natural environment, improve work and learning environments for occupants, and reduce energy consumption costs.

The United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) program, is a point based green building rating system a national standard for measuring a project's sustainability with regard to design, construction, and operation. Points are given for green practices such as using less water and energy or providing natural daylight and views. Based on a building's total number of points, it will receive one of four ratings: Certified, Silver, Gold, or Platinum. While other similar rating systems exist, LEED is among the more nationally recognized green building system.

To show its commitment to sustainability and green building design and construction, the Las Vegas City Council approved the Green Building Program resolution in 2006. The resolution states that the City will "use its best efforts to ensure that all public buildings built by and for the City are built to USGBC's LEED-Silver level or other equivalent standard, as identified by the Director of the Nevada State Office of Energy." In addition, the City Council authorized the City Manager to dedicate a portion of franchise fees collected from providers of electricity, gas, and solid waste collection services (up to $2,500,000) "to fund any increased costs associated with the construction of new public buildings, costs for the renovation or maintenance of existing facilities to LEED-Silver level or other equivalent standard…." Since the adoption of the resolution, the City has built or renovated approximately twenty buildings and facilities, fire

stations, and community centers to LEED and other green standards, representing more than 1 million square feet. Among these are:

- City Hall (LEED Gold)
- Fire Station 106 (LEED Gold)
- Fire Station 107 (LEED Gold)
- The National Museum of Organized Crime and Law Enforcement (Mob) Museum (LEED Silver)
- The Smith Center for the Performing Arts (LEED Silver)
- Fire Station 6 (not certified, but built to LEED Silver)

Symphony Park has also been constructed to LEED Neighborhood Development and LEED New Construction standards. LEED certification of Fire Station 108 and the historic Westside School is expected in 2014.

For renovations of existing buildings, energy audits can be effective tools to evaluate energy consumption and recommend energy conservation measures to improve occupant comfort and decrease electricity, natural gas, and water consumption. Energy audits have been conducted since 2010 to study energy efficiency, lighting, windows, heating, cooling and ventilation, mechanical equipment, pool pumps, and other systems at approximately 20 City facilities where improvements have subsequently been made. In addition, solar panels have been installed at 30 facilities including parks, fire stations, community centers, and the wastewater treatment plant, totaling 5.5 megawatts of solar power with an additional 250 kilowatts under development. While renewable energy and energy efficient building practices typically requires large up-front capital investments, the savings from many energy conservation measures typically pay for themselves through reduced utility costs over an extended period of time.

Utility costs can vary over the years, requiring effective management and monitoring of energy and water consumption. The Office of Sustainability tracks the City's energy, water and waste consumption by monitoring and managing utility data and building management software applications, and is currently working with the Department of Finance to develop a more robust utility management database. These applications allow the City to establish consumption metrics at any city facility or site and compare them to past and current performance in order to set strategic conservation goals. The Office of Sustainability uses utility data to benchmark energy and water use through the ENERGY STAR Portfolio Manager Software application. This application allows the City to measure the energy intensity from City facilities and compare their energy use to national average. Buildings that perform efficiently will have higher scores and may ultimately be eligible for a certification.

NV Energy's addition of smart meters to buildings across the State is an effort to create a smart grid that will allow entities such as the City to monitor daily energy usage and participate in demand management programs and dynamic (tiered) pricing. Smart meters communicate with the utility on 15 minute increments to allow building users to observe energy patterns and billing in an effort to make them aware of their consumption and to reduce their overall energy costs. The addition of a smart grid within Las Vegas will allow the utility to improve its reliability and capacity and reduce the need to build new generation facilities. As a way to reduce costs on an

annual basis, the Office of Sustainability has been conducting a rate analysis to better understand utility billing mechanisms, and how different rate classes may impact annual utility costs. This analysis requires ongoing evaluation to get a better understanding of cost savings; the analysis should continue to be conducted on future utility and energy projects in all departments in order to optimize the return on investments.

More than 70% of the City's water consumption at City facilities and public buildings is for irrigation of exterior landscaping. To provide guidance on resource-efficient planting, the Southern Nevada Water Authority (SNWA) has introduced Water Smart standards that can be applied to all types of properties. This program includes guidelines for reducing water usage by incorporating new technology into both new and existing buildings. The Southern Nevada Regional Planning Coalition (SNRPC) has also published a regional plant list that identifies plants and shrubs that are best suited for our desert climate. By implementing these standards, the City has the opportunity to set the community-wide standard for water conservation and drought tolerant landscaping. The City has reduced more than 8 acres of turf at City facilities and has incorporated xeriscaping into new building and facility design or upgraded to xeric landscaping. Inside buildings, indoor water saving measures should be implemented, including water reuse, efficient coling systems, low flow fixtures, and employee education programs about these measures.

Across all City facilities, the City recycles approximately half of all materials that are disposed of and has optimized the collection of waste and recyclables, saving the City more than $300,000 annually. Recycling and composting should continue to be implemented at all buildings and facilities. Single stream recycling, where recyclable materials and comingled and disposed of, has the advantage of being easy for employees and is used throughout private gaming facilities that focus on sustainability.

Historic Buildings

One important exception to the typical process for funding public buildings is designated historic structures. The Mob Museum, the Fifth Street School, and the Westside School have been officially designated as historic, and are listed on either or all of the local, state, and National Registers of Historic Places. Listing a property as such can affect how the city uses and programs the building. For example, if the building is listed on the city of Las Vegas Historic Property Register, any work that requires a permit must be reviewed by the Historic Preservation Commission. In addition, projects that involve federal funds (as many renovations to historic properties do) are subject to environmental review to determine the impact on historic properties. This can add cost to a project and if it is determined that the project will have a negative effect, mitigation efforts must be considered in the budget process.

Historic buildings not only have intrinsic value as unique architectural gems in the community, but are well-documented contributors to economic development. For example, preservation projects can help create jobs, not only in construction, but also in the heritage tourism and hospitality industries. Preservation of public buildings also supports the city's commitment to conserving public money and encouraging sustainability initiatives by reducing the demand for new infrastructure and raw materials required for new construction. Preserving historic

buildings by making energy upgrades can also dramatically reduce an older building's energy and water usage, saving the city money and serving as an example to the community

Building Types

There are no formal definitions or criteria given to the various buildings types that the city utilizes, but for the purpose of this document, the following meanings will be assigned to the terms listed below:

- Cultural – A building used primarily for the display of visual or performing arts, literature, history, science, or other subject of local, regional, or national importance. Additionally, these buildings may be used for educating the public on the aforementioned subjects through classes, seminars, workshops, etc.

- Administrative – A building used primarily as office space for the execution of various City functions.

- Warehouse – A building used primarily for the storage of vehicles, supplies, or other equipment.

- Detention and Enforcement – A building used primarily for the detaining of criminals and associated activities thereof.

- Fire – A building providing fire protective services twenty-four hours a day.

- Other – A building that does not fit into another category. Often, these buildings are accessory to the uses listed above.

EXISTING CONDITIONS AND FUTURE NEEDS ANALYSIS

Cultural Facilities

Public buildings that are home to functions such as art centers, museums, community cultural centers, performing arts spaces, and libraries are the types of buildings that comprise the cultural category. One of the City Council's visioning priorities for Las Vegas includes *Community Pride*, which encourages public art and other cultural opportunities that provide a source of community pride and enrichment. Cultural buildings play an important role in community life and have been a valued component of Las Vegas for many years. This section will identify existing and proposed cultural buildings within the city of Las Vegas.

New and Existing Cultural Facilities

Since 2008, the City has been able to add several significant cultural facilities for the residents and visitors of the city of Las Vegas. Centrally located in downtown's 61-acre Symphony Park, the Smith Center for the Performing Arts opened its doors in 2012 and fulfilled a long-term need for a world class performing arts facility within the Las Vegas valley. The five-acre cultural

campus features three performance spaces: the 2,050-seat main hall, a 3,700 square-foot Cabaret Jazz and the 3,000 square-foot Troesh Studio Theatre. In addition, a park, which is privately owned but accessible to the public, can be used for outdoor concerts, festivals, community events and private gatherings.

In 2013, the Discovery Children's Museum opened its doors adjacent to The Smith Center in Symphony Park. Once located within the Reed Whipple Cultural Center, the new museum helps redefine Las Vegas as a city that values culture and the arts, an urban lifestyle and its children. The museum is located within a 58,000-square-foot building which is home to nine-themed exhibition halls totaling 26,000 square feet of interactive hands-on core exhibits. The new location is a safe, easily accessible, family-oriented and energetic educational destination that offers visitors extraordinary learning experiences and enhanced school, public and extended programs.

In 2012, the National Museum of Organized Crime and Law Enforcement opened in downtown Las Vegas. Informally known as "Mob Museum," the 41,000 square-foot building includes approximately 17,000 square feet of exhibition space on three floors. The Museum is housed within the historic former federal courthouse and U.S. Post Office.

Just north of downtown along both sides of Las Vegas Boulevard, there are numerous public buildings containing civic and cultural uses which are located in an area known as the Cultural Corridor. Currently, the corridor contains the Cashman Field Center, Las Vegas Library, Old Las Vegas Mormon Fort and State Historic Park, Las Vegas Natural History Museum, and the Neon Museum.

The city of Las Vegas currently operates, is a partner with, or leases land to 17 museums and facilities that house performing and visual arts. Performing and visual arts is a term that encompasses performances, art exhibits, workshops, dance studios, art classes, festivals, and special events. Map 4 and Table 18 displays the inventory of existing museums and performing arts centers within the city of Las Vegas.

Table 18: Existing Cultural Facilities

Existing Museums, Performing, and Visual Arts Facilities				
Name	**Location**	**Land Ownership**	**Const. Year**	**Facility Size (S.F.)**
West Las Vegas Arts Center	947 W. Lake Mead Ave.	CLV	1994	7,601
Natural History Museum	900 N. Las Vegas Blvd.	CLV – Leased to Natural History Museum	1963	38,080
Lied Discovery Children's Museum	360 Promenade Place.	CLV	2013	58,000
Neon Museum / Boneyard	731 N. 9th St.	CLV	N/A	2.53 acres

Park				
Lorenzi Park Community Exhibition Studio	720 Twin Lakes Dr.	CLV	1950	6,642
Hills Park Outdoor Amphitheatre	9100 Hillpointe Rd	CLV	1991	Lawn Seating for 2,500
Reed Whipple Cultural Center	821 N. Las Vegas Blvd.	CLV	1963	32,510
Sammy Davis Jr. Festival Plaza	720 Twin Lakes Dr.	CLV	1951	6,346
LVA Lowden Theatre	315 S. 7th St.	CCSD	2004	40,000
Cashman Center Theater	850 N. Las Vegas Blvd	LVCA	1983	39,500 SF
Historic 5th Street School	401 S. 4th Street	CLV	1936	
Springs Preserve Amphitheater	333 S Valley View Dr	LVVWD	2007	Seating for 2,000
Old Las Vegas Mormon Fort	500 E Washington Ave	State of Nevada	Renovated in 1995	N/A
Charleston Heights Art Center	800 S. Brush Street	CLV	1968	Seating up to 400
Centennial Hills Amphitheater	7107 N Buffalo Dr.	CLV	2008	Lawn Seating for 3,000
Boulder Plaza	1047 S. Main St	CLV	2010	7,140 SF

Facility Needs

One of the hallmarks of a world-class city is the extent of its opportunities for cultural expressions. While the city of Las Vegas has made great strides in recent years regarding cultural facilities, the 2020 Master Plan policy document indicates that the city must continue to expand its cultural role if it intends to aspire to "world-class" status. Cultural enrichment facilities should be available to all citizens and visitors of Las Vegas, and they should be designed to bring cultural awareness and pride to the city.

Desired cultural facilities identified in the 2020 Master Plan policy document include a performing arts center, a major sports entertainment center, museums, and venues for public art and culture.

Proposed Facilities

Proposed cultural facilities are shown on the following per the 2013-2017 CIP plan are identified on Table 18.

Table 18: Proposed Cultural Facilities

Proposed Cultural Facilities					
Proposed Facility	**Budget Year**	**Estimated Square-footage**	**Location**	**Funding Source**	**Estimated Completion Date**
Neon Museum Visitor Center	2013-2014	TBD	SE Corner of McWilliams Ave and Las Vegas Blvd	Grants	2014

There is one funded cultural facility proposed to be built into the existing Neon Museum. The project consists of renovating the old La Concha motel structure into a new visitor's center for the museum.

While not a capital improvement project, The Las Vegas Shakespeare Company is currently sponsoring a capital fund drive for a $45 million renovation of the Reed Whipple Cultural Center. Located in the Cultural Corridor, the expansion/revitalization plans for the 50-year-old structure include a 499-seat theatre, a bar and lounge, a communal terrace and gardens and the return of the popular Rosemary's Café.

Libraries

Through a cooperative effort, Las Vegas and Clark County have established libraries throughout the Las Vegas Valley. This combined effort is called the Las Vegas-Clark County Library District. All eight libraries in the city are designed to host a variety of programs including art classes, concerts, theatre, author appearances, lecture series, book discussions, and workshops. Libraries have exhibition spaces that display the work of local artists. Map 7 and Table 19 indicates the eight libraries located within the city limits of Las Vegas, excluding all others in Clark County.

Table 19: Existing city of Las Vegas Libraries

Existing Libraries Within city of Las Vegas				
Name	**Location**	**Land Ownership**	**Const. Year**	**Facility Size (S.F.)**
Las Vegas Library	833 Las Vegas Blvd North	CLV	1990	100,400
Rainbow Library	3150 N. Buffalo Dr.	CLV	1994	25,000
Meadows Library	251 W. Boston Ave.	CLV	2010	813
Centennial Hills Library	6711 N. Buffalo Dr.	CLV	2009	32,431
Sahara West Library	9600 West Sahara Ave.	Clark County	1997	122,000

Summerlin Library	1771 Inner Circle Dr.	Clark County	1993	40,195
West Charleston Library	6301 W. Charleston Blvd	University Board of Regents	1993	38,900
West Las Vegas Library	951 W. Lake Mead Blvd.	CLV	1989	38,866
Totals				**398,605**

The Centennial Hills and Meadows Libraries were the first new facilities to be funded in the City since the Sahara West Library opened in 1997. The Centennial Hills Library serves the Centennial Hills Sector and was opened in 2009. The 32,431 square-foot LEED gold certified facility is equipped with state of the art technology and free Wi-Fi. The Meadows Library is an 813 square-foot facility located inside the Stupak Community Center in downtown Las Vegas. The center opened in 2010 and provides books, DVD's and various study materials in both English and Spanish. There are no other library facilities planned at this time.

Administrative and Warehouse

Many of the City's employees use public buildings in some capacity, either as office, warehousing, or other space. Public Works and the Operations and Maintenance departments are directly responsible for constructing and maintaining these buildings. They also set standards for the space needs of employees.

The City's existing building stock is currently maintained by the Operations and Maintenance Department. Operations and Maintenance is responsible for routine maintenance of public buildings, renovation work, and general upkeep of the building stock. In addition to facilities maintenance, Operations and Maintenance handles custodial services, remodeling, and real estate and utilities. A list of the City's real estate assets is kept by Operations and Maintenance, and this list includes all types of public buildings ranging from recreation centers to modular units to park restrooms.

The construction of new public buildings within the City is overseen by the Department of Public Works Capital Project Management (CPM) division. CMP manages the design and construction of public buildings, including pre-planning conceptual design, design development, project management and construction support.

Existing Facilities

The city of Las Vegas currently has approximately 632,562 square feet of administrative and warehouse space located throughout the city. The new City Hall complex and the Development Services Center are the two largest administrative buildings in the city's inventory. It is anticipated that these two new buildings in the City's inventory will fulfill the City's office space needs for the foreseeable future. The West Service Center and the City East Maintenance and Storage Yard are the two largest warehouse facilities and store or house many of the city's vehicles, equipment, and repair facilities. The city's state of the art Emergency Management

Facility is also located at the West Service Center. Map 8 and Table 19 identifies the City's administrative and warehousing facilities.

Table 19: Existing Administrative/Warehouse Facilities

Existing Administrative and Warehouse Facilities			
Facility	**Address**	**Square-footage**	**Type**
City Hall	495 S. Main St.	268,588	Admin
Development Services Center	333 N. Rancho Drive	144,411	Admin
Traffic Signal Repair	2804 E. Charleston Blvd.	3,343	Warehouse
7th Street building and Modular	416 N. 7th St	13,342	Admin
East Maintenance and Storage Yard			
Facilities Management /TEFO	3104 E. Bonanza Rd.	16,034	Admin
Parks & Open Spaces Admin	3124 E. Bonanza Rd.	2,880	Admin
Fire Equipment Services Center	3140 E. Bonanza Rd.	12,563	Warehouse
Fire Warehouse	3116 E. Bonanza Rd.	3,186	Warehouse
Carpenter/Paint Shop	3108 E. Bonanza Rd.	10,000	Warehouse
Maintenance Storage Bldg. (Million $ Shed)	3112 E. Bonanza Rd.	2,400	Warehouse
T/E Supply Building	3160 E. Bonanza Rd.	1,200	Warehouse
Vehicle Services - Bldg B	3128 E. Bonanza Rd.	15,946	Warehouse
Vehicle Services - Modular	3128 E. Bonanza Rd.	160	Warehouse
Garage & Storage	3128 E. Bonanza Rd.	1,044	Warehouse
East Yard Transfer Station	3144 E. Bonanza Rd.	12,397	Warehouse
East Satellite Yard			
Rapid Response Trailer	4361 Vegas Dr	720	Admin
Streets Modular	4349 Vegas Dr	1,200	Admin
Vehicle Services Satellite Garage	4357 Vegas Dr	3,261	Warehouse
West Service Center			
Emergency Management	7751 Sauer	8,394	Admin

Building			
TEM/IOT Lab	3001 Ronemus Dr	12,521	Admin
Field Operations	2875 Ronemus Dr	12,690	Admin
Field Operations-Maintenance	2880 Ronemus Dr	5,567	Warehouse
Records Storage Facility	2825 Ronemus Dr	27,282	Warehouse
Sanitation Maintenance	2900 Ronemus Dr	4,238	Warehouse
IT Addition	2900 Ronemus Dr	1,075	Admin
Welding Shop	2900 Ronemus Dr	2,052	Warehouse
TEM Maintenance	2985 Ronemus Dr	4,737	Warehouse
Transfer Station	2870 Ronemus Dr	18,000	Warehouse
Vehicle Services	2950 Ronemus Dr	14,605	Warehouse
Totals		632,562	

Proposed Facilities

With the completion of the new city hall complex and the Development Services Center tenant improvements, there are few new general government capital improvement projects identified in the 2013-2017 Capital Improvement Plan that relate to new facilities or buildings. Only one project is identified within the 2013-2017 Capital Improvement Plan.

Table 20: Proposed Administrative/Warehousing Facilities

Proposed Administrative Facilities					
Proposed Facility	**Budget Year**	**Estimated Square-footage**	**Location**	**Funding Source**	**Estimated Completion Date**
Overflow DSC Parking Lot	2013	117 spaces	Dike and Bonanza	Fund Balance	2013

Detention and Enforcement

A public building used as a detention center houses people charged with criminal offenses who are awaiting trial, who have been sentenced in court, or who have been sentenced in family court. Other buildings in this category are used as City Marshall and Animal Control Facilities. This section identifies and locates each public building used for detention purposes within the Las Vegas city limits. Detention buildings play an important role in the overall safety of Las Vegas citizens. The Detention and Enforcement Department forges working partnerships with the local community and other public safety agencies to reduce the growth of the offender population and strives for excellence with a highly trained, ethical and dynamic work force.

Existing Buildings

The Detention and Enforcement Department consists of three divisions: Detention Center Division, Field Services Division, and Support Services Division. The Detention Services Division is tasked primarily with detaining offenders and running the day-to-day operations of the custody units. The Field Services Division is the law enforcement branch of the department and is responsible for the maintenance and deployment of the City Marshal, Animal Control, and Parking Enforcement workforce. The Support Services Division specializes in departmental administrative functions, control center operations, and staff training and education. Detention and Enforcement personnel occupy various administrative buildings and custody units located at the northeast corner of Stewart Avenue and Mojave Road. Map 9 and Table 20 identifies the existing city of Las Vegas Detention and Enforcement facilities.

Table 20: Existing Detention and Enforcing Facilities

Existing Detention and Enforcement Facilities		
Facility	**Address**	**Total Bldg. SF**
Administration Building	3300 E. Stewart Ave	7,760
Briefing and Lockers	3150 E. Stewart Ave	7,000
Culinary	3300 E. Stewart Ave	7,817
Field Services	3200 E. Stewart Ave	1,282
Housing Unit 1&2	3300 E. Stewart Ave	20,000
Housing Unit 3&4	3300 E. Stewart Ave	20,000
Housing Unit 5&6	3300 E. Stewart Ave	33,223
Housing Unit 7&8	3300 E. Stewart Ave	12,504
Visitation/Programs	3300 E. Stewart Ave	7,076
Lockers/Gym	417&419 N. 7th St.	2,957
D&E Lock Shop	143 N. 7th St	1,440
Northwest Marshal Substation	6841 Lone Mountain Rd	4,411
Totals		**125,470**

Proposed D&E Facilities

In 2011, the cities of North Las Vegas and Las Vegas formed a partnership to house inmates of both entities within the City's detention facilities. This mutually beneficial relationship reduces costs for the city of North Las Vegas while providing revenue for the city of Las Vegas. While this relationship has worked well, it is important that the City continually monitor space needs in the coming years. As of the current 2013-2017 Capital Improvement Program, there are no new Detention and Enforcement buildings scheduled to be constructed.

The city of Las Vegas, in cooperation with other local agencies and a private vender, operates a regional animal shelter that is located on city-owned land. The long term master plan for the facility has identified a need for upgrades to maintain quality services while maximizing the lifespan of the existing buildings. It has been determined that the City's share for the proposed upgrades equates to $3 million. Recognizing funding limitations, the project is being approached in phases. While the priorities for the project have not been identified at this time, the Capital

Improving Plan has allocated $1 million for the 2013-2014 year with a re-evaluation of funding feasibility for each of the next two years for future facility upgrades.

Table 21: Proposed Detention and Enforcing Facilities

Proposed Detention and Enforcement Facilities				
Project	**Budget Year**	**Estimated Square-footage**	**Funding Source**	**Estimated Completion Date**
Animal Shelter Retrofit Phase I	2013-14	N/A	Fund Balance	2015

Fire and Rescue Department

The Las Vegas Fire and Rescue department is comprised of four divisions: Administration, Emergency Services, Fire Prevention, and Support Services. These divisions are responsible for planning and programming for fire prevention and life safety, maintaining fire safety standards, fighting fires and responding to emergencies, mitigating hazardous materials releases, and investigating fire cause and origin. The Department is the primary provider of prehospital emergency medical services, responds to trapped victims, and staffs the only FBI certified bomb squad in southern Nevada.

The Fire and Rescue Department has 670 authorized employees who work in a variety of capacities and locations. Occupations range from firefighters and emergency medical technicians to fire prevention inspectors and communication specialists. Currently, Fire and Rescue employees are located within nineteen fire stations, two maintenance buildings, one training center, and one administrative building within the city of Las Vegas. The following table identifies the location and type of each fire facility:

Table 22: Existing Fire and Rescue Facilities

Existing Fire and Rescue Facilities		
Facility	**Address**	**Planning Sector**
Fire Station 1 and Fire Administration	500 N Casino Center Blvd	Southeast Sector
Fire Station 2	900 S Durango Dr	Southwest Sector
Fire Station 3	2645 W Washington Av	Southeast Sector
Fire Station 4	421 S 15th St	Southeast Sector
Fire Station 5	1020 Hinson St	Southeast Sector
Fire Station 6	1680 South Torrey Pines Rd	Southeast Sector
Fire Station 7	10101 Banburry Cross Dr	Southwest

		Sector
Fire Station 8	805 N Mojave Rd	Southeast Sector
Fire Station 9	4747 N Rainbow Blvd	Centennial Hills
Fire Station 10	1501 S Martin L King Blvd	Southeast Sector
Fire Station 41	6989 N Buffalo Dr	Centennial Hills
Fire Station 42	7331 W Cheyenne Av	Southwest Sector
Fire Station 43	6420 Smoke Ranch Rd	Southwest Sector
Fire Station 44	7701 W Washington Av	Southwest Sector
Fire Station 45	3821 N Fort Apache Rd	Centennial Hills
Fire Station 47	91 Pine Ridge	Southwest
Fire Station 48	9133 W. Elkhorn Rd	Centennial Hills
Support Station 102 (Fire Investigation)	633 N. Mojave	Southeast Sector
Support Station 103 (Warehouse)	190 Upland Blvd	Southeast Sector
Fire Station 106	1888 Stella Lake Dr	Southeast Sector
Fire Station 107	9398 Sundial Dr	Southwest Sector
Fire Station 108	4555 E. Bonanza Rd.	Southeast
Fire Training Center	633 N Mojave Rd	Southeast Sector
Fire Equipment Service Center	3140 E Bonanza Rd	Southeast Sector
Fire Warehouse	3116 E Bonanza Rd	Southeast Sector

The city of Las Vegas has opened four new fire stations since 2008. These new stations include Fire Station 6, 48, 106 and 107. Fire Station 108 is expected to open in August of 2014. The location of each fire station can be viewed on Map 10. In a unique partnership with the College of Southern Nevada (CSN), the Fire Department was able to build Fire Station 6 on its West Charleston campus, which serves as a teaching campus for the college's fire science and EMT students. The four-bay 10,000 square-foot station provides fire coverage in an area with typically high call volumes without the city having to expend money on the purchase of property.

Facility Needs

The Las Vegas Fire and Rescue Department addresses community risk and strives to meet community expectations by providing the best possible customer service. Two established standards of the Department are to maintain accredited agency status through the Commission on

Fire Accreditation International (CFAI) and an Insurance Service Office (ISO) Class One Public Protection Classification (PPC).

Fire Service Accreditation is a comprehensive self-assessment process that requires Las Vegas Fire & Rescue examine past, current, and future service levels and compare them to industry best practices. As of November 2013, there were 187 accredited fire departments worldwide. The ISO collects information on municipal fire-protection efforts in communities throughout the United States and assigns a PPC from one to ten. Class One represents exemplary public protection and Class Ten indicates that the area's fire-suppression program doesn't meet ISO's minimum criteria. In an evaluation of 49,010 fire departments nationwide, the city of Las Vegas was one of only 60 cities receiving a Class One designation.

The Las Vegas Fire and Rescue Department has established benchmark performance expectations levels of service provided. For high-risk fire incidents in populated areas of the City of Las Vegas, the first company will arrive within seven minutes forty seconds total response time, 90 percent of the time. For high-risk life threatening medical incidents in populated areas of the City of Las Vegas, the first advanced life support (ALS) unit will arrive within eight minutes total response time 90 percent of the time.

The density of the population also affects the department's ability to service an area effectively. Higher density areas require more equipment and personnel to service a greater number of residents, tourists, and structures. The higher density areas also represent a greater risk for fire spreading due to the close proximity of buildings. As seen on Map 11, fire stations are generally distributed so that more stations are located in the areas of greatest density.

Over the past several years, the majority of the city's population growth occurred in historically suburban and rural areas in the northwest and west portions of the city. Substantial growth in the city's northwest area has affected Fire & Rescue services with the addition of major retail facilities, single and multi-family residences, businesses, office and industrial parks, gaming, entertainment and recreational facilities. Applying the CFAI population density definition, Las Vegas is predominately a metropolitan community, though population is not dispersed evenly. Recent completion of Fire Stations 47, 48 and 107 helps provide emergency medical and fire response services to these expanding parts of the city.

The fire department's 2013Standards of Cover indicates that there is currently a shortage of fire stations, apparatus and personnel given the current population, call volume and identified performance gaps. The Fire and Rescue Department has compiled a list of planned fire stations that may be built at sometime in the future if and when funds become available. The proposed sites identified by the 2013 Standards of Cover Manual are listed on Table 23 and can be found on Map 12.

Table 23: Future Fire Stations

Station	Location	Ward
Fire Station 142	Grand Teton and Hualapai	6

Fire Station 148	Durango and Grand Montecito	6
Fire Station I	Kyle Canyon Road	6
Fire Station J	Durango and Red Coach	4
Fire Station 49	Fort Apache and Log Cabin Way	6
Fire Station 149	Iron Mountain and Jones	6
Fire Station 109	Ann and Calverts	6
Fire Station G	El Campo Grande and Hualapai	6
Fire Station 145	Cliff Shadows and Hickam	4
Fire Station 147	CC-215 and Lake Mead Blvd	2
Fire Station 101	Bonneville and Union Pacific Railroad	3

Proposed Facilities

There is one new fire station, Fire Station 108, identified within the 2013-2017 Capital Improvement Plan and is expected to open in August of 2014. It is proposed to replace existing Fire Station 3 with a four-bay full service fire station, to include an attached warehouse for storing and managing of medical supplies. The station is designed as a three bay station for staffing; the fourth bay will house the Hazardous Materials unit staffed by existing station crews. An emergency management facility, the Regional Public Safety Complex – Building One, is also proposed within the Fire section of the Capital Improvement Plan. Proposed facilities identified by the CIP plan are identified on Map13 and Table 24.

Table 24: Proposed Fire Facilities in CIP 2013-2017 Plan

Proposed Fire Facilities				
Proposed Station	**Estimated Square-footage**	**Approximate Location**	**Funding Source**	**Estimated Completion Date**
Fire Station 3 replacement with Warehouse	11,600 SF; 6,100 SF	Washington/ Rancho	Unfunded	2017
Fire Station 108	7,600 SF	Bonanza/Page	Fund Balance / Bonds	2014
Regional Public Safety Complex – Building One	Not Specified	Not Specified	Fund Balance	Not Specified

Las Vegas Metropolitan Police Department

Existing Facilities

In 1973, Clark County and the city of Las Vegas consolidated their law enforcement branches to create the Las Vegas Metropolitan Police Department (LVMPD). Fiscal oversight of all LVMPD budget and financial matters is provided by a committee of five representatives; two from the city of Las Vegas City Council, two from the Clark County Commission and an additional member from the general public. There are three city owned facilities that were previously or currently being utilized by LVMPD.

Table 25: Existing Metro Facilities

Existing Metro Facilities		
Facility	**Address**	**Square-footage**
Downtown Area Command	621 N. 9th Street	17,235
Former Northeast Area Command	831 N. Mojave Rd.	11,855
Training Center	861 N. Mojave Rd.	12,664
Totals		**41,754**

Municipal Court

The entire Municipal Court Department is located at the Regional Justice Center, 200 Lewis Avenue. The court occupies space on the lower level, floors 1, 2, 4, 5, and 6. The City of Las Vegas Municipal Court is a trial court with limited jurisdiction over criminal misdemeanor offenses, traffic violations, municipal code ordinance infractions and civil ordinance actions that occur within Las Vegas city limits.

Existing Facility

Opened in October 2005, the 18-story Regional Justice Center contains 717,000 square feet of space housing four different court systems: Municipal, Justice, District and Supreme. Of the 717,000 square feet of space within the RJC, approximately 75,000 square feet are occupied by the Las Vegas Municipal Court.

Other Building Types

The "other" public building category includes buildings that do not fall under any of the other defined categories. "Other" buildings include: facilities owned by the city of Las Vegas and leased to a second party; buildings leased directly to the City of Las Vegas from a public or private entity and Municipal Court. The "Non-categorized" table includes all the remaining buildings in the City's inventory including community/recreation centers, parking structures and water treatment facilities. Table 26 and Map 14 identify all "other" building types within the city's inventory.

Table 26: "Other" Building Types

City Owned Property Leased to Another Party			
Facility	**Lessee**	**Location**	**Sq. Ft. or acreage**
Andre Aggasi Foundation	Charter School Development Foundation	1201 W. Lake Mead Blvd.	84,269
Buffalo House at All American Park	Private Tennis Club	1651 S. Buffalo Dr	7,286
Carson Parking Garage	TLC Gaming	202 E. Carson Ave.	1,740 spaces
City Centre	30 Spaces to Bridger & Associates	455 S. 3rd Street	133,400
Crisis Intervention Center: Salvation Army	Salvation Army	1581 N. Main St.	15,322
Darling Tennis Pro Shop	Darling Tennis Pro Shop	7901 W. Washington Ave	6,685
Desert Pines Golf Course	Southwest Golf LTD	3415 E. Bonanza Rd.	98 acres
Downtown Transportation Center	Downtown Farmers Market	300 N. Casino Center Blvd.	10,066
Durango Hills Golf Course	Evergreen Alliance Golf	3501 N. Durango Dr.	17,811
Durango Hills YMCA	YMCA	3521 N. Durango Rd.	45,329
Finger Print Building	Backstage Bar and Billiards	601 Fremont St	18,916
Former Post Office Building	Mob Museum	301 Stewart Ave	34,573
Firefighter Lounge	West Las Vegas Pride	1201 Miller Ave	3,158
Garden Club Building	Nevada State Garden Clubs	800 Twin Lakes Dr	4,246
Johnson Track Break	Red Rock Fire and Rescue	330 Villa Monterrey	2,400
Johnson Modular	Red Rock Fire and Rescue	340 Villa Monterrey	1,440
Las Vegas Enterprise Business Park	Urban Chamber of Commerce	1951 Stella Lake St.	24,000
Las Vegas Indian Center	Las Vegas Indian Center, Inc.	2300 W. Bonanza Rd.	4,029
Las Vegas Sports Park	Great American Capital	1400 N. Rampart Rd.	69 acres

Municipal Golf Club	Las Vegas Golf Club joint venture under management agreement	4300 Vegas Dr.	18,734
Natural History Museum	Museum of Natural History	900 N. Las Vegas Blvd.	38,080
Nucleus Plaza	State of Nevada department of General Services	1040 W. Owens Ave.	30,840
Rafael Rivera Community Center	City leases portions of the building to Boricua Association of Las Vegas and Hable	2850 Stewart Ave.	190
Reed Whipple Cultural Center	City leases a portion of property to Neon Museum for office space	821 N. Las Vegas Blvd.	32,510
Variety Daycare	Variety Club of Southern Nevada	990 N. D St.	12,100
Westside School	Economic Opportunity Board	330 W. Washington Ave.	18,951
Woodlawn Cemetery	Carriage Services Inc.	1500 N. Las Vegas Blvd.	4,455
Totals			296,411

Facilities Leased by City of Las Vegas			
Facility	**Owner**	**Location**	**Sq. Ft.**
Regional Justice Center (portion)	Clark County	210 Clark Ave.	94,000

City Owned Non-Categorized Facilities			
Facility	**Use**	**Location**	**Sq. Ft.**
Bonanza Mojave Water Resource Center	Water Treatment	650 N. Mojave Rd.	1,925
Centennial Hills Community Center	Recreation/Adult Active Center	6601 N. Buffalo Dr	98,385
Chuck Minker Sports Complex	Sports Park	275 N. Mojave Rd	36,365
Cimarron Rose Community Center	Community Center	5591 N. Cimarron Rd	3,693
City Hall Parking	Parking	500 S. Main St	313,877

Garage			
Doolittle Center	Community/Senior Center	1950 & 1930 N. J St	62,663
DSC Parking Structure	Parking	333 N. Rancho Dr.	231,280
Dula Gym	Gym	430 E. Bonanza	18,916
Durango Hills Water Resource Center	Water Treatment	3271 N. Durango Dr	2,856
East Las Vegas Community Center	Community Center	250 N. Eastern Ave	40,000
Lieburn Senior Center	Senior Center	6230 Garwood Ave	7,733
Mirabelli Community Center	Community Center	6200 Hargrove Ave	31,000
Neonopolis Parking Structure	Parking	Las Vegas Blvd/Fremont St.	225,120
Former Outreach Services	Vacant Modular	1100 E. St. Louis Ave	1,440
Stupak Community Center		Community Center	34,000
Totals			**1,109,253**

IMPLEMENTATION

It is critically important that the expenditure of public funds on local infrastructure improvements and public buildings and facilities be closely coordinated with various elements of the Master Plan, particularly the land use, population and public safety elements to meet the continuing demands of anticipated growth and development throughout the city.

As part of the City's vision for the future, it is acknowledged that the Master Plan must be flexible and that adjustments will be required over time to adapt to changing political, economic and social conditions. To further advance implementation of the goals, objectives and policies of the Master Plan related to provision of public buildings and facilities, recommendations and corresponding actions for the various building categories are provided as follows:

Cultural

Cultural buildings and facilities are an important part of the urban fabric of the City of Las Vegas. These structures play an integral role in community and civic life and have been a valued component of the City for many years. One of the hallmarks of a "world-class" city is the extent and quality of its opportunities and venues for cultural expression. While the City has made great strides in recent years with respect to cultural facilities, the 2020 Master Plan calls for the City to expand its cultural role to achieve its aspiration of attaining world-class status.

Provide visitors and citizens of Las Vegas with access to a range of arts and cultural facilities, programs, and opportunities, and to promote and foster arts and culture within the City.

C1. Promote and foster arts and culture within the City of Las Vegas.

C2. Ensure that the city contain appropriate public arts and culture facilities, museums, libraries and other supportive uses.

C3. Support efforts to expand the number and quality of arts and entertainment opportunities within the community.

C4. Encourage the location of family-oriented arts, cultural, and entertainment facilities and venues in areas where appropriate and accessible to all citizens.

C5. Actively work with public, non-profit organizations and private interests to develop art galleries, museums, performing arts centers, sports and entertainment arenas, and other cultural facilities.

C6. Cooperate with the Clark County Library District and continue to promote the goals of the most recent Clark County Library District Strategic Plan.

Administrative & Warehouse

AW1. Many of the City's employees use public buildings in some capacity related to their work, either as office, warehousing or other space. Administrative and warehousing functions require different types and amounts of space per employee. To maintain adequate levels of customer service as the City continues to grow, it is critical to identify and plan for future public building needs in this category, including renovation and expansion of existing facilities, land acquisition, and new construction.

AW2. Re-evaluate administrative and warehousing space needs periodically to help establish priorities in the annual capital improvement budgeting process.

AW3. Provide excellent customer service through provision of adequate administrative and warehousing buildings and facilities to meet the needs of a growing population.

AW4. Justify expansion and renovation of public buildings using the City's Office of Architectural Services standards as a guide.

AW5. Research and consider land acquisition opportunities in advance of programming capital improvements to take advantage of potential opportunities to expand future service delivery.

Sustainability

Green building is a national design and construction initiative that integrates natural resources more proficiently into the built environment to create more efficient and environmentally

sustainable structures. Conservation of energy, water and material resources are features of green building. The Las Vegas City Council approved a local Green Building Program resolution on October 18, 2006. This program establishes sustainability as a City priority.

S1. Continue to adhere to the recommendations contained in the Conservation Element of the 2020 master Plan and meet the goals established under the Sustainable Energy Strategy (R-50-2008).

S2. The Office of Sustainability shall continue to coordinate with all City departments, including the Planning Department, Public Works Department, and Operations and Maintenance Departments, as well as applicable external agencies and utilities to ensure sustainability measures and implemented in the design, construction, operation, and upkeep of all City public facilities and buildings.

S3. During the design of new or renovations of existing cultural, administrative, warehouse, detention, fire, and other public buildings, evaluate and determine the costs and benefits of the project to ensure projects can meet United States Green Building Council's (USGBC) LEED-Silver or equivalent standard, as identified by the Nevada Governor's Office of Energy, at a minimum.

S4. Utilize the City's Green Building Fund to fund any increased costs on a new public building or renovation to meet LEED certification requirements.

S5. During the design of all new construction or renovations of public facilities and buildings, evaluate and determine the cost and feasibility of renewable generation systems (thermal and photovoltaic solar, wind, ground source geothermal, or other) to offset a portion of the building's annual utility costs.

S6. Encourage and support the renovation and re-use of historic buildings.

S7. Benchmark the energy, water, and waste consumption of all public buildings and facilities to determine energy efficiency, renewable energy, water conservation, and waste management projects in successive capital improvement planning cycles.

S8. Continue implementation of comingled recycling programs at city buildings and facilities and investigate opportunities for composting.

Detention & Enforcement

DE1. Buildings and facilities used by the City's Detention and Enforcement Department are important to the safety and well-being of both citizens and visitors. The Department should continue to partner with the local community and other public safety agencies to reduce the offender population, but recognizes the need to plan for facilities capable of accommodating future detention needs as the numbers of residents and visitors continue to rise.

DE2. Provide clean and safe facilities for Detention and Enforcement staff, criminal offenders, and the general public.

DE3. Provide adequate facility space to accommodate current and forecasted staffing needs of the Detention and Enforcement Department, as well as the current and future inmate populations.

DE4. Continue Interlocal cooperation and shared services if those relationships continue to be beneficial to all entities involved.

Fire & Rescue

The Las Vegas Fire and Rescue department is comprised of four divisions: Administration, Emergency Services, Fire Prevention, and Support Services. These divisions are responsible for planning and programming for fire prevention and life safety, maintaining fire safety standards, fighting fires and responding to emergencies, mitigating hazardous materials releases, and investigating fire cause and origin. The Department is the primary provider of prehospital emergency medical services, responds to trapped victims, and staffs the only FBI certified bomb squad in southern Nevada. Long term public safety and the protection of public and private property is dependent on the ability of the City to continue to provide fire and rescue services, particularly in newly developing areas where there are currently no facilities.

FR1. Strive toward meeting the Fire and Rescue Department benchmarks for all service levels, as established in the most recent Las Vegas Fire & Rescue Standards of Cover.

FR2. Review existing fire stations and determine if new locations are required to meet the established response time goal.

FR3. Strive to maintain CFAI accredited agency status and retain an ISO Class 1 designation.

FR4 Follow the recommendations for the Fire and Rescue Department outlined in the 2020 Master Plan Public Safety Element.

FR5. Continue to follow the performance recommendations of the most recent Las Vegas Fire & Rescue Standards of Cover.

SCHOOL FACILITIES ELEMENT

Public schools and educational services for the city of Las Vegas and all other jurisdictions in Clark County are provided by the Clark County School District (CCSD or the “District”). Planning for the provision of schools has been a challenging task with the rapid growth that took place within the District. Based on future population forecasts for the next 20 years, planning for the location and construction of public schools will continue to be a challenge for the District and the city.

The School Facilities Element addresses existing conditions and projections for schools in the city of Las Vegas, and criteria used for site selection for schools in both the city and Clark County. In addition, service standards provided are used for planning and to determine site suitability and selection for providing public schools and services. Schools within the District are planned for the county as a whole and are not determined by jurisdictional boundaries. The attendance zone where a student resides determines the school he or she is assigned. As such, an attendance zone boundary may incorporate students from more than one jurisdictional boundary.

It is important for the city to closely collaborate in school planning by communicating with the District prior to and during the planning process, encourage appropriate and compatible land uses surrounding school sites, and assist the District with informing the public of future proposed schools and site locations. A joint partnership between the District and the city is imperative during the planning of school facilities to ensure the best outcome for the community and its residents.

History

In 1956, Nevada's various school districts were consolidated under terms of state legislation creating countywide school districts. As such, all public educational services provided by the District are restricted to the boundaries of Clark County. Clark County covers approximately 7,900 square miles, includes a 2013 countywide population of over 2 million people, and is located in the most southern part of the state. The largest cities within Clark County served by the District include Las Vegas, Henderson, and North Las Vegas. Other cities and rural areas served are located as far north as Indian Springs and Mesquite, and as far south as Laughlin, Searchlight and Sandy Valley. The District is a political subdivision of the state of Nevada, thereby the state determines the majority of its funding. In addition to state authorized revenues, the District receives funding from federal and local sources and must comply with the associated requirements of these funding entities.

Population Growth

The official enrollment for the 2012-2013 school year was 311,238. According to the Clark County School District Demographics Department, the enrollment for the 2013-2014 school year was 314,643 students, an increase of approximately one percent over the previous year. The District's enrollment has been relatively stable over the past several years and has not experienced the rapid three to five percent year-over-year growth it experienced in the early 2000's. Table 26 shows the official enrollment of the District between 2007 and 2014.

Table 26: Official Enrollment and Projected Growth

2007-2014 School Enrollment			
Year	Enrollment	Increase	Percent
2007-2008	308,783	6,220	1.99%
2008-2009	311,240	2,457	.80%
2009-2010	309,476	(1,764)	(.57%)
2010-2011	309,893	417	.13%
2011-2012	308,373	(1,520)	(.49%)
2012-2013	311,238	2,865	.93%

2013-2014	314,643	3,405	1.09%

Table 27: City of Las Vegas Total School age Population

Year	Population	School Age Population	Percent School Age
1990	258,295	43,135	16.70%
2000	478,630	87,111	18.20%
2005	575,973	110,011	19.10%
2007	603,093	115,794	19.20%
2012	587,899	105,970	18.03%
2015*	620,939	112,328	18.09%
2025*	730,274	129,177	17.68%

*Projected

Structure of the District

The District is governed by an elected, seven-member Board of Trustees ("Board"). The Board members represent specific geographic areas and are elected by the public for four year overlapping terms. The Board is vested with the authority to adopt and administer budgets as well as establish District policy. A professional superintendent serves as top administrator for the day-to-day operations of the District. These elected officials provide representation for Las Vegas residents. The Board of Trustees District boundaries, along with jurisdictional boundaries are shown on Map 15.

District Services

By state mandate, the District is responsible for providing public education in Clark County, Nevada from pre-kindergarten through twelfth grade. The District offers a variety of additional educational resources in order to meet the needs of the children and adults of Clark County.

Kindergarten

Nevada State law requires that children must attend a state-approved kindergarten or take a developmental assessment test in order to enter the first grade. Currently, the District offers a half-day kindergarten program for all students and a full-day program at selected schools.

Magnet and Vocational Schools

The District offers magnet and vocational schools with programs for students at any grade level who are seeking a more focused area of study than the general curriculum offers. Students may apply for entrance into one of these programs based on their own interests and abilities. The District offers program emphasis in areas such as science, mathematics, performing arts, technology, aerospace and medical professions. There are 13 magnet and vocational schools within the city's jurisdiction, ranging from kindergarten through high school. These schools are depicted on Map 16.

Special Education

Special services are provided for students with disabilities. Trained District employees work with families to offer educational services, along with preparing them for life after school. Both direct and support services are offered for students from ages 3 to 21.

Alternative Education Programs

The District provides alternative education programs designed to provide students who are credit deficient and/or require a non-traditional approach to education an opportunity to complete their course requirements. Programs also are designed to provide an alternative setting for students experiencing chronic behavioral problems. Juvenile Court School programs are offered for students who are no longer eligible for enrollment in comprehensive schools, as well as the adjudicated youth of Clark County.

Federal Programs

The District works with the state and federal government to take advantage of grants offered to help meet the supplemental needs of its students. With the help of these grants, the District is able to offer programs such as Indian Education, Safe and Drug-Free Schools, Adult Education and Math and Science Enhancement. The District also offers a food service program subsidized by the federal government to help guarantee a nutritious meal at a nominal price for its students.

CCSD Nevada Learning Academy

Evolved from the former Distance Education program, the District's Nevada Learning Academy provides full-time or concurrent students educational opportunities through interactive online courses. The high school began accepting both full-time and part-time students in the fall of 2004. Students enroll at no cost, and may complete all necessary coursework to earn a high school diploma. More than 1,500 students enroll each semester in core, elective, and Advanced Placement (AP) courses at Virtual High School.

Vegas PBS

The District is licensee for this Public Broadcasting System affiliate that also provides services for school, collegiate and professional education. KLVX, Channel 10 uses its satellite uplink to service a statewide downlink network with over 135 sites in educational institutions. Vegas PBS also operates two educational channels for a local consortium, and twenty closed circuit TV channels serving schools within both Clark and Nye Counties. In addition, a video lending library and a fiber optic video-on-demand service with over 20,000 titles are available to public and private schools.

Charter Schools

Charter Schools within Clark County operate as independent public schools to provide unique education opportunities under the sponsorship of the District. These schools have fewer state regulations imposed upon them than public schools, which allows charter schools to offer an alternative educational environment. To operate within Clark County, charter schools must meet mandated sponsorship requirements and are monitored by the Nevada Department of Education

and the District. Currently ten charter schools sponsored by either the District or the Nevada State Public Charter School Authority are located within the city of Las Vegas jurisdiction:

- Andre Agassi College Preparatory Academy (K-12)
- Discovery Charter School (K-8)
- Innovations International Charter School of Nevada (K-12)
- Odyssey Charter Schools (K-12)
- Quest Academy (1-8)
- Quest Academy (K)
- Quest Preparatory High School (8-12)
- Rainbow Dreams Academy (K-5)
- Somerset Academy of Las Vegas - Skypointe (K-8)
- Somerset Academy of Las Vegas -Oakey Campus (K-6)
- The Delta Academy (7-12)

All Charter schools within the city's jurisdiction are depicted on Map 18.

OPEN SCHOOLS OPEN DOORS AGREEMENT

The joint "Open Schools Open Doors" (OSOD) policy was executed by the Clark County School District and the city of Las Vegas on September 6th 1995. The agreement provides that school facilities such as gymnasiums, playing fields, classrooms and auditoriums may be utilized by the city during non-school hours. The District has priority use of existing grounds during school hours. In cases where the city and District have joint use of a city park, the District has priority use during school hours. The City and each respective school principal are responsible for coordinating any joint use of the District's facilities with the city or for the general public.

This agreement is applicable to all schools within the Clark County School District. As part of the agreement, each entity is responsible for returning the facilities in the condition they were in prior to use. Any damage to a facility, city or district, by the other will be repaired or replaced by the party responsible for the damage; however, normal wear and tear is excluded.

The agreement also requires the District and the city to jointly establish a planning team which will review and recommend the cooperative potential for design, development, location, operating and funding for new and established joint use sites in the city area. As of March 2014, a planning team has not yet been formed.

BUDGETARY PROCESS & CONTROL

Budgeting in the District is on a July 1 - June 30 fiscal year basis and is a year-round process. The cycle begins in the fall of the prior school year and continues until a final budget is filed with the Nevada Department of Education and the Nevada Department of Taxation in the spring of the following year. After the actual enrollment counts are taken in the fall, the District is required to adopt an amended final budget on or before January 1, reflecting any adjustments

necessary as a result of the completed count of actual students. The general operating fund budget for the 2013-2014 school year is $2.177 billion, with basic per-pupil state funding at $5,457.00 and per-pupil expenditures at $7,082.00. Per-pupil expenditures include funding from federal programs, special education, and class size reduction. The district receives revenue from various sources including:

• 37.3% Local school support s taxes
• 34.8% State aid
• 18.1% Property taxes
• 6.5% Government services franchise taxes, other revenues and sources, transfers • 3.3% Opening fund balance

SCHOOL LOCATIONS

The Centennial Hills Sector – This sector has the same geographic boundaries as the "Newly Developing" 2020 Master Plan Strategy Area. This area is bounded by the city limits to the north and Cheyenne Avenue to the south. This portion of the city has been experiencing rapid commercial and residential growth in recent years.

The Southeast Sector – This sector includes the "Neighborhood Revitalization" and the "Downtown Reurbanization" 2020 Master Plan Strategy Areas. This sector is located along portions of Jones and Rainbow Boulevards to the west, Cheyenne Avenue to the north, and the city limit boundaries to south and east. The Southeast Sector is comprised of many of the city's more mature areas. Much of the Southeast Sector is predominately built out, and future growth in the area will most likely consist of infill development and redevelopment.

The Southwest Sector – This sector is located along Cheyenne Avenue to the north, portions of Rainbow and Jones Boulevard to the east, and the city limit boundaries to the west and south. Many of the city's more recently developed areas such as Summerlin and the Lakes are located within the Southwest Sector Plan.

The school locations for the Southwest, Southeast and Centennial Sector's can be found on Maps 19-21. The following tables display all public schools operated by the District within the boundaries of the city of Las Vegas by geographic sector. School enrollments for the 2013-2014 school years are included.

Table 28: Centennial Hills Sector Elementary Schools (K-5)

Elementary School	2013-2014 Calendar	2013-2014 9 Month Program Capacity	2013-2014 YR Maximum Population	2013-2014 Count Day Enrollment 9/20/13	Over/Under 9 Month Capacity	Over/Under YR Max Population Capacity	Open Doors Open Schools Joint Use Facilities*	Ward
Bilbray	9 Month	788	967	684	-13%	-29%	BBC,CPA, GSF, SBF	6

Carl	9 Month	802	965	738	-8%	-24%	BBC, CPA, GSF, SBF	6
Conners	9 Month	772	968	826	7%	-15%	BBC, CPA	4
Deskin	9 Month	592	718	582	-2%	-19%	BBC, CPA, GSF	4
Eisenberg	9 Month	550	644	562	2%	-13%	BBC, CPA, GSF	4
Garehime	9 Month	645	848	655	2%	-23%	BBC, CPA, GSF	4
Heckethorn	9 Month	772	968	694	-10%	-28%	BBC, CPA, GSF, SBF	6
Kahre	9 Month	550	640	482	-12%	-25%	BBC, CPA, GSF	4
May	9 Month	578	698	648	12%	-7%	BBC, CPA, GSF	4
Neal	9 Month	645	848	641	-1%	-24%	BBC, CPA, GSF	6
Parson	9 Month	548	643	442	-19%	-31%	BBC, CPA, GSF	5
Rhodes	9 Month	659	850	663	1%	-22%	BBC, CPA, GSF, SBF	6
Scherkenbach	9 Month	802	965	607	-24%	-37%	BBC, CPA, GSF, SBF	6
Tarr	9 Month	772	968	644	-17%	-33%	BBC, CPA, GSF, SBF	4
Thompson	9 Month	788	967	747	-5%	-23%	BBC, CPA, GSF	6
Tobler	9 Month	578	698	556	-4%	-20%	BBC, CPA, GSF	5

*Facilities Legend: BBC=Basketball Courts; CPA = Covered Playground Area; FBF = Football Field; G=Gymnasium; GSF = General Sports Field; P=Pool; SBF=Softball Field; TC=Tennis Courts; TR=Track; VC=Volleyball Court

Table 29: Centennial Hills Sector Middle Schools (6-8)

Middle/Junior High Schools	2013-2014 Calendar	2013-2014 9 Month Program Capacity	2013-2014 YR Maximum Population	2013-2014 Count Day Enrollment 9/20/13	Over/Under 9 Month Capacity	Open Doors Open Schools Joint Use Facilities*	Ward
Cadwallader	9 Month	1,631	N/A	1,521	-7%	BBC, BBF, FBF, G, GSF, SBF, TC,TR	6

Lied	9 Month	1,614	N/A	1,246	-23%	BBC, BBF, FBF, G, GSF, SBF, TC,TR	6
Molasky	9 Month	1,631	N/A	1,271	-22%	BBC, BBF, FBF, G, GSF, SBF, TC,TR	4

Table 30: Centennial Hills High Schools (9-12)

Senior High Schools	2013-2014 Calendar	2013-2014 9 Month Program Capacity	2013-2014 YR Maximum Population	2013-2014 Count Day Enrollment 9/20/13	Over/Under 9 Month Capacity	Open Doors Open Schools Joint Use Facilities*	Ward
Arbor View	9 Month	2,626	N/A	2,847	8%	BBC, BBF, FBF, G, GSF, SBF,TC, TR	6
Centennial	9 Month	2,596	N/A	3,030	17%	BBC, BBF, FBF, G, GSF, SBF,TC, TR	6
Northwest CTA	9 Month	1,933	N/A	1,869	-3%	BBC, GSF, SBF,TC,	6
Shadow Ridge	9 Month	2,609	N/A	2,520	-3%	BBC, BBF, FBF, G, GSF, SBF,TC, TR	6

*Facilities Legend: BBC=Basketball Courts; CPA = Covered Playground Area; FBF = Football Field; G=Gymnasium; GSF = General Sports Field; P=Pool; SBF=Softball Field; TC=Tennis Courts; TR=Track; VC=Volleyball Court

Table 31: Southeast Sector Elementary Schools (K-5)

Elementary School	2013-2014 Calendar	2013-2014 9 Month Program Capacity	2013-2014 YR Maximum Population	2013-2014 Count Day Enrollment 9/20/13	Over/Under 9 Month Capacity	Over/Under YR Max Population Capacity	Open Doors Open Schools Joint Use Facilities *	Ward
Adcock	9 Month	731	896	627	-14%	-30%	BBC, CPA, GSF, SBF	1
Bell	9	568	658	832	46%	26%	BBC,	1

	Month						CPA,GSF	
Booker	9 Month	572	659	524	-8%	-20%	BBC, CPA, GSF, SBF	5
Bracken	9 Month	597	713	521	-13%	-27%	BBC, CPA, GSF, SBF	3
Bunker	9 Month	568	751	689	21%	-8%	BBC, CPA,GSF	5
Cambeiro	9 Month	532	734	599	13%	-18%	BBC, CPA,GSF	3
Carson	9 Month	436	436	438	0%	0%	BBC, CPA,GSF	5
Crestwood	9 Month	454	614	730	61%	19%	BBC, CPA,GSF	3
Culley	9 Month	550	640	872	59%	36%	BBC, CPA,GSF	5
Earl	9 Month	568	658	886	56%	35%	BBC, CPA,GSF	3
Edwards	9 Month	548	638	666	22%	4%	BBC, CPA,GSF	3
Fong	9 Month	519	615	835	61%	36%	BBC, CPA,GSF	5
Fyfe	9 Month	417	417	512	23%	23%	BBC, CPA,GSF	5
Gragson	9 Month	631	752	825	31%	10%	BBC, CPA, GSF, SBF	3
Griffith	9 Month	464	607	612	32%	1%	BBC, CPA,GSF	1
Hancock	9 Month	578	677	504	-13%	-26%	BBC, CPA,GS	1

							F	
Hewetson	9 Month	692	831	955	38%	15%	BBC, CPA,GSF	3
Hoggard	9 Month	469	570	462	-1%	-19%	BBC, GSF	5
Hollingsworth	9 Month	728	915	678	-7%	-26%	BBC, CPA,GSF	3
Kelly	9 Month	391	391	294	-25%	-25%	BBC, CPA	5
Lunt	9 Month	504	720	614	22%	-15%	BBC, CPA,GSF	3
McWilliams	9 Month	568	663	689	21%	4%	BBC, CPA,GSF	5
Moore	9 Month	565	753	656	16%	-13%	BBC, CPA,GSF, SBF	3
Park	9 Month	728	867	876	20%	1%	BBC, CPA,GSF, SBF	3
Pittman	9 Month	576	671	620	8%	-8%	BBC, CPA,GSF	1
Red Rock	9 Month	651	772	748	15%	-3%	BBC, CPA,GSF	1
Reed	9 Month	566	661	629	11%	-5%	BBC, CPA,GSF	5
Ronnow	9 Month	641	762	816	27%	7%	BBC, CPA,GSF	3
Ronzone	11 Month	544	738	955	76%	29%	CPA, GSF	5
Sunrise Acres	9 Month	734	923	778	6%	-16%	CPA	3
Twin Lakes	9 Month	543	648	682	26%	5%	BBC, CPA,GSF	5
Vegas Verdes	9 Month	552	641	485	-12%	-24%	BBC, CPA,GSF	1
Ward	9	762	958	850	12%	-11%	BBC,	6

	Month						CPA,GSF	
Warren	9 Month	576	737	675	17%	-8%	BBC, CPA,GSF	1
Wasden	9 Month	594	694	634	7%	-9%	BBC, CPA,GSF, SBF, TC	1
Williams	9 Month	587	691	326	-44%	-53%	BBC, CPA, GSF, SBF	5

*Facilities Legend: BBC=Basketball Courts; CPA = Covered Playground Area; FBF = Football Field; G=Gymnasium; GSF = General Sports Field; P=Pool; SBF=Softball Field; TC=Tennis Courts; TR=Track; VC=Volleyball Court

Table 32: **Southeast Sector Middle Schools (6-8)**

Middle/Junior High Schools	2013-2014 Calendar	2013-2014 9 Month Program Capacity	2013-2014 YR Maximum Population	2013-2014 Count Day Enrollment 9/20/13	Over/Under 9 Month Capacity	Open Doors Open Schools Joint Use Facilities*	Ward
Brinley	9 Month	964	N/A	911	-5%	BBC, G, GSF, TC	5
Escobedo	9 Month	1,646	N/A	1,205	-27%	BBC, G, GSF, SBF, TC, VB	6
Fremont	9 Month	1,336	N/A	866	-35%	BBC, G, GSF, P, SBF, TC	3
Garside	9 Month	1,321	N/A	1,210	-8%	BBC, BBF, G, GSF, SBF, TC, VB	1
Hyde Park	9 Month	1,462	N/A	1,706	17%	BBC, G, GSF, SBF, TC	1
Johnson	9 Month	1,541	N/A	1,153	-25%	BBC, G, GSF, SBF, TC, VB	2
Knudson	9 month	1,354	N/A	1,309	-3%	BBC, G, GSF, SBF, TC	3
Martin	9 Month	1,587	N/A	1,501	-5%	BBF, G, GSF, P, SBF	3

Robison	9 Month	1,304	N/A	1,133	-13%	BBC, G, GSF, SBF, TC, VB	3
West Prep Secondary	9 Month	1,363	N/A	1,302	-4%	BBC, G, GSF, SBF, TC, VB	5

*Facilities Legend: BBC=Basketball Courts; CPA = Covered Playground Area; FBF = Football Field; G=Gymnasium; GSF = General Sports Field; P=Pool; SBF=Softball Field; TC=Tennis Courts; TR=Track; VC=Volleyball Court

Table 33: **Southeast Sector High Schools (9-12)**

Senior High Schools	2013-2014 Calendar	2013-2014 9 Month Program Capacity	2013-2014 YR Maximum Population	2013-2014 Count Day Enrollment 9/20/13	Over/Under 9 Month Capacity	Open Doors Open Schools Joint Use Facilities*	Ward
Advanced Technologies Academy	9 Month	1,003	N/A	1,090	9%	BBC, GSF, TC, TR	5
Clark	9 Month	2,612	N/A	3,013	15%	BBC, BBF, FBF, G, GSF, SBF, TC, TR	1
Desert Pines	9 Month	2,546	N/A	2,215	-13%	BBC, BBF, FBF, G, GSF, SBF, TC, TR	3
Las Vegas Academy	9 Month	1,619	N/A	1,703	5%	BBC, GSF, TC	3
Miley Achievement Alternative School	9 Month	210	210	73	-65%	BBC, GSF, TC, TR	3
Morris Sunset	9 Month	0	0	61	N/A	BBC, BBF, FBF, G, GSF, SBF, TC, TR	3
Variety Secondary		0	0	102	N/A	CPA	3
Western	9 Month	2,794	N/A	2,513	-10%	BBF, FBF, G, GSF, SBF, TC, TR	5

*Facilities Legend: BBC=Basketball Courts; CPA = Covered Playground Area; FBF = Football Field; G=Gymnasium; GSF = General Sports Field; P=Pool; SBF=Softball Field; TC=Tennis Courts; TR=Track; VC=Volleyball Court

Table 34: **Southwest Sector Elementary Schools (K-5)**

Elementary School	2013-2014 Calendar	2013-2014 9 Month Program Capacity	2013-2014 YR Maximum Population	2013-2014 Count Day Enrollment 9/20/13	Over/Under 9 Month Capacity	Over/Under YR Max Population Capacity	Open Doors Open Schools Joint Use Facilities*	Ward
Bonner	9 Month	677	854	878	30%	3%	BBC, CPA, GSF, SBF	2
Bryan	9 Month	645	848	581	-10%	-32%	BBC, CPA, GSF, SBF	4
Christensen	9 Month	568	688	616	9%	-10%	BBC, CPA, GSF	2
Derfelt	9 Month	578	698	664	15%	-5%	BBC, CPA, GSF	1
Givens	9 Month	788	967	1,103	40%	14%	BBC, CPA, GSF, SBF	2
Jacobson	9 Month	578	698	640	11%	-8%	BBC, CPA, GSF	2
Katz	9 Month	534	688	697	31%	1%	BBC, CPA, GSF, SBF	1
Lummis	9 Month	627	845	529	-16%	-37%	BBC, CPA, GSF, SBF	4
McMillan	9 Month	699	835	636	-9%	-24%	BBC, CPA, GSF, SBF	1
Piggott	9 Month	617	813	556	-10%	-32%	BBC, CPA, GSF	2
Smith	9 Month	510	680	487	-5%	-28%	BBC, CPA, GSF	1
Staton	9 Month	772	968	856	11%	-12%	BBC, CPA, GSF, SBF	2

*Facilities Legend: BBC=Basketball Courts; CPA = Covered Playground Area; FBF = Football Field; G=Gymnasium; GSF = General Sports Field; P=Pool; SBF=Softball Field; TC=Tennis Courts; TR=Track; VC=Volleyball Court

Table 35: **Southwest Sector Middle Schools**

Middle/Junior High Schools	2013-2014 Calendar	2013-2014 9 Month Program Capacity	2013-2014 YR Maximum Population	2013-2014 Count Day Enrollment 9/20/13	Over/Under 9 Month Capacity	Open Doors Open Schools Joint Use Facilities*	Ward
Becker, Ernest	9 Month	1,496	N/A	1,326	-11%	BBC, G, GSF, SBF, TC, VB	4
Gibson, Robert	9 Month	1,177	N/A	1,233	5%	BBC, G, GSF, SBF, TC, VB	5
Rogich, Sig	9 Month	1,664	N/A	1,833	10%	BBC, G, GSF, SBF, TC, VB	2

*Facilities Legend: BBC=Basketball Courts; CPA = Covered Playground Area; FBF = Football Field; G=Gymnasium; GSF = General Sports Field; P=Pool; SBF=Softball Field; TC=Tennis Courts; TR=Track; VC=Volleyball Court

Table 36: **Southwest Sector High Schools**

Senior High Schools	2013-2014 Calendar	2013-2014 9 Month Program Capacity	2013-2014 YR Maximum Population	2013-2014 Count Day Enrollment 9/20/13	Over/Under 9 Month Capacity	Open Doors Open Schools Joint Use Facilities*	Ward
Bonanza	9 Month	2,452	N/A	1,994	-19%	BBC, BBF, FBF, G, GSF,SBF, TC, TR	1
Cimarron/Memorial	9 Month	2,579	N/A	2,312	-10%	BBC, BBF, FBF, G, GSF,SBF, TC, TR	4
Palo Verde	9 Month	2,944	N/A	2,886	-2%	BBC, BBF, FBF, G, GSF, P, SBF, TC,TR, VB	2

*Facilities Legend: BBC=Basketball Courts; CPA = Covered Playground Area; FBF = Football Field; G=Gymnasium; GSF = General Sports Field; P=Pool; SBF=Softball Field; TC=Tennis Courts; TR=Track; VC=Volleyball Court

Capacity levels serve as a primary trigger for the development of new schools, along with redrawing district zone boundaries lines to allow for optimum capacity. To assist with planning future school locations and needs, the District developed maps reflecting overcrowding, named the Hot Spot Maps. The maps are created comparing the total "Count Day" enrollment of each school with the capacity and displays the number of portable classrooms required to accommodate that enrollment. This map is subject to change on an annual basis as attendance boundaries, enrollments, and school programs fluctuate.

As of the 2012-2013 school year, eight elementary schools were operating over capacity within the city of Las Vegas, with five schools located in the Southeast Sector and three in the Southwest Sector. There were no middle or high schools were operating over capacity. Priority is given to those schools which are operating capacity and in most instances this will serve as a trigger to redraw district zone boundary lines to redistribute students to adjust capacity levels..

PRIVATE SCHOOLS

The city currently has a number of primary and secondary private schools, which require a Special Use Permit per Unified Development Code Title 19.12. Several private schools on record with the State Department of Education serve the city of Las Vegas and the surrounding area. Table 37 lists all private schools, not including preschools, within the city of Las Vegas. All private schools are shown on Map 22.

Table 37: City of Las Vegas Private Schools

School	Address	Zip	2013 Enrollment	Grade
9thBridge School	310 S. 9th Street	89101	1	K
Abundant Life Christian Academy	1720 N. J Street	89106	40	K - 8

All Saints Day School	4201 W. Washington Ave	89107	2	K
Bright Horizons Family Center	10100 Banburry Cross Drive	89144	13	K
Calvary Christian Learning Academy	2900 N. Torrey Pines Drive	89108	580	K - 8
Candil Hall Academy	5348 N. Rainbow Blvd	89130	43	K - 5
Challenger School at Lone Mountain	9900 Isaac Newton Way	89129	378	K - 8
Crossroads Christian Academy	124 N.Tenaya Way	89145	14	K
Desert Torah Academy	1312 Vista Drive	89102	141	K - 8
Dr. Miriam & Sheldon G. Adelson Educational Campus, The	9700 W. Hillpointe	89134	480	K - 12
First Christian Montessori Children's World	101 S. Rancho Road	89106	2	K
First Good Shepard Lutheran School	301 S. Maryland Parkway	89101	169	K - 6
Griffith Methodist Day School	1701 E. Oakey Blvd	89104	0	K
Imagination Plus Child Development Center	1617 Alta Drive	89106	9	K
International Christian Academy	8100 Westcliff Drive	89145	305	K - 8
Kids' Co-op	4316 N. Decatur Blvd.	89130	13	K
Kinder Prep Academy	5695 N. Rainbow Boulevard	89130	17	K
KinderCare Learning Center	3570 N. Buffalo Drive	89129	10	K
La Petite Academy	4270 S. Rainbow Blvd.	89103	4	K
La Petite Academy	2121 Harbor Island Drive	89128	9	K - 1
Las Vegas Day School	3275 Red Rock Street	89146	699	K - 8
Las Vegas Jr. Academy	6059 W. Oakey Blvd.	89146	99	K - 9
Liberty Baptist Academy	6501 W. Lake Mead Blvd.	89108	157	K - 12
Lit'l Scholar Rainbow	1951 S. Rainbow Blvd.	89146	0	K

Lit'l Scholar Summerlin	8961 Hillpointe Road	89134	0	K
Lone Mountain Academy	4295 North Rancho Drive	89130	26	K - 12
LVVWD School's Out Program	1001 S. Valley View Boulevard	89107	4	K
Merryhill School at Peccole Ranch	10050 Alta Drive	89145	11	K
Merryhill School at Summerlin	2160 Snow Trail	89134	152	K - 6
Mountain Heights Montessori	3412 S. Decatur Boulevard	89102	7	K - 3
Mountain View Lutheran School	9550 W. Cheyenne	89129	140	K - 5
New Horizons Academy	6701 W. Charleston	89146	70	1 - 12
Our Lady of Las Vegas Catholic School	3046 Alta Drive	89107	561	K - 8
Redeemer Lutheran Elementary School	1730 N. Pecos Road	89115	12	K - 2
Shadow Hills Baptist Church Preschool	7811 Vegas Drive	89128	25	K
Shenker Academy	9001 Hillpointe Road	89134	13	K
St. Anne Catholic School	1813 S. Maryland Parkway	89104	312	K - 8
St. Elizabeth Ann Seton Catholic School	1807 Pueblo Vista Drive	89128	488	K - 8
The Meadows School	8601 Scholar Lane	89128	804	K - 12
Trinity International Schools	700 East St. Louis	89104	75	K - 12
West Charleston Enrichment Academy	3216 W. Charleston, Suite B	89102	11	K - 8

FUTURE

The relationship between residential growth and existing and future schools is extremely important. It is essential that planning the location of future schools and facilities be coordinated with the future plans for the city of Las Vegas.

The District and the city depend on each other. As the city continues to develop and expand, the demand for schools will continue to grow; these facilities will play a vital role in the community. A growing community places greater demands on the school system, thereby creating a need for more or expanded schools. Likewise, a new school often stimulates significant traffic as well as

residential development near the new school site. Thus, the actions of one entity affect the interests of the other. Given this fact, it is imperative that the District and the city of Las Vegas work together to site schools and facilities. In order for the two entities to communicate during the development process, the city requires that the District apply for land use entitlements in standard zoning districts and recommends the submittal of a Site Development Plan Review to allow for all city departments along with the Planning Commission and City Council to review the proposed project.

The building, planning and design for all schools are prepared by the District. The District analyzes a wide range of historical, actual, and projected demographic and housing data to determine the demand for new schools and facilities, as well as their optimal locations and timelines for development. The city will continue to assist the District in related land uses decisions; however, the principle responsibility for planning, financing and developing future school facilities and expanded services will continue to lie with the District.

New, remodeled and/or replacement schools are beneficial to a neighborhood and are many times viewed as a community center of an area. In order for the District to determine locations for future schools, a buildable lands inventory must be compiled to identify parcels where schools and facilities are permitted and where residential growth is occurring. All development of schools and facilities requires a full range of public services including fire, police, water and sewer, and are significant items to take into consideration when planning for future schools. The District utilizes best practices in the design of school sites to avoid vehicular access along arterial streets, and to locate parking areas and pick-up and drop-off locations on the site in a manner that would not be detrimental to adjacent residential neighborhoods.

A majority of land acquired by the District to develop new school sites is obtained from the Bureau of Land Management (BLM) through an application process. The District must first file a reservation of intent on the prospective parcel(s) intended for new schools. Once the reservation of intent has been approved by the BLM, a lease application must be submitted along with notification of the area residents. The BLM reviews the application and any letters of opposition prior to lease approval. This process typically takes approximately 18 to 24 months.

The number of acres required for a school site varies by the type of school. A typical elementary school is sited on approximately 12 ½ acres, a middle school on 20.0 acres, and a high school requires 40.0 acres. The following tables display the District's site selection criteria for school capacity, lot size, building square footage and cost.

Table 38: Prototypical School Criteria

Type	Elementary School	Middle School	High School
Bldg size	62,568 square feet	148,569 square feet	274,700 square feet
Design capacity	725 students	1,750 students	2,700 students
Suitable Lot size	12 ½ acres	20 acres	40 acres
Approx. Construction Cost	$27M	$40M	$105M

CCSD School Openings 2008-2013

During the past five years, there has been a gradual reduction in the amount of new, remodeled and/or replacement school openings per year. Table 40 depicts the number of new schools opened, remodeled and/or replaced since 2008. There were no new Clark County schools opened during the 2012-2013 school year.

Table 40: CCSD School Openings 2008-2013

School Year	Elementary	Middle School	High Schools	Remodeled Schools	Special Schools	Total New Schools
2008-2009	4	0	2	5	1	12
2009-2010	3	0	3	0	0	6
2010-2011	4	0	1	0	0	5
2011-2012	0	0	0	2	0	2
2012-2013	0	0	0	0	0	0

Implementation

It is important for the growth and vitality of the city for residents of all ages to gain a basic education and to expand their intellectual, social and career horizons through quality educational and cultural resources. Schools are important venues for community, social, and cultural events and play a role in enhancing community cohesiveness. The following recommendations encourage decision-makers to provide support for these facilities and ensure that they are easily accessible to the public.

SC1. Coordinate with the District through SNRPC to create a master plan of schools within each local jurisdiction and apply the plan to each entity's comprehensive plan, as per the SNRPC Regional Policy Plan 2012.

SC3. Coordinate with the District through SNRPC to identify and project future development and population trends.

SC4. Utilize future land-use maps to assist in strategically locating school facilities on a regional level.

SC5. Continue to work with the District and SNRPC to investigate co-location of schools and other public facilities where feasible.

SC6. Facilitate SNRPC in developing alternative school site and building designs for elementary and middle schools.

SC7. Establish joint planning team(s) per the Open Schools Open Doors Agreement between the District and the city of Las Vegas.

SC8. Promote the design of Community Schools which incorporate the joint use of facilities between the city's Leisure Services Department and the District to provide neighborhoods with additional recreational and open space facilities.

SC9. The Planning Team(s) shall coordinate neighborhood notifications and meetings prior to design and development of schools to ensure community involvement.

SC10. The city shall continue to enforce and monitor the Open Schools-Open Doors Agreement to ensure participation of all schools.

Building Appendix