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CHAPTER 1 - INTRODUCTION

1.1 Overview

This Impact Fee Facilities Plan (IFFP) identifies the capital facilities projects required to provide proposed levels of service to new development through 2023. West Valley City has established current levels of service and is proposing to extend current levels of service to new development. Transportation, storm water, public safety, and parks and recreation facilities are included in this plan.

Demographics

Current population and nonresidential development estimates provided by the West Valley City Planning Division were used to determine the current and proposed level of service (LOS) for each facility type. Future population and nonresidential development projections provided by the West Valley City Planning Division were used to determine future infrastructure needed to provide the proposed LOS. The West Valley City 2013 population estimate is 132,654 residents with an estimated 35.5 million square feet of nonresidential development[1]. West Valley City's 10-year projection is 152,000 people and 45 million square feet of nonresidential development by 2023.

Transportation

West Valley City's current and proposed transportation LOS is to provide adequate lane mile and intersection capacity to maintain current and proposed LOS D according to the Wasatch Front Regional Council Travel Demand Model[2].

West Valley City's system-wide Transportation Capital Facilities Plan is a comprehensive plan with a total cost of approximately $38.4 million in road projects and an additional $11.4 million in intersection improvements. Approximately $8.0 million of the road projects and $2.2 million of the intersection improvement projects increase capacity. These projects will achieve the proposed LOS for new development and will be built between 2013 and 2023. In addition to the $10.2 million in new projects on the IFFP, there is approximately $778,000 in existing excess capacity available for new development. Table 1-1 is the Transportation Impact Fee Facilities Plan.

[1] Calculated using a standardized floor area ratio of 0.26 for general commercial and 0.22 for industrial uses as identified by Dr. A.C. Nelson, Center for Metropolitan Studies, University of Utah.
[2] The travel demand model is the accepted model of the Wasatch Front Regional Council (WFRC) which represents an appropriate planning tool for estimating existing congestion levels and forecasting future congestion levels based on the impacts of growth.

Table 1-1: Transportation IFFP

Roads

Street	Limits		Total Cost	Cost of Existing Capacity Deficiencies	Cost of Through Traffic	IFFP Cost
	From	To				
4000 W	4100 S	4180 S	$90,488	$59,930	$22,622	$7,936
4000 W	4180 S	4340 S	$338,513	$224,196	$84,628	$29,689
4000 W	4340 S	4360 S	$63,700	$42,188	$15,925	$5,587
4000 W	4360 S	4400 S	$47,250	$31,294	$11,813	$4,143
4800 W	2400 S	Lake Park Blvd	$1,219,050	$0	$304,763	$914,287
4800 W	3200 S	3300 S	$192,488	$0	$48,122	$144,366
Parkway Blvd	5630 W	7200 W	$2,629,663	$0	$657,416	$1,972,247
2400 S	2700 W	3200 W	$1,451,520	$0	$362,880	$1,088,640
2400 S	5600 W	6400 W	$2,160,900	$0	$540,225	$1,620,675
2400 S	6800 W	7200 W	$2,250,000	$0	$562,500	$1,687,500
6200 S	MVC	SR-111	$755,325	$0	$188,831	$566,494
		Total Roads	*$11,198,897*	*$357,608*	*$2,799,725*	*$8,041,564*

Intersections

East/West	North/South	Total Cost	Cost of Through Traffic	IFFP Cost
3100 S	3450 W	$180,077	$59,353	$120,724
3100 S	4800 W	$405,077	$133,513	$271,564
3100 S	6400 W	$53,077	$17,494	$35,583
3650 S	3200 W	$53,077	$17,494	$35,583
4100 S	2200 W	$38,077	$12,550	$25,527
4100 S	3200 W	$180,077	$59,353	$120,724
4100 S	4800 W	$307,077	$101,213	$205,864
4100 S	5400 W	$325,077	$107,145	$217,932
4100 S	6000 W	$786,077	$259,091	$526,986
4700 S	3200 W	$165,077	$54,409	$110,668
4715 S	4520 W (Dartmouth Dr.)	$165,077	$54,409	$110,668
4700 S	4800 W	$165,077	$54,409	$110,668
4700 S	6400 W	$452,077	$149,005	$303,072
	Total Intersections	*$3,275,001*	*$1,079,438*	*$2,195,563*

Source: InterPlan

Storm Water

West Valley City's storm water system current and proposed LOS is to design and install infrastructure sufficient to carry storm runoff generated by a 10-year design storm from existing and future developed properties, which is detained per City policy and as required by Salt Lake County Flood Control.

To meet the current and proposed LOS, the City has identified 16 storm water districts. Each district was evaluated independently for the presence of existing excess capacity and existing deficiencies based on the design standard, and developable properties. Of the 16 districts three are eligible for an impact fee to either recoup past expenditures or to build system improvements required for new development. Only one of the districts in which an impact fee is recommended requires construction of new system-level improvements. Table 1-2 is the IFFP for the Riter/Westridge storm drainage district.

Table 1-2 - Riter/Westridge Service Area Impact Fee Facilities Plan

Basin Name:	R5							
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
OHB4	7200 West	3615 S	3563 S	24 inch	550	$115	$63,250	
								$63,250
Basin Name:	**R6**							
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
BA12	7000 West	3500 S	3390 S	36 inch	770	$170	$130,900	
OHB5	6800 West	3720 S	3500 S	24 inch	1980	$115	$227,700	
								$358,600
Basin Name:	**R7**							**.**
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
BC6	6400 West	Parkway Blvd.	Riter Canal	60 inch	1830	$280	$512,400	
BA11	6400 West	3500 S	3270 S	36 inch	1150	$170	$195,500	
OHB2	6400 West	3888 S	3800 S	24 inch	659	$115	$75,785	
BB5	Parkway Blvd	5800 W	6400 W	24 inch	3500	$115	$402,500	
BA5	Parkway Blvd	6600 W	6400 W	18 inch	1400	$95	$133,000	
								$1,319,185
Basin Name:	**R8**							
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
WHB6	6400 West	3750 S	3643 S	24 inch	672	$115	$77,280	
WHB10	6400 West	3887 S	3771 S	18 inch	1118	$95	$106,210	
BB9	6000 West	3500 S	3400 S	36 inch	635	$170	$107,950	
BB8	Walmart	3500 S	Walmart	36 inch	1985	$170	$337,450	
BB13	Walmart to Mdwlnds	Walmart	Meadowlands	42 inch	3135	$195	$611,325	
								$1,240,215
Basin Name:	**R9**							
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
REC6	Brud Drive	Cent. Park	Meadowlands	36 inch	2975	$170	$505,750	
								$505,750
Basin Name:	**R10**							
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
SA6	5400 West	3600 S	3400 S	30 inch	1340	$150	$201,000	
								$201,000
Basin Name:	**R12**							
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
SB5	5100 West	3635 S	3500 S	36 inch	1175	$170	$199,750	
								$199,750

Riter Canal Detention Basin								
Land Acquisition		32 acres	$90,000/ac				$2,880,000	
Excavation		160,000 CY	$8.00/CY				$1,280,000	
Control Structure		1 Lump	$150,000				$150,000	
Landscaping		35 acres	$10,000/ac				$350,000	
								$4,660,000
Total Cost of Improvements								**$8,547,750**
Total Acres in Basin							7232	
Undeveloped/Developable Acres in Basin							1233	
Percent new development							17.05%	
Total IFFP								**$1,457,391**

Source: West Valley City

Public Safety

The current and proposed LOS for fire facilities, fire apparatus and police facilities was established based on space and equipment currently serving West Valley City's resident and daytime population. Table 1-3 summarizes the current and proposed LOS.

Table 1-3: Public Safety Level Current and Proposed Level of Service

Facility Type	Current & Proposed Residential LOS	Unit	Current & Proposed Nonresidential LOS	Unit
Fire Facility	147.985	SF/1,000 Residents	0.795	SF/1,000 SF building
Fire Apparatus	15.71	$/Resident	84.30	$/1,000 SF building
Police Facility	257.292	SF/1,000 Residents	1.381	SF/1,000 SF building

Source: West Valley City, GSBS Richman

In order to achieve the proposed LOS, the impact fee funded facilities identified in Table 1-4 are required to serve the 19,300 new residents and 9.5 million square feet of nonresidential development anticipated through 2023.

Table 1-4: Public Safety Facility Conceptual Impact Fee Facilities Plan

Future Facility	Area (sf)	Impact Fee Area (sf)	Total Cost (2013$)	Impact Fee Cost (2013$)	Funding Source
Fire Station	7,000	7,000	$1,058,505	$1,058,505	IF
Fire Training	3,400	3,400	$514,131	$514,131	IF
Fire Eligible Apparatus	Ladder Truck		1,104,776	800,850	IF/Other[1]
Police Substation	5,000	5,000	$756,075	$756,075	IF
Police Main Station	29,768	7000	$8,653,040	$2,034,778	IF/Other
Police Support	6,000	6,000	$907,290	$907,290	IF
Total			$12,993,817	$6,071,629	

Source: GSBS Richman

Parks and Recreation

The current and proposed LOS for parks and trails was established based on the current number of park acres and facilities per 1,000 population. Table 1-5 identifies the current and proposed LOS for park acres by classification.

Table 1-5 - Park/Trail LOS

Classification	Total Acres	LOS/1,000 Population
Neighborhood	48.35	0.364
Community	115.88	0.874
Undeveloped Park Land	13.15	0.099
Trails	24.13	0.182
Undeveloped Trails	1.79	0.013
Total	203.30	1.532

Source: WVC Parks Department

In addition to the LOS for park acreage, a current and proposed LOS for facilities installed in the parks has also been established based on the current level of improvements. The parks facilities LOS is based on facilities or amenities per acre and per 1,000 people. The LOS assumes that a comparable number of amenities or facilities will be provided through the West Valley park system to serve new development. The LOS does not assume that the exact number of soccer fields and ball diamonds will be achieved, simply that a comparable level of facilities will be provided. Table 1-6 provides the basis of the current and proposed LOS for facilities.

Table 1-6: Park Facilities LOS

Classification	Facility	Total Facilities	Facilities/ Acre	LOS/1,000 Population
Neighborhood	Sm. Restroom	1	0.021	0.008
	Playground	19	0.393	0.143
	Lg. Pavilion	1	0.021	0.008
	Sm. Pavilion	10	0.207	0.075
	Tennis Courts	1	0.021	0.008
	Baseball/Softball	2	0.041	0.015
	Soccer	3	0.062	0.023
Community	Play Structures	5	0.043	0.038
	Lg. Pavilion	5	0.043	0.038
	Tennis Courts	10	0.086	0.075
	Baseball/Softball	13	0.112	0.098
	Soccer	3	0.026	0.023
	Restroom	8	0.069	0.060
Trails	N/A			
Undeveloped Land	N/A			

Source: WVC Parks Department

West Valley City's parks are also improved with landscaping, irrigation, parking and paved surfaces. The current and proposed LOS for park improvements is identified in Table 1-7[3].

[3] The values in this table do not sum to 43,560 (the number of square feet in an acre) because some portion of the park acre is captured in the improvements such as restrooms and playgrounds.)

Table 1-7: Park Improvements LOS/Acre

Classification	Irrigated Landscaping (SF)	Parking (SF)	Walkways/ Other Hardsurface (SF)
Neighborhood	39,640	732	1,584
Community	34,848	3,742	2,792
Trails	NA	NA	40,000

Source: WVC Parks Department

The projected increase in population of 19,346 through 2023 will erode the current LOS. Table 1-8 is the park acreage, by type, required to meet the proposed LOS. Table 1-8 is the parks/trails IFFP identifying the system projects required to maintain the current LOS. The acres identified on the IFFP are greater than the LOS required acres to allow some flexibility in responding to development. The impact fee is based on the required number of acres only and is reflected in the table as estimated impact fee collections.

Table 1-8: Parks/Trails Impact Fee Facilities Plan

Project	Classification	Area (acres)	Total Cost (2013$)	IF Eligible Cost (2013$)
Develop existing park acreage	Neighborhood	6	$984,780	$984,780
Acquire and develop new parks	Neighborhood	20	$5,682,600	$5,682,600
Acquire and develop district park	Community	10	$2,916,350	$2,916,350
Develop existing regional park acreage	Community	3	$514,905	$514,905
Develop new community park	Community	10	$2,916,350	$2,916,350
Develop Wetland Park Area	Community	20	$500,000	$500,000
New skate park	Community	1	$300,000	$300,000
Complete City Center Plaza	Community	4	$50,000	$50,000
Acquire new park property	All	5	$600,000	$600,000
Develop existing trail property	Trails	10	$2,400,000	$2,400,000
Acquire & develop new trails	Trails	20	$7,200,000	$7,200,000
Acquire new trail property	Trails	5	$600,000	$600,000
Total		**114**	**$24,664,985**	**$24,664,985**
Estimated Impact fee collections				$8,459,423
Parks/Trail funding (all other sources)				$16,205,562

Source: WVC Parks Department, GSBS Richman

In addition to the cost of developing new parks and trails to maintain the current level of service, the West Valley City Family Fitness Center was designed with adequate capacity to serve the City until build-out. New development will "buy-in" to its share of existing excess capacity at the fitness center.

1.2 Funding Sources

The City may fund the infrastructure in the IFFP through a combination of different revenue sources.

Federal and State Grants and Donations. Impact fees cannot reimburse costs funded or expected to be funded through federal grants and other funds that the City has received for capital improvements without an obligation to repay. Grants and donations are not currently contemplated in this analysis. If grants become available for construction of facilities, impact fees will be recalculated and an appropriate credit given. Any existing infrastructure funded through past grants has been removed from the system value in the analysis.

Bonds. None of the costs contained in the IFFP include the cost of bonding. The cost of bonding required to finance impact fee eligible improvements identified in the IFPP may be added to the calculation of the impact fee. This will be considered in the impact fee analysis.

Interfund Loans. Because infrastructure must generally be built ahead of growth, there often arise situations in which projects must be funded ahead of expected impact fee revenues. In some cases, the solution to this issue is bonding. In others, funds from existing user rate revenue will be loaned to the impact fee fund to complete initial construction of the project and will be reimbursed later as impact fees are received. Consideration of potential interfund loans will be included in the impact fee analysis and should also be considered in subsequent accounting for impact fee expenditures.

Impact Fees. It is recommended that impact fees be used to fund growth-related capital projects as they help to maintain the proposed level of service and prevent existing users from subsidizing the capital needs for new growth. Based on this IFFP, an impact fee analysis will be able to calculate a fair and legal fee that new growth should pay to fund the portion of the existing and new facilities that will benefit new development.

Developer Dedications and Exactions. Developer exactions are not the same as grants. Developer exactions may be considered in the inventory of current and future infrastructure. If a developer constructs a facility or dedicates land within the development for system-level infrastructure on the IFFP, the value of the dedication is credited against that particular developer's impact fee liability.

If the value of the dedication/exaction is less than the development's impact fee liability, the developer will owe the balance of the liability to the City. If the value of the improvements dedicated is worth more than the development's impact fee liability, the City must reimburse the difference to the developer from impact fee revenues collected from other developments.

It should be emphasized that the concept of impact fee credits pertains to system level improvements only. For project level improvement (i.e. projects not identified in the impact fee facility plan), developers will be responsible for the construction of the improvements without credit against the impact fee.

1.3 Certification

I certify that the attached impact fee facilities plan:

1. Includes only the costs of public facilities that are:
    a. Allowed under the Impact Fees Act; and
    b. Actually incurred; or
    c. Projected to be incurred or encumbered within six years after the day on which each impact fee is paid.
2. Does not include:
    a. Costs of operation and maintenance of public facilities;
    b. Costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
    c. An expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. Complies in each and every relevant respect with the Impact Fees Act.

Christine Richman, GSBS

2.1 Existing Conditions

West Valley City's 2013 estimated population is 132,654 people living in 38,061 households for an estimated average household size of 3.49. This is an estimated increase of 3,174 people and 922 households in the three year period since the 2010 Census.

West Valley City's current 38,000 households occupy approximately 30 percent of the community's 22,932 acres. Table 2-1 indicates that the remaining acreage is distributed between commercial, exempt and vacant, developable land.

Table 2-1: Distribution of Land Uses - 2013

Category	Acres	Percent
Commercial	5,644	24.61%
Multi-family	999	4.36%
Single-family/Duplex Residential	5,985	26.10%
Exempt (schools, government, ecclesiastical)	3,433	14.97%
Mining	655	2.86%
Vacant Land	3,001	13.09%
Other	170	0.74%
Roads	3,045	13.28%
Total	**22,932**	**100.00%**

Source: West Valley City Planning Department

Residential uses (single-family and multi-family) occupy 41% of the developed land, while all other uses combined represent 59% of developed acreage (Table 2-2).

Table 2-2: Distribution of Developed Land Uses - 2013

Category	Acres	Percent
Commercial	5,644	33.42%
Multi-family	999	5.92%
Single-family/Duplex Residential	5,985	35.44%
Exempt (schools, government, ecclesiastical)	3,433	20.33%
Mining	655	3.88%
Other	170	1.01%
Total	16,886	100.00%

Source: West Valley City Planning Department

Table 2-3 provides a breakdown of the estimated 5,644 acres of land in commercial use. The general commercial category includes a wide range of land uses such as automobile repair and auto sales. ATK, a major employer and land holder in West Valley City has been evaluated separately as a specialized land holding with limited structures. The analysis assumes ATK operations will continue during the planning horizon and beyond. If the ATK property is made available for development, this analysis will be amended.

Table 2-3: Commercial Land Uses - 2013

Category	Acres	Percent
General Commercial	1,882	33.345%
Industrial	1,434	25.408%
ATK	2,328	41.247%
Total	**5,644**	**100.00%**

Source: West Valley City Planning Department

As seen in Table 2-4, vacant industrial land represents 64 percent of vacant, developable acreage. If the property develops as currently zoned, industrial land uses will represent 25 percent of total acreage at build out. Vacant residential land is 29 percent of undeveloped area. At build out, residential uses are projected to represent 34 percent of total acreage.

Table 2-4: Vacant Land Distribution - 2013

Category		Acres	Percent
Vacant Residential Land		870	28.99%
Vacant Commercial Land		210	7.00%
Vacant Industrial Land		1,921	64.01%
	Total	**3,001**	**100%**

Source: West Valley City Planning Department

Figure 2-1 is the City's future land use map from the General Plan dated January 2009, and updated through August 27, 2013. The map identifies the planned distribution of uses throughout the City. As seen in Table 2-1 approximately 87 percent of the City is currently developed. Although redevelopment is expected to increase densities in some of the currently developed areas, the majority of growth in the 10 year impact fee planning time frame will occur on currently vacant land.

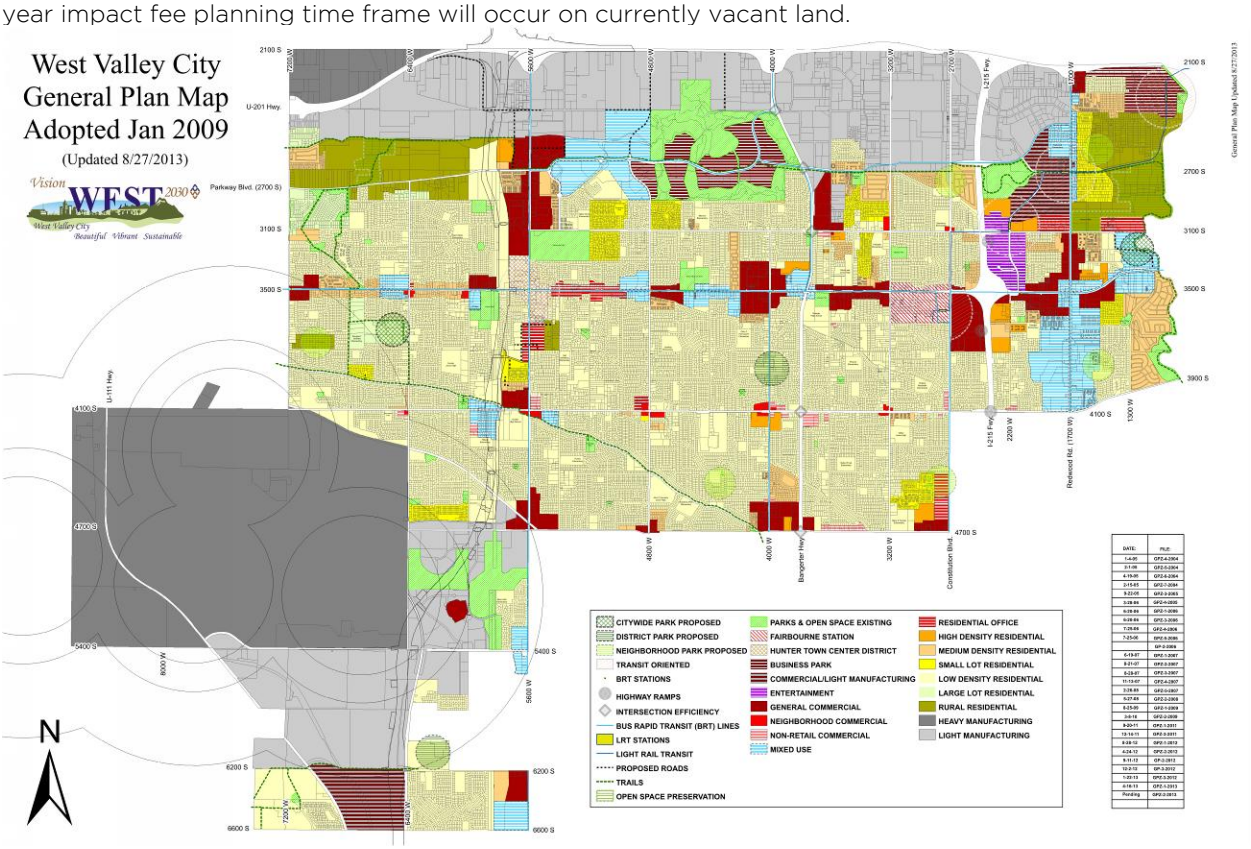

Figure 2-1 General Plan Future Land Use Map

Current and future development will occur in accordance with the adopted zoning regulations of the City. The current zoning map identifying the allowed distribution of uses and related zoning regulations is included in Figure 2-2.

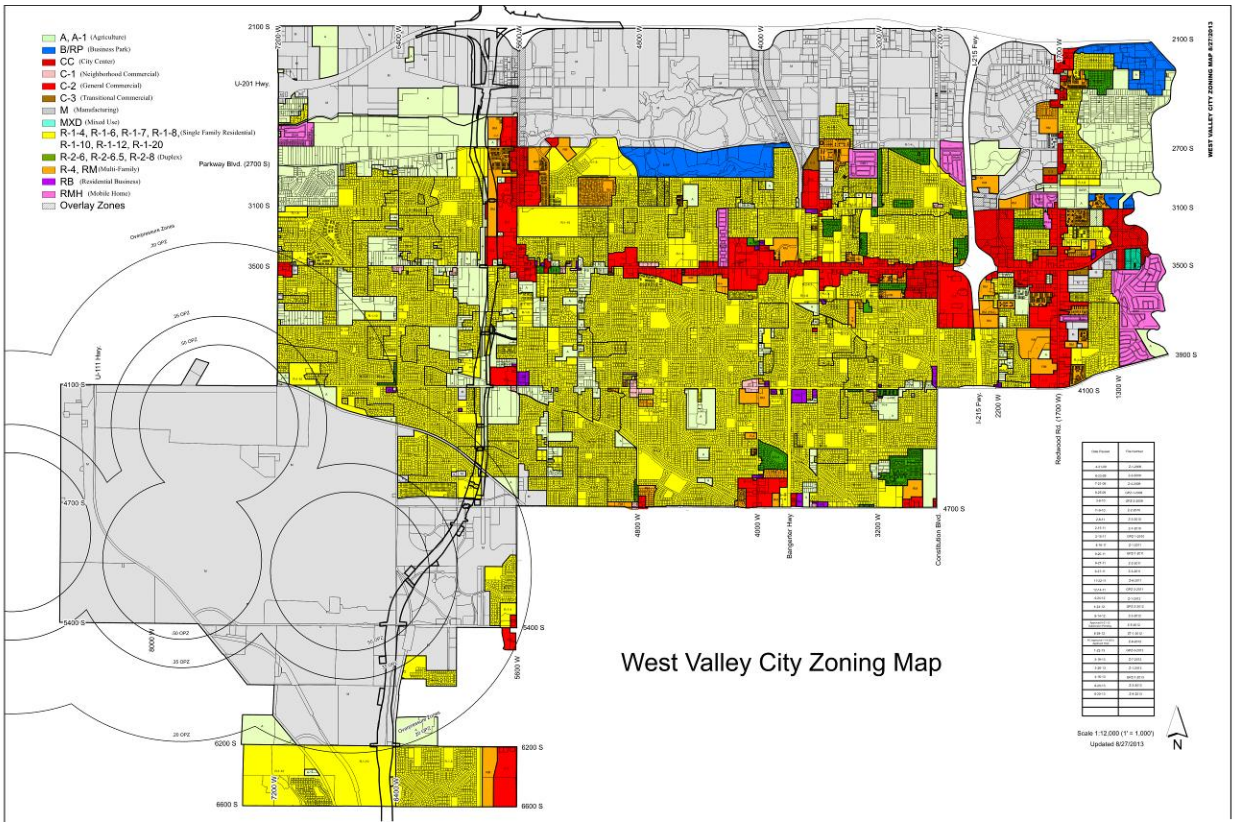

Figure 2-2. Zoning Map

2.2 Population

Table 2-5 provides an overview of West Valley City's general demographic profile from the 2010 Census.

Table 2-5: General Demographics – 2010

	2010	% Total
Total Population	129,480	100%
Population under 5	13,246	10%
Population 5 – 19	33,528	26%
Population 65+	8,913	7%
Housing Units	38,978	100%
Occupied Housing Units	37,139	95%
Owner Occupied	25,975	70%
Renter Occupied	11,164	30%
Average Household Size	3.49	

Source: Census

West Valley City's estimated 2013 population is 132,654 persons living in 38,061 households[4]. This is an increase of 3,174 people and 922 households in the three year period.

[4] Estimates provided by West Valley City Planning Staff.

2.3 Employment

There were an average estimated 2,484 firms reporting employment data to the State of Utah located in West Valley City in 2012. This is a slight decline from 2009. As seen in Table 2-6, 30 percent of the firms located in West Valley City are in the Trade, Transportation and Utilities sector. The second most highly represented sector, in terms of the number of firms, is Professional & Business Services at 18 percent. The sectors that gained firms during the four year period were mining, leisure & hospitality, professional & business services, other services and education and health services.

Table 2-6: Firms by Sector - 2009 – 2012

	2009	2010	2011	2012	% Total 2012	% Change 2009-2012
Total	2,557	2,570	2,477	2,484	100%	-3%
Mining	4	4	4	7	0%	75%
Construction	298	288	242	240	10%	-19%
Manufacturing	219	225	201	204	8%	-7%
Trade, Transp. & Utilities	739	737	733	737	30%	0%
Information	64	60	54	49	2%	-23%
Financial Activities	243	245	234	221	9%	-9%
Professional & Bus. Svcs	387	391	380	401	16%	4%
Education & Health Svcs	183	188	196	184	7%	1%
Leisure & Hospitality	190	191	200	208	8%	9%
Other Svcs	174	184	176	177	7%	2%
Government	56	57	57	56	2%	0%

Source: Annual Report of Labor Market Information, Utah State Department of Workforce Services

Table 2-7 indicates that employment by the firms reporting to the Department of Workforce Services has increased by approximately 1 percent in the period 2009 through 2012. The largest employment sector, just as with the largest number of firms, is Trade, Transportation & Utilities with 29 percent of reported employment in West Valley City. Financial Activities and Professional & Business Services are each at 14 percent of total employment. Mining, Other Services and Leisure & Hospitality have shown the greatest gain in the four year period.

Table 2-7 Employment by Sector - 2009-2012

	2009	2010	2011	2012	% Total 2012	% Change 2009-2012
Total	64,387	64,332	64,438	65,225	100%	1%
Mining	208	166	119	317	0%	52%
Construction	3,895	4,096	3,747	3,855	6%	-1%
Manufacturing	6,481	6,153	6,307	6,738	10%	4%
Trade, Transp. & Utilities	17,537	17,625	18,158	18,893	29%	8%
Information	2,757	2,459	2,384	2,472	4%	-10%
Financial Activities	10,413	10,275	9,854	9,429	14%	-9%
Professional & Bus. Svcs	9,399	9,643	9,909	9,383	14%	0%
Education & Health Svcs	4,141	4,132	4,239	4,374	7%	6%
Leisure & Hospitality	3,739	3,836	3,981	4,154	6%	11%
Other Svcs	1,256	1,274	1,261	1,441	2%	15%
Government	4,561	4,673	4,479	4,169	6%	-9%

Source: Annual Report of Labor Market Information, Utah State Department of Workforce Services

2.4 Growth

If West Valley City "builds out" according to the land use plan in Figure 2-1, the City will have a population of approximately 160,000 people living in 50,000 households. New resident population is expected to occur primarily on the approximately 870 acres of currently vacant, residentially zoned land. This anticipated growth in households and resident population would be accompanied by an increase in commercial and industrial development. This 21 percent increase in population and 31 percent increase in households will require additional road, park, and public safety infrastructure to serve the new development.

Historical Growth

Between April 1, 2000 and April 1, 2010, West Valley City's population grew 19 percent (approximately 1.7 percent each year) and the total number of households grew 15 percent (about 1.4 percent each year). In addition to population increases, nonresidential development in the area increased by more than 1,900 buildings valued at more than $337 million[5]. This is an average annual investment in West Valley City of more than $86 million (nonresidential and residential new construction combined)[6]. In addition to new construction, property owners invested almost $20 million annually[7] in renovation and rehabilitation of existing buildings.

Seventy-four percent of the decade's new investment occurred prior to January 1, 2008. Many communities were affected even more significantly than West Valley City. As can be seen in Table 2-8, residential and retail development were significantly lower during and after the recession with industrial, office and rehabilitation investment performing better.

Table 2-8 - Investment Pre/Post 2008 Recession

Type	Annual Average/2001-2007			Annual Average/2008-2010		
	Buildings	DU	Value ($000)	Buildings	DU	Value ($000)
Single Family/Duplex/Mobile Homes	432	433	$38,634	141	142	$12,879
Multi Family	30	205	$19,616	13	169	$19,197
NonResidential	182		$29,437	187		$34,732
Hotel/Motel	0		$0	1		$4,050
Industrial	4		$7,639	5		$8,768
Office	3		$3,674	3		$6,294
Retail	10		$10,295	4		$4,530
Other	165		$7,829	174		$11,090
Additions/Alterations	325		$17,962	257		$21,097
Total	**969**	**638**	**$105,649**	**598**	**311**	**$87,905**

Source: Building Permit Database, Bureau of Business & Economic Research, University of Utah

For purposes of calculating an impact fee in the state of Utah a ten year growth horizon is used to ensure that the projects identified and the fee imposed will be encumbered within the statutorily required six year period. Table 2-9 provides actual change in population and households between the 2000 and 2010 census, current estimates and projections for the IFFP 10 year window (2023) and build-out based on the general plan land use map.

Table 2-9 - Growth 2000 - 2023

	Census		Estimates	Projections	
	2000	2010	2013	2023	Build Out
Population	108,896	129,480	132,654	152,000	160,000
Households	32,253	37,139	38,061	46,000	50,000
Persons/HH	3.38	3.49	3.49	3.30	3.20
Commercial SF			21,314,779	22,814,779	23,694,031
Industrial SF			13,742,309	21,742,309	32,148,830
ATK SF			410,776	410,776	410,776

Source: U.S. Census, GOMB, West Valley City Planning Department

Future Growth Trends

West Valley City is projected to grow by 19,346 people and 7,939 households between 2013 and 2023. This residential growth represents a 15 percent increase in population and a 21 percent increase in households. At the same time nonresidential uses in the city are projected to increase by 1.5 million square feet of commercial space and 8 million square feet of industrial space. Development projections through 2023 assume that approximately 60 percent of new development will be in residential uses and 40 percent in nonresidential uses.

[5] University of Utah, Bureau of Business and Economic Research, Building Permit Database.
[6] Ibid.
[7] Ibid.

The majority of residential growth is anticipated west of 4000 West with additional population gains in the Fairbourne Station redevelopment area. New industrial investment will be concentrated primarily along the Highway 201 corridor on the City's northern boundary. General commercial growth will occur in and around the City's existing commercial centers as well as near newly developed residential neighborhoods. Figure 2-3 illustrates the areas of projected population growth.

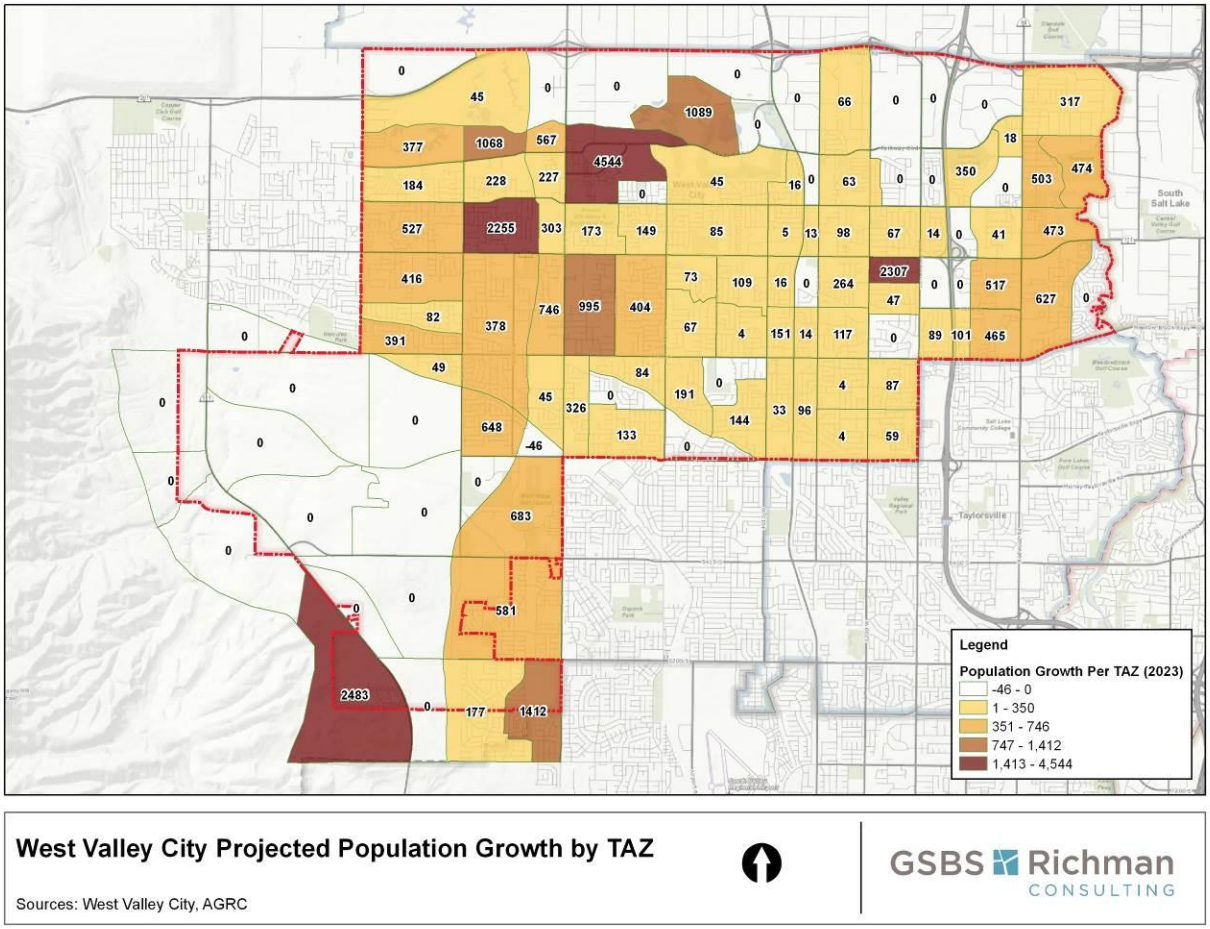

Figure 2-3 Projected Population Growth

2.5 School Planning

According to West Valley City Planning Staff, the Granite School District has plans to construct a new junior high school in the central north area of the City. Section 11-36A-302(4) of the Impact Fees Act requires that the city include on the IFFP any infrastructure facility intended to serve a new school. Although there is a new school planned, there are no IFFP projects required to serve the proposed junior high. If notified of additional schools or of necessary infrastructure to serve a school, the IFFP will be amended to reflect the necessary infrastructure in accordance with the requirements of the Utah Impact Fees Act.

3.1 Current & Proposed Level of Service (LOS)

West Valley City's current and proposed transportation LOS is to provide adequate lane mile and intersection capacity to maintain LOS D according to the Wasatch Front Regional Council travel demand model[8]. Level of service standards are defined in the American Association of State and Territorial Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 2011 (6th Edition) where LOS D is defined by traffic levels "Approaching unstable flow." This level can be measured by methods included in the Transportation Research Board (TRB), *Highway Capacity Manual HCM2010*, October 2010.

LOS calculations can be complex and data intensive. LOS is typically measured at signalized intersections where LOS D represents the approximate point where all vehicles will travel through a signal without having to wait more than one signal cycle. Traveling through multiple signals, LOS D represents the approximate point where drivers may have to wait for one or more signals, but will not wait more than one signal cycle at any one intersection. Therefore, LOS can be highly variable and data intensive depending on the following factors:

- number of travel lanes
- number of turn lanes
- number of trucks in the travel flow
- the level of "platooning" of vehicles approaching each intersection
- the timing of traffic signals and the coordination of multiple traffic signals
- the number of turning vehicles
- the vertical grade of the roadway and other horizontal alignment factors
- the familiarity of drivers to local conditions
- the availability of shoulders and lateral clearances
- various natural environmental conditions

To simplify the analysis, travel models use a link based capacity (even though much of the actual delay is manifested at intersections). Algorithms exist in the travel model to estimate the delay associated with increased traffic volume with the primary input being the travel link number of lanes, functional classification of the road, and area type (urban, suburban, rural, etc.). These simplifications are necessary since detailed data may not be available for forecasting future conditions and the travel model is developed at a regional (metropolitan area) scale. The analysis in West Valley City estimated the capacity of existing and future roads based on the design standards of the City and available information related to transportation plans such as number of travel lanes, classification and presence of right turn lanes. Table 3-1 summarizes the daily traffic capacities used in the West Valley City analysis based on the capacities used in the 2005 West Valley City Road Impact Fee Study & Roadway Capital Facilities Plan.

Table 3-1: Daily Suburban LOS D Capacity in West Valley City

	Max Daily Traffic Capacity Estimates		
Lanes	Arterial	Arterial w/ RT lanes	Collector w/ RT lanes
2	11,500	12,650	11,550
3	13,000	14,300	12,650
4	29,000	31,900	24,750
5	30,500	33,550	27,500
6	40,500	44,550	
7	46,000	50,600	

Source: InterPlan

[8] The travel demand model is the accepted model of the Wasatch Front Regional Council (WFRC) which represents an appropriate planning tool for estimating existing congestion levels and forecasting future congestion levels based on the impacts of growth.

3.2 Existing Facilities

A calibrated travel demand model was used to generate current traffic volumes for each segment in West Valley City's current road network. For segments with capacity greater than volumes, there is existing excess capacity. For segments with capacity less than volumes, there is an existing deficiency. Road improvements are major investments made in anticipation of increased traffic volumes, and are difficult to phase incrementally. Accordingly, at any point in time there will be segments that are above capacity and segments that are below capacity. This is why the system is modeled as a whole and the City-wide system treated as one service area. In addition, the travel demand model was used to form a consistent source of estimating existing traffic that can be used to forecast traffic growth in the future.

3.3 Impact of Growth

The travel demand model was used to estimate the impact of the anticipated 19,346 new residents and 9.5 million square feet of non-residential development in 2023 and 2040. InterPlan worked with West Valley City staff to develop a capital improvement program represented by a first phase that would encompass the period from 2013 to 2023 and subsequent phases beyond the year 2023, as needed. Traffic volume estimates were developed by road segment. Traffic volumes were estimated based on the existing conditions, modeled conditions in the year 2023 based on planned improvements to be completed by 2023, and modeled conditions in the year 2040 based on planned improvements by West Valley City. Although improvements to the State Highway System are not eligible for impact fees, improvements included in the Wasatch Front Regional Council *Regional Transportation Plan* (2011-2040) were assumed in the modeling. Most significantly, the construction of the Mountain View Corridor project is initiated as signalized frontage roads from the south County limits through West Valley (to the north) by the year 2023 and is assumed completed as a multi-lane freeway running the length of the Salt Lake valley by 2040. Improvements to the State Highway system will reduce the need for new capacity on the non-state system in West Valley City and thereby lower the need for new capacity on the non-state system.

InterPlan and West Valley City staff worked to develop capital improvement projects on the road segments that directly benefit expected new development and relieve capacity deficiencies in the year 2023. Since the transportation system works as a network of improvements, projects were identified beyond those with 2023 estimated traffic volumes exceeding current, 2013, capacity at LOS D. However, the IFFP was developed to eliminate all capacity deficiencies in the year 2023, although sometimes making improvements to parallel facilities where direct capacity constraints occur. For the most part, road segments with traffic volumes exceeding capacity in 2040 will be included in the appropriate future impact fee facilities plan update. There are several segments projected to experience accelerated growth during the 2023 to 2040 period requiring investment in capacity during the 2013 to 2023 period. These segments have been included in the IFFP. The cost of capacity for the period beyond 2023 will be recouped as existing excess capacity in future impact fee updates as appropriate. According to the WFRC travel demand model, projected growth of 7,939 households and 9.5 million square feet of nonresidential development will generate an additional 13,526 peak trips in 2023.

Since it is difficult to balance the IFFP to the precise capacity needed to serve new development in West Valley, a "capacity utilization factor" was estimated based on the net new capacity planned in the IFFP. This capacity utilization factor reflects the equivalent lane miles of needed capacity of the IFFP to balance the capacity needed by new development. The capacity utilization factor of the IFFP is 0.92, indicating that only 92 percent of the capacity shown in the IFFP may actually be constructed. Since it is cost effective to build complete road segments, as opposed to partial road construction, it is impossible to determine which 8 percent of road capacity of the IFFP may be deferred until beyond the year 2023, depending on the exact location and magnitude of new growth.

The capacity utilization factor has been proposed by InterPlan in response to the 2011 (and 2013) General Legislative session modifications of the Utah Impact Fees Act. Specifically, the act calls for impact fees to be expended within six years after collection and requires that each IFFP does not raise the level of service of existing residents through impact fees. Since the Act implies that IFFPs and IFAs will be updated every 3-6 years, the capacity utilization factor allows for an approximate balance of capacity added against the development need. The capacity utilization factor of 0.92 in West Valley indicates that 92 percent of the capacity identified in the IFFP is needed by new development in West Valley and will be fully funded based on anticipated development. The remaining 8 percent of the capacity proposed in the IFFP will either be built and included in future Impact Fees as Existing Excess Capacity (discussed later in this report) or deferred until future IFFPs. The use of this capacity utilization factor

results in a lower impact fee since new development is paying for a fraction, in this case 92 percent, of the development attributable cost of the IFFP.

3.4 Source of Cost Estimates

The estimated costs included in the impact fee facilities plan are based on engineering estimates from the West Valley City Engineering Department. Table 3-3 identifies the basis of the cost estimates. The cost estimates are based on recent road projects in the City.

Table 3-3: Estimated Cost of Materials and Labor - Roads

Item	Cost	Unit
Roadway Excavation (28" depth)	$0.26	SF
Clearing & Grubbing	$1,036.00	Acre
Subgrade Finish	$0.18	SF
Untreated Base Course (16" thick)	$0.79	SF
Bituminous Surface Course (12" thick) *	$4.72	SF
Concrete Curb and Gutter Type B1	$6.23	SF
Pavement Marking Paint	$1.83	SF
Parkstrip	$6.00	SF
Clearing and Grubbing for sidewalk	$0.22	SF
Excavation	$0.29	SF
Concrete Base Course, 4" thick	$2.06	SF
5' Concrete sidewalk, 4" thick	$4.47	SF
Signage	5%	of Subtotal
Drainage (inc. structures)	15%	of Subtotal
Environmental & design	20%	of Subtotal
Mobilization & traffic control	10%	of Subtotal
Contingency	20%	of Subtotal

** Assumes UDOT Bid of $69.90 per ton and in place density of 135 lb per SF*

Source: InterPlan

3.5 Future Facilities/Impact Fee Facilities Plan

To serve the approximately 19,300 new residents and 9.5 million square feet of nonresidential development projected through 2023, additional lane miles and intersection capacity are required. Figure 3-1 illustrates the projects included in the IFFP.

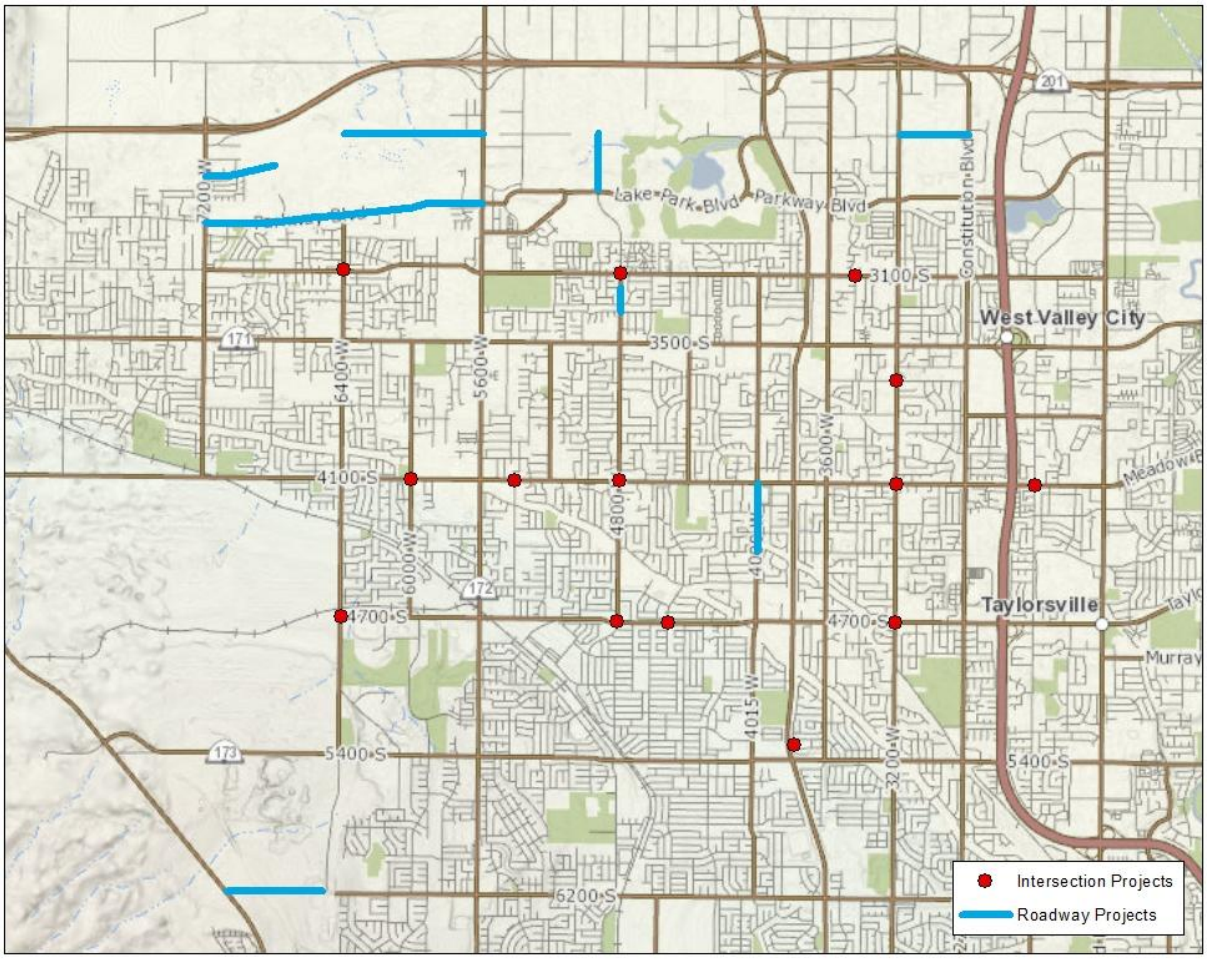

Figure 3-1: Transportation IFFP

Table 3-4 includes the roadway projects and Table 3-5 includes the intersection projects included in the IFFP. Intersection improvements included in the IFFP were estimated based on locations where traffic signal warrants are likely to be met or where other improvements will be required based on new development. The proposed new junior high school does not require construction of additional road capacity.

Table 3-4 is a subset of the City's planned road projects. All projects on the IFFP result in increased capacity. Total improvement costs in Table 3-4 were divided three ways. First, the costs were apportioned based on the relative share of traffic growth amongst the cost to solve existing capacity deficiencies, the cost to serve through traffic (or other traffic unrelated to new development in West Valley City) and the cost to serve traffic generated by new development in West Valley City. The cost to serve new development generated traffic represents the eligible impact fee cost. Existing capacity deficiencies were calculated based on the existing traffic volume over the existing traffic capacity divided by the total traffic increase between existing traffic capacities and year 2023 estimated traffic. The cost to serve through traffic was similarly estimated as the relative share of year 2023 traffic increases on the network. New development's share of increased volumes/capacity forms the basis for the IFFP. Year 2040 traffic was modeled to eliminate short term effects from potential constrained travel paths created by a more limited network. 2040 modelling allows for a wider range of improvements in the IFFP for new development consistent with long range planning.

Table 3-4: Roadway IFFP

Street	Limits		Total Cost	Cost of Existing Capacity Deficiencies	Cost of Through Traffic	IFFP Cost
	From	To				
4000 W	4100 S	4180 S	$90,488	$59,930	$22,622	$7,936
4000 W	4180 S	4340 S	$338,513	$224,196	$84,628	$29,689
4000 W	4340 S	4360 S	$63,700	$42,188	$15,925	$5,587
4000 W	4360 S	4400 S	$47,250	$31,294	$11,813	$4,143
4800 W	2400 S	Lake Park Blvd	$1,219,050	$0	$304,763	$914,287
4800 W	3200 S	3300 S	$192,488	$0	$48,122	$144,366
Parkway Blvd	5630 W	7200 W	$2,629,663	$0	$657,416	$1,972,247
2400 S	2700 W	3200 W	$1,451,520	$0	$362,880	$1,088,640
2400 S	5600 W	6400 W	$2,160,900	$0	$540,225	$1,620,675
2400 S	6800 W	7200 W	$2,250,000	$0	$562,500	$1,687,500
6200 S	MVC	SR-111	$755,325	$0	$188,831	$566,494
		Total Roads	*$11,198,897*	*$357,608*	*$2,799,725*	*$8,041,564*

Source: InterPlan

It was assumed that all intersection improvements in Table 3-5 are necessary to provide for added capacity so the total cost of intersection improvements was apportioned between through traffic increases and traffic increases caused by new development in West Valley City. Modeling was not performed separately for the intersection analysis, so the results of all model links were used to estimate the relative share of new development traffic versus through traffic on all intersections.

Table 3-5: Intersections IFFP

East/West	North/South	Total Cost	Cost of Through Traffic	IFFP Cost
3100 S	3450 W	$180,077	$59,353	$120,724
3100 S	4800 W	$405,077	$133,513	$271,564
3100 S	6400 W	$53,077	$17,494	$35,583
3650 S	3200 W	$53,077	$17,494	$35,583
4100 S	2200 W	$38,077	$12,550	$25,527
4100 S	3200 W	$180,077	$59,353	$120,724
4100 S	4800 W	$307,077	$101,213	$205,864
4100 S	5400 W	$325,077	$107,145	$217,932
4100 S	6000 W	$786,077	$259,091	$526,986
4700 S	3200 W	$165,077	$54,409	$110,668
4715 S	4520 W (Dartmouth Dr.)	$165,077	$54,409	$110,668
4700 S	4800 W	$165,077	$54,409	$110,668
4700 S	6400 W	$452,077	$149,005	$303,072
	Total Intersections	*$3,275,001*	*$1,079,438*	*$2,195,563*

Source: InterPlan

3.6 Existing Excess Capacity

The concept of allocating the cost of existing capacity in excess of what existing traffic needs is similar to the process of allocating the cost of new capacity. For existing excess capacity, the total cost incurred by the City to add capacity is divided by the share of existing traffic, through traffic, and traffic from future new development in West Valley City. Since no future road is planned to have future capacity deficiencies, all future roads will meet the LOS D standard. The volume of traffic from new development in West Valley City using the excess capacity in the year 2023 is simply a subset of all future traffic from new development in West Valley City. The share of volume created by new growth in West Valley City in the year 2023 was derived based on interpolated model years.

Table 3-6 shows the existing excess capacity based on information provided by West Valley City staff. Of the almost $8.2 million spent by the City for existing capacity, only $0.78 million is available for use by future development in the year 2023 in West Valley City. Furthermore, this $0.78 million of existing capacity buy-in for future development is available for 2023 traffic and will continue to be available to 2013 through 2023 new development in the 2040 modelled scenario.

Table 3-6: Existing Excess Capacity Buy-in Calculation

Street	Limits		2013 Vol	2023 Vol	2023 Vol from WVC	Project Cost	2023 Buy-In Eligible Cost
	From	To					
3100 S	Redwood Rd	2700 W	12,553	13,985	1,074	$870,165	$66,826
3100 S	2700 W	3200 W	8,890	10,275	1,038	$435,083	$43,953
3100 S	3200 W	3600 W	9,376	10,919	1,311	$435,083	$52,239
5200 W	3500 S	4100 S	3,529	4,164	540	$1,835,030	$237,972
6000 W	4100 S	4400 S	2,903	3,082	170	$395,279	$21,803
6000 W	4400 S	4700 S	1,684	1,857	165	$379,777	$33,744
6400 W	4300 S	4700 S	3,201	4,091	846	$325,500	$67,312
6400 W	4700 S	5400 S	3,179	3,777	568	$556,652	$83,712
4700 S	5600 W	6400 W	62,140	35,370	1,615	$471,739	$21,540
7200 W	Parkway Blvd	3100 S	18,568	18,637	59	$489,542	$1,550
7200 W	3100 S	3500 S	13,926	14,256	281	$717,995	$14,152
Decker Lake Dr.	Parkway Blvd	2770 S	2,808	3,299	417	$213,352	$26,968
Decker Lake Dr.	2770 S	3100 S	2,564	3,130	481	$574,408	$88,272
Decker Lake Dr.	3100 S	3500 S	20,487	21,380	759	$496,909	$17,641
			Total Buy-In			*$8,196,514*	*$777,684*

Source: InterPlan

3.7 Existing Deficiencies

The WFRC travel demand model was run using the 2013 road network and 2013 travel demands. The model identified several road segments that are currently over LOS D. This situation represents an existing deficiency. Projects required to address current deficiencies have not been included in the IFFP. For projects on road segments that have existing deficiencies and will add capacity for new development, a portion of the project cost proportional to the traffic generated from existing development (i.e. the proportional number of trips currently exceeding LOS D) has been deducted from the total project cost.

3.8 Maximum Allowable Impact Fee

Table 3-7 is the summary IFFP for West Valley City transportation. The capacity utilization factor reflects the ratio of the year 2023 volume to capacity across the network versus the build-out of volume to capacity across the network. This factor is necessary because it is difficult (or impossible) to exactly size the transportation facilities to match the increment of growth that WVC can expect so we are only going to build 92% (CUF=0.92) of the IFFP (Phase 1) Capacity and have reduced the cost to development accordingly.

Table 3-7: Maximum Allowable Impact Fee Calculation

	Roadway	Intersection
Total Cost of IFFP (2023)	$8,041,564	$2,195,563
# of New Peak Trips (2023) *	13,526	
Capacity Utilization Factor	0.92	
Cost/Peak Trip	$546.96	$149.34
Buy-in Cost	$777,684	
Buy-in Cost/Peak Trip	$57.50	
Maximum Allowable Impact Fee/Peak Trip	**$753.80**	

Source: InterPlan

** Based on the WFRC Traffic Demand Model*

CHAPTER 4– STORM DRAIN PLANNING

West Valley City's storm water system is divided into 16 districts representing different drainage areas. Figure 4-1 is a map of the storm water districts within the West Valley City storm water system. The systems within the districts are at varying levels of completion and the acreage included within each district is at varying levels of development. Several districts have little or no developable area left within the boundary, while the Riter district has significant developable area. The districts were designated based on the drainages within the City. There is limited, if any, interaction between the districts and they are treated as independent systems. In the event that a district drains into an adjacent district they are treated as a single service area unit for the purposes of calculating an impact fee.

West Valley City has a storm water utility that collects fees based on impermeable area. The fee funds operation and maintenance of the installed system. Storm water utility fees are the primary funding source for ongoing maintenance of the systems in districts that are completed. The storm water utility fund is also the source of funding to address existing deficiencies in the limited number of districts with existing deficiencies, for this reason a credit will be calculated where appropriate. This IFFP identifies the following information for each of the individual districts:

- Current LOS,
- Proposed LOS,
- Existing excess capacity within each district at the proposed LOS,
- Existing deficiencies at the current LOS
- Demands on existing facilities within each district at the proposed LOS,
- Projects (if any) required within each district to serve new development at the proposed LOS,
- All revenue sources available to fund system improvements, and
- Existing reimbursement agreements for installed system improvements.

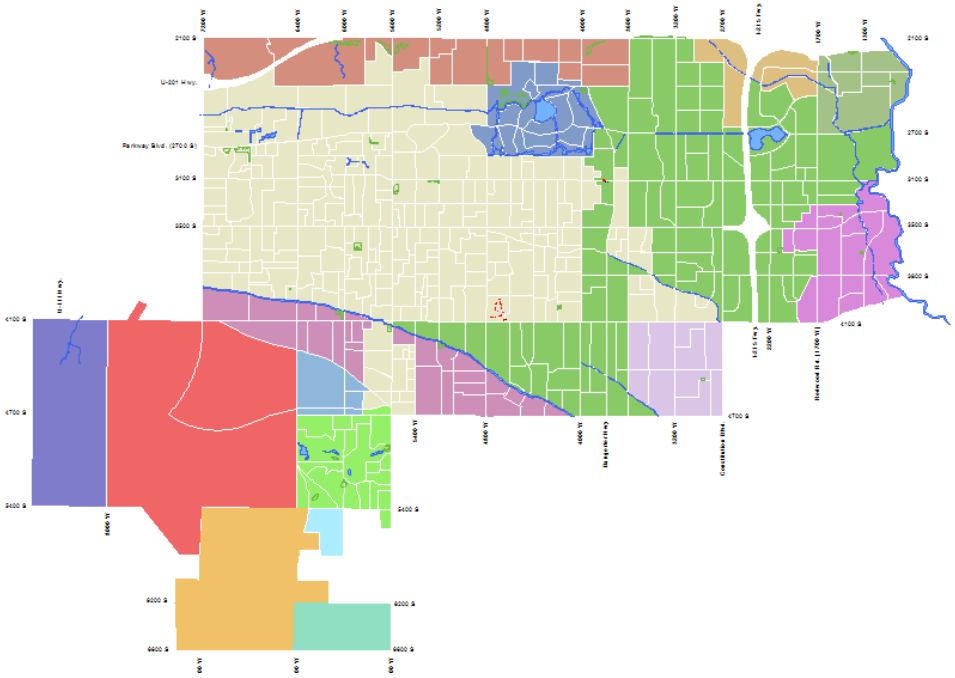

Figure 4-1 – West Valley City Storm water System Districts

4.1 Current & Proposed Level of Service (LOS)

West Valley City's storm watersystem current and proposed LOS is to design and install infrastructure adequate to detain and convey water from a 10-year storm event. The capacity to meet this LOS is determined according to the following hydrologic, policy and inter-governmental elements for storm drainage facilities design:

The City has chosen to use a design storm with a 3-hour duration, which produces 1.15 inches of rainfall, and has a one in ten chance of occurring each year (10-year storm.) The City uses a hydrologic model to predict runoff flows from this storm event, and to size the storm drain system to accommodate these flows. City policy also directs that the storm drain system be piped in most situations.

City policy requires all new commercial, multi-family residential, industrial and institutional uses to detain storm runoff to a maximum rate of .2 cubic feet per second (cfs) per acre. This runoff rate is approximately equivalent to the average runoff generated from a single-family residential development, for the design storm. Storm water detention is not required for single-family residential developments. Thus the runoff from all developed properties is roughly equal. New developments are also required to install unit (or development-level) drainage improvements within the development area itself.

The City's storm drain system discharges into several Salt Lake County Flood Control facilities, including the Jordan River, Decker Lake, the Utah & Salt Lake Canal, and the Riter Canal. Salt Lake County regulates by permit the amount of runoff discharged to County facilities. These County requirements place further detention requirements on the West Valley City storm drain system. For example, West Valley City is required to construct a large regional detention basin to limit runoff flow in the Riter Canal, at the City's western boundary.

In summary, the current and proposed LOS provided by West Valley City's storm drainage system is sufficient to carry storm runoff generated by the design storm, that is detained per City policy and as required by Salt Lake County Flood Control.

4.2 District-Level Evaluation – Existing Facilities

Figure 4-2 is the map of the existing storm drain system by district. Existing system status, required improvements and existing reimbursement agreements are identified on the map.

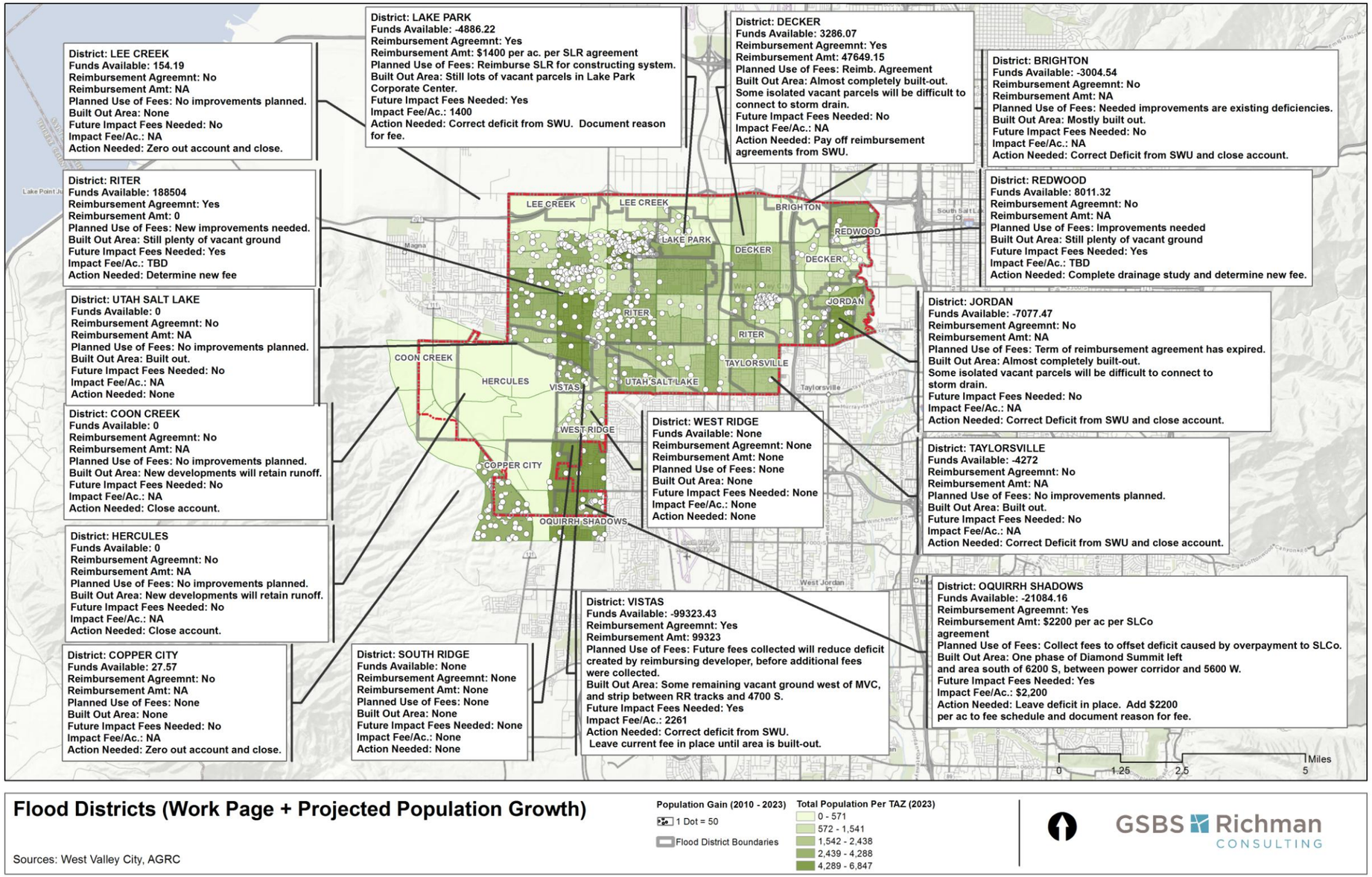

Figure 4-2 – Stormwater System Status by District

Redwood District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system in the Redwood District is partially complete. There are existing deficiencies in the system to be addressed with storm water utility funds.

There is no existing excess capacity in the system. There is limited potential for new development. No system improvements are required to serve new development therefore the current impact fee will be eliminated and no new impact fee imposed.

Decker District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system is 100 percent constructed with limited new development potential. The impact fee account for this district has a balance that will be used, in combination with storm water utility fees, to pay existing reimbursement agreements.

There are no existing deficiencies in this system and no existing excess capacity. Some new development areas will be difficult to attach to the system and therefore will be required to retain on site, others will connect to the existing system. The existing impact fee will be eliminated and no new impact fee imposed.

Jordan District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system is 100 percent constructed with limited new development potential. The impact fee account for this district has a negative balance of $7,077.47 and no reimbursement agreements.

There are no existing deficiencies in this system and no existing excess capacity. The existing impact fee will be eliminated and no new impact fee imposed.

Brighton District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system is 100 percent constructed with limited new development potential. The impact fee account for this district has a negative balance of $3,044.54 and no reimbursement agreements.

There are no existing deficiencies in this system and no existing excess capacity. The existing impact fee will be eliminated and no new impact fee imposed.

Taylorsville District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system is 100 percent constructed with limited new development potential. The impact fee account for this district has a negative balance of $4,272.00 and no reimbursement agreements.

There are no existing deficiencies in this system and no existing excess capacity. New development areas will be required to retain on site. The existing impact fee will be eliminated and no new impact fee imposed.

Lee Creek District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system is 100 percent constructed. New development in the area will be required to retain on site. The impact fee account for this district has a positive balance of $154.19 and no reimbursement agreements.

There are no existing deficiencies in this system and no existing excess capacity. The existing impact fee will be eliminated and no new impact fee imposed.

Riter District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system serves current development at the existing LOS. New development is planned throughout the area. This is an active development area. There are no current reimbursement agreements in the area.

Planned improvements are designed to complete the system and provide capacity for new development. The existing impact fee balance will be used to complete planned improvements and the new impact fee will provide infrastructure for new development. Future planned improvements for the area are identified in Table 4-2.

Table 4-2 - Riter/Westridge Service Area Impact Fee Facilities Plan

Basin Name:	R5							
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
OHB4	7200 West	3615 S	3563 S	24 inch	550	$115	$63,250	
								$63,250
Basin Name:	**R6**							
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
BA12	7000 West	3500 S	3390 S	36 inch	770	$170	$130,900	
OHB5	6800 West	3720 S	3500 S	24 inch	1980	$115	$227,700	
								$358,600
Basin Name:	**R7**							**.**
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
BC6	6400 West	Parkway Blvd.	Riter Canal	60 inch	1830	$280	$512,400	
BA11	6400 West	3500 S	3270 S	36 inch	1150	$170	$195,500	
OHB2	6400 West	3888 S	3800 S	24 inch	659	$115	$75,785	
BB5	Parkway Blvd	5800 W	6400 W	24 inch	3500	$115	$402,500	
BA5	Parkway Blvd	6600 W	6400 W	18 inch	1400	$95	$133,000	
								$1,319,185
Basin Name:	**R8**							
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
WHB6	6400 West	3750 S	3643 S	24 inch	672	$115	$77,280	
WHB10	6400 West	3887 S	3771 S	18 inch	1118	$95	$106,210	
BB9	6000 West	3500 S	3400 S	36 inch	635	$170	$107,950	
BB8	Walmart	3500 S	Walmart	36 inch	1985	$170	$337,450	
BB13	Walmart to Mdwlnds	Walmart	Meadowlands	42 inch	3135	$195	$611,325	
								$1,240,215

Basin Name:	R9							
Sub-Basin	Run Name	From	To	Pipe Size	Pipe Length	Unit Price	Total	
REC6	Brud Drive	Cent. Park	Meadowlands	36 inch	2975	$170	$505,750	
								$505,750
Basin Name:	**R10**							
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
SA6	5400 West	3600 S	3400 S	30 inch	1340	$150	$201,000	
								$201,000
Basin Name:	**R12**							
Sub-Basin	**Run Name**	**From**	**To**	**Pipe Size**	**Pipe Length**	**Unit Price**	**Total**	
SB5	5100 West	3635 S	3500 S	36 inch	1175	$170	$199,750	
								$199,750
Riter Canal Detention Basin								
Land Acquisition		32 acres	$90,000/ac				$2,880,000	
Excavation		160,000 CY	$8.00/CY				$1,280,000	
Control Structure		1 Lump	$150,000				$150,000	
Landscaping		35 acres	$10,000/ac				$350,000	
								$4,660,000
Total Cost of Improvements								**$8,547,750**
Total Acres in Basin							7232	
Undeveloped/Developable Acres in Basin							1233	
Percent new development							17.05%	
Total IFFP								**$1,457,391**

Source: West Valley City

The identified improvements are required to provide the proposed LOS in the district.

Utah & SL Canal District

Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system is 100 percent constructed with limited development potential. The impact fee account for this district has a balance of $0.00 and no reimbursement agreements.

There are no existing deficiencies in this system and no existing excess capacity. The existing impact fee will be eliminated and no new impact fee imposed.

Westridge District

Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system drains to the Riter District. Required improvements have been combined with the Riter system and calculated with that District.

There are no existing deficiencies in this system and no existing excess capacity. The existing impact fee will be recalculated with the Riter District.

Copper City District

There is no proposed storm drain system in this area. New development in the area will occur in areas that will be required to retain storm runoff on site. The impact fee account for this district has a positive balance of $27.57 and no reimbursement agreements.

There are no existing deficiencies in this system and no existing excess capacity. There is no existing impact fee and no new impact fee will be imposed.

Oquirrh Shadows District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system is 100 percent constructed and drains to Salt Lake County. There is existing excess capacity to serve anticipated new development as identified and calculated through a reimbursement agreement with Salt Lake County. The impact fee account for this district has a negative balance of $21,084.16 and a reimbursement agreement to collect $2,200 per acre and pass through to Salt Lake County.

There are no existing deficiencies in this system. There is existing excess capacity to serve planned new development in accordance with the reimbursement agreement.

Coon Creek District
There is no proposed storm drain system in this area. New development in the area will occur in areas that will be required to retain storm runoff on site. The impact fee account for this district has a balance of $0 and no reimbursement agreements.

There are no existing deficiencies in this system and no existing excess capacity. There is no existing impact fee and no new impact fee will be imposed.

Hercules District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system is designed to serve ATK and no new development is currently planned. In the event that development may occur in the future, system improvements will be designed with related fees calculated at that time. The impact fee account for this district has a balance of $0.00 and no reimbursement agreements.

There are no existing deficiencies in this system and no existing excess capacity. The existing impact fee will be eliminated and no new impact fee imposed.

Lake Park District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system is 100 percent constructed through an agreement with Suburban Land Reserve ("SLR") There is existing excess capacity to serve anticipated new development as identified and calculated through the reimbursement agreement. The impact fee account for this district has a negative balance of $4,886.22 and a reimbursement agreement to collect $1,400 per acre and pass through to SLR.

There are no existing deficiencies in this system. There is existing excess capacity to serve planned new development in accordance with the reimbursement agreement.

Vistas District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system is 100 percent constructed. There is existing excess capacity to serve anticipated new development. The impact fee account for this district has a negative balance of $99,323. The deficit in this account occurred because the City paid the developer up front. The City was to be reimbursed through impact fees. Since the time of installation, UDOT purchased most of the developable land in the district for the Mountain View Corridor. There is little potential for reimbursement. The impact fee fund will absorb this deficit. There will be no new impact fee.

There are no existing deficiencies in this system.

Southridge District
Current and proposed LOS is sufficient to carry storm runoff generated by the design storm. The current installed system is 100 percent constructed through funding from the West Valley City General Fund.

There are no existing deficiencies in this system. There is existing excess capacity to serve the limited anticipated new development. An impact fee will not be imposed.

4.3 Maximum Allowable Impact Fee
Table 4-3 provides the maximum allowable storm water system impact fee. The storm water impact fee is generally charged on a per acre basis at the time of subdivision plat or final site approval.

Table 4-3: Stormwater Maximum Allowable Impact Fee Schedule by Drainage District

District	IFFP	Total Acres	Developable Acres	Impact fee/acre
Redwood	$0			No Fee
Decker	$0			No Fee
Jordan	$0			No Fee
Brighton	$0			No Fee
Taylorsville	$0			No Fee
Lee Creek	$0			No Fee
Riter	$1,457,391	7,232	1,233	$1,182
UT & SL Canal	$0			No Fee
Westridge *	$0			$1,182
Copper City	$0			No Fee
Oquirrh Shadows **	$21,084			$2,200
Coon Creek	$0			No Fee
Hercules	$0			No Fee
Lake Park **	$4,886			$1,400
Vistas **	$99,323			No Fee
Southridge	$0			No Fee

Source: West Valley City, SL Co. Assessor's Office, GSBS

** Westridge has been combined with the Riter District*

*** Existing reimbursement agreements, buy-in for previously installed system infrastructure*

5.1 Current & Proposed Level of Service (LOS)

Fire and police facility current and proposed LOS is defined as units of square footage per 1,000 residents and nonresidential developed space. In addition to a facility LOS for fire stations and support facilities, the fire LOS includes fire apparatus costing $500,000 or more in accordance with the Impact Fee Act[9]. Table 5-1 is a summary of the current and proposed LOS for fire and police infrastructure.

Table 5-1: Public Safety Level Current and Proposed Level of Service

Facility Type	Current & Proposed Residential LOS	Unit	Current & Proposed Nonresidential LOS	Unit
Fire Facility	147.985	SF/1,000 Residents	0.795	SF/1,000 SF building
Fire Apparatus	15.71	$/Resident	84.30	$/1,000 SF building
Police Facility	257.292	SF/1,000 Residents	1.381	SF/1,000 SF building

Source: West Valley City, GSBS Richman

Proportional allocation of the cost of new facilities to various land use types will occur in the Impact Fee Analysis.

5.2 Existing Facilities

Figure 5-1 is a map of the location of fire and police facilities and density of population in West Valley City as of 2010. This map demonstrates the distribution of facilities in relation to current population distribution. Because the existing distribution of facilities corresponds to current distribution of developed land uses and future facilities will be located to serve new development, a geographic distribution element was not included in the proposed LOS.

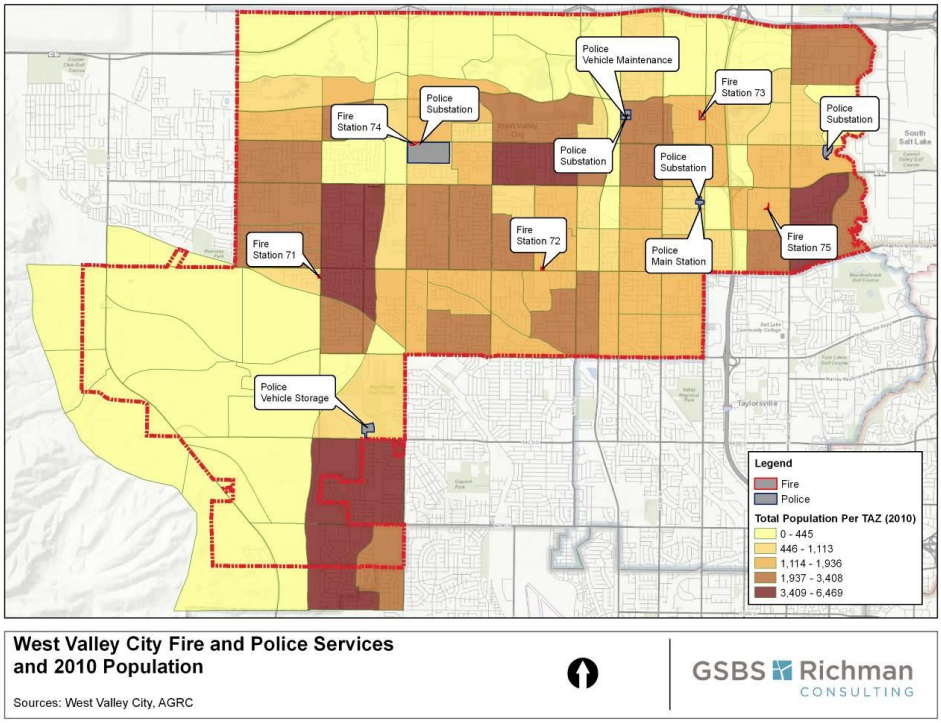

Figure 5-1: Distribution of current public safety facilities

[9] Fire Apparatus impact fees are only allowed for non-residential uses. This will be taken into account in the Impact Fee Analysis.

Fire Protection

West Valley City is served by five fire stations combined with additional space in administrative, storage and training facilities to support the overall mission. Table 5-2 is a list of each facility serving and supporting fire protection in West Valley City. The total square feet to provide the current level of service is 47,467.

Table 5-2: Fire Facilities 2013

Facility	Year Built	SF
Station 71	Unknown	2,489
Station 72	Before 1980	3,809
Station 73	1992	5,472
Station 74	1998	14,766
Station 75	2002	5,755
Public Safety Building	1990*	1,380
Vehicle Maintenance Building	2002	2,380
City Hall	1990	2,016
Training facility (Station 73)	2003	3,400
Storage facility (Station 73)	2013	6,000
Total		**47,467**

** Acquired by the City in 2002*

Source: West Valley City

Fire administration activities are in City Hall and the Public Safety Building. Fire apparatus are serviced in the vehicle maintenance building. Training and storage occurs at Station 73. Table 5-3 represents the current level of fire facility service per resident and per SF of non-residential space. The square footage in each facility was multiplied by the percent of the total residentially developed acreage in the City (41.36 percent) to determine the square footage dedicated to serving residential development. The area in each facility dedicated to serving existing residential development was then divided by each 1,000 of residents to determine the fire facility per resident level of service. A similar calculation based on building square footage was completed for the area of each facility serving nonresidential development.

Table 5-3: Fire Facilities Existing Level of Service

Facility	SF	SF/ Residential Service	SF/1,000 Residents - 2013	SF/non-residential -2013	SF/1,000 SF of nonresidential development
Station 71	2,489	1,029	7.757	1,460	0.042
Station 72	3,809	1,575	11.873	2,234	0.064
Station 73	5,472	2,263	17.059	3,209	0.092
Station 74	14,766	6,107	46.037	8,659	0.247
Station 75	5,755	2,380	17.941	3,375	0.096
Public Safety Building	1,380	571	4.304	809	0.023
Vehicle Maintenance Building	2,380	984	7.418	1,396	0.040
City Hall	2,016	834	6.287	1,182	0.034
Training facility (Station 73)	3,400	1,406	10.599	1,994	0.057
Storage facility (Station 73)	6,000	2,482	18.710	3,518	0.100
Total	47,467	19,631	147.985	27,836	0.795

Source: West Valley City, GSBS Richman

In addition to fire facilities, the Utah Impact Fees Act allows the inclusion of fire apparatus costing more than $500,000 in the calculation of impact fees for nonresidential development. Although residential development benefits from the apparatus and its share in the cost is calculated, the Utah Impact Fees act limits the apparatus impact fee to nonresidential uses only. West Valley City's current inventory of apparatus is identified in Table 5-4. Original purchase costs were used to determine eligibility in this table.

Table 5-4: Fire Apparatus Inventory

Item	Units	Unit Cost	Total
Transport Engines	2	$720,000	$1,440,000
Engine	1	$600,000	$600,000
75' Ladder Truck	1	$800,000	$800,000
Tower Truck	1	$1,200,000	$1,200,000
Hazmat Unit	1	$500,000	$500,000
Technical Rescue Unit	1	$500,000	$500,000
Total Fee Eligible Equipment	**7**		**$5,040,000**

Source: WVC Fire Department

The fire equipment current and proposed LOS is calculated using the same methodology as the fire facility current and proposed LOS, as seen in Table 5-5.

Table 5-5: Fire Equipment Level of Service

Item	Total Cost	Cost/ Residential Service - 2013	Cost/ Resident – 2013	Cost/ non-residential - 2013	Cost/1,000 SF of nonresidential development
Transport Engines	$1,440,000	$595,584	$4.49	$844,416	$24.09
Engine	$600,000	$248,160	$1.87	$351,840	$10.04
75' Ladder Truck	$800,000	$330,880	$2.49	$469,120	$13.38
Tower Truck	$1,200,000	$496,320	$3.74	$703,680	$20.07
Hazmat Unit	$500,000	$206,800	$1.56	$293,200	$8.36
Technical Rescue Unit	$500,000	$206,800	$1.56	$293,200	$8.36
Total Fee Eligible Equipment	$5,040,000	$22,084,544	$15.71	$2,995,456	$84.30

Source: WVC Fire Department, GSBS Richman

West Valley City's current fire service does not have an existing deficiency. All areas of the City receive adequate fire protection. There is also not existing excess capacity in fire protection services.

Law Enforcement

West Valley City is served by a main police station in the Public Safety Building, two sub stations and support and fleet maintenance facilities to support the overall mission. Table 5-6 is a list of each facility serving and supporting police protection in West Valley City. The total square feet to provide the current level of service is 82,523.

Table 5-6: Police Facilities 2013

Facility	Year Built	SF
Public Safety Building	1990*	22,768
City Hall	1990	6,855
Vehicle Maintenance Facility	2002	16,500
Centennial Park Substation	1999	5,400
Vehicle Storage	2009	18,000
Public Works Operations	Unknown	5,000
Utah Cultural Celebration Center Substation	2003	8,000
Total		**82,523**

* Acquired by the City in 2002

Training is held at the public safety building or in other loaned facilities. As the City continues to grow and add resident and daytime population additional police headquarters and training space will be needed, as well as additional substations and vehicle storage and maintenance areas to support the increase in the number of officers serving and protecting West Valley City.

Table 5-7 represents the current level of police facility service per resident and per 1,000 SF of non-residential space. The square footage in each facility was multiplied by the percent of the total residentially developed acreage in the City (41 percent) to determine the square footage dedicated to serving residential development. The area in each facility dedicated to serving existing residential development was then divided by each 1,000 of residents to determine the police facility per 1,000 resident level of service. A similar calculation based on building square footage was completed for the area of each facility serving nonresidential development. This total square footage was then divided by

the 1,000 of existing nonresidential square footage in the City to determine the current square feet per 1,000 square feet of existing development.

Table 5-7: Police Facilities Current Level of Service

Facility	SF	SF/ Residential Service	SF/1,000 Residents - 2013	SF/non-residential - 2013	SF/1,000 SF of nonresidential development
Public Safety Building	22,768	9,417	70.989	13,351	0.381
City Hall	6,855	2,835	21.371	4,020	0.115
Vehicle Maintenance Facility	16,500	6,824	51.442	9,676	0.276
Centennial Park Substation	5,400	2,233	16.833	3,167	0.090
Vehicle Storage	18,000	7,445	56.123	10,555	0.301
Public Works Operations	5,000	2,068	15.589	2,932	0.084
Utah Cultural Celebration Center Substation	8,000	3,309	24.945	4,691	0.134
Total	**82,523**	**34,131**	**257.292**	**48,392**	**1.381**

Source: West Valley City, GSBS Richman

5.3 Impact of Growth

The projected increase in population of 19,346 people to a total population of 152,000 and nonresidential development of 9.5 million square feet to total commercial square footage of approximately 45 million will erode the current levels of service as seen in Table 5-8.

Table 5-8: Impact of Growth

Facility Type	Current Residential LOS	2023 Population	Revised LOS (no new facilities)	Current Nonresidential LOS	2023 Nonresidential SF	Revised LOS (no new facilities)
Fire Facility	147.985	152,000	129.150	0.795	44,557,088	0.625
Fire Apparatus	15.71	152,000	$13.71	$84.30	44,557,088	$66.33
Police Facility	257.292	152,000	224.545	1.381	44,557,088	1.087

Source: GSBS Richman

There is no existing excess capacity in West Valley City's public safety facilities. There are no existing deficiencies in the system.

5.4 Future Facilities

To serve the approximately 19,300 new residents and 9.5 million square feet of nonresidential development projected through 2023, an additional 10,377 SF of fire facilities, $1,107,165 in fire apparatus and 18,040 SF of police facilities are required, as seen in Table 5-9.

Table 5-9: Projected Facility Needs 2013 - 2023

Facility Type	Residential LOS	New Residents	Needed to Serve Residential Growth	Nonresidential LOS	New SF Nonresidential Space (thousands)	Needed to Serve Nonresidential Growth	Total Growth-Related Facility Need
Fire Facility	147.985	19,346	2,863 SF	0.795	9,500	7,553 SF	10,416SF
Fire Apparatus	$15.71	19,346	$303,926	$84.30	9,500	$800,850	$1,104,776
Police Facility	257.292	19,346	4,978 SF	1.381	9,500	13,120 SF	18,098 SF

Source: GSBS Richman

Currently, approximately 41 percent of existing facilities serve residential development and 59 percent serve nonresidential development. As seen in Table 5-10 approximately 27.5 percent of the required new fire and police facilities is created by new residential development and 72.5 percent from nonresidential development. The cost of new facilities will be distributed 27.5 percent to residential growth and 72.5 percent to non-residential growth.

Table 5-10: Source of New Development Driven Capacity Need

Facility Type	Total New Required	Residential Required	% Residential	Non Residential Required	% Non-Residential
Fire Facility	10,416 SF	2,863 SF	27.5%	7,553 SF	72.5%
Fire Apparatus	$1,104,776	$303,926	27.5%	$800,850	72.5%
Police Facility	18,098 SF	4,978 SF	27.5%	13,120 SF	72.5%

Source: GSBS Richman

Although the share of the fire apparatus attributable to residential growth is identified and quantified, the Utah Impact Fees Act prohibits the inclusion of fire apparatus in the residential public safety impact fee. The residential share of the cost is not carried forward in the rest of the IFFP and IFA analyses.

5.5 Source of Cost Estimates

Estimated costs of facilities in the Impact Fee Facilities Plan are based on the assumptions included in Table 5-11. The estimated cost per square foot includes hard and soft construction costs. Land cost is identified separately. Land cost estimates are based on discussions with local developers.

Table 5-11: Estimated Costs - Public Safety Facilities (2013$)

Facility Type	Construction Cost per SF	Land Cost per Acre	Estimated Acres
Police Main Station	$280	$120,000	2.65
All other facilities	$140	$120,000	2.00

Source: GSBS Richman

5.6 Impact Fee Facilities Plan

A concept plan for future growth is provided below in Table 5-12. West Valley City's current fire stations average approximately 6,500 SF. The main police station is currently 22,768 square feet. When the Public Safety Building is replaced, the area dedicated to police will be increased to service the growing city. Impact fees will fund approximately 7,000 SF of the expanded main station building and any support activities included in the new building.

Table 5-12: Public Safety Facility Conceptual Impact Fee Facilities Plan

Future Facility	Area (sf)	Total Cost (2013$)	Impact Fee Cost (2013$)	Funding Source
Fire Station	7,000	$1,058,505	$1,058,505	IF
Fire Training	3,400	$514,131	$514,131	IF
Fire Eligible Apparatus	Ladder Truck	$1,104,776	$800,850	IF/Other[10]
Police Substation	5,000	$756,075	$756,075	IF
Police Main Station	29,768	$8,653,040	$2,034,778	IF/Other
Police Support	6,000	$907,290	$907,290	IF
Total		$12,993,817	$6,071,629	

Source: GSBS Richman

In addition to the facilities identified in the IFFP anticipated nonresidential growth will require the addition of fire apparatus. The capital outlay for fire apparatus identified in Table 5-12 requires partial funding from non-impact fee related sources.

5.7 Maximum Allowable Impact Fee

Table 5-13 is the maximum allowable impact fee for public safety facilities per capita and per 1,000 SF of nonresidential building. The actual fee is calculated in the Impact Fee Analysis document to take into account the proportional impact of different type of development and any applicable credits.

[10] According to the Utah Impact Fees Act, a city may not impose an impact fee for fire suppression vehicles on residential development: 11-36a-202 (2)(a)(i)

Table 5-13: Public Safety Maximum Allowable Impact Fee

Facility Type	IFFP Cost	% Residential	Population Served	Fee Per Capita	% NonResidential	New SF Served (Thousands	Fee per 1,000 SF
Fire Facility	$1,572,636	27.5%	19,346	$22.35	72.5%	9,500,000	$120.02
Fire Apparatus	$800,850	0%	19,346	$0.00	72.5%	9,500,000	$61.12
Police Facility	$3,698,143	27.5%	19,346	$52.57	72.5%	9,500,000	$282.23
Total	$6,071,629			$74.92			$463.37

Source: GSBS Richman

6.1 Current & Proposed Level of Service (LOS)

The Parks and Trails current and proposed LOS for West Valley City's estimated 132,654 residents, by park classification is identified in Table 6-1. This LOS is the basis for projected park needs through 2023.

Table 6-1 - Park/Trail LOS

Classification	Total Acres	LOS/1,000 Population
Neighborhood	48.35	0.364
Community	115.88	0.874
Undeveloped Park Land	13.15	0.099
Trails	24.13	0.182
Undeveloped Trails	1.79	0.013
Total	203.30	1.533

Source: WVC Parks Department

A second component of the Parks and Recreation current and proposed LOS is the level and cost of providing facilities within the parks. Facilities provided in current parks include restrooms, pavilions, baseball and soccer fields, and tennis courts. West Valley City completed an inventory of improvements at current parks.

Table 6-2: Park Facilities LOS

Classification	Facility	Total Facilities	Facilities/ Acre	LOS/1,000 Population
Neighborhood	Sm. Restroom	1	0.021	0.008
	Playground	19	0.393	0.143
	Lg. Pavilion	1	0.021	0.008
	Sm. Pavilion	10	0.207	0.075
	Tennis Courts	1	0.021	0.008
	Baseball/Softball	2	0.041	0.015
	Soccer	3	0.062	0.023
Community	Play Structures	5	0.043	0.038
	Lg. Pavilion	5	0.043	0.038
	Tennis Courts	10	0.086	0.075
	Baseball/Softball	13	0.112	0.098
	Soccer	3	0.026	0.023
	Lg. Restroom	8	0.069	0.060
Trails	N/A			
Undeveloped Land	N/A			

Source: WVC Parks Department

In addition to facilities, West Valley City's improved parks include walkways, parking lots, landscaping and irrigation. The average ratio of these improvements per acre are included in Table 6-3[11].

Table 6-3: Park Improvements LOS/Acre

Classification	Irrigated Landscaping (SF)	Parking (SF)	Walkways/Other Hardsurface (SF)
Neighborhood	39,640	732	1,584
Community	34,848	3,742	2,792
Trails	NA	NA	40,000

Source: WVC Parks Department

[11] The values in this table do not sum to 43,560 (the number of square feet in an acre) because some portion of the park acre is captured in the improvements such as restrooms and playgrounds.)

6.2 Existing Facilities

West Valley City currently owns and maintains the parks and trails identified in Table 6-1. Parks are identified by type. Neighborhood parks are defined as 1.5 to 5 acres. Community and special use parks are defined as 5-25 acres and are designed to meet the City-wide population need for specific types of facilities. The City's 2013 inventory of parks by type is in Table 6-4.

Table 6-4 - Current Facility Inventory

Name of facility	Location	Size
Neighborhood Parks		
Back Nine Park	4105 West 3010 South	0.18
Bridle Farms	6690 West Bridal Farms Rd. (3940 S.)	1.13
Country Mead.	4175 W. 3980 S.	1.72
Falcon Crest	4055 S. 7060 W.	1.50
Fassio Farm	3720 S. 5200 W.	2.72
Foxtail (Sugar P)	6880 West 3045 South	1.69
Hunter Ridge	4383 S. 5710 W.	1.11
Hunter Village Trail Head Park		1.00
Hunter Village	6985 West Hunter Valley Dr. (3215 South)	5.57
Ironwood	4565 S. Early Duke St. (5080 W.)	0.91
Kingspointe	1330 West Rothchild Dr. (3665 SO.)	4.50
Maple Mead.	2520 West 3380 South	1.40
Meadowlands	3350 South 5800 West	2.29
Peachwood	3510 W. 3965 S.	2.20
Scottsdale	3755 W. 3100 South	2.46
Sugarplum	6800 West 2900 South	1.23
Terrace Ridge	6260 West Terrace Ridge Dr. (4365 S.)	2.65
Trailblazer Park	3164 South Trailblazer Cove (6675 West)	1.49
West View	6050 W. 4100 S.	5.00
Wheatland	4266 South 3680 West	1.00
Woodledge	5210 W. 4310 S.	6.6
	Total Acreage - Neighborhood Parks	48.35
Community Parks *		
City Park	4500 W. 3500 S.	25.07
Centennial	5405 W. 3100 So.	77.60
Parkway	3405 W. Parkway Blvd. (2700 So.)	7.00
Promenade/Plaza	2905 West Lehman Ave	4.08
Utah Cultural Center Park	1355 West 3100 South	2.13
	Total Acreage - Community Parks	**115.88**
Undeveloped Park Land		
Arlington Park	4623 South 4725 West	0.60
Brock property	4316 W. Paskay Drive	0.15
Sunset Hills	6414 So. Oquirrh Drive	2.00
East of Redwood Rd property	3876 So. Grasmere Lane	0.75
Pleasant Valley	6124 WEST BRUD DR. (3100 S.)	0.52
Riverside	1115 River Bank Rd.	3.56
Vistas West	6370 West Cape Ridge Lane (4590 South)	2.82
Vistas East	4530 South 6000 West	2.75
	Total Acreage - Undeveloped Park Land	**13.15**
Trails		
Hunter Village Open Space		10.06
Sugar Plum Trails 4.38		14.07
	Total Acreage - Trails	**24.13**
Undeveloped Trails		
Crosstowne Trail	Parkway Blvd and Decker Lake Dr.	
Mtn View Corridor Access		0.19
Beagley Sub Trail		1.00
West Ridge Estates Access		0.60
	Total Acreage - Undeveloped Trails	**1.79**

** Combined from original categories: City, Regional, District and Special Use*
Source: West Valley City Parks Department

Each park in West Valley City is improved with various recreational and other improvements. Table 6-5 identifies the average number of improvements per acre by type of facility.

Table 6-5 -- Average Number of Facilities per acre by type of facility

Type of Facility	Play Structures	Pavilions	Tennis Courts	Baseball/ Softball	Soccer	Restroom
Neighborhood	0.393	0.228	0.021	0.041	0.062	0.021
Community	0.043	0.043	0.086	0.112	0.026	0.069
Trails	N/A	N/A	N/A	N/A	N/A	N/A

Source: WVC Parks Department

6.3 Impact of Growth

The projected increase in population of approximately 19,300 people will erode the current levels of service as seen in Tables 6-6 and 6-7.

Table 6-6: Impact of Growth - Park & Trail Acreage LOS

Classification	Total Acreage	LOS/1,000 Population	2023 Population	Revised LOS (no new facilities)	% Change
Neighborhood	48.35	0.364	152,000	0.318	-13%
Community	115.88	0.874	152,000	0.763	-13%
Undeveloped Park Land	13.15	0.099	152,000	0.086	-13%
Trails	24.13	0.182	152,000	0.159	-13%
Undeveloped Trails	1.79	0.013	152,000	0.011	-13%
Total	203.30	1.532		1.337	-13%

Source: WVC Parks Department

Table 6-7: Impact of Growth - Park Facilities

Classification	Facility	Total Facilities	LOS/1,000 Population	2023 Population	Revised LOS/ 1,000 Population (no new facilities)	% Change
Neighborhood	Sm. Restroom	1	0.008	152,000	0.007	-13%
	Playground	19	0.143	152,000	0.125	-13%
	Lg. Pavilion	1	0.008	152,000	0.007	-13%
	Sm. Pavilion	10	0.075	152,000	0.065	-13%
	Tennis Courts	1	0.008	152,000	0.007	-13%
	Baseball/Softball	2	0.015	152,000	0.013	-13%
	Soccer	3	0.023	152,000	0.020	-13%
Community	Play Structures	5	0.038	152,000	0.033	-13%
	Lg. pavilion	5	0.038	152,000	0.033	-13%
	Tennis Courts	10	0.075	152,000	0.065	-13%
	Baseball/Softball	13	0.098	152,000	0.086	-13%
	Soccer	3	0.023	152,000	0.020	-13%
	Lg. Restroom	8	0.060	152,000	0.052	-13%
Trails	N/A		N/A	N/A	N/A	N/A
Undeveloped Land	N/A		N/A	N/A	N/A	N/A

Source: WVC Parks Department

The impact of growth on the current and proposed LOS for park improvements (landscaping/irrigation/parking) is proportional to the impact seen in acreage and facilities. There is no existing excess capacity in West Valley City's park and trails system. Although the current parks LOS is lower than the standard identified as the desired LOS by city management, the City has identified the current parks LOS as the proposed LOS as a result of the lack of availability of other funding sources.

6.4 Future Facilities

To provide the proposed LOS and serve the anticipated additional approximately 19,300 new residents in West Valley City between 2013 and 2023, a total of approximately 30 new park acres are required, seven acres of neighborhood parks, 17 acres of community parks, two acres of undeveloped park acres, four acres of trails and about 0.25 acres of undeveloped trails. Table 6-8 identifies the needed acres and facilities by classification.

Table 6-8: New Parks/Facilities by Classification

Classification	Facility	LOS/1000	New

		Population	Acres/ Facilities
Neighborhood	Acreage	0.364	7.04
	Sm. Restroom	0.008	0.15
	Playground	0.143	2.77
	Lg. Pavilion	0.008	0.15
	Sm. Pavilion	0.075	1.45
	Tennis Courts	0.008	0.15
	Baseball/Softball	0.015	0.29
	Soccer	0.023	0.44
Community	Acreage	0.874	16.91
	Play Structures	0.038	0.74
	Lg pavilion	0.038	0.74
	Tennis Courts	0.075	1.45
	Baseball/Softball	0.098	1.90
	Soccer	0.023	0.44
	Lg. Restroom	0.060	1.16
Undeveloped Park Land	Acreage	0.099	1.92
Trails	Acreage	0.181	3.52
Undeveloped Trail	Acreage	0.013	0.25

Source: GSBS Richman

6.5 Source of Cost Estimates

Table 6-11 includes the conceptual list of park and trails projects for the next ten years. The projected total cost is based on the cost estimates included in Table 6-9. Estimated costs are based on the most recently completed West Valley City parks projects verified with GSBS parks designers. Land costs are based on interviews with local developers.

Table 6-9: Park/Trail Cost Estimates

Item	Cost per Unit (2014$)	Unit
Acreage	$120,000	acre
Turf/Soil	$1.25	SF
Irrigation	$1	SF
Walkways/hard surface	$6	SF
Parking w/curb & gutter	$5	SF
Small Play Structures	$60,000	ea
Lg. Play Structures	$150,000	ea
Small Pavilion	$60,000	ea
Lg Pavilion	$130,000	ea
Tennis Courts	$48,000	ea
Baseball/Softball	$200,000	ea
Soccer	$200,000	ea
Small Restroom	$60,000	ea
Lg. Restroom	$200,000	ea

Source: WVC Parks Department, GSBS

Using the costs in Table 6-9, the cost per acre to purchase and develop parks in West Valley City is estimated in Table 6-10.

Table 6-10: Cost of Development per Acre by Classification

Classification	Acreage	Improvement	Facilities	Total/ Acre	Acres	Total
Neighborhood	$120,000	$102,354	$61,776	$284,130	7.04	$2,000,275
Community	$120,000	$113,870	$57,765	$291,635	16.91	$4,931,548
Undeveloped Park Land	$120,000	$0	$0	$120,000	1.92	$230,400
Trails	$120,000	$240,000	$0	$360,000	3.52	$1,267,200
Undeveloped Trails	$120,000	$0	$0	$120,000	0.25	$30,000
		Total			**29.64**	**$8,459,423**

Source: GSBS Richman

6.6 Impact Fee Facilities Plan

West Valley City has developed a comprehensive list of parks and trails projects to serve the entire City. The acreage and cost of development for the projects on the list exceed the maximum allowable impact fee collections based on the current and proposed level of service. The projects needed to maintain the level of service will be completed to accommodate development patterns. The impact fee facilities plan in Table 6-11 will allow West Valley City to maintain the current level of service for each of the functional classifications within the current park system.

Table 6-11: Parks/Trails Impact Fee Facilities Plan

Project	Classification	Area (acres)	Total Cost (2013$)	IF Eligible Cost (2013$)
Develop existing park acreage	Neighborhood	6	$984,780	$984,780
Acquire and develop new parks	Neighborhood	20	$5,682,600	$5,682,600
Acquire and develop district park	Community	10	$2,916,350	$2,916,350
Develop existing regional park acreage	Community	3	$514,905	$514,905
Develop new community park	Community	10	$2,916,350	$2,916,350
Develop Wetland Park Area	Community	20	$500,000	$500,000
New skate park	Community	1	$300,000	$300,000
Complete City Center Plaza	Community	4	$50,000	$50,000
Acquire new park property	All	5	$600,000	$600,000
Develop existing trail property	Trails	10	$2,400,000	$2,400,000
Acquire & develop new trails	Trails	20	$7,200,000	$7,200,000
Acquire new trail property	Trails	5	$600,000	$600,000
Total		**114**	**$24,664,985**	**$24,664,985**
Estimated Impact fee collections				$8,459,423
Parks/Trail funding (all other sources)				$16,205,562

Source: WVC Parks Department, GSBS Richman

6.7 Existing Excess Capacity

West Valley City's parks and trails current and proposed LOS is lower than or roughly equal to other jurisdictions in Salt Lake County. There is not existing excess capacity in any of the City's parks or trails.

There is, however, existing excess capacity in the West Valley Family Fitness Center as defined by the City. The Center is intended to serve the community through build-out at 160,000 people. Table 6-12 calculates the "buy-in" value of that excess capacity for new residential development. A credit against this fee will be calculated and applied as part of the Impact Fee Analysis.

Table 6-12: Recreation Center Buy-in Analysis

Build-out Population	SF	SF/ person	Cost of Construction (Millions$)	Financing Cost (Millions$)	Cost/SF	LOS/ person
160,000	96,474	0.603	$22,190,000.00	$11,607,544.64	$350.33	**$211.23**

Source: West Valley City

** A credit for contribution to past and future bond payments will be calculated as part of the Impact Fee Analysis*

6.8 Existing Deficiencies

The current and proposed LOS has been established based on current acreage and facilities available to current residents. Establishing the proposed LOS based on current service levels eliminates the potential for existing deficiencies in parks and trails. The City's current LOS is lower than many comparably sized cities. If the West Valley City Mayor and Council wish to raise the LOS, funding will be identified from other, non-impact fee sources and the LOS will be raised for all residents at the point in time that the investment is made; however, new residents will pay, through impact fees, for facilities at a level comparable to those enjoyed by residents at the date of this analysis.

6.9 Maximum Allowable Impact Fee

Table 6-13 is the maximum allowable impact fee for parks, trails and recreation facilities per capita. The actual fee is calculated in the Impact Fee Analysis document to take into account the proportional impact of different type of development and any applicable credits.

Table 6-13: Parks/Trails/Recreation Maximum Allowable Impact Fee

Classification	IFFP Cost	tion Served	er Capita
Neighborhood	$2,000,275	19,346	$103.39
Community	$ 4,931,548	19,346	$254.91
Undeveloped Land	$230,400	19,346	$11.91
Trails	$1,267,200	19,346	$65.50
Undeveloped Trails	$30,000	19,346	$1.55
Recreation Center Buy-In	$33,797,545	160,000	$211.23
Total Maximum Fee			$648.49

Source: GSBS Richman