

4.11 Public services

4.11.1 Police and court services

4.11.1.1: Existing conditions

Police

The Tacoma Police Department is organized into 3 bureaus - Operations, Investigations, and Administrative Services Bureaus which includes K-9 Unit, Traffic, Marine Services, Police Sectors, Animal Control and Compliance and other specialized police operations.

Operations Bureau - is responsible for emergency 911 responses and patrolling Tacoma's streets, which are divided into sectors. Operations is responsible for handling calls for service, conducting preliminary criminal investigations, responding to emergencies, enforcing traffic laws and investigating accidents.

The Patrol Division consists of 2 Divisions; Operations North and Operations South, which is staffed by 3 Captains, 7 Lieutenants, 30 Sergeants, 15 Police Patrol Specialists and some 200 Police Patrol Officers.

On average, approximately 25 Officers are patrolling Tacoma at any given time. The city is divided into 4 sectors, yielding approximately 6 officers per sector. In addition, 12 police officers are designated as Community Liaison Officers, with at least 3 in each sector.

The day is divided into 3 shifts, which provides additional staffing between 1:00 p.m. and 11:00 p.m., to address the high calls for service requiring police response. Officers respond to many different types of calls, and the calls are classified into one of 3 dispatch types:

- **Routine Response** - there is no threat and no suspect present. The Officer will respond in the normal course of activity.
- **Priority Response** - a suspect is at or near the scene. The Officer will respond immediately, making an effort to reach the scene promptly, but will generally not use lights and siren.
- **Emergency Response** - an immediate threat exists and is used only when a crime is in progress or life is threatened. The Officer will respond immediately, making an effort to reach the scene promptly, making full use of lights and siren.

Investigations Bureau - is committed to the Community Oriented Policing philosophy, and

will continue to be innovative to better serve the citizens of Tacoma. Investigations conduct follow-up investigations on reports generated by the Patrol Division, as well as information provided by citizens.

The Investigations Bureau is comprised of the Criminal Investigations Division: Violent Crimes and Major Crimes Sections, the Special Investigations Unit, and the Forensic Services Section.

Administrative Services Bureau - is the "behind the scenes" section of the Tacoma Police Department. The areas covered by the Administrative Services Bureau include recruiting and hiring, training, and internal affairs.

Tacoma is divided into 4 sectors. The majority of the MLK subarea is located within Sector 1, except for that portion located north of 6th Avenue which is in Sector 2.

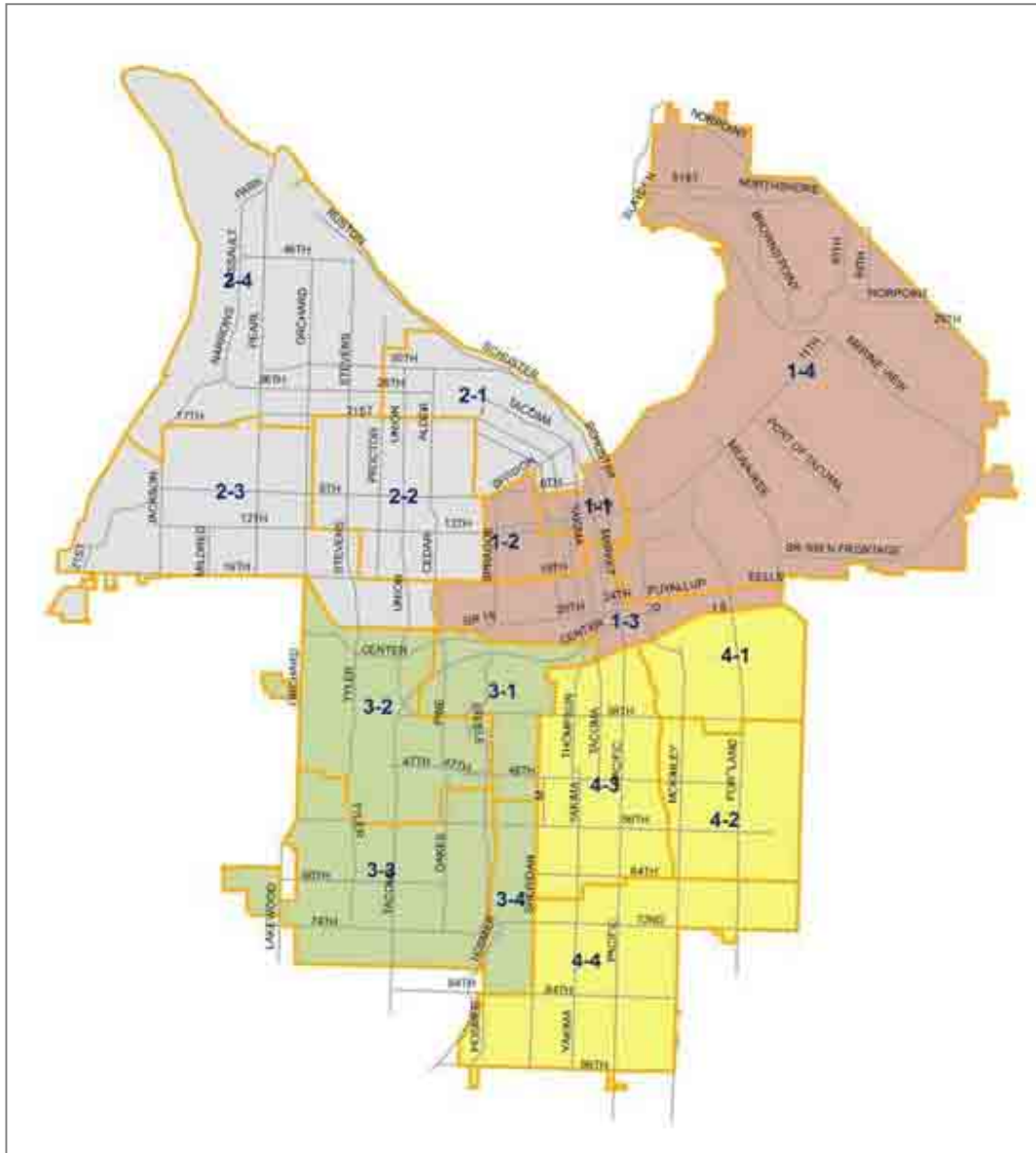
Sector One - which includes the MLK subarea south of 6th Avenue, is one of the most diverse within the city based on geography, cultural and ethnic diversity, businesses, neighborhoods, and many other groups and organizations. Sector One is managed from Central Substation located at 1524 MLK Jr Way.

Sector One encompasses a vast territory which includes 4 distinct areas: Upper Tacoma/Hilltop, Downtown Tacoma, The Port of Tacoma and tide flats, and Northeast Tacoma and Browns Point. Each area is unique as to the challenges facing officers who police the district and investigate crimes.

The core staff of the sector is comprised of a sector commander and 3 Community Liaison Officers (CLO's) whose mission is to identify, recognize, and address a wide variety of citizen concerns within the sector. The CLOs work closely and collaboratively with neighborhood groups, individual citizens, business owners, city staff, other bureaus within the police department, and many other agencies, departments, and organizations.

The core staff group is directly supported by 4 Tacoma Police- Business Improvement Area (BIA) Officers, who primarily patrol the downtown area on bicycles. The Operations/Patrol contingent is led by an assistant chief, captain, and 6 sergeants who supervise the everyday

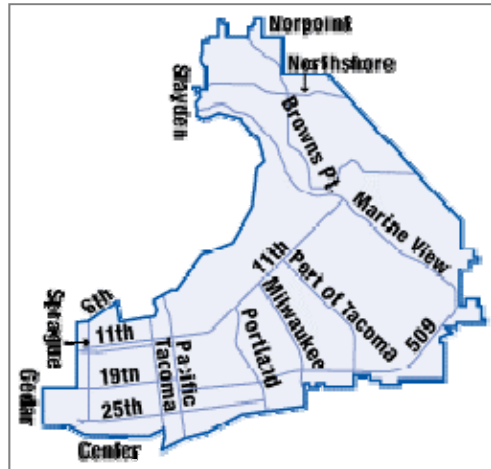
Tacoma's Police Sectors (and subsectors)



The Central Substation (1524 MLK Jr Way)



Police Sector 1



activities, tasks, and duties of 50 Patrol Officers, who work 4 different shifts.

Sector One is further supported by the Investigations Bureau including the Special Operations Section (SOS), the Administrative Services Bureau, civilian staff assigned to various support functions, and the Law Enforcement Support Agency (LESA) - Records and Communications.

Sector One is currently undergoing a “renaissance” as a result of the efforts of many individuals, businesses, and organizations- public and private. Because of a vast array of new building projects that have been completed or are currently underway, the central district of Tacoma has once again become a more vibrant, exciting, pleasant, and safe place to live and work.

Sector Two - covers the entire north end of Tacoma, including the small portion of the MLK subarea north of 6th Avenue. This area consists primarily of MultiCare Health System facilities and Wright Park. Sector One is managed from the North Substation located at 5140 North 26th Street.

Sector Two encompasses a vast territory which includes large residential neighborhoods and business centers located in Ruston and the north end as well as Point Defiance Park and the edge of SR-16.

The core staff of the sector is comprised of a sector commander and 4 Community Liaison Officers (CLO’s) whose mission is to identify, recognize, and address a wide variety of citizen concerns within the sector.

Like Sector One, Sector Two is also further supported by the Investigations Bureau including the Special Operations Section (SOS), the Administrative Services Bureau, civilian staff assigned to various support functions, and the Law Enforcement Support Agency (LESA) - Records and Communications.

Level of service (LOS) - for patrol officers is currently 255 uniforms, or approximately 1.29 patrol officers per 1,000 persons.

Municipal Court

The Tacoma Municipal Court is located in the County-City Building located at 930 Tacoma Avenue South in downtown Tacoma just east of the MLK subarea boundaries. The Municipal Court is administered by 3 municipal judges.

The Municipal Court hears cases involving alleged violations of City of Tacoma ordinances including, but not limited to:

- Criminal charges - domestic violence offenses, assault, theft, drug offenses, etc.,
- Criminal traffic offenses - driving under the influence, physical control, reckless driving, etc., and
- Traffic and parking infractions.

The Municipal Court does not hear small claims or civil cases. These cases are heard by the Pierce County District Courts.

The Municipal Court does not hear requests for protection orders. These cases are heard by the Pierce County Superior Court’s Domestic Violence Office.

The Municipal Court does not hear divorce or child custody cases. These cases are heard by the Pierce County Superior Court.

Level of service (LOS) standard - for court facilities is 0.28858 square feet per capita.

4.11.1.2: Impacts

Both alternatives will allow development and redevelopment in the MLK subarea for urban uses and activities to various intensities. An increase in urban development and thereby the overall employee and resident population will in turn increase the demand for additional police and judicial equipment and facilities.

According to Tacoma’s Community & Economic Development Department’s moderate growth scenario, MLK subarea’s population will increase from 2,903 persons in 2010 to 7,915 persons by 2040 or at an annual average rate of 3.4% for the projection period.

MLK will grow in accordance with recent and expected trends which are optimistic but not maximum build-out. Maximum build-out would reach 14,520 persons by 2040 at an annual average rate of growth of 5.5%.

Police

If the MLK subarea develops in accordance with the moderate growth scenario the additional population will generate a requirement for 6.5 additional patrol officers at current ratios.

Should the MLK subarea reach the potential build-out, the additional 11,617 persons the additional population will generate a

requirement for 15.0 additional patrol officers at current ratios.

Mod	Population	Uniforms/capita
2010	2,903	0.00129
2040	7,915	3.7
Differ	5,012	6.5
Max	14,520	18.7
Differ	11,617	15.0

Source: City of Tacoma

Municipal Court

If the MLK subarea develops in accordance with the moderate growth scenario the additional population will generate a requirement for 1,447 additional court space and all associated judges and court personnel.

Should the MLK subarea reach the potential build-out, the additional 11,617 persons the additional population will generate a requirement for 3,353 square feet and all associated judges and court personnel.

Mod	Population	square feet/capita
2010	2,903	0.28858
2040	7,915	837
Differ	5,012	1,447
Max	14,520	2,284
Differ	11,617	4,190

Source: City of Tacoma

4.11.1.3: Mitigation measures

Police and court services and protection requirements increase with population growth and the intensity of development. Provisions for police protection and court services for any urban area are dictated by established standards at the federal, state, and local levels.

The Capital Facilities Element of the Comprehensive Plan - consists of 2 portions: the 20-year plan and the 6-year program. The plan portion contains capital facilities related goals and policies that are consistent with other goals and policies of the Comprehensive Plan.

The program portion, which is the Capital Facilities Program, contains an inventory of existing and proposed capital facilities; forecasts future needs for facilities for 6 years, identifies deficiencies in capital facilities and the actions necessary to meet such deficiencies, and contains a 6-year financing plan. The Capital Facilities Program is a separate document.

It is Tacoma’s intent to provide adequate public facilities and services, as efficiently and cost-effectively as possible, to serve both existing and new development. Such facilities and services will be designed to meet the capital facility needs of the community and to support Tacoma’s land use growth and development concept.

In situations where the public facility is not owned directly by the city, Tacoma will encourage the provision of adequate services and coordinate with the responsible agency.

Currently, there are 23 types of facilities and services that the city provides or coordinates with other service providers, 13 of which are referred to as “public facilities” in the Growth Management Act and the County-wide Planning Policies, and are subject to the requirement of the City’s concurrency management ordinance.

These “public facilities” that are subject to concurrency requirements include roads, transit, potable water, electric utilities, sanitary sewer, solid waste, stormwater management, law enforcement, fire, emergency medical service, schools, parks and libraries.

The other 10 facilities are not subject to concurrency because their needs are not as directly related to existing population or growth in the city. These facilities include the airport, railway, port facilities, municipal buildings, municipal parking facilities, convention facilities, public assembly buildings, telecommunications, economic and community improvement, and community and human service.

For facilities subject to concurrency, level of service (LOS) standards are used to determine the need for such facilities, test the adequacy of such facilities to serve proposed development concurrent with the impacts of the development, and ensure that appropriate levels of capital resources are allocated. For facilities not subject to concurrency, LOS standards still are helpful as a management tool.

CF-APFSCF-APFS-1 Public Facilities
 Maintain level of service (LOS) standards for each type of public facility and provide capital improvements needed to achieve and maintain the standards for existing and future populations.

CF-APFS-2 Concurrency
 Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time

the development is available for occupancy or use, or within a reasonable time as approved by the city, without decreasing current service levels below locally established minimum standards.

CF-APFS-3 Level of Service (LOS)

No development shall be approved which would result in a reduction in the adopted level of service standard for any needed public facility or service.

The cost for building new projects and maintaining existing facilities is increasing beyond what cities can often afford. Citizens are reluctant to tax themselves further to pay for expensive facilities unless there are compelling reasons for the improvements. State and federal grant funds are usually restricted to specific types of improvements and are often one-time funds for unique purposes. In spite of the financial obstacles facing local governments today, the city is obligated to provide funding for adequate public facilities and services to meet existing and future needs.

CF-FCF-1 Funding Sources

Review existing revenue sources and pursue all available funding sources for the development of capital improvement projects in order to optimally use limited city resources and meet existing and future needs.

CF-FCF-2 Funding Responsibilities

Ensure that existing and future developments pay for some or all of the costs of capital improvements or new facilities that are deemed necessary, by reason of their respective developments, to reduce existing deficiencies or replace obsolete facilities.

Economic Development and Neighborhood Revitalization

- it is the city's intent to strategically use public funds to assist and encourage private investment and development that will foster economic diversity and vitality and preserve quality neighborhoods. The city intends to allocate resources to strengthen the economic base, diversify industrial and commercial enterprises, increase employment opportunities, increase the income level of residents, and enhance and revitalize its neighborhoods and mixed-use centers.

Therefore, Tacoma intends to use its limited resources to its best advantage by strengthening the link between economic development planning and capital facilities planning, and emphasizing the supporting role that infrastructure and capital improvements provide to development and neighborhoods. Since a deteriorating infrastructure may well be

an economic deterrent, it is desirable for the city to maintain its facilities to both attract and retain private enterprise and residents.

CF-EDNR-1 Economic Improvements

Encourage projects which stimulate the economy by expanding employment opportunities, strengthening the tax base or providing for private investment opportunities.

CF-EDNR-2 Improved City Image

Encourage the development of capital improvement projects that promote tourism and convention trade.

CF-EDNR-3 Neighborhood Revitalization

Encourage capital improvements in areas in need of neighborhood revitalization and provide services to neighborhoods at a level commensurate with the respective needs of each.

CF-EDNR-4 Conservation and Preservation

Emphasize capital improvement projects which promote the conservation, preservation or revitalization of commercial, industrial, residential, and natural habitat areas of the city.

CF-EDNR-5 Physical Improvements

Initiate and encourage programs that improve and maintain the physical environment of the business community.

CF-EDNR-6 Public-Private Partnerships

Encourage public-private partnerships to finance infrastructure and capital facilities which foster economic development and fulfill mutual interests of the public and private sectors.

CF-EDNR-7 Facilities in Mixed-Use Centers

Prioritize capital facility improvements within mixed-use centers to enhance and revitalize these areas, support compact development and encourage transit use.

CF-EDNR-8 Partner with Transit

Partner with Pierce Transit and Sound Transit to improve alternative transportation infrastructure within the City.

CF-EDNR-9 Local Improvement Districts

Facilitate the formation of local improvement districts to construct needed infrastructure improvements within mixed-use centers and consider establishing the remonstrance threshold at the maximum level allowed by State law (per RCW 35.43.180).

CF-EDNR-10 Business District Improvements

Give priority to improvements located within a business district that is recognized by the City and that is located within the core area of a designated mixed-use center on a designated pedestrian street.

Concurrency - RCW 36.70A.030 requires local governments provide public facilities based on concurrency requirements, which according to

WAC 365-195-210 means that adequate public facilities are available without decreasing LOS when the impacts of development occur.

Concurrency is mandated for transportation facilities while other public facilities may be considered for concurrency. The list of such additional facilities is locally defined in which Tacoma has determined that Law Enforcement is subject. Two options are available to meet concurrency and LOS requirements:

- Facilities must be in place at the time of development or
- Facilities must be in place within 6-years of the development.

Bike patrols - could be conducted within the mixed use zones where higher density developments create a more concentrated population and workforce within a pedestrian-oriented community. The development of more walkways, trails, and other bike and pedestrian networks under both alternatives may make this

more feasible particularly if operations are conducted out of Central Substation on MLK Way.

4.11.1.4: Unavoidable adverse impacts

Under both alternatives, the undeveloped and underdeveloped lands in the MLK subarea will be redeveloped for higher intensity uses that will increase police, emergency management, and court requirements. Both alternatives will increase associated requirements for personnel, vehicles, equipment, and facility development, maintenance, and service enhancements.

As a result of additional development, both alternatives will collect a greater volume of property taxes and utility fees and service charges as well as construction permits and taxes with which to finance the increase in police and court facilities and services that will be required of a larger population.

4.11.2 Fire and emergency medical response

4.11.2.1: Existing conditions

The Tacoma Fire Department (TFD) responds to all types of emergencies including fire suppression, search and rescue, salvage, basic and advanced life support treatment, transport of critically ill or injured patients, hazardous materials containment, and disaster response. This primary emergency response mission is supported by other critical functions including emergency communications and dispatch, fire inspection and investigations, vehicle and equipment maintenance, training, code enforcement and fire and injury prevention education.

TFD strategically positions 16 engine companies, 4 ladder companies, and 5 medic units throughout the TFD service area in 17 stations in a way that ensures timely response to protect the environment and/or minimize loss of life and property. There are industry standards, specifically NFPA (National Fire Protection Association) and the Pierce County Ambulance Rules and Regulations, that govern response times and therefore dictate how TFD resources are deployed.

In addition to these industry standards and local regulations, the positioning of TFD resources and staffing levels also is governed by geographical considerations. TFD provides service to a developed urban core and the 2,400 acre Port of Tacoma industrial area, a leading North American seaport.

Commencement Bay, the body of water that contributes to the Port of Tacoma's success, together with the elevation changes on either side of the overall tideflats industrial area, also present major geographic obstacles to TFD's ability to respond in a timely manner to emergencies within its service area.

These geographical challenges further underscore the need for TFD to have properly located units and stations, including fireboat capability, to ensure adequate response timeliness and subsequent loss mitigation. As a result, TFD operates on a dual response system.

As a consequence, every TFD firefighter is a certified EMT and every engine and ladder company as well as the fireboat carries not only firefighting equipment, but also medical supplies and equipment, including oxygen and automatic external defibrillators (AED) for Basic Life Support (BLS) response. In addition to TFD's

5 paramedic staffed, transport capable medic units, the department also has 4 paramedic staffed engine companies for Advanced Life Support (ALS) response.

Fire protection and EMT services for the MLK subarea are provided from Station 4 located at 1453 Earnest S Brazill Street. Backup support is available from Station 1 located at 901 Fawcett Avenue in the downtown, east of the MLK subarea boundary, and Station 2 located at 2701 Tacoma Avenue South, south of the MLK subarea boundary in the Brewery District.

In 2006, TFD dispatched personnel to 41,693 initial requests for service in an area populated by 217,555 residents. Of those initial requests for service, 28,779 were EMS calls (69%) and 5,299 were fires (12.7%). The rest of the calls were related, but not limited, to issues like hazardous materials or conditions, investigations and search and rescue.

The assessed value of property is nearly \$21,300,000,000 for the TFD service area, which encompasses 71.6 square miles, including the city limits of Tacoma, Fircrest, Fife and Pierce County Fire District #10.

TFD's level of service (LOS) standard - for fire is 0.000109 fire apparatus per capita and for emergency medical services (EMS) 0.000016 units per capita.

4.11.2.2: Impacts

Both alternatives will allow development and redevelopment in the MLK subarea for urban uses and activities to various intensities. An increase in urban development and thereby the overall employee and resident population will in turn increase the demand for additional fire and EMS personnel, equipment, and facilities.

According to Tacoma's Community & Economic Development Department's moderate growth scenario, MLK subarea's population will increase from 2,903 persons in 2010 to 7,915 persons by 2040 or at an annual average rate of 3.4% for the projection period.

MLK will grow in accordance with recent and expected trends which are optimistic but not maximum build-out. Maximum build-out would reach 14,520 persons by 2040 at an annual average rate of growth of 5.5%.

If the MLK subarea develops in accordance with

the moderate growth scenario the additional 5,012 population will generate a requirement for 0.5463 additional fire apparatus.

Should the MLK subarea reach the potential build-out the additional 11,617 additional population will generate a requirement for 1.2662 more fire apparatus.

Fire Mod	Pop	0.000109 apparatus/capita
2010	2,903	0.3164
2040	7,915	0.8627
Differ	5,012	0.5463
Max	14,520	1.5826
Differ	11,617	1.2662
EMS Mod	Pop	0.000016 units/capita
2010	2,903	0.0464
2040	7,915	0.1266
Differ	5,012	0.0801
Max	14,520	0.2323
Differ	11,617	0.1858

Source: Tacoma Comprehensive Plan, Capital Facilities Element

If the MLK subarea develops in accordance with the moderate growth scenario the additional 5,012 population will generate a requirement for 0.0801 additional EMS units.

Should the MLK subarea reach the potential build-out the additional 11,617 additional population will generate a requirement for 0.1858 more EMS units.

4.11.2.3: Mitigation measures

Demand for fire and EMS services increases as the population and land area increase resulting in more buildings, open undeveloped properties, and risks of all types. Other factors that also impact the supply and demand for quality services include legislative, personnel, water supplies, equipment, and insurance ratings.

Concurrency - fire services are included in the Tacoma capital facilities list for concurrency. TFD operates under the department's own strategic planning process and develops a 5-year Strategic Plan and Capital Improvement Program to accommodate growth and remain certified for fire insurance purposes.

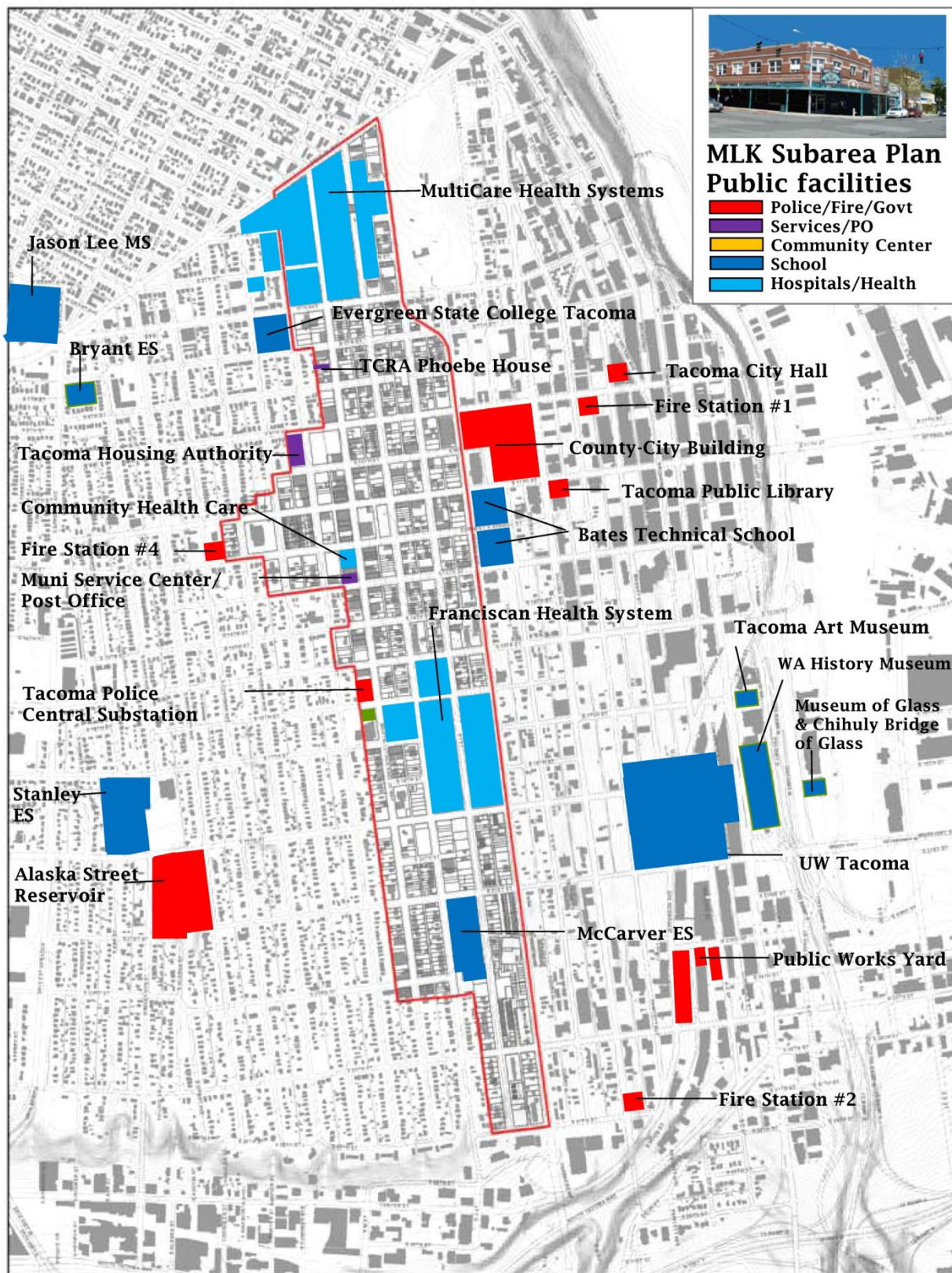
4.11.2.4: Unavoidable adverse impacts

Under both alternatives, the undeveloped and underdeveloped lands in the MLK subarea will be redeveloped for higher intensity uses that

will increase fire and EMS requirements. Both alternatives will increase associated requirements for personnel, vehicles, equipment, and facility development, maintenance, and service enhancements.

As a result of additional development, both alternatives will collect a greater volume of property taxes and utility fees and service charges as well as construction permits and taxes with which to finance the increase in fire and emergency facilities and services that will be required of a larger population.

New developments will also be permitted and constructed under current building and fire safety codes, which utilize and require more fire retardant materials, fire sprinkler systems and alarms, and emergency response and prevention measures than pre-existing buildings.



4.11.3 Schools

4.11.3.1: Existing conditions

The Tacoma Public School District (TSD) is the 3rd largest district in Washington State serving more than 28,000 children in kindergarten through grade 12. The district has 35 elementary schools, 9 middle schools, 5 comprehensive high schools and 14 alternative learning sites. TSD has more than 3,500 employees and is one of the largest employers in Tacoma.

The district has been a "lighthouse" district for many years and often leads the way for the state's 296 districts in piloting new programs and implementing innovative ideas. The Hilltop Artists in Residence glassblowing program is known nationwide and is located in Jason Lee Middle School which serves MLK.

Tacoma Public Schools also has 2 Montessori schools for K-8 as well as the Tacoma Business Academy, Tacoma Virtual Learning online school, Lincoln Center, School of the Arts (SOTA) and the Science and Math Institute (SAMI)—programs that provide significant enrichment and support, including extended school days for initial groups.

- SOTA is a successful small high school that was developed collaboratively with community arts organizations.
- Lincoln Center, housed at Lincoln High School is one of 3 academies at the school, instituting key curriculum features in Lincoln's other 2 small learning communities through work with the College Preparedness Program.
- The district's newest public high school for students beginning their 9th grade year is the Science and Math Institute (SAMI). SAMI creates an inclusive high school learning community that provides integrated, inquiry-based experiences utilizing natural and community resources, combining science, mathematics and the arts.
- TPS also has an extensive special education department and programs for highly capable students.

McCarver Elementary School - located at 2111 South J Street within the MLK subarea boundaries, was established in 1925 as McCarver Public Intermediate School. The historic building houses classrooms, a gymnasium, a library, and a playground next to Metro Parks' McCarver Park.

In 1968 McCarver Elementary became the nation's first Magnet School. McCarver has since been on the cutting edge of innovation in the Tacoma school district. Business and community partnerships are an important part of the McCarver program. More than 250 community volunteers assist McCarver students in developing and reinforcing reading skills and self-esteem.

Working with the Tacoma Housing Authority (THA), McCarver Elementary School was accepted as an International Baccalaureate Primary Years Program (IBPYP) candidate school and is working toward passing a certification visit during the 2013-2014 school year.

In recent years, the student turnover rate at McCarver Elementary school has reached 120-170%. Children who are moved that frequently tend to learn less and make it difficult for other students to learn as well as for the teachers to effectively educate. Much of this turnover happens because families have a hard time finding stable, affordable housing.

Starting in the fall of 2011, the Tacoma Housing Authority (THA) initiated a new program to try and address this issue. The program provides up to 5 years of rental support for up to 50 families who are homeless or at risk of homelessness and who have a child enrolled in kindergarten through 2nd grade at McCarver Elementary School in MLK.

THA pays almost all of the family's rent for the first year and then the family pays 20% more each year for 5 years. On average, a voucher is worth over \$500 per month for a low-income family.

THA has two caseworkers working directly with the families to assure they are meeting their goals and responsibilities. THA also coordinates services with community partners to provide classes, training, and social services.

In exchange for housing and education assistance, THA requires participating families to agree to these conditions:

- Keep their child enrolled in McCarver;
- Be very involved with their child's education;
- Work on their own job and financial growth; and
- Work with THA staff to accomplish these goals.

McCarver staff has begun exploring how to take advantage of the increased family stability to improve the instruction in the classroom. They are working with the school district to receive training and to investigate a school-wide program which will greatly enrich the learning for all students at McCarver.

Each participating family has completed a Family Success Plan with specific goals and timelines for their educational and economic progress. THA caseworkers are monitoring the progress on each of these goals. THA also has a data sharing agreement in place with Tacoma Public Schools to track progress of the students in the program.

4.11.3.2: Impacts

Both alternatives will allow development and redevelopment in the MLK subarea for urban uses and activities to various intensities. An increase in urban development and thereby the overall resident population will in turn increase the demand for additional education personnel, equipment, and facilities.

Under either alternative, the MLK subarea will be developed and redeveloped with higher density housing oriented to individuals, couples, and young family starters, as well as empty nesters and seniors that do not generate high ratios of school age children. In addition, fertility rates have been declining steadily over the years further reducing the number of children being produced for a typical household, let alone household types that do not contain high ratios of dependent children.

For example, the number of children age 5-19 per household in 2010 was 0.308 in the MLK district compared to 0.478 in Tacoma, and 0.550 in Pierce County. The number of children age 5-9 was 0.109 in the MLK district compared to 0.156 in Tacoma, and 0.179 in Pierce County. MLK subarea households are more urban, that is single adults and couples with few or no children compared with more suburban families in the larger city and county.

Proposed mixed use residential densities in the MLK subarea will attract even more urban households with lower corresponding school students accordingly. As a result, the MLK subarea, particularly the mixed use higher density residential zones and projects, are not likely to produce school age children in the ranges typical of other areas of the city.

According to Tacoma’s Community & Economic

Development Department’s moderate growth scenario, MLK subarea’s population will increase from 2,903 persons in 2010 to 7,915 persons by 2040 or at an annual average rate of 3.4% for the projection period.

The MLK subarea will grow in accordance with recent and expected trends which are optimistic but not maximum build-out. Maximum build-out would reach 14,520 persons by 2040 at an annual average rate of growth of 5.5%.

If the MLK subarea develops in accordance with the moderate growth scenario the additional population, and thereby the additional households where a household includes 1.59 persons, by the year 2040 of 3,152 more households will generate 343 more elementary, 280 more middle, and 346 more high school or 969 more total students than are currently in the Tacoma Public School or private school systems.

Should the MLK subarea reach the potential build-out the additional 7,306 more households will generate 796 more elementary, 650 more middle, and 804 more high school or 2,250 more total students than are currently in the Tacoma Public School or private school systems.

Mod	Pop	Pupils			
		DUs	K-5	6-8	9-12
		1.59	.109	.089	.110
2010	2,903	1,826	199	163	201
2040	7,915	4,977	542	443	547
Differ	5,012	3,152	343	280	346
Max	14,520	9,132	995	813	1,005
Differ	11,617	7,306	796	650	804

Source: 2010 US Census, ages 5-9, 10-14, 15-19

The City of Tacoma, in conjunction with the Tacoma Public School District established the following level of service (LOS) standard for school space subject to concurrency requirements:

Mod	LOS		
	K-5	6-8	9-12
	90	100*	120*
2010	17,910	16,300	24,120
2040	48,780	44,300	65,640
Differ	30,870	28,000	41,520
Max	89,550	81,300	120,600
Differ	71,640	65,000	96,480

Source: Tacoma Comprehensive Plan, Capital Facilities Element

* LOS standards for middle schools is 90 sq ft for grade 6 and 110 sq ft for grades 7-8, for high schools is 110 sq ft for grade 9 and 130 sq ft for grades 10-12.

If the MLK subarea develops in accordance with the moderate growth scenario the additional 969 students by the year 2040 will require 30,870 square feet of more elementary, 28,000 square feet of more middle, and 41,520 square feet of more high school space or 100,390 square feet of more total school space than is currently in the Tacoma Public School or private school systems.

Should the MLK subarea reach the potential build-out the additional 2,250 more students will require 71,640 square feet more elementary, 65,000 square feet more middle, and 96,480 square feet more high school or 233,120 square feet more school space than is currently in the Tacoma Public School or private school systems.

The additional school space requirements do not necessarily need to be satisfied within the MLK subarea, though the additional capacity needs to be able to service MLK students somewhere within the MLK and Hilltop service area. Additional capacity could be accommodated by expansions at all McCarver, Stanley, and Bryant Elementary, Jason Lee Middle, and Stadium High Schools sites.

4.11.3.3: Mitigation measures

Concurrency - public schools are included in the Tacoma capital facilities list for concurrency. TSD operates under the district's own specific state guidelines and develops a 5-year Strategic Plan and Capital Improvement Program in order to be eligible for state education funding.

TSD completes a 5-year projection for school going age cohort based on the number of births and current enrollments within the district. TSD becomes eligible for state matching construction funds when the projection indicates an acceptable student population for a new school. TSD, therefore, offers services after the growth occurs, rather than prior to or concurrently with growth.

Growth impact fees - Washington State provides local school districts with construction fund monies for building and modernization projects. The funds come partly from the sale of timber from state lands and from the state legislature. However, the state also has limitations on the amount of state funds that can be provided to local school districts, particularly those impacted by rapid urban development.

"Un-housed" students (those that exceed a school's physical capacity based on state established ratios of space per student) are accommodated in portable units until the district qualifies for state matching funds for the construction of new facilities.

In accordance with the provisions of GMA, a school district may impose a growth impact fee to finance the "un-housed" space requirements that will be created by new residential development that cannot be met by existing school capacity.

4.11.3.4: Unavoidable adverse impacts

Under both alternatives, the undeveloped and underdeveloped lands in the MLK subarea will be redeveloped for higher intensity uses that will increase dwelling units and therefore school age children educational requirements. Both alternatives will increase associated requirements for educational system personnel, vehicles, equipment, and facility development, maintenance, and service enhancements.

Both alternatives will require the funding of continued school expansion and growth-related development projects to adequately provide educational services as a result of MLK subarea redevelopment.

As a result of additional development, both alternatives will collect a greater volume of property taxes with which to finance the increase in educational facilities and services that will be required of a larger population.

4.11.4 Water supply services

4.11.4.1: Existing conditions

The MLK subarea is supplied with potable water by Tacoma Water, a division of Tacoma Public Utilities, which is governed by the 5-member Tacoma Public Utility Board that is appointed by the Tacoma City Council.

Tacoma Water provides water service to residences, businesses and industries located in the cities of Tacoma, University Place and Ruston; in portions of the cities of Puyallup, Orting, Bonney Lake, Fircrest, Lakewood and Federal Way; and, in portions of Pierce and southern King Counties.

The Green River, located in King County, is Tacoma Water's primary source of water. Tacoma Water's Green River First Diversion Water Right can supply up to 73,000,000 gallons of water each day, but is subject to minimum river flows as established in an agreement reached with the Muckleshoot Indian Tribe. Water supply under this water right can be replaced with water from 7 wells when water in the Green River is turbid, or cloudy.

Tacoma Water's Green River Second Diversion Water Right can provide up to 65,000,000 gallons of water each day. In addition to surface and groundwater sources in the Green River Watershed, Tacoma Water owns 24 wells located in and around the city with a short-term combined pumping capacity of approximately 60,000,000 gallons per day.

Tacoma Water's Draft 2011-2020 Business Plan identifies key planning, customer and operation and maintenance (O&M) and capital programs which the utility must address in order to meet customer expectations for high quality water service, to address new regulations and to respond to growth in system demands. The business plan also addresses financing and rate requirements necessary to support the implementation of the projected operations and capital program needs.

The Tacoma Water Business Plan Strategic Initiatives address the following areas:

- Water Supply, Transmission and Storage Improvements
- Water Quality Improvements
- Water Distribution Improvements
- General Improvements

The adopted level of service (LOS) standard for Water

- is 562 gallons per day per Equivalent Residential Unit (ERU). This standard is subject to concurrency. An ERU is a unit of measure used to express the amount of water consumed by a typical residential customer of the Water Division during the 4-day peak period.

The LOS is determined by multiplying the Water Division's actual residential customer 4-day peak factor of 2.01 times the actual average daily residential water consumption. The 4-day peak water demands drive the new water system facility requirements for meeting new customer growth. The 4-day peak (maximum) is defined as: the average use per day of the 4 highest consecutive days of water use in the summer months.

4.11.4.2: Impacts

Both alternatives will continue development of the lands within the MLK subarea for urban uses and activities at various intensities. Development will increase demand for water; higher intensity development alternatives will create correspondingly higher demand.

According to Tacoma's Community & Economic Development Department's moderate growth scenario, MLK subarea's population will increase from 2,903 persons in 2010 to 7,915 persons by 2040 or at an annual average rate of 3.4% for the projection period.

Under a maximum build-out scenario, the MLK subarea would reach 14,520 persons by 2040 at an annual average rate of growth of 5.5%.

Mod	Pop	DUs 1.59	gallons/ERU 562
2010	2,903	1,826	1,026,212
2040	7,915	4,977	2,797,074
Differ	5,012	3,152	1,770,862
Max	14,520	9,132	5,132,184
Differ	11,617	7,306	4,105,972

Source: 2010 US Census

If the MLK subarea develops in accordance with the moderate growth scenario the additional population by the year 2040, and thereby the additional households where a household includes 1.59 persons, of 3,152 more households will generate an additional water requirement of 1,770,862 gallons per day.

Should the MLK subarea reach the potential build-out the additional 7,306 more households will generate an additional water requirement of 4,105,972 gallons per day.

The additional requirements are only to serve the projected additional dwelling units, not total equivalent residential units, which would also include hospital beds, school students, business employees, and other water generating requirements. The projected requirements, therefore, are likely higher than estimated above.

Tacoma Water has evaluated the existing water distribution system within the bounds of the MLK subarea. Research indicates that the capacity of the existing distribution system in this area is generally good and the existing system will provide satisfactory water pressure and flow to support development within the subarea for the foreseeable future.

Accordingly, both alternatives can be achieved without new initiatives being developed.

4.11.4.3: Mitigation measures

Tacoma Water is committed to meeting the Water LOS standard that is also a requirement of concurrency regulations. At present there are no active or planned water main replacement projects within the MLK subarea that are driven solely by the need to support projected development. Current or planned water main replacement work will be the result of project partnering opportunities where aging infrastructure can be replaced with shared restoration costs.

At present, planned replacement of water mains within the MLK subarea is limited to the following project in 2012:

- A project at South I Street, South 19th to South 27th Streets will replace 4-inch cast iron with 8-inch pipe and increase the quantity of water available to customers along South I Street. The project will include restoration of the western half of South I Street from South 21st to South 27th Streets, while from South 19th to South 21st Streets Tacoma Water will be partnering with Street Maintenance to restore the full street section.

Otherwise, there are no current plans for replacing or upgrading specific main segments within the MLK subarea.

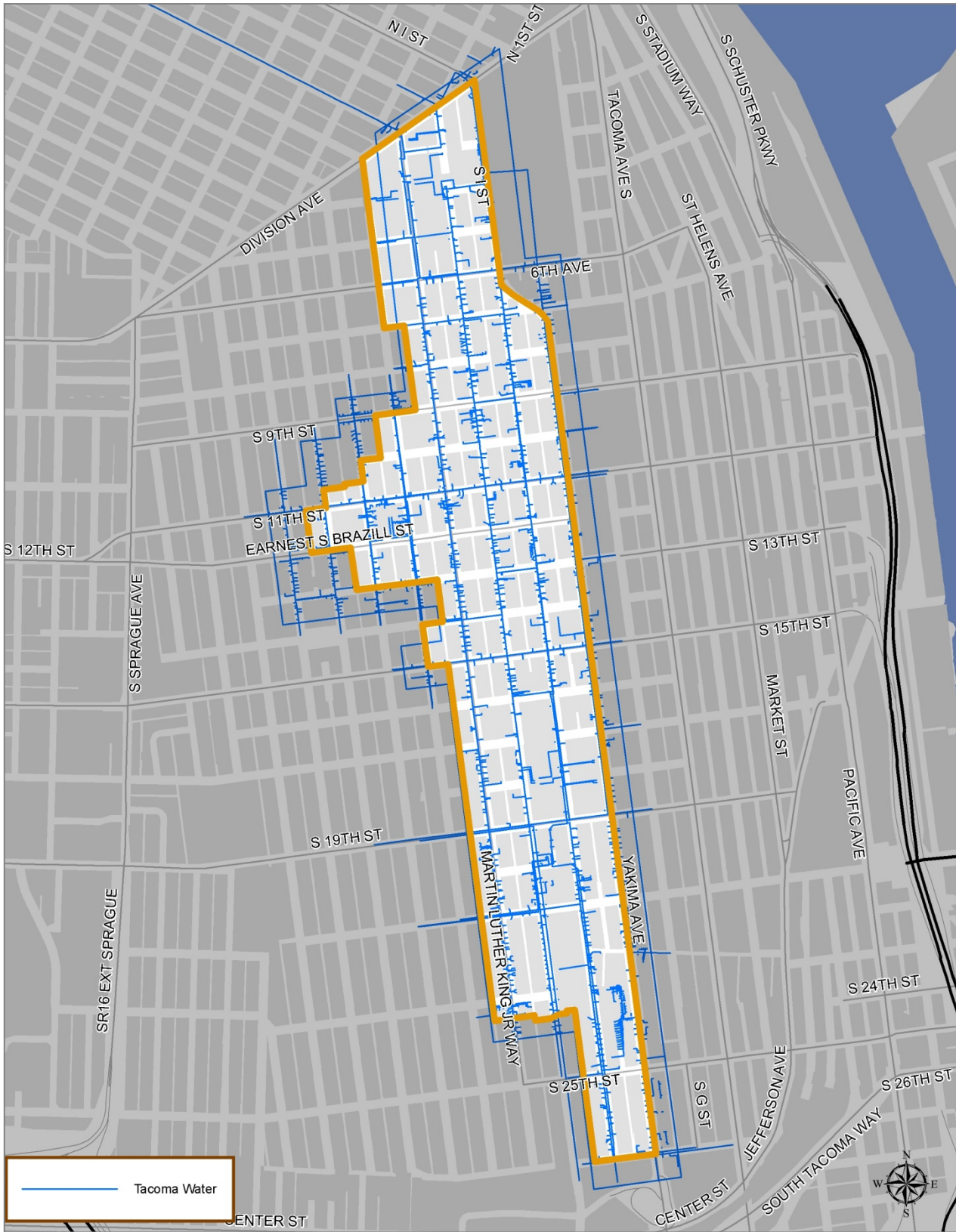
However, it is understood that replacement and/or upgrades to segments within the subarea may be desirable from a long-term maintenance and operation standpoint. While such improvements and maintenance can be accomplished incrementally over time, measures that could advance a more comprehensive, coordinated, and efficient implementation of such improvements and/or maintenance include:

- Development of an MLK subarea master infrastructure plan that includes upgrades and/or rehabilitation of water infrastructure.
- Partnerships with developers concerning their future utilization of properties within the subarea, potentially including use of alternative financing and construction mechanisms, such as local improvement districts.
- Infrastructure project partnering opportunities where aging infrastructure can be replaced and/or upgraded with shared restoration costs.
- Supporting grant application opportunities for funding of water system upgrades and/or adjustments in advance of development.

4.11.4.4: Unavoidable adverse impacts

Under both alternatives, the undeveloped and underdeveloped lands in the MLK subarea will be redeveloped for higher intensity uses that will increase water supply, storage, and distribution requirements. Both alternatives will increase associated requirements for personnel, equipment, and facility development, maintenance, and service enhancements.

As a result of additional development, both alternatives will collect a greater volume of utility fees and service charges as well as construction permits with which to finance the increase in water facilities and services that will be required of a larger MLK population.



4.11.5 Sanitary sewer services

4.11.5.1: Existing conditions

The southern portion of the MLK subarea is served by the Central Treatment Plant (CTP) and the northern portion of the Subarea is served by the North End Treatment Plant (NETP). Both facilities are operated by the City of Tacoma.

The CTP is located approximately 1.5 miles up on the Puyallup River. It is the city's largest plant with a permitted maximum month treatment capacity of 60,000,000 gallons per day (MGD). (Note: Maximum month flow is based on an average of the total daily plant flow throughout an entire month).

The plant has a permitted peak hydraulic capacity of 150 MGD, and a secondary treatment capacity of 60 MGD. It services the majority of wastewater flows from the Tacoma area, including the industrialized tide flats, northeast, central and south Tacoma, plus Fircrest, Fife, Milton and some bordering areas in Pierce County and Federal Way.

The NETP is located at the base of Mason Gulch, approximately 2.5 miles north of the MLK subarea, and services wastewater flows from the majority of Tacoma's North End neighborhood, portions of the West End neighborhood and the City of Ruston. The plant has a permitted maximum month treatment capacity of 7.2 MGD, a permitted peak hydraulic capacity of 15.8 MGD, and a secondary treatment capacity of 8.0 MGD.

Tacoma was founded in 1868 and construction of the first community collection pipes occurred in 1880. The collection pipes were generally installed to follow the shortest path to the tidewaters of Commencement Bay. However, the rapid development of the city in these early years, with the associated industrial and population growth, contributed to the pollution of natural resources far more rapidly than nature could take care of it.

In the 1940s, Tacoma began to seriously assess and combat the pollution problems caused by sewer discharges. In 1944, voters passed a \$3,000,000 bond issue for the construction of essential sewers and a wastewater treatment plant to serve central, southern and eastern parts of Tacoma. Construction of the main sewers began in 1949 and construction of the first primary treatment plant, now known as the CTP, was finished in 1952.

In 1955, Tacoma hired engineers to prepare a report on a long-range program of sewage and drainage improvements that would help the city solve its wastewater pollution problems. Recognizing that many of the local collection systems constructed prior to 1946 were of the combined type, where wastewater and storm water from surface runoff were conveyed to the Bay in the same pipe, Phase I of the program included separating established surface water and wastewater systems within the city.

The 1955 engineering report also called for doubling the capacity of the CTP and building two new treatment plants. However, the surface water and wastewater separation efforts allowed Tacoma to defer enlargement of the CTP plant until 1963. The NETP was constructed in 1968 and the West Slopes Treatment Plant, which has since been closed, was constructed in 1962.

Both the NETP and CTP have been renovated and upgraded. The NETP was upgraded in stages between 1989 and 1997 and the plant's nationally-recognized alternative treatment process, which utilizes chemicals to remove the organics and a filter with "good" bacteria to treat the wastewater before it enters Puget Sound, is so efficient it doesn't require additional large tanks and acreage like most conventional treatment plants.

Significant improvements to the CTP occurred in the 1980s and 1990s, including construction of a high purity oxygen secondary treatment facility in 1989. A third major upgrade to the facility was completed in 2009 and included construction of a new peak wet weather treatment facility, new influent and effluent pumping stations, and new grit removal process. These recent upgrades have brought both facilities up to award-winning secondary treatment standards.

There is a network of approximately 700 miles of wastewater collection pipes and 46 pump stations that convey wastewater to the treatment facilities. In 1995, Tacoma began an aggressive Inflow and Infiltration program. At a cost of \$4,000,000 a year, it began upgrading or replacing old sewer pipes that allowed groundwater and surface water to seep into the sewer system.

Through the inflow and infiltration program, the city continues to remove private roof drains, identified during smoke tests (sending smoke through pipes to identify if drains are

connected), from the sewer system.

The level of service (LOS) standard for wastewater - is 200 gallons per capita per day (GPCD) Maximum Month Flow and 400 GPCD Peak Hydraulic or Peak Instantaneous Flow. This standard is subject to state and city concurrency standards.

Capacity in the city's system for collecting and treating wastewater is a function of both the quantity of flow generated by the city's customers and the amount of inflow and infiltration of surface water runoff and groundwater that enters the wastewater collection system through cracks in pipes or other similar defects.

4.11.5.2: Impacts

Both alternatives will continue development of the lands within the MLK subarea for urban uses and activities at various intensities. New development will increase demand for wastewater services; higher intensity development alternatives will create correspondingly higher demand.

According to Tacoma's Community & Economic Development Department's moderate growth scenario, MLK subarea's population will increase from 2,903 persons in 2010 to 7,915 persons by 2040 or at an annual average rate of 3.4% for the projection period.

MLK will grow in accordance with recent and expected trends which are optimistic but not maximum build-out. Maximum build-out would reach 14,520 persons by 2040 at an annual average rate of growth of 5.5%.

Mod	Population	gallons/capita
		200
2010	2,903	580,600
2040	7,915	1,583,000
Differ	5,012	1,002,400
Max	14,520	2,904,000
Differ	11,617	2,323,400

Source: 2010 US Census

If the MLK subarea develops in accordance with the moderate growth scenario the additional 5,012 population will generate an additional wastewater requirement of 1,002,400 gallons per day.

Should the MLK subarea reach the potential build-out the additional 11,617 more persons will generate an additional wastewater requirement of 2,323,400 gallons per day.

The City has evaluated the existing wastewater conveyance system within the bounds of the MLK subarea. This includes video inspection of all the underground wastewater sewer pipes in this area allowing for an accurate assessment of the condition of the pipes and a more precise capacity analysis of the system.

The research indicates that the capacity of the existing system is generally sufficient to serve the existing level of development, but many portions of the system are old and their condition is poor. While the existing conveyance system is not uniformly distributed throughout the area, it does not generally have capacity to service the level of growth being analyzed.

Improvements to the wastewater system will be necessary to support development within the MLK subarea at the levels allowed in the existing land use code and in the development alternative being evaluated as part of this DEIS.

4.11.5.3: Mitigation measures

The City of Tacoma is committed to delivering the wastewater level of service (LOS) standard that is also a requirement of concurrency regulations. For new capital improvements the city is striving to design the capacity of the system (collection and treatment) to have the hydraulic capacity to convey and treat the inflow and infiltration associated with a statistical one in 20-year rainfall event for this region. During wet weather events larger than this it is possible that hydraulic capacities may be exceeded and sanitary sewer overflows may occur. Natural drainage strategies such as green roofs, rain gardens, and pervious pavement that are implemented with new development will help reduce the occurrence of sanitary sewer overflows.

The Tacoma Public Works Department has on ongoing Rehabilitation/Replacement program to repair and upgrade wastewater pipes. Projects are typically tied to aging pipes that are either failing or about to fail, as well as eliminating the sources of clean groundwater and surface water from inflow and infiltration. Tacoma's current plans for rehabilitation/replacement in the MLK subarea include the following projects:

- Vicinity of South 15th and Yakima - the project will replace and upgrade approximately 2,700 linear feet of existing wastewater conveyance pipes serving properties located along South Yakima Avenue, South 15th Street,

and the alley corridors between Yakima and I Streets and between MLK Jr. Way and J Street.

- 2013A Wastewater Sewer Replacement Project in Various Tacoma Areas – one component of this multiple area project will replace approximately 400 linear feet of existing wastewater conveyance pipes located in the alley between L St and MLK Jr. Way from South 23rd St north to mid-block.

Whenever possible, these and other replacement projects will be coordinated with other utility upgrades that require street excavation and work towards replacement of existing streets with streets that meet Tacoma’s Complete Streets standards.

In addition, the city is willing to adjust, within certain parameters, the timing of ongoing sewer programs in order to stimulate private investment and to partner with property owners through the use of alternative financing and construction mechanisms, such as local improvement districts.

For new development projects, it is Tacoma’s policy to make capacity determinations on a case-by-case basis for the following situations to ensure capacity is either available in the existing system or required to be provided by the developer applicant:

- Developments that add 100 units or more; or
- Developments that will generate wastewater equal to or greater than 10% of the capacity of the existing sewer system.

Additionally, while necessary capacity improvements can be accomplished as

development occurs, measures that could advance a more comprehensive, coordinated, and efficient implementation of such improvements include:

- Development of an MLK subarea master infrastructure plan that includes upgrades and/or rehabilitation of wastewater infrastructure.
- Partnerships with developers concerning their future utilization of properties within the subarea, potentially including use of alternative financing and construction mechanisms, such as local improvement districts.
- Infrastructure project partnering opportunities where aging infrastructure can be replaced and/or upgraded with shared restoration costs.
- Supporting grant application opportunities for funding of wastewater system upgrades in advance of development.

4.11.5.4: Unavoidable adverse impacts

Under both alternatives, the undeveloped and underdeveloped lands in the MLK subarea will be redeveloped for higher intensity uses that will increase wastewater collection and treatment requirements. Both alternatives will increase associated requirements for personnel, equipment, and facility development, maintenance, and service enhancements.

As a result of additional development, both alternatives will collect a greater volume of utility fees and service charges as well as construction permits with which to finance the increase in wastewater facilities and services that will be required of a larger MLK population.

4.11.6 Stormwater drainage

4.11.6.1: Existing conditions

In the MLK subarea, all sewer and stormwater lines are separated. Stormwater from the majority of the MLK subarea flows easterly to several outfalls on the Foss Waterway. The portion of the MLK subarea north of approximately South 8th Street flows northeasterly to a Commencement Bay outfall along Schuster Parkway.

Tacoma was founded in 1868 and construction of the first community sewers occurred in 1880. From that time until 1928, collection systems for sanitary sewage and stormwater were separately constructed and were interconnected only at the head of ravines or near the points of final disposal.

Between 1928 and 1946, most collection system construction was of the combined type where sanitary sewage and stormwater from surface water runoff were conveyed to the Bay in the same pipe. Collection systems constructed since 1946 have been separate.

During the late 1950's and throughout the 1960's, Tacoma sold bonds to finance both the construction of new storm drainage systems (both large diameter pipes and holding basins) and the separation of the combined systems from the 1930's and 1940's.

Today, construction of new storm lines continues as well as operation and maintenance of the existing ones. A storm drainage utility was formed in 1979 to provide funding for these activities.

Level of service (LOS) standard for private systems - is to convey:

- 10-year, 24-hour design storm for pipes less than 24-inches in diameter without surcharging
- 25-year, 24-hour design storm for pipes equal to or greater than 24-inches in diameter without surcharging

Level of service (LOS) for all public systems - is to convey:

- 25-year, 24-hour design storm for drains equal to or greater than 24-inches in diameter without surcharging

If the capacity level of service (LOS) cannot be met or if detention is required, the level of service standard for new detention systems will

be according to the updated 2012 Surface Water Management Manual.

Detention facilities - projects that meet or exceed the thresholds outlined in the 2008 Surface Water Management Manual, Volume 1, Chapter 3, shall be required to construct flow control facilities and/or land use management Best Management Practices (BMPs).

Using an approved continuous simulation runoff model such as the Western Washington Hydrology Model (WVHM), storm water discharges shall match developed discharge durations to pre-developed discharge durations for the range of pre-developed discharge rates from 50% of the 2-year peak flow up to 100% of the 50-year peak flow. The pre-developed condition to be matched shall be a forested land cover.

Treatment facilities - all new treatment facilities shall be designed for the volume of runoff predicted from one of the 2 following methods:

- Single event model - 6-month, 24-hour design storm of 1.44 inches, or
- Continuous simulation runoff model - 91st percentile of 24-hour runoff volume

4.11.6.2: Impacts

Both alternatives will continue development of the lands within the MLK subarea for urban uses and activities at various intensities. Because much of the MLK subarea has been previously developed, the amount of increased impervious surface and associated runoff will be somewhat reduced.

In addition, new development must comply with increasingly stringent best management practices (BMPs), which can, in some cases, reduce capacity demand on the storm water system. However, new development and redevelopment at the high intensity levels allowed under current zoning and being evaluated as part of this DEIS will result in overall increased levels of impervious surface and associated volume of runoff to the storm water system.

The City has evaluated the existing stormwater conveyance system within the bounds of the subarea. While the capacity and condition of the existing infrastructure is generally adequate to

serve the existing level of development, improvements to the stormwater system will be necessary to support development within the MLK subarea at the levels allowed in the existing land use code and in the development alternative being evaluated as part of this DEIS.

4.11.6.3: Mitigation measures

Tacoma regulations associated with new development are documented in Volume 1, Chapter 3 of the City's 2012 Stormwater Management Manual. When new stormwater regulations require added facilities in order to comply with the new requirements, the current strategy is to employ the use of Best Management Practices (BMP).

New development within the city will require stormwater practices/facilities, generally on-site, to comply with the new stormwater regulations. Also, as further development occurs, additional stormwater pipes in city streets may need to be constructed, upgraded or replaced due to age and condition.

A new NPDES permit was issued in February 2007 and modified in June 2009. The new permit is focused on the quality and quantity of water discharged to receiving waters. Increasingly the permit will require new projects to improve water quality and reduce the volume of water discharged into receiving waters.

As the stormwater system ages, focus is shifting from capacity improvements to rehabilitation or replacement of pipe. Tacoma has completed an analysis of the storm sewer network based on criticality factors and is beginning an asset management program including the physical investigation and repair of the most critical pipes in the storm system.

Costs associated with this maintenance of the existing pipe system are borne by the utility's capital fund. Whenever possible, these replacement projects will be coordinated with other utility upgrades that require street excavation and work towards replacement of existing streets with streets that meet Tacoma Complete Streets standards.

In addition, within this program it may be possible to adjust, within certain parameters, the timing of ongoing surface water programs in order to stimulate private investment and to partner with property owners through the use of alternative financing and construction mechanisms, such as local improvement districts.

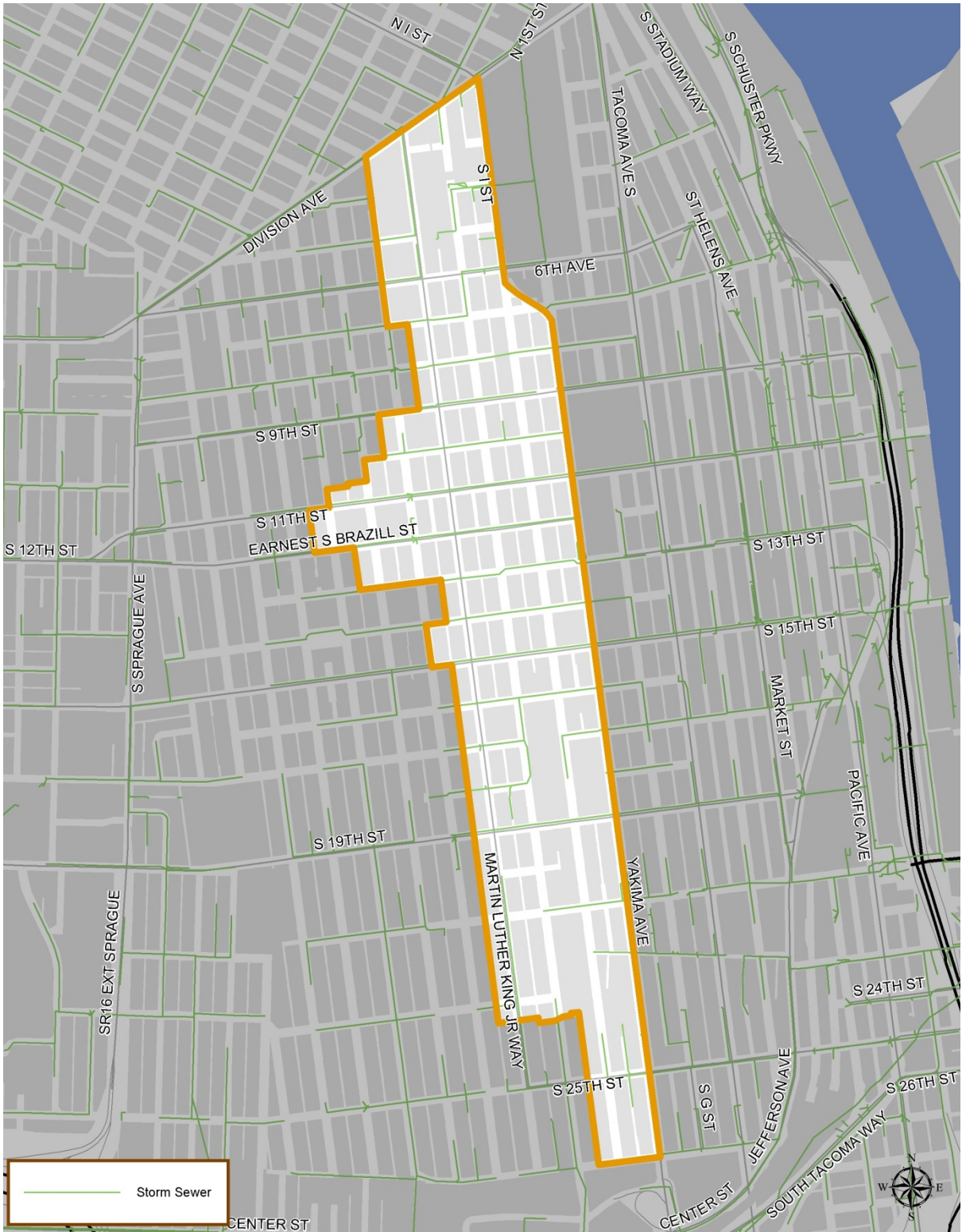
Additionally, while necessary capacity and/or water quality improvements can be accomplished as development occurs, measures that could advance a more comprehensive, coordinated, and efficient implementation of such improvements include:

- Development of a MLK subarea master infrastructure plan that includes upgrades and/or rehabilitation of stormwater infrastructure, potentially including water quality components.
- Partnerships with developers concerning their future utilization of properties within the subarea, potentially including use of alternative financing and construction mechanisms, such as local improvement districts.
- Infrastructure project partnering opportunities where aging infrastructure can be replaced and/or upgraded with shared restoration costs.
- Supporting grant application opportunities for funding of stormwater system upgrades in advance of development.

4.11.6.4: Unavoidable adverse impacts

Under both alternatives, the undeveloped and underdeveloped lands in the MLK subarea will be redeveloped for higher intensity uses that will increase stormwater runoff, collection, and treatment requirements. Both alternatives will increase associated requirements for personnel, equipment, and facility development, maintenance, and service enhancements.

As a result of additional development, both alternatives will collect a greater volume of utility fees and service charges as well as construction permits with which to finance the increase in stormwater facilities and services that will be required of a larger MLK population.



4.11.7 Solid waste services

4.11.7.1: Existing conditions

Solid Waste collections services are provide to the MLK subarea by the City of Tacoma. The Environmental Services Solid Waste Management (SWM) Division of the Public Works Department is an "enterprise" utility solely funded by rate revenues. The SWM Division has provided mandatory solid waste collection and disposal services within the city since 1929.

Solid waste collection service is provided for single and multi-family housing units, commercial and industrial customers and all other solid waste customers within the city limits. Tacoma owns and operates its own fleet of automated collection vehicles and its own landfill. Weekly garbage collection service is mandatory for all residents. Recycling and yard waste collection is an optional biweekly service that is available at no additional cost to residential customers.

Tacoma has owned and operated the Tacoma Landfill at 3510 South Mullen Street within the City limits since 1960. The landfill was declared a federal superfund site by the US Environmental Protection Agency (EPA) in 1983 and has been operating under a Federal Consent Decree since 1988.

The Landfill is required to be closed by December 2014 per the Landfill Consent Decree signed by Tacoma and the EPA. The city, under a 20-year contract established in 2000 with Pierce County Recycling, Composting, and Disposal, LLC, delivers all non-processible and non-recyclable materials and waste not placed in the Tacoma Landfill to the 304th Street Landfill located in Pierce County.

The level of service (LOS) for solid waste - is 1.13 tons per capita per year.

4.11.7.2: Impacts

Both alternatives will continue development of the lands within the MLK subarea for urban uses and activities at various intensities. Development will increase demand for solid waste services; higher intensity development alternatives will create correspondingly higher demand.

According to Tacoma's Community & Economic Development Department's moderate growth scenario, MLK subarea's population will increase from 2,903 persons in 2010 to 7,915 persons by

2040 or at an annual average rate of 3.4% for the projection period.

MLK will grow in accordance with recent and expected trends which are optimistic but not maximum build-out. Maximum build-out would reach 14,520 persons by 2040 at an annual average rate of growth of 5.5%.

Mod	Population	tons/capita
2010	2,903	1.13
2040	7,915	3,280
Differ	5,012	5,663
Max	14,520	16,407
Differ	11,617	13,127

Source: 2010 US Census

If the MLK subarea develops in accordance with the moderate growth scenario the additional 5,012 population will generate an additional wastewater requirement of 5,663 tons per year.

Should the MLK subarea reach the potential build-out, the additional 11,617 more persons will generate an additional wastewater requirement of 13,127 tons per year.

4.11.7.3: Mitigation measures

The Tacoma Public Works Department has evaluated the solid waste collection and disposal system operated within the bounds of the MLK subarea. Research indicates that the existing system in this area is generally excellent and the existing system will provide satisfactory service to support development within the subarea for the foreseeable future.

Tacoma is committed to expanding its solid waste services to meet the additional needs of future growth at the level of service (LOS) standard. Accordingly, both alternatives can be achieved without new initiatives being developed.

4.11.7.4: Unavoidable adverse impacts

Under both alternatives, the undeveloped and underdeveloped lands in the MLK subarea will be redeveloped for higher intensity uses that will increase solid and inert waste disposal requirements. Both alternatives will increase associated requirements for personnel, equipment, and landfill designation, maintenance, and service enhancements.

As a result of additional development, both alternatives will collect a greater volume of utility fees and service charges as well as construction permits with which to finance the increase in solid waste facilities and services that will be required of a larger MLK population.

4.11.8 Library services

4.11.8.1: Existing conditions

The Tacoma Public Library system is governed by a 5 member Board of Trustees appointed by the Mayor, and confirmed by a vote of the Tacoma City Council. Members are appointed for 5 year terms-of-office.

The Tacoma Public Library consists of a downtown Main Library located at 1102 Tacoma Avenue South (that serves MLK), 2 regional libraries serving the city's north and south end, and 5 neighborhood libraries, as well as remote access to the Library's online databases and resources.

Tacoma's Main Library, which is located two blocks east of the MLK district, opened in 1903 and was the first Carnegie Library built in Washington State. Philanthropist and steel-czar Andrew Carnegie gave Tacoma \$75,000 to build the original library (which is now home to the Handforth Gallery, community meeting rooms, and the Library's Northwest Room and Special Collections). Today, more than 100 years later, the Library is still the heart and soul of the city, and a major cultural resource -- with art exhibitions, lectures, author visits, and more -- as well as home to more than 250,000 books, magazines, compact discs, and videos.



The Main Library is filled with many treasures -- from Leaves of Glass -- James Carpenter's stunning dichroic glass sculpture which greets visitors as they enter the library, and Carnegie Pond -- a tile mural by artist Jack Ferrell in the second floor Children's Area, to a collection of work by Tacoman Thomas Handforth, the recipient of the 1939 Caldecott Medal and for whom the Library has named it's art gallery. A collection of images by photographers from the sister city of Vladivostok can be found in the Olympic Room (one of two free community meeting rooms).

Library users can check out novels and audio books, some picture books for children, some classical, jazz, pop or even holiday CDs and the latest movies on DVD. Users have access to an array of information accessible from home computer - including full-text articles from hundreds of magazines, newspapers and journals; business resources; homework assistance; unique local history resources and more at www.tacomapubliclibrary.org.

The Tacoma Public Library provides free meeting rooms for community use. Meeting rooms may be reserved by any group for non-commercial purposes, although preference is given to library-sponsored programs.

The Tacoma Public Library is open to all persons:

- residing within the city limits of Tacoma
- property owners or residents living in unincorporated Pierce County or residents of a military base within Pierce County.
- residents of cities or towns annexed to, or contracting with, Pierce County Library System
- persons showing evidence of paying property tax to the City of Tacoma
- Businesses with an Annual Business License from the City of Tacoma
- Students and full-time employees of Tacoma School District #10 who live outside the city of Tacoma.
- Employees of the City of Tacoma,
- Most (but not all) King County Library District cardholders
- Persons living in a temporary residence or transitional housing (for example: persons residing in a mission or in rehabilitation).

The Tacoma Public Library and the Pierce County Library system have entered into a reciprocal agreement which allows Tacoma residents to get a free card from the Pierce County Library system and residents within the Pierce County Library services district to get a free card from the Tacoma Public Library.

The level of service (LOS) standard - for the library system is 0.06 square feet per circulation. The American Library Association LOS standard is 0.60 square feet per capita on an overall basis for all library facilities including main, regional, community, and branch.

4.11.8.2: Impacts

Both alternatives will allow development and redevelopment in the MLK subarea for urban uses and activities to various intensities. An increase in urban development and thereby the overall employee and resident population will in turn increase the demand for library personnel, equipment, and facilities for all age groups.

According to Tacoma's Community & Economic Development Department's moderate growth scenario, MLK subarea's population will increase from 2,903 persons in 2010 to 7,915 persons by 2040 or at an annual average rate of 3.4% for the projection period.

The MLK subarea will grow in accordance with recent and expected trends which are optimistic but not maximum build-out. Maximum build-out would reach 14,520 persons by 2040 at an annual average rate of growth of 5.5%.

If the MLK subarea develops in accordance with the moderate growth scenario the additional population will generate a requirement for 3,008 additional square feet of library facilities.

Should the MLK subarea reach the potential build-out, the additional 11,617 persons the additional population will generate a requirement for 6,971 additional square feet of library facilities.

Mod	Population	ALA 0.60 sf/capita
2010	2,903	1,741
2040	7,915	4,749
Differ	5,012	3,008
Max	14,520	8,712
Differ	11,617	6,971

Source: American Library Association

4.11.8.3: Mitigation measures

The Tacoma Public Library will have to provide additional personnel, materials, and equipment and possibly expand the Main Library or add another facility to provide for the additional population and user growth from the MLK subarea.

The city will have to finance these additional facilities and services using increased fees or property tax levies as necessary to recover development and operating costs.

4.11.8.4: Unavoidable adverse impacts

Under both alternatives, the undeveloped and underdeveloped lands in the MLK subarea will be redeveloped for higher intensity uses that will increase library requirements and associated personnel, materials, equipment, and facilities.

The Tacoma Public Library will be responsible for expanding facilities and services to meet requirements associated with continued MLK subarea population increases.

4.11.9 Other city facilities

4.11.9.1: Existing conditions

History - Captain George Vancouver anchored off Tacoma's north shore in 1792. In 1870, Tacoma's natural deep-water port became an attraction when the Northern Pacific Railroad made Tacoma a stop on its transcontinental line. Tacoma became known as the City of Destiny in 1887 after it was designated as the Northern Pacific Railroad's western terminus.

Tacoma adopted its name after nearby Mount Rainier, originally called Mount Tahoma. It is known as the "City of Destiny" because the area was chosen to be the western terminus of the Northern Pacific Railroad in the late 19th century. The railroad platted "New Tacoma" and the growth of the city began.

Old Tacoma and New Tacoma merged in 1884 and incorporated as Tacoma. By 1890, the



population reached 36,000 people and the city supported sawmills, coal mines, flour mills and a smelter that turned raw materials into exportable goods.

Tacoma's legacy of historic buildings and strong architectural icons is matchless for a Pacific Northwest city its size. Looming in the distant perspective of Tacoma's principal boulevard, Pacific Avenue, is the Italianate tower of Old City Hall, built in 1893.

The city completed construction of this magnificent public building evoking the splendors of Florence and promising the commerce and culture of the world's great seaports.

Tacoma's Old City Hall continues to be one of the city's most visible landmarks whether approached by land or sea. The building's design and careful restorations defy time. Old City Hall's unmistakable silhouette is one of the symbols of the city and is a centerpiece of a rich historic district overlooking the bay.

Today - Tacoma is a mid-sized urban port city and the county seat of Pierce County. Tacoma is located on Puget Sound, 32 miles southwest of Seattle, 31 miles northeast of the state capital, Olympia, and 58 miles (northwest of Mount Rainier National Park. The population is 199,600 residents.

Tacoma is the 2nd-largest city in the Puget Sound area and the 3rd largest in the state. Tacoma also serves as the center of business activity for the south Puget Sound region that has a population of around 1,000,000 people.

Tacoma is home to the Port of Tacoma, the 7th-largest container port in the United States, and is within 20 miles of the Seattle-Tacoma International Airport.

Like most central cities, Tacoma suffered a prolonged decline in the mid-20th century as a result of suburbanization and divestment. Since the 1990s, developments in the downtown core include the University of Washington Tacoma; Tacoma Link, the first modern electric light rail service in the state; the state's highest density of art and history museums; and a restored urban waterfront, the Thea Foss Waterway.

Tacoma operates under a council-manager system that consists of an elected mayor and 8 elected council members, 5 from individual city council districts and 3 others from the city at-large. All serve 4-year terms and are elected in odd-numbered years.

Tacoma's City Council adopts and amends city laws, approves a 2-year budget, establishes city policy, appoints citizens to boards and commissions, and performs other actions. The council also meets in "standing committees", which break down the council's work into more defined areas, such as Environment & Public Works, Neighborhoods & Housing, and Public Safety, Human Services & Education.

City functions are managed by the City Manager and divided into 7 departments including:

- Public Safety - that includes police fire, and law enforcement support agency,
- Economic Environment - that includes community and economic development, hearing examiner, and human rights human services,
- Culture and recreation
- Transportation - that includes public works,

- Information systems
- Retirement
- Tacoma Public Utilities - that includes administration, customer service, geographic info system, rail, power, and water

Total city employment grew from 3,475 full-time equivalents (FTE) in 2002 to 3,964 FTEs in 2009 then down to 3,840 FTEs in 2011 as a result of the recession. In 2011 the ratio of FTEs to population was 0.0192 FTEs per capita. Additional staffing cuts in 2012 have further reduced city employment by over 200.

Facilities

The city’s functions are located in the following principal buildings, not including scattered utilities:



Tacoma City Hall - is the former Medical Arts Building, a 1931 Art Deco building located at 747 Market Street houses all administration, economic development, culture, and transportation staff.

County-City Building - located at 930 Tacoma Avenue South houses the municipal court

and shares space with Pierce County’s courts and jail.

Public Works Yard - located in the historic Public Market Building located at 2324 South C Street along with adjacent shops and materials yard.

Tacoma Public Utilities - located at 3638 South 35th Street houses all utility and purchasing staff.

Solid Waste Facility - is located at 3510 South Mullen Street.

4.11.9.2: Impacts

Both alternatives will allow development and redevelopment in the MLK subarea for urban uses and activities to various intensities. An increase in urban development and thereby the overall employee and resident population will in turn increase the demand for city personnel, equipment, and facilities.

According to Tacoma’s Community & Economic Development Department’s moderate growth scenario, MLK subarea’s population will increase from 2,903 persons in 2010 to 7,915 persons by 2040 or at an annual average rate of 3.4% for the projection period.

MLK will grow in accordance with recent and expected trends which are optimistic but not maximum build-out. Maximum build-out would reach 14,520 persons by 2040 at an annual average rate of growth of 5.5%.

City staff requirements

Mod	Population	0.0192 FTE/capita
2010	2,903	55.7
2040	7,915	151.9
Differ	5,012	96.2
Max	14,520	278.7
Differ	11,617	223.0

Source: Tacoma Comprehensive Annual Financial Report (CAFR)

If the MLK subarea develops in accordance with the moderate growth scenario the additional population will generate a requirement for 96.2 additional FTEs in all city functions including police, fire, library, and utilities assessed in other elements in this DEIS.

Should the MLK subarea reach the potential build-out the additional 11,617 persons the additional population will generate a requirement for 223.0 additional FTEs were the city to maintain the same ratio of FTEs to population as in 2011.

City facility space requirements

Mod	Population	0.88 sq ft/capita
2010	2,903	2,554
2040	7,915	6,965
Differ	5,012	4,411
Max	14,520	12,777
Differ	11,617	10,223

Source: Tacoma Comprehensive Plan, Capital Facilities Element

If the MLK subarea develops in accordance with the moderate growth scenario the additional population will generate a requirement for 4,411 additional square feet in all city functions including police, fire, library, and utilities assessed in other elements in this DEIS.

Should the MLK subarea reach the potential build-out the additional 11,617 persons the additional population will generate a requirement for 10,223 additional square feet were the city to maintain the level of service (LOS) in the capital facilities element.

An increase in Tacoma's resident population will increase a demand and need for city services, though the increase may not be directly proportional to the amount or type of population that may reside within higher density residential and mixed use developments proposed in the MLK subarea, or even of resident city population characteristics from previous increases - particularly as the national and city population ages.

Tacoma city and utility departments, and special enterprise operations are staffed based on city service demands or needs, and the city's financial resources as they are affected by economic conditions.

Staffing levels in some departments are directly related to population increases and the increase in service demands, as in the police, transportation, public works, and utilities functions.

Other functions, such as the city manager, economic development, arts and culture, and others, are not as proportionately affected by increased population if the demand for their services can be met by slight increases in staff or consulting services or technological innovations or other means.

Economic conditions, as well as economies of scale, may affect city staffing totals, trends, and compositions as much as simple population increases.

4.11.9.3: Mitigation measures

Under both alternatives Tacoma may need to provide additional city personnel, equipment, and facilities to accommodate the additional population and user growth from the MLK subarea using city fees, property and sales taxes, bonds or levies, as necessary to recover development and operating costs.

City administrative facilities and services are not required to keep pace with development under Tacoma's concurrency requirements.

4.11.9.4: Unavoidable adverse impacts

Under both alternatives, the undeveloped and underdeveloped lands in the MLK subarea will be redeveloped for higher intensity uses that will increase city service requirements and associated personnel, equipment, and facilities.

As a result of additional development, both alternatives will collect a greater volume of property taxes and utility fees and service charges as well as construction permits and taxes with which to finance the increase in city administration facilities and services that will be required of a larger MLK population.

10.11.10 Electric power

4.11.10.1: Existing conditions

The MLK subarea is served with electrical power by Tacoma Power. Tacoma Power provides electrical power with a common rate structure to residential, commercial and industrial customers in the cities of Tacoma, Fircrest, Fife, and University Place, and also parts of Lakewood, Midland, Summit, Waller, Spanaway, Frederickson, Graham, and South Hill Puyallup.

Tacoma Power has been publicly owned since 1893, and is a division of Tacoma Public Utilities, which is governed by a 5-member Tacoma Public Utility Board that is appointed by the Tacoma City Council.

Level of Service (LOS) standard:

- Voltage level + or - 5%.
- Average annual system outage duration 75 minutes or less.
- Average annual system outage frequency .95 or less.

In several locations throughout the city, Tacoma Power has converted overhead power lines to underground. Conversion may offer one or more of the following listed benefits:

- Greater reliability due to their reduced exposure to outages caused by storm and vehicular related accidents.
- Elimination of a major source of visual blight and clutter, creating a more aesthetically pleasing urban environment.
- Promotion of economic development consistent with current zoning allowances and the Plan's policies for dense, mixed-use growth, and would also help support historic building upgrades.
- Avoidance of conflicts and reduced risk associated with building construction and maintenance for those structures 3 stories and taller.

Converting the current overhead electrical facilities to underground is relatively expensive, typically costing \$600,000 to \$1,400,000 per block within the urban core of Tacoma. Funding for such conversions is generally provided by property owners and/or developers.

However, pursuant to RCW 35, conversion to underground power lines can be financed by forming a Local Improvement District (LID). Tacoma Power's current Customer Service Policy commits Tacoma Power to fund 30% of the LID

conversion cost. Costs to modify individual services are not included in the LID.

The conversion to underground of the current overhead system poses unique challenges within dense urban areas that include zero lot-line set-back zoning. These challenges often include:

- Installation of 2 underground systems (a multi-conductor high-ampacity feeder system and a low-ampacity distribution system) in place of one overhead system.
- Location of large electrical switching and sectionalizing equipment within very large sub-surface vaults, or with pad-mounted equipment taking up landscape, parking, or other public amenity areas.
- The location of transformers either within specially designed rooms located in buildings, or within landscaping, parking, or other public amenity areas.
- The need to include multiple ducts, in addition to those needed at the time of conversion, to accommodate future load growth and operational needs within and beyond the affected area.

Removal of the overhead system also includes the conversion of the commonly attached multiple communication utilities to underground. Often the communication utilities and Tacoma Power share the same trench and vault excavations.

The resulting volume of conduit and vault systems create additional challenges when designing to avoid conflicts with existing underground utilities such as sanitary and storm sewers, water, street light & traffic signal systems, and natural gas.

4.11.10.2: Impacts

Both alternatives will continue development of the lands within the MLK subarea for urban uses and activities at various intensities. Development will increase demand for electrical power; higher intensity development alternatives will create correspondingly higher demand.

Tacoma Power has evaluated their existing distribution system within the bounds of the MLK subarea. In general, both the capacity and condition of the existing distribution system in this area is good and resources exist to support

development within the subarea for the foreseeable future.

However, the electrical infrastructure does not exist within each block to support full build out to the development capacities allowed by the existing land use code and the level of development being evaluated.

4.11.10.3: Mitigation measures

Tacoma Power is committed to delivering power at the level of service (LOS) standard. In general, Tacoma Power's policy is to add service as required by new demand, with the rate structure covering the cost of adding new service.

At present there are no active or planned electrical infrastructure addition and/or replacement projects within the MLK subarea that are driven solely by the need to support the projected development.

Improvements to the existing electrical infrastructure will be necessary to support development within the MLK subarea at the levels allowed in the existing land use code and in both development alternatives.

It may be possible to adjust, within certain parameters, the timing of future electrical infrastructure programs in order to stimulate private investment and to partner with property owners through the use of alternative financing and construction mechanisms, such as local improvement districts.

While necessary improvements can be accomplished as development occurs, measures that could advance a more comprehensive, coordinated, and efficient implementation of such improvements include:

- Development of an MLK subarea master electrical infrastructure plan, or a master infrastructure plan that includes upgrades and/or conversion of electrical infrastructure.
- Partnerships with developers concerning their future utilization of properties within the subarea; this may include the use of LIDs together with Tacoma Power's associated participation in the cost of undergrounding (currently set at 30%).
- Infrastructure project partnering opportunities where aging infrastructure can be replaced, upgraded, and/or converted with shared restoration costs.
- Supporting grant application opportunities for funding of power system upgrades and/or conversion in advance of development.

4.11.10.4: Unavoidable adverse impacts

Under both alternatives, the undeveloped and underdeveloped lands in the MLK subarea will be redeveloped for higher intensity uses that will increase electricity service requirements and associated personnel, equipment, and facilities.

Tacoma Power has anticipated such demand and will prevent any unavoidable adverse impacts on plans and policies that have not already been accounted for.

Electromagnetic fields - BPA and Tacoma Power provide informational and educational material on electromagnetic field research and impacts to parties who are interested. Due to the lack of conclusive research, however, no specific policies have been defined about the site of electric power facilities or right-of-ways. Policies could be developed in the event future research finds a need to buffer populations from electromagnetic field impacts.

4.11.11 Telecommunications

4.11.11.1: Existing conditions

Cable service

The MLK subarea is provided with telecommunications services by Click! Network which is a broadband cable system owned by Tacoma Power, a division of Tacoma Public Utilities.

Click! Network provides cable television and Internet connectivity for residents and businesses in Tacoma, University Place, Fircrest, Lakewood and Fife.

Commercial high-speed data services began in 1997, cable TV in 1998, and high-speed Internet services over cable modem in 1999. Click! is one of the largest municipally-owned telecommunications systems in the United States.

4.11.11.2: Impacts

Both alternatives will continue development of the lands within the MLK subarea for urban uses and activities at various intensities. Development will increase demand for telecommunications services; higher intensity development alternatives will create correspondingly higher demand.

4.11.11.3: Mitigation measures

The Click! Network has evaluated the telecommunications distribution system within the bounds of the subarea. Research indicates that both the capacity and condition of the existing distribution system in this area is generally excellent and the existing system will provide satisfactory service to support development within the subarea for the foreseeable future.

The Click! Network is committed to expanding its telecommunications services to meet the additional needs of future growth. Accordingly, both alternatives can be achieved without new initiatives being developed.

4.11.11.4: Unavoidable adverse impacts

Under both alternatives, the undeveloped and underdeveloped lands in the MLK subarea will be redeveloped for higher intensity uses that will increase telecommunication service requirements and associated personnel, equipment, and facilities.

Click! has anticipated such demand and will prevent any unavoidable adverse impacts on plans and policies that have not already been accounted for.