



A G E N D A

PLANNING COMMISSION

Connie Coleman-Lacadie • Don Daniels • Robert Estrada • James Guerrero • Robert Pourpasand • Paul Wagemann • Christopher Webber

Regular Meeting

Wednesday, May 6, 2015, at 6:30 pm

City Hall, Council Chambers

6000 Main Street SW, Lakewood, Washington

1. Call to Order

2. Roll Call

3. Approval of Minutes from April 15, 2015

4. Public Comments

(Members of the audience may comment on items that are not included on the agenda. Each person will be allowed 3 minutes to speak, to a total of 15 minutes per topic. Groups with a designated speaker may have a total of 10 minutes to speak.)

5. Public Hearings

- None

6. Unfinished Business

- None

7. New Business

- Six-Year Transportation Improvement Program (TIP) 2016-2020

8. Reports from Commission Members & Staff

(Planning Commission members and staff may make committee reports and announcements relating to items not on the agenda.)

Enclosures: April 15, 2015 draft minutes
Staff Report re: Six-Year Transportation Improvement Program

Members Only:

Please call Karen Devereaux at 253.983.7767 by Tuesday, May 5, 2015, if you are unable to attend. Thank you.

The next meeting is tentatively scheduled for May 20, 2015



**PLANNING COMMISSION
REGULAR MEETING
WEDNESDAY, April 15, 2015
Council Chambers
6000 Main Street SW
Lakewood, WA 98499**

Call to Order

The meeting was called to order at 6:30 p.m. by Mr. Don Daniels.

Roll Call

Planning Commission Members Present: Don Daniels, Connie Coleman-Lacadie, Robert Estrada, James Guerrero and Paul Wagemann

Planning Commission Members Excused: Robert Pourpasand and Christopher Webber

Planning Commission Members Absent: None

Staff Present: Dave Bugher, Assistant City Manager-Development; Dan Catron, Principal Planner; Tyler Wells, IT Administrator; and Karen Devereaux, Recording Secretary

Council Liaison: Councilmember Paul Bocchi

Acceptance of Agenda

Mr. David Bugher was granted permission to move the new business item, iPads Training, forward on the agenda to allow staff to train the commissioners.

Approval of Minutes

Minutes of the meeting held on March 18, 2015, were approved as written by a unanimous voice vote, M/S/C Wagemann/Guerrero.

Public Comments

None

Public Hearing

None

New Business

iPad Training

Planning commissioners were issued new iPads to use while conducting official business. This purchase was approved by City Council to increase efficiency with providing large volume meeting packet information and allow accessibility to research topics on next agenda. Staff member Mr. Tyler Wells provided training and answered basic questions. Keyboards and protective cases will be issued once received.

Unfinished Business

Cottage Housing Regulations

Mr. Dan Catron led a discussion noting some of the policy issues the Commission may want to consider in the formulation of a cottage housing program.

The specific issues identified for early discussion included:

- Maximum allowable lot coverage
- Maximum number of units allowed in a cottage housing development
- Use and ownership of cottage units
- Inclusion of garages
- Should garages be allowed to count toward parking requirements, and
- Design standards

In order to facilitate the Commission's consideration of a cottage housing program, a draft resolution was provided for review and discussed.

R1 and R2 Map Amendments

Based on commissioner's comments to-date regarding possible comprehensive plan and zoning map changes, Mr. Dave Bugher submitted five proposals (Map 1 through Map 5) for further review and study. The group considered possible changes in and around Interlaaken Dr SW, and in the vicinity of Veterans Dr SW and Gravelly Lk Dr SW. A Resolution was examined that outlined a proposed City-initiated amendment for 2015. The Resolution proposes to change the zoning for the properties designated on Map 1 from R1 to R2, and to amend the Comprehensive Plan designation from "Residential Estate" to "Single Family"; and change the zoning classification for two properties located at the southwesterly corner of Gravelly Lk Dr SW and Veterans Dr SW from R1 to R3, as depicted on Map 4 contained in the department staff report to the Lakewood Planning Commission dated April 15, 2015.

Commissioner Ms. Connie Coleman-Lacadie made the motion to adopt the Resolution of Intent. Commissioner Mr. James Guerrero seconded the motion. With no opposition being heard in a voice vote the motion carried unanimously.

The next steps would be an environmental review process initiated in late May/early June, followed by notification to affected property owners, culminating in a public hearing in September 2015.

Reports from Commission Members and Staff

Mr. Dave Bugher shared the following project updates:

The draft Community Visioning document has been received. The next steps with the document are review by the City Manager, the Visioning Committee, and ultimately, City Council.

Staff has been drafting a Cost Recovery Analysis that will be shared with the commissioners after presentation to Council in May 2015.

In early June 2015 Council will be presented with the Multi-Family Tax Analysis.

Planning staff continue to work at updating the 2015 Comprehensive Plan with a deadline of June 2015.

The City's new website is launching on Monday, April 20, 2015, with drop-down menus and quick buttons to enhance the user experience. Permit Central with online permitting, tip sheets and more upgrades are planned for department pages.

Mr. James Guerrero requested all past meeting agenda packets be pushed to the iPads for commissioners to have access.

Community and Economic Development staff will be hosting the City of Lakewood Developers Forum on June 11, 2015 in Council Chambers.

A Joint Council Meeting with the Planning Commission is scheduled for Tuesday, May 26, 2015, at 7:00 p.m. in the Council Chambers.

Next Meeting: May 6, 2015, at 6:30 p.m. in Council Chambers

Agenda items include:

- Review Background Data and 1st Draft of 2016-2021 Six-Year TIP

Meeting Adjourned at 8:08 p.m.

Don Daniels
Planning Commission 5/6/2015

Karen Devereaux, Recording Secretary
Planning Commission 5/6/2015



PUBLIC WORKS DEPARTMENT STAFF REPORT

TO: PLANNING COMMISSION

FROM: Desireé S. Winkler, P.E., Transportation Division Manager

MEETING DATE: May 6, 2015 AGENDA ITEM:

**SUBJECT: 6-YEAR TIP (2016-2021) – FIRST DRAFT and
BACKGROUND INFORMATION**

Background:

Chapter 35.77.010 RCW requires that the City annually update its Six Year Comprehensive Transportation Improvement Program (6-Year TIP) and file a copy with the Secretary of the Washington State Department of Transportation within 30 days of adoption.

The primary objective of the Program is to produce a comprehensive program for the orderly development and preservation of the City's street system. Only those projects identified in the adopted Program are eligible for state or federal grant funding.

Adoption of the Program does not irreversibly commit the City of Lakewood to construct identified projects. Projects in the early years of the Program have, however, a higher probability that they will be constructed as scheduled, at least those with significant grant funding therein versus projects in the later years, which are subjected to more flexibility and may be accelerated, delayed, or canceled as funding and conditions change. The usual reasons for canceling a project are that it is either environmentally unacceptable or contrary to the best interests of the community as a whole or its funding just didn't materialize. The Program may also be revised by a majority of the City Council at any time, but only after a public hearing.

Discussion:

City Council has directed that the Planning Commission review, conduct the Public Hearing, make modifications, and ultimately recommend Council adoption related to the 6-Year TIP. The review and adoption schedule is as follows:

Date	Description	Planning Commission 6 PM	Council Meeting 7:00 PM
02/09/2015	Council / Commission and Board Work Plan Review		X
05/06/2015	Review background data and 1st draft of 2016-2021 TIP	X	
05/20/2015	Review Final Draft of 2016-2021 TIP	X	
05/21/2016	Send Final Draft of 2016-2021 TIP for Review (City Council, PRAB, Other jurisdictions/agencies, Service Groups, Etc.)		
06/01/2015	Notice of Public Hearing (confirm date with Planning Commission)		X
05/26/2015	6-Year TIP Presented to Council - Study Session		X
07/01/2015	6-Year TIP - Public Hearing	X	
07/15/2015	Planning Commission: Review Council and public comments. Make final modifications to 6-year TIP	X	
07/20/2015	6-Year TIP - Adoption		X

1st Draft 6-Year TIP (2016-2021)

During the May 6, 2015 Planning Commission meeting, staff will be on-hand to provide a brief overview of the 6-Year TIP (2016-2021) and associated background information.

Attachments:

1. 6-Year TIP (2016-2021) – 1st Draft
2. 6-Year TIP Background Information
 - a. Pavement management report
 - b. Accident data
 - c. Level of service
 - d. Capital facilities
 - e. Requested projects
 - f. 6-Year CIP - draft

6 Year Transportation Improvement Program Background Information



2015-2021

***** 1st Draft – May 6, 2015 *****

City of Lakewood
Public Works Department
6000 Main Street SW
Lakewood, WA 98499
253-983-7795

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 - a. 6 Year TIP Projects – Prioritized Lists
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- 7. 6 Year Capital Improvement Plan**
 - a. Transportation Projects Year 2015-2020



CITY OF LAKEWOOD

SIX-YEAR COMPREHENSIVE TRANSPORTATION IMPROVEMENT PROGRAM 2016-2021

******* 1st Draft – May 6, 2015 *******

PREFACE

Chapters 35.77.010 of the Revised Code of Washington (RCW) provide that each city shall annually update its Six-Year Comprehensive Transportation Program (Program) and file a copy of the adopted Program with the Secretary of the Washington State Department of Transportation (WSDOT) by July 1 of each year. The Program is necessary to allow cities and counties to obtain State and Federal funding. For a project to obtain funding from the State, it must appear in the agency's current Program. Because the state also disperses federal highway funds, this requirement applies to federally funded projects as well.

RCW 35.77.010 also requires each city to specifically set forth those projects and programs of regional significance for inclusion in the transportation improvement program for that region.

The Program is based upon anticipated revenues versus desirable projects. There are always more projects than available revenues. Therefore, a primary objective of the Program is to integrate the two to produce a comprehensive, realistic program for the orderly development and preservation of our street system.

Several important points must be considered during the review of the proposed Program. The early years of the Program are fairly definite; that is, it can be assumed that those projects will be constructed as scheduled. Projects in the later years are more flexible and may be accelerated, delayed or canceled as funding and conditions change.

It is also important to note that the adoption of the Program does not irreversibly commit the City of Lakewood to construct the projects. A project may be canceled at any time during the course of study or design. The usual reasons for canceling a project are that it is environmentally unacceptable or contrary to the best interests of the community as a whole. The Program may at any time be revised by a majority of the City Council, but only after a public hearing.

CONSISTENCY WITH LAND USE MANAGEMENT PLAN

The State's Growth Management Act (GMA) requires local governments to develop and adopt comprehensive plans covering land use, housing, capital facilities, utilities, and transportation. These comprehensive plans must balance the demands of growth with the provision of public facilities and services and, in particular, transportation facilities and services. The City of Lakewood was required to develop and adopt a comprehensive plan that is in conformance with the requirements of the GMA.

The City of Lakewood has, as part of its Comprehensive Plan, a Transportation Element with a Master Goal to "Ensure that the transportation and circulation system is safe, efficient and serves all segments of the population and reduces reliance on single-occupant vehicles and increase use of other modes of transportation."

Specific goals include the following.

1. To provide a safe, comfortable and reliable transportation system.
2. To reduce consumption of energy through an efficient and convenient transportation system.
3. To enhance options for future improvements to the transportation system by taking advantage of advances in technology and transportation research.
4. To keep travel times for people and goods as low as possible.
5. To emphasize the movement of people and goods, rather than vehicles, in order to obtain the most efficient use of transportation facilities.
6. To establish a minimum level of adequacy for transportation facilities through the use of consistent and uniform standards.
7. To protect the capital investment in the transportation system through adequate maintenance and preservation of facilities.

The projects in the Six-Year Comprehensive Transportation Program are intended to conform to the goals within the City's Comprehensive Plan.

GRANT APPLICATIONS AND LEVERAGING LOCAL DOLLARS

The need to leverage local dollars through grant applications is very important to the City, especially in light of the decrease in funding available for transportation related capital improvements. The intent of this Program is not only to list and program projects for funding, but to establish City Council approval to submit grant applications on those projects contained in the Program.

FUNDING SOURCES

A. Motor Vehicle Fuel Tax Funds

The Motor Vehicle Fuel Tax Funds have been programmed to provide matching funds for federal aid and urban arterial projects and for projects to be implemented with Motor Vehicle Fuel Tax Funds only.

By law, each city receives a proportionate share of the total state motor vehicle fuel tax. Money received is a monthly allocation based on population. The dollars shown in this year's Program reflect the revenues from this source expected to be received by the City of Lakewood. It is anticipated that revenue received from gas tax for the Streets Capital Projects Fund will be: \$335,000 FY 2015.

B. Federal Aid Funding Programs

Each of the Federal aid programs listed below has specific requirements a project must meet to qualify for funding under the individual program. For a project to receive funding from any of these sources it must compete with other public agency projects.

On July 6, 2012, President Obama signed Moving Ahead for Progress in the 21st Century (MAP-21), reauthorizing surface transportation programs through fiscal year 2014. Project prioritization and selection must be done by the Metropolitan Planning Organization (MPO) in areas of greater than 200,000 population. The MPO for this region (in which the City of Lakewood is located) is the Puget Sound Regional Council (PSRC).

There are a number of specific funding programs under MAP-21. These include the following:

1. STP Surface Transportation Program: This is a regionally competitive program.
2. CMAQ Congestion Mitigation and Air Quality: This is a regionally competitive program intended for projects that significantly improve air quality.
3. HSIP Highway Safety Improvement Program: Statewide competition for federal funds targeted at safety improvements at high accident locations.
4. TAP Transportation Alternatives Program: This is a new program that will most likely be a regionally competitive program and will focus on pedestrian and bicycle facilities (on and off road); safe-routes to schools, etc.; and other non-highway focused programs.

C. Washington State Transportation Improvement Board (TIB)

The TIB has a number of statewide competitive programs which use criteria developed by the TIB for prioritization of projects. The three TIB programs in which the City can compete are as follows:

1. UAP Urban Arterial Program. This program is for arterial street construction with primary emphasis on safety and mobility.

2. SP Sidewalk Program. This program is for the improvement of pedestrian safety, and to address pedestrian system continuity and connectivity.

D. Community Development Block Grants (CDBG)

This is a program to provide physical improvements within low-income census tracts or to promote economic development within the City. In 2008, the City was awarded one grant from this funding source for \$10,000 for street lighting within low income residential neighborhoods. In 2009-2010, CDBG funds were awarded to support the sewer extension to Tillicum and Woodbrook neighborhoods. In the near future, funding from this source is anticipated to be sporadic and focused on specific economic development projects that help develop new jobs within the City. Through the years 2016-2021 it is anticipated that a minimum of \$300,000 (on average) per year will be made available for pavement preservation, street lighting, and pedestrian improvements in eligible neighborhoods.

E. City Funding Sources

1. Real Estate Excise Tax (REET). This funding source comes from the two ¼% REET's charged by the City on the sale of real estate within the City limits. The City's REET is designated entirely for transportation related capital improvements. Revenue from REET has averaged around \$900,000 in the past few years. The REET is estimated to be \$900,000 annually.
2. General Fund Transfer In. This funding source comes from several different sources that make up the General Fund revenue including: property tax, sales tax, and utility tax and fees. The Street Capital Projects Fund is budgeted to receive approximately \$500,000 annually (on average) over the next 5 years in support of the pavement preservation program.
3. Transportation Benefit District (TBD). In 2014, the TBD Board implemented a \$20 per vehicle tab fee to provide funds toward a specific list of pavement preservation projects to be implemented between 2015 through 2020. The anticipated revenue is approximately \$680,000 per year.

F. Washington State Department of Transportation

1. Pedestrian and Bicycle Program: This is a statewide competitive program specifically oriented toward the elimination of hazards to the pedestrian and bicyclists. The recent call for projects has expanded the program's scope to emphasize "complete streets" – accommodation of all roadway users from vehicles to bicyclists to pedestrians. The programs focus for "complete streets" is for "main street" urban arterials and corridors. Historically, the city has not received much funding from this program. However, given the change in the grant scope, there may be opportunities from this source in the future.

2. Safe Routes to Schools Program: This is a statewide competitive program specifically oriented toward pedestrian and bicycle safety near schools. This program may be replaced by the Federal Transportation Alternatives Program (TAP).

G. Surface Water Management Program:

The City's Surface Water Management (SWM) Program pays for all drainage facilities constructed in conjunction with street improvements. The revenue from SWM is directly related to the amount of capital improvement projects constructed. SWM participation in roadway projects averages about \$300,000 annually.

PROJECT NUMBERING SYSTEM

Project numbers within most sections of the Program are discontinuous in order to maintain consistency in project numbering from year to year.

Completed projects are removed from subsequent years' programs, thereby eliminating some project numbers.

Projects carried forward from previous year(s) retain the same project numbers from the previous year(s).

BUDGET DOLLARS

Costs shown are planning level estimates and are reflected in each year as FY2015 dollars with no accounting for inflation.

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN		<i>NOTE: BOLD and ITALICIZED numbers denote grant is secured</i>							TOTAL FUNDS
SECTION 1			2016	2017	2018	2019	2020	2021	2016-2021
NEW CONSTRUCTION									
ARTERIAL STREET PROJECTS									
1.2 Gravelly Lake Drive @ I-5 Right Turn Lane	Widen GLD from Nyanza to I-5 SB on-ramp to provide dedicated right-turn lane. Traffic signal upgrades; bridge widening; r/w acquisition.	City				50	350		400
Total Estimated Cost \$1,600		Grant				200	1,000		1,200
		Other							
		Total		0	0	0	250	1350	0
1.4 Union Avenue - Berkeley to N. Thorne Lane	Widen to add turn lane, shared bike/travel lane, sidewalks, street lighting. Intersection improvements. <i>Note: Project 1.24 will complete Union/Berkeley intersection and some improvements from Berkeley to Maple.</i>	City					125	250	375
Total Estimated Cost \$5,000		Grant					375	2,250	2,625
		Other					75	150	225
		Total		0	0	0	0	575	2,650
1.18 96th Street - 2-way left turn lane	Widen 96th St. from 500' east of So. Tac. Wy to I-5 underpass to provide 2-way left turn lane. Does not include sidewalks or HMA overlay.	City					100		100
Total Estimated Cost \$500		Grant							0
		Other					400		400
		Total		0	0	0	0	500	0
1.20 123rd ST SW - Realignment	Realign 123rd ST SW as it enters Bridgeport	City					300		300
Total Estimated Cost \$400		Grant							0
		Other					100		100
		Total		0	0	0	0	400	0
1.21 Murray Road and 150th Street Corridor Capacity	Provide capacity for Woodbrook Industrial development: widening of Murray Road and 150th; bike/pedestrian facilities; structural pavement section improvements <i>Notes: Assume multiple phases; multiple years</i>	City		100	100	100			300
		Grant	0	0	0	0			0
		Other		1,500	1,500	1,500			4,500
		Total		0	1,600	1,600	1,600	0	0
1.22 Gravelly to Thorne Connector	Two-way connector road between Tillicum and Gravelly Lake Drive. Signalization.	City	1	1	1	1	1	1	6
Total Estimated Cost \$25,000		Grant							0
		Other		1,000	12,000	12,000			25,000
		Total		1	1,001	12,001	12,001	1	1
1.23 Interstate 5 through Lakewood (WSDOT led project - coordination only)	Planning and design coordination only.	City	1	1	1	1	1	1	6
		Grant							0
		Other							0
		Total		1	1	1	1	1	1

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN		<i>NOTE: BOLD and ITALICIZED numbers denote grant is secured</i>							TOTAL FUNDS
SECTION 1 NEW CONSTRUCTION ARTERIAL STREET PROJECTS			2016	2017	2018	2019	2020	2021	2016-2021
1.24 Madigan Access Project <i>Phase 1 improvements completed in 2014.</i> Total Cost: \$5.7 Million	Provide improved access to Madigan including: Freedom bridge, ramp, & roadway widening; signalization improvements; Union Ave/Berkeley St improvements	City							0
		Grant	3,000						3,000
		Other							0
		Total	3,000	0	0	0	0	0	3,000
1.25 North Gate Access Improvements	Improve access to Lewis North including: intersection improvements (Edgewood / North Gate Road); non-motorized improvements (Edgewood Dr. and North Gate Rd)	City		50	75	225			350
		Grant		150	300	900			1,350
		Other							0
		Total	0	200	375	1,125	0	0	1,700
1.26 Steilacoom Boulevard / So Tacoma Way Intersection	SB right turn lane extension on Steilacoom Blvd. Access control improvements on both roads. Replace/upgrade traffic signals. Curb, gutter, sidewalk, lighting.	City	100						100
		Grant	1,000						1,000
		Other	100						100
		Total	1,200	0	0	0	0	0	1,200
1.27 Bridgeport Way - I-5 Ramp to Pacific Hwy	Turn lane extension to improve capacity and queuing capability. Road / shoulder widening; sidewalks; walls for widening.	City			10	50	50	100	210
		Grant				100	100	400	600
		Other							0
		Total	0	0	10	150	150	500	810
TOTALS		City	102	152	187	427	927	352	2,147
		Grant	4,000	150	300	1,200	1,475	2,650	9,775
		Other	100	2,500	13,500	13,500	575	150	30,325
		Total	4,202	2,802	13,987	15,127	2,977	3,152	42,247

PROJECT COSTS IN THOUSANDS OF DOLLARS										
EXPENDITURE PLAN								TOTAL FUNDS		
								NOTE: BOLD and ITALICIZED numbers denote grant is secured		
SECTION 2			2016	2017	2018	2019	2020	2021	2016-2021	
ROADWAY IMPROVEMENTS										
2.26 Safety Improvements in the Vicinity of Schools	May include sidewalks, crossing improvements, signage, etc. in vicinity of schools.	City		50		50		50	150	State
		Grant		600		600		600	1,800	
		Other		50		50		50	150	
		Total	0	700	0	700	0	700	2,100	
2.29 Steilacoom Blvd. Custer to 88th Street Total Estimated Cost \$1,975	Curbs, gutters, sidewalks, street lighting, on both sides. Signal modifications. Signal replacement Custer/Ardmore. Overlay.	City	0						0	FED
		Grant	1,400						1,400	
		Other	250						250	
		Total	1,650	0	0	0	0	0	1,650	
2.41 Steilacoom Blvd - Bridgeport Way to Fairlawn Total Estimated Cost \$1,400 <i>Note: Preliminary design completed via previous TIB grant</i>	Curbs, gutters, sidewalks, on both sides. Overlay.	City			10	20	100		130	State
		Grant			20	150	1,000		1,170	
		Other					100		100	
		Total	0	0	30	170	1,200	0	1,400	
2.50 Gravelly Lake Drive - 100th to Bridgeport Way <i>Note: grant for design, environ., & r/w FY2011-2014</i>	Curb, gutters, sidewalks, street lighting, drainage. Signal modifications. Signal replacement Mt. Tacoma.	City	36						36	FED
		Grant	1358						1,358	
		Other	250						250	
		Total	1,644	0	0	0	0	0	1,644	
2.54 Minor Pedestrian Safety Improvements	Non-hardscape improvements. Shoulder widening on high-volume roads where less than 2' walkway exists.	City	50	50	50	50	50	50	300	SWM
		Grant							0	
		Other							0	
		Total	50	50	50	50	50	50	300	
2.55 High Accident Location Safety Improvements <i>2016-2017 Funds reallocated to 2.81 Roadway Safety Improvements to 40th Ave. SW and 96th St. SW and 3.20 Military Rd. and 112th St. Safety Improvement.</i>	May include sight distance corrective measures, signal modifications, etc. at one of top 25 accident locations.	City	44	20	49	50	50	50	263	SWM
		Grant	0	0					0	
		Other							0	
		Total	44	20	49	50	50	50	263	

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN								TOTAL FUNDS	
								<i>NOTE: BOLD and ITALICIZED numbers denote grant is secured</i>	
SECTION 2 ROADWAY IMPROVEMENTS			2016	2017	2018	2019	2020	2021	2016-2021
2.60 South Tacoma Way - SR512 to 96th Street Total Estimated Cost \$3,460 <i>Note: Design starting FY2011</i>	Curb, gutter, sidewalks, street lighting, drainage, overlay.	City	50						50
		Grant	2,826						2,826
		Other	300						300
		Total	3,176	0	0	0	0	0	3,176
2.61 ADA Standards - Sidewalk Upgrades	On-going program to gradually upgrade existing facilities to current ADA standards	City	50	50	50	50	50	50	300
		Grant							0
		Other							0
		Total	50	50	50	50	50	50	300
2.65 Steilacoom Blvd - 87th to 83rd <i>Design through project 2.74</i>	Curb, gutter, sidewalks, street lighting, drainage, overlay.	City			80	200			280
		Grant			200	1,400			1,600
		Other				200			200
		Total	0	0	280	1,800	0	0	2,080
2.66 Steilacoom Blvd - 83rd to Weller Road <i>Design through project 2.74</i>	Curb, gutter, sidewalks, street lighting, drainage, overlay.	City				70	200		270
		Grant				180	2,000		2,180
		Other					200		200
		Total	0	0	0	250	2,400	0	2,650
2.67 Bridgeport Way - I-5 to JBLM Gate Total Estimated Cost \$3,650	Curb, gutters, sidewalks, street lighting, drainage, overlay.	City	50						50
		Grant	2,917						2,917
		Other	683						683
		Total	3,650	0	0	0	0	0	3,650
2.68 Hipkins Rd. 104th to Steilacoom Blvd. Total Estimated Cost \$3,050 <i>TBD priority project</i>	Curb, gutters, sidewalks, street lighting, drainage, overlay.	City							0
		Grant							0
		Other				500	2,550		3,050
		Total	0	0	0	500	2,550	0	3,050
2.69 Gravelly Lake Drive - Bridgeport to Steilacoom Road Diet	Reduce 4 travel lanes to 3. Curb, gutters, sidewalks, bike lanes, street lighting, drainage, overlay.	City							0
		Grant				150	1,500		1,650
		Other					200		200
		Total	0	0	150	1,700	0	0	1,850

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN		NOTE: BOLD and ITALICIZED numbers denote grant is secured							TOTAL FUNDS
SECTION 2			2016	2017	2018	2019	2020	2021	2016-2021
ROADWAY IMPROVEMENTS									
2.70 Lakewood Station - Non-Motorized Access Improvements	Curb, gutters, sidewalks, and street lighting improvements per Lakewood NMTP and Sound Transit Access Improvement Study.	City							0
		Grant							0
		Other				500	500	500	1,500
		Total	0	0	0	500	500	500	1,500
2.71 Steilacoom Blvd - Weller Road to Phillips Road	Curb, gutter, sidewalks, street lighting, drainage, overlay.	City		20	50	100			170
<i>Design through project 2.74</i>		Grant		60	300	1800			2,160
		Other				200			200
		Total	0	80	350	2,100	0	0	2,530
2.72 100th Street & Lakewood Drive	Curb, gutter, sidewalks, sharrows, replace 100th/Lakewood signal, street lighting, drainage, overlay.	City		20	130	200			350
<i>Bridgeport Way to 400 feet north of 100th Street</i>		Grant		80	550	800			1,430
		Other							0
		Total	0	100	680	1,000	0	0	1,780
2.73 112th / 111th - Bridgeport to Kendrick	Curb, gutter, sidewalks, sharrows, street lighting, drainage, overlay.	City	20	20	100				140
		Grant	100	180	940				1,220
		Other	50	70	560				680
		Total	170	270	1,600	0	0	0	2,040
2.74 Steilacoom Blvd Corridor Design - Farwest to Phillips	Curb, gutter, sidewalks, sharrows, turn lanes, street lighting, drainage, overlay.	City	45	50	43	43	14		195
<i>Joint project with Town of Steilacoom - DESIGN ONLY</i>		Grant	100	216	150	150	35		651
		Other	25	25	20	20	6		96
		Total	170	291	213	213	55	0	942
2.75 South Tacoma Way - 88th to North City Limits	Curb, gutter, sidewalks, bike lanes, street lighting, signal at 84th, drainage, overlay.	City		50	50	200			300
		Grant		150	150	2,300			2,600
		Other				200			200
		Total	0	200	200	2,700	0	0	3,100
2.76 Phillips Road - Steilacoom to Onyx	Curb, gutter, sidewalks, bike lanes, street lighting, drainage, overlay.	City							0
		Grant							0
		Other				200	200	2,400	2,800
<i>TBD priority project</i>		Total	0	0	0	200	200	2,400	2,800

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN								TOTAL FUNDS	
								<i>NOTE: BOLD and ITALICIZED numbers denote grant is secured</i>	
SECTION 2			2016	2017	2018	2019	2020	2021	2016-2021
ROADWAY IMPROVEMENTS									
2.77 Washington Blvd - Edgewood Ave to Gravelly Lake Drive <i>TBD priority project</i>	Curb, gutter, sidewalks, bike lanes, street lighting, drainage, overlay.	City							0
		Grant							0
		Other		800	5,100				5,900
		Total	0	800	5,100	0	0	0	5,900
2.78 Oakbrook Sidewalks & Street Lighting Onyx Dr W (97th to 87th); Onyx Dr E (Garnet to Phillips) (Total Cost \$3,400) <i>TBD priority project for 2021+</i>	Curb, gutter, sidewalks, sharrows, turn lanes, street lighting, drainage, overlay.	City							0
		Grant							0
		Other							0
		Total	0	0	0	0	0	0	0
2.79 Lake City Business District Sidewalks (American Lake Park to Veterans Dr / Alameda) (Total Cost \$2,100) <i>TBD priority project</i>	Curb, gutter, sidewalks, sharrows, street lighting, drainage, overlay.	City							0
		Grant							0
		Other			300	1800			2,100
		Total	0	0	300	1,800	0	0	2,100
2.80 Interlaaken Drive SW / Mt. Tacoma Drive Non-Motorized Improvements - Short Lane to Whitman Avenue SW (Total Cost Mt. Tacoma Drive \$2,950) (Total Cost Interlaaken \$4,000) formerly project 5.7. TBD priority project for 2021+	Provide curb and gutter, sidewalk and a shared travel/bike lane on one side of Interlaaken / Mt. Tacoma Dr.	City							
		Grant							
		Other							
		Total	0	0	0	0	0	0	0
2.81 Roadway Safety Improvements at 40th Ave. SW and 96th St. SW	Curb, gutter, sidewalk, sharrows, guard rail, street lighting, pavement reconstruction	City	4	15	1				20
		Grant	30	140	653				823
		Other							0
		Total	34	155	654	0	0	0	843
2.82 59th Ave SW Sidewalk - 100th to Bridgeport Wy SW	Sidewalk east side of roadway.	City		25					25
		Grant		100					100
		Other							0
		Total	0	125	0	0	0	0	125
TOTALS		City	349	370	613	1,033	464	200	3,029
		Grant	8,731	1,526	3,113	8,880	3,035	600	25,885
		Other	1,558	945	5,980	3,870	3,556	2,950	18,859
		Total	10,638	2,841	9,706	13,783	7,055	3,750	47,773

PROJECT COSTS IN THOUSANDS OF DOLLARS										
EXPENDITURE PLAN									TOTAL FUNDS	
SECTION 3 TRAFFIC SIGNALS			2016	2017	2018	2019	2020	2021	2016-2021	
3.1 Steilacoom / Durango Traffic Signal	Intersection meets warrants for traffic signal. Signal needed with new development in area. Special concern with adjacent train crossing becoming active.	City							0	
		Grant							0	
		Other	5	345						350
		Total	5	345	0	0	0	0	0	350
3.7 Washington Blvd. and Interlaaken Drive Signal and intersection improvement Total Estimated Cost \$375	Install new signal at intersection.	City			75	300			375	
		Grant							0	
		Other								0
		Total	0	0	75	300	0	0	0	375
3.8 Traffic Signal Timing Upgrades on-going technical support incl. turning movement counts	Upgrade traffic signal timing and coordination.	City	10	10	10	10	10	10	60	
		Grant								0
		Other								0
		Total	10	10	10	10	10	10	10	60
3.11 City-Wide Traffic Signal Management System Total Estimated Cost \$2,000	City-hall based Traffic Management Center. Fiber optic interconnect. PTZ major corridors. Active traffic management including web based info.	City	50	50	50	50			200	
		Grant			300	300				600
		Other								0
		Total	50	50	350	350	0	0	0	800
3.12 Traffic Signal Replacement Program	Replace aging traffic signals. Priorities based on maintenance history. (one signal every 3rd year)	City		300				300	600	
		Grant							0	
		Other								0
		Total	0	300	0	0	300	0	0	600
3.13 Gravelly Lake Drive / Avondale Traffic Signal	Intersection meets warrants for traffic signal. Increased volumes in and around Towne Center. Increase in accidents.	City					100		100	
		Grant							0	
		Other					150		150	
		Total	0	0	0	0	250	0	0	250

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN									TOTAL FUNDS
SECTION 3 TRAFFIC SIGNALS			2016	2017	2018	2019	2020	2021	2016-2021
3.14 So. Tacoma Way / 92nd Street	New warranted signal	City							0
		Grant		100	550				0
		Other							0
		Total	0	100	550	0	0	0	0
3.16 Steilacoom Blvd / Western State Hospital Signal Replacement	Replace existing signal	City							0
		Grant	210						210 Fed
		Other							0
		Total	210	0	0	0	0	0	210
3.17 Steilacoom Blvd / Lakeview Ave Signal Replacement	Replace existing signal	City							0
		Grant	275						275 Fed
		Other							0
		Total	275	0	0	0	0	0	275
3.19 Traffic Signal Asset Management System	Purchase software; develop asset management system	City	40	40	20	5	5	5	115
		Grant							0 Fed
		Other							0
		Total	40	40	20	5	5	5	115
3.20 Military Rd. and 112th St. Safety Improvement	Replace existing traffic signal to current standards. Update phasing to yellow-flashing arrow operation. ADA ramp upgrades. Repave intersection	City	2	15					17
		Grant	20	128	640				788 Fed
		Other							0
		Total	22	143	640	0	0	0	805
TOTALS		City	102	415	155	365	415	15	1,467
		Grant	230	228	1,490	300	0	0	1,598
		Other	5	345	0	0	150	0	500
		Total	337	988	1,645	665	565	15	3,565

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN									TOTAL FUNDS
SECTION 4 TRANSPORTATION PLANNING			2016	2017	2018	2019	2020	2021	2016-2021
4.1 Pavement Management System	Semi-Annual evaluation of pavement condition	City	30	5	30	5	30	5	105
		Grant							0
		Other							0
		Total	30	5	30	5	30	5	105
4.2 Transportation Model	On-going updates of travel demand model.	City	5	5	5	5	5	5	30
		Grant							0
		Other							0
		Total	5	5	5	5	5	5	30
4.8 Lakewood City Center Sub-Area Plan	Review access and circulation for vehicles, transit, and non-motorized transportation.	City	10	10					20
		Grant							0
		Other							0
		Total	10	10	0	0	0	0	20
4.9 Non-Motorized Transportation Plan Update	Update NMTP to include relevant policy updates and capital improvement projects. (original plan adopted June 2009)	City	10	10					20
		Grant							0
		Other							0
		Total	10	10	0	0	0	0	20
4.10 ADA Transition Plan Update	Update ADA transition plan to address ADA deficiencies of existing curb ramps; signal access / operations; etc.	City	15						15
		Grant							0
		Other							0
		Total	15	0	0	0	0	0	15
TOTALS		City	70	30	35	10	35	10	190
		Grant	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Total	70	30	35	10	35	10	190

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN									TOTAL FUNDS
SECTION 5 BIKEWAYS			2016	2017	2018	2019	2020	2021	2016-2021
5.1 Miscellaneous Bikeway Markings / Signage	City		20	20	20	20	20	20	120
	Grant								0
	Other								0
	Total		20	20	20	20	20	20	120
5.4 Miscellaneous Bike Lane Construction	City			50		50		50	150
	Grant								0
	Other								0
	Total		0	50	0	50	0	50	150
5.5 North Thorne Lane to Gravelly Lake Drive Non-Motorized Trail	City	Provide non-motorized path between Tillicum and Gravelly Lake Drive "Gravelly to Thorne Connector" construction.		20	30	350			400
	Grant			100	170	1,650			1,920
	Other				180	2,500			2,680
	Total		0	120	380	4,500	0	0	5,000
5.6 Gravelly Lake Non-Motorized Trail (Total Cost \$11,100; length = 2.9 miles) TBD Priority Project 2020+	City	Provide non-motorized path around Gravelly Lake along Gravelly Lake Drive and Nyanza Drive. Existing roadway cross section shifted to outside and overlaid. Lighting.							0
	Grant								0
	Other							200	200
	Total		0	0	0	0	0	200	200
TOTALS	City		20	90	50	420	20	70	670
	Grant		0	100	170	1,650	0	0	1,920
	Other		0	0	180	2,500	0	200	2,880
	Total		20	190	400	4,570	20	270	5,470

SWM/TBD

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN									TOTAL FUNDS
SECTION 6 STREET LIGHTING			2016	2017	2018	2019	2020	2021	2016-2021
6.2 New Street Lighting	Install street lighting in requested areas based on ranking criteria.	City	150	150	150	150	150	150	900
		Grant							0
		Other							0
		Total	150	150	150	150	150	150	900
6.6 LED Street Lighting Upgrades	Update existing PSE lighting.	City		250	250				500
		Grant							0
		Other							0
		Total	0	250	250	0	0	0	500
TOTALS		City	150	400	400	150	150	150	1,400
		Grant	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Total	150	400	400	150	150	150	1,400

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN									TOTAL FUNDS
SECTION 7 BRIDGES			2016	2017	2018	2019	2020	2021	2016-2021
7.1 Bridge Inspection	On-going biennial bridge inspection.	City	0	9	0	9	0	9	27
		Grant							0
		Other							0
		Total	0	9	0	9	0	9	27
TOTALS		City	0	9	0	9	0	9	27
		Grant	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Total	0	9	0	9	0	9	27

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN									TOTAL FUNDS
SECTION 8 BEAUTIFICATION PROJECTS			2016	2017	2018	2019	2020	2021	2016-2021
8.10 Gateway Improvements	City		50	50	50	50	50	50	300
	Grant								0
	Other		20	20	20	20	20	20	120
	Total		70	70	70	70	70	70	420
									0
									0
									0
									0
TOTALS	City		50	50	50	50	50	50	300
	Grant		0	0	0	0	0	0	0
	Other		20	20	20	20	20	20	120
	Total		70	70	70	70	70	70	420

PROJECT COSTS IN THOUSANDS OF DOLLARS										
EXPENDITURE PLAN								<i>NOTE: BOLD and ITALICIZED numbers denote grant is secured</i>		TOTAL FUNDS
SECTION 9 ROADWAY RESTORATION PROJECTS			2016	2017	2018	2019	2020	2021	2016-2021	
9.7 Resurfacing Program - Various Locations	Projects in various locations may include pavement preservation contribution to planned utility projects to facilitate full roadway overlays.	City	2,580	1,245	2,323	1,560	1,380	3,500	12,588	
		Grant							0	
		Other							0	
		Total	2,580	1,245	2,323	1,560	1,380	3,500	12,588	
9.10A Steilacoom Boulevard - 87th to Weller Road		City	20	350					370	
		Grant		750					750	
		Other							0	
		Total	20	1,100	0	0	0	0	1,120	
9.10B Steilacoom Boulevard - Weller Road to Custer Road		City			20	350			370	
		Grant				750			750	
		Other							0	
		Total	0	0	20	1,100	0	0	1,120	
9.14 Lakewood Drive - 100th to Steilacoom Blvd		City	900						900	
		Grant							0	
		Other							0	
		Total	900	0	0	0	0	0	900	
9.15 Lakewood Drive - Flett Creek to N. City Limits		City		1,155					1,155	
		Grant							0	
		Other							0	
		Total	0	1,155	0	0	0	0	1,155	
9.16 59th Ave - Main Street to 100th Street		City			496				496	
		Grant							0	
		Other							0	
		Total	0	0	496	0	0	0	496	
9.17 108th - Bridgeport Way to Pacific Hwy		City			661				661	
		Grant							0	
		Other							0	
		Total	0	0	661	0	0	0	661	

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN								TOTAL FUNDS	
								<i>NOTE: BOLD and ITALICIZED numbers denote grant is secured</i>	
SECTION 9 ROADWAY RESTORATION PROJECTS			2016	2017	2018	2019	2020	2021	2016-2021
9.18 Custer - Steilacoom to John Dower	City					540			540
	Grant								0
	Other								0
	Total		0		0	540	0	0	540
9.19 88th - Steilacoom to Custer	City					300			300
	Grant								0
	Other								0
	Total		0		0	300	0	0	300
9.20 Pacific Hwy - 108th to SR512	City						90		90
	Grant						450		450
	Other								0
	Total		0		0	0	540	0	540
9.21 100th - Lakeview to South Tacoma Way	City						180		180
	Grant						300		300
	Other								0
	Total		0		0	0	480	0	480
9.22 100th - 59th to Lakeview	City						1,100		1,100
	Grant								0
	Other								0
	Total		0		0	0	1,100	0	1,100
TOTALS			3,500	2,750	3,500	2,750	2,750	3,500	18,750
	Grant		0	750	0	750	750	0	2,250
	Other		0	0	0	0	0	0	0
	Total		3,500	3,500	3,500	3,500	3,500	3,500	21,000

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN									TOTAL FUNDS
SECTION 10 NEIGHBORHOOD TRAFFIC MANAGEMENT			2016	2017	2018	2019	2020	2021	2016-2021
10.1 Neighborhood Traffic Management Various Locations	May include speed humps, traffic circles, signage, etc.	City	25	25	25	25	25	25	150
		Grant							
		Other							
		Total	25	25	25	25	25	25	150
TOTALS		City	25	25	25	25	25	25	150
		Grant	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Total	25	25	25	25	25	25	150

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN									TOTAL FUNDS
SECTION 11 OTHER			2016	2017	2018	2019	2020	2021	2016-2021
11.1 On-call technical assistance	Various professional services including surveying, structural, geotechnical, environmental to support various projects.	City	50	50	50	50	50	50	300
		Grant							0
		Other							0
		Total	50	50	50	50	50	50	300
11.2 Public Works Operations & Maintenance Facility	Back up generator and fueling station.	City		200					200
		Grant							0
		Other							0
		Total	0	200	0	0	0	0	200
TOTALS		City		250	50	50	50	50	450
		Grant							0
		Other							0
		Total	0	250	50	50	50	50	450

ARTERIAL STREETS

	2016	2017	2018	2019	2020	2021	2016-2021
City	102	152	187	427	927	352	2,147
Grant	4,000	150	300	1,200	1,475	2,650	9,775
Other	100	2,500	13,500	13,500	575	150	30,325
Total	4,202	2,802	13,987	15,127	2,977	3,152	42,247

STREETLIGHTS

	2016	2017	2018	2019	2020	2021	2016-2021
City	150	400	400	150	150	150	1,400
Grant	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	150	400	400	150	150	150	1,400

ROADWAY IMPROVEMENTS

	2016	2017	2018	2019	2020	2021	2016-2021
City	349	370	613	1,033	464	200	3,029
Grant	8,731	1,526	3,113	8,880	3,035	600	25,885
Other	1,558	945	5,980	3,870	3,556	2,950	18,859
Total	10,638	2,841	9,706	13,783	7,055	3,750	47,773

BRIDGES

	2016	2017	2018	2019	2020	2021	2016-2021
City	0	9	0	9	0	9	27
Grant	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	0	9	0	9	0	9	27

TRAFFIC SIGNALS

	2016	2017	2018	2019	2020	2021	2016-2021
City	102	415	155	365	415	15	1,467
Grant	230	228	1,490	300	0	0	1,598
Other	5	345	0	0	150	0	500
Total	337	988	1,645	665	565	15	3,565

BEAUTIFICATION / GATEWAY IMPROVEMENTS

	2016	2017	2018	2019	2020	2021	2016-2021
City	50	50	50	50	50	50	300
Grant	0	0	0	0	0	0	0
Other	120	20	20	20	20	20	120
Total	70	70	70	70	70	70	420

TRANSPORTATION PLANNING

	2016	2017	2018	2019	2020	2021	2016-2021
City	70	30	35	10	35	10	190
Grant	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	70	30	35	10	35	10	190

RESTORATION

	2016	2017	2018	2019	2020	2021	2016-2021
City	3,500	2,750	3,500	2,750	2,750	3,500	18,750
Grant	0	750	0	750	750	0	2,250
Other	0	0	0	0	0	0	0
Total	3,500	3,500	3,500	3,500	3,500	3,500	21,000

BIKEWAYS

	2016	2017	2018	2019	2020	2021	2016-2021
City	20	90	50	420	20	70	670
Grant	0	100	170	1,650	0	0	1,920
Other	0	0	180	2,500	0	200	2,880
Total	20	190	400	4,570	20	270	5,470

OTHER

	2016	2017	2018	2019	2020	2021	2016-2021
City	0	250	50	50	50	50	450
Grant	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	0	250	50	50	50	50	450

NEIGHBORHOOD TRAFFIC MANAGEMENT

	2016	2017	2018	2019	2020	2021	2016-2021
City	25	25	25	25	25	25	150
Grant	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	25	25	25	25	25	25	150

GRAND TOTAL (2015-2020)

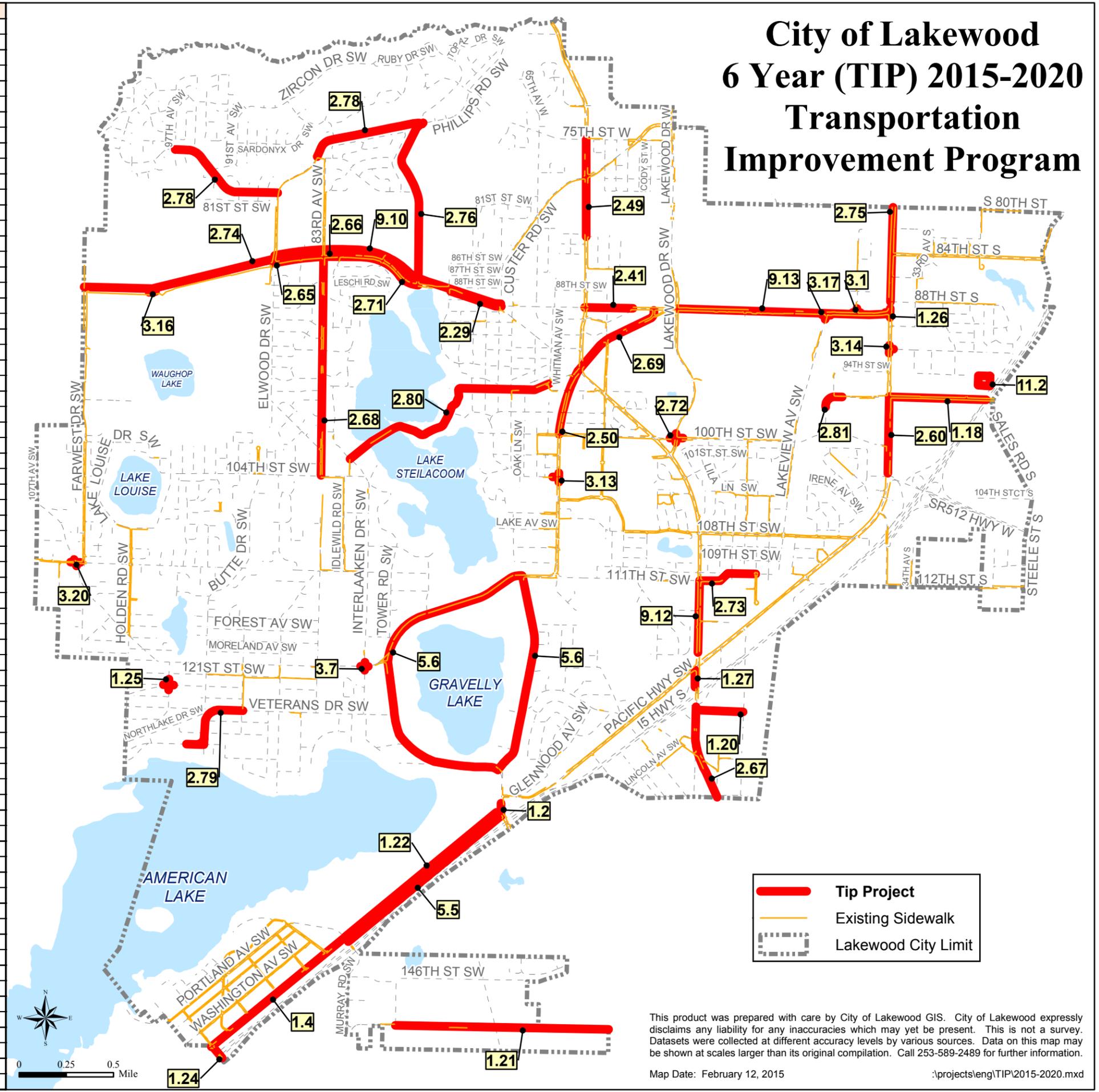
	2016	2017	2018	2019	2020	2021	2016-2021
City	4,368	4,541	5,065	5,289	4,886	4,431	28,580
Grant	12,961	2,754	5,073	12,780	5,260	3,250	41,428
Other	1,783	3,810	19,680	19,890	4,301	3,320	52,684
Total	19,012	11,105	29,818	37,959	14,447	11,001	122,692

Notes:

LID = Property owner participation through a Local Improvement District (LID).
Dev. Contr. = Funds provided through private (developer) contribution
TIB = Transportation Improvement Board grant funding
TEA-21 = Transportation Efficiency Act grant funds.
State = other state grant funding programs
CDBG = Community Development Block Grant funds.
FED = Federal Grant dollars (TEA-21, SAFETEA, Enhancement, etc.)
SWM = Surface Water Management funds
S.T. = Sound Transit
TBD = Transportation Benefit District
MAP-21 = Moving Ahead for Progress in the 21st Century (Federal Transportation Act)

City of Lakewood 6 Year (TIP) 2015-2020 Transportation Improvement Program

Project Number	Project Name
1.2	Gravelly Lake Drive @ I-5 Right Turn Lane
1.4	Union Avenue - Berkeley to N. Thorne Lane
1.18	96th Street - 2-way left turn lane
1.20	123rd ST SW - Realignment
1.21	Murray Road and 150th Street Corridor Capacity
1.22	Gravelly to Thorne Connector
1.23	Interstate 5 through Lakewood
1.24	Madigan Access Project
1.25	North Gate Access Improvements
1.26	Steilacoom Boulevard / So Tacoma Way Intersection
1.27	Bridgeport Way - I-5 Ramp to Pacific Hwy
2.26	Safety Improvements in the Vicinity of Schools
2.29	Steilacoom Blvd. Custer to 88th Street
2.41	Steilacoom Blvd - Bridgeport Way to Fairlawn
2.49	Bridgeport Way - 83rd to 75th
2.50	Gravelly Lake Drive - 100th to Bridgeport Way
2.54	Minor Pedestrian Safety Improvements
2.55	High Accident Location Safety Improvements
2.60	South Tacoma Way - SR512 to 96th Street
2.61	ADA Standards - Sidewalk Upgrades
2.65	Steilacoom Blvd - 87th to 83rd
2.66	Steilacoom Blvd - 83rd to Weller Road
2.67	Bridgeport Way - I-5 to JBLM Gate
2.68	Hipkins Rd. 104th to Steilacoom Blvd.
2.69	Gravelly Lake Drive - Bridgeport to Steilacoom Road Diet
2.70	Lakewood Station - Non-Motorized Access Improvements
2.71	Steilacoom Blvd - Weller Road to Phillips Road
2.72	100th Street & Lakewood Drive
2.73	112th / 111th - Bridgeport to Kendrick
2.74	Steilacoom Blvd Corridor Design - Farwest to Phillips
2.75	South Tacoma Way - 88th to North City Limits
2.76	Phillips Road - Steilacoom to Onyx
2.78	Oakbrook Sidewalks & Street Lighting
2.79	Lake City Business District Sidewalks (American Lake Park to Veterans Dr / Alameda)
2.80	Interlaaken Drive SW / Mt. Tacoma Drive Non-Motorized Improvements - Short Lane to Whitman Avenue SW
2.81	Roadway Safety Improvements at 40th Ave. SW and 96th St. SW
3.1	Steilacoom / Durango Traffic Signal
3.7	Washington Blvd. and Interlaaken Drive Signal and intersection Improvement
3.8	Traffic Signal Timing Upgrades
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11.2	Public Works Operations & Maintenance Facility



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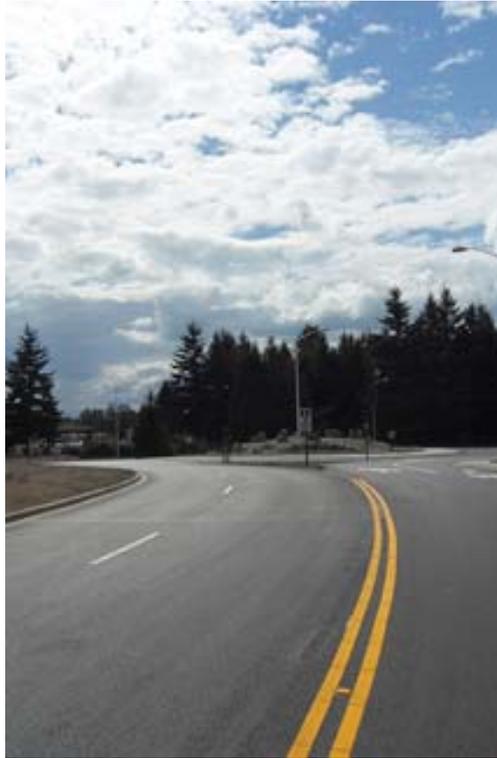
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PAVEMENT MANAGEMENT



2014 STATE OF THE STREETS REPORT



For: City of Lakewood
Engineering Department

By: Omar Barron, EIT
Associate Civil Engineer 1
City of Lakewood

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1.0—Introduction

The City of Lakewood’s Pavement Management System (PMS) is a useful tool. It consists of field ratings of pavement condition, an electronic database and a software computing program. The program is capable of recommending a repair strategy, and this coupled with current street maintenance budget constraints can be used to make valuable assessments. But the road network itself really represents an investment, investments that much like all others is worth looking at how to best protect and optimize the return. The PMS as a whole foments return on investment by encouraging:

- the implementation of a multi-year road rehabilitation program,
- the development of a preventative maintenance program; and
- the selection of the most cost effective repairs at the most cost effective time.

In essence, pavement management is about prioritization. Available funding in most cases will be insufficient to meet the rehabilitation and maintenance demands of the road network. This report has been prepared to identify specific city needs.

The overall condition of the road network will be presented along with options for improving the average Pavement Condition Index (PCI). The PCI is a measurement ranging between 0 and 100. A newly constructed road would rate as 100, while anything under 25 represents extreme failure. The PCI score ranges shown in Table 1 are classified in condition categories between “Good” to “Very Poor.” Speculative analyses, or scenarios, will be run on the pavement database to assess the overall effectiveness of a proposed budget. These are known as “Budget Scenarios.” Required funding will be presented by setting a target PCI over a given period of time.

2.0—2014 Pavement Condition

The City of Lakewood is responsible for the repair and maintenance of 179.9 centerline miles, or 430.5 lane miles, of asphalt pavements. It would cost an estimated \$130,000,000 to replace the entire network. The overall average PCI in Lakewood is 75, placing it at the bottom of the “Good” condition category. Table 1 summarizes the percentage of the network within each condition category.

Table 1. *Lakewood Road Network Summary*

Network Percentage Condition Summary			
Category	PCI Range	2014	2012
<i>Good</i>	<i>70-100</i>	<i>79.3%</i>	<i>81.8%</i>
<i>Fair</i>	<i>50-70</i>	<i>15.1%</i>	<i>14.5%</i>
<i>Poor</i>	<i>25-50</i>	<i>4.8%</i>	<i>3.5%</i>
<i>Very Poor</i>	<i>0-25</i>	<i>0.8%</i>	<i>0.3%</i>

3.0—Pavement Management Comparison

Pavement management data was collected from several surrounding jurisdictions for comparative purposes. Their average network PCI, centerline miles, and annual maintenance budgets are listed in Table 2. The variance in the operating budget can be due

in part to distinct maintenance strategies, the amount of in-house maintenance and a sheer lack of funding resources.

Table 2. Network and Funding Comparison by City

<i>City</i>	<i>Average PCI</i>	<i>Centerline Miles</i>	<i>Annual Budget</i>	<i>Dollars Per Centerline Mile</i>
Des Moines	68	100	\$0	\$0
Lakewood**	76	180	\$1,500,000	\$8,333
Redmond	77	143	\$1,200,000	\$8,400
Olympia	71	210	\$1,825,000	\$8,700
Federal Way*	79	233	\$2,100,000	\$9,000
Woodinville#	69	48	\$500,000	\$10,400
Newcastle	76	44	\$683,000	\$15,500
Kirkland	64	243	\$3,860,000	\$15,900

**PCI for 2011 rating year, approximate 2012 Overlay budget*

***\$1,500k for Overlay/Rehabilitation, w/ additional \$300k for Preventative Maintenance*

#Budget is Overlay exclusive

4.0—Lakewood’s Pavement Management History

Lakewood has been an incorporated city since 1996. Prior to that time, Lakewood was part of Pierce County and part of their overall maintenance and rehabilitation program. After incorporation, the city continued to contract its’ operation and maintenance with Pierce County which included patching and a chip seal program. Major overlay work was conducted by the City through capital projects. The extent of these programs was all dictated by available Lakewood funds dedicated for these purposes.

In addition to the operation and maintenance functions, Pierce County continued to conduct bi-annual pavement ratings on all of the city’s roadways. In 2008, the city decided to take over the pavement ratings in-house and utilize the web-based “Street-Saver” software. The program is managed by existing city staff with extensive background and knowledge of pavement management. Existing staff works on the pavement management on a part-time, as-needed basis. The most labor intensive portion of the city’s pavement management system is during every even-year summer when two college interns are brought in and trained to conduct the ratings over a 3-month period. Spot quality assurance/quality control checks are conducted to ensure rating consistency during and after the ratings. Improvements on rating consistency have been made each year including providing addresses where the “average” pavement segment rating was conducted so that the same section of the segment can be reviewed the following rating cycle.

Information contained in this report is based on “current” city pavement management practices. The history presented in Figure 1 does include pavement ratings conducted by

Pierce County and previous recommendations on annual pavement management expenditures. Although the pre-2008 data may not be an “apple to apple” comparison, the general costs and PCI trends are still consistent with general pavement management strategies and relevant.

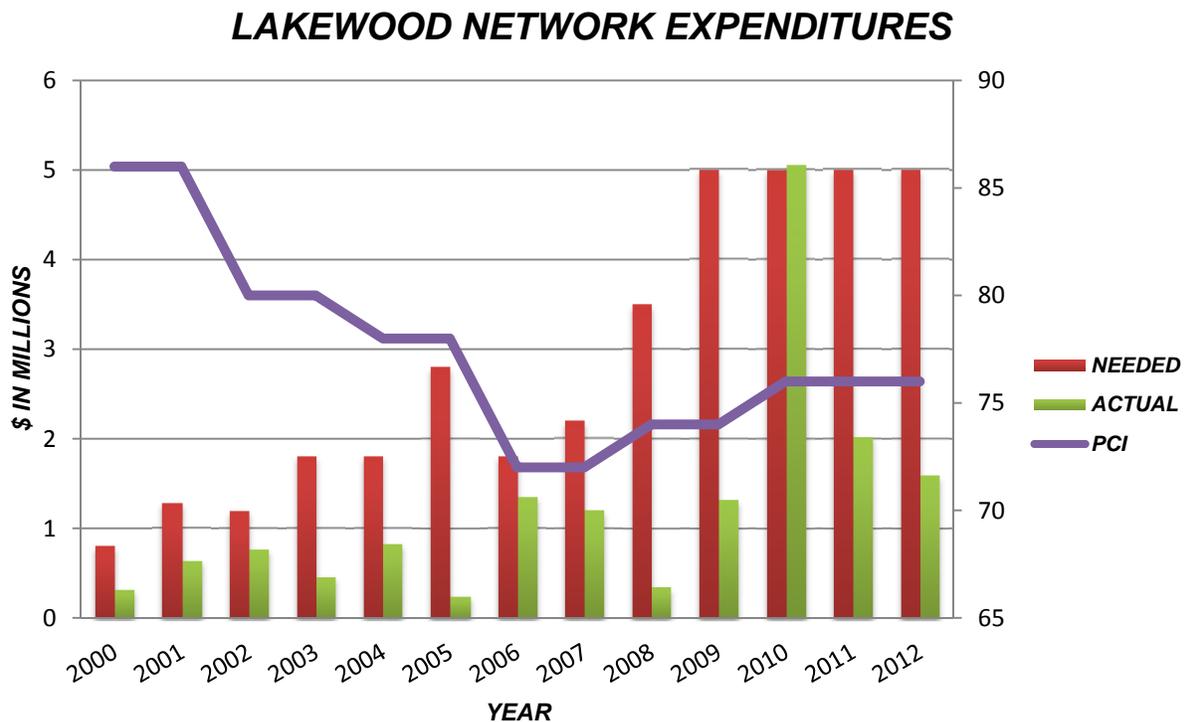


Figure 1. Lakewood’s Actual and Needed Expenditures History

5.0—Lakewood’s Pavement Repair Strategy and Costs

5.1—The Decision Tree

The decision tree represents the overall pavement repair strategy and cost. Basic information about Lakewood’s strategy is given in Table 3. The PMS system uses this information to know which treatments to apply, when to apply them and how much they cost. Lakewood’s Pavement Management System is designed to maintain an optimal network PCI somewhere in the high 70’s. The system will recommend various treatments in an attempt to bring all of the roads in Lakewood up into this “Good” condition category. Treatment

Table 3. Lakewood Decision Tree

Lakewood Repair Strategy Decision Tree		
PCI Range	Treatment	Cost per SY
70-100	Chip or Crack Seals	\$0.45-\$6
50-70	Chip Seal/2" Overlay*	\$6-\$25
25-50	4" Thick Overlay	\$36
0-25	Reconstruction**	\$62

*Overlay if load-related distresses are found.

**4" Overlay of residential streets if sub-base remains intact.

prices were set after extensive research into the bottom-line cost of previous capital improvement projects in Lakewood.

The program outputs show that it would cost the city \$30 million over the next six-year period to maintain the current overall PCI of 75. These costs exceed the city's current funding levels. Additional revenues are needed to adequately repair and preserve the condition of the pavement network. But, if 79% of Lakewood's roads are already considered "Good," why are these costs so high and why bother improving them?

5.2—Pavement Repair Theory

Some basic pavement repair theory must be considered before the idea of an adequate repair strategy is understood. Figure 2 demonstrates that pavement maintenance follows the age old adage "pay me now, or pay me later." The cost to maintain and repair a road depends on the present condition. It costs less to apply preventative maintenance (PM) treatments like chip seals while the pavement is still in "Good" condition. PM treatments extend pavement life by correcting minor surface faults and reducing the freeze-thaw water absorption cycle that leads to undermining of the pavement sub-base.

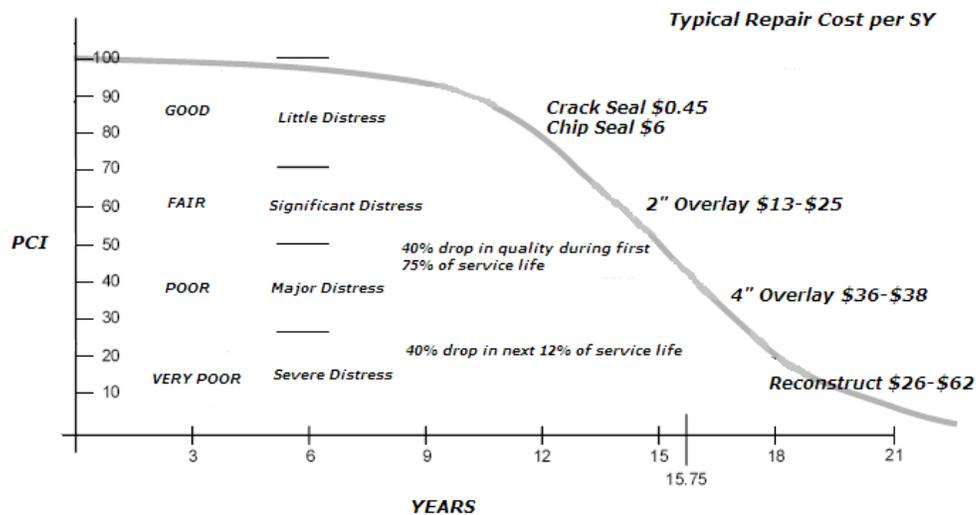


Figure 2. Cost to Maintain Pavements Over Time

Not all treatments work as effectively in each of the 4 condition categories shown in Figure 2. There is no such thing as a "blanket" treatment that will adequately repair any roadway in any present condition. Much like a medical ailment that requires a specific treatment, roadways require a specific repair weighed against several factors. Any street with a PCI of 90 or above need not be considered for repair. When a street falls just below 90 it is assigned to chip or crack sealing depending on its needs. PM treatments will be ineffective on pavements with a PCI rating below 50. These pavements have slid further down the deterioration curve and require an overlay.

Streets in the “Fair” 50-70 PCI range can be considered for either a thin overlay or chip seal. An overlay would be applied for load rated distresses, while a chip seal would be most effective against raveling and other environmental related distresses. Chip sealing would be ideal for residential roads with low volumes and light traffic loading. There are times when this treatment can also be applied in pavement sections below 50, but for these are handled under the experience of engineering staff. Roadways in the “Poor” 25 to 50 PCI range need a thicker overlay, recommended at 4” thickness in Lakewood. Sections in this condition category generally show more advanced load related distresses compared to those in “Fair” condition. Complete reconstruction should occur on pavements with a PCI under 25. But, reconstruction may also be considered in areas with increased load related distresses.

Pavements are designed to a service life of 20 years. The key behind Figure 2 is to identify streets that will respond to less expensive treatments before they slip into conditions that are more costly to repair. The cost to maintain or repair roads, as with many other things, increases exponentially with the passing of time. It costs less to maintain a road in “Good” condition than to repair one that has failed. Roads that currently cost only \$6 per square yard to chip seal will soon cost \$36 per square yard to overlay and \$62 per square yard to completely reconstruct.

Deferred maintenance is maintenance that is needed but cannot be completed due to a lack of funding. This is the amount remaining after the available budget is applied against all of the pavement segments that have triggered a repair cost within the program. Shrinking budgets have forced many Puget Sound area cities and counties to defer road maintenance. But with this choice the cost to repair the roads increases along with the frequency of citizen complaints about the condition of their roads.

6.0—Pavement Repair Treatments

As noted in Table 1, 79.3% of the city road network falls in the “Good” condition category and would benefit from relatively inexpensive PM treatments. 15.1% of the city road network falls into the “Fair” condition category. These show a type of wear that sometimes needs more than an inexpensive PM treatment. The overall quality of well-designed roads in this condition has sometimes fallen by as much as 40% and they have lost 75% of their useful service life. The surface may require a heavy chip seal at \$6 per square yard or a thin 2” overlay at \$25 per square yard.

The remaining 5.6% of roads fall into the “Poor” and “Very Poor” categories. These are close to the end of their useful service life. They often have severe damage like potholes, alligator cracking, old patches and wheel ruts that noticeably affect ride quality. Alligator cracking seen on the pavement surface indicates further underlying damage since cracks begin in the pavement base and travel up to the surface. Pavement in this stage will need either a 4” thick overlay or complete reconstruction depending on the condition of the road surface and sub-base. These treatments cost \$34 and \$62 per square yard, respectively.

Prevention is a key element of a successful pavement maintenance and repair strategy. This is especially true of pavements in “Fair” condition because deterioration will continue at an increasing rate from this point on if left untreated. This is due to the material properties of asphalt and the way that it reacts to repeated loading. Clearly, the most cost effective pavement management strategy is characterized by a proactive approach, not a reactive approach that only addresses more costly repairs.

6.1—Preventative Maintenance

6.1.1—Crack Seal

Crack sealing is an effective treatment for pavements in “Good” condition. Figure 3 shows Detroit Av SW, a road that would benefit from crack sealing. The treatment would prevent water from entering the sub-base to cause further deterioration. In colder temperatures the water freezes, expands and thaws repeatedly below the surface.



Figure 3. *Detroit Av SW-Good Condition*

6.1.2—Chip Seal

Figure 4 provides an example of a pavement that would benefit from a chip seal. The sub-base and surface remain intact. It is still in good condition but is starting to lose aggregate and asphalt binder.



Figure 4. *San Francisco Av SW-Good Condition*

6.2—Rehabilitation Treatments

6.2.1—2” Thin Overlay

Figure 5 is an example of a pavement in “Fair” condition. It has a few areas of alligator (fatigue) cracking that should be patched before finishing the surface with a 2 inch asphalt overlay. Fatigue cracking works its way up to the surface from the sub-base.



Figure 5. *Another section of San Francisco Av SW- Fair Condition*

6.2.2—4” Thick Overlay

An example of a road in “Poor” condition is shown in Figure 6. There are areas of heavy alligator cracking that need to be structurally patched before the surface is rebuilt with a 4 inch asphalt overlay.



Figure 6. Fairlawn Dr SW-Poor Condition

6.2.3—Reconstruction

Figures 7 and 8 are examples of a road in need of reconstruction. This pavement is in “Very Poor” condition with severe alligator cracking, potholes and areas of settlement. This street should be rubblized, regarded, and reconstructed with new sub-base material and asphalt pavement.



Figure 7. John Dower Rd-Very Poor Condition



Figure 8. John Dower Rd-Very Poor Condition

7.0—Future Expenditures for Pavement Maintenance

It is estimated from current funding levels that Lakewood will spend \$10.8 million on pavement maintenance and rehabilitation over the next six years as shown in Table 4.

7.1—Impact of Projected Funding Levels

With the existing budget over the next six-year period, the condition of the network deteriorates with the overall average PCI falling from 75 to 63. The amount of "deferred" maintenance increases roughly 300% from

Table 4. Lakewood Repair Budget

6 Year Road Repair Budget	
Year	Estimated Budget
2015	1,800,000*
2016	1,800,000*
2017	1,800,000*
2018	1,800,000*
2019	1,800,000*
2020	1,800,000*

*\$300k Chip Seals, \$1,500k Overlays

\$8.1 million to \$32.5 million. This backlog will steadily increase if additional funding cannot be allocated.

7.2—Budget Needs

Based on the principle that it costs less to maintain roads in “Good” condition than to repair those that are in “Poor” condition, the City of Lakewood’s Pavement Management System strives to develop a maintenance strategy that brings the overall condition of the network to an optimal level. This PCI level is dependent on the city’s maintenance and rehabilitation policies as delineated in the predetermined preventative maintenance and rehabilitation decision trees. These decision trees systematically assign a specific treatment dependent on the PCI and types of distress found on the pavement. For Lakewood, this optimum PCI level is in the high 70's. Though the average PCI for the city is 75, a portion of the network suffers from load-related distresses.

The first step in developing a cost-effective Maintenance and Rehabilitation (M&R) strategy is to assume unlimited funding and determine the M&R "needs" of Lakewood’s road network. Using the PMS analysis module, maintenance needs over the next six years were estimated at \$41 million if the strategy recommended by the PMS program to increase the average network PCI to 80 were followed (see Scenario 6, Page 18). Roads will continue to deteriorate if no maintenance is applied over the next six years and the network PCI will drop to 63. The results of the budget needs analysis are summarized in Table 5.

Table 5 shows the level of expenditures required to raise Lakewood’s pavement condition

Table 5. 2012 Lakewood Budget Needs Summary

BUDGET NEEDS RESULTS							
YEAR	2015	2016	2017	2018	2019	2020	TOTAL
BUDGET NEEDS	\$9,898,601	\$2,575,241	\$3,989,644	\$8,736,667	\$14,827,049	\$966,292	\$40,993,494
PCI W/ TREATMENT	81	78	78	81	87	80	
PCI W/OUT TREATMENT	75	72	70	68	65	63	

to an optimal network PCI of 80 and eliminate the current maintenance backlog. The results of the budget needs analysis represent the ideal funding strategy recommended by the PMS. \$986,000 of this amount is for preventative maintenance, while the remaining \$40 million is allocated for more costly rehabilitation.

7.3—Cost-Effectiveness of Treatments

The cost-effectiveness of preventative maintenance treatments is demonstrated in Figures 9 and 10. These compare the current condition of the street network and the associated maintenance needs estimated by the program. The portion of the street network in “Fair” condition – 15.1% of the city’s road network – accounts for 70% of the work needed over

the next six years. Whereas the remaining 84.9% in the “Good,” Poor” and “Very Poor” categories account for the remaining 30% of expenditures over the next 6 years.

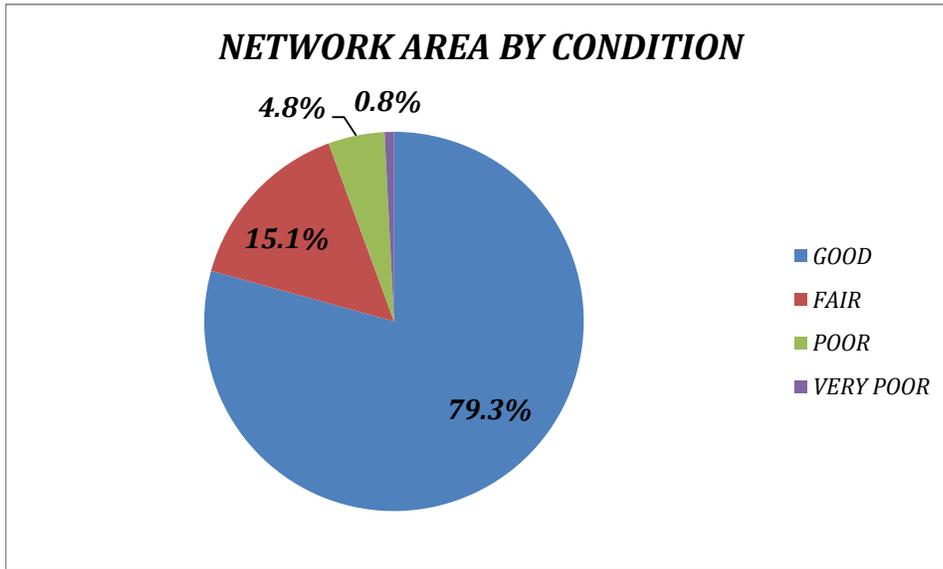


Figure 9. Lakewood Network Condition Summary

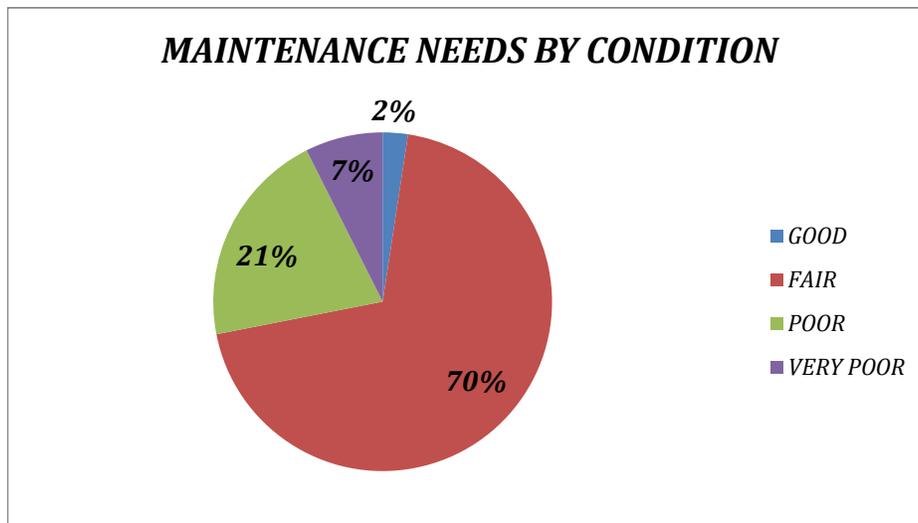


Figure 10. Lakewood Maintenance Needs Summary

8.0—Budget Scenarios

The next step in developing a cost-effective maintenance and rehabilitation strategy is to conduct a “what if” analysis. Using the PMS budget analysis module, the impacts of various budget “scenarios” can be evaluated. The program projects the effects of the different scenarios on PCI and unfunded deferred maintenance (backlog) of segments that have triggered repair costs. The advantages and disadvantages of funding levels and maintenance strategies then become clear. The following scenarios were calculated for the purposes of this report:

Scenario 1 (\$0) Do Nothing—This scenario marks the baseline of doing nothing to the network over the next six years.

Scenario 2 (\$10.8 million over six years) Current Budget—This scenario shows the effect of the current budget.

Scenario 3 (\$19.6 million over 6 years) Gradual Step Budget—This scenario presents the impact of the current budget in 2015 and 2016, an increase to \$3 million in 2017, and a final increase to \$5 million in 2019.

Scenario 4 (\$23.6 million over 6 years) Accelerated Step Budget—This scenario evaluates the impact of the current budget in 2015 and 2016, and a fixed \$5 million dollar budget thereafter.

Scenario 5 (\$30 million over 6 years) Maintain PCI Budget—The \$5 million yearly budget for a target PCI of 77 by the end of year 6.

Scenario 6 (\$41 million over 6 years) Optimal Budget—The budget required to maintain the street network with no deferred maintenance in any year.

8.1—Do Nothing

In this scenario, the network PCI will deteriorate to approximately 63. Roads in this condition are in the “Fair” category. This scenario is not in the best interests of the City of Lakewood. Road conditions deteriorate and the backlog of deferred maintenance due to lack of funds increases from \$9.9 million to almost \$37.8 million.

Table 6. *Do Nothing Results Summary*

DO NOTHING SCENARIO							
YEAR	2015	2016	2017	2018	2019	2020	TOTAL
BUDGET	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DEFERRED MAINTENANCE	\$9,898,532	\$10,570,958	\$12,928,428	\$20,880,317	\$35,131,949	\$37,740,891	\$37,740,891
PCI	75	72	70	68	65	63	

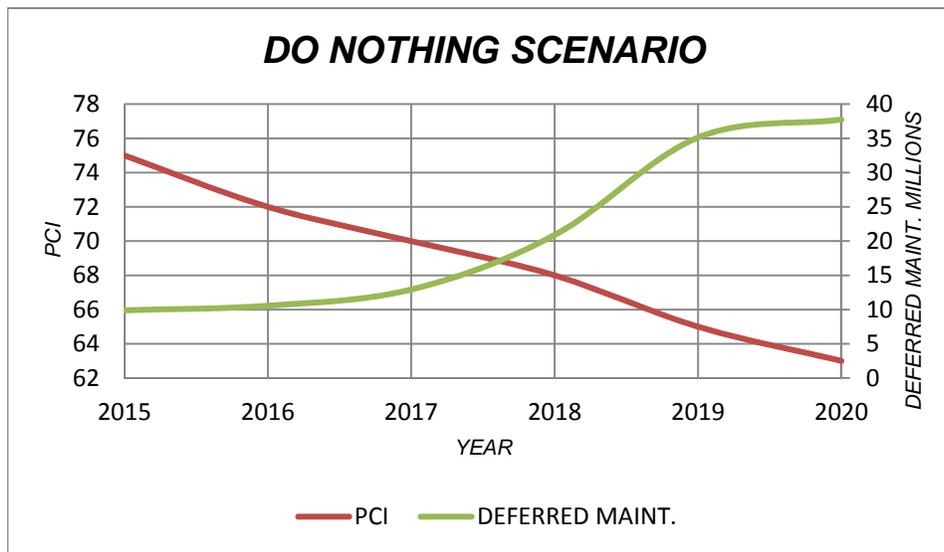


Figure 11. *Do Nothing PCI vs. Deferred Maintenance (\$0—6 yrs.)*

8.2—Current Budget

In this scenario, the network PCI will deteriorate to approximately 67 from its present level of 76. Roads in this condition are at the high end of the “Fair” category. This scenario is also not in the best interests of the city. Road conditions deteriorate and the backlog of work due to lack of funds rises from \$6.6 million to \$34.9 million.

Table 7. Current Budget Results Summary

CURRENT BUDGET SCENARIO							
YEAR	2015	2016	2017	2018	2019	2020	TOTAL
BUDGET	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$10,800,000
DEFERRED MAINTENANCE	\$8,150,709	\$7,562,631	\$9,397,003	\$16,482,734	\$30,943,802	\$32,529,069	\$32,529,069
PCI	77	74	73	71	70	69	

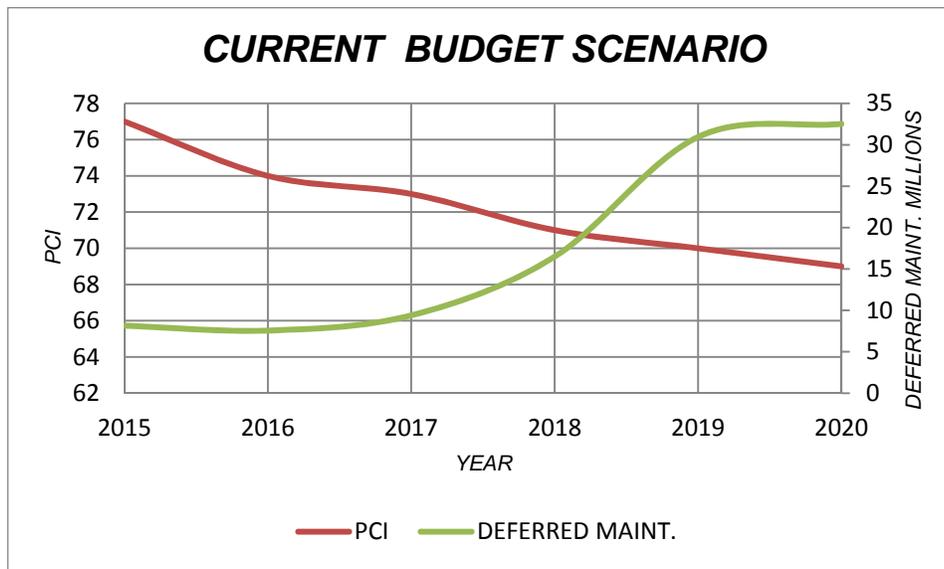


Figure 12. Current Budget PCI vs. Deferred Maintenance (\$10.8M—6 yrs.)

8.3—Gradual Step Budget

The impacts of adding \$8.8 million to the current budget is evaluated in this scenario. There are some concerns even with the added dollar amount. The road condition just maintains a 74 but the backlog of work increases from \$8.1 million to \$23.3 million. This implies is that the city is not “keeping pace” with the deterioration of the network.

Table 8. *Gradual Step Budget Results Summary*

GRADUAL STEP SCENARIO							
YEAR	2015	2016	2017	2018	2019	2020	TOTAL
BUDGET	\$1,800,000	\$1,800,000	\$3,000,000	\$3,000,000	\$5,000,000	\$5,000,000	\$19,600,000
DEFERRED MAINTENANCE	\$8,101,480	\$7,446,077	\$8,194,549	\$13,823,170	\$24,951,668	\$23,291,461	\$23,291,461
PCI	77	74	74	73	73	74	

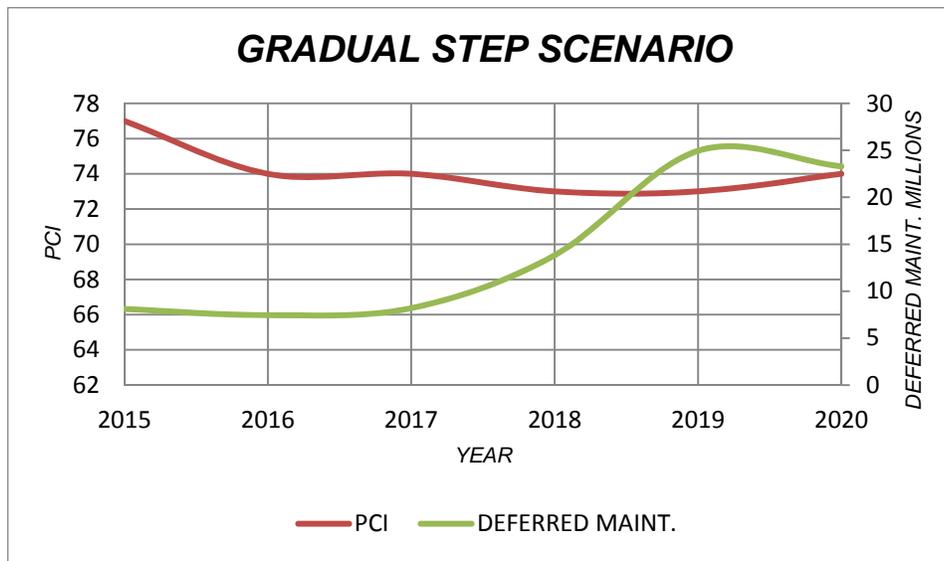


Figure 13. *Gradual Step PCI vs. Deferred Maintenance (\$19.6M—6 yrs.)*

8.4—Accelerated Step Budget

12.8 million is added to the current budget for this scenario. The network PCI maintains a 75 by the sixth year but the maintenance backlog increases from \$8.1 million to \$19.6 million. The city is still not keeping pace with the deterioration rate of the roads.

Table 9. Accelerated Step Budget Results Summary

ACCELERATED STEP SCENARIO							
YEAR	2015	2016	2017	2018	2019	2020	TOTAL
BUDGET	\$1,800,000	\$1,800,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$23,600,000
DEFERRED MAINTENANCE	\$8,165,224	\$7,535,465	\$6,312,290	\$10,336,751	\$21,513,224	\$19,637,465	\$19,637,465
PCI	77	74	75	74	74	75	

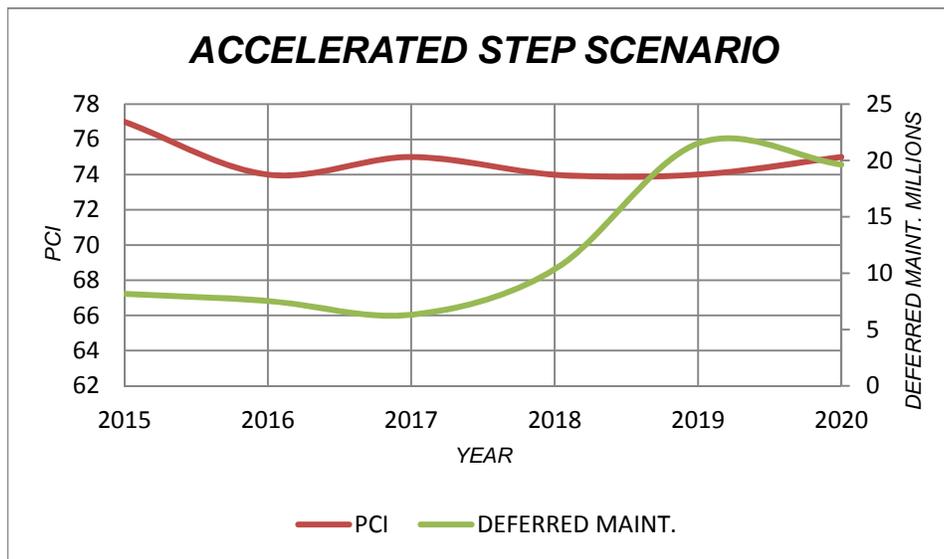


Figure 14. Accelerated Step PCI vs. Deferred Maintenance (\$23.6M—6 yrs.)

8.5—Maintain PCI Budget

This scenario explores the expense needed to achieve a target PCI of 77. Deferred maintenance costs will increase by 165% from \$4.9 million to \$12.9 million because not all of the pavement maintenance and rehabilitation work identified for the City will be completed.

Table 10. *Maintain PCI Budget Results Summary*

MAINTAIN PCI SCENARIO							
YEAR	2015	2016	2017	2018	2019	2020	TOTAL
BUDGET	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$30,000,000
DEFERRED MAINTENANCE	\$4,899,849	\$2,172,318	\$1,237,630	\$5,251,950	\$16,228,374	\$12,949,142	\$12,949,142
PCI	78	78	78	76	76	77	

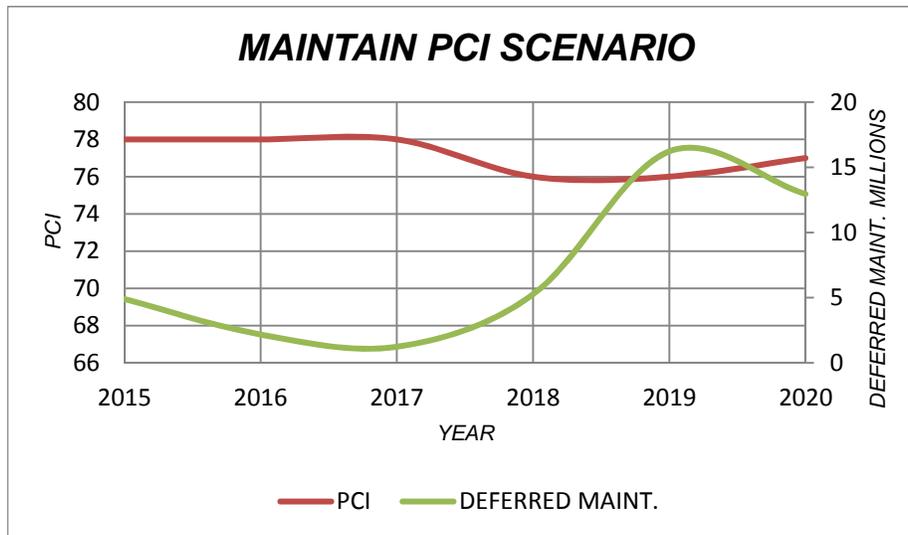


Figure 15. *Maintain Budget PCI vs. Deferred Maintenance (\$30M—6 yrs.)*

8.6—Optimal Budget

The results indicate that the network PCI will increase 5 points to 80. By the year 2020, 91.3% of the network will fall into the “Good” condition category and 8.7% will be considered “Fair.” This scenario has no maintenance backlog in any given year.

Table 11. *Optimal Budget Results Summary*

OPTIMAL SCENARIO							
YEAR	2015	2016	2017	2018	2019	2020	TOTAL
BUDGET	\$9,898,601	\$2,575,241	\$3,989,644	\$8,736,667	\$14,827,049	\$966,292	\$40,993,494
DEFERRED MAINTENANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PCI	81	78	78	81	87	80	

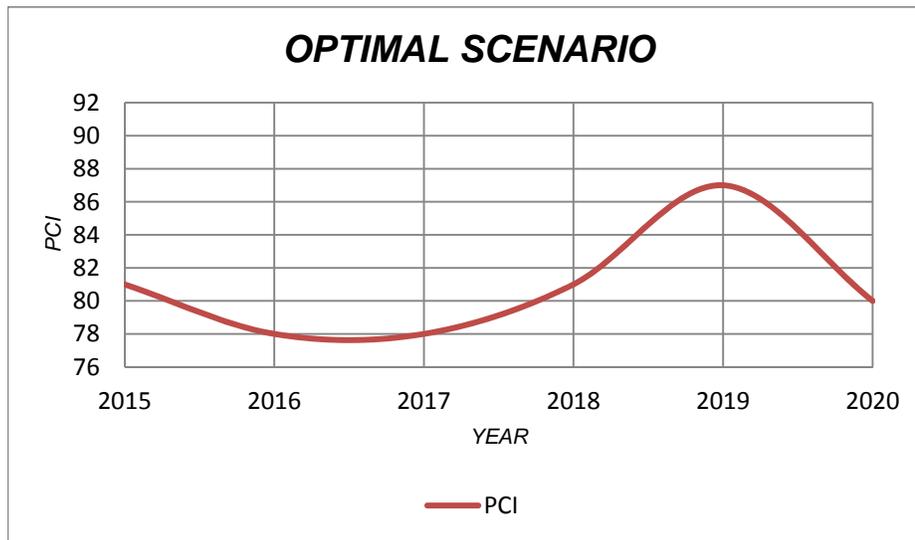


Figure 16. *Optimal PCI vs. Deferred Maintenance (\$41M—6 yrs.)*

9.0—Conclusion

Figure 17 illustrates the change in PCI over time for the six budget scenarios.

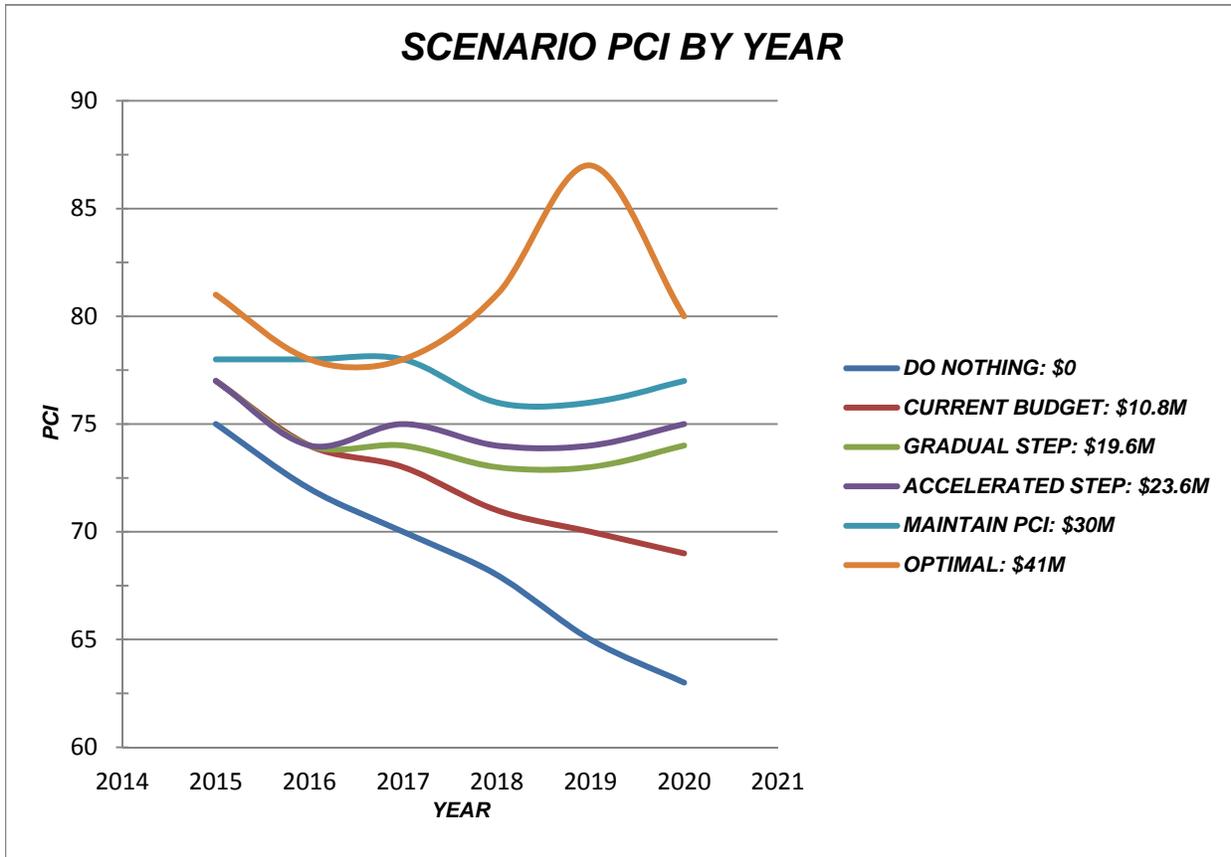


Figure 17. Scenario PCI Comparison

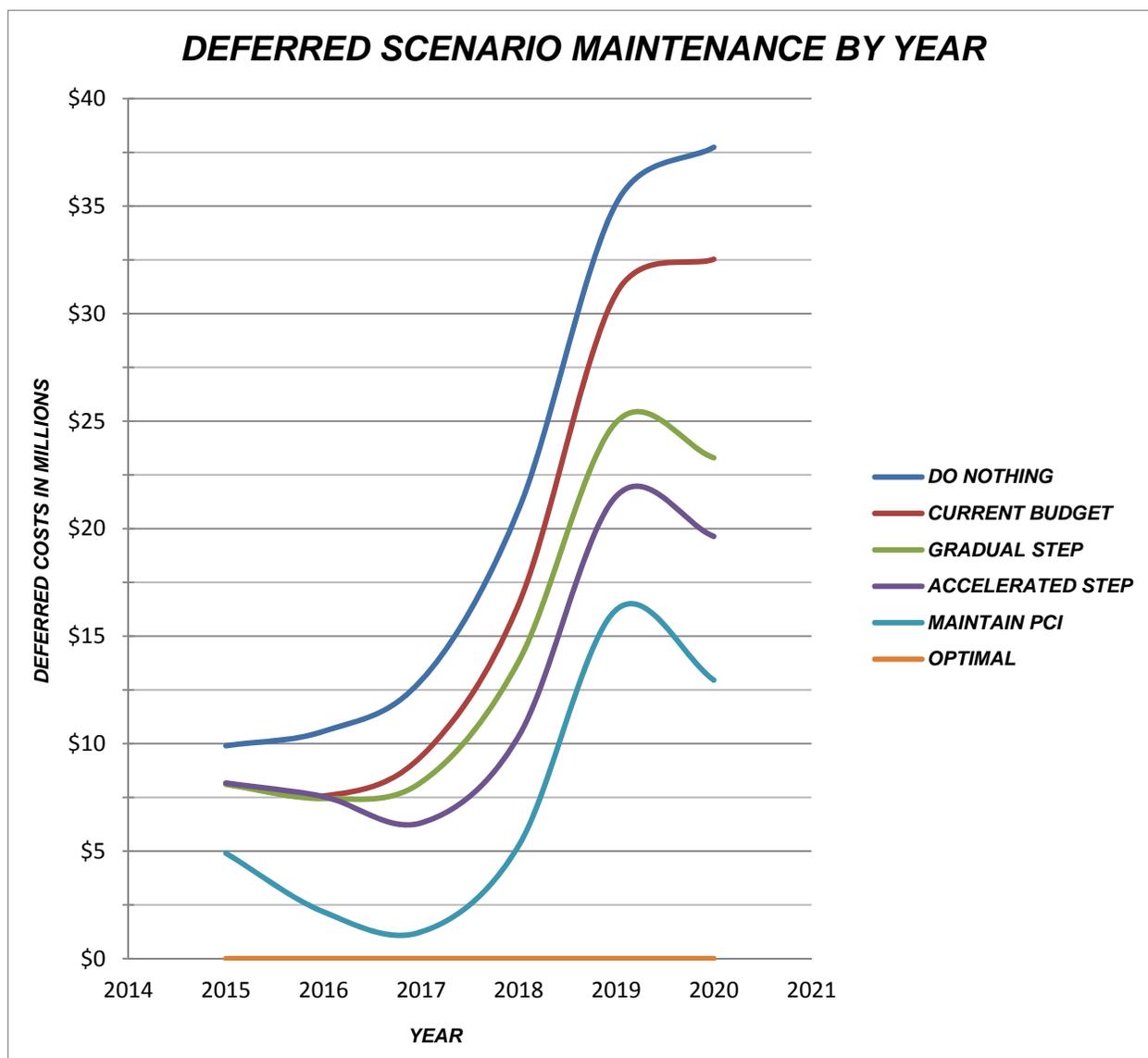


Figure 18. Deferred Scenario Costs Comparison

Figure 18 shows the change in maintenance backlog over time for the different budget scenarios. The Optimal scenario has none.

It can be seen from Figures 17 and 18 that Lakewood’s current budget as proposed in Scenario 2 is insufficient to preserve the network in its current condition.

9.1—Summary

In summary, the City of Lakewood has a substantial investment in their roadway network. The replacement cost for all 180.3 miles of streets is \$130 million. Overall, 79% of the City's network is in the "Good Condition" category. However, the remaining 21% of city streets require a significant investment not only to bring them into the "Good Condition" category but also keep them there. The network PCI will decrease with Lakewood's projected budget of \$10,800,000 over the next six years along with a steady increase in deferred maintenance backlog. The maintenance backlog will result in increased future costs because revenue intensive treatments (reconstruction) will unfortunately be necessary when less expensive treatments (seals or overlays) could have prevented further deterioration.

Based upon the current condition of streets, there are still a large number of candidate sections that would respond well to Chip Seal. However, an increasing number of sections are sliding down the deterioration curve into condition categories that merit more cost intensive repairs. Now is the time to devote additional resources to overlay and reconstruction projects so that these sections can be pushed back up into condition categories conducive to preventative maintenance treatments.

9.2—Recommendations

It is recommended that the City of Lakewood increase the funds available for street maintenance and implement more rigorous preventative maintenance strategies. The result of the proposed budget is a decrease in PCI and a steady increase in deferred maintenance. This is not an ideal scenario. If the City wants to maintain an average PCI of 75 and reduce the backlog of deferred maintenance, proposed expenditures will have to increase by at least \$20 million during the next six years with increased investments in Preventive Maintenance and Rehabilitation. The city currently has a "Good" network rating. More must be invested in order to maintain this vital city infrastructure.

ACCIDENT DATA



City of Lakewood, Washington

Fatal Collision History

2005 thru 2014

Year	Fatalities	Intersection	Description	Report	Date
2014	1	40th Ave (west of 39th Ave Ct)	Vehicle going straight hits pedestrian	E322254	4/20/2014
2013	1	108th St & 47th Ave	Vehicle going straight hits pedestrian	E228121	02/19/13
2012	1	Washington Blvd (West of Gravelly Lake Dr)	Tree or Stump (stationary)	E197496	10/08/12
2011	0	-	-	-	-
2010	1	7800 Block Custer Rd (Ref Bridgeport Way)	Passenger Car, Boulder, Exceeding Reasonable Safe Speed, From West to East	E080019	8/27/2010
	1	Steilacoom Blvd & Woodbourne Rd	Passenger Car, Vehicle Going Straight Hits Pedestrian, From West To East	E044968	3/7/2010
2009	0	-	-	-	-
2008	2	11600 Block Gravelly Lake Dr (Ref Tower Rd)	From opposite direction - all others	3010852	4/20/2008
	1	12500 Block Bridgeport Way (Ref San Francisco Ave)	From opposite direction - both moving - head on, Over center line	2922654	4/4/2008
	1	14500 Block Murray Rd (Ref 146th St)	Tree or stump (stationary), Exceeding reasonable safe speed	2437940	1/29/2008
2007	0	-	-	-	2007
2006	1	12300 Block Bridgeport Way (Ref Seattle Ave)	Vehicle going straight hits pedestrian, Fail to yield ROW to pedestrian, Inattention	2438233	11/15/2006
	1	Washington Blvd & Lake City Blvd	Entering at angle, Disregard stop sign - Flashing red, None	2079425	4/30/2006
2005	1	6000 Block 99th St (Ref 54th Ave)	One parked -- one moving, Under influence of alcohol	909835	2/23/2005
	1	9600 Block Steilacoom Blvd (Ref Farwest Dr)	Retaining Wall (concrete, rock, brick, etc.), Other	2079051	4/8/2005

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4/23/2015

City of Lakewood, Washington
Top 20 Collision Locations
 Collisions Per Million Entering Vehicles (MEV)
2014

#	Intersection	Most Severe Injury					Total Collisions	Average Daily Traffic Street 1	Average Daily Traffic Street 2	Total Entering Vehicles Day Ave	Total Entering Vehicles Yearly Ave	Collisions Per Million Entering Vehicles (MEV)
		Fatal	Serious Injury	Evident Injury	Possible Injury	Unknown or No Injury						
1	Mount Tacoma Dr & Meadow Rd				1	4	5	3,300	2,200	5,500	2,007,500	2.491
2	Bridgeport Way & Pacific Hwy				1	24	25	23,600	12,400	36,000	13,140,000	1.903
3	South Tacoma Way & 96th St			1	8	20	29	30,200	16,200	46,400	16,936,000	1.712
4	100th St & 59th St				4	6	10	11,222	5,844	17,066	6,229,090	1.605
5	Steilacoom Blvd & Farwest Dr				1	11	12	15,256	7,337	22,593	8,246,445	1.455
6	Gravelly Lake Dr & Veterans Dr				2	8	10	13,300	7,400	20,700	7,555,500	1.324
7	Gravelly Lake Dr & Steilacoom Blvd		1	0	2	9	12	11,800	14,100	25,900	9,453,500	1.269
8	Gravelly Lake Dr & Washington Blvd				1	11	12	8,531	18,025	26,556	9,692,940	1.238
9	Steilacoom Blvd & Hipkins Rd & 83rd Ave		1	0	3	11	15	25,191	8,168	33,359	12,176,035	1.232
10	North Gate Rd & Nottingham Rd					1	1	2,044	500	2,544	928,560	1.077
11	Bridgeport Way & 108th St				3	9	12	23,200	8,000	31,200	11,388,000	1.054
12	Steilacoom Blvd & Lakewood Dr			2	3	9	14	18,700	19,600	38,300	13,979,500	1.001
13	84th St & 33rd Ave					6	6	15,860	2,500	18,360	6,701,400	0.895
14	Gravelly Lake Dr & Pacific Hwy				5	5	10	25,186	6,791	31,977	11,671,605	0.857
15	Lakeview Dr & 108th St			1	2	2	5	5,026	11,035	16,061	5,862,265	0.853
16	Pacific Hwy & 104th St Ct				1	3	4	12,859	500	13,359	4,876,035	0.82
17	Bridgeport Way & Custer Rd			1	1	13	15	21,000	29,900	50,900	18,578,500	0.807
18	100th St & Bristol Ave				1	3	4	11,222	2,500	13,722	5,008,530	0.799
19	Military Rd & 112th St		1	0	0	4	5	10,438	6,860	17,298	6,313,770	0.792
20	Bridgeport Way & 75th St				1	8	9	28,700	2,700	31,400	11,461,000	0.785

Intersections only, roadway sections not included.

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J. Howe
4/23/2015

Culmination Top 20 Accident Locations
Collisions Per Million Entering Vehicles (MEV)
2012 Thru 2014

#	Intersection	Accidents Per Million Entering Vehicles				
		2012	2013	2014	Total	Average
1	9400-9500 59th Ave	3.243	2.702	0	5.945	1.982
2	Bridgeport Way & 108th St	1.317	2.195	1.054	4.566	1.522
3	Mt Tacoma Dr & Meadow Rd	0.996	0.996	2.491	4.483	1.494
4	Bridgeport Way & Pacific Hwy	1.065	0.837	1.903	3.805	1.268
5	9000-9100 Farwest Dr	2.24	1.494	0	3.734	1.245
6	So Tacoma W & 96th	0.886	0.886	1.712	3.484	1.161
7	15000-15400 Union Ave	3.016	0.377	0	3.393	1.131
8	So Tacoma W & 100th St	1.333	1.185	0.74	3.258	1.086
9	Gravelly Lk Dr & Veterans Dr	0.397	1.191	1.324	2.912	0.971
10	100th St & 59th Ave	0.482	0.642	1.605	2.729	0.910
11	Steilacoom Blvd & Farwest Dr	0.728	0.485	1.455	2.668	0.889
12	Steilacoom Blvd & 83rd Ave (& Hipkins Rd)	0.493	0.657	1.232	2.382	0.794
13	Steilacoom Blvd & Lakeview Dr	0.93	0.827	0.62	2.377	0.792
14	So Tacoma Way & 88th St	1.112	0.505	0.607	2.224	0.741
15	108th St & Lakeview Ave	0.853	0.512	0.853	2.218	0.739
16	Military Rd & 112th St	0.634	0.792	0.792	2.218	0.739
17	North Gate Rd & Nottingham Rd	1.077	0	1.077	2.154	0.718
18	Steilacoom Blvd & Gravelly Lk Dr	0.74	0.106	1.269	2.115	0.705
19	Bridgeport Way & 59th Ave	1.153	0.314	0.629	2.096	0.699
20	84th St & 33rd Ave	0.448	0.746	0.895	2.089	0.696

2014 - Intersections only, roadways sections not included.

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Culmination Top 20 Accident Locations
Collisions Per Million Entering Vehicles (MEV)
2010 Thru 2014

#	Intersection	Accidents Per Million Entering Vehicles						
		2010	2011	2012	2013	2014	Total	Average
1	Bridgeport Way & 108th St	1.051	1.317	1.317	2.195	1.054	6.934	1.387
2	9400-9500 59th Ave	0	0	3.243	2.702	0	5.945	1.189
3	Steilacoom Blvd & Farwest Dr	0.484	2.547	0.728	0.485	1.455	5.699	1.140
4	Bridgeport Way & Pacific Hwy	0.507	1.37	1.065	0.837	1.903	5.682	1.136
5	So Tacoma W & 96th	0.943	1.122	0.886	0.886	1.712	5.549	1.110
6	9000-9100 Farwest Dr	0.496	1.12	2.24	1.494	0	5.35	1.070
7	15000-15400 Union Ave	1.504	0.377	3.016	0.377	0	5.274	1.055
8	Mt Tacoma Dr & Meadow Rd	0.662	0	0.996	0.996	2.491	5.145	1.029
9	So Tacoma W & 100th St	0.689	0.963	1.333	1.185	0.74	4.91	0.982
10	Gravelly Lk Dr & Veterans Dr	1.056	0.529	0.397	1.191	1.324	4.497	0.899
11	Steilacoom Blvd & 83rd Ave (& Hipkins Rd)	1.201	0.903	0.493	0.657	1.232	4.486	0.897
12	Lakewood Dr & Steilacoom Blvd	1.237	0.93	0.358	0.644	1.001	4.17	0.834
13	Interlaaken Dr & 112th St	1.027	1.544	0	0.772	0.772	4.115	0.823
14	Bridgeport Way & 59th Ave	1.254	0.629	1.153	0.314	0.629	3.979	0.796
15	Steilacoom Blvd & Lakeview Dr	0.825	0.517	0.93	0.827	0.62	3.719	0.744
16	100th St & 59th Ave	0	0.803	0.482	0.642	1.605	3.532	0.706
17	Washington Blvd & Gravelly Lk Dr	0.823	0.722	0.103	0.619	1.238	3.505	0.701
18	North Gate Rd & Nottingham Rd	0	1.077	1.077	0	1.077	3.231	0.646
19	11000 Bridgeport Way	1.369	0.915	0.572	0.343	0	3.199	0.640
20	Washington Blvd & Vernon Ave	0.428	0.806	0.967	0.322	0.645	3.168	0.634

2014 - Intersections only, roadways sections not included.

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LEVEL OF SERVICE



University Place

Tacoma

CHAMBERS BAY

ZIRCON DR SW

WAUGHOP LAKE

LAKE LOUISE

BOYLES LAKE

CARP LAKE

WASHINGTON BLVD SW

AMERICAN LAKE

JBLM

LAKE STEILACOOM

GRAVELLY LAKE

GRAVELLY LAKE DR SW

CARTER LAKE

EMERSON LAKE

STEILACOOM BLVD SW

GRAVELLY LAKE DR SW

BRIDGEPORT WY SW

GRAVELLY LAKE DR SW

GRAVELLY LAKE DR SW

15 HWY N

BRIDGEPORT WY SW

LAKWOOD DR SW

LAKWOOD DR SW

BRIDGEPORT WY SW

15 HWY N

LAKEVIEW AV SW

STACOMA WY

STACOMA WY

STACOMA WY

SR512 E

15 HWY N

15 HWY N

JBLM

Legend

LOS D 0.75c v/c 0.90

LOS E 0.90c v/c 1.00

LOS F v/c > 1.00

Lakes

Jurisdictional Boundaries

**City of Lakewood
Existing (2010)**

PM Peak Hour Corridor LOS

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Map created: June 10, 2010

:\projects\eng\Transportation\Funding2010\Year2010PMPeakCorridors11x17_mrs.mxd



University Place

Tacoma

CHAMBERS BAY

ZIRCON DR SW

WAUGHOP LAKE

LAKE LOUISE

BOYLES LAKE

CARP LAKE

WASHINGTON BLVD SW

AMERICAN LAKE

JBLM

LAKE STEILACOOM

GRAVELLY LAKE

GRAVELLY LAKE DR SW

CARTER LAKE

EMERSON LAKE

STEILACOOM BLVD SW

GRAVELLY LAKE DR SW

BRIDGEPORT WY SW

GRAVELLY LAKE DR SW

GRAVELLY LAKE DR SW

15 HWY N

EMERSON LAKE

BRIDGEPORT WY SW

LAKWOOD DR SW

LAKWOOD DR SW

BRIDGEPORT WY SW

LAKEVIEW AV SW

15 HWY N

STACOMA WY

SR512 E

15 HWY N

Legend

 LOS D 0.75c v/c 0.90

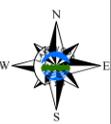
 LOS E 0.90c v/c 1.00

 Lakes

 Jurisdictional Boundaries

**City of Lakewood
Existing (2030)
PM Peak Hour Corridor LOS**

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Street Name/Section	Model Link No.	Traffic Volumes				Directional Capacity ¹		Volume-to-Capacity (v/c) Ratios			
		2010 Existing		2030 Future		Existing	Future	2010 Existing		2030 Future	
		NB/EB	SB/WB	NB/EB	SB/WB			NB/EB	SB/WB	NB/EB	SB/WB
Ardmore Dr SW											
southeast of Steilacoom Blvd SW	6814	644	135	647	134	720	720	0.89	0.19	0.90	0.19
northwest of Whitman Ave SW	4617	447	503	465	501	720	720	0.62	0.70	0.65	0.70
Berkeley St SW											
I-5 overcrossing	5741	665	540	840	500	720	720	0.92	0.75	1.17	0.69
Bridgeport Way W											
north of 75th St W	4225	1,316	1,061	1,326	1,077	2,050	2,050	0.64	0.52	0.65	0.53
north of Custer Rd W	4286	949	886	939	879	2,050	2,050	0.46	0.43	0.46	0.43
south of Custer Rd W	4375	918	835	925	850	2,050	2,050	0.45	0.41	0.45	0.41
north of Gravelly Lake Dr SW	4664	1,213	903	1,224	912	2,050	2,050	0.59	0.44	0.60	0.44
south of Gravelly Lake Dr SW	6740	831	671	826	733	2,050	2,050	0.41	0.33	0.40	0.36
north of 100th St SW	4759	1,103	936	1,144	958	2,050	2,050	0.54	0.46	0.56	0.47
south of 100th St SW	4814	831	764	948	822	2,050	2,050	0.41	0.37	0.46	0.40
south of Lakewood Dr SW	4858	1,181	1,125	1,183	1,156	2,050	2,050	0.58	0.55	0.58	0.56
north of 112th St SW	4936	1,162	1,082	1,248	1,187	2,050	2,050	0.57	0.53	0.61	0.58
north of Pacific Highway SW	5184	1,190	945	1,360	1,140	2,050	2,050	0.58	0.46	0.66	0.56
south of Pacific Highway SW	5301	1,350	1,050	1,520	1,290	2,050	2,050	0.66	0.51	0.74	0.63
I-5 overcrossing	5324	1,265	910	1,450	960	2,050	2,050	0.62	0.44	0.71	0.47
at Clover Creek bridge south of I-5	5422	854	596	867	598	2,050	2,050	0.42	0.29	0.42	0.29
Custer Rd SW/ W											
northeast of Bridgeport Way SW	4339	671	995	681	1,002	1,825	1,825	0.37	0.55	0.37	0.55
southwest of Bridgeport Way SW	4374	665	1,007	656	992	1,825	1,825	0.36	0.55	0.36	0.54
north of 88th St SW	4493	855	1,047	851	1,034	1,825	1,825	0.47	0.57	0.47	0.57
south of 88th St SW	4559	117	177	116	177	2,050	2,050	0.06	0.09	0.06	0.09
Far West Dr SW											
south of Steilacoom Blvd SW	4564	410	442	439	454	2,050	2,050	0.20	0.22	0.21	0.22
Gravelly Lake Dr SW											
southwest of Steilacoom Blvd SW	4600	356	305	419	331	2,050	2,050	0.17	0.15	0.20	0.16
northeast of Bridgeport Way SW	6741	319	401	370	419	1,825	1,825	0.17	0.22	0.20	0.23
southwest of Bridgeport Way SW	6826	734	710	834	664	2,050	2,050	0.36	0.35	0.41	0.32
south of Mount Tacoma Dr SW	4717	1,020	861	1,054	847	2,050	2,050	0.50	0.42	0.51	0.41
south of 100th St SW	4804	999	792	1,005	774	2,050	2,050	0.49	0.39	0.49	0.38
south of Alfaretta St SW	4859	917	664	977	684	2,050	2,050	0.45	0.32	0.48	0.33
north of Wildaire Rd SW	6803	1,018	856	1,083	853	2,050	2,050	0.50	0.42	0.53	0.42
north of 112th St SW	5088	913	869	989	873	2,050	2,050	0.45	0.42	0.48	0.43
west of 112th St SW	6767	974	968	1,036	970	2,050	2,050	0.48	0.47	0.51	0.47
west of end Nyanza Rd SW (S)	5464	571	624	669	713	975	975	0.59	0.64	0.69	0.73
north of Pacific Highway SW	5467	1,125	1,450	1,710	1,310	2,050	2,050	0.55	0.71	0.83	0.64
south of Pacific Highway SW	5490	1,430	1,110	1,710	1,320	2,050	2,050	0.70	0.54	0.83	0.64
I-5 overcrossing	5536	1,000	535	1,320	570	2,050	2,050	0.49	0.26	0.64	0.28

Street Name/Section	Model Link No.	Traffic Volumes				Directional Capacity ¹		Volume-to-Capacity (v/c) Ratios			
		2010 Existing		2030 Future				2010 Existing		2030 Future	
		NB/EB	SB/WB	NB/EB	SB/WB	Existing	Future	NB/EB	SB/WB	NB/EB	SB/WB
Hipkins Rd SW											
south of Steilacoom Blvd SW	4475	479	497	491	502	720	720	0.67	0.69	0.68	0.70
Lakeview Ave SW											
south of 100th St SW	4826	280	241	245	247	1,825	1,825	0.15	0.13	0.13	0.14
south of Steilacoom Blvd SW	6733	310	285	312	294	1,825	1,825	0.17	0.16	0.17	0.16
Lakewood Dr SW											
north of 74th St W	4176	1,309	1,094	1,409	1,134	1,825	1,825	0.72	0.60	0.77	0.62
south of 74th St W	4251	1,089	688	1,147	645	1,825	1,825	0.60	0.38	0.63	0.35
north of Steilacoom Blvd SW	4507	1,372	1,097	1,438	1,057	1,825	1,825	0.75	0.60	0.79	0.58
south of Steilacoom Blvd SW	4602	1,130	927	1,184	957	2,050	2,050	0.55	0.45	0.58	0.47
north of 100th St SW	4745	530	575	580	599	2,050	2,050	0.26	0.28	0.28	0.29
Military Rd SW											
south of 112th St SW	5081	500	316	544	324	975	975	0.51	0.32	0.56	0.33
northwest of 112th St SW	6716	255	199	303	236	975	975	0.26	0.20	0.31	0.24
Mount Tacoma Dr SW											
west of Bridgeport Way	6807	199	169	190	215	975	975	0.20	0.17	0.19	0.22
west of Gravelly Lake Dr	4715	468	537	459	579	975	975	0.48	0.55	0.47	0.59
Murray Rd SW											
north of 146th St SW	5663	845	450	2,200	2,250	720	2,400*	1.17	0.63	0.92	0.94
N Thorne Ln SW											
southeast of Union Ave SW	5656	385	420	400	580	720	720	0.53	0.58	0.56	0.81
Nyanza Rd SW											
north of Gravelly Lake Dr SW	5434	501	288	588	308	975	975	0.51	0.30	0.60	0.32
south of Gravelly Lake Dr SW	5124	611	594	665	615	975	975	0.63	0.61	0.68	0.63
Pacific Highway SW											
north of 108th St SW	4933	1,065	710	1,026	737	2,050	2,050	0.52	0.35	0.50	0.36
southwest of 108th St SW	5030	551	385	600	394	2,050	2,050	0.27	0.19	0.29	0.19
northeast of bridgeport Way SW	5255	480	512	540	550	2,050	2,050	0.23	0.25	0.26	0.27
southwest of Bridgeport Way SW	5302	365	388	410	430	975	975	0.37	0.40	0.42	0.44
east of Gravelly Lake Dr SW	5489	390	395	410	420	720	720	0.54	0.55	0.57	0.58
Phillips Rd SW											
north of Steilacoom Blvd SW	4394	489	241	491	243	720	720	0.68	0.33	0.68	0.34
South Tacoma Way											
north of 84th St SW	4436	1,013	1,182	1,080	1,214	2,050	2,050	0.49	0.58	0.53	0.59
north of Steilacoom Blvd	4527	1,335	1,279	1,555	1,334	2,050	2,050	0.65	0.62	0.76	0.65
south of Steilacoom Blvd SW	6786	1,155	1,407	1,194	1,301	2,050	2,050	0.56	0.69	0.58	0.63
north of 96th St S	4666	1,390	1,520	1,435	1,441	2,050	2,050	0.68	0.74	0.70	0.70
north of 100th St SW	4856	758	1,407	743	1,416	2,050	2,050	0.37	0.69	0.36	0.69
south of SR-512	4898	1,045	1,045	1,137	1,067	2,050	2,050	0.51	0.51	0.55	0.52
southeast of Pacific Highway SW	4934	548	588	531	444	2,050	2,050	0.27	0.29	0.26	0.22

Street Name/Section	Model Link No.	Traffic Volumes				Directional Capacity ¹		Volume-to-Capacity (v/c) Ratios			
		2010 Existing		2030 Future				2010 Existing		2030 Future	
		NB/EB	SB/WB	NB/EB	SB/WB	Existing	Future	NB/EB	SB/WB	NB/EB	SB/WB
Steilacoom Blvd SW											
east of Farwest Dr SW	4562	1,380	1,241	1,499	1,273	1,825	1,825	0.76	0.68	0.82	0.70
west of 87th Ave SW	4490	1,386	1,271	1,501	1,303	1,825	1,825	0.76	0.70	0.82	0.71
west of 83rd Ave SW/Hipkins Rd SW	4474	1,450	1,418	1,534	1,427	2,050	2,050	0.71	0.69	0.75	0.70
west of Phillips Rd SW	6748	1,421	1,673	1,493	1,671	1,825	1,825	0.78	0.92	0.82	0.92
east of Phillips Rd	6865	1,466	1,966	1,534	1,960	2,050	2,050	0.72	0.96	0.75	0.96
southeast of 88th St SW	4557	986	708	992	775	1,825	1,825	0.54	0.39	0.54	0.42
west of Bridgeport Way SW	4592	421	546	478	595	1,825	1,825	0.23	0.30	0.26	0.33
east of Bridgeport Way SW	4586	411	570	468	569	1,825	1,825	0.23	0.31	0.26	0.31
west of Gravelly Lake Dr SW	6724	701	435	783	452	1,825	1,825	0.38	0.24	0.43	0.25
east of Lakewood Dr SW	4601	1,038	790	1,118	861	2,050	2,050	0.51	0.39	0.55	0.42
west of Lakeview Ave SW	6792	975	837	1,052	899	2,050	2,050	0.48	0.41	0.51	0.44
west of South Tacoma Way	4609	956	870	1,062	956	2,050	2,050	0.47	0.42	0.52	0.47
Thorne Ln SW											
I-5 overcrossing	5658	270	670	1,030	1,150	720	2,050	0.38	0.93	0.50	0.56
Union Ave SW											
northeast of Berkeley St SW	6772	460	285	510	230	720	720	0.64	0.40	0.71	0.32
southwest of North Thorne Ln SW	5657	325	260	480	280	720	720	0.45	0.36	0.67	0.39
Washington Blvd SW											
west of Gravelly Lake Dr SW	5268	671	853	731	888	975	975	0.69	0.87	0.75	0.91
west of Interlaken	5299	741	921	807	954	975	975	0.76	0.94	0.83	0.98
Whitman Ave SW											
south of Ardmore Dr SW	4665	358	255	380	307	975	975	0.37	0.26	0.39	0.31
Wildaire Rd SW											
west of Gravelly Lake Dr SW	none	125	97	125	97	720	720	0.17	0.13	0.17	0.13
40th Ave SW											
north of 100th St SW	4729	352	392	365	419	975	975	0.36	0.40	0.37	0.43
74th St											
west of Lakewood Dr	6726	1,051	1,267	822	970	2,050	2,050	0.51	0.62	0.40	0.47
83rd Ave SW											
north of Steilacoom Blvd SW	4371	624	356	630	356	975	975	0.64	0.37	0.65	0.37
84th St S											
east of South Tacoma Way	6795	657	676	901	775	2,050	2,050	0.32	0.33	0.44	0.38
87th Ave SW											
south of Steilacoom Blvd SW	6872	177	209	191	209	720	720	0.25	0.29	0.27	0.29
north of Steilacoom Blvd SW	4453	439	388	471	397	975	975	0.45	0.40	0.48	0.41
88th St SW											
east of Steilacoom Blvd SW	4556	758	980	758	969	1,825	1,825	0.42	0.54	0.42	0.53
93rd St SW											
east of Whitman Ave SW	4663	225	218	310	259	975	975	0.23	0.22	0.32	0.27

Street Name/Section	Model Link No.	Traffic Volumes				Directional Capacity ¹		Volume-to-Capacity (v/c) Ratios			
		2010 Existing		2030 Future		Existing	Future	2010 Existing		2030 Future	
		NB/EB	SB/WB	NB/EB	SB/WB			NB/EB	SB/WB	NB/EB	SB/WB
96th St S											
west of South Tacoma Way	6882	410	226	463	280	975	975	0.42	0.23	0.47	0.29
east of South Tacoma Way	4727	569	571	504	655	1,825	1,825	0.31	0.31	0.28	0.36
100th St SW											
west of South Tacoma Way	6885	872	812	947	814	1,825	1,825	0.48	0.44	0.52	0.45
east of Lakeview Dr SW	4807	1,194	1,134	1,121	1,168	2,050	2,050	0.58	0.55	0.55	0.57
west of Lakeview Dr SW	4824	973	981	959	1,031	2,050	2,050	0.47	0.48	0.47	0.50
east of Lakewood Dr SW	4815	600	535	655	546	2,050	2,050	0.29	0.26	0.32	0.27
east of Bridgeport Way	6736	551	629	582	631	2,050	2,050	0.27	0.31	0.28	0.31
west of Bridgeport Way	4809	395	373	386	367	2,050	2,050	0.19	0.18	0.19	0.18
east of Gravelly Lake Dr	4803	488	461	497	466	1,825	1,825	0.27	0.25	0.27	0.26
108th St SW											
west of Pacific Highway SW	5028	580	396	513	435	720	720	0.81	0.55	0.71	0.60
east of Bridgeport Way SW	5011	521	393	448	427	975	975	0.53	0.40	0.46	0.44
west of Bridgeport Way SW	5008	411	307	397	357	975	975	0.42	0.31	0.41	0.37
east of Davisson Rd SW	5006	295	307	307	312	975	975	0.30	0.31	0.31	0.32
west of Davisson Rd SW	none	41	49	41	49	720	720	0.06	0.07	0.06	0.07
112th St SW/S											
between Military Rd SW & Farwest Dr S	5080	336	260	350	253	720	720	0.47	0.36	0.49	0.35
east of Gravelly Lake Drive	6756	312	349	302	351	975	975	0.32	0.36	0.31	0.36
east of Bridgeport Way SW	5132	186	229	158	237	975	975	0.19	0.23	0.16	0.24
west of Bridgeport Way SW	5112	350	326	342	331	720	720	0.49	0.45	0.48	0.46
150th St SW											
east of Woodbrook Rd SW	5719	394	224	2,100	1,483	720	2,400*	0.55	0.31	0.88	0.62

Notes:

1) Capacity values come from Lakewood Comprehensive Plan . Capacities for roadways widened under future conditions were increased to match similarly sized existing facilities (i.e. widening as part of Cross-Base Highway project on Murray Rd & 150th St).

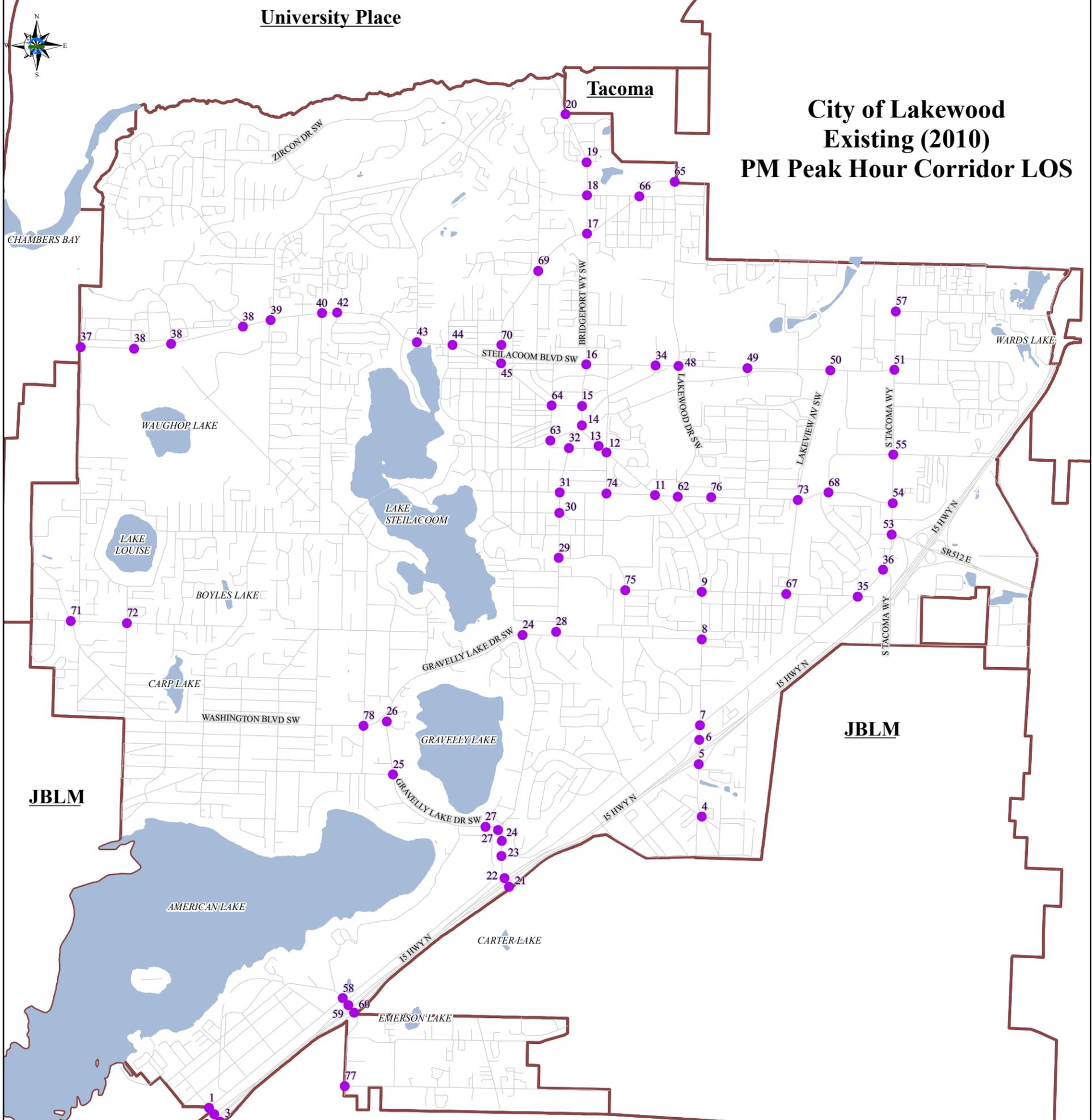
City roadway LOS standard = LOS D

V/C	LOS
0.00 to 0.75	LOS A to LOS C
0.75 to 0.90	LOS D
0.91 to 1.00	LOS E
1.00 and greater	LOS F

University Place

Tacoma

City of Lakewood
Existing (2010)
PM Peak Hour Corridor LOS



Intersection No.	Intersection	2010 Existing PM Peak Hour			2030 Baseline PM Peak Hour			Improvement Assumption	2030 With Improvement PM Peak Hour		
		LOS	Delay	V/C or WM	LOS	Delay	V/C or WM		LOS	Delay	V/C or WM
1	Berkeley St/Junion Ave	B	12.8	0.51	A	8	0.51	Signalized under baseline. Improved with interchange improvements. Per the I-5 corridor study, improvements could include flyover ramps, a SPUA, or diverging diamond. All result in LOS B+.	B	18.9	-
2	Berkeley St/5th I-5 Ramps	B	18.0	0.73	C	24	0.78		B	-	-
3	Berkeley St/5th I-5 Ramps	B	20.9	0.89	C	33	1.00		B	-	-
4	Bridgeport Way/San Francisco Ave	B	28.0	0.66	C	31	0.77				
5	Bridgeport Way/NB I-5 Ramps	C	23.0	0.66	C	28	0.67				
6	Bridgeport Way/SB I-5 Ramps	C	32.1	0.82	C	29	0.81				
7	Bridgeport Way/Pacific Hwy	C	33.7	0.68	C	34	0.78				
8	Bridgeport Way/122nd St	D	35.9	0.71	D	33	0.69				
9	Bridgeport Way/108th St	C	31.0	0.52	B	17	0.54				
10	Bridgeport Way/Lakewood Dr	C	8.0	0.48	A	5	0.40				
11	Bridgeport Way/100th St	C	25.6	0.63	C	30	0.64				
12	Bridgeport Way/59th Ave	B	10.0	0.52	B	10	0.45				
13	Bridgeport Way/Mt. Tacoma Dr	A	25.2	0.64	C	25	0.62				
14	Bridgeport Way/Gravelly Lake Dr	D	25.2	0.75	C	27	0.74				
15	Bridgeport Way/10th St	B	13.4	0.59	B	16	0.56				
16	Bridgeport Way/Steilacoom Blvd	C	25.4	0.81	C	25	0.81				
17	Bridgeport Way/Custer Rd	B	36.2	0.69	B	11	0.69				
18	Bridgeport Way/75th St	E	45.8	0.88				Add EB-LT lane (results in 2 EB-LT & 1 shared EB-LT/RT)	D	42.0	0.65
19	Bridgeport Way/Meadow Park Rd	C	37.5	0.77	D	55	0.88				
20	Bridgeport Way/West-Mart North Access	B	18.0	0.71	B	18	0.82				
21	Gravelly Lake Dr/NB I-5 Ramps	B	11.2	0.61	B	12	0.68				
22	Gravelly Lake Dr/SB I-5 Ramps	B	10.1	0.56	B	17	0.48				
23	Gravelly Lake Dr/Pacific Hwy	D	46.1	0.91	D	41	0.73				
24	Gravelly Lake Dr/Veterans Dr	B	13.4	0.72	C	22	0.70				
25	Gravelly Lake Dr/Washington Blvd	D	19.0	0.63	B	18	0.63				
26	Gravelly Lake Dr/Veterans Rd N	C	21.3	0.64	B	17	0.64				
27	Gravelly Lake Dr/122nd St	B	13.7	0.59	B	12	0.57				
28	Gravelly Lake Dr/112th St	C	30.8	0.71	C	27	0.72				
29	Gravelly Lake Dr/Main St	C	27.7	0.75	C	31	0.69				
30	Gravelly Lake Dr/Alfaretta St	A	9.7	0.53	B	14	0.53				
31	Gravelly Lake Dr/100th St	B	15.8	0.44	C	22	0.38				
32	Gravelly Lake Dr/Mt. Tacoma Dr	C	21.8	0.77	C	23	0.68				
33	Gravelly Lake Dr/Bridgeport Way	C	22.9	0.75	C	26	0.80				
34	Gravelly Lake Dr/Steilacoom Blvd	A	6.8	0.66	A	6	0.69				
35	Pacific Hwy/108th St	C	24.4	0.82	C	21	0.81				
36	Pacific Hwy/5 Tacoma Way	D	44.9	0.82	C	34	0.85				
37	Steilacoom Blvd/Sentinel Dr	A	7.1	0.65	B	16	0.59				
38	Steilacoom Blvd/Western State Hospital	A	6.4	0.65	A	6	0.61				
39	Steilacoom Blvd/87th Ave	D	17.3	0.82	B	16	0.79				
40	Steilacoom Blvd/83rd Ave	B	15.8	0.71	D	36	0.67				
41	Steilacoom Blvd/Custer ES	C	20.3	0.76	D	39	0.75				
42	Steilacoom Blvd/Briggs Ln										
43	Steilacoom Blvd/Phillips Rd										
44	Steilacoom Blvd/88th St										
45	Steilacoom Blvd/Custer Rd										
46	Steilacoom Blvd/Bridgeport Way										
47	Steilacoom Blvd/Gravelly Lake Dr										
48	Steilacoom Blvd/Lakewood Dr										
49	Steilacoom Blvd/Hagness Dr										
50	Steilacoom Blvd/Lakeview Dr										
51	Steilacoom Blvd/S Tacoma Way										
52	S Tacoma Way/Pacific Hwy										
53	S Tacoma Way/SR 512-Perkins Ln							Separate shared EB-TH/LT lane to provide 2 LT & 1 Th	D	52.0	0.93
54	S Tacoma Way/100th St										
55	S Tacoma Way/96th St										
56	S Tacoma Way/Steilacoom Blvd										
57	S Tacoma Way/86th St										
58	Thorne Ln/Junion Ave										
59	Thorne Ln/SB I-5 Ramps							Construct SPUA as part of Cross-Base Highway	D	39.5	0.96
60	Thorne Ln/SB I-5 Ramps							Construct SPUA as part of Cross-Base Highway			
61	100th St/Wasatah St										
62	100th St/Lakewood Dr										
63	Motor Ave/Whitman Ln										
64	Judith Ave/Whitman Ln										
65	Custer Rd/Lakewood Dr										
66	79th St/Custer Rd										
67	100th St/Lakewood Dr										
68	100th St/40th Ave										
69	John Dower Rd/Custer Rd										
70	88th St/Custer Rd										
71	112th St/Old Military Rd										
72	112th St/Holden Rd										
73	100th St/Holden Rd										
74	100th St/59th Ave										
75	100th St/Main St										
76	120th St/Good Ln										
77	Murray Rd/150th St							Realign roadway & install signal as part of Cross-Base Highway	C	34.0	0.93
78	Washington Way/Interlaken Dr							Traffic signal installed under baseline			

- Legend**
- LOS Intersections
 - Lakes
 - ▭ Jurisdictional Boundaries

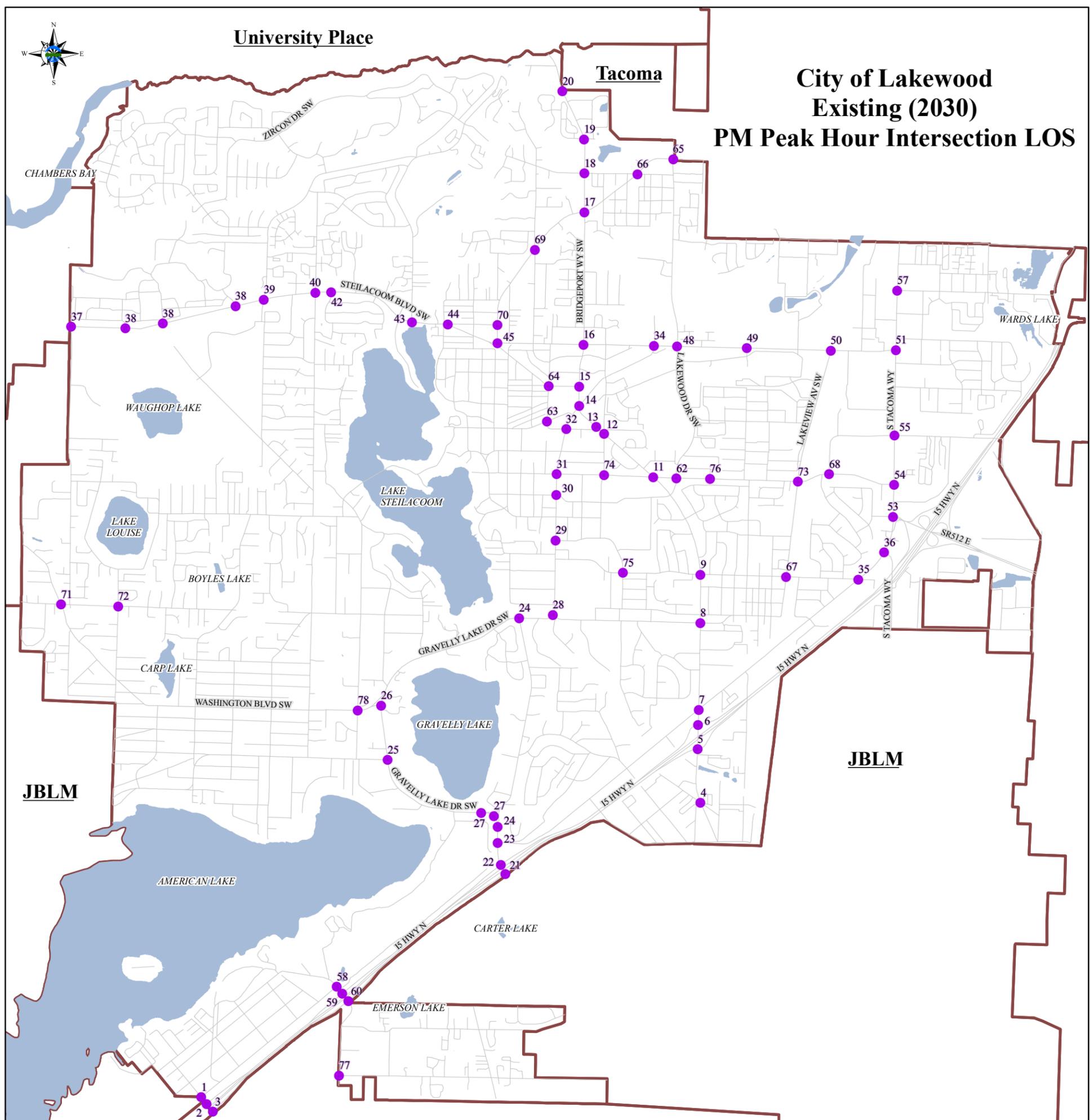
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Notes:
 (1) Existing conditions observed in the field indicate LOS F conditions. Without future improvement, these intersections would continue to operate similar to today's conditions with additional traffic volume increases. (i.e. LOS F)
 A - D = Meets or exceeds City LOS D standard
 E = LOS E (below City standard)
 F = LOS F (below City standard)

University Place

Tacoma

City of Lakewood
Existing (2030)
PM Peak Hour Intersection LOS



Intersection No.	Intersection	2010 Existing PM Peak Hour			2030 Baseline PM Peak Hour			Improvement Assumption	2030 With-Improvement PM Peak Hour		
		LOS	Delay	V/C or WM	LOS	Delay	V/C or WM		LOS	Delay	V/C or WM
1	Berkeley St/Union Ave	C	12.8	0.51	A	8	0.51		B	18.9	
2	Berkeley St/SR I-5 Ramps	C	18.0	0.73	C	24	0.78		B	18.9	
3	Berkeley St/NB I-5 Ramps	C	20.9	0.89	C	33	1.00		B	18.9	
4	Bridgeport Way/San Francisco Ave	B	28.0	0.66	C	31	0.77		B	18.9	
5	Bridgeport Way/NB I-5 Ramps	C	23.0	0.66	C	28	0.67		B	18.9	
6	Bridgeport Way/SR I-5 Ramps	C	32.1	0.82	C	29	0.81		B	18.9	
7	Bridgeport Way/Pacific Hwy	C	33.7	0.68	C	34	0.78		B	18.9	
8	Bridgeport Way/122nd St	C	35.9	0.71	D	33	0.69		B	18.9	
9	Bridgeport Way/108th St	D	11.0	0.52	B	17	0.54		B	18.9	
10	Bridgeport Way/Lakewood Dr	A	8.0	0.48	A	5	0.40		B	18.9	
11	Bridgeport Way/59th Ave	B	33.5	0.63	C	30	0.64		B	18.9	
12	Bridgeport Way/59th Ave	B	10.0	0.52	B	10	0.45		B	18.9	
13	Bridgeport Way/Mt. Tacoma Dr	C	25.2	0.64	C	25	0.62		B	18.9	
14	Bridgeport Way/Gravelly Lake Dr	C	35.2	0.75	C	27	0.74		B	18.9	
15	Bridgeport Way/33rd St	B	13.4	0.59	B	16	0.56		B	18.9	
16	Bridgeport Way/Steilacoom Blvd	C	25.4	0.81	C	25	0.81		B	18.9	
17	Bridgeport Way/75th St	B	16.2	0.69	B	11	0.69		B	18.9	
18	Bridgeport Way/Meadow Park Rd	C	16.2	0.69	B	11	0.69		B	18.9	
19	Bridgeport Way/1st North Access	B	61.5	0.68	D	55	0.88	Add EB-LT lane (results in 2 EB-LT & 1 shared EB-LT/TH/R)	D	42.0	0.65
20	Gravelly Lake Dr/NB I-5 Ramps	D	37.5	0.77	D	55	0.88		D	42.0	0.65
21	Gravelly Lake Dr/SR I-5 Ramps	B	18.0	0.73	B	18	0.62		D	42.0	0.65
22	Gravelly Lake Dr/Pacific Hwy	B	11.2	0.61	B	12	0.68		D	42.0	0.65
23	Gravelly Lake Dr/Nyanza Rd S	B	10.1	0.56	B	17	0.48		D	42.0	0.65
24	Gravelly Lake Dr/Nyanza Rd N	D	46.1	0.91	D	41	0.73		D	42.0	0.65
25	Gravelly Lake Dr/Washington Blvd	B	13.4	0.72	C	22	0.70		D	42.0	0.65
26	Gravelly Lake Dr/122nd St	B	19.0	0.63	B	18	0.63		D	42.0	0.65
27	Gravelly Lake Dr/Main St	C	21.3	0.64	B	17	0.64		D	42.0	0.65
28	Gravelly Lake Dr/Affarietta St	B	13.7	0.59	B	12	0.57		D	42.0	0.65
29	Gravelly Lake Dr/200th St	C	30.8	0.71	C	27	0.72		D	42.0	0.65
30	Gravelly Lake Dr/Tacoma Dr	C	27.7	0.75	C	31	0.69		D	42.0	0.65
31	Gravelly Lake Dr/Bridgeport Way	C	*See Int #14		C	*See Int #14			D	42.0	0.65
32	Gravelly Lake Dr/Steilacoom Blvd	A	9.7	0.53	B	14	0.53		D	42.0	0.65
33	Pacific Hwy/108th St	B	15.8	0.44	C	22	0.88		D	42.0	0.65
34	Pacific Hwy/5 Tacoma Way	C	31.8	0.77	C	23	0.68		D	42.0	0.65
35	Steilacoom Blvd/Sentinel Dr	C	22.9	0.75	C	26	0.80		D	42.0	0.65
36	Steilacoom Blvd/Western State Hospital	A	6.8	0.66	A	6	0.69		D	42.0	0.65
37	Steilacoom Blvd/87th Ave	C	24.4	0.82	C	21	0.81		D	42.0	0.65
38	Steilacoom Blvd/83rd Ave	D	44.9	0.82	C	34	0.85		D	42.0	0.65
39	Steilacoom Blvd/Custer ES	A	7.1	0.65	B	16	0.59		D	42.0	0.65
40	Steilacoom Blvd/Briggs Ln	B	6.4	0.65	A	6	0.61		D	42.0	0.65
41	Steilacoom Blvd/Phillips Rd	B	17.3	0.82	B	16	0.79		D	42.0	0.65
42	Steilacoom Blvd/88th St	B	15.8	0.71	D	36	0.67		D	42.0	0.65
43	Steilacoom Blvd/Custer Rd	C	28.1	0.76	D	39	0.75		D	42.0	0.65
44	Steilacoom Blvd/Bridgeport Way	C	*See Int #16		C	*See Int #16			D	42.0	0.65
45	Steilacoom Blvd/Gravelly Lake Dr	C	*See Int #14		C	*See Int #14			D	42.0	0.65
46	Steilacoom Blvd/Lakewood Dr	D	44.0	1.09	D	39	0.90		D	42.0	0.65
47	Steilacoom Blvd/Hageness Dr	A	3.8	0.49	A	2	0.39		D	42.0	0.65
48	Steilacoom Blvd/Lakeview Dr	B	12.6	0.60	B	13	0.55		D	42.0	0.65
49	Steilacoom Blvd/15th St	D	37.9	0.97	C	35	0.78		D	42.0	0.65
50	S Tacoma Way/Pacific Hwy	C	31.8	0.77	C	24	0.73		D	42.0	0.65
51	S Tacoma Way/SR 112 Perkins Ln	E	58.5	0.84	E	57	0.99	Separate shared EB-TH/LT lane to provide 2 LT & 1 TH	D	52.0	0.93
52	S Tacoma Way/100th St	B	13.5	0.77	B	17	0.74		D	52.0	0.93
53	S Tacoma Way/96th St	C	30.3	0.71	C	28	0.74		D	52.0	0.93
54	S Tacoma Way/Steilacoom Blvd	C	*See Int #51		C	*See Int #51			D	52.0	0.93
55	S Tacoma Way/86th St	C	20.2	0.74	C	28	0.73		D	52.0	0.93
56	Thorne Ln/Union Ave	B	11.6	0.60	C	21	0.78		D	52.0	0.93
57	Thorne Ln/SR I-5 Ramps	D	43.0	0.60	F	211	1.37	Construct SPU as part of Cross-Base Highway	D	38.5	0.96
58	Thorne Ln/NB I-5 Ramps	D	41.0	0.59	F	211	1.37	Construct SPU as part of Cross-Base Highway	D	38.5	0.96
59	84th St/Wapato St	A	7.8	0.34	A	8	0.39		D	38.5	0.96
60	100th St/Lakewood Dr	C	25.6	0.57	D	36	0.55		D	38.5	0.96
61	100th St/Whitman Ln	B	8.7	0.36	B	11	0.26		D	38.5	0.96
62	100th St/Whitman Ln	B	14.3	0.49	C	22	0.43		D	38.5	0.96
63	100th St/Lakewood Dr	D	12.0	0.84	D	40	0.93		D	38.5	0.96
64	100th St/Custer Rd	B	12.3	0.62	C	22	0.61		D	38.5	0.96
65	100th St/Lakeview Dr	A	7.8	0.39	C	34	0.45		D	38.5	0.96
66	100th St/40th Ave	B	11.2	0.67	B	14	0.70		D	38.5	0.96
67	100th St/Custer Rd	A	6.9	0.70	A	9	0.64		D	38.5	0.96
68	100th St/Custer Rd	A	5.4	0.61	A	7	0.65		D	38.5	0.96
69	100th St/Old Military Rd	A	7.7	0.49	B	19	0.45		D	38.5	0.96
70	100th St/Hudson Rd	A	7.5	0.81	B	13	0.27		D	38.5	0.96
71	100th St/Lakewood Dr	B	18.9	0.67	C	22	0.69		D	38.5	0.96
72	100th St/59th Ave	B	16.1	0.41	B	20	0.35		D	38.5	0.96
73	100th St/Main St	A	9.7	0.37	A	10	0.38		D	38.5	0.96
74	100th St/Daniel Ln	A	4.6	0.41	A	6	0.36		D	38.5	0.96
75	Murray Rd/150th St	F			F			Realign roadway & install signal as part of Cross-Base Highway	C	34.0	0.93
76	Washington Way/Interlaken Dr	A			A	5	0.75	Traffic signal installed under baseline	C	34.0	0.93

Legend

- LOS Intersection
- Lakes
- ▭ Jurisdictional Boundaries

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Intersection			2010 Existing PM Peak Hour			2030 Baseline PM Peak Hour			2030 With-Improvement PM Peak Hour			
No.	Corridor	Intersection	LOS	Delay	V/C or WM	LOS	Delay	V/C or WM	Improvement?	LOS	Delay	V/C or WM
1	Berkeley St	Berkeley St/Union Ave	B (F) ¹	14.1	-	B (F)	18.9	-	Singalized under baseline. Improved with interchange improvements.	B	18.9	-
2	Berkeley St	Berkeley St/SB I-5 Ramps	C (F) ¹	32.8	0.76	C (F)	32.4	0.84	Per the I-5 corridor study, improvements could include: flyover ramps, a SPUI, or diverging diamond. All result in LOS B+.	B	-	-
3	Berkeley St	Jackson Ave/NB I-5 Ramps	C (F) ¹	21.6	0.80	C (F)	26.2	0.83		B	-	-
4	Bridgeport Way	Bridgeport Way/San Francisco Ave	B	12.8	0.51	A	8.3	0.51				
5	Bridgeport Way	Bridgeport Way/NB I-5 Ramps	B	18.0	0.73	C	24.0	0.78				
6	Bridgeport Way	Bridgeport Way/SB I-5 Ramps	C	20.9	0.89	C	32.5	1.00				
7	Bridgeport Way	Bridgeport Way/Pacific Hwy	C	28.0	0.66	C	30.6	0.77				
8	Bridgeport Way	Bridgeport Way/112th St	C	23.0	0.66	C	27.9	0.67				
9	Bridgeport Way	Bridgeport Way/108th St	C	32.1	0.82	C	29.3	0.81				
10	Bridgeport Way	Bridgeport Way/Lakewood Dr	C	33.7	0.68	C	34.9	0.78				
11	Bridgeport Way	Bridgeport Way/100th St	D	35.9	0.71	D	32.2	0.69				
12	Bridgeport Way	Bridgeport Way/59th Ave	B	11.0	0.52	B	17.1	0.54				
13	Bridgeport Way	Bridgeport Way/Mt. Tacoma Dr	A	8.0	0.48	A	5.5	0.39				
14	Bridgeport Way	Bridgeport Way/Gravelly Lake Dr	C	33.6	0.63	C	29.6	0.64				
15	Bridgeport Way	Bridgeport Way/93rd St	B	10.0	0.52	B	10.3	0.45				
16	Bridgeport Way	Bridgeport Way/Steilacoom Blvd	C	25.2	0.64	C	25.0	0.62				
17	Bridgeport Way	Bridgeport Way/Custer Rd	D	35.2	0.75	C	26.5	0.74				
18	Bridgeport Way	Bridgeport Way/75th St	B	13.4	0.59	B	16.0	0.56				
19	Bridgeport Way	Bridgeport Way/Meadow Park Rd	C	25.4	0.81	C	24.3	0.81				
20	Bridgeport Way	Bridgeport Way/Wal-Mart North Access	B	16.2	0.69	B	11.2	0.69				
21	Gravelly Lake Dr	Woodbrook Rd SW/NB I-5 Ramps	E	61.5	0.68	F	88.6	0.78	Add EB-LT lane (results in 2 EB-LT & 1 shared EB LT/Th/RT)	D	42.0	0.65
22	Gravelly Lake Dr	Gravelly Lake Dr/SB I-5 Ramps	D	37.5	0.77	D	54.9	0.88				
23	Gravelly Lake Dr	Gravelly Lake Dr/Pacific Hwy	B	18.0	0.71	B	18.1	0.82				
24	Gravelly Lake Dr	Gravelly Lake Dr/Nyanza Rd S	B	11.2	0.61	B	12.4	0.68				
25	Gravelly Lake Dr	Gravelly Lake Dr/Veterans Dr	B	10.1	0.56	B	17.4	0.48				
26	Gravelly Lake Dr	Gravelly Lake Dr/Washington Blvd	D	46.1	0.91	D	40.4	0.73				
27	Gravelly Lake Dr	Gravelly Lake Dr/Nyanza Rd N	B	13.4	0.72	C	22.0	0.70				
28	Gravelly Lake Dr	Gravelly Lake Dr/112th St	B	19.0	0.63	B	17.5	0.63				
29	Gravelly Lake Dr	Gravelly Lake Dr/Main St	C	21.3	0.64	B	17.1	0.64				
30	Gravelly Lake Dr	Gravelly Lake Dr/Alfaretta St	B	13.7	0.59	B	11.6	0.57				
31	Gravelly Lake Dr	Gravelly Lake Dr/100th St	C	30.8	0.71	C	27.9	0.72				
32	Gravelly Lake Dr	Gravelly Lake Dr/Mt. Tacoma Dr	C	27.7	0.75	C	28.1	0.69				
33	Gravelly Lake Dr	Gravelly Lake Dr/Bridgeport Way		*See Int #14			*See Int #14					
34	Gravelly Lake Dr	Gravelly Lake Dr/Steilacoom Blvd	A	9.7	0.53	B	13.4	0.53				
35	Other	84th St/Wapato St	A	7.8	0.34	A	7.9	0.39				
36	Other	100th St/Lakewood Dr	C	25.6	0.57	D	35.4	0.55				
37	Other	Motor Ave/Whitman Ave	A	8.7	0.36	B	11.3	0.26				
38	Other	Ardmore Dr/Whitman Ave	B	14.3	0.49	C	21.5	0.43				
39	Other	Custer Rd/Lakewood Dr	D	41.0	0.84	D	40.3	0.93				
40	Other	75th St/Custer Rd	B	12.3	0.62	C	22.4	0.61				
41	Other	108th St/Lakeview Dr	A	7.8	0.39	C	33.8	0.45				
42	Other	100th St/40th Ave	B	11.2	0.67	B	13.4	0.69				
43	Other	John Dower Rd/Custer Rd	A	6.9	0.70	A	9.3	0.64				
44	Other	88th St/Custer Rd	A	5.4	0.61	A	7.0	0.65				
45	Other	112th St/Old Military Rd	A	7.7	0.49	B	18.5	0.45				
46	Other	112th St/Holden Rd	A	7.5	0.31	B	12.6	0.27				
47	Other	100th St/Lakeview Dr	B	18.9	0.67	C	21.4	0.68				
48	Other	100th St/59th Ave	B	16.1	0.41	B	19.5	0.35				
49	Other	108th St/Main St	A	9.7	0.37	A	9.5	0.38				
50	Other	100th St/David Ln	A	4.6	0.41	A	5.7	0.36				
51	Other	Murray Rd/150th St	F	58.0	-	F	>180	-				
52	Pacific Hwy	Pacific Hwy/108th St	B	15.8	0.44	C	22.3	0.38				
53	Pacific Hwy	Pacific Hwy/S Tacoma Way	C	31.8	0.77	C	22.6	0.68	Separate shared EB-Th/LT lane to provide 2 LT & 1 Th	D	52.0	0.93
54	S Tacoma Way	S Tacoma Way/Pacific Hwy	C	31.8	0.77	C	22.6	0.68				
55	S Tacoma Way	S Tacoma Way/SR 512-Perkins Ln	E	58.5	0.84	E	56.5	0.99				
56	S Tacoma Way	S Tacoma Way/100th St	B	13.5	0.77	B	16.9	0.74				
57	S Tacoma Way	S Tacoma Way/96th St	C	30.3	0.71	C	28.6	0.75				
58	S Tacoma Way	S Tacoma Way/Steilacoom Blvd		*See Int #51			*See Int #51					

Intersection			2010 Existing PM Peak Hour			2030 Baseline PM Peak Hour			Improvement?	2030 With-Improvement PM Peak Hour		
No.	Corridor	Intersection	LOS	Delay	V/C or WM	LOS	Delay	V/C or WM		LOS	Delay	V/C or WM
59	S Tacoma Way	S Tacoma Way/84th St	C	20.3	0.74	C	27.8	0.73	Construct SPUI as part of Cross-Base Highway	D	39.5	0.96
60	Steilacoom Blvd	Steilacoom Blvd/Sentinel Dr	C	22.9	0.75	C	26.0	0.80				
61	Steilacoom Blvd	Steilacoom Blvd/Western State Hospital (Circle Dr)	A	6.8	0.66	A	5.9	0.69				
62	Steilacoom Blvd	Steilacoom Blvd/87th Ave	C	24.4	0.82	C	21.3	0.81				
63	Steilacoom Blvd	Steilacoom Blvd/83rd Ave	D	44.9	0.82	C	34.1	0.85				
64	Steilacoom Blvd	Steilacoom Blvd/Fairway Dr (Custer Elem. School)	A	7.1	0.65	B	16.0	0.59				
65	Steilacoom Blvd	Steilacoom Blvd/Briggs Ln	A	6.4	0.65	A	6.0	0.61				
66	Steilacoom Blvd	Steilacoom Blvd/Phillips Rd	B	17.3	0.82	B	16.3	0.79				
67	Steilacoom Blvd	Steilacoom Blvd/88th St	B	15.8	0.71	D	35.5	0.67				
68	Steilacoom Blvd	Steilacoom Blvd/Custer Rd	C	29.3	0.76	D	38.4	0.75				
69	Steilacoom Blvd	Steilacoom Blvd/Bridgeport Way		*See Int #16			*See Int #16					
70	Steilacoom Blvd	Steilacoom Blvd/Gravelly Lake Dr		*See Int #34			*See Int #34					
71	Steilacoom Blvd	Steilacoom Blvd/Lakewood Dr	D	44.0	1.09	D	39.0	0.90				
72	Steilacoom Blvd	Steilacoom Blvd/Hageness Dr	A	3.8	0.49	A	1.6	0.39				
73	Steilacoom Blvd	Steilacoom Blvd/Lakeview Dr	B	12.6	0.60	B	13.2	0.55				
74	Steilacoom Blvd	Steilacoom Blvd/S Tacoma Way	D	37.9	0.67	C	35.0	0.78				
75	Thorne Ln	Thorne Ln/Union Ave	B	11.6	EB	C	20.9	WB				
76	Thorne Ln	Thorne Ln/SB I-5 Ramps	D	43.0	0.60	F	214.3	1.37				
77	Thorne Ln	Murray Rd SW/NB I-5 Ramps	D	41.0	0.59	F	119.2	1.40	Realign roadway & install signal as part of Cross-Base Highway Traffic signal installed under baseline	C	34.0	0.93
78	Other	Washington Way/Interlaken Dr	F	122.0		A	5.2	0.75				

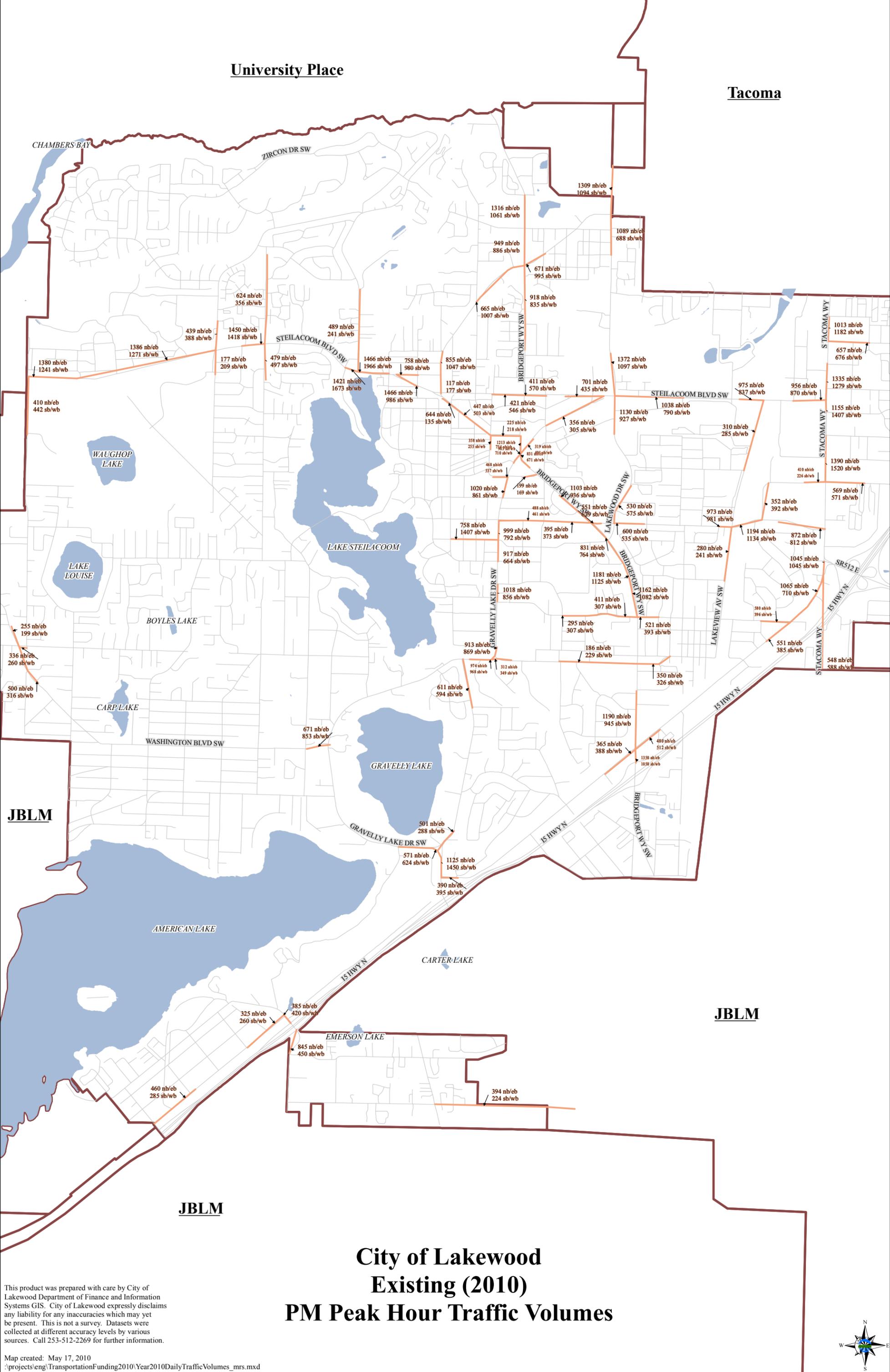
Notes:

1) Existing conditions observed in the field indicate LOS F conditions. Without future improvement, these intersections would continue to operate similar to today's conditions with additional traffic volume increases. (i.e. LOS F)

- A - D = Meets or exceeds City LOS D standard
- E = LOS E (below City standard)
- F = LOS F (below City standard)

University Place

Tacoma



JBLM

JBLM

JBLM

City of Lakewood
Existing (2010)
PM Peak Hour Traffic Volumes

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Map created: May 17, 2010
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CAPITAL FACILITIES



City of Lakewood
Status of Projects through 2015
(Comprehensive Plan, 2016-2021 TIP, and Requested Projects)

Section 1

NEW CONSTRUCTION ARTERIAL STREET PROJECTS	STATUS
1.1 108th St SW Lakeview to S. Tacoma Way- Reconstruct	completed
1.2 Nyanza Road (Gravelly Lk DR) and I-5 Right Turn Lane	unfunded
1.3 Cross Base Highway	on- going
1.4 Union Ave Berkeley to Thorne Ln. - Reconstruct	partial 2014-2015
1.5 146th Street	unfunded
1.6 Interlaaken Dr	unfunded
1.7 Interlaaken Dr / 104th St / Beech Ln Cul-de-sac	unfunded
1.8 Hipkins Traffic Calming	completed
1.9 Reconstruction of intersection of Gravelly Lk Dr / Steilacoom Blvd / Lakewood Dr	completed
1.10 Lakewood Dr Right Turn Lane at So. 74th	completed
1.11 Gravelly Lake Dr and 112th Intersection Improvement	unwarranted ?
1.12 112th St between BPW & Lakeview - Reconstruct	partially funded - see project 2.73
1.13 47th Ave SW / I-5 to 123rd St SW	unfunded
1.14 Elwood & Dresden Intersection (PE Only)	unfunded
1.15 Bridgeport Way / Lakewood Dr to 59th Ave	completed
1.16 Main Street and Wildaire	completed
1.17 Bridgeport Way West - Widening	completed
1.18 96th Street 2-way left turn lane	2012 design only
1.19 Custer Road and John Dower Rd Int. (Number 1.14 in 2006-2011 TIP)	partial 2014 - see 3.18
1.20 123rd St SW - Realingment at Bridgeport Way	unfunded
1.21 Murray Rd and 150th Corridor Capacity	Phase 1 construction completed
1.22 Gravelly to Thorne Connector	unfunded
1.23 Interstate 5 through Lakewood	Interchange Justification Reports funded
1.24 Madigan Access Project	2014-2016
1.25 North Gate Access Improvements	unfunded
1.26 Steilacoom Blvd / South Tacoma Way	2015-2016
1.27 Bridgeport Way - I-5 Ramp to Pacific Hwy	unfunded

Section 2

ROADWAY IMPROVEMENTS	STATUS
2.1 59th Ave SW (one side) Seeley Lk Apts to 100th St	completed
2.2 Pacific St (south side) Kline to Lakeview Ave	completed
2.3 121st St, north side Vernon -Alameda, south side Lake City Blvd on 83rd; east side Lake City Blvd -Washington to 121st	completed
2.4 John Dower Road (east side) -Custer to 75th Street West	completed
2.5 Idlewild Road SW (east side) -104th to 112th	completed
2.6 104th St SW (south side) -Hipkins to Idlewild	completed
2.7 no project	n/a
2.8 Onyx -Garnet Ln to Coral Ln (east side)	unfunded
2.9 So. Tacoma Way (east side) -92nd to Steilacoom Blvd	completed
2.10a So. Tacoma Way (east side) -92nd to Pierce Transit Base Expansion	completed
2.10 Steilacoom Blvd (south side) -Chambers Creek Bridge to Lk Steilacoom Pt Road	unfunded
2.11 East side of I-5 between American Lk Gardens and Gravelly Lk Dr	unfunded
2.12 Hillhurst Dr & Montrose Ave	unfunded
2.13 Bridgeport Way -San Francisco to I-5	renamed as 2.67
2.14 101st St SW & Lake Louise Dr SW -Farwest Dr to 104th St (PE Only)	unfunded

2.15 104th St SW (PE Only) -Lake Louise Dr to Butte Dr SW	unfunded
2.16 SW Corner 93rd St SW & Whitman Ave	unfunded
2.17 So. Tacoma Way (west side) -Steilacoom Blvd to 92nd	completed
2.18 So. Tacoma Way (west side) -92nd to Pierce Transit	completed

Section 2

Roadway Improvements, continued

STATUS

2.19 Pacific Highway Bridgeport Way to BNSF (Phase 1)	completed
2.19A Pacific Highway Bridgeport Way to BNSF (Phase 2)	completed
2.20 Custer Rd (east side) -Meadow Rd to Steilacoom	unfunded
2.21 Custer Rd (south side) -John Dower to Meadow	completed
2.22 Bridgeport Way (PE Only) -No. City Limits to Custer Rd	completed
2.23 80th Ave W /Onyx Dr -85th Ave W to Coral Ln	unfunded
2.24 Pacific Highway -BNSF Trestle to 108th St	completed
2.25 Bridgeport Way -59th Ave to Steilacoom Blvd	completed
2.26 Sidewalks in vicinity of schools	on-going
2.27 88th St SW (north side) -Edgewater to Custer	unfunded
2.28 Pacific St (south side) -Cronin to 47th	completed
2.29 Steilacoom Blvd -Custer Rd to 88th	2015
2.30 San Francisco Ave (one side) -Lincoln to Bridgeport	completed
2.31 100th St (south side) -Bridgeport to Lakeview	unfunded & partial project as 2.72
2.32 Lakewood Dr (one side) -Steilacoom Blvd to Flett Creek	partial-2005
2.33 Oakwood Elementary Sidewalks	completed
2.34 Custer Road (south side) -Bridgeport to John Dower	completed
2.35 87th Ave SW -Steilacoom Blvd to entrance of Fort Steilacoom Golf Course	completed
2.35a All Weather Surface Bus Stops	on-going
2.36 NEC of Steilacoom Blvd and Lakewood Dr	completed
2.36a Flashing Lights at School Crossings	on-going
2.37 Holden Rd -Military Rd to Mann Jr High	completed
2.38 Tillicum Sidewalks	partially completed in 2010 with sewer. See Union Ave Project
2.39 Angle Lane -Hipkins Rd to Elwood Dr (south side only)	unfunded
2.40 Bridgeport Way - Steilacoom to N City Limit - PE only	completed
2.41 Steilacoom Boulevard - BP to Fairlawn	unfunded
2.42 100th ST SW - GLD to 59th Ave	completed
2.43 112th St SW -Racquet Club through Police Precinct	unfunded
2.44 Lakewood Dr (west side) -south side of Lakewood Community Center	completed
2.45 Lakewood Dr (east side) -north side of YMCA to Steilacoom Blvd	completed
2.46 Veterans Dr -Veterans Dr curve to American Lk Park	unfunded
2.48 Bridgeport Way Steilacoom to 83rd	completed
2.49 Bridgeport Way - 83rd to 75th	completed
2.50 Gravelly Lake Dr - 100th to Bridgeport	2016
2.52 Bridgeport Way - Custer to 75th (added to 2.49)	completed
2.53 Bridgeport Way - 75th to N City Limit	completed
2.54 Minor Pedestrian Safety Improvements	on-going
2.55 High Accident Location Safety Improvements	on-going
2.56 So. Tacoma Wy/112/34th/Chapel - LID	completed
2.57 Pacific Hwy - GLD to Bridgeport Way (LID)	completed
2.58 Pacific Hwy - 108th ST to SR 512	completed
2.59 Kendrick St - 112th to South End (Lakewood Station connection)	completed
2.60 So. Tacoma Way - SR512 to 96th Street	2015-2016 construction
2.61 ADA Standards - Sidewalk Upgrades	on-going starting in 2010
2.62 Steilacoom Blvd - Farwest - 87th (c&g both sides)	completed
2.63 Park Lodge Elementary - Safe Routes to Schools	completed

Section 2**Roadway Improvements, continued****STATUS**

2.64 no project	
2.65 Steilacoom Blvd - 87th to 83rd	unfunded
2.66 Steilacoom Blvd - 83rd to Weller Road	unfunded
2.67 Bridgeport Way - JBLM to I-5	2015-2016
2.68 Hipkins Road - 104th to Steilacoom Blvd	unfunded
2.69 Gravelly Lake Drive - Bridgeport to Steilacoom Road diet	unfunded
2.70 Lakewood Station - Non-Motorized Access Improvements	unfunded
2.71 Steilacoom Blvd - Weller Road to Phillips Road	unfunded
2.72 100th & Lakewood Drive	unfunded
2.73 112th / 111th - Bridgeport to Kendrick	funded through right-of-way (2015)
2.74 Steilacoom Blvd (design) - Farwest to Phillips	2015-2017
2.75 South Tacoma Way - 88th to N. City Limits	unfunded
2.76 Phillips Road - Steilacoom to Onyx	unfunded
2.77 Washington Blvd - Edgewood to Gravelly Lake Drive	unfunded
2.78 Oakbrook Sidewalks & Street Lighting	unfunded
2.79 Lake City Business District Sidewalks	unfunded
2.80 Interlaaken Dr / Mt. Tacoma Dr - Short Lane to Whitman Ave	unfunded
2.81 Roadway Safety Improvements - 40th Ave SW and 96th St SW	2017 construction
2.82 59th Ave SW - 100th to Bridgeport (east side)	unfunded

Sidewalk, etc. Project Requests

2.100 Davisson Rd -112th St to 108th St	unfunded
2.101 Coral Lane -Onyx to Sardonyx	unfunded
2.102 Onyx Dr -87th Ave to Onyx Ct	unfunded
2.103 Onyx and Zircon -the entire length	unfunded
2.104 Lake Steilacoom Drive	unfunded
2.105 111th - Clover Park H.S. to Villa Lane	unfunded
2.106 Military / 112th Sidewalks	unfunded
2.107 Military / 107th Sidewalks	unfunded
2.108 McChord Dr - New York Ave to Bridgeport	unfunded
2.109 100th & Lakeview / 100th & Lakewood Dr ADA ramps	unfunded
2.110	

Section 3**TRAFFIC SIGNALS****STATUS**

3.1 Steilacoom Blvd and Durango	unfunded
3.2 Gravelly Lk Dr and School St	completed
3.3 Union Ave and Berkeley	completed
3.4 Motor Ave and Whitman	completed
3.5 Traffic Signal Timing (Steilacoom Blvd) Gravelly Lk Dr	completed
3.6 Red Signal Detection Equipment	completed
3.6a Upgrade of Master Traffic Signal Control Computer System	completed
3.7 Bridgeport Way and San Francisco Ave	completed
3.7a Washington Blvd and Interlaaken Dr -Signal and Intersection Improvement	unfunded
3.8 Traffic Signal Timing Upgrades	on-going
3.9 Traffic Signal Equipment Upgrades	on going
3.10 South Tacoma Way & 88th Steet	2016
3.11 City-Wide Traffic Management System	ph 5 - 2015-2016
3.12 Traffic Signal Replacement Program	unfunded
3.13 Gravelly Lake Dr / Avondale Signal	unfunded

3.14 So. Tacoma Way / 92nd - new signal	unfunded
3.15 Citywide Safety Program	completed
3.16 Steilacoom Blvd / Western State Hospital	2015
3.17 Steilacoom Blvd / Lakeview Ave	2015
3.18 Custer / John Dower	completed

Traffic Signal Requests

3.100 Holden Rd and Military Rd	(possibly enhanced cross walk - HAWK??)	unfunded
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Section 4

TRANSPORTATION PLANNING

STATUS

4.1 Pavement Management System	on-going
4.2 Geographic Information System	on-going
4.2a Transportation Model	on-going
4.3 Development Guidelines Modifications	completed
4.4 Transportation Funding Analysis	in progress
4.5 Tillicum and Amercan Lake Gardens sub-area redevelopment plan	completed
4.6 Lakewood Station Connection Study	completed
4.7 Comprehensive Plan Update	2014-2015
4.8 Lakewood City Center Sub-Area Plan	2016
4.9 Non-Motorized Transportation Plan Update	2016
4.10 ADA Transition Plan (may be part of NMTP)	2015-2016

Section 5

BIKEWAYS

STATUS

5.1 Misc. Bikeway Markings	on-going
5.2 Lakewood Dr SW -So. 74th to Bridgeport Way (PE Only)	unfunded
5.3 80th St West Connection (PE Only)	unfunded
5.4 Misc. Bike Lane Construction	on-going w/other projects
5.5 North Thorne Lane to GLD Connector	2012-2014 if grant funded
5.6 Gravelly Lake Non-Motorized Trail	2013-2015 if grant funded
5.7 Interlaaken Dr / Mt. Tacoma Dr. Non-motorized improve.	unfunded

Bikeway / Lane Project Requests

5.100 Steilacoom - Phillips to Custer	unfunded
5.101 Custer - 88th to BP	unfunded
5.102 Farwest - 112th to Steilacoom	unfunded

Section 6

STREET LIGHTING

STATUS

6.1 Residential Street Lighting	on-going
6.2 Arterial Street Lighting	on-going w/other projects
6.3 Top Priority Street Light Requests	ongoing
6.4 Low Income area street lighting	ongoing
6.5 Pacific Highway (Partial) Street Lighting -GLD to BP	completd
6.7 LED Street Lighting Upgrade	2/3rd - 2015

Street Lighting Requests (see separate work sheet)

Section 7

BRIDGE INSPECTION

STATUS

7.1 Bridge Inspection	on-going
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Section 8

BEAUTIFICATION PROJECTS

STATUS

8.1 Bridgeport Way and Pacific Highway	2007-partial w/road improvements
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8.2 Steilacoom Blvd and Farwest Dr	unfunded
8.3 Arterial Street Tree Planting	on-going
8.4 Misc. Right-of-Way Beautification	on-going
8.5 112th Street and Gravelly Lk Dr R/W	completed
8.6 Ardmore and Steilacoom	completed
8.7 Gravelly Lake DR/Veterans Dr Beautification	completed
8.8 Bridgeport Way - South Gateway	planning funded 2014
8.9 Bridgeport Way - North Gateway	partial completed 2012

Section 9

ROADWAY RESTORATION PROJECTS

STATUS

9.1 Resurfacing Pacific Highway Phase 1 - BP to BNRR	completed
9.1a Resurfacing Pacific Highway Phase 2 - BP to BNRR	completed
9.2 Pacific Highway -BNSF Trestle to SR512	completed
9.5 Resurfacing Gravelly Lake Drive (Nyanza to BP)	completed
9.6 Resurfacing Pacific Hwy - 108th Street to SR512	completed
9.7 Resurfacing Program - Various Locations	unfunded
9.8 Interlaaken Bridge	completed
9.9 Pacific Hwy - GLD to Bridgeport Way	completed
9.10 Steilacoom Blvd - 87th to Phillips	unfunded
9.11 Bridgeport Way - 112th to 59th	completed
9.12 Bridgeport Way - I-5 to 112th Street	2015
9.13 Steilacoom Blvd - Lakewood Dr to So. Tacoma Way	2015
9.14 Lakewood Drive - 100th to Steilacoom	2016
9.15 Lakewood Drive - Flett Creek to N. City Limits	2017
9.16 59th Ave - Main St to 100th Street	2018
9.17 108th - Bridgeport Way to Pacific Hwy	2018
9.18 Custer Road - Stielacoom to John Dower	2019
9.19 88th - Steilacoom to Custer	2019
9.20 Pacific Hwy - 108th to SR512	2020
9.21 100th - Lakeview to South Tacoma Way	2020
9.22 100th - 59th to Lakeview	2020

Section 10

NEIGHBORHOOD TRAFFIC MANAGEMENT

STATUS

10.1 Neighborhood Traffic Management - Various Loacations	ongoing
10.2 Angle Lane - Traffic Management	unfunded

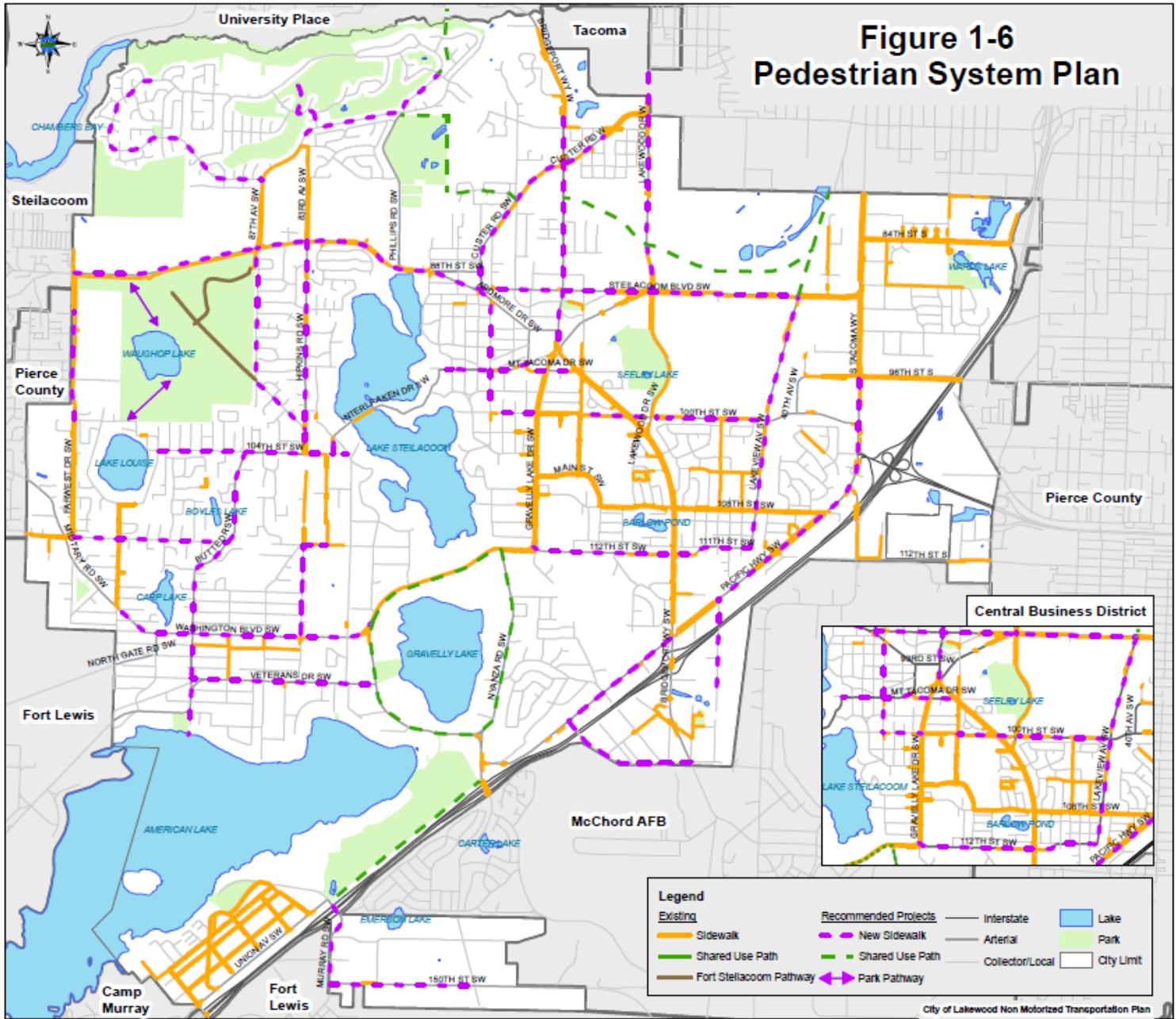
Section 11

OTHER

STATUS

11.1 On-call Technical assistance	ongoing
11.2 PW O&M Facility	2013-2016

Figure 1-6 Pedestrian System Plan



Legend	
Existing Sidewalk	Recommended Projects: New Sidewalk
Shared Use Path	Recommended Projects: Shared Use Path
Fort Steilacoom Pathway	Park Pathway
Interstate	Lake
Arterial	Park
Collector/Local	City Limit

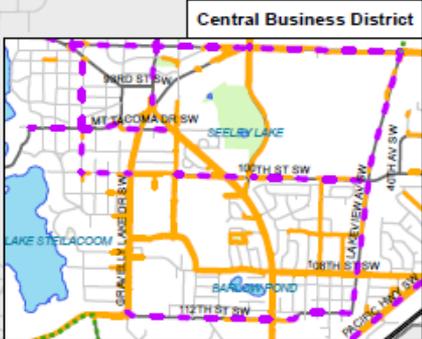
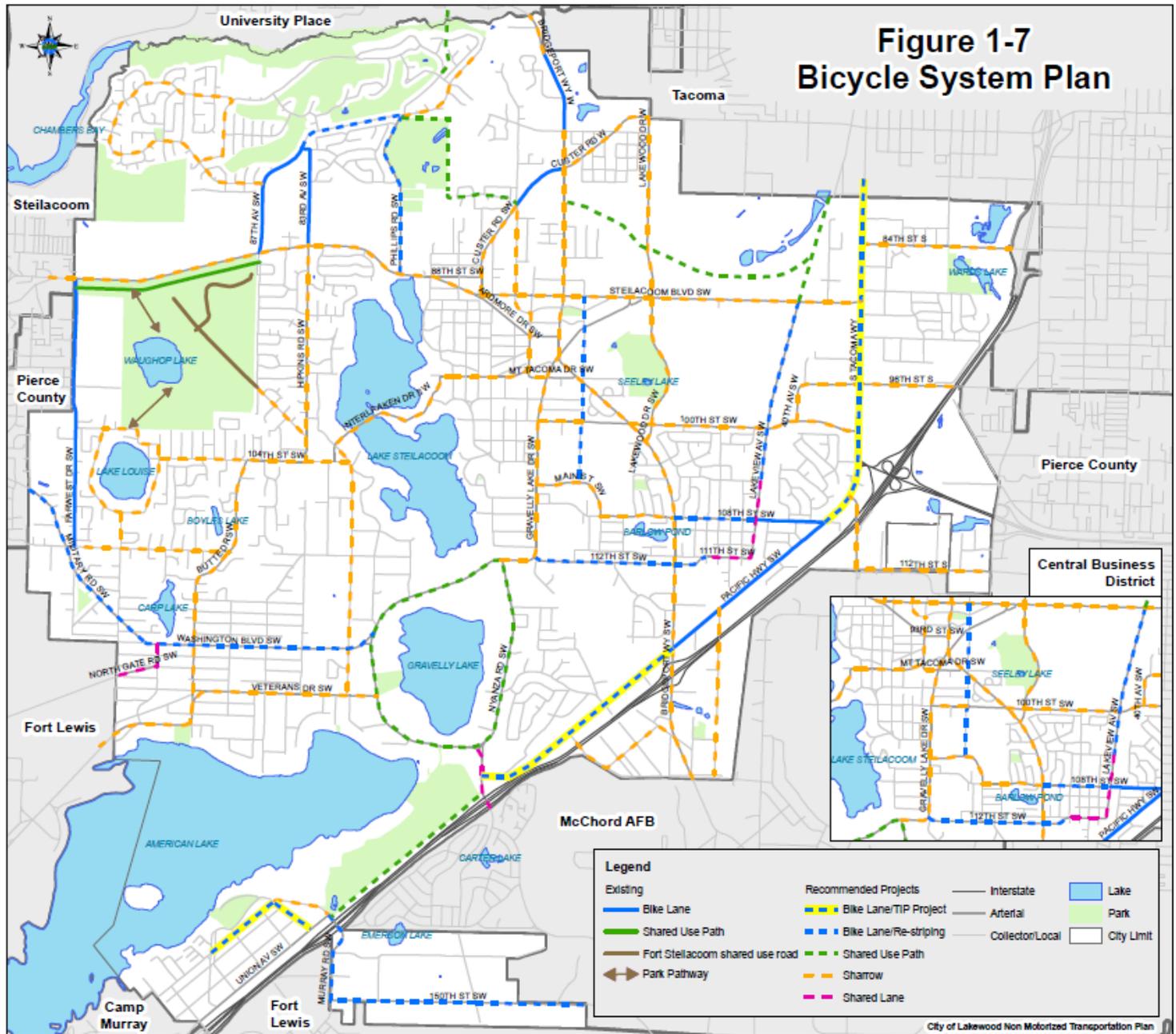


Figure 1-7 Bicycle System Plan



Legend

Existing	Recommended Projects	Interstate	Lake
Blue line: Bike Lane	Yellow dashed line: Bike Lane/TIP Project	Grey line: Arterial	Blue area: Lake
Green dashed line: Shared Use Path	Blue dashed line: Bike Lane/Re-striping	Grey line: Collector/Local	Green area: Park
Brown line: Fort Steilacoom shared use road	Green dashed line: Shared Use Path	Black dashed line: City Limit	
Brown arrow: Park Pathway	Orange dashed line: Sharrow		
	Pink dashed line: Shared Lane		

REQUESTED PROJECTS



6-Year TIP Projects - Prioritized Lists

The 6-Year TIP projects were prioritized based on the following prioritization criteria. The lists with proposed project cut-off for each year are attached.

Prioritization criteria

- 1) Statutory requirement
- 2) Safety improvements - Top 5 Correctable accident locations
- 3) Grant-funded projects leveraged to provide pavement preservation and/or aging infrastructure replacement
- 4) Pavement rehabilitation to maintain current overall pavement score
- 5) Existing infrastructure life expectancy of less than 2 years (not including pavement management)
- 6) Major corridor level of service improvements
- 7) Safety improvements - roadway, pedestrian, and bicycle facilities

Note: All projects proposed are consistent with Lakewood's Comprehensive Plan.

6-Year TIP Projects - Prioritized Lists

Prioritization criteria - detailed

- 1) Statutory requirement
- 2) Safety improvements - Top 5 Correctable accident locations
- 3) Pavement rehabilitation to maintain current overall pavement score
- 4) Existing infrastructure life expectancy of less than 2 years.
- 5) Projects that are under construction
- 6) Projects with 100% grant funding
- 7) Major Corridor level of service improvements
- 8) Projects with over 40% SECURED grant funding that have all right-of-way secure and design is complete
- 9) Projects with over 40% SECURED grant funding with design set to be complete in 1st half of following year
- 10) Projects with over 40% SECURED grant/developer funding with a committed inter-agency/developer partnership
- 11) Priority projects - City funds expended to make project "Shovel-Ready" (~ \$250,000 / year).
- 12) Projects with less than 40% SECURED grant/developer funding
- 13) Projects with REASONABLY ANTICIPATED grant funding
- 14) Safety improvements - Roadway, Pedestrian, and Bicycle facilities

Pedestrian Hazard Projects

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	TOTAL DOLLARS	Comments	Status	
	1	Steilacoom Blvd	Pedestrian path at Custer Road		Done	
	2	Lakewood Drive	Pedestrian Path south of 74th		Done	
09/27/2005	3	Onyx	Coral to Garnet - clear vegetation for a gravel path	\$24,000		
05/23/2007	4	Washington	crossing lights at Lake City	\$25,000	via neighborhood assoc. (Mike Miller, CSO)	
Aug-07	5	104th	Lake Louise Dr to Wauna - ped path	\$40,000		
Oct-07	6	Seminole (to Tyee Elem).	119th to Tyee Elementary - traffic curb and gravel ped path	\$18,000	citizen request at October CTAC mtg	DONE
Mar-08	7	Ardmore & Whitman	curb returns not accessible hill to school / St. John Boscoe. Dangerous with no sidewalks - kids pushing bikes up hill.			
03/05/2012	8	Military / 112th.sidewalk			citizen request by phone.	
07/19/2012	9	87th and Onyx Drive	continue sidewalks from fire station on 87th to Onyx Drive.		citizen request by complain/service request. Email response to Linda Shehan (lshehan@yahoo.com) 8/6/12	
04/19/2012	10	Old Military Road around 107th	Sidewalks for school walkers		citizen request by form: Donald Crouch, 584-7041	
05/17/2012	11	McChord Drive - New York Ave to Bridgeport	wants sidewalks; shoulders potholed/puddle. Lots of parents with strollers		via: community building workshop request; Alea Watterberg; 253.278.6173	
09/17/2012	12	corners of 100th and Lakeview	no ADA ramps; no sidewalks; difficult to get to bus stop on 100th in motorized wheel chair		via: letter; Mrs. Helen Bennet (253.365.0821)	
09/17/2012	13	corners of 100th and Lakewood Dr	ADA ramps not installed; difficult to cross to bus stops		via: letter; Mrs. Helen Bennet (253.365.0821)	
03/12/2013	14	Crosswalk flags (or other) at Washington & Lake City Blvd	Improve crosswalk safety	\$200	via: Service Request from Lyndie Harkey (lyndieharkey01@comcast.net) 253-686-4133	DONE
03/12/2013	15	Crosswalk flags (or other) at Military and Holden	Improve crosswalk safety		via: Service Request from Lyndie Harkey (lyndieharkey01@comcast.net) 253-686-4133	
05/30/2014		Pedestrian safety improvements	Military and 112th	angelamarie.thomas@gmail.com	253.359.0127	
04/23/2014		87th and Onyx Drive	crossing safety on south leg. Stop bar on Onyx.	lshehan@yahoo.com		
Jan-15		Farwest @ Pierce College	protected cross walk	LOCCRS		
03/23/2015		Lakewood Drive @ 93rd	protected cross walk	LOCCRS -		
03/25/2015		Washington @ 83rd	cross walk improvements - possible flags	Mr. Alfredo Dominguez	253.266.9735	
03/25/2015		Steilacoom Blvd @ Woodbourne	Cross walk improvements..	Mr. Alfredo Dominguez	253.266.9735	

cross to food bank from bus stop. City project to add sidewalks. Mid block crossing

Bikeway - Citizen Requests

#	Date	Street	From	To	Comments
	09/07/2005	Steilacoom Blvd	Phillips	Custer	Very narrow and dangerous for bikes. Widen / shift to north?
	09/07/2005	Custer Road	Meadow	88th	
	08/09/2012	Custer Road	Meadow	BP	update bike lane symbols with arrows. Add sharrow symbols on non-bike lane side to keep
	08/09/2012	Farwest Drive	112th	Steilacom	same as above

SHADED = completed

Street Light Requests

	Date Requested	Address	Street
1	04/14/2002	12611	Naomilawn Dr. SW
2	09/23/2002	11102	North Star Way
3	10/31/2002		#126 on McChord Drive
4	11/25/2002	10025	Oak Lane SW
5	12/16/2002	10504	Northstar Way SW
6	12/20/2002		Lake Louise Drive
7	02/02/2003		Mt. Tacoma Dr. & Motor Ave.
8	02/21/2003		Pacific Hwy. & 47th Ave.
9			Diamond Dr S.W
10		9006	Lenox Ave. SW
11		10021	115th St. SW
12		8022	107th St. SW
13		8501	Bellwood Dr. SW
14		12416	Ave. DeBois
15	05/29/2003		NW corner Nixon/Lenox
16	10/01/2003		Bristol Ave. & 100th St.
17	10/31/2003		Pacific Hwy & New York St.
18	11/03/2003		GLD & Motor Ave.
19	11/14/2003		Woodbourne between 86th & 87th St.
20	11/05/2003		84th St. S & 34th Ave. S.
21	12/26/2003		Whitman Ave. SW & Fairlawn Dr. SW
22	01/15/2004	9428	108th Street SW
23	01/26/2004		Elwood between 94th & North Way
24	01/28/2004	7131	Interlaaken Dr. SW
25	02/10/2004	9110	112th St SW
26	05/01/2004	11514	93rd Ave Ct SW
27	05/01/2004	9302	116th ST SW
28	07/20/2004	10402	Becker Dr.
29	10/14/2004		9837 Northgate Road
30	03/01/2004		Pacific Hwy - Ponders
31	01/28/2005		112th and Interlaaken
32	02/15/2005		75th St W & 65th St. W
33	02/18/2004	8320	Bellwood Drive
34	02/18/2004		Pac Hwy/Clover Ck Drive
35	02/23/2005	8715	John Dower
36	03/01/2005	7014	87th
37			Onyx and Zircon -entire length
38		8913	Dolly Madison St SW
39		8419	Paine St SW
40			Corner of 88th near back of Wards Park
41	03/15/2005		Brook LN/ Wildaire
42	03/28/2005	10115	89th AV SW
43	06/16/2005	10801	North Star Way
44	07/13/2005	11102	North Star Way
45	09/13/2005		Meadow
46	11/04/2005		McChord Dr & True Lane
47	11/28/2005		112th & Interlaaken
48	01/06/2006		112th ST SW
49	01/13/2006	3418	90th St S
50	01/24/2006		Candlewyck Dr
51	01/25/2006	11104	Lundstrom Drive (5 lights)

SHADED = completed

Street Light Requests

	Date Requested	Address	Street
52	01/25/2006		112th @ Lundstrom Drive
53	01/27/2006		Butte & 104th
54	01/27/2006		87th & Onyx
55	01/27/2006		87th & Onyx
56	01/30/2006		Emerald & Garnet
57	02/01/2006		Tower and 112th
58	02/14/2006	8101	83rd Ave SW
59	03/02/2006		Onyx/76th ST SW
60	05/02/2006		Lexington, btwn Avondale & Alfaretta
61	05/18/2006		Lake City Blvd Boat House parkinglot
62	09/11/2006	8605	Haviland Ave SW
63		8501	Woodbourne Rd SW
64		6102	84th St. SW & Bridgeport Way
65	10/12/2006	10904	Briar RD SW
66	10/03/2006	8714	105 ST CT SW
67	11/16/2006		Bridgeport Way - McChord Dr to I-5
68	11/20/2006	6331	111th ST SW
69	11/20/2006	8704	Lenox Ave. SW
70	12/04/2006		Pacific Hwy - 65th AV CT SW
71	03/15/2007		122nd Street & Nyanza Park
72	03/19/2007	12519	DeBois Ave SW (back side of prop.)
73	03/31/2007	#25TA TP29317	86th & Meadow Rd. S.W.
74	04/12/2007	10507	Earley Avenue
75	05/10/2007	6809	81st Street SW
76		11417	Interlaaken Dr. SW
77		8802	25th Ave Ct S
78	07/12/2007		Lakewood Dr - Steil. To 75th
79	07/23/2007	8516	Forrest Ave SW
80	08/16/2007	11021	Lake Steilacoom Dr
81	12/11/2007	7003	87th St SW
82	12/27/2007	8711	Briggs Ln SW
83	01/07/2008		Lake Steilacoom Bridge
84	02/14/2008		97th and Onyx at Oakbrook Park
85	05/07/2008	10101	Yew Lane SW
86	09/16/2008	6801	82nd St Sw
87	09/30/2008	10119	Wauna St SW
88	10/01/2008		NW Corner 112th and Military
89	10/01/2008		11100 Farwest Drive (church d/w)
90	10/20/2008	6156	Fairlawn Dr (SE corner of Fairlawn & W)
91	10/31/2008		Gravelly Lake Drive and Motor
92	11/04/2008	9922	Clara Blvd
93	11/05/2008	8512	Forest Avenue SW
94	11/20/2008	10515	110th Street SW
95	12/01/2008	11410	Interlaaken Dr. SW
96	12/11/2008		93rd and 109th
97	12/11/2008		Farwest Drive along Lakes High school
98	01/13/2009		78th Street SW
99	04/10/2009		Murray Road and 146th
100	04/27/2009		Lake City Blvd & Wildwood Ave SW
102	05/13/2009	8712	Lenox Ave. SW
103	06/09/2009		Blossom Ln and Dekoven
104	10/12/2009	9005	Wildwood Ave SW

SHADED = completed

Street Light Requests

	Date Requested	Address	Street
105	09/08/2009	6609	87th Street
106	10/30/2009		Phillips and Turquoise Dr
107	01/25/2010	5904	Hillcrest Dr SW
108	01/26/2010		Forrest Ave and Lake City Blvd
109	03/04/2010		Wildaire Court (by Mall area gate)
110	03/04/2010		104th and Butte
111	07/07/2010	5105	101st ST SW
112	09/07/2010		101st and Lake Louise Drive
113	10/08/2010		Whitman & Community Place
114	01/16/2011		Lucerne Rd SW
115	02/01/2011		Washington & Interlaaken
116	02/22/2011	9132	Edgewater Drive SW
117	03/17/2011	11008	47th Ave SW
118	03/21/2011	8803	Weller Road
119	11/08/2010	10524	107th Ave SW (back side of Lakes HS)
120		10414	DeKoven Rd SW
121		7110	87th St SW
122	03/21/2012		Butte Drive at 109th Street
123	03/21/2012		Lake City Blvd at 116th Street (+)
124	01/23/2013		109th & Military Road
125	01/23/2013		Farwest Dr - btwn 93rd St Ct and Mt. Ta
126	01/23/2013	5	West Shore Ave SW

TBD - Project Prioritization							
Street & Sidewalk Improvements (New Projects)							
#	Project Name	Prioritization Score	Traffic Volume (ADT)	Population Served per 1,000 LF of Project*	Amenities Accessed*	Correctible Safety Concerns	Grant Opportunity
		3 2 1	> 15,000 <15,000 to 5,000 < 5,000	over 2,500 1,000 to 2,500 less than 1,000	4 or more 2 to 3 1 or fewer	Top 20 accident location in last 3 years or ped/bike accident within last 10 years Shoulder width 4 feet or less or top 50 accident location in last 3 years Shoulder width greater than 4 feet. Few reported accidents.	Gap Closure Continuation Start of New
		High Medium Low					
21	Washington Blvd Sidewalks (Vernon Ave to Gravelly Lake Dr)	13	16,000-21,000	1,006	Park, school, bus	Top 20 Accident Location	Continuation Low
21A	Washington Blvd Sidewalks (Edgewood to Vernon Ave)	13	16,000-21,000	1,006	Park, school, bus route	Top 20 Accident Location	Continuation Low
27	Hipkins Road Sidewalks (104th to Steilacoom Blvd)	12	8,000	1,197	Park, school, commercial, bus	Wide shoulders.	Gap Closure Low
29	Gravelly Lake Drive Non-Motorized Trail (Nyanza; and Gravelly Lake Drive - Washington to Nyanza)	12	10,000-14,500	430	School, bus route, commercial, civic	Narrow shoulders.	Continuation Medium
29A	Gravelly Lake Drive Non-Motorized Trail (Nyanza South to Washington Blvd)	12	10,000-14,500	430	School, bus route, commercial, civic	Narrow shoulders.	Continuation Medium
24	Oakbrook Sidewalks & Street Lighting (Onyx Dr West (97th to 87th); Onyx Dr East (Garnet to Phillips))	12	2,000 - 6,000	1,286	Park, school, commercial, bus route	Narrow shoulders.	Continuation Low
26	Phillips Road Sidewalks (Steilacoom to Onyx)	11	8,000	1,259	Park, school, commercial, bus route	Wide shoulders.	Continuation Low
28	Mt. Tacoma Sidewalks (Interlaaken to Gravelly Lake Dr)	11	3,500 - 4,500	1,390	School, commercial, bus route, cultural, transit ctr.	Narrow shoulders.	Continuation Low
28A	Interlaaken Sidewalks (Short Lane to Bridge; Bridge to Mt. Tacoma)	11	3,500 - 4,500	1,390	School, commercial, bus route, cultural, transit ctr.	Narrow shoulders.	Continuation Low
22	Lake City Buisness District Sidewalks (American lake Park to Veterans Dr / Alameda)	10	6,000	1,980	Park, commercial, bus route	Narrow shoulders.	New Corridor Low

*within 1/2 mile

Amenities = schools, parks, commercial centers, library/civic, transit center, transit route, cultural

6-YEAR CAPITAL IMPROVEMENT PLAN



**6-Year Capital Improvement Plan
Transportation Projects
Years 2015 - 2020**

**DRAFT
04/30/2015**

Funding Sources	Total	2015	2016	2017	2018	2019	2020
Motor Vehicle Fuel Tax (MVET)	\$ 2,010,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000
Real Estate Excise Tax (REET)	\$ 5,400,000	900,000	900,000	900,000	900,000	900,000	900,000
Surface Water Mgmt Fund (SWM)	\$ 4,611,000	715,000	1,115,000	515,000	823,000	727,000	716,000
Grants - Secured	\$ 10,145,000	5,805,000	2,840,000	1,500,000	-	-	-
Grants - Anticipated	\$ 11,466,500	4,247,500	1,694,000	2,170,000	2,320,000	455,000	580,000
Private Utilities / Private Developer	\$ 156,000	85,000	25,000	20,000	20,000	6,000	-
General Government	\$ 1,327,500	315,000	189,500	288,000	301,000	104,000	130,000
Package 1 - General Fund, CDBG, VLF	\$ 9,090,000	1,825,000	1,228,000	1,763,000	1,635,000	1,217,000	1,422,000
Package 2 - Property Tax Excess Bond Levy	\$ 34,019,000	980,000	6,950,000	3,750,000	6,862,000	8,033,000	7,444,000
Total Funding Sources	\$ 78,225,000	\$ 15,207,500	\$ 15,276,500	\$ 11,241,000	\$ 13,196,000	\$ 11,777,000	\$ 11,527,000