



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, July 15, 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 June 17, 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

- Cottage Housing Regulations

7. New Business

- 2015 Comp Plan Update Review
 - Chapter 6- Transportation
 - Chapter 8- Public Services

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: June 17, 2015 Draft Minutes
Staff Report re: Cottage Housing
Chapter 6- draft updates
Chapter 8- draft updates and memo

Members Only:

Please call Karen Devereaux at 253.983.7767 by Tuesday, July 14, 2015, if you are unable to attend. Thank you.

The next meeting is tentatively scheduled for August 5, 2015



**PLANNING COMMISSION
REGULAR MEETING
WEDNESDAY, June 17, 2015
Council Chambers
6000 Main Street SW
Lakewood, WA 98499**

Call to Order

Mr. Don Daniels, Chairman called the meeting to order at 6:30 p.m.

Roll Call

Planning Commission Members Present: Don Daniels, Chair; Robert Estrada, James Guerrero, Paul Wagemann and Christopher Webber

Planning Commission Members Excused: Robert Pourpasand, Vice-Chair

Planning Commission Members Absent: Connie Coleman-Lacadie

Staff Present: Dan Catron, Principal Planner; and Karen Devereaux, Recording Secretary

Council Liaison: Councilmember Paul Bocchi

Acceptance of Agenda

No changes.

Approval of Minutes

Minutes of the meeting held on June 3, 2015, were approved as written by a unanimous voice vote, M/S/C Estrada/Guerrero.

Public Comments

Mr. Glen Spieth, Lakewood resident, commented on the U.S. Open Golf Championship as it relates to the history of the Spieth name in the Lakewood area. He invited commissioners to visit the Lakewood Historical Society Museum display and learn about the reigning golf history associated with the Spieth name.

Public Hearing

Cottage Housing Regulations – Public Hearing

Mr. Dan Catron explained the notice of public hearing was posted at the City Hall and published in the News Tribune and the cottage housing topic has been discussed by commissioners at three separate meetings. It was noted the discussion would continue after the hearing as well as at subsequent meetings before the commissioners, and would culminate in a recommendation to the City Council. The issues before commissioners included zoning code amendments to increase density as well as limitations on the allowed size of cottage units. Mr. Catron added that a SEPA determination of non-significance had been issued.

As part of the public comments, Mr. Dan Catron also provided the commissioners with a copy of an email from Marilyn Henderson noting her concerns of density increases and smaller lot sizes in the R1 zones near lake areas and traffic impacts on Gravelly Lk Dr SW.

Chairman, Mr. Don Daniels, opened the floor to the public and invited them to comment on the topic.

Mr. Glen Spieth, Lakewood resident, cautioned commissioners about limiting the parking spaces availability of only 1.8 spaces per unit, allowed in cottage housing developments, noting he felt the City was not ready at this time to diminish reliance on automobile use and expect everyone to use transit to commute.

Mr. Charles Ames, Lakewood resident, supported the idea of cottage housing in his comments that he has observed the concept in other cities in the state and feels it's a good idea and can be a neighborhood asset.

Ms. Marie Barth, Lakewood resident and realtor, shared that Lakewood does not currently offer much to those local residents looking to downsize from larger homes in wooded areas and tree lined properties into a comfortable living space such as a cottage housing unit. Ms. Barth cautioned the commissioners to allow a larger unit of 1,500 to 2,000 sq. ft. to retain buyers; she stated 800 – 1,200 sq. ft. is more like an apartment.

Commissioners sought to clarify a few public comments before opening the floor to discussion.

Mr. Dan Catron clarified for the group the draft resolution currently allows the minimum number of parking stalls for cottage housing to be 1.8 per unit, apartment complexes is allowed 1.75 per unit, and a standard single-family residence requires 2 parking spaces dwelling.

Ms. Victoria Stanich, Lakewood resident, arrived late and was invited to address the commissioners. Ms. Stanich voiced concerns of minimum size requirements of each lot and how many units would be squeezed onto a smaller lot. Mr. Dan Catron explained the minimum lot size depended on the zone involved. He noted the draft resolution currently requires a minimum of 4 units and allows a maximum of 12 units for cottage housing projects.

It was noted Ms. Marie Barth, Realtor, has sold units to Lakewood residents who are now moving into University Place because Lakewood was unable to provide what the buyer wanted in a comfortably-sized, secure community. Ms. Barth suggested the commissioners visit the local Interlaaken Towers and a few other planned communities to get a better idea of her example for larger units in cottage housing.

Mr. Don Daniels, Chairman, closed the public hearing after thanking the public participants for their comments. The Chairman opened the floor for discussion among commissioners.

Mr. James Guerrero queried the design restrictions on the roofing of cottage housing units. Mr. Dan Catron explained he tried to create flexibility in the resolution to allow for a higher level of design compatibility within an existing neighborhood.

Mr. James Guerrero felt a couple downsizing into a cottage housing unit would likely have two cars and wondered if 1.8 parking stalls would be enough per unit. Mr. Robert Estrada commented that most would use the garage for storage and park on the street creating congested neighborhoods.

Mr. Don Daniels, Chairman, asked commissioners to list the items they would like staff to research and consider as changes for the draft resolution. Mr. Robert Estrada queried the possibility of getting data on the elderly population leaving Lakewood to live in University Place. Mr. Robert Estrada commented they may want to increase the square footage of cottage housing to larger units of 1,500 to 2,000 sq. ft.

Mr. Paul Wagemann queried if the request for larger units could be accommodated. Both Mr. James Guerrero and Mr. Dan Catron commented it could probably be done in an R3 or R4 zone in a broad spectrum of mixed residential or low-multifamily where you can build fairly densely or at medium density.

Mr. Dan Catron added he would like to research the queries made by commissioners for changes to the draft resolution while taking another look at the codes and consequences of the changes before another presentation.

Unfinished Business

None.

New Business

Economic Development Update

The presenter was unavailable and commissioners decided to reschedule the topic for a future meeting.

Reports from Commission Members and Staff

Commissioner Mr. Paul Wagemann commented that the gateways to the City look great. He specifically noted that Bridgeport Way looks remarkable and is a positive reflection of our community to those visitors to the U.S. Open Golf Championship.

Mr. Paul Wagemann observed the stop sign at Meadow Rd SW and Mt. Tahoma Dr SW is blocked by overgrown vegetation and needs trimming. Mr. Don Daniels, Chair, explained how to use the City website to report these types of observations, adding that a tracking number is provided and the response to requests is quick.

Mr. Dan Catron shared that a complete street request for proposals will be advertised next week to seek a consultant for the Motor Avenue SW right-of-way acquisition to better utilize the unused space as a “flexible” public street.

Next Meeting: July 1, 2015, at 6:30 p.m. in Council Chambers

Agenda items include:

- Further discussion regarding Cottage Housing
- Economic Development Update –Becky Newton

Meeting Adjourned at 7:20 p.m.

Don Daniels, Chair
Planning Commission 7/15/2015

Karen Devereaux, Recording Secretary
Planning Commission 7/15/2015



COMMUNITY DEVELOPMENT DEPARTMENT STAFF REPORT

TO: PLANNING COMMISSION
FROM: DAN CATRON, PLANNING MANAGER
MEETING DATE: JULY 15, 2015 AGENDA ITEM:
SUBJECT: COTTAGE HOUSING REGULATIONS

RECOMMENDATION:

- Review staff report and proposed ordinance amendments;
- Consider public comments and approve resolution recommending that the Council adopt the proposed amendments.

ANALYSIS

Background:

On March 4, April 15, and May 20, 2015, the Planning Commission reviewed recommended amendments to the zoning code regarding the subject of cottage housing. The Commission has reviewed several versions of a draft ordinance that would provide for cottage housing, and discussed policy variables that would be reflected in a cottage housing ordinance.

On June 17, 2015, the Planning Commission held a public hearing on the proposed regulations. Several people spoke on the issue. Most comments were supportive of the concept with the suggestion that larger unit sizes might be more appropriate. Ms. Marie Barth, Realtor, noted that buyers are looking at units in University Place and elsewhere, instead of Lakewood, for lack of appropriately sized units.

DESCRIPTION OF PROPOSED AMENDMENTS:

Generally speaking, cottage housing is defined as a multi-unit housing development consisting of small detached units (650-1,200 sq. ft.) arranged around a commonly owned open space area with congregate parking, and including an integrated development plan for the entire site. Cottage housing offers a degree of privacy and some of the benefits of single family housing

combined with the lower maintenance costs of an integrated multi-family housing development. The clustered arrangement of the dwelling units can contribute to a sense of community. The shared common area and coordinated design allow densities to be increased while minimizing impacts on adjacent residential neighborhoods. As a result, cottage housing can offer its owners a quality living environment that is less expensive than traditional single family housing.

The proposed ordinance would apply in the City's single-family residential zones (R1 through R4). The proposed cottage housing ordinance would allow cottage housing developments to exceed the base density otherwise allowed in the underlying zoning district as an incentive to provide a cottage housing product. Allowable density in R1 and R2 zones would be tripled. Allowable density in R3 and R4 zones would be doubled.

Allowing an increased number of dwelling units and density would be mitigated through the requirement of smaller dwelling units and a higher level of design control. In developing a cottage housing ordinance, the Planning Commission will need to balance development incentives that promote cottage housing against design requirements that protect existing neighborhood character.

Discussion:

Staff has been making adjustments to the draft ordinance in response to discussions with the Planning Commission. Specific changes that have been made to the draft resolution include:

- Provided broad design review authority (and flexibility) at the discretion of the hearing examiner, while at the same time providing a prescriptive option for certain design elements;
- Deleted requirements for a minimum amount of private open space;
- Clarified that parking areas, yard setbacks, private open space and driveways do not qualify as common open space area;
- Increased maximum cottage unit size to 1,200 sq. ft. This could be adjusted further at the discretion of the Commission.
- Now proposing that cottage units may include basements of up to 400 sq. ft. which shall not be included in the gross floor area calculations. This provision was included after review of the cottage housing regulations for the City of Lake Stevens;
- Increased maximum size of shared garages to 1,200 sq. ft.
- Added design language to address fencing (proposed Section 18A.70.740.C.6)

The Planning Commission is free to discuss any aspect of the proposed cottage housing program and/or the draft ordinance. Issues discussed at the May 20th Planning Commission hearing, but not yet reflected in the draft ordinance, include parking on the street (currently allowed, and may count towards minimum parking requirements under certain circumstances. See draft Section 18A.70.770.B), reducing the minimum number of parking stalls required (minimum 1.8 spaces per unit currently proposed), and re-examining minimum roof slope requirements.

ZONING ORDINANCE AMENDMENT REQUIREMENTS:

Lakewood Municipal Code Section 18A.02.415 provides that amendments to the zoning code shall only be made if the City Council determines that the change is consistent with the standards and criteria listed below. The standards and criteria are listed in *italics*, and staff comments are provided below each standard for each proposed amendment.

1) *The request must be compatible with the Comprehensive Plan.*

The Lakewood Comprehensive Plan seeks to establish and maintain Lakewood as a “vibrant, sustainable, family-oriented community”. The Plan seeks to accommodate growth while preserving the character of established neighborhoods and protecting them from intrusion of incompatible uses by using “innovative land development concepts and techniques”. The following policies of the Land-Use Chapter support cottage housing explicitly:

Objective: Provide a variety of housing types and revised regulatory measures which increase housing affordability.

LU-2.38 Support projects including subdivisions and site plans incorporating innovative lot and housing types, clustered detached houses, clustered semi-attached houses and a variety of lots and housing types within a site.

LU-2.39 Support projects that incorporate quality features, such as additional window details, consistent architectural features on all facades, above average roofing and siding, entry porches, or trellises where innovative site or subdivision designs are permitted.

LU-2.40 Encourage the construction of cottages on small lots through incentives such as density bonuses.

LU-2.41 Support standards that allow cottage housing developments with the following features in residential zones, provided the cottages are limited by size or bulk;

- Allow increased density over the zoned density;
- Allow reduced minimum lot size, lot dimensions, and setbacks;
- Allow both clustered and non-clustered cottages;
- Allowing clustered parking; and
- Base the required number of parking spaces on unit size, or number of bedrooms.

LU-4.19 Use design standards to encourage housing types that protect privacy, provide landscaping or other buffering features between structures of different scale, and/or promote investments that increase property values where housing that is more dense is allowed in existing single-family neighborhoods.

Staff concludes that adoption of the proposed cottage housing regulations is consistent with explicit comprehensive plan policies.

2) The proposed amendment and subsequent development of the site would be compatible with development in the vicinity.

3) The proposed amendment will not unduly burden the transportation system in the vicinity of the property with significant adverse impacts which cannot be mitigated.

4) The proposed amendment will not unduly burden the public services and facilities serving the property with significant adverse impacts which cannot be mitigated.

The proposed amendments do not propose the rezoning of any specific properties or sites. Compatibility with surrounding development and questions of impacts will be addressed in the context of specific cottage housing proposals. Criteria 2, 3, and 4 are not applicable to the proposed amendments.

5) The proposed amendment will not adversely affect the public health, safety and general welfare of the citizens of the City.

The proposed cottage housing regulations provide property owners with additional options and flexibility with regard to redevelopment and in-fill of single-family residential properties. The proposed regulations require that cottage housing projects undergo review as a conditional use permit, giving the hearing examiner broad authority to require project designs and design elements that protect and promote the public health, safety and general welfare of the community.

6) The entire range of permitted uses in the requested zoning classification is more appropriate than the entire range of permitted uses in the existing zoning classification, regardless of any representations made by the petitioner as to the intended use of subject property.

7) Circumstances have changed substantially since the establishment of the current zoning map or zoning district to warrant the proposed amendment.

8) The negative impacts of the proposed change on the surrounding neighborhood and area are largely outweighed by the advantages to the city and community in general, other than those to the individual petitioner.

The proposed amendments do not propose the rezoning of any specific properties or sites. Criteria 6, 7, and 8 are not applicable to the proposed amendments.

PUBLIC NOTICE:

Public notice of the June 17th public hearing was posted at City Hall and published in the Tacoma News Tribune on May 28, 2015. On May 15, 2015, notice of the proposed amendments was provided to the Washington Department of Commerce pursuant to RCW 36.70A.106.

SEPA REVIEW STATUS:

A Determination of Non-Significance for the proposed changes was adopted on June 4, 2015. A Notice of Issuance was published in The News Tribune on the same day. The public comment deadline on the SEPA determination closed June 18, 2015. The final SEPA determination for legislative actions, such as the proposed amendments, is considered conclusive and is not subject to appeal. Documentation of the SEPA process including the environmental checklist and Determination of Non-Significance was included with the May 20th study session staff report.

CONCLUSION:

Based on the foregoing discussion, the Community Development Department recommends that the Planning Commission make final adjustments to the proposed cottage housing regulations, and approve a resolution recommending adoption of the proposed regulations by the City Council.

EXHIBITS:

1. Planning Commission Staff Report
2. Draft Resolution
3. Planning Commission minutes from March 4, April 15, May 20, and June 17, 2015.
4. Determination of Non-Significance dated June 4, 2015
5. E-mail from Marilyn Henderson dated June 13, 2015
6. Letter from WA Dept. of Ecology dated June 18, 2015

**CITY OF LAKEWOOD
PLANNING COMMISSION
RESOLUTION NO. 2015-DRAFT**

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LAKEWOOD
RECOMMENDING APPROVAL OF AN AMENDMENTS TO THE LAND USE AND
DEVELOPMENT CODE- CHAPTER 18A OF THE LAKEWOOD MUNICIPAL CODE
REGARDING COTTAGE HOUSING

WHEREAS, the City of Lakewood incorporated on February 28, 1996; and

WHEREAS, pursuant to the Washington State Growth Management Act of 1995, the City of Lakewood adopted a Comprehensive Plan in July, 2000, and a Land Use and Development Code (Chapter 18A of the Lakewood Municipal Code) on August 20, 2001; and,

WHEREAS, since the time of adoption of the Land Use and Development Code the City has received input on the Code from citizens and project proponents, and has identified areas where adjustments to the Code would be appropriate; and,

WHEREAS, the Community Development Director has received suggestions to provide for increased density and housing options within the City's single family residential zoning districts; and

WHEREAS, the Planning Commission held a duly-noticed public hearing(s) on June 17, 2015, to receive and consider public testimony on said proposed code changes; and,

WHEREAS, the Planning Commission has found that the proposed changes to the Land Use and Development Code are consistent with the adopted Lakewood Comprehensive Plan and will not adversely affect the public health, safety and general welfare of the citizens of the city; and,

WHEREAS, the Planning Commission has found affirmatively that the proposed amendments satisfy the applicable findings of LMC 18A.02.415;

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission for the City of Lakewood does hereby recommend to the Lakewood City Council that the following amendments to Chapter 18A of the Lakewood Municipal Code be adopted:

(Language to be added is underlined, and language to be deleted is ~~struck through~~).

1. The Commission recommends that Section 18A.02.502 be amended so that the Section reads as follows:

18A.02.502 - Process Types – Permits

TABLE 3: APPLICATION PROCESSING PROCEDURES

Permit Process Types. Permit applications for review pursuant to this section shall be classified as a Process I, Process II, Process III, or Process IV action. Process V actions are legislative in nature. Permit applications and decisions are categorized by process type as set forth in Table 3. The differences between the processes are generally associated with the different nature of the decisions and the decision-making body as described below.

	Process I Administrative Action	Process II Administrative Action	Process III Hearing Action	Process IV Hearing Action	Process V Legislative Action
Permits	Zoning certification; Building permit; Design Review; Sign permit; Temporary Sign permit; Accessory Living Quarters; Limited Home Occupation; Temporary Use; Manufactured or Mobile Home permit; Boundary Line Adjustments; Minor modification of Process II and III permits; Final Site Certification; Certificate of Occupancy; ***Sexually Oriented Business extensions	Administrative Uses; Short Plat; SEPA; Home Occupation; Administrative Variance; Binding Site Plans, Minor Plat Amendment, Major modification of Process II permits	Conditional Use; Major Variance; Preliminary Plat; Major Plat Amendment; Major modification of Process III permits; Shoreline Conditional Use; Shoreline Variance; Shoreline Substantial Development Permit; Public Facilities Master Plan; <u>Cottage Housing Development</u> (may be <u>considered together with residential binding site plan</u>)	Zoning Map Amendments; Site-specific Comprehensive Plan map amendments; Specific Comprehensive Plan text amendments; Shoreline Redesignation, **Final Plat**;; **Development Agreement** **No hearing required or recommendation made by Planning Advisory Board**	Generalized or comprehensive ordinance text amendments; Area-wide map amendments; Annexation; Adoption of new planning-related ordinances

Impacts	Minimal or no effect on others, so issuance of permit is not dependent on others	Application of the standards may require some knowledge of impacts and effect upon others	Potential significant effect on some persons or broad impact on a number of persons	Potential significant effect on some persons or broad impact on a number of persons	Potential significant effect on some persons or broad impact on a number of persons
Notice & Comment	Participation of applicant only	Nearby property owners invited to comment on an application	In addition to applicant, others affected invited to present initial information	In addition to applicant, others affected invited to present initial information	Anyone invited to present information
Recommendation	NA	NA	Community Development Department Staff	Planning Advisory Board, except for Final Plat and Development Agreement as noted ** above	Planning Advisory Board
Decision-Making Body	Community Development Director	Community Development Director	Hearing Examiner	City Council	City Council
Appeal	Hearing Examiner Community Development Director's decision on permits noted *** above is appealable to Superior Court.	Hearing Examiner	Superior Court	Superior Court	Superior Court

2. The Board recommends that a new Section 18A.70.700 through 790 be added to read as follows:

18A.70.700 - Cottage Housing

18A.70.710 – Purpose and Intent – Cottage Housing

The purpose of this chapter is to provide for a specific residential development type (“cottage housing”) featuring modestly sized single family detached residences with commonly held community amenities, and oriented around commonly held open-space areas. Specific design standards must be met. An increase in allowable density over the maximum density allowed in the underlying zoning district is provided as an incentive to encourage development of this type of housing, and in recognition of the reduced impacts expected from this type of housing versus typical single-family residential development. This housing type is intended to:

- A. Promote a variety of housing choices to meet the needs of a population diverse in age, income, household composition, and individual needs.
- B. Provide opportunities for more affordable housing choices within single-family neighborhoods.
- C. Encourage creation of functional usable open space in residential communities.
- D. Promote neighborhood interaction and safety through design.
- E. Ensure compatibility with neighboring land uses.
- F. Provide opportunities for infill development that support the growth management goal of more efficient use of urban residential land.

Intent: It is the intent of this section to provide specific standards for an increased density residential development type that is compatible with moderate density single family residential environments. This housing type will be strictly regulated to provide design amenities that make the development more attractive and compatible as infill in existing single family neighborhoods. Specific design features include limited-size detached building forms with a high level of design quality, increased minimum levels of landscaping and open space, and professionally maintained landscaping, common areas and building exteriors.

Approval of a cottage housing development project exceeding the maximum density allowed in the underlying zoning district shall only be granted if the project complies with the specific development and design standards contained in this section. Nothing in this section is intended

prohibit or limit the development of housing projects that otherwise meet the provisions of the underlying zoning district.

18A.70.720 – Applicability – Cottage Housing

Cottage housing is permitted in the R1, R2, R3 and R4 zoning districts. The provisions of individual zoning districts shall be applicable to cottage housing developments; provided, that where a conflict exists, the provisions of this section shall control.

18A.70.730 - General Provisions – Cottage Housing

- A. Cottage housing projects are permitted with the approval of a Cottage Housing Development Plan. Discrete ownerships may only be created through the residential binding site plan and/or condominium declaration process pursuant to RCW 64.34 as applicable. Cottage housing development plans shall be subject to review and approval as a conditional use permit subject to Process III permit procedures. Adherence to all applicable development standards shall be determined by the City's Hearing Examiner as a component of the review process.
- B. Individual cottage units shall contain at least eight hundred (800) and no more than one thousand two hundred (1,200) square feet of gross floor area. Cottage units may include basements of up to 400 sq. ft., which shall not be included in the gross floor area calculation.
- C. A community building of up to 2,500 square feet in size may be provided for the residents of the cottage housing development. Roof pitch, architectural themes, materials and colors shall be consistent with that of the dwelling units within the cottage housing development.
- D. Accessory dwelling units shall not be permitted in cottage housing developments.

18A.70.740 - Development Standards – Cottage Housing

Cottage housing development shall be subject to the following development standards.

A. Density.

1. In the R1 and R2 zoning districts, cottage housing development shall be allowed a density not to exceed three (3) times the base density allowed in the underlying zone.

2. In R3 and R4 zoning districts, cottage housing developments shall be allowed a density not to exceed two (2) times the base density allowed in the underlying zone.

3. On a site to be used for a cottage housing development, existing detached single-family residential structures, which may be nonconforming with respect to the standards of this section, may be permitted to remain at the discretion of the hearing examiner, but the extent of the nonconformity may not be increased. The number of any such nonconforming dwelling unit(s) shall be multiplied by the factors noted in sections 1 or 2 above, and included in calculating the density of the cottage housing development.

B. Locational criteria.

1. The minimum area for a cottage housing project is 0.75 acre, which may include more than one contiguous lot.

2. Cottage housing development shall be separated from another cottage housing development by a minimum of 400 feet measured between the closest points of the subject properties.

C. Site design.

1. Cottage housing development shall be clustered and shall consist of a minimum of four (4) dwelling units and a maximum of twelve (12) dwelling units.

2. At least seventy-five (75) percent of dwelling units shall abut the common open space.

3. Common open spaces shall have dwelling units abutting at least two (2) sides.

4. Creation of individual lots shall only be permitted through the residential binding site plan process provided in LMC 17.34 and Chapter 64.34. RCW.

5. Siting of dwelling units or common open space in areas with slopes exceeding fifteen (15) percent is discouraged. Dwelling units shall not be placed in such areas if extensive use of retaining walls is necessary to create building pads or open space areas.

6. Fencing and Screening. The intent of internal decorative fencing and screening is to delineate private yards, screen parking areas and structures, community assets and unit walls. A cottage housing development is intended to be an internally open community sharing common areas. The intent of external fencing and screening is to conceal the higher density development from adjacent lower density land uses. Chain link and solid fences shall not be allowed internally. Solid fencing is allowed on the perimeter boundary, except where bordering an external street where streetscape landscaping is required.

D. Setbacks and building separation.

1. Dwelling units shall have at least a fifteen (15) foot front and five (5) foot side and rear yard setback.

2. Dwelling units shall be separated from one another by a minimum of ten (10) feet, not including projections.

3. Dwelling units and accessory buildings shall be separated by at least six (6) feet.

4. Dwelling units not abutting or oriented toward a right of way shall have a front yard oriented towards the common open space. The approval authority may use appropriate discretion, consistent with the intent of this chapter, in determining orientation of yards.

E. Lot coverage.

Lot coverage shall not exceed the maximums specified for each individual zoning district. Lot coverage shall be calculated for the overall cottage housing development, not for individual lots. Paved components of common open space areas and walkways shall not be counted in lot coverage calculations.

18A.70.750 - Open Space – Cottage Housing

1. A minimum of five hundred (500) square feet of common open space shall be provided per dwelling unit.

2. Common open space shall be a minimum of three thousand (3,000) square feet in size, regardless of number of dwelling units.

3. No dimension of a common open space area used to satisfy the minimum square footage requirement shall be less than ten (10) feet, unless part of a pathway or trail.

4. In subdivisions and short subdivisions, common open space shall be located in a separate tract or tracts.

5. Required common open space shall be divided into no more than two (2) separate areas per cluster of dwelling units.

6. Common open space shall be improved for passive or active recreational use. Examples may include but are not limited to courtyards, orchards, landscaped picnic areas or gardens. Common open space shall include amenities such as but not limited to seating, landscaping, trails, gazebos, barbecue facilities, covered shelters or water features.

7. Surface water management facilities may be commonly held, but shall not counted toward meeting the common open space requirement.

8. Parking areas, required setbacks, private open space, and driveways do not qualify as common open space area.

18A.70.760 – Building Design Standards – Cottage Housing

A cottage housing development is expected to reflect a coherent and high quality design concept and include architectural elements that ensure compatibility with existing neighborhood development and character. The following design elements are intended to provide compatibility with existing residential environments. Alternative designs may be submitted to the hearing examiner for review and approval, but the Examiner must find that any such concepts meet or exceed the design quality of the prescriptive standards, and fulfill the stated purpose and intent of this chapter.

A. Roofs.

1. Dwelling units shall have a minimum 6:12 roof pitch. Up to thirty-five (35) percent of roof area may have a slope not less than 4:12. Portions of a roof with a pitch of less than 6:12 shall be limited to architectural features such as dormers, porch roofs and shed roofs.
2. Garages and carports shall have a minimum 6:12 roof pitch.

B. Entries and porches.

1. Each dwelling unit abutting a public right of way (excluding alleys) shall have a primary entry and covered porch a minimum of eighty (80) square feet in size, oriented toward the public right of way. If abutting more than one public right of way, the developer and City shall collaborate to determine which right of way the entrance and covered porch shall be oriented toward.
2. Each dwelling unit shall have an entry and covered porch oriented toward the common open space. If the dwelling unit abuts a public right of way, this may be a secondary entrance, and the minimum porch size shall be fifty (50) square feet. If not abutting a public right of way, this shall be the primary entrance, and the minimum porch size shall be eighty (80) square feet.
3. Covered porches shall be a minimum of six (6) feet deep.

C. Dwelling units shall not include attached garages unless the garage abuts an alley or shared parking lot. The first 200 square feet of attached garage space shall not be counted towards maximum dwelling unit size allowance. Garage area in excess of 200 sq. ft. shall be counted in the floor area of the unit.

D. Detached garages and carports associated with individual dwelling units shall not exceed five hundred (500) square feet in size. No shared garage or carport may exceed one thousand – two hundred (1,200) square feet in size.

E. Hearing Examiner Review. The Hearing Examiner shall consider all aspects of the project, and shall ensure that the project is well designed and compatible with existing and planned development in the vicinity. Possible topics for review by the Examiner include (but are not

necessarily limited to): building materials and finishes, articulation and modulation, massing, trim details, colors, exterior lighting, special building heights, paving materials, mechanical equipment screening, fencing, tree retention and landscaping.

18A.70.770 – Parking – Cottage Housing

A. A minimum of 1.8 parking spaces per cottage shall be provided for the entire development. Fifteen (15) percent of total required spaces shall be designated for guests.

B. All or a portion of new on-street parking provided as a component of the development may be counted towards minimum parking requirements if the approval authority finds that such parking configuration will result in adequate parking, and is compatible with the character and context of the surrounding area.

C. No more than fifty (50) percent of covered parking spaces may be carports.

D. Garage doors shall not be oriented toward a public right of way with the exception of an alley.

E. Garages and carports shall not be located between the common open space and the dwelling units.

F. Parking lots shall be broken into sub-lots of no more than eight (8) parking spaces. Sub-lots shall be separated by landscaped bulb-outs a minimum of 12 (twelve) feet in width.

G. Parking in the form of garages, carports or lots may occupy no more than forty (40) percent of site frontage on a public right of way, except in the case of an alley, in which case no restriction applies. On-street parking is permitted along the entire frontage. Parking in garages shall not be counted towards meeting minimum parking requirements unless an enforceable covenant is established that would require that the garage be used for automobile parking only and not general storage.

H. Parking lots shall be set back at least fifteen (15) feet from front property lines and ten (10) feet from external side and rear property lines.

I. Parking lots of more than two (2) spaces, visible from a public right of way (excluding alleys) or adjacent single-family uses or zones shall be screened by landscaping consistent with LMC 18A.50.430.

18A.70.780 - Common Area Maintenance – Cottage Housing

Cottage housing development shall be required to implement a mechanism, acceptable to the approval authority, to ensure the continued care and maintenance of all common areas including common open space, parking, surface water management facilities (if applicable) and any other common area. Such a mechanism might include creation of a homeowners' or condominium association with authority and funding necessary to maintain the common areas.

18A.70.790 – Modifications – Cottage Housing

Applicants may request modifications to the open space, site design, design standards, setbacks and parking provisions of this chapter. The approval authority may modify the above referenced provisions of this chapter if both of the following apply:

- A. The site is constrained due to unusual shape, topography, easements or critical areas; and
- B. The modification will not result in a project that is less compatible with neighboring land uses than would have occurred under strict adherence to the provisions of this chapter.
- C. The approval authority may permit modifications to the building design standards if it finds the alternative design concept provides a high level of design quality and compatibility with the character of the surrounding neighborhood.

- 3. The Commission recommends that Section 18A.90.200 be amended to add the following definitions:

18A.90.200 - Definitions

COTTAGE. A Single Family Detached Dwelling containing at least eight hundred (800) and no more than one thousand two hundred (1,200) square feet of gross floor area, constructed as part of a cottage housing development project and subject to the general requirements of LMC section 18A.10.800

COTTAGE HOUSING DEVELOPMENT. An alternative type of development comprised of small, Single Family Detached Dwellings (“cottages”) clustered around common open space, usually with detached garages and parking area.

18A.90.200A - Definitions

SINGLE FAMILY DETACHED DWELLING. A residential dwelling unit that is not attached to another residential dwelling unit by any means and provides living accommodations for a single individual or family. Dwelling units shall be separately located, with a maximum of one (1) dwelling unit per individual lot, except as may be allowed in conjunction with approved Cottage Housing Development.

PASSED AND ADOPTED at a regular meeting of the Planning Commission on ____, 2015, by the following vote:

AYES: BOARDMEMBERS:

NOES: BOARDMEMBERS:

ABSENT: BOARDMEMBERS:

DON DANIELS, CHAIR
PLANNING COMMISSION

ATTEST:

KAREN DEVERAUX, SECRETARY

PRELIMINARY DRAFT

Excerpts from Planning Commission Meeting Minutes Regarding Cottage Housing

From March 4, 2015

Introduction to Cottage Housing

Mr. Dan Catron informed the group that staff has been asked by Council to work on a cottage housing program to provide alternatives within single-family districts throughout the City. During his introduction he provided two workups of development sites explaining that cottage housing is defined as a multi-unit housing development consisting of small detached units (650-1,100 sq. ft.) arranged around a commonly owned open space or garden with a congregate parking area.

In this introduction, Mr. Catron noted he borrowed heavily from surrounding jurisdictions and how they have introduced cottage housing concepts into their neighborhoods.

Mr. Dave Bugher ran through a work plan draft and overview of the steps the commissioners will go through in developing a draft ordinance. The process will include the development of a draft ordinance, environmental review under SEPA, notifications to the State, and likely public hearings in June. It is expected that comprehensive plan amendments will get very intense from August to October before this project is completed.

From April 15, 2015

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.

From May 20, 2015

Cottage Housing Draft Ordinance

Mr. Dan Catron noted this is the third review of the draft by the commissioners. In response to previous discussions, staff made further adjustments to the draft ordinance to show the program is consistent with the City's Comprehensive Plan and the Washington State Growth Management Act.

Mr. Dan Catron explained the following substantive changes were made to the draft resolution: Provided broad design review authority (and flexibility) at the discretion of the hearing examiner, while at the same time providing a prescriptive option for certain design elements; Deleted requirements for a minimum amount of private open space; Increased maximum cottage unit size to 1,200 sq. ft.; Clarified that cottage units shall not include basements; and Increased maximum size of shared garages to 1,200 sq. ft.

Staff further recommends the Commission schedule a public hearing on the proposed amendments for the June 17th meeting. Environmental official still has time to review any public comments made before the SEPA comment period ends and findings become final on June 18th. There is no appeal on SEPA determinations for legislative acts. The Planning Commission would make recommendation to City Council at some time after the close of the public hearing. Usually the board will take action at the next meeting if all concerns are resolved.

Mr. Dan Catron provided commissioners with a copy of both the SEPA Checklist and the draft SEPA Determination of Non-Significance.

Mr. Robert Estrada requested clarification on the inclusion of basements. Mr. Dan Catron noted he was looking at comparable codes of similar jurisdictions and stated he added that in consideration of the definition for floor area exempting basements.

Mr. Robert Estrada asked about dates of the SEPA documents. Mr. Dan Catron explained the environmental checklist documents have already been completed. Staff is looking for the environmental official to sign the Determination of Non-Significance on June 4th with a 14-day comment period culminating in a hearing on June 17th. Mr. Dan Catron explained that the commissioner's recommendation to Council is not a final action. 60-day notice to CTED was initiated a few days ago; Council is not allowed to take action during this 60-day period.

Mr. James Guerrero thanked staff for work on revisions. Concerns were voiced over limiting design with requirements of 6/12 or steeper pitch roofs with a small percentage allowed at a lower pitch. Noting that a potential site for cottage housing is near the transit station, Mr. Guerrero also queried the requirement for 1.8 parking spaces per unit and wondered if as a community we want to discourage cars in general and have people move toward mass transit. Mr. Paul Wagemann commented that less parking near a transit station makes sense; however, not enough parking causes other consequences worth discussing.

Mr. Don Daniels commented that builder/developer deals with staff then goes to the Hearing Examiner (HEX). Mr. Dan Catron explained that every cottage housing

development will be required to get approval from hearing examiner. Staff works with developers to resolve as many issues as possible before going in front of HEX. Mr. Bugher added that the code is written that the HEX is to give great weight to the recommendation provided by the Community Development Department in the approval process.

Mr. Dave Bugher explained to commissioners this same discussion can happen after the public hearing to get a better understanding of citizen concerns and relevant issues could then be determined. Mr. Bugher queried if commissioners were comfortable with the proposed dates for the public hearing on the matter so staff could move forward. All agreed to hold public hearing on June 17th.

FROM JUNE 17, 2015

Cottage Housing Regulations – Public Hearing

Mr. Dan Catron explained the notice of public hearing was posted at the City Hall and published in the News Tribune and the cottage housing topic has been discussed by commissioners at three separate meetings. It was noted the discussion would continue after the hearing as well as at subsequent meetings before the commissioners would forward a recommendation to City Council. The issues before commissioners included zoning code amendments to increase density as well as limitations on the allowed size of cottage units. Mr. Catron added that a determination of non-significance had been filed.

As part of the public comments, Mr. Dan Catron also provided the commissioners with a copy of an email from Marilyn Henderson noting her concerns of density increases and smaller lot sizes in the R1 zones near lake areas and traffic impacts on Gravelly Lk Dr SW.

Chairman, Mr. Don Daniels, opened the floor to the public and invited them to comment on the topic.

Mr. Glen Spieth, Lakewood resident, cautioned commissioners about limiting the parking spaces availability of only 1.8 spaces per unit, allowed in cottage housing developments, noting he felt the City was not ready at this time to diminish reliance on automobile use and expect everyone to use transit to commute.

Mr. Charles Ames, Lakewood resident, supported the idea of cottage housing in his comments that he has observed the concept in other cities in the state and feels it's a good idea and can be a neighborhood asset.

Ms. Marie Barth, Lakewood resident and realtor, shared that Lakewood does not currently offer much to those local residents looking to downsize from larger homes in wooded areas and tree lined properties into a comfortable living space such as a cottage housing unit. Ms. Barth cautioned the commissioners to allow a larger unit of

1,500 to 2,000 sq. ft. to retain buyers; she stated 800 – 1,200 sq. ft. is more like an apartment.

Commissioners sought to clarify a few public comments before opening the floor to discussion.

Mr. Dan Catron clarified for the group the draft resolution currently allows the minimum number of parking stalls for cottage housing to be 1.8 per unit, apartment complexes is allowed 1.75 per unit, and a standard single-family residence requires 2 parking spaces dwelling.

Ms. Victoria Stanich, Lakewood resident, arrived late and was invited to address the commissioners. Ms. Stanich voiced concerns of minimum size requirements of each lot and how many units would be squeezed onto a smaller lot. Mr. Dan Catron explained the minimum lot size depended on the zone involved. He noted the draft resolution currently allows a minimum of 4 units and a maximum of 12 units as it relates to the cottage housing regulations.

It was noted Ms. Marie Barth, Realtor, has sold units to Lakewood residents who are now moving into University Place because Lakewood was unable to provide what the buyer wanted in a comfortably-sized, secure community. Ms. Barth suggested the commissioners visit the local Interlaaken Towers and a few other planned communities to get a better idea of her example for larger units in cottage housing.

Mr. Don Daniels, Chairman, closed the public hearing after thanking the public participants for their comments. The Chairman opened the floor for discussion among commissioners.

Mr. James Guerrero queried the design restrictions on the roofing of cottage housing units. Mr. Dan Catron explained he tried to create flexibility in the resolution to allow for a higher level of design compatibility within an existing neighborhood.

Mr. James Guerrero felt a couple downsizing into a cottage housing unit would likely have two cars and wondered if 1.8 parking stalls would be enough per unit. Mr. Robert Estrada commented that most would use the garage for storage and park on the street creating congested neighborhoods.

Mr. Don Daniels, Chairman, asked commissioners to list the items they would like staff to research and consider as changes for the draft resolution. Mr. Robert Estrada queried the possibility of getting data on the elderly population leaving Lakewood to live in University Place. Mr. Robert Estrada commented they may want to increase the square footage of cottage housing to larger units of 1,500 to 2,000 sq. ft.

Mr. Paul Wagemann queried if the request for larger units could be accommodated. Both Mr. James Guerrero and Mr. Dan Catron commented it could probably be done in

an R3 or R4 zone in a broad spectrum of mixed residential or low-multifamily where you can build fairly densely or at medium density.

Mr. Dan Catron added he would like to research the queries made by commissioners for changes to the draft resolution while taking another look at the codes and consequences of the changes before another presentation.

**CITY OF LAKEWOOD
DETERMINATION OF NON-SIGNIFICANCE**

PROJECT NAME: 2015 Cottage Housing Regulations

PROJECT DESCRIPTION: Amendments to the City’s Land Use and Development Code to provide for Cottage Housing Developments

PROJECT PROPONENT: City of Lakewood
6000 Main Street SW
Lakewood, WA 98499

SUMMARY:

This proposal involves zoning code amendments establishing special provisions for a specific form of residential development known as “Cottage Housing”. Cottage housing involves developments of 4 to 12 detached dwelling units of limited size that are oriented around a central garden or community open space area. Density bonuses above the maximum residential density of the underlying zoning district are permitted in exchange for compliance with specific design guidelines and parameters. Specific environmental protection regulations, including the City’s Environmental Rules and Procedures (“Local SEPA Regulations”), Critical Areas and Resource Lands Ordinance, and the City’s Shoreline Management Regulations remain applicable to cottage housing, and are not affected by these proposed amendments.

FINDINGS OF FACT:

1. On July 10, 2000, the Lakewood City Council adopted a new Comprehensive Plan as required by the Washington State Growth Management Act of 1995. An Environmental Impact Statement was prepared pursuant to the State Environmental Policy Act (SEPA) which addresses the environmental impacts caused by changes in land use proposed by the new Plan.
2. On August 20, 2001 the City adopted a Land Use and Development Code (Chapter 18A of the Lakewood Municipal Code). The broad intent of the Code is to implement the Comprehensive Plan. The adopted Code is intended to foster harmony among land uses, preserve the qualities of desirable residential neighborhoods, improve neighborhoods whose character undermines good-quality living conditions, diminish reliance on automobile use, and promote the well-being of the city through integration of aesthetic, environmental, and economic values.
3. The Community Development Department is now proposing to provide for a special type of residential development known as “cottage housing”. Cottage housing involves the construction of multiple single-family detached residential structures of limited size oriented

around a commonly-held open space area. Cottage housing would allow for density to be increased in terms of dwelling units per acre, but would also be subject to special design and permitting requirements. Overall impervious lot coverage limitations would remain in effect.

4. The proposed changes to the Land Use and Development Code are minor in nature and will help the City accommodate additional in-fill housing units in existing urban areas served by existing infrastructure and utilities consistent with the Washington State Growth Management Act.

CONCLUSIONS OF RESPONSIBLE OFFICIAL:

The Responsible Official concludes that the proposed amendment to the Land Use and Development Code to allow for Cottage Housing development will help implement the provisions of the Comprehensive Plan. The proposed amendments to the Land Use and Development Code will not have any adverse effects on the environment beyond, or separate from, those of the Comprehensive Plan itself. Pursuant to WAC 197-11-350 (3), a DNS may be issued. This conclusion is based on staff review of the proposed code amendments and the environmental checklist. The environmental effects of specific projects allowed by the proposed ordinance will be analyzed on a case-by-case basis, as required by the State Environmental Policy Act.

Agency: City of Lakewood
Community Development Department
6000 Main Street SW
Lakewood, WA 98499

Date of Issue: June 4, 2015

Comment Deadline: June 18, 2015

Date of Final Determination: _____


David Bugher, Responsible Official

NOTE: Pursuant to Lakewood Municipal Code Section 14.02.200, decisions of the Responsible Official regarding Process V Legislative Actions are final and are not subject to administrative appeal.

From: Marilyn Henderson [mailto:tukatz@tukatz.com]

Sent: Saturday, June 13, 2015 8:38 PM

Subject: Cottage Housing

Dear Council Members:

I understand there is a hearing on Tuesday about the proposed zoning ordinance change to allow 'cottage housing' in zones R1, R2, R3 and R4. I am not able to attend, but want to express my concerns about this proposal.

I have read the draft resolution and looked at the maps of the city. I have also had some email conversations with Dan Catron, the Planning Manager. He was very helpful in explaining the reasons behind the proposed changes. I understand that in large part it is an attempt to satisfy requirements in the Growth Management Plan and increase housing density.

Mr. Catron also explained to me that in 2000 the city successfully argued a case brought by the Low Income Housing Institute, which sought to increase densities in the central areas around the lakes. The argument, as I understand it, was that the large lot sizes were necessary to protect trees, wild life habitat and aquifer recharge areas. Which brings me to my concern about the proposed Cottage Housing: What has changed? Are the large lots, particularly in R1 zones, no longer needed to protect trees, wild life habitat and aquifer recharge areas? We see every year the problems with the lakes - particularly Lake Steilacoom, but recently Lake Louise. How will the proposed Cottage Housing address the problems we have with these lakes?

I am also concerned about providing for increased traffic - yes, I recognized that the plan is mandated by the Growth Management Act, but what plans are incorporated to address the increased traffic load, particularly along Gravelly Lake Drive, where getting onto the freeway is backed up in the morning? Also, are there plans to modify utilities to take on the extra load? What about police and fire? Will these units provide sufficient tax revenues to offset the additional cost for infrastructure, public safety and schools?

While I understand the necessity to implement the provisions of the Growth Management Act, I am concerned that this plan needs more discussion before rushing into a decision. I recall the discussion regarding the zoning variance for the SHB Estates - there was a lot of opposition to that variance, but it was granted anyway with, as I recall, a single stipulation - a traffic light at the intersection of Washington and Interlaaken. This was a travesty - a significant change to an area of large lots, impacting many property owners. I know nothing can be done about SHB Estates now, but I sincerely hope that the proposed Cottage Housing isn't yet another example of poor planning.

Mr. Catron also advised me of a zoning change that is in the works around Gravelly Lake Drive and Veterans where the property owner wants to subdivide into 7000 square foot lots. That is absolutely intolerable! I hope when that change comes before the city council there will be rigorous debate about the impact to the historical area of Lakewood.

Regards
Marilyn Henderson



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

June 26, 2015

Dan Catron, Principal Planner
City of Lakewood
Community Development Department
6000 Main Street Southwest
Lakewood, WA 98499-5027

Dear Mr. Catron:

Thank you for the opportunity to comment on the prethreshold consultation for the Lakewood Racquet and Sport Club Re-Designation & Rezone Project located at 5820 112th Street Southwest as proposed by Lakewood Racquet and Sport Club. The Department of Ecology (Ecology) reviewed the environmental checklist and has the following comment(s):

TOXICS CLEANUP: Eva Barber (360) 407-7094

If contamination is suspected, discovered, or occurs during the proposed re-designation, rezoning, and future residential development, testing of the potentially contaminated media must be conducted. If contamination of soil or groundwater is readily apparent, or is revealed by testing, Ecology must be notified. Contact the Environmental Report Tracking System Coordinator in the Southwest Regional Office (SWRO) at (360) 407-6300. For assistance and information about subsequent cleanup and to identify the type of testing that will be required, contact Eva Barber with the SWRO, Toxic Cleanup Program at the phone number given above.

REVIEWER: Sonia Mendoza

WATER QUALITY CONTACT: Deborah Cornett (360) 407-7269

The following construction activities require coverage under the Construction Stormwater General Permit:

1. Clearing, grading and/or excavation that results in the disturbance of one or more acres **and** discharges stormwater to surface waters of the State; and
2. Clearing, grading and/or excavation on sites smaller than one acre that are part of a larger common plan of development or sale, if the common plan of development or

- sale will ultimately disturb one acre or more **and** discharge stormwater to surface waters of the State.
- a) This includes forest practices (including, but not limited to, class IV conversions) that are part of a construction activity that will result in the disturbance of one or more acres, **and** discharge to surface waters of the State; and
3. Any size construction activity discharging stormwater to waters of the State that Ecology:
- a) Determines to be a significant contributor of pollutants to waters of the State of Washington.
 - b) Reasonably expects to cause a violation of any water quality standard.

If there are known soil/ground water contaminants present on-site, additional information (including, but not limited to: temporary erosion and sediment control plans; stormwater pollution prevention plan; list of known contaminants with concentrations and depths found; a site map depicting the sample location(s); and additional studies/reports regarding contaminant(s)) will be required to be submitted.

You may apply online or obtain an application from Ecology's website at: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/> - [Application](#).

Construction site operators must apply for a permit at least 60 days prior to discharging stormwater from construction activities and must submit it on or before the date of the first public notice.

Ecology's comments are based upon information provided by the lead agency. As such, they may not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.

If you have any questions or would like to respond to these comments, please contact the appropriate reviewing staff listed above.

Department of Ecology
Southwest Regional Office

(SM:15-3020)

cc: Eva Barber, TCP
Deborah Cornett, WQ
Josh Klimek, HQ/WQ
Lakewood Racquet and Sport Club (Applicant)
Michael Cina, AustinCina Architects (Contact)



PUBLIC WORKS DEPARTMENT STAFF REPORT

TO: PLANNING COMMISSION

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

MEETING DATE: July 15, 2015

AGENDA ITEM:

SUBJECT: COMPREHENSIVE PLAN – TRANSPORTATION ELEMENT UPDATE

Background:

The Washington State Growth Management Act (RCW 36.70) requires state and local governments manage Washington's growth by identifying and protecting critical areas and natural resource lands, designating urban growth areas, preparing comprehensive plans, and implementing them through capital investments and development regulations. These plans must be updated periodically to account for current population, employment, and land use and address updated regulations. The city adopted its first comprehensive plan in 2000 and annually amended it as needed. The city completed the major update of the land use element in 2014. Staff is now providing the draft *Transportation Element* update consistent with the updated land use element.

According to RCW 36.70a.070, the Comprehensive Plan shall include:

- (6) A transportation element that implements, and is consistent with, the land use element.
 - (a) The transportation element shall include the following subelements:
 - (i) Land use assumptions used in estimating travel;
 - (ii) Estimated traffic impacts to state-owned transportation facilities resulting from land use assumptions to assist the department of transportation in monitoring the performance of state facilities, to plan improvements for the facilities, and to assess the impact of land-use decisions on state-owned transportation facilities;
 - (iii) Facilities and services needs, including:
 - (A) An inventory of air, water, and ground transportation facilities and services, including transit alignments and general aviation airport facilities, to define existing capital facilities and travel levels as a basis for future planning. This inventory must include state-owned transportation facilities within the city or county's jurisdictional boundaries;
 - (B) Level of service standards for all locally owned arterials and transit routes to serve as a gauge to judge performance of the system. These standards should be regionally coordinated;

(C) For state-owned transportation facilities, level of service standards for highways, as prescribed in chapters [47.06](#) and [47.80](#) RCW, to gauge the performance of the system. The purposes of reflecting level of service standards for state highways in the local comprehensive plan are to monitor the performance of the system, to evaluate improvement strategies, and to facilitate coordination between the county's or city's six-year street, road, or transit program and the office of financial management's ten-year investment program. The concurrency requirements of (b) of this subsection do not apply to transportation facilities and services of statewide significance except for counties consisting of islands whose only connection to the mainland are state highways or ferry routes. In these island counties, state highways and ferry route capacity must be a factor in meeting the concurrency requirements in (b) of this subsection;

(D) Specific actions and requirements for bringing into compliance locally owned transportation facilities or services that are below an established level of service standard;

(E) Forecasts of traffic for at least ten years based on the adopted land use plan to provide information on the location, timing, and capacity needs of future growth;

(F) Identification of state and local system needs to meet current and future demands. Identified needs on state-owned transportation facilities must be consistent with the statewide multimodal transportation plan required under chapter [47.06](#) RCW;

(iv) Finance, including:

(A) An analysis of funding capability to judge needs against probable funding resources;

(B) A multiyear financing plan based on the needs identified in the comprehensive plan, the appropriate parts of which shall serve as the basis for the six-year street, road, or transit program required by RCW [35.77.010](#) for cities, RCW [36.81.121](#) for counties, and RCW [35.58.2795](#) for public transportation systems. The multiyear financing plan should be coordinated with the ten-year investment program developed by the office of financial management as required by RCW [47.05.030](#);

(C) If probable funding falls short of meeting identified needs, a discussion of how additional funding will be raised, or how land use assumptions will be reassessed to ensure that level of service standards will be met;

(v) Intergovernmental coordination efforts, including an assessment of the impacts of the transportation plan and land use assumptions on the transportation systems of adjacent jurisdictions;

(vi) Demand-management strategies;

(vii) Pedestrian and bicycle component to include collaborative efforts to identify and designate planned improvements for pedestrian and bicycle facilities and corridors that address and encourage enhanced community access and promote healthy lifestyles.

(b) After adoption of the comprehensive plan by jurisdictions required to plan or who choose to plan under RCW [36.70A.040](#), local jurisdictions must adopt and enforce ordinances which prohibit development approval if the development causes the level of service on a locally owned transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development. These strategies may include increased public transportation service, ride sharing programs, demand management, and other transportation systems management strategies. For the purposes of this subsection (6), "concurrent with the development" means that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years.

(c) The transportation element described in this subsection (6), the six-year plans required by RCW [35.77.010](#) for cities, RCW [36.81.121](#) for counties, and RCW [35.58.2795](#) for public transportation systems, and the ten-year investment program required by RCW [47.05.030](#) for the state, must be consistent.

Discussion:

Over the past year, staff has been working with our consultant, the Transpo Group in updating the *Transportation Element*. Two major efforts included: 1) evaluating the current transportation system operations and determining if the current and planned transportation improvements are adequate to serve future land use to an adopted level of service standard; and

2) updating the goals and policies to be consistent with current state, regional, and local regulations and City of Lakewood vision.

Staff will provide an overview of the “Background Report” findings as well as review proposed changes to the “Transportation Element” at the July 15, 2015 meeting.

Attachments:

1. DRAFT Lakewood Transportation Element with Highlighted changes
2. DRAFT Lakewood Comprehensive Plan – Transportation Background Report

Transportation Background Report

CITY OF LAKEWOOD COMPREHENSIVE PLAN

Prepared for:
City of Lakewood

July 2015

Prepared by:



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Kirkland, WA 98034-7120
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Inventory of Existing Transportation Facilities & Conditions

Travel needs within the City of Lakewood are met by a range of transportation facilities and services. These facilities and services provide for travel within the City and also connect Lakewood with the rest of the region. The City's existing transportation system is comprised of a state highway, arterials, collectors, and local roads as well as facilities for pedestrians, bicycles, and transit. The following summarizes key elements of the existing transportation system serving the City. The inventory provides input for identifying and prioritizing the City's transportation improvement projects and programs.

Street & Highway System

The backbone of the City's transportation system is the street and highway system. The street and highway system provides mobility and access for a range of travel modes and users. Roadways are classified by their intended function and desired service. The City's roadway functional classification is identified in the Transportation Systems Plan section and is based on existing and future transportation needs.

To provide background for identifying the transportation improvement projects and programs, a summary of existing conditions of the City roadway system is presented. This includes the number of lanes and existing traffic controls, traffic volumes and operations, transportation safety conditions, and the freight system. Non-motorized and transit facilities and services, which use the roadway system, are described in the subsections that follow.

Street Network

The existing state highway and arterial street system serving Lakewood is shown in Figure 1. The City is served by several highways and major, minor, and local streets include Interstate 5 (I-5), State Route (SR) 512, South Tacoma Way, Pacific Highway SW, Steilacoom Boulevard, Bridgeport Way, a portion of Gravelly Lake Drive, Custer Road, 100th Street SW, Lakewood Drive, Washington Boulevard, Military Road, and a small segment of 112th Street SW. Existing intersection traffic control devices are shown on Figure 2. All major arterial street intersections are signalized.

Existing Traffic Volumes

Recent traffic counts were assembled from a variety of sources to determine current vehicle demands on City roadways. Daily vehicle volumes were obtained from the City of Lakewood and as needed, were adjusted based on historically observed growth rates to reflect existing (2014) conditions. Weekday PM peak hour volumes were also assembled for major intersections throughout the City through a combination of planning studies conducted in the City and new counts collected in 2014. The weekday PM peak hour is typically the period when traffic volumes are the highest within the City.

Existing (2014) average daily traffic volumes are summarized in Figure 3 and existing weekday PM peak hour traffic volumes are summarized in Figure 4. As shown, high daily traffic volumes are generally experienced along principal arterials, which carry volumes ranging from approximately 13,000 to as high as 41,000 trips per day. Traffic volumes are the highest in the vicinity of interchanges with I-5, with the highest daily volume occurring at South Tacoma Way north of the I-5/SR 512 interchange (about 41,400 vehicles per day). Volumes are generally lower in the southern and western areas of the city, where many of the residential neighborhoods are located.

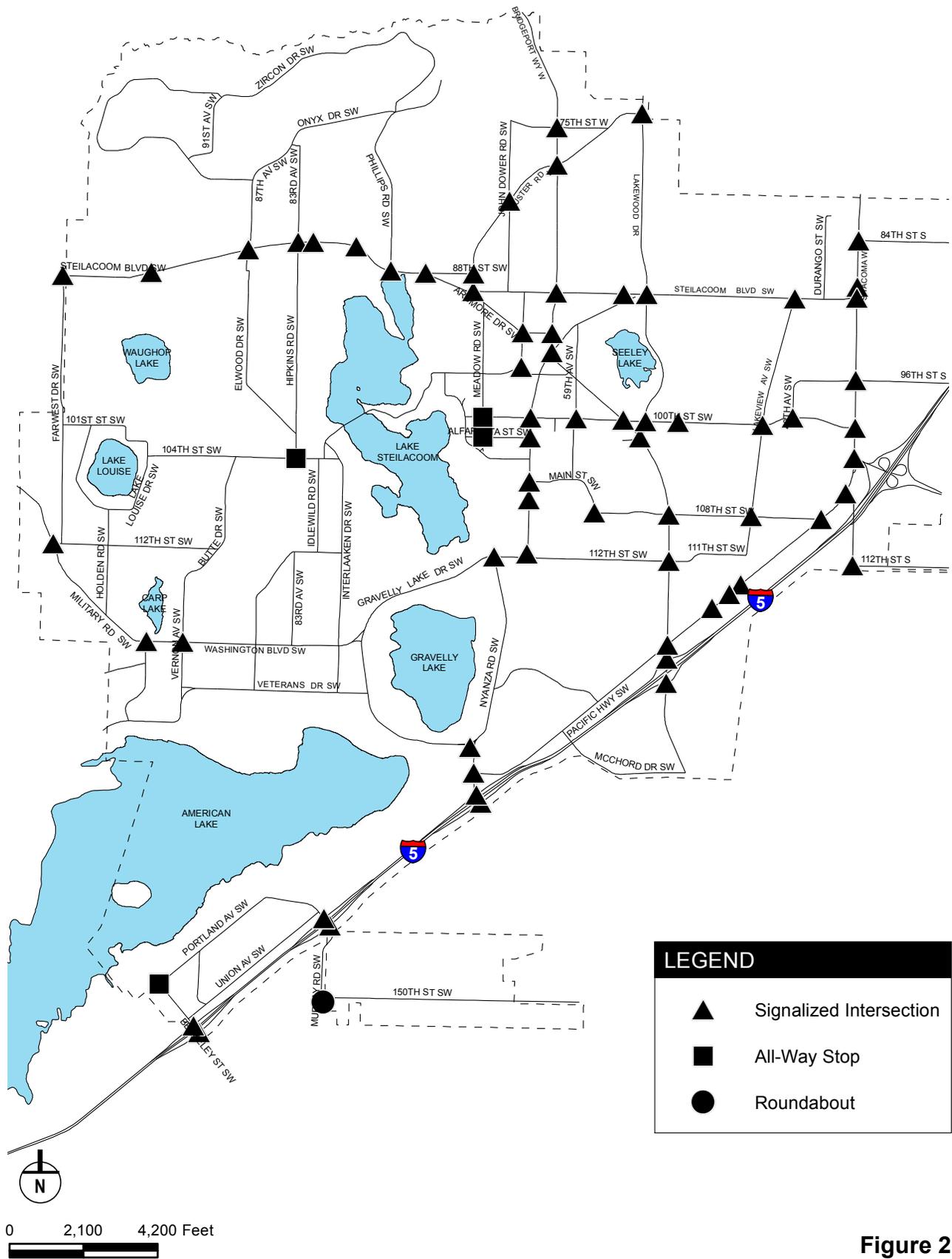


Figure 2
Existing Traffic Control

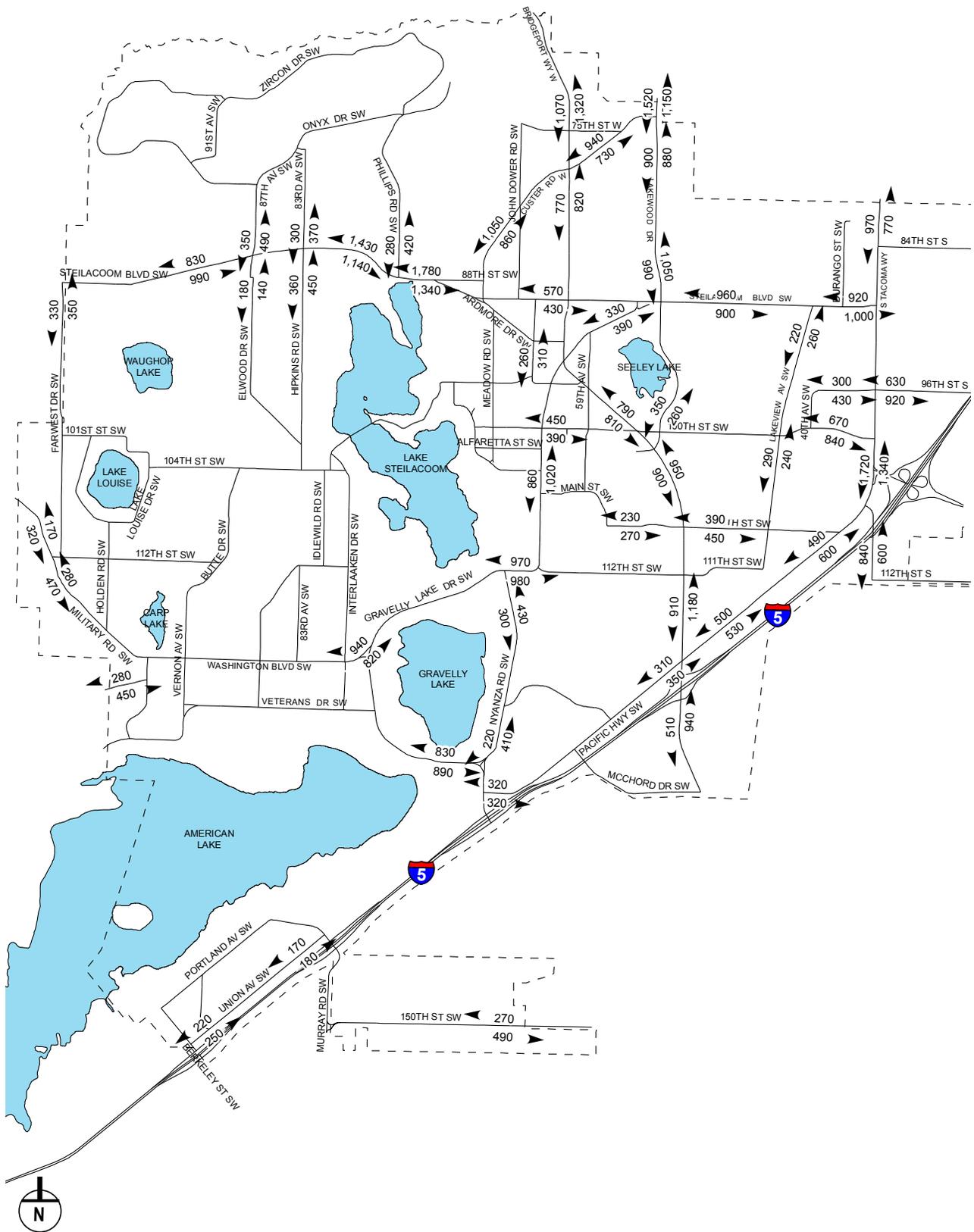


Figure 4
Existing (2014) Weekday PM
Peak Hour Traffic Volumes

Source: Transpo Group
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Existing Traffic Operations

Traffic volumes were used to evaluate existing traffic operations in Lakewood through the evaluation of levels of service (LOS) as defined in the later Travel Forecasts and Needs Evaluation section. Major intersections throughout the City were evaluated based on the latest level of service methodologies defined in the *Highway Capacity Manual (HCM)*, 2010.

Level of service (LOS) is an estimate of the quality and performance of transportation facility operations in a community. According to the HCM, the degree of traffic congestion and delay is rated using the letter "A" for the least amount of congestion to the letter "F" for the highest amount of congestion (i.e., LOS A through LOS F). LOS for intersections is based on the overall delay for all drivers at an intersection while LOS for roadway segments is based on the volume-to-capacity ratio (V/C) for roadway segments.

An LOS standard of LOS D is generally applied for all arterial street intersection in Lakewood, and WSDOT facilities within the City are also under an LOS D standard. An average delay of 35 seconds or less for drivers at stop-controlled intersection is equivalent to LOS D or better. At signalized intersections this threshold is 55 seconds or less and for roadway segments it is a V/C ratio of 0.90 or less.

Table 1 summarizes the level of service at each of the major intersections while roadway operations are described later.

Intersection	LOS^{1,2}	Delay³
Berkeley Ave/NB I-5 Ramps ²	D	52
Berkeley Ave/SB I-5 Ramps ²	C	27
Berkeley Ave/Union Ave	B	12
Bridgeport Way/San Francisco Ave	A	9
Bridgeport Way/NB I-5 Ramps ²	C	21
Bridgeport Way/SB I-5 Ramps ²	B	19
Bridgeport Way/Pacific Hwy	D	45
Bridgeport Way/112th St	B	17
Bridgeport Way/108th St	B	20
Bridgeport Way/Lakewood Dr ²	C	30
Bridgeport Way/100th St	C	32
Bridgeport Way/59th Ave	B	12
Bridgeport Way/Mt. Tacoma Dr	A	8
Bridgeport Way/Gravelly Lake Dr ²	C	27
Bridgeport Way/93rd St	B	10
Bridgeport Way/Steilacoom Blvd	C	22
Bridgeport Way/Custer Rd	C	27
Bridgeport Way/75th St	B	16
Bridgeport Way/Meadow Park Rd	D	43
Gravelly Lake Dr/NB I-5 Ramps ²	E	70
Gravelly Lake Dr/SB I-5 Ramps ²	D	47
Gravelly Lake Dr/Pacific Hwy ²	B	16
Gravelly Lake Dr/Nyanza Rd S ²	A	10
Gravelly Lake Dr/Veterans Dr	B	11
Gravelly Lake Dr/Washington Blvd	B	18
Gravelly Lake Dr/Nyanza Rd N ²	A	8

Intersection	LOS^{1,2}	Delay³
Gravelly Lake Dr/112th St	C	30
Gravelly Lake Dr/Main St ²	C	27
Gravelly Lake Dr/Avondale Rd	E	50
Gravelly Lake Dr/Alfaretta St	B	11
Gravelly Lake Dr/100th St	B	19
Gravelly Lake Dr/Mt. Tacoma Dr	B	13
Gravelly Lake Dr/Steilacoom Blvd	B	12
Pacific Hwy/108th St ²	C	22
Pacific Hwy/S Tacoma Way ²	C	24
Steilacoom Blvd/Sentinel Dr	A	10
Steilacoom Blvd/Western State Hospital ²	A	7
Steilacoom Blvd/87th Ave	B	19
Steilacoom Blvd/83rd Ave	C	26
Steilacoom Blvd/Custer ES	B	14
Steilacoom Blvd/Briggs Ln	B	18
Steilacoom Blvd/Phillips Rd ²	B	10
Steilacoom Blvd/88th St ²	B	16
Steilacoom Blvd/Custer Rd ²	A	7
Steilacoom Blvd/Lakewood Dr	C	26
Steilacoom Blvd/Hageness Dr	A	3
Steilacoom Blvd/Lakeview Dr	A	8
Steilacoom Blvd/Durango St	D	33
Steilacoom Blvd/S Tacoma Way	C	30
S Tacoma Way/Pacific Hwy ²	C	24
S Tacoma Way/SR 512-Perkins Ln ²	D	35
S Tacoma Way/100th St ²	B	10
S Tacoma Way/96th St	C	28
S Tacoma Way/92nd St	F	60
S Tacoma Way/84th St ²	B	14
SR 512/I-5 SB Off-Ramp	E	62
Thorne Ln/NB I-5 Ramps ²	D	51
Thorne Ln/SB I-5 Ramps ²	D	48
Thorne Ln/Union Ave	B	11
100th St/Lakewood Dr	C	21
Motor Ave/Whitman Ln	A	6
Ardmore Dr/Whitman Ln	B	11
Custer Rd/Lakewood Dr	D	46
Interlaaken Dr/Washington Blvd	D	34
75th St/Custer Rd	B	14
75th St/Lakewood Dr	C	17
108th St/Lakeview Dr	A	8
John Dower Rd/Custer Rd	A	6
88th St/Custer Rd ²	A	5
112th St/Old Military Rd	A	6
112th St/Holden Rd	A	7
100th St/Lakeview Dr	B	17
100th St/59th Ave	B	15

Intersection	LOS ^{1,2}	Delay ³
108th St/Main St	B	11
100th St/David Ln	A	5
Murray Rd/150th St ⁴	B	0

1. Level of service based on *Highway Capacity Manual (HCM) 2010* methodology unless otherwise noted.
2. Level of service based on *HCM 2000* methodology due to limitation of the *HCM 2010* methodology,
3. Average delay in seconds per vehicle.
4. Level of service based on Sidra roundabout methodology.
5. When comparing these calculated performance measures to field observations and real-world driver experience, it is important to note that these calculations are based on the volume of vehicles that travelled through each intersection and may not fully capture the actual travel demand; some locations such as S Tacoma Way/100th Street or S Tacoma Way/SR 512-Perkins Lane may operate worse than reported in this table.

As shown in Table 1, all study intersections currently operate at LOS D or better with the exception of the State Route (SR) 512/I-5 Southbound Off-Ramp traffic signal which operates at LOS E primarily due to long vehicle delays on the southbound off-ramp approaching SR 512.

Although all study intersections are calculated to meet City and WSDOT level of service standards, when comparing these calculated performance measures to field observations and real-world driver experience, it is important to note that these calculations are based on the volume of vehicles that travelled through each intersection and may not fully capture the actual travel demand. This is demonstrated by observed congestion at the two SR 512 intersections where calculated delays may be shorter than those experienced in the field. However, the calculated results do illustrate similar patterns of performance and relative congestion to those observed in the field, which indicates that the methodology is useful in evaluating the performance of potential improvements.

Roadway V/C ratios and LOS were calculated for mid-block arterial roadway sections throughout the City of Lakewood, based on and on the HCM methodology and current PM peak hour traffic volumes. The results are shown in Table 2.

Table 2. Existing (2014) Weekday PM Peak Hour Roadway Traffic Operations Summary

Street Name/Section	Existing (2014) Volume		Existing Capacity ²	Existing (2014) V/C	
	NB/EB ¹	SB/WB ¹		NB/EB	SB/WB
Ardmore Dr SW					
southeast of Steilacoom Blvd SW	480	480	720	0.67	0.67
northwest of Whitman Ave SW	370	460	720	0.51	0.64
Bridgeport Way W					
north of 75th St W	1,320	1,070	2,050	0.64	0.52
north of Custer Rd W	920	900	2,050	0.45	0.44
south of Custer Rd W	820	770	2,050	0.40	0.38
north of Gravelly Lake Dr SW	1,070	890	2,050	0.52	0.43
south of Gravelly Lake Dr SW	740	680	2,050	0.36	0.33
north of 100th St SW	790	810	2,050	0.39	0.40
south of 100th St SW	570	620	2,050	0.28	0.30
south of Lakewood Dr SW	950	900	2,050	0.46	0.44
north of 112th St SW	880	760	2,050	0.43	0.37
north of Pacific Highway SW	1,180	910	2,050	0.58	0.44
south of Pacific Highway SW	1,250	990	2,050	0.61	0.48
at Clover Creek bridge south of I-5	940	510	2,050	0.46	0.25
Custer Rd SW/ W					
northeast of Bridgeport Way SW	730	940	1,825	0.40	0.52

Street Name/Section	Existing (2014) Volume			Existing (2014) V/C	
	NB/EB ¹	SB/WB ¹	Existing Capacity ²	NB/EB	SB/WB
southwest of Bridgeport Way SW	790	1,040	1,825	0.43	0.57
north of 88th St SW	860	1,050	1,825	0.47	0.58
south of 88th St SW	120	180	2,050	0.06	0.09
Far West Dr SW					
south of Steilacoom Blvd SW	350	330	2,050	0.17	0.16
Gravelly Lake Dr SW					
southwest of Steilacoom Blvd SW	390	330	2,050	0.19	0.16
northeast of Bridgeport Way SW	280	290	1,825	0.15	0.16
southwest of Bridgeport Way SW	670	560	2,050	0.33	0.27
south of Mount Tacoma Dr SW	960	740	2,050	0.47	0.36
south of 100th St SW	950	790	2,050	0.46	0.39
south of Alfareta St SW	920	670	2,050	0.45	0.33
north of Wildaire Rd SW	1,020	860	2,050	0.50	0.42
north of 112th St SW	920	870	2,050	0.45	0.42
west of 112th St SW	980	970	2,050	0.48	0.47
west of end Nyanza Rd SW (S)	890	830	975	0.91	0.85
north of Pacific Highway SW	1,380	1,070	2,050	0.67	0.52
south of Pacific Highway SW	1,330	1,020	2,050	0.65	0.50
Hipkins Rd SW					
south of Steilacoom Blvd SW	450	360	720	0.63	0.50
Lakeview Ave SW					
south of 100th St SW	240	290	1,825	0.13	0.16
south of Steilacoom Blvd SW	260	220	1,825	0.14	0.12
Lakewood Dr SW					
north of 74th St W	1,150	1,520	2,050	0.56	0.74
south of 74th St W	880	900	1,825	0.48	0.49
north of Steilacoom Blvd SW	1,050	990	1,825	0.58	0.54
south of Steilacoom Blvd SW	690	680	2,050	0.34	0.33
north of 100th St SW	260	350	2,050	0.13	0.17
Military Rd SW					
south of 112th St SW	470	280	975	0.48	0.29
northwest of 112th St SW	320	170	975	0.33	0.17
Mount Tacoma Dr SW					
west of Bridgeport Way	200	170	975	0.21	0.17
west of Gravelly Lake Dr	390	410	975	0.40	0.42
Murray Rd SW					
north of 146th St SW	1,040	530	1,825 NB / 975 SB	0.57	0.54
N Gate Rd SW					
northeast of Nottingham Rd SW	450	280	720	0.63	0.39
N Thorne Ln SW					
southeast of Union Ave SW	270	450	720	0.38	0.63
Nyanza Rd SW (N)					
north of Gravelly Lake Dr SW	410	220	975	0.42	0.23
south of Gravelly Lake Dr SW	430	300	975	0.44	0.31
Pacific Highway SW					
north of 108th St SW	1,050	850	2,050	0.51	0.41

Street Name/Section	Existing (2014) Volume			Existing (2014) V/C	
	NB/EB ¹	SB/WB ¹	Existing Capacity ²	NB/EB	SB/WB
southwest of 108th St SW	600	490	2,050	0.29	0.24
northeast of Bridgeport Way SW	530	500	2,050	0.26	0.24
southwest of Bridgeport Way SW	350	310	975	0.36	0.32
east of Gravelly Lake Dr SW	320	320	720	0.44	0.44
Phillips Rd SW					
north of Steilacoom Blvd SW	420	280	720	0.58	0.39
South Tacoma Way					
north of 84th St SW	770	970	2,050	0.38	0.47
north of Steilacoom Blvd	1,000	1,240	2,050	0.49	0.60
south of Steilacoom Blvd SW	990	1,310	2,050	0.48	0.64
north of 96th St S	910	1,300	2,050	0.44	0.63
north of 100th St SW	780	950	2,050	0.38	0.46
south of SR 512	1,060	1,190	2,050	0.52	0.58
southeast of Pacific Highway SW	600	840	2,050	0.29	0.41
Steilacoom Blvd SW					
east of Farwest Dr SW	830	840	1,825	0.45	0.46
west of 87th Ave SW	990	830	1,825	0.54	0.45
west of 83rd Ave SW/Hipkins Rd SW	960	1,190	2,050	0.47	0.58
west of Phillips Rd SW	1,140	1,430	1,825	0.62	0.78
east of Phillips Rd	1,340	1,780	2,050	0.65	0.87
southeast of 88th St SW	710	1,040	1,825	0.39	0.57
west of Bridgeport Way SW	430	570	1,825	0.24	0.31
east of Bridgeport Way SW	470	580	1,825	0.26	0.32
west of Gravelly Lake Dr SW	500	600	1,825	0.27	0.33
east of Lakewood Dr SW	900	960	2,050	0.44	0.47
west of Lakeview Ave SW	940	930	2,050	0.46	0.45
west of South Tacoma Way	1,000	920	2,050	0.49	0.45
Union Ave SW					
northeast of Berkeley St SW	250	220	720	0.35	0.31
southwest of North Thorne Ln SW	180	170	720	0.25	0.24
Washington Blvd SW					
west of Gravelly Lake Dr SW	820	940	975	0.84	0.96
Whitman Ave SW					
south of Ardmore Dr SW	310	260	975	0.32	0.27
40th Ave SW					
north of 100th St SW	360	390	975	0.37	0.40
74th St					
west of Lakewood Dr	960	1,010	2,050	0.47	0.49
83rd Ave SW					
north of Steilacoom Blvd SW	370	300	975	0.38	0.31
84th St S					
east of South Tacoma Way	540	570	2,050	0.26	0.28
87th Ave SW					
south of Steilacoom Blvd SW	140	180	720	0.19	0.25
north of Steilacoom Blvd SW	490	350	975	0.50	0.36
88th St SW					

Street Name/Section	Existing (2014) Volume		Existing Capacity ²	Existing (2014) V/C	
	NB/EB ¹	SB/WB ¹		NB/EB	SB/WB
east of Steilacoom Blvd SW	780	840	1,825	0.43	0.46
93rd St SW					
east of Whitman Ave SW	180	220	975	0.18	0.23
96th St S					
west of South Tacoma Way	430	300	975	0.44	0.31
east of South Tacoma Way	920	630	1,825	0.50	0.35
100th St SW					
west of South Tacoma Way	840	670	1,825	0.46	0.37
east of Lakeview Ave SW	1,180	930	2,050	0.58	0.45
west of Lakeview Ave SW	980	810	2,050	0.48	0.40
east of Lakewood Dr SW	1,130	1,040	2,050	0.55	0.51
east of Bridgeport Way	730	710	2,050	0.36	0.35
east of Gravelly Lake Dr	390	450	1,825	0.21	0.25
108th St SW					
west of Pacific Highway SW	550	460	720	0.76	0.64
east of Bridgeport Way SW	450	390	975	0.46	0.40
west of Bridgeport Way SW	300	270	975	0.31	0.28
east of Davisson Rd SW	270	230	975	0.28	0.24
112th St SW/S					
between Military Rd SW & Farwest Dr S	200	210	720	0.28	0.29
east of Gravelly Lake Drive	310	350	975	0.32	0.36
east of Bridgeport Way SW	180	190	975	0.18	0.19
west of Bridgeport Way SW	290	310	720	0.40	0.43
150th St SW					
east of Woodbrook Rd SW	490	270	720	0.68	0.38

1. Volumes shown are for northbound and southbound (NB and SB) when the roadway is oriented NB-SB or eastbound and westbound (EB and WB) when oriented EB-WB.
 2. When roadway capacity differs between a roadway's two directions of travel, each direction's capacity is shown (e.g. NB / SB or EB / WB).

Figure 5 highlights the one arterial segment within the City of Lakewood that currently operates at LOS D (v/c > 0.90) or worse under existing (2014) conditions: westbound Washington Boulevard SW west of Gravelly Lake Drive SW. Although operating at LOS F with a v/c of 1.22, this roadway segment does not currently exceed its adopted LOS F and 1.30 v/c standard.

Freight System

The Washington State Freight and Goods Transportation System (FGTS) is used to classify state highways, county roads, and city streets according to average annual gross truck tonnage they carry as directed by RCW 47.05.021. The FGTS establishes funding eligibility for the Freight Mobility Strategic Investment Board (FMSIB) grants and supports designations of HSS (Highways of Statewide Significance) corridors, pavement upgrades, traffic congestion management, and other state investment decisions.

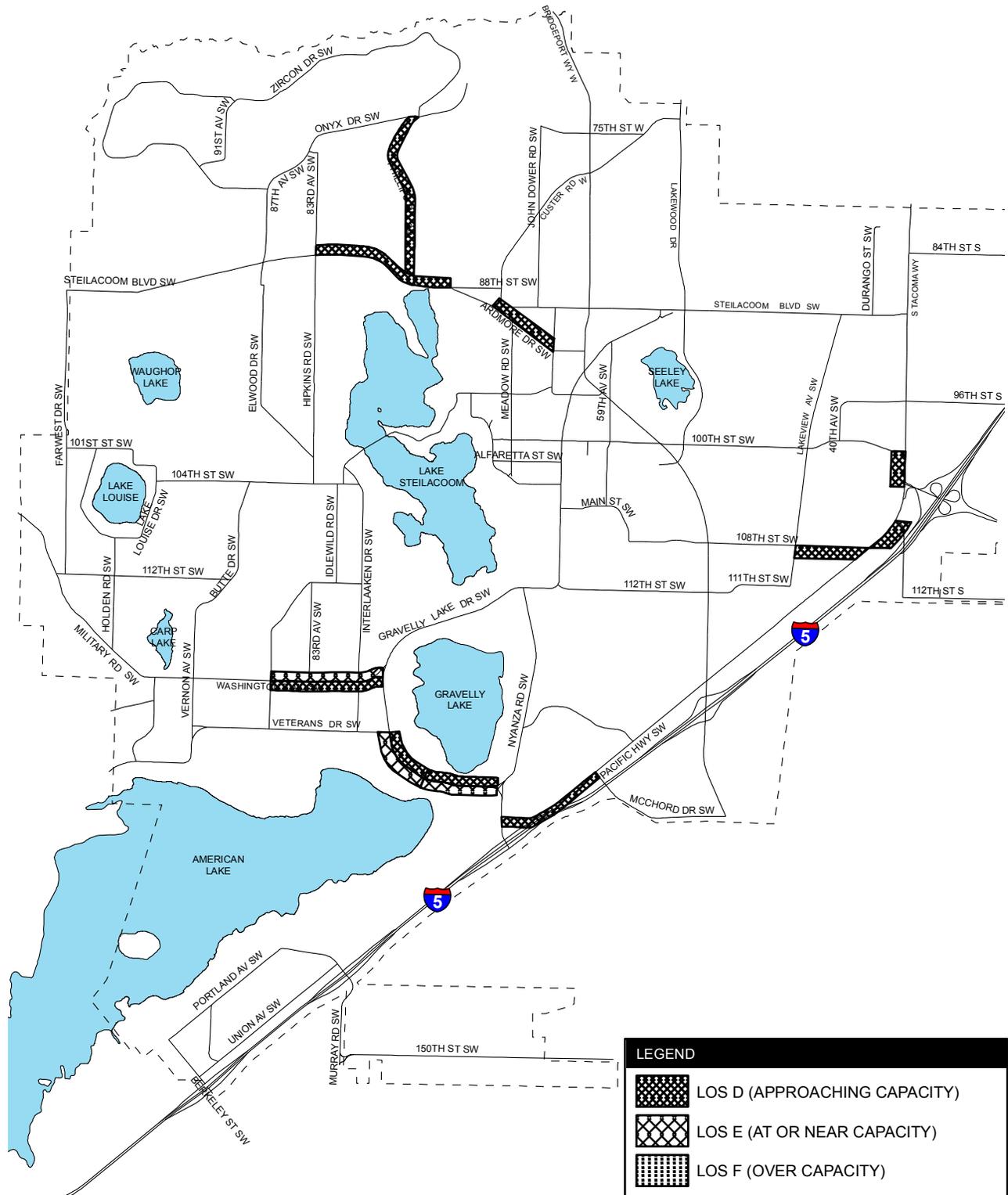


Figure 5
Existing (2014) Weekday PM Peak Hour
Roadway LOS Where LOS D or Worse

Source: Transpo Group

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The FGTS classifies roadways using five freight tonnage classifications, T-1 through T-5. Routes classified as T-1 or T-2 are considered strategic freight corridors and are given priority for receiving FMSIB funding. Within the City of Lakewood, the western terminus of SR 512 up to Pacific Highway SW has the highest classification at T-1, which reflects this state route’s connectivity to I-5 and the broader Puget Sound region freeway system. The City of Lakewood also classifies all principal arterials as truck routes and designs these roadways to serve freight movement. Industrial areas throughout the City served by these routes include the Lakewood Industrial Park, the areas southeast of the SR 512/I-5 interchange, and other designated industrial areas throughout the City

Non-Motorized Travel System

Pedestrian and bicycle facilities play a vital role in the City’s transportation environment. The non-motorized transportation system is comprised of facilities that promote mobility without the aid of motorized vehicles. A well-established system encourages healthy recreational activities, reduces travel demand on City roadways, and enhances safety within a livable community. Pedestrian and bicycle facilities also provide access to/from transit facilities. Good transit access can increase the use of non-automobile travel modes, and vice versa.

The City of Lakewood has developed a Non-Motorized Transportation Plan (NMTP, June 2009). The NMTP provided an inventory of the City’s pedestrian and bicycle facilities, evaluated deficiencies and needs, and identified projects and strategies to enhance the non-motorized system.

Transit System

Three transit providers operate within the City of Lakewood: Pierce Transit, Intercity Transit, and Sound Transit. Pierce Transit provides bus service throughout Lakewood and all three transit agencies provide service to areas outside of Lakewood.

Pierce Transit provides transit service within the City of Lakewood and throughout Pierce County. There are currently ten local routes serving the City of Lakewood, offering connections to McChord AFB, Parkland Transit Center, Tillicum, Steilacoom, Tacoma Mall, and downtown Tacoma. Nine of these routes connect at the Lakewood Transit Center, adjacent to the north side of Lakewood Towne Center.

In addition to the local transit routes, regional express routes to Seattle and Olympia operated by Sound Transit and Intercity Transit also serve the SR 512 Park and Ride located at the junction of SR 512 and South Tacoma Way, and the Lakewood Sounder Station. Sound Transit operates three bus routes that serve the City of Lakewood as well as the Lakewood-Seattle Commuter Train. Intercity Transit operates four daily commuter routes that serve Lakewood and one weekend route. Table 1 lists Pierce Transit, Sound Transit, and Intercity transit routes currently serving the City of Lakewood.

Table 3. Transit Service Routes

Route No.	Operator	Description	Service Area	Schedule
2	Pierce Transit	S 19th St – Bridgeport	Downtown Tacoma to Lakewood Mall	Weekdays – every 30 minutes Sat/Sun. – every 30 minutes
3	Pierce Transit	Lakewood – Tacoma	Downtown Tacoma to Lakewood Mall	Weekdays – every 30 minutes Sat/Sun. – every 30 minutes
48	Pierce Transit	Sheridan – M St	Downtown Tacoma to Lakewood Mall	Weekdays – every 30 minutes Sat/Sun. – every hour
51	Pierce Transit	Union Ave	Ruston to St Clare Hospital	Weekdays – every hour

Route No.	Operator	Description	Service Area	Schedule
				Sat/Sun. – every hour
202	Pierce Transit	72nd St	Lakewood Mall to Tacoma City Park	Weekdays – every 30 minutes Sat/Sun. – every 30 minutes
204	Pierce Transit	Lakewood - Parkland	Pacific Lutheran University to Lakewood Mall	Weekdays – every 30 minutes Sat/Sun. – every 30 minutes
206	Pierce Transit	Pacific Highway – Tillicum	Lakewood Mall to Tillicum	Weekdays – every 45 minutes Sat/Sun. – every 45 minutes
212	Pierce Transit	Steilacoom	Lakewood Mall to Steilacoom Ferry	Weekdays – every 30 minutes Sat/Sun. – every hour
214	Pierce Transit	Washington	Lakewood Mall to Pierce College to American Lake Veterans Hospital	Weekdays – every 30 minutes Sat/Sun. – every hour
300	Pierce Transit	S Tacoma Way	Tacoma Mall to McChord Air Force Base	Weekdays – every 30 minutes Sat/Sun. – every hour
574	Sound Transit	Lakewood – Sea-Tac	Lakewood Mall to Sea-Tac Airport	Weekdays – every 30 minutes Sat/Sun. – every 30 minutes
592	Sound Transit	Olympia/DuPont – Seattle	Downtown Seattle to Downtown Olympia	Weekdays – every 20 minutes Sat/Sun. – every 30 minutes
594	Sound Transit	Lakewood – Seattle	Downtown Seattle to Downtown Tacoma to DuPont	Weekdays – every 15 minutes Sat/Sun. – every 30 minutes
Train	Sound Transit	Commuter rail line from Lakewood to Seattle	Downtown Seattle to St Clare Hospital	Weekdays – every 30 minutes Sat/Sun. – No Service
603	Intercity Transit	Olympia – Tumwater – Tacoma - Lakewood	Downtown Tacoma to Tumwater	Weekdays – every 30 minutes Sat/Sun. – No Service
605	Intercity Transit	Weekend Service	Downtown Tacoma to Tumwater	Weekdays – No Service Sat/Sun. – Every hour
609	Intercity Transit	S 19th St – Bridgeport	Downtown Tacoma to Lakewood Mall	Weekdays – every 30 minutes Sat/Sun. – every 30 minutes
612	Intercity Transit	Lakewood – Tacoma	Downtown Tacoma to Lakewood Mall	Weekdays – every 30 minutes Sat/Sun. – every 30 minutes
620	Intercity Transit	Sheridan – M St	Downtown Tacoma to Lakewood Mall	Weekdays – every 30 minutes Sat/Sun. – every hour

1. Route and service information provided on each transit agencies' website (Accessed 7/1/2015).

Pierce Transit also provides door-to-door paratransit service via the Shuttle for the mentally ill and physically impaired. This service is available through the Pierce Transit Dispatch Office. Rideshare and ridematch programs are also available for commuters who want to start or join a carpool or vanpool.

In support of these transit operations, several transit service facilities are also provided in Lakewood including:

- The Lakewood Transit Center located in the Town Center area,
- The SR 512 Park & Ride near the SR 512 / I-5 interchange, and
- Lakewood Station on Pacific Highway SW near the Bridgeport Way SW interchange with I-5

City Transportation Programs

The City of Lakewood maintains a Six-Year Comprehensive Transportation Improvement Program (Six-Year TIP) that provides a six-year list of proposed transportation-related capital expenditures and associated operating costs for the City. This plan sets funding strategies not only for the current year, but also to project future needs for major construction, land acquisition, and equipment to improve the cultural environment, capital infrastructure, and recreational opportunities for the citizens of Lakewood.

The City maintains a pavement resurfacing program to maintain the City's road system to the highest condition rating with the funds available using asphalt overlays and surface chip seals. The City uses a Pavement Management System software program to help identify individual resurfacing projects. The City targets alternating annual funding of \$30,000 and \$5,000 for the pavement management software program while funding for pavement resurfacing varies each year depending on roadway locations and resurfacing needs. The City's 2016-2021 Six-Year Transportation Improvement Program identifies a minimum annual expenditure of \$1,410,000 for pavement resurfacing during the next six years.

Travel Forecasts and Needs Evaluation

In addition to addressing existing transportation system issues, the City must develop its transportation system to accommodate forecast growth. The Growth Management Act (GMA) requires that the transportation planning horizon be at least ten years in the future. The City has adopted 2030 as the forecast year for the Transportation Element consistent with the Land Use Element.

The City's travel demand model was updated to support the City's transportation planning efforts. The travel demand model provides a tool for forecasting long-range traffic volumes based on the projected growth in housing and employment identified in the Land Use Element. However, it must be noted that the specific land use forecasts included in the model are intended for planning purposes only and in no way are intended to restrict or require specific land use actions. The land use forecasts are consistent and supportive with the adopted countywide growth targets for the City and region.

The following sections summarize the travel demand forecast, planned improvements, and level of service standards used to evaluate the adequacy of the City's planned transportation system. A future baseline scenario (2030 Baseline) was evaluated that reflects all currently planned land uses and transportation improvements. Where deficiencies were identified by this analysis when compared to the City's adopted standards, improvements were identified to be added to the City's Comprehensive Plan (2030 Plan).

Travel Demand Forecasts

A citywide travel demand model was developed using the Visum computer software package. An important function of a travel demand model is its ability to analyze future land use and its corresponding travel forecasts. The model calculates trip generation based on land use characteristics, allowing the impact of different land use types and development intensities to be evaluated.

The City's travel demand model developed in 2009 was updated as part of the I-5 JBLM Corridor Plan. The I-5/JBLM/Lakewood Model (or 2014 Lakewood Model) was the basis for the 2015 Transportation Element update because it enhances the 2009 model with more detail around I-5 and JBLM facilities and travel demands. The 2009 Lakewood Model was a refined version of Pierce County's older regional EMME model, but was converted to the Visum software platform. TAZs had also been subdivided to better reflect travel patterns in the Cities of Lakewood and DuPont, and for JBLM areas.

The 2014 Lakewood Model was built to be generally consistent with PSRC model inputs and outputs, such as regional land use forecasts, mode share estimates, and trip distribution in the model area, along with future forecasts at some external zones. The model also included the roadway network in eastern Thurston County. The 2014 Lakewood Model is generally consistent with TRPC future volume forecasts for Thurston County external zones.

Land use inputs drive the travel demand developed for the study area. In other words, the number of person trips generated in the model is directly tied to the land use inputs. These land use inputs can be in units of people, homes, or employment, or for more unique land types, specific traffic counts. The land use growth assumed in the City's travel demand model is consistent with the Land Use Element.

Within the City of Lakewood, the number of residential dwelling units was forecast to grow at an annual growth rate of 1.3 percent until 2030, based on Pierce County growth targets for the City of Lakewood. The number of employees is expected to grow at an annual growth

rate of 1.6 percent until 2030, consistent with the growth agreed upon by Pierce County and local cities and the Land Use Element of the City of Lakewood Comprehensive Plan.

Planned Transportation Improvements

The City has identified a comprehensive list of multimodal transportation system improvement projects and programs. The multimodal improvement projects address transportation needs within the existing City limits. Improvements under other jurisdictions include previously identified projects as well as potential improvements identified by the City of Lakewood. The City will continue to coordinate with the other agencies in their transportation planning efforts to facilitate development of a comprehensive transportation system for the City and surrounding communities.

The following sections describe roadway network and transit service/capital project planned to improve the transportation system within the City. Additional improvement not currently included but identified to be added to the City's Comprehensive Plan are also identified (2030 Plan). Non-motorized improvements have been separately identified in the City's Non-Motorized Transportation Plan (NMTP, June 2009).

Roadway Network Improvements

Adapted from the existing street network, the future street network includes various planned transportation improvements. For travel demand forecasting purposes, only funded projects associated with vehicle operations and roadway capacity have been analyzed in the City's travel demand model. The following are planned transportation improvements outside the City assumed when evaluating future 2030 Baseline model:

- High-Occupancy Vehicle lanes on I-5 and SR 16 in the Tacoma area, north of S 38th Street
- SR 510 Yelm Loop
- I-5 Congestion Management TIGER III (Southbound auxiliary lane and ramp metering)
- Point Defiance Bypass rail project
- JBLM Joint-Base Connector Phase 1 (Rainer Gate Closed)
- JBLM Integrity Gate Open
- JBLM Mounts Road Gate Open (full access)
- JBLM I-Street and Pendleton Gates Closed

For areas within the City, the future 2030 Baseline scenario includes only the projects that have been recently completed or will be completed in the near future as identified in the City's current (2016-2021) Six-Year Transportation Program project list. This scenario provides a baseline for identifying future deficiencies, which are used to establish a framework for developing the Transportation Systems Plan. The 2030 Baseline scenario includes the following planned improvements:

- **Madigan Access Improvement Project** - Activate the traffic signal at the Union Avenue SW / Berkeley Avenue SW and add dual left-turn lanes from Union Avenue SW to Berkeley Avenue SW.
- **Steilacoom Boulevard / S Tacoma Way Intersection** – Add eastbound right-turn lane on Steilacoom Boulevard, replace/upgrade traffic signal controllers, and implement access control in the vicinity of the intersection.

- **Gravelly to Thorne Connector** – Construct a new two-way connector road between Tillicum and Gravelly Lake Drive, and install a traffic signal at the Union Avenue SW/Thorne Lane SW.

The future 2030 Plan scenario includes improvement projects expected to be completed as part of the City's Transportation Element. The 2030 Plan scenario includes the following long-term improvement projects which were identified based on the evaluation of 2030 Baseline conditions described in the later 2030 Baseline & Plan Evaluation section:

- All 2030 Baseline improvements
- **96th Street Two-Way Left-Turn Lane** – Construct a center two-way left-turn lane from 500 feet east of S Tacoma Way to the I-5 underpass.
- **Murray Road & 150th Street Corridor Widening** – Widen southbound Murray Road north of S 146th Street to two travel lanes. Previous phases of this project have been constructed and are reflected in existing conditions.
- **Gravelly Lake Drive: Bridgeport to Steilacoom Road Diet** – Reduce four travel lanes to two travel lanes with a center two-way left-turn lane.
- **Rechannelize Southbound S Tacoma Way at 96th Street** – Reconfigure the southbound channelization on southbound S Tacoma Way at 96th Street SW to provide two left-turn lanes, one through lane, and one shared through/right-turn lane, and modify associated traffic signal heads.

Note that the WSDOT is currently preparing an Interchange Justification Report (IJR) to identify improvements to the interchanges between SR 512 and Nisqually. Within the City of Lakewood, this study is considering potential improvements to the Thorne Lane SW and Berkeley Avenue SW interchanges. This study is currently still in progress and as such, no specific improvements to either of these interchanges or I-5 within the City are included in the future conditions analysis.

Transit Planned Service and Capital Improvements

Pierce Transit's planned service and capital improvements are summarized in the *Transit Development Plan: 2014-2019* and show no anticipated bus expansions. Bus routes are regularly reviewed for potential modification and/or consolidation although no specific expansion of bus route service is planned from 2015 and beyond, although vanpool service is anticipated to expand by approximately 10 vans per year through the 2019 planning horizon.

Sound Transit's current long-range plans are summarized in the *Final Supplemental Environmental Impact Statement on the Regional Transit Long-Range Plan* (2005). This plan identified two potential Sound Transit service expansions beyond existing conditions that would be located within the Lakewood:

- 1) The potential extension of Sounder Commuter Rail service from its current southern terminus at the Lakewood Sounder Station to a new station located in DuPont, although funding/construction of this extension was not included within the Sound Transit 2 funding package, and
- 2) A potential Bus Rapid Transit (BRT) route from DuPont to Lakewood and extending north to Tacoma and Federal Way.

Potential additional changes to Sound Transit service have been adopted by Sound Transit's Board of Directors in the *Sound Transit Regional Transit Long-Range Plan Update Final Supplemental Environmental Impact Statement* (November 2014). This document is the basis behind the potential "Sound Transit 3" funding package that is anticipated to be put a public vote in November 2016. Within Lakewood, this plan would maintain the previously planned extension of Sounder Commuter Rail service to DuPont and adds a potential regional

express/BRT service from Lakewood to Spanaway, Frederickson, South Hill, and Puyallup. However, it is important to consider that none of these potential Sound Transit service expansions are currently funded.

Based on a review of **Intercity Transit's** 2015-2019 *Strategic Plan*, no specific Intercity Transit service changes or capital projects are anticipated to occur that impact Lakewood.

Level of Service Standards & Concurrency

Level of service (LOS) standards establish the basis for the concurrency requirements in the GMA, while also being used to evaluate impacts as part of the State Environmental Protection Act (SEPA). Agencies are required to “adopt and enforce ordinances which prohibit development approval if the development causes the level of service on a transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with development” (RCW 36.70A.070(6)(b)). Therefore, setting the LOS standard is an essential component of regulating development and identifying planned improvements for inclusion in the Transportation Element.

Level of Service Definitions

Level of service is both a qualitative and quantitative measure of roadway and intersection operations. Level of service uses an “A” to “F” scale to define the operation of roadways and intersections as follows:

LOS A: Primarily free flow traffic operations at average travel speeds. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delays at signalized intersections are minimal.

LOS B: Reasonably unimpeded traffic flow operations at average travel speeds. The ability to maneuver within the traffic stream is only slightly restricted and control delays at signalized intersections are not significant.

LOS C: Stable traffic flow operations. However, the ability to maneuver and change lanes may be more restricted than in LOS B, and longer queues, adverse signal coordination, or both may contribute to lower than average travel speeds.

LOS D: Small increases in traffic flow may cause substantial increases in approach delays and, hence, decreases in speed. This may be due to adverse signal progression, poor signal timing, high volumes, or some combination of these factors.

LOS E: Significant delays in traffic flow operations and lower operating speeds. Conditions are caused by some combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and poor signal timing.

LOS F: Traffic flow operations at extremely low speeds. Intersection congestion is likely at critical signalized intersections, with high delays, high volumes, and extensive vehicle queuing.

A more technical method of measuring LOS is described in the Transportation Research Boards *Highway Capacity Manual* (HCM), which involves the calculation of the volume-to-capacity ratio (V/C) of a roadway or intersection. The V/C ratio ranges shown in Table 4 have been developed for determining corridor LOS for urban roadways.

Table 4. Level of Service Criteria for Urban and Rural Roadways

LOS		Volume-to-Capacity (V/C) Ratio
A	less than or equal to	0.3
B	less than or equal to	0.5
C	less than or equal to	0.75
D	less than or equal to	0.90
E	less than or equal to	1.0
F	greater than	1.0

State Highway Level of Service Standards

The City of Lakewood is served by two state highways. Both of the highways, I-5 and SR 512, are classified as Highways of Statewide Significance (HSS). There are no state highways classified as Highways of Regional Significance (HRS) within Lakewood.

State law sets LOS D for HSS facilities in urban areas and LOS C for HSS facilities in rural areas. Both I-5 and SR 512 are classified as Urban within the Lakewood planning area so LOS D applies. The GMA concurrency requirements do not apply to HSS facilities.

WSDOT applies these standards to highway segments, intersections, and freeway interchange ramp intersections. When a proposed development affects a segment or intersection where the level of service is already below the region’s adopted standard, then the pre-development level of service is used as the standard. When a development has degraded the level of service on a state highway, WSDOT works with the local jurisdiction through the SEPA process to identify reasonable and proportional mitigation to offset the impacts. Mitigation could include access constraints, constructing improvements, right-of-way dedication, or contribution of funding to needed improvements.

City of Lakewood Level of Service Standards

The City has adopted LOS standards for transportation facilities under its jurisdiction as required under the GMA. The Comprehensive Plan adopts the following roadway capacity and LOS standard:

Maintain LOS D with a V/C ratio threshold of 0.90 during weekday PM peak hour conditions on all arterial streets and intersection in the city, including state highways of statewide significance.

Although, this standard is typically considered reasonable and is used in most urban areas in the Puget Sound region, some transportation facilities are considered fully built-out and are not able to be further improved due to either physical limitations or very high financial cost. Setting different LOS standards for specific areas is a common practice that accounts for the function and use of the roadways into acceptable operating conditions. At locations where physical limitations prevent widening or where a very high financial cost to construct additional improvements would likely occur, LOS standards are based on the 2030 Plan scenario described in the later 2030 Baseline & Plan Evaluation section.

- Maintain LOS F with a V/C ratio threshold of 1.10 in the Steilacoom Boulevard corridor between 88th Street SW and 83rd Avenue SW.
- Maintain LOS F with a V/C ratio threshold of 1.30 on Gravelly Lake Drive between I-5 and Washington Boulevard SW and Washington Boulevard SW, west of Gravelly Lake Drive.

Signalized and stop-sign controlled intersection LOS shall be calculated based on the most recent version of the *Highway Capacity Manual* (HCM, Transportation Research Board). Signalized and all-way stop-controlled intersection level of service shall be calculated for the overall intersection while side-street (two-way) stop-controlled intersections shall be calculated for the worst operating travel lane group at the intersection. Intersection level of service at roundabout intersections shall be evaluated using the Sidra software program roundabout methodology for the overall intersection and signalized LOS delay thresholds from the current HCM. When HCM or Sidra intersection methodologies are unable to be applied due to limitations of the methods, alternative calculation methods may be used.

The City also recognizes how intersection control (e.g., traffic signals, roundabouts, and stop signs) defines level of service. For two-way and one-way stop-controlled intersections, the LOS is defined by the amount of time vehicles are waiting at the stop sign. Although a substantial volume of traffic can proceed through the intersection without any delays, a small volume at the stop sign can incur delays that would exceed LOS D. To avoid mitigation that would only serve a small volume of traffic, the City may allow two-way and one-way stop-controlled intersections to operate worse than the LOS standards. However, the City requires that these instances be thoroughly analyzed from an operational and safety perspective.

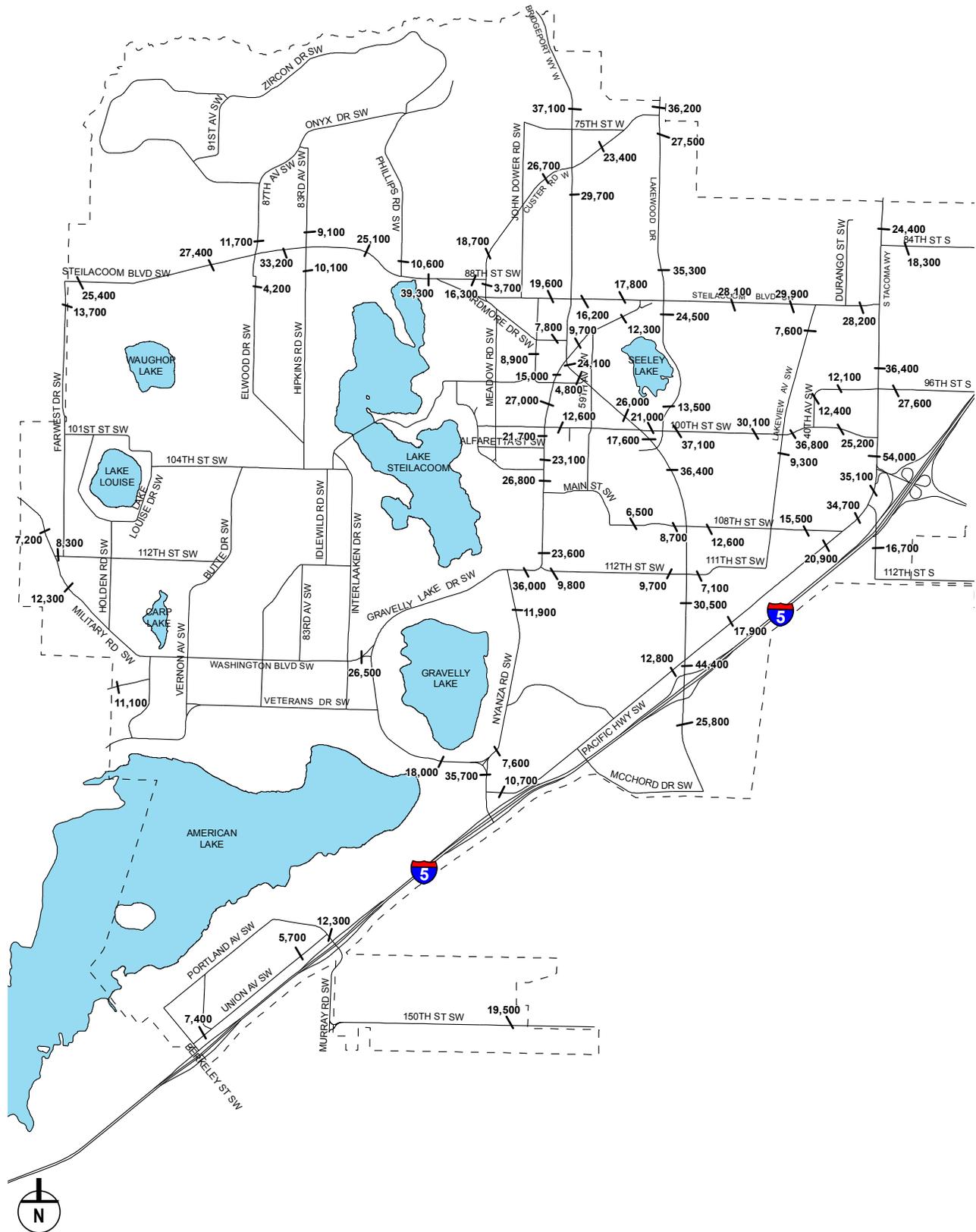
As appropriate, mitigation will be identified and required to address potential impacts to safety or operations. Potential installation of traffic signals or other traffic control devices at these locations shall be based on the Manual on Uniform Traffic Control Devices (MUTCD), the Transportation Element, and sound engineering practices. This allowance within the LOS standards is needed because the installation of a traffic signal or other traffic control device may not be warranted per the MUTCD or desirable based on the proximity of other current or planned traffic controls as identified in the Transportation Element.

2030 Baseline & Plan Evaluation

The 2030 travel demand model assumed currently committed and planned transportation improvement projects would be constructed by 2030 as discussed above. This scenario provides a baseline for identifying potential alternative transportation improvement needs. The results of the alternatives evaluation were used to establish a framework for the Transportation Systems Plan.

The updated Lakewood travel demand model was used to convert forecasted 2030 land use data into vehicle travel demand growth on City roadways. This travel demand growth was then used to forecast 2030 traffic volumes and travel patterns. Figure 6 and Figure 7 summarize the forecast daily and weekday PM peak hour traffic volumes throughout Lakewood.

Traffic operations for forecast 2030 conditions were evaluated and have been summarized in Table 5 for intersection operations and Table 6 for roadway operations. Locations falling below City or WSDOT level of service (LOS) standards are highlighted in both tables. Both the future planned intersection and roadway segment LOS results are compared with the baseline conditions results to understand potential deficiencies in the transportation system, and whether the identified long-term transportation improvements address the baseline deficiencies.



0 2,100 4,200 Feet

Source: Transpo Grou

R | 2015

Figure 6
Future (2030) Weekday Daily Traffic Volumes

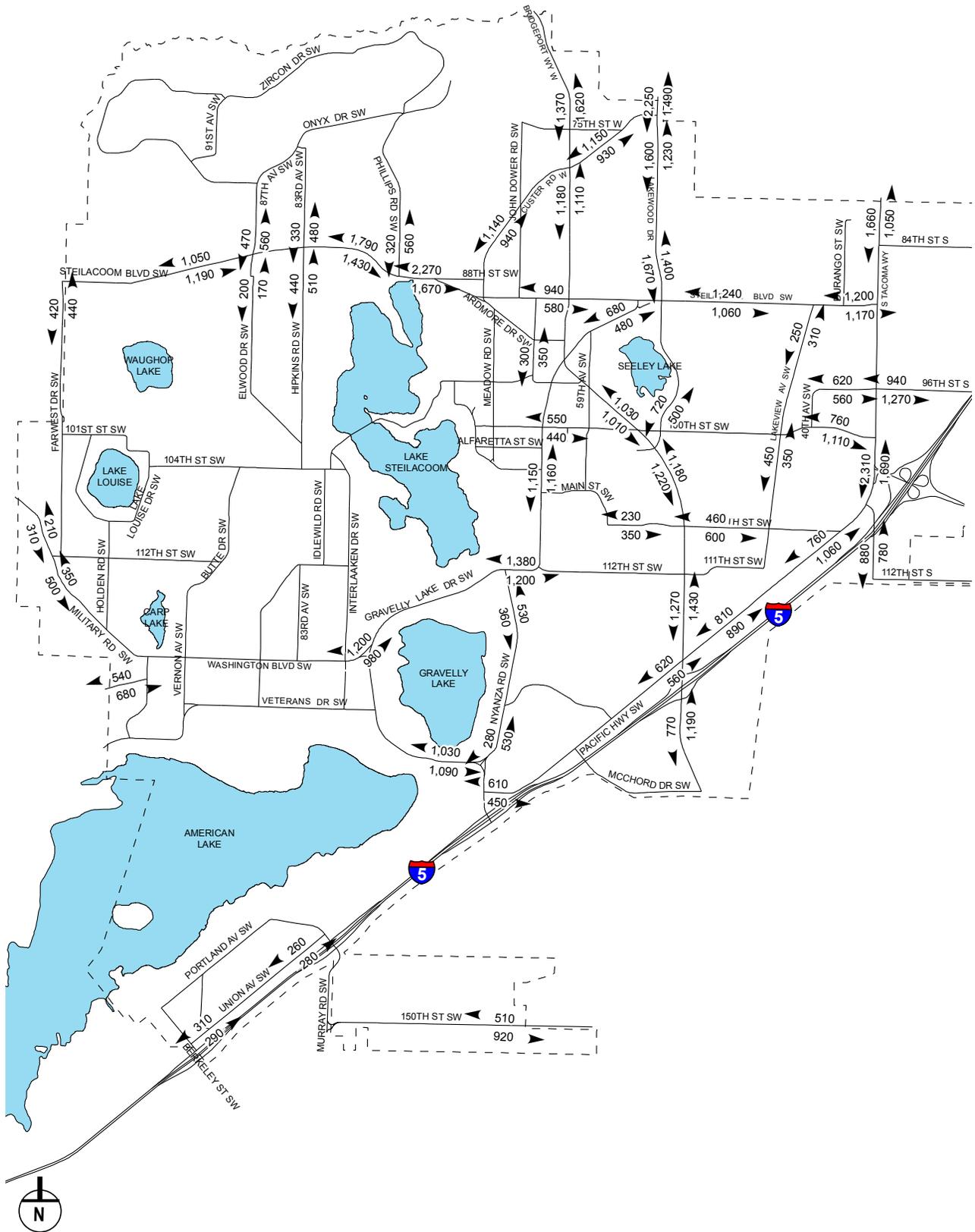


Figure 7
Future (2030) Weekday PM
Peak Hour Traffic Volumes

Source: Transpo Group

Table 5. Future (2030) Weekday PM Peak Hour Intersection Traffic Operations Summary

Intersection	2030 Baseline		2030 Plan ¹	
	LOS ^{2,3}	Delay ⁴	LOS	Delay
Berkeley Ave/NB I-5 Ramps ²	D	46	-	-
Berkeley Ave/SB I-5 Ramps ²	F	85	-	-
Berkeley Ave/Union Ave	B	13	-	-
Bridgeport Way/San Francisco Ave	A	9	-	-
Bridgeport Way/NB I-5 Ramps ²	B	20	-	-
Bridgeport Way/SB I-5 Ramps ²	B	14	-	-
Bridgeport Way/Pacific Hwy	D	53	-	-
Bridgeport Way/112th St	C	20	-	-
Bridgeport Way/108th St	C	28	-	-
Bridgeport Way/Lakewood Dr ²	D	35	-	-
Bridgeport Way/100th St	D	51	-	-
Bridgeport Way/59th Ave	B	12	-	-
Bridgeport Way/Mt. Tacoma Dr	A	10	-	-
Bridgeport Way/Gravelly Lake Dr ²	D	38	-	-
Bridgeport Way/93rd St	B	14	-	-
Bridgeport Way/Steilacoom Blvd	D	36	-	-
Bridgeport Way/Custer Rd	D	39	-	-
Bridgeport Way/75th St	C	21	-	-
Bridgeport Way/Meadow Park Rd	D	49	-	-
Gravelly Lake Dr/NB I-5 Ramps ²	C	27	-	-
Gravelly Lake Dr/SB I-5 Ramps ²	C	31	-	-
Gravelly Lake Dr/Pacific Hwy ²	D	51	-	-
Gravelly Lake Dr/Nyanza Rd S ²	A	10	-	-
Gravelly Lake Dr/Veterans Dr	B	15	-	-
Gravelly Lake Dr/Washington Blvd	C	21	-	-
Gravelly Lake Dr/Nyanza Rd N ²	A	10	-	-
Gravelly Lake Dr/112th St	D	45	-	-
Gravelly Lake Dr/Main St ²	C	26	-	-
Gravelly Lake Dr/Avondale Rd	A	6	-	-
Gravelly Lake Dr/Alfaretta St	B	12	-	-
Gravelly Lake Dr/100th St	C	23	-	-
Gravelly Lake Dr/Mt. Tacoma Dr	B	15	-	-
Gravelly Lake Dr/Steilacoom Blvd	C	20	-	-
Pacific Hwy/108th St ²	C	25	-	-
Pacific Hwy/S Tacoma Way ²	D	42	-	-
Steilacoom Blvd/Sentinel Dr	B	14	-	-
Steilacoom Blvd/Western State Hospital ²	B	10	-	-
Steilacoom Blvd/87th Ave	C	25	-	-
Steilacoom Blvd/83rd Ave	C	34	-	-
Steilacoom Blvd/Custer ES	C	34	-	-
Steilacoom Blvd/Briggs Ln	C	28	-	-
Steilacoom Blvd/Phillips Rd ²	B	13	-	-
Steilacoom Blvd/88th St ²	C	25	-	-
Steilacoom Blvd/Custer Rd ²	B	17	-	-
Steilacoom Blvd/Lakewood Dr	E	66	D	51

Intersection	2030 Baseline		2030 Plan ¹	
	LOS ^{2,3}	Delay ⁴	LOS	Delay
Steilacoom Blvd/Hageness Dr	A	3	-	-
Steilacoom Blvd/Lakeview Dr	A	10	-	-
Steilacoom Blvd/Durango St	A	4	-	-
Steilacoom Blvd/S Tacoma Way	C	32	-	-
S Tacoma Way/Pacific Hwy ²	D	42	-	-
S Tacoma Way/SR 512-Perkins Ln ²	D	40	-	-
S Tacoma Way/100th St ²	B	17	-	-
S Tacoma Way/96th St	E	71	D	48
S Tacoma Way/92nd St	A	7	-	-
S Tacoma Way/84th St ²	B	17	-	-
SR 512/I-5 SB Off-Ramp	E	56	-	-
Thorne Ln/NB I-5 Ramps ²	D	40	-	-
Thorne Ln/SB I-5 Ramps ²	D	37	-	-
Thorne Ln/Union Ave	B	15	-	-
100th St/Lakewood Dr	D	42	-	-
Motor Ave/Whitman Ln	A	8	-	-
Ardmore Dr/Whitman Ln	B	12	-	-
Custer Rd/Lakewood Dr	D	55	-	-
Interlaaken Dr/Washington Blvd	A	5	-	-
75th St/Custer Rd	B	14	-	-
75th St/Lakewood Dr	C	26	-	-
108th St/Lakeview Dr	B	11	-	-
John Dower Rd/Custer Rd	B	12	-	-
88th St/Custer Rd ²	A	6	-	-
112th St/Old Military Rd	A	7	-	-
112th St/Holden Rd	A	7	-	-
100th St/Lakeview Dr	C	31	-	-
100th St/59th Ave	B	16	-	-
108th St/Main St	B	12	-	-
100th St/David Ln	A	5	-	-
Murray Rd/150th St ⁵	A	4	-	-

1. Traffic operations at locations where the 2030 Plan scenarios differs from the 2030 Baseline scenario are shown in both tables; where results are not shown for the 2030 Plan scenario, traffic operations remain the same as 2030 Baseline operations.
2. Level of service based on *Highway Capacity Manual (HCM) 2010* methodology unless otherwise noted.
3. Level of service based on *HCM 2000* methodology due to limitation of the *HCM 2010* methodology,
4. Average delay in seconds per vehicle.
5. Level of service based on Sidra roundabout methodology.

As shown in Table 5, the Steilacoom Boulevard SW / Lakewood Drive SW and S Tacoma Way / 96th Street S intersection would operate below the City's LOS D intersection standard without the planned improvements at both intersections.

Table 6. Future (2030) Weekday PM Peak Hour Roadway Traffic Operations Summary

Street Name/Section	2030 Baseline					2030 Plan ¹		
	NB/EB ² Volume	SB/WB ² Volume	Capacity ³	NB/EB v/c	SB/WB v/c	Capacity	NB/EB v/c	SB/WB v/c
Ardmore Dr SW								
southeast of Steilacoom Blvd SW	550	610	720	0.76	0.85	-	-	-
northwest of Whitman Ave SW	420	530	720	0.58	0.74	-	-	-
Bridgeport Way W								
north of 75th St W	1,620	1,370	2,050	0.79	0.67	-	-	-
north of Custer Rd W	1,190	1,220	2,050	0.58	0.60	-	-	-
south of Custer Rd W	1,110	1,180	2,050	0.54	0.58	-	-	-
north of Gravelly Lake Dr SW	1,340	1,160	2,050	0.65	0.57	-	-	-
south of Gravelly Lake Dr SW	930	850	2,050	0.45	0.41	-	-	-
north of 100th St SW	1,030	1,010	2,050	0.50	0.49	-	-	-
south of 100th St SW	660	700	2,050	0.32	0.34	-	-	-
south of Lakewood Dr SW	1,180	1,220	2,050	0.58	0.60	-	-	-
north of 112th St SW	1,060	1,060	2,050	0.52	0.52	-	-	-
north of Pacific Highway SW	1,430	1,270	2,050	0.70	0.62	-	-	-
south of Pacific Highway SW	1,650	1,350	2,050	0.80	0.66	-	-	-
at Clover Creek bridge south of I-5	1,190	770	2,050	0.58	0.38	-	-	-
Custer Rd SW/ W								
northeast of Bridgeport Way SW	930	1,150	1,825	0.51	0.63	-	-	-
southwest of Bridgeport Way SW	980	1,150	1,825	0.54	0.63	-	-	-
north of 88th St SW	940	1,140	1,825	0.52	0.62	-	-	-
south of 88th St SW	260	190	2,050	0.13	0.09	-	-	-
Far West Dr SW								
south of Steilacoom Blvd SW	440	420	2,050	0.21	0.20	-	-	-
Gravelly Lake Dr SW								
southwest of Steilacoom Blvd SW	480	680	2,050	0.23	0.33	975	0.49	0.70
northeast of Bridgeport Way SW	350	610	1,825	0.19	0.33	975	0.36	0.63
southwest of Bridgeport Way SW	740	840	2,050	0.36	0.41	-	-	-
south of Mount Tacoma Dr SW	1,100	980	2,050	0.54	0.48	-	-	-
south of 100th St SW	1,080	1,070	2,050	0.53	0.52	-	-	-
south of Alfareta St SW	1,050	950	2,050	0.51	0.46	-	-	-
north of Wildaire Rd SW	1,160	1,150	2,050	0.57	0.56	-	-	-
north of 112th St SW	1,100	1,170	2,050	0.54	0.57	-	-	-
west of 112th St SW	1,200	1,380	2,050	0.59	0.67	-	-	-
west of end Nyanza Rd SW (S)	1,090	1,030	975	1.12	1.06	-	-	-
north of Pacific Highway SW	1,670	1,320	2,050	0.81	0.64	-	-	-
south of Pacific Highway SW	1,530	1,350	2,050	0.75	0.66	-	-	-
Hipkins Rd SW								
south of Steilacoom Blvd SW	510	440	720	0.71	0.61	-	-	-
Lakeview Ave SW								
south of 100th St SW	350	450	1,825	0.19	0.25	-	-	-
south of Steilacoom Blvd SW	310	250	1,825	0.17	0.14	-	-	-
Lakewood Dr SW								
north of 74th St W	1,490	2,250	2,050	0.73	1.10	2,050	0.73	1.10

Street Name/Section	2030 Baseline					2030 Plan ¹		
	NB/EB ² Volume	SB/WB ² Volume	Capacity ³	NB/EB v/c	SB/WB v/c	Capacity	NB/EB v/c	SB/WB v/c
south of 74th St W	1,230	1,600	1,825	0.67	0.88	-	-	-
north of Steilacoom Blvd SW	1,400	1,670	1,825	0.77	0.92	1,825	0.77	0.92
south of Steilacoom Blvd SW	1,020	1,080	2,050	0.50	0.53	-	-	-
north of 100th St SW	500	720	2,050	0.24	0.35	-	-	-
Military Rd SW								
south of 112th St SW	500	350	975	0.51	0.36	-	-	-
northwest of 112th St SW	310	210	975	0.32	0.22	-	-	-
Mount Tacoma Dr SW								
west of Bridgeport Way	240	210	975	0.25	0.22	-	-	-
west of Gravelly Lake Dr	440	500	975	0.45	0.51	-	-	-
Murray Rd SW								
north of 146th St SW	1,360	740	1,825 NB / 975 SB	0.75	0.76	1,825	0.75	0.41
N Gate Rd SW								
northeast of Nottingham Rd SW	680	540	720	0.94	0.75	-	-	-
N Thorne Ln SW								
southeast of Union Ave SW	440	650	720	0.61	0.90	-	-	-
Nyanza Rd SW (N)								
north of Gravelly Lake Dr SW	530	280	975	0.54	0.29	-	-	-
south of Gravelly Lake Dr SW	530	360	975	0.54	0.37	-	-	-
Pacific Highway SW								
north of 108th St SW	1,550	1,200	2,050	0.76	0.59	-	-	-
southwest of 108th St SW	1,060	760	2,050	0.52	0.37	-	-	-
northeast of Bridgeport Way SW	890	810	2,050	0.43	0.40	-	-	-
southwest of Bridgeport Way SW	560	620	975	0.57	0.64	-	-	-
east of Gravelly Lake Dr SW	450	610	720	0.63	0.85	-	-	-
Phillips Rd SW								
north of Steilacoom Blvd SW	560	320	720	0.78	0.44	-	-	-
South Tacoma Way								
north of 84th St SW	1,050	1,660	2,050	0.51	0.81	-	-	-
north of Steilacoom Blvd	1,350	1,960	2,050	0.66	0.96	-	-	-
south of Steilacoom Blvd SW	1,290	1,880	2,050	0.63	0.92	-	-	-
north of 96th St S	1,180	1,830	2,050	0.58	0.89	-	-	-
north of 100th St SW	1,110	1,350	2,050	0.54	0.66	-	-	-
south of SR 512	1,410	1,570	2,050	0.69	0.77	-	-	-
southeast of Pacific Highway SW	780	880	2,050	0.38	0.43	-	-	-
Steilacoom Blvd SW								
east of Farwest Dr SW	1,050	1,060	1,825	0.58	0.58	-	-	-
west of 87th Ave SW	1,190	1,050	1,825	0.65	0.58	-	-	-
west of 83rd Ave SW/Hipkins Rd SW	1,180	1,380	2,050	0.58	0.67	-	-	-
west of Phillips Rd SW	1,430	1,790	1,825	0.78	0.98	-	-	-
east of Phillips Rd	1,670	2,270	2,050	0.81	1.11	2,050	0.81	1.11
southeast of 88th St SW	1,010	1,370	1,825	0.55	0.75	-	-	-
west of Bridgeport Way SW	580	940	1,825	0.32	0.52	-	-	-

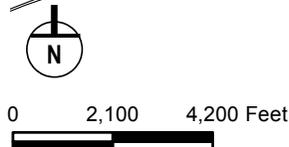
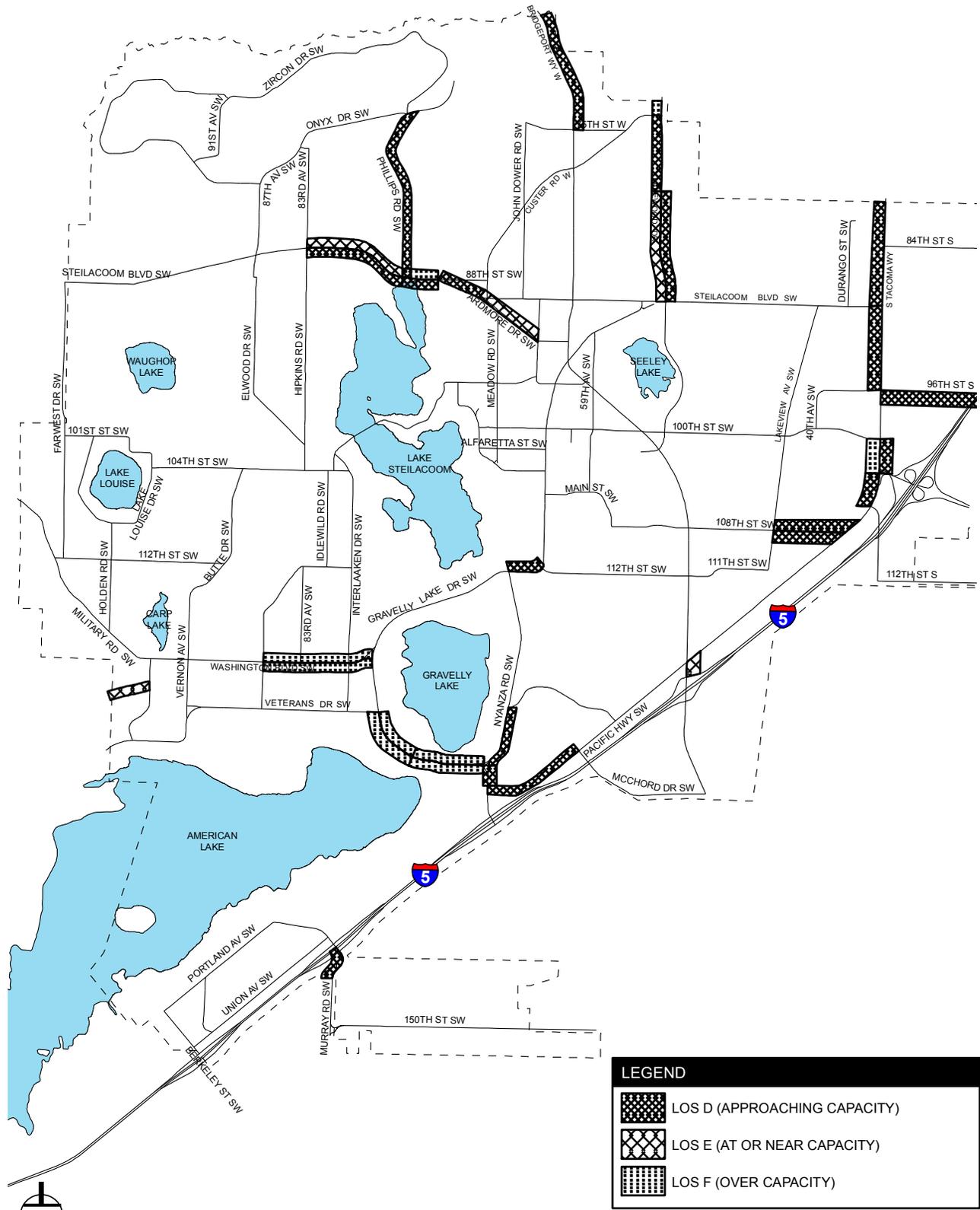
Street Name/Section	2030 Baseline					2030 Plan ¹		
	NB/EB ² Volume	SB/WB ² Volume	Capacity ³	NB/EB v/c	SB/WB v/c	Capacity	NB/EB v/c	SB/WB v/c
east of Bridgeport Way SW	580	800	1,825	0.32	0.44	-	-	-
west of Gravelly Lake Dr SW	630	830	1,825	0.35	0.45	-	-	-
east of Lakewood Dr SW	1,060	1,240	2,050	0.52	0.60	-	-	-
west of Lakeview Ave SW	1,150	1,270	2,050	0.56	0.62	-	-	-
west of South Tacoma Way	1,170	1,200	2,050	0.57	0.59	-	-	-
Union Ave SW								
northeast of Berkeley St SW	290	310	720	0.40	0.43	-	-	-
southwest of North Thorne Ln SW	280	260	720	0.39	0.36	-	-	-
Washington Blvd SW								
west of Gravelly Lake Dr SW	980	1,200	975	1.01	1.23	975	1.01	1.23
Whitman Ave SW								
south of Ardmore Dr SW	350	300	975	0.36	0.31	-	-	-
40th Ave SW								
north of 100th St SW	420	670	975	0.43	0.69	-	-	-
74th St								
west of Lakewood Dr	1,160	1,280	2,050	0.57	0.62	-	-	-
83rd Ave SW								
north of Steilacoom Blvd SW	480	330	975	0.49	0.34	-	-	-
84th St S								
east of South Tacoma Way	750	730	2,050	0.37	0.36	-	-	-
87th Ave SW								
south of Steilacoom Blvd SW	170	200	720	0.24	0.28	-	-	-
north of Steilacoom Blvd SW	560	470	975	0.57	0.48	-	-	-
88th St SW								
east of Steilacoom Blvd SW	810	1,010	1,825	0.44	0.55	-	-	-
93rd St SW								
east of Whitman Ave SW	250	320	975	0.26	0.33	-	-	-
96th St S								
west of South Tacoma Way	560	620	975	0.57	0.64	-	-	-
east of South Tacoma Way	1,270	940	1,825	0.70	0.52	2,050	0.62	0.46
100th St SW								
west of South Tacoma Way	1,110	760	1,825	0.61	0.42	-	-	-
east of Lakeview Ave SW	1,530	1,320	2,050	0.75	0.64	-	-	-
west of Lakeview Ave SW	1,280	1,050	2,050	0.62	0.51	-	-	-
east of Lakewood Dr SW	1,400	1,310	2,050	0.68	0.64	-	-	-
east of Bridgeport Way	900	960	2,050	0.44	0.47	-	-	-
east of Gravelly Lake Dr	440	550	1,825	0.24	0.30	-	-	-
108th St SW								
west of Pacific Highway SW	630	590	720	0.88	0.82	-	-	-
east of Bridgeport Way SW	600	460	975	0.62	0.47	-	-	-
west of Bridgeport Way SW	400	270	975	0.41	0.28	-	-	-
east of Davisson Rd SW	350	230	975	0.36	0.24	-	-	-
112th St SW/S								
between Military Rd SW & Farwest Dr S	240	280	720	0.33	0.39	-	-	-

Street Name/Section	2030 Baseline					2030 Plan ¹		
	NB/EB ² Volume	SB/WB ² Volume	Capacity ³	NB/EB v/c	SB/WB v/c	Capacity	NB/EB v/c	SB/WB v/c
east of Gravelly Lake Drive	370	490	975	0.38	0.50	-	-	-
east of Bridgeport Way SW	240	310	975	0.25	0.32	-	-	-
west of Bridgeport Way SW	350	460	720	0.49	0.64	-	-	-
150th St SW								
east of Woodbrook Rd SW	920	510	1,825	0.50	0.28	-	-	-

1. Traffic operations at locations where the 2030 Plan scenarios differs from the 2030 Baseline scenario are shown in both tables; where results are not shown for the 2030 Plan scenario, traffic operations remain the same as 2030 Baseline operations.
 2. Volumes shown are for northbound and southbound (NB and SB) when the roadway is oriented NB-SB or eastbound and westbound (EB and WB) when oriented EB-WB.
 3. When roadway capacity differs between a roadway's two directions of travel, each direction's capacity is shown (e.g. NB / SB or EB / WB).

Figure 8 highlights the arterial segments within the City of Lakewood that operate at LOS D (v/c > 0.90) or worse under future (2030) conditions and includes the following roadway sections:

- Southbound Lakewood Drive SW north of 74th Street W
- Southbound Lakewood Drive SW north of Steilacoom Boulevard SW
- Southbound Murray Road SW north of 146th Street SW
- Westbound Steilacoom Boulevard SW east of Phillips Road
- Westbound Washington Boulevard SW west of Gravelly Lake Drive SW



Source: Transpo Group
July 2015

Figure 8
Future (2030) Baseline Weekday PM Peak Hour
Roadway LOS where LOS D or Worse

Transportation Systems Plan

The transportation system improvement recommendations provide a long-range strategy for the City of Lakewood to address current and forecast transportation issues and needs. Transportation system improvements are required to safely and more efficiently accommodate the projected growth in population and employment within the City. The recommended improvements are based upon analyses of the existing transportation system, forecasts of future travel demands, anticipated availability of funding resources, and the desire of the community to create an efficient transportation system that puts a priority on community livability.

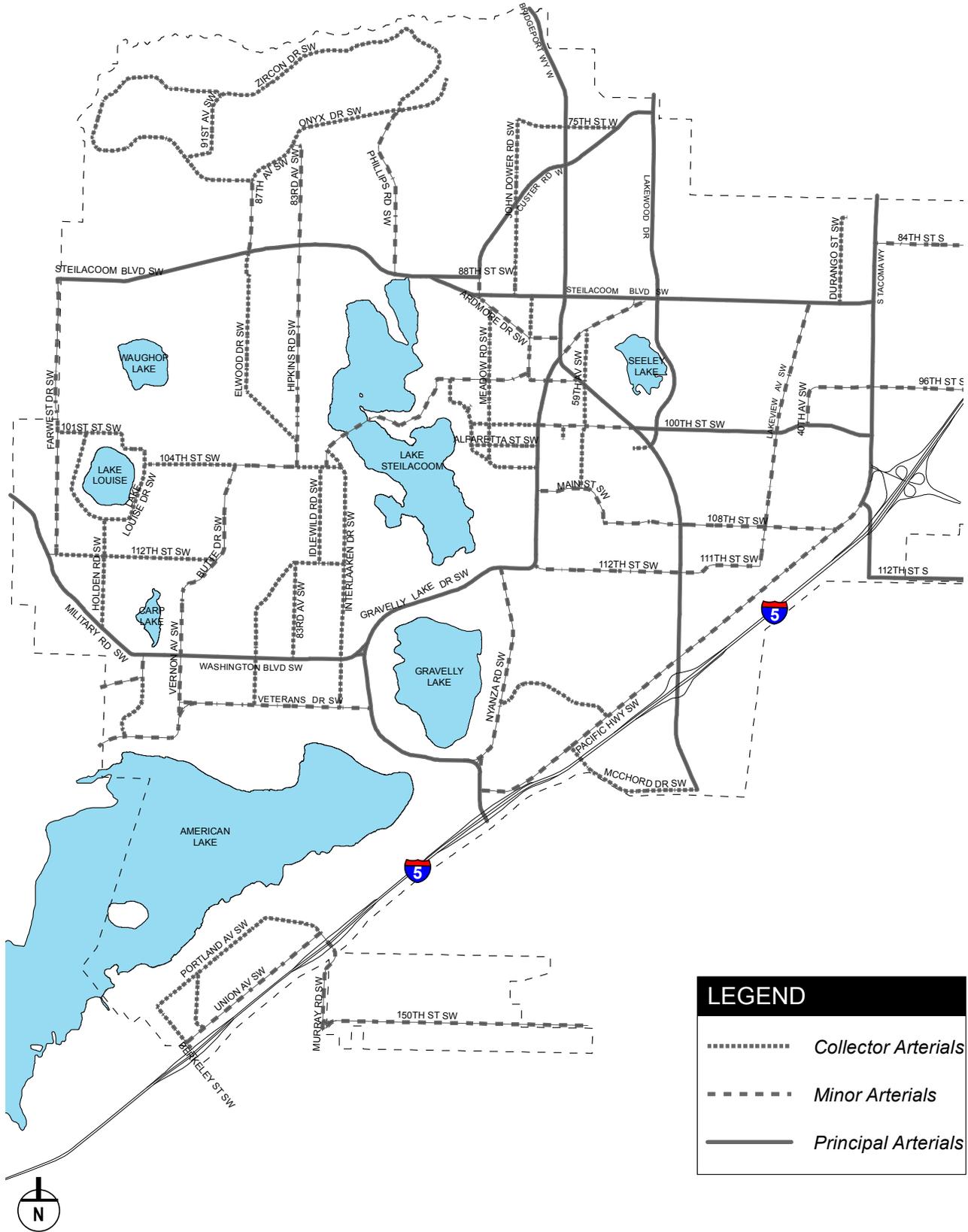
Street and Highway System

Streets and state highways are the core of the transportation system serving the City of Lakewood and surrounding communities. These facilities provide for the overall movement of people and goods through a wide range of travel modes. Streets and highways serve automobile trips, trucks, transit, vanpools, carpools, and bicycle/pedestrian travel. Therefore, the streets and highways establish the framework for the overall transportation system of the City.

Roadway Functional Classification

A roadway functional classification system allows the City to group highways, roads, and streets that comprise the transportation system into a hierarchy. The functional classification of a roadway is typically based on the types of trips that occur on it, the basic purpose for which it was designed, and the amount of traffic it carries. Higher classifications (e.g., freeways, principal arterials) provide a high degree of mobility with higher traffic volumes, generally at higher speeds, and should have limited access to adjacent land uses. Lower classifications (e.g., local access streets) provide greater access to adjacent land and are not intended to serve through traffic, carrying lower volumes at lower speeds. Collectors balance the function between mobility and access.

Based on state law, cities are required to adopt a roadway functional classification system that is consistent with state and federal guidelines. In Washington, these requirements are codified in RCW 35.78.010 and RCW 47.26.090. Each local jurisdiction is responsible for defining its transportation system into at a minimum, three functional classifications: principal arterial, minor arterial, and collector. All other roadways are assumed to be local streets. Lakewood's roadway functional classification system has four categories, as presented in Table 7. Figure 9 shows the functional classification for streets within the City.



LEGEND

- Collector Arterials
- - - - Minor Arterials
- Principal Arterials

0 2,000 4,000 Feet

Figure 9
Arterial Street Classification

Table 7. Roadway Functional Classification Descriptions

Classification	Description
Principal Arterial	Principal arterials are roadways that provide access to principal centers of activity. These roadways serve as corridors between principal suburban centers, larger communities, and between major trip generators inside and outside the plan area. Service to abutting land is subordinate to travel service to major traffic movements. The principal transportation corridors within the City of Lakewood are principal arterials. These roadways typically have daily volumes of 15,000 vehicles or more.
Minor Arterial	Minor arterials are intra-community roadways connecting community centers with principal arterials. They provide service to medium-size trip generators, such as commercial developments, high schools and some junior high/grade schools, warehousing areas, active parks and ballfields, and other land uses with similar trip generation potential. These roadways place more emphasis on land access than do principal arterials and offer lower traffic mobility. In general, minor arterials serve trips of moderate length, and have volumes of 5,000 to 20,000 vehicles per day.
Collectors	Collector arterials connect residential neighborhoods with smaller community centers and facilities as well as provide access to the minor and principal arterial system. These roadways provide both land access and traffic circulation within these neighborhoods and facilities. Collector arterials typically have volumes of 2,000 to 8,000 vehicles per day.
Local Streets	Local access roads include all non-arterial public city roads and private roads used for providing direct access to individual residential or commercial properties. Service to through traffic movement usually is deliberately discouraged.

Planning for the transportation system needs primarily focuses on the arterial and collector street system within the City since local access streets typically do not have capacity deficiencies.

Roadway Standards

The City has sought to encourage standardization of road design elements for consistency and to assure that motoring, bicycling, and pedestrian public safety needs are met. Considerations include safety, convenience, aesthetics, proper drainage, and economical maintenance. The standards include items such as right-of-way needs, pavement width, type and width of pedestrian and bicycle facilities, and roadway and intersection radii.

The standards are intended to support the City's goals in providing adequate facilities to meet the mobility and safety needs of the community, as well as complying with storm water management, sensitive areas, and other regulations. The standards are intended to assist design professionals and developers for all new and reconstructed roadways and right-of-way facilities, both public and private, within the City. See City of Lakewood *Engineering Standards Manual* and *Non-Motorized Transportation Plan* for more details.

Transportation Improvement Projects

Based on an evaluation of existing and forecast traffic volumes, traffic operations, safety, and circulation needs, a recommended list of transportation improvement projects and programs were defined. The project list is organized into the following categories:

- New Construction Arterial Street Projects
- Roadway Improvements
- Traffic Signals
- Transportation Planning
- Bikeways
- Street Lighting
- Bridges
- Beautification Projects
- Roadway Restoration Projects
- Neighborhood Traffic Management
- Various Other Transportation Projects

Table 8 also provides a brief description of each project including the project limits. A project identification number consistent with the City's Six-Year TIP project list is provided for each project that is referenced. Planning-level cost estimates are also included for each project based on costs identified in the 2016-2021 Six-Year TIP. This project list includes one improvement in addition to the 2016-2021 Six-Year TIP: rechannelizing Southbound S Tacoma Way at 96th Street (Project #3.20). The cost estimates for Project #3.20 were prepared based on typical per unit costs, functional classification, and level of improvement. Adjustments to construction costs were included, as needed, to reflect any specific implementation issues, such as environmental impacts or impacts on adjacent properties.

Table 8. Transportation Projects and Programs

Number	Project	Description	Estimated Cost ¹
<u>New Construction Arterial Street Projects</u>			
1.2	Gravelly Lake Drive at 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.	\$1,600,000
1.4	Union Avenue – Berkeley to N. Thorne Lane	Widen to add turn lane, shared bike/travel lane, sidewalks, street lighting. Intersection improvements.	\$5,000,000
1.18	96th Street – 2-way left turn lane	Widen 96th St. from 500' east of So. Tac. Way to I-5 underpass to provide 2- way left turn lane. Does not include sidewalks or HMA overlay.	\$500,000
1.20	123rd St SW – Realignment	Realign 123rd St SW as it enters Bridgeport	\$400,000
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	\$4,500,000
1.22	Gravelly to Thorne Connector	Two-way connector road between Tillicum and Gravelly Lake Drive. Signalization.	\$25,000,000
1.23	Interstate 5 through Lakewood	Planning and design coordination only.	\$1,000 annual
1.24	Madigan Access Project	Provide improved access to Madigan including: Freedom bridge, ramp, & roadway widening; signalization improvements; Union Ave/Berkeley St improvements	\$4,200,000
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)	\$1,700,000
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.	\$1,380,000
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.	\$810,000
<u>Roadway Improvements</u>			
2.26	Safety Improvements in the Vicinity of Schools	May include sidewalks, crossing improvements, signage, etc. in vicinity of schools.	\$50,000 bi-annual
2.29	Steilacoom Blvd. Custer to 88th Street	Curbs, gutters, sidewalks, street lighting, on both sides. Signal modifications. Signal replacement Custer/Ardmore. Overlay.	\$1,975,000
2.41	Steilacoom Blvd – Bridgeport Way to Fairlawn	Curbs, gutters, sidewalks, on both sides. Overlay.	\$1,400,000
2.50	Gravelly Lake Drive – 100th to Bridgeport Way	Curb, gutters, sidewalks, street lighting, drainage. Signal modifications. Signal replacement Mt. Tacoma.	\$1,774,000

Number	Project	Description	Estimated Cost¹
2.54	Minor Pedestrian Safety Improvements	Non-hardscape improvements. Shoulder widening on high-volume roads where less than 2' walkway exists.	\$50,000 – annual
2.55	High Accident Location Safety Improvements	May include sight distance corrective measures, signal modifications, etc. at one of top 25 accident locations.	\$50,000 – annual
2.60	South Tacoma Way – SR512 to 96th Street	Curb, gutter, sidewalks, street lighting, drainage, overlay.	\$3,460,000
2.61	ADA Standards – Sidewalk Upgrades	On-going program to gradually upgrade existing facilities to current ADA standards	\$50,000 – annual
2.65	Steilacoom Blvd – 87th to 83rd	Curb, gutter, sidewalks, street lighting, drainage, overlay.	\$2,080,000
2.66	Steilacoom Blvd –83 rd to Weller Road	Curb, gutters, sidewalks, street lighting, drainage, overlay.	\$2,650,000
2.67	Bridgeport Way – I-5 to JBLM Gate	Curb, gutters, sidewalks, street lighting, drainage, overlay.	\$3,650,000
2.68	Hipkins Rd. 104th to Steilacoom Blvd.	Curb, gutters, sidewalks, street lighting, drainage, overlay.	\$3,050,000
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.	\$1,850,000
2.70	Lakewood Station – Non-Motorized Access Improvements	Curb, gutters, sidewalks, and street lighting improvements per Lakewood NMTP and Sound Transit Access Improvement Study.	\$1,500,000
2.71	Steilacoom Blvd – Weller Road to Phillips Road	Curb, gutter, sidewalks, street lighting, drainage, overlay.	\$2,530,000
2.72	100th Street & Lakewood Drive	Curb, gutter, sidewalks, sharrows, replace 100th/Lakewood signal, street lighting, drainage, overlay.	\$1,780,000
2.73	112th / 111th – Bridgeport to Kendrick	Curb, gutter, sidewalks, sharrows, street lighting, drainage, overlay.	\$2,040,000
2.74	Steilacoom Blvd Corridor Design – Farwest to Phillips	Curb, gutter, sidewalks, sharrows, turn lanes, street lighting, drainage, overlay.	\$942,000
2.75	South Tacoma Way – 88th to North City Limits	Curb, gutter, sidewalks, bike lanes, street lighting, signal at 84th, drainage, overlay.	\$3,100,000
2.76	Phillips Road – Steilacoom to Onyx	Curb, gutter, sidewalks, bike lanes, street lighting, drainage, overlay.	\$2,800,000
2.77	Washington Blvd – Edgewood Ave to Gravelly Lake Drive	Curb, gutter, sidewalks, bike lanes, street lighting, drainage, overlay.	\$5,900,000
2.78	Oakbrook Sidewalks & Street Lighting	Curb, gutter, sidewalks, sharrows, turn lanes, street lighting, drainage, overlay.	\$3,400,000
2.79	Lake City Business District Sidewalks (American Lake Park to Veterans Dr / Alameda)	Curb, gutter, sidewalks, sharrows, street lighting, drainage, overlay.	\$2,100,000
2.80	Interlaaken Drive SW / Mt. Tacoma Drive Non-Motorized Improvements – Short Lane to Whitman Avenue SW	Provide curb and gutter, sidewalk and a shared travel/bike lane on one side of Interlaaken / Mt. Tacoma Dr.	\$4,000,000
2.81	Roadway Safety Improvements at 40 th Ave. SW and 96 th St. SW	Curb, gutter, sidewalks, sharrows, guard rail, street lighting, pavement reconstruction.	\$843,000
2.82	59th Ave SW Sidewalk – 100th to Bridgeport Way SW	Sidewalk east side of roadway	\$125,000
2.83	Gravelly Lake Dr. – Pacific Hwy to Nyanza (south)	Curb, gutter, sidewalks, bike way, street lighting, pavement rehab.	\$1,450,000
Traffic Signals			
3.1	Steilacoom / Durango Traffic	Intersection meets warrants for traffic signal. Signal	\$350,000

Number	Project	Description	Estimated Cost¹
	Signal	needed with new development in area. Special concern with adjacent train crossing becoming active.	
3.7	Washington Blvd. / Interlaaken Drive Signal and Intersection improvement	Install new signal at intersection.	\$375,000
3.8	Traffic Signal Timing Upgrades	Upgrade traffic signal timing and coordination.	\$10,000 – annual
3.11	City-Wide Traffic Signal Management System	City-hall based Traffic Management Center. Fiber optic interconnect. PTZ major corridors. Active traffic management including web based info.	\$1,270,000
3.12	Traffic Signal Replacement Program	Replace aging traffic signals. Priorities based on maintenance history. (one signal every 3rd year)	\$250,000 – bi-annual
3.13	Gravelly Lake Drive / Avondale Traffic Signal	Intersection meets warrants for traffic signal. Increased volumes in and around Towne Center.	\$250,000
3.14	S Tacoma Way / 92nd Street	New warranted signal	\$650,000
3.16	Steilacoom Blvd / Western State Hospital Signal Replacement	Replace existing signal	\$210,000
3.17	Steilacoom Blvd / Lakeview Ave Signal Replacement	Replace existing signal	\$340,000
3.19	Traffic Signal Asset Management System	Purchase software; develop asset management system	\$115,000
3.20	Rechannelize Southbound S Tacoma Way at 96th Street	Reconfigure the southbound channelization on southbound S Tacoma Way at 96th Street SW to provide two left-turn lanes, one through lane, and one shared through/right-turn lane, and modify associated traffic signal heads.	\$805,000

Transportation Planning

4.1	Pavement Management System	Semi-Annual evaluation of pavement condition	\$5,000 / \$30,000 – bi-annual
4.2	Transportation Model	On-going updates of travel demand model.	\$5,000 – annual
4.8	Lakewood City Center Sub-Area Plan	Review access and circulation for vehicles, transit, and non- motorized transportation.	\$20,000
4.9	Non-Motorized Transportation Plan Update	Update NMTP to include relevant policy updates and capital improvement projects. (original plan adopted June 2009)	\$15,000
4.10	ADA Transition Plan Update	Update ADA transition plan to address ADA deficiencies of existing curb ramps; signal access / operations; etc.	\$15,000

Bikeways

5.1	Miscellaneous Bikeway Markings / Signage	Ongoing installation of bicycle pavement markings and signage throughout the City.	\$20,000 – annual
5.4	Miscellaneous Bike Lane Construction	Ongoing construction of bicycle lanes on existing roadways.	\$50,000 – bi-annual
5.5	North Thorne Lane to Gravelly Lake Drive Non-Motorized Trail	Provide non-motorized path between Tillicum and Gravelly Lake Drive “Gravelly to Thorne Connector” construction.	\$5,000,000
5.6	Gravelly Lake Non-Motorized Trail	Provide non-motorized path around Gravelly Lake along Gravelly Lake Drive and Nyanza Drive. Existing roadway cross section shifted to outside and overlaid. Lighting.	\$200,000

Street Lighting

6.2	Arterial Street Lighting	Install street lighting in requested areas based on ranking criteria	\$30,000 – annual
6.4	Low income area street lighting	Install street lighting in various low income areas	\$30,000 – annual
6.6	LED Street Lighting Upgrades	Update existing street lighting to LED. Coordinate	\$2,260,000

Number	Project	Description	Estimated Cost¹
		with purveyors on rebates.	(*typically \$160,000 annual)
<u>Bridges</u>			
7.1	Bridge Inspection	On-going biennial bridge inspection.	\$9,000 – bi-annual
<u>Beautification Project</u>			
8.10	Gateway Improvements		\$20,000 – annual
<u>Roadway Restoration Projects</u>			
9.7	Resurfacing Program – Various Locations	Projects in various locations may include pavement preservation contribution to planned utility projects to facilitate full roadway overlays.	\$18,070,000
9.10A	Steilacoom Boulevard – 87th to Weller Road	Restore roadway section to current City standards.	\$1,120,000
9.10B	Steilacoom Boulevard – Weller Road to Custer Road	Restore roadway section to current City standards.	\$1,120,000
9.14	Lakewood Drive – 100th to Steilacoom Blvd	Restore roadway section to current City standards.	\$900,000
9.15	Lakewood Drive – Flett Creek to N. City Limits	Restore roadway section to current City standards.	\$1,100,000
9.16	59th Ave – Main Street to 100 Street	Restore roadway section to current City standards.	\$450,000
9.17	108th – Bridgeport Way to Pacific Hwy	Restore roadway section to current City standards.	\$600,000
9.18	Custer – Steilacoom to John Dower	Restore roadway section to current City standards.	\$450,000
9.19	88th – Steilacoom to Custer	Restore roadway section to current City standards.	\$250,000
9.20	Pacific Hwy – 108th to SR512	Restore roadway section to current City standards.	\$540,000
9.21	100th – Lakeview to South Tacoma Way	Restore roadway section to current City standards.	\$480,000
9.22	100th – 59th to Lakeview	Restore roadway section to current City standards.	\$1,100,000
10.1	Neighborhood Traffic Management	May include speed humps, traffic circles, signage, etc.	\$20,000 – annual
<u>Other</u>			
11.1	On-call technical assistance	Various professional services including surveying, structural, geotechnical, environmental to support various projects	\$50,000 – annual
11.2	Public Works Operations & Maintenance Facility	Property acquisition; design and construction of jointly-owned Streets / Surface Water Management O&M Shop.	\$585,000
1. All costs in 2015 dollars with no accounting for inflation and are consistent with the 2016-2021 Six-Year TIP project list with the exception of Project #3.20 - Rechannelize Southbound S Tacoma Way at 96th Street. 2. Costs estimated for project #3.20 - Rechannelize Southbound S Tacoma Way at 96th Street prepared by Transpo Group and are based on typical per unit costs, functional classification, and level of improvement			

Transportation Programs

The City of Lakewood has several ongoing programs to maintain or improve the transportation system. These regular programs help to ensure the condition and reliability of the City's transportation system and to upgrade different elements to current City, State, Federal, or typical industry standards. Improvement programs include:

- Safety improvements within the vicinity of schools (bi-annual)
- A review of high accident location safety improvements (annual)

- On-going upgrades to pedestrian facilities to comply with current Americans with Disabilities Act (ADA) standards (annual)
- Maintenance updates for traffic signal timing settings (annual)
- A traffic signal replacement program to update/upgrade aging traffic signals (tri-annual)
- A pavement management system (bi-annual)
- On-going updates to the City's travel demand model
- Bikeway markings and signage (annual) and bike lane construction (bi-annual)
- Street lighting installation based on ranking criteria, specific low-income areas, and regular upgrading to LEDs (annual)
- Bridge inspections (bi-annual)
- Pavement resurfacing (annual)
- Neighborhood traffic management (annual)

Freight & Mobility System

Trucks deliver goods to retail establishments and construction materials to construction sites, as well as transport goods from industrial uses located throughout the City. By increasing the time cost and other costs of moving freight, traffic congestion increases the price of goods. The City must ensure that trucks have the ability to move to and through Lakewood.

To support freight movement, the City classifies all principal arterials as truck routes. Access to industrial areas such as the Lakewood Industrial Park, the areas northeast and southeast of the SR 512/I-5 interchange, the Woodbrook neighborhood, and other designated industrial areas throughout the City is supported by the maintenance and design of the City's principal arterials.

Non-Motorized Travel System

Bicycle, pedestrian, and equestrian facilities play a vital role in the City's transportation environment. The non-motorized transportation system is comprised of facilities that promote mobility without the aid of motorized vehicles. A well-established system encourages healthy recreational activities, reduces vehicle demand on City roadways, and enhances safety within the community.

The City desires to enhance the Lakewood urban area pedestrian and bicycle system. The City has an annual program to enhance non-motorized facilities. Improvements summarized in the Non-Motorized Transportation Plan (NMTP, June 2009) are identified to address gaps in the non-motorized transportation system. Greater details on existing and planned pedestrian and bicycle facilities are provided in the NMTP and previously in Table 8. As a separate publication, the NMTP was developed to directly address non-motorized elements as part of the Comprehensive Plan and the vision of citizens.
Non-Motorized Transportation Plan (NMTP, June 2009)

Public Transit System

As the region continues to grow in population, vehicular traffic congestion, and ages, more citizens will become reliant on alternatives to the passenger vehicle for mobility purposes. Pierce

Transit, Sound Transit, and Intercity Transit will be key players in Lakewood's ability to maintain necessary mobility.

The City will continue to support the use of transit services by supporting the following:

- Bus, commuter rail, and passenger rail stops at popular destinations;
- Transit oriented development near existing or new transit facilities;
- Transit stops that are comfortable and convenient for waiting for transit service;
- High frequency and reliability of service (Bus Rapid Transit, transit signal priority, etc.);
- Low number of transfers required to reach a destination;
- Service during non-peak hours and weekends;
- Vehicular and non-motorized accessibility of transit facilities (bus stops, park-and-rides, etc.);
- Safety and security at the transit facilities

Several key transit facilities located in the City support of these features including the Lakewood Transit Center, SR 512 Park & Ride, and Lakewood Station. In addition the City could implement transit oriented development policies in the vicinity of these facilities to further support transit usage.

Transportation Demand Management

To minimize increases in the impacts of vehicles on the transportation system and the environment, alternatives to the single-occupancy vehicle will become more necessary. These alternatives include carpooling, walking, bicycling, transit, telecommuting, and flexible hours at work sites.

Transportation demand management (TDM) is the term used when communities, employers, schools, or households develop techniques to influence mode choice, the time of a trip, and the frequency of trips made. TDM is a major policy thrust in the Puget Sound Regional Council's MTP and is also required under the Growth Management Act (GMA). Examples of TDM include:

- Charging for parking at worksites to increase the cost of driving alone, relative to carpooling;
- Providing free or low cost bus passes to employees as part of an employee benefit package to encourage use of transit or vanpools;
- Providing incentives to employees who carpool, walk, or bicycle to work;
- Allowing flexible hours at work sites so employees can shift their commute trip to non-peak periods;
- Developing telecommuting programs so that employees do not need to commute into the office every work day;
- Providing guaranteed ride home programs to employees who bus, carpool, or vanpool; and
- Providing worksite amenities, such as cash machines, food services, daycare, breakrooms, showers, and clothes lockers to reduce the need for non-work trips.

Other techniques, such as convenient parking for carpool/vanpools, in-house ride matching services, and bus maps on site can encourage alternatives to the single-occupancy vehicle.

Washington's Commute Trip Reduction (CTR) Act sets goals for reducing the number of single-occupancy vehicle trips at worksites that employ over 100 regular, full-time employees.

While there are currently no employers in the City that currently fall under these requirements, the City will continue to coordinate with employers and transportation service providers (such as Pierce Transit and Sound Transit) as appropriate, to coordinate policies and services to CTR affected sites.

Air, Rail, & Water Transportation Facilities

Regional, national, and international air travel for Lakewood is provided via Seattle-Tacoma International Airport, located approximately 30 miles north of the City. The airport can be accessed via I-5.

Sound Transit railroad tracks traverse Lakewood in approximate alignment with S Tacoma Way, Lakeview Avenue S, and I-5. Currently, this rail line serves Sounder Commuter Rail north from the Lakewood Station. Amtrak passenger train activity is anticipated to begin using these tracks through Lakewood beginning in 2017, although is not expected to stop at the Lakewood Station. The City of Lakewood would support potential improvements to rail facilities such as a study of a potential Amtrak stop at the Lakewood Station or potential grade separation from rail facilities at various crossing locations through the City.

There is no waterborne transportation serving Lakewood. The Transportation Element does not identify waterborne transportation as a component of the City's transportation system.

Implementation Program

The transportation improvement projects must be funded and implemented to meet existing and future travel demands in and around the City of Lakewood. Implementation of the projects identified in the Transportation Element involves a range of funding strategies and potential new funding sources. One strategy includes coordinating with other agencies to build support and construct the transportation improvement projects, including the expansion of transit service in the City. Another strategy includes the pursuit of grants, which will be especially critical in the implementation of safety and operational improvements and completion of the non-motorized projects. The City will also need to review and regularly maintain development review processes to assure that the impacts of growth are mitigated and transportation improvements are completed concurrent with new development. Additionally, the City should explore additional funding sources to implement high priority transportation projects to support new growth. Finally, if expected funding for improvements to meet future transportation needs is found to be inadequate and the City will not be able to meet adopted level of service (LOS) standards, then the City will need to pursue options as laid out under the Reassessment Strategy.

Local Funding

The City utilizes a number of fees and tax revenues to construct and maintain their transportation facilities. Primary City revenues directed toward transportation projects include the Real Estate Excise Tax (REET) and Surface Water fees. Drainage and retention of storm water is part of most roadway and intersection projects making Surface Water fee revenue an appropriate part of the transportation funding program. The City also uses state fuel tax revenue to maintain and operate the transportation system and can direct revenues from its General Fund to transportation projects and programs, as needed.

Transportation Benefit District

The City created a Transportation Benefit District (TBD) in 2012, and in 2014 authorized an annual \$20 vehicle licensing fee to fund specific transportation projects and programs throughout the City. The TBD is governed by the members of the Lakewood City Council as the District's Board of Directors and the Mayor serves as the Chair of the Board. Revenues from a TBD can be used for the construction, maintenance, preservation, and operation of state, regional, or local agency roadways, high capacity transportation systems, public transit, and transportation management programs. However, Lakewood has specifically identified the projects and programs that the fee revenue will be applied towards. The City could consider enacting additional TBD taxes and fees to implement additional projects identified in the Transportation Element.

Regional Coordination

The City will closely coordinate with WSDOT to implement improvements to I-5, SR 512, the Sound Transit railroad tracks in association with the Point Defiance Bypass project, and the Berkeley Street interchange. Even though I-5 and SR 512 are outside the corporate limits of the City, Lakewood residents and businesses take primary and direct access from these highways. Lakewood will work with WSDOT, PSRC, the transit providers, and neighboring jurisdictions to improve these corridors.

Lakewood's transportation system is also impacted by neighboring jurisdictions. Lakewood needs to address regional traffic impacts to jointly develop or advocate for transportation improvements along common border streets. The City must also work to improve connections to key Pierce Transit and Sound Transit facilities.

Grants

The City will continue to aggressively pursue federal and state grants to implement many of the identified transportation improvements. Key state and federal grant programs are managed by the state Transportation Improvement Board (TIB), PSRC, or through WSDOT Local Programs. Each grant program requires an agency match. The City will need to reserve adequate funding for use in matching against any grant funds that are received.

The City will work through TIB, PSRC, and WSDOT to pursue grants for specific projects. Projects to improve principal arterials such as South Tacoma Way, Steilacoom Boulevard, Bridgeport Way, and Gravelly Lake Drive are candidates for TIB and some federal grant programs managed through WSDOT. Grants to enhance pedestrian and bicycle facilities are largely through either TIB, WSDOT pedestrian/bicycle program, or the Safe Routes to Schools program.

Other Potential Funding Sources

The following outlines possible funding sources the City could consider for financing transportation maintenance, and capital projects and programs. The City should explore strategies to address funding shortfalls and consider policy changes that would provide for reliable future revenues to fully maintain, operate, and expand its transportation system. The potential funding options are described below and listed in Table 9.

Table 9. Local Transportation Funding Options

Local Funding Source	Comments
Transportation Impact Fee	<u>With City Council approval</u> , the City may charge a fee to help fund specific transportation projects shown to be reasonably related to new development.
Local or Business Improvement District (LID or BID)	Levy a special benefit assessment on properties within a specific area that would benefit from the improvement.
General Obligation (GO) Bonds	<u>With voter approval</u> , a GO bond requires 60 percent approval and creates a new source of funds when tied to an excess levy for repayment of the bond debt.
Planned Action Ordinance	A project specific action under the State Environmental Protection Act (SEPA) in which the mitigation measures that will be applied have already been identified through a environmental review process.
Other Developer Mitigation	Potential mitigation to address local development regulations and requirements such as GMA concurrency, the State Environmental Policy Act (SEPA), and street standards/frontage improvements.
Latecomers Agreements	Allow property owners who have paid for capital improvements to recover a portion of the costs from other property owners in the area who later develop property that will benefit from those improvements.

SOURCE: Transpo Group 2015

Transportation Impact Fees

Transportation impact fees (TIF) may be charged to help fund specific transportation projects shown to be reasonably related to new development. The impact fees “shall only be used to fund system improvements” that are reasonably related to and benefit the new development. Impact fees may not be used to correct existing deficiencies. The imposing jurisdiction must also contribute funds to the included projects, which by statute cannot be funded 100 percent through impact fees (RCW 82.02.050 [2]). The revenues collected from a TIF must then be used within six years of payment. The goal of implementing transportation impact fees is to create fees based on a new development’s expected benefit from the transportation system improvements that are needed to support future growth. Generally, this is done by basing the fees on the number of vehicle trips a development is expected to generate and the

proportional cost of the transportation improvement projects (alternatively can be charged on a per unit basis) needed to serve growth.

Local Improvement District or Parking and Business Improvement Area

Any jurisdiction may form a local improvement district (LID) parking and business improvement area (PBIA) and levy a special assessment on properties within the district that would benefit from the improvements. An LID is a special purpose financing option that may be created by the City or other local governments to fund improvements, such as streets, water, or sewer facilities that benefit nearby property owners. Voter approval is not required to form an LID, but the LID formation may be challenged by the property owners. LIDs for cities are authorized under RCW 35.43 to 35.56. The City may levy a tax on the property within an area that will benefit from a specific capital project. They can be created by local governments or they can be initiated by property owners in the benefit area. Property owners that will benefit from the improvements would be assessed a special benefit assessment based on proportionate levels determined during the formation of the districts. This special benefit assessment would typically be paid annually by the property owner for a time period established during the formation of the district. The City would have discretion in its financial contribution to the overall project costs of the district.

A PBIA is somewhat similar to an LID, but has specific requirements per RCW 35.87A.010. A PBIA is permitted to aid general economic development and neighborhood revitalization. It is intended to facilitate the cooperation of merchants, businesses, and residential property owners to support economic vitality, livability, and general trade. A PBIA requires a petition be submitted by at least 60 percent of the assessments of property within the area.

General Obligation Bonds Supported with an Excess Property Tax Levy

The City Council may go to the public for a voter-approved bond with a property tax increase. With voter approval, the City can increase funding through debt by raising the property tax rates to pay the general obligation bond.

Planned Action Ordinance

Planned Action Ordinances (PAO) are a project specific action under the State Environmental Protection Act (SEPA) in which an Environmental Impact Statement (EIS) designates, by ordinance, those types of projects to be considered Planned Actions – spelling out mitigation measures that will be applied. This type of action is appropriate for small areas, such as the downtown, expecting a specific type of development. Per RCW 43.21C.031, GMA counties and cities may designate a planned action. A planned action must be designated by an adopted ordinance or resolution of the City. The planned action must be based on an Environmental Impact Statement (EIS) that adequately addresses significant environmental impacts. The EIS needs to be prepared in conjunction with a comprehensive plan or subarea plan adopted under GMA.

The planned action can only include projects that are subsequent to or implement the comprehensive plan or subarea plan; however, the projects must be located within the defined urban growth area. The planned action would be limited to specific geographical areas that are less than the boundaries of the City or to specific types of development within the City. The ordinance and/or EIS must specify a time limit for the planned action. The City will need to fund the costs of preparing the subarea plan and EIS to establish the planned action, which is typically a significant upfront investment.

To ensure that the developments are not paying twice for the same impacts, it is recommended that projects included in a planned action are not also included in a TIF, or at least are specifically allocated to each funding source. This distinction would simplify the administration of both funding options.

Other Development Mitigation

All new development in the City must pass state and local development regulations and requirements. These include GMA concurrency requirements, the State Environmental Policy Act (SEPA), and road standards/frontage improvements. These elements are project specific and are reviewed as part of each development application.

Latecomers Agreements

Latecomers Agreements (RCW 35.72) are contracts that allow property owners who have elected to install capital improvements to recover a portion of the costs from other property owners in the area who later develop property that will benefit from those improvements. The City may also join in the financing of the improvement projects and be reimbursed in the same manner as a property owner. The period of collection may not exceed 15 years and is based on a pro-rata share of the construction and contract administration costs of the particular project. The City must define an area subject to the charges by determining which properties would require similar improvements. The preliminary assessment reimbursement area needs to be provided to all property owners within the area; owners of property in the area may request a hearing to discuss the Latecomers Agreement. The contract must define the cost allocation process based on benefits to properties in the reimbursement area. The final contract must be recorded with the County Auditor within 30 days to be valid. Although not explicitly required, the City could adopt an ordinance noting the circumstances where the option for such a reimbursement contract would be acceptable.

Concurrency Management and Development Review

Concurrency refers to the ongoing process of coordinating infrastructure needs with community development. This concept was formalized in the GMA to ensure that adequate public facilities are provided in concert with population and employment growth. For transportation facilities, the GMA requirement is fulfilled if its LOS standards will continue to be met including the additional travel demand generated by each development.

Concurrency determinations for the roadway network are closely linked with development review decisions. In addition, the City reviews development applications pursuant to the State Environmental Policy Act (SEPA). Concurrency and SEPA are primarily focused on a shorter-term time frame. Projects that result in an adverse impact are required to fund or implement mitigation measures that reduce the impact below a level of significance and/or meet the LOS standard. The City provides credits where developers are required to construct improvements whose costs are included in the Six-Year TIP program.

The City will regularly monitor the operations and levels of service of its transportation system. The City will use the information in developing its Six-Year Transportation Improvement Program (TIP), pursuit of grants, and coordination with WSDOT and other agencies. The City will apply SEPA and the City's Road Standards to evaluate and identify appropriate improvements for mitigating impacts of developments in the City.

Reassessment Strategy

The implementation strategy to complete the capital projects identified in Table 8 is largely based on revenue from taxes and grants, and the Transportation Benefit District. The City may be able to shift revenues from other funding programs to address specific needs as yearly budgets are prepared. In addition, the City is committed to reassessing its transportation needs and funding sources each year as part of the annual six-year TIP. This allows the City to match the shorter-term improvement projects with available funding.

In order to maintain the vitality of the City's transportation system, the City should adhere to the following principles as it implements the Transportation Element:

- Coordinate timing of new development in LOS deficient areas with fully-funded improvements identified in the required six-year TIP.
- Provide for routing traffic to other roads with underutilized capacity to relieve LOS standard deficiencies, but taking into consideration the impact of additional traffic on the safety and comfort of existing neighborhoods.
- Aggressively pursue the following TDM strategies, including parking management actions in the commercial centers:
 - Install parking meters on streets within and adjacent to commercial centers;
 - Develop public parking facilities and use cost pricing to discourage SOV commuting;
 - Institute a municipal parking tax;
 - Set maximum parking space development standards and reduce over time to further constrain parking supply;
 - Support charging for employee parking and providing monetary incentives for car and vanpooling;
 - Partner with Pierce Transit to identify public and/or private funding for expanded transit service during peak and off-peak times along LOS deficient corridors.
- Aggressively pursue federal and state grants for specific transportation improvements on LOS deficient roadway segments.
- Make development density bonuses available to developers who provide additional transit, bicycle, and pedestrian-friendly amenities beyond the minimum requirements.
- Reassess commercial and residential development targets and make adjustments to channel development away from LOS deficient locations.
- If the actions above are not sufficient, consider changes in the LOS standards and/or limit the rate of growth, revise the City's current land use element to reduce density or intensity of development, and/or phase or restrict development to allow more time for the necessary transportation improvements to be completed.

6.0

TRANSPORTATION

The references highlighted throughout this document reference the *VISION 2040 and Growth Management ACT (GMA) Checklist*. The policy review found many of the policies and goals established by the City of Lakewood comply with guidance from PSRC and the State of Washington.

Notes:

TEXT – These sections contain track-changes updates related to the GMA/VISION 2040 checklist contained in Attachment A.

TEXT – These sections include other updates unrelated to the checklist.

TEXT – These sections may need to be updated to reflect changes in travel demand model or network operations.

6.1 Introduction and Purpose

By the year 2030, traffic congestion on freeways and arterial roadways within the region is projected to be far more extensive, resulting in longer travel delays. Lakewood shares the region's transportation woes since it is part of the regional transportation system and integrally connected to systems of adjacent jurisdictions. Lakewood currently experiences traffic congestion around its freeway interchanges and some principal arterial streets.

There are many causes of increased traffic congestion within Lakewood, including:

- Annual vehicle miles traveled growing at a faster rate than population or employment growth.
- An increase in the number of two-wage-earner households. An historical decline in transit use as a percentage of overall trips.
- Road improvements have not kept pace with traffic volume for environmental, financial, and community character reasons.

To correct some of the problems contributing to these conditions, Lakewood must develop and maintain a balanced multimodal transportation system that integrates the local transportation network with the regional transportation system and supports land use goals and policies.

This chapter addresses the connection between transportation and land use; establishes means to increase travel options; describes desirable characteristics of transportation facility and design; and addresses connectivity, access, traffic management, maintenance, and amenities for transportation improvements. The general principles underlying the transportation chapter include:

- Promote safe, efficient, and convenient access to transportation systems for all people.
- Recognize transit, bicycling, and walking as fundamental modes of transportation of equal importance compared to driving when making transportation decisions.
- Create a transportation system that contributes to quality of life and civic identity in Lakewood.
- Reduce mobile source emissions to improve air quality.
- Integrate transportation-oriented uses and facilities with land uses in a way that supports the City's land use as well as transportation goals.
- Increase mobility options by actions that diminish dependency on SOVs.
- Focus on the movement of both people and goods.

This chapter covers all areas within Lakewood's city limits and will be expanded to ensure that consideration is given to urban growth areas as they are brought into the city. The transportation goals and policies included here are based on local priorities but are also coordinated with the comprehensive plans of neighboring cities such as University Place and Tacoma, and that of Pierce County. The proposals within this transportation chapter are consistent with neighboring jurisdiction plans and will positively contribute to the region's transportation system.

Travel forecasts and financial strategies are included in the technical appendix.

The challenge of developing Lakewood's future transportation system will be to strike a balance between accommodating increased traffic demand and maintaining community character. Developing a transportation system that enhances Lakewood's neighborhoods while providing effective mobility for people, goods, and services through multiple travel modes is a primary focus of this chapter. There are a number of considerations related to transportation in Lakewood:

Physical Features. Natural obstacles, especially American Lake, Gravelly Lake, and Lake Steilacoom, constrict traffic flow between the east and west halves of the city to a few arterial connections.

Existing Patterns. Lakewood's road network has evolved in a pattern typical of suburban sprawl. A few principal roadways connect a network largely composed of otherwise unconnected cul-de-sacs. Because of the city's geographic location and presence of natural features and military reservations, I-5 and SR 512 form primary connections with the rest of the region.

Alternative Modes. There are few realistic alternatives to driving for most people in Lakewood. The City's incomplete bicycle and pedestrian network does not provide safe links between most commercial areas, schools, community facilities, and residential neighborhoods. Alternative motorized modes include local and regional transit connections provided by Pierce Transit. Intercity Transit and Sound Transit systems will improve connectivity as commuter rail service is established.

6.1.1 Arterial Street Classifications

Street classifications are defined in Figure 6.1.

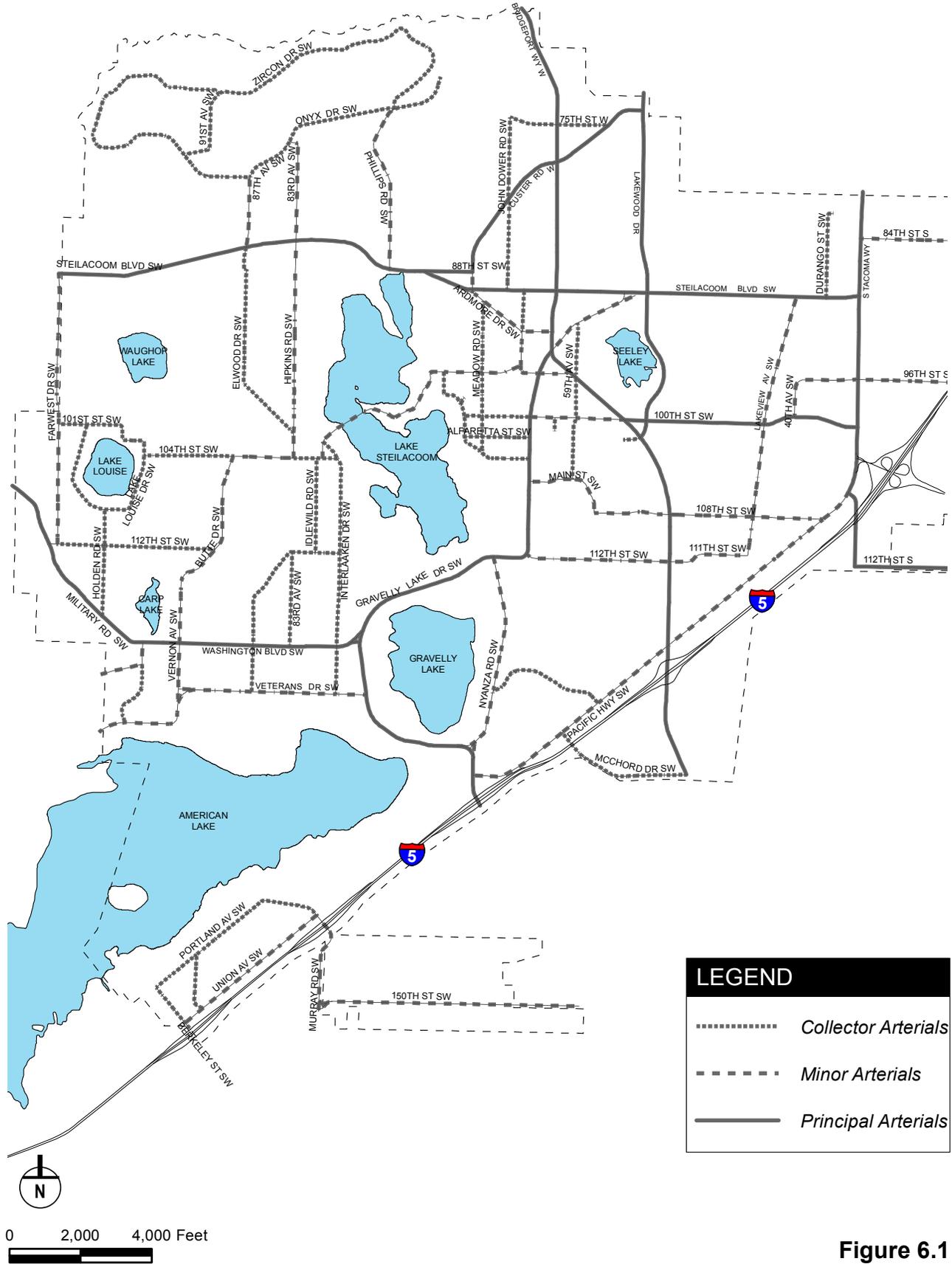
6.2 General Transportation Goals and Policies

GOAL T-1: Apply the street functional classification system and transportation design standards in the construction of new or upgraded transportation infrastructure.

Policy:

T-1.1: Define all streets according to the following criteria:

- Principal arterials are roadways that provide access to principal centers of activity. These roadways serve as corridors between principal suburban centers, larger communities, and between major trip generators inside and outside the plan area. Service to abutting land is subordinate to travel service to major traffic movements. The principal transportation corridors within the City of Lakewood are principal arterials. These roadways typically have daily volumes of 15,000 vehicles or more.
- Minor arterials are intra-community roadways connecting community centers with principal arterials. They provide service to medium-size trip generators, such as commercial developments, high schools and some junior high/grade schools, warehousing areas, active parks and ballfields, and other land uses with similar trip generation potential. These roadways place more emphasis on land access than do principal arterials and offer lower traffic mobility. In general, minor arterials serve trips of moderate length, and have volumes of 5,000 to 20,000 vehicles per day.
- Collector arterials connect residential neighborhoods with smaller community centers and facilities as well as provide access to the minor and principal arterial system. These roadways provide both land access and traffic circulation within these neighborhoods and facilities. Collector arterials typically have volumes of 2,000 to 8,000 vehicles per day.
- Local access roads include all non-arterial public city roads and private roads used for providing direct access to individual residential or commercial properties. Service to through traffic movement usually is deliberately discouraged.



LEGEND	
	Collector Arterials
	Minor Arterials
	Principal Arterials

Figure 6.1
Arterial Street Classification

Source: Transpo Group
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T-1.2: Design transportation facilities to fit within the context of the built or natural environments in which they are located.

T-1.3: Adopt a street light placement policy that establishes the level and type of lighting that must be provided in conjunction with new development and redevelopment, including pedestrian-oriented lighting in targeted areas.

GOAL T-2: Maintain maximum consistency with state, regional, and local plans and projects.

Policies:

T-2.1: Coordinate with the state, county, adjacent jurisdictions, and transit providers to ensure consistency between transportation improvements, land-use plans, and decisions of the City and other entities, consistent with PSRC's Regional Growth Strategy.

T-2.2: Continue to participate in regional transportation planning to develop and upgrade long-range transportation plans.

T-2.3: Periodically review the street classification system with adjacent jurisdictions to ensure consistency.

T-2.4: Support and actively participate in improvements to I-5 through Lakewood and JBLM, and pursue safe connections to the local community.

T-2.5: Work with WSDOT to identify and implement improvements to the I-5/SR 512 interchange.

GOAL T-3: Maximize transportation connections without negatively impacting residential areas.

Policies:

T-3.1: Delineate key street connections through undeveloped parcels to ensure that connections are made as development occurs.

T-3.2: Where practical, connect public streets to enable local traffic to circulate efficiently and to reduce impacts elsewhere in the transportation network.

T-3.3: Where practical, require new development to "stub out" access to adjacent undeveloped parcels to ensure future connectivity, indicating the future connection on the face of the plat, and (when possible) connect with existing road ends.

T-3.4: Accommodate pedestrian and bicycle connections where grades, right-of-way (ROW) widths, or other natural or built environment constraints have precluded street connections from being implemented.

GOAL T-4: Balance the need for property access with safety considerations.

Policies:

T-4.1: Limit access as necessary to maintain safe and efficient operation of the existing street system while allowing reasonable access to individual parcels.

T-4.2: Limit direct access onto arterials when access opportunities via another route exist.

T-4.3: Provide for full access to parcels abutting local residential streets, except where adequate alley access exists to individual lots.

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T-4.4: Discourage abandonment of alleys.

T-4.5: Work with adjacent jurisdictions to establish consistent access limitations to arterials and highways of regional transportation importance.

T-4.6: **Ensure emergency responders have efficient access to public and private properties.**

GOAL T-5: Manage traffic to minimize its impact on neighborhoods, mobility, and enterprise.

Policies:

T-5.1: Maintain optimal traffic signal timing and synchronization along arterials and other principal transportation routes to ensure smooth traffic flow as well as pedestrian safety at crossings.

T-5.2: Prior to any street reclassifications, conduct an analysis of existing street configurations, land uses, subdivision patterns, location(s) of structure(s), impact on neighborhoods, and transportation network needs.

T-5.3: Upgrading residential streets to collector and arterial classifications will be discouraged and will occur only when a significant community-wide need can be identified.

GOAL T-6: Reduce the impact of freight routing on residential and other sensitive land uses.

Policies:

T-6.1: Designate **truck** routes for freight.

T-6.2: Require new development and redevelopment to provide for freight loading and unloading on-site or in designated service alleys rather than in the public ROWs.

GOAL T-7: Sustain and protect the City's investment in the existing **transportation** network.

Policies:

T-7.1: Maintain streets at the lowest life cycle cost (the optimum level of street preservation required to protect the surfaces).

T-7.2: Maintain sidewalks to ensure continuous and safe connections.

T-7.3: **Ensure predictable sources of income to maintain the transportation system.**

GOAL T-8: Minimize visual and noise impacts of roadways on adjacent properties and other users.

Policies:

T-8.1: Create and apply standards for planting strips, including street trees, between road edges and sidewalks to be applied to various road classifications.

T-8.2: Create and apply standards for landscaped islands and medians to break up linear expanses.

GOAL T-9: Provide a balanced, **multimodal transportation system that supports the safe and efficient movement of people and goods.**

Policies:

- T-9.1: Provide for the needs of drivers, public transportation vehicles and patrons, bicyclists, and pedestrians of all ages and abilities in the planning, programming, design, construction, reconstruction, operations, and maintenance of the City's transportation system.
- T-9.2: Minimize the negative impacts of transportation improvement projects on low-income, minority, and special needs populations.
- T-9.3: Ensure mobility choices for people with special transportation needs, including persons with disabilities, the elderly, the young, and low-income populations.

6.3 Transportation Demand and Systems Management

Transportation demand management (TDM) techniques include various mechanisms intended to influence people's choices about how they get from one place to another, with the goal of reducing vehicular travel demand on the road network, which subsequently reduces pollution and greenhouse gas emissions. Within Washington State, there is a statewide commute trip reduction (CTR) program that was initiated in 1991 to work with and assist employers in instituting TDM programs for their employees. These programs include measures such as parking management (making parking more difficult or expensive to obtain) ridesharing, telecommuting, and alternative work schedules. In addition, local governments can establish land-use regulations that foster the use of bike/pedestrian and transit modes.

Transportation systems management (TSM) refers to strategies that improve facility operations, traffic flow, or safety without adding lanes to increase capacity. TSM strategies are generally lower-cost improvements that do not typically involve major construction of new or expanded capital facilities.

GOAL T-10: Minimize the growth of traffic congestion to meet state, regional, and local environment and sustainability goals.

Policies:

- T-10.1: Require TDM improvements serving pedestrians, bicyclists, and transit riders as impact mitigation for new development.
- T-10.2: Where practical, retrofit existing streets to link neighborhoods and disperse neighborhood access to services.
- T-10.3: Interconnect traffic signals to provide green light progressions through high-volume corridors to maximize traffic flow efficiency during peak commute periods.
- T-10.4: Consider the negative effects of transportation infrastructure and operations on the climate and natural environment.
- T-10.5: Support the development and implementation of a transportation system that is energy efficient and improves system performance.

GOAL T-11: Reduce dependence on SOV use during peak commute hours.

While the WSDOT, the State Department of General Administration (GA), and Pierce Transit have shared responsibility for implementing and managing the state and regional CTR programs, the City of Lakewood can actively support and promote these programs. Beyond supporting the state's and Pierce Transit's work to implement CTR programs, the City of Lakewood should work closely with Pierce Transit, Pierce County and/or the GA to cooperatively implement CTR programs

Policies:

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- T-11.1: Establish CTR programs within major employer worksites as required by state law.
- T-11.2: Work with Pierce Transit, Pierce County and major employers and institutions to coordinate and publicize CTR efforts.
- T-11.3: Encourage employers not affected by the CTR law (less than 100 employees) to offer CTR programs to their employees on a voluntary basis and assist these employers with tapping into larger employers' ridematching/ridesharing and other HOV/transit incentive programs, where possible.
- T-11.4: Encourage large employers to institute flex-hour or staggered-hour scheduling and compressed work weeks to reduce localized congestion during peak commute times.
- T-11.5: Implement a local public awareness and education program designed to promote the environmental and social benefits of TDM strategies.
- T-11.6: Work with local high schools to educate students about the social benefits of carpooling and riding transit to school.
- T-11.7: Plan and implement arterial HOV improvements such as HOV lanes or transit-signal priority improvements at intersections to connect high-density employment centers with bus transit centers and commuter rail stations.

GOAL T-12: Decrease dependence on single-occupant vehicles (SOVs) as a primary means of transportation.

Policies:

- T-12.1: Prevent automobiles from dominating neighborhood and central business districts, while still accommodating their use.
- T-12.2: Maximize the availability of non-SOV transportation options to encourage people to use different modes.
- T-12.3: Work with Pierce Transit to implement transit signal-priority systems that enhance the reliability of transit as an alternative transportation mode.

GOAL T-13: Develop and maintain collaborative working relationships with outside agencies to **improve the transportation system**.

Policies:

- T-13.1: Involve appropriate agencies in the early review of development proposals to assess opportunities for transit-oriented design and amenities.
- T-13.2: Support regional **and high-capacity transit systems (e.g., buses and rail) that reliably and efficiently connect to local transit services**.
- T-13.3: Coordinate with transit agencies to provide facilities and services supportive of HOV use such as ridematching, provision of vanpool vehicles, on-demand services, shuttles, etc.
- T-13.4: Coordinate with transit agencies to determine and respond to emerging routing and frequency needs, particularly in residential neighborhoods.

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- T-13.5: Work with transit agencies to develop design and placement criteria for shelters so that they best meet the needs of users and are a positive amenity.
- T-13.6: Work with WSDOT to pursue HOV lanes on I-5 and SR 512 serving the city and regional transit operations.
- T-13.7: Allocate staff resources to work with other transportation government agencies in drafting and submitting joint applications for state and federal transportation grants to support projects that benefit multiple jurisdictions.
- T-13.8: Work with the Burlington Northern Santa Fe Railway, Sound Transit and other appropriate agencies to pursue funding for a grade separation at the 100th Street SW rail crossing.
- T-13.9: Explore local shuttle service between high density areas within the urban center such as the Lakewood Station district, Lakewood Towne Center, the Sound Transit commuter rail station, the Colonial Center, and other high-density developments with high transit ridership potential.
- T-13.10: Encourage ridesharing through requirements for parking reserved for carpool and vanpool vehicles in the zoning code.
- T-13.11: Coordinate with service providers and other utilities using rights-of-way on the timing of improvements to reduce impacts to communities and to lower the cost of improvements.
- T-13.12: Work with Sound Transit and WSDOT to pursue expansion of the existing SR-512 park-and-ride facility.
- T-13.13: Work with Pierce Transit to monitor transit service performance standards and to focus service expansion along high-volume corridors connecting high-density development centers with intermodal transfer points.

GOAL T-14: Provide safe, convenient, inviting routes for bicyclists and pedestrians (see adopted Non-Motorized Transportation Plan).

Policies:

- T-14.1: Implement and place a high importance on projects identified in the City's Non-Motorized Transportation Plan that serve and connect high density areas, major employers, schools, parks, shopping areas, and other popular destinations.
- T-14.2: Promote and improve public bicycle and pedestrian connections to achieve greater connectivity.
- T-14.3: Balance the desirability of breaking up large blocks with midblock crossings with the safety needs of pedestrians.
- T-14.4: Require the incorporation of non-motorized facilities including bicycle parking, pedestrian-scale lighting, benches, and trash receptacles into new development designs.
- T-14.5: Work with transit providers to provide bike racks and/or lockers at key transit stops and require them as condition of new development.

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T-14.6: Coordinate with adjacent jurisdictions to design for coherent bike and pedestrian corridors.

T-14.7: Consider adopting a “Complete Streets” ordinance.

6.4 Parking

Parking in Lakewood primarily exists in surface parking lots to support commercial, office, light industrial, and multi-family residential areas. There is an abundant supply of parking in most of these areas. While adequate parking is critical to any type of development, an oversupply of parking wastes resources and encourages a continuation of auto-oriented travel. Therefore, the parking goals and policies balance these two conflicting outcomes.

GOAL T-15: Provide adequate parking that serves Lakewood's needs but does not encourage a continuation of auto-oriented development and travel patterns.

Policies:

T-15.1: Develop and implement reasonable and flexible parking standards for various types of land uses that balance the need for providing sufficient parking with the desirability of reducing commute traffic.

T-15.2: Consider parking standards that support TDM efforts.

T-15.3: Allow adjacent or nearby uses that have different peak parking demands such as employment and housing to facilitate shared parking spaces.

T-15.4: Recognize the capacity of transit service in establishing parking standards.

T-15.5: Develop and enforce parking lot design standards, identifying requirements for landscaping, walkways, runoff treatment, parking area ratios, lighting, and other elements as needed.

GOAL T-16: Foster the evolution of a central business district that is compact and walkable and not defined by large expanses of parking lots.

Policies:

T-16.1: Consider maximum parking requirements for higher density areas to encourage alternative transportation modes.

T-16.2: Confine the location of parking areas to the rear of properties to increase pedestrian safety and minimize visual impact.

T-16.3: Identify places where on-street parking can be added adjacent to street-facing retail to encourage shopping and buffer sidewalks.

T-16.4: Encourage the use of structured or underground parking to use land more efficiently.

T-16.5: Focus investments in downtown central business areas by promoting joint- and mixed use development and integrating shared-use parking practices.

T-16.6: Incorporate Transportation 2040 guidelines into planning for centers and high-capacity transportation station areas.

GOAL T-17: Expand park-and-ride capacity to serve rail as well as other transit uses and accommodate growth.

Policies:

- T-17.1: Work with transit providers to establish additional park-and-ride facilities to serve Sound Transit operations and to facilitate ridesharing and express bus connections.
- T-17.2: Encourage commercial development on major transit routes to dedicate unused parking area to park-and-ride facilities where feasible.

6.5 Freight Mobility

Movement of goods is critical to Lakewood's economic activity. Supplies and products must be able to move into, out of, and throughout the commercial parts of the city. The following goals and policies address the specific needs of freight mobility in Lakewood.

GOAL T-18: Plan for location of freight routing in conjunction with placement of industrial, commercial, and other land uses to maintain and improve commercial transportation and mobility access.

Policies:

- T-18.1: Install directional signage for truck routes through key areas of the city.
- T-18.2: Consider potential freight movement needs of new development as part of SEPA review.
- T-18.3: Create development standards for freight access to commercial uses likely to possess such needs.
- T-18.4: Examine the potential of unused or underutilized rail lines in Lakewood for freight rail.
- T-18.5: As industrial uses concentrate into certain areas, identify ways to eliminate the conflict among freight users this may tend to create.
- T-18.6: Promote the continued operation of existing rail lines to serve the transportation needs of Lakewood businesses.
- T-18.7: Support reconstruction of the I-5/SR 512 interchange to improve access to the Lakewood Industrial Park.
- T-18.8: Support new access and infrastructure improvements to American Lake Gardens that facilitate industrial development.
- T-18.9: Explore future opportunities to grade separate rail traffic from street arterials where significant safety hazards or traffic congestion warrant.

6.6 Level-of-Service Standards and Concurrency

6.6.1 Definitions

The GMA requires the adoption of Level-of-Service (LOS) standards for arterial streets and intersections to serve as a gauge to judge the quality and performance of the transportation system. The LOS standards for arterial streets and intersection selected for Lakewood are based on the peak hour LOS for special roadway links designated on Figure 6.2.

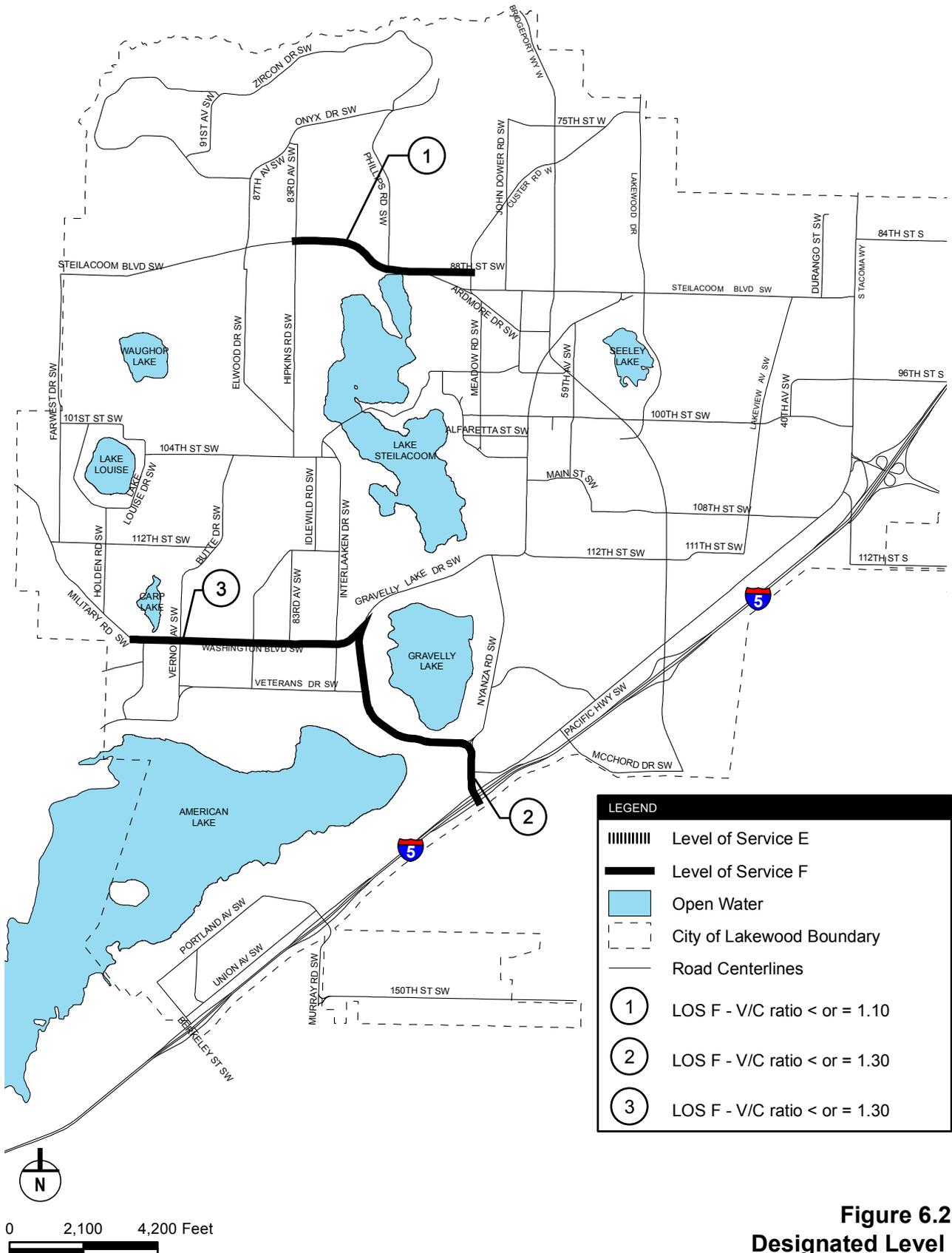


Figure 6.2
Designated Level
of Service Thresholds

Level-of-service standards required by the GMA are closely related to the issue of concurrency. The GMA requires transportation improvements to be made concurrent with development. Once a street or intersection exceeds its LOS standard, improvements must be planned within six years to improve the street's performance to a level that does not violate the standard. If planned improvements were to exceed the six-year time frame, new development that would add traffic to the street could not be approved.

The most common approach to LOS for roads is the ratio of traffic volume to the design capacity of a facility while intersection LOS is based on the average delay experience by drivers. Both roadway and intersection LOS are typically evaluated during the peak hour travel and are typically converted to letter grades "A" through "F," as described in the Transportation Research Board's *Highway Capacity Manual*. The LOS A represents the least amount of congestion, while LOS F represents the highest level of congestion.

Level-of-service standards can be chosen for different arterials within a city. Levels of service should desirably be the same on both sides of a city/county boundary; however, different goals on either side of a boundary can be legitimate reasons for two jurisdictions to establish different standards.

6.6.2 Goals and Policies

GOAL T-19: Apply standardized performance measurement criteria to monitor transportation LOS.

Policies:

T-19.1: Monitor road performance using the Highway Capacity Manual's standardized A-F LOS measures:

- LOS A is defined as representing a free flow condition. Travel speeds are typically at or near the speed limit and little to no delay exists. Drivers have the freedom to select their desired speeds and to make turns and maneuver within the traffic stream.
- LOS B is defined as representing stable flow. Drivers still have some freedom to select their travel speed. Average delays of 10-20 seconds per vehicle are experienced at signalized intersections.
- LOS C is defined as falling within the range of stable flow, but vehicle travel speeds and maneuverability are more closely controlled by higher traffic volumes. The selection of speed is not affected by the presence of others, and maneuvering within the traffic stream requires vigilance on the part of the driver. Longer average delays of 20-35 seconds per vehicle are experienced at signalized intersections.
- LOS D is defined as approaching unstable flow. Travel speed and freedom to maneuver are somewhat restricted, with average delays of 35-55 seconds per vehicle at signalized intersections. Small increases in traffic flow can cause operational difficulties at this level.
- LOS E is defined as representing operating conditions at or near the capacity of the roadway. Low speeds (approaching 50 percent of normal) and average intersection delays of 55-80 seconds per vehicle are common. Freedom to maneuver within the traffic stream is extremely difficult. Any incident can be expected to produce a breakdown in traffic flow with extensive queuing.
- LOS F is defined as forced flow operation at very low speeds. Operations are characterized by stop-and-go traffic. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. Long typical delays of over 80 seconds per vehicle occur at signalized intersections.

July 10, 2015

T-19.2: Collaborate with adjacent jurisdictions to develop appropriate LOS standards where roadway centerlines serve as a jurisdictional boundary.

T-19.3: Work toward developing multimodal LOS and concurrency standards.

GOAL T-20: Adopt the following arterial and intersection LOS thresholds for maintaining transportation concurrency on arterial streets in Lakewood.

Policies:

T-20.1: Maintain LOS D with a V/C ratio threshold of 0.90 during weekday PM peak hour conditions on all arterial streets and intersection in the city, including state highways of statewide significance except as otherwise identified.

T-20.1: Maintain LOS D during weekday PM peak hour conditions at all arterial street intersections in the city, including state highways of statewide significance except as otherwise identified.

T-20.2: Maintain LOS F with a V/C ratio threshold of 1.10 in the Steilacoom Boulevard corridor between 88th Street SW and 83rd Avenue SW.

T-20.3: Maintain LOS F with a V/C ratio threshold of 1.30 on Gravelly Lake Drive between I-5 and Washington Boulevard SW and Washington Boulevard SW, west of Gravelly Lake Drive.

T-20.4: The City may allow two-way and one-way stop-controlled intersections to operate worse than the LOS standards. However, the City requires that these instances be thoroughly analyzed from an operational and safety perspective.

GOAL T-21: Use traffic management strategies and land use regulations to protect street and network LOS standards.

Policies:

T-21.1: Establish mitigation requirements for new development where LOS is expected to fall below acceptable standards as a result of that development.

T-21.2: Limit new development to areas where LOS standards can be maintained and restrict development in areas where they cannot be maintained.

T-21.3: Use road widening only as a last resort to address LOS deficiencies, except in areas where roadways are substandard and improving them to standards would increase their contribution to overall LOS.

T-21.4: Ensure that comprehensive plan amendments, rezones, master plans, conditional uses, and other significant land use proposals are reviewed with consideration of the proposal's impact on street LOS standards.

6.7 Reassessment Strategy

The arterial level of service thresholds established above will be monitored over time. For locations that may exceed the level of service threshold in the future, a different threshold would need to be established or a specific facility improvement would need to be identified and programmed for funding within six years.

While the future of transportation financing from state and federal sources remains uncertain at present, there are mechanisms available to municipalities to generate revenue for, or otherwise encourage private

investment in, transportation facilities. If the above proactive policies fail to maintain future levels of service within the established LOS thresholds, the City of Lakewood will resort to some combination of the following TDM/TSM and land-use strategies to bring any LOS deficiencies back into compliance under GMA concurrency requirements:

- Coordinate timing of new development in LOS-deficient areas with fully-funded improvements identified in the required six-year transportation improvement plan.
- Provide for routing traffic to other roads with underutilized capacity to relieve LOS standard deficiencies, but taking into consideration the impact of additional traffic on the safety and comfort of existing neighborhoods.
- Aggressively pursue the following TDM strategies, including parking management actions in dense commercial centers:
 - Install parking meters on streets within and adjacent to commercial centers;
 - Develop public parking facilities and use cost pricing to discourage SOV commuting;
 - Institute a municipal parking tax;
 - Set maximum parking space development standards and reduce over time to further constrain parking supply;
 - Support charging for employee parking and providing monetary incentives for car and vanpooling;
 - Partner with Pierce Transit to identify public and/or private funding for expanded transit service during peak and off-peak times along LOS-deficient corridors.
- Aggressively pursue federal and state grants for specific transportation improvements on LOS deficient roadway segments.
- Make development density bonuses available to developers who provide additional transit, bicycle, and pedestrian-friendly amenities beyond the minimum requirements.
- Reassess commercial and residential development targets by planning area and make adjustments to channel development away from LOS-deficient locations.
- If the actions above are not sufficient, consider changes in the LOS standards and/or limit the rate of growth, revise the City's current land use element to reduce density or intensity of development, and/or phase or restrict development to allow more time for the necessary transportation improvements to be completed.



PUBLIC WORKS DEPARTMENT STAFF REPORT

TO: PLANNING COMMISSION

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

MEETING DATE: July 15, 2015 AGENDA ITEM:

SUBJECT: 6-YEAR TIP (2016-2021) – FINAL DRAFT

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 and recommend Council adoption related to the 6-Year TIP. The Planning Commission reviewed background information and the first two drafts of the 6-Year TIP at their May 6, and May 20, 2015 meetings.

City council reviewed the 6-Year TIP at their May 25, 2015 study session and held a public hearing on July 6, 2015. Copies of the 6-Year TIP were sent to various stakeholders including: citizen advisory committee members, adjacent jurisdictions, utility providers, Pierce Transit, and the school district. The 6-year TIP was also placed on the city's web site.

The following modifications were made to the 6-year TIP as a result of various review comments and staff recommendations:

- 1) Section 9 – Roadway Restoration Projects. Several roadway restoration projects were specifically identified in this section to correspond with the current Transportation Benefit District program.
- 2) 2.83 Gravelly Lake Drive – Pacific Hwy to Nyanza (south). Add curb, gutter, sidewalk, street lights, bike facilities. Completed a gap in the non-motorized network.
- 3) 5.7 Motor Avenue – Whitman to Gravelly Lake Drive. Provide non-motorized path including lighting and landscaping. Consistent with Central Business District preliminary vision.
- 4) 2.84 Lakewood Drive – Steilacoom to 74th. Provide left turn lanes. Add curb, gutter, sidewalk, street lights, bike facilities in conjunction with the pavement rehabilitation project within the same project limits (project 9.15).

Recommendation:

The Planning Commission, via “minute motion” recommends council approval of the 6-year TIP (2016-2021) – Final Draft – dated July 10, 2015.

Attachments:

1. 6-Year TIP (2016-2021) – FINAL Draft (July 10, 2015)



CITY OF LAKEWOOD

SIX-YEAR COMPREHENSIVE TRANSPORTATION IMPROVEMENT PROGRAM 2016-2021

******* Final Draft – July 10, 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 (with additional extensions into FY2015). 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. 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 NEW CONSTRUCTION ARTERIAL STREET PROJECTS			2016	2017	2018	2019	2020	2021	2016-2021	
1.2 Gravelly Lake Drive @ I-5 Right Turn Lane Total Estimated Cost \$1,600	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	
		Grant				200	1,000		1,200	
		Other								
		Total	0	0	0	250	1,350	0	1,600	
1.4 Union Avenue - Berkeley to N. Thorne Lane Total Estimated Cost \$5,000	Widen to add turn lane, shared bike/travel lane, sidewalks, street lighting. Intersection improvements.	City					125	250	375	
<i>Note: Project 1.24 will complete Union/Berkeley intersection and some improvements from Berkeley to Maple.</i>		Grant					375	2,250	2,625	
		Other					75	150	225	SWM
		Total	0	0	0	0	575	2,650	3,225	
1.18 96th Street - 2-way left turn lane Total Estimated Cost \$500	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	
		Grant							0	
		Other					400		400	Dev. Contr.
		Total	0	0	0	0	500	0	500	
1.20 123rd ST SW - Realignment Total Estimated Cost \$400	Realign 123rd ST SW as it enters Bridgeport	City					300		300	
		Grant							0	
		Other					100		100	Dev. Contr.
		Total	0	0	0	0	400	0	400	
1.21 Murray Road and 150th Street Corridor Capacity <i>Notes: Assume multiple phases; multiple years</i>	Provide capacity for Woodbrook Industrial development: widening of Murray Road and 150th; bike/pedestrian facilities; structural pavement section improvements	City		100	100	100			300	
		Grant	0	0	0	0			0	
		Other		1,500	1,500	1,500			4,500	SWM/Dev. Contr.
		Total	0	1,600	1,600	1,600	0	0	4,800	
1.22 Gravelly to Thorne Connector Total Estimated Cost \$25,000	Two-way connector road between Tillicum and Gravelly Lake Drive. Signalization.	City	1	1	1	1	1	1	6	
		Grant							0	
		Other		1,000	12,000	12,000			25,000	Other
		Total	1	1,001	12,001	12,001	1	1	25,006	
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	Dev. Contr.
		Total	1	1	1	1	1	1	6	

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN									TOTAL FUNDS
<i>NOTE: BOLD and ITALICIZED numbers denote grant is secured</i>									
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> <i>Total Cost: \$5.7 Million</i>	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				50	50	100	200
		Grant				100	100	400	600
		Other						100	100
		Total	0	0	0	150	150	600	900
TOTALS		City	102	152	177	427	927	352	2,137
		Grant	4,000	150	300	1,200	1,475	2,650	9,775
		Other	100	2,500	13,500	13,500	575	250	30,425
		Total	4,202	2,802	13,977	15,127	2,977	3,252	42,337

PROJECT COSTS IN THOUSANDS OF DOLLARS									
EXPENDITURE PLAN		<i>NOTE: BOLD and ITALICIZED numbers denote grant is secured</i>							TOTAL FUNDS
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	30	100	150	30	100	250	660
		Grant	120	250	1,100	120	250	1,100	2,940
		Other			150			150	300
		Total	150	350	1,400	150	350	1,500	3,900
2.29 Steilacoom Blvd. Custer to 88th Street	Curbs, gutters, sidewalks, street lighting, on both sides. Signal modifications. Signal replacement Custer/Ardmore. Overlay.	City	0						0
Total Estimated Cost \$1,975		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	Curbs, gutters, sidewalks, on both sides. Overlay.	City			10	20	100		130
Total Estimated Cost \$1,400		Grant			20	150	1,000		1,170
<i>Note: Preliminary design completed via previous TIB grant</i>		Other					100		100
		Total	0	0	30	170	1,200	0	1,400
2.50 Gravelly Lake Drive - 100th to Bridgeport Way	Curb, gutters, sidewalks, street lighting, drainage. Signal modifications. Signal replacement Mt. Tacoma.	City	36						36
<i>Note: grant for design, environ., & r/w FY2011-2014</i>		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
		Grant							0
		Other							0
		Total	50	50	50	50	50	50	300
2.55 High Accident Location Safety Improvements	May include sight distance corrective measures, signal modifications, etc. at one of top 25 accident locations.	City	44	20	49	50	50	50	263
<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>		Grant	0	0					0
		Other							0
		Total	44	20	49	50	50	50	263
2.60 South Tacoma Way - SR512 to 96th Street	Curb, gutter, sidewalks, street lighting, drainage, overlay.	City	50						50
Total Estimated Cost \$3,460		Grant	2,826						2,826
<i>Note: Design starting FY2011</i>		Other	300						300
		Total	3,176	0	0	0	0	0	3,176

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									
2.61 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	50
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	0
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	0
2.67 Bridgeport Way - I-5 to JBLM Gate Total Estimated Cost \$3,650	Curb, gutters, sidewalks, street lighting, drainage, overlay.	City	20						20
		Grant	2,978						2,978
		Other	555						555
		Total	3,553	0	0	0	0	0	0
2.68 Hipkins Rd. 104th to Steilacoom Blvd. Total Estimated Cost \$3,050	Curb, gutters, sidewalks, street lighting, drainage, overlay.	City							0
		Grant							0
		Other				350	2,700		3,050
		Total	0	0	0	350	2,700	0	0
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	50	200					250
		Grant	100	1,300					1,400
		Other		200					200
		Total	150	1,700	0	0	0	0	0
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				100	100	100	300
		Grant			100	400	400	400	1,300
		Other			100	500	500	500	1,600
		Total	0	0	200	1,000	1,000	1,000	1,000

FED
SWM&Dev

S.T.

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									
2.71 Steilacoom Blvd - Weller Road to Phillips Road <i>Design through project 2.74</i>	Curb, gutter, sidewalks, street lighting, drainage, overlay.	City	20	50	100				170
		Grant	60	300	1800				2,160
		Other			200				200
		Total	80	350	2,100	0	0	0	2,530
2.72 100th Street & Lakewood Drive <i>Bridgeport Way to 400 feet north of 100th Street</i>	Curb, gutter, sidewalks, sharrows, replace 100th/Lakewood signal, street lighting, drainage, overlay.	City	20	130	200				350
		Grant	80	550	800				1,430
		Other	50						50
		Total	150	680	1,000	0	0	0	1,830
2.73 112th / 111th - Bridgeport to Kendrick	Curb, gutter, sidewalks, sharrows, street lighting, drainage, overlay.	City	20	5	110				135
		Grant	100	50	1,440				1,590
		Other	50	45	250				345
		Total	170	100	1,800	0	0	0	2,070
2.74 Steilacoom Blvd Corridor Design - Farwest to Phillips <i>Joint project with Town of Steilacoom - DESIGN ONLY</i>	Curb, gutter, sidewalks, sharrows, turn lanes, street lighting, drainage, overlay.	City	45	50	43	43	14		195
		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	300				400
		Grant	150	150	2,341				2,641
		Other			300				300
		Total	200	200	2,941	0	0	0	3,341
2.76 Phillips Road - Steilacoom to Onyx	Curb, gutter, sidewalks, bike lanes, street lighting, drainage, overlay.	City							0
		Grant							0
		Other				300	2500		2,800
		Total	0	0	0	300	2,500	0	2,800
2.77 Washington Blvd - Edgewood Ave to Gravelly Lake Drive	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

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										
2.78 Oakbrook Sidewalks & Street Lighting Onyx Dr W (97th to 87th); Onyx Dr E (Garnet to Phillips) (Total Cost \$3,400)	Curb, gutter, sidewalks, sharrows, turn lanes, street lighting, drainage, overlay.	City							0	
		Grant							0	
		Other			400	3000				3,400
		Total	0	0	400	3,000	0	0	0	3,400
2.79 Lake City Business District Sidewalks (American Lake Park to Veterans Dr / Alameda) (Total Cost \$2,100)	Curb, gutter, sidewalks, sharrows, street lighting, drainage, overlay.	City							0	
		Grant							0	
		Other		300	1,800					2,100
		Total	0	300	1,800	0	0	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. Construction 2022+	Provide curb and gutter, sidewalk and a shared travel/bike lane on one side of Interlaaken / Mt. Tacoma Dr.	City								
		Grant								
		Other					750	700		
		Total	0	0	0	0	750	700	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	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	0	125
2.83 Gravelly Lake Dr. - Pacific Hwy to Nyanza (south)	Curb, gutter, sidewalk, bike way, street lighting, pavement rehab	City				50	75	250	375	
		Grant				100	175	800	1,075	
		Other								0
		Total	0	0	0	150	250	1,050	1,450	
2.84 Lakewood Drive - Steilacoom Blvd to 74th Street <i>*note: pavement rehab City match also listed in project 9.15</i>	Add turn lanes, curb, gutter, sidewalk, bike way, street lighting, pavement rehab	City	50	100	950				1,100	
		Grant	200	300	3,180				3,680	
		Other	50	50	500				600	
		Total	300	450	4,630	0	0	0	5,380	
TOTALS		City	539	845	2,093	663	739	750	5,629	
		Grant	9,502	3,356	11,784	2,500	3,860	2,300	33,302	
		Other	1,530	1,420	8,820	4,370	6,756	1,350	22,796	
		Total	11,571	5,621	22,697	7,533	11,355	4,400	61,727	

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	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	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	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	800
3.12 Traffic Signal Replacement Program	Replace aging traffic signals. Priorities based on maintenance history. (one signal every 3rd year)	City		300		300		300	900
		Grant							0
		Other							0
		Total	0	300	0	300	0	300	900
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	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
		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
		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
		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
		Other							0
		Total	22	143	640	0	0	0	805
TOTALS		City	102	415	155	665	115	315	1,767
		Grant	230	228	1,490	300	0	0	1,598
		Other	5	345	0	0	150	0	500
		Total	337	988	1,645	965	265	315	3,865

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		Provide non-motorized path between Tillicum and Gravelly Lake Drive "Gravelly to Thorne Connector" construction.	City		20	30	350		400	
			Grant		100	170	1,650		1,920	
			Other			180	2,500		2,680	
			Total	0	120	380	4,500	0	5,000	
5.6 Gravelly Lake Non-Motorized Trail (Total Cost \$8,800; length = 2.9 miles) Additional Construction 2022+		Provide non-motorized path around Gravelly Lake along Gravelly Lake Drive and Nyanza Drive. Existing roadway cross section shifted to outside and overlaid. Lighting.	City						0	
			Grant						0	
			Other	300	1,200	1,300	300	990	2,000	6,090
			Total	300	1,200	1,300	300	990	2,000	6,090
5.7 Motor Avenue - Whitman to Gravelly Lake Dr.		Provide non-motorized path including lighting and landscaping.	City	20	80				100	
			Grant	180	650				830	
			Other						0	
			Total	200	730	0	0	0	930	
			City	40	170	50	420	20	70	770
			Grant	180	750	170	1,650	0	0	2,750
			Other	300	1,200	1,480	2,800	990	2,000	8,770
			Total	520	2,120	1,700	4,870	1,010	2,070	12,290

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								<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	1,300	1,410	1,700	2,400	3,500	12,890	
Grant									0	
		Other							0	
		Total	2,580	1,300	1,410	1,700	2,400	3,500	12,890	
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		1,100					1,100	
		Grant							0	
		Other							0	
		Total	0	1,100	0	0	0	0	1,100	
9.16 59th Ave - Main Street to 100th Street		City			450				450	
		Grant							0	
		Other							0	
		Total	0	0	450	0	0	0	450	
9.17 108th - Bridgeport Way to Pacific Hwy		City			600				600	
		Grant							0	
		Other							0	
		Total	0	0	600	0	0	0	600	

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
9.18 Custer - Steilacoom to John Dower	City					450			450
	Grant								0
	Other								0
	Total		0		0	450	0	0	450
9.19 88th - Steilacoom to Custer	City					250			250
	Grant								0
	Other								0
	Total		0		0	250	0	0	250
9.20 Pacific Hwy - 108th to SR512	City				90				90
	Grant				450				450
	Other								0
	Total		0		540	0	0	0	540
9.21 100th - Lakeview to South Tacoma Way	City				180				180
	Grant				300				300
	Other								0
	Total		0		480	0	0	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	City		3,500	2,750	2,750	2,750	3,500	3,500	18,750
	Grant		0	750	750	750	0	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	50
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	0
TOTALS		City		250	50	50	50	50	450
		Grant							0
		Other							0
		Total	0	250	50	50	50	50	50

ARTERIAL STREETS

	2016	2017	2018	2019	2020	2021	2016-2021
City	102	152	177	427	927	352	2,137
Grant	4,000	150	300	1,200	1,475	2,650	9,775
Other	100	2,500	13,500	13,500	575	250	30,425
Total	4,202	2,802	13,977	15,127	2,977	3,252	42,337

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	539	845	2,093	663	739	750	5,629
Grant	9,502	3,356	11,784	2,500	3,860	2,300	33,302
Other	1,530	1,420	8,820	4,370	6,756	1,350	22,796
Total	11,571	5,621	22,697	7,533	11,355	4,400	61,727

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	665	115	315	1,767
Grant	230	228	1,490	300	0	0	1,598
Other	5	345	0	0	150	0	500
Total	337	988	1,645	965	265	315	3,865

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	2,750	2,750	3,500	3,500	18,750
Grant	0	750	750	750	0	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	40	170	50	420	20	70	770
Grant	180	750	170	1,650	0	0	2,750
Other	300	1,200	1,480	2,800	990	2,000	8,770
Total	520	2,120	1,700	4,870	1,010	2,070	12,290

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 (2016-2021)

	2016	2017	2018	2019	2020	2021	2016-2021
City	4,578	5,096	5,785	5,219	5,611	5,281	31,570
Grant	13,912	5,234	14,494	6,400	5,335	4,950	49,675
Other	2,055	5,485	23,820	20,690	8,491	3,620	62,611
Total	20,445	15,815	44,099	32,309	19,437	13,851	143,856

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)



COMMUNITY & ECONOMIC DEVELOPMENT REPORT

TO: Lakewood Planning Commission

FROM: M. David Bugher, Assistant City Manager/Community Development Director

MEETING DATE: July 15, 2015

SUBJECT: 2015 Comprehensive Plan Update, Chapter 8, Public Services

Attached is a draft of Chapter 8, Public Services. The chapter was last amended in 2004. The chapter outlines City policy in the following areas: fire protection; emergency medical services; police; emergency management; schools and higher education; library services; health and human services; and housing and community development programs.

CED staff has initiated review of these draft policies to various city boards/committees, and outside agencies. Comments/recommendations from these groups will be submitted to the Commission throughout August and early September. At this time, Chapter 8 is being provided to the Commission for informational purposes. The Commission will be asked to provide recommendations after the Commission conducts a public hearing. The hearing has been tentatively scheduled for September 16.

Attachment:
Chapter 8, 2015 Comprehensive Plan Update

PUBLIC SERVICES

8.1 Introduction

~~As a new city with many start-up responsibilities, the City has not taken on direct provision of the majority of public services within Lakewood. Police and fire services are provided by contract with the Pierce County Sheriff's Office and Lakewood Fire District #2, respectively, while other services traditionally held by other entities continue to be provided in that fashion.~~

The City of Lakewood is not a full-service city. This circumstance stems from Lakewood being an unincorporated community of Pierce County up until 1996. Many public services were provided by Pierce County, the City of Tacoma, special service districts, a utility co-op (Lakeview Light and Power), and a private utility company (Puget Sound Energy). A number of these entities still provide services to Lakewood.

Since incorporation, some public services are now provided by the City of Lakewood. The table below provides information on the services the City provides, and the services provided by other public agencies and one private company.

<u>Table 8.1</u> <u>Public Service Providers</u>	
<u>Public Service</u>	<u>Provider</u>
<u>General Administrative Services</u>	<u>City of Lakewood</u>
<u>Police</u>	<u>City of Lakewood</u>
<u>Public Works</u>	<u>City of Lakewood</u>
<u>Stormwater</u>	<u>City of Lakewood</u>
<u>Refuse</u>	<u>Waste Connections (under contract with the City of Lakewood)</u>
<u>Fire Protection</u>	<u>West Pierce Fire & Rescue</u>
<u>Emergency Medical Services (EMS)</u>	<u>West Pierce Fire & Rescue</u>
<u>Emergency Management</u>	<u>City of Lakewood</u>
<u>Health & Human Services</u>	<u>City of Lakewood</u>
<u>Housing and Community Development Programs</u>	<u>Tacoma/Lakewood Consortium</u>
<u>Schools</u>	<u>Clover Park School District, Pierce College, Clover Park Technical College, & private schools</u>
<u>Library Services</u>	<u>Pierce County Library</u>
<u>Water</u>	<u>Lakewood Water District</u>

<u>Sewer</u>	<u>Pierce County Public Works & Utilities; City of Tacoma provides sewers on Lakewood's northerly edge</u>
<u>Power (electricity & gas)</u>	<u>Tacoma Power, Puget Sound Energy, & Lakeview Light & Power</u>

Many of the utility related services listed in the table are covered in other chapters of Lakewood's Comprehensive Plan, or by other agencies' planning programs. Thus, these services are not addressed in this chapter. This chapter concentrates on the following services: fire protection; emergency medical services; police; emergency management; schools and higher education; library services; health and human services; and housing and community development programs.

~~Nonetheless,~~The City recognizes the importance of planning for these functions in conjunction with required GMA elements to ensure that growth in the City is coordinated with growth in these services. This is particularly important for schools, both K-12 and post-secondary education, whose enrollment numbers, student populations, and sometimes even course emphases are strongly tied to local growth, but where "disconnects" may easily occur if planning is not coordinated. This chapter interrelates Lakewood's Comprehensive Plan to the functions of Clover Park School District, Pierce College, Clover Park Technical College, the Pierce County Library System, and various human services providers.

In setting goals and policies related to this final group, this chapter also sets forth the City's commitment to its citizens' well-being through its participation in community-based strategic planning efforts for health and human, and housing and community development services.

8.2 Fire Protection

GOAL PS-1: Protect the community through a comprehensive fire and life safety program.

Policies:

PS-1.1: Maintain standards necessary to maintain a Washington Surveying and Rating Bureau (or successor agency) rating of ISO Class 3 or better, including response distance standards, apparatus, staffing levels, training, water delivery system, and the communication/ dispatch system.

- PS-1.2: Install traffic signal control devices responsive to emergency vehicles.
- PS-1.3: Where possible, coordinate land acquisition for emergency services facilities with other departments (e.g., Parks, Public Works, Police) to maximize benefits to the City.
- ~~PS-1.4: Examine the potential of utilizing joint fire stations and operation agreements with fire departments of adjoining districts and other emergency responders where and when operationally and fiscally advantageous.~~
- PS-1.54: Continue the general assembly, commercial and industrial fire inspection program as a means of identifying and remedying potential fire hazards before fires occur.
- PS-1.65: Educate and inform the public on fire safety and hazardous materials to further protect the community and the environment from unnecessary hazards.

GOAL PS-2: Ensure that fire facilities and protective services are provided in conjunction with growth and development.

Policies:

- PS-2.1: Periodically evaluate population growth, LOS (response time and staffing), and fire hazards to identify increased service and facility needs.
- PS-2.2: Maintain phasing and funding standards based on population, specific time projections, and build out percentages.
- PS-2.3: Incorporate the fire department in evaluation of proposed annexations to determine the impact on response standards.
- PS-2.4: Provide fire station locations that comply with the 1.5-mile response distance standard and/or four-minute response standards, ~~provided in the Lakewood Fire Department Master Siting Plan.~~

GOAL PS-3: Ensure built-in fire protection for new development and changes or additions to existing construction.

Policies:

- PS-3.1: Require all new development to provide minimum fire flow requirements as prescribed in the Uniform Fire Code.
- PS-3.2: Continue to require that all structures and facilities under City jurisdiction adhere to City, state, and national regulatory standards such as the Uniform Building and Fire Codes and any other applicable fire safety guidelines.
- PS-3.3: Require developers to install emergency access control devices to gated communities as approved by the public works director.
- PS-3.4: Require building sprinklering or other approved measures for new development in areas where response standards cannot be met.
- PS-3.5: Consider requiring assessment of a hazardous material impact fee for industrial uses.

8.3 Emergency Medical Services (EMS)

GOAL PS-4: Protect citizens through a comprehensive EMS program that maximizes available resources.

Policies:

- PS-4.1: The fire department will serve as the primary and lead Basic Life Support and Advanced Life Support provider within the city.
- PS-4.2: Provide a four-minute initial response time standard for EMS calls.
- PS-4.3: Provide fire station/EMT locations that meet a 1.5-mile response distance standard.
- PS-4.4: Sign agreements among service providers to determine the role of first provider.
- PS-4.5: Maintain criteria-based dispatch system for determining appropriate levels of response.
- PS-4.6: Implement citizen CPR training programs with existing personnel and resources.

PS-4.7: Implement a physician control program or integrate with the Pierce County EMS physician control program to ensure the medical quality of emergency medical services.

8.4 Police Service

GOAL PS-5: Protect community members from criminal activity and reduce the incidence of crime in Lakewood.

Policies:

PS-5.1: Provide police protection with a three-minute response time for life-threatening emergencies (Priority 1), a six-minute response time for crimes in progress or just completed (Priority 2), and a routine/non-emergency response time of 20 minutes (Priority 3).

PS-5.2: Maintain a level of police staffing, services, and administration that is adequate to serve Lakewood's current needs and future growth.

PS-5.3: Where appropriate, participate in innovative programs and funding strategies to reduce community crime.

GOAL PS-6: Enhance the ability of citizens and the Police Department to minimize crime and provide security for all developed properties and open spaces.

Policies:

PS-6.1: Support and encourage community-based crime-prevention efforts through interaction and coordination with existing neighborhood watch groups, assistance in the formation of new neighborhood watch groups, and regular communication with neighborhood and civic organizations.

~~PS-6.2: Increase participation in the crime-free rental housing program as a means of controlling crime related to rental properties.~~

PS-6.32: Implement a crime prevention through environmental design program that results in the creation of well-defined and defensible spaces by reviewing such things as proposed developments' demographic settings; intended uses; and landscaping, lighting, and building layout as a means of access control.

PS-6.43: Seek ways to involve police with youth education, such as bike safety training, anti-drug courses, "cop in school" program, etc.

8.5 Emergency Management

GOAL PS-7: Protect the community through a comprehensive emergency management program.

Policies:

PS-7.1: Adopt and maintain a comprehensive emergency management plan consistent with federal and state requirements.

PS-7.12: Continue to fund and support the emergency management program, ensuring that emergency management plans, equipment, and services are sufficient for potential disaster response.

~~PS 7.2: Provide personnel and resources in Lakewood's Fire, Police, Public Works, Community Development, and Parks and Recreation departments for participation in the preparation or amendment of any emergency management disaster response plans.~~

PS-7.3: Maintain the personnel, resources, and training necessary within all appropriate City departments to provide the disaster response called for in the emergency management disaster response plans.

~~PS 7.4: Provide for a unified emergency operations center where all public service departments of the City will be coordinated in the event of a disaster in accordance with the disaster plan.~~

PS-7.54: Coordinate with appropriate state agencies when preparing disaster response plans and when considering floodplain or seismic ordinance standards.

PS-7.65: Develop an interagency communications network incorporating all public service agencies within the City for use during disasters.

PS-7.76: Maintain and enhance rescue capabilities that include extrication, trench rescue, water rescue, high-angle rescue, and urban rescue.

PS-7.87: Develop and implement additional public education activities that promote water safety.

8.6 Schools

GOAL PS-8: Support the maintenance and enhancement of the public education system, placing a strong emphasis on providing quality school facilities that function as focal points for family and community activity.

Policies:

PS-8.1: Support efforts of the school district to ensure that adequate school sites are provided and that the functional capacity of schools is not exceeded.

PS-8.2: Work with the school district to prepare/update a master plan for all its facilities and a capital improvement plan.

PS-8.3: Consider the impact on school enrollment and capacities when reviewing new development proposals, higher density infill projects, zoning changes, and comprehensive plan amendments.

PS-8.4: Require that developers assist in donating or purchasing school sites identified on the facilities map in correlation to the demand that their developments will create.

PS-8.5: Ensure that new school sites include room for future expansion if needed.

PS-8.6: Request student generation factors from the school district for the City's use in analyzing the impact of project proposals on schools.

GOAL PS-9: Accommodate the maintenance and enhancement of private school opportunities for area students and residents.

Policies:

PS-9.1: Subject to specific regulatory standards, allow existing private schools to expand and new private schools to develop.

PS-9.2: Ensure that the comprehensive plan and development standards provide sufficient accommodation for the operation and expansion of private school opportunities.

~~PS-9.3: Monitor travel demand at private schools and consider special bus programs to facilitate student and faculty transportation.~~

GOAL PS-10: Ensure that both public and private schools are safe and accessible to students, generate a minimal need for busing, and are compatible with and complementary to surrounding neighborhoods.

Policies:

PS-10.1: Prohibit development of public and private schools on sites that present hazards, such as within Accident Potential Zones and industrial zoning districts, nuisances, or other limitations on the normal functions of schools that are unable to be mitigated.

~~PS-10.2: Follow standardized locational criteria for placement of schools.~~

PS-10.32: Work with schools and neighborhoods to explore options for access to elementary and secondary schools via local streets and/or paths.

PS-10.43: Develop specific regulatory standards to ensure that new residential development located near public schools provides adequate pedestrian and bicycle connections, signage, and traffic control measures where needed to ensure the safety of students traveling between the development and the school.

PS-10.54: Apply improvement responsibilities to school district or private school operator developing new school sites equivalent to that applied to other types of development.

PS-10.65: Retrofit existing neighborhoods with sidewalks, crosswalks, special signage, and other traffic control measures near schools as funding becomes available or as land uses are redeveloped.

PS-10.76: Co-locate public school grounds and public parks whenever possible.

PS-10.87: Encourage as appropriate the school district or private school operator to reduce high school student generated traffic impacts

by implementing transportation demand management mechanisms such as limited student parking, public bus routes, and other appropriate tools.

PS-10.98: Encourage the school district to continue to make schools available for civic functions when classes are not in session.

PS-10.109: Establish limited parking zones around schools where parking capacity problems exist.

PS-10.10: Work with the CPSD to reuse/redevelop surplus school properties with appropriate uses consistent with the Comprehensive Plan.

8.7 Higher Education

GOAL PS-11: Maintain and enhance top-quality institutions of higher education that will meet the changing needs of Lakewood's residents and business community.

Policies:

PS-11.1: Work with colleges to prepare a master plan and policy guide addressing the location of existing and proposed on- and off-site campus structures and uses.

PS-11.2: Require new construction to be subject to requirements of the City's development standards, including adequate fire protection and emergency access, and generally consistent with the master plan.

PS-11.3: Work with colleges to enhance area infrastructure to better serve college facilities, such as improved pedestrian, bike and bus connections, and more student housing and support services in the surrounding area.

GOAL PS-12: Maximize the ability of higher educational institutions to provide quality services while minimizing impacts on area residents and businesses.

Policies:

PS-12.1: Participate with institutions of higher education in master planning efforts, transit programs, neighborhood plans, and

other programs intended to facilitate the provision of quality education in a manner compatible with surrounding uses.

8.8 Library Services

GOAL PS-13: Ensure that high quality library services are available to Lakewood residents.

Policies:

PS-13.1:

~~Support the efforts of the Pierce County Library System to ensure that adequate library service is available and responsive to growth and development. Work with the Pierce County Library System to address current service deficits, continued population growth, changing library services, increased and changing customer needs and expectations within the Lakewood service area.~~

PS-13.2: ~~Work with the Library System to ensure that its facilities are located and designed to effectively serve the community. Promote the construction a new main library facility within the City's downtown core.~~

PS-13.3: ~~Maintain or exceed Pierce County's level of service (LOS) standard for library facilities. Assist the Pierce County Library System in the reuse/sale of the existing library building/property located on Gravelly Lake Drive SW.~~

PS-13.4: ~~Provide opportunities for the Library System's review and comment on the impact of proposed annexations on LOS. Work with the Library System to ensure that its facilities are located and designed to effectively serve the community.~~

PS-13.5: ~~Establish a three- to five-mile service radius for library coverage. Support the Pierce County Library System's service levels (seating, materials and shelving, technology guidelines, meeting rooms, square feet per capita, and parking) as outlined in the *Pierce County Library 2030* report and as may be updated from time-to-time. Maintain or exceed Pierce County's level of service (LOS) standard for library facilities.~~

PS-13.6: Work with the Library System to identify non-capital alternatives such as specialized programs, new technologies, and other

~~alternatives to provide up-to-date library services. achieve the library facilities LOS.~~

~~PS-13.7: Establish a three- to five-mile service radius for library coverage.~~

~~PS-13-8: Continue and expand bookmobile services to underserved and/or isolated areas such as Springbrook, Tillicum, and Woodbrook.~~

8.9 Health and Human Services

~~GOAL PS 14: Improve the delivery and outcome of health and human services efforts in Lakewood.~~

~~Policies:~~

~~PS-14.1: Foster and utilize the individual and combined strengths of the Lakewood Human Services Collaboration or successor affiliations.~~

~~PS-14.2: Maintain a strategic plan to direct collaborative services efforts.~~

~~PS-14.3: Create a process to disburse funds to programs serving City priorities as recommended by a citizen advisory group to the City Council.~~

~~PS-14.4: Support the development of a central database of partner agencies and other pertinent information to improve communication among and between providers and consumers.~~

~~PS-14.5: Coordinate with other funding sources to apply consistent funding requirements based on best practices and evaluated outcomes.~~

~~PS-14.6: Leverage funding by promoting collaboration among agencies with complementary program objectives.~~

GOAL PS-14: Create a community in which all members have the ability to meet their basic physical, economic, and social needs, and the opportunity to enhance their quality of life.

PS-14.1: Assess and anticipate human services needs and develop appropriate policy and program responses.

PS-14.2: Convene and engage others, including the Youth Council, the Lakewood Community Collaboration, and Lakewood's Promise, in

community problem-solving to develop and improve social services.

PS-14.3: Disburse Community Development Block Grant and General Fund dollars to support a network of services which respond to community needs.

PS-14.4: Promote awareness of needs and resources through strengthened dialogue, effective marketing strategies, and public relations activities.

PS-14.5: Encourage services that respect the diversity and dignity of individuals and families, and foster self-determination and self-sufficiency.

PS-14.6: Foster a community free of violence, discrimination and prejudice.

~~GOAL PS-15: Encourage the provision of collaborative, neighborhood-based services using collective resources.~~

~~Policies:~~

~~PS-15.1: Create service hubs at schools and other neighborhood centers.~~

~~PS-15.2: Encourage linkages and working relationships among businesses, community-based organizations, the military, religious institutions, educational entities, other partners, and the neighborhood service hubs.~~

~~PS-15.3: Utilized educational institutions as points for information exchange.~~

~~PS-15.4: Seek ways to enlist the community in marketing the availability of services.~~

GOAL PS-15: Ensure the City's Human Services Funds are effectively and efficiently managed.

PS-15.1: The City's role is to fund, advocate, facilitate, plan, and inform by continually engaging service providers and community organizations in dialogue regarding the functioning of the present service systems, the emerging needs of the community and the building of a comprehensive system of services.

PS-15.2: Develop and maintain a strategic plan to direct collaborative services efforts.

PS-15.3: Assess community needs and administer a funding allocations process to address identified community needs.

PS-15.4: Develop contract performance measures and monitor contracting agencies performance.

GOAL PS-16: Give a broad range of Lakewood citizens a voice in decision making about how we can create a safer, healthier community.

Policies:

PS-16.1: Ensure the representation of culturally and economically diverse groups, including youth, people of color, seniors, and the disabled, in publicly appointed committees working on human services needs.

~~PS-16.2: Seek ways of including non-English speakers in decision-making.~~

PS-16.3~~2~~: Develop decision-making processes that include regular feedback from the community and health/human services consumers.

~~PS-16.4: Conduct public relations efforts to enlist the broader community in preparing to meet human services needs in Lakewood.~~

~~GOAL PS-17: Create conditions that contribute to a safe community and enable all citizens to access needed resources and take responsibility for their own success.~~

~~Policies:~~

~~PS-17.1: Focus on the prevention of all forms of community violence.~~

~~PS-17.2: Partner with youth, neighborhoods, and service providers to pursue the availability of safe places for both structured and unstructured extra-curricular activities for youth of all ages.~~

~~PS-17.3: Develop a means of outreach to seniors, particularly those who might otherwise feel disenfranchised within the community, to bring them together and form supportive structures.~~

GOAL PS-17: Participate in regional and local efforts that address human services needs in the region and in the City.

PS-17.1: Support and actively coordinate with local, regional, and national efforts that address local human services needs and ensure that local services are compatible with other programs provided at the state and federal levels.

PS-17.2: Continue the City's active participation in the Pierce County Continuum of Care, the Pierce County Human Services Coalition, and the 2060 and 2163 Funding Programs.

8.10 Lakewood's Housing and Community Development Programs

GOAL PS-18: Provide decent affordable housing.

PS-18.1: Preserve existing owner-occupied housing stock.

Provide a range of home repair assistance to qualified lower-income homeowners.

PS-18.2: Expand/sustain affordable homeownership opportunities.

Reduce the financial burden of new homeowners through assistance with down payment for home purchases.

Provide housing counseling to homeowners and potential homebuyers.

Collaborate with partners and housing providers toward the goal of expanding homeownership opportunities.

PS-18.3: Provide assistance to preserve the quality and habitability of affordable rental housing.

Provide incentives to improve properties.

Collaborate with partners and housing providers to develop and implement strategies to preserve affordable rental housing.

Support the crime-free housing activities.

Support fair housing activities such as landlord/tenant counseling.

PS-18.4: Provide assistance for a continuum of housing for persons with special needs, homeless persons and people at risk of homelessness.

Develop partnerships with housing providers and human services agencies providing emergency shelters, permanent supportive, and repaid re-housing assistance.

Support the efforts of the Ten-Year Regional Plan to End Chronic Homelessness in Pierce County.

PS-18.5: Reduce barriers to affordable housing by supporting fair housing activities such as outreach and education.

Support fair housing activities such as outreach and education.

PS-18.6: Develop new affordable housing options as new funding opportunities become available.

GOAL PS-19: Revitalize targeted neighborhoods.

PS-19.1: Assist with sewer connections for single family owner-occupied units in targeted areas.

PS-19.2: Support code violation enforcement activities and activities to remove slums and blight.

GOAL PS-20: Maintain/improve community facilities and public infrastructure.

PS-20.1: Support public infrastructure such as streets, sidewalks, street-lighting, street-related improvements, and park facilities and improvements, and the removal of architectural barriers that impede American Disabilities Act accessibility.

PS-20.2: Support community facilities providing emergency services and basic needs.

PS-20.3: Support the delivery of human services to identified vulnerable populations.

PS-20.4: Develop and improve parks and open space in low income residential neighborhoods.

GOAL PS-21: Expand economic opportunities.

PS-21.1: Support economic development activities that provide or retain livable wage jobs for low and moderate income persons.

Develop a low-interest loan program, tax credits and other mechanisms to serve as incentives for businesses to create or retain jobs for low and moderate income persons.

Develop a technical assistance program for supporting businesses for the purpose of creating or retaining jobs for low and moderate income individuals.

Provide businesses with access to low-interest loans to expand economic opportunities through on-site infrastructure improvements, rehabilitation, acquisition, and other commercial improvements for the purpose of creating or retaining jobs for low and moderate income persons.

PS-21.2: Focus investment on housing development and infrastructure improvements in support of economic development in targeted neighborhoods.