Lakewood Neighborhood Master Plan

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PREPARED BY:
MAKERS
Transpo
SvR
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Introduction

PURPOSE

The Lakewood Neighborhood Master Plan guides physical development over the next 20 years for the area mapped in Figure 1. It is consistent with the Marysville Comprehensive Plan and provides additional detail for Lakewood. This plan focuses on the infrastructure and urban design aspects of the neighborhood.

As an emerging community, Lakewood will continue to see development. The neighborhood is primarily zoned Mixed Use, Low and Medium Multifamily residential, General Commercial, and Community Business. As Figure 2 shows, much of the area has not yet developed to the densities allowed under current zoning. This plan ensures that development is in line with the community and City’s vision.

LAKEWOOD PLANNING AREA

The Lakewood Neighborhood, outlined on Figure 2, is generally bounded by the railroad on the west, I-5 on the east, and the Snohomish County boundary north of 172nd St NE. Near 172nd St NE, the planning area extends across the railroad to include Lakewood schools and some residential zones. At the south tip of Lakewood, the area again extends west of the railroad to include public and light industrial zones.

BACKGROUND

The Lakewood neighborhood is transitioning from a long history of rural land to a more urbanized character. Since its designation as an urban growth area, it has seen substantial commercial and multifamily development that has brought more people and amenities to the area, along with the associated vehicular trips, stormwater considerations, and changing architectural character. During the neighborhood planning process, residents and property...
Zoning

Figure 1. Existing zoning in the Lakewood neighborhood.
Development Potential

<table>
<thead>
<tr>
<th>Zoning</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Commercial</td>
<td>Community Business</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>Light Industrial</td>
</tr>
<tr>
<td>R18 Multi-Family Medium</td>
<td>R12 Multi-Family Low</td>
</tr>
<tr>
<td>R8 Single Family High</td>
<td>R6.5 Single Family High</td>
</tr>
<tr>
<td>Public-Institutional</td>
<td>Recreation</td>
</tr>
</tbody>
</table>

Proposal in place
Appears underdeveloped

Marysville
Arlington
Snohomish County
I-5
SMOKEY POINT BLVD
172ND ST NE
169TH ST NE
11TH AVE NE
140TH ST NE
188TH ST NE
FORTY-FIVE RD
19TH DR NE
23RD AVE NE
148TH ST NE
25TH AVE NE
156TH ST NE
40TH AVE NE
31ST AVE NE
16TH DR NE
27TH AVE NE
SPRING LANE AVE
19TH AVE NE
LI
GC
MU
CB
PI
R12 MFL
REC
R18 MFM
LI
MU
R18 MFM
GC

Lakewood Station Apartments (Phase 1)
Lakewood Station Apartments (Phase 2)
Lakewood Station Market Place (auto-oriented commercial)
Villas at Lakewood (apartments)
Zorzi (mixed use)
Twin Lakes Landing (apartments)

Figure 2. Development potential (areas not developed to allowed densities)
owners expressed mixed feelings about these changes. Concerns revolved around growing traffic issues and a loss of rural land to “undesired” activities (e.g., shops that do not serve local needs and multifamily housing that appears dense). Some hoped to see growth and change to draw local amenities (e.g., a grocery store west of I-5 and small local businesses), achieve the anticipated street improvements that are required with development, and build a walkable and bikable neighborhood center. These objectives are consistent with the City’s Comprehensive Plan and its vision for Lakewood.

The concepts described in the “Lakewood vision” section on page 7 address three major issues:

1) Transportation. With a limited street network, a well-used railroad corridor, a regional shopping center, and Community Transit and school bus systems, vehicular congestion occurs along many Lakewood routes. As a future suburban neighborhood, Lakewood lacks appealing “active transportation” (i.e., walking and bicycling) routes. AARP’s Livability Index points to some of the challenges residents face regarding active transportation:

- Lakewood is below average in the number of walking trips residents take each day (.53 trips per household per day as compared to the national average of .73, Arlington’s 1.25, and Seattle’s 1.4),
- Residents pay above average transportation costs ($4,350 per year more than Seattle residents),
- Lakewood has higher than average speed limits, increasing the likelihood of fatal crashes,
- Lakewood has lower than average ADA accessibility,
- 28% of residents are obese, elevating the importance of active transportation, and
- Lakewood has a far lower density of jobs and residents than average (533 people per square mile as compared to 7,014 in Arlington, 10,964 in Everett, and 17,673 in Seattle), resulting in fewer walking and biking distance destinations and opportunities for spontaneous community gathering.

This plan describes the steps needed to shift Lakewood to a healthier share of transportation modes and better-performing 172nd Street NE and neighborhood streets. In particular, it provides street design concepts and strengthens the requirements for regular, connected streets as development occurs.

![Figure 3. The railroad crossing on 172nd Street NE delays traffic.](image)
2) **Utility infrastructure.** As a flat, historically rural area with a high water table zoned for higher-intensity land uses, stormwater management and water and sewer service will need to be designed to accommodate the high groundwater levels and adjacent critical areas and buffers.

In the areas without a high groundwater area and infiltrative soils, redevelopment within the Lakewood Subarea provides opportunity to incorporate low impact development principles such as native vegetation protection, site phasing, and Low Impact Development facilities such as bioretention swales and planters to manage stormwater. This applies to stormwater management on both private parcels and within the public rights-of-way.

3) **Urban design.** Lakewood lacks the feel of a cohesive neighborhood with well-connected residences, destinations, and community-oriented spaces. Despite the existence of a large, mixed-use zone, retail has only developed in the general commercial zone, is scaled to serve people arriving by automobile, is not easily accessed from the rest of the neighborhood due to the limited routes serving it, and lacks plazas or small parks to serve as community gathering spaces. In addition to the geographically disjointed feel and shortage of neighborhood character, the multifamily and mixed-use zones are experiencing residential development that, to some, appears to lack quality materials, design, and sensitivity to open space needs.

*Figure 4. The Lakewood Crossing shopping area has quality landscaping and building design, but the development is scaled and oriented to the automobile, not to the neighborhood or human.*
Despite these issues, Lakewood has some major assets. The concepts below build on some of Lakewood's best characteristics:

- **Civic center.** The high, middle, and elementary schools create a hub of civic activity.
- **Gissberg Twin Lakes Park.** The park offers green space and swimming, fishing, walking, remote control boating competition, and picnicking opportunities.
- **Railroad right-of-way with opportunity for a trail.** The right-of-way and sensitive areas provide a unique setting for a recreational trail and linear park through the neighborhood. This trail could provide an exceptional connection to Centennial Trail to the east.
- **Existing rural crossroads character.** The existing Post Office and small businesses near the railroad have the unique look and feel of a rural neighborhood crossroads. As the area develops, this could become a pedestrian-oriented center of local activity (different from the regionally-oriented shopping center near I-5). Likewise, it could build on the activity at the Lakewood School District campus.
- **Scenic views.** Lakewood provides expansive views of the Cascade Mountains.
- **Major shopping center.** The proximity to the major regional shopping center at the I-5 interchange means short trips for many retail needs.
- **Access to region.** I-5 provides excellent north-south access to Everett, Seattle, and other places in the region.

The following section describes a vision for Lakewood that, over time, solves existing issues and reinforces its assets.
URBAN DESIGN CONCEPT

The Lakewood urban design concept lays out a holistic neighborhood that transitions between a rural crossroads character and a more urban mixed-use center, increases pedestrian, bicycle, and vehicular access between residences and destinations, creates community gathering places and small parks, and strengthens the identity of a neighborly Lakewood.

Lakewood has two major centers: 1) a regional commercial center at I-5 and 172nd Street NE and 2) a civic center with historic crossroads at 172nd Street NE and the railroad tracks.

REGIONAL COMMERCIAL CENTER

The General Commercial (GC) zone (highlighted in pink in Figure 13) is nearly built out with large stores and shopping malls scaled for a regional clientele arriving by automobile. Although new development has provided sidewalks, street trees, and other quality design elements, the stores are primarily oriented to large surface parking lots and I-5, turning their backs to the neighborhood. This plan recommends:

- Improving the design requirements on key streets that connect neighbors to the shopping center (see the pedestrian-oriented streets noted on Figure 17). Creating tree-lined streets with safe walking and bicycling routes in the area just outside of the GC zone to encourage active transportation amongst locals.

- Developing an interactive relationship between the Gissberg Twin Lakes Park and the shopping center by connecting the park to the neighborhood and improving the sense of safety by increasing the number of “eyes” on the park. To accomplish this, the ground floor along the street facing the park should have active uses (e.g., retail, live/work) or residential entries that transition well between private and public space (see Lakewood Design Guidelines 22C.-----(2)(e)). Multifamily balconies looking over the park would also increase the eyes on the park.
RAILROAD CROSSING NEIGHBORHOOD CENTER

The railroad crossing area has an architectural character that ties Lakewood to its rural history, and combined with the schools, is a center of activity. Unique from the regional commercial center to the east, buildings here are scaled to humans rather than automobiles and provide space for local, small businesses. Given that Lakewood is expecting population growth, the Mixed Use (MU) zone surrounding the crossroads could become a vibrant, compact, pedestrian-oriented neighborhood. Internal destinations (i.e., a new small business main street), as well as good connections between surrounding residences and the regional shopping center about a mile away, would complete this neighborhood. To create a lively neighborhood center, this plan recommends strengthening design standards and connectivity efforts in a locally-oriented mixed-use center (highlighted in orange in Figure 13). In particular, development standards and design guidelines should accomplish the following:

- **Pedestrian-oriented main streets.** A new mixed use neighborhood center northeast of the railroad crossing at 172nd Street NE would be close enough to the existing historic buildings and schools to build on their energy, would have adequate space to develop into a true neighborhood, and would not be encumbered by heavily-trafficked roads. Ideally, a new east-west main street would develop north of 172nd bisected by 19th Avenue NE, and secondary main streets may branch out from there. Design standards that require ground floor active uses (e.g., restaurants, retail, live/work and “makers” spaces, offices) should be applied to some central streets (approximately 500 to 1,000 linear feet total) in this area (dashed circle on Figure 17). In general, commercial spaces should have limited footprints and flexible arrangements to accommodate small and growing businesses and to offer a different option than the shopping center near I-5. A neighborhood plaza or park with active edges should be required with development to provide a central community gathering space. A grocery store should be encouraged. Overall, design standards are particularly important in this area for creating a pleasant walking and resting environment.

- **Historic character near 16th Drive NE and 19th Drive NE.** The existing rural crossroads character should be preserved if possible. Consider placing a “Lakewood Community Overlay” on the area marked in brown on Figure 13 to encourage adaptive re-use over time rather than full redevelopment. Given the small sites and unique configurations, this may happen naturally, but an overlay
Encourage locally-oriented mixed-use center

Build on existing historic, rural character:
- Slow traffic significantly,
- Orient businesses to pedestrians & streets,
- Celebrate the historic character with a gateway feature near railroad crossing.

Continue small scale street grid to connect neighborhoods & provide safe routes to schools

Improve 172nd with:
- Multi-use pathways on north & south sides,
- Streetscape, &
- Safe crossings.

Improve pedestrian environment crossing I-5

Regionally-oriented commercial, ensure multi-modal access

Enhanced park & connections to it

Trail along RR & linear park with opportunity to connect to Centennial Trail

Anticipated I-5 interchange at 156th Street NE

Consider opportunities for job creation

Buffer 1-5 with regional or natural uses

Figure 13. Urban design concepts map
would ensure that Lakewood maintains at least a piece of its history and rural character. Connections between the historic center and the new pedestrian-oriented center described above should be carefully considered to encourage walking and bicycling.

- **Pedestrian and bicycle connectivity.** Throughout the MU zone, buildings and streets should be laid out in a way that supports comfortable, safe, and pleasant walking and bicycling routes. Low-speed streets or paths should be provided every 200 to 300 feet. These routes should be designed primarily for active travel (i.e., non-motorized) with adequate space and quality landscaping as described in the Lakewood Design Guidelines.

- **Gateway to historic Lakewood.** A gateway feature (e.g., a sign) on the southeast corner of the railroad tracks and 172nd Street NE would announce entry into the heart of the Lakewood neighborhood. This spot marks an important link between the proposed bicycle trail on the east side of the railroad right-of-way, the new neighborhood center to the north, and the historic center to the west. Design elements might take inspiration from the railroad crossing to strengthen the local character and should provide visual cues to motorists that they are entering a unique neighborhood.

### OTHER ZONES

Other large areas in Lakewood include the following:

- **Multifamily zones** (highlighted in yellow in Figure 13) extend beyond the two major nodes described above. As the area develops, like in the MU zone described above, street connectivity and pedestrian and bicycle infrastructure will be imperative. Also important in this area are “green” connections between the railroad right-of-way trail and Gissberg Twin Lakes Park.

- **A Community Business (CB) zone** is located in southern Lakewood and is bounded by I-5 and the BNSF railroad tracks. As a thin strip of land adjacent to I-5 and disconnected from most neighborhood amenities, it is not appropriate for residential or community-oriented retail uses. The CB zone leaves the area flexible for commercial uses that may provide additional jobs in the area. When an I-5 interchange is built at 156th Street NE, this area will become even more auto-oriented and physically separated from northern Lakewood. Thus, although development would follow the citywide commercial design guidelines and accommodate pedestrians and bicycles, this area would be less neighborhood oriented than the Mixed Use and residential areas to the north.
New streets and paths to be “pedestrian-oriented” as area develops. Pedestrian-oriented streets must have active ground floor uses. Developer may choose location, as long as it falls within this general area. Approximately 500 linear feet of continuous pedestrian-oriented streets must be provided. “Continuous streets” may include cross-streets.

The “Lakewood Community Overlay” encourages adaptive re-use of existing buildings over time to maintain a rural crossroads character. Boundary not definitive.

Buildings should primarily orient to the human-scale local streets (i.e., “required streets” shown in dotted grey or “required pedestrian paths” in wavy grey lines) when a development fronts more than one type of street.

Pedestrian-oriented commercial area
Pedestrian-oriented commercial streets
Pedestrian-oriented trail or park
Lakewood Community Overlay

**Proposed transportation network**
- Required roads
- Required streets (location flexible)
- Required pedestrian paths, with or without vehicular access (location flexible)

**Major Lakewood centers**
- Mixed use neighborhood (MU zone)
- Regional commercial center (GC zone)

Note: all new development and redevelopment must follow the Lakewood Design Guidelines for pedestrian-friendly development throughout the neighborhood. This map identifies streets with additional standards for active ground floor uses and building orientation to the street or public area.

Pedestrian-oriented commercial streets: New development must provide active ground floor uses.

Pedestrian-oriented trail or park: New development must follow the Lakewood Design Guidelines XX to adequately transition from public to private space and increase natural surveillance of the public spaces without impacting residents. Any commercial uses must follow pedestrian-oriented streets guidelines.

**Figure 17. Streets, trails, and parks with special design guidelines**
Critical Areas

Figure 18. Lakewood critical areas map
A Public-Institutional (PI) zone found south of the railroad may be appropriate for low intensity uses, critical area restoration, or stormwater management as it is encumbered by critical areas, I-5, and the railroad tracks. The City's Comprehensive Plan allows for this property to potentially be rezoned to medium density, single family residential upon traffic analysis of 140th Street NE and a future connection from 140th Street NE to 172nd Street NE.

UTILITIES AND STORMWATER SYSTEM OVERVIEW

The Lakewood Subarea is located within the Quilceda Creek basin and is specifically tributary to the West Fork of Quilceda Creek. Figure 18 shows the location of existing streams and other environmentally critical areas (ECAs). Locations of ECAs may guide where utility connections can be made and may inform which types of stormwater management facilities may be used on individual parcels. New development and redevelopment is required to comply with applicable ECA codes, including Marysville Municipal Code (MMC) Chapter 22E.010.

STORMWATER

Permitting through the City of Marysville requires new development and redevelopment to control stormwater runoff to match predevelopment conditions in accordance with MMC Chapter 14.15. Therefore, redevelopment will reduce existing runoff by managing stormwater to mimic predeveloped forested conditions. Likewise, new development and redevelopment are required to provide water quality treatment facilities for pollution-generating surfaces. This includes any improvements to the street network and parcel frontages.

Soils records indicate that most of the subarea is underlain by outwash soils, which are generally good for infiltration and Low Impact Development (LID). The far western side of the subarea is underlain by till soils which, depending on the depth, may not be suitable for concentrated infiltration facilities. Under the new Phase 2 National Pollutant Discharge Elimination System (NPDES) permit, the City of Marysville will be adopting codes and standards (December 2016) that make LID the preferred method for stormwater management.
WATER AND SEWER

The subarea is located within the City of Marysville water and sewer system service area. Figure 19 and Figure 20 show the existing public water and sewer infrastructure. Like in other Washington communities transitioning from rural to urban land uses, developers must provide any water and sewer infrastructure needed to support the new development. Water and sewer main extensions will be required for most new development in the Lakewood Subarea. Main extensions will be built and paid for by developers in accordance with City of Marysville engineering design and construction standards. Some developments will require lift stations and force mains to provide sewer conveyance. Upgrades to existing mains will also be required to provide sufficient conveyance capacity for water and sewer. Water and sewer services, including main line extensions, will be constructed in accordance with MMC Title 14.

The City of Marysville wastewater treatment plant (WWTP) was upgraded in 2004 to accommodate up to 20.3 million gallons per day (mgd). The sewer flow for the entire service area is expected to reach only 16.9 mgd by the year 2031. This is based on estimated population growth, including the Lakewood Subarea, as described in the 2011 Sewer Comprehensive Plan. The zoning within the Lakewood Subarea has not changed since the 2011 Sewer Comprehensive Plan.

According to the 2011 Sewer Comprehensive Plan Exhibit IV, the Lakewood Subarea is within Sewer Basin F. The 2011 plan identified segments of this trunk line as potentially deficient for full build-out of current zoning.
Figure 19. Lakewood existing public water infrastructure map
Figure 20. Lakewood existing public sewer infrastructure map

Legend
- Sewer Manhole
- Sewer Pipes
- Force Mains
- Streams
- Lakes
- Lakewood Subarea
The 172nd Street NE corridor is the most important street in the Lakewood subarea. It serves regional through traffic, regional trips accessing goods and services in Lakewood, and local trips. In addition, multimodal travel demands are increasing due to recent and planned mixed-use development along much of 172nd Street NE. For this reason, this plan prioritizes pedestrian and bicycle improvements, particularly through buffered multi-use trails along 172nd Street NE, while accommodating growth in vehicular traffic volumes.

This corridor plan builds upon the City’s 172nd Street NE/SR-531 Corridor Analysis (Gibson Traffic Consultants, Inc. July 2013), which identified a variety of roadway and intersection capacity improvements. This analysis recommends the following:

- Adding one additional travel lane in each direction between 27th Avenue NE and 19th Avenue NE,
- Constructing two lane roundabouts at 23rd Avenue NE and at 19th Avenue NE,
- Making the intersection at 16th Drive NE right-in/right-out, and
- Constructing a one-lane roundabout at 11th Avenue NE.
This plan builds upon the previous analysis and the City’s desire for a higher quality, more attractive multimodal corridor with an interesting urban design. A variety of pedestrian, bicycle, and urban design improvements are identified with the goal of developing a safe and attractive multimodal corridor that will link the Lakewood subarea to internal destinations and other parts of Marysville. High-quality pedestrian and bicycle facilities, including multi-use trails on both sides of 172nd Street NE and crosswalks roughly every 650 feet, are recommended. Also identified are wide, planted medians and buffers between travel lanes and the multi-use trail.

As traffic volumes decrease toward the west end of the corridor, the proposed number of travel lanes decreases from four to two with a two-way left turn lane. Pedestrian and bicycle facilities become narrower as well. Immediately to the west of the BNSF railroad tracks, a more urban “main street” roadway cross-section with parking and narrower planting strips is proposed. Farther west, roadway changes are minimized—the largest improvement being a new multi-use trail on the north side of 172nd Street NE.

The proposed concepts for 172nd Street NE were developed holistically with the rest of the transportation network, including improvements to secondary east-west and north-south vehicular circulation routes, a dense network of pedestrian routes, and safe and attractive bicycle connections to schools and parks.

**STREETSCAPE DESIGN GUIDELINES**

The illustrations and text below describe the three envisioned primary roadway cross-sections of 172nd Street NE from 27th Avenue NE to 11th Avenue NE. While improvements along this corridor would be funded and constructed by developers and the City, 172nd Street NE is a State Route (SR 531), so the City will work with the Washington State Department of Transportation (WSDOT) on any improvements.

The City should work with WSDOT to limit travel lane widths to discourage speeding, improve safety, limit pedestrian crossing distances, reduce costs, decrease stormwater runoff, and support the overall vision of an urban, multimodal corridor. Discussions between WSDOT and the City should reflect evolving best practices, including guidance from the WSDOT-endorsed National Association of City Transportation Officials (NACTO) Urban Street Design Guide, which recommends a maximum typical travel lane width of 11 feet.
The cross-sections below provide some detail on the varying conditions and proposed improvements along the length of 172nd Street NE.

**27TH AVENUE NE TO JUST WEST OF 19TH AVENUE NE**

This plan recommends the following characteristics for the eastern portion of 172nd Street NE:

- Two travel lanes in each direction. The road transitions from two travel lanes per direction at 19th Avenue NE to one travel lane per direction at the railroad tracks.
- Travel lane widths of 11 feet (preferred by the City). WSDOT has stated a preference for 12 foot inside lanes and 14 foot outside lanes. The City and WSDOT will work toward a resolution.
- Limited mid-block access points, with only right-in, right-out movements allowed (i.e., no left turns allowed).
- A median up to 12 feet in width.
- A 12 foot multi-use trail on both the north and south side of the road.
- A 10 foot planted buffer between travel lanes on the multi-use trail.

**Figure 22. Existing conditions on 172nd Street NE between 19th Ave NE and 27th Ave NE**

**Figure 23. Proposed 172nd Street NE cross-section between 19th Ave NE and 27th Ave NE**

**Figure 24. Proposed 172nd Street NE plan between 19th Ave NE and 27th Ave NE**
This plan recommends the following characteristics for this segment of 172nd Street NE:

- One travel lane in each direction, with westbound left turn pockets at:
  - 16th Drive NE
  - 19th Drive NE
- Travel lane widths of 11 feet (preferred by the City).
- A new signal or roundabout at 19th Drive NE.
- At the intersection of 19th Drive NE, restrict northbound movement to right turn only.
- On the north side of the street, a 10-foot multi-use trail, 10-foot planted buffer, and 4-foot shy space (the zone adjacent to a building that a pedestrian instinctively avoids).
- On the south side of the street, a 10-foot multi-use trail and 10-foot planted buffer between the BNSF railroad tracks and 19th Drive NE. At 19th Drive NE the trail and buffer turn south, paralleling the railroad right of way to provide access to the schools via 170th Street NE.
- A bike lane, on-street parallel parking, and sidewalk on the south side of the street between 19th Drive NE and just west of 16th Drive NE,
- Bus stops as needed.
JUST WEST OF 16TH DRIVE NE TO 11TH AVENUE NE

This plan recommends the following characteristics for this segment of 172nd Street NE:

SECTION C (Looking west near the Shell station)

Figure 29. Proposed 172nd Street NE cross-section between 16th and 19th Drives NE

- One travel lane in each direction as well as a two-way left turn lane.
- Travel lane widths of 11 feet (preferred by City).
- A 10 foot multi-use trail and 10 foot planted buffer on the north side of the street, with the existing sidewalk remaining on the south side of the street.
- A one-lane roundabout at 11th Avenue NE.
- A new pedestrian crossing near Shell gas station’s western driveway. The school district plans to construct a new access point to the school superblock at this location.
- In-lane bus stops as needed on the far side of the intersection or as approved by WSDOT and Community Transit.

SECTION D (Looking west near Lakewood Highschool)

Figure 32. Proposed 172nd Street NE plan just east of 11th Ave NE
UTILITIES AND STORMWATER STRATEGY

The existing 172nd Street NE runoff generally sheet flows from the roadway into ditches or adjacent fields. The long-term plan for 172nd Street NE is to provide multiuse paths, landscaped buffers, and curb and gutter. Drainage improvements will be installed at that time to manage the new runoff conditions. 172nd Street NE is a wide state highway (SR 531) that accommodates high volumes of arterial traffic. Thus, stormwater facilities will be more stringently evaluated for space efficiency and ability to accommodate higher pollutant loading than neighborhood streets. Intersections that meet the Ecology definition for “high-use” will require a higher level of treatment and will inform which types of stormwater management facilities are appropriate. LID will be used where feasible. LID opportunities that will be evaluated include but are not limited to: street trees, bioretention for surfaces not considered “high-use,” permeable pavement sidewalks, and infiltration trenches.

Performing utility upgrades and extensions in conjunction with surface improvements can reduce traffic disruptions and reduce the cost of restoration.

IMPLEMENTATION

Construction of the identified improvements to 172nd Street NE will occur incrementally through frontage improvements by developments along the corridor, as well as through City improvements funded in part by Transportation Impact Fees (TIF). Improvements to 172nd Street NE are included in the City’s existing TIF program. The TIF is planned to be updated based on the Lakewood Subarea Plan and 2015 Transportation Element. New development will contribute towards the improvements. If developments are required to construct a portion of the 172nd Street NE projects, appropriate credit would be provided for implementing the TIF project.

To address increasing congestion in the corridor, several interim strategies have been identified. These strategies range in cost and timeline, but are targeted to address the most significant near-term priorities.
NEAR-TERM TRANSPORTATION PRIORITIES
The following actions would provide immediate relief to some of the congestion issues raised frequently by community members:

• Restrict westbound U-turns at the intersection of 172nd Street NE and 27th Avenue NE. This would reduce congestion at the intersection by providing green arrows for traffic turning left into Lakewood Crossing and traffic turning right out of Lakewood Crossing at the same time. This is not currently an option because U-turns are allowed.

• Improve the functionality of the Twins Lake Avenue and 156th Street NE overpass by:
  • Realigning the intersection of 156th Street NE and 30th Avenue NE and move the stop sign to control traffic from the west.
  • Realigning the intersection of Twins Lake Avenue and 158th Place NE and move the stop sign to control traffic from the south.
  • Increasing the turn radius of the bridge approach roadway.

MID-TERM TRANSPORTATION PRIORITIES
The following are high-priority actions that, if possible, would be pursued prior to the otherwise piecemeal redevelopment of 172nd Street NE:

• Implement intersection improvements ahead of roadway widening projects. Construct roundabouts and intersections to full dimensions, but stripe based on current lane configuration.

• Preemptively construct one of the two multi-use trails along 172nd Street NE to provide safe facilities for pedestrians and cyclists.

• Restrict traffic from I-5 southbound from turning left at 172nd Street NE, requiring traffic to either make a U-turn or left turn at the 23rd Avenue NE roundabout. This routing option requires completion of the 23rd Avenue NE roundabout and connection of 23rd Avenue NE to 169th Place to provide an alternate route to the Lakewood Crossing shopping area.

• Continue supporting the 156th Street NE interchange (funded by State Transportation Package), potentially focusing early efforts on ramps to and from the south.
FUNDING OPTIONS

Improving 172nd Street NE for vehicular and active transportation is a priority for the community and City. As described for both transportation and utilities improvements above, developers are responsible for providing improvements to mitigate the impacts of their developments. Over time, this system would implement the roadway, intersections, pedestrian and bicycle facilities, landscaping, and stormwater infrastructure envisioned in this plan. However, the community and City recognize that at least some elements would be best provided in a single project in the near future. For example, the multi-use trails do not become particularly useful until the entire length along 172nd is constructed. Thus, the City should consider alternate funding avenues, such as:

- WSDOT programs focused on increasing active transportation options, such as the Transportation Alternatives Program (TAP), Safe Routes to Schools, and/or Pedestrian and Bicycle Safety Program,
- WSDOT programs for highways, such as the Highway Improvement Program (HIP), Surface and Transportation Program (STP), and Transportation Improvement Board (TIB),
- City funding (challenge: the City has an extremely limited budget), and
- A Local Improvement District (LID) comprised of Lakewood property owners (challenge: many property owners feel that they would not directly benefit from 172nd Street NE improvements).
The growing Lakewood subarea requires improvements to the transportation system beyond 172nd Street NE. To support the growth in vehicular and non-motorized demand, a secondary network of minor and collector arterials has been identified. This network was developed to provide alternative travel routes to 172nd Street NE as well as 27th Avenue NE. The network also supports the City’s vision of a second I-5 interchange at 156th Street NE in the long term and a near-term alternate travel route to and from the Smokey Point area. Finally, the network supports a safe and attractive pedestrian and bicycle network structured around multi-use trails. As the area develops into a mixed-use center, this non-motorized network will assure that multimodal travel options are available.

ROADWAY SYSTEM

The proposed roadway system is primarily comprised of new north-south and east-west minor and collector arterials. Two lane roadway cross-sections are preferred, except at intersections where turn lanes are needed or analysis identifies additional capacity is necessary to meet the City’s level-of-service standards. These streets include:

NORTH OF 172ND STREET NE

- **174th Street NE.** This collector arterial runs east-west from the BNSF railroad tracks to the west end of Market Place Commercial. It would include bike lanes and pedestrian facilities.

- **176th Street NE.**

- **23rd/25th Avenue NE.** This collector arterial is currently under construction through the Market Place Commercial development. It shifts 25th Avenue NE to the west, intersecting with 172nd Street NE. Pedestrian facilities will be provided.

- **19th Avenue NE.** This collector arterial includes an upgrade of the rural arterial to urban arterial standards, including bike lanes and sidewalks.
SOUTH OF 172\textsuperscript{ND} STREET NE

• **27th Avenue NE.** This project includes the southward extension of 27th Avenue NE as a minor arterial, with a multiuse trail on the west side of the street and sidewalks on the east side of the road. This extension would bend westward at roughly 164th Street NE, ending at approximately 25th Avenue NE.

• **23rd Avenue NE.** This collector arterial would extend southward from the roundabout at 172\textsuperscript{nd} Street NE bending eastward at roughly 164th Street NE, ending at 25th Avenue NE. This corridor would include bike lanes on the north-south segment of the corridor. The east-west segment of the corridor would include a multiuse trail on the north side of the roadway and sidewalks on the south side of the roadway.

• **19th Avenue NE/169th Street NE.** This collector arterial runs from the roundabout at 172\textsuperscript{nd} Street NE and 19th Avenue NE southwards, bending eastward at 169th Street NE and extending to the end of the current street at 25th Avenue NE. The north-south segment of the roadway includes a multi-use trail on the west side roadway. The east-west segment includes bike lanes and sidewalks on both sides.

• **25th/27th Avenue NE.** This minor arterial connects the 23rd Avenue NE and 27th Avenue NE extension with 156th Street NE. The street runs from approximately 164th Street NE to 156th Street NE and includes bike lanes and sidewalks on both sides.

• **156th Street NE and Interchange.** This includes multiple large projects, such as the expansion of the 156th Street NE bridge to accommodate a new single point urban interchange. It also includes a new grade-separated railroad tracks crossing and associated upgrades of the roadway to a minor arterial. Non-motorized improvements to this corridor include a multiuse trail and sidewalks.

• **156th Street NE Multiuse Connection to Centennial Trail.** This would connect the proposed railroad trail and Lakewood neighborhood with the regional Centennial Trail.

• **Twins Lake Avenue.** This project includes the restriping of Twins Lake Avenue between 164th Street NE and 169th Place NE with bike lanes. This restriping would be contingent upon low enough left-turn volumes once 23rd/25th/27th Avenue extensions have been completed.

• **156th Street/Twin Lakes Avenue.** This project includes short-term upgrades to improve the attractiveness for trips between Lakewood Crossing and the Smokey Point area, such as bicycle facilities and sidewalks.
Figure 33. Proposed vehicular network map
NON-MOTORIZED SYSTEM

Investments in the non-motorized system largely overlap with vehicular roadway improvements, including multi-use trails along the road, sidewalks, and bike lanes/routes. A connected and high-quality network of pedestrian and bicycle facilities is proposed to support the transition of Lakewood from a rural area to a mixed-use center.

The goal of the pedestrian system is to provide a dense network of direct routes within the core of the mixed-use areas. The backbone of this network is on a ~650 foot grid and will likely be developed in coordination with local streets. A secondary network of thru-block connections should also be developed to fill in this network, providing at least one east-west and one north-south pedestrian route between each primary connection (see Figure 36). Typically, this secondary network will prioritize pedestrian and bicycle comfort while also accommodating vehicular traffic via small, local streets. The locations of these routes are flexible, but they should be developed in a way that improves overall pedestrian circulation through the site while maintaining full thru-block access. A tertiary network of pedestrian paths will be required where streets are located further than 200 feet apart to ensure an intricate and dense pedestrian system. The Lakewood Design Guidelines “Street Connectivity” section details these requirements. Big box retail or fences should not block use of these routes for continuous access from one street to the next.

The primary goal of the bicycle network is to provide connected, safe, and attractive cycling options for all ages and abilities. This plan recommends off-street multi-use trails along high-volume streets like 172nd Street NE and 27th Avenue NE and bike lanes along lower volume streets. These facilities should be built based on evolving best practices as identified by the NACTO Urban Bikeway Design Guide and City design standards. This network is supplemented by additional off-street trails parallel to the BNSF railroad right-of-way (allowed within a portion of the wetland and stream buffers), to the school superblock, and to Gissberg Twin Lakes Park. The City should work with Snohomish County, WSDOT, and the City of Arlington to improve connectivity of the regional bicycle network 156th Ave NE connection to Centennial Trail.
Snohomish County sidewalk network hatch continues south to Lakewood neighborhood border.

Figure 36. Proposed pedestrian network map
Figure 37. Proposed bicycle network map

- **Bikes dismount and walk on sidewalk**
- **Bike lane contingent upon reallocation of left-turn space to bike lanes within existing right-of-way**

**Bicycle Network**
- Multi-Use Trail
- Bike Lane
- Bike Route
- Area Under Construction

**Scale**: 0 1/4 1/2 1 Mile 0 1,000 2,000 4,000 Feet
STREETSCAPE DESIGN STANDARDS

Identified below are design guidelines for arterial and collector street connections. Cross-sections that represent the typical roadway are shown below. Two-lane roadway cross-sections are preferred, except at intersections where turn lanes are needed. Several options are presented, including both traditional drainage solutions and Low Impact Development (LID).

NEW ROAD WITH BIKE LANES: OPTION 1 (WITH LID)

This plan recommends the following characteristics for a typical new street (represented in blue on Figure 37). With a 75-foot right-of-way, stormwater runoff can be treated and infiltrated onsite. Thus, this plan recommends Option 1 over Option 2. Option 1 has the following characteristics:

- Two travel lanes of 10 feet wide, with an 11-foot left turn lane at intersections.
- Access management reduces mid-block turning vehicular conflicts with pedestrians and cyclists.
- Bike lanes a minimum of 5 feet wide (not including gutter).
- Sidewalks a minimum of 5 feet wide with a planted buffer between travel lanes and sidewalks of varying width from 12 to 17.5 feet.
- Explore mid-block crosswalks in coordination with through-block connections.
- Traffic circles to break up longer stretches.

Figure 38. Proposed typical new road with bike lanes with LID (preferred Option 1); turn lanes at intersections (above) and narrowed for slower speeds and access management between intersections (below)
NEW ROAD WITH BIKE LAKES: OPTION 2 (WITHOUT LID)

If a 60-foot right-of-way is preferred, this plan recommends the following characteristics for a typical new street (represented in blue on Figure 37). Note that this limited right-of-way could also accommodate onsite stormwater infiltration (LID).

- Two 10-foot wide travel lanes, with an 11 foot left turn lane at intersections.
- Access management should reduce mid-block turning vehicular conflicts with pedestrians and cyclists.
- Bike lanes a minimum of 5 feet wide (not including gutter).
- Sidewalks a minimum of 5 feet wide with a planted buffer between travel lanes and sidewalks of varying width, from 4.5 to 10 feet.
- Explore mid-block crosswalks in coordination with through-block connections.
MULTI-USE TRAIL

New multi-use trails (marked in pink on Figure 37) are proposed along fairly high-volume streets that connect to major destinations, such as the Lakewood Crossing shopping center and the Lakewood schools. This cross-section would be used along segments of 27th Avenue NE, 164th Street NE, 16th Drive NE, 19th Drive NE, and 19th Avenue NE. New trails along streets should include the following elements:

- 10 foot multi-use trail with a 2 foot buffer from the property line.
- A 7.5 foot landscaped LID buffer between the trail and the roadway.
- Standard LID and sidewalk cross-section on opposite side of roadway.

TWINS LAKE AVENUE RESTRIPING

Twin Lakes Avenue would provide a north-south bicycle route for eastern Lakewood. This plan notes the following for restriping the road to accommodate bicycles:

- Remove two-way-left turn lane and add 5 foot bike lanes.
- This project is contingent on traffic volumes along the road segment bracketed on Figure 37.
- This action maintains 12-foot lane widths; the need for narrower lanes might be explored.
UTILITIES AND STORMWATER RUNOFF STRATEGY

Due to the anticipated lower traffic volumes on neighborhood roads, there is more space available for LID. Neighborhood roads will generally be new to the area. The first stormwater consideration will be to balance transportation needs while minimizing stripping and compacting of native soil. Drainage improvements and utility extensions will be installed in conjunction with surface improvements. LID opportunities that will be evaluated will include: street trees, roadside bioretention, permeable pavement sidewalks, and infiltration trenches. In addition to providing stormwater management, LID provides buffers between pedestrians and vehicle traffic.

DECORATIVE STREET LIGHTING REQUIREMENTS

Decorative street lighting will be required on the following streets:

- 169th Street NE
- 172nd Street NE
- 174th Street NE
- 19th Avenue NE
- 23rd/25th Avenue NE (north-south extension)
- 27th Avenue NE
- 30th Avenue NE
- 164th Street NE
- 159th Street NE
- 156th Street NE

See lighting standards in Appendix A.

IMPLEMENTATION

As described for the 172nd Street NE implementation, neighborhood streets would be paid for and constructed by developers to mitigate new development. New “Street Connectivity” language in the Lakewood Design Guidelines will ensure that this approach eventually leads to a complete network. However, implementing major legs earlier would make the network more useful in the near-term. The pedestrian and bicycle funding mentioned for 172nd Street NE above may also be applicable for these neighborhood streets and paths. In addition, the railroad right-of-way trail and links to Gissberg Twin Lakes Park may have additional funding options as it serves a recreational and park-like purpose. These options may include City-collected parks fees, the City general fund, Community Development Block Grant (CDBG) funds, and Washington Recreation and Conservation Office (RCO) trails development funds.