Attachment 4 Transportation Element

Transportation Element

A Building Urban Villages: Land Use ((&))and Transportation

discussion

The development pattern described in the Urban Village Element of this Plan will shape the city's transportation facilities. In particular, transportation facility design will reflect the intended pedestrian nature of the urban centers and villages and the desire to connect these places with transit service. Because Seattle is a fully built city with a mature street system, the City uses a full range of non-single-occupant vehicle transportation facilities to support the desired redevelopment pattern within ((~~U~~))urban ((~~V~~))villages. These facilities can help create the mixed-use, walkable, transit, and bike-friendly centers that this Plan envisions. However, the City recognizes that auto and service access to property will remain important for accommodating growth in centers and villages.

Outside of urban centers and villages, the City will also look for appropriate transportation designs that align transportation facilities and services with adjacent land uses.

((~~This Element contains references to the Transportation Strategic Plan (TSP), which is the functional plan developed to implement these policies.~~

~~The TSP:~~

- ~~Establishes the Seattle Department of Transportation's (SDOT) near- and long-term work program.~~
- ~~Defines the strategies, projects and programs to accomplish Comprehensive Plan goals and policies for transportation.~~
- ~~Provides a central resource for planning tools and transportation-related data to use in developing future projects and programs.~~
- ~~Outlines SDOT's financial plan, and describes the projects, programs and services that will be implemented through SDOT's budget over the next 20 years.~~
- ~~Defines the process for determining funding priorities and leveraging project investments to meet multiple goals for SDOT and the community.~~
- ~~Defines SDOT's performance goals.~~

~~The Comprehensive Plan will guide updates to the TSP.~~))

goal

TG1 Ensure that transportation decisions, strategies, and investments are coordinated with land use goals and support the urban village strategy.

policies

T1 Design transportation infrastructure in urban villages to support land use goals for compact, accessible, walkable neighborhoods.

T2 Make the design and scale of transportation facilities compatible with planned land uses and with consideration for the character anticipated by this Plan for the surrounding neighborhood.

T3 Encourage and provide opportunities for public involvement in planning and designing of City transportation facilities, programs, and services((,)) and encourage other agencies to do the same.

T4 Provide sufficient transportation facilities and services to promote and accommodate the growth this Plan anticipates in urban centers, urban villages, and manufacturing/industrial centers while reducing reliance on single-occupancy vehicles.

T5 Establish multi-modal hubs providing transfer points between transit modes in urban centers and urban villages.

B Make the Best Use of the Streets We Have to Move People ((&))and Goods

discussion

The City has a limited amount of street space, and is unlikely to expand this space significantly. To make the best use of existing rights-of-way for moving people and goods, the City must allocate street space carefully among competing uses to further the City's growth management and transportation goals. The Complete Streets principles set out in Ordinance 122386 promote safe and convenient access and travel for all users — pedestrians, bicyclists, transit riders, and people of all abilities, as well as freight and motor vehicle drivers.

((~~As guided below by this Plan, the Transportation Strategic Plan (TSP) will include detailed maps and descriptions of Seattle's street classifications. Street classifications define how a street should function to support movement of people, goods and services versus access to property. Street classifications provide the basis for determining how individual streets should be used and operated. The TSP also designates street types to further define streets by relating them to the adjacent~~

~~land uses and their function for pedestrians, bicyclists, transit and freight. Street types enhance the citywide street classifications with more site-specific design guidance that balances the functional classification, adjacent land uses, and competing travel needs.~~))

goals

TG2 Manage the street system safely and efficiently for all modes and users and seek to balance limited street capacity among competing uses.

TG3 Promote safe and convenient bicycle and pedestrian access throughout the transportation system.

TG4 Promote adequate capacity on the street system for transit and other designated uses.

TG5 Preserve and maintain the boulevard network as both a travel and open space system.

TG6 Promote efficient freight and goods movement.

TG7 Protect neighborhood streets from through traffic.

policies

T6 Allocate street space among various uses (e.g., traffic, transit, trucks, carpools, bicycles, parking, and pedestrians) according to Complete Streets principles, set out in Ordinance 122386, to enhance the key function(s) of a street((~~ as described in the Transportation Strategic Plan~~)).

T7 Designate((~~, in the~~)) a series of arterials as defined below and, consistent with such designations, identify these arterials in Transportation Appendix Figure A-1.((~~Strategic Plan, a traffic network that defines Interstate Freeways, Regional, Principal, Minor and Collector Arterial streets, Commercial and Residential Access streets and Alleys as follows:~~

- ~~**Interstate Freeways:** roadways that provide the highest capacity and least impeded traffic flow for longer vehicle trips.~~
- ~~**Regional Arterials:** roadways that provide for intra-regional travel and carry traffic through the city or serve important traffic generators, such as regional shopping centers, a major university, or sports stadia.~~
- **Principal Arterials:** roadways that are intended to serve as the primary routes for moving traffic through the city connecting urban centers and urban villages to one another, or to the regional transportation network.
- **Minor Arterials:** roadways that distribute traffic from principal arterials to collector arterials and access streets.

- **Collector Arterials:** roadways that collect and distribute traffic from principal and minor arterials to local access streets or provide direct access to destinations.

- ~~**Commercial Access Streets:** roadways that directly serve commercial and industrial land uses and provide localized traffic circulation.~~

- ~~**Residential Access Streets:** roadways that provide access to neighborhood land uses and access to higher level traffic streets.~~

- ~~**Alleys:** travelways that provide access to the rear of residences and businesses that are not intended for the movement of through trips. Where a continuous alley network exists, it is the preferred corridor for utility facilities.~~))

T8 ((~~Pursue strategies to reduce and help prevent road damage from heavy vehicles~~))Establish a street system that can accommodate the weight of heavy vehicles and reduce the damage such vehicles can cause.

T9 Designate, ((~~in the Transportation Strategic Plan,~~)) a future transit network in the Transit Master Plan to maintain and improve transit mobility and access, compatible with the transportation infrastructure and surrounding land uses. Through the network, focus transit investments and indicate expected bus volumes and transit priority treatments appropriate for the type and condition of the street.

T10 Designate in a Freight Master Plan((~~, in the Transportation Strategic Plan,~~)) a truck street classification network to accommodate trucks and to preserve and improve commercial transportation mobility and access. ((~~Designate as follows:~~

- ~~**Major Truck Streets:** an arterial street that accommodates significant freight movement through the city, and connects to major freight traffic generators.~~))

T11 Designate, ((~~in the Transportation Strategic Plan, ~~))a future bicycle classification network in the Bicycle Master Plan to accommodate bicycle trips through the ((~~C~~))city and to major destinations. ((~~Designate as follows:~~

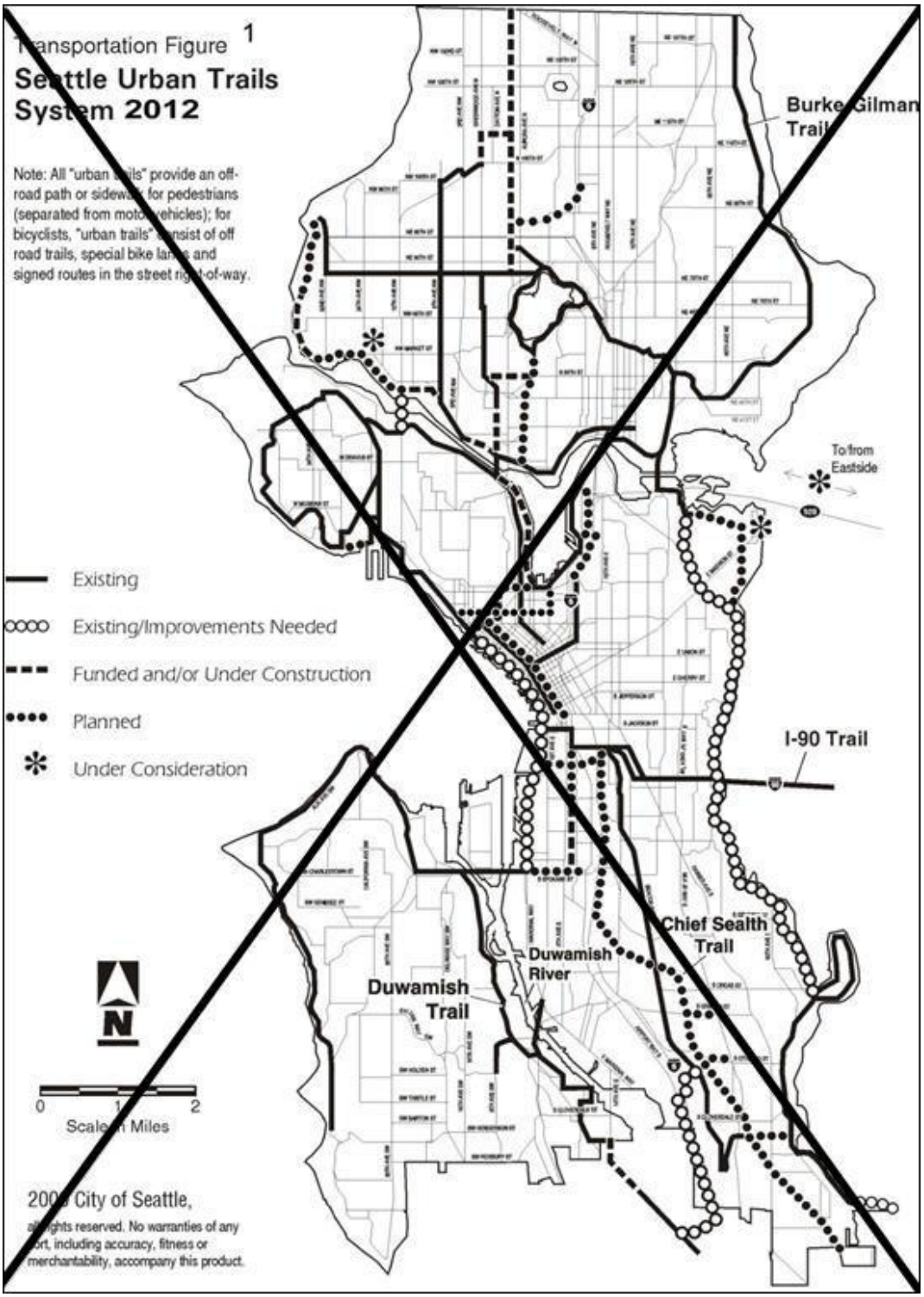
- ~~**Urban Trails:** a network of on- and off-street trails that facilitate walking and bicycling as viable transportation choices, provide recreational opportunities, and link major parks and open spaces with Seattle neighborhoods, as shown on Figure 1.~~

- ~~**Streets:** an on-street bicycle network that connects neighborhoods and urban centers and villages and serves major inter-modal connections.~~))

T12 Designate((~~, in the Transportation Strategic Plan,~~)) a network of boulevards that provides for circulation and access in a manner that enhances the appreciation or use of adjacent major parklands and vistas and preserves the historic character of the boulevards.

T13 Designate, in the ((~~Transportation Strategic Plan~~))Right-of-Way Improvement Manual, a series of s((~~S~~))treet ((~~T~~))types ((~~overlay~~))to define street use and design features that support adjacent land uses((~~,~~)) and mobility.((~~generally, as follows:~~

- ~~**Main Street:** Main activity center in urban villages for pedestrians and transit. This Street Type encourages and supports pedestrian and bicycle activity as well as transit. Streets in this type may include high capacity transit stops and are distinguished by compact, mixed land uses, and high densities.~~))


Transportation Figure 1
Seattle Urban Trails System 2012
Note: All "urban trails" provide an off-road path or sidewalk for pedestrians (separated from motor vehicles); for bicyclists, "urban trails" consist of off road trails, special bike lanes and signed routes in the street right-of-way.
Burke-Gilman Trail
To/from Eastside
Existing
Existing/Improvements Needed
Funded and/or Under Construction
Planned
Under Consideration
I-90 Trail
Chief Sealth Trail
Duwamish River
Duwamish Trail
N
0 1 2
Scale in Miles
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- ~~((**Mixed Use Street:** Streets within neighborhood commercial areas of the city. This Street Type supports all modes with an emphasis on pedestrian access.~~

- ~~**Regional Connector Street:** Provide connections between regional centers along principal arterials. This Street Type supports all modes but is primarily designed to provide citywide and regional access for transit, cars and truck trips and may support high and intermediate capacity transit service.~~

- ~~**Commercial Connector Street:** Provide connections between commercial areas as well as local access within urban villages along minor arterials streets. This Street Type supports all modes with an emphasis on local access.~~

- ~~**Local Connector Street:** This Street Type supports pedestrian access along Collector Arterials to and from key pedestrian generators and destinations (e.g. schools, community centers, transit stops). May also be non-arterial streets that provide direct connection to high capacity transit stops.~~

- ~~**Industrial Access Street:** This Street Type supports freight access to manufacturing and industrial land uses.~~

- ~~**Green Street:** This Street Type on certain downtown streets provides exceptional pedestrian environments and may include wider sidewalks,street trees, landscaping, and appropriate street furniture emphasizing pedestrian movement.~~

- ~~**Neighborhood Green Street:** May be on any non-arterial street adjacent to residential and commercial land uses. This Street Type supports all modes with an emphasis on pedestrian amenities, street trees and landscaping.~~))

T14 Use neighborhood traffic control devices and strategies to protect local streets from through traffic, high volumes, high speeds, and pedestrian/vehicle conflicts. Use these devices and strategies on collector arterials where they are compatible with the basic function of collector arterials.

T15 Increase capacity on roadways only if needed to improve safety, improve connectivity of the transportation network, improve isolated connections to regional roadways, or where other measures are impractical to achieve level-of-service standards. The City will manage capacity of principal arterials where and as appropriate and will not attempt to provide street space to meet latent demand for travel by car. The City will not support

freeway expansion for the sole purpose of increasing general traffic capacity.

T16 Recognize the important function of alleys in the transportation network. Consider alleys, especially continuous alleys, a valuable resource for access to abutting properties to load/unload, locate utilities, and dispose of waste.

C Increasing Transportation Choices

discussion

To reduce car use, the City will employ land use policies and parking strategies that encourage increased use of transit, walking, biking, and carpooling. To be effective, the City must provide for transportation alternatives and educate people on transportation choices that are responsive to the specific needs of ((~~U~~))urban ((~~C~~))centers as well as other residential and employment areas. These kinds of tools enable the City to better manage, or control, the need to travel by car. Transportation alternatives to the single-occupancy-vehicle (SOV) need to address cost, convenience, and travel time. The City recognizes that transportation needs and travel choices will change over time as alternatives to car travel become more viable.

goals

TG8 Meet the current and future mobility needs of residents, businesses, and visitors with a balanced transportation system.

TG9 Provide programs and services to promote transit, bicycling, walking, and carpooling to help reduce car use and SOV trips.

TG10 Accommodate all new trips in downtown with non-SOV modes.

((~~**T**G11 Strive to achieve the following mode choice goals for use of travel modes through the City's land use strategies and transportation programs:~~

Mode Choice Goals for Work Trips to Seattle & its Urban Centers

Proportion of work trips made using Non-SOV Modes

Urban Center	2000*	2010 Goal	2020 Goal
Downtown	56%	62%	70%
First Hill/Capitol Hill	31%	37%	50%
Uptown/Queen Anne	33%	37%	50%
South Lake Union	30%	37%	50%
University District	56%	62%	70%
Northgate	26%	30%	40%
Seattle	**39%**	**42%**	**45%**

* 2000 mode choice numbers are from the U.S. Census for the year 2000 journey to work data by place of employment.

Mode Choice Goals for Residents of Seattle & its Urban Centers

Proportion of all trips made using Non-SOV Modes

Urban Center	2000*	2010 Goal	2020 Goal
Downtown	77%	80%	85%
First Hill/Capitol Hill	69%	75%	80%
Uptown/Queen Anne	64%	70%	75%
South Lake Union	65%	70%	75%
University District	60%	65%	70%
Northgate	50%	55%	60%
Seattle	**53%**	**55%**	**60%**

~~* 2000 mode choice numbers are preliminary estimates from the Puget Sound Regional Council Regional Travel Demand Model (2004 preliminary model update) for Home-Based Work and Home-Based Non-Work Trips.~~))

policies

T17 Provide, support, and promote programs and strategies aimed at reducing the number of car trips and miles driven (for work and non-work purposes) to increase the efficiency of the transportation system((,)) and reduce greenhouse gas emissions.

T18 Promote public awareness of the impact travel choices have on household finances, personal quality of life, society, and the environment((,)) and increase awareness of the range of travel choices available.

T19 Pursue transportation demand management (TDM) strategies at the regional and urban center levels, and strengthen regional and urban center-based partnerships working on TDM measures. Coordinate and develop relationships with urban center, regional, and state partners so customers see their travel choices and the various TDM promotions as a coordinated, integrated system that makes a difference in the community.

C-1 Increasing Transportation Choices: Making Transit a Real Choice

discussion

Providing convenient and accessible transit service can help reduce reliance on single-occupant vehicles, slow the increase in environmental degradation associated with their use, and increase mobility without building new streets and highways. Street rights-of-way are limited and as streets get more congested, transit provides an efficient way to move large numbers of people around the city and the region and support growth in urban centers and villages. These policies will guide City decisions to enhance transit, and are also intended to guide decisions of transit serving Seattle.

goals

TG((~~12~~))11 Create a transit-oriented transportation system that builds strong neighborhoods and supports economic development.

TG((~~13~~))12 Provide mobility and access by public transportation for the greatest number of people to the greatest number of services, jobs, educational opportunities, and other destinations.

TG((~~14~~))13 Increase transit ridership, and thereby reduce use of single-occupant vehicles to reduce environmental degradation and the societal costs associated with their use.

policies

T20 Work with transit providers to provide transit service that is fast, frequent, and reliable between urban centers and urban villages and that is accessible to most of the city's residences and businesses. Pursue strategies that make transit safe, secure, comfortable, and affordable.

T21 Support development of an integrated, regional high capacity transit system that links urban centers within the city and the region.

T22 Pursue a citywide intermediate capacity transit system that connects urban centers, urban villages, and manufacturing/industrial centers.

T23 Pursue a citywide local transit system that connects homes and businesses with neighborhood transit facilities.

T24 Work with transit providers to design and operate transit facilities and services to make connections within the transit system and other modes safe and convenient. Integrate transit stops, stations, and hubs into existing communities and business districts to make it easy for people to ride transit and reach local businesses. Minimize negative environmental and economic impacts of transit service and facilities on surrounding areas.

T24.5 Work with transit providers to locate transit stops and stations to facilitate pedestrian access. Seek to develop safe street crossings at transit stop locations, particularly on roadways with more than one travel lane in any direction.

T25 Work with transit providers to ensure that the design of stations and alignments will improve how people move through and perceive the city, contribute positively to Seattle's civic identity, and reflect the cultural identity of the communities in which they are located.

T26 Discourage the development of major, stand-alone park-and-ride facilities within Seattle. Situations where additions to park-and-ride capacity could be considered include:

- At the terminus for a major, regional transit system;
- Opportunities exist for "shared parking" (e.g., where transit commuter parking can be leased from another development, such as a shopping center, movie theater, or church); and

- Areas where alternatives to automobile use are particularly inadequate (e.g., lack of direct transit service, or pedestrian and bicycle access) or cannot be provided in a cost-effective manner.

T27 Encourage transit services that address the needs of persons with disabilities, the elderly, other people with special needs, and people who depend on public transit for their mobility.

T28 ((~~1.~~))Support efficient use of ferries to move passengers and goods to, from, and within Seattle. Explore route, funding, and governance options for waterborne transit service, especially those that serve pedestrians.

((~~2.~~))In order to limit the expansion of automobile traffic by ferry, encourage the Washington State Ferry System to expand its practice of giving loading and/or fare priority to certain vehicles, such as transit, carpools, vanpools, bicycles, and/or commercial vehicles, on particular routes, on certain days of the week, and/or at certain times of day. Encourage the Washington State Ferry System to integrate transit loading and unloading areas into ferry terminals, and to provide adequate bicycle capacity on ferries and adequate and secure bicycle parking at terminals.

T29 For water-borne travel across Puget Sound, encourage the expansion of passenger-only ferry service and land-side facilities and terminals that encourage walk-on (by foot, bicycle and transit) trips rather than ferry travel with automobiles.

C-2 Increasing Transportation Choices: Bicycling ((&))and Walking

discussion

Walking and bicycling can be practical alternatives to driving, especially for short trips. They can also contribute greatly to neighborhood quality and vitality, and help achieve City transportation, environmental, open space, and public health goals. Pedestrian and bicycle improvements to streets, intersections, sidewalks, and other facilities can improve access and safety. Such facilities are particularly important for children, senior citizens, and people with disabilities.

goals

TG((~~15~~))14 Increase walking and bicycling to help achieve City transportation, environmental, community, and public health goals.

TG((~~16~~))15 Create and enhance safe, accessible, attractive, and convenient street and trail networks that are desirable for walking and bicycling.

policies

T30 Improve mobility and safe access for walking and bicycling, and create incentives to promote non-motorized travel to employment centers, commercial districts, transit stations, schools and major institutions, and recreational destinations.

T30.5 Look for opportunities to re-establish connections across I-5 by enlarging existing crossings, creating crossings under, or constructing lids over I-5 that can also provide opportunities for development or open space.

T31 Integrate pedestrian and bicycle facilities, services, and programs into City and regional transportation and transit systems. Encourage transit providers, the Washington State Ferry System, and others to provide safe and convenient pedestrian and bicycle access to and onto transit systems, covered and secure bicycle storage at stations,((~~ and~~)) especially for persons with disabilities and special needs.

T32 Recognize that stairways located within Seattle's public rights-of-way serve as a unique and valuable pedestrian resource in some areas of the ((~~C~~))city. Discourage the vacation of public rights-of-way occupied by stairways, and protect publicly-owned stairways from private encroachment.

T33 Accelerate the maintenance, development, and improvement of pedestrian facilities, including public stairways. Give special consideration to:

- ((~~a.~~))access to recommended school walking routes;
- ((~~b.~~))access to transit, public facilities, social services, and community centers;
- ((~~c.~~))access within and between urban villages for people with disabilities and special needs;
- ((~~d.~~))areas with a history of ((~~pedestrian / motor vehicle~~))pedestrian/motor vehicle crashes and other safety problems; and
- ((~~e.~~))areas with high levels of growth.

((~~The Pedestrian Master Plan should identify a method for assessing and implementing pedestrian safety and access improvements in high growth areas.~~))

T34 Provide and maintain a direct and comprehensive bicycle network connecting urban centers, urban villages, and other key locations. Provide continuous bicycle facilities and work to eliminate system gaps.

T35 Develop, apply, and report on walking and bicycling transportation performance measures ((~~in the Transportation Strategic Plan~~))to evaluate

the functioning of the non-motorized transportation system; to ensure consistency with current industry standards; to identify strengths, deficiencies, and potential improvements; and to support development of new and innovative facilities and programs.

T35.5 Provide facilities for non-motorized modes of travel that keep pace with development in the City.

T36 Promote safe walking, bicycling, and driving behavior through education, enforcement, and engineering design, in order to provide public health benefits and to reinforce pedestrian, bicycle, and motorist rights and responsibilities.

C-3 Increasing Transportation Choices: Managing the Parking Supply

discussion

Long- or short-term parking is part of every car trip, and parking, especially when free, is a key factor in the mode choice for a trip. The availability and price of parking influences people's housing and transportation choices about where to live and how to travel to work, shop, and conduct personal business. The City's challenge is to provide enough parking to meet mobility and economic needs, while limiting supply to encourage people to use non-auto modes. This section establishes goals and policies primarily for on-street parking. Off-street parking goals and
policies can be found in the Land Use Element, parking section.

goals

TG((~~17~~))16 Manage the parking supply to achieve vitality of urban centers and villages, auto trip reduction, and improved air quality.

TG((~~18~~))17 Recognize that the primary transportation purpose of the arterial street system is to move people and goods, when making on-street parking decisions.

policies

T37 Consider establishing parking districts that allow for neighborhood based on- and off-street parking management regulations((~~ to help meet urban center mode split goals~~)).

T38 Use low-cost parking management strategies such as curb space management, shared parking, pricing, parking information and marketing, and similar tools to encourage more efficient use of existing parking supply before pursuing more expensive off-street parking facility options.

T39 Restrict on-street parking when necessary to address safety, operational, or mobility problems. In urban centers and urban villages where such restriction is being considered, the pedestrian environment and transit operations are of primary concern, but decisions should also balance the use of the street by high-occupancy vehicles, bicycles, and motor vehicles; access to local businesses; control of parking spillover into residential areas; and truck access and loading.

T40 In commercial districts prioritize curb space in following order:

- transit stops and layover((,));
- passenger and commercial vehicle loading((,));
- short-term parking (time limit signs and paid parking);
- parking for shared vehicles; and
- vehicular capacity.

T41 In residential districts, prioritize curb space in the following order:

- transit stops and layover;
- passenger and commercial vehicle loading;
- parking for local residents and for shared vehicles; and
- vehicular capacity.

T42 During construction or implementation of new transportation projects, consider replacing short-term parking only when the project results in a concentrated and substantial amount of on-street parking loss.

T43 Use paid on-street parking to encourage parking turnover, customer access, and efficient allocation of parking among diverse users.

T44 Consider installing longer-term paid on-street parking along edges of commercial districts or in office and institutional zones to regulate curb space where short-term parking demand is low.

T45 Strive to allocate adequate parking enforcement resources to encourage voluntary compliance with on-street parking regulations.

T46 Coordinate Seattle's parking policies with regional parking policies to preserve Seattle's competitive position in the region.

D Promoting the Economy: Moving Goods ((&))and Services

discussion

The transport of goods and services is critical to Seattle's and the region's economic development. As a major port city, Seattle's businesses and industries rely on rail, water, and truck transport. These policies, and those in the Economic Development and the Neighborhood Planning elements, support existing businesses and industries, and promote Seattle as a place for economic expansion. Major truck streets are an important part of the freight mobility network((~~and are described in Section B – Make the Best Use of the Streets We Have to Move People and Goods, in this element. The Transportation Strategic Plan has more detailed strategies and street classifications that further support freight mobility in the City of Seattle~~)).

goals

TG((~~19~~))18 Preserve and improve mobility and access for the transport of goods and services.

TG((~~20~~))19 Maintain Seattle as the hub for regional goods movement and as a gateway to national and international suppliers and markets.

policies

T47 Maintain a forum for the freight community to advise the City and other entities on an ongoing basis on topics of land-based freight transportation facility modifications and enhancements. Coordinate the review of potential operational changes, capital projects, and regulations that may impact freight movement. Participate and advocate Seattle's interests in regional and state forums.

T48 Recognize the importance of the freight network to the city's economic health when making decisions that affect Major Truck streets as well as other parts of the region's roadway system. Complete Street improvements supporting freight mobility along with other modes of travel may be considered on Major Truck streets.

T49 Support efficient and safe movement of goods by rail where appropriate. Promote continued operation of freight rail lines and intermodal yards that serve industrial properties and the transport of goods. Improve the safety and operational conditions for freight rail transport at the rail track crossings within city streets.

T50 Promote an intermodal freight transportation strategy, including rail, truck, air, and water transport and advocate for improved freight and goods movement. Work toward improved multi-modal connections among rail yards, industrial areas, airports, and regional roadways.

T51 Consider the needs for local delivery and collection of goods at businesses by truck when making street operational decisions and when developing and implementing projects and programs for highways, streets, and bridges.

E Improving the Environment

discussion

The development pattern promoted by the urban village strategy is supported by transportation policies that encourage walking, biking, and transit. Streets that support travel by all modes and that are well designed and maintained and that include landscaping and street trees contribute to a healthy urban environment. Over-reliance on motor vehicles degrades environmental quality in the form of deteriorating air quality, increasing water pollution through street and stormwater runoff, and causing higher levels of noise pollution. Excessive reliance on motor vehicles also negatively affects the quality of life in the city by increasing congestion and travel time.

goals

TG((~~21~~))20 Promote healthy neighborhoods with a transportation system that protects and ((~~i~~))improves environmental quality.

TG((~~22~~))21 Reduce or mitigate air, water, and noise pollution from motor vehicles.

TG((~~23~~))22 Promote energy-efficient transportation.

policies

T52 Design and operate streets to promote healthy urban environments while keeping safety, accessibility, and aesthetics in balance.

T53 Implement an environmental management system to develop, operate, and maintain a safe and reliable transportation system in a manner that reduces the environmental impacts of City operations and services.

T54 Identify, evaluate, and mitigate environmental impacts of transportation investments and operating decisions (including impacts on air and water quality, noise, environmentally critical areas, and endangered species). Pursue transportation projects, programs, and investment strategies consistent with noise reduction, air quality improvement, vehicle trip reduction, protection of critical areas and endangered species, and water quality improvement objectives.

T55 Coordinate with other city, county, regional, state, and federal agencies to pursue opportunities for air and water quality improvement, street and stormwater runoff prevention, reduction in vehicle miles traveled, and noise reduction.

T56 Continue to work to reduce fuel use and promote the use of alternative fuels.

F Connecting to the Region

discussion

Seattle is a regional destination and is also the focus of a number of major regional transportation facilities. Much of the rest of the Comprehensive Plan Transportation Element considers transportation within the city limits. This section provides guidance for regional projects that affect Seattle and for Seattle's participation in regional planning and funding efforts.

goal

TG((~~24~~))23 Actively engage other agencies to assure that regional projects and programs affecting the city are consistent with City plans, policies, and priorities.

policies

T57 Support regional pricing and parking strategies that contribute to transportation demand management objectives and to economic development.

T58 Coordinate with regional, state and federal agencies, local governments, and transit providers when planning and operating transportation facilities and services in order to promote regional mobility for people and goods and the urban center approach to growth management.

T59 Support completion of the freeway high-occupancy-vehicle (HOV) lane system throughout the central Puget Sound region. Maintain the HOV system for its intended purpose of promoting non-SOV travel.

T60 Expansion of freeway capacity should be limited primarily to accommodate ((~~n~~))non-SOV users. Spot expansion of capacity to improve safety or remove operational constraints may be appropriate in specific locations.

T61 Support a strong regional ferry system that maximizes the movement of people, freight, and goods.

G Conserving Transportation Resources: Operating ((&))and Maintaining the Transportation System

discussion

Successful operation and maintenance of the transportation system promotes safety, efficiency, infrastructure preservation, and a high quality environment. Maintenance costs consume 75 to 80((%)) percent of the Seattle Department of Transportation's annual operating budget. This investment represents a significant and recurring commitment to the conservation of our city's transportation facilities, as dollars spent on maintenance today help ensure that more dollars are not needed for premature replacement later. Effective maintenance of the transportation system means the City will have to plan for future maintenance activity and must also address the significant backlog of unmet maintenance needs that currently exist((s)). The policies below guide transportation system operating and maintenance decisions of the City.

goals

TG((25))24 Promote the safe and efficient operation of Seattle's transportation system.

TG((26))25 Preserve and renew Seattle's transportation system.

policies

T62 In operating the transportation system, balance the following priorities: safety, mobility, accessibility, infrastructure preservation, and citizen satisfaction.

T63 Maintain the transportation system to keep it operating safely and to maximize its useful life.

T64 Repair transportation facilities before replacement is warranted. Replace failed facilities when replacement is more cost-effective than continuing to repair.

H Measuring Levels of Service

discussion

The Growth Management Act requires that the Comprehensive Plan include level-of-service (LOS) standards for all locally-owned arterials and transit routes to judge the performance of the system. The LOS standards identify minimally acceptable travel conditions on arterials and the transit network. The City has decided to use a system-wide method as a basis to assess the performance of the transportation system. Because buses are the primary form of transit service in the City and buses operate in the same traffic stream as cars, the City has chosen to use the same technique to measure the operation of both forms of travel.

The City's facilities currently comply with the standards in Policies T65 and T66 below.

goal

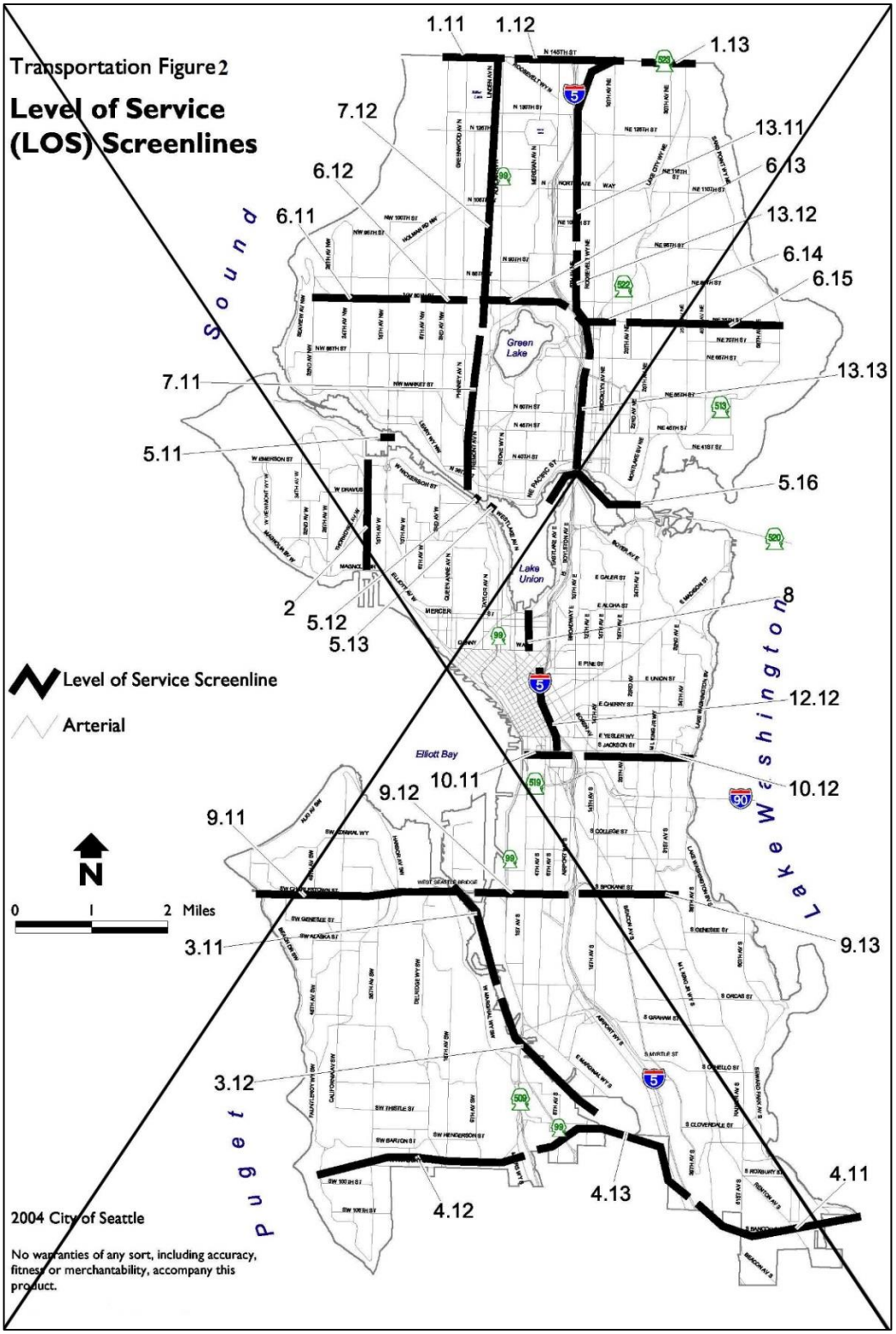
TG((~~27~~))26 Use level-of-service standards, as required by the Growth Management Act, as a gauge to judge the performance of the arterial and transit system.

policies

T65 Define arterial level-of-service (LOS) to be the ratio of measured traffic volumes to calculated roadway capacity at designated screenlines, each of which encompasses one or more arterials, as shown in Transportation Appendix Figure ((~~2~~))A-11. Measure peak hour directional traffic volumes on the arterials crossing each screenline to calculate the screenline LOS. ((~~To judge the performance of the arterial system, compare the calculated LOS for each screenline with the LOS standard for that screenline shown in Transportation Appendix Figure 3.~~))

T66 Define transit level-of-service (LOS) to be the ratio of measured traffic volumes to calculated roadway capacity at designated ((~~screen lines~~))screenlines, each of which encompasses one or more arterials((~~,~~)) shown in Transportation Appendix Figure A-11 on some of which transit operates((~~, as shown in Transportation Figure 2~~)). Measure peak hour directional traffic volumes on the arterials crossing each screenline to calculate the screenline LOS. ((~~To judge the performance of the transit system compare the calculated LOS for each screenline with the LOS standard for that screenline shown in Transportation Figure 3.~~))

T67 When the calculated LOS for a screenline approaches the LOS standard for that screenline, first pursue strategies to reduce vehicular travel demand across the screenline before increasing the operating capacity across the screenline.


Transportation Figure 2
Level of Service (LOS) Screenlines
1.11
1.12
1.13
7.12
13.11
6.12
6.13
6.11
13.12
6.14
6.15
Green Lake
7.11
13.13
5.11
5.16
Lake Union
2
8
5.12
5.13
Level of Service Screenline
Arterial
12.12
Elliott Bay
10.11
9.12
10.12
9.11
N
0 1 2 Miles
9.13
3.11
3.12
4.11
4.13
4.12
Puget Sound
Lake Washington
2004 City of Seattle
No warranties of any sort, including accuracy, fitness or merchantability, accompany this product.

((~~Transportation Figure 3~~

~~Level-of-Service (LOS) Standards~~))

((~~Level-of-Service Screenline Number~~	**~~Screenline Location Segment~~**	**~~LOS Standard~~**	**~~Direction~~**	**~~2020 V/C Ratios Comp. Plan~~**
~~1.11~~	**~~North City Limit~~** ~~3rd Ave. NW to Aurora Ave. N~~	~~1.20~~	~~NB~~	~~0.96~~
			~~SB~~	~~0.61~~
~~1.12~~	**~~North City Limit~~** ~~Meridian Ave. N to 15th Ave. NE~~	~~1.20~~	~~NB~~	~~0.83~~
			~~SB~~	~~0.43~~
~~1.13~~	**~~North City Limit~~** ~~30th Ave. NE to Lake City Way NE~~	~~1.20~~	~~NB~~	~~0.93~~
			~~SB~~	~~0.58~~
~~2~~	**~~Magnolia~~**	~~1.00~~	~~EB~~	~~0.51~~
			~~WB~~	~~0.64~~
~~3.11~~	**~~Duwamish River~~** ~~West Seattle Fwy. & Spokane St.~~	~~1.20~~	~~EB~~	~~0.55~~
			~~WB~~	~~0.86~~
~~3.12~~	**~~Duwamish River~~** ~~1st Ave. S & 16th Ave. S~~	~~1.20~~	~~NB~~	~~0.51~~
			~~SB~~	~~0.75~~
~~4.11~~	**~~South City Limit~~** ~~Martin Luther King Jr Way to Rainier Ave. S~~	~~1.00~~	~~NB~~	~~0.46~~
			~~SB~~	~~0.61~~
~~4.12~~	**~~South City Limit~~** ~~Marine Dr. SW to Meyers Way S~~	~~1.00~~	~~NB~~	~~0.33~~
			~~SB~~	~~0.39~~
~~4.13~~	**~~South City Limit~~** ~~SR 99 to Airport Way S~~	~~1.00~~	~~NB~~	~~0.41~~
			~~SB~~	~~0.49~~
~~5.11~~	**~~Ship Canal~~** ~~Ballard Bridge~~	~~1.20~~	~~NB~~	~~1.20~~
			~~SB~~	~~0.81~~
~~5.12~~	**~~Ship Canal~~**	~~1.20~~	~~NB~~	~~1.07~~

((Level-of-Service Screenline Number	Screenline Location Segment	LOS Standard	Direction	2020 V/C Ratios Comp. Plan
	Fremont Bridge		SB	0.73
5.13	**Ship Canal** Aurora Bridge	1.20	NB	0.90
			SB	0.78
5.16	**Ship Canal** University & Montlake Bridges	1.20	NB	1.10
			SB	1.07
6.11	**South of NW 80th St.** Seaview Ave. NW to 15th Ave. NW	1.00	NB	0.47
			SB	0.32
6.12	**South of N(W) 80th St.** 8th Ave. NW to Greenwood Ave. N	1.00	NB	0.56
			SB	0.33
6.13	**South of N(E) 80th St.** Linden Ave. N to 1st Ave. NE	1.00	NB	0.46
			SB	0.36
6.14	**South of NE 80th St.** 5th Ave. NE to 15th Ave. NE	1.00	NB	0.76
			SB	0.48
6.15	**South of NE 80th St.** 20th Ave. NE to Sand Point Way NE	1.00	NB	0.55
			SB	0.38
7.11	**West of Aurora Ave** Fremont Pl. N to N 65th St.	1.00	NB	0.52
			SB	0.71
9.11	**South of Spokane St.** Beach Dr. SW to W Marginal Way SW	1.00	NB	0.45
			SB	0.59
9.12	**South of Spokane St.** E Marginal Way S to Airport Way S	1.00	NB	0.52
			SB	0.63
9.13	**South of Spokane St.**	1.00	NB	0.58

((Level of Service Screenline Number	Screenline Location Segment	LOS Standard	Direction	2020 V/C Ratios Comp. Plan
	15th Ave. S to Rainier Ave. S		SB	0.64
10.11	South of S Jackson St. Alaskan Way S to 4th Ave. S	1.00	NB	0.70
			SB	0.69
10.12	South of S Jackson St. 12th Ave. S to Lakeside Ave. S	1.00	NB	0.52
			SB	0.66
12.12	East of CBD	1.20	EB	0.61
			WB	0.74
13.11	East of I-5NE Northgate Way to NE 145th St.	1.00	EB	0.76
			WB	0.63
13.12	East of I-5 NE 65th St. to NE 80th St.	1.00	EB	0.46
			WB	0.48
13.13	East of I-5 NE Pacific St. to NE Ravenna Blvd.	1.00	EB	0.64
			WB	0.77))

I Financing the Transportation System

discussion

Without funding, the goals identified in this Element would be difficult to achieve. This section identifies goals and policies related to providing and prioritizing funds for transportation projects, programs, and services. ((It also identifies the types of multi-year investment plans to be developed as part of the Transportation Strategic Plan process.))

goals

TG((~~28~~))27 Recognize and promote the urban village strategy when making transportation investments.

TG((~~29~~))28 Work towards transportation funding levels adequate to maintain and improve the transportation system.

policies

T68 Make strategic transportation investment decisions that are consistent with other policies in this Plan((~~, with the Transportation Strategic Plan,~~)) and with funding opportunities that promote the city's transportation investment priorities. These investment decisions will also be made with consideration to future operating and maintenance costs associated with improvements.

T69 Support regional and local transit resource allocations, as well as efforts to increase overall transit funding that are consistent with the City's urban village strategy and the regions' urban center policies.

T70 Pursue strategies to finance repair of road damage from heavy vehicles in a way that is equitable for Seattle's taxpayers.

T71 Fund projects, programs, and services with a combination of local and non-local funds, including:

- contributions from other entities that benefit from an investment, such as property owners located near((~~ by~~)) an investment;
- grants and other investments from local, regional, state, and federal funding sources; and
- contributions from the region for investments that serve regionally-designated urban centers and regional facilities.

T72 Consider new funding sources that are flexible, equitable, and sustainable, including:

- growth- and development-related revenues, including impact fees, where appropriate and where consistent with economic development policies;
- user-based taxes and fees, including a commercial parking tax; and
- other locally generated revenues.

T73 Support regional, state, and federal initiatives to increase transportation funding. Work to encourage new and existing funding sources that recognize Seattle's needs and priorities.

T74 Consistent with the other policies in this Plan((~~ and the Transportation Strategic Plan~~)):

- Prepare a six-year CIP that includes projects that are fully or partially funded;
- ((~~As part of the Transportation Strategic Plan, p~~))Prepare an intermediate-range list of projects for which the City plans to actively pursue funds over the next approximately ((~~8 to 10~~))eight to ten years((~~,~~)); and
- Maintain a long-range working list of potential projects and known needs.

T75 If the level of transportation funding anticipated in the six-year financial analysis((~~,~~)) below (Figure 1((4))) falls short, the Department of Finance and the Seattle Department of Transportation will:

- Identify and evaluate possible additional funding resources; and/or
- Identify and evaluate alternative land use and transportation scenarios, including assumptions about levels and distribution of population and employment, densities, types and mixes of land use, and transportation facilities and services, and assess their effects on transportation funding needs.

The City may then revise the Comprehensive Plan as warranted to ensure that level-of-service standards will be met.

((Transportation Figure 4

Estimated Future Transportation Revenue))

((Source	**Estimated Revenue in millions 2004-2009**
Gas tax	$70 to $70
Grants & Loans	$405 to $450
General Fund & Cumulative Reserve Fund	$205 to $230
Total	**$680 to $750**

Transportation Figure 5
Estimated Future Transportation Expenditures

Category	**Estimated Expenditures in millions 2004-2009**
Operations & Maintenance	$291 to $321
Major Maintenance & Safety	$192 to $212
Mobility & Enhancements	$197 to $217
Total	**$680 to $750))**

Transportation Figure 1

Estimated Future Transportation Revenue

Source	Estimated Revenue in Millions (2015-2020)	
	Low	High
Seattle Dedicated Transportation Funding [1]	$230	$510
STBD Funding [2]	$305	$325
Grants and Partnerships	$160	$240
General Fund and Cumulative Reserve Fund	$325	$400
Seawall and Waterfront Revenue	$420	$475
Total	**$1,440**	**$1,950**

Notes to Transportation Figure 1:
1 – Gas Tax, Bridging the Gap transportation levy, commercial parking tax, school zone camera revenue
2 – Vehicle License Fee, sales tax

Based on the revenue and expenditure estimates shown in Transportation Figures 1 and 2((~~4 and 5~~)), the City expects to have sufficient resources to fund the expenditure needs shown.

Transportation Figure 2

Estimated Future Transportation Expenditures

Category	Estimated Expenditures in Millions (2015-2020)	
	Low	High
Operations and Maintenance [1]	$350	$430
Major Maintenance and Safety	$325	$550
Mobility and System Enhancements [2]	$765	$970
Total	**$1,440**	**$1,950**

Notes to Transportation Figure 2:
1 – Does not include reimbursables
2 – Includes transit service purchases