

Recommended Actions

What are we going to do?

This Plan contains seven broad recommendations that will make a difference for bicyclists and pedestrians. These include (1) Adoption of Bicycle and Pedestrian Infrastructure Designs, (2) Designation & Adoption of “Bicycle Friendly Routes”, (3) Continued Construction of Neighborhood Links, (4) Providing More than the Minimum for Pedestrian Safety, (5) Railbanking for the Future, (6) Promotion of and Participation in Biking and Walking Programs, and (7) Creating a dedicated CIP fund for projects in the Walk & Roll Plan. Within each of the seven recommendations are pieces that can be done discretely to improve the overall nonmotorized function of and use of the infrastructure system. A short description of each recommended action is below, followed in the next section of the plan by recommended designs, and by the list of specific projects recommended to make Tukwila’s streets and neighborhoods more bicycle- and pedestrian- friendly. A set of goals and performance measures concludes the plan so that the City of Tukwila can measure how far it has come from today’s existing conditions, and track progress toward meeting the stated goals of the Walk & Roll Plan.

Adoption of Bicycle and Pedestrian Infrastructure Designs

Adopted design standards will result in a city with improvements that are (1) acceptable in terms of overall quality, and (2) acceptable in terms of consistency, so that the City as well as individuals will have the ability to construct separate sections with some assurance that when gaps are filled in to complete the bicycle and pedestrian network, there will be continuity within the system. With the adoption of these standards, the City can be assured that when an entire route is completed, it will be functional over its length.

Currently, minimal City direction or standards are available to guide pedestrian improvements and no guidance currently exists for bicycle infrastructure. The City has a “Development Guidelines and Infrastructure and Construction Standards” manual that will be amended to include the designs that are recommended for bicycle and pedestrian infrastructure contained in the plan.

The Bicycle and Pedestrian Infrastructure Design section provides a range of bicycle and pedestrian designs, and a recommended hierarchy that helps with the decision of which design to choose. The choice of a design will vary depending on site conditions, surrounding land uses, and other factors such as cost. The hierarchy is recommended in the order of the most preferable improvement option to the least preferable, based on factors such as safety and the type and forecasted number of users.

Designation & Adoption of “Bicycle Friendly Routes”

The recommended network of bicycle friendly routes is shown on the Bicycle Friendly Routes Map, **Figure 5**. Recommended improvements to complete this network include construction of bike lanes or trails. The recommended network connects the majority of Tukwila’s parks, schools, major employers, activity centers, and regional routes.

If a section of the bicycle network is indicated on a street proposed for capital improvement, then design and construction plans should include a bike lane. Separate capital project(s) will be needed to retrofit streets that have recently been improved or those not currently or likely to be listed as a capital improvement project. The first step in this process will be to hire an engineering firm to evaluate the design and construction options and costs on each of the routes.

Streets that are not identified as Bicycle Friendly Routes should be evaluated according to Complete Streets principles. Within school zones, all streets should be evaluated for pedestrian and bicycle facilities because of their use by a large number of children. This type of school zone evaluation can be supported through a Safe Routes to School program in which the school district partners with the city to identify design needs for the student population, and to obtain grant funding for design, construction, enforcement, and education.

Continue construction of Neighborhood Links

Connectivity of the street grid means that the greater the density of through-connections there is in an area, the easier it is to get from point A to point B. Increasing the number of safe through connections makes walking more convenient, thereby encouraging more people to walk.

The City of Tukwila currently requires construction of street frontage improvements (including curbs, gutters, and sidewalks) with new construction. Exemptions to this requirement exist in certain circumstances, including single-family residential development of less than five lots. In order to achieve development of a connected transportation system for pedestrians in all areas of Tukwila, the exemptions that are currently allowed should be re-examined.

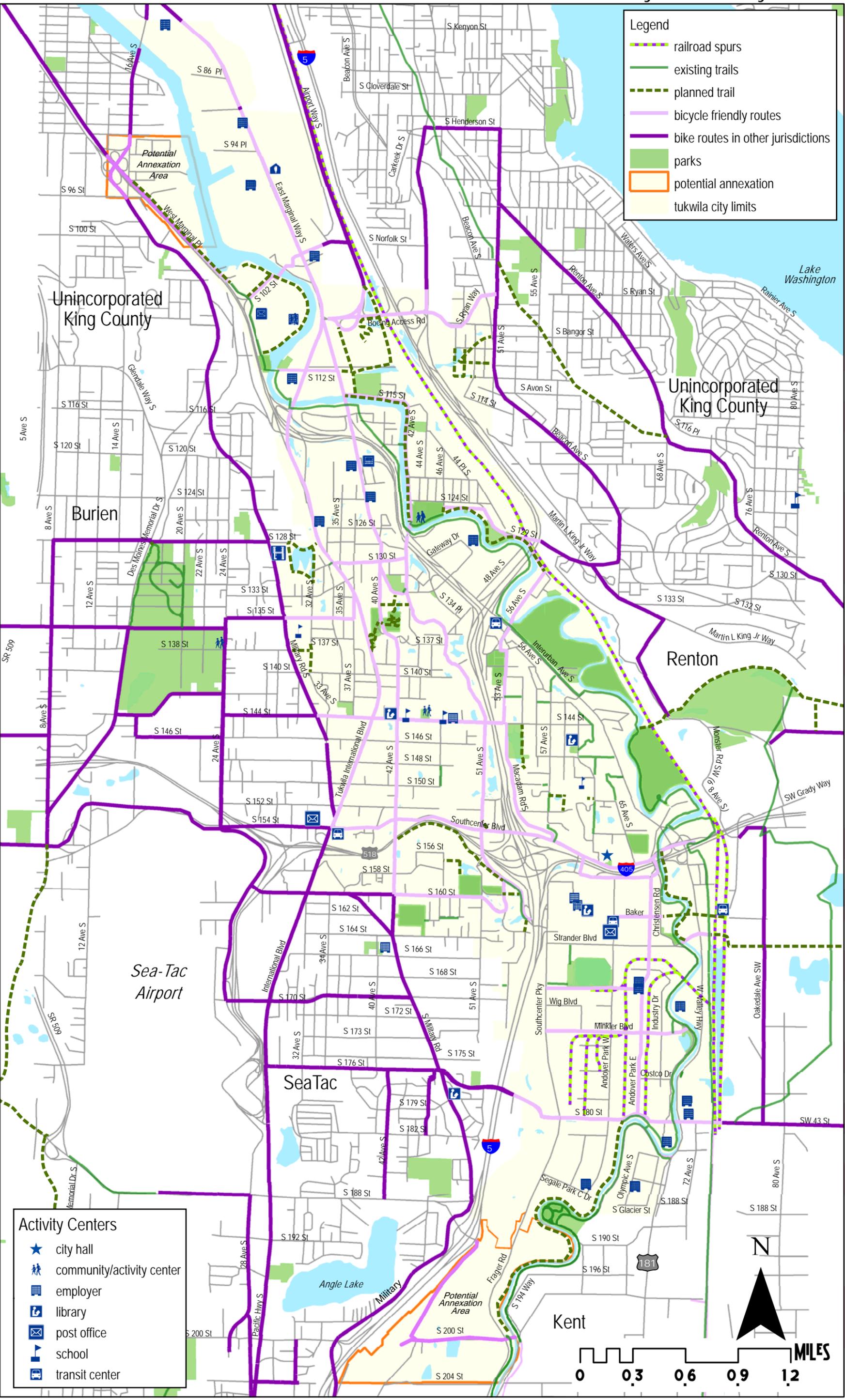
An important component of connectivity for pedestrians is the size of the block, or the length of a street segment between intersecting pedestrian pathways and/or intersecting streets. The more pedestrian pathways or intersecting streets that cut through the middle of blocks, the more options that pedestrians have to get to different destinations in an area, and the more walkable an area. Ideal block sizes to provide pedestrian connectivity range from 200 to 400 feet. Maximum block length should be limited to a maximum of 600 feet. Many blocks within Tukwila are longer in length than this maximum length. **Figure 6** illustrates the block and street pattern of the City and illustrates the lack of connectivity for pedestrians. Currently, the Tukwila standard for block length in residential areas is up to 1,000 feet, and in commercial and industrial areas it is up to 2,000 feet (TMC 17.20.030 (E), accessed on Oct. 1, 2008). As new development occurs, the creation of new pedestrian pathways and/or streets should be considered for improved pedestrian connectivity.

Unimproved street rights-of-way, utility easements, and railroad rights-of-way are golden opportunities to provide connectivity for pedestrians. In most residential neighborhoods within Tukwila, there are unimproved street rights-of-way and utility easements which represent opportunities to construct walking trails and/or through streets. The Neighborhood Maps provide details about areas where additional walking trails could be constructed.

Bicycle Friendly Routes

Legend

- railroad spurs
- existing trails
- planned trail
- bicycle friendly routes
- bike routes in other jurisdictions
- parks
- potential annexation
- tukwila city limits



Activity Centers

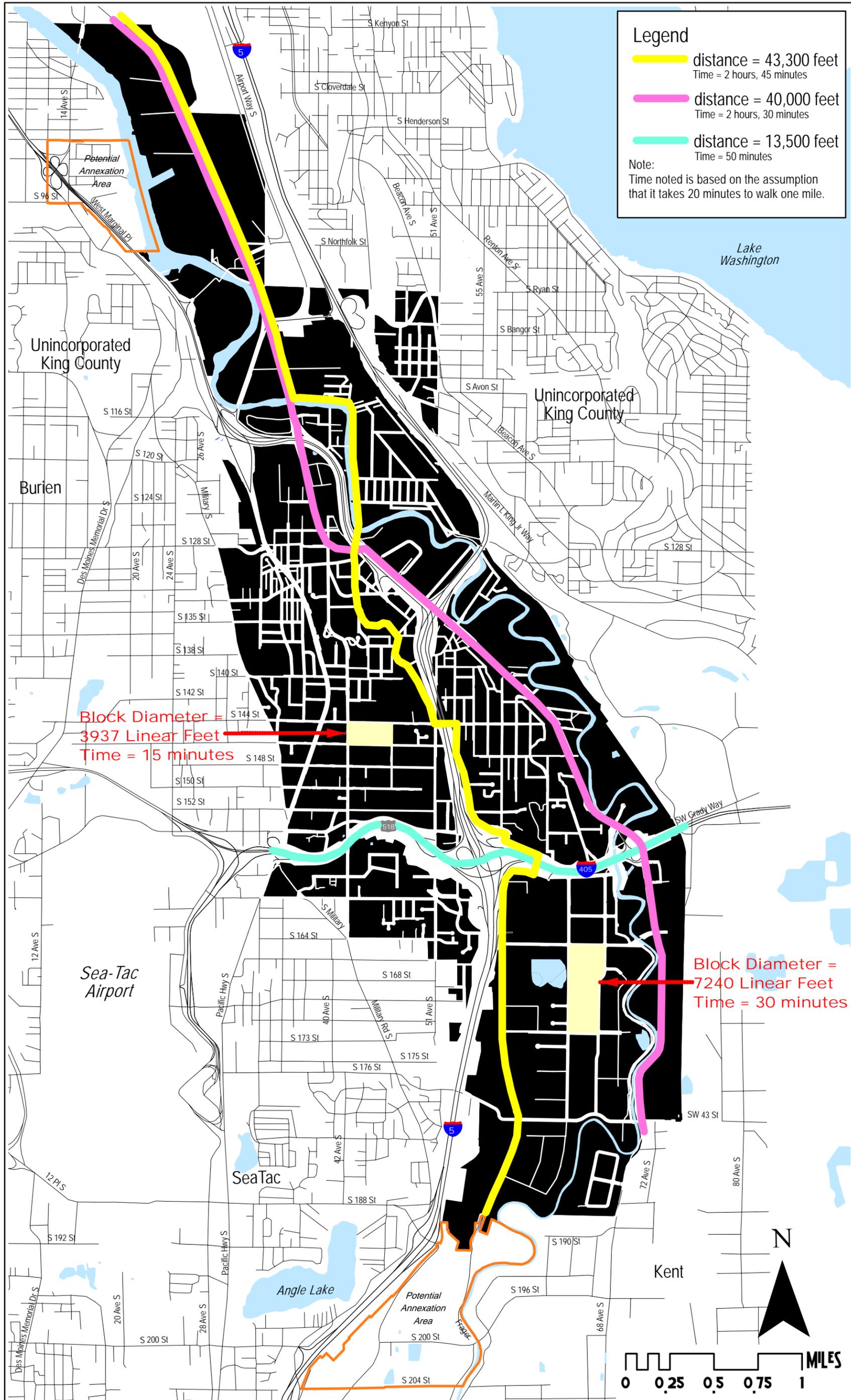
- city hall
- community/activity center
- employer
- library
- post office
- school
- transit center

Walkability Map (Using Existing Blocks)

Legend

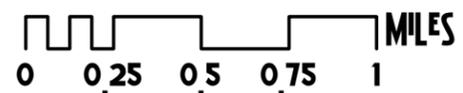
- █ distance = 43,300 feet
Time = 2 hours, 45 minutes
- █ distance = 40,000 feet
Time = 2 hours, 30 minutes
- █ distance = 13,500 feet
Time = 50 minutes

Note:
Time noted is based on the assumption
that it takes 20 minutes to walk one mile.



Block Diameter =
3937 Linear Feet
Time = 15 minutes

Block Diameter =
7240 Linear Feet
Time = 30 minutes



The scope of project improvements can range from the relatively simple need of clearing away overgrown brush, laying down a walking surface such as bark and placing bollards, to carrying out a geotechnical study in areas with steep slopes for the construction of stairs or installation of prefabricated stair systems. A potential incentive would be to designate a budget that would allow partnerships with developers during development, which could provide the extra boost needed to complete a missing link.

In Tukwila's urban center and the Manufacturing and Industrial Center, there are large utility corridors as well as railroad rights-of-way that represent opportunities for walking and/or multi-use trails. Railbanking, the process of preserving railroad rights-of-way for use as trails, is discussed under ***Railbanking for the future***, below.

More than the minimum for pedestrian safety

Safety and quality are the goals. Arterials connect people to major destinations within this city as well as to destinations in adjacent cities, and they tend to have higher speeds and traffic volumes than local access streets. Therefore, providing pedestrian and bicycle facilities along arterial streets helps make trips along arterial streets, which are often the most direct routes, convenient and safer. Figure 3, a map of arterials in Tukwila and Table 2, list the remaining arterials without sidewalks in the City.

In order to make a walking trip feel safe as well as comfortable, City standards should be changed to require landscape buffers along arterial streets where posted speeds are 30 miles per hour or higher. Secondly, driveway aprons that allow the sidewalk through a driveway to remain at a constant grade (see Infrastructure Designs section) should be used at parking lot entrances. This requirement could be modified if the driveway will be the location of a future street or for some other reason that makes this option infeasible .

In addition to adopting a standard that creates a comfortable walking environment, the creation of a prioritized project list is recommended. Although funding is difficult, there are a number of grant programs such as Safe Routes to Schools that may be able to contribute to short lengths of missing sidewalks. The need and design should be highlighted and prioritized should funding sources such as grants become available.

Railbanking for the future

It is time to start Tukwila's second generation of multi-use paved trails. Planning for the Green River and Interurban Trails was started 30 years ago and they are close to complete. It is time to be adding arms, thereby connecting the trail system to City neighborhoods and creating new corridors. Because of the high volume of cars and trucks and the high number of turning movements in and out of driveways within the urban center and the industrial center, alternative routes for bicyclists and pedestrians are important goals for these areas.

The neighborhood maps for the Southcenter urban center and the Manufacturing and Industrial Center (MIC) show railroad spur locations, as well as the small number of parks and open space. The potential abandonment of railroad spurs as routes are no longer viable represents an opportunity to preserve railroad right-of-way for use as multi-use trails.

The goal for the urban center is for a livelier 24-hour neighborhood with housing and more employment. These people-intensive uses need to have public amenities like parks and open space. To make the area more walkable, a system of trails could enhance the street network to connect parks and open space with employers, retail, and new housing development in the urban center. Since existing railroad spur alignments within the urban center are located in between street right-of-way (with the exception of a few crossing areas), future conversion of existing railroad spurs to multi-use trails has the potential to increase the density of pedestrian and bicycle connections in the urban center.

In the MIC, railroad spurs run adjacent to the street right-of way of East Marginal Way. Providing a connection to Seattle and major employers, East Marginal Way is a major route for bicycles as well as automobiles. With high vehicle speeds and heavy truck traffic, East Marginal Way is an area of conflict between bicyclists and motorists. The tracks that run along East Marginal Way, if abandoned, could be used as additional right-of-way to build bike lanes, as well as to fill in some of the missing gaps in sidewalks along each side of the street.

Track locations within the Southcenter urban center have been identified previously as opportunity areas for the construction of multi-use pedestrian and bicycle trails. While it is generally known that some of these spurs have been abandoned, further research is needed to find out the ownership and disposition status of each specific spur. Relationships among the City of Tukwila, interest groups, and railroad companies need to be developed, and notice of interest in preserving these corridors as trails needs to be provided to the Union Pacific Railroad (who operate in the urban center), and to Burlington Northern Santa Fe (who own the corridor along East Marginal Way S).

After abandonment, the railroad company usually removes tracks and ties for salvage and regrades the corridor with the original ballast left behind from the railbed. Many trails are later surfaced with asphalt, crushed stone, wood chips or another material appropriate for the intended trail uses. Ideally, bridges and tunnels are left intact so the trail agency need only add wood decking, appropriate railings and other safety features. Street crossings must be properly striped and signed for both trail and street users.

Rail-trails are long-term projects and require the commitment of a staff person to pursue preservation of these track areas for future trail use. Funding for title research, persistence, and a written record to the railroads could have big results in the long term, save millions of public dollars, and is recommended as a strategy that Tukwila should pursue for future development of multi-use trails. This recommendation will result in the satisfaction of capitalizing on existing opportunities, and in creation of a trail system that would be incredibly difficult and costly to develop starting from scratch.

Promotion of and Participation in Biking and Walking Programs

The City currently implements portions of a good program. For example, City standards require that bicycle racks be included in new commercial development, and design guidelines suggest that developers construct sidewalks to building entrances from the streetfront. An array of small operational and programmatic actions occurs on a daily

basis by the City and private developers that create a system that supports the pedestrian and bicyclist.

During discussions with residents and employees of the City about this Plan, points of conflict were identified. For example, the ten foot wide Green River Trail narrows to six feet with no shoulders on a bridge over the Green River. This bridge accommodates walkers and bicyclists and is a point of conflict. There are a couple of potential solutions such as rerouting the bicycle traffic to the street or providing signage asking bicyclists to dismount to cross the narrower sidewalk/trail portion of the bridge. This situation illustrates the need for continual efforts to educate the different users on how to share facilities.

As noted in the survey of CTR employers, lack of shower facilities are a deterrent to riding a bike to work. The City could encourage developers to include showers within buildings with expected high employment numbers and include pedestrian weather protection such as awnings from the public sidewalk to building entrances. Required parking could be reduced if showers for employees are included in the development. A change in the City code would be necessary to implement this.

Participation in walking and biking programs could be increased. Additional staff dedicated to promoting participation in bicycle programs, such as the bicycle rodeo, Bike to Work events, Walk to School events, the Hazelnut and City web site, and other partnerships would highlight City-sponsored programs and increase participation.

Creation of a Dedicated CIP Fund for Projects in the Walk & Roll Plan

A dedicated budget in the CIP for projects in the Walk & Roll Plan would focus the City's efforts on a list of prioritized nonmotorized improvements, and would demonstrate Tukwila's commitment to building a connected nonmotorized transportation network. In the past, sidewalks and walkways were constructed through a Residential Improvements CIP budget item, the goal of which was to revitalize neighborhoods through residential street, sewer, and water improvements. Construction of sidewalks was just one component of the Residential Improvements CIP fund, and sidewalks or other nonmotorized facilities are not included in every project that receives funding through the Residential Improvements program. For several years, the Residential Improvements CIP item has been unfunded.

The goal of a Walk & Roll CIP component would be to focus on improving the City's nonmotorized transportation network through design and construction of sidewalks, bike lanes, and trails. The demonstrated level of commitment that a CIP fund for Walk & Roll projects represents the additional benefit of bolstering the City's efforts to obtain grant funding for nonmotorized transportation projects.

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