

WILBURTON CENTER SEGMENT & TOTEM LAKE CONNECTOR

NEW CONNECTIONS FOR EASTSIDE INNOVATION CENTERS



TIGER Application

**DUNS Number/CCR Registration:
12.080.6745, CCR Cage#: 5P3X3**

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WILBURTON CENTER SEGMENT & TOTEM LAKE CONNECTOR

NEW CONNECTIONS FOR EASTSIDE INNOVATION CENTERS



Wilburton Center Segment & Totem Lake Connector –
 keystone projects along the Eastside Rail Corridor connecting the
 innovation centers east of Seattle with a multi-purpose, non-motorized trail.

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Note: Hyperlinks to online resources are shown [in underlined green text](#).



PROJECT DESCRIPTION & LOCATION

Located in western Washington State, east of Seattle and Lake Washington, this project constructs two interconnected components of the 42-mile, Eastside Rail Corridor: The **Wilburton Center Segment** and the **Totem Lake Connector**. These projects will construct new, non-motorized trail in a rapidly densifying urban center, and a pedestrian bridge over a busy intersection. Both will offer new connections to the innovation centers located along the Eastside Rail Corridor, a regional, rails-to-trails right of way that crosses two counties and six cities in eastern King and southeastern Snohomish Counties in Washington State.

The Eastside Rail Corridor traverses the 1st and 9th Congressional Districts. The Wilburton Center Segment is in the City of Bellevue and the Totem Lake Connector is in the City of Kirkland.

RESOURCE

A video overview of the Wilburton Center Segment and Totem Lake Connector can be viewed on the [project website](#).

Both components are currently in the preliminary engineering phase with final, ready-to-advertise plans, specifications and engineers estimate ready for construction expected in early 2019.

These projects were selected because they will:

- Connect to Sound Transit, light rail and rapid ride bus lines currently under construction and scheduled to open in 2023;
- Leverage significant economic re-development efforts funded by the Cities of Kirkland and Bellevue in the Totem Lake Urban Center, Yarrow Bay, Wilburton and Spring Business Districts;
- Complement freeway expansion projects recently completed and underway on Interstate-405;
- Provide significant safety and mobility benefits for the traveling public;
- Eliminate pedestrian delays and a barrier at a high traffic volume intersection; and,
- Construct the most heavily urbanized, highest-projected use, and historically iconic portions of the trail.

The Seattle metropolitan area is the fastest growing big city in America with estimates of more than one million people expected to move here by 2040. As people move here, traffic has accompanied growth with increases in volumes, pedestrian crash rates and congestion-related delays in travel times. This area is also home to the highest rising housing costs in the nation, forcing commuters to move further from urban centers and to rely on transit and other alternatives for more economical and reliable commuting options. Current, projected, and increasing transit ridership is creating additional demand for non-motorized connections to reach transit and take people the last mile to their businesses, homes, schools, services and stores.

The Eastside Rail Corridor and the two components selected for this application,



The region's rapidly growing populations are creating demand for alternative transportation options.

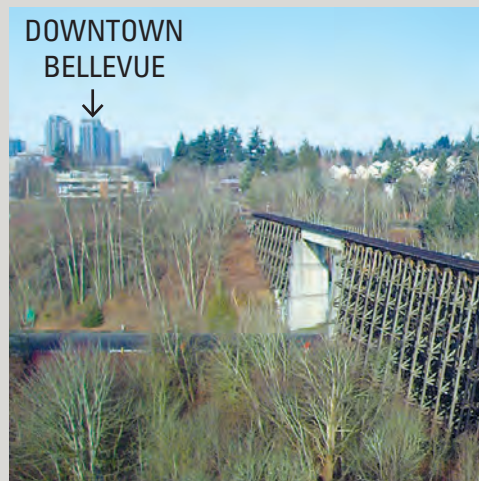


are crucial to those connections. Other improvements, being constructed within and along the same corridor, by the Washington State Department of Transportation and Sound Transit (a regional transit authority), will contribute toward developing a north-south, non-motorized spine to the innovative triangle of cities that includes Bellevue, Kirkland and Redmond – home of Microsoft.

Component 1 – Wilburton Center Segment: The Wilburton Center Segment will construct 2.64 linear miles of multipurpose trail corridor through the Wilburton District in downtown Bellevue. The project runs south, from NE 8th Street and connects to the east-west trail system just north of I-90. The trail will be a paved cross section, 12-14 feet wide with two-foot wide gravel shoulders. Where additional width allows, an adjacent six-foot wide soft surface will be included for joggers and walkers seeking an alternative to pavement. Between 2,000 and 3,000 users are projected to use these segments daily – matching or exceeding the number of people currently using other regional trails in the area including the Burke-Gilman Trail through the University of Washington campus in Seattle.

In the middle of the Wilburton Center Segment, the Washington State Department of Transportation will be constructing a new pedestrian, highway overpass over I-405 at what is called the Wilburton Gap. I-405 is one of the Puget Sound Region’s largest highways surpassing 195,000 cars and trucks per day. State funds are fully funding the overpass, removing another barrier for non-motorized travelers that connects the Wilburton Center Segment to the Eastside Rail and Cross-Kirkland corridors to the north. Design for the Wilburton Gap is underway and the overpass is scheduled to be completed in 2020.

The central feature of the Wilburton Center Segment is the historic, Northern Pacific Railway Wilburton Trestle, the longest wooden trestle in the Pacific Northwest. Originally built in 1904, this 1,000-foot-long and 100-foot-high train trestle will be restored and repurposed into an elevated trail for pedestrian and bicycle use. Once open to the public, the Wilburton Trestle will become an iconic tourist destination offering spectacular views of the City of Bellevue and Lake Washington. The Washington State Legislature, the City of Bellevue, King County Parks and private health care company, Kaiser-Permanente have made funding commitments to restore this historically significant link of the trail corridor that leads directly into Bellevue’s downtown core.



Built in 1904, the restoration of the Wilburton Trestle will fill a key commuter transportation gap.

The City of Bellevue is the State of Washington’s fifth largest city and is home to one of our nation’s largest and most rapidly growing innovation centers. Corporations such as e-Bay, Microsoft, Hewlett Packard, Oracle, Expedia, CH2M, Eddie Bauer, Coinstar, Ericsson, and T-Mobile have offices or corporate headquarters located adjacent to or within a mile of these trail improvements. These densely located innovative, high-tech, internet technology and start-up businesses employ younger workers that rely on transit and non-motorized connections – trading vehicular travel and promises of congestion for more reliable and healthier commuting options.



Component 2 – Totem Lake Connector: The Totem Lake Connector is a non-motorized, multi-modal bridge that will provide a safe and reliable pedestrian and bicycle crossing over a busy, five-way, intersection that carries upwards of 50,000 vehicles daily. At this location, the regional trail crosses two legs and nine lanes of traffic, in less than 350 feet, to deliver non-motorized users to the Totem Lake Urban Center and continuation of the corridor, northward into the Woodinville Wine District, City of Redmond, City of Woodinville, and into rural Snohomish County. Kirkland’s Totem Lake Urban Center is experiencing tremendous re-development with 608,650 square feet of commercial space currently in the construction and permit stages.

The area is home to large and small corporations including the Washington location of Google. Evergreen Hospital is located here in addition to Costco, PACCAR’s Kenworth Truck Company, Astronics Advanced Electronic Systems, Wave Broadband and Games, Tableau Software, Bluetooth Special Interest Group and transportation data company Inrix. The city has already constructed and opened 5.7 miles of the Eastside Rail Corridor, known locally as the Cross-Kirkland Corridor. The Cross-Kirkland Corridor is heavily used with an average of 560 bicyclist and pedestrian users per day in 2017. The Totem Lake Connector will catalyze greater trail use, reduce pedestrian and bicycle collisions and provide utility to an otherwise orphaned segment of this regional trail by connecting people with a vibrant and growing commercial and light manufacturing area. It will also facilitate a more seamless connection from rural Snohomish County to jobs and commerce.

Funding and partnerships with both private and public sectors demonstrate strong support for this project.

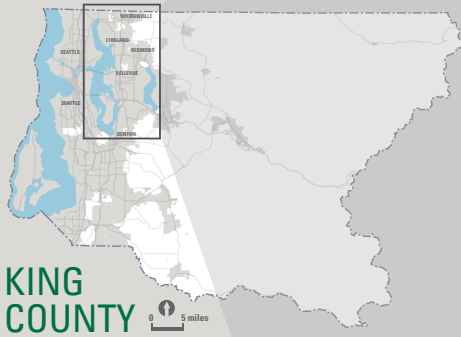
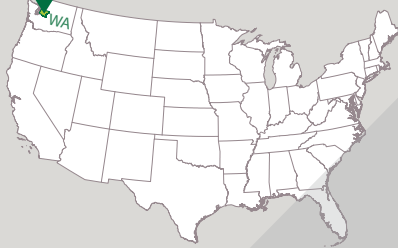
Federal funding has already been awarded for the right-of-way acquisition, and preliminary engineering phases. Preliminary engineering and design for both the Wilburton Center Segment and the Totem Lake Connector are currently underway. Right of way has been completed, awaiting certification once construction funding is obligated, for projects on the corridor. If TIGER funds are awarded, construction funding can be obligated to begin work in early 2019 and expended well before the 2025 deadline.

The construction of the Totem Lake connector will provide for a much needed safer connection for walking and biking.

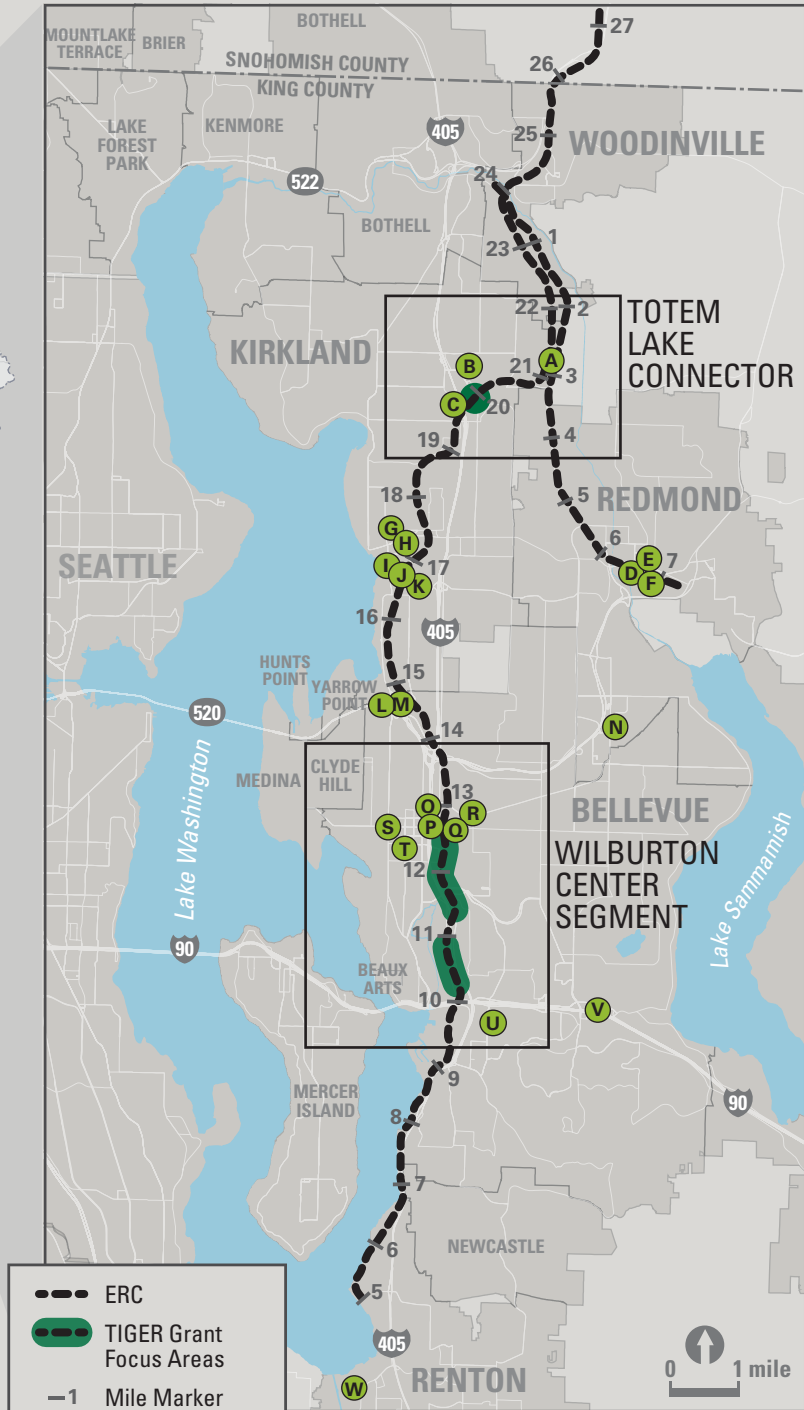


THE EASTSIDE RAIL CORRIDOR: A NEW WAY TO CONNECT THIS INNOVATIVE REGION

KING COUNTY



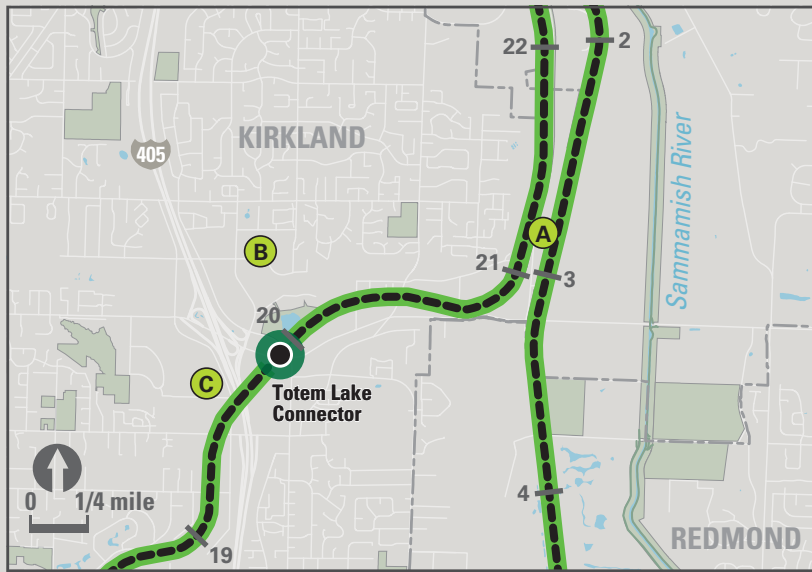
EASTSIDE RAIL CORRIDOR



NEW CONNECTIONS FOR EASTSIDE INNOVATION CENTERS



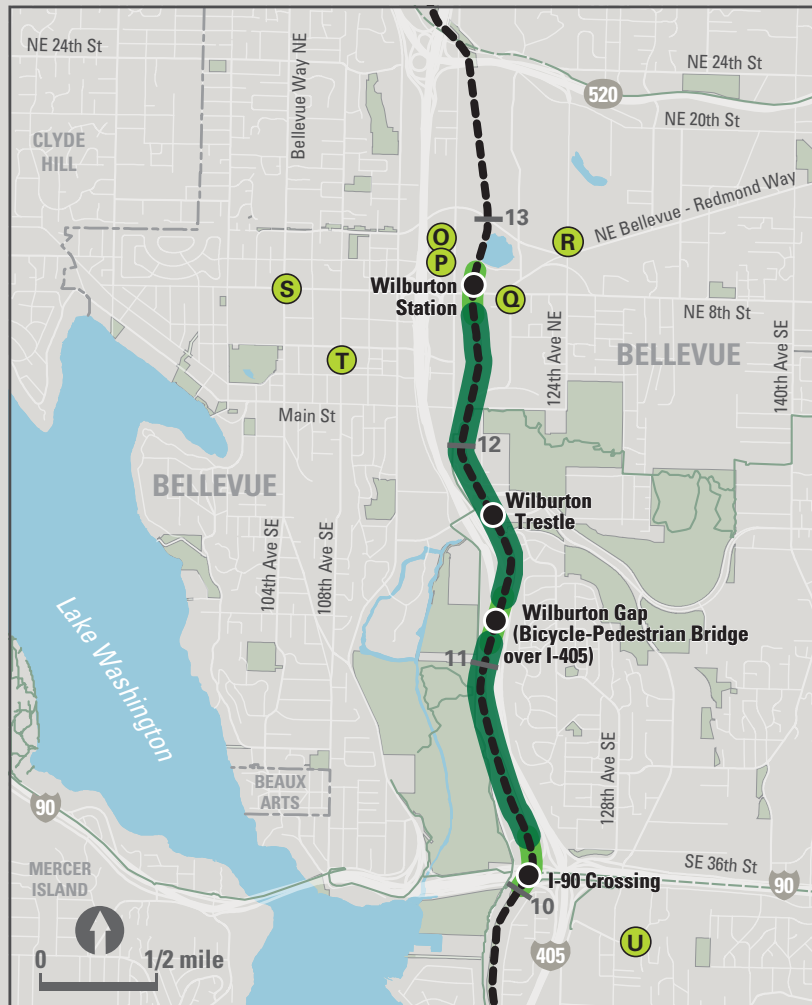
TOTEM LAKE CONNECTOR



LARGE BUSINESSES IN THE CORRIDOR

- A** Astronics Advanced Electronic Systems
- B** Evergreen Healthcare
- C** Fred Meyer #391
- D** Lake Washington School District
- E** Redmond Town Center
- F** AT&T Corporate
- G** Tableau Software
- H** Wave Broadband
- I** Nytec
- J** Jemco Components & Fabrication
- K** Google
- L** Inrix Americas Headquarters
- M** Kenworth Truck Company
- N** Microsoft
- O** Overlake Hospital Medical Center
- P** Kaiser Permanente
- Q** Uwajimaya
- R** Gix Institute, University of Washington
- S** Eddie Bauer Corporate Headquarters
- T** Expedia Headquarters
- U** T-Mobile Headquarters
- V** REI Headquarters
- W** Boeing

WILBURTON CENTER SEGMENT



- A** Large Business
- Eastside Rail Corridor (ERC)
- TIGER grant focus areas
- Funded concurrent projects
- 10** ERC mile marker
- Trail
- Planned trail
- Roads
- Park



FUNDING PARTNERS

Washington State



- Allocated funding in the transportation bill “Connecting Washington” for Wilburton Connections
- Designing and constructing the Wilburton Gap over I-405

\$2.5 million match contribution

King County



- Lead agency with significant experience in public works contracting, construction and administration of FHWA funds
- Recipient of the successfully constructed, TIGER II funded, South Park Bridge
- Owner of 16.7 miles of the Eastside Rail Corridor
- Responsible for over 175 miles of regional and 26 miles of backcountry trail, 200 parks, and 28,000 acres of open space in King County

\$10.3 million match contribution

City of Kirkland



- Partnering agency with a population of 83,000 located in eastern King County
- Jurisdiction and owner of Cross- Kirkland Trail, where the Totem Lake Connector will cross the Totem Lake Boulevard / NE 124th Street intersection
- Owner of 5.75 linear miles of the Cross-Kirkland Corridor

\$4 million match contribution

City of Bellevue



- Partnering agency with a population of 140,700 located in eastern King County
- Jurisdiction where the Wilburton Center Segment is located

\$2 million match contribution

Kaiser-Permanente



- One of the nation’s largest not-for-profit health plans serving 11.8 million members nationally and 677,000 members in Washington State
- Annual operating revenue of \$64 billion in 2016
- Washington offices are located adjacent to the Wilburton Center Segment

\$0.5 million match contribution

Puget Sound Regional Council



Puget Sound Regional Council

- Municipal Planning Organization for Central Puget Sound serving four counties, 82 cities and towns, transit agencies, the state transportation department and tribal governments
- Has made several FHWA awards for preliminary engineering and right-of-way phases of this project

\$19.3 Million

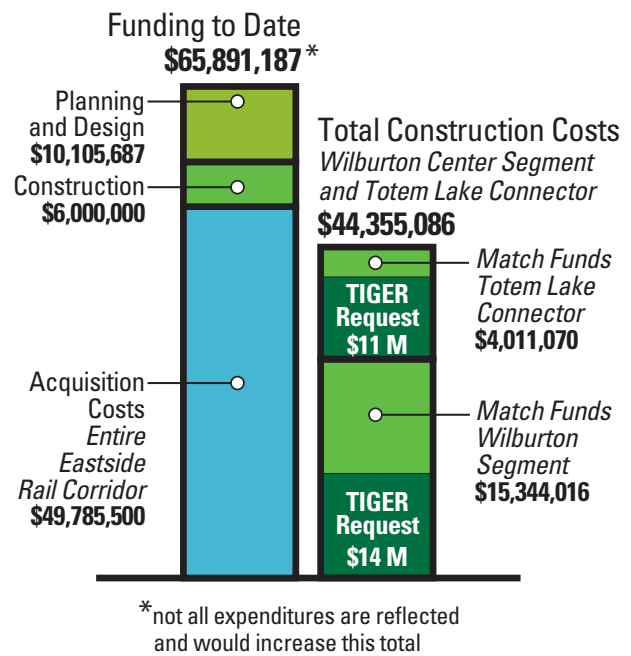
Total Partner Funding Support

GRANT FUNDS

TIGER Request: \$25,000,000 of TIGER discretionary funding is being requested. This award is the final amount needed for the construction of the Wilburton Center Segment and the Totem Lake Connector.

- Design plans are nearing 60% complete for the Totem Lake Connector and the consultant contract to begin design has been awarded for the Wilburton Center Segment.
- Right of way for the entire Eastside Rail Corridor has been reviewed by the Washington State Department of Transportation, awaiting obligation of construction funds. The [WSDOT letter](#) that verifies this is available to review. [Letters and documentation outlining financial commitments](#) from funding partners are available to review.

TIGER Request Project Funding Context



The table below illustrates funded and/or ongoing project phases for various elements and segments of the Eastside Rail Corridor. It includes the initial acquisition costs and ongoing preliminary engineering and construction efforts being undertaken by the Washington State Department of Transportation for the Wilburton Gap where the trail corridor crosses Interstate-405. The table also includes preliminary engineering funding for this TIGER request: The Wilburton Center Segment and the Totem Lake Connector.

| Acquisition of Eastside Rail Corridor | | | | |
|---------------------------------------|--|---------------|---------------------|--------------|
| Other Funded Trail Components | Funding Source | Project Phase | Jurisdiction | Amount |
| | Federal Surface Transportation Program | Right-of-Way | | \$1,400,000 |
| | Local Government | Right-of-Way | | |
| | King County Parks | | King County Parks | \$15,285,000 |
| | City of Kirkland | | City of Kirkland | \$5,000,000 |
| | City of Woodinville | | City of Woodinville | \$1,100,000 |
| | City of Redmond | | City of Redmond | \$10,000,000 |
| | Sound Transit | | Sound Transit | \$13,500,500 |
| | Snohomish County | | Snohomish County | \$3,500,000 |
| | Total Acquisition - Eastside Rail Corridor \$49,785,500 | | | |

Tables continued on next page



| Other Funded Trail Components | Totem Lake Connector | | | |
|--|--|-------------------------|---------------------|---------------|
| | Funding Source | Project Phase | Jurisdiction | Amount |
| | Federal Surface Transportation Program | Preliminary Engineering | | \$923,000 |
| | Local Government City of Kirkland | Preliminary Engineering | City of Kirkland | \$1,719,030 |
| Total Planning & Design – Totem Lake Connector: \$2,642,030 | | | | |

| Other Funded Trail Components | Wilburton Center Segment | | | |
|--|--|-------------------------|---------------------|---------------|
| | Funding Source | Project Phase | Jurisdiction | Amount |
| | Federal Surface Transportation Program | Preliminary Engineering | | \$2,000,000 |
| | Local Government King County Parks | Preliminary Engineering | King County Parks | \$3,545,590 |
| Total Planning & Design – Wilburton Center Segment: \$5,545,590 | | | | |

| Other Funded Trail Components | Wilburton Gap | | | |
|---|---|-------------------------|---------------------------------------|---------------|
| | Funding Source | Project Phase | Jurisdiction | Amount |
| | State WA State Department of Transportation | Preliminary Engineering | WA State Department of Transportation | \$430,000 |
| | | Construction | | \$6,000,000 |
| Total Planning, Design & Construction – Wilburton Gap: \$6,430,000 | | | | |

| Other Funded Trail Components | Wilburton (aka Hospital) Station Improvements | | | |
|--|--|-------------------------|---------------------|---------------|
| | Funding Source | Project Phase | Jurisdiction | Amount |
| | Federal Surface Transportation Program | Preliminary Engineering | | \$350,000 |
| | Local Government King County Parks | Preliminary Engineering | King County Parks | \$1,138,067 |
| Total Planning & Design – Wilburton Station Improvements: \$1,488,067 | | | | |

TOTAL EASTSIDE RAIL CORRIDOR FUNDING INVESTMENT TO DATE: \$65,891,187



The tables below illustrate how TIGER funds would be allocated to the construction phase for both the Wilburton Center Segment and the Totem Lake Connector components of this application.

Local, state and private funds yield a 44% match to the TIGER funds being requested.

| TIGER Request for Construction Funding – Component 1: Wilburton Center Segment | | |
|---|------------------------------|-----------------------------|
| Funding Source | Project Phase | Amount |
| Federal TIGER Request* | Construction | \$14,000,000 |
| State WA State Department of Transportation – Local Programs** | Construction | \$2,500,000 |
| Local Government King County Parks City of Bellevue** | Construction Construction | \$10,344,016 \$2,000,000 |
| Private Kaiser-Permanente** | Construction | \$500,000 |
| Total Construction – Wilburton Center Segment: \$29,344,016 | | |

* pending funds ** funding for Wilburton Trestle

| TIGER Request for Construction Funding – Component 2: Totem Lake Connector | | |
|---|----------------------|---------------------|
| Funding Source | Project Phase | Amount |
| Federal TIGER Request* | Construction | \$11,000,000 |
| Local Government City of Kirkland | Construction | \$4,011,070 |
| Total Construction – Totem Lake Connector: \$15,011,070 | | |

* pending funds

TOTAL CONSTRUCTION COSTS = \$44,355,086

This combination of funding for these components yields a 44% match to the TIGER funds being requested, demonstrating the depth of local financial support for this project.



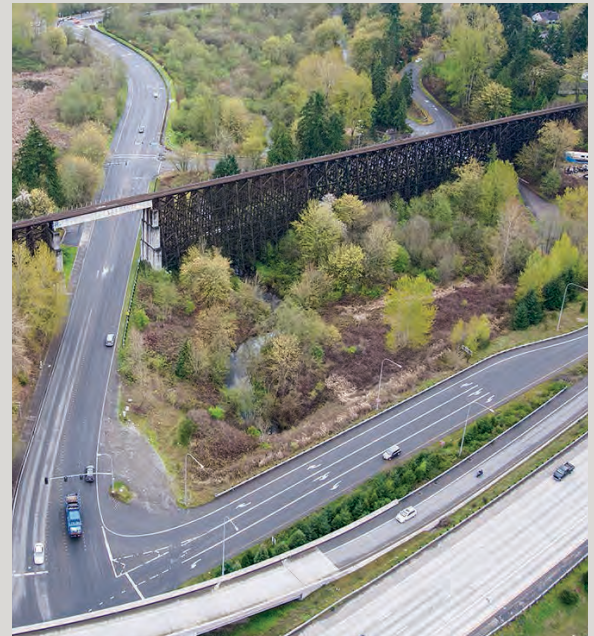
SUMMARY OF BENEFITS

Construction of the Totem Lake Connector and the Wilburton Center Segment will encourage additional mixed-use development and improve the quality of life in Bellevue and Kirkland. The trail will provide a north-to-south connection through six cities and two counties connecting hundreds of thousands of people who live and work in these downtown centers. The project will connect growing numbers of commuters to transit options including, the soon to be opened, 14-mile East Link Light Rail Extension and the Wilburton Station. This trail corridor will make non-motorized connections with transit that will in turn connect with the region.

Construction of these new connections for eastside innovation centers offers numerous benefits for our nation, and the Pacific Northwest.

Component 1: Wilburton Center Segment

- Between \$109 million to \$4.1 million in economic benefit depending on the discount rate and property value assumptions based on proximity to a non-motorized trail.
- Restoration and repurposing of the iconic, 100-foot-high, Wilburton Trestle – the longest wooden trestle in the Pacific Northwest.
- New, non-motorized connection for the 50,000-current transit riders using bus routes that travel and stop within a mile of the trail corridor.
- New non-motorized, last mile connection for transit riders who will use the East Link Light Rail at the Wilburton Station and the Bellevue Transit Center located less than half a mile from the Wilburton Center Segment.



Component 2 - Totem Lake Connector

- Between \$37 million to \$1.6 million in economic benefit depending on the discount rate and property value assumptions based on proximity to a non-motorized trail. New non-motorized connection for the 560 average daily users of the Cross-Kirkland Corridor.
- New safe connection over the busy five-way, Totem Lake Boulevard intersection – crossing two legs and nine lanes of traffic averaging over 50,000 vehicles daily.
- Walking and biking connection to the 1,015 businesses and 1,423 homes located in the Totem Lake Business Center.



PRIMARY CRITERIA

SAFETY

Component 1 – Wilburton Center Segment

The Wilburton Center Segment creates new dedicated non-motorized trail connecting businesses, transit and schools in the heart of downtown Bellevue.

Currently, there are no dedicated, non-motorized facilities linking the downtown Bellevue core with its neighboring communities, current and future transit stations, and other regional trails. The Wilburton Center Segment creates a new major north-south non-motorized connection through Bellevue and to other trails. The project will remove barriers and impediments to safe non-motorized travel, thereby reducing pedestrian, bicycle and vehicular crash rates.

All 2.64 miles of the Wilburton Center Segment are in the City of Bellevue providing safer connections to seven parks and the Woodridge Elementary School. Traffic counts for area urban arterials are high and the Wilburton Center Segment will offer non-motorized users a respite from crossing busy intersections and traveling alongside thousands of cars per hour.

The City of Bellevue supports the internationally-developed, Vision Zero Initiative to reduce traffic deaths and serious injury collisions to zero by the year 2030. The city passed a resolution and an ordinance amending its comprehensive plan toward this effort. One of this effort's near-term action items has been to implement projects identified in the city's [Pedestrian and Bicycle Implementation Initiative](#). The non-motorized trail being proposed in the Wilburton Center Segment is identified as a crucial north-south corridor that will connect with other bicycle and non-motorized routes in the city. Trail components will reduce serious injury crashes and fatalities between people, bicycles, cars and trucks.

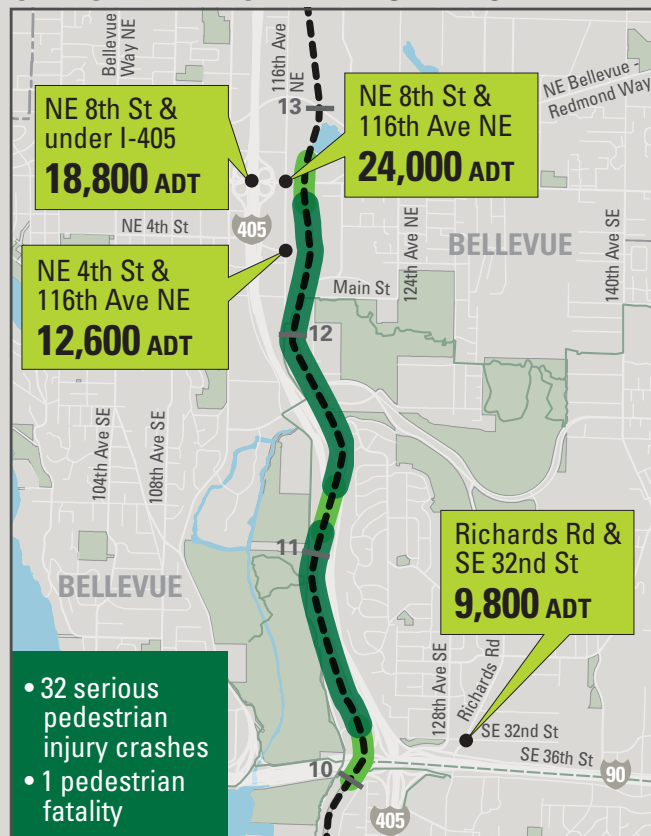
From 2012 to 2016, there were 32 serious injury crashes between pedestrians and vehicles in the City of Bellevue. Most of these occurred in Bellevue's downtown core and the area immediately surrounding

City of Bellevue – Vulnerable Population Statistics Within the Project Corridor

| Population Type | Percentage |
|-----------------|------------|
| Disabled | 2-10% |
| Poverty | 0-13% |
| Elderly | 8-19% |
| Minority | 19-29% |

[data source](#)

CITY OF BELLEVUE TRAFFIC AND SAFETY



the Wilburton Center Segment. During this same five-year period, there was a pedestrian fatality less than a half mile from where the Wilburton Segment crosses NE 12th Street. The closest identified bicycle route to the Wilburton Center Segment is to the west of I-405 along 118th Avenue SE. Between 2012-2016 there have been six serious recorded injuries here. At this same location, bicycle counts taken in 2010 show upwards of 30 bicyclists an hour over a three-hour period. At another location close by, (108th Avenue NE just south of NE 4th) counts for the AM and PM peak periods were between 150-175 pedestrians per hour.

Pedestrians, skaters and cyclists will choose a multi-purpose trail over city sidewalks and streets because it will be safer and faster for them to reach employment sites. Construction of the Wilburton Center Segment will offer a safer alternative for non-motorized users in the downtown core of one of our state and region’s largest innovation centers. After its construction, Bellevue pedestrian crash incidents should decrease.

Component 2 – Totem Lake Connector

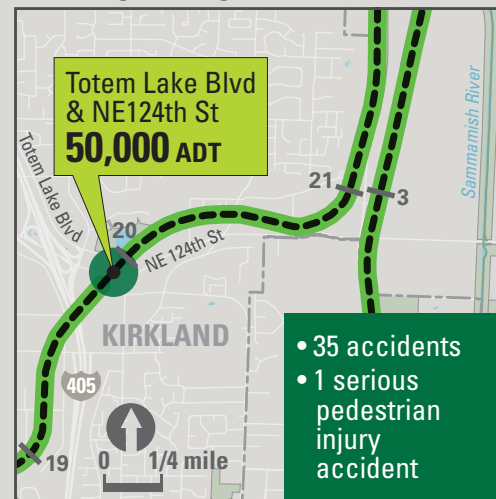
Difficult Non-Motorized Crossing at the 50,000 average daily traffic Totem Lake Boulevard & NE 124th Intersections

Commuters preferring efficient, vehicle-free access to community destinations such as schools, parks, businesses, and public transit regularly use the Cross-Kirkland Corridor as their preferred route. Yet, they are currently forced to negotiate two busy crossings at 124th Avenue and Totem Lake Boulevard. At this intersection, non-motorized users must cross two legs and nine lanes of traffic in less than 350 feet. This is one of Kirkland’s busiest intersections, with traffic volumes exceeding 50,000 vehicles per day.

Safely navigating this intersection crossing and waiting for the signal to cross, deters walkers and bicyclists from frequenting commercial and retail businesses in the Totem Lake Urban Center. Those that do, cause vehicular and freight-traffic delays while left and right turning movements must wait for pedestrians and bicyclists to pass.

The intersection is configured at an angle to the trail creating an uninviting, and inefficient environment for users to travel. The current configuration makes access to the trail difficult. The vehicle travel lanes are close to existing sidewalks, exposing pedestrians and bicyclists to fast moving turning vehicles and leaving them vulnerable. Providing a grade separated, pedestrian bridge for

CITY OF KIRKLAND TRAFFIC AND SAFETY



Currently the Cross-Kirkland Trail meets the intersection just left of the METRO bus.



non-motorized users will enhance the experience, fill a gap, and reduce modal conflicts between non-motorized and motorized users.

Between 2014-2016, there were 35 accidents and one serious injury, pedestrian accident along NE 124th Avenue close to the Totem Lake Boulevard intersection. As development in the Totem Lake Urban Center continues, the number and rate of pedestrian accidents will rise as more people living and working in the area will be subjected to the dangers associated with crossing at this intersection.

Sound Transit and King County METRO ridership data show that over 17,000 average daily riders frequent the 17 bus routes that stop within a mile of the Totem Lake Connector. Huge increases in transit ridership have occurred over the past year in the Puget Sound Region as population growth and development have exacerbated traffic congestion, creating unreliable commute options and long commute times. The Totem Lake Connector will provide safety and connectivity for commuters who depend on walking or cycling – particularly for the last mile from bus stops to jobs, health care, services and stores.

During every month in 2017 so far, the City of Kirkland surveyed users on the Cross-Kirkland Corridor south of the Totem Lake intersection. Trail user counts were high with a median of 665 people walking, running, bicycling or skating on the trail on weekdays and over 1,000 on the weekends.

Given the high pedestrian use, crossing delays, and the safety impediment posed by this intersection, construction of a pedestrian bridge to link already high trail usage with the commercial and essential services located in the Totem Lake Business District would improve part of the transportation system. Design for the Totem Lake Connector will soon be at a 60% level of completion. Designs call for a structure with ample approaches, at a reasonable grade, built high enough above traffic to safely convey the walking and biking public to the Totem Lake Urban Center and toward the downtown Kirkland core.



The new pedestrian bridge will radically improve the connection for non-motorized users.

STATE OF GOOD REPAIR

Component 1 – Wilburton Center Segment

King County has been developing, operating, and maintaining trails for more than 40 years, managing an inventory of approximately 175 miles of shared use paths and regional trails. Trail facilities are provided for both active transportation and recreational purposes, planned well into the future, undergo extensive design and public involvement, and are developed to the highest standards for user convenience and safety. Trail facilities are provided for both active transportation and recreational purposes.

In 2007 and 2013, King County voters approved and renewed a countywide levy to generate funds for parks and trails. This assessment is based on property taxes and it generates revenue for operations, maintenance, and capital project improvements on trails, parks and open space in King County Parks' inventory.

In 2017, King County Parks had a council-approved budget of \$7.3 million dedicated for trail maintenance activities. Upon completion, the Wilburton Center Segment will be incorporated in King County Park's trail network for regular and preventative maintenance to enable regular and active use of this transportation asset for the duration of its engineered lifecycle.

The trail will be designed and constructed to King County's Regional Trail System Development Guidelines, Guide for the Development of Bicycle Facilities, and American Association of State Highway and Transportation Officials, 4th Edition (2012), thus ensuring design is consistent with relevant plans.

Trail maintenance activities are tracked, based on visual inspection during weekly maintenance activities, citizen action requests, and use of ratings in a pavement management system. Trail surfaces are replaced according to standard maintenance schedules. Inspection of trail surfaces and conditions occurs regularly using equipment outfitted with information gathering tools to generate information for Parks' Maintenance staff concerning obstacles in the clear zone, deteriorating pavement conditions, fallen trees, boulders, or encroachments in the trail right-of-way that would hinder the regular use of the transportation corridor. In this way, using state-of-the-art techniques and equipment, King County optimizes the best management options for its trail assets. Once constructed, the Wilburton Center Segments will be included for regular preservation, assessment and maintenance activities to achieve the optimal lifecycle of its pavement and ensure safe conditions for the traveling public.

King County's demonstrated experience in constructing and maintaining its regional trail and parks network accompanied by strong public support for recreational activities will ensure that the Wilburton Center Segment remains in good repair throughout its lifespan, serving generations to come.



King County Parks employs the use of remote LiDAR (Light Detection and Ranging) to create an inventory of trail surfaces and trailside assets (shown here on the back of a motorcycle).

Component 2 – Totem Lake Connector

The City of Kirkland owns and manages the Totem Lake Connector and its right-of-way. Kirkland has developed a long-standing standard practice of estimating and formalizing ongoing maintenance costs for new facilities and assets. Operating and maintenance rates are established for new buildings, vehicles, and computer systems that are charged to users and built into ongoing budgets. A city-wide asset management plan is nearing completion for all assets.

In 2012, after a robust community outreach program to demonstrate the need and importance of sustainable roadway maintenance, Kirkland residents approved a permanent \$3 million property levy specifically for maintenance of Kirkland’s 250-mile network of roads and bike lanes. In 2015, the City Council formalized ongoing and increasing maintenance and replacement costs associated with transportation facilities by approving additional maintenance funding from the general fund. This funding was established as a key component toward fulfilling the city’s long-range Transportation Master Plan (See Goal T-6 below).

The Kirkland City Council modifies the operating budget on an annual basis to address the needs of new infrastructure. An example of this occurred in 2016 when the City Council increased maintenance funding from \$100,000 per year to approximately \$170,000 per year for the Cross-Kirkland Corridor. Kirkland has repeatedly proven a high level of support for sustaining maintenance funding of its assets.

The Totem Lake Connector will have maintenance needs beyond what is currently required at the intersection. City maintenance staff will perform graffiti removal, sweeping and inclement weather preparation for ice/snow, landscape maintenance to include mowing, trimming, and herbicide treatment, lighting and electrical control repair, signage, handrail and safety inspections, general cleaning, and when needed, deck treatments, painting, and system upgrades for the new pedestrian bridge. Review of industry standards and maintenance crew experience will allow staff to develop a work program and recommended funding levels to the City Council. The maintenance repair work plan will be modified to accommodate final design, finishes, permit conditions, and completed elements, to maintain the desired level of service on the Totem Lake Connector.

As the transportation system is planned, designed, built, maintained and operated, provide mobility for all using reasonably assured revenue sources while minimizing environmental impacts.

Goal T-6 from the 2015 City of Kirkland Transportation Master Plan



ECONOMIC COMPETITIVENESS

Recent population growth in the Seattle area leads the nation, with close to two million people currently residing in King County and four million in the four-county, Puget Sound Region. The Puget Sound Regional Council, the metropolitan planning organization for the four-county region that includes King County, projects that an additional one million people will live here by 2040. King County is home to the largest economic engine in Washington State.

The region has enjoyed an influx of highly educated, millennial, high-tech workers attracted by jobs and a high quality of life in the Pacific Northwest. Millennials in the information technology and telecommunications industries who work for start-ups and established companies such as Google, Microsoft, Expedia, and T-Mobile regularly use transit and require non-motorized last mile connections in increasing numbers. Completing these new connections for eastside community projects will greatly enhance Kirkland and Bellevue's competitiveness for attracting and retaining businesses and jobs.

As a powerful sub-regional economic development initiative, the Innovation Triangle is a dynamic partnership between the Cities of Kirkland, Bellevue and Redmond. The partnership invites technology companies to experiment, develop and prosper in these Eastside communities.

In 2013, the Innovation Triangle output was \$48 billion, making it one of the most dynamic regional economies in the country. Regional partners that are global household names, and convenient flight options to new partners and customers in Europe and Asia, add to the attraction of the Innovation Triangle. Other attributes such as quality of life, a renowned work/life balance, and surrounding natural beauty make the Innovation Triangle a region that is one of the world's best places to start and grow a business.

The information and communications technology sector is the fastest growing business sector in the region. According to a 2013 report by the Economic Development Council of Seattle and King County, King County has 130,000 jobs in to this sector with incomes averaging \$124,300 and tax revenues estimated at \$36.9 billion.

Component 1 – Wilburton Center Segment

In Bellevue, strong demand for private sector development, coupled with public works re-development has advanced dramatically over the past five years. Bellevue's Wilburton neighborhood is expected to add 110,000 jobs and 21,500 housing units by 2035. The Wilburton Center Segment is in the heart of the downtown core, providing a crucial, non-motorized connection that links employees to where they live and work. The trail will connect the



Bellevue is the fifth largest city in Washington State with a population of 140,700 in 2017, which is projected to reach 160,400 by 2035. [source](#)

innovation centers that are helping drive economic recovery in this region and in the United States.

Many low-density commercial properties surrounding the Wilburton Center Segment are being redeveloped. The trail corridor defines the western edge of Bellevue's Spring District, located around the soon to be constructed, 120th Street Light Rail Station. The Wilburton Center Segment will provide a non-motorized transportation and recreation corridor to this 36-acre transit-oriented, mixed-use urban neighborhood. When completed, the Spring District will cover 16 city blocks, including 3.7 million square feet of office space, 1.2 million square feet of residential space with over 800 multi-family, residential units, a 200,000-square-foot hotel and 158,000 square feet of retail space. Bellevue's Spring District highlights parks, open spaces, and several east west shared-use paths that will directly connect to the Wilburton Center Segment.



Many businesses are intentionally locating offices along the corridor.

The promise of the Wilburton Center Segment has already sparked economic growth and will continue to do so as the trail is built. Starting in 2018, the Spring District will be home to the new Global Innovation Exchange (GIX), a graduate academic institute focused on technology innovation. GIX was recently created by the University of Washington and the Tsinghua University of Beijing, and supported by Microsoft. More than 3,000 domestic and international students are expected to attend GIX in the first year, adding to the demand for mixed-use development that offers trails for transportation and recreation opportunities in this dense and vibrant district. The Seattle-based outdoor company, Recreational Equipment Inc. (REI) has already located one of its flagship, retail stores along the Wilburton Center Segment. In 2017, REI announced its intention to relocate its headquarters, with 1,200 employees, to the Spring District in part, to take advantage of the transportation mode choices provided by the corridor and adjacent high capacity transit. The company estimates that 25% of its employees' bike to work daily.

Component 2 – Totem Lake Connector

Kirkland's Totem Lake Neighborhood is a vital employment, retail and service area for the surrounding region. This area is the City of Kirkland's largest employment center and highest revenue generator. Kirkland is expected to add 26,000 jobs with 3,500 new housing units and 608,650 square feet of new development currently under construction or in the permitting process. However, inadequate transportation infrastructure poses a severe challenge to Totem Lake's success. The transportation network's weakest aspects are heavy traffic and poor bicycle and pedestrian circulation.



Currently there are close to 35,000 jobs in Kirkland. By 2035 that number is expected to grow to 53,000. Totem Lake contains the city's only regionally designated urban center, a designation by the State Growth Management Planning Council in 2003. Urban centers are the focus of regional growth, and are expected to incorporate high-density housing of 15 households per gross acre and employment of 15,000 jobs within a half mile of a transit center or 50 employees per gross acre.

The Totem Lake Urban Center is expected to incorporate a broad range of uses, while emphasizing a safe and accessible pedestrian experience, superior urban design, and limits on the use of single-occupancy vehicles to ensure a livable environment and vibrant sense of place. Public transit plays a central role in urban centers, allowing them to accommodate the substantial densities expected of them. The Totem Lake Transit Center, which serves both the revitalized mall and Evergreen Hospital, Kirkland's largest employer, is no exception. It was Kirkland's first improvement following urban center designation, along with a transit flyer stop using High Occupancy Vehicle access from I-405, and the redevelopment of NE 128th Street into a portal to the hospital and other health care businesses.

The city continues to focus on the Totem Lake area with various studies aimed at developing a regional park, further development along the corridor, and a study of economic tools to incentivize investment. Affordable housing is a required element of any residential development in Totem Lake. Results have been promising, with new investments by 100 businesses ranging from cutting-edge, aerospace to wineries and fitness facilities. An example of a business expansion resulting from the Cross-Kirkland Corridor is the Google expansion bringing as many as 1000 new jobs into Kirkland. Once the Totem Lake Connector is completed, more businesses and developers will be enticed to build here since the non-motorized infrastructure connecting workers and residents to services, business and stores will already be in place.



The current and Phase II of the Google campus in Kirkland, WA was designed to envelope the Cross-Kirkland Corridor.

ENVIRONMENTAL SUSTAINABILITY

The Seattle Metropolitan Area is said to have some of the worst traffic congestion in the nation. Complicating traffic congestion associated with population growth and major construction, the area is geographically hampered with a large lake separating Seattle from the eastside of King County where the Wilburton Center Segment and Totem Lake Connector are located. The area has been served by bus transit service with light rail only recently funded and under construction.

Transportation related travel is one of the largest contributors to emissions in the Seattle area both for people and the movement of goods and services. Construction of the Wilburton Segment



and the Totem Lake Connector will offer an alternative to traffic jams, offer reliable commute times and reduce emissions by converting drivers to walkers and transit riders.

As part of the benefit cost analysis conducted for this project, it was estimated that a dedicated bicycle path will reduce travel time by 26% when compared to bicycling in the roadway, on the sidewalk or in traffic. For the Wilburton Center Segment, the benefit cost analysis estimated an additional 51 new daily bicycle trips and 300 new pedestrian trips. Of these new walkers and bikers, 56 trips would be made by commuters. For the Totem Lake Connector, the benefit cost analysis estimated an additional 26 new bicycle trips and 160 new pedestrian trips. Of these new walkers and bikers, 28 trips would be made by commuters.

One of the major benefits of federal, rails-to-trails conversion projects is that they use existing right of way, without much additional disturbance to the environment surrounding them. This is true for the Wilburton Center Segment and Totem Lake Connector. These projects are being constructing in urbanized areas where development and infrastructure already exists.

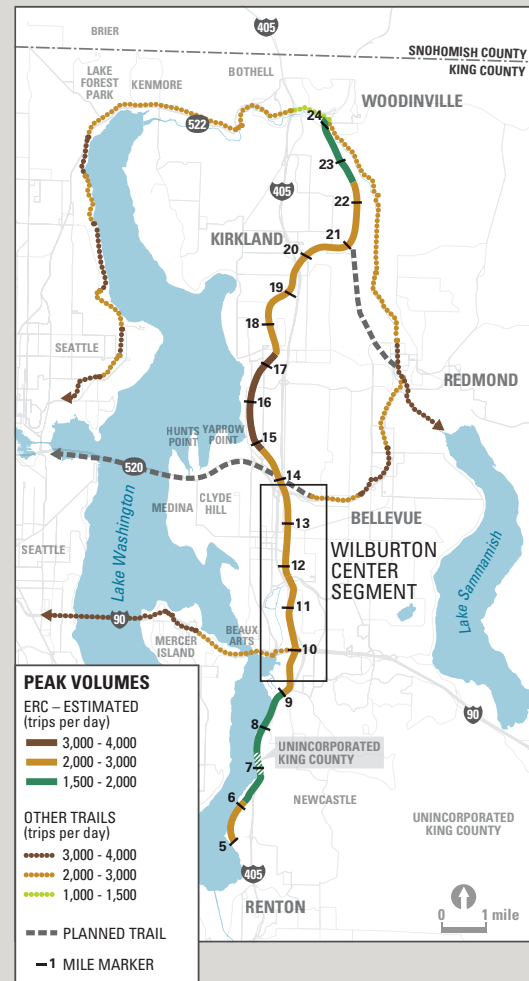
QUALITY OF LIFE

Trails are recognized elements of the larger transportation network of the United States complementing roads and highways by allowing for the movement of goods and services that develop our economy, offering people pathways to come and go, and are identified as important in case of threats to our national security.

The Seattle Metropolitan Area, which includes Bellevue and Kirkland experiences some of the highest percentages of bicycle commuters in the United States. A strong network of bicycle facilities is essential to the region’s livability and affords residents greater freedom and flexibility in transportation choices. King County’s Eastside Rail Corridor Master Plan projects that the Wilburton Center Segment and the Cross-Kirkland Corridor will see some of the highest usage with estimates as high as 2,000 to 3,000 users per day.

Washington State’s 1991 Commute Trip Reduction Law (CTR) affects worksites in King County with 100 or more full-time employees who arrive at work between 6 and 9 a.m. Affected organizations are required to develop and implement programs that encourage employees to reduce how often and how far they drive alone to work. The spirit of the law is not punitive, and public agencies and local jurisdictions have developed programs and services to support employers’ efforts to meet the requirements.

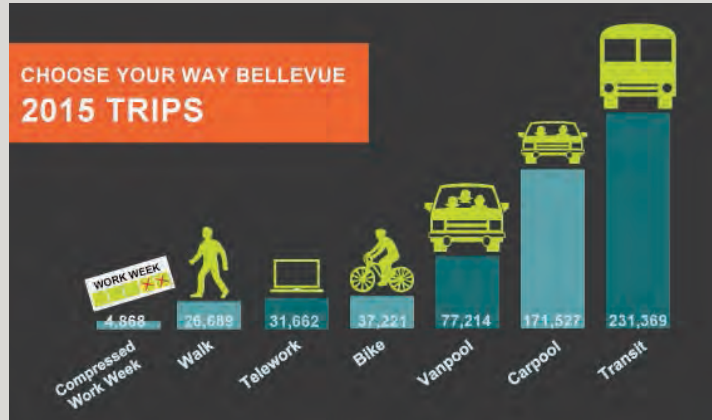
EASTSIDE RAIL CORRIDOR ESTIMATED PEAK VOLUMES



Projected bicycle use on the Wilburton Center Segment is high with an estimated 2,000 to 3,000 users per day.



Many Bellevue and Kirkland employers participate in commute reduction efforts in many ways including paying for or providing discounts on METRO or Sound Transit bus, and soon, for light rail trips. Because state law and well-funded commute reduction programs are prevalent, more people who would once drive are instead riding to and from work, making non-motorized connections increasingly important. From the bus or light rail stops along the Wilburton Central Segment, walkers and bicyclists will be able to walk along the trail that stretches directly west of the new Wilburton Station to reach their destinations throughout Bellevue.



Commuter trip reduction offerings encourage employees to ride transit instead of driving their cars. Many eastside businesses participate creating more transit riders and increasing the need for non-motorized connections.

Component 1 – Wilburton Center Segment

Construction of the Wilburton Center Segment will increase network efficiency by creating a new, non-motorized, multi-purpose pathway that is separated from the vehicular and commercial traffic of downtown Bellevue. These new links will provide coherent connection to the city’s existing bicycle and sidewalk network serving walkers and riders with a first-of-its-kind, separated pathway. Separating the walking and riding public from cars and trucks will improve vehicular travel times by reducing delays associated with longer stop lights, turn movement restrictions, and delays associated with pedestrian-vehicular crashes.



In 2014, Bellevue was rated #2 in 24/7 Wall Street’s national list of “Best Cities to Live.”

As the new spine for Bellevue’s active transportation network, the Wilburton Center Segment will support connections to other local and regional trails including:

- I-90 Trail
- Sammamish River Trail
- Tolt Pipeline Trail
- SR520 Trail
- Cross-Kirkland Corridor
- May Creek Trail
- Lake Washington Loop Trail





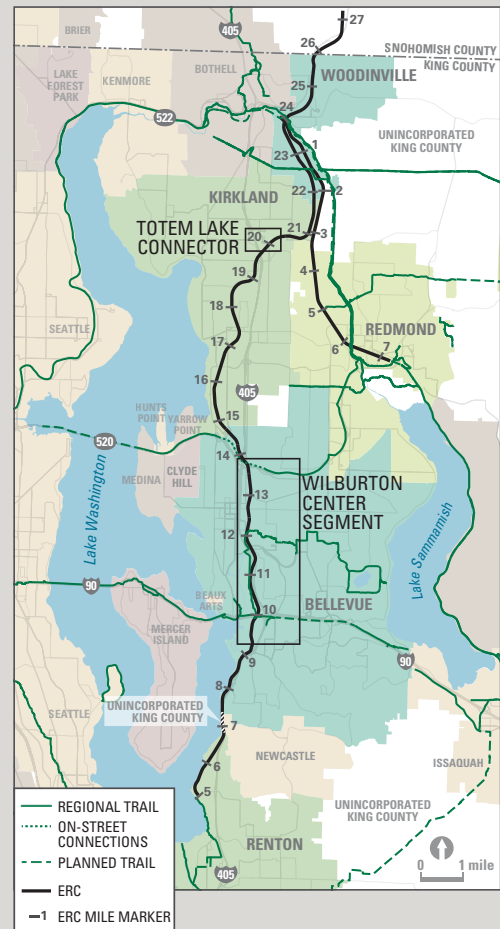
More than 50,000 people ride Sound Transit or METRO transit with stops at the Bellevue Transit Center or within a mile from the Wilburton Center Segment.

To increase transportation choices, the Wilburton Center Segment will provide numerous walking and riding connections to public transit. Sound Transit’s new East Link Light Rail Extension will arrive and depart from the nearby Wilburton Station, which will open for service in 2023 after the Wilburton Center Segment is completed. METRO Transit’s Bellevue bus transit center is located three blocks west of the Wilburton Segment. Eight Sound Transit and 27 METRO Transit bus routes have bus stops and travel within a mile of the Wilburton Center Segment. These routes carry over 50,000 riders on average, every day.

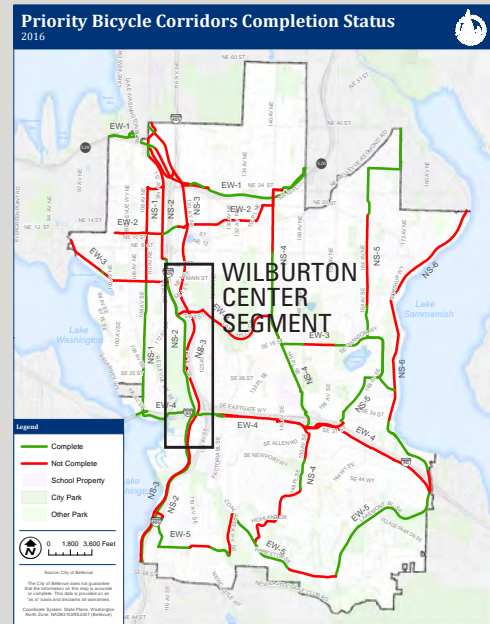
The King County Comprehensive Plan speaks to support for the corridor. The City of Bellevue’s 2009 Pedestrian and Bicycle Transportation Plan identified and set goals for the construction of bicycle routes within the city. The plan identifies the Wilburton Center Segment, as part of the Eastside Rail Corridor, as a top priority, north-south route since its connections with other east-west corridors will create comprehensive accessibility for riders citywide. While Bellevue has been successful in increasing dedicated bicycle routes, with 24.7 miles constructed in the 17 years since the plan was adopted, almost all of Bellevue’s bicycle lane miles are located on road shoulders or in shared lanes, alongside

Bellevue’s bicycle plan identifies the Wilburton Center Segment as a top priority north-south bike route as an important link for citywide bicycle access.

REGIONAL TRAIL CONNECTIONS



The Wilburton Center Segment and Totem Lake Connector connects the corridor with other existing regional and local trails to form a cohesive network.



vehicles. Overall bicycle use in the region has grown especially near new, off-road, multi-purpose paths. Construction of the Wilburton Center Segment will provide dedicated bicycle access, thus increasing transportation choices and bicycle ridership.

Component 2 – Totem Lake Connector

The City of Kirkland and its partners will invest more than \$87.5 million into the Totem Lake Urban Center over the next few years. Growth is happening now, with more than 50% of the projected development already in the permitting pipeline. In response, Kirkland is upgrading traffic control technology and increasing capacity at its most critical roadway intersections. The Totem Lake Connector is one of the most transformative of Kirkland’s capital projects, providing residents with greatly increased transportation freedom. The bridge will connect Kirkland’s 5.75 mile Cross Kirkland Corridor to Woodinville’s wine country, Redmond’s Samammish River Trail, and into rural, Snohomish County.

A gateway to the Totem Lake Urban Center, the Totem Lake Connector will become a powerful symbol for growth and change in an increasingly important hub of retail and commercial activity for Kirkland and the region. A grade-separated crossing is the ideal way to provide quick, safe passage across the highest traffic intersection on the Cross-Kirkland Corridor. In addition, the Totem Lake Connector will support direct connections to the regional trail network including:

- Sammamish River Trail
- Burke Gilman Trail
- Redmond Central Connector

Kirkland is developing bicycle and pedestrian greenways, or trail adjacent to or incorporating nature-rich settings, on residential streets that connect to the Cross-Kirkland Corridor. The corridor supplies the backbone of those greenways. Kirkland is also investing in a system of on-street bicycle lanes to improve safety, link to community destinations, fill gaps, connect to transit and reach low income and minority populations. The Totem Lake Connector will encourage more users from around the region to choose this safe, efficient, and enjoyable mode of transportation.

The Cross-Kirkland Corridor has transformed alternative transportation in Kirkland by creating an unmatched path for walking and biking, along with a space for future transit. This means a stunning linear park, places for people to gather, a quick route to get to work, safe ways to travel to schools or parks, and a fun place for recreation.

RESOURCES

Identification and support for the Eastside Rail Corridor and its various component projects has been included in many planning documents including the:

- [King County Comprehensive Plan](#)
- [City of Kirkland’s Comprehensive Plan and its six year CIP](#)
- [City of Bellevue’s Comprehensive Plan and its 2009 Bicycle Plan](#)
- [Puget Sound Regional Council’s Transportation 2040 Project List](#)

The Totem Lake Connector will provide direct connections to other regional trails

| Trail | Length |
|---------------------------|------------|
| Sammamish River Trail | 10.9 Miles |
| Burke Gilman Trail | 29.2 Miles |
| Redmond Central Connector | 4.0 Miles |



SECONDARY CRITERIA

INNOVATION

Since innovation is at the heart of the region’s economic engine, it is fitting that innovative strategies play a key role in the project’s implementation in two main ways. For the economic competitiveness criteria, innovation is displayed by the Cities of Kirkland and Bellevue’s powerful brand, the Innovation Triangle, of which this project is a central component. For safety, each component experiments with innovative approaches to transportation safety using technological developments.

Innovation Triangle: Innovation for Economic Competitiveness

The [Innovation Triangle](#) is a powerful sub-regional economic development initiative where innovation is the norm, creativity is the goal, and building the future is the destination. Established in 2016, the Innovation Triangle is a partnership of the Cities of Bellevue, Kirkland and Redmond that invites innovation-intensive businesses to experiment, develop and prosper in Eastside communities. The unique and innovative partnership is based on the mutual appreciation that all cities benefit when a technology company locates in any one of them: while one benefits from additional employment, the others benefit from new employees purchasing housing and goods and services.

By working together, the partner cities develop and promote a more far-reaching and attractive brand than they could independently.

The Innovation Triangle boasts many attributes desirable to technology companies, including a talent pool that is unmatched anywhere in the U.S.

INNOVATION TRIANGLE

- 62% of adults with bachelor’s degrees and above
- 4,600 software publishing workers
- 99,100 information and communications technology workers

This project builds non-motorized infrastructure to encourage additional development and location within the Innovation Triangle. As keystone portions of the Eastside Rail Corridor, both the Wilburton Center Segment and the Totem Lake Connector are crucial components of the Innovation Triangle’s compelling brand. The project adds to the quality of life in the Pacific Northwest and encourages a balance between work and public health by offering places for walking, cycling, skating and simply enjoying this public, open-space amenity amidst a densifying urban environment. The quality of life afforded by this project is desirable to technology companies that must offer such if they seek to hire the nation’s top talent.

Safety Innovations

Component 1 - Wilburton Center Segment

The City of Bellevue is planning on embracing the use of autonomous vehicles in the near future. In civic and public places in downtown and the Wilburton Commercial Area, the city will incorporate future use of autonomous Group Rapid Transit. Group Rapid Transit is a network of small, autonomous shuttles capable of carrying six to 12 passengers at similar speeds to that of cyclists (12-18 mph). The network can scale up from operating on demand to metro mode with convenient and predefined stops and schedules.



The Grand Connection non-motorized network will intersect with the Wilburton Center Segment at I-405, at what is currently the Wilburton Gap. Here, pedestrians will be able to seamlessly transition from walking the Wilburton Center Segment to riding in an autonomous Group Rapid Transit shuttle. To ensure the highest degree of safety, this intersection will have car detection equipment and beacons and receptors to receive transmissions from these shuttles. As the popularity of these shuttles increases, shuttle routes will include the Wilburton Center Segment itself. For this technology to be successful, the infrastructure must be in place first; this project seeks to install the first infrastructure.

Component 2 - Totem Lake Connector: Encouraging Safe Trail Use with Solar Powered Urban Terrain Trail Policing Vehicles

The City of Kirkland fosters a safe environment for non-motorized commuting, walking, and biking along the Cross-Kirkland Corridor through the innovative use of two solar powered urban terrain vehicles. With these vehicles, police monitor activity on the trail without disrupting the trail's atmosphere. Knowing that it is monitored by police to aide them in case of emergency, more people are comfortable using the trail.

PARTNERSHIPS

The Eastside Rail Corridor enjoys support at all levels of government and the private sector since its purchase and conversion from a nationally connected railroad, to a multi-purpose trail corridor. This is evidenced by the robust number of funding partners and support letters in favor of this application. Four counties and 82 cities participate in the region's municipal planning organization, the Puget Sound Regional Council where Eastside Rail Corridor projects have successfully competed and received federal awards for acquisition and preliminary engineering. These investments combined with state, local and private contributions demonstrate broad regional support.

The Washington State Legislature supports the project in several ways with a direct appropriation in Connecting Washington – the state's \$16 billion, 2016 transportation funding bill, – with \$7.5 million toward Wilburton

PUBLIC BENEFITS FROM SOLAR POWERED – ON-TRAIL POLICING ATVs

Enforcement Benefits

- Dogs on leash
- Trash and illegal dumping
- Non-authorized vehicles, ATVs and motorcycles on trail
- Use after closing hours
- Other non-authorized uses

Service Benefits

- Information and directions to trail users
- Aid and assistance as needed
- Trail safety and maintenance identification
- Presence for positive influence along the trail

RESOURCES

Support letters for the project and the memorandum of understanding between Kirkland and King County can be found by visiting:

<http://www.kingcounty.gov/EastsideConnect>



Connections. Of this allocation, \$5 million will support the construction of the pedestrian bridge over I-405 and \$2.5 million directly supporting the Wilburton Center Segment.

Numerous corporations have shown support through direct, contributions or by voicing commitments to locate or expand offices. Health care company Kaiser-Permanente has provided a \$500,000 contribution to the project. Google has expanded their campus across the Cross-Kirkland Corridor, making significant investments in public amenities along the corridor. In addition to moving a flagship store to the Wilburton Center Segment in Bellevue, REI has pledged to locate their headquarters close to the trail in order to offer employees an enhanced quality of life with active transportation commuting and places for walks during the lunch hour.

Numerous letters of support have been received from local, state and congressional elected officials. In addition, a diverse collection of non-profit organizations strongly support all of the components of the Eastside Rail Corridor rails-to-trails project, including the Cascade Bicycle Club, Forterra, Futurewise, the Mountains to Sound Greenway Trust, Transportation Choices, The Trust for Public Land, and the Washington Trails Association.

RESOURCES

Washington State's Transportation Improvement Projects where the FHWA funds for Preliminary Engineering are:

- [Wilburton Center](#)
- [Wilburton \(aka "Hospital"\) Station projects.](#)

PROJECT READINESS

Component 1 - Wilburton Center Segment

Preliminary Engineering FHWA funded and already underway

Design work has already begun within the Wilburton Center Segment project area from FHWA funding awarded at the Puget Sound Regional Council's 2016 funding competition. Both awards are for development of the preliminary engineering phase. \$350,000 has been awarded for the design and NEPA for non-motorized improvements leading to and providing access from the trail to the new, Wilburton Light Rail Station, and \$2 million has been awarded for design and NEPA work for the Wilburton Center Segment. Consultant contracts for both grants have been awarded and documentation to obligate the preliminary engineering funds has been submitted to WSDOT for FHWA approval. Completion of all preliminary engineering work including NEPA / Section 106, an engineer's estimate at 100% level of completion, contract specifications included in a contractor's proposal will be ready in time to support construction advertisement by the beginning of 2019.

Right-of-Way for the entire Eastside Rail Corridor already acquired and certification complete pending construction funding

Right-of-way for the entire 42 miles of this former Burlington Northern Santa Fe Railroad corridor now known as the Eastside Rail Corridor was completed in 2009. All activities and documentation required for certification of the right of way are complete. The Washington



State Department of Transportation, acting under agreement with FHWA, has verified this after conducting a desk audit. The letter from WSDOT confirming this can be viewed on the [application website](#). The letter states that certification will be granted once construction funding is secured and submitted for approval and obligation.

As part of the Eastside Rail Corridor, the Wilburton Center Segment has been the focus of an extensive master planning effort, by multiple owner entities, for more than two years during which many practical project considerations have been determined. This included studies, ample public involvement, resulting in the completed master plan in 2016. The master plan is the latest and most thorough examination of the issues, costs and designs of the Eastside Rail Corridor. Currently underway is an extensive, engineering development design review process that includes value engineering. The aim of this effort is to reduce costs and improve efficiencies. This work is expected to be complete by 2018.

Completion of the Wilburton Light Rail Station and Wilburton Trestle preliminary engineering and construction phases must occur by 2022. For the Wilburton Station, non-motorized connections must occur before the station is built and open to the public. Early completion and coordination with Bellevue and Sound Transit will prevent the area from being closed to construction twice and for a longer period.

Component 2 - Totem Lake Connector

Preliminary Engineering FHWA funded and already underway

The Totem Lake Connector component has received \$923,000 in FHWA funds and combined with the \$1.7 million in local funds, the preliminary engineering phase is well underway. The consultant contract has been awarded and design plans are currently approaching 60% complete. Design for the Totem Lake Connector will be 100% complete before the end of 2018.

Standard bridge design methodology is being employed for the Totem Lake Connector including the development of a full Basis of Design Report. The report will guide engineering development by providing an explanation of the design approach and listing the hierarchy of relevant codes and guidelines.

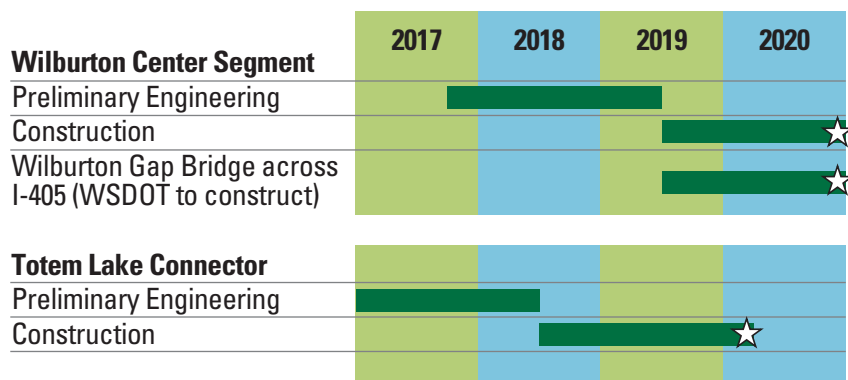
RESOURCES

Supporting materials for both components are available on the Eastside Connect project website:

<http://www.kingcounty.gov/EastsideConnect>

This includes information about the multi-jurisdictional, Master Planning process for the entire trail as well as other documents supporting timely project delivery.

PROJECT TIMELINE



☆ Project Complete and Open to Public

Key topics included in the report include Bridge Geometry, Design Loads, Deflection Criteria, Vibration Criteria, Geotechnical Considerations, and Analysis.

As design progresses, Kirkland will employ a continual process of design verification. For example, preliminary geotechnical investigations were performed to verify site soil conditions. Since the structure's location and number of supports are known, a secondary geotechnical investigation is being performed to confirm or verify soil conditions to inform the project's final design. Current design has been analyzed to be feasible from both a location and constructability viewpoint.

The project's 30% design cost estimate has been developed, using current bid item costs from recent bridge projects of like design and site parameters. There is a 5% design contingency included in the estimate.

Public input on the Totem Lake Connector began with Kirkland's master planning efforts initiated more than a decade ago where public residents identified the desire for a grade-separated crossing of this busy intersection. Project-specific public outreach occurred at three formal, public meetings, along with many presentations to specific neighborhoods, businesses, civic groups and technical committees. At these meetings, the public learned about the project and how it complements the local and regional non-motorized trail network. The public also voted on the bridge concept during the structure selection process. Public preferences were provided to the Kirkland City Council, which selected the preferred and current design concept out of four design options.

COSTS AND BENEFITS

In preparation for this application, a benefit cost analysis was conducted that quantified economic benefits for both the Wilburton Center Segment and the Totem Lake Connector. The analysis calculated changes in recreational value, auto use, auto crashes, user delay and changes in land values. The work assumed a base case along with three different, alternative scenarios into consideration. Each of the alternatives made different assumptions to produce varying levels of benefit.

The base case scenario includes the number of new bicycle and pedestrian trips and assigns a recreational trip value of \$10 per trip. This scenario also assumes the mean of the value of adjacent land associated with its proximity and benefit from the trail corridor. Other scenarios assign a higher or lower value to the land value and the final, mixed scenario assumes a higher per trip recreation value at \$22 per trip and the lower land value.

RESOURCES

Washington State's Transportation Improvement Project list where the FHWA funds for Preliminary Engineering are:

[Totem Lake Connector \(called the 124th St/124th Ave NE Pedestrian Bridge\)](#)

RESOURCES

[ECONW](#) performed the benefit cost analysis for this application. The firm conducts economics, finance and planning.

The full version and supporting documentation used to calculate and derive the benefit cost analysis for the are available for review by visiting [the project website](#).



To determine the potential increases in land value an econometric model calculated increases, mainly based on distance to the trail corridor, along with other considerations. The model considered the size of the house or condominium, the lot size, driving distance to a business district, zoning and other value-adding characteristics. This econometric model demonstrated that property values increase from being close or adjacent to non-motorized trails.

Component 1 - Wilburton Center Segment

In all four scenarios considered, the benefit cost analysis demonstrates a net economic benefit from constructing the Wilburton Center Segment. The economic benefit ranges from a low of \$2.5 million to a high of \$72 million. The \$2.5 million economic benefit uses a discount rate of seven percent and assumes the lowest increase in land value associated with proximity to the trail. The \$72 million benefit uses a discount rate of three percent and assumes the higher per trip value per recreational trip. The table below illustrates the net economic benefit from the Wilburton Segment as derived for each of the four scenarios and the two different discount rates used.

| Net Present Values | Base Case | | High Rec Value | | Low Land Premium | | Mixed Scenario | |
|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 7% Discount Rate | 3% Discount Rate | 7% Discount Rate | 3% Discount Rate | 7% Discount Rate | 3% Discount Rate | 7% Discount Rate | 3% Discount Rate |
| Total Costs | \$ (24,716,734) | \$ (27,446,970) | \$ (24,716,734) | \$ (27,446,970) | \$ (24,716,734) | \$ (27,446,970) | \$ (24,716,734) | \$ (27,446,970) |
| Total Benefits | \$ - | \$ - | \$ 53,641,081 | \$ 99,576,697 | \$ 27,194,352 | \$ 50,982,661 | \$ 48,608,947 | \$ 93,716,146 |
| Net Economic Benefits | \$ 7,509,751 | \$ 29,396,241 | \$ 28,924,347 | \$ 72,129,727 | \$ 2,477,617 | \$ 23,535,691 | \$ 23,892,213 | \$ 66,269,177 |
| Benefit Cost Ratio | 1.30 | 2.07 | 2.17 | 3.63 | 1.10 | 1.86 | 1.97 | 3.41 |

Component 2 - Totem Lake Connector

In all four scenarios, the benefit cost analysis demonstrates a net benefit from constructing the Totem Lake Connector ranging from \$1.6 million to over \$37 million. The difference in benefit depends on the discount rate and the scenario and its assumptions that were used. The base case scenario yield of \$1.6 million assumes a recreational trip value of \$10 and the mean value of property based on proximity to the trail. The \$37 million benefit was calculated using the high recreational scenario that increased the per trip cost from \$10 to \$22. The seven percent discount rate yields the lower benefit and the three percent rate yields the higher amount. This is illustrated in the table below.

| Net Present Values | Base Case | | High Rec Value | | Low Land Premium | | Mixed Scenario | |
|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 7% Discount Rate | 3% Discount Rate | 7% Discount Rate | 3% Discount Rate | 7% Discount Rate | 3% Discount Rate | 7% Discount Rate | 3% Discount Rate |
| Total Costs | \$ (12,678,663) | \$ (14,111,262) | \$ (12,678,663) | \$ (14,111,262) | \$ (12,678,663) | \$ (14,111,262) | \$ (12,678,663) | \$ (14,111,262) |
| Total Benefits | \$ 14,292,213 | \$ 27,034,899 | \$ 26,419,919 | \$ 51,699,083 | \$ 13,102,233 | \$ 25,649,019 | \$ 25,229,939 | \$ 50,313,202 |
| Net Economic Benefits | \$ 1,613,550 | \$ 12,923,637 | \$ 13,741,256 | \$ 37,587,821 | \$ 423,570 | \$ 11,537,757 | \$ 12,551,275 | \$ 36,201,940 |
| Benefit Cost Ratio | 1.13 | 1.92 | 2.08 | 3.66 | 1.03 | 1.82 | 1.99 | 3.57 |

