

Summary

Purpose and Contents of this Summary

The primary function of the East Lake Sammamish Trail environmental impact statement (EIS) is to help the lead agencies—the Federal Highway Administration (FHWA) and King County Department of Executive Services, Facilities Management Division (KCFMD)—make informed choices among reasonable alternatives for a ~~permanent-long-term~~ East Lake Sammamish Master Plan Trail. This summary provides key information from the EIS, describing how the alternatives compare in terms of consistency with the project's purpose and need, and potential environmental impacts.

This summary begins with a description of the project, including the purpose and need for the East Lake Sammamish Trail. The major features of the trail and alternatives being considered are described. The impacts associated with each alternative are then compared, focusing on major impacts and differences among the alternatives. These impacts are evaluated during the decision making process to select a preferred alternative. Subsequent sections briefly discuss areas of controversy associated with the project and the permits that will be required to implement the project.

Introduction to the Project

Where is the project located?

The 11-mile trail would start at Gilman Boulevard in Issaquah and end near Bear Creek in Redmond (Figures S1-A (pg S-3), S1-B (pg S-4), and S1-C (pg S-5)).

What is the purpose of the project?

The purpose of the proposed project is to design and construct an alternative non-motorized transportation corridor and a multi-use recreational trail along the former Burlington-Northern Santa Fe railroad corridor on the east side of Lake Sammamish. The trail would provide access to recreation, employment, and retail centers in the Cities of Redmond, Sammamish, and Issaquah and complete a link in the King County regional trails system. The trail is intended to safely accommodate a variety of user groups such as bicyclists, pedestrians, runners, wheelchair users (including those with motorized wheelchairs), in-line skaters, and equestrians, and different ages and skill levels within those groups.

Why is the project needed?

The need for the project is driven by several factors including: (1) the regional need for alternative transportation corridors between major business centers, (2) the need for non-motorized recreational trails to support a growing population, and (3) the need to make connections among other existing and planned trails. Figures 3.7-1 (pg 3.7-3) and 3.7-2 (pg 3.7-4) illustrate existing and planned trails in the project vicinity. The trail would provide an option for commuters on local roadways and provide another link between business centers. The continuing increase in population has put pressure on existing recreational facilities in the area. A trail is needed that will accommodate the full range of potential trail users, such as walkers,

runners, wheelchair users, bicyclists, in-line skaters, and equestrians of all ages and skill levels. Links to existing and planned trails are possible along the 11-mile trail corridor.

Who is leading the project?

The Federal Highway Administration (FHWA), the Washington State Department of Transportation (WSDOT), and King County Department of Executive Services, Facilities Management Division (KCFMD) are leading the project. As a County-proposed project with federal funding, the project must comply with both the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA). KCFMD is the lead agency for SEPA. FHWA is the lead agency for NEPA.

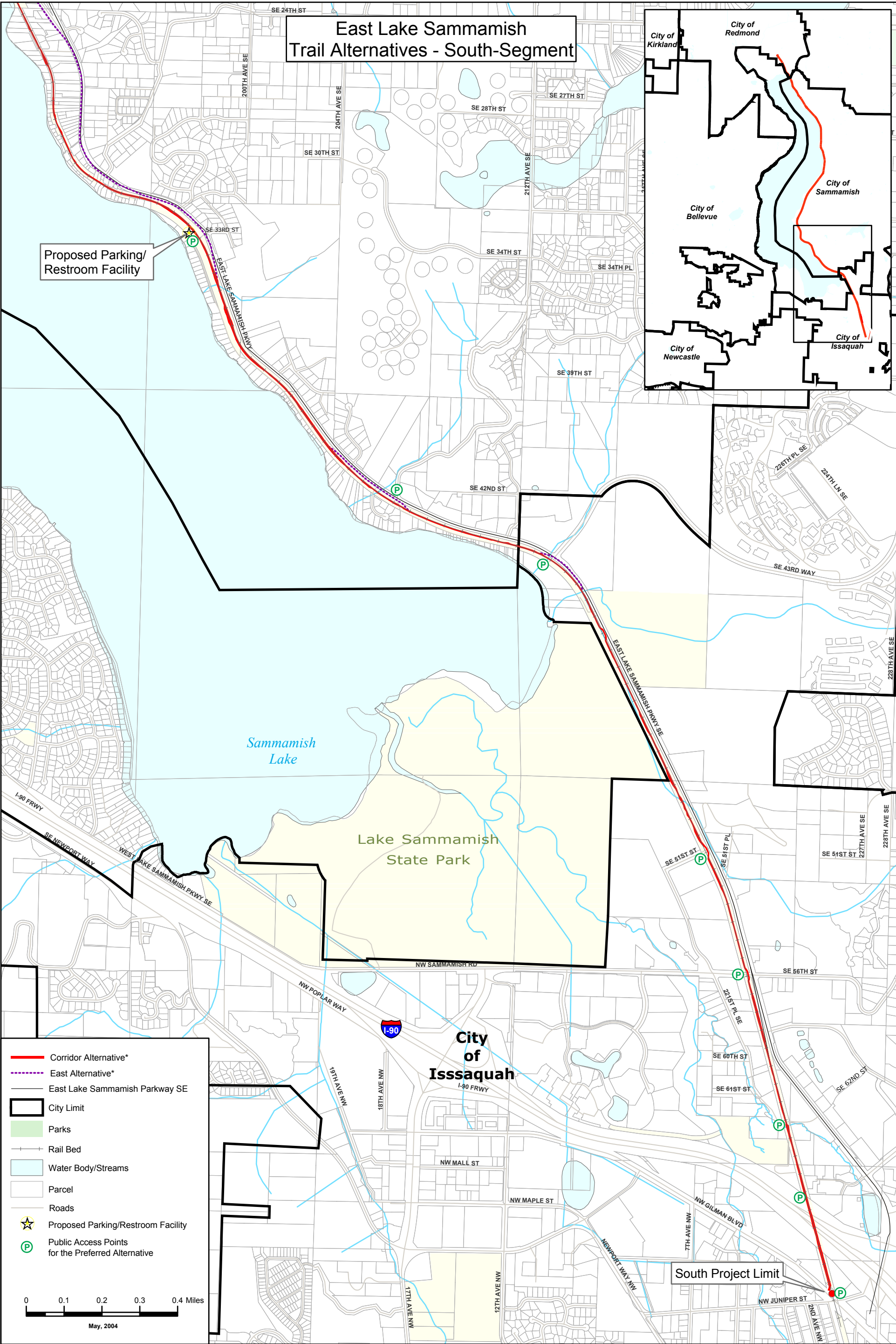
Who will decide where the trail will be located and what it will look like?

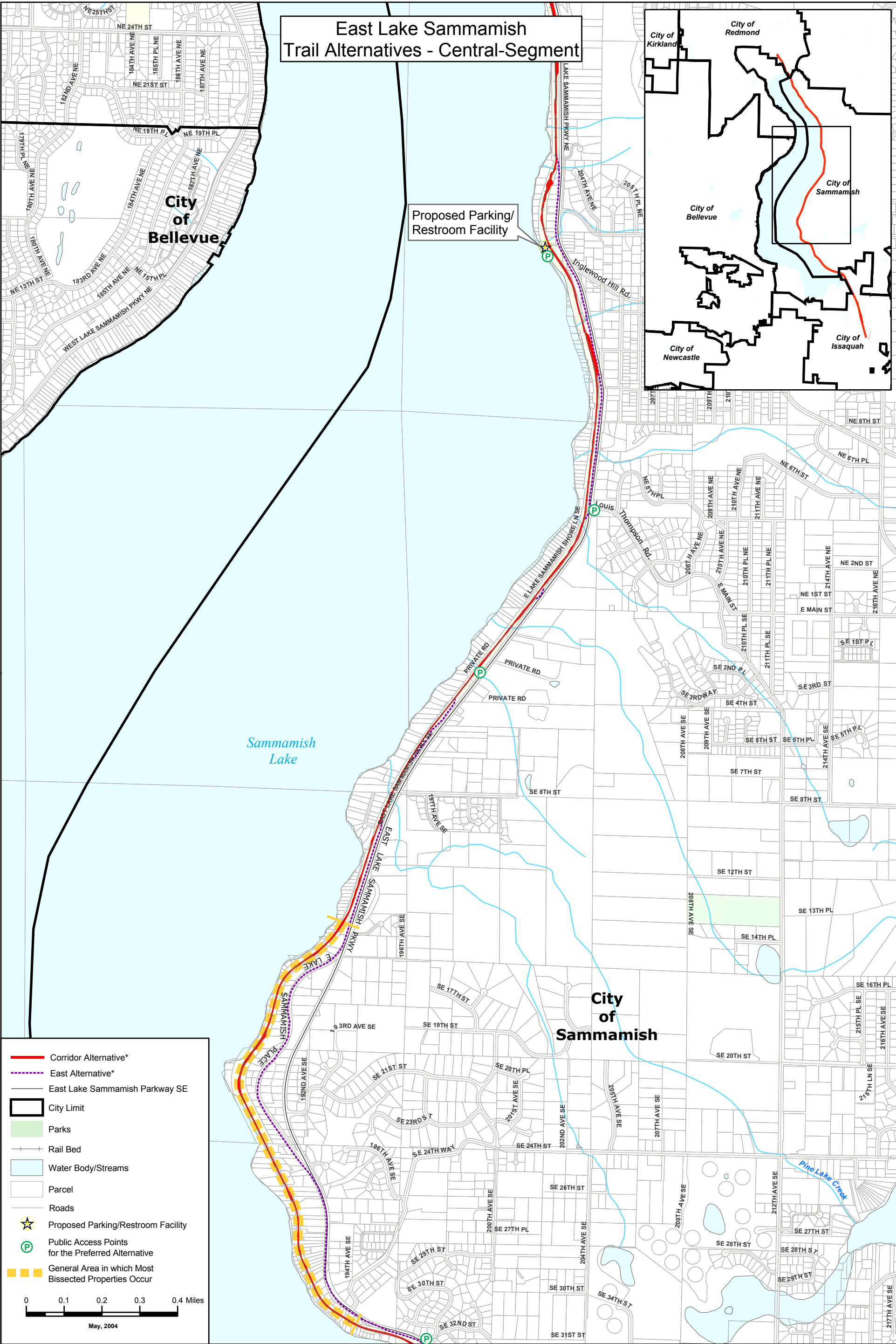
King County and FHWA will make the decision regarding trail alignment and configuration based on the Draft EIS evaluations of the alternatives, including cost considerations, and comments received on the Draft EIS. ~~A-This Final EIS will be prepared to~~ provides the results of those evaluations and comments received. The final decision will be contained in the federal Record of Decision (ROD) issued by FHWA following the Final EIS.

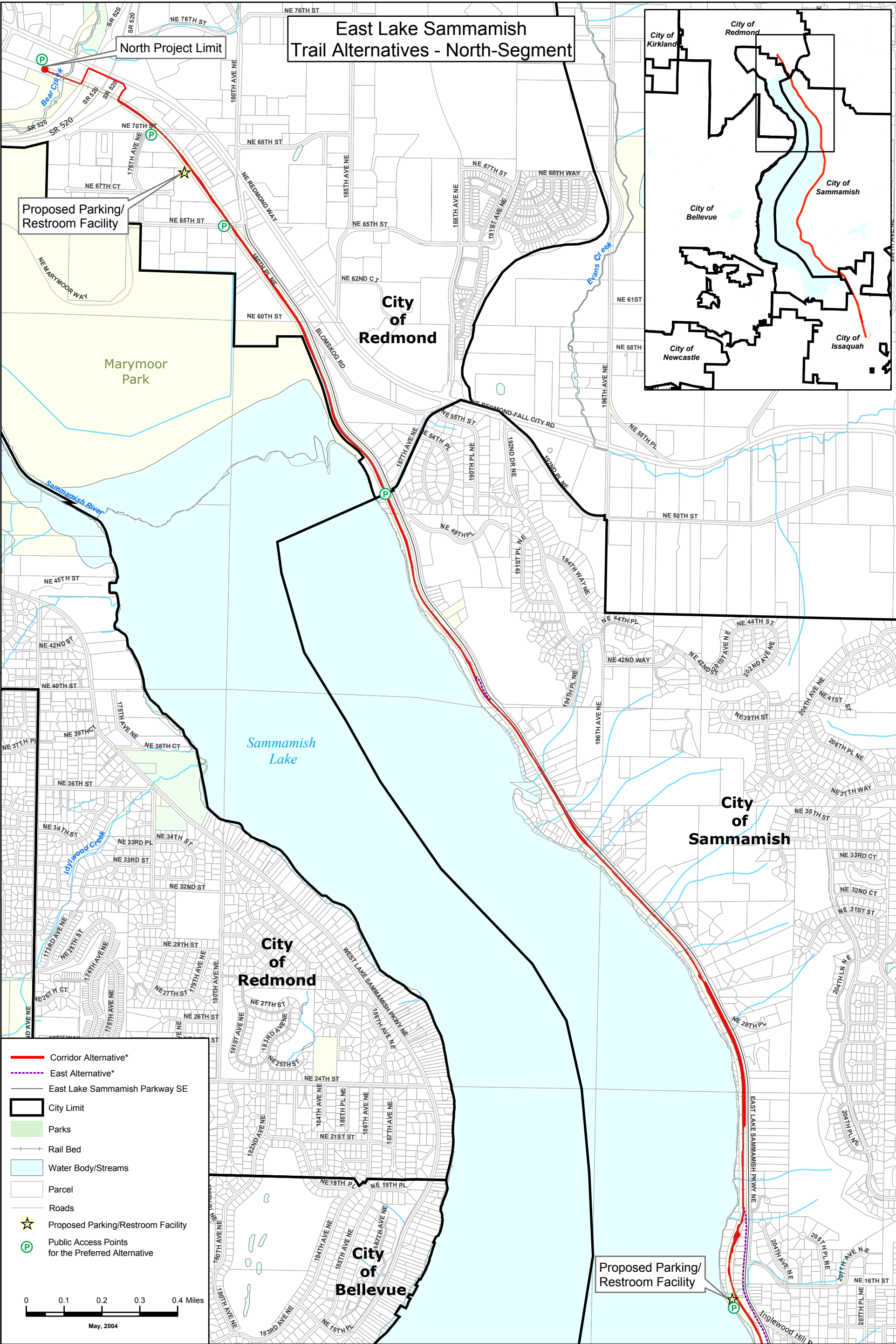
How did the rail corridor become available for use as a trail?

Railroads operated along this corridor from 1885 to 1996. In 1996, the Burlington-Northern/Sante Fe Railroad (BNSF) ceased 100 years of operations along this rail corridor. The Cascade Land Conservancy purchased the active railroad corridor from BNSF in April 1997. In 1997, King County and the Land Conservancy requested that the Surface Transportation Board (Board) grant interim trail use/railbanking status to this corridor. Railbanking allows the development of unused railroad corridors as recreational trails, such that the corridors are preserved for potential reestablishment of railroad use, should the need arise.

The application to railbank the corridor was approved in August 1998 and a federal “Notice of Interim Trail Use” was issued. The Land Conservancy sold the railbanked corridor to King County in September 1998. The County purchased the corridor with the intention of developing it into the East Lake Sammamish Trail. In December 2000, the King County Council approved construction of an Interim Use Trail along the railroad corridor.







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How is the corridor currently being used?

Portions of the corridor have been developed as the East Lake Sammamish Interim Use Trail. The Interim Use Trail is a 10.6-mile gravel trail, varying from 8 to 12 feet wide. The Interim Use Trail was constructed to allow public use of the railbanked trail corridor, protect natural resources and human safety, and fulfill railbanking requirements until the planning for a permanent trail could be completed and the permanent trail developed. Operation of the Interim Use Trail will expire in 2015; the trail would be decommissioned and closed to the public in 2015.

All permits necessary to construct the Interim Use Trail within the Cities of Redmond and Issaquah were obtained, and construction of the Interim Use Trail in these cities was completed in early 2004. Construction of the remaining segment of Interim Use Trail in the City of Sammamish began September 19, 2005, and was completed in March 2006. Constructed portions of the trail are open for pedestrian and bicycle use; equestrian use is not permitted on the Interim Use Trail. The term “corridor” is used to describe the former railroad right of way. The term “railbed” is used in instances where physical studies or analyses were conducted prior to the construction of the Interim Use Trail.



Figure S-2. Photo of Interim Use Trail

A representative photograph of the current use of the corridor is provided in Figure S-2 above.

What are the major features of the proposed Master Plan Trail?

The project would develop the existing Interim Use Trail into a ~~permanent~~ long-term Master Plan Trail. The basic features of the Master Plan Trail include:

- For most Build Alternatives, the installation of ~~permanent~~ trail surfacing, including a combination of asphalt paving, soft surface shoulders for pedestrians (and equestrians in the Redmond segment only), and vegetated buffer;
- New accessible restroom facilities, with drinking fountains, at two locations along the trail corridor;
- New parking facilities, with accessible parking spaces, at three locations along the trail corridor;
- Traffic control measures (signage) where the trail crosses private driveways or roadways;
- A stormwater management system to control runoff from the trail and parking areas;

- Retaining walls where needed to support slopes and reduce embankment area;
- Improvements within County-owned right-of-way such as sidewalks and crosswalks at public access points;
- Litter receptacles, doggy litter bag boxes, and trail etiquette signs;
- Fencing to provide for trail user safety and identify and protect sensitive natural areas; and
- Bollards at trail crossings to prevent unauthorized vehicles from driving onto the trail.

Features would vary depending on the alternative; see the next section for details.

Trail Alternatives

What alternatives are were evaluated in this the Draft EIS?

This ~~Draft~~ EIS evaluates the following alternatives for developing a ~~permanent~~ long-term, Master Plan Trail:

- **Corridor Alternative:** ~~A Master Plan Trail~~ The Corridor Alternative would be located within the former railroad right of way (referred to as the “corridor”) currently developed as the Interim Use Trail. The majority of the trail would encompass the existing Interim Use Trail (Figures S1-A (pg S-3), S1-B (pg S-4), and S1-C (pg S-5)). The trail would accommodate pedestrians, wheeled uses, and equestrian use (in Redmond segment only) ~~use~~ on paved and adjacent or separated soft surfaces. This alternative includes vehicular parking and restrooms.
- **East A Alternative:** The East A Alternative would use the existing Interim Use Trail in certain segments and transition to the roadway shoulder at an Americans with Disabilities Act (ADA)-acceptable gradient for driveway/public roadway intersections, along 1.7 miles of divided properties between SE 33rd Street and approximately the 1400 block of East Lake Sammamish Parkway SE, to avoid sensitive areas, and in other locations (Figures S1-A (pg S-3), S1-B (pg S-4), and S1-C (pg S-5)). Where the alignment for the paved portion of the multi-use trail leaves the Interim Use Trail, pedestrians and equestrians (in Redmond segment only) ~~use~~ would continue on the Interim Use Trail. This alternative assumes that the local jurisdictions will retain bike lanes on East Lake Sammamish Parkway for high-speed bicycle use. This alternative includes vehicular parking and restrooms.
- **East B Alternative:** The East B Alternative would be identical to the East A Alternative except that there would be no equestrian or pedestrian use on the existing Interim Use Trail in some segments (Figures S1-A (pg S-3), S1-B (pg S-4), and S1-C (pg S-5)). Where the trail transitions to the roadway shoulder, the existing Interim Use Trail on the railbed would be closed and no trail access would be permitted on the railbed. In these areas, pedestrians and equestrians would be routed away from the corridor along with the paved portion of the trail. Pedestrians, equestrians (Redmond segment only), and bicycles ~~use~~ would continue on the paved trail adjacent to the roadway in these areas. High-speed bicycle use would remain in the bike lanes on the roadway. This alternative includes vehicular parking and restrooms.
- **Continuation of the Interim Use Trail Alternative:** The existing Interim Use Trail would be continued beyond the currently approved 2015 expiration date. Equestrian use is not permitted on the existing Interim Use Trail but would be considered as part of this alternative. The existing Interim Use Trail would be extended at the northern terminus, across Bear Creek

and connecting to the Bear Creek Trail. This alternative includes vehicular parking and restrooms.

- **No Action Alternative:** King County would continue to operate the existing Interim Use Trail through 2015, at which time the permitted operation of the trail would expire in the absence of additional environmental review and King County Council action. The trail would be decommissioned and closed to public use in 2015.

How does the trail relate to the existing rights of way?

The railbanked corridor encompasses the public right of way and is 100 to 200 feet wide over 91 percent of the proposed trail length. The railbed is 8 to 12 feet wide and is located within a portion of the corridor. Figure S-3 (pg S-10) conceptually illustrates the scale of the trail in comparison to the right of way. The figure is intended to show the scale of the trail relative to the King County and road rights of way. The location of trail with respect to these rights of way varies throughout the length of the project.

Do the alternatives meet the purpose and need for the East Lake Sammamish Trail?

The Corridor Alternative, East A Alternative, and East B Alternative meet King County's purpose and need. The East A Alternative would utilize all of the existing corridor but would also require extensive development outside of the corridor. The East B Alternative would not use all of the existing corridor and would also require extensive development outside of the corridor. The No Action Alternative and Continuation of the Interim Use Trail Alternative fail to fully meet the project's purpose and need, as discussed in Section 2.5.

Is there a preferred alternative?

The preferred alternative is the Corridor Alternative because it best meets King County's purpose and need. Specifically, it offers a paved alignment along the railbanked corridor. Although a preferred alternative has been identified for this Draft EIS, final selection and refinement of an alternative will be based on the environmental review, including the impacts associated with each alternative, cost considerations, and comments received on ~~this~~ the Draft EIS. The final location will be confirmed in the federal Record of Decision (ROD) issued for this project.

What safety features will the trail include?

State and local design guidelines would be considered in order to design a multi-use trail to safely accommodate the anticipated uses (AASHTO, 1999; King County, 1992, 1993, 2004; WSDOT, 1995). Physical and spatial separation between the trail and vehicle traffic is important to provide a safe environment for trail users. In addition, trails need to provide adequate operating space for bicycle riders and other users (including equestrians); adequate width to avoid conflicts with other users of a two-way trail; appropriate surfaces in good condition; appropriate bicyclist speed limit for the conditions; grade changes that comply with requirements of the Americans with Disabilities Act (ADA); controlled crossings that include curb cuts and truncated domes at intersections with roadways; safe alignment; and adequate stopping sight distances. When an alternative varies from the design guidelines, the potential impacts are discussed.



INTERIM
USE TRAIL
8-12'

MASTER PLAN
TRAIL
UP TO 27'

SCALE ON RAILBED



MASTER PLAN
TRAIL
21'

SCALE IMMEDIATELY ADJACENT TO PARKWAY

NOTE:
THESE FIGURES ARE INTENDED
TO SHOW THE RELATIVE SCALE
OF THE TRAIL WITH RESPECT TO
RIGHTS-OF-WAY. THE LOCATION
OF THE TRAIL WITH RESPECT TO
THE RIGHTS-OF-WAY VARIES.



How do the estimated costs compare between the Build Alternatives?

Table S-1 summarizes the estimated cost of construction and property acquisition for each alternative. These estimates are based on the preliminary configurations developed for each alternative as described in the Draft EIS. If alternatives are refined based on environmental review and comments received, the cost estimates will be refined accordingly.

Table S-1. Comparison of Estimated Costs among Build Alternatives

DESIGN ELEMENT/ALTERNATIVE	CORRIDOR ALTERNATIVE	EAST A OR EAST B ALTERNATIVE	CONTINUATION OF THE INTERIM USE TRAIL
Preparation	2,296,000	3,221,000	26,000
Grading	663,000	951,000	7,000
Erosion Control and Planting	1,998,000	2,106,000	12,000
Surfacing	1,468,000	1,567,000	41,000
Drainage	1,421,000	1,826,000	0
Structures	8,364,000	13,169,000	0
Traffic	530,000	1,139,000	26,000
Signage	76,000	109,000	2,000
Other Items	4,982,000	7,016,000	145,000
Parking, Restrooms, Access ^a	5,325,000	5,165,000	5,165,000
Subtotal	27,123,000	36,269,000	6,124,000
Construction Contingency (5%)	1,356,000	1,813,000	306,000
Construction Engineering (10%)	2,712,000	3,627,000	612,000
Total Construction	31,191,000	41,709,000	7,043,000
Engineering and Permitting (12%)	3,743,000	5,005,000	845,000
Right of Way Acquisition ^b	0	22,000,000	0
TOTAL	34,934,000	68,714,000	7,888,000

^a Specific features of some access improvements vary between alternatives (see EIS Chapter 2, Table 2-2). These distinctions are not reflected in the above estimates.

^b Acquisition cost based on impacts identified in EIS Chapter 3, Section 3.8.4, Private Property Impacts; average property value identified in Section 3.8.2.4, Property Values; an average of 5 percent of average property value for partial acquisitions; and negotiation and acquisition costs.

^c Estimated costs are based on 2004 dollars. Costs are likely to be escalated by 6% per year to the date of construction. The costs are comprehensive planning-level costs that take ADA compliance into consideration.

Summary of Impacts

The following sections briefly describe and compare the impacts of the alternatives. Table S-2 provides a summary of differences in impacts among the alternatives.

What will happen during construction?

What is the timing of the proposed trail construction and how does the duration of construction compare between the alternatives?

The approximate phasing and relative duration of construction is described for each alternative below from shortest to longest:

- The No Action Alternative would not require construction.

- The Continuation of the Interim Use Trail Alternative would require extending the Interim Use Trail approximately 1,500 feet to the north and constructing parking and restroom facilities. These activities would occur in the cities of Redmond and Sammamish. Depending on permitting and funding availability, the work could be completed in a single season and within 2 to 3 months.
- The Corridor Alternative would likely be constructed in segments due to the length of the trail and the multiple jurisdictions that would be affected. Assuming seasonal constraints and funding availability, construction would likely occur over at least ~~three~~ four ~~construction seasons~~ calendar years (not necessarily consecutive), possibly beginning in 2010. Construction sequencing and phasing will be based upon funding availability. Construction of the portion of the trail occurring within the City of Redmond is funded for 2010. Some funding is available in 2010 for construction of the portion of the trail occurring in the City of Issaquah. Funding availability after 2010 is uncertain.
- The phasing of the East Alternatives would be similar to that for the Corridor Alternative. However, the East Alternatives require more extensive construction (e.g., more excavation and more than twice as much fill), compared with the Corridor Alternative. Thus more resources would be required to complete the work in the same amount of time.

How would local roadways and driveways be affected by construction work?

With the use of standard best management practices for traffic control, no disruption of traffic flow is expected during construction. The East Alternatives would require more work along roadways than the Corridor Alternative (approximately 300 feet for Corridor compared to 4 miles for the East Alternatives). Construction at residential driveways, which would take about one to two weeks per driveway, would be managed to allow access to private properties.

How would construction noise differ between alternatives?

The equipment used to construct the trail would generate noise that could disrupt activities at nearby homes. Construction of the trail is expected to occur only on weekdays, during daylight hours. The Corridor Alternative would follow the existing Interim Use Trail for most of the route and would likely require less excavation, grading, and pile driving than the East Alternatives. Under the East Alternatives, the trail would be located off of the Interim Use Trail and involve construction in areas with steeper terrain. With the East Alternatives, some construction activities would occur farther from homes west of the trail, but closer to homes east of the trail, including properties east of East Lake Sammamish Parkway (Parkway). The steeper terrain would require more complex construction that would likely extend the duration or intensity of construction and increase the potential for noise impacts. The East Alternatives would require more truck trips for hauling of additional materials to and from the project corridor compared with the Corridor Alternative. Because the East Alternative route would move the trail eastward and raise the trail elevation compared to remaining on the Interim Use Trail alignment, both East Alternatives would increase the potential for short-term construction noise impacts at homes both east and west of the trail.

Construction noise associated with the Continuation of the Interim Use Trail Alternative would be limited to the northerly trail extension and the parking and restroom facilities. There would be no construction-related noise under the No Action Alternative.

Table S-2. Summary of Differences in Impacts among Alternatives, East Lake Sammamish Master Plan Trail

ALTERNATIVE	CORRIDOR ALTERNATIVE	EAST A ALTERNATIVE	EAST B ALTERNATIVE	CONTINUATION OF THE INTERIM USE TRAIL ALTERNATIVE	NO ACTION
Construction Impacts	<ul style="list-style-type: none"> Construction would likely be phased due to the length of the trail and multiple jurisdictions that would be affected. Assuming seasonal constraints and staggered funding availability, construction would likely occur over at least three <u>four</u> construction seasons. Construction of trail would occur along approx. 300 ft. of roadway <u>to extend the northern terminus beyond the current location.</u> Approx 30 one-way truck trips would occur each day of construction. Trucks would access trail from public streets and potentially from driveways through negotiation with homeowners. Equipment noise could disrupt activities at nearby homes on weekdays during daylight hours. 	<ul style="list-style-type: none"> Construction duration within a single season could be longer than Corridor Alternative due to more earthwork and higher retaining walls. Construction of trail would occur along approx. 4 miles of roadway. Approx. 47 one-way truck trips would occur each day of construction. More truck access points available than with Corridor Alternative because of proximity of trail to roadways. Potential for noise impacts greater than Corridor Alternative. 	<ul style="list-style-type: none"> Similar to East A Alternative, potentially with more installation of signs and bollards to mark closed portions of railbed. 	<ul style="list-style-type: none"> Construction activities would occur in the cities of Redmond and Sammamish. Depending on permitting and funding availability, the work could be completed in a single season and within 2 to 3 months. Construction of trail would occur along approx. 300 ft. of roadway <u>to extend the northern terminus.</u> Approx. 17 truck trips would occur each day of construction. Construction noise would be limited to northern trail extension and parking/restroom areas. 	<ul style="list-style-type: none"> No construction required.
Wetland Impacts	<ul style="list-style-type: none"> 4.04 <u>1.03</u> acres of wetland fill. 3.93 <u>.29</u> acres of wetland buffer impact. 	<ul style="list-style-type: none"> 4.19 <u>1.21</u> acres of wetland fill. 4.14 <u>.35</u> acres of wetland buffer impact. 	<ul style="list-style-type: none"> Same as East A Alternative. 	<ul style="list-style-type: none"> No wetland or buffer fill required. 	<ul style="list-style-type: none"> No wetland or buffer fill required.
Fish and Stream Impacts	<ul style="list-style-type: none"> Increase of 20 acres total impervious surface; however, minimal increase in stormwater runoff expected because area is small relative to basin and stormwater management facilities would be provided. 2.3 acres of fill and permanent vegetation removal along streambanks. Work on culverts required in 18 streams. Net benefit to fish passage resulting from replacement of barrier culverts. Potential for turbidity during trail and drainage system maintenance. 	<ul style="list-style-type: none"> Increase of 20 acres total impervious surface; however, minimal increase in stormwater runoff expected because area is small relative to basin and stormwater management facilities would be provided. 2.4 acres of fill and permanent vegetation removal along streambanks. Work on culverts required in 22 streams. Net benefit to fish passage resulting from replacement of barrier culverts. Greatest potential for turbidity during trail and drainage system maintenance because more area would be maintained (railbed plus portions of trail along roadways). 	<ul style="list-style-type: none"> Same as East A Alternative. 	<ul style="list-style-type: none"> Culvert and fish passage improvements limited to ongoing maintenance. Minor potential for turbidity during trail and drainage system maintenance. 	<ul style="list-style-type: none"> Culvert and fish passage improvements limited to ongoing maintenance. Minor potential for turbidity during trail and drainage system maintenance.
Impacts to Private Properties	<ul style="list-style-type: none"> No property acquisitions or relocations required. Potential for parking impacts near businesses in Issaquah (near southern terminus of trail). Potential for illegal parking on residential driveways. No substantial increase in crime expected along trail. <u>Due to higher trail use volumes and some vegetation removal,</u> Residents may experience reduced privacy due to the presence of the trail and trail users, especially where trail is close to a residence or divides a property. 	<ul style="list-style-type: none"> Approx. 58 to 61 partial acquisitions and 15 to 18 full acquisitions of private property required. 12 to 15 family units would need to be relocated. Parking impacts similar to Corridor Alternative. Potential for loss of some parking along west side of East Lake Sammamish Parkway. No substantial increase in crime expected along trail. Privacy impacts would be less for residents adjacent to portions of railbed that are closed to high-speed use; residents of homes adjacent to East Lake Sammamish Place SE and East Lake Sammamish Parkway would experience reduced privacy, especially where trail would be at a similar elevation to yards facing the road. 	<ul style="list-style-type: none"> Similar to East A Alternative, but no impacts on privacy for residents along portions of railbed that would be closed to all users. 	<ul style="list-style-type: none"> No impacts to private properties. 	<ul style="list-style-type: none"> No impacts to private properties.
Impacts on Views	<ul style="list-style-type: none"> Removal of private landscaping and structures from publicly owned trail corridor could increase visibility from or toward homes. Visual impacts due to retaining walls and fencing would be moderate to high where a wall is visible from a sensitive view or is close to a house. 	<ul style="list-style-type: none"> Greater visual impacts than Corridor Alternative in areas where trail would come close to several residences or where tall retaining walls were required. 	<ul style="list-style-type: none"> Improvement of view along railbed where existing fencing and signs would be removed (where paved portion of trail moves to the roadway). 	<ul style="list-style-type: none"> No impacts on views aside from construction of two parking/restroom facilities. 	<ul style="list-style-type: none"> Views would remain the same as they are currently.
Trail Safety and User Conflicts	<ul style="list-style-type: none"> Potential for conflicts between trail users and vehicles where trail intersects roadways and driveways. Proposed trail widths would minimize potential for conflicts among trail users. 	<ul style="list-style-type: none"> Trail users may be less safe compared to Corridor Alternative in areas where trail runs adjacent to roadways. Potential for conflicts among trail users could be less than with Corridor Alternative where paved portion of trail transitions to roadway because the soft-surface trail would be fully separated from the high-speed paved trail. 	<ul style="list-style-type: none"> Similar to East A Alternative but safety further reduced where both equestrians and pedestrians travel close to roadways. Potential for conflicts among trail users higher than with Corridor and East A Alternatives because of less separation between equestrian/ pedestrian and higher speed trail users. 	<ul style="list-style-type: none"> Ongoing potential for conflicts among trail users because trail does not separate high-speed trail users and equestrians/ pedestrians. 	<ul style="list-style-type: none"> Same as Continuation Alternative.

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How would the contractor access construction areas?

Trucks would access the trail primarily from public streets. In addition, King County and the contractor may jointly determine that some driveways ~~may~~ are also needed to be used for access; temporary easements ~~this~~ would be negotiated with homeowners as needed prior to construction. The East Alternatives would have more access points available than the Corridor Alternative because of the proximity of portions of the trail to roadways.

Under the Continuation of the Interim Use Trail Alternative, trucks would also access the trail from public streets. Minimal impact from trucks would occur. Under the No Action Alternative, no construction would be needed.

How many trucks would be used during construction?

Trucks would be needed during excavation, filling, and surfacing for the trail. The Corridor Alternative would require approximately 30 one-way truck trips per day. The East Alternatives would each require approximately 47 one-way truck trips per day. The Continuation of the Interim Use Trail Alternative would require approximately 17 truck trips per day. Though the East Alternatives would require the most truck trips, fewer trucks would require access to the corridor because most of the alignment would be accessed from roadways instead.

What other major projects are planned or underway along the trail corridor?

The City of Redmond, City of Sammamish, and City of Issaquah Six-Year Transportation Improvement Programs (TIPs) were reviewed to identify planned transportation improvements within the transportation study area. Each jurisdiction has several roadway improvements planned for the next decade (for example, roadway widening, intersection improvements, bike lanes, sidewalk, signalization, restriping). Non-motorized improvements are proposed for the Bear Creek Trail in Redmond. Planned improvements are identified in detail, by jurisdiction, in Section 3.11 of Chapter 3 (Table 3.11-12).

In addition, the Washington State Department of Transportation is designing improvements to SR 520 from West Lake Sammamish Parkway to SR 202. These improvements include widening the highway and other access improvements where the trail would intersect the highway.

None of these projects would be adversely impacted by, or adversely impact, the construction or operation of the Corridor Alternative or the Continuation of the Interim Use Trail Alternative. Most of these projects could increase traffic volumes on roadways in the project area and could increase trail use. With the East Alternatives, the potential for northbound queuing due to vehicles turning left at driveways along East Lake Sammamish Parkway would be reduced with the addition of a center two-way left-turn lane. The location of the East Alternatives with respect to the roadway is intended to accommodate the future roadway improvements. However, depending on the outcome of ongoing corridor studies and planning efforts by the local jurisdictions, the location may require some minor modifications. Trail design would be coordinated with local jurisdictions.

How do effects to fish and aquatic resources compare between the alternatives?

Construction activities in or near streams or wetlands could potentially cause localized sedimentation, turbidity, and erosion. The Corridor and East Alternatives would likely require temporary dewatering for construction of cast-in-place concrete walls. The Build Alternatives could disturb fish due to construction noise, machinery, or human activity, or spills of fuel or oil within construction or staging areas. With the application of best management practices (BMPs) and stream and wetland mitigation, the Build Alternatives should not have major negative effects on aquatic resources, including streams, wetlands, or fish.

The project would increase the amount of impervious surface area along the trail corridor, approximately 18.8 acres associated with the Corridor Alternative and 18.4 acres associated with the East A Alternative; stormwater best management practices would be installed to manage the increase in surface runoff that would result from the increased impervious surface area. The Corridor and East Alternatives would require a small amount of wetland fill (1.04 acres and 1.19 acres, respectively), wetland buffer fill, and removal of vegetation along streambanks. The Corridor and East Alternatives would require replacing or lengthening culverts in streams but would result in net beneficial effects on fish passage conditions resulting from the replacement of barrier culverts. The impacts to fish and aquatic resources and habitat are expected to be negligible for the No Action Alternative.

How do effects to wildlife compare between the alternatives?

The Corridor and East Alternatives would result in the greatest potential to disturb wildlife through noise and visual disturbance during construction. Construction impacts of the Continuation of the Interim Use Trail Alternative would be limited to the northern trail extension and parking areas, restrooms, and access points.

Sensitive wildlife could be temporarily displaced to surrounding areas during construction. However, the construction period along any given portion of the trail would be short and most wildlife would be expected to return after construction was complete. Based on existing levels of human disturbance, construction impacts are expected to be relatively lower adjacent to East Lake Sammamish Parkway or Place (because of existing high levels of disturbance and limited habitat) and relatively higher adjacent to Marymoor Park (because of lower existing levels of disturbance and more intact habitat). Construction impacts to sensitive species such as bald eagle would be largely avoided by timing construction to avoid nesting seasons, as directed by resource agencies.

The Corridor and East Alternatives would result in the permanent removal of primarily non-native shrubs and trees, which would not result in substantial impacts to wildlife. Vegetation removal for the other alternatives would be limited to maintenance activities.

The Corridor and East Alternatives have a greater potential to disturb wildlife than the Continuation of the Interim Use Trail Alternative because more people would likely use the trail. However, the effect of trail use on wildlife is expected to be minor because of the existing level of human disturbance. Sensitive species in relatively intact habitats (i.e., Marymoor Park and Lake Sammamish State Park) are likely to be more affected by trail use than wildlife adjacent to housing and other developed areas.

The Corridor and East A Alternatives would more than double the amount of chain-link fencing along the trail, which would restrict the movements of some animals. However, this fencing would not be continuous, would only be placed in those areas as required for public safety, and predominantly occurs in areas that are characterized by urban landscape (i.e., buildings, asphalt, ornamental gardens, lawns, and shrubby/grassy areas with scattered trees. Areas without fencing or with only split-rail fencing would continue to provide wildlife access to key habitats. The East B Alternative would result in a minor benefit to wildlife in areas where the corridor would be closed and fencing removed.

How would adjacent neighborhoods and communities be affected?

Are private properties divided by the trail?

Yes, 75 properties are currently divided by the historic railbed corridor and Interim Use Trail, and would be divided by the proposed Master Plan Trail. The majority of the divided properties are within the City of Sammamish between SE 33rd Street and approximately the 1400 block of East Lake Sammamish Parkway SE.

Won't the widening of the railbed or the road prism to accommodate the trail result in loss of access to some properties?

Loss of access to some properties will occur as a result of project construction; however, the preliminary designs for the Build Alternatives are intended to minimize access impacts. The Corridor Alternative does not eliminate access to any residential properties, and it transitions to the narrowest configuration (that is, 12 feet of pavement with two 2-foot shoulders and two 1-foot clear zones) for each driveway and road crossing for safety reasons, thus minimizing impacts to driveways. The East Alternatives incorporate the above minimum configuration with the addition of a buffer separating the trail from vehicle use or a landing for vehicle use. Regardless of these measures, access would likely be altered to some properties because of the topography in the project vicinity and the proximity of homes to some alignments.

Would private property be acquired for the trail?

Despite design measures to minimize the width of the trail where private property would be affected, under the East Alternatives private property would have to be fully or partially acquired in some areas where the trail would extend outside the public right of way. Even where the trail would not extend beyond the public right of way, private property would be impacted where the project modifies or eliminates access.

Not all properties that would be impacted by the proposed trail under the Build Alternatives would need to be fully acquired. Full acquisition would likely occur when the project substantially interferes with and thus damages the property to a degree that it removes all economic value. For example, if a portion of the house would have to be removed or if access to the property was eliminated and could not be replaced, full acquisition is assumed. In addition, for safety reasons, a number of constraints exist for an intersection of a driveway and a trail. For example: (1) drivers should be at eye level with the trail before crossing; and (2) the grades for modified driveways should be functional and safe. If access to a property that complies with these criteria cannot be provided, then full acquisition of the property is assumed. Partial acquisitions occur when only a portion of the property is required by the project and the remaining portion of the site retains its economic value.

Based on preliminary investigations, the East Alternatives would require approximately 58 to 61 partial acquisitions, 15 to 18 full acquisitions, and 12 to 15 relocations. None of the other alternatives would require relocations or acquisitions. The number of relocations relates to the number of family units that would need to be relocated, and the number of acquisitions relates to the number of properties that would need to be acquired.

Under both the Corridor and East Alternatives, easements or agreements with other public agencies would be necessary when the trail or associated improvements occur in another right of way. For example, all of the Build Alternatives are routed through the Redmond Way right of way, which would require approval from the City of Redmond. However, many more such agreements would be necessary under the East Alternatives, due to the use of road right of way along East Lake Sammamish Parkway and Place for the trail alignment.

Where residential driveways must be regraded or reconstructed to maintain access, easements or agreements with the property owners would be necessary for any work outside the King County corridor.

What would happen to adjacent parking?

Under the Corridor and East Alternatives, the combination of existing and proposed new parking facilities would provide sufficient parking for trail users on most days. However, parking at Marymoor Park by trail users could reduce available parking for park users, especially on busy summer weekends. There is some potential for parking impacts near businesses in Issaquah because limited parking is currently available for trail users near the south terminus of the trail. Trail users would be discouraged from parking on the shoulders of East Lake Sammamish Parkway since this could encourage illegal access. There is potential for illegal parking if trail users attempted to access the trail via residential driveways.

The location of the East Alternatives with respect to East Lake Sammamish Parkway and East Lake Sammamish Place is based on direction by the City of Sammamish. The Parkway configuration would appear to accommodate either a center turn lane or parallel parking, but not both. Therefore, the cumulative effect of the East Alternatives and roadway improvements could be the elimination of parking in some or all portions of the west side of the Parkway. The East Lake Sammamish Place configuration is intended to allow parallel parking on one side of the road. However, some or all areas of parking could be eliminated during final design to further minimize access and property impacts to adjacent property owners.

The Corridor Alternative narrows in some areas and meanders across the centerline of the former railbed, thereby preserving existing parking in most areas. In some areas the alignment moves off the railbed entirely to improve existing parking.

Shared parking agreements could make additional parking available for weekend use at the existing Microsoft campus, Issaquah District Court, and potentially other local businesses. With Washington State Parks approval, additional parking may also be available at Lake Sammamish State Park.

What would happen to existing views from residences along the trail?

Visual impacts during construction of the Build Alternatives would include the temporary presence of construction equipment, temporary storage of construction materials, and excavation of soil. Overall construction impacts to views may be less for the East Alternatives than for the Corridor Alternative because there would be no construction along the rail corridor in areas where

the multi-purpose trail diverts to the roadway. However, impacts on East Lake Sammamish Place would be greater for the East Alternatives due to clearing and construction of retaining walls.

The Corridor Alternative would require the removal of privately-installed vegetation and structures, such as fences, walls, sheds and irrigation systems, in the publicly-owned corridor. The loss of landscaping could cause increased visibility from or toward homes and change the visual character. Overall, the asphalt paving of the trail and the addition of split-rail fences and retaining walls less than 4 or 5 feet high would not create major changes in views. In some places retaining walls may be up to 8 feet high; however, these taller walls would be used primarily in wooded areas where no residences are located. Visual impacts due to walls and chain-link fences would be moderate to high in areas where a wall is visible from a sensitive view, such as in the Sammamish Place area, or where the wall is very close to a house, such as in the 205th Avenue SE area. View impacts would be less intrusive where the project corridor is currently used as private storage space.

The East Alternatives would result in higher impacts to views in the East Lake Sammamish Place neighborhood than the Corridor Alternative because the alignment would come very close to several residences. This proximity would require the removal of private landscaping, driveways, and parking spaces, and the addition of a physical barrier between the trail and East Lake Sammamish Place. Retaining walls as tall as 10 to 15 feet high could be required in some places, including in the Sammamish Place area, where the retaining wall would be close to an existing home. For the East B Alternative, most chain-link fences and trail etiquette and traffic control signs would be removed from areas where the paved portion of the trail leaves the corridor. This would improve the view of the corridor in these areas.

Would noise from people using the trail be noticeable to nearby residents?

None of the alternatives are expected to have ~~substantial~~ significant noise impacts during operation of the trail, although noise from trail users may be audible to nearby receptors.

Noise sources associated with use of the trail under the Corridor and East Alternatives would include bicycles traveling on pavement, occasional bicycle bells, foot traffic on pavement and possibly gravel, human voices, and horses traveling on gravel. Noise levels would be expected to be greater than current conditions due to the anticipated increased trail use. Vehicles would create some noise in and near parking lots. Trail maintenance would involve occasional movement of vehicles on the trail and use of equipment for mowing or other activities, generating noise similar to existing neighborhood yard maintenance noise.

For portions of the trail located near major roadways such East Lake Sammamish Parkway, noise generated by trail users under the Corridor and East Alternatives is likely to be completely obscured by traffic noise. Noise from trail users may be more noticeable to residents along portions of the trail that are far from traffic noise and shielded from view of the roadway; such areas are currently quiet and therefore additional noise may be more perceptible to residents. However, even in these quieter areas, it is unlikely that noise generated by permitted trail uses would approach or exceed any local noise standards or pose substantial noise impacts to residents. The trail and parking areas would be closed to the public at night. The proposed parking areas are far enough away from existing homes that they would not pose noise impacts to residents.

Noise levels could be reduced under the Continuation and No Action Alternatives because the gravel surface of the trail might restrict the types of users and overall trail numbers.

How would the trail affect crime incidents and the safety of nearby residents?

The trail is not expected to substantially impact public safety or security based on data from other paved, multi-use trails in King County. There are no reported data to indicate the proposed trail would result in a substantial increase in crime. Past studies indicate that trails within urban and suburban areas do not experience disproportionately high rates of crime relative to other types of recreational venues or meeting places. The trails seem to be viewed as desirable quality of life enhancements that, despite occasional problems, make homes and property more desirable. These studies indicate that crime does not necessarily result from trail proximity. Other factors not related to the trail, such as the location of property and the presence of a wooded area, may also influence the possibility of criminal activity.

Potential safety and crime issues associated with the Corridor and East Alternatives include the increased potential for collisions with trail users, particularly for young children and the hard-of-hearing; conflicts arising from untethered or off-leash dogs; increased trespass or vandalism; or an increase in other crimes such as robbery.

Occasional incidents of trespass or private property vandalism could occur along the proposed trail but would not be expected to exceed current levels. Major crimes such as robbery are possible but are expected to be similar to, or less than, that experienced in other venues where people gather for recreation.

Are there issues related to safety where the trail runs alongside or crosses roadways?

Trail user safety may be lowered for those portions of the East Alternatives located immediately adjacent to roadways because of the reduced separation between vehicles and trail users. Under the East B Alternative in particular, equestrian/pedestrian use would occur in proximity to a high-volume arterial. Safety risks would be highest during heavy traffic or bad weather. Safety issues can be addressed through design features such as using a planter or other barrier between the trail and the roadway.

The potential for safety impacts at crossings under the Build Alternatives would be minimized by installing signs and managing vegetation to allow for better sight distance. The Corridor and East Alternatives would increase the potential for conflicts between trail users and vehicles where the trail intersects roadways and driveways, compared to the existing Interim Use Trail. This is because of the increased trail use and the likelihood that some trail users would travel at higher speeds on a paved surface than they do on the existing gravel surface. Sight distance would be limited in many locations for vehicles as well as for trail users. Under the East B Alternative, equestrians would be exposed to more residential driveway crossings and other potential distractions from the adjacent roadway.

What about conflicts between users on the trail?

The typical trail sections designed for the Corridor Alternative and East Alternatives are based on recommendations published by the American Association of State Highway and Transportation Officials (AASHTO) in its 1999 *Guide for the Development of Bicycle Facilities*. Based on King County's experience with other urban trails, the narrowest trail section is 12 feet of pavement with two 2-foot shoulders and two 1-foot clear zones. Where possible, a separate soft-surface trail is being evaluated to separate equestrian and pedestrian use from higher-speed, wheeled uses.

The Corridor Alternative substantially meets current King County and AASHTO guidelines for ideal trail widths on multi-use trails. The trail widths that can be provided under the Corridor Alternative are expected to minimize the potential for trail user conflicts. Under the East A Alternative, the potential for trail user conflicts could be less than for the Corridor Alternative where the paved portion of the trail transitions to the roadway and equestrians/pedestrians would continue along the Interim Use Trail. The potential for trail user conflicts would be higher under the East B Alternative than the Corridor and East A Alternatives since there would be less separation between equestrian/pedestrian use and higher speed trail users. The highest potential for trail user conflicts would occur under the Continuation of the Interim Use Trail Alternative, which would not meet minimum standards for separation between higher speed trail users and equestrians/pedestrians. The No Action Alternative would result in continued potential for trail user conflicts. However, neither the No Action Alternative nor the Continuation of the Interim Use Trail Alternative is expected to attract the volumes anticipated with a wider, paved trail.

Would the alternatives affect cultural or historic resources?

Archaeological surveys of the area were conducted in 2000 and 2003, and archaeological monitoring was conducted in 2004. The Interim Use Trail was constructed largely on the same alignment as the proposed Corridor Alternative. It is possible that the Build Alternatives could affect cultural resources such as archaeological deposits that have not previously been identified. The primary impacts would be associated with construction or maintenance activities that disturb native soils. For example, constructing or upgrading access roads for construction equipment, clearing staging areas, building parking and restroom facilities, extending culverts, constructing retaining walls, or installing fences could impact cultural resources during construction of the trail. During trail operation, maintenance activities such as culvert maintenance requiring excavation into native soil could disturb archaeological deposits.

The potential to impact cultural resources would be higher under the East Alternatives than for the Corridor Alternative, because the East Alternatives would potentially require more extensive construction and ground disturbance of native soils. Potential impacts for the Continuation of the Interim Use Trail Alternative would be limited to disturbance of native soils associated with the northern extension of the trail. The tribes have requested for all alternatives that tribal representatives monitor any excavations around culverts because of the high probability of cultural resources being present in these areas. King County would coordinate proper monitoring and excavation.

Are there any significant unavoidable adverse impacts that cannot be mitigated?

The magnitude of the property acquisition that would occur under the East Alternatives would be considered a significant unavoidable adverse land use and socioeconomic impact to displaced residents. Based on preliminary investigations, the East Alternatives would require approximately 58 to 61 partial acquisitions, 15 to 18 full acquisitions, and 12 to 15 relocations. None of the other alternatives would require relocations or acquisitions.

Under the East Alternatives, the trail would pass very close to several residences in the East Lake Sammamish Place neighborhood. If these properties are not acquired, significant unavoidable adverse impacts to visual quality could result.

Areas of Controversy and Major Unresolved Issues

What will East Lake Sammamish Parkway and other local roadways look like in the future?

Traffic on key roadways in the study area is increasing as the cities of Issaquah, Sammamish, and Redmond continue to grow. Accordingly, these local jurisdictions are planning improvements to these roadways to accommodate the increased traffic. Many of these roadways, including East Lake Sammamish Parkway, will likely be wider with new or additional lanes for through travel, turning, and bicycling, as well as sidewalks. However, the final configuration for many of these improvements has not been established at this time.

The alignment for the East Alternatives is frequently adjacent to East Lake Sammamish Parkway and East Lake Sammamish Place SE. The location of the trail alignment with respect to East Lake Sammamish Parkway and East Lake Sammamish Place SE (e.g., the distance from the existing center line) is intended to accommodate potential future roadway improvements. However, depending on the outcome of ongoing corridor studies and planning efforts by the local jurisdictions, the location may require some minor modification.

Because of the potential for modifications to the trail alignment as the project design is refined, some of the property acquisition and natural resource impacts described for the East Alternatives may be reduced or avoided. King County will continue to coordinate with the local jurisdiction during the environmental review process. ~~Any additional information regarding future roadway improvements will be incorporated in the Final EIS.~~

Should equestrian use be allowed on the trail?

A number of citizens and several staff from resource agencies have commented that equestrian use should not be allowed on the trail due to the potential impacts associated with the need for a wider trail and the potential impacts to water quality. These impacts are discussed further in Section 3.2, Surface Water Resources and Water Quality and Section 3.7, Recreation. However, the adopted *King County Regional Trails Plan* directs that trail planning and design consider the broadest array of uses appropriate to the setting. As a result, King County is including accommodation of equestrian use in each of the Build Alternatives for the Redmond portion of the trail. ~~Based on the results of the Draft EIS evaluations and comments received on the Draft EIS, equestrian use may be included in all parts of the trail, limited to certain trail segments, or eliminated entirely. Equestrian use along all or part of the trail would be conducted in accordance with local jurisdictions' plans and policies. Any changes to the Build Alternatives will be fully described in the Final EIS.~~

How wide should the trail be?

The minimum typical sections applied to the Corridor and East Alternatives have 12 feet of pavement with two 2-foot wide shoulders. This is the accepted minimum width applied to the greatest extent possible for King County's paved urban trail system. Configurations with wider shoulders or separated soft-surface for pedestrian and equestrian use ~~are~~ were evaluated in the ~~Draft EIS~~. King County and FHWA will make final decisions regarding trail configuration based on the ~~Draft EIS~~ evaluations and comments received on the Draft EIS.

Required Permits and Approvals

The following permits and approvals would likely be needed to construct the permanent trail:

- Record of Decision (ROD) issued by FHWA and WSDOT and published in the *Federal Register* as the final NEPA approval
- Notice of Action Taken (NAT) issued by King County and WSDOT and published in the Washington State Department of Ecology *SEPA Register* as the final SEPA approval
- Federal Endangered Species Act Section 7 ~~Compliance~~ Consultation
- U.S. Army Corps of Engineers Section 404 Permit
- Office of Archaeology and Historic Preservation Section 106 of the National Historic Preservation Act
- Section 401 Water Quality Certification, Washington State Department of Ecology
- National Pollutant Discharge Elimination System (NPDES) Permit, Washington State Department of Ecology
- Washington State Department of Fish and Wildlife Hydraulic Project Approval
- Right of Way Permit from City of Issaquah, City of Sammamish, City of Redmond
- Shoreline Substantial Development Permit from City of Issaquah, City of Sammamish, City of Redmond
- Clearing and Grading Permit from City of Issaquah, City of Sammamish, City of Redmond
- Public Agency Utility Exception Permit from City of Issaquah, City of Sammamish, City of Redmond
- Building Permit, City of Issaquah, City of Sammamish, City of Redmond
- Administrative Design and Planning, City of Issaquah

Environmental Commitments

Appendix A summarizes the mitigation commitments, as well as additional potential mitigation measures that have been identified for possible implementation. The measures have been grouped by topic in the appendix, as a single mitigation measure may benefit a number of elements of the environment. Refer to the specific sections in Chapter 3 of the Draft and final EISs for a complete listing associated with each element of the environment.

Next Steps

King County, together with FHWA and WSDOT, ~~will~~ will evaluate public and agency comments submitted on the Draft EIS. The evaluation ~~will~~ could be used to:

- Develop new alternatives or refine existing alternatives if necessary;
- Update information of the affected environment;
- Determine if additional studies or supplemental review are needed;
- Incorporate other changes; and
- Select mitigation measures.

~~The Theis~~ Final EIS ~~will~~ communicates the above changes, contains the lead agencies' final recommendations for a preferred alternative, and provides responses to public and agency comments received.