

Redmond Central Connector Master Plan
Appendix E

Trolley Study

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DRAFT

City of Redmond
Trolley Feasibility Study:
*A Supplement to the Redmond Central
Connector Master Plan*

February 2011

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Dept**

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EXECUTIVE SUMMARY

The City of Redmond commissioned a Trolley Feasibility Study as part of the Redmond Central Connector Master Plan along the former BNSF railroad corridor. This study was intended to evaluate the feasibility and requirements to operate a trolley on the existing tracks between Downtown Redmond and the Woodinville Winery District. The primary type of service would be tourist based; however, there is some interest in evaluating local commuter service along the same route due to peak hour traffic congestion on the city's north-south arterials, Willows Road and Red-Wood Road (SR 202).

This limited study provides preliminary information about the regulatory issues, operational and capital needs, market analysis and financial requirements for trolley service.

- **Regulatory** – The City of Redmond has the legal authority to operate a tourist trolley in Redmond, but would need an inter-local agreement or other permission from neighboring local jurisdictions or transit agencies to extend the line beyond Redmond city limits. In general, if a trolley system operated on the railroad tracks alone, the only relevant federal and state regulation would be the Manual on Uniform Traffic Control Device (MUTCD) standards. If heavy rail shared the tracks, then the trolley service would need to comply with Federal Transit Administration regulations and safety standards. If the trolley either provided commuter service or shared tracks with commuter trains, then the trolley would have to follow Federal Transit Administration regulations and Federal Rail Transit safety and security requirements. If applied the FTA regulations would lead to additional costs, based on more stringent operating guidelines.
- **Market** – In general, the study has shown that trolley service is feasible along the corridor, but commuter service would not likely be successful, due to limited anticipated commuter growth. There was interest in trolley service from some local businesses and citizens. However, a number of the interested businesses were concerned about the walkability of the Woodinville area from potential trolley stops and thought trolley service would have to be supplemented by a local shuttle or circulator. There is insufficient data to estimate the ridership potential for a tourist trolley at this time. However, other tourist trolley systems experience ridership numbers ranging from 7,000 - 132,000.
- **Operations** - The existing condition of the railroad tracks and ties are generally poor, which render train speeds to be limited to 10 miles per hour on this section of track according to recent evaluations by PSRC (based on high-capacity transit); this limited speed is within the range of most trolleys and streetcars in the U.S. (7 – 12 miles per hour). The bridges and trestles appear to be in fair condition, but require further analysis. There are concerns about drainage from the ballast. There is no infrastructure for a station, stops, or parking in Redmond. The annual operations and maintenance costs could range from approximately \$50,000 to \$250,000, based on other existing models in the U.S., but highly dependent on the level of volunteer resources and condition of cars, infrastructure and facilities.
- **Capital** – Based on a review of other tourist trolley systems in operation and a review of the condition of existing facilities and planned improvements along this route, initial capital costs could range from approximately \$2M to \$5M or more, depending on many variables including extent of repairs to existing conditions, number and type of cars and features desired by the Project Proponent. If City leadership is interested in preserving the option for a trolley in the near future, then significant capital investments may be necessary in the form of potential track and bridge repairs, stations and stops, and maintenance and

storage facilities. In addition, the Redmond Central Connector trail will need to be designed along the side of the existing railroad tracks, trestles, and bridges, rather than in the track bed using the existing crossings as currently designed/ envisioned by the Master Plan. Initial cost estimates for Phase I of the trail, the Downtown Study Area (Sammamish River to 161st Ave), would increase by approximately \$1.45 million to preserve room for the trolley. Phase I of the trail, in the proposed shared use section of construction must be completed in 2012 in order to comply with grant requirements.

- **Revenue Projections** - Upon evaluating other tourist trolley systems and evaluating initial market data gathered during this study, examples akin to a Redmond-Woodinville tourist trolley suggest potential revenues could see between \$30,000 and \$100,000 annually on fare revenue alone. Further market analysis is necessary to develop site-specific ridership and revenue projections, sponsorship, grant funding and other major revenue sources.

It is recommended that the City determine if any of these models meets its goals. Based on this study, the City should determine whether to continue to evaluate trolley service by embarking on a more detailed market study, an expert evaluation of the existing infrastructure, and/or more deliberate and strategic discussions with potential project partners.

1.0 INTRODUCTION

1.1 Purpose

The City of Redmond commissioned a Trolley Feasibility Study as part of the Redmond Central Connector Master Plan along the former BNSF railroad corridor. This study was intended to evaluate the feasibility and requirements to operate a trolley on the existing tracks between Downtown Redmond and the Woodinville Winery District. The primary type of service would be tourist based service; however, there was some interest in evaluating local commuter service along the same route.

The goals of this study were to:

- Evaluate alignment and station locations between Downtown Redmond and the Woodinville Winery District, exclusively on the former BNSF corridor.
- Utilize previous studies to assess the condition of the railroad track, crossings, bridges, and infrastructure
- Identify key regulatory and safety requirements for trolley service
- Summarize various options for vehicles, stations, and other infrastructure
- Assess ridership potential based on service goals and customer base and use this to estimate revenues
- Develop potential operations model(s)
- Identify initial project investment and long term operations and maintenance costs
- Conduct outreach to stakeholders to gauge interest in trolley
- Develop an initial business and implementation outline
- Integrate the findings of this study with the Redmond Central Connector Master Plan.

1.2 Background

The City of Redmond purchased the former BNSF rail corridor from milepost 7.3 to 3.4 of the Redmond Spur in June 2010. The City began master planning the corridor immediately. The Central Connector master plan is coordinating all of the City's long planned public works projects in the master plan and creating the preliminary design for a regional trail in the Downtown Study Area of this rails to trails corridor.

A trolley has not been specifically called out in City plans or policies, but there are a number of City policies that call for the City to seek out economic opportunities that will benefit the city, its citizens and businesses. In addition, there are a number of policies that encourage the city to provide for or encourage alternative forms of transportation. Once the City's acquisition of the corridor was finalized, more people asked the City to consider a trolley in the corridor for tourists, commuters, or both.

2.0 REGULATORY ISSUES

There are a number of regulatory issues to consider when considering a trolley service including:

- Which organizations have the authority to operate a trolley (whether it be tourist or commuter service)?
- Which regulations apply to tourist trolleys versus commuter trolleys and do the rules change if the tracks are shared with other types of rail users? How do those regulations effect the trolley capital improvements and operations?

2.1 Authority to Operate

Based on the multi-party Memorandum of Understanding regarding acquisition of the Eastside Rail Corridor and the Purchase Agreement between Redmond and the Port of Seattle, Redmond maintains rights to develop a tourist trolley system within its portion of the corridor (milepost 7.3 to 3.4). However, if the intended use is commuter transit ridership, then a transit agency (King County Metro or Sound Transit) is a likely candidate to provide service.

In order to develop trolley service north of Redmond (milepost 3.4), the City would need to develop an inter-local agreement with the Port of Seattle (the owner), King County and Woodinville (jurisdictions), and potentially other partners (public or private). There are existing trolley models for multi-party development and operating systems.

2.2 Operating Regulations

Per an initial interview with Washington State Department of Transportation Passenger Rail Division, the following are preliminary findings on safety standards that may apply or not apply to a tourist trolley:

- There are no officially adopted regulations for trolley systems.
- Federal Transit Administration (FTA) regulations pertain to heavy rail. If a tourist or excursion trolley has shared use with heavy passenger or freight rail, the FTA regulations would then apply. If there is no shared use with other rail (such as in the case of rail abandonment), then FTA regulations do not apply.
- FTA has guidelines for transit operations and maintenance, but not rolling stock.
- Federal Rail Transit safety and security requirements apply to commuter uses only.
- State Manual on Uniform Traffic Control Devices (MUTCD) are required.
- If there is viable transit option for system or shared on this line, then Washington State Safety Oversight has authority over the following:
 - Sound management
 - Maintenance
 - Operations
 - Training
 - Cooperation with other stakeholders
 - Safety and security plans for operations
 - Vehicle procurement
 - Configuration management
 - Internal audits

In summary, there may be a substantial difference in regulatory vehicle standards and operating requirements (and thus cost in time and expense) if the City chose to consider a trolley as a viable part of its transit system rather than a strictly tourist line, or whether any part of a trolley were to share with heavy rail service.

Although FTA regulations, guidelines and safety and security requirements may not apply to a strictly tourist trolley system envisioned, other trolley systems develop a documented Safety Plan & Safety Certification Process with Checklist to address risk management. The American Public Transportation Association (APTA) has developed and issued voluntary safety standards that could be advisable for heritage trolley vehicles as part of public agencies' transit systems. In general these standards were developed to be in line with safety standards that were applicable when trolley systems were originally in service, particularly for vintage or heritage cars and rolling stock.

3.0 EXISTING CONDITIONS

In order to determine potential capital costs, existing studies and data were reviewed to determine the physical tracks condition of the railroad infrastructure. The data was gathered primarily from the Puget Sound Regional Council (PSRC), 2009 Sound Transit 2 Planning: BNSF Eastside Corridor Commuter Rail Feasibility Study.

- Tracks are in poor condition generally as evaluated for high speed, high capacity commuter rail only. Existing track conditions would limit speeds to 10 MPH. This type of speed, however, is customary for most vintage and modern streetcar and trolley systems.
- Ties are in poor to extremely poor condition as evaluated for high capacity commuter rail. The PSRC study recommends 100% replacement of ties for high capacity commuter rail use.
- Bridges and trestles were not fully analyzed in the PSRC study; further analysis would be needed. PSRC recommended upgrades to bridge at MP 6.2 (over-water at Sammamish River) as evaluated for high capacity commuter rail. No specific recommendations were made for the Redmond Way trestle or the 154th Street Bridge.
- Drainage was considered poor by PSRC. The ballast sections are not properly draining and they are adjacent to some critical areas.
- Crossings would likely be used as is. The PSRC study recommended grade separated crossings for some locations, but that was due to the speed of high-capacity commuter rail, frequency of track use and the associated impacts on local traffic.



Exhibit 1 – Existing Tracks



Exhibit 2 – Sammamish River Trestle

4.0 DEMAND

In order to evaluate ridership potential and alignment options, a variety of data was gathered including interviews of stakeholders, input from members of the public, gathering the numbers of visitors to key tourist attractions in the area, and reviewing existing studies and data. Demand was analyzed for both tourist and commuter trolley service.

4.1 Potential Tourist Ridership

4.1.1. Plans and Policies

Redmond's Comprehensive Plan has a number of policies that encourage economic development and strengthening of the arts in Downtown Redmond. The City is planning for the redevelopment of the Redmond Central Connector in Downtown in 2012 to attract tens of thousands of people to downtown each month and stimulate local businesses. The City is also planning for a nearby Downtown Central Park (~2016) and performing arts center (~2020), which will also enhance Downtown as a destination. Redmond is in the process of working with the Lodging and Tax advisory Committee and Chamber of Commerce to determine how Redmond can grow tourism in the near and long term.

4.1.2 Survey Results

In order to gauge initial viability of a trolley, a dozen local businesses and associations were surveyed. The results of these surveys are provided in Appendix A. In summary, five of the business organizations surveyed thought a trolley would benefit their business and were very enthusiastic about the possibility of a tourist trolley. One of these five, the Woodinville Wine Country member organization, represents about half of the 70 wineries in the District, and highly favored a trolley. Another six business organizations were interested in a tourist trolley, but did not see a significant benefit to their business or had reservations about how it could be successful and affordable. The twelfth organization was the historical society, which was supportive of a historic trolley, and saw some local economic benefit. None of the respondents thought that commuter service provided by the trolley would be very successful. Redmond was able to include some trolley questions in a transportation survey administered by DigiPen University, the results of which are provided in Appendix B. In summary, 37.6 percent of the students and faculty, who are strongly dependent on alternative forms of transportation, would use a trolley for commuting if it were frequent, ran at appropriate speed, low cost, and a stop were located close to school and the trolley accommodated bicycles.

4.1.3 Public Comments

Throughout the Redmond Central Connector Master Plan process public comments were received and public input was solicited at various public meetings and commission meetings.

Public Meetings - Three public meetings were held as part of the Redmond Central Connector Master Plan development. Each meeting had an attendance of approximately 100 people. Comments were received in a variety of forms including verbal (which were later summarized by staff), written on comments forms or plots of the concepts, and later by email. In general, less than 10 percent of those that attended commented on forms or via email; therefore, many of these comments summarized here are from that minority. At the first public meeting on September 15, 2010, there was some support for a tourist trolley or other types of train service that would reduce car trips. However, most people did not want tourist trains running through downtown as there were concerns about noise and odor from diesel engines and also financing of such a project. At the second public meeting on November 15, 2010, there was interest in a tourist trolley from Downtown Redmond to the Woodinville wineries, but there is concern about how to engineer the trail and the trolley across the three bridge structures between Downtown and the Sammamish Valley. In the last public meeting on January 27, 2011, there were concerns about the City's ability to operate a trolley, about the economic viability of a trolley in Redmond, about the trolley interfering with future light rail plans in the corridor, and there were requests that the trolley be historic in nature and incorporate Redmond's history. In addition, the project team asked a question on a handout questionnaire about the Trolley Study, which was **"If a tourist trolley connecting Downtown Redmond with Woodinville Wine District was to happen, can you imagine it being a benefit to the community?"** About one third of the meeting attendees responded to the trolley question, as provided in Appendix C, with about 85 percent of the respondents favoring the idea and 12 percent not favoring it.

Commissions & Council Feedback - Throughout the master planning process, the project team has been with many of the City commissions and Council to discuss the project. The commissions visited included:

- Parks and Trails Commission
- Pedestrian and Bicycle Advisory Committee
- Arts Commission
- Planning Commission
- Design Review Board

Commissioners and committee members that commented on the trolley had mentioned the following:

- Interested in a tourist trolley as economic stimulus for Downtown Redmond businesses, which can coexist with future plans for East Link.
- Not interested in a tourist trolley and specifically do not agree with the City spear heading such an effort with taxpayer dollars, the Chambers should be leading this effort and it needs to be self-sustaining if it happens
- Concern about failure rate of trolleys
- What will we do about the trestle bridge, it is in poor condition?
- What is the economic value to businesses of having a trolley? How will it actually affect their bottom line?

A summary of all of these comments will be provided in the Redmond Central Connector Master Plan Public Involvement Reports.

4.1.4 Tourist Attractions in the Study Area

The demand for trolley ridership can be based on winery, tourist industry and business and hospitality interviews that provided data on the number of annual visitors to key attractions in the area, as summarized below:

- Woodinville Wineries: over 70 wineries and tasting rooms (number of visitors not reported)
- Ch. Ste Michelle: 350,000 visitors / year
- Columbia Winery: 200,000+ visitors / year
- Red Hook Brewery: 250,000 visitors / year
- Willows Lodge, Herbfarm & Barking Frog Restaurants: 100,000 visitors / year
- Marriott: 60,000 rooms/year
- Redmond Town Center: 7 million customers / year
- Downtown Redmond City Events: 150 recreational events / year; 16,000 attendees / year
- Marymoor Park: 59 Events / year; 3 million customers / year (located within ¼ mile of the alternate southern terminus (S2) at MP 7.3; however it is not along the BNSF route proper)

No discrete projection of ridership was calculated based on these numbers because this study did not gather information on the trends of transportation modes used by these visitors or their origination. However, these visitor numbers noted above are all significant. Nearly all of these places of interest are along the proposed trolley route, with the majority between 0 and ¼-mile of the line, and all but 5 potential destinations within ½-mile from the corridor route.

4.2 Potential Commuter Transit Ridership

In order to evaluate the potential for the commuter market utilizing the trolley a number of data and reports were reviewed, they are summarized below.

- **Stakeholder Surveys** - As mentioned earlier, the stakeholders interviewed did not believe that their employees or customers would use the trolley for commuting.
- **King County Metro Routes 244 & 930 August 2010 Ridership Reports** - The two bus routes that serve the Willows Road corridor, which parallels the proposed trolley route, have poor ridership. Route 930, which runs between Redmond Town Center and Kingsgate Park and Ride in Kirkland, experiences less than 50 percent ridership capacity of a 15 passenger bus during peak periods and serves about 130 riders a day. Route 244, which runs between Overlake in Kenmore in peak direction and peak period only, is between 17 percent full inbound and 29 percent full outbound, with about 200 daily riders.

- **Redmond Local Transit Study, 2010.** This study evaluated local and regional transit needs throughout the city and recommended that the City and King County maintain current levels of service for transit on Willows Road. Only about 2.5 percent (~1,700 trips) of the 2030 daily multi-modal trips from Downtown are projected to begin or end from the Willows Road area. An origin/destination study found that there is not strong desire for lines between the businesses on Willows Road and Woodinville or Willows Road and Downtown Redmond.
- **Puget Sound Regional Council, 2009.** Sound Transit 2 Planning: BNSF Eastside Corridor Commuter Rail Feasibility Study, Phase II Technical Memorandum: Feasibility Study. The PSRC study evaluated the potential for high capacity transit to utilize the entire Eastside rail corridor from Renton to Kirkland and Woodinville to Redmond. The ridership projections from South Woodinville to Downtown Redmond (the same route as the proposed trolley) are merely 75 boardings a day in 2020.
- **Existing and projected Redmond population and employment data (PARCC Plan, 2010)** – There is no residential development along Willows Road, but is the fourth largest employment area in the City of Redmond, which is expected to grow about 20 percent in the next 20 years. Downtown Redmond is expected to grow substantially in the next 20 years, with about 67 percent growth in residents and 23 percent growth of employees, with the goal of having more people who work and live in Redmond.

In summary, commuter service does not appear viable in this corridor using the proposed trolley route. Adding commuter service to the tourist trolley would also likely trigger a new set of regulations and safety requirements.

5.0 OPERATING CONCEPTS

Based on the data evaluated to date, some basic operating concepts were developed for a tourist trolley between Redmond and Woodinville.

5.1 Alignment

For the purpose of this study, the alignment is assumed to follow the existing BNSF rail corridor from Downtown Redmond to Woodinville, as shown in Exhibits 3 and 4. The alignment could potentially span across the City of Redmond and City of Woodinville, which would lead to a 5.3 mile route. If the 5.3 mile route is used, a trolley could travel at approximately 10 miles per hour point to point, without stops, in 33 minutes. The following are options for the northern and southern termini.

Three variations of the northern terminus were evaluated:

- Option N1 - Approximately milepost 1.4 of the Redmond Spur, near the entrance to Columbia Winery at NE 145th St.
- Option N2 – Approximately milepost 0.7 of the Redmond Spur, near Tefft Cellars.
- Option N3 – Approximately milepost 25 of the Woodinville Subdivision, at 144th Ave. NE & North Woodinville Way, near a concentration of 22 additional wineries.

The southern terminus has two potential options:

- Option S1 – Approximately milepost 6.7 of the Redmond Spur, at approximately 161st Avenue NE
- Option S2 – Approximately milepost 7.3 of the Redmond Spur, at the junction of the Bear Creek Trail and East Lake Sammamish Trail if there is demand to provide trolley service in the interim period before Sound Transit implements light rail service (~2021 to 2025), or if there is significant demand or special interest for service between these 2 points.

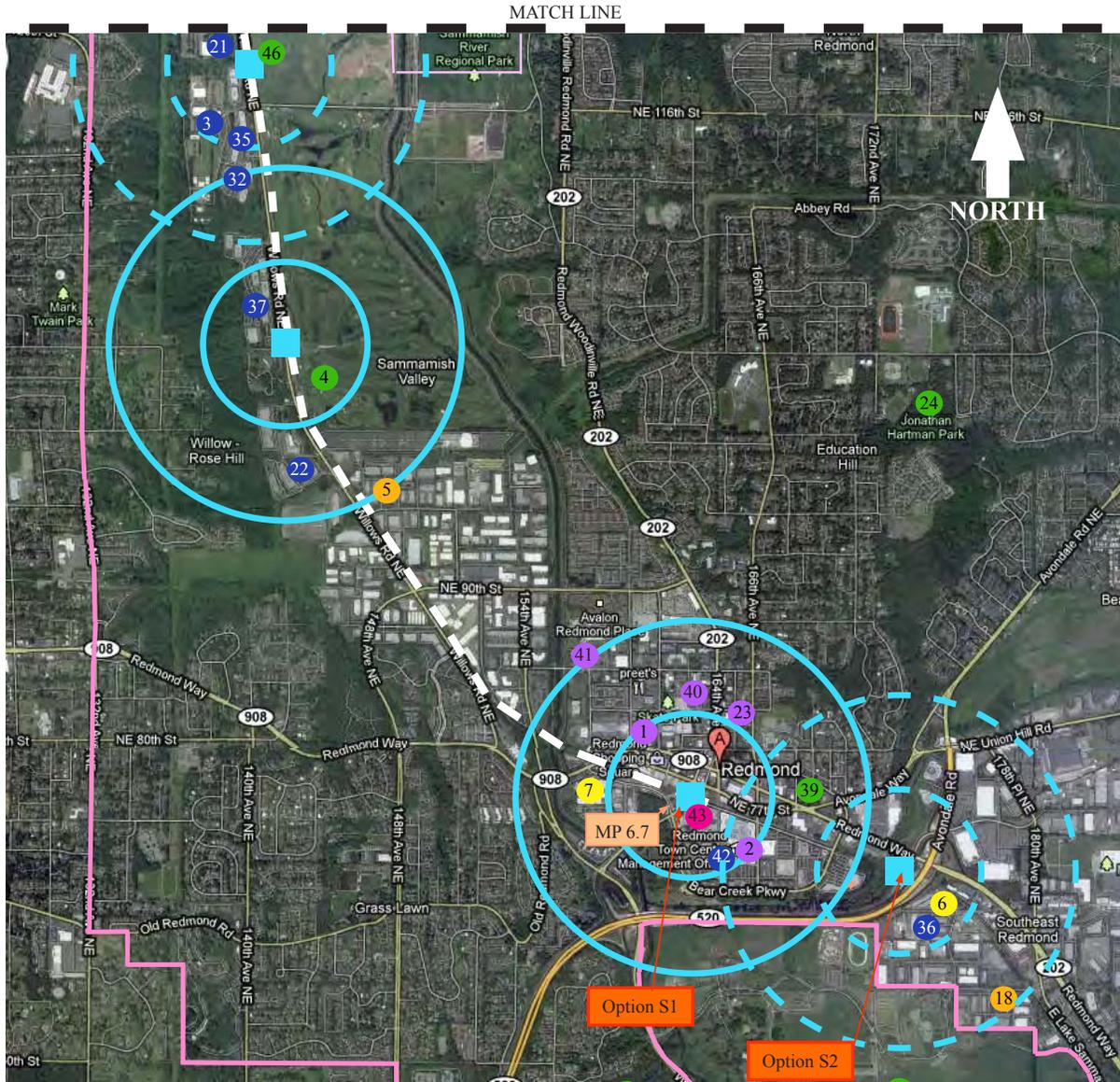
5.2 Stations & Stops

Technically, there is no minimum or maximum distance between stops. Trolleys in America have anywhere between 0 and 9 stops between stations. Stops are generally located at tourist points of interest or where future established ridership criteria would be met for commuter service. Ridership criteria would be based on current or projected growth of populations of business, retail, and recreation.

Potential stops for a tourist trolley could include the following, as shown on Exhibits 3 and 4:

- Downtown Redmond Station
- Willows Run Golf Course & Clubhouse
- Future Sammamish Park
- Chateau Ste. Michelle Winery, Columbia Winery, Willows Lodge, Red Hook Brewing Co.
- Other wineries and tasting rooms along route
- Downtown Woodinville
- Woodinville Warehouse Winery District (25 other wineries) (See Figure 4)
- 21 Acres Center, Woodinville (agricultural and environmental learning center)

Exhibit 3 – Proposed Alignment and Stops in South End



Woodinville - Redmond Trolley Map Key

- = Big business / institutions
- = Stations
- = Recreation
- = Wineries / Breweries
- = Restaurants / Retail
- = City Agencies and Non-Profits
- = Hotels
- = Mixed Use
- = Rail Line
- = Possible Rail Line Extensions
- = Redmond City Limits
- = Stations w/ 1/4 & 1/2 mi radius

Number Codes

- | | | |
|---|--|--|
| 1 - Greater Redmond Chamber of Commerce | 21 - Medtronic | 39 - Anderson Park |
| 2 - Redmond Town Center | 22 - Digipen University | 40 - US Post Office - Redmond |
| 3 - Aerojet | 23 - Redmond Historical Society | 41 - City of Redmond City Hall |
| 4 - Willows Run Golf Course | 24 - Jonathan Hartman Park | 42 - Microsoft - City of Redmond Campus |
| 5 - Black Raven Brewing Company | 25 - Sammamish River Regional Park | 43 - REI |
| 6 - Redmond Inn | 26 - Gold Creek County Park | 44 - Westside Park |
| 7 - Marriott Redmond Town Center | 27 - Greater Woodinville Chamber of Commerce | 45 - 21 Acres Center |
| 8 - Chateau St. Michelle Winery | 28 - Woodinville Mall | 46 - Sammamish Valley Park - Ph I and II |
| 9 - Columbia Winery | 29 - City of Woodinville City Hall | 47 - Woodinville Village |
| 10 - Woodinville Memorial Park | 30 - Woodinville Town Center | |
| 11 - Warehouse District Wineries | 31 - Marymoor Park | |
| 12 - Other wineries in Valley | 32 - Volt Technical Industries, LLC | |
| 13 - Redhook Brewery | 33 - Group Health Cooperative Hospital | |
| 14 - Willows Lodge | 34 - Nintendo of America, Inc. | |
| 15 - Barking Frog Restaurant / the Herbfarm | 35 - Advanced Digital Information Corp | |
| 16 - Purple Cafe & Wine Bar | 36 - TTM Technologies | |
| 17 - Hollywood Schoolhouse | 37 - Interpoint Corporation | |
| 18 - Mac & Jack's Brewery | 38 - Zetron Inc. | |
| 19 - Microsoft | | |
| 20 - Nintendo | | |

5.3 Project Capital Elements

Elements of a Trolley System Capital Project could range dramatically depending on how elaborate the project sponsor desires the system to be and what condition the current infrastructure is to support the proposed loads, speeds and use. The following are elements to consider:

- **Vehicles:** Cars may vary from historic (or vintage) trolley cars to newly-fabricated modern design. Most vintage cars are manufactured to traditional heavy rail gauge dimensions; new cars can be manufactured to the same standard gauge. The cars could be powered by on-board or trailer-mounted generators. Since this corridor does not already have overhead electric power catenaries, all-electric vehicles would not be recommended due to infrastructure cost; although cars can be battery, hybrid, natural gas or quiet diesel powered. There is a market for surplus vintage cars for purchase, through Newstead Tramcars (Australia) for example, and through brokers. Restoration of vintage or historic cars can be performed by Brookville Equipment Co. and Gomaco Trolley Co., for example. Newly-manufactured cars (modern or vintage replica design) are available from a number of sources such as Gomaco Trolley Co., Transportation Innovations Group (TIG/m), Brookville Equipment Corp., Kasgro Rail Equipment and United Streetcar. Acquisition cost of vehicles vary widely from donated (no cost) to \$30,000 (vintage, unrestored) to \$450,000 (vintage restored) to \$1,000,000 (newly fabricated – vintage replica or modern low floor streetcar). Leasing of historic cars from museums has occurred and could offer a more cost-effective solution for initial trial or pilot runs. Some leases from non-profits have been \$1/year, in exchange for the promise to maintain the vehicles in a certain operating condition.
- **Station & Stop Elements:** Platforms can be covered or not and they typically include signage, ticket booths or kiosks, and accessible features such as ramps or lifts.
- **Crossing Elements:** Traffic Arms, signals, alarms. Most of this equipment already exists at current roadway crossings. However; there may be some possible new crossing elements if the alignment is extended past Option N1, or new roadways, paths, or sidewalks are installed.
- **Maintenance Base:** Depending on vehicle type and condition, a covered shed, enclosed barn or similar facility for repairs and maintenance is necessary. However, rented or shared maintenance base could be possible along the route. Vehicles can be stored indoors or outdoors. A short spur track off the main line might be used for temporary vehicle storage or layover if rail is potentially shared.



Exhibit 5: Restored historic trolley



Exhibit 6: Modern trolley

- **Utilities:** Base case assumes on-board (or trailer-mounted) generator to power engines using diesel, natural gas, electric, hybrid, solar, or a combination. Therefore, no new utility infrastructure is anticipated to be required.
- **Rail Track:** Base case uses existing track. As a contingency measure, a capital project may involve possible retrofit or replacement of some track, depending on inspection of existing conditions against tolerances.
- **Potential Major Infrastructure Upgrades:** Depending on future inspection and desired design speed, track replacement/repair and repair of ties and ballast may be necessary. Bridge repair would also depend on results of a future physical inspection for the specific intended loads from a trolley system.
- **Other On-ground infrastructure:** Optional, depending on amenities desired by operator or project sponsor such as parking, visitor's center or other facilities.
- **Coordination with other Proposed Projects:** In order to reduce costs of relocating and rebuilding public infrastructure projects, the trolley's southern terminus should be west of 161st Ave NE. The approval of a trolley project would require a substantial change in the proposed regional trail location between 161st Ave NE and west of 154th Ave NE, where the train would require the use of the existing track bed and bridges rather than the trail. This would increase capital costs for the 2012 trail project by approximately \$1.45 million and it would increase the future extension of the trail costs by approximately \$2.37 million. The cost estimates provided by The Berger Partnership for these improvements are provided in Appendix D. The following exhibit shows generally how the trail would have to be designed to accommodate the trolley using the existing tracks.

Exhibit 7 – Effect on Trolley on Trail Design between 161st Ave NE and the Sammamish River



Trail on track bed



Trail constructed next to track bed

- Sound Transit will have a transit easement throughout the former BNSF corridor, so at some time in the future if Sound Transit decides to extend service north of Downtown Redmond, the trolley may need to change operations or potentially be eliminated.

6.0 OPERATIONS CONCEPTS

As there is no single existing operating model which will mirror what a Redmond-Woodinville Trolley might follow, the following are a range of a few examples of how other tourist systems were initiated and have operated.

Willamette Shore Trolley, a 7-mile route, is run by a non-profit organization. The City of Lake Oswego, OR, as contracting agency, contracts with Oregon Electric Railway Historical Society (OERHS) to operate and maintain the trolley cars. A consortium of jurisdictions oversees and maintains the rails and corridor, contributing approximately \$250,000 annually for major maintenance along the corridor. Annual operating expenses are approximately \$86,000 with a seasonal ridership of 7,200.



Exhibit 8 – Willamette Shore Trolley

The Astoria Riverfront Trolley, a 3-mile route, is run by a non-profit organization (Astoria Riverfront Trolley Association) comprised of 55 – 60 volunteers. The City of Astoria, OR owns the tracks and performs major capital upgrades when needed on the line. Routine track and car maintenance is performed by the non-profit organization. Initial capital costs in 2005 included purchase of a vintage car for \$50,000 + approximately \$25,000 for a trailer-mounted quiet diesel generator + \$250,000 to build a maintenance facility. The 3-mile track was sold to the City by BNSF in 1998 for \$20. Annual operating expenses are approximately \$38,000 with seasonal ridership of 50,000.



Exhibit 9 – Astoria Riverfront Trolley

San Pedro / Port of LA Waterfront Trolley, a 1.5-mile route, is run by the Port of L.A. (public agency). Once having 3 cars, they currently run 1 car, bringing 80,000 - 90,000 cruise ship passengers primarily to the central shopping/retail, dining entertainment and festival core downtown. Initial capital costs to initiate the system that included 3 cars was \$10 M in 2003. At its peak, this system experienced 132,000+ riders daily. Most of the revenues to operate the system are provided by the Port's general fund. Presumably, the benefits to the downtown core and its related tourist / hospitality / retail economy justify the annual operating expense of approximately \$1M.

Ridership, capital and operating costs vary significantly across trolley systems in the United States. Ridership depends heavily on the popularity of the attractions along the trolley route, the schedule of operations, ease of accessibility to the trolley and the trolley experience and fare. The very productive trolley systems are generally in large cities, run by or in coordination with transit agencies, and serve commuters and tourists. Operating costs vary based on the operational model (paid staff, volunteers, or cooperation with other agencies), the hours of operation, the types of services provided on-board (nothing, beverages, dinner), the type of fuel used, corridor condition and more. Capital costs depend on the condition of the existing facilities, the ease of building or renovating facilities, the amount of in-kind work that is available, the regulatory requirements the system is held to, and the level of quality that the system is being designed to. Ridership for trolley systems examined include 21 systems in North America: Fort Smith, Arkansas; Tuscon, AZ; San Jose, CA; San Francisco, CA; San Pedro, CA; The Grove (LA, CA); Denver, CO; Ft. Collins, CO; Lowell, MA; El Reno, OK; Astoria, OR; Portland, OR; Lk. Oswego, OR; Philadelphia, PA; Memphis, TN; Dallas, TX; Galveston, TX; Waterfront Seattle, WA; Issaquah, WA; Yakima, WA; Kenosha, Wisconsin; and Edmonton, Canada.

Exhibit 11 – Financial Operating Data from Case Studies

Element	Low-Mid Range <i>Astoria, OR</i>	High Range <i>San Pedro, Port of LA, CA</i>
Ridership (annual)	50,000	132,000 +
Fare (one way)	\$1.00	\$1.00
Revenue (annual)	\$33,000	\$1,000,000*
Operating Costs	\$38,000	\$1,000,000
Capital Costs	\$325,000	\$10,000,000

* Farebox Revenues cover approx. \$20,000; remainder of revenues from Port's general operating fund.

The following are example revenue sources that other trolley systems have used, besides fare box revenues:

- Non-profit fundraising
- City as sponsor
- Consortium agencies as sponsor
- Special Benefits Users (example: wineries, visitor & tourism bureaus, visitor & tourism businesses) vis à vis Local Improvement District (LID) or Special Assessment District
- Local, state, regional, and federal grants
- Local, transit, and regional tax revenues (including, but not limited to special districts, hotel tax, parking tax, sales tax, festival tax)
- Historic foundation or non-profit sponsorship or in-kind donations (including labor)
- Advertising and sponsorships

A sample Operations Model is shown in Exhibit 12.

Exhibit 12 - Operations Model

REDMOND TROLLEY	
SAMPLE OPERATING BALANCE SHEET	
INCOME	
	Private Donations
	Advertising Revenue
	Fares / Charters
	Merchandise Sales
	Investment Income
	Public Agency Contributions
	Partnership / Consortium Contributions
	Tax Revenues
	LID or Special Assessment District
	Foundations
	Grants
	Special Events / Other
	Capital Reserves
TOTAL INCOME	
EXPENSE	
	Advertising / Marketing Expense
	Bank Fees
	Debt Service on Loans / Interest Expense
	Cost of Merchandise
	Equipment Rentals
	Supplies
	Licenses, Permits & Fees
	Insurance
	Office / Administrative
	Safety Oversight
	Utilities
	Capital
	Vehicle Maintenance
	Rail & Track Maintenance
	Facility Maintenance
	Major Capital
	Vehicle Repairs
	Major Rail / Track / Corridor Upgrades
TOTAL EXPENSES	

REDMOND TROLLEY	
SAMPLE CAPITAL PROJECT	
HARD COSTS	
	Real Property Rts / Easements
	Station Elements
	Crossing Elements
	Maintenance Facility
	Crossing Upgrades (if needed)
	Track Upgrades (if needed)
	Ballast Upgrades (if needed)
	Ties Replacement (if needed)
	Other
	Vehicle Cost (if acquired)
	Testing / Inspections
	Sales Tax
	Contingency
TOTAL HARD COSTS	
SOFT COSTS	
	PM & Administration
	Design
	Insurance
	Commissining
	Geotech
	Hazmat
	Surveying
	Permits & Entitlements
	Insurance
	Brokerage
	Legal
	Contingency
TOTAL SOFT COSTS	
TOTAL CAPITAL PROJECT COST	

7.0 IMPLEMENTATION SCHEDULE

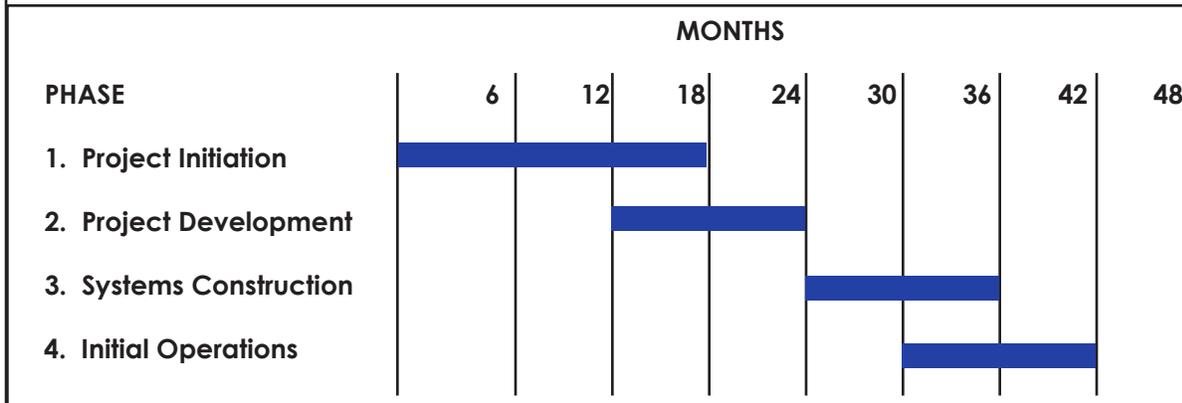
If the City is interested in investigating a trolley project further, then there are a number of steps that must be taken to further validate the feasibility of the project. The City would need to determine who to partner with on the project. If the project crossed the city boundaries, then other local jurisdictions would be asked to partner, but there also may be interest from the business and non-profit communities. Therefore, a partnering outreach strategy will need to be developed. An example of an outreach plan is provided in Appendix E.

In addition, there are many other elements that require further analysis such as:

- Define the City's goals and vision for a trolley
- Refine the route alternatives
- Further legal consultation to confirm authority and entitlement once a vision, target user, preferred operating system and partners are determined
- Ridership potential (who, frequency, origin and destination)
- What is considered a walkable distance from trolley stops and is a road-based supplemental shuttle necessary?
- How would partners or sponsors contribute to the project (financially, operationally, in-kind, other)?
- What are the drivers for moving forward (schedule, economic stimulus, coordination with other projects)?
- What are the real capital costs of starting and maintaining a trolley?
- What are the real operational costs of a trolley?
- What are the anticipated fare box revenues and will that meet the financial obligations of the trolley or will other sources of funds be necessary? If more funds are necessary, how will they be raised?

Upon completing a full feasibility analysis, then the City could move forward into planning and preliminary design of the system. For purposes of this study, it is assumed that a Trolley, if implemented, could begin service within approximately two to three years of committing to a planning schedule and could operate simultaneously with Sound Transit's East Link light rail project as currently planned. The following Exhibit 13 provides a draft implementation schedule. Depending on actual construction improvements, vehicle choices, partnering agreements, project planning and financing, a complete project implementation duration could vary significantly beyond this range.

Exhibit 13 – Draft Implementation Schedule for Redmond Trolley



NOTES:

Phase 1 - Project Initiation

- * Create Authority or Operating Entity
- * Establish Governing Structure
- * Secure Regulatory and Environmental
- * Business Plan Approval
- * Implement Revenue Sources
- * Develop / Negotiate Multi-Party Agreements

Phase 2 - Project Development

- * Design
- * Vehicle Procurement
- * Right of Way Issues
- * Permitting

Phase 3 - System Construction

- * Utilities, if any
- * Fixed Construction (Maintenance Facility, for example)
- * Marketing Plans

Phase 4 - System Operations

- * Delivery of Vehicles
- * Modification of Vehicles
- * Testing of Operations

Prior to Project Initiation, decisions about partnering, institutional arrangements, funding model and other key policy issues would need to be vetted and made.

Based on key factors including vehicle procurement, vehicle type, transit or no transit, actual condition of existing track and facilities, partner development, legal and risk management, this sample timeline could vary significantly.

DRAFT

Appendix A

Stakeholder Survey Results



Redmond Trolley Questionnaire

OVERVIEW

As part of the SOJ study of the Redmond Trolley, the following questionnaire was created to solicit the opinions and input of key stakeholders in the Woodinville Wine Country and the hospitality and tourism industry in Redmond and Woodinville.

Stakeholder opinions and recommendations regarding a trolley, trolley specifications and customer expectations are important in the development of a trolley that best serves these area businesses and may take into account other factors, such as commuter traffic and the growth of employment centers.

Since no public information has been made available about a possible Redmond Trolley, little is known about these stakeholders' interests, needs and expectations; hence this questionnaire, as part of the larger study, aims to examine the views of winery, hotel, restaurant and tourism-related stakeholders and decision makers on a trolley running from downtown Redmond through the Woodinville Wine Country.

The proposed sample is comprised of representatives from the 70 wineries in Woodinville Wine Country; six hotels; 13 other major businesses along the route or located in or near downtown Redmond; and members of the Redmond and Woodinville's tourism councils. A sampling of these individuals will be contacted by phone and asked to participate in a brief, 15-minute questionnaire about the trolley.

BACKGROUND PROVIDED TO INTERVIEWEES

The following information will be provided to every interviewee at the beginning of the questionnaire:

We are conducting a preliminary study of a tourist trolley that would run between downtown Redmond and the Woodinville Winery district. A trolley is passenger train, which would run on existing tracks, and could use alternative clean energy propelled by a quiet on-board generator. This study is part of the City of Redmond's Central Connector Master Plan, which aims to develop a system of rails, trails, streets and infrastructure with the overall goal of supporting projected growth for Downtown Redmond.

The feasibility of a trolley is being considered on a portion of the former Redmond Spur of the Woodinville Subdivision of the Burlington Northern Santa Fe (BNSF) Rail Corridor, which the City of Redmond purchased in June 2010. The spur extends approximately 3.9 miles from downtown Redmond to the intersection of Willows Road and NE 124th Street in the Sammamish Valley neighborhood.

The tourist trolley would then head north along the former BNSF Woodinville Subdivision mainline to the Woodinville Wine Country; the exact terminus is under study and yet to be determined.

KEY AUDIENCES

Initial courtesy calls will be made to the following organizations to let them know about our outreach in advance of reaching out to their members or employees.

- City of Redmond
 - Greater Redmond Chamber of Commerce
 - Planning and Community Development Department (includes transportation)
 - Karen Nolz, business operations manager and tourism fund administrator
 - Lori Peckol, planner

- City of Woodinville
 - Greater Woodinville Chamber of Commerce
 - Councilmembers
 - Liz Aspen – Tourism Task Force; liaison to Parks & Recreation Commission; Council Economic Development Workgroup Committee; term expires 2011

Questionnaire targets

Redmond

- Lodging Tax Advisory Committee Members
 - Dave Norwood, General Manager, Redmond Inn
 - Dan Angellar, General Manager, Marriott Redmond Town Center
 - Miguel Llanos, Redmond Historical Society
- Redmond Town Center, Steven Chaffee (involved with master plan)
- Aerojet
- Willows Run Golf Course
- Black Raven Brewing Company
- Medtronic
- Digipen University

Woodinville

- Select Woodinville Wine Country members along the BNSF rail corridor
 - Chateau St. Michelle Winery
 - Columbia Winery
 - 13 other wineries
- Redhook Brewery
- Willows Lodge

QUESTIONS

1. Is Redmond an important source of customers and visitors for your business?
2. What public and private projects in the Redmond area are most/least promising to your business?
3. Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?
4. Do your customers/visitors use public transit? What percentage?
5. Do you promote use of public transit to employees and customers?
6. Do you participate in any private/public shuttle programs?
7. What percentage of your business is related to tourists? business travelers? Others?
8. Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?
9. Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?
10. How does traffic congestion impact your business? How often?
11. How many visitors do you have per year?

Trolley questions:

1. Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?
2. What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?
3. Who do you think would ride the trolley?
4. Would such a trolley benefit your employees as a form of transportation?
5. What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?
6. Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?
7. What concerns would a trolley raise?



THE FEAREY GROUP

Redmond Trolley Questionnaire - Aerojet, John Whaley, 425-936-5366

BACKGROUND PROVIDED TO INTERVIEWEES

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The feasibility of a trolley is being considered on a portion of the former Redmond Spur of the Woodinville Subdivision of the Burlington Northern Santa Fe (BNSF) Rail Corridor, which the City of Redmond purchased in June 2010. The spur extends approximately 3.9 miles from downtown Redmond to the intersection of Willows Road and NE 124th Street in the Sammamish Valley neighborhood.

The tourist trolley would then head north along the former BNSF Woodinville Subdivision mainline to the Woodinville Wine Country; the exact terminus is under study and yet to be determined.

QUESTIONS

1. **Is Redmond an important source of customers and visitors for your business?**
Yes.
2. **What public and private projects in the Redmond area are most/least promising to your business?**
We do aero space and defense. The Redmond Towne Center project has been great for vendors who can stay in hotels and eat and restaurants there.
3. **Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
Yes. 450 employees. 600 spaces. Sufficient for current use. Through GRM, we do subsidize vanpools and carpools
4. **Do your customers/visitors use public transit? What percentage?**
Yes. Service along Willows Corridor not that great, probably 6. We have folks who bike part way ride bus part way.
5. **Do you promote use of public transit to employees and customers?**
Focus more on carpools and vanpools because of lack of services.
6. **Do you participate in any private/public shuttle programs?**
Yes.
7. **What percentage of your business is related to tourists? business travelers? Others?**
We end up with groups every week of the year. Size of groups are 2 – 40. Probably about 15 visitors a week from out of down. Most are overnight

DRAFT

8. **Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
Standard handout sheet that lists a bunch of the hotels and restaurants in the area.
9. **Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
N/A
10. **How does traffic congestion impact your business? How often?**
Had to shift work hours to work around 7:00 a.m. start time. Willows Road is almost impossible to get on at 8:00 a.m.
11. **How many visitors do you per year?**
See answer to #7 above

TROLLEY QUESTIONS

1. **Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?**
It would be of interest to our guests, but I'm not sure it would benefit our business
2. **What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
Frequency and attractions at the stops (restaurants, hotels, etc.)
3. **Who do you think would ride the trolley?**
Out of town guests
4. **Would such a trolley benefit your employees as a form of transportation?**
If it were running up and down the Willows Road corridor and serving multiple stops it could potentially be of use to our employees.
5. **What would make a tourist trolley beneficial to your businesses (e.g. walking trails, connecting shuttle or bus service, etc.)?**
See above
6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
Yes
7. **What concerns would a trolley raise?**
Don't think it would really raise concerns.

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THE FEAREY GROUP

Redmond Trolley Questionnaire – Chateau Ste. Michelle, Eileen Votteler, Guest Services Director 425-415-3694 (formerly Community Relations Director)

BACKGROUND PROVIDED TO INTERVIEWEES

We are conducting a preliminary study of a tourist trolley that would run between downtown Redmond and the Woodinville Winery district. A trolley is passenger train, which would run on existing tracks, and could use alternative clean energy propelled by a quiet on-board generator. This study is part of the City of Redmond's Central Connector Master Plan, which aims to develop a system of rails, trails, streets and infrastructure with the overall goal of supporting projected growth for Downtown Redmond.

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QUESTIONS

- 1. Is Redmond an important source of customers and visitors for your business?**
I suspect we have customers from Redmond, probably mostly day-visitors, though we do have a relationship with the Marriot. Most of our tourist/non-local guests stay in downtown Seattle or at The Willows.
- 2. What public and private projects in the Redmond area are most/least promising to your business?**
The hotels in Redmond, definitely; we have a relationship with the Marriot. We haven't done much with Redmond Towne Center.
- 3. Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
Yes, more than 200 spots and for the most part this is sufficient. We have a lot of tour buses as well.
- 4. Do your customers/visitors use public transit? What percentage?**
They would love to use public transit but there is none available. We get some guest from the Burke Gilman, but I would not say that is a big percentage
- 5. Do you promote use of public transit to employees and customers?**
No, because it really isn't an option, buses don't come down this road.
- 6. Do you participate in any private/public shuttle programs?**
We do private shuttles for summer concert series from off-site parking facility. Private tour buses regularly.

7. **What percentage of your business is related to tourists? business travelers? Others?**
Tourists ¾
Wine club 8,500 people
Business events and vendors – couple thousand
¼ are probably local guests
8. **Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
Members of Seattle Convention and Visitors Bureau
WA wine Commission
Woodinville Wine Country
Woodinville Chamber
Bellevue Chamber
9. **Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
For our Summer Concert Series, we have shuttles to offsite parking
10. **How does traffic congestion impact your business? How often?**
Limitations on 202
Traffic circles have made a huge difference and we've seen improvements
No public transportation
Can get backed up at 124th
11. **How many visitors do you per year?**
300,000

TROLLEY QUESTIONS

1. **Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?**
I think so, because it would give people an opportunity to come down in an interesting way. It would be very beneficial
2. **What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
 - Frequency would be important.
 - I don't think speed is a big issue.
 - Safety is huge, needs to be safe for riders and pedestrians, cars, bikes, etc.
 - Probably don't need a lot of services except restrooms
 - Maybe a video that talks about WA Wine Country
 - Challenge is Woodinville – once you land you can't walk everywhere. What do you do when you get off the trolley? We have a location, because of our old relationship with the dinner train but not everyone does.
 - How easy is it to bring a case of wine on the trolley – porters, hand trucks? Or is it easier to just drive.
3. **Who do you think would ride the trolley?**
Tourists definitely. I could see locals if it made sense for ease of parking and frequency. It would be interesting as an employee too – if I could run down to Redmond Towne Center on my lunch hour.

4. **Would such a trolley benefit your employees as a form of transportation?**
Possibly, depends on where the trolley stops. Might be beneficial
5. **What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
For us, there needs to be a way to transport a case of wine that makes sense, otherwise people are going to continue to drive. Cost will also impact how well used the trolley is.
6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
Yes, there are all of those possibilities. The main thing is this area is large and winerie are scattered throughout. Not a lot of sidewalks – we'd probably need a Woodinville shuttle or streetcar than connects terminus to various wineries?
7. **What concerns would a trolley raise?**
It would need to be managed effectively to ensure success. It needs to be affordable, frequent, easy, clean for people to use it.

###



Redmond Trolley Questionnaire - Dan Angellar, General Manager, Marriott Redmond Town Center; Chamber of Commerce Member, 425-498-4000

BACKGROUND PROVIDED TO INTERVIEWEES

We are conducting a preliminary study of a tourist trolley that would run between downtown Redmond and the Woodinville Winery district. A trolley is passenger train, which would run on existing tracks, and could use alternative clean energy propelled by a quiet on-board generator. This study is part of the City of Redmond's Central Connector Master Plan, which aims to develop a system of rails, trails, streets and infrastructure with the overall goal of supporting projected growth for Downtown Redmond.

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The tourist trolley would then head north along the former BNSF Woodinville Subdivision mainline to the Woodinville Wine Country; the exact terminus is under study and yet to be determined.

QUESTIONS

- 1. Is Redmond an important source of customers and visitors for your business?**
Yes
- 2. What public and private projects in the Redmond area are most/least promising to your business?**
MOST: Microsoft, Town Center development and public transit developments
LEAST: city celebrations, regional events
- 3. Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
220 spaces, 190 for associates and overflow at Town Center, it is sufficient
- 4. Do your customers/visitors use public transit? What percentage?**
No, not a lot of options
- 5. Do you promote use of public transit to employees and customers?**
Yes, as much as possible but again, not a lot of availability
- 6. Do you participate in any private/public shuttle programs?**
Public: We participate in the Redmond's city transportation program (can't remember the name of it) Bike racks and public transit options for associates. We don't participate in any private shuttle programs.
- 7. What percentage of your business is related to tourists? business travelers? Others?**
Biz travelers 85%; 15% weekend business / tournaments, etc.

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8. **Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
Yes. We are part of WA Wine Highways and we work with Chateau St. Michelle on packages
9. **Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
Yes. Corporate meetings, government officials, associations. Parking on site is sufficient as we can always utilize Town Center for overflow if needed.
10. **How does traffic congestion impact your business? How often?**
520 impacts a lot from employee and guest stand point. 520 is a hurdle
11. **How many visitors do you per year?**
Close to 60,000 rooms / year

TROLLEY QUESTIONS

1. **Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?**
Yes. I've been asking for this for four years. Benefits by bringing a new guests that we don't have, the weekend guests. Woodinville doesn't have hotel rooms and Redmond doesn't have the wineries, so it's a great match. Also, just the safety aspect of not having to drive after wine tasting is an opportunity
2. **What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
Doesn't need to have much, a seat and a safe car; would love if it had a historical look if it's called a trolley, but it could be light rail, don't really care as long as Point A connects to Point B and then a shuttle system in Woodinville to connect depot to the wineries. It could be a great benefit to commuters too, but would need wireless to serve commuters. Frequency could be every hour that would be sufficient.
3. **Who do you think would ride the trolley?**
Weekend guests, incoming tourists, a lot of residents as it is so much safer than driving 202 after wine tasting.
4. **Would such a trolley benefit your employees as a form of transportation?**
Yes, any associates/employees who come from North; I live in Woodinville, I would use it. Microsoft associates would also benefit. Redmond is a green community that would embrace this.
5. **What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
Depends on development of the line, Redmond guests tend to be very health conscious, so walking running trails would be great. Bikes available for free to guests.
6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
Yes, it would increase tourist travel – weekend travel and family travel. It would increase Association travel on weekends, huge for us. To be able to offer a Woodinville outing as an event would be great. Also, lots of business potential.

DRAFT

We're doing it now with buses, but costs are significant for us, we can't offer it regularly.

What Bellevue has that we don't is walking distance to lots of restaurants/bars/attractions – this would make Redmond more competitive with Bellevue

7. What concerns would a trolley raise?

None. Other than how fast can we get it.

###



THE FEAREY GROUP

Redmond Trolley Questionnaire - DigiPen, Raymond Yan, SVP Ops, (866) 478-5236

BACKGROUND PROVIDED TO INTERVIEWEES

We are conducting a preliminary study of a tourist trolley that would run between downtown Redmond and the Woodinville Winery district. A trolley is passenger train, which would run on existing tracks, and could use alternative clean energy propelled by a quiet on-board generator. This study is part of the City of Redmond's Central Connector Master Plan, which aims to develop a system of rails, trails, streets and infrastructure with the overall goal of supporting projected growth for Downtown Redmond.

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QUESTIONS

1. **Is Redmond an important source of customers and visitors for your business?**
No – we're here b/c training people for game industry and there are a lot of game companies here. Redmond is a central location so students .
2. **What public and private projects in the Redmond area are most/least promising to your business?**
 - a. No, not tracking anything closely. Tracking parks planning somewhat b/c could be beneficial, maentiy to students.
 - b. 60% student body comes from out of state –
 - c. Our main concern is public transit along willows is not very good. Bought a passenger van to shuttle students 148th and back. If there would be transpo projects that could help students, that would be of interest. Have been working with City of Redmond on that. Transpo for students is a big thing, huge # of bikes being used.
3. **Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
 - a. Yes, about 320 spaces
 - b. Organization is 1000 (100 staff, 900 students)
 - c. Other tenant companies in area have unmarked spots fair game for all businesses and students
 - d. Parking has not been a problem
4. **Do your customers/visitors use public transit? What percentage?**
 - a. Worked with city on subsidy for Student discount
 - b. Don't know hard #
 - c. Running shuttle b/c students stay late; shuttle has a set route and times during

- d. day; on-demand at night. One year old.
 - d. Student services group is doing a survey in next week on student transportation so they can revisit transpo needs.
 - e. A lot of students walk along Willows – bus service is not great so they find other ways to get there.
 - f. Concerned about student safety – Willows not safe
- 5. Do you promote use of public transit to employees and customers?**
- a. above
- 6. Do you participate in any private/public shuttle programs?**
- a. above
- 7. What percentage of your business is related to tourists? business travelers? Others?**
- a. Starting to open up campus for public events - Lake Wa School district will host meetings at Digipen, other festivals, community meetings
 - b. About 2x a month
 - c. Game educators Summit in June, in 2011, Digipen will be a host – out of town biz travelers.
- 8. Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
- a. With gaming industry events, such as “power of play” hosted at Marriott.
- 9. Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
- a. Haven't needed one yet for events.
 - b. Substantial
 - c. Redmond Digital Arts Festival in march
- 10. How does traffic congestion impact your business? How often?**
- a. Not really.
 - b. In late afternoon btn 4-6 pm north on Willows gets backed up.
 - c. Single lane; people drive in middle turning lane
- 11. How many visitors do you per year?**
- a. As a college, have students, parents, high school program visits.
 - b. 70 high school kids, parents pick up and drop off
 - c. 400 a month (estimate)

TROLLEY QUESTIONS

- 1. Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?**
- a. It would benefit students not as a tourist option but as a transpo option; esp if stop near campus.
 - b. Doesn't know what level of demand there would be
 - c. Could throw it into their survey – yes please
- 2. What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
- a. Stop in front of campus, convenient, regular schedule, close to campus
 - b. Cost for riding – keep it low for students
 - c. Anything that can improve safety of area

3. **Who do you think would ride the trolley?**
 - a. Some students, visitors
4. **Would such a trolley benefit your employees as a form of transportation?**
 - a. Guessing that majority of employees would drive.
5. **What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
 - a. Stop in front of campus, convenient, regular schedule, close to campus
 - b. Cost for riding – keep it low for students
 - c. Anything that can improve safety of area
6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
 - a. It wouldn't drive students to DigiPen but it might serve transportation needs or interest visiting families checking out the school.
7. **What concerns would a trolley raise?**
 - a. From a practical perspective, what are the costs?
 - b. Not concerned from impact on Digipen.
 - c. Students are coming whether trolley is there or not.
 - d. Wouldn't want a noisy train running there. Sound pollution could be a concern.

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Redmond Trolley Questionnaire - Miguel Llanos, Redmond Historical Society, Redmond Chamber Member, (425) 885-2919

BACKGROUND PROVIDED TO INTERVIEWEES

We are conducting a preliminary study of a tourist trolley that would run between downtown Redmond and the Woodinville Winery district. A trolley is passenger train, which would run on existing tracks, and could use alternative clean energy propelled by a quiet on-board generator. This study is part of the City of Redmond's Central Connector Master Plan, which aims to develop a system of rails, trails, streets and infrastructure with the overall goal of supporting projected growth for Downtown Redmond.

The feasibility of a trolley is being considered on a portion of the former Redmond Spur of the Woodinville Subdivision of the Burlington Northern Santa Fe (BNSF) Rail Corridor, which the City of Redmond purchased in June 2010. The spur extends approximately 3.9 miles from downtown Redmond to the intersection of Willows Road and NE 124th Street in the Sammamish Valley neighborhood.

The tourist trolley would then head north along the former BNSF Woodinville Subdivision mainline to the Woodinville Wine Country; the exact terminus is under study and yet to be determined.

QUESTIONS

- 1. Is Redmond an important source of customers and visitors for your business?**
Yes
- 2. What public and private projects in the Redmond area are most/least promising to your business?**
Most promising is the downtown park the City working on and the railway corridor
- 3. Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
Our office is at the community center, they have parking and it is adequate for our needs.
- 4. Do your customers/visitors use public transit? What percentage?**
Don't think so, maybe 5 – 10%
- 5. Do you promote use of public transit to employees and customers?**
No
- 6. Do you participate in any private/public shuttle programs?**
No
- 7. What percentage of your business is related to tourists? business travelers? Others?**
75% is consumed by locals and 25% is tourists/visitors

DRAFT

8. **Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
Provide local hotels with guidebooks
9. **Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
Help city with Derby Days, working with the city on 100th anniversary but the city handles transportation around these events.
10. **How does traffic congestion impact your business? How often?**
Downtown core is not high-traffic area, so we're not really impacted by it
11. **How many visitors do you per year?**
1,000 ish

TROLLEY QUESTIONS

1. **Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?**
Yes. We'd like to incorporate heritage aspects to the trains
 - Signage – photos and maps at the stations and on-board
 - Cell phone tour app that shows historical landmarks
2. **What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
 - Two depots that have plenty of room for signage and well laid out
 - People expect a high-end experience, and we should provide that
 - Historical look to the train would be preferred
 - Include historical maps and photos on-board
 - Good food and beverage experience
 - Frequency: should run, weekdays and weekends
3. **Who do you think would ride the trolley?**
 - Tourists for sure
 - Commuters might use it during the week, at least test it during the week and see if there is a public appetite for this type of transit
4. **Would such a trolley benefit your employees as a form of transportation?**
No – they might use it to take visitors and family but as not a regular commuter train
5. **What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
n/a
6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
n/a
7. **What concerns would a trolley raise?**
Safety, there are some roads that intersect the trolley, gates and signage would have to be updated and maintained. Safety is the biggest concern for me, which is why they should also be slow, the distance isn't far, they don't need to be fast.

###



THE FEAREY GROUP

Redmond Trolley Questionnaire - Dave Norwood, General Manager, Redmond Inn; Redmond Chamber, 425-883-4900

BACKGROUND PROVIDED TO INTERVIEWEES

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The tourist trolley would then head north along the former BNSF Woodinville Subdivision mainline to the Woodinville Wine Country; the exact terminus is under study and yet to be determined.

QUESTIONS

- 1. Is Redmond an important source of customers and visitors for your business?**
Yes
- 2. What public and private projects in the Redmond area are most/least promising to your business?**
 - a. Anything that puts heads in beds, sporting events, concerts, arts and culture, corporate biz, develop a nightlife (don't have one really)
 - b. Whatever can keep people in Redmond for one more night
- 3. Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
 - a. Yes; 140; yes
- 4. Do your customers/visitors use public transit? What percentage?**
 - a. Sometimes – some public request own shuttle van drops at public transit bus stop
- 5. Do you promote use of public transit to employees and customers?**
 - a. Both - if that is what they want, if they ask
- 6. Do you participate in any private/public shuttle programs?**
Yes
- 7. What percentage of your business is related to tourists? business travelers? Others?**
 - a. Tourists – 40-45%
 - b. Business travelers – 50%
 - c. Other 5%

8. **Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
 - a. Yes, with Alaska Airlines – cross promo with Redmond Town Center – Stay and Shop
 - b. Wine program with Columbia and Ste Michelle tour when economy was better
9. **Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
 - a. Used to host concert series for 3 years – nixed due to econ
 - b. No special parking plan – had starlite buses taking folks to Marymoor
10. **How does traffic congestion impact your business? How often?**
 - a. Every day, better since fixed 520; traffic congest on Redmond way bad
11. **How many visitors do you per year?**
 - a. 60,000

TROLLEY QUESTIONS:

1. **Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?**
 - a. Yes
 - b. Would offer another way to get places
 - c. If Redmond has more things to do can help make it a destination
2. **What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
 - a. Convenience is most important
3. **Who do you think would ride the trolley?**
 - a. Out of towners - tourists
 - b. Commuters
 - c. If connects to other transit
4. **Would such a trolley benefit your employees as a form of transportation?**
 - a. Probably not ours, but other employees
5. **What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
 - a. Anything that brings in people would be good.
6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
 - a. Yes
7. **What concerns would a trolley raise?**
 - a. If trolley lost a lot of money, is there enough \$ that it would last. Needs a long enough trial period. Would want to put money into getting it going and then have the plug pulled too soon.



THE FEAREY GROUP

Redmond Trolley Questionnaire - Willows Lodge, Shaun Tucker, GM, Tel: (425) 424 3900

BACKGROUND PROVIDED TO INTERVIEWEES

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The tourist trolley would then head north along the former BNSF Woodinville Subdivision mainline to the Woodinville Wine Country; the exact terminus is under study and yet to be determined.

QUESTIONS:

- 1. Is Redmond an important source of customers and visitors for your business?**
Absolutely
- 2. What public and private projects in the Redmond area are most/least promising to your business?**
Redmond Town Center, Microsoft, Burke Gilman Trail
- 3. Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
Yes. We have 135 spots. No, it is not sufficient during peak times.
- 4. Do your customers/visitors use public transit? What percentage?**
No, not available, no bus lines.
- 5. Do you promote use of public transit to employees and customers?**
No. it is a 1 ½ - 2 mile walk to the closest bus stop
- 6. Do you participate in any private/public shuttle programs?**
No. We use Butler Valet and green cabs for guests
- 7. What percentage of your business is related to tourists? business travelers? Others?**
Well, we're in the hospitality business, so 100%. But probably about 50 % local, 50% out of town
- 8. Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
We do. We're part of management company MTM Luxury with a number of sister properties. We're also part of the Preferred Hotel Group

9. **Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
Not public events.
10. **How does traffic congestion impact your business? How often?**
Friday evenings at 5:00 the congestion from 520 impacts us. Occasionally 124th ST (Redmond/Woodinville Rd) can impact us a bit. Right around us, traffic doesn't have much effect.
11. **How many visitors do you per year?**
We book 31,000 rooms a year. We also have outside guests probably 60,000, though that's a bit of a guess

TROLLEY QUESTIONS:

1. **Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?**
I think so. From a guest perspective it would give guests other options for shopping and dining. I don't really think that it would bring us guests, but it would be an attraction for our guests.
2. **What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
Make it cute/fun. Comfort would be important. Because it is wine country, there should be featured wines and snacks. I don't think speed is important, as it isn't a long distance and it would be more of an attraction for tourists, who generally aren't in a big hurry.
3. **Who do you think would ride the trolley?**
Guests going to Redmond
4. **Would such a trolley benefit your employees as a form of transportation?**
We only have a few employees from that area. It could, but doesn't stand out as an obvious solution. Maybe if it connects to Park and Rides or bus stops.
5. **What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
A tourist theme that makes it more of an activity / attraction, less functional or public transit oriented. It should (and could) draw people to wineries and other Woodinville attractions as well as Redmond.
6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
Possibly, but parking isn't difficult here. I could be wrong but I see it more as a benefit for our guests than a way to bring people from Redmond.
7. **What concerns would a trolley raise?**
Construction noise. Potential to be an eye sore or noise issue, has to be done right. Funding is a concern; who's going to pay for this? Woodinville is full of Mom and Pops that can't pay for something like this. Also, it should be a complete line from tourist district to other wineries, really connecting Woodinville wine areas. And getting complete buy-in and support from all the businesses and stakeholders would be very important.



THE FEAREY GROUP

**Redmond Trolley Questionnaire - Woodinville Wine Country, Cynthia Dasté, ED,
425.205.4394**

BACKGROUND PROVIDED TO INTERVIEWEES

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QUESTIONS:

General Comment: They have a little bit of mixed feelings about old dinner train, bringing in large # of people at one time. It is disruptive to non-dinner train customers.

1. **Is Redmond an important source of customers and visitors for your business?**
yes
2. **What public and private projects in the Redmond area are most/least promising to your business?**
Not tracking
3. **Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
N/A
4. **Do your customers/visitors use public transit? What percentage?**
We would like to see some public transit come out to WWC
5. **Do you promote use of public transit to employees and customers?**
a. There isn't anything working
6. **Do you participate in any private/public shuttle programs?**
a. Not now
7. **What percentage of your business is related to tourists? business travelers? Others?**
a. Ask wineries

8. **Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
 - a. A little with Kirkland, not much
 - b. Redmond Inn and Marriott town center affiliate members
9. **Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
 - a. St. Nick's Open house – Dec. 7 (2700 attendees)
 - b. Passport to woodinville – 3rd weekend in April (3500 attendees)
10. **How does traffic congestion impact your business? How often?**
 - a. No
 - b. City of Woodinville doesn't like their events – try to keep visitors out of downtown , map to kepep out
11. **How many visitors do you per year?**
 - a. Total # 350,000

TROLLEY QUESTIONS:

1. **Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?**
 - a. Yes, but there are two districts
2. **What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
 - a. Decent frequency on weekends
 - b. Frequency is key
3. **Who do you think would ride the trolley?**
 - a. Tourists, hotel visitors, biz travelers
4. **Would such a trolley benefit your employees as a form of transportation?**

n/a
5. **What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
 - a. Connecting to bus service, ease of getting to and from
6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
 - a. yes
7. **What concerns would a trolley raise?**
 - a. No! Bring it!!

###



THE FEAREY GROUP

Redmond Trolley Questionnaire - Redhook, Nathan Wetmore, (425) 420-1111

BACKGROUND PROVIDED TO INTERVIEWEES

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QUESTIONS:

1. **Is Redmond an important source of customers and visitors for your business?**
yes
2. **What public and private projects in the Redmond area are most/least promising to your business?**
Everything on the east side contributes
3. **Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
Yes. 200 spaces and no, not sufficient.
4. **Do your customers/visitors use public transit? What percentage?**
No, but they would if it was available
5. **Do you promote use of public transit to employees and customers?**
n/a
6. **Do you participate in any private/public shuttle programs?**
No.
7. **What percentage of your business is related to tourists? business travelers? Others?**
Tourists: 60%
Biz Travelers: 25%
Local / Other: 15%
8. **Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
Through the chamber of commerce (Woodinville Chamber)

DRAFT

9. **Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
Movie nights, runs, bike rides. 30th b-day party in September. We use off-site parking (ballfields on the other side of and lot where wine village is slated and direct with signage)
10. **How does traffic congestion impact your business? How often?**
It can stop business, we can hold more than we can park reduces people through the door.
11. **How many visitors do you per year?**
250,000

TROLLEY QUESTIONS

1. **Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?**
Yes. More people coming to a destination area. Only brewery and destination, depending where it would let out.
2. **What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
Making sure that the depot is off the road and convenient to access; having Red Hook on draft would be a good idea. It would be important to schedule frequency around events, evening hours, etc.
3. **Who do you think would ride the trolley?**
Microsoft, Microsoft, Microsoft. Everyone in Redmond and South. I think a lot of people would drive there and not have to worry about parking or traffic.
4. **Would such a trolley benefit your employees as a form of transportation?**
Maybe
5. **What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
Connecting to shuttle and advertising different locations in Woodinville would make it more accessible
6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
Yes.
7. **What concerns would a trolley raise?**
Slow down driving traffic if we have to put in train crossings but overall it is a positive. Getting people to come and they don't have to park is like free business. Funding could be a concern.

###



THE FEAREY GROUP

Redmond Trolley Questionnaire – Redmond Chamber, CEO and President Chris Hoffman

BACKGROUND PROVIDED TO INTERVIEWEES

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Not ripe yet – seems to me lots of conjecture; done lots of trolley studies and this just isn't where it needs to be to get input, need to have a terminus, need agreement with Woodinville, needs # of stops; not put together well.

We don't have a there there. Grabbing at wishes.

QUESTIONS:

1. **Is Redmond an important source of customers and visitors for your business?**
n/a

2. **What public and private projects in the Redmond area are most/least promising to your business {to the Chamber}?**
 - Anything that has to do with real and viable infrastructure that is well planned and executed.
 - City is taking on huge parks project funded with private capital; Chamber not 100% behind it but supportive
 - Biz growth and getting economy on its feet is top priority, not a trolley line. A trolley is okay down the line, but biz and economy comes first.
 - This is not what we need to working on.

3. **Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
 - There is sufficient parking in downtown Redmond currently - parking study from 1.5 years ago reflects that.

4. **Do your customers/visitors use public transit? What percentage?**
 - There is not sufficient public transit in Redmond.

5. **Do you promote use of public transit (to employees and customers)?**
 - The Chamber is behind promoting public transit projects if funded, well-planned, vetted thru biz and residents here.
6. **Do you participate in any private/public shuttle programs?**
 - n/a
7. **What percentage of your business is related to tourists? business travelers? Others?**
 - City is Tourism guru, not the Chamber
 - City uses that lodge tax
8. **Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
 - We don't officially cross promote these businesses; but of course we do promote hoteliers, as they are one of backbones of our economy; wineries are members; the only hope for tourism in this town is to partner with Woodinville city to city; haven't reached out to Woodinville yet – need to do that first – getting Woodinville on board is key.
9. **Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
 - The City is the tourism entity – so they do holiday things and spin that off onto a foundation; Chamber has looked at doing both Derby days and Xmas lighting, and there is no profit, it is actually a drain, so the City is trying to establish a foundation to make it go.
10. **How does traffic congestion impact your business? How often?**
 - The worst is construction – it is greatest impact. There are the standard Peak hour issues, hopefully high capacity transit will help that.
11. **How many visitors do you per year?**
 - Good question. I have a philosophy about visitorship – we are a city of visitors, not tourists – visitors come b/c taking jobs, interviewing – that's where people come from – City will argue this, but I don't think we have a real tourist base (contrast Galveston, TX – tons of things to draw tourists in). In Redmond, don't have a tourist base until/unless we do a partnership with Woodinville. We have a weekday activities; weekends are dead. Get #'s from Hoteliers- they will reflect that.

TROLLEY QUESTIONS:

1. **Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?**
 - You are asking questions ahead of research: need answers: how much, who pays, frequency, using for peak hour transit in two cities, all these need to be addressed first.
 - Wineries, businesses, City not going to pay b/c no \$\$
 - Microsoft and Nintendo only ones healthy enough to afford this, but why would they want it?
 - Would it help business here? That depends on frequency, whether there parking at both ends, cost to ride, stops, etc.
 - Used to think it would be phenomenal to have such a trolley, but the liability costs alone associated with transporting people on a public vehicle to drink wine is enormous – who will pay?

2. **What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
 - Frequency
 - Parking at both end
 - Highly subsidized – People won't spend \$10-15 to ride
 - More sites along the line – Currently, there are not enough sites along the route to hop on- hop off (Contrast Savannah, Charleston trolley)
 - This route would miss the wineries on Woodinville-Redmond Road, and they are some of the most prominent ones – most are not walkable.

3. **Who do you think would ride the trolley?**
 - If doing winery tours, possibly you would get some visitorship in summer, maybe not in winter
 - Excellent question – who would ride it – Would people in Redmond ride it to Woodinville?
 - o If Redmond residents took it, they might go to a winery once or twice a year, if friends in town, something like that.
 - o But typically, people got to Woodinville to shop, to go to but would want to get to Molbaks or other shopping locations.
 - Need Peak hour transit with it going back and forth for Microsoft commuters
 - Would someone from farther out take it? Would someone from Cle Elum take it to see the wineries? Don't know. Why wouldn't they just drive?

4. **Would such a trolley benefit your employees as a form of transportation?**
 - n/a

5. **What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
 - See above #2

6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
 - Only if multiple stops, only if there were a reason to ride it. Not sure I would go out of my way

7. **What concerns would a trolley raise?**
 - Worked on Lake Oswego – trolley there went near housing – key issues were that it was noisy, pedestrians had to stop at crossings; if it were of some value to businesses, then it would be okay going back and forth; if not, then there is not a reason for it. If went Woodinville-Redmond road and back Willows Lodge and Ste Michelle and up into wine country by Molbaks, it would be great but it can't. That would be something for a rubber wheel trolley; a better use and better possibility for momentum but still how do you pay for it?!
 - Business environment not right for a trolley now. Not something Sound Transit would do; will take a purveyor to pick it up. What the City has gone through with not wanting someone to run a train through their town (GNP) - now a legal battle the City is spending \$100k to fight in DC. If someone wants to put a train on that track, a private co., it doesn't matter who owns the track b/c the laws that deal with rail lines are separate from city laws, so they can take over and run on that line. GNP wants to haul garbage on it during the night. Chamber is out of this conflict. It seems to me like this interest in the tourist trolley is in response to the GNP issue.



THE FEAREY GROUP

Redmond Trolley Questionnaire – Woodinville Chamber, Executive Director Dave Witt

BACKGROUND PROVIDED TO INTERVIEWEES

We are conducting a preliminary study of a tourist trolley that would run between downtown Redmond and the Woodinville Winery district. A trolley is passenger train, which would run on existing tracks, and could use alternative clean energy propelled by a quiet on-board generator. This study is part of the City of Redmond's Central Connector Master Plan, which aims to develop a system of rails, trails, streets and infrastructure with the overall goal of supporting projected growth for Downtown Redmond.

The feasibility of a trolley is being considered on a portion of the former Redmond Spur of the Woodinville Subdivision of the Burlington Northern Santa Fe (BNSF) Rail Corridor, which the City of Redmond purchased in June 2010. The spur extends approximately 3.9 miles from downtown Redmond to the intersection of Willows Road and NE 124th Street in the Sammamish Valley neighborhood.

The tourist trolley would then head north along the former BNSF Woodinville Subdivision mainline to the Woodinville Wine Country; the exact terminus is under study and yet to be determined.

General comment: I hope this happens!

QUESTIONS:

1. **Is Redmond an important source of customers and visitors for your business?**
Yes!
2. **What public and private projects in the Redmond/Woodinville area are most/least promising to your business {to the Chamber}?**
 - No projects on the books in Woodinville.
 - Recently toured mixed use developments in downtown Redmond; interested in that kind of development b/c that is what Woodinville has planned
3. **Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
 - There is sufficient parking in downtown Woodinville currently – some peak time issues, but we have stringent parking zoning so businesses and wineries required to have parking.
4. **Do your customers/visitors use public transit? What percentage?**
 - There is not sufficient public transit in Woodinville. Park and Ride is awkward, in convenient. No public transit in the city.
5. **Do you promote use of public transit (to employees and customers)?**
6. **Do you participate in any private/public shuttle programs?**
n/a
 - There are several private services, servicing the wineries.
7. **What percentage of your business is related to tourists? business travelers? Others?**
 - Chamber oversees tourism, provides information about the area.

8. **Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
 - n/a
9. **Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
 - N/a
10. **How does traffic congestion impact your business? How often?**
 - n/a
11. **How many visitors do you per year?**
 - Don't have #s. Wish we did.

TROLLEY QUESTIONS:

1. **Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit business? If so – how?**
 - It would be an asset to the city.
2. **What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
 - Safety
 - Go out – assuming afternoon and evening 2-4 x a day
3. **Who do you think would ride the trolley?**
 - Hotel guests (4 hotels)
 - Residents
 - Mostly visitors
4. **Would such a trolley benefit your employees as a form of transportation?**
 - Doubt it
5. **What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
 - Connecting to other areas via other transit.
6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
 - Yes, it would be an attraction.
7. **What concerns would a trolley raise?**
 - Pedestrian safety
 - Bicycle safety
 - Could it be separated from bike and ped path?

###



Redmond Trolley Questionnaire – Karen Nolz, Business operations manager and tourism fund administrator, City of Redmond

BACKGROUND PROVIDED TO INTERVIEWEES

We are conducting a preliminary study of a tourist trolley that would run between downtown Redmond and the Woodinville Winery district. A trolley is passenger train, which would run on existing tracks, and could use alternative clean energy propelled by a quiet on-board generator. This study is part of the City of Redmond's Central Connector Master Plan, which aims to develop a system of rails, trails, streets and infrastructure with the overall goal of supporting projected growth for Downtown Redmond.

The feasibility of a trolley is being considered on a portion of the former Redmond Spur of the Woodinville Subdivision of the Burlington Northern Santa Fe (BNSF) Rail Corridor, which the City of Redmond purchased in June 2010. The spur extends approximately 3.9 miles from downtown Redmond to the intersection of Willows Road and NE 124th Street in the Sammamish Valley neighborhood.

The tourist trolley would then head north along the former BNSF Woodinville Subdivision mainline to the Woodinville Wine Country; the exact terminus is under study and yet to be determined.

QUESTIONS:

1. **Is Redmond an important source of customers and visitors for your business?**
 - n/a

2. **What public and private projects in the Redmond/Woodinville area are most/least promising to your business (in terms of increasing tourism to Redmond)?**
 - Central connector will help move people around
 - Trolley would help to draw overnight visitors

3. **Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
 - There is sufficient parking in downtown Redmond.

4. **Do your customers/visitors use public transit? What percentage?**
 - n/a

5. **Do you promote use of public transit (to employees and customers)?**
 - n/a

6. **Do you participate in any private/public shuttle programs?**
 - n/a
 - There are several private services, servicing the wineries.

7. **What percentage of your business is related to tourists? business travelers? Others?**
 - No #s

8. **Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
 - n/a
9. **Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
 - No
10. **How does traffic congestion impact your business? How often?**
 - One main street that goes downtown is also a commuter route to the NE part of area – a bit of an issue, but that is it.
 - Roundabouts cut down on speeding.
11. **How many visitors do you per year?**
 - Don't have #s. Wish we did.

TROLLEY QUESTIONS

1. **Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit Woodinville/ Woodinville business, Wineries? If so – how?**
 - Don't know if it would benefit more than the wineries.
 - Depends on stops. Ste. Michelle critical; 175th and State Route 202 – but you need to pick up and move people to other places. How does that happen?
2. **What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
 - Frequency
 - Convenient schedules
 - Reliability
 - Not on-board amenities – they don't really matter
 - Parking at both end important
 - If it has a wine focus, would wineries offer a discount to riders?
 - Would have to be fairly inexpensive to ride because people can take other forms of transit. Maybe \$10 would be okay, didn't know.
3. **Who do you think would ride the trolley?**
 - Business travelers prime market
 - Wine fans
4. **Would such a trolley benefit your employees as a form of transportation?**
 - Issue is how do you get beyond the terminals. How to do they connect to employment center, shopping center, etc.
5. **What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
 - See above #2
6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
 - Yes, it would be an attraction.
7. **What concerns would a trolley raise?**
 - We would have to work up the logistics about how they get around.

###



THE FEAREY GROUP

Redmond Trolley Questionnaire – Redmond Town Center , Steven Chaffee

BACKGROUND PROVIDED TO INTERVIEWEES

We are conducting a preliminary study of a tourist trolley that would run between downtown Redmond and the Woodinville Winery district. A trolley is passenger train, which would run on existing tracks, and could use alternative clean energy propelled by a quiet on-board generator. This study is part of the City of Redmond's Central Connector Master Plan, which aims to develop a system of rails, trails, streets and infrastructure with the overall goal of supporting projected growth for Downtown Redmond.

The feasibility of a trolley is being considered on a portion of the former Redmond Spur of the Woodinville Subdivision of the Burlington Northern Santa Fe (BNSF) Rail Corridor, which the City of Redmond purchased in June 2010. The spur extends approximately 3.9 miles from downtown Redmond to the intersection of Willows Road and NE 124th Street in the Sammamish Valley neighborhood.

The tourist trolley would then head north along the former BNSF Woodinville Subdivision mainline to the Woodinville Wine Country; the exact terminus is under study and yet to be determined.

QUESTIONS:

1. **Is Redmond an important source of customers and visitors for your business?**
 - yes

2. **What public and private projects in the Redmond area are most/least promising to your business?**
 - We are an extension of downtown Redmond, so any developments in the downtown are important to us. Also MSFT developments are important, as we have an office component for ATT and MSFT, so their plans impact us.

3. **Do you provide customer/visitor/employee parking? How many spaces? Are they sufficient?**
 - Customer spaces – yes
 - Total – 3500 stalls, sufficient
 - Office buildings have own parking

4. **Do your customers/visitors use public transit? What percentage?**
 - Yes; no; not a big generator.

5. **Do you promote use of public transit to employees and customers?**
 - Yes, thru Greater Redmond Transit Agency – commuter cars, etc.

6. **Do you participate in any private/public shuttle programs?**
 - Not directly

7. **What percentage of your business is related to tourists? business travelers? Others?**
 - Hard one because we don't measure across all our businesses.
 - 30% tourists for hotels on property

- 70% business traveler for hotels on property
- 8. Do you cross promote your business with wineries/hotels/other hospitality and tourist locations?**
 - Yes, and we partner with City for events. We would like to tap into wineries more, but there hasn't been strategy to do so.
 - 9. Do you host any major events (concerts, harvest events, conferences, performances, trade shows or exhibits)? What is your transportation/parking plan for such events?**
 - Redmond Lights
 - Different marketing promo events: Good Fest, Arts and crafts sidewalk fest in summer; looking at adding one more (Bite of Redmond)
 - Cross promote events in Redmond, like Senior Open Tour
 - 10. How does traffic congestion impact your business? How often?**
 - Don't see a huge impact
 - 11. How many visitors do you per year?**
 - 7 million on property a year, based on vehicle counts math 2.5/per car

TROLLEY QUESTIONS:

- 1. Would a tourist trolley between downtown Redmond and the Woodinville Winery district benefit your business? If so – how?**
 - I think so. It would benefit our hotels, the city and tourism in general. Also the restaurants in the area.
- 2. What features would you want a tourist trolley to have (e.g. speed, frequency, style, safety, services, etc.)? Why?**
 - There would be a shared interest in the summertime for use with stops at historical or touristy points; nice to make it not just a transit.
 - It would need a theme and a venue to promote the tourism side – it would be a unique marketing opportunity
 - Most beneficial and productive Spring-summer-fall; winter could have a holiday theme
 - Also could draw family and community functions
 - Wouldn't promote dinner or food because it would compete with restaurants
 - Cross promote to Seattleites taking the cruise over
- 3. Who do you think would ride the trolley?**
 - Tourists – I see it as good for local Redmond businesses
 - Also it could be a link for some commuters or locals, not opposed to that but wouldn't want that to become the primary purpose. Creating a tourist attraction is more important to us.
- 4. Would such a trolley benefit your employees as a form of transportation?**
 - Not ours but maybe employees of the Center, not that big a pop
- 5. What would make a tourist trolley beneficial to your businesses? (e.g. walking trails, connecting shuttle or bus service, etc.)?**
 - Not the first time we've heard this idea; GNP came with similar idea.
 - Issues are: where's the parking, where do you put the stops and platforms
 - Platforms need to integrate with trails and make destinations appealing

DRAFT

6. **Do you think a tourist trolley connecting major area business centers with Woodinville Wine Country might increase business by attracting people (tourist, employees and business travelers) to your business (restaurants, bars, etc.)?**
 - Could be if done well

7. **What concerns would a trolley raise?**
 - Overall impact of parking and traffic flow around RTC
 - Lack of a good thorough plan about how it would work
 - Overall concept is good with right partners would be a good thing for Redmond

###

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Appendix B

DigiPen Transportation Survey Results

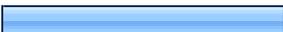
Student Commuting and Transportation Survey - SurveyMonkey

January 2011

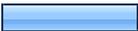
1. Where do you live? (select neighborhood that best reflects where living this semester)

		Response Percent	Response Count
Bellevue – Crossroads		3.7%	9
Bellevue - Other		6.2%	15
Issaquah/Newcastle/Sammamish		1.2%	3
Kirkland - Other		3.7%	9
Kirkland – Rose Hill		0.8%	2
Kirkland – Totem Lake		2.5%	6
North King County (Bothell/Lynnwood/Shoreline)		1.7%	4
Overlake/Microsoft (148th Ave or 156th Ave near Hampton Greens / Bellevue Meadows)		9.1%	22
Pierce/Thurston Counties		0.4%	1
Redmond – Avondale Rd.		2.9%	7
Redmond – Downtown		12.9%	31
Redmond – SR 202/East Lake Sammamish		5.4%	13
Redmond - Willows Rd & 148th (Shadowbrook, Trailwood, Sammamish Ridge)		32.0%	77
Seattle		4.6%	11
Snohomish County		2.9%	7
South King County (Renton/Kent/Federal Way)		4.1%	10
Woodinville		1.2%	3

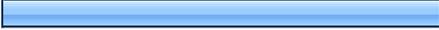
Other		4.6%	11
		answered question	241
		skipped question	12

2. Do you commute to DigiPen in a car or motorcycle?			
		Response Percent	Response Count
Yes		57.3%	141
No		42.7%	105
		answered question	246
		skipped question	7

3. Do you take public transportation as part of your commute to DigiPen? (Metro Transit, Sound Transit, etc.)			
		Response Percent	Response Count
Yes		9.8%	24
No		90.2%	221
		answered question	245
		skipped question	8

4. Do you take a bicycle to commute to DigiPen?			
		Response Percent	Response Count
Yes		20.4%	50
No		79.6%	195
		answered question	245
		skipped question	8

5. Do you take the DigiPen shuttle to commute to DigiPen?			
		Response Percent	Response Count
Yes		10.2%	25
No		89.8%	220
answered question			245
skipped question			8

6. Do you walk to DigiPen?			
		Response Percent	Response Count
Yes		33.9%	83
No		66.5%	163
answered question			245
skipped question			8

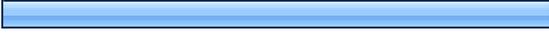
7. Would you ride a trolley running between downtown Redmond and the Woodinville Wine District on the Burlington Northern Sante Fe Railway to get to and from DigiPen?			
		Response Percent	Response Count
If it stopped within ¼ mile of school		22.3%	54
If it stopped within ½ mile of school		15.3%	37
None of the above		62.4%	151
answered question			242
skipped question			11

8. How often would you ride a trolley to DigiPen?		Response Count
		153
	answered question	153
	skipped question	100

9. What would you be willing to pay for this service?		Response Percent	Response Count
\$2		38.8%	87
\$4		4.5%	10
\$5		1.8%	4
\$0		54.9%	123
	answered question		224
	skipped question		29

10. Would you ride it recreationally? If so, how often?		Response Count
		149
	answered question	149
	skipped question	104

11. What features would you want a tourist trolley to have

		Response Percent	Response Count
speed		57.7%	116
frequency		83.6%	168
style		24.4%	49
safety		42.8%	86
bike racks		32.8%	66
Other (please specify)			27
		answered question	201
		skipped question	52

2. How often would you ride a trolley to DigiPen?

	Response Text	
1	once a month	Jan 26, 2011 12:22 AM
2	I prefer to bike as it provides exercise	Jan 26, 2011 12:41 AM
3	I would ride it everyday	Jan 26, 2011 12:44 AM
4	wouldnt	Jan 26, 2011 12:49 AM
5	Doesn't pertain to my location.	Jan 26, 2011 12:51 AM
6	Really depends on how frequent the trolley stopped / distance from the apartment to the trolley to the school. Would definitely ride during down-pours.	Jan 26, 2011 1:02 AM
7	Never. I don't live along the route.	Jan 26, 2011 1:03 AM
8	Depends on how convenient the trolley is in comparison to my schedule.	Jan 26, 2011 1:04 AM
9	Probably never, I'm south and Woodinville is north. It would provide options if I moved however.	Jan 26, 2011 1:04 AM
10	Depends on how deep into Totem lake the trolley goes to. Likely every morning if the times are closer to 9-10 AM, with reasonable walking time. The trolley must compare to the bus which runs at \$2.50 with the latest time of 8:30.	Jan 26, 2011 1:05 AM
11	When necessary	Jan 26, 2011 1:06 AM
12	I am close enough that I wouldn't bother riding a trolley.	Jan 26, 2011 1:06 AM
13	I drive my own car so would not likely ride a trolley.	Jan 26, 2011 1:18 AM
14	Seems too far away to be applicable for me	Jan 26, 2011 1:25 AM
15	Never; I live too close.	Jan 26, 2011 1:30 AM
16	Never. I enjoy walking	Jan 26, 2011 1:35 AM

2. How often would you ride a trolley to DigiPen?

	Response Text	
17	Depends on pricing	Jan 26, 2011 1:38 AM
18	Never	Jan 26, 2011 1:39 AM
19	Depends on the time it arrives	Jan 26, 2011 1:44 AM
20	I have no use of such a contraption	Jan 26, 2011 1:48 AM
21	In my current living location, never. This will change in about 6 months, but I don't yet know where I'll be.	Jan 26, 2011 1:50 AM
22	Somewhat often. Depends where exactly it stops.	Jan 26, 2011 1:53 AM
23	If it went to a place with cheaper rent then I would move there and take the trolley whenever I needed to go to DigiPen	Jan 26, 2011 1:54 AM
24	I live in an area this trolley would not go to as currently proposed. Also, I plan to graduate this spring, so the trolley implementation would come too late.	Jan 26, 2011 1:55 AM
25	I would not--there is no need to wait for a trolley when I live so close.	Jan 26, 2011 1:55 AM
26	If I lived along that route and a mile or more from the campus, I would probably use it to commute to and from the school (especially on rainy days).	Jan 26, 2011 2:03 AM
27	never if it costs money	Jan 26, 2011 2:04 AM
28	As often as needed	Jan 26, 2011 2:05 AM
29	Every day	Jan 26, 2011 2:07 AM
30	not at all	Jan 26, 2011 2:10 AM
31	Daily	Jan 26, 2011 2:12 AM
32	I don't live anywhere near Woodinville... nor do I plan to. So I wouldn't. If it was somewhere near where I lived, definitely, all the time.	Jan 26, 2011 2:12 AM
33	NEVER!	Jan 26, 2011 2:13 AM
34	Probably never	Jan 26, 2011 2:14 AM
35	Every single day for the rest of my four years at this amazing school.	Jan 26, 2011 2:15 AM
36	Daily	Jan 26, 2011 2:19 AM
37	Probably none, as I am in Bellevue and not near any of those stops. It would have to come closer to me to be of any use.	Jan 26, 2011 2:22 AM
38	Never unless it got me between home and school.	Jan 26, 2011 2:23 AM
39	Anytime it was convenient, if I could afford to- less than \$2 a day	Jan 26, 2011 2:34 AM
40	N/A	Jan 26, 2011 2:36 AM
41	never	Jan 26, 2011 2:37 AM
42	Since the shuttle stops running at 12, I'd use it whenever I had classes that started after 12 (which right now is all of my classes this semester).	Jan 26, 2011 2:38 AM
43	Every day if it is more convenient than walking for 20 minutes after an hour long bus ride.	Jan 26, 2011 2:40 AM
44	I wouldn't unless it was necessary	Jan 26, 2011 2:43 AM
45	During bad weather	Jan 26, 2011 2:49 AM
46	not at all.	Jan 26, 2011 2:52 AM
47	Everyday I could	Jan 26, 2011 3:00 AM
48	It would honestly depend on the situations	Jan 26, 2011 3:03 AM
49	I would not.	Jan 26, 2011 3:05 AM
50	Given the above information, I would not use the trolley to get to DigiPen. It would only cover about 6 miles of my trip, and could cost me more time to park, board, ride, and walk to school.	Jan 26, 2011 3:07 AM

2. How often would you ride a trolley to DigiPen?

	Response Text	
51	Never	Jan 26, 2011 3:08 AM
52	Once or twice.	Jan 26, 2011 3:11 AM
53	once a week	Jan 26, 2011 3:15 AM
54	Probably not at all.	Jan 26, 2011 3:17 AM
55	I live close enough to the campus that riding the trolley wouldn't be necessary.	Jan 26, 2011 3:26 AM
56	if it was raining and the trolley was free	Jan 26, 2011 3:35 AM
57	well not very much; but if you count the possible event where the trolley collides with my car as I'm waiting on the train tracks for the light to change... then once or twice.	Jan 26, 2011 3:39 AM
58	I probably wouldn't since I already live within about a half a mile from the school.	Jan 26, 2011 3:42 AM
59	I wouldn't, not only is it too far away, it's moving the wrong direction.	Jan 26, 2011 3:51 AM
60	Never since its way more convenient to drive my car.	Jan 26, 2011 3:51 AM
61	Never.	Jan 26, 2011 3:52 AM
62	Never, unless it came 1/4 mi from my apartment	Jan 26, 2011 3:56 AM
63	I wouldn't ride the trolley at all. I need to commute from Puyallup to Redmond, and a car is the only practical way.	Jan 26, 2011 3:57 AM
64	Every moment I could, even if I had no reason to go to school at all.	Jan 26, 2011 4:01 AM
65	Only if my bike was broken and there was a stop on Willows Rd between Redmond Rd and DigiPen	Jan 26, 2011 4:05 AM
66	Depending on how convenient it is for me to take it	Jan 26, 2011 4:09 AM
67	Very rarely.	Jan 26, 2011 4:16 AM
68	N/A	Jan 26, 2011 4:19 AM
69	A few times a week if it were convenient enough from my apartment.	Jan 26, 2011 4:26 AM
70	every day	Jan 26, 2011 4:30 AM
71	If the walking distance was very reasonable, I would take this method very often. Granted, if I lived near the trolley station on the other end.	Jan 26, 2011 4:34 AM
72	never	Jan 26, 2011 4:39 AM
73	When it coincided with my class times.	Jan 26, 2011 4:44 AM
74	I already live close enough, so not unless I needed to get somewhere it goes.	Jan 26, 2011 4:48 AM
75	If I lived in the area, regularly.	Jan 26, 2011 4:52 AM
76	Probably just if it is an emergency because of money.	Jan 26, 2011 5:02 AM
77	If it passed by Shadowbrook at a convenient time during weekdays, and stopped basically at DigiPen, I might ride it to school Mon. - Fri. Otherwise I would continue walking to school.	Jan 26, 2011 5:03 AM
78	I might move further away next year so it depends on where I move/how convenient it is for me to access etc.	Jan 26, 2011 5:03 AM
79	On the weekends or days when I come to school in the afternoon.	Jan 26, 2011 5:12 AM
80	Depending on the hub location in Downtown Redmond, everyday. If the hub would just as far away as the campus itself, I would not ride it at all. This is the case with the DigiPen shuttle.	Jan 26, 2011 5:15 AM
81	Only when i needed/wanted to get there and I didn't really want to exercise all that much	Jan 26, 2011 5:34 AM
82	I live to far from it to be worth it.	Jan 26, 2011 5:47 AM
83	if I lived in Woodinville, that would be fun!	Jan 26, 2011 5:48 AM
84	Depends on frequency of roundtrips, dependability and price.	Jan 26, 2011 5:59 AM

2. How often would you ride a trolley to DigiPen?

Response Text		
85	4 days/wk	Jan 26, 2011 6:04 AM
86	Never...don't live in an area that I could use it.	Jan 26, 2011 6:23 AM
87	Every day if convenient	Jan 26, 2011 6:25 AM
88	Hardly at all - I'm only a 20-minute walk away.	Jan 26, 2011 6:39 AM
89	I prefer to walk since I live so close to school.	Jan 26, 2011 6:53 AM
90	Never	Jan 26, 2011 6:53 AM
91	Would not.	Jan 26, 2011 7:03 AM
92	not at all	Jan 26, 2011 7:22 AM
93	Not often.	Jan 26, 2011 7:23 AM
94	If it was convenient all the time	Jan 26, 2011 7:29 AM
95	Never for academic activities. Im perfectly happy taking the DigiPen every day.	Jan 26, 2011 7:29 AM
96	It depends on how close it is to my apartments, and how often it runs. If it is too far out of the way, or runs at inconvenient times, I would probably continue walking/biking to school.	Jan 26, 2011 7:31 AM
97	Every day if it was cheap and dropped me off close to school.	Jan 26, 2011 7:33 AM
98	assuming it was inexpensive and a short distance from my apartment, probably most days. However, the walk is only 25 minutes to digipen, so if the trolley was at all inconvenient I would just walk	Jan 26, 2011 7:34 AM
99	I would not since I am in walking distance of the school.	Jan 26, 2011 7:35 AM
100	Constantly!	Jan 26, 2011 7:36 AM
101	I wouldn't, barring extenuating circumstances	Jan 26, 2011 7:38 AM
102	If convenient, then ALWAYS, but I'd probably just have to drive half way to school before getting to the trolley station considering where I live now. Also, I may be moving to an apartment within walking distance next year, so this might not apply to me at all.	Jan 26, 2011 7:47 AM
103	It wouldn't run near where I live	Jan 26, 2011 8:01 AM
104	when ever it would be conviniet	Jan 26, 2011 8:03 AM
105	I wouldn't because the center of Redmond isn't near my home.	Jan 26, 2011 8:11 AM
106	If it is near my place. Then I might use it.	Jan 26, 2011 8:19 AM
107	it depends on where my place located in is. (Since I'm going to move out later)	Jan 26, 2011 8:23 AM
108	N/A	Jan 26, 2011 8:36 AM
109	Depends on speed and accessibility.	Jan 26, 2011 8:54 AM
110	Well, if I didn't live so close, probably alot	Jan 26, 2011 9:25 AM
111	never	Jan 26, 2011 9:26 AM
112	I live within a mile from the school, it wouldn't be worth walking to the trolley. I do know some friends that would love taking a trolley though. Mainly the friends in Red 160.	Jan 26, 2011 9:31 AM
113	As often as my schedule allows. It would depend on the operating hours of the trolley since I am sometimes on campus until midnight and would have to plan to take my car on those days. If it runs until after 7 pm, I would take it 3-4 times a week. If it goes until 10, I could ride it potentially 5-6 times a week. I would still have to drive 15 minutes to reach Woodinville, so the trolley would only save me 10 minutes of commute. At that point I may as well drive the rest of the way. The cost would be the same.	Jan 26, 2011 11:29 AM
114	if there's a parking place nearby in Woodinville- every day (saves me half my trip)	Jan 26, 2011 1:01 PM
115	depends on when and where it stopped for me to get home and to school. If close enough to both then everyday. Also depends on the price.	Jan 26, 2011 4:05 PM

2. How often would you ride a trolley to DigiPen?

Response Text		
116	Never.	Jan 26, 2011 5:08 PM
117	When needed.	Jan 26, 2011 5:19 PM
118	daily	Jan 26, 2011 5:19 PM
119	If they had one going to Renton all the time, but i doubt it.	Jan 26, 2011 5:30 PM
120	Never.	Jan 26, 2011 5:51 PM
121	I would ride as often as I have classes if the downtown location is near my apartment.	Jan 26, 2011 6:01 PM
122	n/a	Jan 26, 2011 6:39 PM
123	I live too far away at the moment, but when if I lived closer, I would consider using it to get to school, depending on the location.	Jan 26, 2011 6:41 PM
124	never	Jan 26, 2011 6:44 PM
125	I wouldn't, doesn't go anywhere near my house	Jan 26, 2011 7:00 PM
126	Never, I don't live in that direction from the school	Jan 26, 2011 7:07 PM
127	Maybe??	Jan 26, 2011 7:39 PM
128	the proposed trolley is not in an appropriate location for me to ride it	Jan 26, 2011 7:59 PM
129	depends...	Jan 26, 2011 8:17 PM
130	I never ride before	Jan 26, 2011 9:45 PM
131	It doesn't come near my house	Jan 26, 2011 9:46 PM
132	Not at all	Jan 26, 2011 10:08 PM
133	If I could ride light rail from Everett to Redmond then it would be great, but this small of a rout would not help me.	Jan 26, 2011 11:44 PM
134	Whenever I needed to go to school, if it ran close by my apartment.	Jan 27, 2011 1:42 AM
135	Every day if it was close enough to be worth it, to my house and school.	Jan 27, 2011 2:15 AM
136	If it was convenient enough I would use it all the time.	Jan 27, 2011 3:45 AM
137	my friends ride for me every day	Jan 27, 2011 7:42 AM
138	Never. I live within 1 mile.	Jan 27, 2011 4:37 PM
139	not very often, because Woodinville is out of the way for me	Jan 27, 2011 4:42 PM
140	Probably never	Jan 27, 2011 8:23 PM
141	None	Jan 27, 2011 9:22 PM
142	As often as I could. It would especially help during the afternoon into evening hours.	Jan 28, 2011 4:41 PM
143	Couple of days a week.	Jan 28, 2011 5:40 PM
144	Depends on how long it took.	Jan 30, 2011 2:17 AM
145	I'm not sure because I don't know if the trolley would come close enough to my house.	Jan 31, 2011 12:05 AM
146	Every school day if its cheap enough	Jan 31, 2011 8:22 PM
147	I would ride it as often as I have classes during a week. During the current semester, this would be two days a week.	Jan 31, 2011 8:38 PM
148	5 days a week.	Jan 31, 2011 10:02 PM
149	If there was a trolley it would allow me to live farther from school and closer to stores, as well as nicer apartments.	Jan 31, 2011 10:05 PM
150	Probably never.	Feb 1, 2011 12:50 AM
151	To and from school on Mondays and Wednesdays if it made getting from the 545 bus stop to school faster (which would mean a stop at 90th and a stop by DigiPen) and if it used the Orca card bus pass.	Feb 1, 2011 5:22 AM

2. How often would you ride a trolley to DigiPen?

Response Text		
152	rarely	Feb 1, 2011 9:22 AM
153	I would take it when my roommates are unavailable for transport, or to avoid inconveniencing them if they have no other reason to go to school.	Feb 1, 2011 7:16 PM

4. Would you ride it recreationally? If so, how often?

Response Text		
1	yes, once a month	Jan 26, 2011 12:22 AM
2	maybe rarely	Jan 26, 2011 12:41 AM
3	It sounds like fun. I wouldn't mind paying a little extra to ride it during non-school days	Jan 26, 2011 12:44 AM
4	no	Jan 26, 2011 12:49 AM
5	don't know	Jan 26, 2011 12:51 AM
6	I ride to downtown Redmond for food/shopping every so often.	Jan 26, 2011 1:04 AM
7	Maybe once a month.	Jan 26, 2011 1:04 AM
8	Would ride it if cheaper than the bus, and leads to markets.	Jan 26, 2011 1:05 AM
9	Oh yes, that would be fun! Perhaps on the weekends and when it's a bit warmer.	Jan 26, 2011 1:06 AM
10	Probably not.	Jan 26, 2011 1:06 AM
11	I would ride it once just for the novelty but it would not be a major part of my transportation schedule.	Jan 26, 2011 1:18 AM
12	Depends, maybe once a week	Jan 26, 2011 1:25 AM
13	Maybe once a month.	Jan 26, 2011 1:30 AM
14	Never. I enjoy walking	Jan 26, 2011 1:35 AM
15	Depends on where it stops	Jan 26, 2011 1:38 AM
16	Probably not	Jan 26, 2011 1:39 AM
17	No	Jan 26, 2011 1:44 AM
18	Maybe once per month.	Jan 26, 2011 1:50 AM
19	Yes, sometimes.	Jan 26, 2011 1:53 AM
20	I would ride it every time I did not feel like driving	Jan 26, 2011 1:54 AM
21	Doubtful: I have a car.	Jan 26, 2011 1:55 AM
22	Yes-probably to get around the area sans bus.	Jan 26, 2011 1:55 AM
23	Whenever I need to travel a mile or more and/or it is raining - about two round trips a week.	Jan 26, 2011 2:03 AM
24	once in the summers	Jan 26, 2011 2:04 AM
25	Not often, as I don't usually have business in that area.	Jan 26, 2011 2:05 AM
26	Every .75 weeks [aka I'd ride it weekly, but sometimes I'd ride it twice a week]	Jan 26, 2011 2:07 AM
27	no	Jan 26, 2011 2:10 AM
28	Nope. Too busy with work.	Jan 26, 2011 2:12 AM
29	Y U NO GIVE ME FREE RIDE?!!	Jan 26, 2011 2:13 AM
30	No	Jan 26, 2011 2:14 AM
31	No, unless it was free.	Jan 26, 2011 2:15 AM

4. Would you ride it recreationally? If so, how often?

Response Text		
32	once a year	Jan 26, 2011 2:21 AM
33	Possibly for fun or a one time only thing. Since I have a car I don't see much utility in it unless it went closet to my apartment.	Jan 26, 2011 2:22 AM
34	Maybe if I ever get any free time.	Jan 26, 2011 2:23 AM
35	Perhaps I would ride it recreationally once every 1-2 weeks.	Jan 26, 2011 2:32 AM
36	Few times a month.	Jan 26, 2011 2:36 AM
37	no	Jan 26, 2011 2:37 AM
38	If I had the time between classes and homework, yeah I would. Because of classes and homework, I don't know how often I'd actually ride it.	Jan 26, 2011 2:38 AM
39	Probably not as I don't live in this area.	Jan 26, 2011 2:40 AM
40	NO	Jan 26, 2011 2:43 AM
41	No	Jan 26, 2011 2:45 AM
42	Once in a while, if it went to interesting places	Jan 26, 2011 2:49 AM
43	perhaps... if i saw a need for it.	Jan 26, 2011 2:52 AM
44	I don't know, it would depend on where it goes.	Jan 26, 2011 3:00 AM
45	no	Jan 26, 2011 3:03 AM
46	I would, around once a month at the most.	Jan 26, 2011 3:05 AM
47	I have no reason to go to Woodinville at this time. However, if there was a event in Woodinville, or the trolley had bike racks, it would be nice to bike one way and take the trolley back. My estimate no more than 3 trips a week.	Jan 26, 2011 3:07 AM
48	Never	Jan 26, 2011 3:08 AM
49	Yes, maybe once a month.	Jan 26, 2011 3:08 AM
50	Possibly I would try it out once or twice.	Jan 26, 2011 3:11 AM
51	if the sights were nice yes. once a month	Jan 26, 2011 3:15 AM
52	If I found it as an easy alternative to get places, then possibly everyday.	Jan 26, 2011 3:17 AM
53	I probably wouldn't have the time.	Jan 26, 2011 3:26 AM
54	yes. probably once a month or so.	Jan 26, 2011 3:39 AM
55	Maybe every now and then if they let me take my bike on, so I could ride until I was tired and then use it to get back?	Jan 26, 2011 3:42 AM
56	Yes, once a week I think	Jan 26, 2011 3:44 AM
57	Perhaps, if friends or school led me to it.	Jan 26, 2011 3:51 AM
58	Maybe. Depends on where it stops. Once every few months.	Jan 26, 2011 3:52 AM
59	Probably only when I didn't have access to a car ride. So maybe once a week.	Jan 26, 2011 3:56 AM
60	I probably wouldn't ride it too often.	Jan 26, 2011 3:57 AM
61	Yes, I would. Every moment of spare time I had would be spent on said trolley.	Jan 26, 2011 4:01 AM
62	Yes, whenever I needed to go into downtown Redmond, or if there were any other locations of interest along the line.	Jan 26, 2011 4:05 AM
63	No idea	Jan 26, 2011 4:09 AM
64	Rarely.	Jan 26, 2011 4:12 AM
65	No.	Jan 26, 2011 4:16 AM
66	N/A	Jan 26, 2011 4:19 AM
67	every day	Jan 26, 2011 4:30 AM
68	Not frequently, but I would go on it to explore Redmond and other areas.	Jan 26, 2011 4:34 AM

4. Would you ride it recreationally? If so, how often?

Response Text		
69	no	Jan 26, 2011 4:39 AM
70	Not sure. If it goes somewhere interesting, yes.	Jan 26, 2011 4:44 AM
71	Maybe	Jan 26, 2011 4:48 AM
72	No	Jan 26, 2011 5:02 AM
73	I wouldn't really ride it recreationally.	Jan 26, 2011 5:03 AM
74	Maybe a few times a semester at most.	Jan 26, 2011 5:03 AM
75	I don't think so.	Jan 26, 2011 5:07 AM
76	Maybe once or twice a month	Jan 26, 2011 5:12 AM
77	Considering that it would run into the Woodinville Wine Country, which I could then get to the Redhook Brewery fairly easily, I would take it recreationally on some weekdays and weekends.	Jan 26, 2011 5:15 AM
78	dik	Jan 26, 2011 5:34 AM
79	If it ran in the evening, I would take it with friends to Woodinville to dine or something	Jan 26, 2011 5:36 AM
80	Yes, all the time. Trains are awesome. America is stupid for getting rid of its trains.	Jan 26, 2011 5:40 AM
81	I would ride it to go get wine!	Jan 26, 2011 5:48 AM
82	I'm not familiar with the areas, but yes if it opened up more options for places to eat.	Jan 26, 2011 5:59 AM
83	yes, a few times a month	Jan 26, 2011 6:16 AM
84	Possibly, but unlikely.	Jan 26, 2011 6:23 AM
85	Depends on if I can find activities to do near its effective range.	Jan 26, 2011 6:25 AM
86	Maybe. Twice a month.	Jan 26, 2011 6:39 AM
87	Possibly, not very often.	Jan 26, 2011 6:42 AM
88	It would be nice to ride this at least once a week to get groceries.	Jan 26, 2011 6:53 AM
89	Maybe once or twice a year	Jan 26, 2011 6:53 AM
90	Maybe, but probably only once.	Jan 26, 2011 6:55 AM
91	Possibly maybe once or twice in several months.	Jan 26, 2011 7:03 AM
92	no	Jan 26, 2011 7:22 AM
93	Yes. Probably once a week.	Jan 26, 2011 7:23 AM
94	only on special occasions	Jan 26, 2011 7:29 AM
95	It depends on the stops. I'm already close to most stores. I know a few people in Woodinville, so I may head up that way, but I doubt I would have time if its not during a break.	Jan 26, 2011 7:31 AM
96	Never.	Jan 26, 2011 7:33 AM
97	probably not	Jan 26, 2011 7:34 AM
98	Yes, Weekends.	Jan 26, 2011 7:35 AM
99	Possibly, depending on the price.	Jan 26, 2011 7:38 AM
100	Most probably at least once	Jan 26, 2011 7:47 AM
101	Very often. It would be a good personal service, if I want to go to those areas for a while.	Jan 26, 2011 7:47 AM
102	again, it wouldn't run near where I live	Jan 26, 2011 8:01 AM
103	yes, it it took me where i wanted to go	Jan 26, 2011 8:03 AM
104	Possibly on weekends or less busy days to get into Redmond Town Center.	Jan 26, 2011 8:11 AM
105	no	Jan 26, 2011 8:36 AM

4. Would you ride it recreationally? If so, how often?

	Response Text	
106	Depends on purpose of trip.	Jan 26, 2011 8:54 AM
107	Probably, at least once every 2 weeks	Jan 26, 2011 9:25 AM
108	yes, on weekends mostly	Jan 26, 2011 9:26 AM
109	No, I take my car if I'm going to be stopping at more than one destination.	Jan 26, 2011 11:29 AM
110	semi-rarely (maybe 5 times a month)	Jan 26, 2011 1:01 PM
111	Very often. I would like to go visit other places in my free time rather than stay in the Redmond area.	Jan 26, 2011 2:25 PM
112	depends on the cost.	Jan 26, 2011 4:05 PM
113	No, I wouldn't.	Jan 26, 2011 5:08 PM
114	N/a	Jan 26, 2011 5:30 PM
115	I'd ride it once or twice just for the fun of it.	Jan 26, 2011 5:51 PM
116	Yes, probably once a semester.	Jan 26, 2011 6:01 PM
117	n/a	Jan 26, 2011 6:39 PM
118	Probably once in a while, like perhaps every few weeks.	Jan 26, 2011 6:41 PM
119	never	Jan 26, 2011 6:44 PM
120	n/a	Jan 26, 2011 7:00 PM
121	Maybe to visit friends who live up in Snohomish, probably rarely though, once or twice a year	Jan 26, 2011 7:07 PM
122	Every other weekend perhaps, just to get out and see what's new.	Jan 26, 2011 7:08 PM
123	Depends on how cheap, I wouldn't if as expensive as the bus.	Jan 26, 2011 7:39 PM
124	no	Jan 26, 2011 7:59 PM
125	No	Jan 26, 2011 8:13 PM
126	no	Jan 26, 2011 8:17 PM
127	no	Jan 26, 2011 9:45 PM
128	Sure. Then if I went wine tasting, I wouldn't have to drive. Very occasionally	Jan 26, 2011 9:46 PM
129	Not more than once a month	Jan 26, 2011 9:58 PM
130	Nope	Jan 26, 2011 10:08 PM
131	Not likely.	Jan 26, 2011 11:44 PM
132	N/A	Jan 27, 2011 1:42 AM
133	yes, quite often in fact.	Jan 27, 2011 3:45 AM
134	every day	Jan 27, 2011 7:42 AM
135	Sure. Maybe once a month. If it cost me less than \$1.	Jan 27, 2011 4:37 PM
136	Yes. Not sure.	Jan 27, 2011 4:42 PM
137	Maybe to get food	Jan 27, 2011 8:23 PM
138	No	Jan 27, 2011 9:22 PM
139	Every once in a while.	Jan 28, 2011 4:41 PM
140	Sometimes on weekends.	Jan 28, 2011 5:40 PM
141	Maybe once a week	Jan 30, 2011 2:17 AM
142	No	Jan 31, 2011 12:05 AM
143	I would probably not ride recreationally, or if so, only rarely.	Jan 31, 2011 8:38 PM
144	No.	Jan 31, 2011 10:02 PM
145	I would probably end up traveling on it recreationally on the weekends.	Jan 31, 2011 10:05 PM
146	Maybe.	Feb 1, 2011 12:50 AM

4. Would you ride it recreationally? If so, how often?

Response Text		
147	No.	Feb 1, 2011 5:22 AM
148	probably not	Feb 1, 2011 9:22 AM
149	I don't actually know the area too well as I am always a passenger, so I cannot say for certain if there is something along the route that would interest me.	Feb 1, 2011 7:16 PM

5. What features would you want a tourist trolley to have

Other (please specify)		
1	Distance to trolley	Jan 26, 2011 1:05 AM
2	intrigue	Jan 26, 2011 1:30 AM
3	Clean energy.	Jan 26, 2011 1:55 AM
4	Enough space for a backpack/a few bags of groceries near seats	Jan 26, 2011 2:07 AM
5	Going somewhere near Bellevue.	Jan 26, 2011 2:22 AM
6	What a silly question.	Jan 26, 2011 2:52 AM
7	COMFORT! THE MOST IMPORTANT!	Jan 26, 2011 3:15 AM
8	...Style?	Jan 26, 2011 3:26 AM
9	I hope tourist doesn't mean people visiting from out of state	Jan 26, 2011 3:35 AM
10	reliability.	Jan 26, 2011 3:51 AM
11	Cleanliness. No one wants a Dirty Trolley.	Jan 26, 2011 4:34 AM
12	Clean	Jan 26, 2011 4:48 AM
13	The public transportation in Redmond is horrible. Would not recommend if you plan on being on time.	Jan 26, 2011 5:07 AM
14	Ease of access(uses the ORCA card or something)	Jan 26, 2011 5:36 AM
15	Consistently on time	Jan 26, 2011 5:59 AM
16	cheap!	Jan 26, 2011 7:34 AM
17	ORCA card compatible	Jan 26, 2011 7:36 AM
18	Trolleys are awesome.	Jan 26, 2011 7:47 AM
19	Waiting 2 or more hours for a trolley can be frustrating.	Jan 26, 2011 7:47 AM
20	car parking lots at Woodinville	Jan 26, 2011 1:01 PM
21	Quiet	Jan 26, 2011 5:51 PM
22	spaciousness for passengers to sit/stand	Jan 26, 2011 6:01 PM
23	n/a	Jan 26, 2011 7:00 PM
24	don't need the trolley	Jan 27, 2011 7:17 AM
25	Frequency and safety are key features	Jan 27, 2011 4:37 PM
26	use the Orca card bus pass	Feb 1, 2011 5:22 AM
27	Cheap. (If it's not cheaper than the bus, I don't know why I would take it instead).	Feb 1, 2011 7:16 PM

DRAFT

Appendix C

Public Meeting Questionnaire Results



REDMOND TROLLEY FEASIBILITY

PUBLIC MEETING 1-27-2011

QUESTION POSED:

“If a Visitor / Tourist Trolley connecting Downtown Redmond with Woodinville Wine District was to happen, can you imagine it being a benefit to the community?”

RESPONSES RECEIVED IN PERSON AT PUBLIC EVENT:

SUMMARY		
YES:	28	(19 with Comments*)
NO:	4	(3 with Comments*)
MAYBE:	1	(1 with Comment*)
TOTAL:	33	(23 Comments*)

These responses do not account for any comments made via email or received by City personnel.

* COMMENTS WRITTEN (Verbatim):

- YES Very positive idea
- YES I'm on it - love the wine country & would love to see the connection. How about extending to Redmond Ridge/Trilogy?
- YES Improve transportation between Redmond & Woodinville; easy access to Woodinville Wine District. Improve traffic flow on surface streets
- YES Huge benefit to Redmond. Even better if the light rail gets in from Seattle, would be a big tourist draw.
- YES It would be great to visit all the wineries-especially during passport time. No driving! Get to see lots without worry.
- YES Seems like it would increase commerce in Redmond-tourist lodging & shopping. Plus, it would be fun for residents to go to Woodinville for a day or 1/2 day. Great Idea.
- YES We need to connect Redmond with UW Bothell. A streetcar would be great. An alternative could be a commuter train from Snohomish to Redmond.
- YES Absolutely a benefit! Bring it on now! It can be stacked with light weight equipment while the tracks are being renovated, existing businesses along the way, e.g. Black Raven brewing, golf course would enjoy more traffic right away. Take it all the way to Snohomish too.
- YES Absolutely! The sooner the better! The trolley should connect to Snohomish and further. This would allow a greater segment of the Puget Sound population to shop/dine/recreate in Redmond, bringing more dollars to the area. It would also attract more tourists to the east side.
- YES Stopping at Redhook.

DRAFT

- YES It can be completed with modest repair to exist(ing) rail. I think the modern trolley and vintage trolley combination would be unique. Perhaps start with vintage.
- YES I never had thought of going to Woodinville, but I'd be way more likely to visit if there were a trolley (provided it didn't cost a ton to ride)
- YES I imagine it would be a great weekend draw for people from Seattle. If a trolley museum with a variety of cars, that would be amazing.
- YES Would like to see the Redmond & Woodinville Chambers of Commerce get together on this. Could be a great year-round destination for out of state cruise ship tourists. NO tax & should be used to subsidize operations however.
- YES Get people/drivers off the roads & give them "permission" to enjoy the wine opportunities at leisure and on & off experience would sell wine & scenery as well as the historical experience.
- YES It would be a good commute option as well.
- YES Suggest you talk with Beaux Bowman, owner of Black Raven Brewery (NE 95th & Willows Rd)
- YES Going North is great but having winery visitors come spend time & money in downtown Redmond is even better!
- YES Free, frequent!!
- NO Bad Idea! Waste of money.
- NO Maintain/develop one system-not two. Transfers add time & make public transit less competitive relative to cars.
- NO I think that it would complicate the trail. Marymoor Park is 2 miles from the end of the trolley. Not many people would be willing to walk that far. Using the right-of-way for a trail would benefit a lot more people.

MAYBE There may be value from a tourist point of view. It could make Redmond/Woodinville more of a destination for day trips. BUT as transportation it falls short. I am waiting for P.R.T.

Other Comments Received following 1-27-11 Public Open House

Trolley study - I hope you will consider a trolley system using historic cars or reproductions; 20 MPH should be realistic and easily achievable. If Redmond chooses rails & trails, it will add a unique and functional connection between Woodinville's tremendously successful wineries and downtown Redmond

Additionally, the following individuals requested to be contacted either for further information or requesting web access to trolley Study information.

Paula Schwartz: pschwartz@ci.mlf.wa.us

Robert Scheuerman: rochesch@aol.com

Samantha Pak, Reporter, Redmond Reporter: spak@redmond-reporter.com

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Appendix D

**Cost Estimate for Phase I of Redmond Central
Connector with Accommodation of Trolley,
Prepared by The Berger Partnership**

DRAFT

Redmond BNSF Trail Corridor

Construction Cost Considerations Estimate of Additional Costs to Accommodate Trolley

Date: February 2011

Item Description	Quantity	Unit	Unit Cost	Total
161st to Sammamish River Trail				
Site Preparation				
Remove Existing Trail	16,500	SF	1.75	28,875.00
Scope Includes:				
Removal of trail between 161st and Sammamish River Trestle				
Clearing/Grubbing	52,500	SF	1.00	52,500.00
Scope Includes:				
28' wide swath (6' either side of trail and shoulder width)				
Hauling/Dumping		Allow		10,000.00
Scope Includes:				
Asphalt				
Landscape Debris				
T.E.S.C. (Not Included In Cost)				N.I.C.
	Subtotal	Site Preparation		\$91,375.00
Site Improvements				
Retaining walls (North) at RR abutment				
Import fill (12' width of trail @ 2.5' avg depth	1,735	CY	25.00	43,375.00
7.5' tall walls avg. height (4.5' above/ 3' below)	14,060	FF	20.00	281,200.00
Accommodates 5% Slope Trail (included in trail cost below)				
MSE or precast block				
Railing @ \$15/ LF	1,250	LF	65.00	81,250.00
Trail- 12' wide concrete trail	1,190	LF	42.00	49,980.00
CIP concrete paving (4" depth concrete)				
16' crushed rock subgrade (including 2' crushed rock				
shoulders both sides)	1,190	LF	30.00	35,700.00
Install new rail tracks (161st to Sammamish River Trestle)	1,650	LF		N.I.C.
Scope Includes:				
Rail bed and tracks				
Redmond Way Trestle Improvements		Allow		500,000.00
Allowance to provide:				
* Assumes structurally possible				
Structural attachment of cantilevered trail				
Grading to meet ADA				
Decking to meet ADA				
Guardrails				
	Subtotal	Site Improvements		\$991,505.00
Landscape				
Irrigation Modification				
2" Meter (provided by municipality)				N.I.C.
Mainline system w/ quick couplers	6,200	LF	28.00	173,600.00
Meadow Irrigation	67,800	SF	1.00	67,800.00
Planting Bed Irrigation	72,000	SF	1.75	126,000.00
Site Restoration				
Improvements include:				
6' on either side of path				

Construction Cost Considerations
Estimate of Additional Costs to Accommodate Trolley

Date: February 2011

Item Description	Quantity	Unit	Unit Cost	Total
Import 4" of topsoil	20	CY	35.00	700.00
Meadow mix (seeded)	14,280	SF	0.50	7,140.00
Subtotal Landscape				\$375,240.00
Subtotal 161st to Sammamish River Trail				\$1,458,120.00

Sammamish River Trail to South Sammamish Valley

Site Preparation

Clearing/Grubbing	12,040	SF	1.00	12,040.00
Scope Includes:				
28' wide swath (6' either side of trail and shoulder width)				
Rough Grading (Assumes balanced cut and fill on site. Does not include import or export of fill)	12,040	SF	3.00	36,120.00
Scope Includes:				
Balanced cut and fill on site				
28' wide swath (6' either side of trail and shoulder width)				
Hauling/Dumping		Allow		15,000.00
Scope Includes:				
Landscape Debris				
T.E.S.C. (Not Included In Cost)				N.I.C.
Subtotal Site Preparation				\$63,160.00

Site Improvements

New rail tracks	950	LF		N.I.C.
Retaining walls at RR abutment climb (NW of 154th Ave NE)				
Import fill (12' width of trail @ 2.5' avg depth)	400	CY	25.00	10,000.00
7.5' tall walls avg. height (4.5' above/ 3' below)	3,225	FF	20.00	64,500.00
Accommodates 5% Slope Trail (included in trail cost below)				
MSE or precast block				
Railing @ \$15/ LF	430	LF	65.00	27,950.00
Trail- 12' wide concrete trail	680	LF	42.00	28,560.00
CIP concrete paving (4" depth concrete)				
16' crushed rock subgrade (including 2' crushed rock shoulders both sides)	430	LF	30.00	12,900.00
Sammamish River Pedestrian Bridge		Allow		1,500,000.00
East/ West Pedestrian Street Crossing at: 154th Ave. NE				
Improvements Include:				
Enhanced paving (800sf per crossing)	1	EA	9,600.00	9,600.00
Striping	1	EA	5,000.00	5,000.00
Lighted pedestrian mid-block crossing	1	EA	75,000.00	75,000.00
Seating Node at 154th Ave NE				
Improvements include:				
Concrete Pavers (600sf per seating node)	1	EA	9,600.00	9,600.00
Tables	1	EA	2,500.00	2,500.00
Benches	1	EA	2,500.00	2,500.00
Bike Racks	1	EA	1,500.00	1,500.00
Trash Can (Trash, Recycling, Pet Waste)	1	EA	1,000.00	1,000.00
Signage		Allow		10,000.00
Subtotal Site Improvements				\$1,760,610.00

Construction Cost Considerations
Estimate of Additional Costs to Accommodate Trolley

Date: February 2011

Item Description	Quantity	Unit	Unit Cost	Total
Landscape				
Irrigation				
2" Meter (provided by municipality)				N.I.C.
Mainline system w/ quick couplers	200	LF	28.00	5,600.00
Meadow Irrigation	8,160	SF	1.00	8,160.00
Planting Bed Irrigation	500	SF	1.75	875.00
Site Restoration				
Improvements include:				
6' on either side of path (680 LF)				
Import 4" of topsoil	10	CY	35.00	350.00
Meadow mix (seeded)	8,160	SF	0.50	4,080.00
Planting Areas at Pedestrian Street Crossing				
Improvements include:				
1 street crossings				
500 sf of planting at each crossing				
Topsoil import- 6"	10	CY	35.00	350.00
Trees	5	EA	400.00	2,000.00
Shrubs, groundcover, and mulch @ edge restoration	500	SF	8.00	4,000.00
Planting Areas at Seating Nodes				
Improvements include:				
1 additional seating node				
500 sf at each seating node				
Topsoil import- 6"	10	CY	35.00	350.00
Trees	5	EA	400.00	2,000.00
Shrubs, groundcover, and mulch @ edge restoration	500	SF	8.00	4,000.00
Subtotal Landscape				\$31,765.00

Subtotal Sammamish River to South Sammamish Valley **\$1,855,535.00**

Sammamish Valley (North of 154th abutment climb)

Site Preparation

Rough Grading (Assumes balanced cut and fill on site. Does not include import or export of fill)	12,040	SF	3.00	36,120.00
Scope Includes:				
Balanced cut and fill on site				
28' wide swath (6' either side of trail and shoulder width)				
Hauling/Dumping		Allow		15,000.00
Scope Includes:				
Landscape Debris				
T.E.S.C. (Not Included In Cost)				N.I.C.
Subtotal Site Preparation				\$51,120.00

Site Improvements

Retaining walls South of NE 90th St. to accommodate side running trail				
Import fill (12' width of trail @ 2.5' avg depth)	2,155	CY	25.00	53,875.00
7.5' tall walls avg. height (4.5' above/ 3' below)	14,550	FF	20.00	291,000.00
MSE or precast block				
Railing @ \$15/ LF	1,940	LF	65.00	126,100.00
Subtotal Site Improvements				\$470,975.00

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Construction Cost Considerations
Estimate of Additional Costs to Accommodate Trolley

Date: February 2011

Item Description	Quantity	Unit	Unit Cost	Total
				<hr/>
Subtotal Sammamish River to South Sammamish Valley				\$522,095.00
				<hr/>
Grand Total Additional Costs for Trail with Trolley				\$3,835,750.00
Subtotal Sammamish River to North Sammamish Valley				\$2,377,630.00

*Cost does not include construction mark-ups, taxes, permitting, soft costs and other contingencies

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Appendix E

Outreach Plan Example



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SOJ Redmond Trolley Outreach Plan

SITUATION OVERVIEW

Shiels Oblatz Johnsen (SOJ) is preparing a study of a limited tourist-trade passenger trolley to run from downtown Redmond to the Woodinville Winery district. Over the next three months, SOJ will research and develop an operations concept and model for the City of Redmond, which will take into account several considerations, including potential alignments, condition of the existing tracks, regulatory compliance issues, project elements, ridership projections and costs. To be successful, the trolley model would have to provide sufficient benefits and opportunities within a broader context of the city's vision as a regional growth center and its current planning efforts.

Central to that planning is the City of Redmond's Central Connector Master Plan process, which the city and the Berger Partnership recently kicked off to address rails, trails, streets and infrastructure needs and considerations. Their aim is to prepare for projected growth in Downtown Redmond and make it a more attractive place to live and work.

One area of the master plan focuses on the Redmond Spur of the Woodinville Subdivision of the Burlington Northern Santa Fe (BNSF) Rail Corridor, which the City of Redmond purchased in June 2010. The spur extends approximately 3.9 miles from the junction of SR-520 and Redmond Way in Southeast Redmond to the intersection of Willows Road and NE 124th Street in the Sammamish Valley neighborhood.

The tourist trolley would run along this spur and then north along the BNSF Eastside corridor into the Woodinville Wine Country. The terminus is under study and yet to be determined. In any case, the northern portion of the line is owned by the Port of Seattle, and King County and Sound Transit also own interests in it. Furthermore, the northern portion runs through the city limits of Woodinville. The jurisdictional complexity involved around the possible tourist trolley alignment may require an early outreach effort to key stakeholders prior to the Nov. 15th community meeting, where a tourist trolley alternative may be unveiled.

Simultaneous to the master plan process, GNP Railway (GNP) has been promoting its own excursion train concept and rail rights interests to the City of Redmond, City of Woodinville and other constituents. In December 2009, GNP purchased a permanent freight easement from BNSF for the north portion of the East Corridor line from Woodinville to Snohomish, but it no longer has rights from Woodinville to Redmond. To date, neither Redmond nor Woodinville seem interested in GNP's proposals, but GNP's are worth tracking because their interests may compete with other plans for the Eastside Corridor, including the tourist trolley and future Sound Transit East Link extensions north of Redmond.

APPROACH

A critical aspect of the tourist trolley model's viability is a successful public outreach strategy that builds support for it. This outreach plan identifies key stakeholders and strategies that would help promote the tourist trolley and present possible sources of revenue and funding. The plan addresses timing broadly. Once we have more details from SOJ's study, we will create a more detailed timeline of activities and deadlines. Because the tourist trolley is still in an early study period, this plan will function as a working draft, subject to SOJ's research, modeling and other pertinent information and developments.

Key Stakeholders and Audiences

Redmond

- City of Redmond
 - Mayor John Marchione – first term; term expires 12/31/12
 - Council members
 - Richard Cole – President; previous Planning Commission chair; long time resident; term expires 12/31/11
 - Pat Vache – Vice President; Member of Parks Committee; previously on the Redmond Planning Commission; term expires 12/31/13
 - Kimberly Allen – Chair, Planning & Public Works Committee (includes transportation issues); land use hearing examiner; previously on Redmond Planning Commission; term expires 12/31/13
 - David Carson – Lodging Tax Advisory Committee Chair (committee funds Experience Redmond tourist efforts); Planning & Public Works Committee member; term expires 12/31/11
 - Dayle (Hank) Margeson – Parks Committee member; term expires 12/31/11
 - Hank Myers – first term; previously a consultant in transportation economics including surface issues; served on Metro Transit advisory board; term expires 12/31/11
 - John Stilin – Chair of the Parks & Human Services Committee; term expires 12/31/13
- Parks and Recreation Department
 - Craig Larsen, Parks and Recreation Director
 - Carol Hope, senior planner, point on master plan
- Planning and Community Development Department (includes transportation)
 - Rob Odle, director
 - Erika Vandenbrande, transportation demand management program manager
 - Karen Nolz, business operations manager and tourism fund administrator
 - Joel Pfundt, AICP, senior transportation planner
- Parks and Trails Commission (responsible for the primary recommendation to Council on the Redmond Central Connector Master Plan)
- Planning Commission (responsible for possible public hearing and recommendation to Council on transportation changes to the Redmond Central Connector Master Plan)
- Berger Partnership
 - David Knight
 - Guy Michaelsen

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- Redmond business community, including:
 - Greater Redmond Chamber of Commerce
 - Lodging Tax Advisory Committee Members
 - Dave Norwood, General Manager, Redmond Inn
 - Leah Mannhalt, General Manager, Redmond Silver Cloud Inn
 - Dan Angellar, General Manager, Marriott Redmond Town Center
 - Miguel Llanos, Redmond Historical Society
 - Chris Falco, Greater Redmond Chamber of Commerce
 - Christina Henning, Redmond Town Center
 - Redmond Town Center, Steven Chaffee (involved with master plan)
 - JG Redmond II, LLC
 - Nelson Legacy Group, CEO Tom Markl (owns properties along BNSF)
 - Redmond Cleveland Condominiums, Intracorp real estate developers
 - AT&T
 - Aerojet
 - Willows Run Golf Course
 - Mac & Jack's Brewery
 - Black Raven Brewing Company
 - Microsoft
 - Nintendo
- Redmond community groups
 - Redmond Rotary
 - Redmond Historical Society

Woodinville

- City of Woodinville
 - Chuck Price, Mayor; term expires 2013
 - Bernie Talmas, Deputy Mayor; Eastside Transportation Partnership, Council Economic Development Workgroup Committee; term expires 2013
 - Councilmembers
 - Jeff Glickman – Parks liaison; term expires 2011
 - Paulette Bauman – Tourism Task Force, Council Economic Development Workgroup Committee, liaison to the Chamber; term expires 2013
 - Scott Hageman – Lodging Tax Advisory Committee; term expires 2011
 - Susan Boundy-Sanders – Eastside Transportation Partnership; liaison to Planning Commission; term expires 2013
 - Liz Aspen – Tourism Task Force; liaison to Parks & Recreation Commission; Council Economic Development Workgroup Committee; term expires 2011
 - Development Department
 - Hal Hart, director
 - Ray Sturtz, long-range planning manager
 - Public Works Department
 - Tom Hansen, director
- Woodinville business community, including:
 - Greater Woodinville Chamber of Commerce
 - Woodinville Wine Country
 - Chateau St. Michelle Winery
 - Columbia Winery
 - 70 other wineries
 - Redhook Brewery
 - Willows Lodge
 - Barking Frog Restaurant

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- Purple Café & Wine Bar
- Hollywood Schoolhouse

- Woodinville community groups
 - Woodinville Heritage Society
 - Woodinville Farmer's Market

Local and neighborhood media

- *Redmond Reporter, Redmond Blog, The Redmond Blog*
- *Woodinville Weekly, Woodinville Blog*
- *The Seattle Times*
- *Puget Sound Business Journal*
- *Snohomish Times*

Regional stakeholders

- King County
 - Pam Bissonette, Assistant Deputy County Executive
 - King County Department of Transportation
 - Harold Taniguchi
 - Ron Posthuma
 - Kathy Lambert, King County Council, District 3 – Redmond-Woodinville
- Sound Transit
 - Katie Kuciemba, East Link project manager
- Puget Sound Regional Council
- Port of Seattle
- Washington State Department of Commerce
 - Washington State Tourism/Experience Washington
- 4 Culture, Cath Brunner
- Cascade Bicycle Club

Residential stakeholders

- Housing developments and residents near the spur
- Key neighborhood leaders and activists
 - Douglas Treuting, The Cleveland resident, Redmond neighborhood leader
 - Clara Simon, Redmond neighbor, LEED AP, Sustainability Manager in the Capital Projects Office for the University of Washington

Potential Opponents

- GNP

Goal

- Build support for the Redmond Trolley with key stakeholders and sponsors

Strategies

- Articulate vision for the tourist trolley in terms of Redmond's business travel industry and Woodinville's winery-centered hospitality industry.
 - Connect the trolley with area music venues, such as the Chateau St. Michelle concert series.
 - Leverage burgeoning wedding industry in the Woodinville Wine Country.
 - For business travelers, position the trolley as an easy, convenient, unique wine country excursion to tack onto a business trip.
- Make the business case for the trolley, emphasizing the direct and indirect benefits and opportunities of the trolley line to area businesses – e.g. increased tourist activity, greater

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customer base, increased access and visibility of area businesses to travelers, urban circulator transit to business parks along the route.

- Provide statistics related to ridership, increased job creation and economic activity tied to the trolley.
- For government stakeholders, tie the trolley to increased tax generation.
 - Provide projections of additional tourist spending, based on growth projections and other data, which will generate increased taxes for municipalities.
- Form a sounding board of business and community leaders to help inform the community outreach plan and serve as ambassadors of the project; build this group into a steering committee for a more public pro-trolley effort as the project moves forward.
- Develop messaging and basic materials to support outreach efforts.
- Designate and train a spokesperson for the various outreach efforts.
- Coordinate efforts within the master plan process and leverage the plan to demonstrate how the tourist trolley fits into a vastly improved pedestrian/rail/trail environment.
- Examine real benefits to any traffic congestion by introducing the trolley line and measuring usage and traffic patterns.
- Position tourist trolley as part of an integrated transit system, which is easy to use and access and which minimizes traffic congestion and hassles.
- Develop proactive and timely communications about all public actions related to the tourist trolley.
- Mark milestones and leverage key events to build excitement.
- Identify opponents and develop customized approaches and messaging to counter their claims and to persuade them toward a compromise or a more supportive positive.
- Honor the history of the BNSF railway in the area as well as other rail related elements (e.g. trolley cars themselves, case studies of other popular tourist trolleys, etc.) and position the tourist trolley as the latest development in that important local history.

Objectives

- Cultivate broad-based support for the tourist trolley from the hospitality sector, local government, area business and civic leaders, and other community stakeholders.
- Identify potential sources of revenue for the trolley (for initial capital project and operations).
- Secure key endorsements for the trolley.
- Support the successful completion of a master plan process inclusive of the tourist trolley.

Tactics

Create materials

- Prepare materials for the trolley that include an overview/fact sheet, FAQ, renderings, and community benefits sheets.
- Collect or develop a list of major property owners along the trolley route.
- Prepare additional information for public forums to help tell the story visually.
- Develop a PowerPoint presentation for open houses and presentations.
- Develop a sponsorship leave-behind, promoting the exciting opportunities associated with the trolley.
- Draft letters of support for trolley and provide to supporters to bolster efforts around public meetings or decision points.
- Draft messaging on comparative advantages of trolley over GNP excursion train; to inform messaging, conduct background research on recent advocacy efforts of GNP and evaluate their success.
- Develop web site information about the trolley for the Redmond Central Connector web site and other locations.

Proactively engage business, civic and community leaders

- Conduct one-on-one outreach with top tier audiences who are closest to the BNSF

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corridor and Redmond-Woodinville tourist area and would benefit most.

- Use early outreach to this group to inform and determine special benefits and gauge level of interest, investment and partnership.
- Determine a way to talk about costs and present sponsorship information.
- Brief Redmond and Woodinville City Halls, key staff and regional leaders.
 - Find out what kind of thresholds Councils would need to help fund the project.
- Brief the Chambers of Commerce.
- Seek endorsements whenever possible.
- Develop list of supporters and add to materials kit.
- Invite supporters to public forums to demonstrate their support.
- Meet with stakeholders that have been approached by GNP to advocate for the trolley over GNP's excursion train.
- Coordinate outreach and communications efforts with City of Redmond and Berger Partnership.

Leverage key events to build excitement

- Whenever possible, use public meetings to provide as vivid a vision for the tourist trolley as possible, using video and examples of other trolley lines to draw an exciting and enticing image of a Redmond-Woodinville tourist trolley.
- Host open houses at locations along the BNSF corridor to provide the community with more information and build support.

Media outreach

- Brief select media about the Redmond Trolley vision and alternative.
- Draft an authored article and letters to the editor to be submitted by supporters and secure their publication.

Important Dates

Oct. - Nov. 2010	Draft Concept Design Development
Nov. 15, 2010	Public Meeting on Conceptual Design, including trolley points in an alternative
Dec. 2, 2010	Parks & Trails Commission Meeting with Planning Commission, Arts Commission & Pedestrian Bike Advisory Committee to Discuss Conceptual Design
Nov. 2010 – Jan. 2011	Preparation of Draft Master Plan
Jan. 2011	Trolley Study Complete
April 2011	Final Master Plan & SEPA

Redmond Central Connector Master Plan
Appendix F

History and Interpretive Opportunities

BOLA Architecture and Planning
May, 2011

Appendix:
Redmond Historic Corridor, History as Place Making



BOLA Architecture + Planning
159 Western Avenue West, Suite 486
Seattle, WA 98119

May 9, 2011

Appendix
Redmond Historic Corridor, History as Place Making

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Cover: Redmond Train Depot, 1900 (Source: University of Washington Libraries)

Redmond Corridor, History as Place Making

Appendix

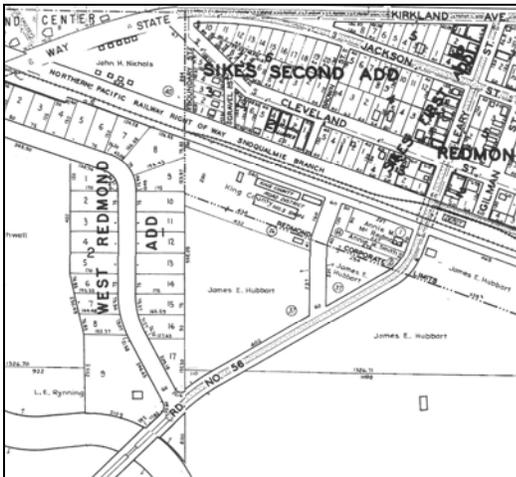
BOLA Architecture + Planning, May 9, 2011

1. The Presence of History in the Master Plan

Historically Redmond emerged as a crossroads that became a village and then a town that served agriculture and transportation. It became a place from the presence of a river, placement of a rail line, and the activities of growing and moving resources from the land, and from the hands and then the minds of its occupants.

How does this history inform the future vision of the Master Plan? How does the design use and re-purpose the specific history of Redmond? It does this by identifying broad patterns of the past and the present that remain the backdrop of daily living. History, through interpretation in the plan, becomes a means of identifying the special circumstances and locus of this place.

The Master Plan authenticates the character of Redmond. The design does not “caption” the past or place artifacts out of context as historic symbols in a new setting. And it does not attempt recreation. Rather it interprets the elements of the rail corridor, early agriculture, and the emergence of technology. The trunk line is a connecting corridor, featuring water flow and linear trails, encouraging frontage buildings and creek-like crossings and pedestrian interchanges. It interprets the past artfully in the forms of landings, river islands and eddies, transforming rail ties to linear ground-plane elements, and agricultural rows and pastures to structured plantings. The plan abstracts the features of the past in a way that promotes curiosity, and encourages residents and visitors to discover the unique aspects of history that made the city.



2. The BNSF Rail Line: A Time Line

- 1871 First settlement at Redmond, originally called Salmonberg by its earliest settlers for the abundance of salmon there. First settlers were Luke McRedmond and Warren Perrigo. Perrigo built an early Inn, called Melrose House. Salmonberg became known as Melrose.
- 1880s The Redmond area contained huge, towering trees. Logging, lumber and shingle mills were established.
- 1882 McRedmond becomes postmaster of the community at Melrose, the settlement becomes known as Redmond.
- 1885 Incorporation of the Seattle, Lake Shore & Eastern Railway (SLS&E). Leading founders of the rail line were Seattle pioneers Thomas Burke and Daniel Gilman.
- 1887 Construction begins in Seattle on the SLS&E.
- 1888 Service begins on the SLS&E from Seattle to Gilman (Issaquah).
- 1889 SLS&E begins to serve Redmond. Redmond population began to grow.
- 1889 SLS&E track construction reaches Sallal Prairie, just east of North Bend. Construction ceases. Tracks total 126.3 miles (Tracks were originally intended to meet a rail line starting in Spokane, but the two lines never met. The SLS&E was intended to instigate a link with a transcontinental railroad to Seattle.)
- 1892 SLS&E consolidated with Northern Pacific Railway (NP).
- 1893 SLS&E claims bankruptcy, Northern Pacific takes over the rail line.
- 1897 First school built in Redmond.
- 1900 Historic photograph of Redmond Depot shows that Depot was constructed by this time. Redmond population: 271.
- 1904 Lake Washington belt line of NP completed through Redmond and Kirkland; eventually trains to North Bend from Seattle ran along this route rather than through Fremont and Kenmore.
- 1904 NP service from Seattle to North Bend takes 2 hrs 55 min each way.
- 1904 Seattle banker and business man James Clise buys 78 acres near Redmond, and builds Clise family farm there. The site is now part of Marymoor Park, and a National Register Historic District.
- 1908 Sanborn Map of Redmond shows the downtown area bounded by the NP rail line to the south, county roads to east and north, and main streets of Cleveland, Jackson, Leary and Gilman (see attached Sanborn maps from 1908 and 1926).
- 1910 Redmond population: 450.

- 1912 Incorporation of the city of Redmond. New buildings and a water system were constructed to meet population needs.
Redmond population: 300.
- 1920s The virgin forests in the Redmond area were exhausted, and the logging industry faded. Agriculture became the mainstay of the area's economy. Redmond population: 438.
- 1922 NP ends Seattle-Fremont-Woodinville-Issaquah scheduled passenger service.
- 1939 Redmond Bike Derby established, which continues to be held today, over 70 years later.
- 1940 Redmond population: 530.
- 1960 Redmond population: 1,426.
- 1963 Evergreen Point floating bridge completed, initiating suburban residential development on the East Side, including the Redmond area.
- 1970 Burlington Northern (BN) merges with NP (and other rail lines).
Redmond population: 11,031.
- 1970s BN abandons the SLS&E rail line.
- 1978 The Burke-Gilman bike and pedestrian trail is established from Lake Union to Woodinville.
- 1980 Redmond population: 23,318.
- 1981 BN announces the Redmond-Issaquah section of track is under study for abandonment.
- 1990 Redmond population: 35,800.
- 1998 BN abandons Redmond-Issaquah track.
- 1996 BN merges with the Atchison, Topeka and Santa Fe Railway to form the Burlington Northern Santa Fe Railway (BNSF).
- 2000 Redmond population reaches 45,256 (King County's total population in 2000 was 1,1737,034. WSDOT estimates that growth county will increase 25.6% between 2000 and 2030.)

3. Interpretive Elements from the BNSF Rail Line

- The rail line represents communication connections. The old rail lines can be used to re-interpret the expansiveness of communication in the present digital age, which is seemingly limitless. This is represented in the receding of the parallel tracks into infinity. An opportunity for this concept to be conveyed is in the four mile stretch of track between Bear Creek Trail and NE 116th Street.
- Railroads transportation represents an in-between time/space for commuters and travelers where life is suspended, and there is time for reading, watching, or simply waiting.
- Railroads established organized time zones and time-keeping in America. They represent the concept of consistent time for everyone, and consistent time-keeping across space.
- Rail tracks are sometimes flush with the ground and hidden, and sometimes exposed above ground. They are often revealed at a station when a passenger is waiting on the platform. Tracks flush with the ground surface is a particular characteristic of urban streetcar and light rail lines.
- Railroads are associated with distant views, and the endlessness of the tracks. This ‘endless view’ can be framed and emphasized.
- Examples of rail elements that have been successfully integrated into public parks and spaces are the High Line in New York and Tanner Springs Park in the Pearl District of Portland, Oregon. Images of these spaces are attached.
- Rail lines are sometimes accompanied by additional infrastructure, such as telephone lines and electrical lines. Light rail trains and streetcars often have a unique overhead infrastructure to deliver the electricity that is their power source. This type of infrastructure adds another visual layer to the linear nature of railways, and relates ideas about communication and connections across time and space.
- Railroads are associated with specific sounds – the alarm at crossings, the train whistle, and the hypnotic rhythmic sound of wheels on tracks. Consideration should be given to the development of a sound-garden, or development of public art that incorporates sound.
- The trail, as it goes northwest out of the city center, appears narrow, and not conducive to safe use by bicycles and pedestrians. Consideration should be given to different treatments of the route.

4. Historic Photographs of Redmond and the BNSF Rail Line



The historic Redmond Depot in ca. 1900. (Source: University of Washington Libraries, Special Collections Division)



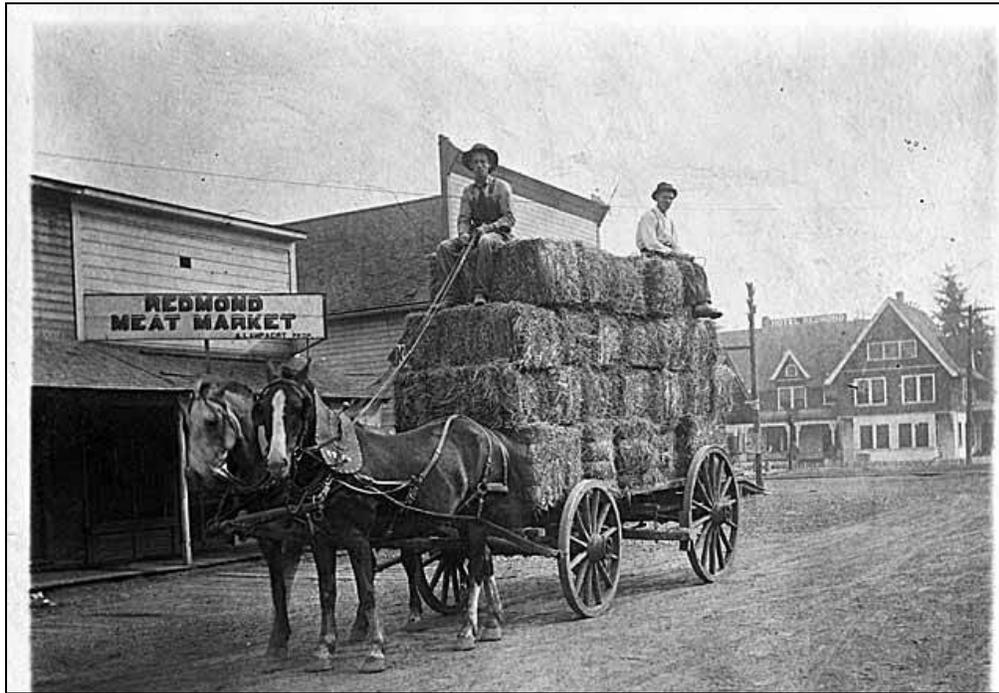
The Depot in 1970, shortly before its demolition. (Source: University of Washington Libraries)



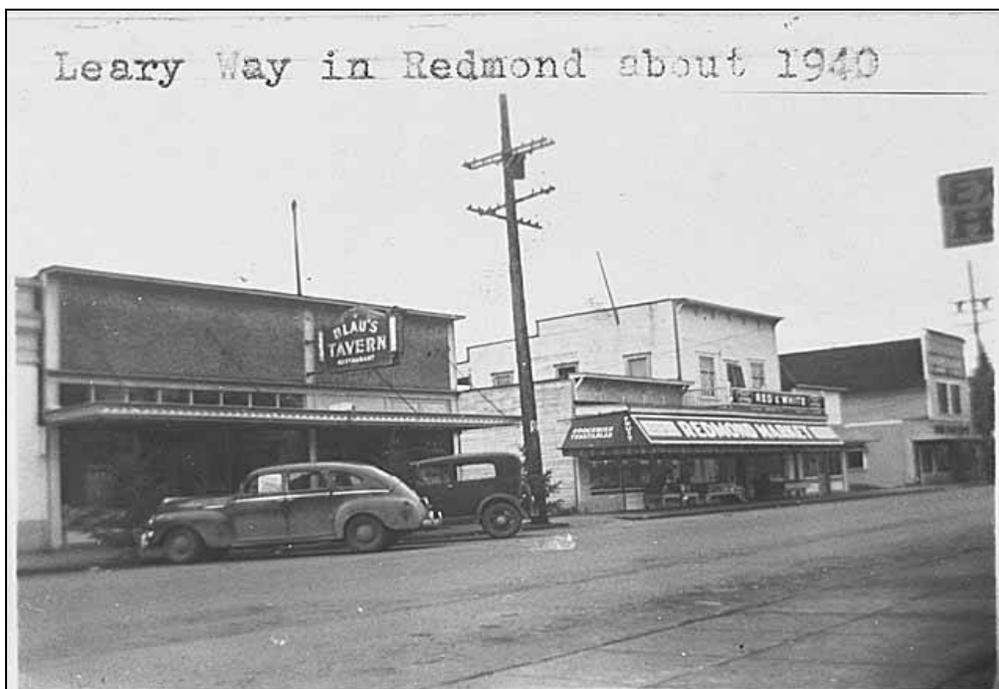
Redmond Depot Interior, ca. 1913. (Source: University of Washington Libraries, Special Collections Division)



Leary Way, shown above in 1915, was one of the early streets of downtown Redmond. (Source: University of Washington Libraries, Special Collections Division)



Leary Way in Redmond, 1915. Note the rail line in background.
(Source: University of Washington Libraries, Special Collections Division)



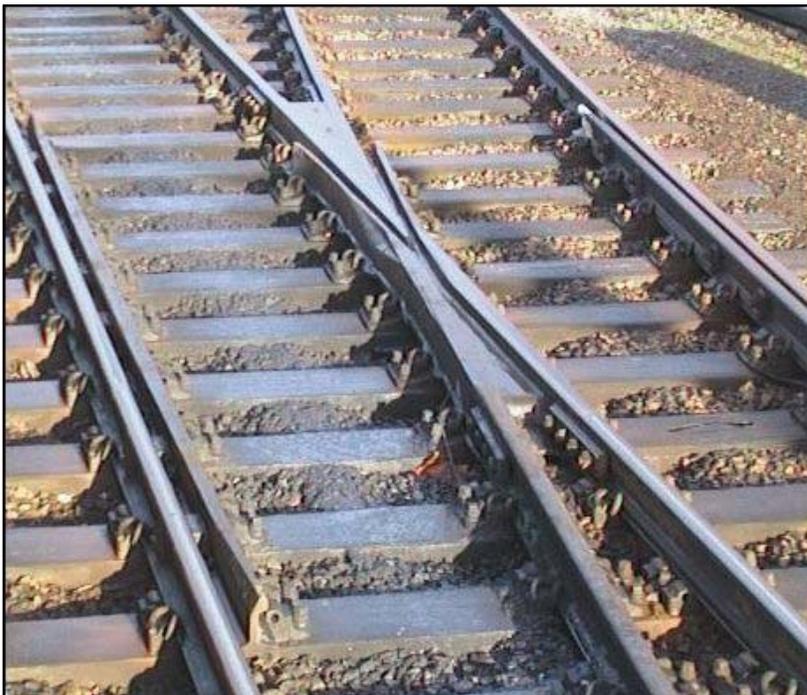
Leary Way in Redmond in 1940, with the rail line visible in the foreground.
(Source: University of Washington Libraries, Special Collections Division)



The Redmond Depot, 1960. (Source: University of Washington Libraries, Special Collections Division)

5. Interpretive Images

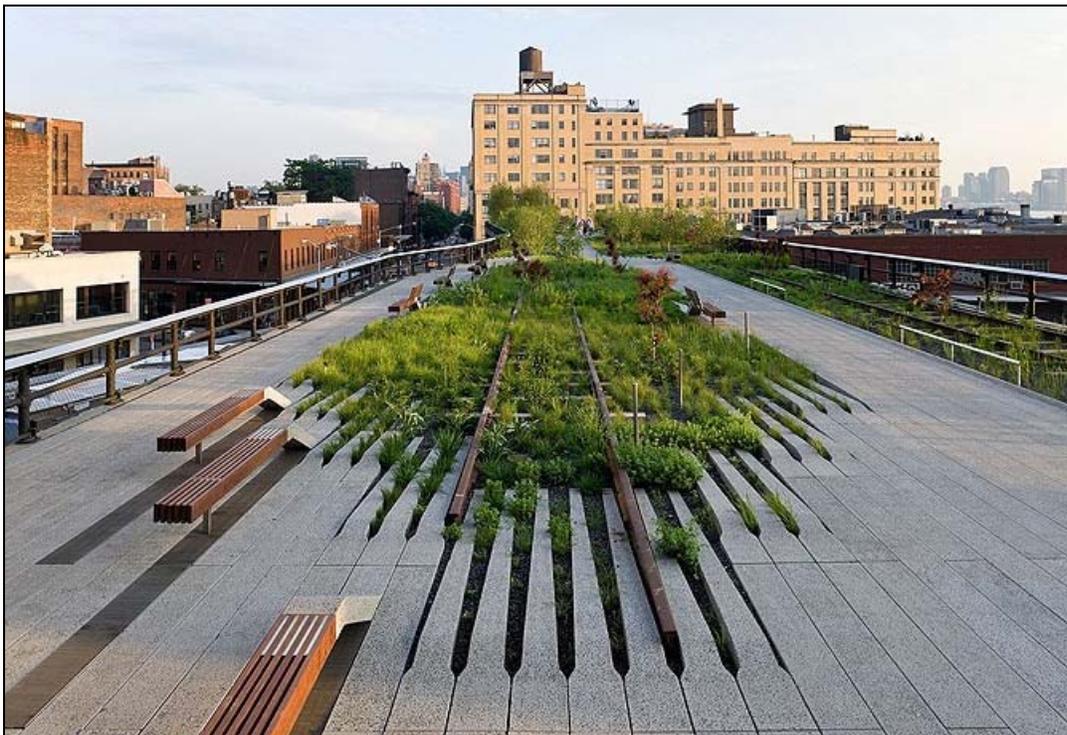
Inspiration: Railway Elements

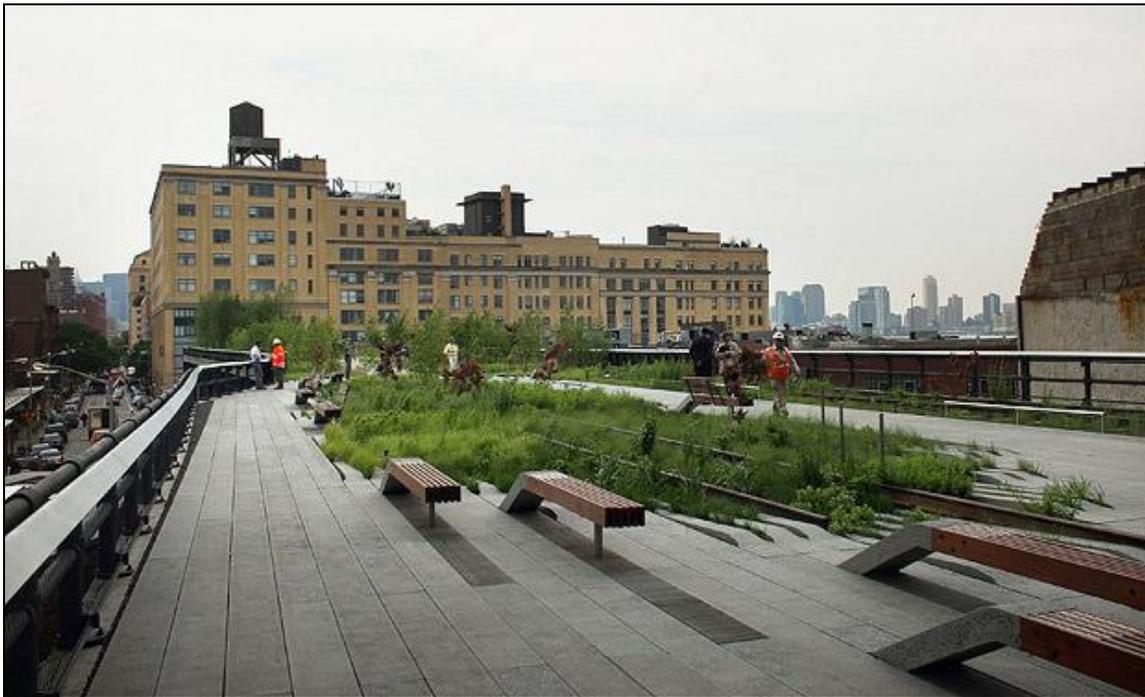






Inspiration: The High Line, a contemporary park in New York built on an elevated rail line







Inspiration: Tanner Springs Park in Portland's Pearl District





6. Redmond's Historic White House

Introduction

Concerns have been noted about the density of potential development at the intersection of Leary Way NE and NE 76th Street, due to the potential siting of Sound Transit's new light rail system and its Redmond station, a nearby performance arts center, and additional corridor development. There are several nearby historic properties on the north side of NE 76th Street/Avenue in the city's historic downtown and at least one on the south side, the White House at 7529 Leary Way NE. These historic buildings may be impacted by future development. This section of the appendix provides a brief review of the White House and comments on the potential for relocating the building as a preservation strategy.

Historic Significance of the White House

The White House in Redmond Washington was built in 1889-1900 by Justice William Henry White and his wife Emma Francis. Emma was a daughter of one of the city's founders, Luke McRedmond. Originally from Virginia, William White fought for the North in the Civil War in an Ohio regiment. He was wounded in the battle of Fayetteville, but managed nonetheless to cast his vote for Lincoln in the presidential election of 1863.

Soon after returning to Virginia after the war, White was appointed United States Attorney for the Territories of Oregon and Washington by President Cleveland. He served at this post from 1865 – 1869, after which he moved to Seattle and set up a law practice. In 1898 White was appointed a Washington State Supreme Court Justice, a position he filled until 1903. Justice White is remembered as an advocate for rights for Chinese laborers, even to the point of calling out the militia for their protection on one occasion. White was a prominent political figure in early Washington State until his death in 1914.

Justice White staked his first homestead in the community of Avondale, northeast of Redmond. He married Emma Francis McRedmond, and together the couple began building the Hotel Redmond (presently known as the White House) on the McRedmond homestead. The building was completed in 1889. Emma's sister, Anna, and Anna's husband also built a rooming house nearby. Since demolished, it once sat directly across the street from the Hotel Redmond on Leary Way NE.

The Hotel Redmond stood across the railroad tracks from the Redmond Railway Depot, which was built in 1889 to service the Seattle, Lake Shore & Eastern Rail Line (SLS&E). The SLS&E became part of the Northern Pacific Railway in 1892. The depot was demolished in 1972, when Northern Pacific merged with the Burlington Northern Railway and the rail line was subsequently abandoned.

The Hotel Redmond was a fashionable and popular lodging destination, particularly among visitors from Seattle who came to Redmond to hunt and fish. The Redmond Post Office was located in the rear of the Hotel Redmond for a time, and Emma McRedmond White served as the town's post-mistress for a number of years. After Justice White's death in 1914, she continued to maintain the hotel as a boarding house.

The hotel was in operation until it was foreclosed during the Great Depression. In 1932 the Hotel Redmond became the clubhouse for the Redmond Golf Links. This public golf course was well used for four decades, until the land was sold by the City in the 1980s to the Winmar Company. Winmar built a shopping center on the golf course land, and restored the front facade of the Redmond Hotel in 1986. The land adjacent to the Redmond Hotel was subsequently redeveloped as the Redmond Town Center mixed-use development, which opened in 1997. The Hotel Redmond property presently is owned by Redmond Retail, LLC.

At the time of its construction, the Redmond Hotel was one of the few large buildings in the town, and it embodied the presence of prosperity and the promise of future development. At present the building still occupies a prominent site in downtown Redmond. It appears to be an intact example of its early history and

architecture. The Redmond Hotel is closely connected to an important figure in Redmond's and the state's early history, Justice White, and one of Redmond's founding families, the McRedmonds.

Architectural Description

The Redmond Hotel is L-shaped in plan with a total built area of 5,264 square feet and net area of 3,856 square feet and a 1,480 partial basement. It sits on a 9,583 square foot (0.22) acre site. The building's primary façade is on north and secondary façade on the west; both facing onto public streets. The two-story, wood-frame, Queen Anne style structure appears to have maintained much of its integrity based on a review of existing exterior conditions and historic photographs.

Distinctive architectural features include the steeply sloped cross-gable roof clad in wood shingles with gabled wall dormers, all faced with wide verge boards. The building retains in its original siding: horizontal wood clapboard at the first and second levels and a combination of fish scale, diamond and coursed shingles at the gable faces and attic level. Wood shingles also form a skirt that conceals the concrete foundation and partial basement. Decorative wood elements of the house include, which are characteristic of the Queen Anne style, include the decorative cladding materials, exposed rafters ends and purlins beneath the eave overhang, square porch columns with bracketed tops, and decorative brackets below the second story overhang. Many of the original windows are still in place, including latticed windows in the attic story. The building also has a prominent brick slope chimney on the west side, although two of its original ridge chimneys were removed in 1940 along with their interior fireplaces.



Justice William Henry White, above. Right, an interior view of the Hotel Redmond ca. 1900 (University of Washington Libraries Special Collections, both photos).

The interior of the building features 9' floor-to-floor heights on main floors and 7' at the basement. It has been extensively altered. Current County records cite its use as an office building.

Minor alterations have been made to the primary (north) facade of the White House, including the addition of a safety rail above the original porch railing and the extension of the front porch around the east side of the building. The rear (south) façade of the building has been more extensively altered, including the removal of the bay windows that once marked the location of the Post Office. The building has also been painted in various colors over the years; its historic color scheme featured a contrasting palette that distinguished its floor levels and emphasized scale-providing elements such as the multi-lite window sash and decorative millwork.

76th Street, which runs in front of the primary façade of the building, appears to have been widened, and the building's original white picket fence is no longer in place. The open space to the south of the White House is presently the site of Redmond Farmers' Market in the summer months, with permanent open pavilions for the vendors. A number of fir trees east the White House appear to be historic.



The primary north façade of the Redmond Hotel ca. 1895 (University of Washington Libraries Special Collections).



Current view looking southwest at the building's north and west facades (BOLA Architecture + Planning).

The Regulatory Framework for Preservation of the White House

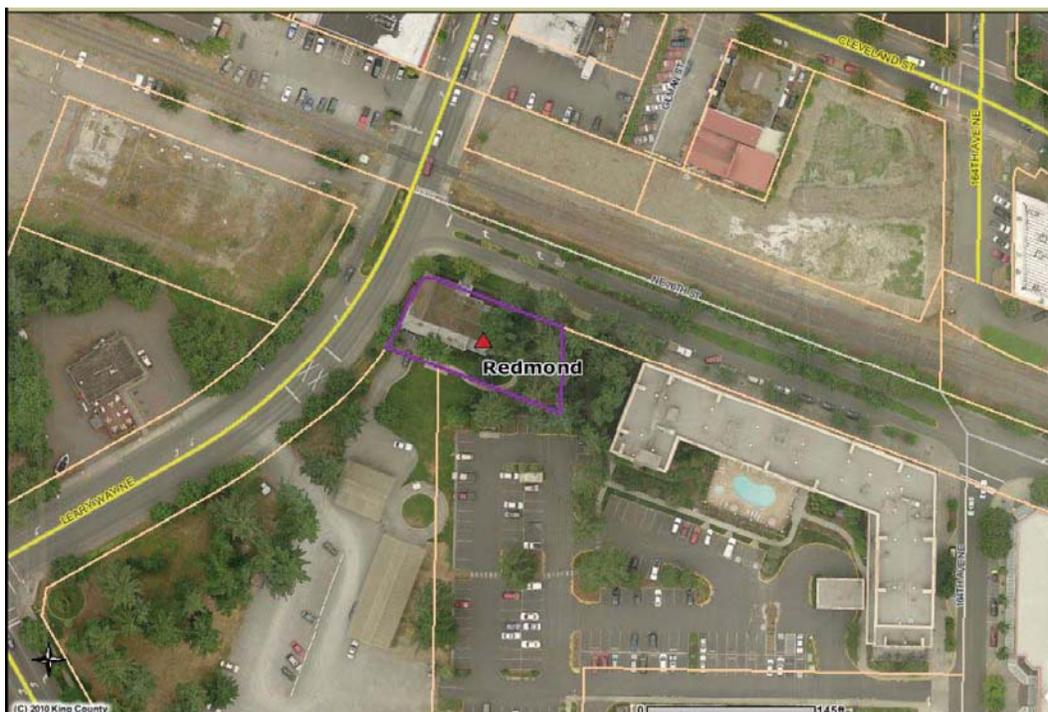
The White House is acknowledged as an architecturally and historically significant building in the City of Redmond. A State Historic Property Inventory Form, dating from 1998, indicates that the building was eligible for listing on the National Register of Historic Places at that time, and it appears that it remains

eligible. Thus any actions by the City, Sound Transit or others that involve federal funding or federal directly or indirectly actions, which impact the building, will trigger a required review and consultation with the Washington State Historic Preservation Officer and Washington State Department of Archaeology and Historic Preservation (DAHP) under provisions of Section 106 of the 1966 Federal Preservation Act and the Federal Transportation Act Section 4f. Such consultation will result in a Memorandum of Agreement stipulating mitigation efforts to offset negative impacts on the building. One mitigation strategy is to relocate the building, and rehabilitate and/or restore it on a new compatible site. (Other mitigation may include historic documentation and interpretation of the property.)

In accepted preservation practice, moving a historic building may be at times the only alternative to demolition. Taken as a last resort, moving a structure "unavoidably destroys some of the historic fabric and lessens the historic integrity of the building" (Curtis, p. 2). On-site preservation of an historic building, such as the White House, is preferred. However, the negative impact on it resulting from new construction or potential demolition can be mitigated by relocation.

The relocation of wood frame building has a lengthy history in the Puget Sound region reaching back to the late 19th century. In nearby towns, such as Edmonds, low-scale downtown structures were commonly moved from one nearby site to another to allow for construction of larger buildings or street grading. Seattle is famous for its dramatic, early 20th century regrade projects that resulted in the relocation of many buildings. In the late 1950s and early 1960s, Seattle saw the relocation of many large mansions, moved from the site of the I-5 freeway to other nearby locations or by barges to new sites on nearby Bainbridge Island. Historically, the relocation of a wood-frame structure on pier and post foundations was a relatively simple process, and an economic means to retain a habitable building.

House-moving has resurged in recent years in part because of the cost of new construction and the embodied energy and value that existing building retain. On the University of Washington campus, the historic Penthouse Theater was moved in the 1990s and the historic Cunningham Hall moved earlier this year, both buildings from original sites to new campus locations. These relocations allowed some original features of the historic sites to be maintained, and they resulted in rehabilitation and continued vitality and use of the buildings. Relocation of the White House may be a similar strategy for the City of Redmond to preserve an important historic resource, address sustainability goals, and rehabilitate the building for a new community-based use.



Current aerial view of the White House location in Redmond (King County iMAP)

Preservation Design Issues

Preservation standards call for the new site of a relocated historic building, such as the White House, to convey the character of the original site and the building's historic relationship to other structures, open space, and landscape.

Planning to move a historic building requires an initial analysis of the its structure to verify it can be moved without risking a loss of historic building fabric, followed by planning and design of the move upon the selection of the recipient site. An analysis of the building's character-defining features and acquisition of historic design and construction documents or development of accurate as-built plans should occur during a planning phase. Moving a building intact, as a single unit with an intact roof, is considered the optimum approach to preserve its historic fabric. Such an approach reduces the cost and effort of new construction at the recipient site. However, wood frame structures may be dismantled and moved in sections or as a single, particularly those with heavy and/or projecting elements such as a porch or exterior fireplace chimney.

Character-defining features of the original and existing site should also be documented and recipient site and move routes considered in initial planning for a building move. Selection of a recipient site includes consideration of the structure's historic context – how well it preserves the essential site aspects of the present or historic building site, including surrounding landscape and open space; the availability of water, sewer, storm drainage and other utilities; ease in providing ADA-complaint access and nearby parking; fire vehicle access; grading requirements; and existing landscaping and planting that may be impacted by the move route or the building location. Widths along the route will need to be sufficiently wide to allow for the move.

Because of its size and height, it is preferable that a nearby site be selected for the White House, if it is to be moved. Move routes should be studied and one selected with minimal overhead utility lines and/or tree canopies to reduce impacts and costs associated with the move.

Technical Move Issues

Consideration of a relocation of the White House will involve detailed pre-planning, in addition to coordination once a new site and move route are identified. The work should be undertaken only by an experienced, licensed and bonded move contractor.

Move preparations will necessitate removal of plantings and excavation near the building, and potentially along the move route. Non-paved route areas should be grubbed, compacted and graded as necessary. In advance of the move, all utility connections are to be cut or capped. Cladding around an existing crawlspace will be removed, and any hazardous materials in the building will need to be identified and abated. Appendage elements, such as an exterior chimney and fireplace or projecting porch or stairs, may need to be removed. These elements should be salvaged as appropriate for restoration or reconstruction at the new site.

The existing site would be excavated sufficiently to provide access below the floor framing, and the structure raised on jacks to allow insertion of cribbing and a network of steel beams. Existing sill plates will be lifted from the foundation and a network of steel supports will be inserted. The largest of the steel beams in the undercarriage will carry the building once it is placed on jacks and towed by truck to the new site. Final preparation for the move include removal of constructed obstacles in the move route path, including low-hanging electrical wire, curbs, affixed outdoor furniture, light standards, signs, etc.

A permit for the move and Street Use Permit should be secured and the move scheduled by the move contractor, preferably to occur on a single weekend day (or night) in order to minimize its impacts on traffic and utility operations. If a public route is required, there will be necessary coordination with local agencies including Metro, WADOT, the City, and Puget Sound Energy or other utility companies. Coordination with City police and fire departments and the City's permit officials will be required.

At the new site a new crawlspace or basement will be excavated and a new foundation built, constructed to meet current code requirements, and utility hook-ups provided. The foundation should be built after the building is moved over the excavated crawlspace, to assure correct alignment of the framing. The existing wood frame should be tied to the new foundation to address seismic and wind loads.

Recommended Design Approach

Development of a building program and consideration of necessary upgrades to the building should occur a planning phase along with analysis and selection of an appropriate site. Upgrading may be in response to code requirements, existing deterioration, and preservation and program goals. Preservation standards have been developed over the last 50 years, and they are defined by the National Park Service. These standards cite four treatments or design approaches for a historic building: preservation, rehabilitation, restoration, and reconstruction. Future required work on the White House may be guided by a rehabilitation approach. After the building is moved, however, there will be some elements of restoration and reconstruction. NPS defines these as follows:

"Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values." This approach should be undertaken if the building is upgraded in response to new program needs.

"Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period ..." This approach would likely be undertaken if there is an effort to return the building to its period of greatest significance.

"Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, (or) building ... for the purpose of replicating its appearance at a specific period of time and in its historic location." This approach would address any building components that were removed to allow for the remove.

These three approaches – rehabilitation, restoration, and reconstruction – appear appropriate given the historical and architectural significance of the White House. The building is highly visible and it embodies important aspects of Redmond's history. Its vitality and continued use can be assured by a carefully planned and executed relocation, and subsequent preservation.

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7. A Historic Voice from the Redmond Historical Society Oral History Program

The following notes are from an oral history program undertaken by the Redmond Historical Society. They date from an interview with a former long-time Redmond resident, Dorothy Hanscom, at her home on August 30, 1999 by Amanda Cooke. Mrs. Hanscom's grandparents, Luke and Kate McRedmond, were homesteaders and were among the early settlers of Redmond. Captain Luke McRedmond arrived in 1871 and helped found the town along with Warren Perrigo. He served as the community's Postmaster in 1882, and in 1888 he donated land for the local railway depot. Dorothy Hanscom was raised on her family's nearby farm. Her father was an attorney and judge, while her mother served as its Postmistress at the age of 16, and later ran the Redmond Hotel. The excerpts below are of Mrs. Hanscom's recollections of her family, the city's early history, the train depot, and travel to and from Redmond.

[My father] had his law practice in Seattle and he loved the [Redmond] area. He wouldn't go into Seattle. He'd go back and forth. It was a chore in those days. You had to take the stage coach or the horse-and-buggy and go to Kirkland first. You went over to Houghton first, through the trails, and then of course Kirkland. The ferry Lincoln ferry would meet the stage coach in Redmond, and I would say a good hour or two-hour trip each way in those days ... [We mainly traveled around via bicycle and horseback.] Although we had the little Ford truck. It was a passenger car that had been made into a truck after it was in an accident. I used to drive that.

... I remember the depot very well with the trains coming in and the toot of the whistle. The train used to carry quite a few passengers at one time. It went all the way up to North Bend. You used to hear it coming. In the morning you'd hear it coming with the toot toot, and it was time to get up. I liked the railroad. I don't remember when they stopped operating it ...

[After Redmond was incorporated], I think we [got] a Fire Department. They had a place by the post office to park the stages to take you to Seattle and to Kirkland. The bank was established about that time, so the city had a bank ... The City bought the red bricks [that built the Red Brick Road]. It was part of the highway to go all the way to the east coast. It's still interesting to go over there, bumpy as it is ... [When I was a girl] roads weren't paved. We had some macadam roads, but out here we had dirt roads. When you rode the horses the dust would fly.

I left Redmond to go to college. I graduated in 1926 from the University of Washington, and then I left to go to Burlington. I liked it there, but I used to come home 2-3 times a month. If Mama was going to be in Seattle for one of her meetings I would always meet her at the Democratic Club and we would have lunch. I worked in Burlington for two years, and I loved teaching up there. But when I got more money at the other place, I left ... [There] was too much change [when I came back] ... Redmond had only 500 people in 1950 ... The changes have come since Nintendo, Microsoft and the others. Redmond has more jobs. Microsoft is Redmond now ... where the Morellis' chicken farm was.

The full transcript to the interview with Mrs. Hanscom is available in the collections of the Redmond Historical Society. The Society was founded in 1999. It has a research collection and sponsors walking tours of historic Redmond and an annual picnic, as well as meetings with presentations on aspects of local history. Its collections include historic photographs and publications, oral histories, early newspapers, biographies, and other historic information, and an active web site: <http://www.redmondhistoricalsociety.org>

The interview in its entirety can be found at:

http://www.redmondhistoricalsociety.org/RHS/index.php?option=com_content&view=article&id=209:dorothy-hanscom-interview&catid=25:people&Itemid=185

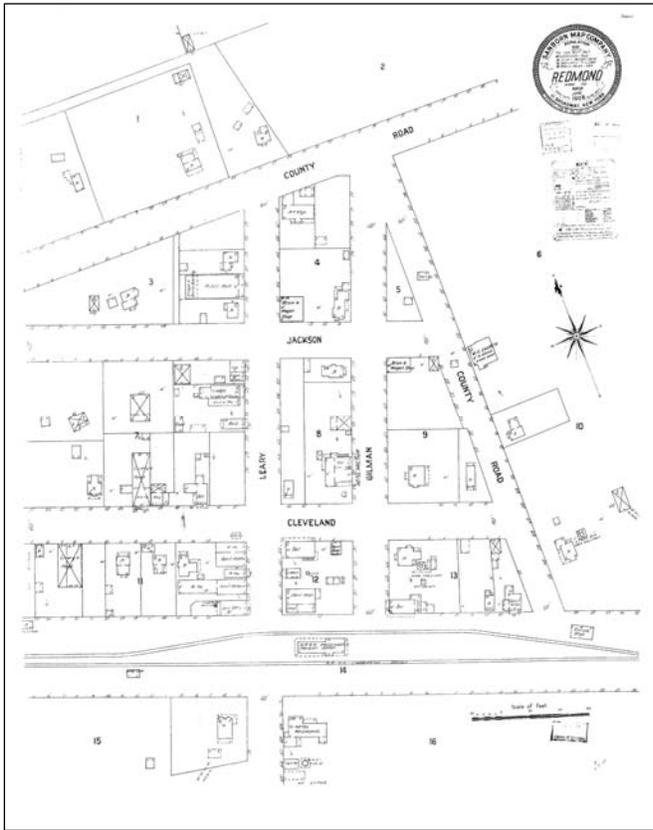
8. Historic Downtown Redmond

To help guide urban design efforts, we looked at a three-block stretch of Leary Way NE immediately north of its intersection with the railway corridor. These blocks contain the following buildings on the Redmond Heritage Resource Register, which, along with the Justice White House, have been designated by the Redmond City Council as City Landmarks:

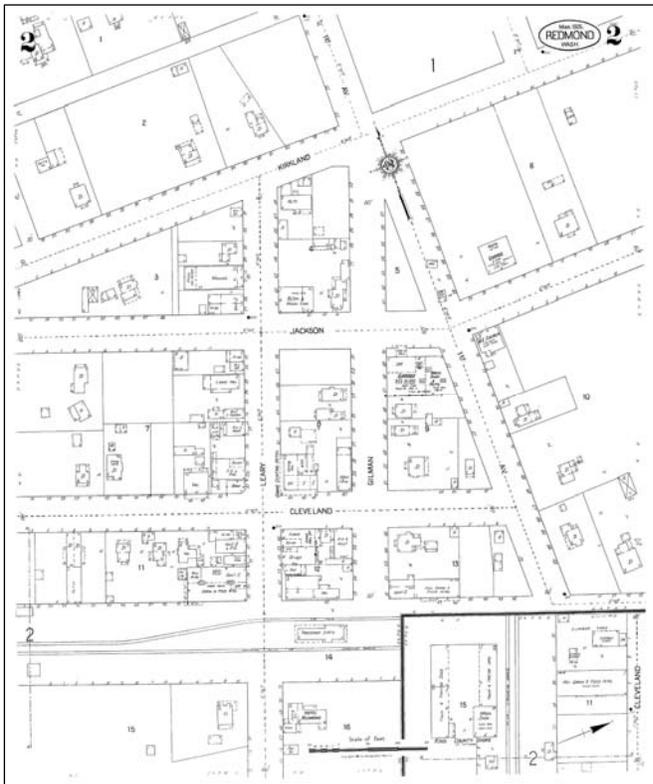
- Redmond Trading Company (Half Price Books), 7805 Leary Way NE
- Bill Brown Saloon (Matador Restaurant), 7824 Leary Way NE
- Redmond State Bank (Brad Best Real Estate), 7841 Leary Way NE
- Lodge Hall (Gerk's Ski & Cycle), 7875 Leary Way NE
- Odd Fellows Hall (Oddfellows Grill), 7979 Leary Way NE

The blocks on which these buildings are situated are not recognized as a historic district, and the area does not appear to meet the criteria for listing, due to its lack of continuity. However, there is a lower-scale, pedestrian-oriented character on these blocks that could be emphasized as part of the BNSF Corridor project. In addition, the current project could have as an indirect impact—the preservation and enhancement of the recognized oldest part of the city.

Preservation planner Sonja Sokol Fürész undertook preliminary research on the history of the blocks by examining Sanborn Maps dating from 1908, 1926, and 1930, as well as a Kroll Map dating from ca. 1947. These identified the development pattern in this "Old Town" area. The blocks and original parcel sizes appear to be smaller and have resulted in a finer scale and more persistent older buildings than in other parts of the city core. The smallest block, bounded by Leary on the west, the railway on the south, Gilman Street on the east, and Redmond Way (historically Jackson Street) on the north, measures just 120' by 120'. The two blocks north measure 120' by 240' +/- . The blocks on the west side of Leary are also 60' and 120' wide although they are deeper. Their scale has resulted in a number of individually-owned properties. The block and parcel sizes have not lent themselves to aggregation of properties for larger development. This appears to be one of the primary reasons that historic and generally low-scale, one- and two-story buildings stand on these blocks despite extensive newer development nearby. Occupants such as the local bookstore and



1908 Sanborn Map of Redmond



1926 Sanborn Map of Redmond

independent retailers also persist on this stretch, and their presence in the city seems to complement the nearby development of Redmond Town Center with its larger, national chain tenants. An economically healthy city would want to maintain this diversity and assist in preserving the special, local character of its shopping area. It is worth considering if the present project should include recommendations for enhancing the character of the nearby historic blocks—guidance for preservation of buildings and for infill development.

A Tour of Historic Structures

The text and images below are taken from the Walking Tour brochure produced by the Redmond Historical Society (<http://redmondhistoricalsociety.org>)

Redmond Railway Depot



Walking Tour Building 18 -- Historic Structure Gone

Redmond's logging industry received a tremendous boost in 1889 when the Seattle Lake Shore & Eastern Railway built a station in the center of town. With regular passenger service, Redmond's hotels and eateries flourished. Twice each day, the train passed through Redmond, bringing school children into town in the morning, delivering mail to the post office, picking up milk in large metal cans, and taking



businessmen and shoppers into Seattle. The depot was located just east of Leary Way, and north of the Hotel Redmond. Its location played a pivotal part in naming the town of Redmond. Shortly after he and Luke McRedmond staked the area's first land claims, Warren Perrigo built Melrose House, an inn that was the predominant local landmark. Soon, travelers and residents were calling the settlement Melrose, instead of Salmonberg, and in 1881 the name was officially recognized when Adam Tosh was appointed the first Postmaster of Melrose. The next year Luke McRedmond was appointed Postmaster and successfully petitioned to change the postal name to Redmond, although the change wasn't widely accepted until he donated a portion of his homestead for a railway depot site. After 8 decades of service, the Redmond depot was closed in 1970, and the building was demolished in 1972, after attempts by concerned citizens to preserve it failed.

Annie Smith's Rooming House



Walking Tour Building 15 -- Historic Structure Gone

Anna McRedmond was born and raised in the town bearing her father's name. Affectionately called Annie, she was the daughter of Captain Luke McRedmond and Kate Barry Morse McRedmond. In 1899, her older sister Emma and Emma's husband, Justice William White, opened the Hotel Redmond on the original McRedmond homestead, facing north on Leary toward the railway depot and arriving visitors. A few



years later in 1908, Anna and Anna's husband built a rooming house directly across the street on Leary Way, also facing north, expectantly toward the railway tracks. When she first met him, Anna's husband Elmer A. Smith was a conductor for the Seattle Lake Shore & Eastern Railway line, which stopped in Redmond. Probably seeking a job closer to home, Smith resigned from the railroad after they married, and formed a partnership with Theodore Youngerman in a general dry goods store, Smith & Youngerman. Before long, Smith began his own local feed and seed business, and described himself as a rancher to Polk Directory census takers in 1911, although he lived with Annie and their three children in the attractive rooming house in the heart of town. What became of this gingerbread-style building isn't known.

Redmond Central Connector Master Plan
Appendix G

Cost Considerations

The Berger Partnership
May, 2011

Redmond Central Connector Master Plan Cost Considerations Preface

May 10, 2011

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This master plan is intended to serve as a decision-making guide for the City. “Decision-making” frequently implies spending money; as a result, this plan includes preliminary cost estimates for specific items in the Connector. It is important to note that these costs are intended to be used as budgeting figures and do not reflect a guaranteed construction cost, as the elements are not yet fully designed to ensure that level of accuracy.

Most park projects lend themselves to phasing, and this is the case with the Redmond Central Connector. Furthermore, many master plans are never fully realized, as priorities and influences change over time. Through the planning phase of this project we have identified several areas that together make up the Connector. These Master Plan Cost Considerations (MPCC) address each of these areas individually with numerous assumptions made for levels of design not yet fully defined or visible in the master plan drawings. The assumptions for this document are as follows.

General Assumptions

- This estimate has been prepared on the assumption that the project is bid and a general contractor will complete the work.
- Park plans and graphics included in the master plan are intended to convey a long-term vision for the corridor.
- All elements included on the plans may not be included in this Probable Cost of Construction due to pending resolution on adjacent properties by the City and (or) the proposed work involves significant impacts beyond the scope of this project.
- Items involving work that is not clearly defined at the master plan level are either noted as N.I.C. or given a cost allowance. The allowances provided are estimated figures based on items from similar projects of like character and site conditions.

Cost Ranges

Some elements included in the MPCC that may have a range in costs are included with the higher cost to allow the city further leeway in establishing a budget.

Mark-up Definitions

Mark-ups are generally required to allocate prime contractor costs beyond those that can be quantified under Direct Costs. Additional post-bid mark-ups may also be included to reflect additional costs to the project beyond those of the general

Redmond Central Connector

Master Plan Cost Considerations Preface

May 10, 2011

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contractor, including sales tax, design fees and administrative costs. A typical percentage assigned to each of these mark-ups is noted below and is typical for similar projects but may vary based upon a variety of factors.

Construction Contract Mark-ups

- Direct Construction Costs: The sum of line item costs in the estimate. These are the direct costs to the prime contractor.
- Design Contingency: Design contingency is a reflection of the level of design on which the MPCC is based. This contingency is an allowance to reflect unforeseen or non-quantifiable elements of the project that will be incorporated during subsequent design development work. This contingency is higher in the early phases of design and gets lower as the design approaches completion. This is not a bid contingency or an owner construction contingency. For this project, we would recommend a design contingency of 20%.
- General Conditions: Direct field costs to the general contractor which cannot be charged to any particular item of work. These items include, but are not limited to: mobilization, job shack, phone and fax, storage shed, temporary work, demobilization, etc. For this project, general conditions are assumed to be 5%.
- Contractor Overhead: Home office costs to the general contractor including, but not limited to: accounting, billing, estimating, project management, etc. For this project, Contractor overhead is assumed to be 5%.
- Contractor Profit: This fee is a percentage of gross project costs. For this estimate, contractor profit is assumed to be 6%.
- Escalation: Escalation is a provision for inflation increasing the cost of labor, materials and equipment over time. Escalation is typically applied from the date of the estimate projecting to the midpoint of future construction. For the purposes of this cost estimate, given no firm timeline, *no escalation has been included in this cost estimate*. While a rate of escalation is highly dependent on existing economic conditions, the rate is historically in the “ballpark” of around 3% annually, but can fluctuate greatly.

Post-Bid Costs (Soft Costs)

- Sales Tax: The local sales tax rate will ultimately be applied to the costs. This MPCC includes 9.5% sales tax.

Redmond Central Connector Master Plan Cost Considerations Preface

May 10, 2011

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- Estimated Design Fees: Design costs to the consultant team to develop the design, apply for permits, and produce Construction Documents to put the project out to bid. For this estimate, design fees are assumed to be 15% of the total cost of construction.
- Administrative Costs: Administrative costs include budgeting of city department staff time in realizing a project. Administrative costs can range widely dependent upon a city's bookkeeping and project management protocols. For this MPCC, we have assumed administrative costs of 10%.
- Permitting Costs: Permit costs are generally based on a percentage of the value of the permitted improvement. (To clarify, this does not usually mean the cost of the entire project, but the element being permitted.) These permit fees are difficult to forecast and are not included in this estimate (listed as NIC). However in two (2) areas where environmental permits and mitigation are anticipated, permitting and mitigation allowances have been included.

MPCC Qualifications

These Master Plan Cost Considerations are prepared as a guide only. The Berger Partnership makes no warranty that actual costs will not vary from the amounts indicated and assumes no liability for such variance.

This MPCC is based on master plan level design.

Fees such as permits, inspections, and utility connections are not included in this MPCC.

No maintenance costs are included in this MPCC.

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Downtown Trail (2012)

Item Description	Quantity	Unit	Unit Cost	Total
Site Preparation				
Clearing/Grubbing	60,000	SF	1.00	60,000.00
Scope Includes:				
Area outside of stormwater trunk line limit of work only				
28' wide swath (6' either side of trail and shoulder width)				
Tree Removal		Allow		10,000.00
Near R.R. abutment				
Remove Railroad Tracks		Allow		75,000.00
Scope Includes:				
Areas outside of stormwater trunk line limit of work only				
Ties and gravel base where needed				
Hauling/Dumping		Allow		75,000.00
Scope Includes:				
RR Ties				
RR Tracks				
Landscape Debris				
Rough Grading (Assumes balanced cut and fill on site. Does not include import or export of fill)	60,000	SF	3.00	180,000.00
Scope Includes:				
Area outside of stormwater trunk line limit of work only				
Balanced cut and fill on site				
28' wide swath (6' either side of trail and shoulder width)				
Retaining walls (North and South) at RR abutment for connections to Sammamish River Trail (SRT) over Sammamish River				
Import fill (16' width of trail @ 5' avg depth)	2,000	CY	25.00	50,000.00
(2) 10' tall walls avg. height (7' above/ 3' below)	6,400	FF	20.00	128,000.00
Accommodates 5% Slope Trail (included in trail cost below)				
MSE or precast block				
Railing @ \$15/ LF	640	LF	65.00	41,600.00
Environmental Permitting & Mitigation Allowance		Allowance		140,000.00
T.E.S.C. (Not Included In Cost)				N.I.C.
Subtotal Site Preparation				\$759,600.00
Site Civil Infrastructure (Not Included In Cost)				
Water				N.I.C.
Sewer				N.I.C.
Electrical				N.I.C.
Subtotal Site Civil Infrastructure				N.I.C.

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Downtown Trail (2012)

Item Description	Quantity	Unit	Unit Cost	Total
Site Improvements				
Trail- 12' wide asphalt trail	4,900	LF	30.00	147,000.00
4" asphalt lift				
Trail- Additional cost of 12' wide concrete trail	4,900	LF	12.00	58,800.00
CIP concrete paving (4" depth concrete)				
16' crushed rock subgrade (including 2' crushed rock shoulders both sides)	1,350	LF	30.00	40,500.00
Occurs outside of stormwater trunk line limit of work (crushed rock base included in stormwater trunk line scope of work)				
CIP concrete stairs at Sammamish River (includes rebar)	150	CY	950.00	142,500.00
Improvements between Redmond Way crossing and SRT atop abutment				
Improvements include:				
Existing subgrade to remain				
16' wide concrete paving with thickened edge	1,300	LF	50.00	65,000.00
Railing	2,600	LF	65.00	169,000.00
Seating Nodes				
Improvements include:				
Concrete Pavers (600 sf per seating node)	16	EA	9,600.00	153,600.00
Tables	8	EA	2,500.00	20,000.00
Benches	16	EA	2,500.00	40,000.00
Bike Racks	16	EA	1,500.00	24,000.00
Trash Can (Trash, Recycling, Pet Waste)	16	EA	1,000.00	16,000.00
East/ West Pedestrian Street Crossings at: 170th Ave. NE, 166th Ave. NE, 161st Ave. NE, 164th Ave. NE (future 2012) & Leary				
Improvements Include:				
Enhanced paving (800 sf per crossing)	5	EA	5,600.00	28,000.00
Striping	5	EA	5,000.00	25,000.00
Bollards (6 per crossing)	5	EA	1,200.00	6,000.00
Potential modification of traffic control signaling at existing intersections	2	EA	100,000.00	200,000.00
Modifications include:				
164th Ave. NE and 166th Ave. NE				
4-way improvements				
Ped heads, push buttons and wiring at signals				
North/South Mid-Block Pedestrian Street Crossings to Town Center Mall across NE 76th St at 168th				
Improvements Include:				
Enhanced paving (800 sf per crossing)	1	EA	5,600.00	5,600.00
Striping	1	EA	5,000.00	5,000.00
Lighted pedestrian mid-block crossing	1	EA	75,000.00	75,000.00
Redmond Way Trestle Improvements as needed to meet WSDOT/AASHTO standards				
Enhance pedestrian and safety amenities (rail demo and asphalt trail and subgrade included elsewhere)		Allow		20,000.00
170th Trestle Improvements as needed to meet WSDOT/ AASHTO standards		Allow		10,000.00
Improvement allowance to provide:				
Grading to meet ADA				
Decking to meet ADA				
Guardrails				
Signage				
Traffic and trail etiquette signs on trail		Allow		5,000.00
Traffic control signage as needed on approaching roads		Allow		10,000.00
Lighting- safety pathway lighting				
Approximately 1 fixture every 75 ft.		Allow		237,000.00
				N.I.C.
Subtotal Site Improvements				\$1,503,000.00

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Downtown Trail (2012)

Item Description	Quantity	Unit	Unit Cost	Total
Landscape				
Irrigation				
2" Meter (provided by municipality)		Allow		9,000.00
POC (DCVA, Master valve, vaults, etc.; assumes 2" connection)		Allow		20,000.00
Controller (commercial, maxicom)		Allow		15,000.00
Mainline system w/ quick couplers	6,200	LF	28.00	173,600.00
Meadow Irrigation	67,800	SF	1.00	67,800.00
Planting Bed Irrigation	72,000	SF	1.75	126,000.00
Site Restoration				
Improvements include:				
6' on either side of path (5,650 LF)				
Import 4" of topsoil	828	CY	35.00	28,980.00
Meadow mix (seeded)	67,800	SF	0.50	33,900.00
Planting Areas at Pedestrian Street Crossings				
Improvements include:				
9 street crossings				
500 sf of planting at each crossing				
Topsoil import- 6"	250	CY	35.00	8,750.00
Trees	50	EA	400.00	20,000.00
Shrubs, groundcover, and mulch @ edge restoration	500	SF	8.00	4,000.00
Planting Areas at Seating Nodes				
Improvements include:				
16 seating nodes				
500 sf at each seating node				
Topsoil import- 6"	250	CY	35.00	8,750.00
Trees	50	EA	400.00	20,000.00
Shrubs, groundcover, and mulch @ edge restoration	500	SF	8.00	4,000.00
			Subtotal Landscape	\$539,780.00
Construction Soft Costs				
Traffic Control				
		Allow		45,000.00
Includes:				
160th, Leary, 166th and 170th				
2 flaggers, 1 uniformed police officer				
4 portable message signs				
Survey (1.5% Project Cost)				\$42,710.70
Mobilization (8% Project Total)				\$227,790.40
			Subtotal Construction Soft Costs	\$315,501.10
			Total	\$3,117,881.10

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Downtown Trail (2012)

Item Description	Quantity	Unit	Unit Cost	Total
Escalation (undetermined %)				\$0.00
Design Contingency (20%)				\$623,576.22
Subtotal				\$3,741,457.32
General Conditions (5%)				\$187,072.87
Subtotal				\$3,928,530.19
Contractor Overhead (5%)				\$196,426.51
Subtotal				\$4,124,956.70
Contractor Profit (6%)				\$247,497.40
Total Construction Contract Amount				\$4,372,454.10

Design and Administrative Soft Costs

Sales Tax (9.5%)				\$415,383.14
Estimated Design Fees (15% Total Construction Contract Amount)				\$655,868.11
Administrative Costs (10% Design Contingency)				\$65,586.81
Permitting Fees (N.I.C.)				\$0.00
Design and Administrative Soft Costs Subtotal				\$1,136,838.07

Grand Total Downtown Trail 2012 Project Amount				\$5,509,292.16
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Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Sammamish River Crossing (Sammamish River to Redmond Way)				
Site Preparation				
Clearing/Grubbing	30,000	SF	1.00	30,000.00
Scope Includes: 75% of landscape area				
Tree Removal		Allow		2,000.00
Near R.R. abutment				
Hauling/Dumping		Allow		5,000.00
Scope Includes: Landscape Debris				
Rough Grading (Assumes balanced cut and fill on site. Does not include import or export of fill)	15,000	SF	3.00	45,000.00
Scope Includes: Balanced cut and fill on site				
T.E.S.C. (Not Included In Cost)				N.I.C.
Sammamish River Crossing 2016-2020 Subtotal Site Preparation				\$82,000.00
Site Civil Infrastructure (Not Included In Cost)				
Water				N.I.C.
Sewer				N.I.C.
Electrical				N.I.C.
Sammamish River Crossing 2016-2020 Subtotal Site Civil Infrastructure				N.I.C.
Site Improvements				
"The Ties"	1,255	LF	Varies	
Scope Includes:				
60% of length of Ties to be flush stone paving bands	879	LF	70.00	61,495.00
40% of length of Ties to be 2' high stone seatwalls	377	LF	220.00	82,830.00
8% of length receives screen, shelter or feature attachments	188	LF	700.00	131,775.00
Art Integration Allowance			Allow	500,000.00
Sammamish River Crossing 2016-2020 Subtotal Site Improvements				\$776,100.00
Landscape				
Irrigation				
Meadow Irrigation	20,000	SF	1.00	20,000.00
Planting Bed Irrigation	10,000	SF	1.75	17,500.00
Site Restoration				
Improvements include:				
Import 4" of topsoil at meadow areas	244	CY	35.00	8,540.00
Meadow mix (seeded)	20,000	SF	0.50	10,000.00
Planting Areas				
Topsoil import- 6"	185	CY	35.00	6,475.00
Trees	25	EA	400.00	10,000.00
Shrubs, groundcover, and mulch	10,000	SF	8.00	80,000.00
Sammamish River Crossing 2016-2020 Subtotal Landscape				\$152,515.00
Sammamish River Crossing 2016-2020 Subtotal				\$1,010,615.00

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Escalation (undetermined %)				\$0.00
Design Contingency (20%)				\$202,123.00
Project Subtotal				\$1,212,738.00
General Conditions (5%)				\$60,636.90
Subtotal				\$1,273,374.90
Contractor Overhead (5%)				\$63,668.75
Subtotal				\$1,337,043.65
Contractor Profit (6%)				\$80,222.62
Sammamish River Crossing 2016-2020 Construction Contract Amount				\$1,417,266.26

Design and Administrative Soft Costs

Sales Tax (9.5%)				\$134,640.30
Estimated Design Fees (15% Total Construction Contract Amount)				\$212,589.94
Administrative Costs (10% Design Contingency)				\$21,258.99
Permitting Fees (N.I.C.)				\$0.00
Sammamish River Crossing 2016-2020 Design and Administrative Soft Costs				\$368,489.23
TOTAL Sammamish River Crossing 2016-2020 Costs				\$1,785,755.49

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Higher Ground (Redmond Way to 161st Ave NE)				
Site Preparation				
Clearing/Grubbing	37,865	SF	1.00	37,865.00
Scope Includes:				
75% of landscape & paving area				
Tree Removal		Allow		2,000.00
Near R.R. abutment				
Hauling/Dumping		Allow		3,000.00
Scope Includes:				
Landscape Debris				
Rough Grading (Assumes balanced cut and fill on site. Does not include import or export of fill)	15,000	SF	3.00	45,000.00
Scope Includes:				
Balanced cut and fill on site				
T.E.S.C. (Not Included In Cost)				N.I.C.
Higher Ground 2016-2020 Subtotal Site Preparation				\$87,865.00
Site Civil Infrastructure (Not Included In Cost)				
Water				N.I.C.
Sewer				N.I.C.
Electrical				N.I.C.
Higher Ground 2016-2020 Subtotal Site Civil Infrastructure				N.I.C.
Site Improvements				
Paving Areas (Total)	10,110	SF	Varies	
Includes:				
80% CIP concrete paving (4" depth, standard finish)	8,088	SF	3.50	28,308.00
20% CIP enhanced concrete paving (4" depth, standard finish)	2,022	SF	7.00	14,154.00
CIP concrete stairs (includes rebar)	85	CY	950.00	80,750.00
"The Ties"	1,835	LF	Varies	
Scope Includes:				
60% of length of Ties to be flush stone paving bands	1,285	LF	70.00	89,915.00
40% of length of Ties to be 2' high stone seatwalls	551	LF	220.00	121,110.00
8% of length receives screen, shelter or feature attachments	275	LF	700.00	192,675.00
Art Integration Allowance			Allow	250,000.00
Higher Ground 2016-2020 Subtotal Site Improvements				\$776,912.00
Landscape				
Irrigation				
Meadow Irrigation (60%)	24,220	SF	1.00	24,220.00
Planting Bed Irrigation (40%)	9,690	SF	1.75	16,957.50
Site Restoration				
Improvements include:				
Import 4" of topsoil at meadow areas	296	CY	35.00	10,360.78
Meadow mix (seeded)	24,220	SF	0.50	12,110.00
Planting Areas				
Topsoil import- 6"	179	CY	35.00	6,280.56
Trees	25	EA	400.00	10,000.00
Shrubs, groundcover, and mulch	9,690	SF	8.00	77,520.00
Higher Ground 2016-2020 Subtotal Landscape				\$157,448.83
Higher Ground 2016-2020 Subtotal				\$1,022,225.83

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Escalation (undetermined %)				\$0.00
Design Contingency (20%)				\$204,445.17
Project Subtotal				\$1,226,671.00
General Conditions (5%)				\$61,333.55
Subtotal				\$1,288,004.55
Contractor Overhead (5%)				\$64,400.23
Subtotal				\$1,352,404.78
Contractor Profit (6%)				\$81,144.29
TOTAL Higher Ground 2016-2020 Construction Contract Amount				\$1,433,549.06

Design and Administrative Soft Costs

Sales Tax (9.5%)				\$136,187.16
Estimated Design Fees (15% Total Construction Contract Amount)				\$215,032.36
Administrative Costs (10% Design Contingency)				\$21,503.24
Permitting Fees (N.I.C.)				\$0.00
Higher Ground 2016-2020 Design and Administrative Soft Costs				\$372,722.76

TOTAL Higher Ground 2016-2020 Costs \$1,806,271.82

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Station (161st Ave NE to Leary Way)				
Site Preparation				
Clearing/Grubbing	49,031	SF	1.00	49,031.25
Scope Includes: 75% of landscape & paving area				
Hauling/Dumping		Allow		2,000.00
Scope Includes: Landscape Debris				
Rough Grading (Assumes balanced cut and fill on site. Does not include import or export of fill)	30,000	SF	3.00	90,000.00
Scope Includes: Balanced cut and fill on site				
T.E.S.C. (Not Included In Cost)				N.I.C.
Station 2016-2020 Subtotal Site Preparation				\$141,031.25
Site Civil Infrastructure (Not Included In Cost)				
Water				N.I.C.
Sewer				N.I.C.
Electrical				N.I.C.
Station 2016-2020 Subtotal Site Civil Infrastructure				N.I.C.
Site Improvements				
Paving Areas (Total)	31,110	SF	Varies	
Includes:				
25% CIP standard finish concrete paving (4" depth)	7,778	SF	3.50	27,221.25
60% CIP enhanced concrete paving (4" depth)	18,666	SF	7.00	130,662.00
15% CIP stone pavers on rat slab	4,667	SF	45.00	209,992.50
"The Ties"	2,145	LF	Varies	
Scope Includes:				
60% of length of Ties to be flush stone paving bands	1,502	LF	70.00	105,105.00
40% of length of Ties to be 2' high stone seatwalls	644	LF	220.00	141,570.00
8% of length receives screen, shelter or feature attachments	322	LF	700.00	225,225.00
Station Canopies	3	EA	80,000.00	240,000.00
Pavilion	1	EA	350,000.00	350,000.00
Site Furnishings			Allow	60,000.00
Art Integration Allowance			Allow	500,000.00
Station 2016-2020 Subtotal Site Improvements				\$1,989,775.75
Landscape				
Irrigation				
Meadow Irrigation (20%)	3,584	SF	1.00	3,584.25
Planting Bed Irrigation (80%)	14,337	SF	1.75	25,089.75
Site Restoration				
Improvements include:				
Import 4" of topsoil at meadow areas	44	CY	35.00	1,533.26
Meadow mix (seeded)	3,584	SF	0.50	1,792.13
Planting Areas				
Topsoil import- 6"	266	CY	35.00	9,292.50
Trees	25	EA	400.00	10,000.00
Shrubs, groundcover, and mulch	14,337	SF	8.00	114,696.00
Station 2016-2020 Subtotal Landscape				\$165,987.89
Station 2016-2020 Subtotal				\$2,296,794.89

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Escalation (undetermined %)				\$0.00
Design Contingency (20%)				\$459,358.98
Project Subtotal				\$2,756,153.87
General Conditions (5%)				\$137,807.69
Subtotal				\$2,893,961.56
Contractor Overhead (5%)				\$144,698.08
Subtotal				\$3,038,659.64
Contractor Profit (6%)				\$182,319.58
Station 2016-2020 Construction Contract Amount				\$3,220,979.21

Design and Administrative Soft Costs

Sales Tax (9.5%)				\$305,993.03
Estimated Design Fees (15% Total Construction Contract Amount)				\$483,146.88
Administrative Costs (10% Design Contingency)				\$48,314.69
Permitting Fees (N.I.C.)				\$0.00
Station 2016-2020 Design and Administrative Soft Costs				\$837,454.60

TOTAL Station 2016-2020 Costs \$4,058,433.81

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Promenade (Leary Way to 164th Ave NE)				
Site Preparation				
Clearing/Grubbing	16,680	SF	1.00	16,680.00
Scope Includes: 75% of landscape & paving area				
Hauling/Dumping		Allow		2,000.00
Scope Includes: Landscape Debris				
Rough Grading (Assumes balanced cut and fill on site. Does not include import or export of fill)	5,000	SF	3.00	15,000.00
Scope Includes: Balanced cut and fill on site				
T.E.S.C. (Not Included In Cost)				N.I.C.
Promenade 2016-2020 Subtotal Site Preparation				\$33,680.00
Site Civil Infrastructure (Not Included In Cost)				
Water				N.I.C.
Sewer				N.I.C.
Electrical				N.I.C.
Promenade 2016-2020 Subtotal Site Civil Infrastructure				N.I.C.
Site Improvements				
Paving Areas (Total)	12,055	SF	Varies	
Includes:				
25% CIP standard finish concrete paving (4" depth)	3,014	SF	3.50	10,548.13
60% CIP enhanced concrete paving (4" depth)	7,233	SF	7.00	50,631.00
15% Stone pavers on rat slab	1,808	SF	45.00	81,371.25
"The Ties"	2,145	LF	Varies	
Scope Includes:				
60% of length of Ties to be flush stone paving bands	1,502	LF	70.00	105,105.00
40% of length of Ties to be 2' high stone seatwalls	644	LF	220.00	141,570.00
8% of length receives screen, shelter or feature attachments	322	LF	700.00	225,225.00
Canopies	3	EA	40,000.00	120,000.00
Screens	160	LF	100.00	16,000.00
Site Furnishings			Allow	40,000.00
Art Integration Allowance			Allow	500,000.00
Promenade 2016-2020 Subtotal Site Improvements				\$1,290,450.38
Landscape				
Irrigation				
Planting Bed Irrigation (100%)	10,185	SF	1.75	17,823.75
Planting Areas				
Topsoil import- 6"	189	CY	35.00	6,601.39
Trees	15	EA	400.00	6,000.00
Shrubs, groundcover, and mulch	10,185	SF	8.00	81,480.00
Promenade 2016-2020 Subtotal Landscape				\$111,905.14
Promenade 2016-2020 Subtotal				\$1,436,035.51

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Escalation (undetermined %)				\$0.00
Design Contingency (20%)				\$287,207.10
Project Subtotal				\$1,723,242.62
General Conditions (5%)				\$86,162.13
Subtotal				\$1,809,404.75
Contractor Overhead (5%)				\$90,470.24
Subtotal				\$1,899,874.98
Contractor Profit (6%)				\$113,992.50
Promenade 2016-2020 Construction Contract Amount				\$2,013,867.48

Design and Administrative Soft Costs

Sales Tax (9.5%)				\$191,317.41
Estimated Design Fees (15% Total Construction Contract Amount)				\$302,080.12
Administrative Costs (10% Design Contingency)				\$30,208.01
Permitting Fees (N.I.C.)				\$0.00
Promenade 2016-2020 Design and Administrative Soft Costs				\$523,605.55

TOTAL Promenade 2016-2020 Costs				\$2,537,473.03
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Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Open Space (164th Ave NE to 166th Ave NE)				
Site Preparation				
Clearing/Grubbing	28,010	SF	1.00	28,010.25
Scope Includes: 75% of landscape & paving area				
Hauling/Dumping		Allow		5,000.00
Scope Includes: Landscape Debris				
Rough Grading (Assumes balanced cut and fill on site. Does not include import or export of fill)	15,000	SF	3.00	45,000.00
Scope Includes: Balanced cut and fill on site				
T.E.S.C. (Not Included In Cost)				N.I.C.
Open Space 2016-2020 Subtotal Site Preparation				\$78,010.25
Site Civil Infrastructure (Not Included In Cost)				
Water				N.I.C.
Sewer				N.I.C.
Electrical				N.I.C.
Open Space 2016-2020 Subtotal Site Civil Infrastructure				N.I.C.
Site Improvements				
Paving Areas (Total)	13,452	SF	Varies	
Includes:				
25% CIP standard finish concrete paving (4" depth)	3,363	SF	3.50	11,770.50
60% CIP enhanced concrete paving (4" depth)	8,071	SF	7.00	56,498.40
15% Stone pavers on rat slab	2,018	SF	45.00	90,801.00
"The Ties"	2,145	LF	Varies	
Scope Includes:				
60% of length of Ties to be flush stone paving bands	1,502	LF	70.00	105,105.00
40% of length of Ties to be 2' high stone seatwalls	644	LF	220.00	141,570.00
8% of length receives screen, shelter or feature attachments	322	LF	700.00	225,225.00
Canopies	7	EA	40,000.00	280,000.00
Screens	385	LF	100.00	38,500.00
Site Furnishings			Allow	60,000.00
Art Integration Allowance			Allow	500,000.00
Open Space 2016-2020 Subtotal Site Improvements				\$1,509,469.90
Landscape				
Irrigation				
Planting Bed Irrigation (100%)	23,895	SF	1.75	41,816.25
Planting Areas				
Topsoil import- 6"	443	CY	35.00	15,487.50
Trees	15	EA	400.00	6,000.00
Shrubs, groundcover, and mulch	23,895	SF	8.00	191,160.00
Open Space 2016-2020 Subtotal Landscape				\$254,463.75
Open Space 2016-2020 Subtotal				\$1,841,943.90

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Escalation (undetermined %)				\$0.00
Design Contingency (20%)				\$368,388.78
Project Subtotal				\$2,210,332.68
General Conditions (5%)				\$110,516.63
Subtotal				\$2,320,849.31
Contractor Overhead (5%)				\$116,042.47
Subtotal				\$2,436,891.78
Contractor Profit (6%)				\$146,213.51
TOTAL Open Space 2016-2020 Construction Contract Amount				\$2,583,105.29

Design and Administrative Soft Costs

Sales Tax (9.5%)				\$245,395.00
Estimated Design Fees (15% Total Construction Contract Amount)				\$387,465.79
Administrative Costs (10% Design Contingency)				\$38,746.58
Permitting Fees (N.I.C.)				\$0.00
Open Space 2016-2020 Design and Administrative Soft Costs				\$671,607.37
TOTAL Neighborhood 2016-2020 Costs				\$3,254,712.66

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Neighborhood (166th Ave NE to 170th Ave NE)				
Site Preparation				
Clearing/Grubbing	50,066	SF	1.00	50,066.25
Scope Includes: 75% of landscape & paving area				
Hauling/Dumping		Allow		5,000.00
Scope Includes: Landscape Debris				
Rough Grading (Assumes balanced cut and fill on site. Does not include import or export of fill)	10,000	SF	3.00	30,000.00
Scope Includes: Balanced cut and fill on site				
T.E.S.C. (Not Included In Cost)				N.I.C.
Neighborhood 2016-2020 Subtotal Site Preparation				\$85,066.25
Site Civil Infrastructure (Not Included In Cost)				
Water				N.I.C.
Sewer				N.I.C.
Electrical				N.I.C.
Neighborhood 2016-2020 Subtotal Site Civil Infrastructure				N.I.C.
Site Improvements				
Paving Areas (Total)	5,075	SF	Varies	
Includes:				
70% CIP standard finish concrete paving (4" depth)	3,553	SF	3.50	12,433.75
20% CIP enhanced concrete paving (4" depth)	1,015	SF	7.00	7,105.00
10% Stone pavers on rat slab	508	SF	45.00	22,837.50
"The Ties"	1,290	LF	Varies	
Scope Includes:				
60% of length of Ties to be flush stone paving bands	903	LF	70.00	63,210.00
40% of length of Ties to be 2' high stone seatwalls	387	LF	220.00	85,140.00
8% of length receives screen, shelter or feature attachments	194	LF	700.00	135,450.00
Canopies	2	EA	40,000.00	80,000.00
Screens	835	LF	100.00	83,500.00
Site Furnishings			Allow	30,000.00
Art Integration Allowance			Allow	750,000.00
Neighborhood 2016-2020 Subtotal Site Improvements				\$1,269,676.25
Landscape				
Irrigation				
Meadow Irrigation (50%)	30,840	SF	1.00	30,840.00
Planting Bed Irrigation (50%)	30,840	SF	1.75	53,970.00
Planting Areas				
Topsoil import- 6"	571	CY	35.00	19,988.89
Trees	15	EA	400.00	6,000.00
Meadow mix (seeded)	30,840	SF	0.50	15,420.00
Shrubs, groundcover, and mulch	30,840	SF	8.00	246,720.00
Neighborhood 2016-2020 Subtotal Landscape				\$372,938.89
Neighborhood 2016-2020 Subtotal				\$1,727,681.39

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Escalation (undetermined %)				\$0.00
Design Contingency (20%)				\$345,536.28
Project Subtotal				\$2,073,217.67
General Conditions (5%)				\$103,660.88
Subtotal				\$2,176,878.55
Contractor Overhead (5%)				\$108,843.93
Subtotal				\$2,285,722.48
Contractor Profit (6%)				\$137,143.35
Neighborhood 2016-2020 Construction Contract Amount				\$2,422,865.83

Design and Administrative Soft Costs

Sales Tax (9.5%)				\$230,172.25
Estimated Design Fees (15% Total Construction Contract Amount)				\$363,429.87
Administrative Costs (10% Design Contingency)				\$36,342.99
Permitting Fees (N.I.C.)				\$0.00
Neighborhood 2016-2020 Design and Administrative Soft Costs				\$629,945.11

TOTAL Neighborhood 2016-2020 Costs				\$3,052,810.94
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Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Creekside (170th Ave NE to Bear Creek Trail)				
Site Preparation				
Clearing/Grubbing	41,745	SF	1.00	41,745.00
Scope Includes:				
75% of landscape & paving area				
Hauling/Dumping		Allow		5,000.00
Scope Includes:				
Landscape Debris				
Rough Grading (Assumes balanced cut and fill on site. Does not include import or export of fill)	20,000	SF	3.00	60,000.00
Scope Includes:				
Balanced cut and fill on site				
T.E.S.C. (Not Included In Cost)				N.I.C.
Creekside 2016-2020 Subtotal Site Preparation				\$106,745.00
Site Civil Infrastructure (Not Included In Cost)				
Water				N.I.C.
Sewer				N.I.C.
Electrical				N.I.C.
Creekside 2016-2020 Subtotal Site Civil Infrastructure				N.I.C.
Site Improvements				
Paving Areas (Total)	3,250	SF	Varies	
Includes:				
70% CIP standard finish concrete paving (4" depth)	2,275	SF	3.50	7,962.50
20% CIP enhanced concrete paving (4" depth)	650	SF	7.00	4,550.00
10% Stone pavers on rat slab	325	SF	45.00	14,625.00
"The Ties"	810	LF	Varies	
Scope Includes:				
60% of length of Ties to be flush stone paving bands	567	LF	70.00	39,690.00
40% of length of Ties to be 2' high stone seatwalls	243	LF	220.00	53,460.00
8% of length receives screen, shelter or feature attachments	122	LF	700.00	85,050.00
Canopies	2	EA	40,000.00	80,000.00
Site Furnishings			Allow	15,000.00
Art Integration Allowance			Allow	500,000.00
Creekside 2016-2020 Subtotal Site Improvements				\$800,337.50
Landscape				
Irrigation				
Meadow Irrigation (80%)	44,528	SF	1.00	44,528.00
Planting Bed Irrigation (20%)	11,132	SF	1.75	19,481.00
Planting Areas				
Topsoil import- 6"	206	CY	35.00	7,215.19
Trees	25	EA	400.00	10,000.00
Meadow mix (seeded)	44,528	SF	0.50	22,264.00
Shrubs, groundcover, and mulch	11,132	SF	8.00	89,056.00
Creekside 2016-2020 Subtotal Landscape				\$192,544.19
Creekside 2016-2020 Improvement Subtotal				\$1,099,626.69

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Escalation (undetermined %)				\$0.00
Design Contingency (20%)				\$219,925.34
Project Subtotal				\$1,319,552.02
General Conditions (5%)				\$65,977.60
Subtotal				\$1,385,529.62
Contractor Overhead (5%)				\$69,276.48
Subtotal				\$1,454,806.10
Contractor Profit (6%)				\$87,288.37
Creekside 2016-2020 Construction Contract Amount				\$1,542,094.47

Design and Administrative Soft Costs

Sales Tax (9.5%)				\$146,498.97
Estimated Design Fees (15% Total Construction Contract Amount)				\$231,314.17
Administrative Costs (10% Design Contingency)				\$23,131.42
Permitting Fees (N.I.C.)				\$0.00
Creekside 2016-2020 Design and Administrative Soft Costs				\$400,944.56
TOTAL Creekside 2016-2020 Costs				\$1,943,039.03

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Sammamish Valley (Sammamish River Trestle to NE 124th St.)				
Site Preparation				
Clearing/Grubbing	152,460	SF	1.00	152,460.00
Scope Includes:				
Assumption that train tracks are removed				
Area outside of stormwater trunk line limit of work only				
6' either side of trail and shoulder width				
Hauling/Dumping		Allow		5,000.00
Scope Includes:				
Landscape Debris				
Rough Grading (Assumes balanced cut and fill on site. Does not include import or export of fill)	20,000	SF	3.00	60,000.00
Scope Includes:				
Balanced cut and fill on site				
Environmental Permitting & Mitigation Allowance		Allowance		120,000.00
T.E.S.C. (Not Included In Cost)				N.I.C.
Sammamish Valley 2016-2020 Subtotal Site Preparation				\$337,460.00

Site Civil Infrastructure (Not Included In Cost)

Water				N.I.C.
Sewer				N.I.C.
Electrical				N.I.C.
Sammamish Valley 2016-2020 Subtotal Site Civil Infrastructure				N.I.C.

Site Improvements

Trail- 12' wide asphalt trail	12,105	LF	30.00	363,150.00
4" asphalt lift				
Trail- Additional cost of 12' wide concrete trail	12,105	LF	12.00	145,260.00
CIP concrete paving (4" depth concrete)				
16' crushed rock subgrade (including 2' crushed rock shoulders both sides)	14,475	LF	30.00	434,250.00
Improvements between Sammamish River Trestle and 90th St. NE atop abutment				
Improvements include:				
Existing subgrade to remain				
16' wide concrete paving with thickened edge	2,370	LF	50.00	118,500.00
Railing	2,370	LF	65.00	154,050.00
CIP concrete stair connections south of 90th St.	120	CY	950.00	114,000.00
"The Ties"	6,000	LF	Varies	
Scope Includes:				
400 LF (avg.) at each intersection, crossing, driveway, and node				
60% of length of Ties to be flush stone paving bands	4,200	LF	70.00	294,000.00
40% of length of Ties to be 2' high stone seatwalls	1,800	LF	220.00	396,000.00
8% of length receives screen, shelter or feature attachments	900	LF	700.00	630,000.00
Primary Seating Nodes (Landings)				
Improvements include:				
Concrete Pavers (800sf per seating node)	3	EA	12,000.00	36,000.00
Tables	6	EA	2,500.00	15,000.00
Benches	6	EA	2,500.00	15,000.00
Bike Racks	1	EA	1,500.00	1,500.00
Trash Can (Trash, Recycling, Pet Waste)	1	EA	1,000.00	1,000.00
Art Integration Allowance	3	EA	250,000.00	750,000.00

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Seating Nodes (Islands & Eddies)				
Improvements include:				
Concrete Pavers (600sf per seating node)	8	EA	9,600.00	76,800.00
Tables	8	EA	2,500.00	20,000.00
Benches	8	EA	2,500.00	20,000.00
Bike Racks	8	EA	1,500.00	12,000.00
Trash Can (Trash, Recycling, Pet Waste)	8	EA	1,000.00	8,000.00
Art Integration Allowance	8	EA	25,000.00	200,000.00
Pedestrian Street Crossings at: 116th Ave. NE, 95th St. NE, 90th				
Improvements Include:				
Enhanced paving (800sf per crossing)	3	EA	5,600.00	16,800.00
Striping	3	EA	5,000.00	15,000.00
Bollards (6 per crossing)	3	EA	1,200.00	3,600.00
Potential modification of traffic control signaling at existing	2	EA	100,000.00	200,000.00
Modifications include:				
116th, 95th and 90th				
4-way improvements				
Ped heads, push buttons and wiring at signals				
Pedestrian Driveway Crossings from Sammamish River at RR				
Major Pedestrian Driveway Crossings (Commercial Driveways > 35' width)				
Improvements Include:				
Enhanced paving (600sf per crossing)	2	EA	2,800.00	5,600.00
Bollards (6 per crossing)	2	EA	1,200.00	2,400.00
Striping	2	EA	1,250.00	2,500.00
Modifications include:				
Permanent Signage				
Minor Pedestrian Driveway Crossings (Driveways < 35' width)				
Improvements Include:				
Enhanced paving (300sf per crossing)	5	EA	1,400.00	7,000.00
Bollards (6 per crossing)	5	EA	1,200.00	6,000.00
Striping	5	EA	850.00	4,250.00
Modifications include:				
Permanent Signage				
Canopies	11	EA	40,000.00	440,000.00
Sammamish River Trestle Improvements				N.I.C.
154th Ave NE Bridge Improvements				N.I.C.
Sammamish Valley 2016-2020 Subtotal Site Improvements				\$4,507,660.00

Landscape

Irrigation

2" Meter (provided by municipality)		Allow		9,000.00
POC (DCVA, Master valve, vaults, etc.; assumes 2" connection)		Allow		20,000.00
Controller (commercial, maxicom)		Allow		15,000.00
Mainline system w/ quick couplers	14,475	LF	28.00	405,300.00
Meadow Irrigation (80%)	44,528	SF	1.00	44,528.00
Planting Bed Irrigation (20%)	11,132	SF	1.75	19,481.00

Planting Areas

Topsoil import- 6"	206	CY	35.00	7,215.19
Trees	25	EA	400.00	10,000.00
Meadow mix (seeded)	44,528	SF	0.50	22,264.00
Shrubs, groundcover, and mulch	11,132	SF	8.00	89,056.00

Site Restoration

Improvements include:				
6' on either side of path (14,475LF)				
Import 4" of topsoil	2,123	CY	35.00	74,305.00
Meadow mix (seeded)	173,700	SF	0.50	86,850.00

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Trail Enhancements (2016-2020)

Item Description	Quantity	Unit	Unit Cost	Total
Planting Areas at Pedestrian Street Crossings				
Improvements include:				
3 street crossings				
500 sf of planting at each crossing				
Topsoil import- 6"	30	CY	35.00	1,050.00
Trees	24	EA	400.00	9,600.00
Shrubs, groundcover, and mulch @ edge restoration	1,500	SF	8.00	12,000.00
Planting Areas at Seating Nodes (Landings, Islands & Eddies)				
Improvements include:				
11 seating nodes				
600 sf at each seating node				
Topsoil import- 6"	125	CY	35.00	4,375.00
Trees	100	EA	400.00	40,000.00
Shrubs, groundcover, and mulch @ edge restoration	6,600	SF	8.00	52,800.00
Sammamish Valley 2016-2020 Subtotal Landscape				\$922,824.19
Sammamish Valley 2016-2020 Improvement Subtotal				\$5,767,944.19
Escalation (undetermined %)				\$0.00
Design Contingency (20%)				\$1,153,588.84
Project Subtotal				\$6,921,533.02
General Conditions (5%)				\$346,076.65
Subtotal				\$7,267,609.67
Contractor Overhead (5%)				\$363,380.48
Subtotal				\$7,630,990.16
Contractor Profit (6%)				\$457,859.41
Construction Contract Amount				\$8,088,849.57
Design and Administrative Soft Costs				
Sales Tax (9.5%)				\$768,440.71
Estimated Design Fees (15% Total Construction Contract Amount)				\$1,213,327.43
Administrative Costs (10% Design Contingency)				\$121,332.74
Permitting Fees (N.I.C.)				\$0.00
Design and Administrative Soft Costs Subtotal				\$2,103,100.89
TOTAL Sammamish Valley 2016-2020 Costs				\$10,191,950.45
Grand Total 2016-2020 Improvements				\$28,630,447.24

Master Plan Cost Considerations

Project: Redmond BNSF Trail Corridor

Date: May 2011

Project Description

Total Cost

Phase 1- Downtown Trail (2012)	\$5,509,292.16
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Phase 2- Downtown and Sammamish Valley Trail Enhancements (2016-2020)	\$28,630,447.24
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