
Concepts to Service Expanded UGB Areas

This section discusses projects to directly serve as future streets for the expanded UGB area. Generally, the conceptual projects discussed in this section are enumerated to correspond with the alternative number title the project had in *Technical Memorandum 5.2: Banks TSP Alternatives Evaluation Report* – text is provided to alert the reader where this is not the case.

The location of projects depicted in this TSP are conceptual in nature, and as such are intended as a guide for development and should not be explicitly used as shown to constrain development options in the future. The precise location of all recommended projects should be defined through the land development process as projects are funded, designed, and built.

Need:

East-west internal circulation in Banks to accommodate expanded urban area and reduce reliance on state highways for intra-city circulation.

Making provisions for east-west travel is critical to maintaining adequate citywide circulation as the City expands east of the railroad tracks. Subsequently, there is a need to provide an east-west collector road for the City of Banks with respect to the UGB expansion area east of the existing city. Such an east-west collector road system, which integrates the proposed new eastside collector road (see Concept 10) is not possible without a railroad crossing. Along with this need is the City's transportation objective of having a secondary route from the existing City of Banks to the Aerts Road access point to OR 6.

The preferred option for a collector road between the east and west sides of Banks would be to construct at-grade railroad crossings because the cost to do so would be significantly less than an overcrossing. However, at-grade crossings of the railroad under existing conditions is infeasible because the tracks that would need to be crossed are currently used for track-switching – an activity that is highly incompatible with at-grade crossings; this is also the reason that at-grade crossings along this segment of tracks is not permitted under ODOT Rail Division Policy.

Based on the above circumstances, at-grade crossings are not a feasible option for recommendation at this time. However, as noted, at-grade crossings are the City's preferred option for east-west railroad crossings, and would be pursued for implementation at such time in the future that at-grade crossings become feasible due to changing conditions.

A proposed over-crossing would be treated as local parallel route to OR6 and Banks Road. To gain a better investment for the structure, this parallel route would be classified as a collector and allow cut-through traffic. Local traffic could use this over-crossing instead of using OR 6 to access different sides of the city. It is important to note that each of the concepts proposed to address this would necessitate close coordination with the railroad companies actively using the rail lines.

Concept #3a: Install vehicular overcrossing of railroad from area south of Arbor Village to Rose Avenue

This concept would entail constructing a vehicular bridge over the railroad tracks connecting the existing street network on the west side of Banks (south of the Arbor Village

neighborhood) to the future street network on the east side of Banks (at Rose Avenue) (see Figure 11 below). This crossing would include bicycle/pedestrian accommodations. This concept is a long-term one which assumes the full build-out of the UGB expansion area on the east side of Banks as a prerequisite for consideration of construction.

This concept would be constructed only when warranted based on future traffic conditions associated with future development of the UGB expansion area east of the railroad tracks.

The proposed railroad crossing corridor shown on Figure 11 is conceptual and would be defined through the land development process as it is funded, designed, and built.

FIGURE 11: CONCEPT #3A – LOCATION OF RR OVERCROSSING FROM ARBOR VILLAGE TO ROSE AVENUE



A detailed evaluation of this concept is provided in Appendix C (*Technical Memorandum 5.2: Banks TSP Alternatives Evaluation Report*). As noted in the aforementioned technical memorandum, this concept's crossing corridor is less advantageous than Concept 3b because it is as centrally located in juxtaposition to the eastside UGB expansion area. Both Washington County and ODOT staff noted that, in a comparison between Concept 3a and 3b, Concept 3b is preferable because Concept 3a appears too far south to be the sole east-west railroad crossing and would result in out of direction travel for significant portions of intra-city traffic in the future (if it were the sole crossing). Therefore, this concept is recommended as a project to be placed on the City's transportation CIP list as a secondary option to Concept 3b.

Based on planning level estimate tools, this project is estimated at \$8,650,000. This estimate includes the design and construction of new roadway, a new single span cast-in-place concrete girder bridge, new right-of-way, contingency, and engineering costs. Cost estimate details are provided in Appendix D.

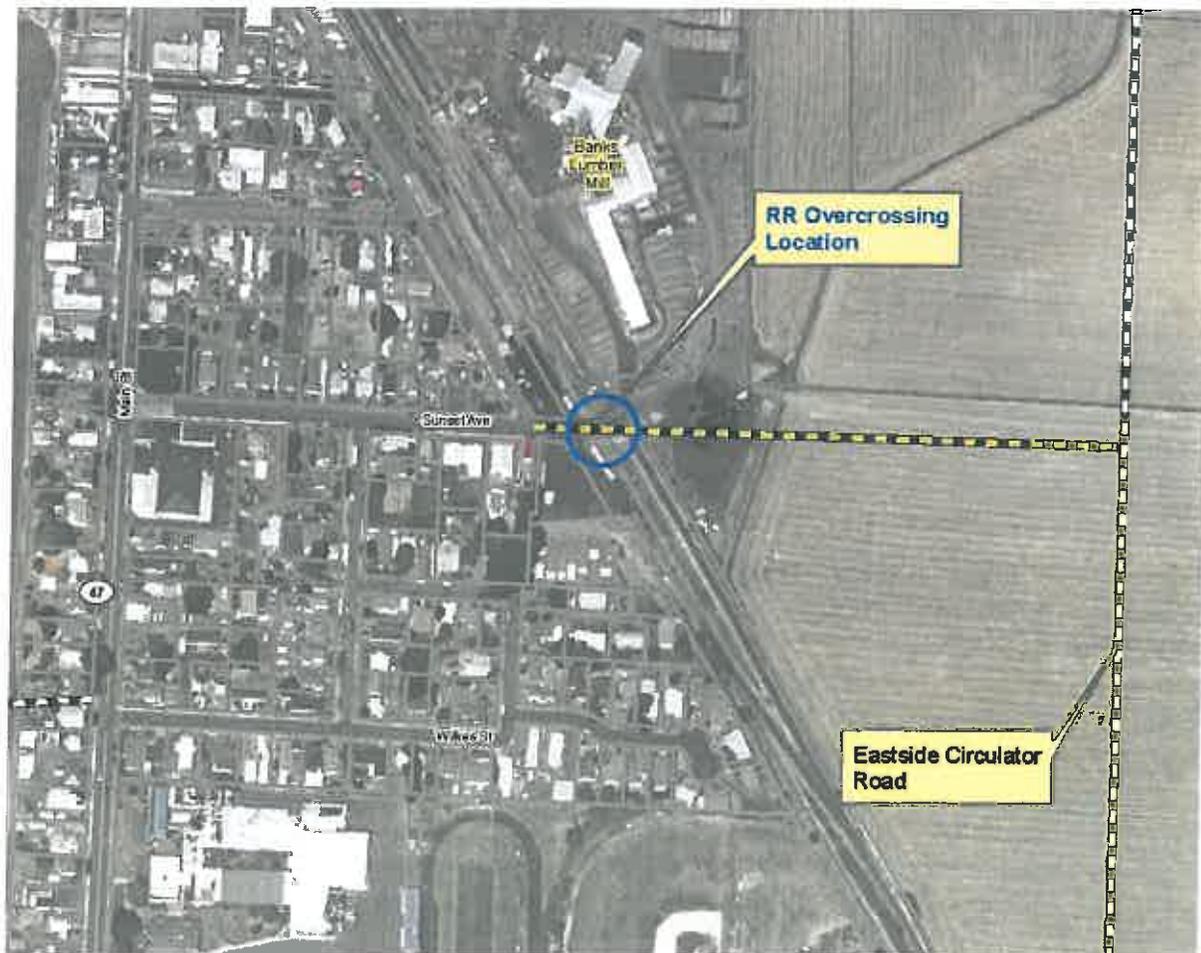
A detailed discussion of potential transportation funding sources for this concept is provided in Section 4 of this TSP.

Concept #3b: Install vehicular overcrossing of railroad from Sunset Avenue to new collector road on east side of railroad

Concept 3b is intended to address the same needs described for Concept 3a. Concept 3b would construct a vehicular bridge crossing of the railroad tracks at a point further north than 3a; from Sunset Avenue on the west to a future circulator road on the east (see Figure 12). There is currently an at-grade crossing at this location, which is not open to the public that is utilized by the Banks Lumber Mill under an agreement with the existing rail companies. This crossing would include bicycle/pedestrian accommodations.

The proposed railroad crossing corridor shown on Figure 12 is conceptual and would be defined through the land development process as it is funded, designed, and built.

FIGURE 12: CONCEPT #3B – LOCATION OF RR OVERCROSSING FROM SUNSET AVENUE TO EASTSIDE



A detailed evaluation of this concept is provided in Appendix C (*Technical Memorandum 5.2: Banks TSP Alternatives Evaluation Report*). Based on analysis conducted, this concept is recommended as a project to be placed on the City's transportation CIP list.

Based on planning level estimate tools, this project is estimated at \$7,083,000. This estimate includes the design and construction of new roadway, a new single span cast-in-place concrete girder bridge, new right-of-way, contingency, and engineering costs. Cost estimate details are provided in Appendix D.

A detailed discussion of potential transportation funding sources for this concept is provided in Section 4 of this TSP.

As noted earlier, Concept 3b is recommended as the primary location option for a vehicular railroad crossing, with Concept 3a being a secondary option. Along with cost, major factors that should be considered with regard to deciding on a railroad crossing location include:

- Usefulness as a intra-city collector to reduce reliance on peripheral roads (OR 6; Banks Road)
- Effect on railroad operations (i.e. feasibility of crossing location vies a vies railroad operations)
- Impact on existing residents, businesses, landowners
- Anticipated associated traffic impacts
- Engineering feasibility

Need:

North-south circulation system on west side of Banks in UGB expansion area and access to new land uses.

Concept #8: New North-South Circulator Road in Westside Banks Area between Cedar Canyon Road and Area South of Sunset Park

This concept entails constructing a new north-south road on the west side of the existing City of Banks with termini intersections at Cedar Canyon Road in the north and Main Street in the south (see Figure 13). This roadway would be a 40-foot wide paved roadway with sidewalks, illumination, landscaping and drainage, occupying a right-of-way footprint of 64 feet, and meeting City of Banks Collector standards.

The location of this proposed roadway is optimal because it will allow for double-loading of mixed uses on the lot line in the northern segment of the road and will provide access to the commercial and industrial areas, while simultaneously providing north-south circulation within the constraints of the adjacent floodplain. It is the intent of this TSP that land on both sides of this circulator road would be developed.

This concept would be constructed only when warranted based on future traffic conditions associated with future development of the UGB expansion area west of Main Street.

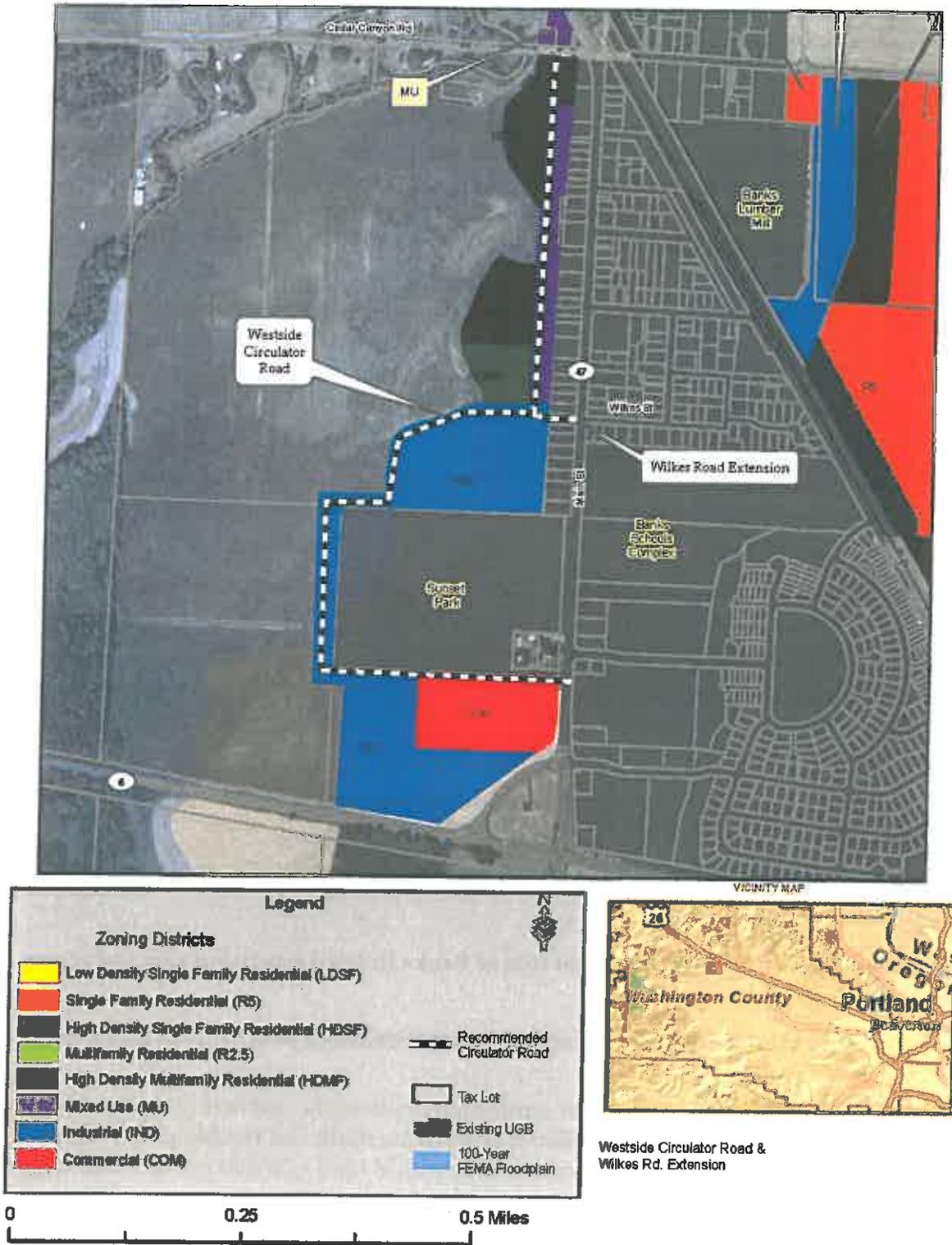
The proposed Westside north-south circulator road corridor as shown on Figure 13 is conceptual and would be defined through the land development process as it is funded, designed, and built.

A detailed evaluation of this concept is provided in Appendix C (*Technical Memorandum 5.2: Banks TSP Alternatives Evaluation Report*). Based on analysis conducted, this concept is recommended as a project to be placed on the City's transportation CIP list.

Based on planning level estimate tools, this project is estimated at \$12,673,100. This estimate includes the design and construction of new roadway, new right-of-way, contingency, and engineering costs. Cost estimate details are provided in Appendix D.

A detailed discussion of potential transportation funding sources for this concept is provided in Section 4 of this TSP.

FIGURE 13: CONCEPT #8 – WESTSIDE CIRCULATOR ROAD



Need:

Connection from new UGB expansion area on the west side of Banks to Main Street to provide access and east-west circulation.

Concept #9: New West Extension of Wilkes Road

As shown on Figure 13, this concept entails constructing a west extension of Wilkes Road that would connect to Main Street on the east and the new west side circulator road on the west (see Concept #8), and would result in a new 4-way intersection of Wilkes Road and Main Street. This concept would include the installation of a striped pedestrian crossing. This concept addresses the need to provide an outlet from the new UGB expansion area west of Main Street.

This concept would be constructed only when warranted based on future traffic conditions associated with future development of the UGB expansion area west of Main Street. Per ODOT staff, the new roadway would require an ODOT approach permit and the proposed marked crosswalks would need State Traffic Engineer Approval.

The location of the proposed Wilkes Road extension is optimal in that it will allow for a formal 4-way intersection with Main Street and the existing Wilkes Road and will support the circulatory function of a collector (Wilkes Road is proposed for upgrading to collector status).

A detailed evaluation of this concept is provided in Appendix C (*Technical Memorandum 5.2: Banks TSP Alternatives Evaluation Report*). Based on analysis conducted, this concept is recommended as a project to be placed on the City's transportation CIP list.

Based on planning-level estimate tools, this project is estimated at \$464,000. This estimate includes the design and construction of new roadway, contingency, and engineering costs. Cost estimate details are provided in Appendix D.

A detailed discussion of potential transportation funding sources for this concept is provided in Section 4 of this TSP.

Need:

North-south circulation system on east side of Banks in UGB expansion area and access to new land uses.

Concept #10: New North-South Circulator Road in Eastside Banks Area between Banks Road and Washington Avenue

This concept entails constructing a new north-south road on the east side of the existing City of Banks with termini intersections at Banks Road in the north and Washington Avenue in the south (see Figure 14). The proposed roadway would have a 36-foot paved width within a 60-foot right-of-way, meeting Washington County Major Collector standards. This concept would address the need to provide a primary circulator road for the UGB expansion area to the east of the railroad tracks.

The location of this proposed circulator road would be the most efficient because it is central to the new eastside UGB expansion area and would have significant cost-benefits because it

could serve adjacent land uses on both sides and would limit out-of-direction travel. Washington County and ODOT staff has concurred on this assessment. The predominantly central location of this road would allow for double-loading of land use development; it is the intent of this TSP that land on both sides of this circulator road would be developed.

A previously considered eastside circulator road that would be located adjacent to the railroad tracks for much of its length was discarded because it would be ineffective from a cost-benefit perspective with regard to serving adjacent land uses. The rationale for the location of the discarded concept was to provide a buffer between land use development and the railroad. However, as was noted by Washington County staff, there are other aesthetically pleasing mechanisms, such as berms or vegetated walls, which could be used to provide a buffer function instead of the roadway, which, as noted, would be significantly more effective if located in a more central location that served adjacent land uses on both sides of the road.

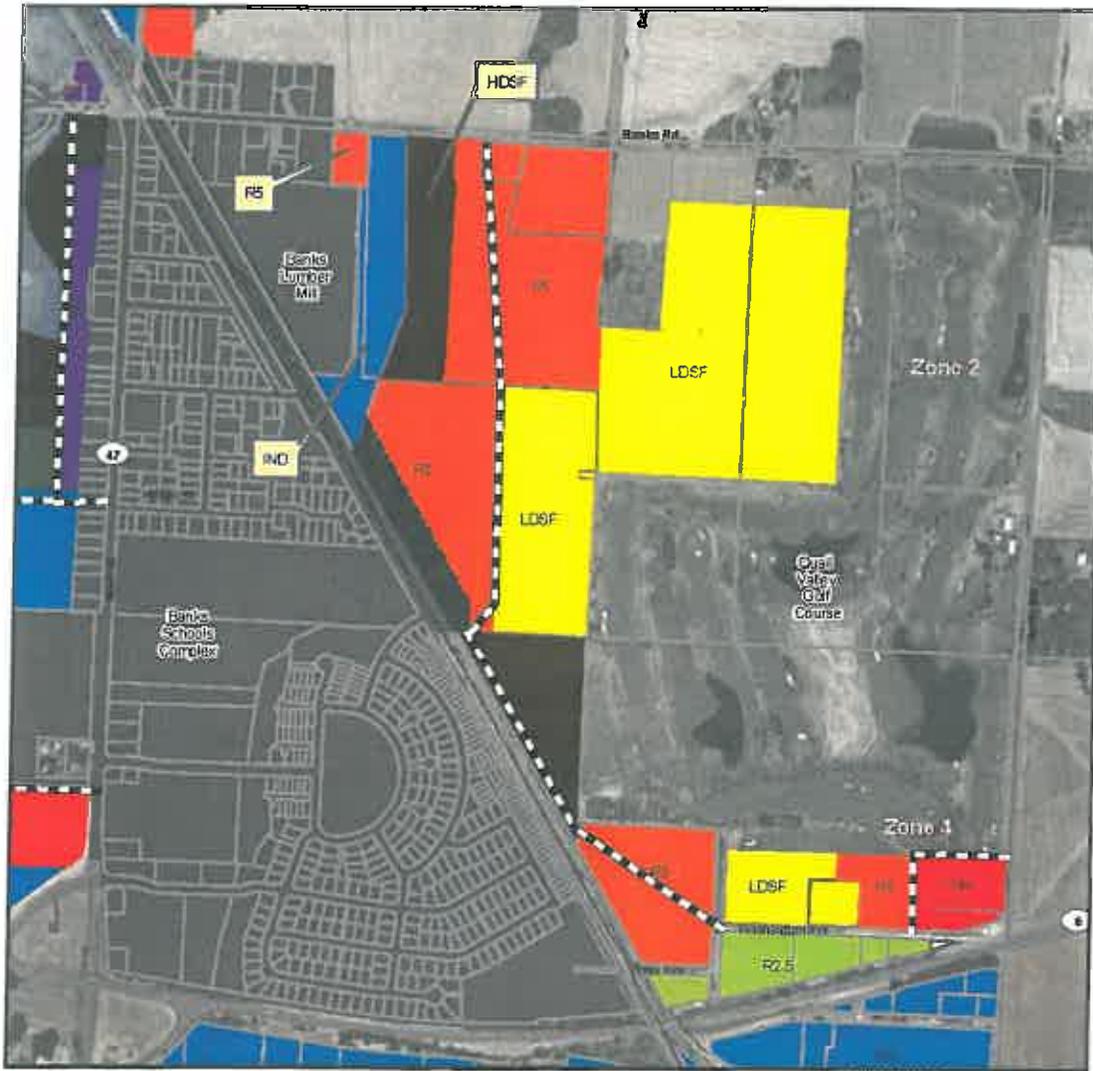
The proposed Westside north-south circulator road corridor as shown on Figure 14 is conceptual and would be defined through the land development process as it is funded, designed, and built.

A detailed evaluation of this concept is provided in Appendix C (*Technical Memorandum 5.2: Banks TSP Alternatives Evaluation Report*). Based on analysis conducted, this concept is recommended as a project to be placed on the City's transportation CIP list.

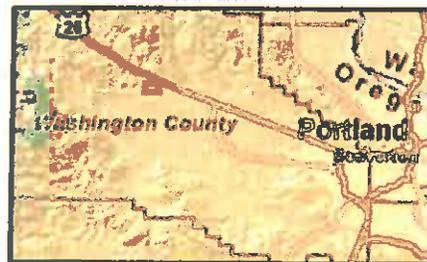
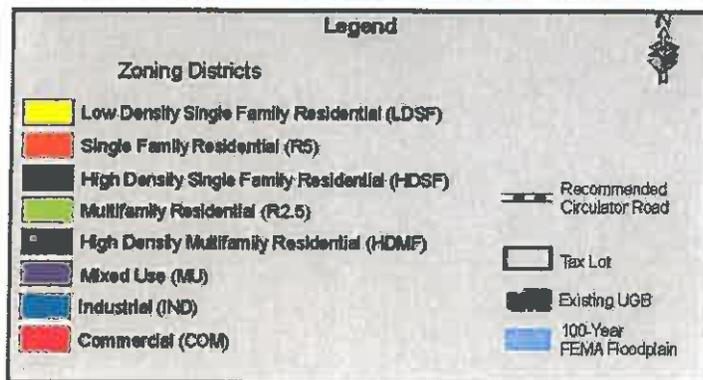
Based on planning level estimate tools, this project is estimated at \$4,441,400. This estimate includes the design and construction of new roadway, new right-of-way, contingency, and engineering costs. Cost estimate details are provided in Appendix D.

A detailed discussion of potential transportation funding sources for this concept is provided in Section 4 of this TSP.

FIGURE 14: CONCEPT #10 – EASTSIDE CIRCULATOR ROAD



VICINITY MAP



Eastside Circulator Road



CH2MHILL

Need:

East-west bicycle/pedestrian circulation system.

Several versions of this concept were assessed and are discussed in turn below.

The proposed bicycle/pedestrian crossing corridor as shown on Figure 15 is conceptual and would be defined through the land development process as it is funded, designed, and built.

Concept #11 Option A: Install Bicycle/Pedestrian Overcrossing of Railroad from Area East of Banks Schools Complex to Eastside of Banks (UGB Expansion Area)

As shown in Figure 15, this concept entails constructing a pedestrian/bicycle overcrossing of the railroad tracks to connect the UGB expansion area east of the tracks to the west side of Banks (at the Banks schools complex area) and would include a connecting path on the eastside to the circulator road (thereby providing a connection to the bicycle facilities on the new road). This concept would entail a temporary closure of the railroad tracks (approximately 2 nights at 6 hours a night).

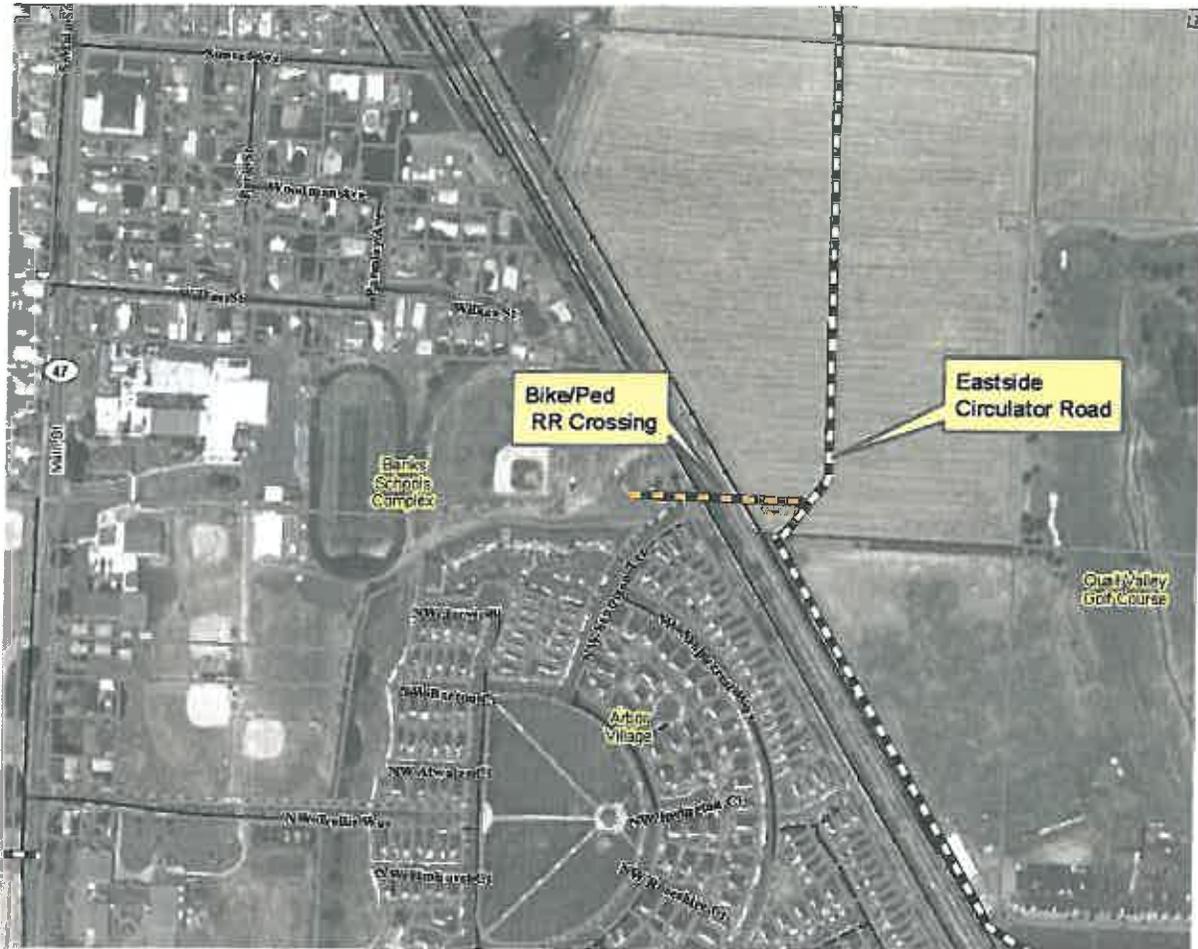
This concept addresses the need to provide safe, convenient, and reasonably direct east-west bicycle/pedestrian circulation. This concept could serve as an affordable interim step to meet this need in the event that the City determines that the longer-term objective of constructing motor vehicle crossings of the railroad with bicycle/pedestrian accommodations (see Concepts 3a and 3b) will occur at an unacceptably late future time with respect to the need for bicycle/pedestrian accommodations across the railroad (to accommodate the population in the eastside UGB expansion area).

This concept would encourage the use of alternate modes of travel between the west and east sides of Banks (assuming development of the UGB expansion areas on the east side of Banks) in keeping with City goals and objectives.

This concept would significantly improve safety conditions for bicyclists and pedestrians who would be provided with an east-west connecting route that was separated from motor vehicle traffic. This concept would be a pivotal safe route to school component.

This concept would significantly improve mobility conditions for bicyclists and pedestrians traveling to and from the UGB expansion area on the east side of the railroad tracks. This concept would enable short trips from east to west Banks and most importantly to the Banks school complex and downtown Banks – to be made conveniently by foot or bicycle.

FIGURE 15: CONCEPT #11 – BIKE/PED RR CROSSING CORRIDOR



A detailed evaluation of this concept is provided in Appendix C (*Technical Memorandum 5.2: Banks TSP Alternatives Evaluation Report*). In the aforementioned memorandum this concept is titled “Alternative 11a”. Based on analysis conducted, this concept is recommended as a project to be placed on the City’s transportation CIP list as a secondary bicycle/pedestrian bridge option IF Concept #11 Option B were not feasible, as discussed later in this report. Also, as previously noted, this concept should only be considered for implementation in the event that the City determines that the longer-term objective of constructing motor vehicle crossings of the railroad with bicycle/pedestrian accommodations (see Concepts 3a and 3b) will occur at an unacceptably late future time with respect to the need for bicycle/pedestrian accommodations across the railroad (to accommodate the population in the eastside UGB expansion area).

Based on planning level estimate tools, this project is estimated at \$5,690,800. This estimate includes the design and construction of a new pedestrian/bicycle overcrossing, new right-of-way, contingency, and engineering costs. Cost estimate details are provided in Appendix D.

A detailed discussion of potential transportation funding sources for this concept is provided in Section 4 of this TSP.

Concept #11 Option B: Install Bicycle/Pedestrian Undercrossing of Railroad from Area East of Banks Schools Complex to Eastside of Banks (UGB Expansion Area)

This concept would be in the same location and provide the same connecting points as in Concept 11 Option A (see Figure 15) but would entail an undercrossing (tunnel) connection rather than an overcrossing (bridge). This concept would necessitate a total closure of the railroad tracks for approximately 2-4 weeks.

The location for this undercrossing is optimal for the same reasons described for Concept 11, Option A.

A detailed evaluation of this concept is provided in Appendix C (*Technical Memorandum 5.2: Banks TSP Alternatives Evaluation Report*). In the aforementioned memorandum this concept is titled "Alternative 11c".

Based on analysis conducted, this concept is recommended as a project to be placed on the City's transportation CIP list as the primary bicycle/pedestrian bridge option. **However**, as previously noted, this concept should only be considered for implementation in the event that the City determines that the longer-term objective of constructing motor vehicle crossings of the railroad with bicycle/pedestrian accommodations (see Concepts 3a and 3b) will occur at an unacceptably late future time with respect to the need for bicycle/pedestrian accommodations across the railroad (to accommodate the population in the eastside UGB expansion area). In the event that the City wanted to pursue a bicycle/pedestrian bridge, but Concept 11 Option B were deemed infeasible due to the construction impacts on the railroad companies, Concept Option A would then be recommended.

Based on planning level estimate tools, this project is estimated at \$4,167,000. This estimate includes the design and construction of a new pedestrian undercrossing of the existing railroad, new right-of-way, contingency, and engineering costs. Cost estimate details are provided in Appendix D.

A detailed discussion of potential transportation funding sources for this concept is provided in Section 4 of this TSP.

Summary of Recommendations to Service Expanded UGB Areas

Planning level cost estimates for recommended project to address the needs identified in the traffic analysis are included in Table 12. Cost estimate details are provided in Appendix D.

TABLE 12
Recommendations to Service Expanded UGB Areas

Recommendation	Estimated Cost (2010\$) (rounded to the nearest \$1,000)
Concept #3b: Construct Overcrossing of Railroad from Sunset Avenue to Eastside ¹	\$8,650,000
Concept #3a: Construct Overcrossing of Railroad from South Arbor Village to Rose Avenue ¹	\$7,083,000
Concept #8: Construct Westside Circulator Road	\$12,673,000
Concept #9: Construct Wilkes Road Extension	\$464,000
Concept #10: Construct Eastside Circulator Road	\$4,441,000
Concept #11 Option B: Construct Bicycle/Pedestrian RR Undercrossing ²	\$4,167,000

¹ As noted earlier in this report, the City's preferred option for east-west collector road railroad crossing is to construct at-grade crossings, which, although not currently a feasible option, would be pursued by the City at such point in the future that at-grade railroad crossings become feasible due to changing conditions.

² In the event that the City wanted to pursue a bicycle/pedestrian bridge but Concept 11 Option B were deemed infeasible due to the construction impacts on the railroad companies, Concept 11 Option A would then be recommended

The City should also consider conducting a concept plan for the Eastside UGB expansion area – this would be a comprehensive focused plan to define preferred specific locations for the transportation facility project concepts recommended in this TSP.

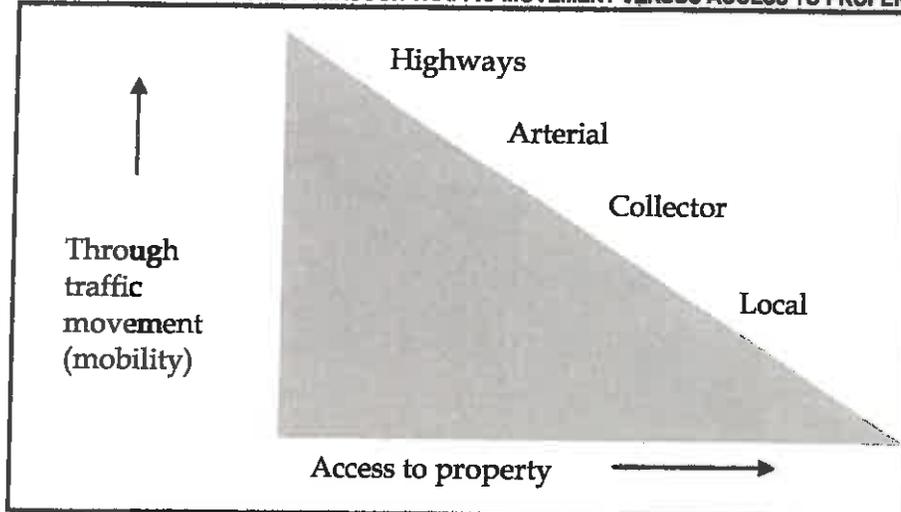
Functional Classification of Roadways

Functional Classifications

The purpose of classifying streets is to provide a balanced transportation system that provides both mobility for all modes at acceptable levels of service and reasonable access to land uses. The functional classification defines a street's role and context in the overall transportation system and how it is used within the community. In addition, the classification defines the appropriate street standards for the facility: desirable roadway width, right-of-way needs, access spacing and pedestrian and bicycle facilities.

Functional classifications balance the need for mobility - getting from point A to point B quickly - with access - the need to get to land uses. As access points along a street increase, mobility tends to decrease because traffic slows to allow for turns on and off the roadway. Drivers generally slow down to make turns off a roadway, and accelerate after making a turn onto a roadway. The differences in travel speed caused by accelerating and decelerating vehicles interrupt the overall flow of traffic. As illustrated in Figure 16, functional classifications balance mobility with access.

FIGURE 16: THE BALANCE OF THROUGH TRAFFIC MOVEMENT VERSUS ACCESS TO PROPERTY



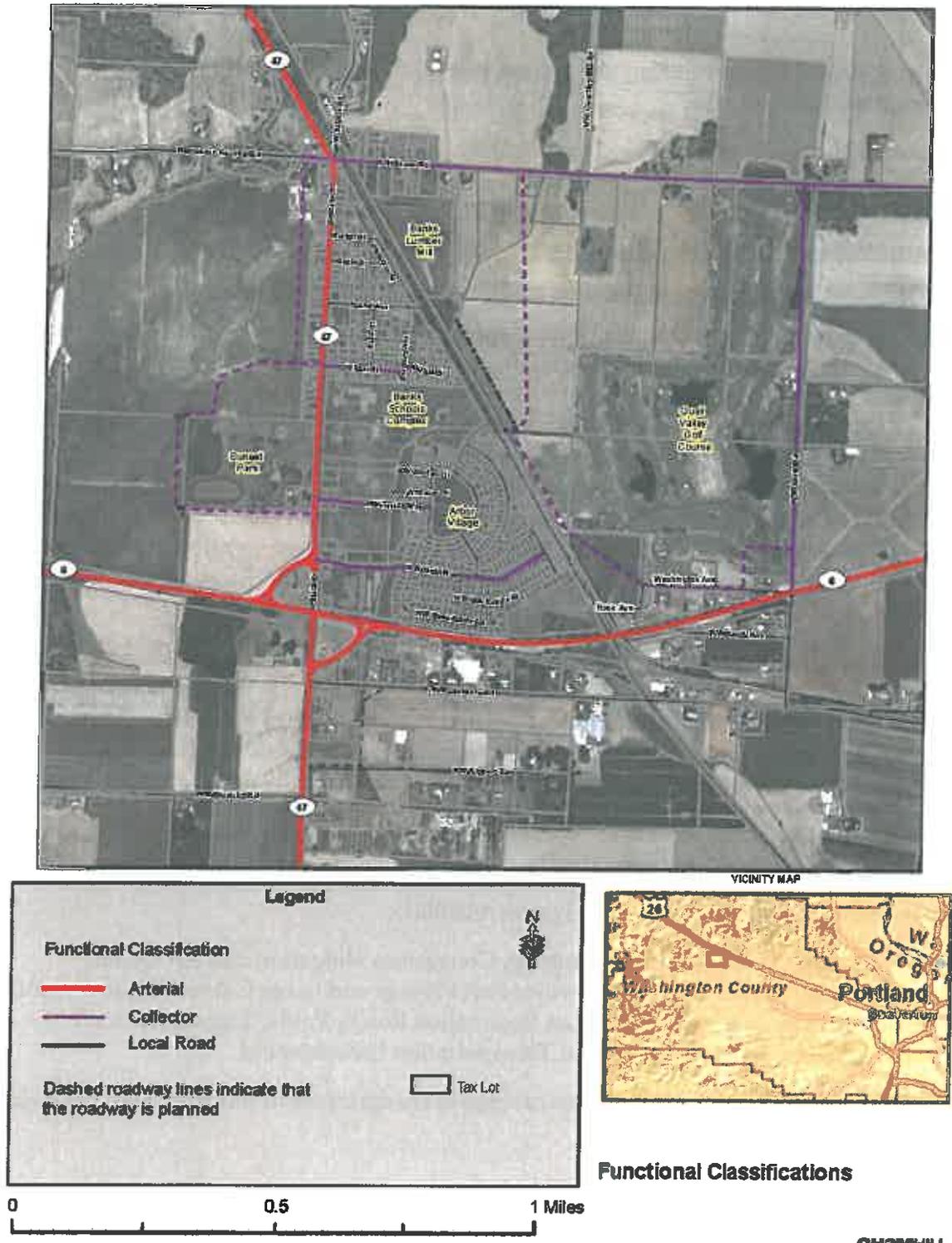
Since functional classifications define the role of a roadway in the transportation system and overall community, those roadways that have a greater emphasis on mobility, highways and arterials, limit the number of access points to provide for better traffic flow. Retrofitting an existing system of streets to meet design standards can be impracticable. In such cases, deficiencies in the system may be defined instead through other means such as safety analysis, future traffic demand analysis, bicycle and pedestrian needs analysis, and public input. Design standards aid in defining potential improvements, but alone do not prompt improvement on existing roadways.

The 1999 Banks Transportation Network Plan (TNP) established a functional classification for Banks that included arterial streets, collector streets, and local streets. The proposed functional classification map for streets in Banks is shown in Figure 17. Any street not designated as an arterial or collector street is considered a local street. The recommended

changes to the existing functional classification defined in the 1999 TNP are summarized below.

- Oak Way is upgraded from a local street to a collector
- Trellis Way is upgraded from a local street to a collector
- Wilkes Street is upgraded from a local street to a collector
- Aerts Road is upgraded from a local street to a collector

FIGURE 17: FUNCTIONAL CLASSIFICATIONS



4 IMPLEMENTATION

A variety of local and state funding sources can be explored to help fund the recommendations in this plan.

Further research should be conducted to ensure the applicability of these funding sources for the projects recommended in this report.

State Administered Funding Sources

State Transportation Improvement Program (STIP)

The STIP is the primary programming document that identifies transportation priorities for federal and state funding in Oregon. The STIP provides a schedule and identifies funding for projects throughout the state. The STIP lists projects that are planned for construction during a four-year period. Projects that are included in the STIP are considered “regionally significant” and have been given a high priority through planning efforts and by the relevant area commissions on transportation (ACT). The STIP has five major programs: modernization, safety, preservation, bridge, and operations – and fifteen specific programs from which projects can receive funding. All federally funded transportation projects and programs, and all state and locally funded projects that are deemed “regionally significant” must be included in the STIP.

Transportation projects in the STIP are generally categorized into the five major programs referenced above, plus a sixth “other,” or “special projects” category. Recommended transportation capital improvement projects related to state facilities may fall within two categories: Operations Projects and Special Programs. The STIP states that the applicable uses under each of these projects are as follows:

- **Modernization:** Capital projects that lead to increased highway system capacity.
- **Operations:** System management and improvements that lead to more efficient and safer traffic operations and greater system reliability.
- **Special Programs:** Bicycle and Pedestrian, Congestion Mitigation and Air Quality Improvement, Federal Lands Highways, Fish Passage and Large Culvert Improvement, Immediate Opportunity Fund, Indian Reservation Roads, Public Transit, Railroad Crossing Safety, Scenic Byways, and Transportation Enhancement.

The funding programs under these three categories are described in more detail in the pages that follow.

Modernization

The 2010-2013 Draft STIP states that projects funded under this section are capital highway improvements that lead to increased system capacity. Increased capacity can be accomplished by either adding additional lanes, constructing new highways, or other system improvements. Strong competition exists for funding through the STIP Modernization Program as the need for funding such projects greatly outweighs the funds

available. Projects are awarded funding through this program by the applicable ODOT Region.

Operations

The 2010-2013 Draft STIP states that projects funded under this section “improve the efficiency of the transportation system through the replacement of aging infrastructure and the deployment of technology that allows the existing system to meet increased demands.” Applicable projects may be listed within four sub-categories: (1) Intelligent Transportation Systems (ITS); (2) Signs, Signals, and Illumination; (3) Slides and Rockfalls and; (4) Transportation Demand Management (TDM).

- **Signs, Signals and Illumination Program** – The Signs, Signals and Illumination program provides funding for the replacement of equipment that has reached the end of its useful life. This program also provides limited funding for new or upgraded signals at problem intersections.

Special Programs

ODOT also provides funding to a number of special programs. This section describes the programs that are applicable to recommended projects for the City of Banks.

- **ODOT Bicycle and Pedestrian Program** – The ODOT Pedestrian and Bicycle Grant Program provides funding to cities, counties and ODOT regional and district offices through a competitive process. Eligible projects are related to the design and construction of pedestrian and bicycle facilities within the public right-of-way. The application process occurs every two years with applications for the 2012-2013 cycle beginning in 2010 and applications for the 2014-15 cycle beginning in 2012. Every biennium, the program awards approximately \$5 million. A local match is expected for projects that receive this grant.

The bicycle and pedestrian recommendations located within the public right-of-way would be eligible for this program. A grant application could be submitted as early as 2010 for receipt of funds in the 2012-2013 funding cycle.

- **Transportation Enhancement Program** – Oregon’s Transportation Enhancement (TE) program provides federal highway funds for project that strengthen the cultural, aesthetic, or environmental value of our transportation system. TE activities are funded through a required state set aside from STP funds of 10%, or the amount set aside in FY 2005, whichever is greater. Projects fall into four main categories: Bicycle and Pedestrian; Historic Preservation; Landscaping and Scenic Beautification; and Environmental Mitigation. The intent of the program is to fund special or additional activities not normally required on a highway or transportation project.

Since the project’s inception in 1992, 190 projects of approximately \$97 million have been funded in Oregon through the TE program. For fiscal years 2008-2011 the Program will have \$6.5 million per year for competitive selection, and \$2 million per year for the TE Discretionary Account. Awards for the 2012-2013 bienniums were approved by the Oregon Transportation Commission in August 2009; applications for the 2014-2015 bienniums start in April 2010. The funds are provided through reimbursement, not

grants. Participation requires matching funds from the project sponsor, at a minimum of 10.27 percent. All projects must have a direct relationship to surface transportation.

This is a competitive grant application process facilitated by ODOT that awards funding to local governments on an annual basis. The TE Advisory Committee awards the grants based on a project's technical merit and local support. The committee also considers the TE "focus areas" for the year and the connection to other transportation projects.

- **Immediate Opportunity Fund** – This fund provides funding for the construction and improvement of streets and roads that are crucial to support site-specific economic development projects. ODOT manages this fund on a case-by-case basis in cooperation with the Oregon Economic and Community Development Department.

The fund's use is discretionary, and it can only be used when other sources of financial support are unavailable or insufficient. Its use is also restricted to circumstances where an actual transportation problem exists and where funds are needed to identify or retain employers that provide primary industry employment in a community. A match of at least 50 percent of the total fund requested is expected from project's applicants.

- **Railroad Crossing Safety Program** – This program is administered through the Rail Division of ODOT. They allocate funding by prioritizing projects based on an accident prediction model. The Division also has limited funds for discretionary projects that improve safety at railroad-highway grade crossings.

Special Transportation Fund

The Special Transportation Fund (STF) was created by the Oregon Legislature in 1985. It is funded through a cigarette tax and ODOT Transportation Operating Funds. This state funding source provides support for special transportation services that benefit seniors and individuals with disabilities. Seventy-five percent of the funding is allocated to designated counties, transit districts and Indian tribal governments proportional to population. The remaining 25 percent of the funds are distributed through a discretionary grant program called the Public Transportation Discretionary Grant Program.

STF funds can be used to create, maintain, or expand systems that serve seniors or individuals with disabilities, as well as plan and develop new services for those currently not served. ODOT's STF Guidebook provides a list of TSM and TDM examples of previous fund use (http://www.oregon.gov/ODOT/PT/PROGRAMS/stf_program.shtml).

Special City Allotment Grant

The Special City Allotment Grant was created by the Oregon Legislature. The legislature mandated that a \$1 million be set aside for cities with populations less than 5,000. Half of the funds for this grant come from the cities' share of the state gas tax and half of the funds come from ODOT's portion of the State Highway Fund. The maximum grant allocation is \$25,000. Half of the grant can be allocated to the city up front and the second half is provided when the project is completed.

County Funding Sources

Transportation Development Tax (TDT) program

The Transportation Development Tax (TDT) is a countywide tax applied to all new developments to help pay for the transportation infrastructure needed throughout the County to accommodate growth. Ultimately, the TDT is designed to generate enough revenue to construct approximately 28% of the growth-related transportation infrastructure called for in the county and cities' 20-year Transportation Plans. The TDT is not a property tax. New development is required to pay the tax when a building permit or occupancy permit is issued. The TDT tax rate is uniform throughout the County, and the amount of tax due is based on the estimated traffic generated by each development. TDT taxes are assessed and collected by the Washington County Current Planning Division in unincorporated Washington County, and by the cities within city limits. Remodeling, temporary uses, and state and federal government buildings are exempt from the TDT. All TDT revenue will be dedicated to funding transportation improvements designed to accommodate growth, such as:

- Improvements to Arterial and Collector roadways, including sidewalks and bike lanes;
- Transit capital projects (such as bus shelters).

Developers may be eligible to receive credits against their TDT tax for the value of certain developer-constructed improvements built as conditions of development approval. To be eligible for TDT credits, the improvements must be to an arterial or collector roadway or on the adopted Project List ([link to list/map](#)). There are a number of additional limitations on TDT credit eligibility, and developers are strongly advised to consult with appropriate city or county staff regarding credit eligibility prior to investing in an improvement.

Major Streets Transportation Improvement Program (MSTIP)

The MSTIP is a tax that originated in 1986 as a short term levy put forth by Washington County to fund various construction projects throughout the area. Two more MSTIP measures were approved by voters, in 1989 and 1995. In 1997 voters approved Measure 50, which included provisions to reduce the MSTIP tax rate to 90 percent of the 1995 level and then combine it with Washington County's permanent fixed property tax rate.

Local Funding Sources

City Budget

Many of the state and federal grants identified in this funding section require a local match. This is the most appropriate use of city budget funding as it can leverage larger pools of money available for identified projects.

Exactions

With developer exactions, an improvement is paid for or built by the developer to City standards and then deeded to the City as a condition for development approval. Developer exactions and contributions can pay for portions of roads in, adjacent to, or through new developments. The City of Banks currently requires that all new subdivisions build sidewalks as a developer exaction.

Local Improvement District

Local Improvement Districts (LIDs) are created by property owners within a specified area to raise revenues for constructing street improvements within the same district. LIDs may be used to assess property owners for improvements that benefit properties. The LID can be a larger geographic area than the area with the actual street improvements but all landowners will need to understand advantage to entering into the LID. Property owners typically enter into LIDs because they see economic or personal advantages to the improvements.

Assessments are secured by property liens. The formation of LID districts is governed by state law and local jurisdictional development codes. LID revenues can be used solely for capital costs.

Urban Renewal Areas

Banks does not currently have any urban renewal areas. To establish an Urban Renewal Areas (URAs) the City of Banks would need to create an Urban Renewal Agency. Once this agency was formed, it could identify blighted areas within the city. In the selected area, tax-increment financing (TIF) could be used to generate urban renewal funds. TIF works by 'freezing' property values at the beginning of an urban renewal plan, and assessing a fee only on the incremental growth in property value observed since the beginning of the urban renewal district plan. The revenues generated within an urban renewal area are used to secure bonds to finance projects and programs within that area.

Local Option Levies

In most taxing districts, voters within an established taxing district, such as a city or a fire district can approve levies for operating purposes or capital projects. A levy can either be established as a set rate or a set dollar amount. For capital projects, a levy cannot last longer than 10 years. Levies must be approved at a November election in an even numbered year or by more than 50 percent of eligible voters (double majority).

General Obligation Bonds

Bonding allows municipal and county governments to finance costs for construction projects by borrowing money and paying it back over time (with interest). Financing

requires smaller regular payments over time compared to paying the full cost at once, but financing increases the total cost by adding interest. General Obligation Bonds are often used to pay for construction of large capital improvements. This method is typically used to fund road improvements that will benefit an entire community. General Obligation Bonds add the cost of the improvement to property taxes over a period of time. Oregon State law states "A city may issue general obligation bonds to finance capital construction or capital improvements upon approval of the electors of the city" (287A.050). Revenue for General Obligation Bonds is collected in property tax billings.

Revenue Bonds

Revenue bonds are paid back with dedicated revenue from a source other than property taxes. Revenues from a Systems Development Charge (Washington County's TDT is a system development charge), Local Improvement District, or other reliable revenue streams can be used. The City of Banks has not used revenue bonds backed by Systems Development Charges, as this funding source is variable based on the amount of development. Revenue bonds are typically used to fund improvements that primarily benefit the people who provide the revenue through fees and assessments.

APPENDIX A
PLAN AND CODE AMENDMENTS

APPENDIX B

**TRANSPORTATION SYSTEM NEEDS,
OPPORTUNITIES, AND CONSTRAINTS**

APPENDIX C
ALTERNATIVES EVALUATION

APPENDIX D
PLANNING-LEVEL COST ESTIMATES