

Transportation System Plan

Baker City Transportation System Plan

Baker City, Oregon

June 2013

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PREFACE

The Baker City Transportation System Plan (TSP) was guided by the Project Management Team (PMT) made up of Baker City staff with input from the Oregon Department of Transportation (ODOT). The project was also guided by a Technical Advisory Committee (TAC), the Baker City Planning Commission (PC), and the Baker City City Council (CC). The TAC provided guidance on technical aspects of the TSP and consisted of staff members from ODOT and Baker County. In addition, city Stakeholders provided guidance and ensured that the needs of the people of Baker City were incorporated into the TSP.

The PMT, TAC, and project stakeholders devoted a substantial amount of time and effort to the development of the Baker City Transportation System Plan (TSP) Update, and their participation was instrumental in the development of this document. The Consultant Team and PMT believe that the city's future transportation system will be better because of their commitment.

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Section 1
Introduction

INTRODUCTION

Overview

Baker City, in conjunction with the Oregon Department of Transportation (ODOT), initiated an update of the City's Transportation System Plan (TSP) in 2012. The TSP update will guide the management and implementation of the transportation facilities, policies, and programs, within Baker City over the next 20 years. This plan is reflective of the community's vision, while remaining consistent with state and other local plans and policies. The plan also provides the necessary elements for adoption as the transportation element of the City's Comprehensive Plan. In addition, the plan provides ODOT and Baker County with recommendations that can be incorporated into their respective planning efforts.

Plan Background and Regulatory Context

The Oregon Revised Statutes require that the TSP be based on the current Comprehensive Plan land uses and that it provide for a transportation system that accommodates the expected growth in population and employment that will result from implementation of the land use plan. Development of this TSP was guided by Oregon Revised Statute (ORS) 197.712 and the Department of Land Conservation and Development (DLCD) administrative rule known as the Transportation Planning Rule (TPR, OAR 660-012).

The TPR requires that alternative travel modes be given consideration along with the automobile, and that reasonable effort be applied to the development and enhancement of the alternative modes in providing the future transportation system. In addition, the TPR requires that local jurisdictions adopt land use and subdivision ordinance amendments to protect transportation facilities and to provide bicycle and pedestrian facilities between residential, commercial, and employment/institutional areas. It is further required that local communities coordinate their respective plans with the applicable county, regional, and state transportation plans.

Planning Work Foundation

The development of the Baker City TSP began with a review of the local and statewide plans and policies that guide land use and transportation planning in the City. In addition to the previously adopted transportation plan (1996), the TSP incorporates the following other transportation planning efforts:

- Baker City
 - Comprehensive Plan
 - Development Code
- Baker County

- Comprehensive Plan
- Transportation Plan
- State
 - Oregon Highway Plan
 - OAR Chapter 660 division 012
 - OAR Chapter 734 division 051

Public Involvement

The TSP planning process provided the citizens of Baker City with the opportunity to identify their vision and priorities for the future transportation system within the city. The planning process was guided by a Technical Advisory Committee (TAC) and a project stakeholder committee. The TAC was comprised of key stakeholder agencies, including the Baker City, Public Works, and Engineering Departments, the Baker City planning department, and the Oregon Department of Transportation Planning and Rail Divisions. The project stakeholder committee was comprised of community leaders, local business owners and residents.

Members of the PMT, TAC, and stakeholders reviewed the technical aspects of the TSP. They held four joint meetings that focused on all aspects of the TSP development, including the evaluation of existing deficiencies and forecast needs; the selection of transportation options; the presentation of the draft TSP and funding plan; and the presentation of recommended ordinance amendments.

In addition to the established advisory committees, two community workshops were held at key junctures in the process to gather public input regarding transportation needs and priorities. This input was incorporated in the options analysis and final plan development. Finally, the draft plans were discussed with the Planning Commission and City Council at work sessions and at public hearings. Details of the public involvement process are provided in Volume 2, Appendix "A".

Public involvement for developing and reviewing the Baker City TSP was achieved through:

- Two (2) public forums in the form of a public open house
- Targeted outreach of local elementary and high school students
- Joint Planning Commission (PC)/City Council (CC) work sessions, advertised open to the public;
- Public hearings (PC) and (CC) as part of the adoption process.

Organization of the TSP

The Baker City TSP is comprised of a main document (Volume 1) and one volume of technical appendices (Volume 2).

Volume 1 is the Baker City TSP. It is organized into the following sections.

- Section 1 – Introduction (current section)
- Section 2 – Active Transportation Plan (Bicycle and Pedestrian)
- Section 3 – Intersection and Roadway Plan
- Section 4 – Transit Plan
- Section 5 – Other Modes Plan (Air, Rail, Water, Pipeline)
- Section 6 – Funding and Implementation

Volume 2 (under separate cover) contains the technical memorandums prepared during the development of the Baker City TSP including the detailed data and analysis that informed the final plan.

Section 2
Active Transportation Plan

ACTIVE TRANSPORTATION PLAN

The active transportation plan presents those projects focused on facilitating pedestrian and bicycle travel. The projects were identified based on input received through the Alternatives Analysis process and input from the PMT, TAC, and general public and were prioritized based on their proximity to schools, the underlying roadway's functional classification, and overall benefit to the transportation network.

PLANNED PEDESTRIAN NETWORK

Pedestrian facilities include sidewalks, multi-use paths, and neighborhood route designations. The street design standards ensure that pedestrian facilities are provided in conjunction with all new or substantially reconstructed public streets. For existing roadways without sidewalks, the inclusion of sidewalks will be required with any redevelopment of properties or with significant improvements in the roadways.

The planned pedestrian network for Baker City is detailed in Table 2-1 and shown in Figure 2-1. This network improves the connection between residential neighborhoods and commercial, social and educational locations around Baker City. Table 2-1 details the planned pedestrian projects and planning level cost estimates.

Table 2-1: Planned Pedestrian Network

(Project #) Name	Description	Reason for the Project	Priority (Timeline)	Cost ¹
(P1) 11 th Street/ Hillcrest Drive/ 9 th Street	Sidewalk infill and wayfinding from Indiana Avenue to Auburn Avenue	Gap in existing pedestrian network	Near-term	\$342,000
(P2) 4 th Street	Sidewalk infill and wayfinding from Colorado Avenue to Ohio Avenue, Neighborhood Route	Improving pedestrian network, gap in existing pedestrian network	Near-term/ Development Driven	\$113,000
(P3) Tracy Street & 5 th Street	Sidewalk infill and wayfinding from 9 th to OR 7, Neighborhood Route	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$290,000
(P4) 5 th Street	Add sidewalks from C Street to E Street and from F Street to Sports Complex	Improving pedestrian network	Near-term	\$98,000
(P5) Auburn Avenue	Add sidewalks from Main Street to Birch Street; enhanced pedestrian crossings at Resort Street and Main Street	Gap in existing pedestrian network	Near-term	\$288,000
(P6) Baker Street	Sidewalk infill and wayfinding from Birch Street to Swim Center/Skate Park	Gap in existing pedestrian network	Near-term	\$25,000
(P7) Birch Street	Sidewalk infill and wayfinding from Auburn Avenue to Campbell Street, Neighborhood Route, enhanced pedestrian crossing at Campbell Street	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$218,000
(P8) Broadway Street	Sidewalk infill and wayfinding from 21 st Street to 10 th Street; pedestrian crossing opportunities at 10 th Street; project will require coordination with ODOT Rail Division at rail crossing	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$477,000

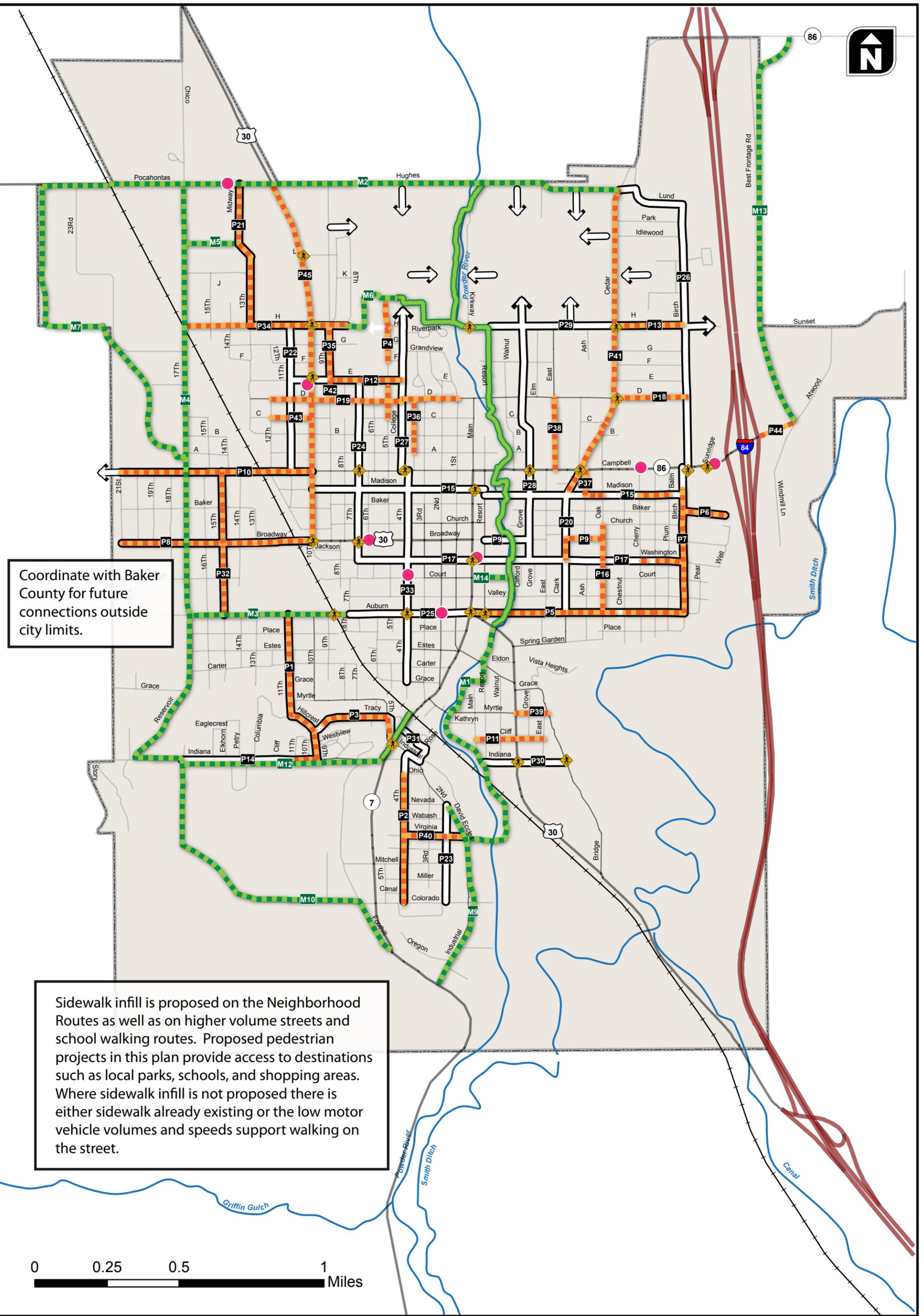
(Project #) Name	Description	Reason for the Project	Priority (Timeline)	Cost ¹
(P9) Broadway Street	Add sidewalks from Clark Street to Oak Street	Improving pedestrian network	Near-term/ Development Driven	\$31,000
	Neighborhood Route from Grove Street to Resort Street	Improving pedestrian network	Near-term	\$1,000
(P10) Campbell Street	Sidewalk infill and wayfinding from 21 st Street to 10 th Street; project will require coordination with ODOT Rail Division at rail crossing	Gap in existing pedestrian network	Near-term	\$354,000
(P11) Cliff Street	Add sidewalks from Main Street to East Street	Improving pedestrian network	Near-term	\$100,000
(P12) E Street	Sidewalk infill and wayfinding from 11 th Street to College, Neighborhood Route	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$176,000
(P13) H Street (east)	Sidewalk infill and wayfinding from Cedar Street to Birch Street, Neighborhood Route, enhanced pedestrian crossing at Cedar Street	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$125,000
(P14) Indiana Avenue	Sidewalk infill and wayfinding from E Fairway to 9 th Street, Neighborhood Route	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$83,000
(P15) Madison Street	Sidewalk infill from Plum Street to Cherry Street and from Oak Street to Ash Street	Improving pedestrian network, gap in existing pedestrian network	Development Driven	\$114,000
	Neighborhood Route from 10 th Street to Birch Street	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$9,000
(P16) Oak Street	Add sidewalks from Church Street to Auburn Avenue	Improving pedestrian network	Near-term/ Development Driven	\$78,000
(P17) Washington Street	Sidewalk infill from Cherry Street to Birch Street	Improving pedestrian network, gap in existing pedestrian network	Development Driven	\$54,000
	Neighborhood route from 7 th Street to Birch Street; pedestrian crossing investigation at Main Street	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$8,000
(P18) D Street	Add sidewalks from Cedar Street to Birch Street	Improving pedestrian network	Near-term	\$114,000
(P19) D Street	Add sidewalks from 1 st Street to 12 th Street	Improving pedestrian network	Near-term	\$327,000
(P20) Clark Street	Sidewalk infill and wayfinding from Washington Avenue to Broadway Street and Madison Street to Campbell Street	Improving pedestrian network, gap in existing pedestrian network	Development Driven	\$147,000
	Neighborhood route from Campbell Street to Auburn Avenue	Improving pedestrian network, gap in existing pedestrian network	Near term	\$6,000
(P21) Midway Drive & 13 th Street	Sidewalk infill and wayfinding on 13 th Street and Midway from H Street to Hughes Lane	Gap in existing pedestrian network	Near-term	\$369,000
(P22) 11 th Street	Neighborhood route from H Street to Campbell Street	Gap in existing pedestrian network	Long-term	\$4,000
(P23) 2 nd Street	Neighborhood route from David Eccles Road to Colorado Avenue	Gap in existing pedestrian network	Long-term	\$3,000
(P24) 7 th Street	Neighborhood route from E Street to Washington Street, pedestrian crossing investigation at Broadway Street	Gap in existing pedestrian network	Long-term	\$5,000
(P25) Auburn Avenue	Add wayfinding signage from Resort Street to Railroad Crossing; pedestrian crossing investigation at 4 th Street	Improving pedestrian network navigation	Long-term	\$19,000
(P26) Birch Street/Lund Lane	Neighborhood route from Campbell Street to Cedar Street, Fill in paving gaps	Gap in existing pedestrian network	Long-term	\$406,000

(Project #) Name	Description	Reason for the Project	Priority (Timeline)	Cost ¹
(P27) College Street	Neighborhood route from H Street to Campbell Street	Gap in existing pedestrian network	Long-term	\$4,000
(P28) Grove Street	Neighborhood route from H Street to Washington Street; opportunities for crossing improvements should be examined at Campbell Street	Gap in existing pedestrian network	Long-term	\$7,000
(P29) H Street (east)	Neighborhood route from Kirkway Drive to Cedar Street	Gap in existing pedestrian network	Long-term	\$196,000
(P30) Indiana Avenue (east)	Neighborhood route from Resort Street to Bridge Street; pedestrian crossing investigation at Elm Street and Bridge Street	Gap in existing pedestrian network	Long-term	\$2,000
(P31) David Eccles Road/Rose Street/Orchard Street	Neighborhood route along Rose Street (from David Eccles Road to Orchard Street) and along Orchard Street (from Rose Street to OR 7)	Gap in existing pedestrian network	Long-term	\$19,000
(P32) 15 th Street	Sidewalk infill and wayfinding from Auburn Street to Campbell Street	Improving pedestrian network, gap in existing pedestrian network	Long-term	\$374,000
(P33) 4 th Street	Proposed neighborhood route from Campbell Street to Grace Street; pedestrian crossing enhancements at Auburn Avenue	Gap in existing pedestrian network	Long-term	\$6,000
(P34) H Street (west)	Add sidewalks from 17 th Street to 8 th Street; pedestrian crossing investigation at 10 th Street	Improving pedestrian network, gap in existing pedestrian network	Long-term	\$408,000
(P35) 9 th Street	Sidewalk infill and wayfinding from E Street to H Street	Gap in existing pedestrian network	Long-term	\$100,000
(P36) 4 th Street	Add sidewalks from A Street to D Street	Improving pedestrian network	Long-term	\$95,000
(P37) Ash Street	Add sidewalks from Madison Street to Campbell Street	Improving pedestrian network	Long-term	\$28,000
(P38) East Street	Add sidewalks from Campbell Street to D Street	Improving pedestrian network	Long-term	\$171,000
(P39) Myrtle Street	Add sidewalks from US 30 to Bridge Street	Improving pedestrian network	Long-term	\$57,000
(P40) Virginia Avenue	Sidewalk infill and wayfinding from 4 th Street to David Eccles Road	Gap in existing pedestrian network	Long-term	\$171,000
(P41) Cedar Street	Add sidewalks from Campbell Street to Hughes Lane; pedestrian crossing opportunities at D Street and H Street	Improving pedestrian network	Long-term	\$754,000
(P42) 9 th Street	Add sidewalks from D Street to E Street	Improving pedestrian network	Long-term	\$6,000
(P43) C Street	Add sidewalks from 12 th Street to 10 th Street	Improving pedestrian network	Long-term	\$71,000
(P44) Campbell Street	Add sidewalks on north side of Campbell Street from I-5 ramps to future extension of Best Frontage Road.	Improving pedestrian network	Long-term	\$38,000
(P45) 10 th Street	Sidewalk infill from Broadway Street to Hughes Lane/Pocahontas Road	Improving pedestrian network	Long-term	\$316,000
Sub-Totals				
Near-Term Priority (0-5 Years)				\$3,632,000
Longer-Term Priority (5-20 Years)				\$3,260,000
Development Driven ²				\$315,000
Total				\$7,207,000

Notes:

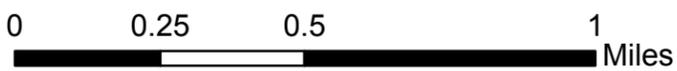
¹Planning level cost estimates are for construction and engineering.

²Refers to projects that prioritized exclusively as “Development Driven”



Coordinate with Baker County for future connections outside city limits.

Sidewalk infill is proposed on the Neighborhood Routes as well as on higher volume streets and school walking routes. Proposed pedestrian projects in this plan provide access to destinations such as local parks, schools, and shopping areas. Where sidewalk infill is not proposed there is either sidewalk already existing or the low motor vehicle volumes and speeds support walking on the street.



	Proposed Neighborhood Route (Wayfinding Only)		Crossing Improvement (pedestrian focus)
	Proposed Neighborhood Route (Sidewalk Infill and Wayfinding)		Existing Transit Stop
	Proposed Sidewalk		Proposed Multi-Use Path
	Proposed Multi-Use Path		Existing Multi-Use Path
	Planned Future Connection		Urban Growth Boundary
			Pedestrian Project
			Multi-Use Path Project

Planned Pedestrian Projects



Figure 2-1

PLANNED BICYCLE NETWORK

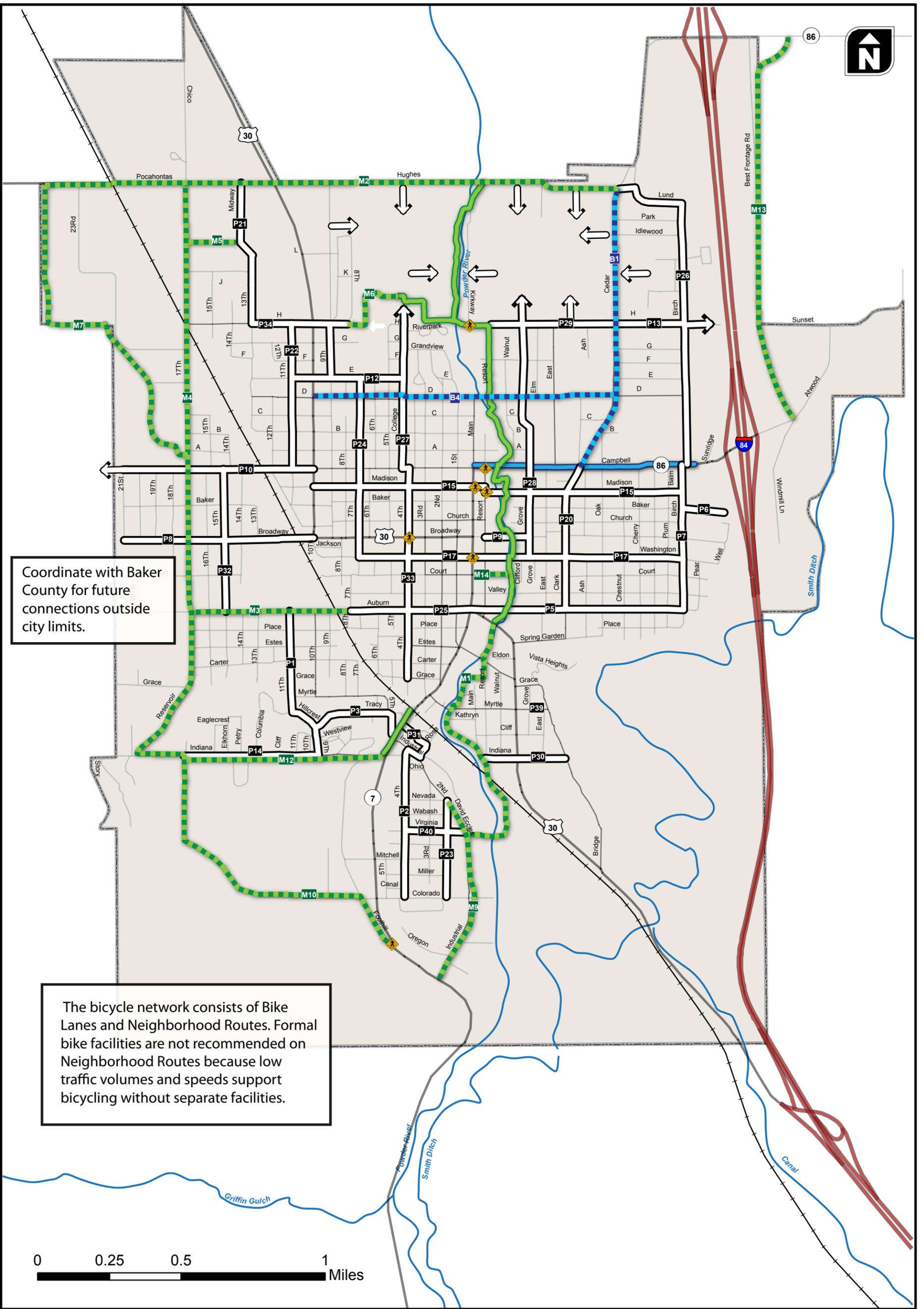
The bicycle plan is intended to establish a network of bicycle lanes and routes that connect the City’s bicycle generators and provide a safe and effective bicycle travel system. The planned bicycle network for Baker City is detailed in Table 2-2 and shown in Figure 2-2. This network increases route options and connectivity to serve bicyclists with a wide range of skill sets and comfort levels (i.e. to serve novice to experienced riders).

Table 2-2: Planned Bicycle Network

(Project #) Name	Description	Reason for the Project	Priority (Timeline)	Cost ¹
(B1) Cedar Street	Upgrade bike lanes (signing and striping) from Campbell Street to Hughes Lane	Gap in existing bicycle network	Near-term	\$35,000
(B2) 10 th Street (US 30)	See Table 3-5, 10 th Street Refinement Study for further information – project to be considered based on outcome of refinement study	-	-	See Project R11
(B3) Broadway Street (US 30)	See Table 3-5, Broadway Street Refinement Study for further information – project to be considered based on outcome of refinement study	-	-	See Project R12
(B4) D Street	Add bike lanes from 10 th Street to Cedar Street	Gap in existing bicycle network	Near-term	\$57,000
Sub-Totals				
Near-Term Priority (0-5 Years)				\$92,000
Longer-Term Priority (5-20 Years)				-
Total				\$92,000

Notes:

¹Planning level cost estimates are for construction and engineering. Cost estimates assume striping and signing changes occur within the existing pavement width (i.e., no additional construction or road expansion is required).



Coordinate with Baker County for future connections outside city limits.

The bicycle network consists of Bike Lanes and Neighborhood Routes. Formal bike facilities are not recommended on Neighborhood Routes because low traffic volumes and speeds support bicycling without separate facilities.

	Proposed Neighborhood Route		Bicycle Project
	Proposed Bike Lane		Multi-Use Path Project
	Proposed Multi-Use Path		Existing Bike Lane
	Planned Future Connection		Existing Multi-Use Path
	Crossing Improvement (bicyclist focus)		Urban Growth Boundary

Planned Bicycle Projects and Multi-Use Paths



Figure 2-2

PLANNED MULTI-USE PATH NETWORK

The multi-use path network is intended to establish a network of multi-use paths that serve the City’s recreational needs as well as enhance the overall network of bicycle and pedestrian facilities. The planned multi-use path network for Baker City is detailed in Table 2-3 and shown in Figure 2-2. This network increases route options and connectivity to serve bicyclists with a wide range of skill sets and comfort levels (i.e. to serve novice to experienced riders).

Table 2-3: Planned Multi-Use Path Network

(Project #) Name	Description	Reason for the Project	Priority (Timeline)	Cost ¹
(M1) Leo Adler Pathway Extension	Add multi-use path from Bridge Street to David Eccles Road; project will require coordination with ODOT Rail Division at rail crossing	Promote recreational and non-motorized travel	Near-term	\$627,000
(M2) Pocahontas/Hughes	Add multi-use path from Settlers Loop to Cedar Street	Promote recreational and non-motorized travel	Long-term	\$1,169,000
(M3) Auburn	Add multi-use path from 17 th Street to Railroad tracks; project will require coordination with ODOT Rail Division at rail crossing	Promote recreational and non-motorized travel	Near-term	\$309,000
(M4) 17 th Ave Trail	Add multi-use path from Indiana Avenue to Pocahontas Road; project will require coordination with ODOT Rail Division at rail crossing	Promote recreational and non-motorized travel	Near-term	\$1,294,000
(M5) Hospital Connector	Add multi-use path from 17 th Street to Midway Drive	Promote recreational and non-motorized travel	Near-term	\$116,000
(M6) Sports Complex Connector	Add multi-use path from H Street to Sports Complex	Promote recreational and non-motorized travel	Near-term	\$168,000
(M7) Settler’s Trail	Add multi-use path from Pocahontas Road to 17 th Street	Promote recreational and non-motorized travel	Long-term	\$746,000
(M8) Cemetery Connector²	Add multi-use path from Bridge Street to Proposed Smith Ditch Trail	Promote recreational and non-motorized travel	Long-term	\$213,000
(M9) David Eccles Rd	Add multi-use path from 2 nd Street to OR 7	Promote recreational and non-motorized travel	Long-term	\$378,000
(M10) Golf Course Trail	Add multi-use path from Indiana Avenue to OR 7	Promote recreational and non-motorized travel	Long-term	\$691,000
(M11) Smith Ditch	Add multi-use path from Cherry Street to OR 7; project will require coordination with ODOT Rail Division at rail crossing	Promote recreational and non-motorized travel	Long-term	\$2,089,000
(M12) Indiana Avenue	Add multi-use path from 17 th Street to OR 7	Promote recreational and non-motorized travel	Near-term	\$259,000
(M13) Best Frontage Road	Add multi-use path from OR 86 to Atwood Road	Promote recreational and non-motorized travel	Near-term	Already Funded
(M14) Central Park Connector	Add multi-use path from Resort Street at Court Street to the LAMP Connector	Promote recreational and non-motorized travel	Near-term	\$122,000
Sub-Totals				
Near-Term Priority (0-5 Years)				\$2,514,000
Longer-Term Priority (5-20 Years)				\$3,365,000
Total				\$5,879,000

Notes:

¹Planning level cost estimates are for construction and engineering. Cost estimates assume striping and signing changes occur within the existing pavement width (i.e., no additional construction or road expansion is required).

²Strikethrough text reflects changes made to the project list during Planning Commission and City Council hearings.

Section 3
Intersection and Roadway Plan

INTERSECTION AND ROADWAY PLAN

Baker City's intersection and roadway plan provides guidance on how to best facilitate roadway travel over the next 20 years as well as identifying key elements of a future vision of transportation facilities serving the city. This plan is based on the identified existing and anticipated future operational and circulation needs.

FUNCTIONAL CLASSIFICATION PLAN

The purpose of classifying roadways is to create a mechanism through which a balanced transportation system can be developed that facilitates mobility for all modes of transportation as well as access to adjacent land uses. A roadway's functional classification determines its intended purpose, the amount and character of traffic it is expected to carry, the degree to which non-auto travel is emphasized, and the roadway's design standards and overall management approach.

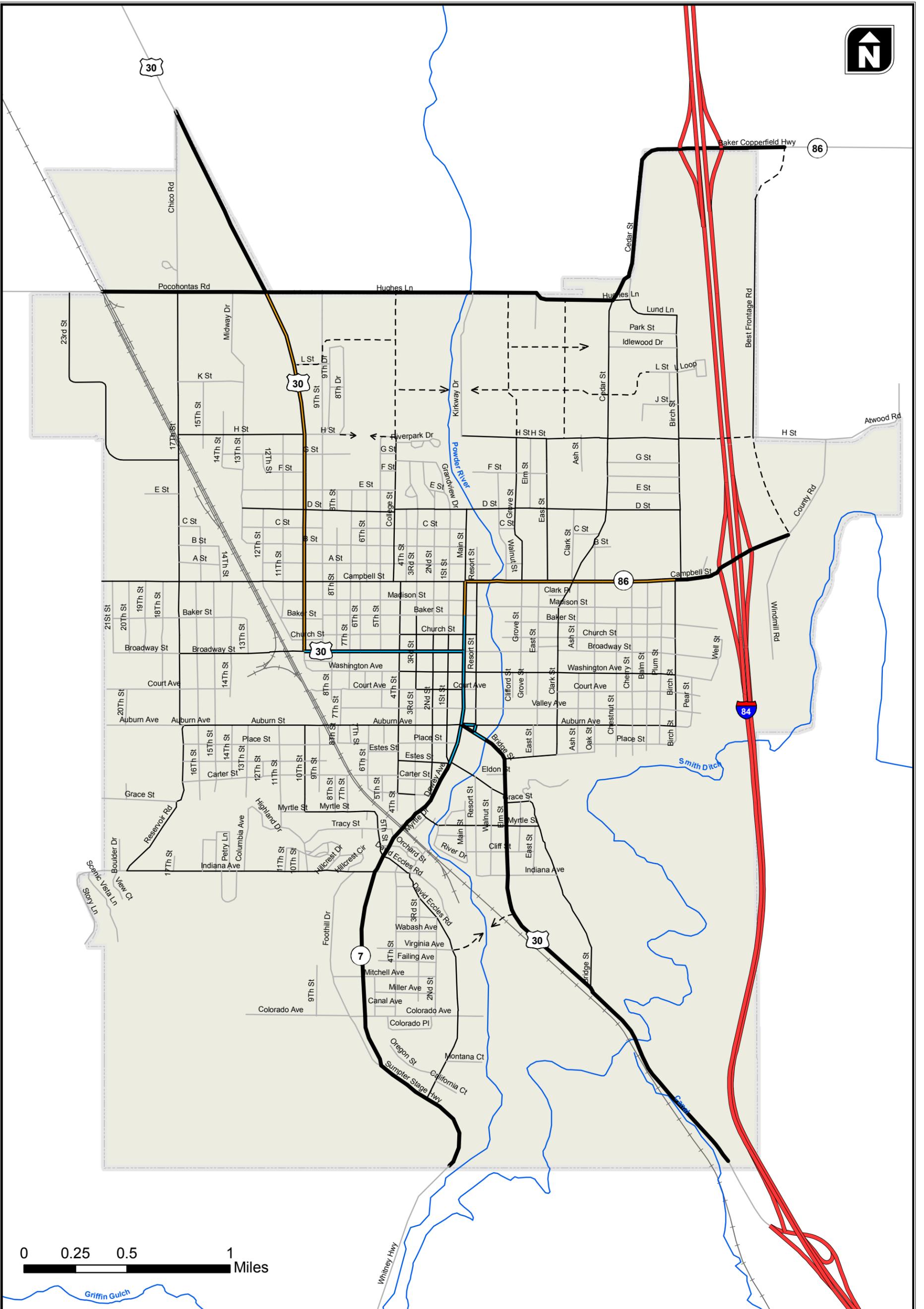
The functional classification plan for Baker City is shown in Figure 3-1. The functional classification plan incorporates three functional categories: arterials, collectors, and local streets¹ as defined below.

Arterials

Arterials are roadways that are primarily intended to serve traffic entering and leaving the urban area. While arterials may provide access to adjacent land, that function is subordinate to the mobility service provided to major traffic movements. Arterials also serve local pedestrian and/or bicycle activities, which should be accommodated in the arterial streetscape.

Within the arterial classification is recognition of special overlay designations for specific state highway segments within Baker City. These overlay designations would allow for the incorporation of the Special Transportation Area (STA) and Urban Business Area (UBA) designations applied at the state level. As the state highway network occurs on multiple roadways within Baker City, Table 3-1 identifies the different STA and UBA overlay designations by individual roadway segments.

¹ The new roadway alignments shown on the plan should be considered as conceptual. The end points of the streets are generally fixed where they make essential connections to other roadways while the alignments between intersections may vary depending on design requirements and right-of-way available at the time a given facility is constructed.



-  Interstate
-  Arterial
-  Future Arterial
-  Special Transportation Area (Arterial)
-  Urban Business Area (Arterial)
-  Collector
-  Future Collector
-  Local

Functional Classification Plan

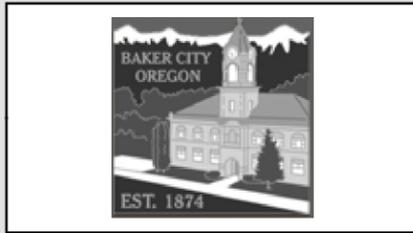


Figure 3-1

Table 3-1: Baker City STA and UBA Overlay Designations

Roadway	From (milepost)	To (milepost)
STA Designation for US 30 (La Grande-Baker Highway)		
Broadway Street	10 th Street (51.23)	Main Street (51.79)
Main Street	Broadway Street (51.79)	Auburn Avenue (52.04)
Auburn Avenue/Bridge Street	Main Street (52.04)	Powder River Bridge (52.13)
UBA Designation for US 30 (La Grande-Baker Highway)		
10th Street	Hughes Lane (49.97)	Broadway Street (51.79)
STA Designation for OR 86 (Baker-Copperfield Highway)		
Main Street	Broadway Street (0.00)	Baker Street (0.13)
UBA Designation for OR 86 (Baker-Copperfield Highway)		
Main Street	Baker Street (0.12)	Campbell Street (0.24)
Campbell Street	Main Street (0.12)	Birch Street (0.98)
STA Designation for OR 7 (Whitney Highway)		
Main Street/Dewey Avenue	Estes Avenue (50.83)	Auburn Avenue (50.96)

Collectors

Collector streets generally facilitate the movement of traffic within the city’s urban areas. Collectors provide for circulation and mobility for all users of the system. Collectors carry lower volumes than arterials and typically have two-lane cross-sections with on-street parking. They serve as the primary routes into residential neighborhoods. Although they carry higher volumes than local streets, they are intended to provide direct access to adjacent land rather than serving through traffic.

Local Streets

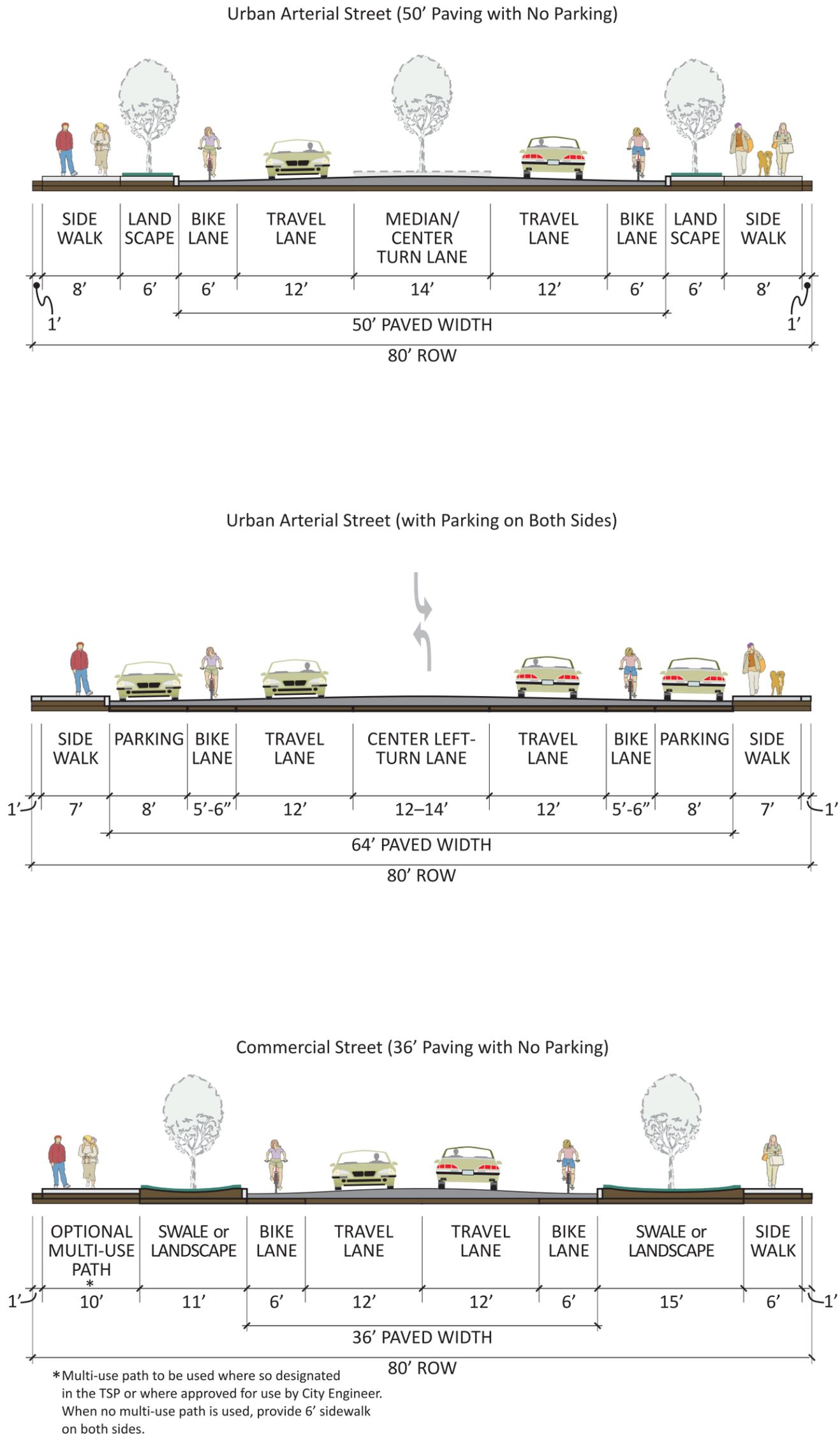
Local streets are primarily intended to provide access to abutting land uses. Local street facilities offer the lowest level of mobility and consequently tend to be low-speed facilities. As such, local streets should primarily serve passenger cars, pedestrians, and bicyclists. Heavy truck traffic is discouraged. On street parking is common. Sidewalks are provided, though the relatively low travel speeds and traffic volumes allow bicycles to share the vehicle travel lanes.

STREET DESIGN STANDARDS

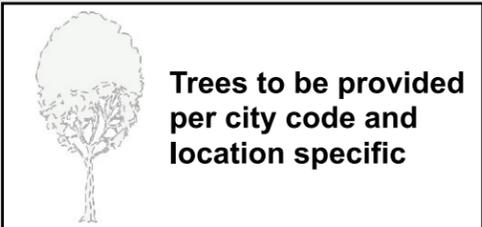
Street design standards support the functional and operational needs of streets such as travel volume, capacity, operating speeds, and safety. The standards also are established to accommodate pedestrian and bicycle travel modes. They are necessary to ensure that the system of streets, as it develops, will be capable of safely and efficiently serving the traveling public while also accommodating the orderly development of adjacent property.

The street design standards are shown as cross sections in Figures 3-2 through 3-4. The cross sections are intended to be used for planning purposes for new road construction, as well as for those locations where it is physically and economically feasible to improve existing streets. Detailed design elements,

such as cross-slopes, are not shown in the figures. Also, additional width for turn lanes may be needed at specific intersections based on an engineering investigation; these are not shown in the street design standards. The standards shown are intended to define typical cross-sections of streets between intersections.



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Roadway Cross Sections

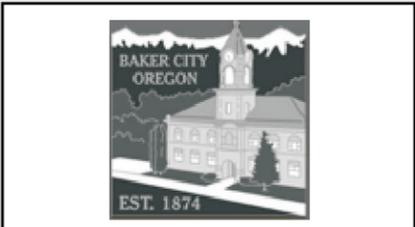
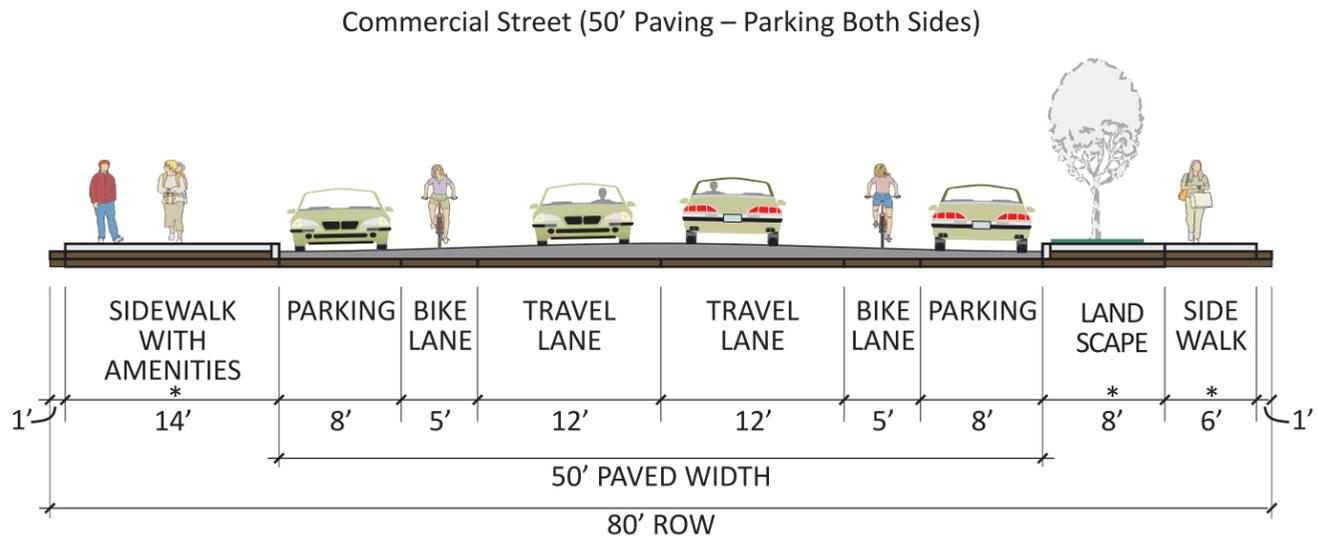
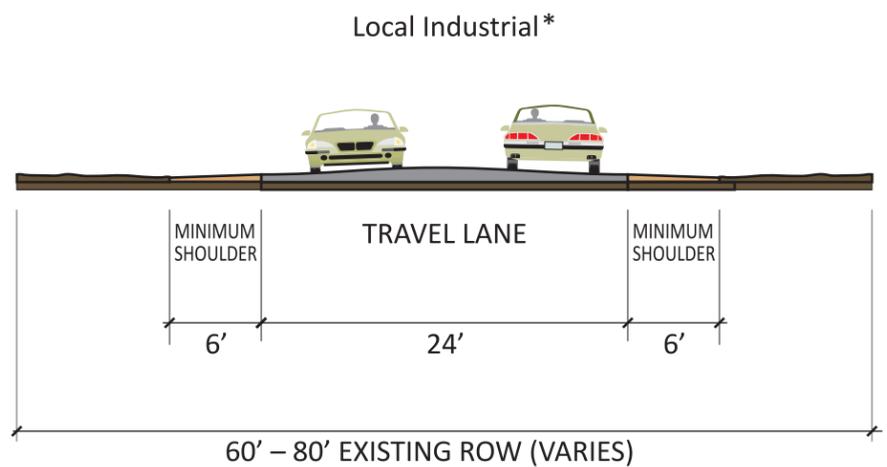


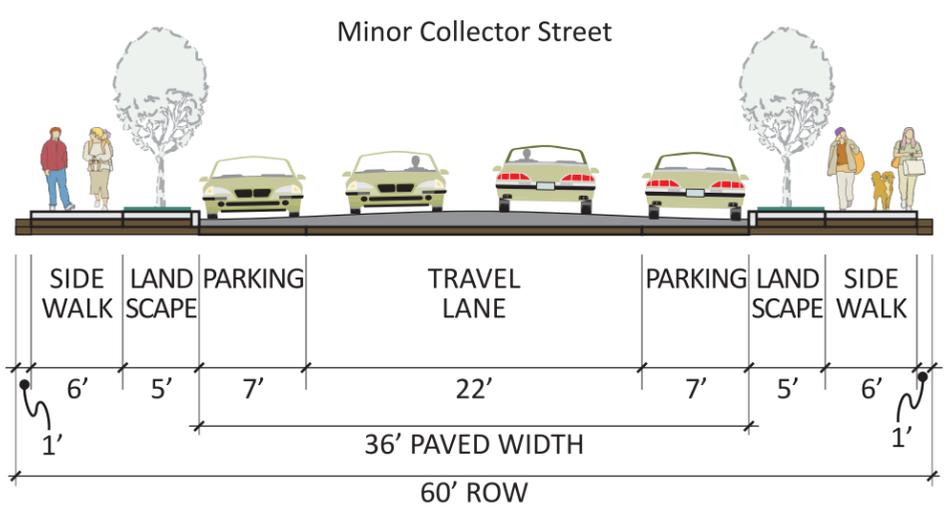
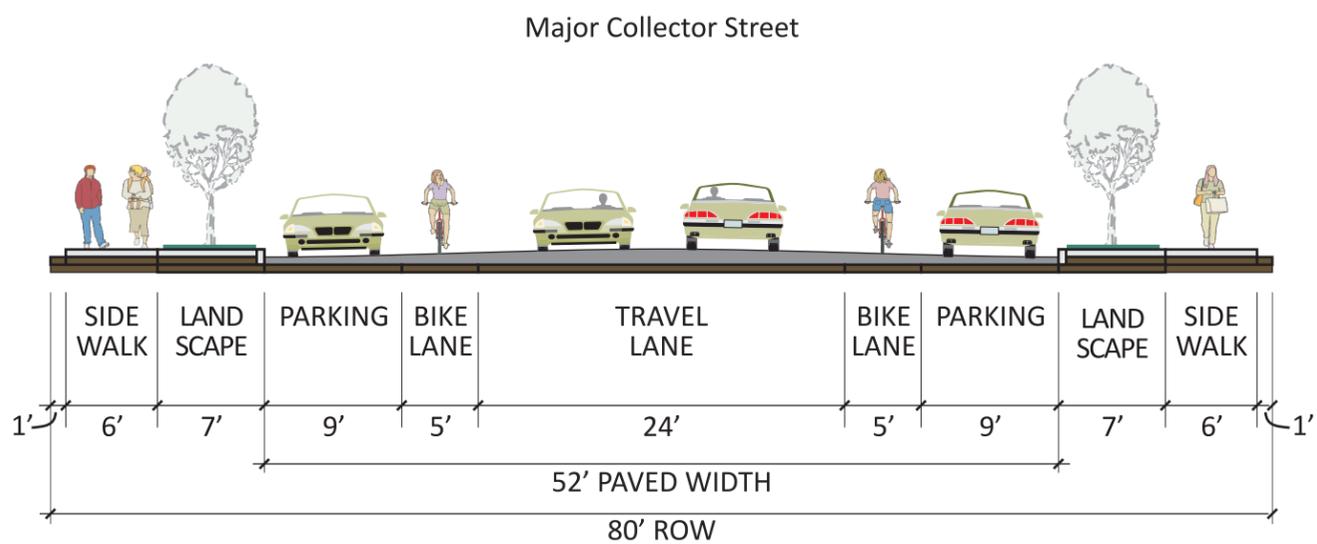
Figure 3-2



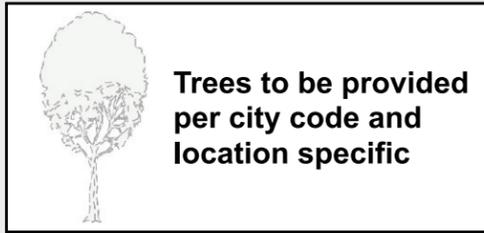
* Design may utilize either setback sidewalks with a landscape strip or a continuous 14' sidewalk with a 4' – 5" wide strip for amenities (lighting, trees, benches, etc.) adjacent to curb. The Central Commercial Zone will have 14' sidewalks with amenities and the General Commercial Zones shall have the landscape strip and sidewalks.



* Section to be used only for industrial streets that are not designated as collectors or arterials.



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Roadway Cross Sections

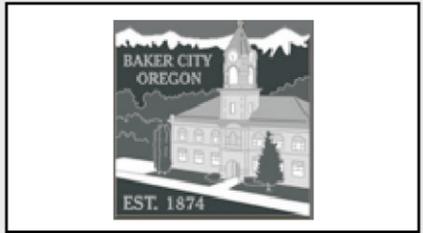
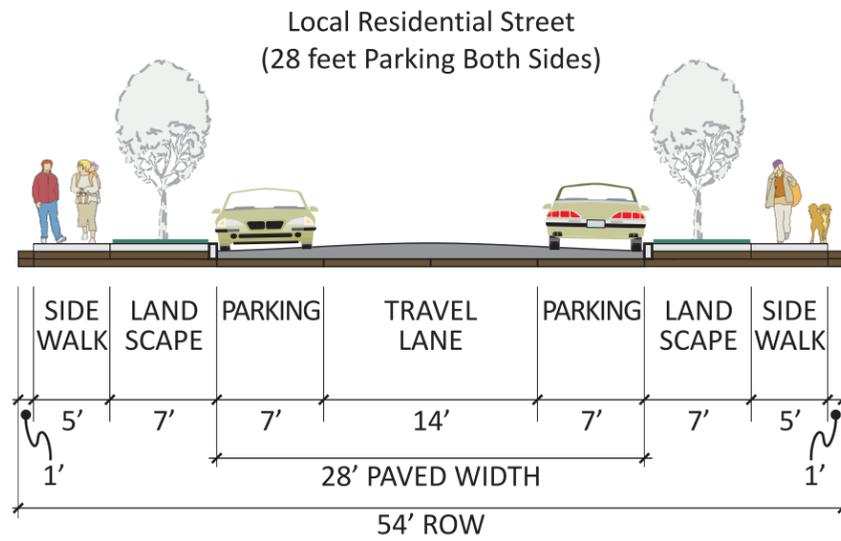
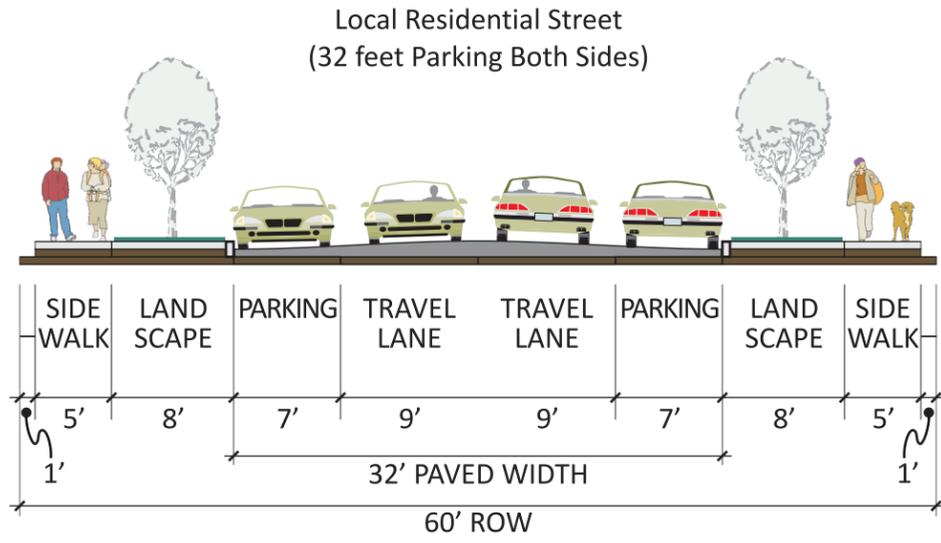
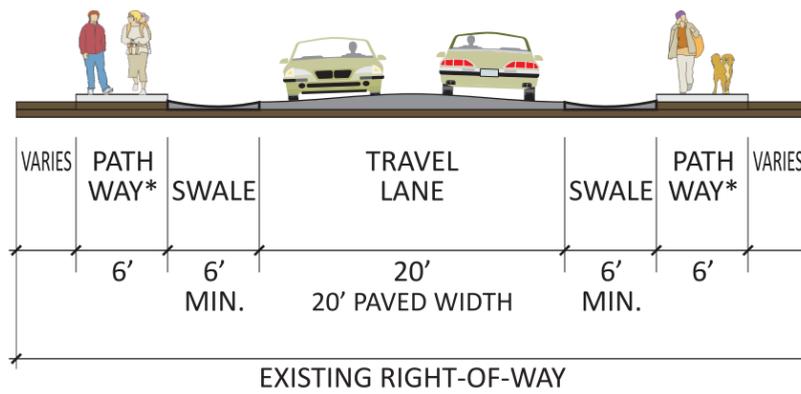


Figure 3-3

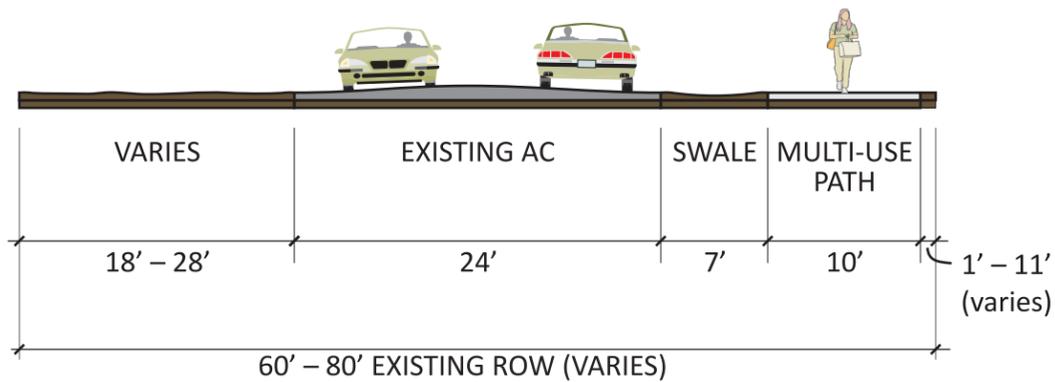


Improvement Option for Existing Unpaved Local Residential Streets

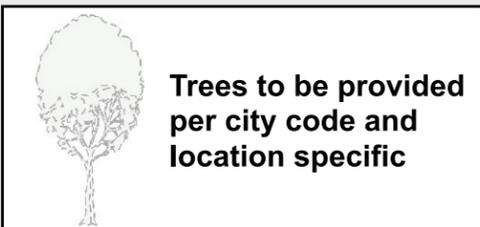


* Pathway may be constructed on one side or both sides of street. Pathway shall be hard surface (concrete, asphalt or equivalent).

Multi-Use Path Street Option



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Roadway Cross Sections

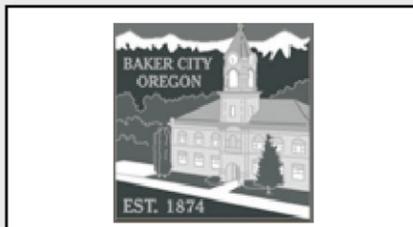


Figure 3-4

ACCESS MANAGEMENT

Access management is the systematic implementation and control of the locations, spacing, design, and operations of driveways, median opening, interchanges, roundabouts, and street connections to a roadway. It involves roadway design applications, such as median treatments and auxiliary lanes, and the appropriate spacing and design of signalized intersections. Access management standards vary depending on the functional classification and purpose of a given roadway. Roadways on the higher end of the functional classification system (i.e. arterials and collectors) have higher spacing standards to facilitate movement of through traffic, while facilities such as local streets allow more closely spaced access points to facilitate access to land uses.

ODOT has legal authority to regulate access points along the state highway segments within the city's urban growth boundary. Baker City and Baker County independently manage access on all other arterial, collector and local streets.

The Oregon Transportation Planning Rule defines access management as a set of measures regulating access to streets, roads, and highways, from public roads and private driveways. The TPR requires that new connections to arterials and state highways be consistent with designated access management categories. This TSP includes an access management plan that maintains and enhances the integrity (capacity, safety, and level of service) of the city's streets.

Access management standards vary depending on the functional classification and purpose of a given roadway. Roadways on the higher end of the functional classification system (i.e., arterials and collectors) tend to have higher spacing standards, while local streets allow more closely spaced access points. These standards apply to new development or redevelopment. Existing accesses are allowed to remain as long as the land use does not change and no safety problem is posed. As a result, access management is a long-term process in which the desired access spacing to a street slowly evolves over time as redevelopment occurs.

In implementing access management standards, parcels cannot be land-locked; they must have some way of accessing the public street system. This may mean allowing closer access spacing than would otherwise be allowed or implementation of shared access with a neighboring parcel, where possible. Where a property has frontage on two roadways, access on the roadway of lower classification is preferred, all other things being equal. The following discussion presents the hierarchical access management system for roadways in Baker City.

ODOT Access Management Standards

The OHP specifies an access management classification system for state facilities based on its highway classification system. Table 3-2 summarizes ODOT's current access management standards for all state highway segments within Baker City.

Table 3-2: Access Spacing Standards on State Highways

Posted Speed	Spacing Standards	
	AADT ¹ of 5,000 Vehicles or Less	AADT ¹ of More Than 5,000 Vehicles
US 30 (La Grande-Baker Highway) and OR 86 (Baker-Copperfield Highway) – District Highways		
55 mph and higher	650	700
50 mph	425	550
40 & 45 mph	360	500
30 & 35 mph	250	350
≤25 mph	150	250
OR 7 (Whitney Highway) – Regional Highway		
55 mph and higher	650	990
50 mph	425	830
40 & 45 mph	360	500
30 & 35 mph	250	350
≤25 mph	150	250

Note: Spacing standards obtained from the latest edition of the OHP. Consult the OHP for updates and addenda.
¹AADT = Annual Average Daily Traffic

City Roadway Access Standards

Table 3-3 identifies the minimum public street intersection and private access spacing standards for the city’s roadway network as they relate to new development and redevelopment. County facilities within the city’s UGB should also be planned and constructed in accordance with these street design standards.

Table 3-3: City Access Spacing Standards

Functional Classification	Public Street	Private Drive	Signal Spacing ¹	Median Control ²
Arterial	¼ mile	300-500 feet	½ mile	Partial
Collector	500 feet	100 feet	¼-1/2 mile	None
Local Street	200-400 feet	Access to each lot	N/A	None

Note: Access spacing standards identified in the Oregon Highway Plan supersede this table on all state highways unless the state highway segment has an STA or UBS overlay designation.

¹Generally, signals should be spaced to minimize delay and disruptions to through traffic. Signals may be spaced at intervals closer than those shown to optimize capacity and safety.

² Partial median control allows well defined and channelized breaks in the physical median barrier between intersections. Use of physical median barriers can be interspersed with segments on continuous left-turn lane, or, if demand is light, no median at all.

Variations to Access Spacing Standards

Access spacing variations may be provided to parcels whose highway/street frontage, topography, or location would otherwise preclude issuance of a conforming permit and would either have no reasonable access or cannot obtain reasonable alternate access to the public road system. In such a situation, a conditional access permit may be issued by ODOT or Baker City, as appropriate, for a

connection to a property that cannot be accessed in a manner that is consistent with the spacing standards. The permit can carry a condition that the access may be closed at such time that reasonable access becomes available to a local public street. The approval condition might also require a given land owner to work in cooperation with adjacent land owners to provide either joint access points, front and rear cross-over easements, or a rear access upon future redevelopment.

The requirements for obtaining a deviation from ODOT's minimum spacing standards are documented in OAR 734-051. For streets under the City's jurisdiction, the City may reduce the access spacing standards, at the discretion of the City Engineer, if the following conditions exist:

- Joint access driveways and cross access easements are provided in accordance with the standards;
- The site plan incorporates a unified access and circulation system in accordance with the standards;
- The property owner enters into a written agreement with Baker City that pre-existing connections on the site will be closed and eliminated after construction of each side of the joint use driveway; and/or,
- The proposed access plan for redevelopment properties moves in the direction of the spacing standards.

The City Engineer may modify or waive the access spacing standards for streets under the City's jurisdiction subject to Section 3.1.200 of the Baker City Development Code.

Access Management Measures

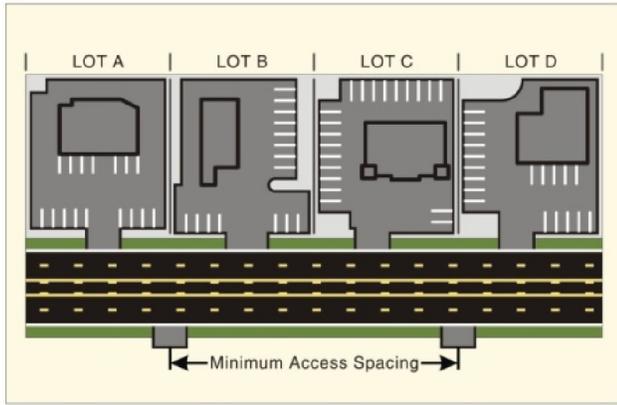
From an operational perspective, access management measures limit the number of redundant access points along roadways. This enhances roadway capacity and benefits circulation. Enforcement of the access spacing standards should be complemented with provision of alternative access points. Purchasing right-of-way and closing driveways without a parallel road system and/or other local access could seriously affect the viability of the impacted properties. Thus, if an access management approach is taken, alternative access should be developed to avoid "land-locking" a given property.

As part of every land use action, Baker City will evaluate the potential need for conditioning a given development proposal with the following items in order to maintain and/or improve traffic operations and safety along the arterial and collector roadways.

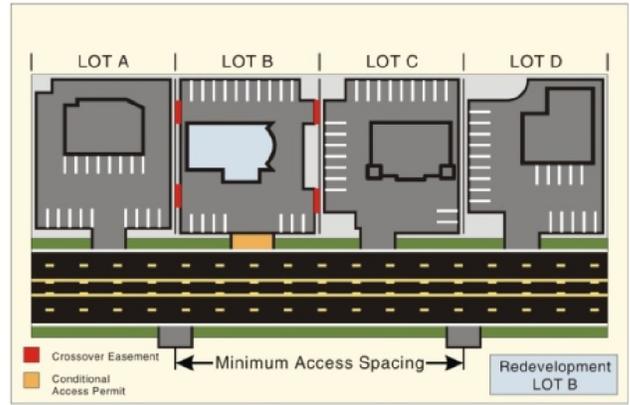
- Provision of crossover easements on all compatible parcels (considering topography, access, and land use) to facilitate future access between adjoining parcels.
- Issuance of conditional access permits to developments having proposed access points that do not meet the designated access spacing policy and/or have the ability to align with opposing driveways.

-
- Right-of-way dedications to facilitate the future planned roadway system in the vicinity of proposed developments.
 - Half-street improvements (sidewalks, curb and gutter, bike lanes/paths, and/or travel lanes) along site frontages that do not have full build-out improvements in place at the time of development.

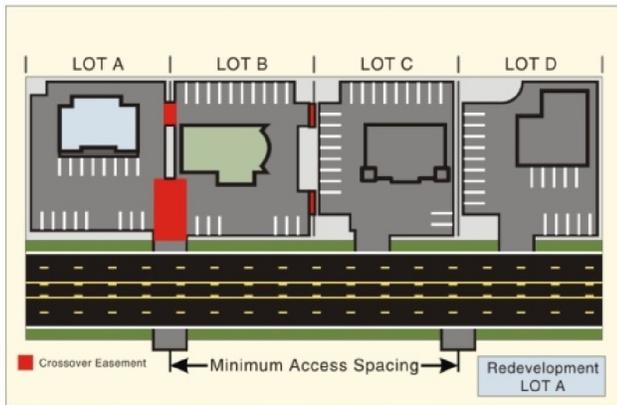
Figure 3-5 illustrates the application of cross-over easements and conditional access permits over time to achieve access management objectives. The individual steps are described in Table 3-4. As illustrated in the figure and supporting table, using these guidelines, all driveways along the highways can eventually move in the overall direction of the access spacing standards as development and redevelopment occur along a given street.



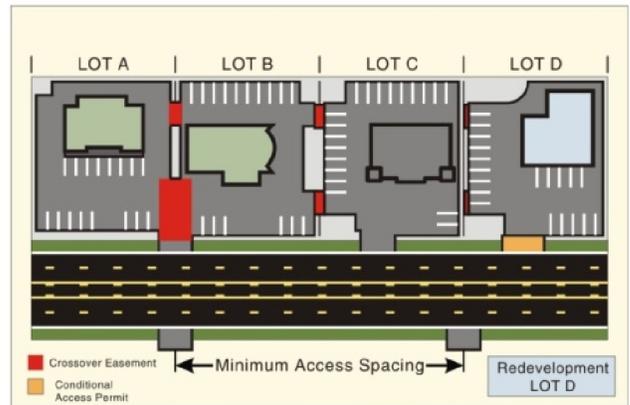
EXISTING CONDITIONS



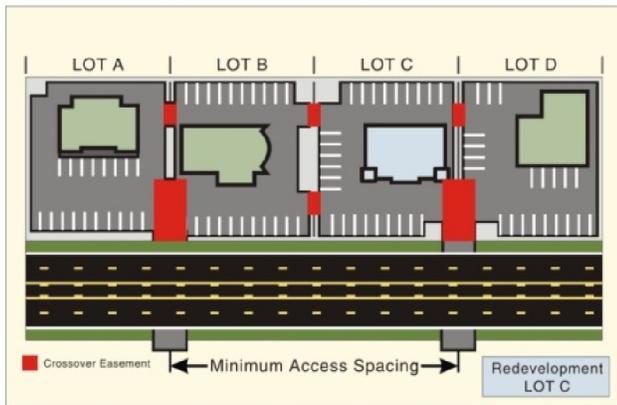
STEP 1
REDEVELOPMENT OF LOT B



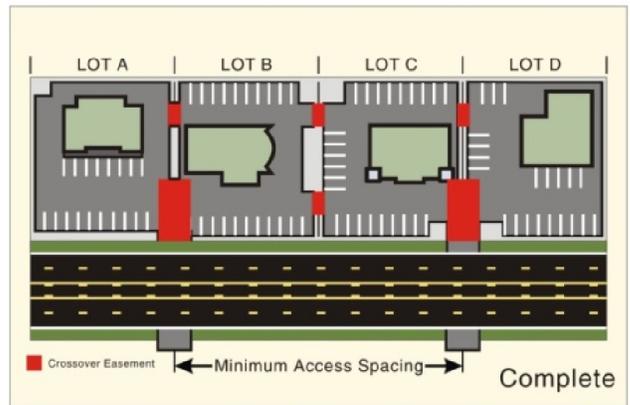
STEP 2



STEP 3



STEP 4



STEP 5

Complete

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Example of Crossover Easement/Consolidation Conditional Access Process

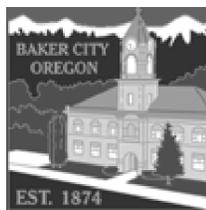


Figure 3-5

Table 3-4: Example of Crossover Easement/Consolidation – Conditional Access Process

Step	Process
1	EXISTING – Currently Lots A, B, C, and D have site-access driveways that neither meet the access spacing criteria of 500 feet nor align with driveways or access points on the opposite side of the highway. Under these conditions motorists are into situations of potential conflict (conflicting left turns) with opposing traffic. Additionally, the number of side-street (or site-access driveway) intersections decreases the operation and safety of the highway
2	REDEVELOPMENT OF LOT B – At the time that Lot B redevelops, the City would review the proposed site plan and make recommendations to ensure that the site could promote future crossover or consolidated access. Next, the City would issue conditional permits for the development to provide crossover easements with Lots A and C, and ODOT/City would grant a conditional access permit to the lot. After evaluating the land use action, ODOT/City would determine that LOT B does not have either alternative access, nor can an access point be aligned with an opposing access point, nor can the available lot frontage provide an access point that meets the access spacing criteria set forth for segment of highway.
3	REDEVELOPMENT OF LOT A – At the time Lot A redevelops, the City/ODOT would undertake the same review process as with the redevelopment of LOT B (see Step 2); however, under this scenario ODOT and the City would use the previously obtained cross-over easement at Lot B consolidate the access points of Lots A and B. ODOT/City would then relocate the conditional access of Lot B to align with the opposing access point and provide an efficient access to both Lots A and B. The consolidation of site-access driveways for Lots A and B will not only reduce the number of driveways accessing the highway, but will also eliminate the conflicting left-turn movements the highway by the alignment with the opposing access point.
4	REDEVELOPMENT OF LOT D – The redevelopment of Lot D will be handled in same manner as the redevelopment of Lot B (see Step 2)
5	REDEVELOPMENT OF LOT C – The redevelopment of Lot C will be reviewed once again to ensure that the site will accommodate crossover and/or consolidated access. Using the crossover agreements with Lots B and D, Lot C would share a consolidated access point with Lot D and will also have alternative frontage access the shared site-access driveway of Lots A and B. By using the crossover agreement and conditional access permit process, the City and ODOT will be able to eliminate another access point and provide the alignment with the opposing access points.
6	COMPLETE – After Lots A, B, C, and D redevelop over time, the number of access points will be reduced and aligned, and the remaining access points will meet the access spacing standard.

TRAFFIC CALMING

Traffic calming elements will be integrated as appropriate into transportation improvement projects. The following traffic calming elements are the City's preferred traffic calming tools to be considered. The measures below can be modified on a case-by-case basis such that they will not prohibit or degrade the City's ability to conduct winter maintenance activities such as snow removal.

Raised Median Islands

Raised median islands provide a protected area in the middle of a crosswalk for pedestrians to stop while crossing the street. The raised median island allows pedestrians to complete a two-stage crossing if needed. The ODOT Traffic Manual states that for state highways a raised median, in combination with a marked crosswalk is desired when average daily traffic (ADT) volumes are greater than 10,000.

Advantages of raised medians include:

- Improves visibility of crossing to approaching motorists;
- Helps slow vehicle speeds by providing a sense of a narrower roadway to motorists;
- Provides a protected place for pedestrians to wait for a gap in traffic;
- Requires shorter gap in traffic for pedestrians to cross the street; and
- Effective for creating a gateway or entry type treatment into an area of high pedestrian activity.

Challenges to implementing raised medians include:

- Raised median must be able to provide at least six-feet of space to accommodate wheel chairs and not streets have sufficient right-of-way; and
- Places a physical barrier in the street and therefore requires distinctive visible attributes such as landscaping and signs.

Raised Crosswalk

A raised crosswalk is raised higher than the surface of the street to give motorists and pedestrians a better view of the crossing area. A raised crosswalk is similar to a speed table marked and signed for pedestrian crossing. Raised crosswalks are not permitted on state highways.

Advantages of a raised crosswalk include:

- Provides better view of pedestrians for motorists;
- Slows vehicle travel speeds; and
- Applicable on arterial and collector streets

Challenges to implementing raised crosswalks include:

- Can be difficult for large trucks, snow plows, and buses to navigate; and
- Requires adequate signing on the approach to inform motorists of raised roadway.

Rectangular Rapid Flashing Beacon

Rectangular Rapid Flashing Beacons, or RRFBs, are user-actuated amber lights that have an irregular flash pattern similar to emergency flashers on police vehicles. These supplemental warning lights are used at unsignalized intersections or mid-block crosswalks to improve safety for pedestrians using a crosswalk. Implementation of RRFBs require meeting minimum design criteria and are not permitted on facilities over 45 miles per hour.

Advantages of using rectangular rapid flashing beacons include:

- Typically increases yielding behavior of motorists;
- May be used at unsignalized intersections and mid-block crossing locations;
- May be installed on two-lane or multilane roadways;
- Low cost alternatives to traffic signals and hybrid signals.

Challenges to implementing rectangular rapid flashing beacons include:

- Flashing beacons do not force motorists to yield;
- Pedestrians may not activate flashing lights.

Pedestrian Hybrid Signal

The pedestrian hybrid signal is a pedestrian-actuated hybrid signal that stops traffic on the mainline to provide a protected crossing for pedestrians at an unsignalized location. Warrants for the installation of pedestrian-actuated hybrid signal are based on the number of pedestrian crossings per hour (PPH), vehicles per hour on the roadway, and the length of the crosswalk. Thresholds are available for two types of roadways: locations where prevailing speeds are above 35 mph and locations where prevailing speeds are below 35 mph.

Advantages of implementing pedestrian hybrid signals include:

- Produce a high rate of motorists yielding to pedestrians; and
- Drivers experience less delay at hybrid signals compared to other signalized intersections.

Challenges to implementing pedestrian hybrid signals include:

- Expensive compared to other crossing treatments; and

- Requires pedestrian activation.

Planting Strips

Planting strips narrow the width of streets by moving curbs away from sidewalks to create space for native street trees and ground cover and/or decorative rock.

Advantages for planting strips include:

- Narrow the roadway and adding planting strips by moving existing curbs into the street will create a buffer between roadways and sidewalks while still retaining enough roadway width for traffic and all existing on-street parking; and
- Storm water can be readily integrated into the design and construction of planting strips through green street treatments.

Challenges associated with implementing planting strips include:

- Construction costs particularly for retrofits can be relatively high, because it may require modifications to the existing drainage system.
- Maintenance responsibility is typically turned over to the adjacent property owner(s).
- In residential areas, the choice of landscaping and the quality of its maintenance varies in quality from home owner to home owner.
- Opportunities to implement this treatment are constrained by the location, design of existing storm drains, and location of low elevations where storm water can collect.

ROADWAY AND INTERSECTION IMPROVEMENT PLAN

This section outlines Baker City’s specific roadway and intersection improvement projects for the next 20 years. In addition, a generalized timeline for implementation has been identified for each project. The sequencing plan presented is not detailed to the point of a schedule identifying specific years when infrastructure should be constructed, but rather prioritizes projects to be developed within near-term (0-5 year) and long-term (5-20 year) horizons. In this manner, implementation of identified system improvements has been staged to spread investment in the city’s transportation infrastructure over the life of the plan.

Roadway and Intersection Refinement Studies

Table 3-5 summarizes the roadway and intersection refinement plan studies that have been identified to more fully determine the level and extent of the near- or long-term improvement projects.

Table 3-5: Roadway and Intersection Refinement Plan Studies

(Study #) Study Name	Refinement Plan Description	Priority (Timeline)	Cost Estimate ¹
(R11) 10 th Street Travel Way Refinement Study	In conjunction with ODOT and local property/business owners, conduct a detailed refinement plan of the 10 th Street corridor from Hughes Lane to Broadway Street. The purpose of the plan would be a more thorough investigation of potential modifications to the 10 th Street travel way cross section.	Near-Term	\$15,000
(R12) Broadway Street Travel Way Refinement Study	In conjunction with ODOT and local property/business owners, conduct a detailed study of the Broadway Street corridor from 10 th Street to Main Street. The purpose of the refinement plan would be a more thorough investigation of potential modifications to the Broadway Street travel way cross section	Near-Term	\$15,000
(R13) Main Street Refinement Study	An integrated land use and transportation plan that evaluates and prioritizes goals for revitalization on the primary downtown streets supporting commercial business. This will include opportunities for accommodating additional parking, enhancing pedestrian and bicycle modes, and revisiting streetscape options that support a safe and vibrant downtown area.	Near-Term	\$50,000
(R21) Hughes/Pocahontas/Highway 30 Intersection	In conjunction with ODOT and the on-going ODOT STIP refinement studies, conduct a more detailed investigation of potential near-term and long-term improvements for the Highway 30/Hughes Lane/Pocahontas Road intersection. Potential near- or long-term improvements may include intersection approach realignments, turn lanes, sidewalks, and intersection traffic control devices such as a traffic signal or roundabout.	Near-Term	\$10,000
Near-Term Priority (0-5 Years)			\$90,000
Long-Term Priority (5-15 Years)			-
Development Driven			-
Total			\$90,000

¹Cost estimates for engineering and construction costs. They do not include right-of-way. There are rounded to the nearest thousand dollars.

Roadway and Intersection Improvements

The planned roadway and intersection improvement projects will enhance the motorized element of the Baker City transportation network within and through the city. While site specific projects such as traffic signals and turn lanes have been included to improve conditions at particular locations, the plan

also seeks to develop an efficient transportation network that will reduce reliance on the main east-west and north-south state highways through development of parallel facilities. New roadways or roadway extensions are planned to serve all modes. These include road segments to fill gaps in the existing street system, new roads to serve development on adjacent properties, and new arterials and collectors to create an efficient grid system of future roadways.

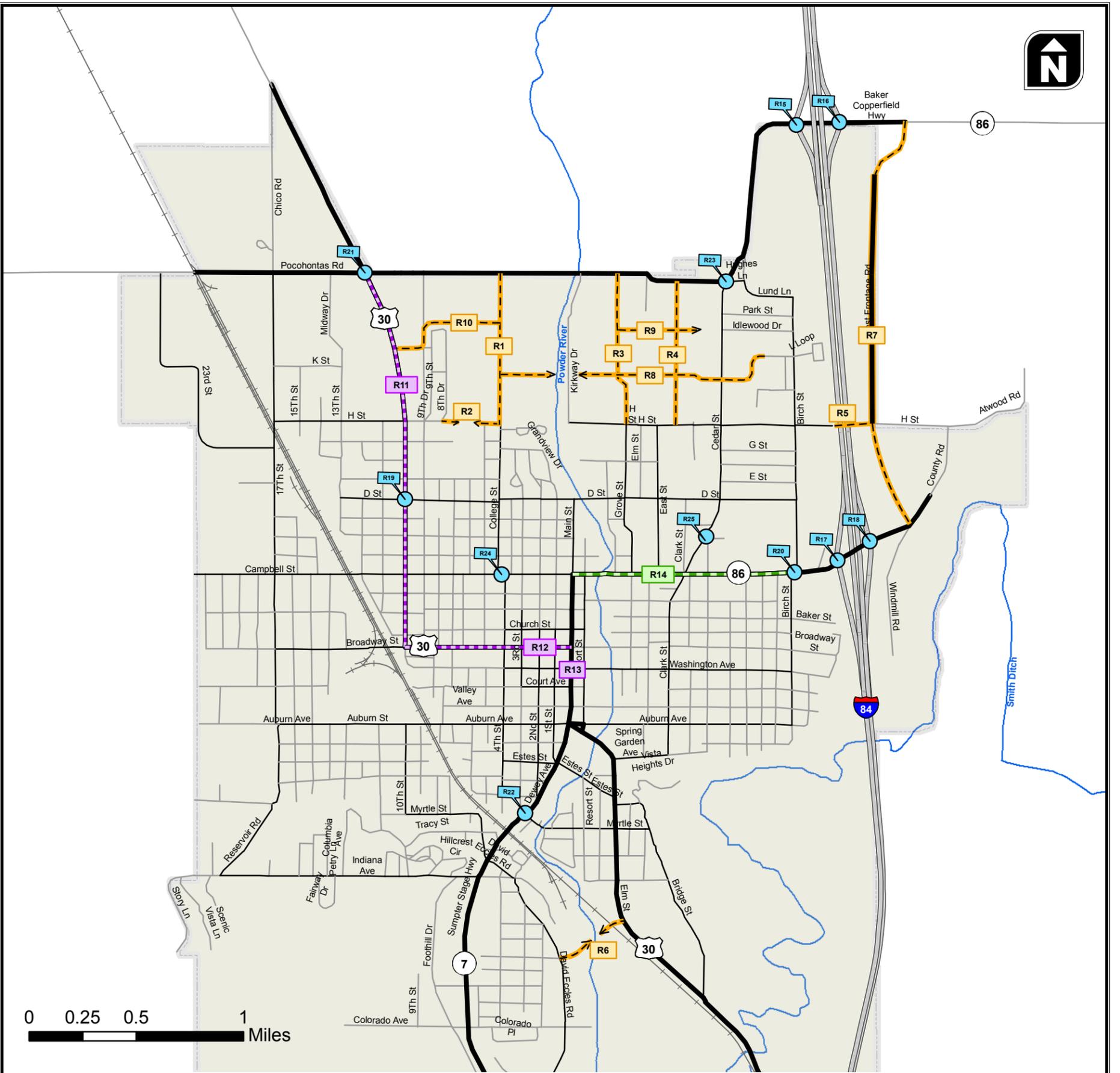
Table 3-6 summarizes the planned roadway extension projects, new roadways, and intersection projects. Figure 3-6 illustrates the location of these projects.

Table 3-6: Planned Roadway and Intersection Projects

(Project #) Project Name	Project Description	Reasons for the Project	Priority (Timeline)	Cost ¹
Planned Roadway Extensions				
(R1) College Street Extension	Extend College Street from H Street to Hughes Lane	Facilitate north-south mobility and connectivity for future growth north of the recreation complex	Development Driven	\$2,367,000
(R2) H Street Extension	Extend H Street from 8 th Street to College Street	Facilitate east-west mobility and connectivity between the east and west sides of the Sports Complex/High School Area	Development Driven	\$928,000
(R3) Grove Street Extension	Extend Grove Street from H Street to Hughes Lane	Facilitate north-south mobility, growth, connectivity, and access for future development north of H Street	Development Driven	\$2,455,000
(R4) Clark Street Extension	Extend Clark Street from H Street to Hughes Lane	Facilitate north-south mobility, growth, connectivity, and access for future development north of H Street	Development Driven	\$2,274,000
(R5) H Street Overpass	Extend H Street over I-84 from H Street stub to Best Frontage Road	Facilitate east-west mobility and connectivity between the east and west sides of I-84	Longer-Term	\$17,350,000
(R6) Southeast Connector	Construct new roadway connecting David Eccles Road (near Virginia Avenue) to US 30	Facilitate growth, mobility and connectivity in the southeast part of the city	Longer-Term	\$4,305,000
(R7) Best Frontage Road Reconstruction/Extension	Extend Best Frontage Road from H Street to Campbell Street	Accommodate growth and facilitate better roadway connectivity on the east side of I-84.	Near-Term	Already Funded
(R8) K Street Alignment	Extend K Street from L Street to College Street Extension	Facilitate east-west mobility, growth, connectivity, and access for future development north of H Street	Development Driven	\$4,442,000
(R9) East Idlewood Extension	Extend Idlewood Drive from College Street to Cedar Street	Facilitate east-west mobility, growth, connectivity, and access for future development north of H Street	Development Driven	\$1,632,000
(R10) West Idlewood Extension	Construct new roadway connecting College Street Extension through to 10 th Street	Facilitate east-west mobility, growth, connectivity, and access for future development north of H Street	Development Driven	\$1,920,000
Planned Roadway Modifications				
(R14) Campbell Street	Perform a study of Campbell Street from Main Street to Birch Street that would revisit signal timing plans and median placement.	Accommodate changing traffic and development patterns.	Near-Term	\$10,000

(Project #) Project Name	Project Description	Reasons for the Project	Priority (Timeline)	Cost ¹
	Modify the cross-section of Campbell Street from Main Street to Birch Street to provide adequate width for parking and bike lanes.	Reallocate roadway for improved multi-modal use and increase safety for pedestrians and bicyclists	Near-Term	\$95,000
Planned Intersection Improvements				
(R15) SB I-84 Ramp & OR 86 Intersection Improvements	Install traffic signal or single-lane roundabout ¹	Accommodate growth and improve long-term traffic operations	Long-Term or Development Driven	\$350,000 (traffic signal)
(R16) NB I-84 Ramp & OR 86 Intersection Improvements	Install traffic signal or single-lane roundabout ¹	Accommodate growth and improve long-term traffic operations	Long-Term or Development Driven	\$350,000 (traffic signal)
(R17) SB I-84 Ramp & Campbell Street Intersection Improvements	Install traffic signal or single-lane roundabout ¹	Accommodate growth and improve long-term traffic operations	Long-Term or Development Driven	\$350,000 (traffic signal)
(R18) NB I-84 Ramp & Campbell Street Intersection Improvements	Install traffic signal or single-lane roundabout ¹	Accommodate growth and improve long-term traffic operations	Long-Term or Development Driven	\$350,000 (traffic signal)
(R19) US30/10 th Street & D Street Intersection Improvements	Install traffic signal and remove half signal at C Street intersection	Improve long-term traffic operations	Near-Term	\$533,000
(R20) Birch Street & Campbell Street Intersection Improvements	A - Modify the concrete separator for the eastbound left-turn lane to allow south to north vehicles the ability to access the left-turn pocket. Install an enhanced pedestrian crossing treatment across Campbell Street on the east side of the intersection.	Discourage illegal left-turn maneuvers for south to north vehicles crossing Campbell Street and accommodate pedestrian crossings	Near-Term	\$30,000
	B - Realign north and south legs of Birch Street to eliminate the existing offset and add signalization when warranted	Improve long-term safety and operations	Long-Term or Development Driven	\$4,451,000
(R22) Dewey Avenue & Myrtle Street Improvements	Work with adjacent property owners to develop a modification plan for the Myrtle Street/Dewey street intersection that would improve intersection sight distance.	Improve safety	Near-Term	\$100,000
(R23) Cedar Street & Hughes Lane Intersection Improvements	Realign intersection as per suggestions in the 2005 Interchange Area Management Plan for Interchange 302	Accommodate growth and improve safety and operations	Long-Term	\$4,723,000
(R24) 4 th Street/College Street & Campbell Street Intersection Improvements	Install a pedestrian refuge island and crosswalk signage along Campbell Street between 4 th Street and College Street approaches	Improve pedestrian safety	Near-Term	\$12,000
(R25) Cedar Street & B Street Intersection Improvements	Work with adjacent property owners to develop a modification plan to improve safety and traffic operations in this area.	Improve operations, improve safety	Development Driven	\$50,000
Near-Term Priority (0-5 Years)				\$780,000
Long-Term Priority (5-15 Years)				\$32,229,000
Development Driven				\$16,068,000
Total				\$49,077,000

¹Cost estimates for engineering and construction costs. They do not include right-of-way. There are rounded to the nearest thousand dollars.



Planned Roadway Extensions

- | | | | |
|------------------------------------|------------------------------------|--|----------------------------------|
| R1 College Street Extension | R2 H Street Extension | R3 Grove Street Extension | R4 Clark Street Extension |
| R5 H Street Overpass | R6 Southeast Connector | R7 Best Frontage Road Extension | R8 K Street Alignment |
| R9 East Idlewood Extension | R10 West Idlewood Extension | | |

Refinement Studies

- | | | |
|---|---|--|
| R11 10th Street Refinement Study | R12 Broadway Street Refinement Study | R13 Main Street Refinement Study (Extents to be determined) |
|---|---|--|

Planned Roadway Modifications

- R14** Campbell Street Modification

Planned Intersection Improvements

- | | | | |
|---|--|---|---|
| R15 SB I-84 Ramp & OR 86 | R16 NB I-84 Ramp & OR 86 | R17 SB I-84 Ramp & Campbell Street | R18 NB I-84 Ramp & Campbell Street |
| R19 US 30/10th Street & D Street | R20 Birch Street & Campbell Street | R21 US 30/10th Street & Pocahontas/Hughes Lane | R22 Dewey Avenue & Myrtle Street |
| R23 Cedar Street & Hughes Lane | R24 4th Street/College Street & Campbell Street | R25 Cedar Street & B Street | |

IMPROVEMENT TYPE

- Planned Intersection Project
- Refinement Plan
- Roadway Modification
- Roadway Extension
- Roadway Reconstruction

Planned Intersection Improvements and Roadway Connections



Figure 3-6

Section 4
Transit Plan

TRANSIT PLAN

The transit plan presents policies and guidance focused on strengthening Baker City's support of transit service within and to/from the city.

Summary of Existing Transit Service in Baker City

Northeast Oregon Transit (NEOtransit) provides public transportation services within the Baker City area. NEOtransit provides three forms of service: 1) Fixed Route Trolley Service; 2) Fixed Route Bus Service to La Grande; 3) Dial-A-Ride Service.

Fixed Route Service (Baker City Trolley)

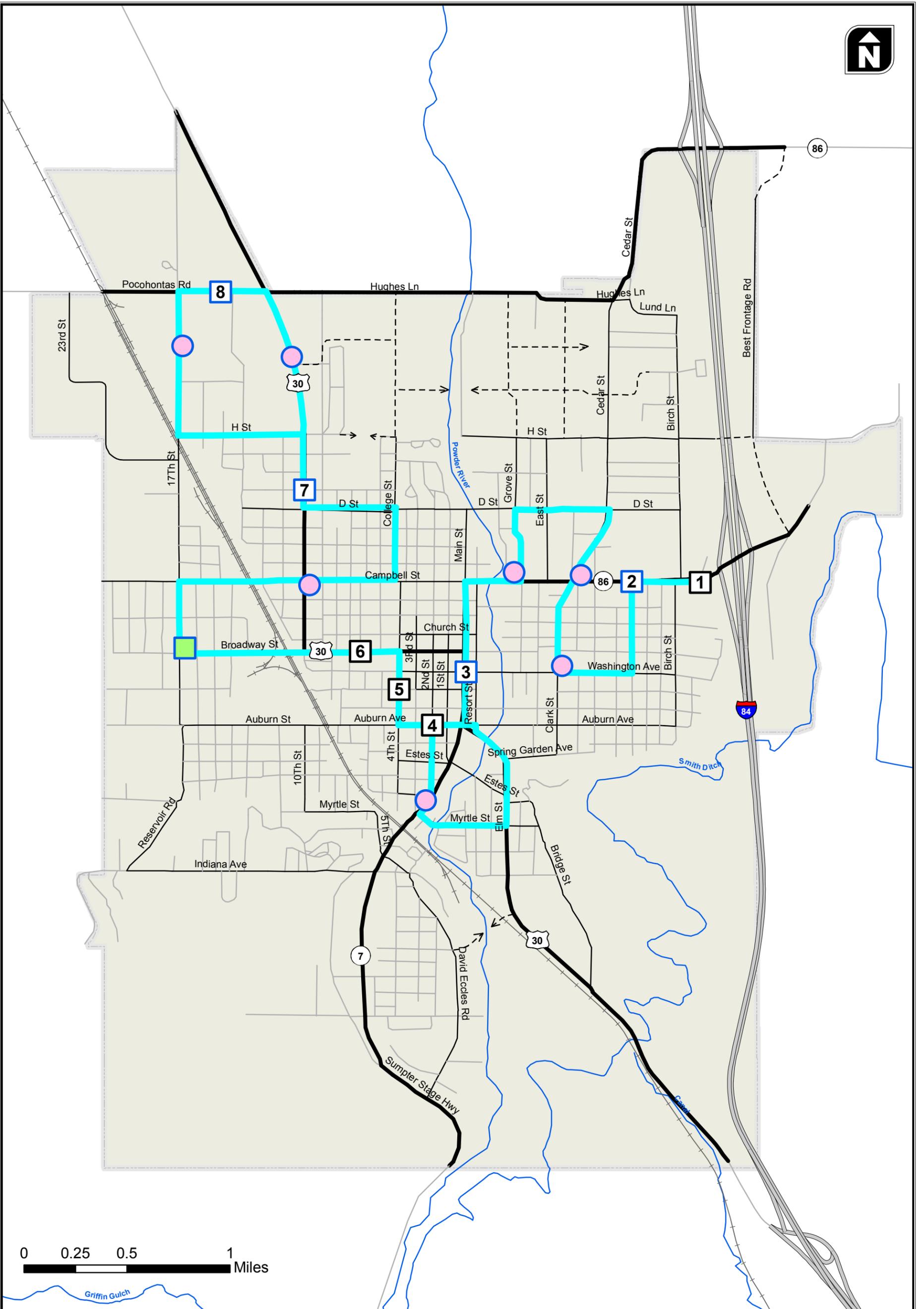
The fixed route Baker City Trolley consists of a single route with eight scheduled stops as shown in Figure 4-1. The total route time is 1 hour and the trolley will stop at each stop twice during the hour (once for the westbound trip and once for an eastbound trip).

Fixed Route Bus Service to La Grande (InterCity Connector)

NEOtransit offers a service that links Baker City to La Grande called the InterCity Connector. This service makes two daily round trips from Baker City to La Grande, one in the morning and one in the afternoon. Stops are also made in Haines and North Powder on the way to La Grande and back to Baker City. This service is available Monday through Friday.

Paratransit

Baker City Paratransit utilizes an application based eligibility process consistent with its obligation under the Americans with Disabilities Act to reserve the service for people who are prevented from using a fixed route due to a disability. Community Connection also provides service to Halfway once per week. It is intended for seniors or persons with disabilities; however general public may ride on space available basis.



	Existing Stop		Near-Term - Proposed Shelter
	Existing Stop - Proposed Shelter		Long-Term - Proposed Shelter
			Existing Transit Line

Trolley Service Ammenities

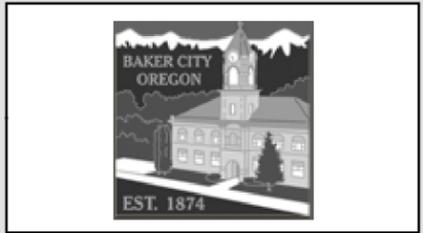


Figure 4-1

Transit Supportive Policies

The following transit supportive policies will help Baker City improve access to transit and encourage the development of physical elements or attributes which would make transit more accessible to all citizens of Baker City.

- Upgrade Sidewalk Facilities – As project opportunities arise through capital improvement investments or development, upgrade sidewalk facilities to ADA compliance on streets where transit service is provided and/or planned. The identified pedestrian improvement projects shown in the Active Transportation Plan would ensure that all existing transit route roadways would have sidewalk facilities in either the near- or long-term planning horizon.
- Provide Street Lighting - As project opportunities arise through capital improvement investments or development, install and/or improve street lighting at transit stops and along streets leading to transit stops.
- Increase and Improve Pedestrian Crossing Opportunities - As project opportunities arise through capital improvement investments or development; improve pedestrian crossing opportunities across major roadways to facilitate access to transit stops.
- Monitor and Improve Transit Stop Amenities - As opportunities arise; work with local transit providers to upgrade transit stop amenities based on ridership thresholds. Potential ridership thresholds and amenities include:
 - Level 1 (stops with 1 to 10 riders/day) - Bus stop sign with route information and attached bench
 - Level 2 (stops with 11 or more riders/day) - Level 1 amenities plus covered shelter
- Coordinate with local transit providers and ensure that the Baker City TSP is consistent and complimentary to their near- and long-term service priorities. Projects identified in the Baker/Union/Wallowa Coordinated Transit Plan and the Baker/Union/Wallowa Human Services Transportation Plan that would likely require a local City funding match include the following:
 - Purchase an ADA accessible Category D passenger bus.
 - Install digital surveillance security cameras and recorders in five public transit buses serving Baker County.
 - Install bicycle racks on Baker City Trolley and InterCity Connector buses
 - Continued development of public awareness of Travel Options tool – NEO Travel Options
- Coordinate with local transit providers to identify future locations for a multi-modal transfer center or park-n-ride lot.

Section 5
Other Modes Plan (Air, Rail, Water, Pipeline)

OTHER MODES PLAN (AIR, RAIL, WATER, PIPELINE)

This section addresses Baker City's air, rail, surface water, and pipeline plans. Each subsection below describes each respective network and how it operates within the City. Future projects were not identified for these service areas, because service is provided by separate entities.

AIR

Baker City Municipal Airport (BKE) is approximately 3 miles north of the city limits and urban grown boundary to the east of I-84. The airport is owned by Baker City despite being located in an unincorporated portion of Baker County. Service is operated by Baker Aircraft and offers fueling, flight instruction, aircraft rental, charter, and maintenance.

The nearest airport providing scheduled commercial passenger service is in Pendleton, approximately 95 miles away at Eastern Oregon Regional Airport (PDT), followed by Boise, Idaho (BOI), approximately 127 miles away. While commercial air service is beyond the scale of project that Baker City can pursue independently, the City will remain aware of other changes or opportunities to bring other air travel options to the community and will support these efforts, as they are able.

RAIL

Freight rail through Baker City travels on Union Pacific's (UP) east-west mainline, which runs from the southeast corner of the city to the northwest corner of the city. This line connects to Portland and the I-5 corridor, Spokane (via the Hinkle hump yard), Idaho, and other points east. The UP main line is a Federal Railroad Administration (FRA) Class 4 railroad, meaning it allows freight speeds up to 60 MPH. It has no weight or dimension restrictions.

Commercial rail service is beyond the scale of project that Baker City can pursue independently. However, the City will remain aware of other changes or opportunities to bring rail travel options to the community and will support these efforts, as they are able.

SURFACE WATER

The only water based transportation in Baker City is recreational floating of the Powder River.

PIPELINE AND TRANSMISSION SYSTEMS

Pipeline transportation within Baker City includes transmissions lines for electricity, television, and telephone services, as well as transport of water, sanitary sewer, natural gas, and a major north-south petroleum pipeline. Baker City provides water and sanitary sewer within the City Limits. Cascade Natural Gas provides natural gas via a pipeline that runs along the western edge of the City. Chevron's

pipeline carrying petroleum products from Pasco, Washington to Boise, Idaho runs alongside the natural gas pipeline.

Section 6
Funding and Implementation

FUNDING AND IMPLEMENTATION

This section provides context regarding the City’s historical funding sources, which was the basis for forecasting the funds likely available in the future for transportation projects, studies, and programs. Also presented in this section is the financially constrained plan which helps guide the City’s implementation of the TSP.

HISTORICAL TRANSPORTATION FUNDING

Key funding sources that have contributed to transportation projects within the city over the past five years are summarized below.

Revenue Sources

Table 6-1 displays the total revenue by source used to fund transportation projects within the city over the past ten years.

Table 6-1: Baker City Revenue Source History

Revenue Source	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Avg.
Taxes	\$376,713	\$397,889	\$412,003	\$427,673	\$448,796	\$470,639	\$485,411	\$512,656	\$518,629	\$450,045
Inter-Gov. Sources	\$687,151	\$804,014	\$709,956	\$568,699	\$789,701	\$834,790	\$492,420	\$546,794	\$591,012	\$669,393
Other ¹	\$16,236	\$4,016	\$14,027	\$28,376	\$40,592	\$51,863	\$63,786	\$69,547	\$69,790	\$39,804
Total Revenue	\$1,080,100	\$1,205,919	\$1,135,986	\$1,024,748	\$1,279,089	\$1,357,292	\$1,041,617	\$1,128,997	\$1,179,431	\$1,159,242

¹Other revenue sources generally include miscellaneous revenue, service charges, and interest

Based on the information shown in Table 6, Baker City has generated an average of approximately \$1,160,000 per year in total revenue for transportation related projects. Also shown, the largest revenue sources for the city have traditionally been the motor vehicle tax and intergovernmental sources.

Expenditure History

Table 6-2 displays the total expenditures on transportation related projects within Baker City over the last nine years.

Table 6-2: Baker City Expenditure History

Expenditure	2003	2004	2005	2006	2007	2008	2009	2010	2011	Avg.
Maintenance	\$432,122	\$406,767	\$381,629	\$413,572	\$437,478	\$443,475	\$446,527	\$484,565	\$430,566	\$430,745
Storm Water	\$30,678	\$18,308	\$32,542	\$31,471	\$35,128	\$84,066	\$79,250	\$72,735	\$43,574	\$47,528
Preventative	\$357,957	\$328,006	\$336,963	\$262,231	\$392,859	\$384,014	\$366,314	\$403,075	\$426,222	\$361,960
Street Lighting	\$70,839	\$67,634	\$70,957	\$63,436	\$55,519	\$61,656	\$66,023	\$59,947	\$62,134	\$64,238
Snow and Ice Control	\$17,925	\$71,274	\$18,415	\$46,127	\$16,424	\$95,782	\$76,630	\$41,677	\$52,180	\$48,493
Street Construction	\$98,595	\$95,174	\$20,504	\$24,082	\$8,090	\$5,502	\$14,878	\$4,848	\$5,911	\$30,843
Total Overhead	\$1,008,116	\$987,163	\$861,010	\$840,919	\$945,498	\$1,074,495	\$1,049,622	\$1,066,847	\$1,020,587	\$983,806
Capital Projects	\$838,752	\$358,490	\$66,722	\$27,003	\$245,705	\$313,223	\$494,412	\$30,323	\$0	\$263,848
Total Expenditures	\$1,846,868	\$1,345,653	\$927,732	\$867,922	\$1,191,203	\$1,387,718	\$1,544,034	\$1,097,170	\$1,020,587	\$1,247,654

Based on the information shown in Table 6-2, Baker City has spent an average of \$263,848 per year on capital improvement projects (or approximately 21 percent of available resources) and \$983,806 on maintenance/overhead (or approximately 79 percent of available resources). The information shown in Tables 6-1 and 6-2 were used to project the availability of future funding for transportation improvement projects as described below.

PROJECTED TRANSPORTATION FUNDING

Table 6-3 provides a summary of the potential future project funding (in year 2012/2013 dollars) over the next five, ten, and twenty years based on an assumed average funding level of approximately \$1,160,000 per year.

Table 6-3: Baker City Future Transportation Funding Projections

Revenue Source	Average Annual	5-Year Forecast	10-Year Forecast	20-Year Forecast
Total Revenue	\$1,160,000	\$5,800,000	\$11,600,000	\$23,200,000
Revenue for Capital Improvements (21%)	\$243,600	\$1,218,000	\$2,436,000	\$4,872,000
Revenue for Operations and Maintenance (79%)	\$916,400	\$4,582,000	\$9,164,000	\$18,328,000

As shown in Table 6-3, it is anticipated that approximately \$23.2 million will be available for transportation project funding over the next 20 years using historical funding trends. Under this methodology, approximately \$4.9 million of the \$23.2 million can reasonably be assumed to be available for funding the transportation plan while the remaining \$18.3 million will be needed for operations and maintenance.

Table 6-4: Estimated Transportation Improvement Costs

Type	Near-Term	Longer-Term	Development Driven	Total
Roadway	\$780,000	\$32,229,000	\$16,068,000	\$49,077,000
Bicycle	\$92,000	-	-	\$92,000
Multi-Use Path	\$2,514,000	\$3,365,000	-	\$5,879,000
Pedestrian	\$3,632,000	\$3,260,000	\$315,000	\$7,207,000
Total	\$7,018,000	\$38,854,000	\$16,383,000	\$62,255,000
			Available	\$4,872,000
			Funding Shortfall	\$57,383,000

Based on the estimated projected funding available and the estimated costs of the transportation improvement projects included in this memorandum, Baker City will need to identify additional funding sources to pay for transportation improvements over the next 20 years.

POTENTIAL FUNDING SOURCES

The remainder of this section provides an overview of funding and financing options that are potentially available for Baker City. For each of the funding options listed below, there is a brief description and a short discussion. No effort has been made to screen funding options according to their political or legal feasibility. The funding environment is dynamic so the list shown should not be considered exhaustive.

Federal Resources

Federal Highway Trust Fund (HTF)

Description: Highway Trust Fund (HTF) revenues consist primarily of taxes on the sale of fuel as well as a number of other smaller transportation related taxes. The federal legislation that appropriates the HTF is the Moving Ahead for Progress in the 21st Century (MAP 21) which was authorized in October 2012. Funds to local agencies within the State of Oregon are primarily allocated by the Oregon Department of Transportation (ODOT) unless dedicated to a local agency.

Potential: The potential for Baker City to take advantage of this funding source will be to lobby to get local highway projects included on the next ODOT STIP and applying for funds dedicated to specific types of projects such as bicycle and pedestrian projects.

Community Development Block Grants (CDBG)

Description: Community Development Block Grants (CDBG) are offered through the Federal Department of Housing and Urban Development. To receive CDBG funds, cities must compete for grants based upon a formula that includes factors such as rural/urban status, demographics, local

Potential: With an increase in population, number of registered vehicles, and fuel sales, the total revenue from the State Motor Vehicle Fund will rise, but if the fees (tax per gallon) remain at current levels, there will be a reduction in buying power due to inflation. The gas tax will however continue to be a source of funds for Baker City through ODOT for highway and pedestrian and bicycle projects.

Statewide Transportation Improvement Program (STIP)

Description: The Statewide Transportation Improvement Program (STIP) is Oregon's 4-year capital improvement program for major state and regional transportation facilities. This scheduling and funding document is updated every two years. Projects included on the STIP are allocated into the five different ODOT regions. The current 2012-2015 STIP contains a number of roadway projects located throughout Region 5, several of which are located in Baker County. The majority of these projects rely upon federal funds.

Potential: The next STIP (2015-2018) is currently in the development process and is expected to be organized into two different categories that focus on projects that will fix/preserve the existing transportation network and enhance/improve the transportation network. Several projects within Baker County could be included on this list.

Oregon Bicycle and Pedestrian Program

Description: The Oregon Pedestrian and Bicycle Program awards grants to local governments for bicycle and pedestrian improvements within the rights-of-way of streets, roads, and highways. Grants generally range between \$80,000 and \$500,000 and examples of eligible uses include pedestrian islands, bike lane striping, and crosswalks.

Oregon Parks and Recreation Funds

Description: Recreational Trails Grants are national grants administered by the Oregon Parks and Recreation Department (OPRD) for recreational trail-related projects, such as hiking, running, bicycling, off-road motorcycling and all-terrain vehicle riding.

Existing Application: OPRD distributes more than \$4 million annually to Oregon communities for outdoor recreation project, and has awarded more than \$40 million in grants across the state since 1999. Grants can be awarded to non-profits, cities, counties, and state and federal agencies.

Local Funding Options

The following local funding programs are commonly used by cities in the funding of transportation improvements.

General Obligation Bonds (G.O. Bonds)

Description: Bonds are often sold by a municipal government to fund transportation (or other types) of improvements, and are repaid with property tax revenue generated by that local government. Under Oregon Measure 50, voters must approve G.O. Bond sales with at least a 50 percent voter turnout.

Existing Application: Cities all over the state use this method to finance the construction of transportation improvements. For smaller jurisdictions, the cost of issuing bonds versus the amount that they can reasonably issue creates a problem. Underwriting costs can become a high percentage of the total cost for smaller issues. According to a representative of the League of Oregon Cities, the state is considering developing a “Bond Pool” for smaller jurisdictions. By pooling together several small bond issues, they will be able to achieve an economy of scale and lower costs.

Potential: Within the limitations outlined above, G.O. bonding can be a viable alternative for funding transportation improvements when focused on specific projects.

System Development Charges

Description: ORS 223.297 to 223.314 authorizes local governments to impose system development charges (SDCs) for capital projects related to transportation. SDCs are fees imposed on new development projects and are intended to cover a share of costs needed to support growth on the transportation network. SDCs may only be used for capital improvements.

Potential: Baker City does not currently impose transportation SDCs. However, given the ability to use these fees for capital improvement projects, transportation SDCs should be explored.

Local Street Utility/User Fee

Description: This maintenance fee is premised on viewing public streets as utilities used by citizens and businesses similar to a public water or sewer system. Fees are typically assessed by usage (e.g., average number of vehicle trips per property).

Existing Application: Many Oregon cities assess street user fees through a monthly fee charged to local dwelling units and businesses. The assessment formulas range from a flat rate per dwelling unit and per business to fees tied to trip rates calculated for each property individually based on the Institute of Transportation Engineers Trip Generation. The revenues generated by these fees can be used for operations and maintenance and can be used to secure bond debt that would be used to fund capital projects.

Potential: In Baker City, a \$5.00 monthly fee charged to the estimated 4,212 households would generate approximately \$252,720 per year in revenue from residential uses alone. The ability to use these fees for capital projects, including pedestrian and bicycle projects should be explored.

Local Improvement District (LID)

Description: Under a local improvement district (LID), a street or other transportation improvement is built and the adjacent properties that benefit are assessed a fee to pay for the improvement.

Existing Application: LID programs have wide application for funding new or reconstructed streets, sidewalks, water/sewer or other public works projects. The LID method is used primarily for local or collector roads, though arterials have been built using LID funds in certain jurisdictions.

Potential: LIDs continue to offer a good mechanism for funding projects such as new sidewalks and street surface upgrades. Baker City may be able to fund the cost of sidewalks on collector streets to provide a connected pedestrian system for current and future residents in the previously developed areas of the city lacking sidewalks.

Urban Renewal District

Description: An Urban Renewal District is an area that is designated by a community as a “blighted area” to assist in revitalization. Funding for the revitalization is provided by urban renewal taxes that are generated by the increase in total assessed values in the district from the time it was first established.

Existing Application: Urban Renewal Districts have been formed in over 50 cities in Oregon, generally focused on revitalizing downtowns.

Potential: Urban Renewal dollars can be used to fund infrastructure projects such as roadway, sidewalk, or transit improvements. Because funding relies on taxes from future increases in property value, Baker City may seek to create a District where such improvements will likely result in such an increase.

Developer Dedications of Right-of-Way and Local Street Improvements

Description: New local streets required to serve new development areas are provided at the developer’s expense in accordance with the tentative and final plan approvals granted by the City Council.

Existing Application: Current City ordinance requires local streets and utilities to be provided in accordance with the adopted Land Use Plan, and the zoning ordinance and subdivision ordinance. This includes dedication of street/utility right-of-way and construction of streets, pedestrian/bicycle facilities, and utilities to City design standards.

Potential: Private developer street dedications are an excellent means of funding new local street/utility extensions, and are most effective if guided by a local roadway network plan. This funding mechanism could apply to all new local street extensions in Baker City within the 20-year planning period.

Leveraging Transit Funds

Opportunities potentially could be identified to leverage existing transit funds to assist with bicycle and pedestrian projects.

IMPLEMENTATION

The Financially Constrained Plan and Preferred Plan facilitate the TSP's implementation. The projects and refinement plans included in the Financially Constrained Plan are higher priority projects on which the City plans to focus its funding resources. The total Preferred Plan helps the City leverage opportunities that may arise through development, unexpected grants, and/or agency partnerships to implement additional projects, studies, and/or programs identified as needed and desired.

Total Preferred Plan

The total Preferred Plan consists of all of the projects and refinement plans identified in Sections 2 through 5. Table 6-5 summarizes the project costs by mode and desired timeframe based on need and priority.

Table 6-5: Transportation Projects and Refinement Plans Project Cost Summary by Timeline

Priority (Timeline)	Pedestrian	Bicycle	Multi-Use Path	Refinement Studies	Intersection and Roadway	Total Program Study and Project Costs
Near-Term (0-5 Years)	\$3,632,000	\$92,000	\$2,514,000	\$90,000	\$780,000	\$7,108,000
Long-Term (5-15 Years)	\$3,260,000	-	\$3,365,000	-	\$32,229,000	\$38,854,000
Development Driven	\$315,000	-	-	-	\$16,068,000	\$16,383,000
Total	\$7,207,000	\$92,000	\$5,879,000	\$90,000	\$49,077,000	\$62,345,000

Note: No City-related transit expenditures to quantify.

As shown in Table 6-5, a total planned cost of 82 of projects and studies have been identified for Baker City over the next 20 years. The following section discusses the Financially Constrained Plan, which includes as many of the near-term projects identified in the total Preferred Plan as fiscally possible.

Financially Constrained Plan

Table 6-6 identifies the projects the City would like to have funded. They include projects that are under jurisdiction of Baker City as well as projects that would likely require the City's financial participation in joint projects with ODOT and Baker County. The City will coordinate with other agencies to leverage funding opportunities and therefore the projects in the Financially Constrained project list should be looked at as an illustration of the City's current funding priorities but one that will change over time.

Table 6-6: Baker City Financially Constrained Projects and Studies List

(Project #) Project Name	Project Description	Reasons for the Project	Priority (Timeline)	Cost ¹
Active Transportation Projects				
(P1) 11 th Street/Hillcrest Driver/9 th Street	Sidewalk infill and wayfinding from Indiana Avenue to Auburn Avenue	Gap in existing pedestrian network	Near-term	\$342,000
(P3) Tracy Street & 5 th Street	Sidewalk infill and wayfinding from 9 th to OR 7, Neighborhood Route	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$290,000
(P5) Auburn Avenue	Add sidewalks from Main Street to Birch Street	Gap in existing pedestrian network	Near-term	\$288,000
(P6) Baker Street	Sidewalk infill and wayfinding from Birch Street to Swim Center/Skate Park	Gap in existing pedestrian network	Near-term	\$25,000
(P7) Birch Street	Sidewalk infill and wayfinding from Auburn Avenue to Campbell Street, Neighborhood Route	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$218,000
(P14) Indiana Avenue (west)	Sidewalk infill and wayfinding from 10 th Street to Plum Street	Improving pedestrian network, gap in existing pedestrian network	Development Driven	\$83,000
(P15) Madison Street	Neighborhood Route from 10 th Street to Birch Street	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$9,000
(P16) Oak Street	Add sidewalks from Court Street to Church Street	Improving pedestrian network	Near-term	\$78,000
(P17) Washington Street	Neighborhood route from 7 th Street to Birch Street	Improving pedestrian network, gap in existing pedestrian network	Near-term	\$8,000
(P27) College Street	Neighborhood route from H Street to Campbell Street	Gap in existing pedestrian network	Long-term	\$4,000
(P33) 4 th Street	Proposed neighborhood route from Campbell Street to Grace Street	Gap in existing pedestrian network	Long-term	\$6,000
(M3) Auburn	Add multi-use path from 17 th Street to Railroad tracks	Promote recreational and non-motorized travel	Near-term	\$309,000
(M4) 17 th Ave Trail	Add multi-use path from Indiana Avenue to Pocahontas Road	Promote recreational and non-motorized travel	Near-term	\$1,294,000
(M6) Sports Complex Connector	Add multi-use path from H Street to Sports Complex	Promote recreational and non-motorized travel	Near-term	\$168,000
(M12) Indiana Avenue	Add multi-use path from 17 th Street to OR 7	Promote recreational and non-motorized travel	Long-term	\$259,000
(M13) Central Park Connector	Add multi-use path from Resort Street at Court Street to the LAMP Connector	Promote recreational and non-motorized travel	Near-term	\$122,000
Roadway and Intersection Projects				
(R11) 10 th Street Travel Way Refinement Study	In conjunction with ODOT and local property/business owners, conduct a detailed refinement plan of the 10 th Street corridor from Hughes Lane to Broadway Street. The purpose of the plan would be a more thorough investigation of a potential reallocation of the travel way from four lanes to three lanes including a two-way center turn lane and bicycle lanes in both directions.	Reallocate roadway for improved multi-modal use and increase safety for pedestrians and bicyclists	Near-term	\$15,000
(R12) Broadway Street Travel Way	In conjunction with ODOT and local property/business owners, conduct a detailed study of the Broadway Street corridor from 10 th Street to Main Street. The	Reallocate roadway for improved multi-modal use and increase safety for pedestrians and	Near-term	\$15,000

(Project #) Project Name	Project Description	Reasons for the Project	Priority (Timeline)	Cost ¹
Refinement Study	purpose of the plan would be a more thorough investigation of a potential reallocation of the travel way from four lanes to three lanes including a two-way center turn lane and bicycle lanes in both directions.	bicyclists		
(R13) Main Street Refinement Study	An integrated land use and transportation plan that evaluates and prioritizes goals for revitalization on the primary downtown streets supporting commercial business. This will include opportunities for accommodating additional parking, enhancing pedestrian and bicycle modes, and revisiting streetscape options that support a safe and vibrant downtown area.	Reallocate roadway for improved multi-modal use and increase safety for pedestrians and bicyclists	Near-Term	\$50,000
(R14) Campbell Street Modification	Modify the cross-section of Campbell Street from Main Street to Birch Street to provide full 8'-wide parking lanes by reducing the total width of the two-way center turn lane.	Reallocate roadway for improved multi-modal use and increase safety for pedestrians and bicyclists	Near-term	\$105,000
(R20) Birch Street & Campbell Street Intersection Improvements	Remove concrete separator for the eastbound left-turn lane to allow south to north vehicles the ability to access the left-turn pocket	Discourage illegal left-turn maneuvers for south to north vehicles crossing Campbell Street	Near-term	\$30,000
(R22) Dewey Avenue & Myrtle Intersection Improvements	Work with adjacent property owners to develop a modification plan for the Myrtle Street/Dewey Street intersection that would improve intersection sight distance.	Improve safety	Near-term	\$12,000
(R24) 4 th Street/College Street & Campbell Street Intersection Improvements	Install a pedestrian refuge island and crosswalk signage along Campbell Street between 4 th Street and College Street approaches	Improve pedestrian safety	Near-term	\$12,000
Near-Term Priority (0-5 Years)				\$3,172,000
Long-Term Priority (5-15 Years)				\$437,000
Development Driven				\$83,000
Total				\$3,692,000

¹Cost estimates for engineering and construction costs. They do not include right-of-way. There are rounded to the nearest thousand dollars.