Lewiston-Clarkston Downtown Circulation Plan

Prepared For:
Lewis-Clark Valley Metropolitan Planning Organization

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Note: This document is formatted for printing on 11" x 17" paper.

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Many individuals, business owners, and groups contributed their talents, input, and leadership in the development of this plan. This is the collective vision of a diverse group of Clarkston and Lewiston residents. People in the Lewis-Clark Valley are passionate about their cities, about the development of their downtowns into components that define their community identity. They typically are not hesitant to express their opinions with this passion. We list here a few of the many individuals and groups that contributed to the development of this plan. Many more, too numerous to list, made meaningful contributions to this plan and deserve our thanks. Using the public's expertise, we were able to facilitate the process for development of this plan.

Project Leadership Team

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Executive Summary

The Lewiston-Clarkston Downtown Circulation Plan is the result of a cooperative process between the LCVMPO and its member agencies, the citizens of Lewiston and Clarkston, and the planning consultant. In addition to meeting with the MPO board, three public meetings were held to present project progress and solicit public input.

The first public meeting, held in early December 2009, introduced the project purpose, study area, and methodology; presented a perspective on where this planning effort fits into the overall project implementation process; presented extensive information on the important attributes of successful downtowns; and actively solicited input on the public's critical concerns, perceived opportunities for improvement, and goals for the project.

The second public meeting was conducted in June 2010 and presented land use and traffic analysis, identified circulation issues, and introduced initial concepts for addressing the circulation issues identified.

The third public meeting was held in October 2010. During this meeting the project recommendations for improvements to the circulation network, individual intersections, and streetscaping were presented. Following an explanation of the proposed improvements, traffic simulations were presented showing the improvements in real space, as well as the initial wayfinding concepts, which are included in a separate Wayfinding Plan.

The Lewiston-Clarkston Downtown Circulation Plan provides an evaluation of the existing transportation network, projections of future land use, recommendations for improvements, and guidelines for design. This plan is intended to guide physical solutions and compliment other mechanisms, plans, and policies that provide the foundation upon which the downtowns will operate, grow, and redevelop. Sensitivity to and appreciation of the various, sometimes conflicting, needs of different modes of transportation is a key component of the plan.

The plan focuses on addressing deficiencies and identifying improvements in the roadway network serving downtown Clarkston and Lewiston, focusing on US Highway 12 and major connecting streets.

Table ES-1. Projected Land Use Increases

Lewiston Downtown	
Office/commercial	150,000 s.f.
Retail/social/recreational	190,000 s.f.
Housing/lodging	150 – 185 units
Lewiston Snake River Ave. Corridor	
Office/commercial	133,000 s.f.
Retail/social/recreational	87,000 s.f.
Housing/lodging	240 units
Clarkston	
Office/commercial	997,820 s.f.
Retail/social/recreational	45,800 s.f.
Light Industrial	18,000 s.f.
Educational	20,000 s.f.
Housing/lodging	50 units

s.f.=square feet

This plan recommends a balanced approach to providing circulation in downtown Lewiston and Clarkston – one that provides adequate vehicle capacity now and in the future, while at the same time making improvements that enhance and stimulate downtown revitalization.

The study area for the Downtown Circulation Plan is shown in Figure 1 on page 12, which includes the land area that influences traffic volumes within the downtown areas. An inventory of the existing street network and traffic volumes was conducted at the onset of this project. The traffic volume counts were conducted after the Super Walmart moved from Lewiston to Clarkston to allow traffic patterns related to this major attractor to shift and settle back into a routine. Traffic volumes at 29 study intersections were counted and peak-hour traffic volumes identified for analysis. Bicycle and pedestrian facilities were also recorded.

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A comprehensive land use analysis of the downtowns was undertaken to estimate realistic levels and locations of growth based on existing uses, vacancies, economic trends, and local knowledge provided by city planners. This analysis extends from 15th Street in Clarkston to 21st Street in Lewiston. The anticipated increases in land use, summarized in Table ES-1, were then used as a critical input to the traffic volume forecasting process. Land use density and distribution, along with street network options, dictate the amount of traffic growth that the region will experience. This critical link between land use and traffic volumes was made through the use of the LCVMPO's traffic demand model. This model produced anticipated traffic growth rates, which were then applied to the existing counted traffic volumes to establish the future 2030 traffic volumes used as the basis for the traffic analysis in this plan. Some areas are projected to experience very little traffic growth, while others are anticipated to experience 30 to 40 percent increases in traffic volume over the next 20 years.

Traffic analysis of the existing and projected traffic volumes was conducted using the existing traffic network and control. This type of traffic analysis estimates the average amount of delay experienced by drivers at each intersection and assigns a level of service (LOS), essentially a letter grade from A through F, based on the amount of delay. The year 2009 existing and 2030 projected traffic analysis results are summarized in Tables ES-2 and ES-3. (LOS is discussed more thoroughly on page 23.)

Table ES-2. Clarkston LOS Results

	2009 Existing		2030 Projected	
Intersection Location	**LOS**	**Delay**	**LOS**	**Delay**
6th/Chestnut	B	10.8	A	9.2
6th/Sycamore	A	5.0	A	5.8
6th/Elm	A	7.7	A	7.2
6th/Maple/Diagonal	B	15.7	C	20.5
5th/Chestnut	A	9.4	A	9.4
5th/Sycamore	B	10.6	B	10.6
5th/Elm	B	11.1	B	11.1
5th/Maple	B	10.2	B	10.2
5th/Diagonal	C	15.1	C	16.4
2nd/Diagonal/Bridge	C	31.9	D	46.1
5th/Bridge	B	16.2	B	19.5
6th/Bridge	B	14.4	C	15.4
5th/Fair	B	11.5	C	25.2

Table ES-3. Lewiston LOS Results

	2009 Existing		2030 Projected	
Intersection Location	**LOS**	**Delay**	**LOS**	**Delay**
3rd/Main	B	13.4	B	16.5
5th/Main	A	4.3	A	6.4
9th/Main	A	6.3	A	6.9
11th/D/Main	C	15.7	C	17.2
13th/Main	A	8.0	B	11.5
18th/Main/Levee Bypass	B	19.9	C	29.8
9th/D	B	11.7	B	13.3
5th/D	A	9.3	B	11.4
3rd/D	A	10.0	B	12.4
1st/D	E	40.2	F	*
Levee Bypass/D	D	31.5	F	116.2
5th/Levee Bypass	B	10.5	B	12.1
Levee Bypass/Snake River Ave	B	12.2	C	15.7

*Delay too high to accurately estimate

Note: As detailed in Table 4 on page 23, there are different delay ranges (in seconds of delay) for a given LOS for signalized intersections versus unsignalized intersections. This is why a delay of 16.2 seconds is equal to a LOS B at 5th/Bridge (a signalized intersection), whereas a lesser delay of 15.1 seconds equates to a worse LOS C at 5th/Diagonal (an unsignalized intersection).

By examining the future traffic volumes, critical locations were identified for the focus of the remainder of the traffic analysis. These included the following intersection "hot spots":

- 2nd/Diagonal/Bridge
- 5th/Fair
- 5th/Wal-Mart/Costco Driveway
- 18th/Main/Levee Bypass
- 1st/D
- Levee Bypass/D

In addition to the specific intersection-related traffic analysis, a broader assessment of the Clarkston and Lewiston street and path network was conducted. This assessment identified a variety of issues. These identified issues, illustrated graphically in the figures at the end of Section I of this plan, include:

- Lack of street grid network between Fair Street and the river in the waterfront district
- Lack of connectivity between downtown Clarkston (5th and 6th Streets) and Bridge Street (US Highway 12)
- Lack of bicycle facilities and landscaping on Bridge Street
- Poor pedestrian design at the intersection of 2nd/Diagonal/Bridge
- Excess capacity on Diagonal Street
- Lack of connectivity from neighborhoods to river trails in both cities
- Poor pedestrian and bicycle connectivity between the cities
- Lack of downtown integration with the riverfront (both cities)
- Cut-through traffic using Main and D Streets in Lewiston instead of the Levee Bypass
- Lack of downtown gateways (both cities)
- Lack of wayfinding (both cities)
- Poor streetscape on Main Street in Lewiston as an introduction to downtown
- Confusing connections to the Levee Bypass resulting in lack of use of the bypass route in Lewiston

Section II of this plan presents recommendations for addressing the street and bicycle/pedestrian network weaknesses and the poorly operating intersections identified in Section I. These recommendations are labeled as either short-term or long-term. In some cases, both short- and long-term recommendations are made for the same location. In addition, page 29 of Section II clearly defines the functional classifications of roadways to assist in understanding the character of service each roadway provides.

The recommendations for Clarkston are summarized in Tables ES-4 and ES-5 on the following page and are presented in detail beginning on page 30. Key recommendations include:

2nd/Diagonal/Bridge Signal Modifications – by converting 2nd Street north of this intersection to one-way southbound and making associated changes to the traffic signal operation, significant reductions in delay can be achieved at this increasingly congested location. This change is expected to result in reasonable levels of service for many years, after which a roundabout option, also presented and discussed, may be a more viable alternative.

2nd Street Extension and Port Drive Improvements – Connecting Port Drive directly to Bridge Street via a route behind Costco will shift traffic off of Fair Street and onto Port Drive, which is more capable of accommodating this traffic based on its wide right-of-way and underpass at 15th Street. Port Drive would be reclassified as a collector street and Fair Street would be reclassified as a local street.

12th Street Extension – 12th Street should be extended north to Port Way to provide a continuous north-south collector route serving the Port area and the riverfront.

Shift State Route 129 – Shift the state highway designation from 6th Street onto 5th Street between Diagonal Street and Bridge Street. This allows the highway traffic to take advantage of the traffic signal at 5th and Bridge, and 5th Street can then be reclassified as a minor arterial. Along with streetscape improvements on 5th Street, this will improve the connectivity between downtown Clarkston, Bridge Street, and the riverfront area.

Bike Lanes and Trail Extensions – On-street bike lanes are recommended on specific streets and trail extension are recommended along the river to improve non-motorized circulation options and to encourage the use of these modes. At present, on-street bike

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lanes are not typically used in Clarkston or Lewiston. These lanes can be easily striped within the existing roadway in some areas, while in other areas, they may restrict use of street areas that might otherwise be used by vehicles or pedestrians. Each city should consider its modal priorities and determine whether to implement a comprehensive bike lane system.

Downtown Streetscape – Streetscaping recommendations presented for both 6th Street from Chestnut to Diagonal and Diagonal Street from 6th Street to Bridge Street. These will improve the pedestrian, shopping, and visitor experience in these areas and help tie the downtown area to US Highway 12 on Bridge Street.

Table ES-4. Clarkston Bicycle/Pedestrian Projects Identified

	Bicycle/Pedestrian Improvements	Priority: Short Term	Priority: Long Term	Description
1	On-Street Bike Lane Network	X		Re-stripe existing streets with bike lanes connecting neighborhoods to riverfront and downtown
2	Extend Riverfront Trail to College	X		Extend trail from tour boat dock to Walla Walla Community College
3	Downtown Streetscape Improvements	X		6th Street sidewalk improvements, curb bulb-outs, lighting, and landscaping between Chestnut and Diagonal
4	5th Street Streetscape Improvements	X		Sidewalk improvements, curb bulb-outs, lighting, and landscaping between Diagonal and Port Drive
5	Diagonal Streetscape Improvements	X		Raised medians, lighting, landscaping between 2nd and 6th Streets
6	Bike/Ped Connection to Lewiston		X	New bicycle/pedestrian bridge over Snake River
7	Bridge Street Streetscape Improvements		X	Sidewalk improvements, lighting, and landscaping between 2nd and 15th Streets

The recommendations for Lewiston are summarized in Tables ES-6 and ES-7 on the following page and are presented in detail beginning on page 34. Key recommendations include:

Table ES-5. Clarkston Street Network Projects Identified

	Street Network Improvements	Priority: Short Term	Priority: Long Term	Description
1	Street Network Reclassification	X		Reclassify existing streets and shift State Route 129 to 5th Street north of Diagonal
2	Signing & Wayfinding Improvements	X		Improve and consolidate directional signing for the downtown and riverfront district
3	5th/Walmart/ Costco Entrance	X		Remove 4-way stop with possible right-in/right-out to redirect Walmart traffic to Port Dr
4	2nd/Diagonal/Bridge Signal Modifications	X		Convert 2nd Street to one-way southbound to improve signal operations
5	Port Drive Improvements	X		Improve Port Drive to Collector standard
6	Grid Street Network Improvements		X	Improve grid street network in the Port area to support riverfront district
7	2nd Street Extension		X	Extend 2nd between Port Drive and Bridge behind Costco for more direct connection to Port Drive collector
8	12th Street Extension		X	Extend 12th Street between Fair Street and Port Way
9	5th/Fair		X	Future Turn Lanes
10	5th/Port Drive		X	Future Signal or Roundabout
11	12th/Bridge		X	Future Signal
12	12th/Port Drive		X	Future Signal or Roundabout
13	13th/Port Drive		X	Future Signal or Roundabout
14	14th/Bridge		X	Future Signal
15	14th/Port Drive		X	Future Signal or Roundabout
16	15th/Port Drive		X	Future Turn Lanes
17	2nd/Diagonal/Bridge Roundabout		X	Future Roundabout and Gateway

18th/Main/Levee Bypass – Gateway and wayfinding* improvements are recommended as well as signal phasing changes to reduce delays for all movements. A roundabout may be the long-term solution.

Levee Bypass Reroute – The out of direction connection to the bypass from the west results in the bypass being underutilized. This creates higher volumes on Main and D Streets, negatively impacting the downtown pedestrian experience. The Levee Bypass also presents an obstacle to connecting the downtown with the riverfront. Relocating the bypass away from the river could significantly increase the use of the bypass, create developable space near the river, and enhance the value of the Twin City Foods site. This plan recommends relocating US Highway 12 to 1st Street between Main Street and the riverfront providing a more intuitive route and encouraging use of the bypass.

5th/Levee Bypass – Reconstructing 5th Street as a multi-modal street will offer a better connection between downtown and the Bypass and riverfront with wayfinding and gateway treatments.

Grid Street Network – Create/extend the grid street network through the downtown area west of 5th Street and north of Main Street.

*A separate Lewiston-Clarkston Wayfinding Plan has been prepared to address specific wayfinding needs and recommendations.

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Main Street Streetscaping – As the primary entrance to downtown Lewiston from the east, Main Street should be improved with sidewalk and/or median streetscaping, presenting a more attractive gateway to downtown. These improvements should extend from the existing green space at 19th Street to 9th Street where the existing downtown streetscaping begins.

Trail Connections – Connections to the Clearwater River trail system are recommended at 18th Street, 13th Street and in the vicinity of the redeveloped Twin City Foods site. Connections to the Snake River trail system are identified at 11th Avenue and 5th Avenue.

Parking – The majority of downtown Lewiston zoning contains no parking requirement. This makes public parking very important to supporting higher density land use downtown. Additional opportunities to increase public parking supply should be pursued as downtown properties redevelop. Existing streets may be converted to angled parking where right-of-way width permits and a future parking structure should be considered to meet long-term needs.

On Street Bike Lanes – Specific streets are identified for on-street bike lanes to better connect the non-motorized user to the downtown, riverfront, Lewis Clark State College, and the surrounding neighborhoods.

Table ES-6. Lewiston Street Network Projects Identified

		Priority		
	Street Network Improvements	Short Term	Long Term	Description
1	Signing & Wayfinding Improvements	X		Improve and consolidate directional signing for the downtown and riverfront district
2	18th/Main Street Signal Modifications	X		Wayfinding and protective/ permissive left turns
3	Levee Bypass Re-route	X		Relocate Hwy 12 to 1st Street between riverfront and Main. Reclassify Levee Bypass as Minor Arterial between Snake River Ave and D Street. Close Levee Bypass or reclassify as Local between D Street and 1st Street.
4	1st/Main Street	X		New Intersection, gateway, landscaping, and wayfinding to support Levee Bypass re-route. Future Signal if two-way traffic conversion on Main.
5	1st/D Street	X		New Signal to support Levee Bypass re-route
6	5th/Levee Bypass	X		Gateway and wayfinding, oversized vehicle parking. Plan for future Signal or Roundabout
7	Waterfront Grid Street Network Improvements		X	Improve grid street network in the Waterfront Redevelopment District
8	Two-Way Conversion on Main & D Streets		X	Convert one-way couplet to two-way traffic to improve access and circulation
9	18th/Main Street Roundabout		X	Future Roundabout and Gateway
10	21st/Main Street		X	Wayfinding and future Roundabout

Table ES-7. Lewiston Bicycle/Pedestrian Projects Identified

		Priority		
	Bicycle/Pedestrian Improvements	Short Term	Long Term	Description
1	On-Street Bike Lane Network	X		Re-stripe existing streets with bike lanes connecting neighborhoods to riverfront and downtown
2	Main Street Streetscape Improvements	X		Raised medians, sidewalk improvements, curb bulb-outs, lighting, and landscaping between 9th and 21st Streets
3	5th Street Streetscape Improvements	X		Sidewalk improvements, curb bulb-outs, lighting, and landscaping between Main and Levee Bypass
4	13th Street RR Underpass Trail Connection	X		New bicycle/pedestrian railroad underpass connecting to Levee Trail
5	18th Street Trail Connection	X		New connection to Levee Trail with at-grade railroad crossing
6	5th Avenue Trail Connection	X		New connection to Snake River Trail with at-grade crossing of Snake River Ave and Railroad
7	7th Avenue Trail Connection	X		New connection between 11th St and 13th St through Vollmer Park
8	11th Avenue Trail Connection	X		New connection to Snake River Trail with at-grade crossing of Snake River Ave and Railroad
9	Oversized Vehicle Parking	X		Surface parking for RV's and trucks adjacent to 5th & Levee Bypass
10	Parking Structure		X	Future parking structure on existing surface lot at 5th & D Streets
11	Waterfront District Streetscape Improvements		X	Sidewalk improvements, curb-bulbouts, on-street parking, lighting, and landscaping in conjunction with redevelopment
12	Levee Parkway		X	Curb, gutter, sidewalk, raised medians, landscaping and pedestrian refuge crossings on Levee Bypass between D Street and 5th Street, in conjunction with Waterfront redevelopment
13	River Gateway		X	Pedestrian walkway, plaza, river access, and boat docks, in conjunction with Waterfront redevelopment
14	Bike/Ped Connection to Clarkston		X	New bicycle/pedestrian bridge over Snake River

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Traffic analysis of the projected 2030 volumes was conducted, including the intersection improvements recommended in this plan. The results of this analysis, summarized in Table ES-8 for Clarkston area intersections and Table ES-9 for Lewiston area intersections, are acceptable levels of service at each of the study intersections and improvements to the critical intersections identified in the initial traffic analysis. Additionally, network-wide measures of effectiveness were calculated based on the traffic simulation model created for this plan, which show an improvement of 25 to 60 percent in measures such as total vehicle delay, travel time, fuel consumed, and CO emissions.

Section III of this plan offers principles and guidelines for streetscaping. This section provides a set of guiding design principles and a pallet of tools with which to shape the future downtown street environment. The purpose of these guidelines is to help coordinate improvements downtown by providing opportunity and color for your downtown public spaces, streets, sidewalks, building facades, and landscaping. These guidelines provide a design context for consistency, as well as variation, in creating successful community spaces, and a starting point for new ideas based on healthy design principles.

Considerations for each city should include public safety, vitality, business encouragement, aesthetics, pride of place, community expression and civic involvement. Universal design principles are discussed and guidelines are provided for sidewalks, planting, seating, outdoor tables, sidewalk lighting, public art, and signage. Ongoing considerations of maintenance issues and seasonal changes are also discussed.

As the Lewis-Clark Valley grows and changes, it's increasingly apparent that design guidelines are needed to allow the streetscape to adapt appropriately for the community, while at the same time promoting a mix of uses, including pedestrian, bicycle, automobile, and public transit. It is intended that implementation of these designs will serve to increase not only the appeal and viability of downtown Lewiston and Clarkston, but in addition, the treatment of the Valley's other through-fares and arterials.

The Lewis-Clark Valley is a unique place in the northwest. The objective of this plan is to facilitate and focus continued redevelopment efforts to enhance both downtowns, creating high quality places where people want to live, work, and play.

Table ES-8. Clarkston Traffic Analysis Summary 2030 With Recommended Improvements

CLARKSTON	2009 Existing		2030 Projected		2030 With Recommended Improvements	
Intersection Location	LOS	Delay	LOS	Delay	LOS	Delay
6th/Chestnut	B	10.8	A	9.2	A	9.2
6th/Sycamore	A	5.0	A	5.8	A	5.8
6th/Elm	A	7.7	A	7.2	A	7.2
6th/Maple/Diagonal	B	15.7	C	20.5	C	20.3
5th/Chestnut	A	9.4	A	9.4	A	9.4
5th/Sycamore	B	10.6	B	10.6	B	10.6
5th/Elm	B	11.1	B	11.1	B	11.1
5th/Maple	B	10.2	B	10.2	B	10.2
5th/Diagonal	C	15.1	C	16.4	C	16.9
2nd/Diagonal/Bridge	C	31.9	D	46.1	C	31.3
5th/Bridge	B	16.2	B	19.5	B	19.4
6th/Bridge	B	14.4	C	15.4	B	14.7
5th/Fair	B	11.5	C	25.2	C	25.2

Table ES-9. Lewiston Traffic Analysis Summary 2030 With Recommended Improvements

LEWISTON	2009 Existing		2030 Projected		2030 With Recommended Improvements	
Intersection Location	LOS	Delay	LOS	Delay	LOS	Delay
Main/Snake River Ave	n/a	n/a	n/a	n/a	C	21.7
1st/Main	n/a	n/a	n/a	n/a	A	7.8
1st/Levee Bypass	n/a	n/a	n/a	n/a	B	10.6
3rd/Main	B	13.4	B	16.5	B	15.1
5th/Main	A	4.3	A	6.4	A	6.6
9th/Main	A	6.3	A	6.9	A	7.5
11th/D/Main	C	15.7	C	17.2	B	14.3
13th/Main	A	8.0	B	11.5	B	10.1
18th/Main/Levee Bypass	B	19.9	C	29.8	B	16.3
9th/D	B	11.7	B	13.3	B	12.2
5th/D	A	9.3	B	11.4	B	10.7
3rd/D	A	10.0	B	12.4	B	12.0
1st/D	E	40.2	F	*	D	40.1
Levee Bypass/D	D	31.5	F	116.2	C	20.8
5th/Levee Bypass	B	10.5	B	12.1	C	24.7
Levee Bypass/Snake River Ave	B	12.2	C	15.7	C	15.7

*Delay too high to accurately estimate
n/a: not applicable, intersection did not exist in this analysis scenario

I. Transportation Planning and Analysis

Introduction

Clarkston, Washington and Lewiston, Idaho are nestled together at the confluence of the Snake and Clearwater Rivers offering a large variety of recreational and vocational opportunities. While existing within two different states, the cities function well as a single region with a combined population of nearly 60,000. The region is home to Lewis-Clark State College and Walla Walla Community College, and offers access to the nearby Hells Canyon, the deepest river gorge in North America. Primary industries include agriculture, paper and timber products, and light manufacturing. Each city boasts an inland port, which at approximately 465 river miles from the Pacific Ocean, are the most inland sea ports along the west coast of the United States. US Highway 12 passes through both cities providing good regional access for commerce, tourists and local residents. Highway 12 also connects the two cities via the Interstate Bridge, also known as the Blue Bridge, over the Snake River.

The existing street network is typical of many small western downtowns. Traditional main street shops and businesses grew up around major thoroughfares, which eventually developed into State and US highways. Streets that were originally design for horse and carriage were redesigned for cars, but often left out important pedestrian elements. Improvements focused mainly on capacity and ignored the benefits of good access and circulation, parking, pedestrian amenities, and transit – critical elements to a healthy downtown.

Today, traditional downtowns are re-thinking the auto-centric designs of the past and instead focusing on design for people. At some point, everyone is a pedestrian. Designing for that lowest common denominator, ensures that all users' needs are met. Downtowns historically depended on a strong multi-modal element. This has not changed. Successful downtowns of the future will need to strike a balance between users – cars, trucks, pedestrians, bikes, and transit.

Goals and Objectives

This plan provides an evaluation of the existing transportation network, projections of future land use, recommendations for improvements, and guidelines for design. This plan is intended to guide physical solutions and compliment other mechanisms, plans, and policies that provide the foundation upon which the downtowns will operate, grow, and redevelop. Sensitivity to and appreciation of the various, sometimes conflicting, needs of different modes of transportation is a key component of the plan.

The plan focusses on addressing deficiencies and identifying improvements in the roadway network serving downtown Clarkston and Lewiston, focusing on US Highway 12 and major connecting streets.

This plan recommends a balanced approach to providing circulation in downtown Lewiston and Clarkston – one that provides adequate vehicle capacity now and in the future, while at the same time making improvements that enhance and stimulate downtown revitalization.

Other Studies

A number of previous planning efforts and studies were utilized in evaluating circulation and future land use. These include:

- Lewis-Clark Valley Long Range Transportation Plan & Transit Master Plan (2006)
- Asotin County Regional Bicycle/Pedestrian Plan (2007)
- Putting the Pieces Together - A Revitalization Plan for Downtown Lewiston
- A Parking Management Plan for Downtown Lewiston (2007)
- Capital Improvement Recommendations: Lewiston Signal Timing Study (2004)
- City of Lewiston Waterfront Plan (2010)
- Lewiston and Clarkston Comprehensive Plans, Land Use Plans, and Zoning

Demographic Trends

Changes in population age, household size, and transportation costs are changing where people choose to live. Nearly half of the built environment that will be needed in the year 2030 doesn't exist today. Most of this new space will be residential construction, and most of the new growth will occur in the South and Western U.S.[1]

The current economic recession has slowed growth and population migration. However, many of the underlying trends, such as an aging "baby boomer" population, have not changed. While the pace of growth may be slower, these changes in the demographic landscape will continue to occur.

This represents a tremendous opportunity to shape future growth. Traditional downtowns have the ability to capture desire for more compact, walkable, high-quality residential living, entertainment, and work environments. Communities with scenic qualities and outdoor recreational amenities will be in demand. Good transportation investments can help support these opportunities.

[1]Dr. Arthur C. Nelson, FAICP, Director of Metropolitan Research, University of Utah

Baby Boom Migration Tilts Toward Rural America

John Cromartie, Economic Research Service, USDA

As Americans age, their likelihood of migrating, their reasons for moving, and their destination choices shift dramatically. Baby boomers—born between 1946 and 1964—are entering a stage when moves to rural locales increase, especially to areas with scenic amenities and lower housing costs.

"Boomers" have already demonstrated an affinity for moving to rural and small-town destinations, compared with older or younger cohorts. They led a short-lived rural "rebound" in the early 1990s despite being at an age when career-oriented motivations strongly influence migration decisions.

Today's 83 million boomers, ranging from age 45 to 63, represent a fourth of the total U.S. population. There has never been such a large share of the workforce approaching retirement. By comparison, 42 million were age 45 to 63 in 1990. Boomers are now poised to significantly increase rural and small-town elderly populations by 2020, with major social and economic implications for their chosen destinations.

- The size and direction of migration patterns vary considerably by age, and baby boomers are increasingly migrating to rural destinations.
- If baby boomers follow migration patterns similar to those of their predecessors, the rural population age 55-75 will increase by 30 percent between 2010 and 2020.
- Local economic development strategies aimed at attracting more jobs will likely have little effect on the migration decisions of baby boomers searching for a better quality of life.
- Communities judged to have high amenities are seeing higher in-migration rates.

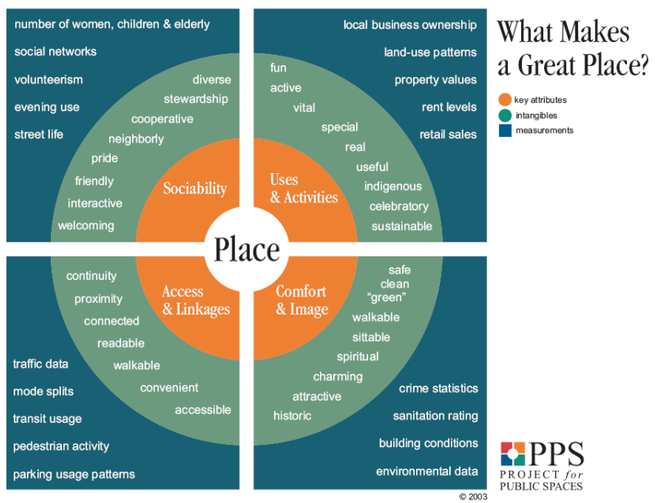
Place Principles

Creating a high-quality downtown environment requires paying attention to the attributes that make it a comfortable and attractive place for *people*.

Successful public spaces have four key qualities: [2]

- They are accessible.
- People are engaged in activities there.
- The space is comfortable and has a good image.
- It is a sociable place: one where people meet each other and take people when they come to visit.

Good planning and design of transportation networks and streets can be the framework for creating great public spaces, encouraging economic vitality, civic engagement, human health, and environmental sustainability, in addition to serving peoples' mobility needs.



- ❑ Create an Organizing Structure
  - Street & Block Pattern
  - Hierarchy of Streets
  - Open Spaces
  - Land Use & Density
  - Spatial Definition
- ❑ Foster a Distinctive Identity
  - Historic Buildings
  - Geography
  - Vistas
  - Landmarks
  - Streetscape Treatments
  - Public Art
  - Public Spaces
- ❑ Maximize Convenience
  - Pedestrian Movement
  - Parking
  - Transit
  - 1/4 Mile Walking Distance
- ❑ Ensure Visual and Functional Continuity
  - Architecture
  - Streetscape
  - Signs
  - Linkages
- ❑ Provide for Comfort & Safety
  - Climate
  - Traffic
  - Amenities
  - Physical Safety
- ❑ Emphasize High Quality Place
  - Authentic Materials
  - Color & Texture
  - Well Designed Lighting
  - Clean & Well Maintained

[2] Project for Public Spaces, www.pps.org

Lewiston-Clarkston Downtown Circulation Plan

Public Spaces

- ❑ Public Gatherings
- ❑ Festival Space
- ❑ Outdoor Markets
- ❑ Outdoor Entertainment
- ❑ Redevelopment Catalyst
- ❑ Create Identity

Pedestrian Spaces

- ❑ Safe & Comfortable
- ❑ Street Trees
- ❑ Sidewalk Width
- ❑ Sidewalk Paving
- ❑ Sidewalk Lighting
- ❑ Plantings
- ❑ Street Furniture
- ❑ Bike Parking
- ❑ Transit Stops

Lewiston-Clarkston Downtown Circulation Plan

Vehicular Circulation

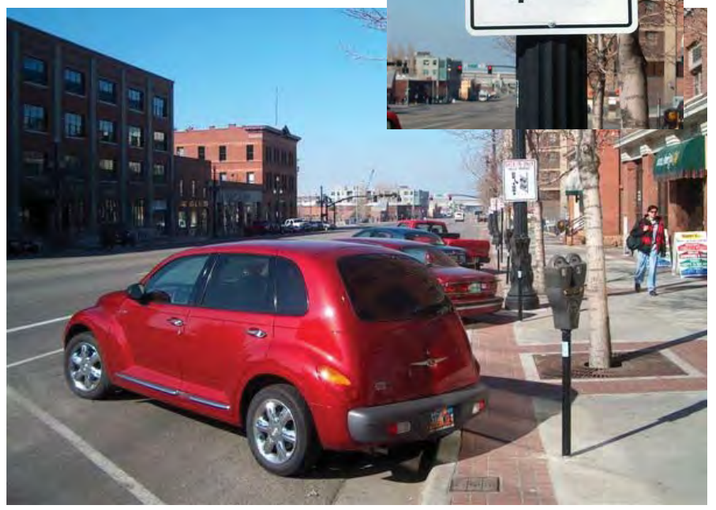
- ❑ Street Hierarchy & Function
  - ➤ Arterial Street
  - ➤ Collector Street
  - ➤ Parking Street
  - ➤ Local Access Street
  - ➤ Alley
- ❑ Convenience & Access
- ❑ Complete Streets
- ❑ Traffic Calming
- ❑ Gateways & Edges
- ❑ Traffic Control
  - ➤ Signals
  - ➤ Roundabouts

Parking

- ❑ Office Parking
- ❑ Retail Parking
- ❑ Residential Parking
- ❑ On-street Parking
- ❑ Municipal Parking Lots & Structures
- ❑ Enforcement
- ❑ Allocate with Uses
- ❑ Catalyst for Redevelopment
- ❑ Transportation Demand Management

What Do Downtowns Need?

- ❑ *Traffic & Visibility*
- ❑ *Direct Access*
- ❑ *Convenient Parking*
- ❑ *Low Speeds*
- ❑ *Pedestrian-Friendly Environment*
- ❑ *A Sense of Place*



Lewiston-Clarkston Downtown Circulation Plan

Study Area

The study area for the Downtown Circulation Plan is shown in Figure 1, which includes the land area that influences traffic volumes within the downtown areas. Detailed traffic analysis was performed within a smaller study area of intersections in the downtown areas. The roadways included in the detailed traffic analysis include:

Clarkston

- Bridge Street from the Snake River Bridge to 6th Street
- Diagonal Street from Bridge Street to 6th Street
- 5th Street from Chestnut Street to Fair Street
- 6th Street from Chestnut Street to Bridge Street

Lewiston

- Main Street from 18th Street to the Snake River Bridge
- D Street from 11th Street to the Levee Bypass
- Levee Bypass from 18th Street to Snake River Avenue
- Cross-street intersections at 1st, 3rd, 5th, 9th, 13th, and 18th Streets

Figure 1. Study Area

Process

The transportation planning process began with an inventory of the existing conditions, including street and intersection configurations, traffic volumes, and bicycle and pedestrian facilities. Next an evaluation of existing land uses and a realistic, market-constrained assessment of potential land use changes for the next 20 years was developed within the study area. These land use changes were then used to forecast traffic growth. By combining the traffic growth with the existing volumes, traffic levels were established for analysis of future conditions. Analysis was then conducted using the future traffic volumes on the existing street network to identify critical circulation issues and intersection "hot-spots". The recommendations made in this report are focused on addressing these circulation issues and providing transportation infrastructure that will support the future land use projected for the downtown areas.

Existing Conditions

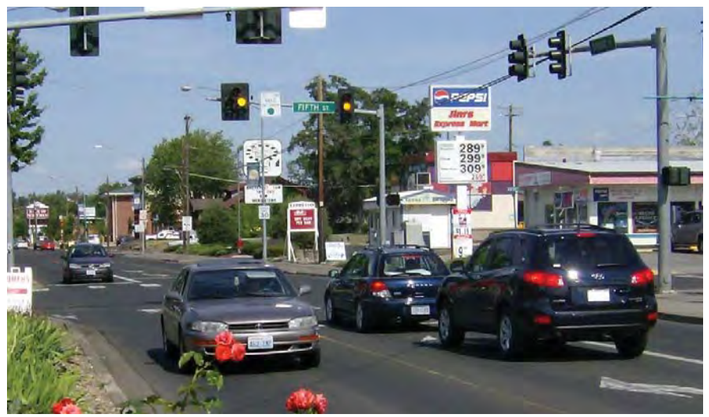
Street Network

An inventory of the existing street network was conducted, including:

- Number of lanes at each study intersection
- Lane assignment at each study intersection
- Width of each lane
- Areas of allowed parking
- Traffic signal equipment and operations
- Pertinent traffic control devices

Traffic Volumes

Manual counts of traffic volume at the twenty-nine (29) study intersections were completed during the first two weeks of December 2009. This timeframe was deliberately scheduled for several weeks after the Super Walmart relocated from Lewiston to Clarkston to allow traffic patterns to re-establish around this major attractor prior to conducting the traffic data collection. Discussions with area planners indicate no significant seasonal variation in traffic volumes associated with summer or winter tourism.



Peak Periods

Manual traffic counts were conducted during the PM peak traffic period, 4:00 to 6:00 PM, during which traffic volumes and delays are typically at their highest levels of the day. AM peak traffic volumes were not collected nor AM analysis completed because the PM period traffic volumes far exceed AM traffic levels throughout the study area. Within the PM peak period is a one-hour period of time when traffic volume and delay is highest, commonly referred to as the "peak hour" or "rush hour". The study area traffic counts were analyzed to determine the PM peak-hour traffic volumes from within the two-hour timeframe counted. These volumes are the basis for the traffic analysis conducted for this study.

Bicycle and Pedestrian Facilities

Most of the study roadways provide sidewalks for pedestrians. No dedicated space for on-street bike lanes was noted in the study area. A significant and well established bike and pedestrian trail system exists along the riverfront in both cities.

Land Use Analysis

Land use within the study area was evaluated to forecast projected development over the next 20 years so that these land use changes could then be related to changes in traffic levels. In order to determine the future development forecast, both existing land uses and public and private sector plans for future development were reviewed.

This land use forecast process included basic assumptions on growth trends, transitioning land uses, relocation of industrial land uses out of the downtown cores (e.g., the Twin City Foods site in Lewiston), and future development of waterfront areas to non-industrial uses. See Appendix A for more on these assumptions.

The process for projecting future land use consisted of five steps:

1. Identify the location and size of vacant or underdeveloped lots and buildings with the study area
2. Determine the desired or most likely future use (commercial, office, retail, etc.) for each lot or building based on a realistic evaluation of potential development (See Table 14 in Appendix A for forecasted land use development.)
3. Convert the size of each land use to employment and housing figures based on national ratios
4. Assign each land use into a traffic analysis zone (TAZ) consistent with the TAZs used in the LCVMPO's transportation demand model and compare the forecasted 2030 employment and housing figures for each TAZ with those currently used in the transportation demand model
5. Calculate the revised projections for each TAZ for use in the traffic modeling portion of this study

The projected increases in land use resulting from this process and distributed to the study area TAZs are summarized in Table 1. For a more detailed discussion of the land use forecasting process, see Appendix A.

Table 1. Projected Land Use Increases

Lewiston Downtown	
Office/commercial	150,000 s.f.
Retail/social/recreational	190,000 s.f.
Housing/lodging	150 – 185 units
Lewiston Snake River Ave. Corridor	
Office/commercial	133,000 s.f.
Retail/social/recreational	87,000 s.f.
Housing/lodging	240 units
Clarkston	
Office/commercial	997,820 s.f.
Retail/social/recreational	45,800 s.f.
Light Industrial	18,000 s.f.
Educational	20,000 s.f.
Housing/lodging	50 units

s.f.=square feet

Lewiston-Clarkston Downtown Circulation Plan

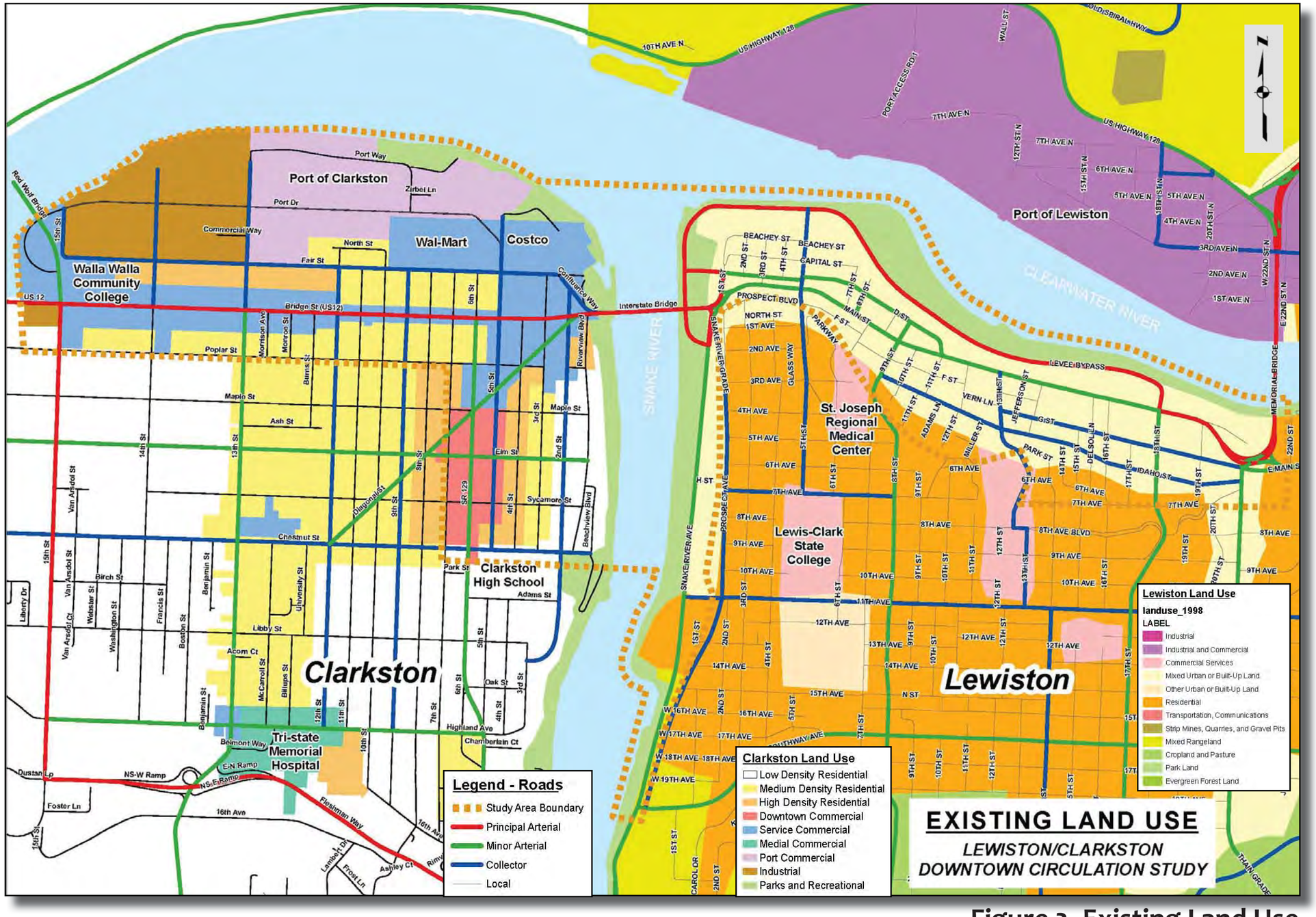


Figure 2. Existing Land Use

Lewiston-Clarkston Downtown Circulation Plan

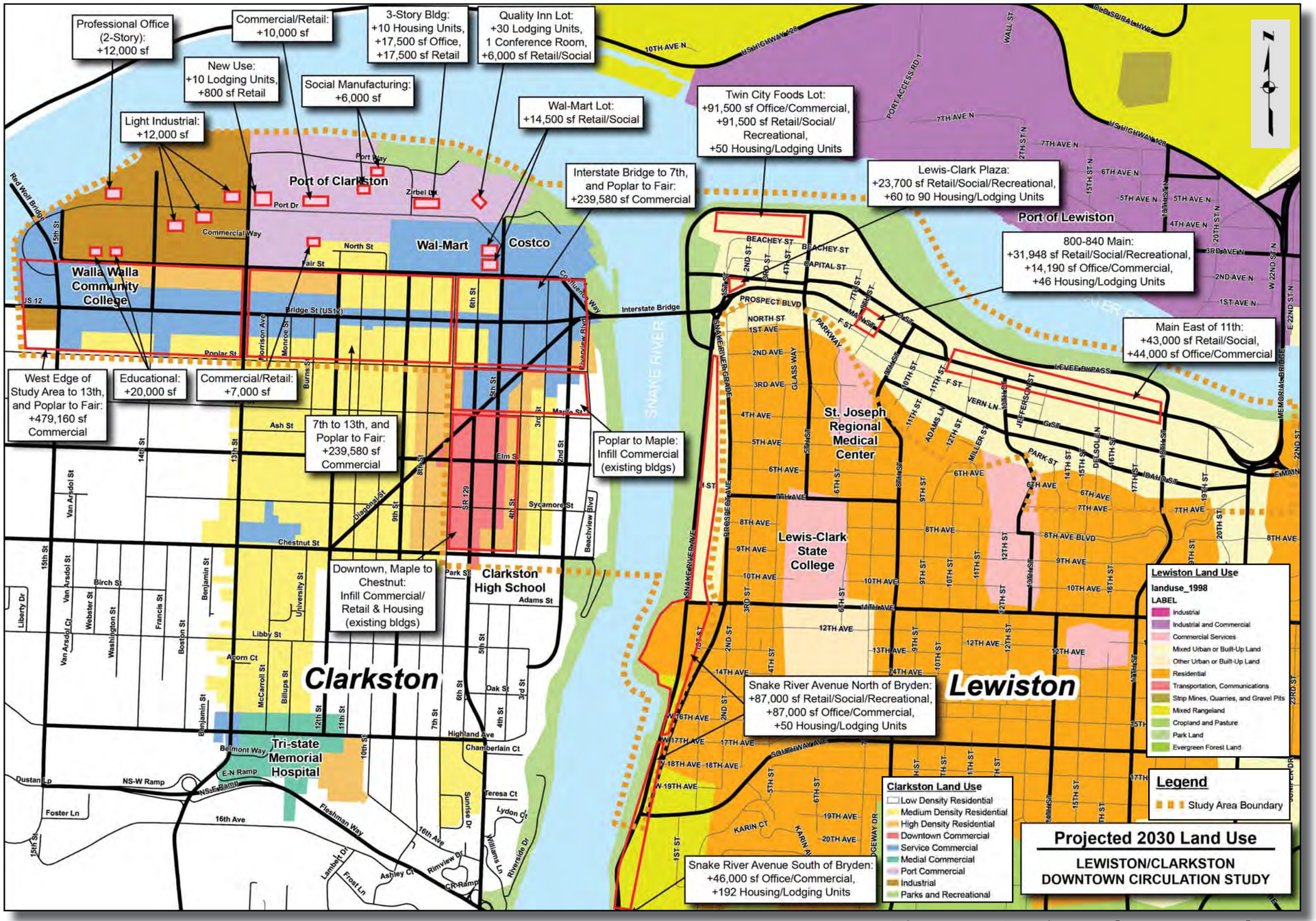


Figure 3. Projected 2030 Land Use

Traffic Volume Development

Proposed changes to the street network must function well when implemented, as well as for many years to come. The future land use analysis previously described formed the basis for projecting future traffic volumes against which to analyze the existing traffic network and to evaluate potential network and intersection changes.

Land uses such as homes and apartments produce trips. Land uses such as offices, schools, and retail attract trips. Arterial streets carry more trips than local streets. These fundamental facts form the basis of transportation demand modeling, a process whereby traffic engineers and planners predict traffic volumes based on anticipated land use patterns (i.e., property development or redevelopment) and additions or changes to the roadway network.

The housing and employment projections become critical inputs to the traffic volume forecasting process. Both the existing and projected (year 2030) land uses were analyzed using the MPO's transportation demand model. By comparing the model's traffic volume projections for the existing land use against those for the future land use, a growth factor was calculated for each street in the travel demand model. A representative sample of these calculated growth factors is presented in Table 2.

The projected traffic growth factors were applied to the 2009 existing traffic volumes, resulting in the projected 2030 traffic volumes analyzed for this plan. The 2009 Existing Traffic Volumes are shown for Clarkston in Figure 4 and for Lewiston in Figure 5. The 2030 Projected Traffic Volumes for Clarkston and Lewiston are illustrated in Figures 6 and 7, respectively.

Table 2. Calculated Growth Factors

Location	Projected Traffic Growth Factor*
Main Street west of 18th Street	14%
Main Street west of 13th Street	21%
Main Street between 3rd and 5th Streets	21%
Highway 12 Snake River Bridge	28%
D Street east of 9th Street	41%
D Street between 3rd and 5th Streets	35%
1st Street between Main and D Streets	37%
Levee Bypass north of Main/18th Street	22%
Levee Bypass between 5th and D Streets	6%
Bridge Street west of Diagonal/2nd Street	8%
Bridge Street between 5th and 6th Streets	6%
Diagonal Street south of Bridge Street	12%
Diagonal Street between 5th and 6th Streets	14%
5th Street north of Bridge Street	15%
6th Street south of Diagonal/2nd Street	15%

*Total projected growth over 20 years

Lewiston-Clarkston Downtown Circulation Plan

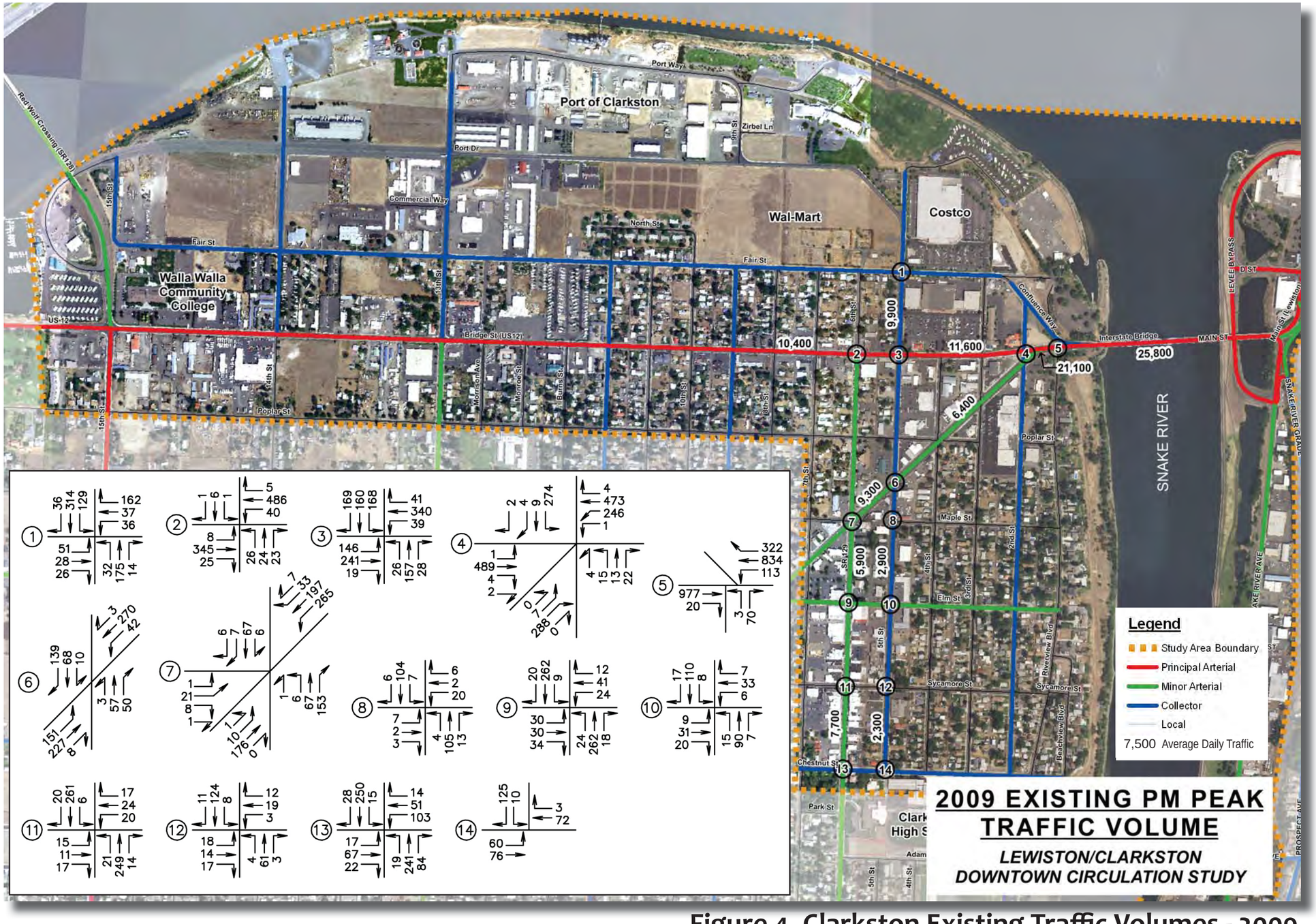


Figure 4. Clarkston Existing Traffic Volumes - 2009

Lewiston-Clarkston Downtown Circulation Plan

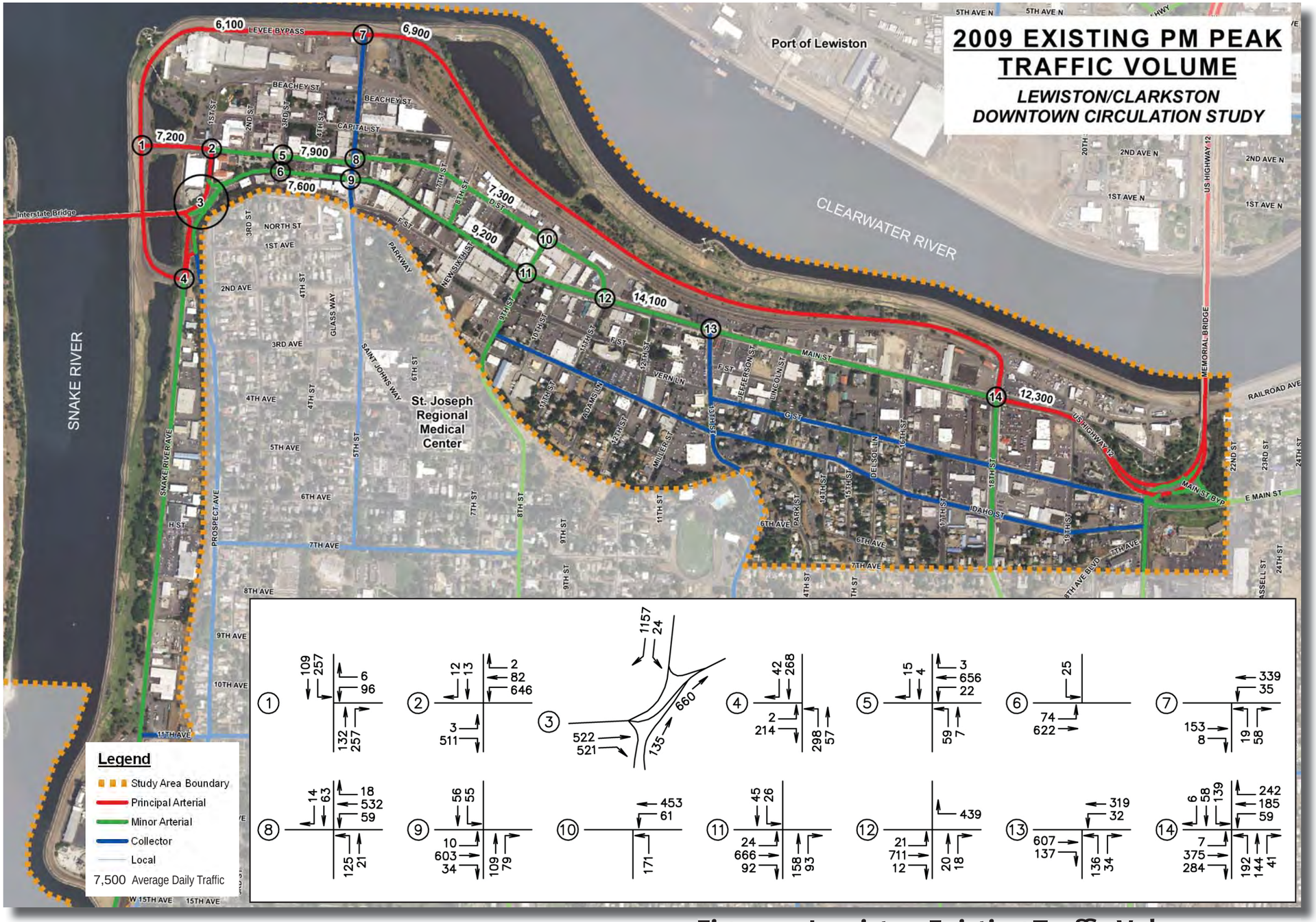


Figure 5. Lewiston Existing Traffic Volumes - 2009

Lewiston-Clarkston Downtown Circulation Plan

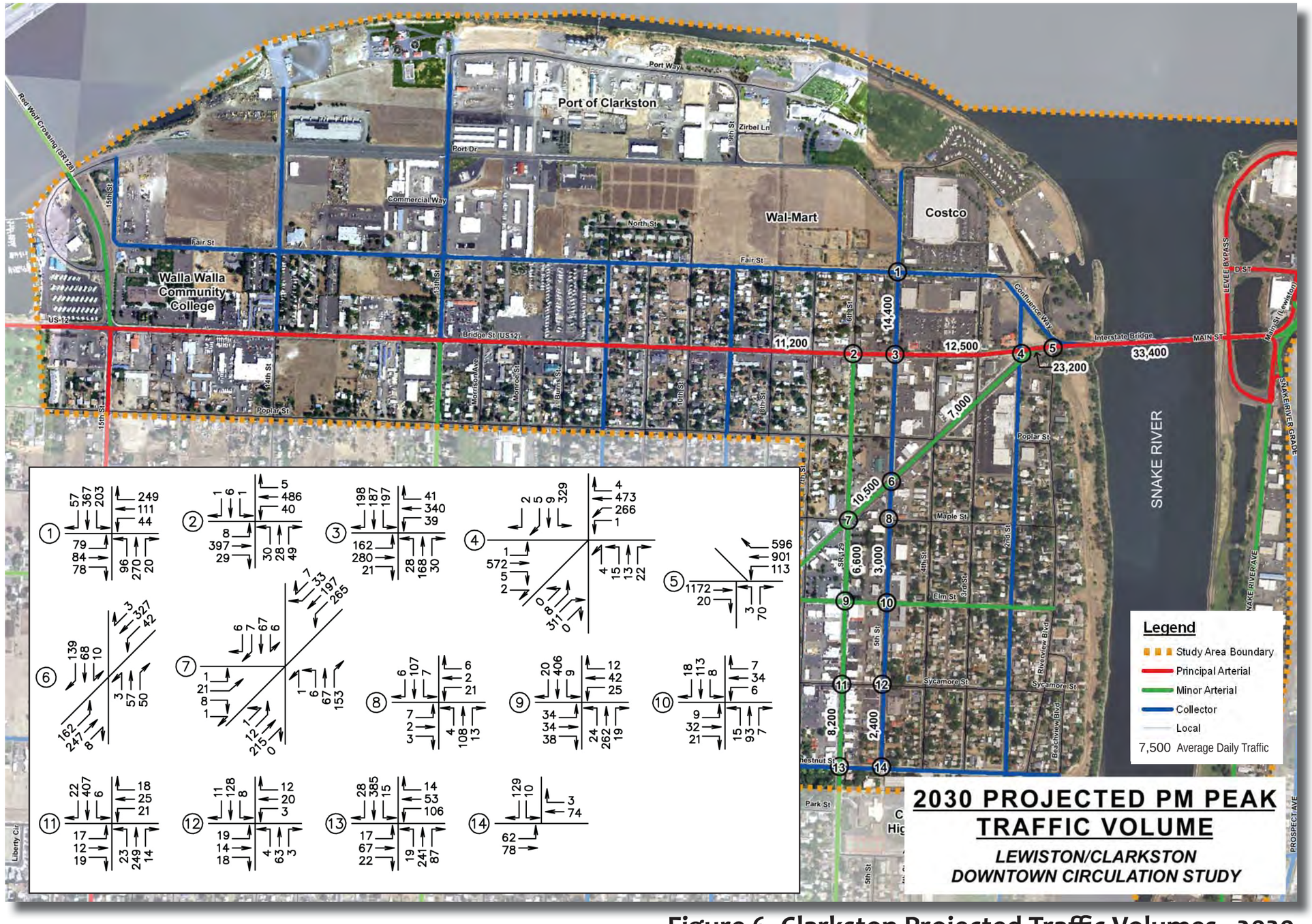


Figure 6. Clarkston Projected Traffic Volumes - 2030

Lewiston-Clarkston Downtown Circulation Plan

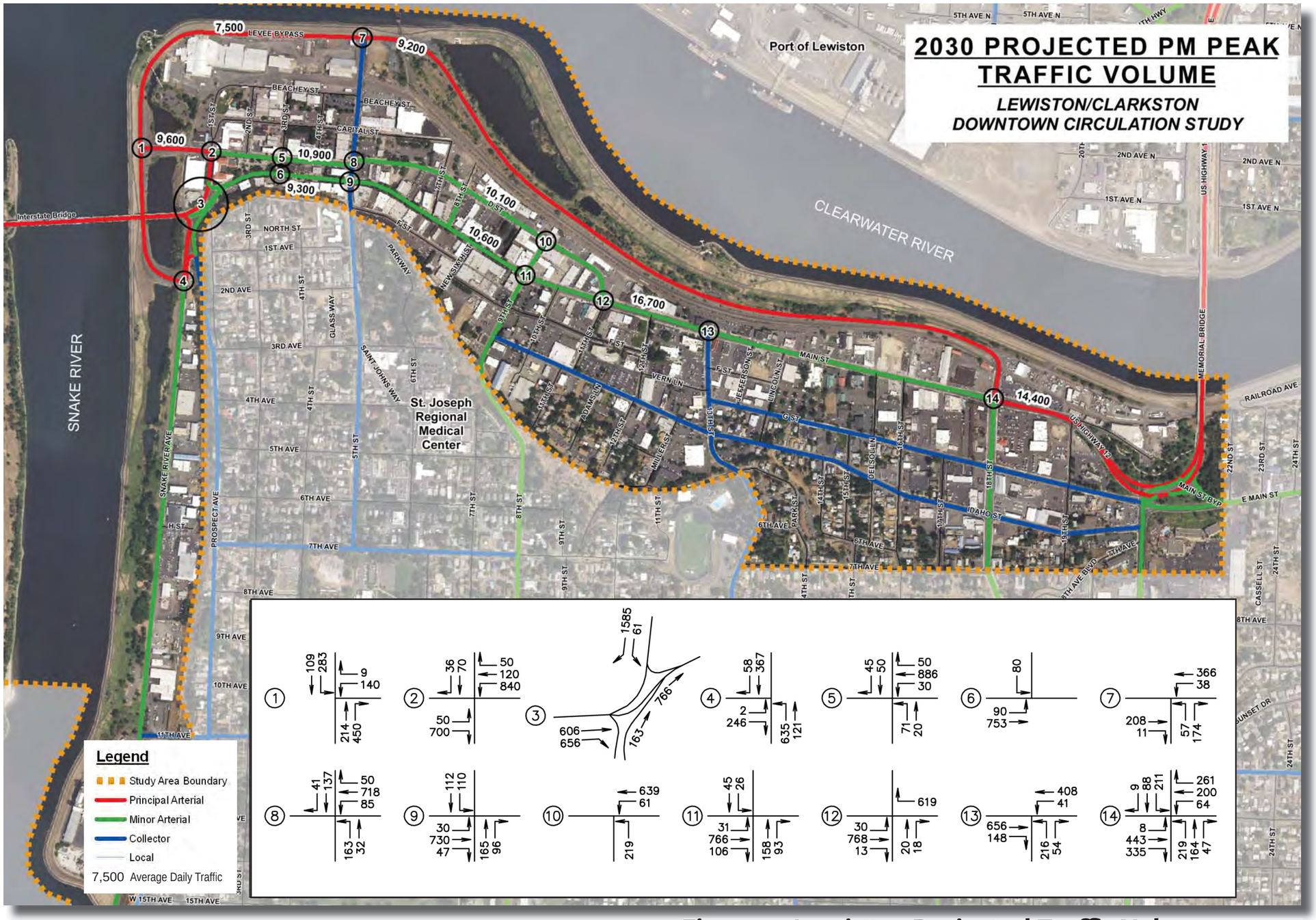


Figure 7. Lewiston Projected Traffic Volumes - 2030

Origin/Destination Study

An origin/destination study was conducted to estimate the percentage of traffic entering the Lewiston and Clarkston downtown areas that passes directly through town without stopping.

As shown in Figure 8, three monitoring locations were selected at key points where roadways enter and exit the downtown areas:

- Location 1 (Clarkston): Bridge Street just west of 15th Street
- Location 2 (Clarkston): 6th Street just north of Chestnut Street
- Location 3 (Lewiston): Main Street just east of 18th Street

Data was collected for a 48-hour mid-week period in February 2010 by tracking the Bluetooth signature of cell phones in vehicles.

Automatic traffic counters were also installed at each monitoring location to count the total traffic on the street. By comparing the number of Bluetooth signatures identified to the total traffic count at the monitoring stations, it was determined that 4.6% of vehicles had Bluetooth technology active and were monitored as they entered and exited the study area. This detection rate is comparable to the hit rate on more traditional postcard-type origin/destination surveys, and is useful for estimating travel trends.

The Bluetooth data was searched to find matching pairs of Bluetooth signatures. Multiple windows of time varying in duration from ten hours to 30 minutes were analyzed in the search for matches. This was done in order to identify both commuting workers as well as pass-through drivers.

The origin/destination study found that, across all three study locations, 15.2% of vehicles entering the downtown study area pass through without stopping. This represents approximately 1,800 vehicles on an average weekday. This suggests that the majority of traffic entering the study area is local, bound for destinations within the downtown area. Because approximately 85% of traffic in the downtowns is local, resources should be focused on opportunities to improve local circulation routes as discussed in this plan. Providing other routes for Highway 12 traffic to bypass the downtowns, such as Down River Road (Highway 128), would have little effect on reducing downtown traffic volumes.

Additional results drawn from the origin/destination study, including percent of pass-through trips by study location and percent commuter trips, are summarized in Table 3.

Table 3. Study Results Summary

	Study Location 1	Study Location 2	Study Location 3
Commuter Type Trips*	24%	43%	25%
Percent of trips entering at the study location that pass through the study area without stopping	27%	20%	8%
Percent of trips exiting at the study location that pass through the study area without stopping	6%	12%	37%

*Vehicle trips recorded twice at the same study location within a ten-hour window of time.

Figure 8. Origin/Destination Study Monitoring Locations

Traffic Analysis

Level of Service

Level of Service (LOS) is a qualitative measure, similar to a report card, used to describe operational conditions within a traffic stream. LOS is based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, and delay. LOS ratings range from "A" (free-flow traffic conditions, indicating that drivers will experience little, if any, delay) to "F" (indicating significant traffic congestion and driver delay will occur). The most commonly desired LOS is C, representing full but constant traffic flow with only occasional interruptions.

This study uses LOS measures for signalized and unsignalized intersections to represent the amount of delay experienced by drivers. The delay value used in determining LOS is known as "control delay." Control delay is defined as the total delay experienced by a driver and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

The delay a vehicle experiences at a traffic signal is a function of the capacity of the approach, the volume of traffic, and the signal timing. The delay a vehicle experiences at a stop-controlled intersection is a function of the capacity of the approach and the degree of saturation on the uncontrolled (un-stopped) roadway (i.e. the number of acceptable gaps in the passing traffic stream).

The standard delay range for each LOS value is shown in Table 4. The acceptable delay range for a given LOS is generally higher at signals than at stop signs because drivers expect signalized intersections to carry higher traffic volumes and have greater levels of delay.

Table 4. LOS Criteria[3]

Level of Service	Average Control Delay (seconds/vehicle)	
	Signalized	Unsignalized
A	0 - 10	0 - 10
B	>10 - 20	>10 - 15
C	>20 - 35	>15 - 25
D	>35 - 55	>25 - 35
E	>55 - 80	>35 - 50
F	>80	>50

Measures of Effectiveness

Measures of Effectiveness (MOEs), various measurements used to compare traffic operations (including average vehicle speed, vehicle stops, delays, vehicle-hours of travel, vehicle-miles of travel, fuel consumption, and pollutant emissions) provide insight into the effects on the traffic stream of the applied improvement strategy. The MOEs used in this traffic analysis are defined as follows:

Total Delay in the System (hrs)

Total delay is equal to the total travel time minus the travel time the vehicle would have experienced with no other vehicles or traffic control devices to contend with. This is the combined delay calculated for all vehicles traveling in the street network during the entire analysis period (the peak hour). The lower the value, the better the network is operating.

Stops

The total number of times a vehicle has to stop, for example at a stop sign or traffic signal, within the entire network during the analysis period (the peak hour). The lower the value, the better the network is operating.

Average Speed

The average speed of a vehicle traveling in the street network. Speed includes time spent idling when stopped. Values near or slightly below the signed speed limit indicate good network operations.

Fuel Used (gal)

The total amount of fuel consumed by all vehicles in the street network during the analysis period (one hour) taking into account vehicle class, speed, and acceleration. The lower the value, the more efficiently the network is operating.

CO Emissions

The amount of carbon monoxide emitted by vehicles in the entire network during the analysis period (the PM peak-hour). The lower the value, the better.

Performance Index (PI)

A quantitative measure of overall network performance. PI is a value derived from a formula based on vehicle stops and delay. The lower the PI, the better the overall network is operating.

[3] Transportation Research Board, Highway Capacity Manual, Special Report 209, 2000.

Analysis of Existing and Projected Traffic Conditions

A detailed traffic analysis was conducted of the study area streets and intersections for both the 2009 Existing and 2030 Projected traffic volumes. This analysis was conducted using the latest version of the Synchro/SimTraffic software suite. This software applies national standard traffic analysis methods to evaluate individual intersection LOS and network MOEs.

The LOS results of this traffic analysis for each city are presented in Tables 5 and 6. Figure 9 illustrates the results of the year 2030 projected traffic analysis.

It is worth noting that the existing traffic signal progression arrangement on Main Street and D Street in Lewiston between 3rd Street and 9th Street is very well conceived and provides excellent progression of traffic through multiple signals at a reasonable speed.

Table 5. Clarkston LOS Results

	2009 Existing		2030 Projected	
Intersection Location	**LOS**	**Delay**	**LOS**	**Delay**
6th/Chestnut	B	10.8	A	9.2
6th/Sycamore	A	5.0	A	5.8
6th/Elm	A	7.7	A	7.2
6th/Maple/Diagonal	B	15.7	C	20.5
5th/Chestnut	A	9.4	A	9.4
5th/Sycamore	B	10.6	B	10.6
5th/Elm	B	11.1	B	11.1
5th/Maple	B	10.2	B	10.2
5th/Diagonal	C	15.1	C	16.4
2nd/Diagonal/Bridge	C	31.9	D	46.1
5th/Bridge	B	16.2	B	19.5
6th/Bridge	B	14.4	C	15.4
5th/Fair	B	11.5	C	25.2

Table 6. Lewiston LOS Results

	2009 Existing		2030 Projected	
Intersection Location	**LOS**	**Delay**	**LOS**	**Delay**
3rd/Main	B	13.4	B	16.5
5th/Main	A	4.3	A	6.4
9th/Main	A	6.3	A	6.9
11th/D/Main	C	15.7	C	17.2
13th/Main	A	8.0	B	11.5
18th/Main/Levee Bypass	B	19.9	C	29.8
9th/D	B	11.7	B	13.3
5th/D	A	9.3	B	11.4
3rd/D	A	10.0	B	12.4
1st/D	E	40.2	F	*
Levee Bypass/D	D	31.5	F	116.2
5th/Levee Bypass	B	10.5	B	12.1
Levee Bypass/Snake River Ave	B	12.2	C	15.7

*Delay too high to accurately estimate

Note: As detailed in Table 4 on page 23, there are different delay ranges (in seconds of delay) for a given LOS for signalized intersections versus unsignalized intersections. This is why a delay of 16.2 seconds is equal to a LOS B at 5th/Bridge (a signalized intersection), whereas a lesser delay of 15.1 seconds equates to a worse LOS C at 5th/Diagonal (an unsignalized intersection).

Lewiston-Clarkston Downtown Circulation Plan

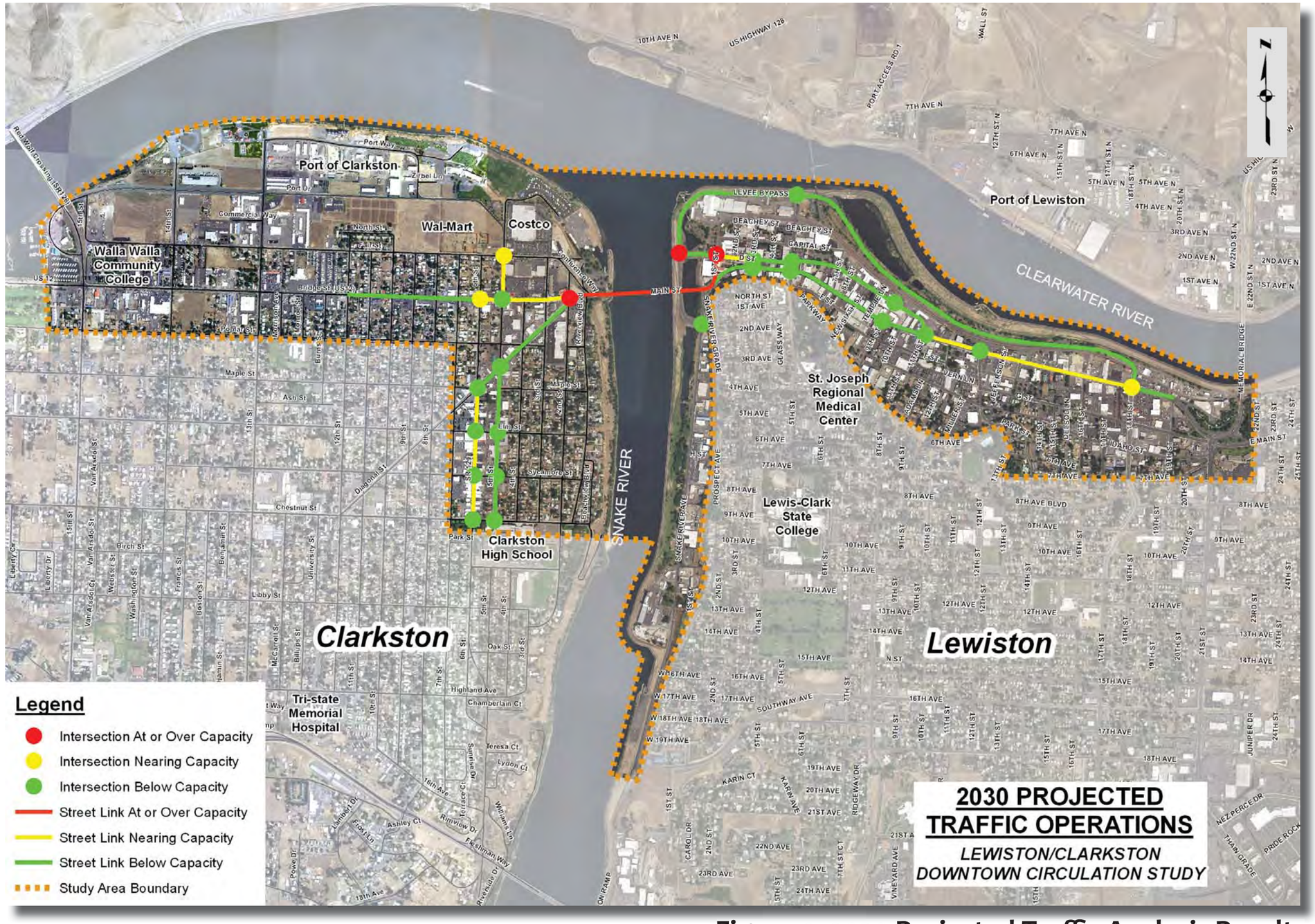


Figure 9. 2030 Projected Traffic Analysis Results

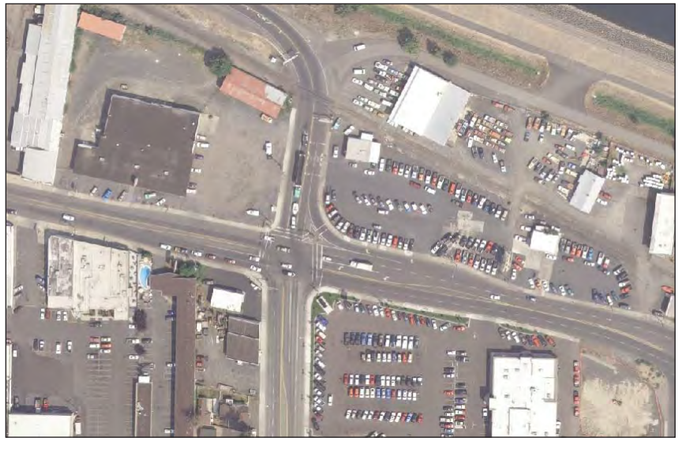
Intersection Hot Spots

Analysis of the year 2030 projected traffic volumes identified the following hot spots, where attention should be focused.

- **2nd/Diagonal/Bridge** – This intersection is projected to operate at an overall LOS D, with individual intersection movements falling to LOS E and F. Recommended intersection reconfigurations to address this poor operating condition are discussed later in this plan.

- **5th/Fair** – This intersection is projected to operate at an overall LOS C, but the eastbound approach may fall to a LOS D as properties along the waterfront continue to develop. As time passes, this intersection should continue to be monitored to evaluate whether separate left-turn lanes become warranted on the Fair Street approaches.

- **5th/Wal-mart-Costco Driveway** – While not a part of the study area for this plan, this intersection merits some mention. This intersection is currently controlled by stop signs on all four approaches (four-way stop). This results in a notable amount of observed and reported delay. Queues from the northbound approach at this location occasionally back up enough to interfere with the traffic signal at 5th and Fair. A more traditional intersection control treatment at this location would be to stop only that traffic exiting the driveways and not stop the traffic on 5th Street. It is recommended that a trial of this altered intersection control be tested and, if successful, permanently implemented.



- **18th/Main/Levee Bypass** – The left turns at this intersection are projected to operate at LOS D on the westbound and northbound approaches, and at LOS F on the southbound approach. Changes to both the signal programming at this intersection and the intersection configuration are discussed later in this plan.

- **1st/D** – This intersection is projected to operate at LOS F with significant levels of delay on the southbound approach. Traffic volume on the southbound approach is currently very low, but will increase with the redevelopment of the Twin City Foods site. The eastbound and westbound D Street approaches are projected to continue to operate at very good LOS A. This is a good example of where individual intersection LOS does not always tell the full story. Because of the regular gaps in D Street traffic created by the traffic signal at the 3rd/D intersection, the southbound traffic is shown in the traffic simulation to operate with very little delay or queuing.

- **Levee Bypass/D** – This intersection is projected to operate at LOS F on the D Street approach. Observation of the simulation indicates average queues in the year 2030 of approximately five to seven vehicles during the peak hour. This intersection should be monitored over time to evaluate whether a traffic signal or other advanced form of traffic control becomes warranted.

Lewiston-Clarkston Downtown Circulation Plan

Identified Issues

In addition to the LOS analysis discussed above, the evaluation of transportation infrastructure, street network connectivity, and anticipated redevelopment areas resulted in the identification of a wide range of transportation circulation concerns beyond those identified in the LOS analysis. These are illustrated on Figure 10 for Clarkston and Figure 11 for Lewiston. Recommendations to address these issues are presented later in this plan.

Clarkston

While Clarkston has a well defined network of streets, the downtown is somewhat isolated and cutoff from two important attractions: the riverfront and Highway 12. Highway 12 (Bridge Street), particularly the intersection of 2nd/ Diagonal/Bridge, creates a barrier for pedestrians between downtown and developing riverfront activities. And while Highway 12 carries a high volume of traffic -- vital lifeblood for businesses -- it is well-removed from the downtown retail core, with little or no invitation for visitors to explore.

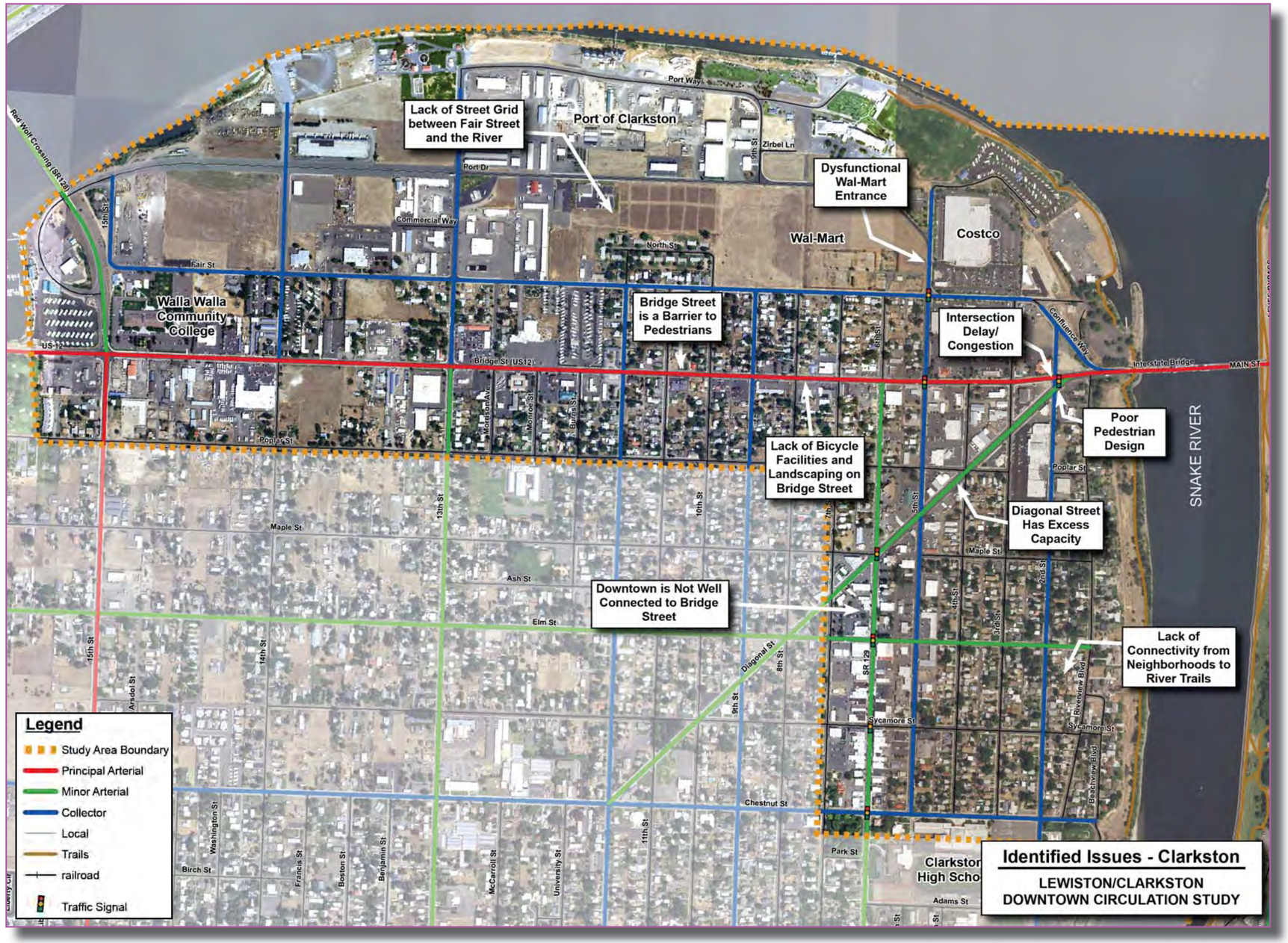


Figure 10. Identified Issues - Clarkston

Lewiston-Clarkston Downtown Circulation Plan

Lewiston

Lewiston is fortunate to have a bypass route that removes heavy traffic from the downtown retail core. However, the bypass tends to be under utilized, difficult to follow, and creates a barrier to the riverfront trail system. The one-way couplet on Main and D Streets does a good job of moving traffic, but tends to encourage higher speeds and cut-through traffic.

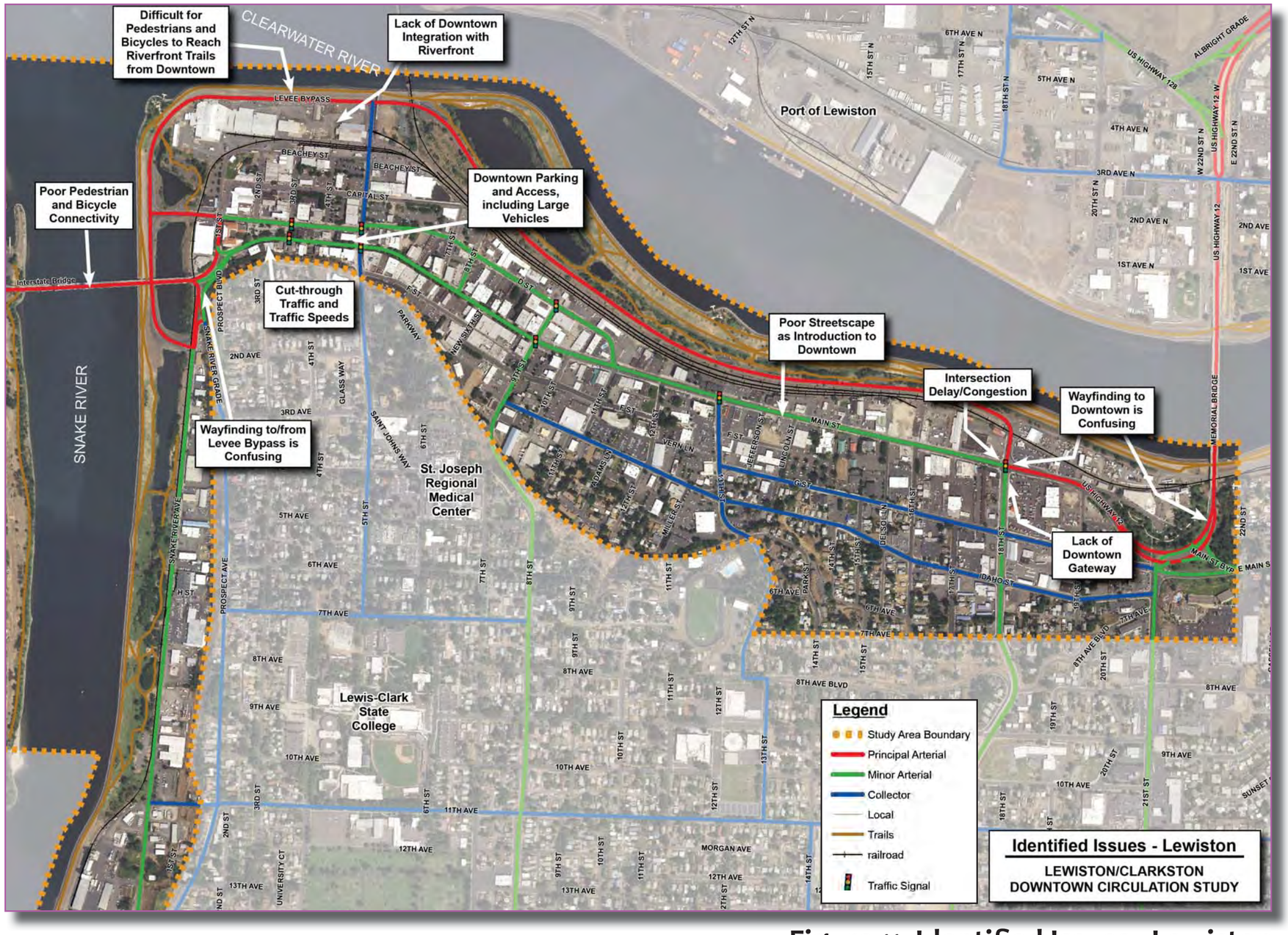


Figure 11. Identified Issues - Lewiston

II. Recommendations

The existing street infrastructure serving downtown Clarkston and Lewiston generally provides a relatively high level of service for the current traffic volumes. Over time, as development occurs and traffic volumes increase, several locations are likely to become more congested and operate poorly. These include:

2030 Intersection Hot Spots

- **2nd/Diagonal/Bridge**
- **5th/Fair**
- **18th/Main/Levee Bypass**
- **1st/D**
- **Levee Bypass/D**

In addition to traffic capacity improvements at these locations, there are a number of other opportunities to improve access and circulation in the downtowns. Many of these opportunities are enhancements to the existing transportation system that provide improved pedestrian and bicycle access, improved traffic routing and wayfinding, and improved aesthetics. While these enhancements may not have a significant impact (positive or negative) on traffic operations, they are essential to creating a healthy downtown environment.

Desirability of these enhancements is strong. Communities that have amenities tend to attract more visitors and permanent residents. The community as a whole realizes the value of making improvements to the downtown.

Both street network improvements and bicycle/pedestrian improvements are presented for each downtown in the following pages. The recommended improvements are categorized as either short-term or long-term priorities. The intent is to provide flexibility, so that transportation investments can be tailored to support desired land use changes. This plan should be used as a tool, working with the community, to prioritize how these investments are made. Implementation of short-term improvements could begin immediately, with relatively low costs, and should serve as a catalyst for private investment in the adjacent land, businesses, and buildings.

The long-term improvements generally have higher costs and will require major investments of transportation funds. These may take many years to fully fund, and should be part of an on-going community discussion of funding goals and priorities.

Functional Classifications

The grouping of roadways by the character of service they provide is known as 'Functional Classification'. Certain characteristics, as well as the level of access and the type of travel mobility they provide, define the classes. In general, as the functional classification increases, the traffic volume and mobility provided also increase and the level of access to adjacent properties decreases.

Local Streets

Local Streets primarily provide access to residences, businesses, or other abutting properties. The primary function of local streets is access to property rather than extensive mobility. Trips are typically short and volumes are expected to be low. Local roads connect to collector streets for the continuation of the vehicle trip.

Collector Streets

Collector Streets have characteristics of both local roads and arterial streets, and often serve as a connection between them. Collectors serve a dual function: collecting traffic for movement between local roads and arterial streets, and providing access to abutting properties. Collectors connect neighborhoods or other areas of common land use with the arterial street system, and serve traffic both between and within these areas. Traffic volumes are usually moderate, and access can be somewhat limited to ensure that the street fulfills its roll of efficiently moving traffic between local and arterials roadways.

Arterial Streets

Arterial Streets typically provide a high-speed, high-volume network for travel between major points in both rural and urban areas. Streets in this class can vary from two-lane to multi-lane roadways. Their primary purpose is to move traffic. Access to adjoining land is limited so that it does not interfere with the primary purpose of moving larger volumes of traffic safely and efficiently. Frequently both Principal and Minor Arterials are identified within a roadway network. Minor Arterials differ from Principal Arterials in that they place more emphasis on land access and are characterized by lower traffic mobility, volume, and speed.

Clarkston

Street Network Improvements

Clarkston has a well-defined grid street network south of Bridge Street. This allows a good hierarchy of streets and dispersion of traffic among residential and commercial areas. This grid street network should be extended north to less developed lands in and around the Port of Clarkston. This will create smaller blocks, which improve both vehicle and pedestrian circulation, and are more compatible with the type of development planned for the Clarkston Riverfront District.

There are also opportunities to reclassify the hierarchy of streets to provide better long-term traffic circulation. This will provide better connectivity and more consistent spacing between major roadways, and will allow new traffic signals or other intersection controls to be planned on a network-wide basis. Street network reclassification should be done in conjunction with signing and wayfinding improvements.

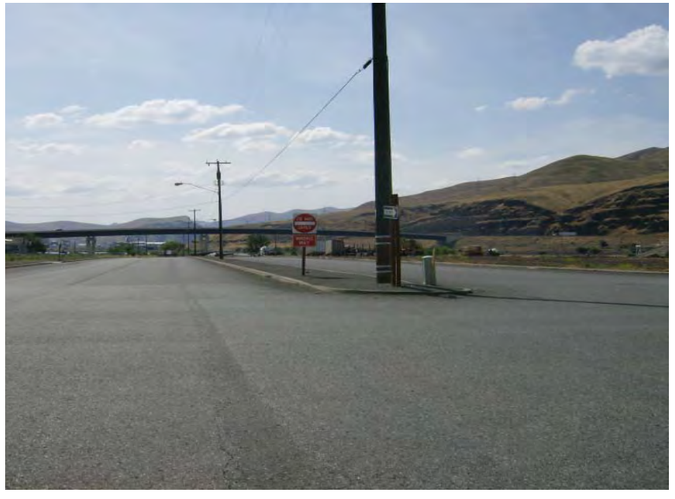
Key Network Improvements:

- **2nd/Diagonal/Bridge Signal Modifications** – As traffic operations at this intersection deteriorate, modifications will be necessary to prevent this area from becoming a further bottleneck. Long-term, a roundabout may be a viable solution. However, this will be a complex and expensive undertaking. Short-term, modifications to the lane configurations and signal timing will allow this intersection to function well for many years to come. Recommended short-term modifications include converting the north leg of 2nd Street to one-way southbound for the block between Fair and Bridge Streets. Confluence Way would continue to be one way northbound to form the other half of the one-way couplet. This allows the southbound 2nd Street approach to be reconfigured to provide multiple lanes entering the intersection, more efficiently moving traffic. With no northbound traffic allowed on 2nd Street, the left-turn lane on eastbound Bridge Street can be converted to a through lane. Together, these changes would significantly increase the capacity of the intersection and reduce delay and congestion.

- **Port Drive Improvements** – Port Drive is currently classified as a Local Street between 5th and 15th Streets. This street's wide right-of-way and underpass at 15th are ideally suited to serve traffic travelling to and from the Port area, which will help alleviate some of the traffic using Bridge Street. Port Drive should be reclassified as a Collector Street. Curb, gutter, and sidewalk improvements, which have been made near the new Walmart, should be continued to the west to bring the entire street to a Collector standard. This will also allow Fair Street, which is currently the Collector route, to be reclassified as a Local Street.

- **2nd Street Extension** – A connection between Port Drive and 2nd Street will help alleviate congestion at the 5th/Fair signal, and will provide a more direct route to Port Drive from Bridge Street. This connection would require new right-of-way, and should be planned as the vacant lots are developed east of Costco.

- **12th Street Extension** – 12th Street is an existing Collector Street south of Fair Street. This street should be extended north to Port Way to provide a continuous north-south Collector route serving the Port area and the riverfront.



Lewiston-Clarkston Downtown Circulation Plan

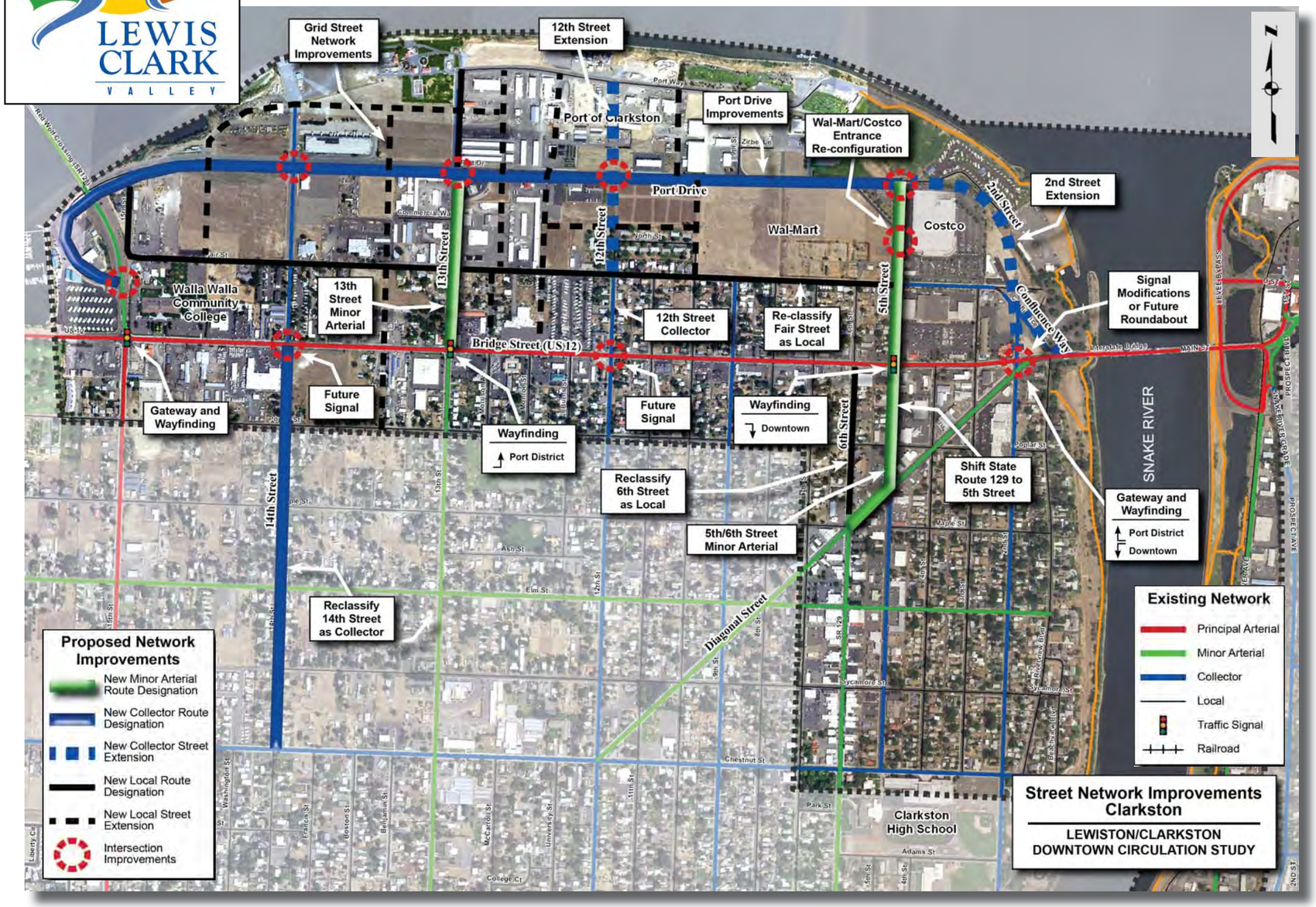


Figure 12. Street Network Improvements - Clarkston

Table 7. Clarkston Street Network Projects Identified

	Street Network Improvements	Priority: Short Term	Priority: Long Term	Description
1	Street Network Reclassification	X		Reclassify existing streets and shift State Route 129 to 5th Street north of Diagonal
2	Signing & Wayfinding Improvements	X		Improve and consolidate directional signing for the downtown and riverfront district
3	5th/Walmart/ Costco Entrance	X		Remove 4-way stop with possible right-in/right-out to redirect Walmart traffic to Port Dr
4	2nd/Diagonal/Bridge Signal Modifications	X		Convert 2nd Street to one-way southbound to improve signal operations
5	Port Drive Improvements	X		Improve Port Drive to Collector standard
6	Grid Street Network Improvements		X	Improve grid street network in the Port area to support riverfront district
7	2nd Street Extension		X	Extend 2nd between Port Drive and Bridge behind Costco for more direct connection to Port Drive collector
8	12th Street Extension		X	Extend 12th Street between Fair Street and Port Way
9	5th/Fair		X	Future Turn Lanes
10	5th/Port Drive		X	Future Signal or Roundabout
11	12th/Bridge		X	Future Signal when MUTCD warrants are met
12	12th/Port Drive		X	Future Signal or Roundabout
13	13th/Port Drive		X	Future Signal or Roundabout
14	14th/Bridge		X	Future Signal when MUTCD warrants are met
15	14th/Port Drive		X	Future Signal or Roundabout
16	15th/Port Drive		X	Future Turn Lanes
17	2nd/Diagonal/Bridge Roundabout		X	Future Roundabout and Gateway

Clarkston

Bicycle and Pedestrian Improvements

Downtown Clarkston has a well-established , traditional main street, with some relatively easy opportunities for improvement. The primary focus for retail shopping and pedestrian activity should be 6th Street. Buildings should front the street and gaps between buildings should be filled in over time. The existing on-street parallel parking should be maintained, with additional parking provided on 5th and 7th Streets within easy walking distance of the 6th Street retail core (generally a five minute walk or about 1/4 mile). Truck access for deliveries should be focused on adjacent streets and alleys, rather than on 6th Street.

Streetscape improvements, such as curb bulb-outs at intersections (a curb extension to the width of the parking lane, which makes pedestrians more visible to drivers and reduces pedestrian crossing distances), lighting, landscaping, and well-marked/mid-block pedestrian crossings are recommended. Opportunities to create future civic space, such as a town green or plaza, should be explored where parking or vacant lots currently exist. Recommended locations are shown in Figures 13 and 19.

Clarkston also has the potential to take advantage of the scenic and recreational values of the riverfront, with redevelopment of restaurants, breweries, wineries, lodging, and residential housing in the Clarkston Riverfront District. As this redevelopment occurs, it will be important for the downtown to establish a strong connection to the riverfront, so that the riverfront development is a benefit, rather than competition, for the downtown. This can be accomplished with consistent land use, architecture, streetscaping, and landscaping elements that extend from the downtown to the riverfront. We are recommending that this be established along the 5th/6th Street corridor. On-street bike lanes and extended trail systems can further help connect the downtown, residential neighborhoods, the college, and the riverfront.

Figure 13. Clarkston Downtown Functional Plan

Lewiston-Clarkston Downtown Circulation Plan

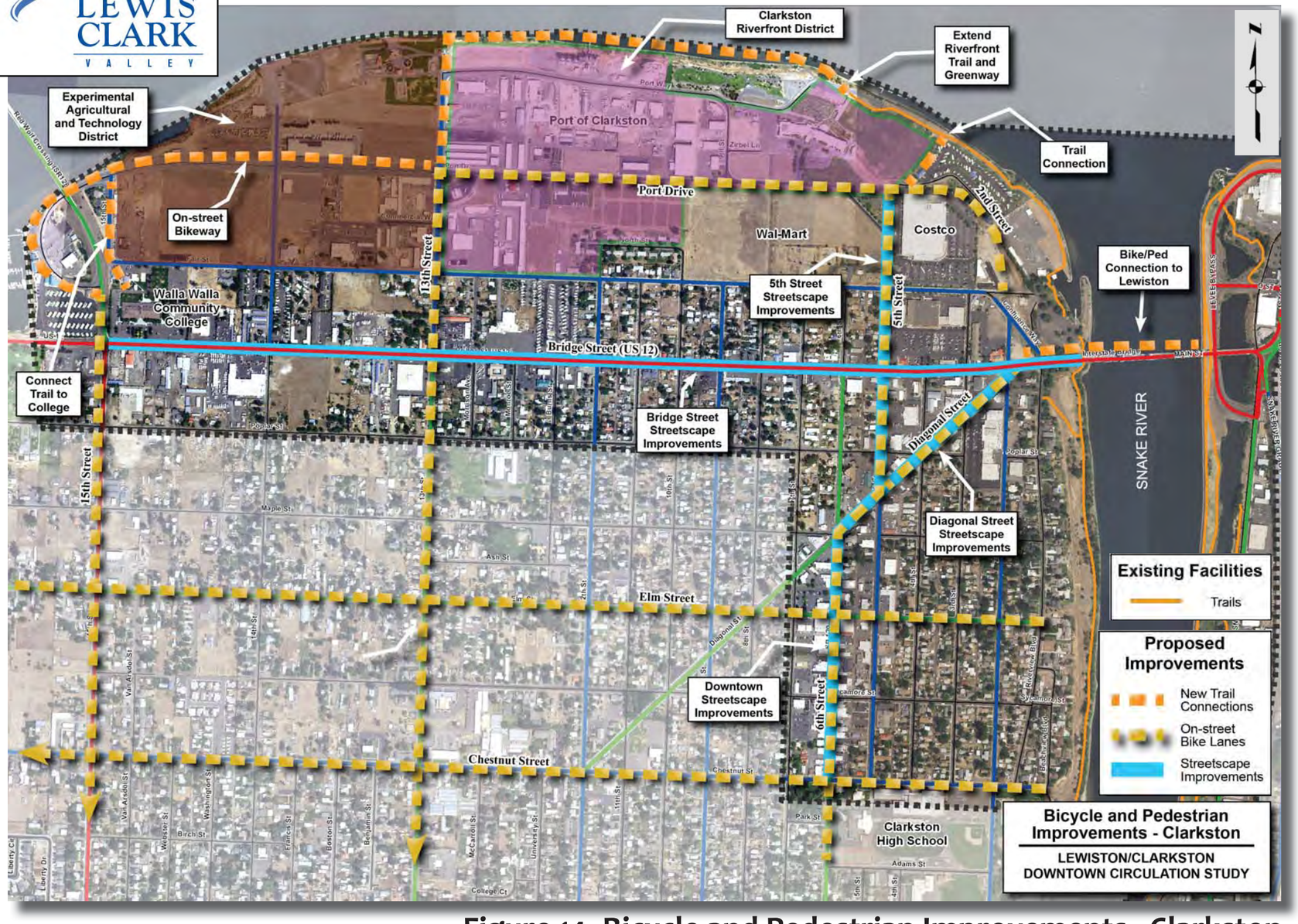


Figure 14. Bicycle and Pedestrian Improvements - Clarkston

Table 8. Clarkston Bicycle/Pedestrian Projects Identified

	Bicycle/Pedestrian Improvements	Priority: Short Term	Priority: Long Term	Description
1	On-Street Bike Lane Network	X		Re-stripe existing streets with bike lanes connecting neighborhoods to riverfront and downtown
2	Extend Riverfront Trail to College	X		Extend trail from tour boat dock to Walla Walla Community College
3	Downtown Streetscape Improvements	X		6th Street sidewalk improvements, curb bulb-outs, lighting, and landscaping between Chestnut and Diagonal
4	5th Street Streetscape Improvements	X		Sidewalk improvements, curb bulb-outs, lighting, and landscaping between Diagonal and Port Drive
5	Diagonal Streetscape Improvements	X		Raised medians, lighting, landscaping between 2nd and 6th Streets
6	Bike/Ped Connection to Lewiston		X	New bicycle/pedestrian bridge over Snake River
7	Bridge Street Streetscape Improvements		X	Sidewalk improvements, lighting, and landscaping between 2nd and 15th Streets

Lewiston

Street Network Improvements

Downtown Lewiston is characterized by its constrained geography between the river and the bluff. The traditional downtown commercial area is arranged in a narrow, linear pattern. Industrial uses and the railroad historically separated downtown from the riverfront. However, this land use is beginning to change, creating opportunities to connect the downtown with one of its most defining features – the river.

Redevelopment of the Downtown Waterfront District should focus on creating a walkable, pedestrian friendly environment that connects the riverfront to the retail core on Main Street. The concept of a "river gateway" with river access, boat docks, lodging, restaurants, residential housing, and entertainment would be an exciting amenity for the downtown. The existing grid-street network should be extended north to the Levee Bypass, creating a pattern of smaller blocks with one or two larger blocks with an anchor land use, such as a hotel.

There are also opportunities to create better gateways and improved wayfinding for the downtown and waterfront areas. These should be focused at key decision points for visitors as they travel Highway 12 – 18th/Main Street, 5th/Levee Bypass, and 1st/Main Street. (A separate Lewiston-Clarkson Wayfinding Plan has been prepared to address specific wayfinding needs and recommendations.)

Key Network Improvements:

- **18th/Main/Levee Bypass** – Visitors arriving from the east must decide at this intersection either to continue on Main Street or follow Highway 12 on the Levee Bypass. This intersection must have a recognizable gateway and good wayfinding signs to invite visitors into the downtown. This intersection was also identified as a potential traffic hot spot, and should be considered for future capacity enhancements. A roundabout could be a long-term solution to create both a gateway treatment and provide additional capacity. In the short-term, signal modifications are recommended to allow protected/permissive left turns, which adds additional capacity to the intersection and significantly reduces delay.

- **Levee Bypass Reroute** – The Levee Bypass appears to be underutilized, based on the observed traffic volumes. This is likely due to the out-of-direction travel required, particularly from the west, where it is often faster to use Main Street. This creates more traffic on Main Street. Traffic volumes are good for business, but too much traffic hurts walkability, so a good balance is necessary. The Levee Bypass also presents an obstacle to connecting the downtown with the riverfront. Relocating the bypass away from the river could significantly enhance the value of the Twin City Foods site. This plan recommends several improvements to address these issues:

  - Relocate Highway 12 to 1st Street between Main Street and the riverfront. This provides a more intuitive direct route and encourages through traffic to use the bypass.
  - Reclassify the Levee Bypass as a Minor Arterial between Snake River Avenue and D Street. This is still an important part of the circulation network.
  - Close or reclassify the Levee Bypass as a Local Street between D Street and 1st Street. This provides a developable parcel on the waterfront, without a major road separating it from the river and the Levee Trail system.
  - Create a new intersection at 1st and Main Streets as a gateway to the downtown retail core, and a new signal at 1st and D Streets to facilitate the new bypass route. (A signal at this intersection would meet MUTCD warrants.)

- **5th/Levee Bypass** – 5th Street is an important Collector route providing access to the downtown and the riverfront. It should be designed as a multi-modal street, accommodating trucks, cars, bikes, buses, and pedestrians. The intersection of 5th/Levee Bypass should be well marked with wayfinding and gateway treatments.

- **Two-Way Conversion on D & Main** – Converting the one-way couplet on Main and D Streets was evaluated in the traffic model, and was determined to be feasible in conjunction with the bypass reroute. This would allow improved circulation and possibly some additional traffic calming. However, it would likely result in the loss of some on-street parking to provide left-turn lanes at the intersections. This option is included as a potential long-term improvement, but would require further evaluation.

Lewiston-Clarkston Downtown Circulation Plan

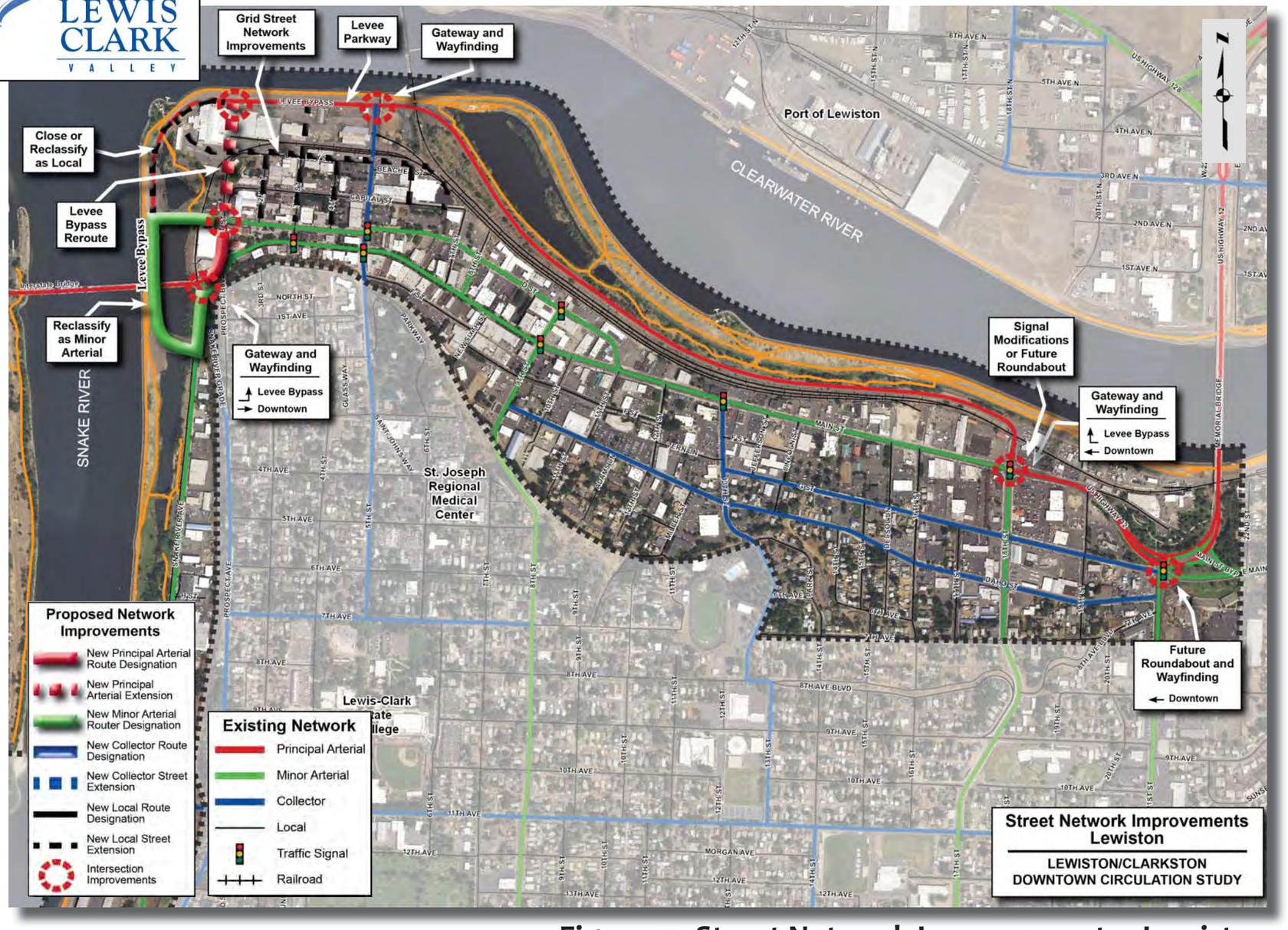


Figure 15. Street Network Improvements - Lewiston

Table 9. Lewiston Street Network Projects Identified

	Street Network Improvements	Priority: Short Term	Priority: Long Term	Description
1	Signing & Wayfinding Improvements	X		Improve and consolidate directional signing for the downtown and riverfront district
2	18th/Main Street Signal Modifications	X		Wayfinding and protective/ permissive left turns
3	Levee Bypass Re-route	X		Relocate Hwy 12 to 1st Street between riverfront and Main. Reclassify Levee Bypass as Minor Arterial between Snake River Ave and D Street. Close Levee Bypass or reclassify as Local between D Street and 1st Street.
4	1st/Main Street	X		New Intersection, gateway, landscaping, and wayfinding to support Levee Bypass re-route. Future Signal if two-way traffic conversion on Main.
5	1st/D Street	X		New Signal to support Levee Bypass re-route
6	5th/Levee Bypass	X		Gateway and wayfinding, oversized vehicle parking. Plan for future Signal or Roundabout
7	Waterfront Grid Street Network Improvements		X	Improve grid street network in the Waterfront Redevelopment District
8	Two-Way Conversion on Main & D Streets		X	Convert one-way couplet to two-way traffic to improve access and circulation
9	18th/Main Street Roundabout		X	Future Roundabout and Gateway
10	21st/Main Street		X	Wayfinding and future Roundabout

Lewiston

Bicycle and Pedestrian Improvements

Many good pedestrian improvements have been implemented within the downtown Lewiston core. The primary focus for additional improvements should be entryways and connectivity. Streetscape improvements, such as raised medians, curb bulb-outs, lighting, landscaping, and well-marked/mid-block pedestrian crossings are recommended for Main Street between 9th and 21st Streets, and on 5th Street between Main and Levee Bypass.

A successful bike/ped network needs many connections. The residential neighborhoods south of downtown should be connected to downtown and the riverfront with on-street bike lanes and trail connections at frequent locations. New trail connections are recommended at 13th Street, 18th Street, 5th Avenue, 7th Avenue, and 11th Avenue. These should be accomplished with grade-separated crossings, where feasible, or at-grade crossings with well signed crosswalks and median refuge islands.

Opportunities to create future civic space or a town green should also be explored between Main and D Streets at the end of 2nd Street, as a gathering place for downtown events, concerts, farmer's markets, and other activities.

Parking

The majority of Downtown Lewiston is zoned C4 or C5, both of which have no parking requirement. This makes public parking extremely important to support higher density downtown land use. The 2007 Parking Management Plan for Downtown Lewiston found that there is not a near-term need for additional major parking facilities in the downtown area. Parking occupancy levels were observed between 44% and 49% throughout most of the day. The Plan recommended increased parking management (shorter time limits, "over-leasing", and parking promotion) to make more efficient use of the existing parking facilities and improve the perception of parking availability. The Parking Management Plan also noted the need to control speeds and encourage use of the Levee Bypass for through traffic, both of which affect the perceived comfort and safety of downtown parking.

Over time, as the downtown develops, surface parking can be converted to other uses (such as buildings, plazas, civic space or town green) and replaced by structured parking. Structured parking should be considered as an anchor within the downtown because it will generate walking traffic to and from the structure, much the way a department store or other major attraction will. For this reason, a future parking structure location should be planned strategically to serve as a catalyst for other downtown development. One possible location is the corner of 5th and D Streets, where private and City-owned parking lots currently exist. This site enjoys good access from both D Street and 5th, and is centrally located between the historic downtown core and the future riverfront redevelopment district. Parking structures can be designed as "mixed use" facilities with retail or office space fronting the street and an increased parking supply behind.

While parking is not a near-term need for Lewiston, it should be considered as a means to attract new downtown development. Providing public parking reduces the cost and land requirements for businesses to locate downtown, which could give downtown locations a competitive advantage over outlying areas.

Long-term, Lewiston should continue to pursue opportunities to increase the parking supply in close proximity to Main Street and the Riverfront District.

- Existing streets should be converted to angle parking, where adequate width exists.
- 3rd Street and Beachey Street should be developed as "parking streets" with angle parking, wide sidewalks, and other streetscape amenities.
- Oversized vehicle parking should be considered with access to the bypass near the intersection with 5th Street. This will allow RV's and trailers to park within easy walking distance of downtown (generally a five minute walk or 1/4 mile).

Lewiston-Clarkston Downtown Circulation Plan

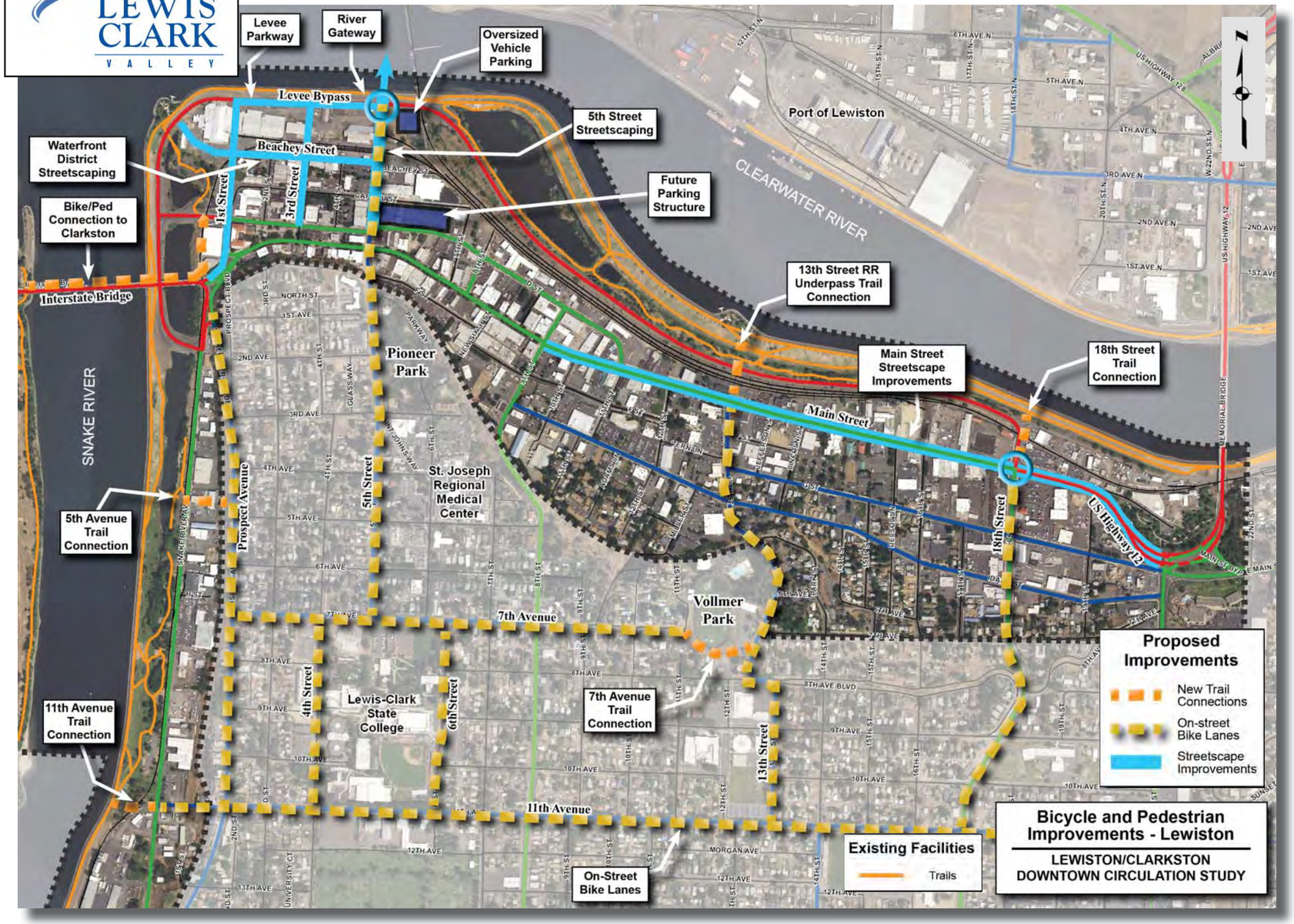


Figure 16. Bicycle and Pedestrian Improvements - Lewiston

Table 10. Lewiston Bicycle/Pedestrian Projects Identified

	Bicycle/Pedestrian Improvements	Priority: Short Term	Priority: Long Term	Description
1	On-Street Bike Lane Network	X		Re-stripe existing streets with bike lanes connecting neighborhoods to riverfront and downtown
2	Main Street Streetscape Improvements	X		Raised medians, sidewalk improvements, curb bulb-outs, lighting, and landscaping between 9th and 21st Streets
3	5th Street Streetscape Improvements	X		Sidewalk improvements, curb bulb-outs, lighting, and landscaping between Main and Levee Bypass
4	13th Street RR Underpass Trail Connection	X		New bicycle/pedestrian railroad underpass connecting to Levee Trail*
5	18th Street Trail Connection	X		New connection to Levee Trail with at-grade railroad crossing
6	5th Avenue Trail Connection	X		New connection to Snake River Trail with at-grade crossing of Snake River Ave and Railroad
7	7th Avenue Trail Connection	X		New connection between 11th St and 13th St through Vollmer Park
8	11th Avenue Trail Connection	X		New connection to Snake River Trail with at-grade crossing of Snake River Ave and Railroad
9	Oversized Vehicle Parking	X		Surface parking for RV's and trucks adjacent to 5th & Levee Bypass
10	Parking Structure		X	Future parking structure on existing surface lot at 5th & D Streets
11	Waterfront District Streetscape Improvements		X	Sidewalk improvements, curb-bulbouts, on-street parking, lighting, and landscaping in conjunction with redevelopment
12	Levee Parkway		X	Curb, gutter, sidewalk, raised medians, landscaping and pedestrian refuge crossings on Levee Bypass between D Street and 5th Street, in conjunction with Waterfront redevelopment
13	River Gateway		X	Pedestrian walkway, plaza, river access, and boat docks, in conjunction with Waterfront redevelopment
14	Bike/Ped Connection to Clarkston		X	New bicycle/pedestrian bridge over Snake River

*Underpass should be well designed with good lighting, drainage, ADA compliance, aesthetics, and an open feel to invite pedestrian use.

Recommended Plan

Traffic analysis of the year 2009 existing and 2030 projected traffic volumes under the existing roadway network were summarized earlier in this plan to identify intersection hot spots.

Analysis of the 2030 traffic volumes was conducted again with the recommended network and intersection improvements in place to evaluate the effect of these improvements on traffic congestion. The delay and LOS results of this analysis, presented in Tables 11 and 12, illustrate that acceptable traffic conditions can be achieved with implementation of the improvement concepts.

Additionally, network-wide Measures of Effectiveness (MOEs) were assessed for the year 2030 volumes both with and without the recommended improvements. This assessment, summarized in Table 13, shows a 25 to 63 percent improvement in each of the MOEs when implementing the improvements. This is a substantial improvement. It is important to understand that the MOEs are only estimates based on a model. It is not the actual value of the measure that is important, but rather the relative change in the value. This relative change is presented as a percentage improvement in Table 13.

Table 11. Lewiston Traffic Analysis Summary 2030 With Recommended Improvements

Lewiston	2009 Existing		2030 Projected		2030 With Recommended Improvements	
Intersection Location	LOS	Delay	LOS	Delay	LOS	Delay
Main/Snake River Ave	n/a	n/a	n/a	n/a	C	21.7
1st/Main	n/a	n/a	n/a	n/a	A	7.8
1st/Levee Bypass	n/a	n/a	n/a	n/a	B	10.6
3rd/Main	B	13.4	B	16.5	B	15.1
5th/Main	A	4.3	A	6.4	A	6.6
9th/Main	A	6.3	A	6.9	A	7.5
11th/D/Main	C	15.7	C	17.2	B	14.3
13th/Main	A	8.0	B	11.5	B	10.1
18th/Main/Levee Bypass	B	19.9	C	29.8	B	16.3
9th/D	B	11.7	B	13.3	B	12.2
5th/D	A	9.3	B	11.4	B	10.7
3rd/D	A	10.0	B	12.4	B	12.0
1st/D	E	40.2	F	*	D	40.1
Levee Bypass/D	D	31.5	F	116.2	C	20.8
5th/Levee Bypass	B	10.5	B	12.1	C	24.7
Levee Bypass/Snake River Ave	B	12.2	C	15.7	C	15.7

*Delay too high to accurately estimate
n/a: not applicable, intersection did not exist in this analysis scenario

Table 12. Clarkston Traffic Analysis Summary 2030 With Recommended Improvements

Clarkston	2009 Existing		2030 Projected		2030 With Recommended Improvements	
Intersection Location	LOS	Delay	LOS	Delay	LOS	Delay
6th/Chestnut	B	10.8	A	9.2	A	9.2
6th/Sycamore	A	5.0	A	5.8	A	5.8
6th/Elm	A	7.7	A	7.2	A	7.2
6th/Maple/Diagonal	B	15.7	C	20.5	C	20.3
5th/Chestnut	A	9.4	A	9.4	A	9.4
5th/Sycamore	B	10.6	B	10.6	B	10.6
5th/Elm	B	11.1	B	11.1	B	11.1
5th/Maple	B	10.2	B	10.2	B	10.2
5th/Diagonal	C	15.1	C	16.4	C	16.9
2nd/Diagonal/Bridge	C	31.9	D	46.1	C	31.3
5th/Bridge	B	16.2	B	19.5	B	19.4
6th/Bridge	B	14.4	C	15.4	B	14.7
5th/Fair	B	11.5	C	25.2	C	25.2

Table 13. Network MOEs With and Without Recommended Improvements

	2009 Existing	2030 No Action	2030 Recommended Network	% Improvement with Recommended Network
Total Delay (hours)	70	313	116	63%
Stops (#)	12,648	17,798	16,707	6%
Average Speed (mph)	19	11	17	55%
Total Travel Time (hr)	273	566	371	34%
Fuel Consumed (gal)	331	584	439	25%
CO Emissions (kg)	23.1	40.8	30.7	25%
Performance Index	105.4	362.1	162.0	55%

Concept Plans

The following pages illustrate several of the improvement concepts developed in this plan.

2nd/Diagonal/Bridge Signal Modifications (Clarkston)
Short-term Project

- Convert 2nd Street to one-way southbound between Confluence Way and Bridge Street
- Maintain Confluence Way as one-way northbound
- Restripe 2nd Street to provide turn lanes on southbound approach to Bridge Street
- Convert existing eastbound left-turn lane on Bridge Street at 2nd Street to a second through lane
- Reprogram traffic signal timing and phasing
- Estimated cost: $70K - $90K

Figure 17. 2nd/Diagonal/Bridge Signal Modifications (Clarkston)

Lewiston-Clarkston Downtown Circulation Plan

2nd/Diagonal/Bridge Roundabout (Clarkston)

Long-term Project

- Construct two-lane roundabout to replace existing traffic signal control
- Convert 2nd Street back to two-way traffic north of Bridge Street
- Remove south leg of 2nd Street from intersection to provide alternate access from Diagonal further south
- Landscape center island as gateway to Clarkston
- Improve wayfinding
- Estimated cost: $2.8M - $4.6M

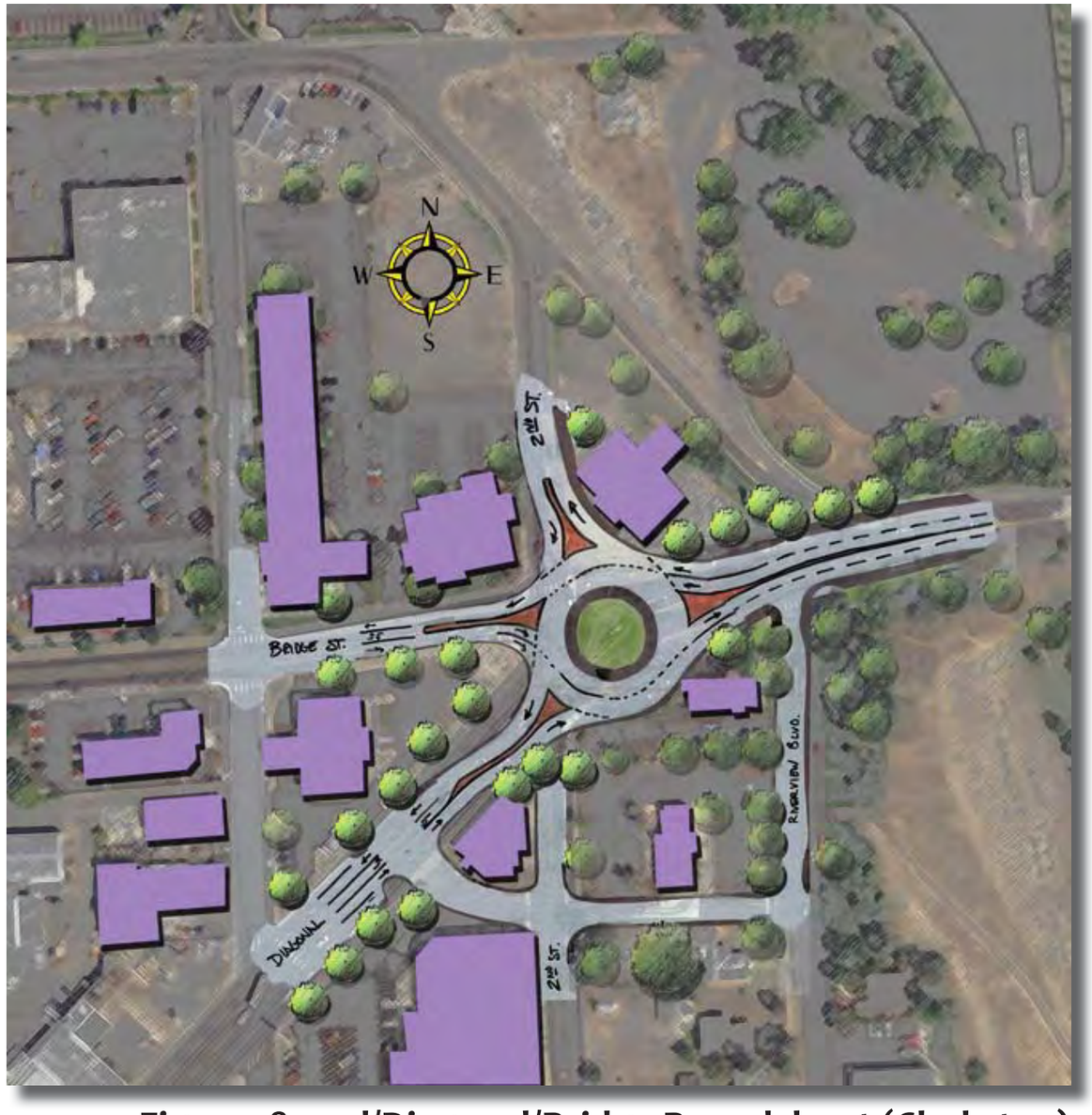


Figure 18. 2nd/Diagonal/Bridge Roundabout (Clarkston)

Lewiston-Clarkston Downtown Circulation Plan

6th Street Streetscape (Clarkston)
Short-term Project

- Project limits from Chestnut Street to Diagonal Street
- Bulb-outs at intersections
- Street trees
- Street furniture
- Street lighting (dark skies compliant)
- Estimated cost: $2.1M - $2.5M

Figure 19. 6th Street Streetscape (Clarkston)

Lewiston-Clarkston Downtown Circulation Plan

<u>Diagonal Street Streetscape</u> (Clarkston)

Short-term Project

- Project limits from 2nd Street to 6th Street
- Landscaped medians between intersections
- Street trees
- Street lighting (dark skies compliant)
- Estimated cost: $280K - $340K

Figure 20. Diagonal Street Streetscape (Clarkston)

Lewiston-Clarkston Downtown Circulation Plan

<u>1st Street</u> (Lewiston)
Short-term Project

- Widen, if necessary, to accommodate four lanes of traffic plus sidewalks
- Reroute Levee Bypass to 1st Street
- Reconfigure intersection at Main Street
- New traffic signal at D Street
- Estimated cost: $2.8 - $4.5M
  (from Snake River Avenue to D Street)

Figure 21. 1st Street (Lewiston)

Lewiston-Clarkston Downtown Circulation Plan

Levee Parkway (Lewiston)

Short-term Project

- Reroute Levee Bypass away from river frontage and through former Twin City Foods site
- Provide access to redevelopment via improved grid street network
- Connect to new bypass alignment on 1st Street at D Street
- Develop gateway intersection at 5th Street
- Include, curb, gutter, sidewalk, and streetscape
- Estimated cost: $2.4M - $4.0M
- Close coordination with ITD would be required to address questions such as access control, intersection spacing, signal frequency, and pedestrian crossings should US 12 (Levee Bypass) be routed through the center of a redevelopment area as illustrated.

Figure 22. Levee Parkway (Lewiston)

Lewiston-Clarkston Downtown Circulation Plan

Main Street Streetscape and 13th Street Trail Connection (Lewiston)

Short-term Project

- Landscaped medians between intersections
- Street trees
- Street lighting (dark skies compliant)
- Pedestrian connection between Main Street and Levee Trail System
- Underpass of railroad
- Improved at-grade crossing of Levee Bypass
- Estimated costs:
  Main Street Streetscape: $650K - $775K
  13th Street Trail Connection: $190K - $240K

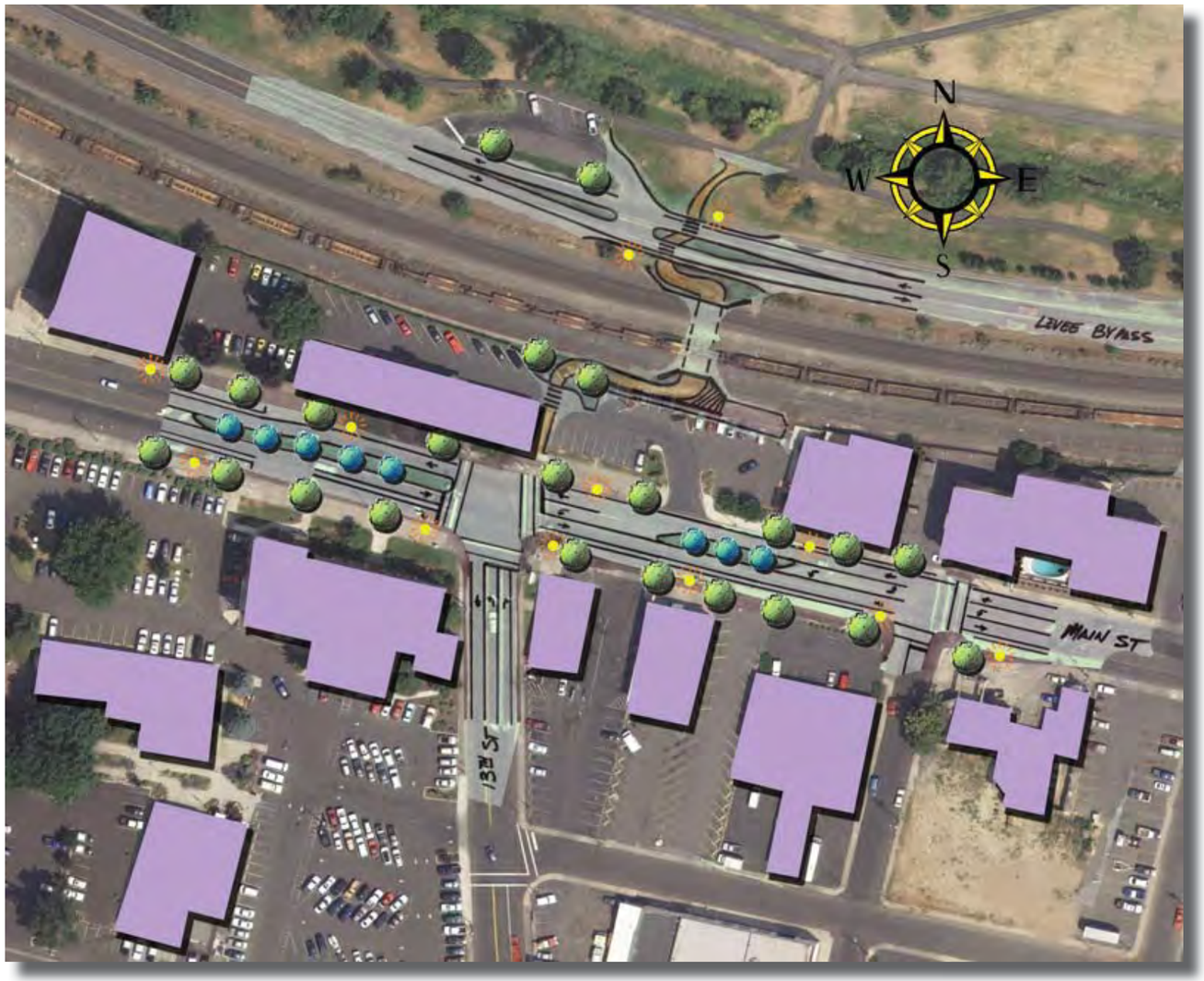


Figure 23. Main Street Streetscape and 13th Street Trail Connection (Lewiston)

Lewiston-Clarkston Downtown Circulation Plan

<u>18th/Main Street Roundabout</u> (Lewiston)

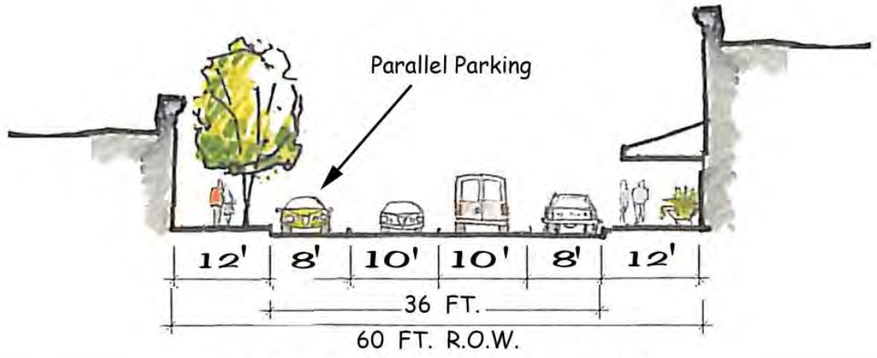
Long-term Project

- Construct two-lane roundabout to replace existing traffic signal control
- Landscape center island as gateway to downtown Lewiston
- Improve wayfinding at Levee Bypass decision point
- Estimated cost: $1.3M - $2.2M

Figure 24. 18th/Main Street Roundabout (Lewiston)

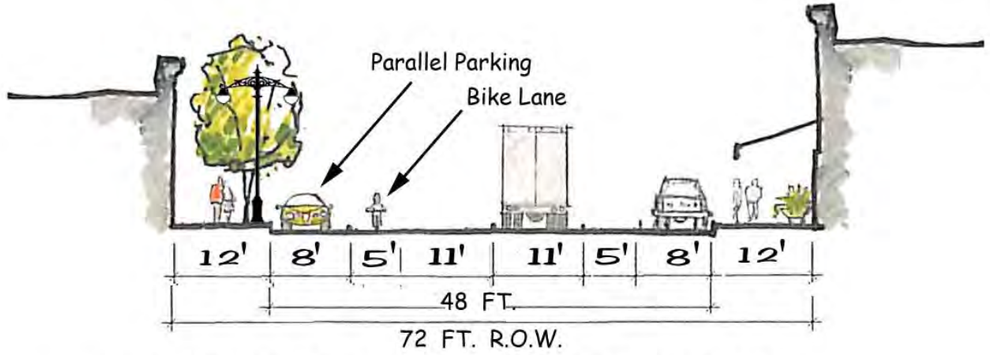
Recommended Street Configurations

The following general street configurations are recommended as guidelines for design. Example locations are given, but configurations could apply in other locations as well. Actual street widths will vary depending on site conditions, turn lane needs, parking needs, and available right-of-way.



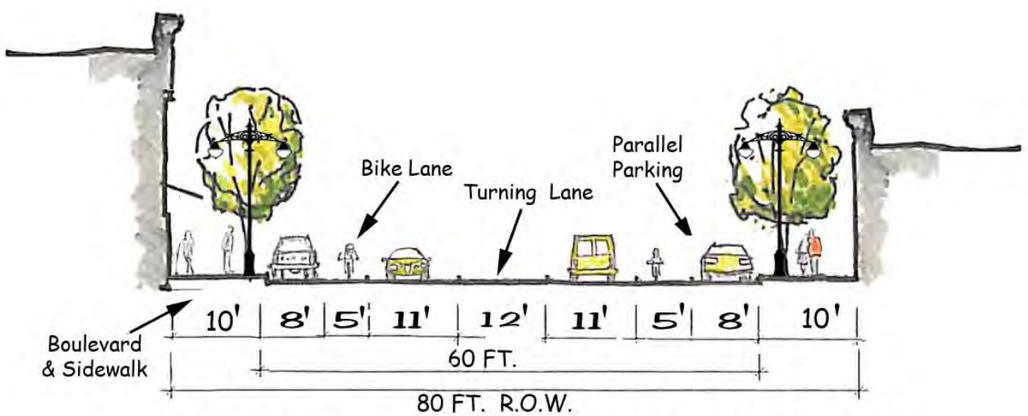
2-LANE LOCAL STREET
WITH PARALLEL PARKING

Various Locations



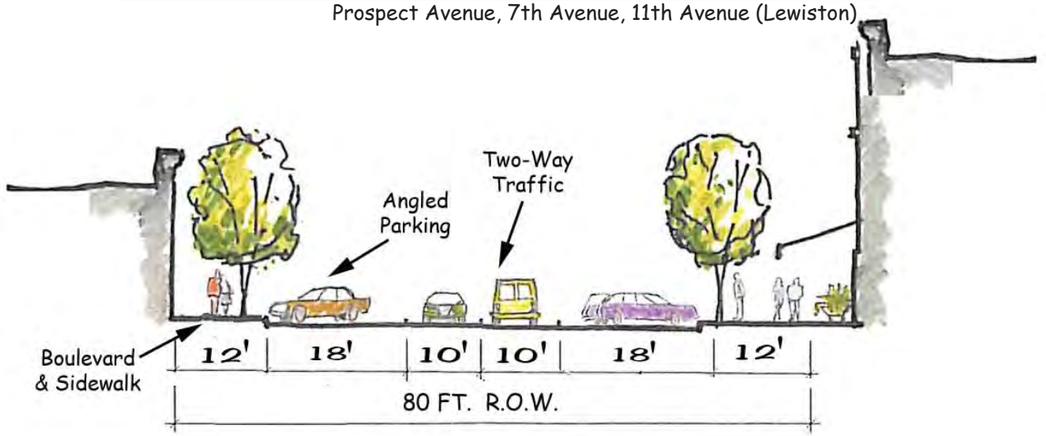
2-LANE COLLECTOR or MINOR ARTERIAL
WITH BIKE LANES & PARKING

Example Locations: 13th Street, Elm Street, Chestnut Street (Clarkston)
Prospect Avenue, 7th Avenue, 11th Avenue (Lewiston)



3-LANE COLLECTOR OR MINOR ARTERIAL
WITH BIKE LANES AND PARKING

Example Locations: 5th/6th Street, 15th Street, Port Drive (Clarkston)
5th Street, 9th Street, 18th Street (Lewiston)

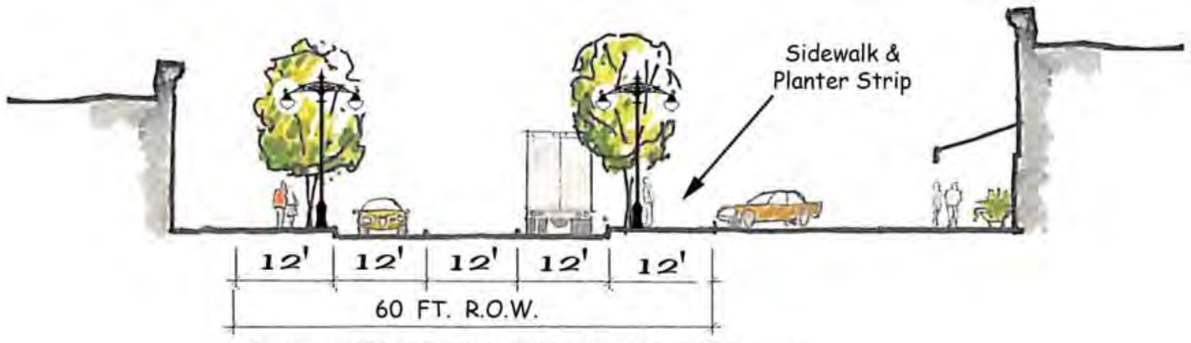


PARKING STREET
ANGLED PARKING ON BOTH SIDES

Example Locations: 5th Street, 7th Street (Downtown Clarkston)
3rd Street, Beachey Street (Lewiston)

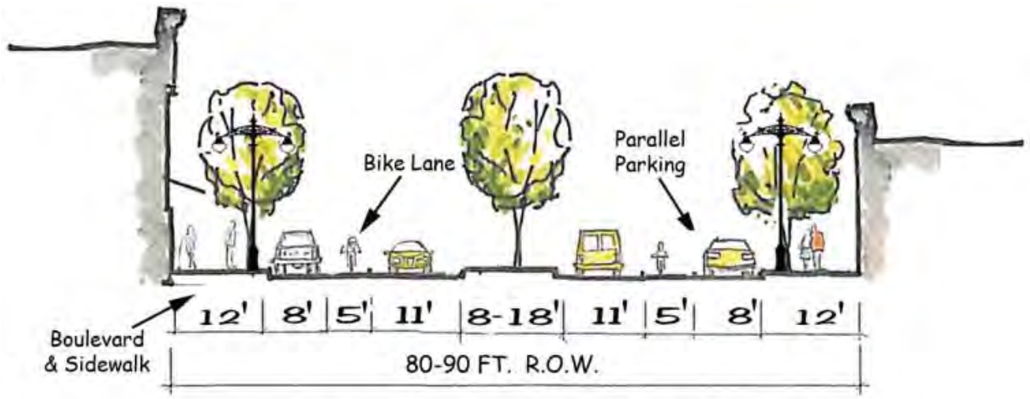
Lewiston-Clarkston Downtown Circulation Plan

Recommended Street Configurations



3-LANE PRINCIPAL ARTERIAL

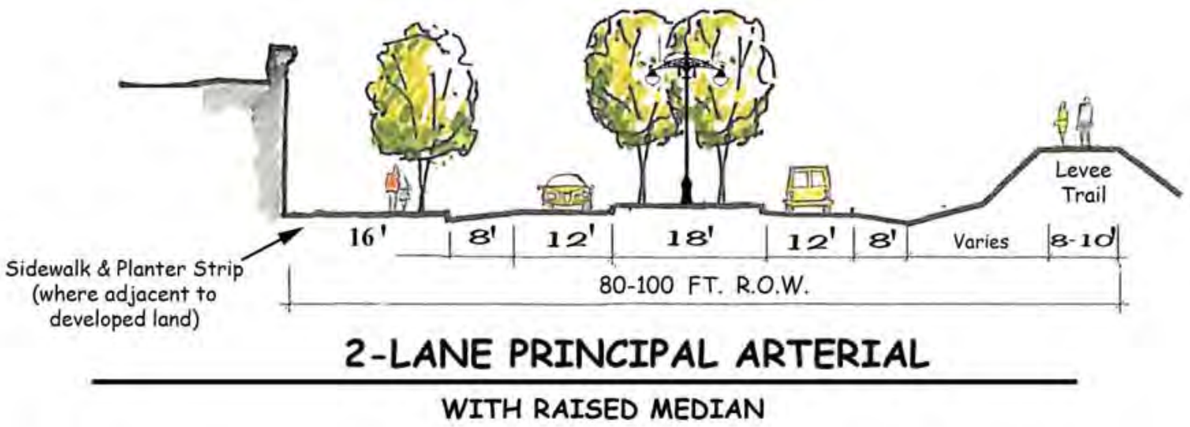
Example Location: Bridge Street (Clarkston)



3-LANE MINOR ARTERIAL

WITH RAISED MEDIAN

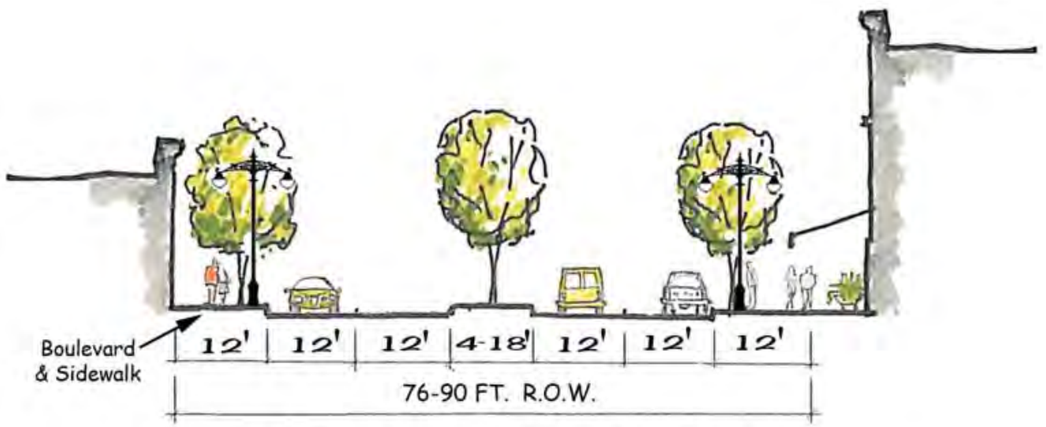
Example Location: Main Street between 11th and 18th (Lewiston)



2-LANE PRINCIPAL ARTERIAL

WITH RAISED MEDIAN

Example Location: Levee Bypass Parkway (Lewiston)



4-LANE PRINCIPAL ARTERIAL

WITH RAISED MEDIAN

Example Location: Main Street east of 18th (Lewiston)

FUNDING

Implementing the projects identified in this plan will require long-term strategies to commit funding and create incentives for private investment. There are many financing tools available, and it is likely that it will take a combination of funding sources to make this plan successful.

Nationally, the focus of transportation funding is shifting away from projects that are solely auto-oriented and toward projects that can address a wider range of transportation choices. Projects that can demonstrate competitive advantage in the areas of sustainability, livability, energy savings, health & obesity, air & water quality, and economic vitality will be more successful in attracting funding at the federal level.

One-third of the U.S. population doesn't drive. Planning for a wider range of transportation options, including transit, biking, and walking, insures that the most vulnerable populations – particularly the young, old, disabled, and low income – are accounted for in your transportation system. Cities that do this will be well positioned to attract funding and investment, and become better places to live.

Potential Funding Sources

Federal Aid Highway Funding – The Lewis-Clark Valley MPO receives federal funding for several different categories of transportation projects in Washington and Idaho. A number of these funding sources could be applied to projects included in this plan. Specific projects should be identified and added to the Long Range Transportation Plan.

- Roadway Funding (National Highway System, State Transportation Funds, Urban Areas)
- Enhancement Funding (walking and bicycling pathways)
- School Trip Safety
- Transit
- Safety (Idaho)
- Congestion Mitigation and Air Quality (CMAQ) (Idaho)
- Aviation (Idaho)
- Hazard Elimination (Washington)
- MPO Planning Funds

TIGER Grants – Competitive grant programs, such as the Transportation Investment Generating Economic Recovery (TIGER) grant program, have replaced traditional federal earmarks for transportation projects. These grants require a high level of accountability and performance, and are judged on the merits and potential benefits of the project. One round of TIGER Grants has been awarded, with a second round now being evaluated. This program appears to have bipartisan support and is expected to continue with the reauthorization of the next highway bill. TIGER Grants are a good fit for the projects recommended in this plan because of the strong connection to economic development, land use, and livability.

Public/Private Partnerships – There is strong support at the Federal level for public/private partnerships on transportation projects. While this typically applies to toll roads in larger cities, we believe there may be opportunities to create incentives for a public/private partnership with the Levee Bypass Reroute. Moving the bypass away from the river will significantly enhance the land values of the Twin City Foods site. This could create enough added value to fund relocating the roadway.

Tax Increment Financing (TIF) – Tax Increment Financing is a common tool used for redevelopment of former industrial sites or blighted areas. As redevelopment occurs and property values increase within a defined district, the incremental tax revenue generated is returned to the district. This revenue can be used to fund projects or repay bonds. A TIF district exists in Lewiston. Additional opportunities should be explored in Clarkston.

Community Development Block Grants (CDBG) – The Department of Housing and Urban Development (HUD) provides grants for affordable housing and community development in low- and moderate-income areas.

New Market Tax Credit Program (NMTC) – This relatively new federally-funded program provides incentives for private-sector investment in low-income areas to help finance community development projects, stimulate economic opportunity, and create jobs.

Low-Income Housing Tax Credits (LIHTC) – Federal tax credits are available for development of affordable multifamily rental housing. This is a potential tool to create downtown workforce housing.

Federal Rehabilitation Tax Credits for Certified Historic Structures – Historic building renovation costs can be credited against Federal income taxes in exchange for certain Federal Department of Interior renovation standards. This is a potential tool to for adaptive reuse and renovation of existing downtown buildings.

Parking Districts – Public parking is important for existing businesses and for encouraging redevelopment. Parking can also provide a source of revenue, which can finance construction of additional parking spaces. This requires careful consideration. Paid parking has to be balanced with the disincentive it creates for people to choose to shop and do business downtown.

Special Improvement Districts (SID) – Special Improvement Districts, as allowed by state law, can be used to finance improvements in the public right-of-way, such as utilities, curb, gutter, sidewalk, and lighting improvements. Bonds are sold to finance the cost of the improvements, which are assessed to the adjacent property owners over a period of 10 to 20 years. Interest rates for the financing are typically five to six percent. Rates will vary with current market interest rates.

Business Improvement Districts (BID) – Business Improvement Districts are also property assessments within a defined district. BIDs are typically used for operation and maintenance costs, business promotion, events, and beautification. They typically do not involve bonding and are renewed every five to ten years.

Transportation Impact Fees – Impact fees are assessed to new development to account for off-site improvements that will be required to the overall transportation system over time. Fees are typically established based on the level of traffic a particular development will generate.

Local Option Sales Tax – Local sales taxes are commonly used to fund transportation infrastructure. Local option sales taxes are currently prohibited in Idaho.

Brownfield Funding – Federal grants and loans are available from the Environmental Protection Agency and/or state agencies for clean up of hazardous materials on former industrial and commercial sites. This funding can be used as an incentive to lower redevelopment costs for potential developers on sites like the Twin City Foods site.

Army Corps of Engineers (the Corps) – A number of the recommended projects in this plan are located on or adjacent to levees controlled by the Corps. The Corps often funds flood protection, storm water, and water quality projects, as well as recreational trails and parks. Opportunities should be explored for funding mutually beneficial projects.

Utility Franchise Fees – Assessments to utilities occupying public right-of-ways have been discussed as a small potential funding source in the Lewis-Clark Valley.

Federal Transit Administration (FTA) – Limited opportunities exist to apply FTA funding for capital improvements related to transit service, which could include pedestrian improvements, bus shelters, street lighting, etc.

III. Streetscaping Principles and Guidelines

Introduction

The streetscaping principles and guidelines that follow provide property owners, business owners, city planners, landscape architects, engineers, designers, and civic-minded community members with a set of guiding design principles and a pallet of tools with which to shape the future downtown street environment. The purpose of these guidelines is to help coordinate improvements downtown by providing opportunity and color for your downtown public spaces, streets, sidewalks, building facades, and landscaping. These guidelines provide a design context for consistency, as well as variation, in creating successful community spaces, and a starting point for new ideas based on healthy design principles.

As the Lewis-Clark Valley grows and changes, it becomes increasingly apparent that design guidelines are needed to allow the streetscape to adapt appropriately for the community, while at the same time promoting a mix of uses, including pedestrian, bicycle, automobile, and public transit. It is intended that implementation of these designs will serve to increase not only the appeal and viability of downtown Lewiston and Clarkston, but in addition, the treatment of the Valley's other through-fares and arterials.

Considerations

A few of the most important reasons for concern with the layout and design of the downtown Lewiston and Clarkston streetscapes include:

Public Safety

Ensuring public safety is paramount. In terms of safety, perception is reality. A downtown that is unsafe—or perceived as unsafe—for pedestrians, cyclists, motorists, and residents will not be able to attract the current community or new residents, customers, and businesses.

Design guidelines are created to enhance public safety.

Vitality

Our downtowns, as integral parts of the community, need the insight, opportunity, and capacity to grow and develop.

Design guidelines are developed to enhance and promote the vitality of the Valley's downtowns. This includes nurturing street level commerce and social activity.

Business Encouragement, Growth, and Tax Base

These elements are critical to the sustainability of successful downtowns. Creating the right climate for business growth, helping businesses succeed, and attracting new businesses are essential. Strong downtowns provide jobs to residents, and the creation of more jobs results in a solid tax base that adequately supports the downtown.

Design guidelines that promote streetscaping can encourage the growth of business and attract new business to the area by promoting pedestrian safety, comfort, and activity; increasing the population density; improving functions at the street level; providing adequate and convenient parking; increasing retail and service building use; and developing public spaces.

Aesthetics

Improving the physical appearance of the downtown creates an attractive, comfortable, and inviting atmosphere. Comfortable, pedestrian-friendly downtowns enhance vitality. Studies have shown that attractive, clean downtowns with street trees and other amenities will increase the retail sales revenue of businesses and cause shoppers to stay longer in the downtown.

Design guidelines aspire to create a high-quality and attractive environment that evokes a sense of pride, care, and safety for people who live, work, and play downtown.

Pride of Place

Listening to, exploring, and expressing the ideas of the community leads to the creation of a distinctive downtown and a sense of ownership. Our downtowns offer a unique historical character which can be enhanced and developed.

Design guidelines help design a place we are proud to call home.

Community Expression

Community expression defines and empowers a place.

Design guidelines are flexible, allowing for individual and group expression, while promoting an identifiable character unique to Lewiston and Clarkston.

Civic Involvement

The best streets encourage participation. Strengthening public participation and making downtown a fun place to live and visit are as critical to the downtown's future as new businesses.

Design guidelines enhance pedestrian amenities and the civic image of downtown. Both Lewiston and Clarkston have recently begun Alive After Five street fair events that are quite popular and will flourish with streetscape enhancements.

Lewiston-Clarkston Downtown Circulation Plan

Community Expression

The downtown is a medium through which community character is expressed. Design should recognize and even be derived from the contextual setting in which it exists. That context includes the natural setting of the valley, the history, the influence of the Nez Perce and other elements which will promote the specialness of this area. To encourage and enhance the unique qualities of Lewiston and Clarkston, street improvements should be carried out with a sense of community expression underlying the design. The question is how to apply universal design principles in a way that allows this community expression to continue to accentuate the uniqueness found in Lewiston and Clarkston.

The Lewiston and Clarkston Valley is a compelling place—more so than many cities of similar size or larger. Its natural beauty and outdoor opportunities attract many people. You can build on Lewiston and Clarkston's strengths by embracing what compels people to live there. You can create places that support the Lewiston and Clarkston community and visitors living, working, and playing there. In this way, you are continually expressing something about who you are.

Architectural History

Lewiston and Clarkston's rich heritage is evident in the variety of architectural styles—from the sturdy brick structures of the early 20th Century to the Spanish style of the Lewis-Clark Plaza and the eclectic variety of more modern buildings —they are all part of Lewiston and Clarkston's downtown streetscape.

Community members who love and cherish Lewiston and Clarkston's history have striven to protect and preserve these historical buildings. At the same time, they understand that today's creation is tomorrow's historical legacy. **New work should be innovative while respecting the context and variety of historical neighbors.**

Natural Setting

Lewiston and Clarkston are shaped by the landscape—the confluence of the Snake and Clearwater Rivers, the hills to the north, the surrounding Palouse, and the mountains, wildlands, and natural resources of the region. This landscape provides employment, recreation, and inspiration for the people who live here. **New work downtown should reflect and respect the natural setting and casual outdoor lifestyle.**

Activities

The downtowns of Lewiston and Clarkston are working to develop a healthy mix of daytime, nighttime, weekday, and weekend activities revolving around commercial businesses and services, government offices, community and public services, dining, and entertainment. It is feasible to envision the streets of these two downtowns as full of life from early morning to late night. The breadth of demographics inherent in these activities is critical to both downtowns.

A vibrant downtown is conducive to individual and group expression. This can be seen in the popular Alive After Five events, in the variety of parades that march the downtown streets each year, and in the cultural and art opportunities, open marketplaces, community festivals, and new businesses starting up. **Downtown improvements should encourage the broad spectrum of both established and spontaneous activities.**

Potential exists to enhance and build upon the existing framework of both downtowns, to move forward with a confident energy and a desire for community expression which can increase the activities in your downtowns.

Universal Design Principles for Healthy Streets

A study of the best streets in healthy, vibrant cities reveals numerous design principles common to nearly all. The broad and successful application of these principles deems them universal and applicable to any community. Several of these principles are discussed in detail below.

The shape of our cities and the form of our streets affect the success of the community as a whole. A successful downtown is full of people who gather, celebrate, and use all kinds of services, all within an enjoyable and inviting place.

Within that space, there should be places to:

live...

work...

shop...

wait...

people watch ...

meet and talk...

eat, drink...

rest or pause...

There should be places to assemble, inform, teach...

and places for art and expression.

Allan Jacobs, in Great Streets, describes the social and economic criteria having to do with building good cities: accessibility, bringing people together, publicness, livability, safety, comfort, participation, and responsibility.[4]

The economic health of a place relies on a strong diversity of uses concentrated in one area—an interdependent mix of businesses, activity, and people. Socioeconomic factors are as much a part of a healthy street as physical features. Although socioeconomic factors are beyond the control of a designer, providing a physical setting where these healthy interactions can take place is not.

The designer uses the tools available and the fabric of "why" to produce an idea. The idea is drawn out of local and regional influences, with connection to the specific place, the people, the geography, the climate, the environment, the vegetation, the business, the history, the culture, and/or the future of the place. The goal is for every space and every street corner not to be the same. Instead each design idea responds to the place and those who will use it.

Urban studies author William H. Whyte suggests we start with an understanding of the way people use spaces and how they would like to use spaces:

"What attracts people most… is other people."[5]

Universal Principles

Sidewalk Width

The sidewalk is about communication. The sidewalk, a public right-of-way, is what makes a city accessible to all. The width and layout should allow people of all ages to walk comfortably and safely at their own pace. There should be room for several people to walk together and pass. There should be room for wheelchair users to move freely and travel alongside other people. It's on foot that our social interactions downtown take place.

Use of the Public Right-of Way

The use of city sidewalks for private purposes is a benefit to adjacent businesses and patrons, and contributes to the vibrancy of a downtown. Dining alfresco is common and popular in Europe, Latin America, and increasingly in the United States. Sidewalk cafes provide opportunities for watching people. This plan encourages outdoor dining and sidewalk cafes where appropriate.

Psychological and Physical Separation of Pedestrians from Traffic

Separation of pedestrians from traffic is for safety and peace of mind. People are reluctant to use the sidewalk if they feel uncomfortable or unsafe. Visual or physical cues create a sense of security for pedestrians.

Separation ideas include:

- Changing materials and texture at the curb
- Parked cars
- A line of street trees
- Plantings
- Large planter pots / urns
- Benches
- Bollards
- Light poles / banners

[4]Allan B. Jacobs, Great Streets, (Cambridge: MIT Press 1995).
[5]William H. Whyte, Jr., "The Humble Street," Historic Preservation January 1980: 34-36

Lewiston-Clarkston Downtown Circulation Plan

Define the Edges

Define the street's edges or boundaries to define the sidewalk space (as mountains define a valley). Use the building line, the building height, walls, screens, trees, hedges, and sculptural elements. A line of lights illuminated at night can serve to define a clear boundary. Think about the terminus of the street space and how it is treated. Consider prominent physical and visual barriers which help to define the spaces. For example, downtown Lewiston is bordered by the bluff to the south and the levee to the north and west. On the Blue Interstate Bridge crossing the Snake River, the street space remains strongly defined by the railings and the bridge support structure.

The ratio of street width to building wall height often determines the volume of a street and, accordingly, its feel. Proportionately, if building height is low and street width wide, the space feels open and exposed. With building height high and street width narrow, the street becomes a dark canyon with less appeal to the pedestrian. An appropriate ratio gives the street volume, definition, and a human scale. Along Diagonal Street in Clarkston, for instance, the wide expanse of pavement coupled with the lower buildings, which are set back from the street, contributes to a rather wide open feel. This is contrasted with the more canyon feeling found in sections of Lewiston's Main Street, which are bounded by three-story structures, tall shade trees and a 80-foot-wide right-of-way.

A strong tree line can provide edge definition when the height-to-width ratio is too small. Large gaps in the street wall, such as at-surface parking lots, are a detriment to defining the street volume. These gaps are like missing teeth in a smile. A tree line can remedy this situation as well, even if the building line is inconsistent.

A variety of buildings with smaller widths, rather than very large buildings taking up large proportions of a block, is conducive to a healthier street.

Buildings with regularity in height in proportion to the street width are better than buildings with huge variations in height abutting each other. A complementary, yet variable, character of scale, materials, and colors is desirable.

Provide Texture, Variety, Light, and Shadow to Stimulate the Eye

Building surfaces contribute to visual appeal. However, when considering sidewalk surfaces only, trees, pots, benches, signage, lighting, and varying materials can also achieve a variety of depths, textures, and colors. Variety in this context is often more important than consistency. Again, street trees can provide considerable benefit for relatively little investment. The variegation in leaves, color, shape, shadow, movement, depth, and richness are impossible to duplicate with any man-made element.

Occupy the Upper Floors

Although usually an economic consideration beyond the scope of the streetscape designer, the active and visible habitation of the floors above street level adds substantially to the positive social atmosphere of the street. Occupied windows in apartments, hotels, and offices add eyes to the street, create a visual connection between people, and contribute to the safety, liveliness, and vitality of downtown. The residential use of the upper floors in Lewiston's downtown has been promoted by its Downtown Revitalization Plan. In Clarkston, both the Comprehensive Plan and Zoning allow for and advocate for residential in the downtown area's upper levels.

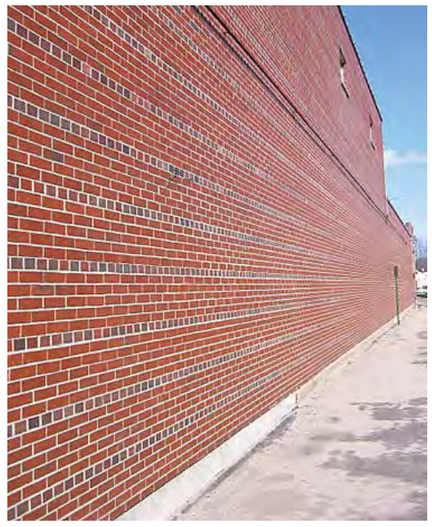
People living downtown dramatically change the feel of the street, making it safer, busier, and more comfortable. A street becomes successful when there are people supporting it. A critical mass of density is required to support a vibrant community. Consider how alive the downtown areas feel on a Saturday morning with the Farmers' Market underway, or during an Alive After Five event. Increasing residential use is critical to a successful downtown. A residential downtown augments other uses and creates a 24-hour environment. Student housing associated with Lewis-Clark State College will continue to enhance these objectives.

Lewiston-Clarkston Downtown Circulation Plan

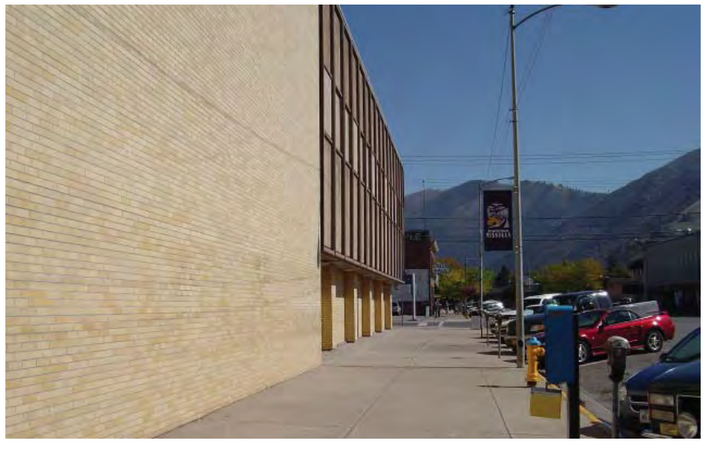
Building Transparency at the Street

The importance of transparency in the street-front façade cannot be over emphasized.

Without visual connection between pedestrian and interior space, sidewalks seem cold and lifeless.



People do not pause or spend time on streets with blank walls, small punched window openings, or dark or mirrored glass; where there is no connection between indoors and outdoors; where the environment is non-conducive to communication.

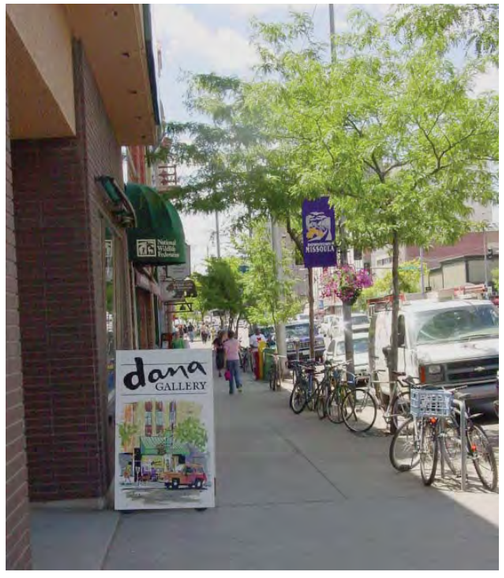


An abundance of windows and entryways intensifies activity level by opening the building to the street and augmenting communication between the inside and outside.

A high ceiling at ground floor with a tall, transparent storefront is considerably more inviting than a low-level space with punched openings. We encourage a trend towards opening businesses visually to the sidewalk with glass, good lighting, and good signage design to engage pedestrian traffic. Compel people to notice; cause them to pause outside; pull them into the space; and interest them in staying to shop or eat. Beautiful Downtown Lewiston's members have actively promoted this cause and the resulting improvement in street-level storefronts is strong evidence of their success.

Comfort

Consider comfort. Take notice of the amenities available at a specific place downtown. How does it look and feel? Is it hot? Is there shade available? Is it cool? Is there sun exposure in the winter? Is there a pleasant place to sit and rest? Do you feel safe? Are there people nearby? Is there conversation? Are there elderly people? Are there children? Is food available nearby? Is the space well lit at night? Are there maintained trees and flowerpots? Has the snow been removed? Is there activity to watch? Is there anyone you know? Was it easy to get to? Is it easy to get home? Would you take your family there? Would you go there at night? Would you consider living there?



Elements of personal comfort, considered in relation to a specific place, are valuable tools for deciphering the pedestrian nature of that place—whether people might spend time there and, most importantly, whether they will come back.

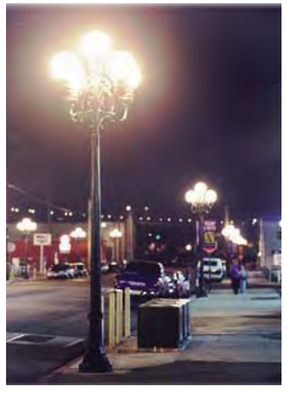
Design Tools

One goal in using these design tools is to make a place, an area of the street where social interaction occurs because of the clustering of complementary uses and functions. A coffee cart near the benches in front of the flower tubs next to the bus stop on a wide sidewalk area at a festive store entrance creates an environment where people will encounter each other. This is the communication streets need to thrive. Functional elements get more use when clustered than when placed in isolation. Clustering helps people feel safe and comfortable, and provides additional incentives for spending time in a particular place.

The best solutions are based on simple, clear ideas. A "solution" is only accurate when it allows for the street to continually evolve as the city does. Implement a few simple elements to see how they work and how people use them, and then develop the space further if needed.

The following terms, describing simple spatial concepts, can help trigger ideas:

Entry, arrival, gateway, portal, vista, enclosure, width, height, volume, openness, edge, center, axis, arc, radius, overhead, solid, transparent, translucent, permeable, intermittent.



toolbox

- Sidewalks
- Planting
- Seating
- Tables
- Lighting
- Public Art
- Signage

Sidewalks

1 Width

The space available on the sidewalk is determined by the width and any obstructions occurring within that width. As mentioned previously, the sidewalk width needs to comfortably accommodate groups of pedestrians passing, wheelchair users, people with dogs, and so on. Everything that occurs and everything that takes space on the sidewalk has to fit within that width, while still allowing comfortable pedestrian usage.

In the core of downtown Lewiston, most sidewalks are between 10 and 12 feet wide. In downtown Clarkston, sidewalks are uniformly 12 feet in width. There is no standard for how wide is enough. Every block in every city is different because of variations in pedestrian population, routes, destinations, patterns of development, businesses, and residences.

Three Zones

Wide expanses of empty concrete are not the answer, and there are examples of popular streets with narrow sidewalks. Nevertheless, in general, wider, more comfortable sidewalks should be the goal. There are three zones to consider when planning sidewalks: Pedestrian Travel Zone, Building Frontage Zone, and Features/Planting Zone.

If the typical downtown sidewalk width was extended several feet in selected locations, pedestrians, food carts, outdoor tables, benches, and trees could fit at intervals within that space and still allow comfortable pedestrian movement and flow.

In addition, wider sidewalks encourage sidewalk dining. Restaurants that expand their boundaries by moving out to the street add tremendously to a vibrant outdoor scene downtown. This has proven popular and successful in Coeur d'Alene, Spokane and Nelson, British Columbia.

Downtown sidewalks should be wide enough to accommodate anticipated uses in each sidewalk zone. For comfortable activity, the Pedestrian Travel Zone should generally have a clear walking path eight to ten feet wide, with about eight feet of height clearance. This imaginary pedestrian channel can weave in and out around activities on the sidewalk. An additional two feet minimum should be provided immediately adjacent to store windows to allow for viewing and sandwich-board signage, or an additional four feet minimum for dining tables.

This is the Building Frontage Zone. The Features/Planting Zone, the space from the street trees to the curb for edge definition and separation from traffic, should be from three to ten feet. These distances are provided as a guideline. Cross slopes meeting Americans with Disabilities Act (ADA) requirements are two percent, or 2½ inches in ten feet.

Crossing Distances

Crossing distances for pedestrians should be minimized for safety and comfort, especially for those who move more slowly. Excessive slopes in crossings need to be mitigated in order to conform to the ADA. Drainage structures need to be located outside of pedestrian use areas. Areas where pedestrians wait to cross the street should be well lit to improve the motorists' visibility of the pedestrians. Changes in materials and colors at crossings should be used to clue cars to the presence of pedestrians and to assist vision impaired persons. Consider using crossing signals that incorporate sound. For additional information, consult with the vision impaired community and the ADA.

Bulb Outs

Wider sidewalks created with tools such as curb bulb-outs or mid-block curb extensions generate a considerable amount of space for use by people, plants, events, street music, and seating. This has been implemented for portions of Main Street in downtown Lewiston.

Consider bulb-out designs that respond to the specific location and context. An intersection or crossroads is an important, and even central, public place.

Lewiston-Clarkston Downtown Circulation Plan

Fixtures

Poles supporting highway signage, directional signage, parking meters, and bike parking contribute to visual clutter on our sidewalks. Whenever possible, consolidate sidewalk fittings and fixtures onto a single pole. For example, a pedestrian light pole can also carry directional signage, two parking meters, bike parking, and a suspended trashcan. Consolidation reduces the number of poles and encroachment on the sidewalk. This simplifies both the visual clutter and eases snow removal and cleaning.

Bike Parking Accommodation

Bike parking should always be four feet away from curbs where cars park to prevent damage to the bikes and to allow space for motorists to get out. Bike parking should not encroach onto the Pedestrian Travel Zone.

2 Sidewalk Materials and Surfaces

There are many possibilities for paving surfaces on the sidewalk. Keep in mind that a simple, inexpensive surface done well is better than a specialized surface requiring expensive maintenance. It can be more effective to save special treatments for select locations where more attention is focused. In selecting surface materials, consider these factors:

- Initial Cost / Long-Term Cost
- Life Cycle / Reliability / Durability
- Safety / Information for Disabilities
- Texture, Color, Pattern, Decoration, Material Source
- Distance / Availability of Regional Sources
- Creative Expression (A Form of Public Art)

Here are a couple surface material selections along with some of their qualities:

Concrete (poured in place)

Concrete is inherently strong when detailed correctly, easy to place, and relatively inexpensive.

It can be finished in many ways: steel-troweled smooth and flat, broom texture, raked texture, brushed or washed to expose the aggregate, or sand-blasted. Many kinds of aggregate are available, including native stone, for color and texture.

Pressed surface textures are available. These use forms or "mats" to produce textures and patterns. However, avoid the use of patterns that imitate other materials. Honesty and authenticity are best.

Patterns can be troweled or saw-cut into concrete slabs for design or traction. Steel mesh is often pressed onto troweled surfaces to create traction on slopes.

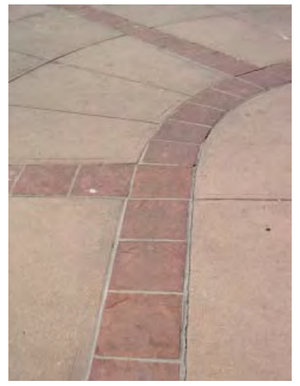
Color can be added by staining the surface or integrated by adding color to the mix before placing. Staining gives variegation and a far richer color than add-mixtures. Either type should be tested first. Many dark add-mixture colors fade in the sun. Red, for example, often fades to a dull pink. The use of earth tones and warm colors is recommended. Again, avoid attempting to imitate other materials.

Lampblack added to the mix darkens the slab to eliminate the overly bright, new concrete look. Alternating slabs or squares created with varying amounts of lampblack can create a pattern, such as a checkerboard or basket weave. Alternating stained and plain concrete can provide the same effect.

Pavers

Pavers, sometimes called unit pavers, are a good way to surface an area that needs to be more pervious to water or accessed for utility work.

Pavers can also be used to create a beautiful, textured surface with color and warmth. Available materials include high-fired, hard street bricks, clay pavers (usually in a brick format), pre-cast concrete, and natural stone. Man-made pavers are generally 2½ to 3 inches thick and can be mortar-set or sand-set.



Concrete pavers are available in a large selection of earth tones and muted colors, and a wide variety of shapes and textures. Shapes and colors can be combined for simple or elaborate patterns.

Tumbled concrete pavers have a soft-edge, weathered look. Extremely strong, dense, large pavers are available from 12 inches by 12 inches to 30 inches by 30 inches.

Detailing and proper installation of base materials are critical to the success of a paver system. When considering pavers, check the surface texture and joint width for accessibility issues. When done correctly, pavers will carry heavy traffic and last indefinitely.

Planting

The downtowns of Lewiston and Clarkston can make good use of a variety of plantings in the streetscape, including trees, planters, beds, large pots and tubs, hedges, hanging planters, and flower baskets. Some of these are already in use to good effect.

Both Lewiston and Clarkston are recognized as "Tree City USA" by the National Arbor Day Foundation. Increasing the greenery downtown provides a visual and physical benefit for the community and promotes a green reputation.

1 Trees

Trees have the greatest effect, relative to cost, of all the elements available. They can contribute to a sense of place and pride in the community.

Trees supply shade in summer. Trees are cooling, provide fade protection for materials and retail goods, and reduce glare.

Trees bestow beauty, color, texture, depth, movement, and filtered light. They announce seasonal change and denote a human scale. There are a number of good healthy trees in both downtowns. There also exist many streetscapes in the downtowns and along the main arterials that are devoid of trees altogether and could certainly benefit from the addition of well-designed tree plantings.

Trees help define spaces, borders, and enclosures. They provide separation and screening from traffic, and help absorb traffic noise. Trees soften the hard edges of the urban environment. Trees encourage people to use the street, and stay longer. They give neighborhoods and districts identity and increase property values.

An often-overlooked advantage to having trees is the impact they can have on air quality. A large tree can release several hundred gallons of water into the air everyday, creating a major cooling effect. The leaves filter dust and help remove toxic pollutants from the air. The foliage removes ozone, carbon monoxide, nitrogen oxide, airborne ammonia and some sulfur dioxide. Trees convert carbon dioxide into oxygen. Evidence shows that people feel better in green and leafy surroundings.

It is important to select the right species of tree for the installation. Consider shape, height, crown spread, leaf characteristics, watering needs, climate, and maintenance demands. Coordinate the selection of tree species with the detailing of the surfaces that surround it. How large a planting pit is required? How pervious is the surface? How wide is the tree's root pattern? How much water will it need to thrive? Is there an irrigation system or will it be watered manually? How will leaf cleanup be handled?

Different species require different spacing, but in general, 20 to 30 feet creates a strong line, canopy, edge definition, and separation from traffic. Maintain a continuous line of trees to define the line of the street. Sparsely spaced or too-small trees are ineffective. Begin the tree line close to the intersection, but keep in mind safety and visibility for traffic. Sight triangles for both vehicles and pedestrians should be checked at intersections and mid-block crossings. Consider the effect of shadows and light on visibility of pedestrians to drivers, and avoid placing trees that will shade crosswalks or block street lighting. A consistent placement of trees also marks the beginning and end of major pedestrian streets.

Lewiston-Clarkston Downtown Circulation Plan

Tree Species

Select tree species consistent with Urban Forestry goals for diversity and disease resistance. In retail areas, the ability to see storefronts and signage is an important criterion. Trees with open canopies, such as Japanese Pagoda Tree (Sophora japonica) or Skyline Honeylocust (Gleditsia triacanthos 'Skyline') are well suited to this application. Relatively clean trees, such as the Autumn Purple Ash (Fraxinus americana 'Autumn Purple) and Village Green Zelkova (Zelkova serrata 'Village Green') could be considered as "fill-in" species or possible replacement species in the Valley's downtown areas. Additional tree species with open canopies or narrow branching are Sentry Ginkgo (Ginkgo biloba 'Fastigiata'), and Boulevard Linden (Tilia americana).

The health of a tree is dependent on the material that the roots are growing in. Tree planting pits should be a minimum of eight feet deep and up to ten feet laterally. Structural soil, sub-drainage, and irrigation should be utilized.

Tree Grates

The street trees which have been in place in downtown Lewiston since the early 1980s and on Sixth Street in Clarkston since 1994 have not used, nor required, tree grates. Tree grates are an urban treatment that adds a considerable dollar amount to the installation of trees downtown. Therefore, the use of such items for new, additional trees should be given a thorough consideration of their worth. If tree grates are desired, it is good practice to use ADA-compliant tree grates that are a minimum of 4-feet wide.

Tree planting areas may be extended and developed as group planting areas to add color and interest on the sidewalk. Bark mulch may be used in tree wells. Boulders may be incorporated to provide interest and seating.

Any treatment at the base of a sidewalk tree planting must meet ADA and safety requirements. Trunk protectors are recommended.

At parallel parking, allow a two foot six-inch distance from the curb. At angle parking, allow a three to five foot distance from the curb to avoid impact from overhanging vehicle bumpers. Where planting areas are in the sidewalk, provide a two-foot-wide walking surface adjacent to the curb.

2 Plantings

Hanging flower baskets, if well maintained, can add tremendously to the color and vitality of a streetscape. The new lamp posts which will be installed in 2011 along Sixth Street in Clarkston include decorative arms for such baskets. In addition, built-in drip irrigation is included inside the post. Other streetscapes in the Valley should consider adding similar improvements.

In other planting areas, planting options can include traditional clipped forms and loose flowers contrasted with free flowing ornamental grasses and native plants. The juxtaposition of plant forms actually accentuates the characteristics of the plants, creating a jubilant expression of life. Choose species that provide a balance of winter form and color and summer form and color.

Chose plant materials according to ease of maintenance, longevity, soft texture, and seasonal interest. Plants that can cut or poke people should not be in areas that people come in contact with. In addition, these types tend to capture debris on their thorns and sharp edges. Other considerations important in an urban setting subject to various impacts include attractiveness to vandals, ability to regenerate when crushed or broken, resiliency, exposure to deicers, and dogs.

At-Grade Plantings

Planting areas flush with the sidewalk surface can double as an aesthetic element and provide filtration of runoff water.

These areas may be combined with tree planting pits in an extended fashion, or be located independently in areas of extended sidewalk width.

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Containers

Moveable containers are preferable to permanently constructed raised planters. Large planter pots and tubs are a good way to add color, define space, protect pedestrians, and liven up any street.

They can be used as barriers, edges, enclosures, bollards, or announcements of an entrance.

They need to be tall enough and large enough to provide real protection—about 24 to 30 inches high and 30 to 48 inches in diameter. A larger size will help protect the soil and create a substantial barrier.

Planters should be free draining. Materials should be sturdy, vandal-resistant, pleasant to look at, and freeze-proof. Terra cotta is beautiful, but will disintegrate with freeze-thaw cycles. Many materials and designs that look good and hold up well are available. Look for products that incorporate water reservoirs. Use soils amended with moisture retention polymers. Fertilize the tubs monthly.

Buffer Plantings

Buffer parking lots from the sidewalk with vegetation. Buffer plantings provide edge definition and greenery to soften urban space and incorporate storm water collection.

Watering

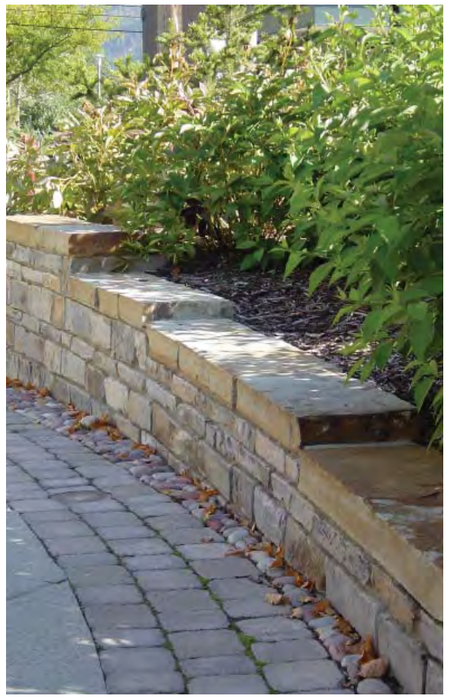
In the Lewis-Clark Valley with its long, hot summers, supplemental watering is essential to ensure the survival of trees and other plantings. All new streetscape planting projects should include automatic, underground irrigation. Where the opportunity exists, retrofit existing street trees and other planting areas to provide irrigation. Where no automatic irrigation is present, incorporate hand watering as part of regular maintenance.

A central irrigation system can be provided with a new water connection and sleeved to connect multiple blocks, or by connecting to an existing water line at an existing building. A separate meter should be installed to facilitate monitoring, maintenance, and invoicing. Multiple, individual irrigation systems may be installed and maintained by each property owner. In either case, where existing sidewalks are to remain, concrete will need to be cut to allow a trench for the water line to the planting area. Trenches can be repaired easily by utilizing unit pavers. Tree wells can have bubblers under the grates or laser tube over the root zone. Both at-grade and raised planting areas will require vandal resistant pop-up spray, laser tube, or manual irrigation.

Seating

If seating is situated in the right spots, people will use it. Seating is one of the most common attributes of a good street. The most interesting and inviting streetscapes contain small areas for activities and respite. These gathering spaces contribute to the character of the street and provide visual interest.

Locate seating near the pedestrian traffic flow. People want to sit where others pass by. Concentrate furnishings in proportion to the level of pedestrian activity for the space. Locate seating near other amenities and services for increased social interaction. People like something to look at, whether it is other people, interesting shop fronts, or passing traffic. In general, place seating to allow for viewing pedestrians, unless there is something compelling in the street or across the street.



Seating surfaces should generally be about 18 inches high, with bench seat angles two to ten degrees off horizontal. Bench backs should lean back 95-105 degrees from the seat plane. Curved is more comfortable than flat. A seat depth of 12 to 18 inches works well. A flat surface, 30 inches deep, allows seating from both sides.

Look at an area for seating as a streetscape microcosom—a unique activity center. Seating should reflect the uses and character of the specific activity center it helps create.

A bench or seating spot is the perfect subject for a design competition. Artists and other interested parties can provide fun, creative, expressive ideas. Locally designed street furnishings, such as seating, provide a sense of community for residents, add to the uniqueness of the downtown, and attract visitors.

Outdoor Tables

A great advantage of additional sidewalk width is the ability to set outdoor café tables on the street side at restaurants, pubs, taverns, coffee and tea shops, bakeries, juice bars, and so on.

Eating and drinking alfresco, while watching the activity on the street, is enjoyed by people throughout the world. Food attracts people, people attract other people. Outdoor dining is a vital part of a vibrant entertainment, tourist, business, and residential district.

Tables are usually arranged on the building side or on the curbside of the sidewalk, with tables arranged in rows or staggered.

For eating establishments located on corners, tables can be placed on a curb bulb-out to take advantage of extra space.

Dining can be left open on the sidewalk or enclosed with a border or barrier. Enclosing dining areas provides physical and psychological protection and enhances control. The area can be delineated by an iron railing attached to the sidewalk with removable anchors. Ensure a six- to eight-foot clear pedestrian path on the sidewalk near outdoor dining areas.

Different furnishings can be used to provide varying degrees of enclosure.

These include large planter tubs or boxes, hedges, a tight line of trees, cast-iron fences, lightweight plastic fences, stanchions and ropes, or bollards. Depending on design and material, tables and chairs can be left outside or taken in each night.

Regardless of layout, consideration should be given to overhead protection from sun, rain, or snow. A retractable canvas canopy above the storefront can protect the tables inside, as well as outside, the building line. A marquee can extend from the building to the curb. Umbrellas shade tables and allow a more flexible layout. Overhead cover also provides a place to locate radiant heaters which, with some wind protection, can make outdoor space usable on all but the coldest days in Lewiston and Clarkston.

Sidewalk Lighting

Sidewalk lighting is specific to the sidewalk and pedestrians. It is not street lighting for vehicles. Pedestrian lighting is a key component of street vitality and nighttime use. Clarkston's central business district will have new, energy-efficient luminares installed in 2011 to increase the safety of its pedestrians and to add to the visual character of the streetscape. Downtown Lewiston has a variety of existing light styles, but is working towards consolidating them into one standard, historic style.

Good lighting serves a number of functions, most importantly providing safety and security for pedestrians. People need to feel comfortable and secure in an area before they will use it at night. A brightly lit area with activity attracts pedestrians and shoppers, and thereby becomes safer. The lighting needs to be, at a minimum, adequate to illuminate pedestrians on the sidewalk.

Sidewalk lighting should define the pedestrian space and be of pedestrian scale. Providing the correct scale for pole and fixture, along with the correct type of lighting, serves to promote a sense of pedestrian sidewalk ownership. Many guides recommend a minimum of ½ footcandle at all pedestrian areas. Some areas can be much brighter, but not so much that it creates the perception of dark spots. Primary streets, such as Bridge Street in Clarkston, can be lit more brightly than side streets.

Lighting Specifications

Closely spaced poles with lower lamps and lower brightness light the sidewalk evenly and are preferred to fewer high poles with high wattage lamps. This configuration will usually save power as well. Fixture height should be 12 to 15 feet, on average. Fixtures, called luminaries, should be the full, cut-off type, with the light source shielded in such a way that no light escapes the luminaire above a horizontal line. This ensures that light is directed down, not spilled into the sky. It is important to note that some full, cut-off fixtures can bounce light off the sidewalk and into the sky, defeating the purpose of the design. Additionally, in areas with taller buildings, it is important to avoid a "tunnel" effect caused by low fixtures with full cut-off. Select fixtures that softly light the building walls and trees to define the volume of the street at night. Correctly directed light increases visibility and reduces glare. Glare makes the task of seeing more difficult, and produces a subtle sense of discomfort or annoyance. What is important for good vision is not necessarily the quantity of light, but uniformity and appropriate changes in light levels. Over lighting an area creates its own safety hazards, especially when moving from bright areas to dark areas.

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Multiple Functions

Street lighting poles should add to the aesthetic of the sidewalk and provide multiple functions. Besides supporting the light fixtures, poles can accommodate and organize signalization, hanging baskets, business and directional signage, and banners and flags. Clarkston's new lamp posts along Sixth Street will include brackets for banners. Many lamp posts throughout the Lewis-Clark Valley already include such brackets and are utilized to promote valley festivals such as the Dogwood Festival or the Lewiston Round Up. Incorporating or relocating streetscape elements into the lighting system reduces clutter. New poles can be installed, or existing poles can be retrofitted with ornamental bases and brackets and painted black. Ornamentation on poles, brackets, and bases can provide artistic elements and express the character of a place. For instance, poles with bracket ornamentation can be custom designed by the associated property owner to complement the building or business activity, or a block of poles may be designed by local artists / craftspeople.

Light quality can strongly affect the character of a place and the quality of the pedestrian environment. Many old technology lamps are inefficient and have very poor color rendering qualities. These are hard on the eyes and less safe. Sources with more natural, white light and long lamp life are desirable. The relatively new LED lamps are initially expensive, but very efficient, and last 100,000 hours.

Lighting serves other purposes as well. A line of sidewalk lamps can define the edges and the shape of the street at night. Lights can reinforce a vista or major axis. They can create a more festive atmosphere in a shopping and entertainment district. The light spill and bounce off of the sidewalk illuminates the storefronts.

A critical component of sidewalk lighting, important for building and business owners, is lighting the street-level storefront from within. When the walkway is lit but the storefront is dark, it is like a bridge with a missing railing on one side. Pedestrians hurry by or don't travel that segment at all.

The glow and sparkle from well-designed display window lighting pulls people into downtown to stroll and window-shop. They will come back if it's fun and they like what they see.

Exterior lighting on buildings can have beautiful and artistic results and create a character and identity in the nighttime downtown.

Public Art

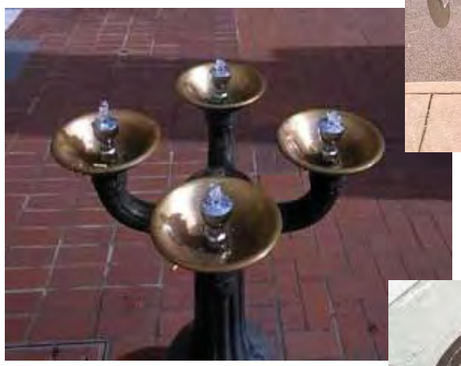
Public art enriches spaces and is vital to the cultural health of a city. It helps a community express itself and conveys something about the residents, the history, and the local culture to visitors. Public works of art become cultural landmarks of community expression and identity. In Lewiston and Clarkston, there has been an active concerted effort in recent years to incorporate more public art. The "Dancers" sculpture at Brackenbury Square is a prime example of how art can add vitality and joy to a streetscape. The new sculptures that grace the entrances to the community are a giant leap forward in this area. The figures at the base of the Lewiston hill provoke great interest and establish a historic context for visitors coming to the valley. The new sculptures at both ends of the Blue Interstate Bridge serve as welcoming statements and establish a character for the community. Additional opportunities continue to exist at other key locations in the Valley.

Art adds to the public discourse on ideas. It can beautify, educate, inspire, challenge, question, or remind.

It can take many forms.

It can be an independent object, such as a sculpture.

It can be part of another object, like a bicycle rack or a drinking fountain.



It can be functional, like a utility cover.

It can be a place, such as a garden or plaza. It can be materials, designs, and patterns. For instance, art can make a statement about place when it incorporates geological, regional, or Native American sources. It creates a sense of connection to the context of the place.

Art can be in the sidewalk paving patterns and surfaces; light poles and banners; benches; bus stops; and plantings.

It can be imbedded in the sidewalk plane.

Artifacts and found objects can be combined to express an idea. Imagery and graphics can be used. Art can be about words, or movement. It can be about light and color, sound, or wind.

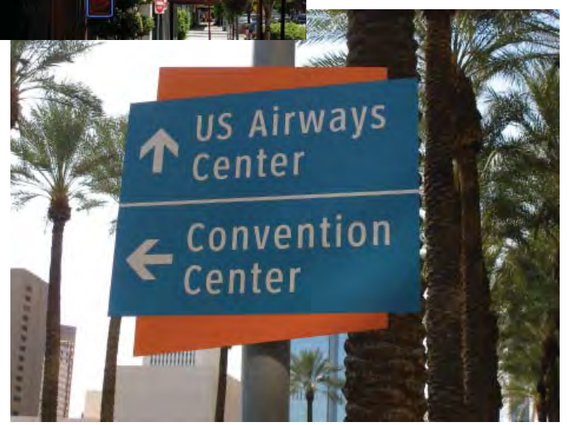
Art should be part of the thought and discussion process when planning, designing, and budgeting for any new public work downtown, and highly encouraged in privately funded projects. The possibilities for incorporating public art in the streetscape are limitless.

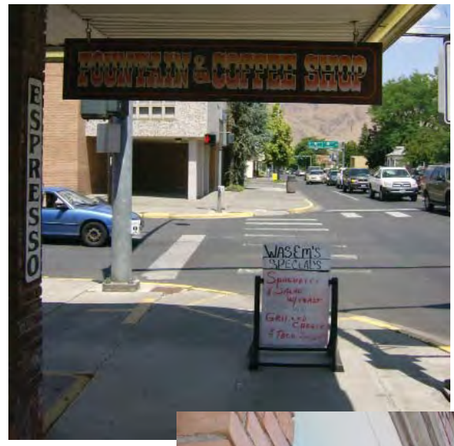
Signage

There are many examples of good signage design in Lewiston and Clarkston. Notably, the major entrances to both cities have welcoming signs. The use of good signage, incorporating innovation, creativity, and simplicity, is essential for information, safety, directions, public transportation, parking, business and retail, and celebration.

Graphics for functional, safety, and informational signage should be simple, clear, easy to comprehend, and easy to read quickly. Currently, a wayfinding signage program is being developed for Lewiston and Clarkston which will aid the visitors and residents alike in the easy recognition of directions to key destinations.

Commercial signage can be more inventive, designed with character, color, depth, and good lighting, as well as information. Well-designed commercial signage conveys the character of the business or the products. The incorporation of new signs with the classic, iconic signs of the past produces a rich, eclectic mixture and contributes to the texture and liveliness of the street.





Streetscape Maintenance

All elements of the streetscape will require regular maintenance.

Streetscaping projects have to be considered not only in terms of their implementation, but their future maintenance and care. Design and maintenance need to be considered together if the streetscape environment is to add value to the image and perception of the city. Materials and the way they are used need to be able to withstand weather and constant wear.

A successful maintenance program is critical to the success of downtown street improvements.

Streetscape maintenance includes the concrete and plant elements within the public right-of-way, from the curb inward to the building wall. This includes repair and maintenance of curbs and gutters, sidewalks, signage, furnishings, sidewalk lighting, and the planting, cultivating, and maintenance of trees and plantings.

Sidewalks must be cleaned regularly. Tripping hazards must be identified and repaired promptly. Conformity to ADA requirements must be maintained. Consider the impact of cleaning methods when establishing a cleaning regime. Many materials and laying methods require time to cure and pavements to become more impervious.

Maintenance and upkeep of the streetscape includes tree trimming, fertilizing, weeding, watering, plant care, and irrigation system repair and maintenance.

Plantings must be monitored on a weekly basis for health, damage, cleaning, and correct watering. Irrigation must be adjusted according to weather variations and plant needs. Seasonal fertilization, pruning, and mulching are important to the vigor of the plantings. Hanging baskets without the installation of drip systems will require hand watering.

The presence of the maintenance worker watering the baskets contributes to the activity on the street. Hose bibs should be located approximately every 100 feet along the sidewalks. Irrigation start-up and winterization will be required. Irrigation requires ongoing monitoring and adjustment.

Time and Movement

Streets and sidewalks change through the day and the seasons. Simple practices, such as putting out sandwich-board signs, washing the sidewalk, or sweeping leaves from the street should be recognized as elements that express time.

The use of elements that express time, such as movable awnings, should be encouraged. Movable awnings, in addition to promoting interaction between shop and street, add to a sense of time and change according to need, such as bright sun, precipitation, etc.

Subtle changes, such as these, mark the passage of the day. Sandwich boards, a florist's flower buckets, a rack of clothing, and restaurant seating come out onto the sidewalk, marking the start of the business day. Removal of the flower buckets and clothes racks signals the end of this phase of activity and the beginning of another. Announce change and activity through movement.

Announce the change of seasons. The removal of summer banners and flower pots announces autumn, the coming of winter, snow, and holiday lights. The community anticipates the next season, holiday, or event, an important factor to retail business downtown.

Conclusion

The downtowns of Lewiston and Clarkston are great places for business, entertainment, and recreation. As improvements are made to these downtown areas, this guide should be used to enhance the good places, improve the not-so-good places, and create new places that are conducive to a vibrant community.

Appendix A

LCMPO Development Forecast Process and Results

The purpose of the Lewis-Clark MPO Downtown Circulation Study is to assess projected development over the next 20 years in the project Study Area, determine the amount of additional traffic likely to be generated by the new development, and provide recommendations for improvements to the transportation system to meet the traffic needs.

A key element of the assessment was to determine potential traffic demand, based on economic factors and forecasts of new development or redevelopment in the Study Area. In order to determine the development forecast, the planning team reviewed existing development and land uses, and public and private sector plans for future development.

In the course of this analysis, the following economic assumptions were used:

- The Valley will continue to experience steady, but not aggressive, growth.
- Current industrial and agri-business areas will transition to mixed uses, specifically the former Twin City Foods site, the Snake River Avenue corridor in Lewiston, and North Clarkston (the Port area north of Bridge Street).
- Industrial uses will relocate to other industrial areas (Ports of Lewiston and Wilma, new Port of Clarkston Industrial Park, etc.).
- Future development of waterfront areas will be attractive mixed use (commercial, residential, social, retail, entertainment, professional, technology, education, recreation), rather than industrial uses.

The development forecast process used by the planning team consisted of five steps:

1. Work with City and Port officials, economic development staff, realtors, and property owners to identify vacant or underdeveloped lots or buildings in the Study Area, and quantify the size of the lots/buildings (square feet or acres).
2. Determine the desired or most likely future use for each lot or building (commercial, office, retail, social, residential, industrial, or a combination), based on a realistic evaluation of potential development types and patterns over a 20-year scenario. The evaluation of development types/patterns accounted for population growth, economic factors, transportation options, and projected vacancy rates.
3. Convert the square footage of projected land use changes to employment figures (retail/non-retail and housing), using conversion tables prepared by the Institute of Transportation Engineers.
4. Code each land use change by location, based on Traffic Area Zones (TAZs) identified in the LCMPO's 2006 Long Range Transportation Plan (LRTP), and compare the projected 2030 employment figures for each TAZ with the 2005-2030 figures from the 2006 LRTP.
5. Calculate the revised employment projections for each TAZ, and use the projections for the traffic modeling to determine projected traffic demand.

According to the City of Lewiston Planning Department, potential development targets by 2030 for the Study Area are as follows:

- Downtown Lewiston:
  - Office/commercial: 150,000 s.f.
  - Retail/social/recreational: 190,000 s.f.
  - Housing/lodging: 150-185 units
- Snake River Avenue:
  - Office/commercial: 133,000 s.f.
  - Retail/social/recreational: 87,000 s.f.
  - Housing: 240 units

In the 2006 LRTP, potential development targets for Downtown Clarkston (including Diagonal) included the addition of 300 non-retail jobs, 110 retail jobs, and 27 housing units. Along Bridge Street and in North Clarkston, targets were 500 non-retail jobs, 350 retail jobs, and 60 housing units. Note that the addition of Wal-Mart already added 500 retail jobs to this area.

Lewiston-Clarkston Downtown Circulation Plan

In 2010, the revised land use projections and development forecasts for the Study Area are contained in Table 14.

Table 14. Study Area Development Forecasts

LEWISTON

Downtown	Twin City	L-C Plaza	800 Main	826 Main	832 Main	840 Main	East Main	TOTALS
Housing/lodging (# units)	50	60-90	0	18	18	10	0	**156-186**
Office/commercial (sf)	91,500	0	0	11,250	2,940	0	44,000	**149,690**
Retail/social/recreational (sf)	91,500	23,700	9,375	11,200	3,093	8,280	43,000	**190,148**

Snake River Ave.	N. of Bryden	S. of Bryden	TOTALS
Housing/lodging (# units)	50	192	**242**
Office/commercial (sf)	87,000	46,000	**133,000**
Retail/social/recreational (sf)	87,000	0	**87,000**

Source: City of Lewiston Planning Dept.

	U.S. 12 Corridor, Poplar to Fair			Port Dist. (N. of Fair)		
CLARKSTON	13th to 15th	7th to 13th	River to 7th	W. of 13th	E. of 13th	TOTALS
Housing/lodging (# units)	0	0	0	0	50	**50**
Office/commercial (sf)	479,160	239,580	239,580	12,000	27,500	**997,820**
Retail/social/recreational (sf)	0	0	0	0	45,800	**45,800**
Light Industrial (sf)	0	0	0	12,000	6,000	**18,000**
Educational (sf)	0	0	0	20,000	0	**20,000**

Sources: John Murray, Clarkston P&Z; Port of Clarkston

In Downtown Lewiston, a total of 156-186 housing or lodging units are projected for development by 2030. 50 of those are anticipated in the former Twin City Foods site (possibly condominiums or a boutique hotel), 60-90 units in the upper floors of the Lewis-Clark Plaza building (apartments, condos, or hotel/vacation rental units), and another 46 units in upper floors of existing Main Street buildings (apartments or condos). Nearly 150,000 square feet of office/commercial space and nearly 200,000 square feet of retail/social/recreational space are projected for development. Of that, nearly two-thirds of the office/commercial and nearly half of the retail/social would be developed on the former Twin City Foods site.

Along Snake River Avenue, existing vacant and/or industrial areas are targeted for redevelopment, including 242 housing/lodging units, 133,000 square feet of office/commercial space, and 87,000 square feet of retail/social/recreational space.

In Clarkston, the U.S. Highway 12/Bridge Street corridor (including one block north and south from Poplar to Fair Streets) could see up to 950,000 square feet of new or redeveloped office/commercial uses, including re-purposing of existing buildings. In the Port district (north of Fair Street), projected development includes 50 lodging units, about 40,000 square feet of office/commercial space, nearly 46,000 square feet of retail/social/recreational space, 18,000 square feet of light industrial space, and a 20,000 square foot expansion of Walla Walla Community College. Port area development is anticipated to include social retail and experiential manufacturing such as wineries, microbreweries, restaurants, and waterfront-related recreational services.

The planning team translated the projected land use and development figures into employment data, and the resulting 2030 employment figures for each traffic area zone (TAZ) in the Study Area are contained in Table 15.

The table shows that in the Clarkston portion of the Study Area, between 2005 and 2030, projected development includes the addition of about 360 housing/lodging units, 1,063 non-retail jobs, and 879 retail jobs (including the 500 Wal-Mart jobs).

Table 15. 2030 Employment Figures

LCMPO Study Area Housing Unit, Retail & Non-Retail Employment 2005-2030* *Feb. 2010*

Traffic Area Zone	2005 Pop'n	2005 Housing Units	2030 Housing Units	Diff 2005-2030	2005 Non-Retail Employmt	2030 Non-Retail Employmt	Diff 2005-2030	2005 Retail Employmt	2030 Retail Employmt	Diff 2005-2030
CLARKSTON										
C1	436	221	365	144	569	969	400	75	161	86
C2	695	327	412	85	527	1,041	514	263	883	620
C3	1,575	736	781	45	533	595	62	244	390	146
C4	941	445	445	0	776	806	30	46	74	28
C5	2,860	1,265	1,323	58	315	295	-20	5	8	3
C6	3,617	1,656	1,683	27	1,851	1,928	77	140	136	-4
Subtotal	10,124	4,650	5,009	359	4,571	5,634	1,063	773	1,652	879
LEWISTON										
L4	0	0	50	50	1,066	1,766	700	110	509	399
L6	136	70	70	0	1,808	2,145	337	180	370	190
L7	448	211	211	0	941	1,184	243	378	714	336
L11	0	0	50	50	264	581	317	50	269	219
L12	1,004	513	513	0	79	127	48	5	45	40
L13	377	185	213	28	1,704	1,954	250	94	150	56
L14	983	493	493	0	292	319	27	5	7	2
Subtotal	2,948	1,472	1,600	128	6,154	8,076	1,922	822	2,064	1,242
TOTALS	**13,072**	**6,122**	**6,609**	**487**	**10,725**	**13,710**	**2,985**	**1,595**	**3,716**	**2,121**

* Study Area includes the following:
Clarkston: TAZs C1, C2, C3, C4, C5, C6 (note that data above includes parts of C5 and C6 outside the project area).
Lewiston: TAZs L4, L6, L7, L11, L12, L13, L14

Housing Unit and Employment projections for 2030 are based on data provided by the Port of Clarkston, City of Clarkston, Asotin County Planning Commission, SEWEDA, and City of Lewiston Planning Department for the Study Area.

In the Lewiston portion of the Study Area, growth from 2005 to 2030 is projected to include 487 housing/lodging units, 2,985 non-retail jobs, and 2,121 retail jobs. Tables 16 and 17 show 2005 and 2030 figures for all TAZs within the LCMPO metropolitan area.

Lewiston-Clarkston Downtown Circulation Plan

Based on the 2010 economic evaluation, forecasts for overall population and non-retail employment growth by 2030 were consistent with the 2006 LCMPO Long-Range Transportation Plan. However, as a result of the current analysis, the location of some housing units and employment shifted to the Study Area. In other words, the base figures used in the LRTP for projected 2030 population growth and non-retail employment in the Valley were deemed to still be valid, particularly in view of the growth slowdown caused by the recession. However, overall retail employment projections in Clarkston were revised upward to account for the new Wal-Mart. A quality control analysis was conducted on the entire final data set to check each Traffic Area Zone for internal consistency.

The development and employment forecasts shown above were used in the traffic model to determine potential traffic demand for each portion of the Study Area.

The following sources were reviewed in the preparation of this land use analysis:

- Valley Vision Work Plan 2010
- Southeast Washington Economic Development Association Goals, Objectives, and Reports 2010
- Palouse Regional Transportation Plan 2010
- Palouse RTPO Human Services Transportation Coordination Plan, 2010
- Idaho Dept. of Commerce Business Recruitment Project Updates 2010
- Southeast Washington Comprehensive Economic Development Strategy, 2009 Update
- Clearwater Economic Development District 2009-2014 Comprehensive Economic Development Strategy, 2009
- Clearwater Economic Development Association Annual Report, 2009
- Asotin and Nez Perce County Profiles 2009
- Economic Impacts of Wind Energy Projects in Southeast Washington, 2009
- Washington Dept. of Commerce Community Economic Revitalization Board Development Reports and Policies, 2008-2011
- Washington Ports Legislative Reports 2008-2010
- Downtown Lewiston Work Plan 2008-2009
- Port of Clarkston Business Park Feasibility Study 2009
- Lewiston-Clarkston Manufacturers' Survey, 2007
- Survey of Idaho Innovation Businesses, 2007
- Lewis-Clark Valley Tourism Strategic Plan 2007
- Lewiston Urban Renewal Plan 2005
- Destination Development Lewiston/Clarkston Assessment & Recommendations 2002

Table 16. Clarkston & Asotin 2005 and 2030 Figures for all TAZs

LCMPO Housing Unit, Retail & Non-Retail Employment - All Zones 2005-2030 *Feb. 2010*

Traffic Area Zone	2005 Pop'n	2005 Housing Units	2030 Housing Units	Diff 2005-2030	2005 Non-Retail Employmt	2030 Non-Retail Employmt	Diff 2005-2030	2005 Retail Employmt	2030 Retail Employmt	Diff 2005-2030
CLARKSTON & ASOTIN										
A1	270	99	99	0	519	579	60	5	8	3
A2	1,233	595	776	181	11	70	59	0	53	53
C1	**436**	**221**	**365**	**144**	**569**	**969**	**400**	**75**	**161**	**86**
C2	**695**	**327**	**412**	**85**	**527**	**1,041**	**514**	**263**	**883**	**620**
C3	**1,575**	**736**	**781**	**45**	**533**	**595**	**62**	**244**	**390**	**146**
C4	**941**	**445**	**445**	**0**	**776**	**806**	**30**	**46**	**74**	**28**
C5	**2,860**	**1,265**	**1,323**	**58**	**315**	**295**	**-20**	**5**	**8**	**3**
C6	**3,617**	**1,656**	**1,683**	**27**	**1,851**	**1,928**	**77**	**140**	**136**	**-4**
C7	0	0	0	0	0	0	0	0	0	0
C8	1,343	575	1,246	671	783	803	20	5	8	3
C9	769	322	495	173	48	54	6	48	76	28
C10	999	391	555	164	54	60	6	0	0	0
C11	4,046	1,740	2,027	287	497	535	38	0	31	31
C12	1,758	678	910	232	116	145	29	5	49	44
C13	181	70	94	24	11	12	1	0	0	0
Subtotal	20,723	9,120	11,211	2,091	6,610	7,892	1,282	836	1,877	1,041
Study Area*	10,124	4,650	5,009	359	4,571	5,634	1,063	773	1,652	879

Table 17. Lewiston 2005 and 2030 Figures for all TAZs

LCMPO Housing Unit, Retail & Non-Retail Employment - All Zones 2005-2030 *Feb. 2010*

Traffic Area Zone	2005 Pop'n	2005 Housing Units	2030 Housing Units	Diff 2005-2030	2005 Non-Retail Employmt	2030 Non-Retail Employmt	Diff 2005-2030	2005 Retail Employmt	2030 Retail Employmt	Diff 2005-2030
LEWISTON										
L1	16	6	6	0	29	33	4	0	0	0
L2	87	55	55	0	817	1,024	207	73	106	33
L3	355	138	138	0	307	357	50	34	49	15
L4	**0**	**0**	**50**	**50**	**1,066**	**1,766**	**700**	**110**	**509**	**399**
L5	310	158	158	0	595	747	152	50	71	21
L6	**136**	**70**	**70**	**0**	**1,808**	**2,145**	**337**	**180**	**370**	**190**
L7	**448**	**211**	**211**	**0**	**941**	**1,184**	**243**	**378**	**714**	**336**
L8	2	1	0	-1	2,250	2,250	0	5	7	2
L9	90	36	36	0	362	421	59	0	0	0
L10	242	113	113	0	124	144	20	5	7	2
L11	**0**	**0**	**50**	**50**	**264**	**581**	**317**	**50**	**269**	**219**
L12	**1,004**	**513**	**513**	**0**	**79**	**127**	**48**	**5**	**45**	**40**
L13	**377**	**185**	**213**	**28**	**1,704**	**1,954**	**250**	**94**	**150**	**56**
L14	**983**	**493**	**493**	**0**	**292**	**319**	**27**	**5**	**7**	**2**
L15	906	360	360	0	806	902	96	5	7	2
L16	797	381	381	0	31	36	5	5	7	2
L17	1,001	422	422	0	528	583	55	5	7	2
L18	562	247	247	0	109	117	8	5	7	2
L19	751	332	332	0	238	273	35	0	0	0
L20	895	395	515	120	223	314	91	0	21	21
L21	625	303	592	289	5	150	145	5	42	37
L22	0	0	0	0		0	0		0	0
L23	994	406	598	192	1,088	1,297	209	5	57	52
L24	782	320	320	0	335	359	24	18	26	8
L25	477	232	232	0	187	207	20	0	0	0
L26	226	99	99	0	1,070	1,193	123	390	557	167
L27	0	0	0	0	568	615	47	784	1,077	293
L28	652	346	642	296	266	446	180	5	54	49
L29	0	0	0	0		0	0		0	0
L30	131	52	52	0	0	6	6	0	0	0
L31	504	217	217	0	380	439	59	10	14	4
L32	380	174	174	0	53	58	5	5	8	3
L33	662	294	294	0	97	110	13	178	282	104
L34	332	167	167	0	211	230	19	142	233	91
L35	0	0	0	0	50	65	15	25	36	11
L36	425	165	200	35	65	87	22	5	7	2
L37	0	0	0	0	190	210	20	5	7	2
L38	2,722	1,280	1,280	0	476	513	37	5	8	3
L39	932	393	393	0	257	258	1	22	32	10
L40	569	329	329	0	282	297	15	236	357	121
L41	1,241	537	623	86	324	392	68	0	12	12
L42	846	309	474	165	96	177	81	0	23	23
L43	260	102	134	32	16	34	18	5	7	2
L44	260	101	127	26	12	25	13	0	4	4
L45	1,075	370	434	64	278	453	175	0	43	43
L46	612	274	274	0	5	7	2	5	7	2
L47	852	380	380	0	137	156	19	5	8	3
L48	759	357	669	312	95	269	174	0	48	48
L49	747	304	304	0	248	286	38	5	7	2
L50	675	307	338	31	107	141	34	49	75	26
L51	1,089	418	475	57	90	139	49	5	11	6
L52	1,358	511	572	61	49	95	46	0	8	8
L53	1,194	458	631	173	110	193	83	0	24	24
L54	93	51	51	0	0	0	0	0	0	0
L55	737	273	569	296	5	123	118	5	40	35
L56	1,273	482	722	240	56	164	108	5	42	37
L57	230	85	231	146	0	46	46	0	16	16
Subtotal	32,676	14,212	16,960	2,748	19,788	24,517	4,734	2,932	5,525	2,593
Study Area*	2,948	1,472	1,600	128	6,154	8,076	1,922	822	2,064	1,242
TOTALS	**53,399**	**23,332**	**28,171**	**4,839**	**26,398**	**32,409**	**6,016**	**3,768**	**7,402**	**3,634**
Study Area*		**6,122**	**6,609**	**487**	**10,725**	**13,710**	**2,985**	**1,595**	**3,716**	**2,121**

* Study Area includes the following:
Clarkston: TAZs C1, C2, C3, C4, C5, C6 (note that data above includes parts of C5 and C6 outside the project area)
Lewiston: TAZs L4, L6, L7, L11, L12, L13, L14

Housing Unit and Employment projections for 2030 are based on data provided by the Port of Clarkston, City of Clarkstor Asotin County Planning Commission, SEWEDA, and City of Lewiston Planning Department for the Study Area