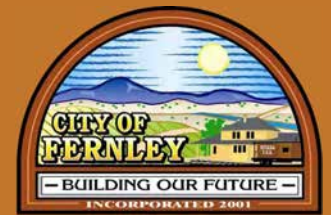




Downtown Fernley Revitalization Project

Final

Planning Study



May 7, 2014

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With:
Frame Architecture
Traffic Works

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Introduction

Purpose

The purpose of the Downtown Revitalization Study is to identify and evaluate potential streetscape, transportation and urban design improvements to Main Street and US 95 Alternate to encourage revitalization of the Fernley Downtown Corridor, as well as developing an overall design framework and guidelines for the area.

Project Area

The Study Area includes Main Street from the Union Pacific Railroad Underpass to the NDOT Roundabout at Farm District Road and also includes US Highway 95 Alternate - approximately 2,000 lineal feet south of Main Street.



Figure 1 — Study Area

Vision for the Future

As the City of Fernley continues to transform in the coming decades, the Downtown will continue to be the pulse of the City with the Main Street and US 95 Alternate corridors remaining as the key travel corridors for the community. Through a combination of strategies and actions proposed within this plan, the Downtown will become safer, more attractive, and better integrated with the surrounding neighborhoods. The Main Street and US 95A corridors will offer convenient travel choices, including walking, cycling, and vehicles. Proposed improvements will support and catalyze economic development and redevelopment of the Downtown, while enhancing the quality of life for Fernley residents by improving accessibility, safety, and visual character.

The Downtown Corridor has significant opportunities for revitalization. As a State Highway, the roadway exhibits the minimalist characteristics (i.e. pedestrian amenities, lighting, etc.) of highways of past decades, as well as limited opportunities for access to adjacent neighborhoods and properties. The existing roadway improvements have limited sidewalk and bicycle facilities and very limited aesthetic improvements (i.e. landscape and street trees).

Many of the transportation and safety improvements in this plan stand on their own merits. However, in an era of increasingly limited public resources and an uncertain economic future, it is vital that public infrastructure investments be made where they can support other important community goals, such as economic development and community revitalization. Therefore, this plan targets investments at locations where revitalization is

desired and possible.

Significant opportunities for revitalization in the corridor exist to support the core of the Downtown. The core of the Downtown, for the purposes of this study, is generally located on Main Street between Miller Lane and Hardie Lane, and on US 95 Alternate between Main Street and Cedar Street. This area has several vacant store fronts, with few vacant parcels. This draws attention to vacant (both large and small) parcels located west

and south of the Downtown core. Economic and market trends are not likely to support significant new retail development in these areas. With the multi-modal improvements, streetscape enhancements, and increased access proposed in this Downtown Corridor Plan, there is a unique opportunity to respond to economic and demographic changes occurring in the region and to transform these areas into one or more mixed-development nodes with neighborhood serving commercial, public facilities, and diversification of



Figure 2 — Photo Simulation of Landscaped Bulb-Outs

the existing housing stock that will further support the core.

Revitalization of Downtown Fernley will be accomplished through the collaboration of numerous community stakeholders. The Main Street and US 95 Alternate rights of way are currently owned and maintained by the Nevada Department of Transportation. Their partnership and participation in the planning and implementation of infrastructure improvements is critical to any future success. The City of Fernley, through its numerous departments, will likely take on the majority of construction and maintenance of proposed streetscape, landscape and lighting improvements in the project area. Additionally, through the City's Master Plan and Zoning Ordinance, regulation of uses and development will aid in the implementation of thematic landscape, lighting and architectural design and construction. Non-public organizations, such as the Chamber of Commerce, Lyon County Fire Department, non-profits, and other private entities with a stake in the long term success of Downtown can participate in maintaining of a comprehensive banner program, flower baskets, bench dedications and other smaller elements of the streetscape. Collectively, the Downtown can thrive with the commitment of all agencies, groups, and business owners.

Goals

To support the vision for the corridor, the following goals for the study and the corridor have been established. The goals have been developed through coordination with the stakeholders focus group and by engaging the public. These goals will guide the development of alternatives for improvements within the corridor and establish a long term, 20 year, vision for the future of the corridor.

- Enhance the character of Downtown through thematic streetscape and building façade improvements
- Coordinate wider sidewalks with appropriate landscape and lighting treatments to create an attractive environment
- Provide safe and attractive pedestrian connectivity.
- Improve traffic operations of the Main/US 95A intersection.



Figure 3 — Photo Simulation of Possible Gateway Enhancements

Summary of Preferred Alternative

Common elements that are proposed throughout the study area include integrated thematic street lighting and banners, as well as landscape and hardscape improvements where space allows. Roadway alternatives have been organized into roadway segments that are anticipated to have similar design characteristics. These alternatives include:

Main Street

UPRR to Miller Lane – Two alternatives have been included – a short term and a long term alternative.

The short term alternative proposes to leave the roadway surface “as-is”, with the addition of a multi-use path and landscape strip separating the path from the travel lanes. With this short term alternative, pedestrian and bicycle connectivity and safety needs can be addressed, while also providing street beautification with street trees and unified street lights. With this options the current travel lanes and roadside ditches would remain.

The long term option provides a more urban street standard with the provision of curb, gutter and separated sidewalk. In this options, bicycles are moved from a multi-use path to a formal bike lane adjacent to the travel lane.

Miller Lane to Hardie Lane

This portion of Main Street has the most restrictive right of way constraints. It is not anticipated that any lane modifications would be warranted. The middle turn lane must remain to provide turning movements for the numerous driveway access and

intersections throughout this segment. Sidewalk and pedestrian ramps through this segment is inconsistent. Proposed improvements for this segment are best characterized as sidewalk reconstruction and lighting installation. Additionally, to help add aesthetic interest through this segment street trees can be provided by strategically eliminating individual on-street parking spaces to construct tree wells. Further, bulb-outs at intersections provide a visual narrowing of the roadway, while shortening crossing distances for pedestrians and providing small landscape pockets at intersection that can also integrate art, signage, or other street furniture elements. Hardscape, such as stamped concrete, can also be used at intersections and midblock on the sidewalk to provide additional visual interest.

Hardie Lane to 7th Street

The proposed alternative for this segment proposes a similar lane configuration to what exists now. The proposed alternative would represent a full reconstruction of this segment to provide the envisioned roadway modifications, which include:

- Construction of a median. The median will provide opportunities for hardscape and limited median street trees to provide additional beautification.
- Addition of a formal bike lane located adjacent to the travel lane.
- Addition of landscape separated sidewalk.

7th Street to Farm District Road

No modifications to the roadway or sidewalks within this segment are proposed, nor are they anticipated to be required. Proposed improvements in this segment are limited to the south side of Main Street, with the installation of

landscaping and a unified fencing treatment adjacent to the single family residential. Currently, the fencing along the rear lot lines of the single family residential adjacent to the road have a mix of colors and materials. With the construction of a unified design fence or wall, the thematic aesthetics of the overall corridor can be improved.

US 95 Alternate

Main Street to Cedar Street

For this segment, the lane configurations remain the same with parallel on-street parking formalized on the west side of the street adjacent to In Town Park. As US 95A is a school route for many students of Fernley Intermediate School, a landscape separated multi-use path is proposed on both sides of the street. This allows for a greater separation of both bicycles and pedestrians from vehicles, providing a safer environment for students, as well as visitors to In Town Park.

Cedar Street to Shadow Lane

Similar to the previous segment, this portion of the corridor proposes a landscape separated multi-use path to provide safer pedestrian and bicycle connectivity. No on-street parking is proposed through this segment.

Main Street/US 95 Alternate Intersection Improvements

A traffic analysis of this intersection found that the intersection operates at a Level of Service “E” in both the morning and afternoon peak hour periods. Five alternative options were prepared and are included in the Planning Study. The alternatives each have “pros” and “cons” that begin to analyze ease and difficulty of implementation, right of way needs, and Level of

Stakeholder Focus Group #2—March 27, 2014

The second focus group meeting was also held at the Fernley City Hall Building on March 27, 2014, with approximately 10 people in attendance. The purpose of this meeting was to present the focus group with the priorities and goals that originated from the previous meeting, and to present the various roadway alternatives the project team developed from the opportunities and constraints exercise that the stakeholders participated in on February 27, 2014. The project team went through each of the alternatives in detail, highlighting the pros and cons for each. This meeting was an open discussion format where questions and comments were encouraged. This open format generated comments from the stakeholders and an additional constraint (northbound right turn movement on US 95A) was brought to the attention of the project team which resulted was an extra alternative for the Main Street SR95 A Intersection (see exhibit to the right).

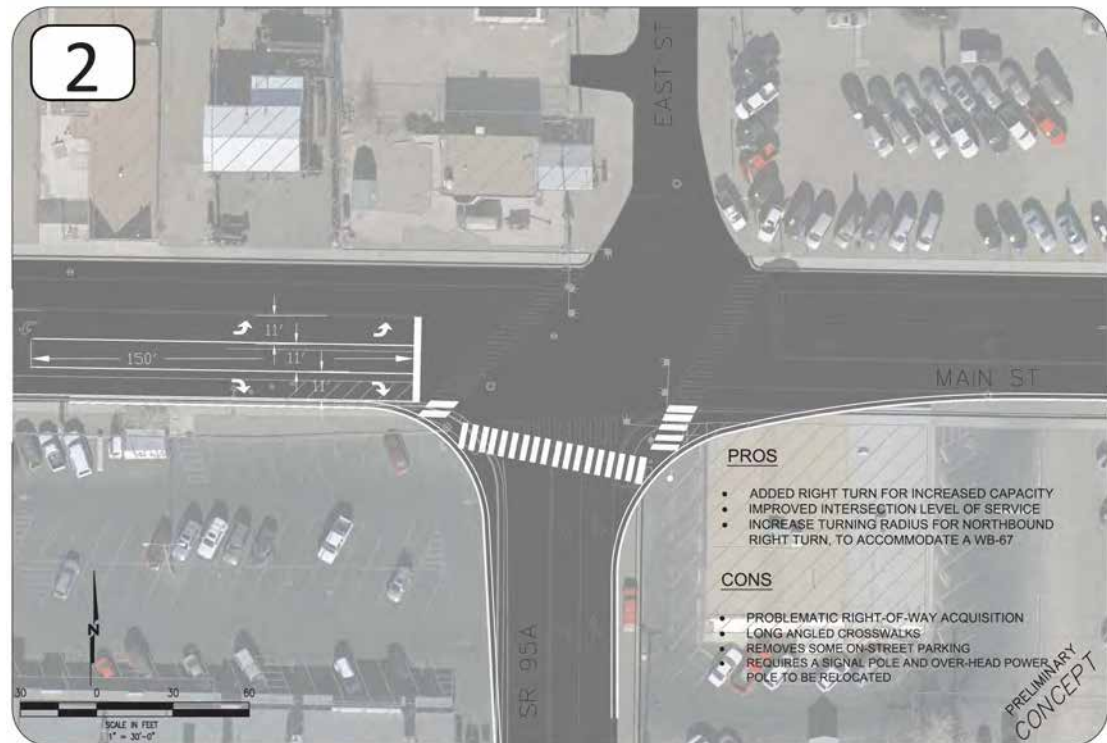


Figure 4 — Main Street SR95 A Intersection Alternative

Public Charrette—April 14, 2014

The final public meeting was held on April 14, 2014 at City Hall in the Chamber room. This public meeting was an open house style format, to seek confirmation of the preferred alternatives for the five roadway segments, and the three street furniture themes. Participants were asked to vote on fifteen different roadway alternatives for the six segments throughout the corridor and to also choose their preference for street furniture. Eleven people attended the meeting and the following feedback was received:

Segment 1 UPRR to Miller Lane: Alternative B was the preferred option. A two-lane road with attached bike lanes and a center-turn lane with landscaping separating the road from the sidewalk.

Segment 2 Miller Lane to Hardie Lane: Alternative B was the preferred option. Adding sidewalk, lighting and landscaping to this portion of the roadway.

Segment 3 Hardie Lane to 7th Street: Alternative B was the preferred option. A two-lane road with a center turn-lane and attached bike lanes, landscaping separating road from sidewalk.

Segment 4 Main Street to Cedar Street: Alternative A was the preferred option. A two-lane road with center turn-lane, on-street parking on the west side of the road and landscaping separating the multi-use path (pedestrians and bicycles) from the road.

Segment 5 Cedar Street to Shadow Lane: Alternative B was the preferred option. A two-lane road with landscape median, and landscaping

separating the multi-use path (pedestrians and bicycles) from the road.

Segment 6 Main Street and SR95 Intersection: This segment had been a concern for the stakeholders because of the 18-wheeled trucks having issues turning onto and off of Main Street. The project team provided five different options for this intersection. Option number five was the favorite

option which proposed a round-about for that intersection.

The “traditional” street furniture theme was preferred over the other street furniture thematic options. Based on comments from participants, this preference was based solely on the ability to provide banners on the light posts.



Public Charrette

The following pages illustrate a complete understanding of the public charrette preferred option voting.

Which Option do You Prefer?



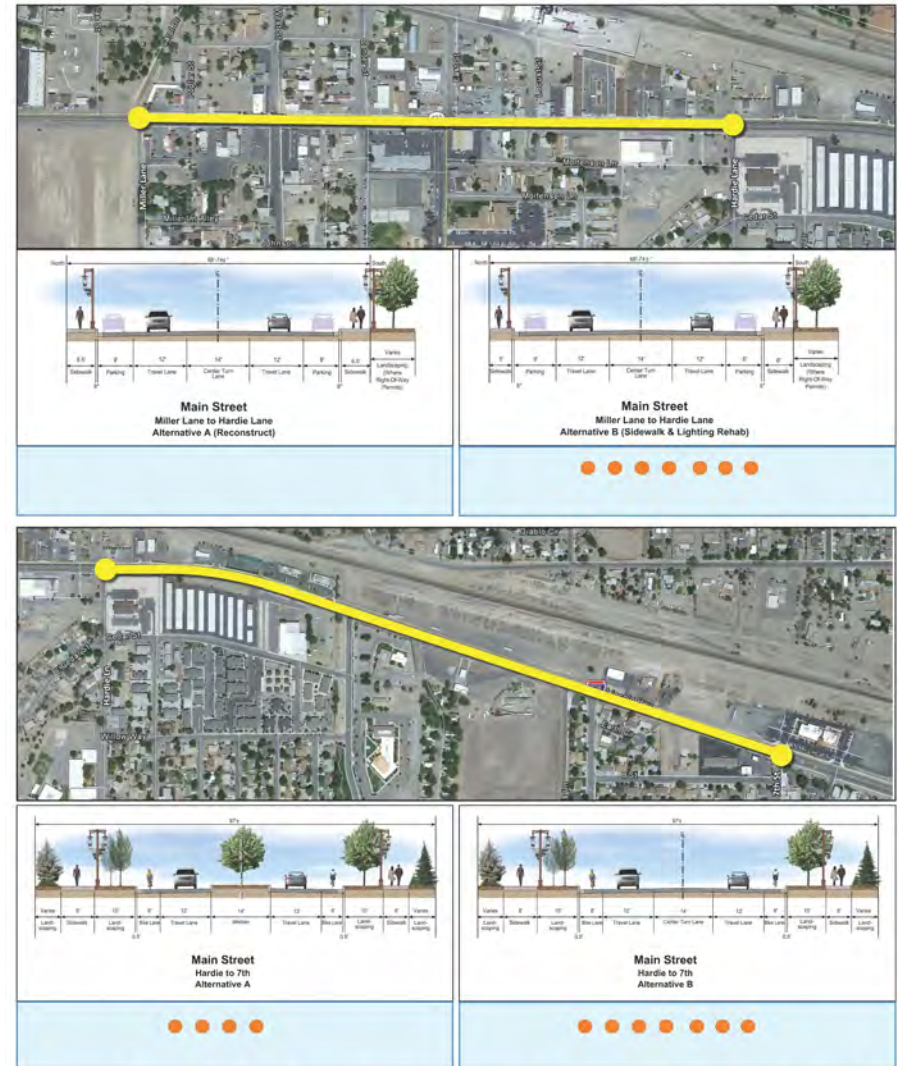
Place a sticker in the blue box under the street revitalization option which you prefer.



Fernley Main Street Revitalization
Community Workshop

WOOD RODGERS

Which Option do You Prefer?



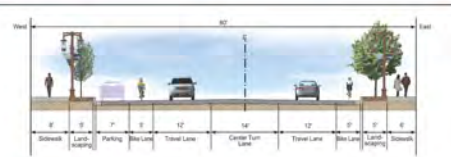
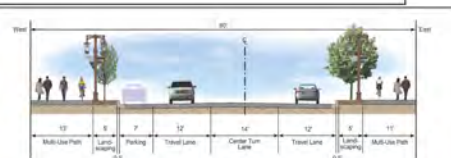
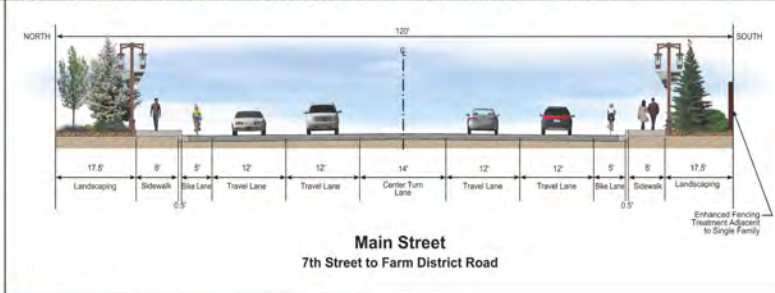
Place a sticker in the blue box under the street revitalization option which you prefer.



Fernley Main Street Revitalization
Community Workshop

WOOD RODGERS

Which Option do You Prefer?



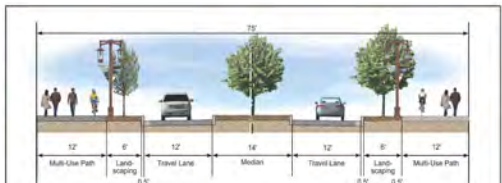
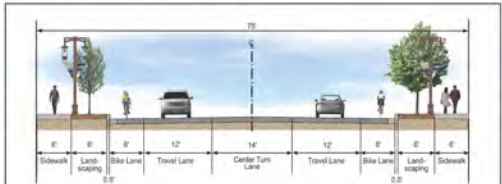
Place a sticker in the blue box under the street revitalization option which you prefer.



Fernley Main Street Revitalization
Community Workshop



Which Option do You Prefer?



Place a sticker in the blue box under the street revitalization option which you prefer.



Fernley Main Street Revitalization
Community Workshop



1

PROS

- Reduces travel time for all vehicles
- Reduces the number of vehicles in the intersection
- Reduces the number of vehicles in the intersection
- Reduces the number of vehicles in the intersection

CONCEPT

• •

2

PROS

- Reduces travel time for all vehicles
- Reduces the number of vehicles in the intersection
- Reduces the number of vehicles in the intersection
- Reduces the number of vehicles in the intersection

CONCEPT

• • • • •

3

PROS

- Reduces travel time for all vehicles
- Reduces the number of vehicles in the intersection
- Reduces the number of vehicles in the intersection
- Reduces the number of vehicles in the intersection

CONCEPT

• • • • •

4

PROS

- Reduces travel time for all vehicles
- Reduces the number of vehicles in the intersection
- Reduces the number of vehicles in the intersection
- Reduces the number of vehicles in the intersection

CONCEPT

• • • • •

5

PROS

- Reduces travel time for all vehicles
- Reduces the number of vehicles in the intersection
- Reduces the number of vehicles in the intersection
- Reduces the number of vehicles in the intersection

CONCEPT

• • • • •

Main Street / SR 95-A Intersection Options

Place a sticker in two blue boxes under the intersection options that you think may work best to improve the intersection.

Which Option do You Prefer?

• •

"Rail"

• • • • •

"Traditional"

• • • • •

"Modern Mountain"

• •

Place a sticker in the blue box under the theme of the street furniture option you prefer.

Fernley Main Street Revitalization Community Workshop

WOOD RODGERS

Fernley Main Street Revitalization Community Workshop

WOOD RODGERS

Planning Study | Introduction

10

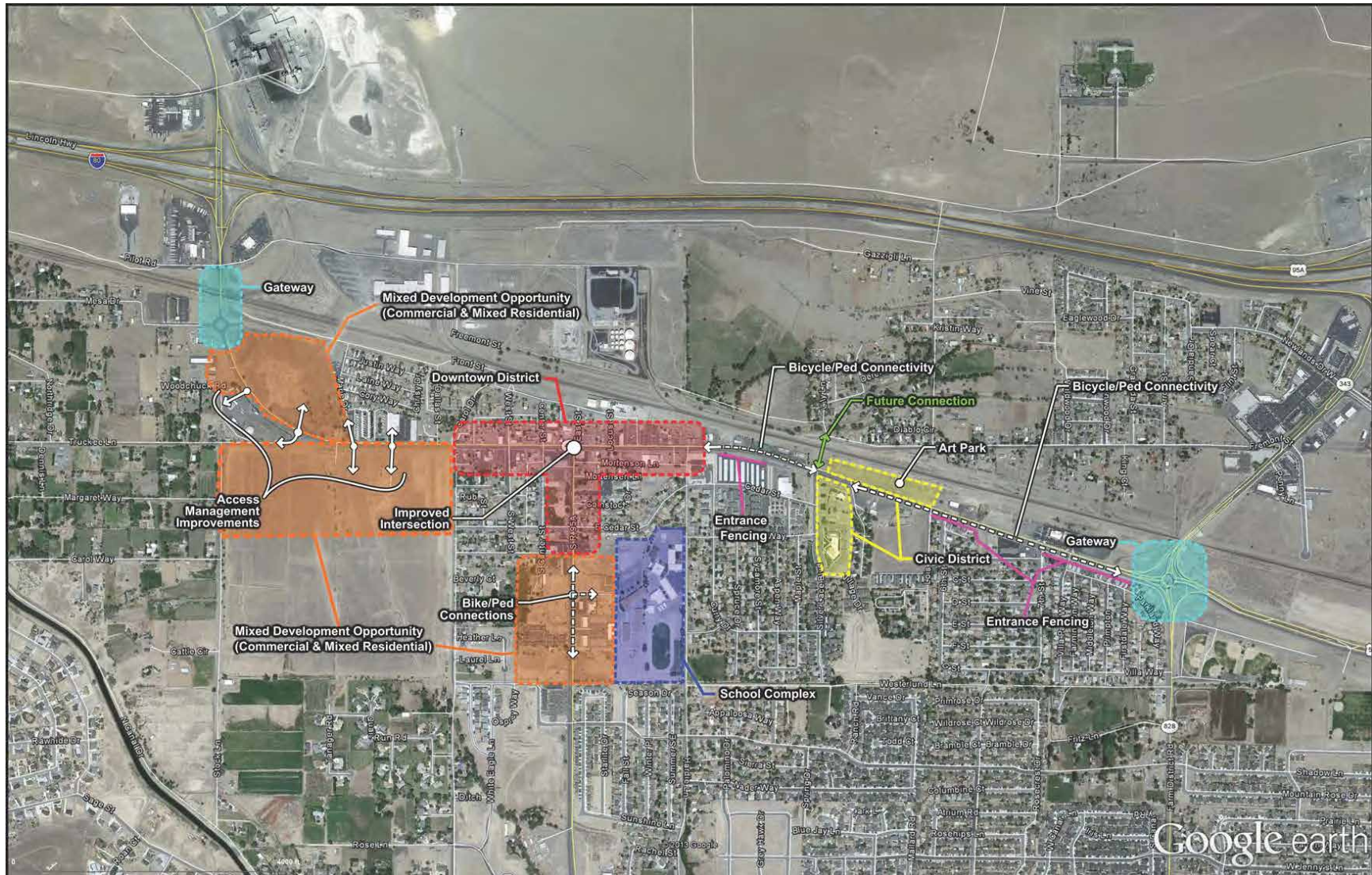
Opportunities and Constraints

Summary

The below exhibit identifies different opportunities within the corridor. Beginning with the western edge of the project area and traveling

east, the following pages provide a summary of the opportunities to implement a “main street” improvements, transportation and urban design improvements, neighborhood accessibility, and theming.

Figure 5— Over All Main Street Opportunities



Gateways

The corridor has two logical and physical gateways into the downtown area. The roundabout at Farm District Road on the east side of the corridor is already a currently established gateway for the corridor. The Union Pacific Railroad underpass on the west side has potential to be an additional gateway on the west side of Downtown. While it has been a difficult proposition over the years for the City to widen the underpass due to the railroad, there is an opportunity to enhance the area on both sides to include a welcome sign, sidewalks, lighting and landscaping to aesthetically improve the look of this area.



Figure 6: Additional Photo Simulation of Possible Gateway Enhancements

Downtown District

Downtown Fernley is the epicenter for businesses in the City of Fernley. There are multiple areas throughout this section of the corridor that can be improved to add an attractive and friendly environment for pedestrians. The improvements proposed for the downtown district would help encourage people to spend time downtown.

To support the central core of the City, areas to the south and west of the Downtown District, where larger vacant parcels exist, there is an opportunity for a mix of development. These areas can provide some additional commercial and retail development with a mix of residential densities to provide additional population base within walking distance to support the Downtown District.

Architecture façade updates were also an area the project team thought could be improved throughout the corridor. The team developed examples of how slight improvements to the existing buildings could transform the entire look of an area and could help bring a more consistent look throughout the corridor.



Civic Core

Anchored by City Hall and the future art park this area is the logical civic center for the community. Better pedestrian and bicycle connectivity will assist in connecting the residents of Fernley to their public resources. Safety improvements, such as an enhanced crossing at Silver Lace to link the art park to the other civic uses on the south side of Main Street are recommended.

Connectivity

Throughout the corridor the project team discovered multiple opportunities to enhance connectivity from the out lying areas. The school complex located on Hardie Lane warrants the need for sidewalks and bikes lane for a safer route to school. Also there is an opportunity to provide a pedestrian bridge over the railroad tracks north of Silver Lace Boulevard to connect the northeast neighborhoods to the civic core and downtown area.

Additionally, with the undeveloped large tracks of land west of Downtown, there is an opportunity to plan for future access management and improve the intersections that exist. This can include a possible roundabout just south of the UPRR underpass to help fix some of the awkward existing intersections. New planned potential intersections are also shown on the opportunities exhibit.





Preferred Alternative Roadway Configurations

Overall

The preferred roadway alternative for the Downtown Corridor generally maintains the existing lane configurations and utilizes the existing right of way to provide sidewalk, bike facilities, landscaped medians and parkway planter strips (where available right of way widths exist). Detailed cross sections for individual segments are provided in this chapter.

The overall goal for the corridor is to create a multi-modal roadway that improves mobility, increases vitality for the businesses and residents along the corridor, and provides an attractive “main street” environment. Decorative street lighting will be an overall consistent design element, aesthetically linking all of the individual segments and areas along the corridor.

Destinations within the Downtown were considered with the proposed recommendations. For example, pedestrian and bicycle connectivity and safety were found to be of great importance in two areas in particular. The Civic Core area (generally located in and around City Hall) requires that quality pedestrian and bicycle connectivity is provided to link the residents of Fernley to their civic resources, including the new art park. Further, the desire to promote greater bicycle and pedestrian safety on US 95 Alternate led to the proposed separated multi-use path. This path will allow students of Fernley Intermediate School, as well as visitors to In Town Park with a safer route than currently exists.

Several alternatives are proposed for improvement of the Main Street/US 95A intersection. While not a final list, the menu of alternatives developed within this study provides a starting point for the future next steps of the design and NEPA process.

On-street parking has been retained where ever possible, with particular care to retain on-street parking on Main Street between Miller Lane and Hardie Lane. On-street parking will also be formalized on US 95 Alternate between Main Street and Cedar Street, adjacent to In Town Park. On other sections outside of these areas, on-street parking may be eliminated, as there is not a current demand for it. Typically, areas that do not include on-street parking in the preferred cross sections have adjacent properties with off-street parking provided.

The following pages contain a summary of the proposed improvements within each segment of the corridor.

Main Street — Union Pacific Rail Road to Miller Lane

Within this section, two proposed alternatives are proposed. This area has the greatest propensity in the project area to see wholesale changes. Large vacant parcels on both the north and south sides of Main Street have the potential for additional commercial and residential development. Planned potential access points and/or future intersections are described in the opportunities exhibit, provided in the Introduction chapter. This portion of roadway currently has a three lane cross section with a travel lane provided in either direction and a center turn lane. There are roadside ditches and no bike lanes or sidewalks currently within this segment.

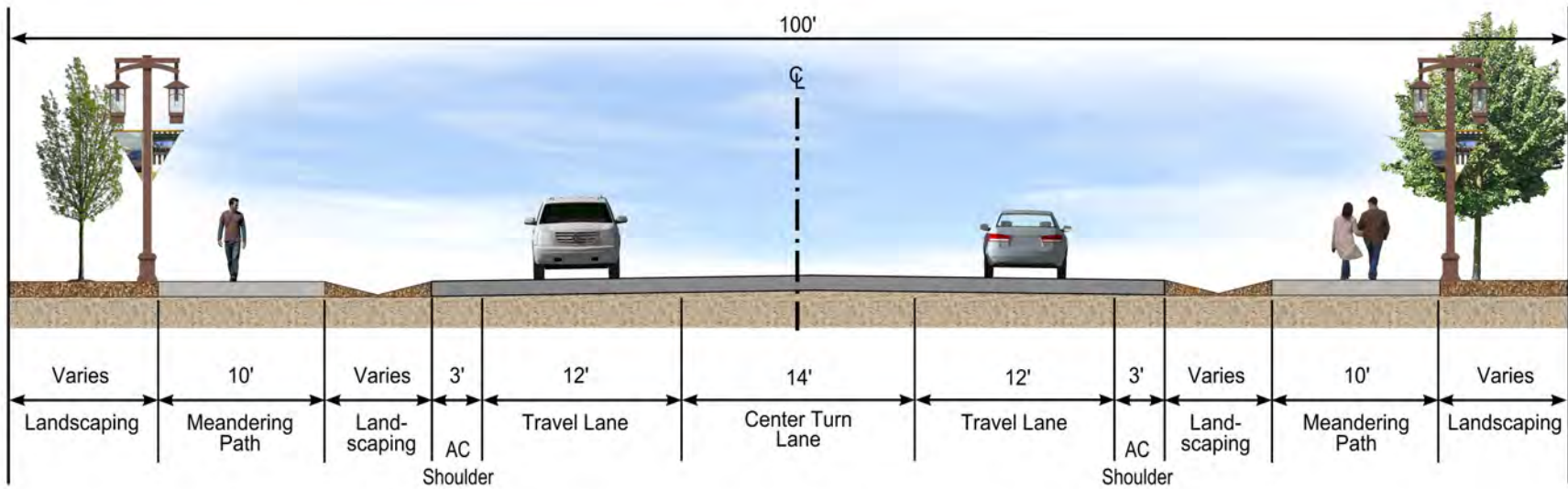
In both proposed alternatives, the lane configuration does not change. The alternatives proposed represent a possible short-term improvement and a long term envisioned improvement for the corridor. The short-term improvements would not augment the existing roadside drainage and would add a multi-use path for both pedestrians and cyclists. This short-term alternative could be implemented without having to make improvements to the roadway. The paths and landscape can be added outside of the current paved section within the ample right of way.

The long-term vision for this segment, however, contemplates a more formal urban street cross section, with curb, gutter, and separated sidewalks. In this alternative, a formal bike lane would be added with the construction of the curb and gutter. A more costly alternative, this option is envisioned to be implemented in the 15-20 year horizon, coinciding with the build-out of the adjacent large parcels.

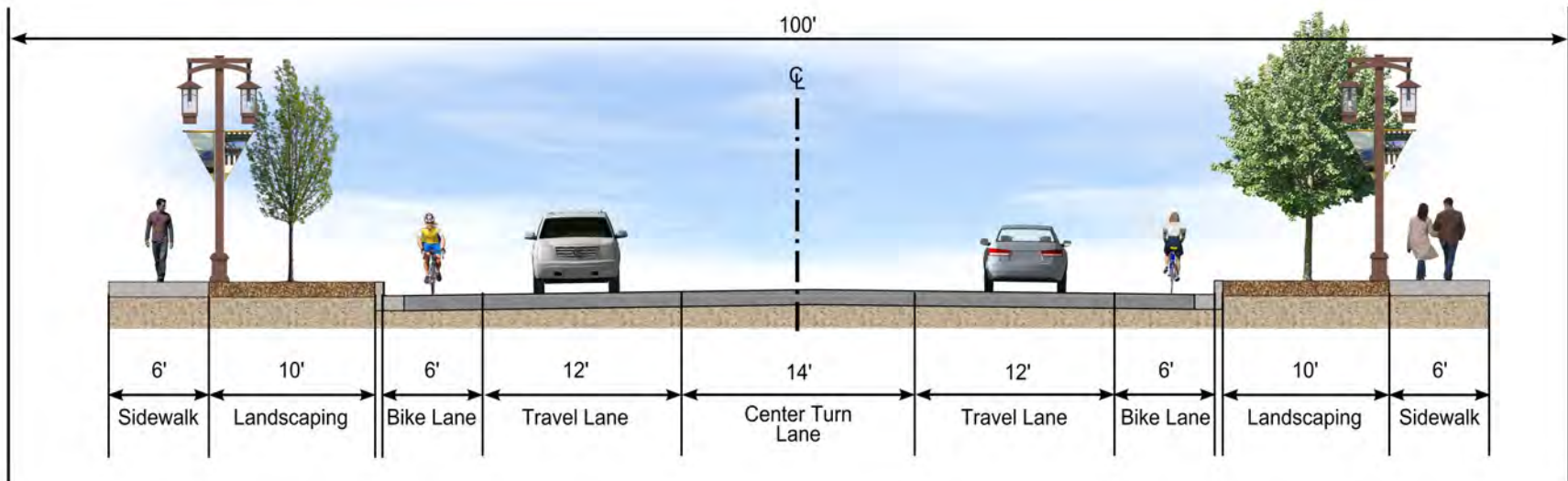


Figure 7—UPRR to Miller Lane Section

Figure 8—UPRR to Miller Lane Alternatives



Short-term Alternative



Long-term Vision



Figure 9—UPRR (north side) Conceptual Gateway Improvement



Figure 10—UPRR (north side) Conceptual Gateway Improvement

Main Street— Miller Lane to Hardie Lane

This segment contains the highest concentration of existing buildings, many of which are built to the right of way line. Further, the existing right of way within this segment is the narrowest of all the segments within the study area. On-street parking exists on both sides of the street and the segment has numerous intersections with short blocks.

Due to the limited right of way and constraints of buildings located on the right of way lines, the proposed improvement program for this segment is best characterized as a sidewalk and lighting project. Currently, there is a 5-foot sidewalk on the north, adjacent to a 9-foot parking lane and a 6-foot sidewalk on the south, adjacent to a 8-foot parking lane. A reconstruction of this segment to gain additional sidewalk width would be desirable, however it would require the elimination of parking at least on one side of the street. Within this section, numerous properties have limited or

no off-street parking and elimination of on-street parking was discouraged. As such, the proposed improvements provide a cost effective measure to improve the pedestrian environment with lighting and better quality sidewalks, while also retaining on-street parking.

To address further beautification of this segment, the addition of bulb-outs at intersections will provide additional visual interest, shorten the crossing distance for pedestrians, and provide pockets for landscaping, street furniture, or way finding signage. Additionally, mid-block planters are proposed to eliminate one on-street parking space on each side of the street to allow for a street tree planting per block. Both of these features will provide a visual narrowing of the roadway, which can slow drivers down, as well as provide opportunities for small landscape areas and street trees. An additional benefit of this feature is that on-street parking is “framed”, thus making it more recognizable and inviting for vehicles to park in. Both concepts can be installed

as part of the sidewalk and lighting project, without substantial augmentation of the roadway. It should be noted that the bulb out concept has not been included in the preliminary cost estimates provided in the Implementation chapter of this report. As these elements are dependent on individual siting, availability of water service for landscape, and other constraints, the location and number of bulb outs and planters will need to be addressed at the time of preliminary and final design in the future. An example of this bulb-out concept is provided on the following pages.

Figure 11—Miller Lane to Hardie Section



Figure 12—Miller Lane to Hardie Alternative

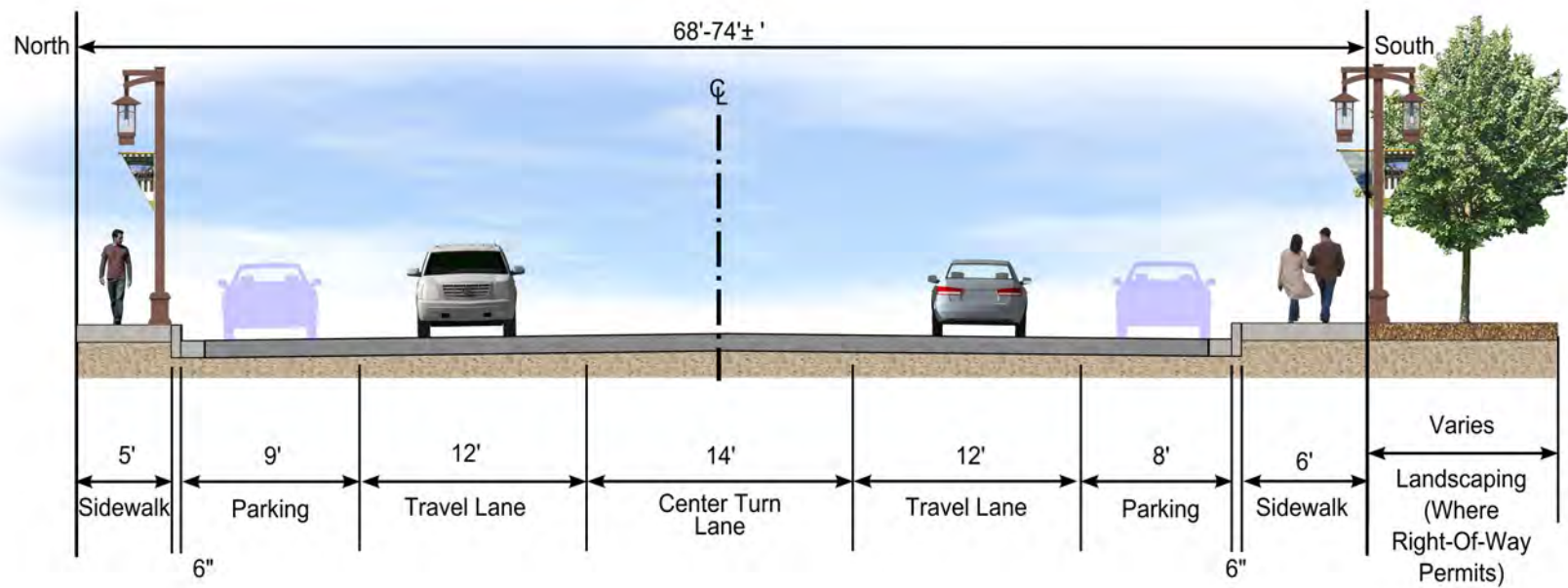
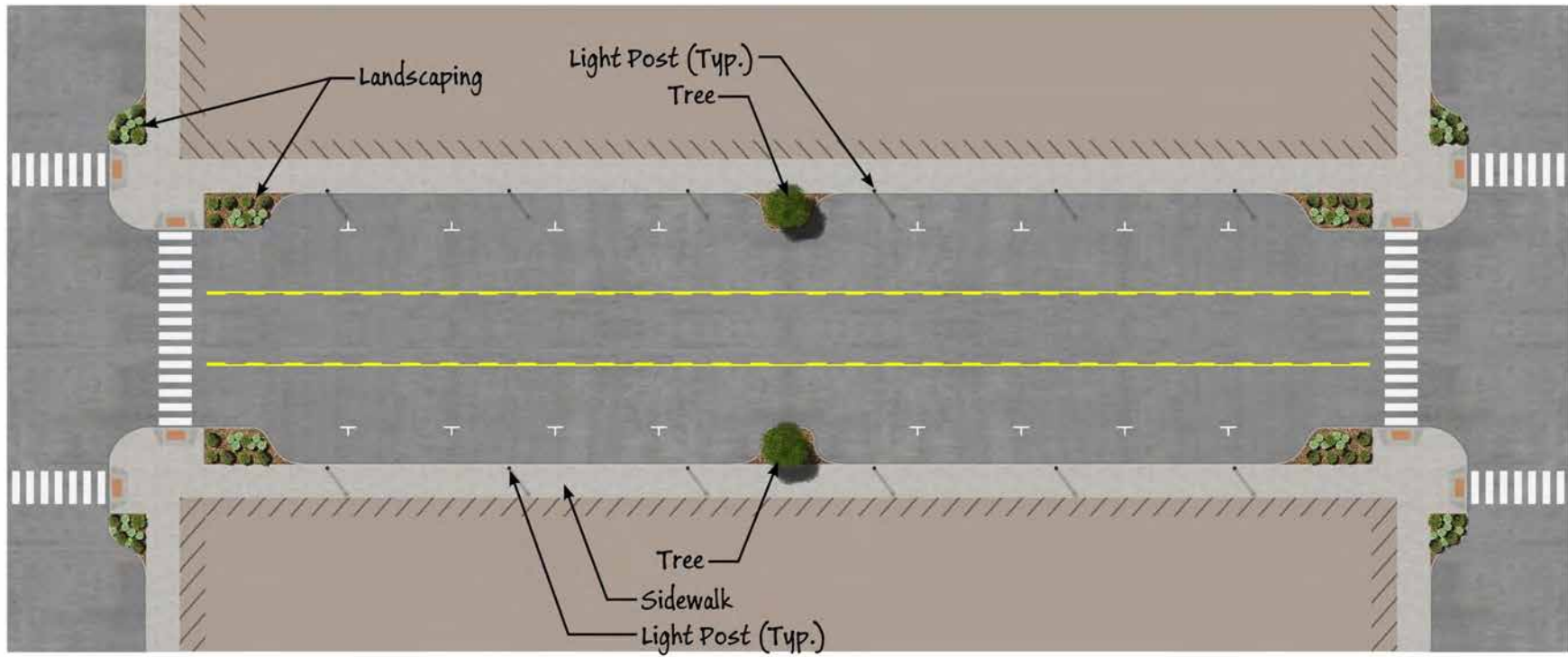


Figure 13 - Bulb-Outs Examples





Before



After

Figure 14—Main Street Conceptual Renderings



Before



After

Figure 15—Main Street Conceptual Renderings

Main Street & US 95A Intersection

The Main Street and US 95 Alternate intersection was analyzed as part of this planning study and five alternatives were developed. These five alternatives do not represent a final slate of alternatives to be assessed in the future, but were provided for initial public preferences and for budgetary purposes. It is anticipated that additional alternatives will likely be developed and analyzed as part of future design and NEPA permitting phases for this project. It should be noted that it is also anticipated that any improvements to this intersection could stand alone and would not be dependent on the improvement of the segments of roadway on either Main Street or US 95 Alternate. A summary of the intersection alternatives is provided on the following pages.

Existing Conditions

One of the most significant intersections in Fernley, and the only signalized location in the study area, is the intersection of Main Street (Interstate 80 Business) and State Route 95A. Main Street runs east-west and US 95A extends south from intersection. The northern leg of the intersection is East Street, a two-lane minor industrial road which is approximately 410 feet long and connects with East Front Street to the north. The north-south alignment of US 95A and East Street is offset with East Street roughly 45 feet to the east. The majority of traffic at the intersection travels east-west and to/from the south, with a minor volume of vehicles using East Street.

Currently, three pedestrian crossings are striped on the eastern, southern, and western sides of the intersection and are roughly 57 feet, 49 feet, and

72 feet in length respectively. Sidewalks are present at all four corners of the intersection. There are currently no dedicated bicycle facilities present on any of the intersecting roadways. The existing conditions are shown to the right.

Current Issues

Excessive vehicle queuing has been identified as an issue at the Main Street/US 95A intersection, predominately in the PM peak hour on the northbound (US 95A) approach to the intersection. Due to the offset north and south legs, the signal timings are split phased for safety reasons. The southbound approach is actuated, and although there is minimal traffic associated with the southbound movement, when vehicles are present at this location it increases the delay to vehicles on the three major approaches.

A lack of pedestrian connectivity has also been identified at the intersection. The northern side of the intersection lacks an east-west marked pedestrian crossing and the split north-south

phasing may cause some confusion for pedestrians as to the appropriate time to cross.

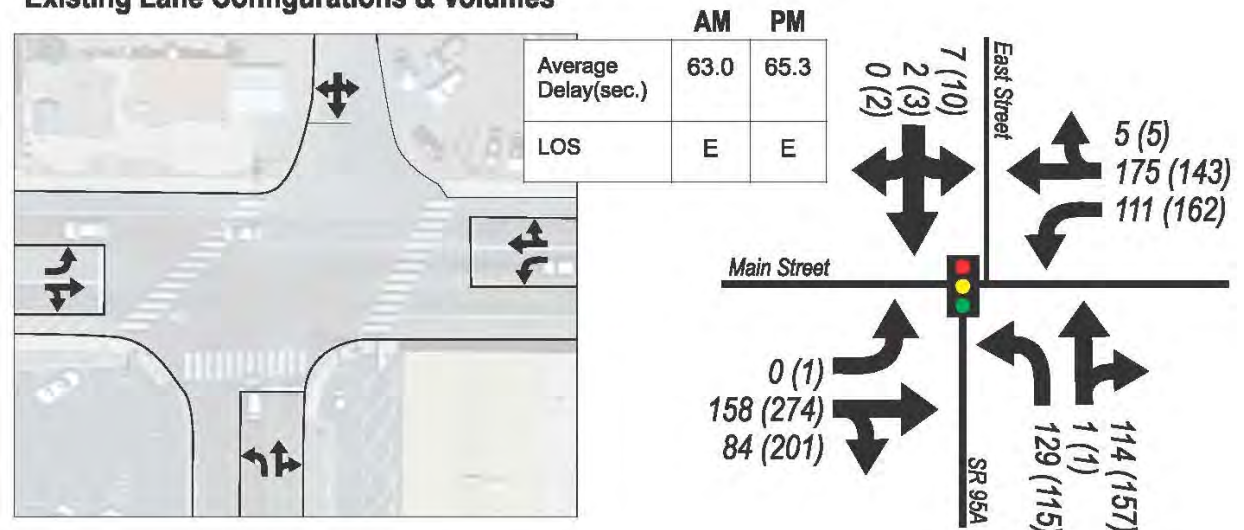
We also understand there are some truck maneuvering issues at the intersection, primarily for the westbound right-turn movement from Main Street to US 95A southbound and northbound US 95A to eastbound Main Street. The intersection has a small footprint with small curb return radii. Large trucks use all the available space and right turn lanes are not feasible with the existing curb returns.

Existing Level of Service

Turn movement counts for all travel modes were collected at the study intersection on the 4th and 5th of February, 2014 during the AM peak (7am – 9am) and the PM peak (4pm – 6pm) periods.

An existing conditions level of service analysis was performed using standard Highway Capacity Manual (HCM) methodology and found that the

Existing Lane Configurations & Volumes



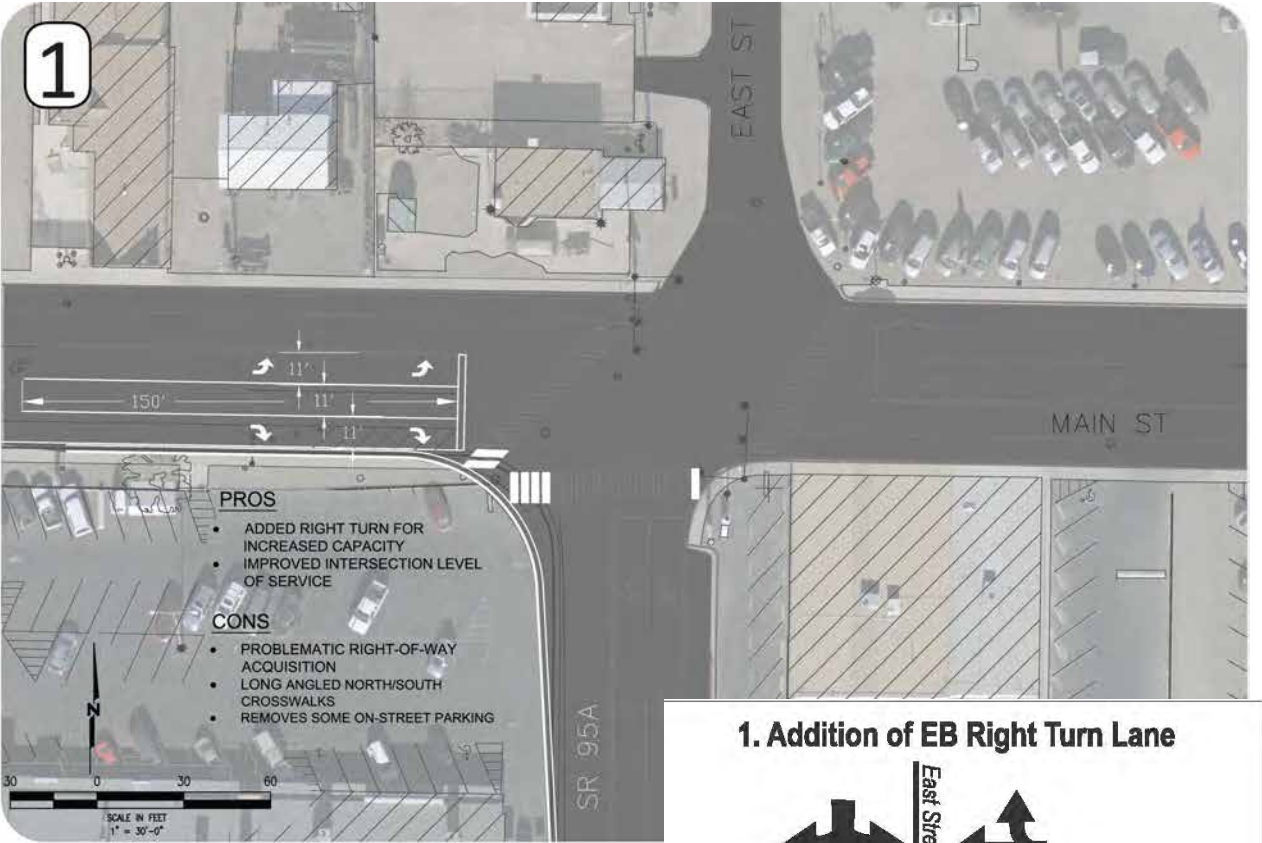
intersection currently operates at Level of Service (LOS) “E” during both the AM and PM peak hours. The existing average control delay is 63.0 seconds during the AM peak hour and 65.3 seconds during the PM peak hour. The policy LOS for this intersection is “D” based on NDOT standards, therefore improvements should be considered.

From this analysis, it was determined that the primary causes of delay are the split phasing of the northbound and southbound movements and the southbound leg itself. These split signal timings result in longer waits for eastbound and westbound traffic when vehicles approach the intersection from East Street. The additional delay to all other movements, for the benefit of 10 vehicles hour in the AM peak hour and 18 vehicles in the PM peak hour, indicates too much priority given to a small number of users at the expense of the major movements, which have much higher vehicular volumes.

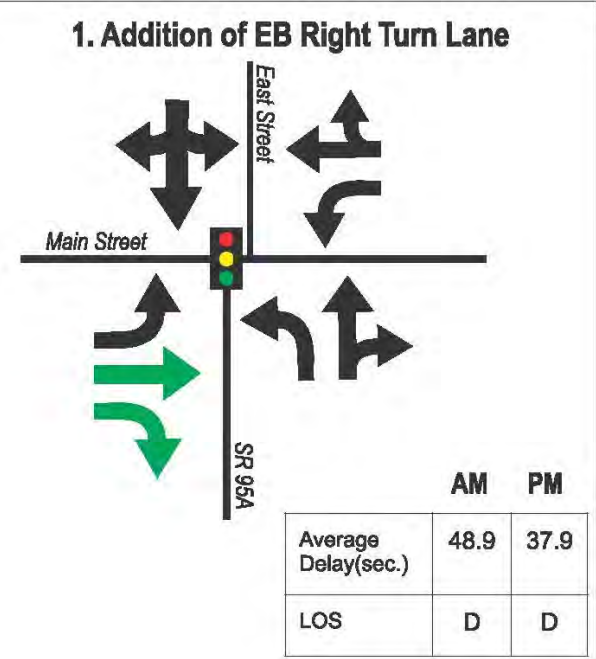
Improvement Alternatives

Five potential alternatives were developed to improve vehicular movement, safety, multi-modal access, and provide an acceptable level of service. The four alternatives are as follows:

1. Addition of Eastbound Right Turn Lane –
Due to the high volume of eastbound right turns, especially during the PM peak hour (approximately 200), the addition of a right turn lane to accommodate this movement was proposed. The current lane configuration combines eastbound through and eastbound right-turn movements in one lane and the aggregate of these movements is over 240 vehicles during the AM peak hour and 475 during the PM peak hour. The separation of these movements would



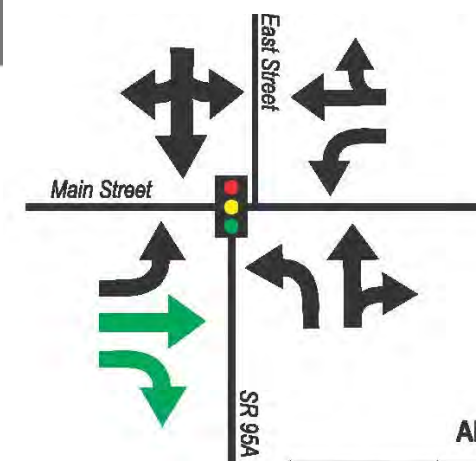
reduce the overall eastbound queue length and allow for eastbound right turns on red during the northbound and southbound movements. This alternative was found to improve both the AM and PM LOS to “D” with the average control delay being 48.9 seconds and 37.9 seconds respectively for the AM and PM peaks (see figure to the right). This alternative would require right-of-way acquisition in the southwest quadrant of the intersection.



2. Addition of Eastbound Right Turn Lane and Larger Turning Radii on US 95A – Due to the high volume of eastbound right turns, especially during the PM peak hour (approximately 200), the addition of a right turn lane to accommodate this movement was proposed in the previous option. The current lane configuration combines eastbound through and eastbound right-turn movements in one lane and the aggregate of these movements is over 240 vehicles during the AM peak hour and 475 during the PM peak hour. Additional feedback was provided by the Stakeholder Focus Group that the northbound US 95A right turn movement created problematic situations for large trucks to navigate the turn. Resulting property and signal pole damage prompted this Option 2, which requires additional right of way on both southerly corners of the intersection. The LOS from Option 1 remains unchanged. The LOS from Option 1 remains unchanged.



2. EB Right Turn Lane and Turning Larger Radii

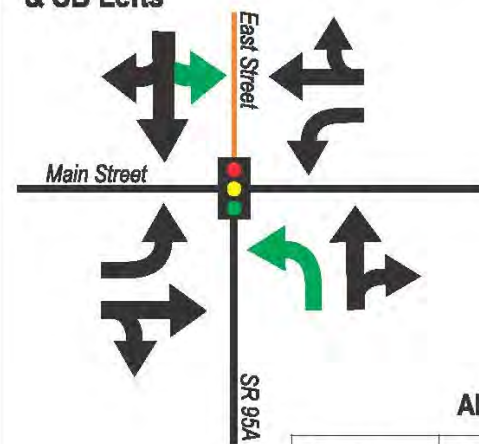


	AM	PM
Average Delay(sec.)	48.9	37.9
LOS	D	D

3. Realigned East Street and Permitted NB & SB Left-turns – As the current configuration of the intersection makes permitted lefts from the northbound and southbound legs too high a safety hazard, the intersection layout would have to change to avoid split phasing and allow permissive left-turns. East Street would have to be relocated roughly 45 feet to the west in order to be aligned with US 95A. This would require the acquisition of likely the entire parcel located at the northwestern corner of the intersection. Upon analyzing this alternative, it was found that the LOS for the intersection would be “B” and “C” for the AM and PM peak hours, respectively. The average control delay would also decrease to 19.5 seconds for the AM peak hour and 30.0 seconds for the PM peak hour (see figure to the right).



3. Realigned East Street & Permitted NB & SB Lefts

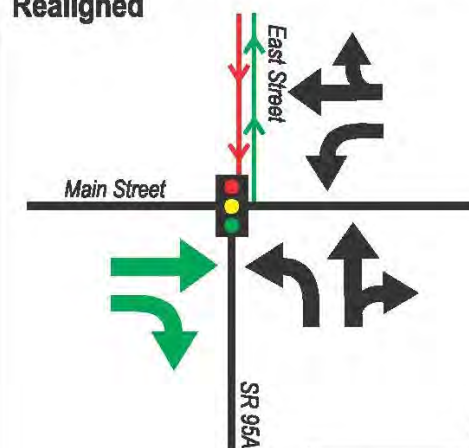


	AM	PM
Average Delay(sec.)	19.5	30.0
LOS	B	C

4. SB East Street Closed & EB Main Street Realigned – Due to the small number of vehicles traveling southbound on East Street, but the additional delay that is caused to the other movements, closing East Street to southbound traffic is a potential solution to the traffic flow issues. Continuing to allow westbound right-turns onto East Street would still provide access to the businesses along East Street. Eliminating the eastbound left-turn lane and movement would allow space for a dedicated through lane and dedicated right-turn lane in the eastbound direction. This alternative results in the second most significant improvement to LOS for the intersection, achieving LOS “B” for both AM and PM peak hours. The average control delay would be significantly reduced to 16.2 seconds for the AM peak hour and 19.1 seconds for the PM peak hour (see figures to the right).

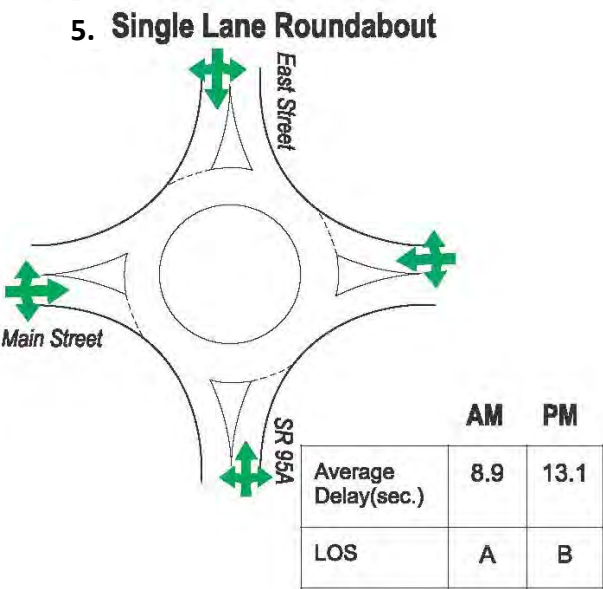


4. SB East Street Closed & EB Main Street Realigned



	AM	PM
Average Delay(sec.)	16.2	19.1
LOS	B	B

5. Single Lane Roundabout – Converting the intersection from a signalized intersection to a single-lane roundabout was found to have the most significant benefit on LOS at the intersection during both the AM and PM peak hours. Implementation of a roundabout at this intersection would improve the overall intersection LOS to “A” in the AM and “B” in the PM. The average delay is projected to decrease to 8.9 seconds during the AM peak hour and 13.1 seconds in the PM peak hour. This alternative would, however, require the most right-of-way acquisition.



Comparison of Alternatives

The improvements in level of service and delay reduction garnered from the eastbound right-turn lane (Alternate 1 and 2) are not significant enough to justify implementation due to their failure to improve the LOS above LOS “D” for either the AM or PM peak hours (see **Table 1**). Additionally, right of way acquisition would be required on the southwest quadrant to add the turn lane and truck maneuvering space. Therefore, this alternative was deemed to be less attractive and should be removed from further consideration.

Of the remaining three alternatives, the closure of southbound East Street would be simplest in terms of construction and would produce the greatest benefit for the lowest construction cost. This alternative would increase the LOS to “B” for the AM and PM peak hours and reduce the average delay by 74% during the AM peak and 71% during the PM peak (see **Table 1**). Redirecting the small amount of southbound traffic from East Street to Locust Street, Center Street, or West Street would pose a minimal barrier to implementation of this alternative. Retaining appropriate access to the businesses along East Street would, however, be an important factor to consider with this alternative. This alternative may not be the most consistent with business revitalization themes. The realignment of the eastbound lanes (and potentially the westbound lanes) to add the eastbound right-turn lane modification would require new striping. Closure of the northbound through and eastbound left-turn movements would require additional signage and striping.

Realignment of southbound East Street and implementation of permitted left-turns would require property acquisition on the northwest quadrant of the intersection. The overall

intersection LOS and average delay improvements associated with this alternative are not quite as high as those for the other two viable alternatives. Level of service would improve to “B” during the AM peak and “C” during the PM peak, with the average delay falling 69% during the AM and 54% during the PM peaks (see **Table 1**). This alternative would provide a more conventional intersection with full pedestrian access (i.e. crosswalks on all legs of the intersection).

Implementation of a single-lane roundabout at the study intersection would result in the most significant improvements to the LOS and delay. LOS would improve to “A” during the AM peak hour and “B” during PM peak hour. Similarly,

delay would be reduced by 86% during the AM peak hour and 80% during the PM peak hour (see **Table 1**). However, the construction costs of this alternative coupled with the potential real estate and ROW acquisitions would be significant.

Table 1 – AM/PM Peak Hour LOS and Delay Improvements

AM Peak Hour	LOS		Average Delay		
Alternative	Before	After	Before	After	Percent Reduction
1. EB Right Turn Lane	E	D	63.0	48.9	22%
2. EB Right Turn Lane and Geometric Mod to US 95A	E	D	63.0	48.9	22%
3. Realigned SB East St. Permitted Lefts	E	B	63.0	19.5	69%
4. SB East St Closed & EB Main St. Realigned	E	B	63.0	16.2	74%
5. Single Lane Roundabout	E	A	63.0	8.9	86%
PM Peak Hour	LOS		Average Delay		
Alternative	Before	After	Before	After	Percent Reduction
1. EB Right Turn Lane	E	D	65.3	37.9	42%
2. EB Right Turn Lane and Geometric Mod to US 95A	E	D	65.3	37.9	42%
3. Realigned SB East St. Permitted Lefts	E	C	65.3	30.0	54%
4. SB East St Closed & EB Main St. Realigned	E	B	65.3	19.1	71%
5. Single Lane Roundabout	E	B	65.3	13.1	80%

Main Street – Hardie Lane to 7th Street

Within this segment, there is ample right of way to provide much better pedestrian and bicycle facilities to connect Fernley residents with their civic resources located in and around Silver Lake Drive. This segment has greater access control than other segments, with fewer intersections and driveways. NDOT staff expressed an interest in furthering this access control through the use of medians.

Two alternatives have been provided to demonstrate the look and aesthetics of areas within medians and areas with turn lanes. Both cross sections can be used interchangeably depending on the access control needs.

Pedestrian facilities and connectivity are promoted by providing landscape detached wide sidewalks.

Bike lanes are provided adjacent to the travel lanes on both sides of the street.

Additional streetscape enhancements can take place within the excess right of way adjacent to the existing ministorage site. A large, oddly shaped right of way can be enhanced with landscaping, while a decorative screening fence can improve on the unsightly chain link fence that currently exists. Examples of fencing options are provided on the following pages.

Figure 16 - Hardie to 7th Street Section



Figure 17- Hardie to 7th Street Alternatives

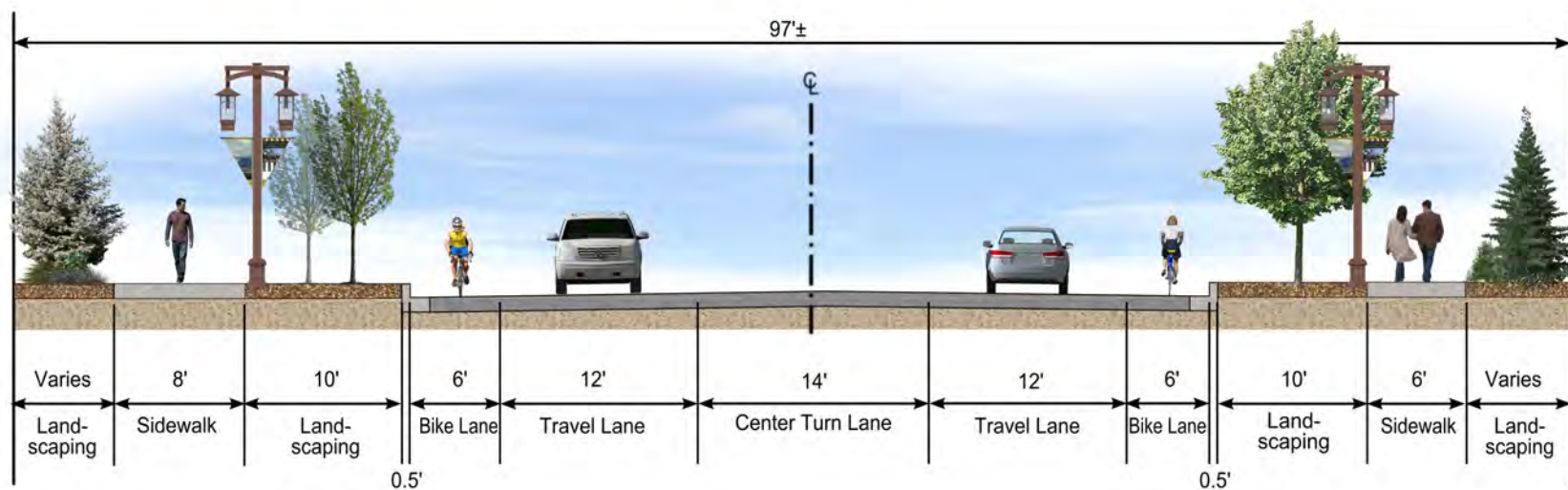
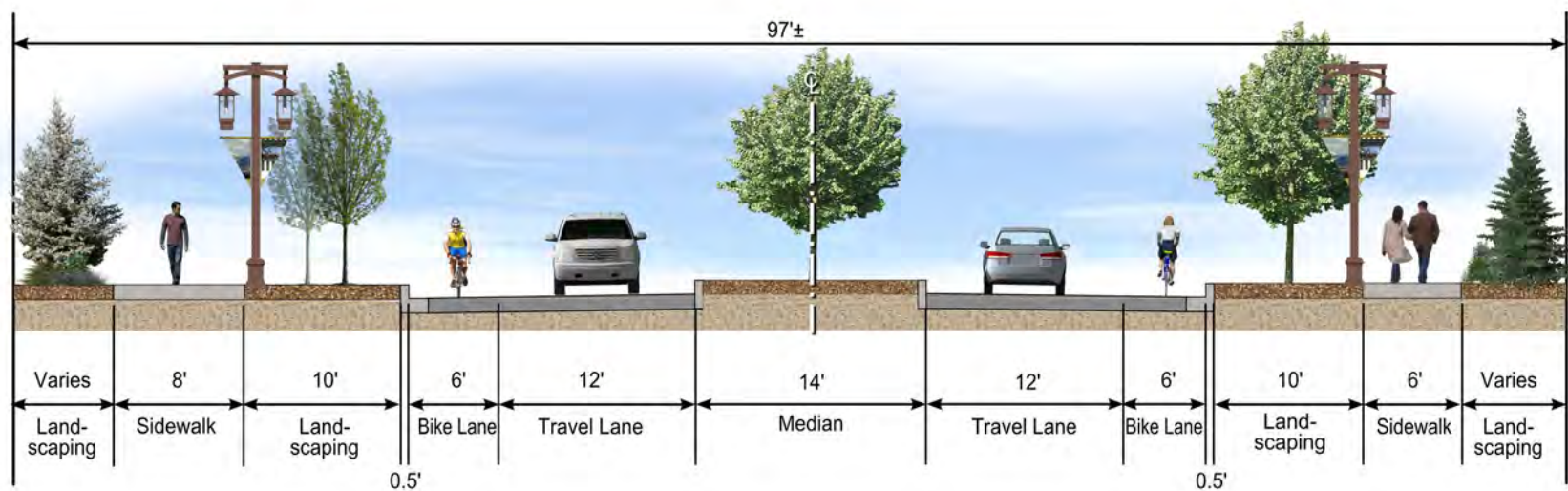




Figure 18- Hardie to 7th Street Example of Decorative Fencing Options

Main Street – 7th Street to Farm District Road

The segment of Main Street from 7th Street to the roundabout at Farm District Road must remain virtually unchanged in order to not jeopardize the operations of the roundabout. The existing cross section through this segment contains a 5-lane section with sidewalk on both sides.

The minimal proposed improvements within this segment are largely concentrated on the south side of the street. Installation of landscaping on the south side between the sidewalk and single family will help in beautifying this segment, while matching the aesthetics of the existing landscaping on the north side of the street and within the roundabout. Further, this south side can further be improved with the installation of a unified fencing treatment along the rear property lines of the adjacent single family. The existing fencing has a mix of colors and materials, which can be

improved with a common decorative fence or wall. Examples of both a decorative wood fence and wall are provided on the following pages.

Figure 19 - 7th Street to Farm District Road Section



Figure 20 - 7th Street to Farm District Road Alternative

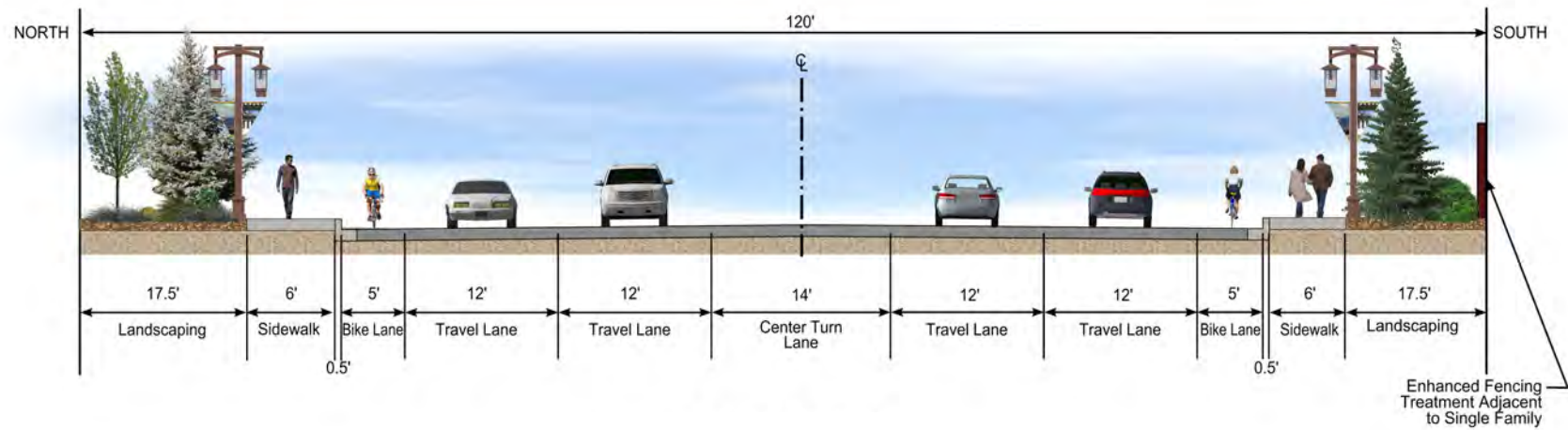




Figure 21 – Example Fencing Option

US 95 Alternate – Main Street to Cedar Street

Both of the segments of US 95 Alternate in the project study area are school routes serving Fernley Intermediary School. Additionally, In Town Park, located on the west side of the street within this segment, is a popular downtown destination. As such, the proposed cross section within this segment balances the needs of a safe school route, with the need to formalize on-street parking adjacent to the park.

Currently, during highly attended events at In Town Park, visitors park diagonally on the west side of US 95 Alternate. This caused reason for concern on the part of both the Stakeholder Focus Group and NDOT for this segment. The proposed alternative includes parallel on-street parking on the west side of the street only. The parking is separated from a wide multi-use path by a landscape strip. On the east side of the street, a slightly smaller multi-use path is also separated from the travel lane by a landscape strip. The separated multi-use path provides all pedestrians and bicyclists, especially students, with a safe route.

With the formalization of parking on US 95A adjacent to the park, a concern was raised by the Stakeholder Focus Group that there may not be enough parking at the park to meet peak demands. To help address this, a parking plan was prepared for the park that formalizes parallel parking on Cedar Street and 90-degree parking on Center Street. A total of 95 parking spaces can be formalized adjacent to the park. An exhibit showing the proposed parking plan is provided on the following pages.



Figure 22 - Main Street to Cedar Street Section

Figure 23 - Main Street to Cedar Street Alternatives

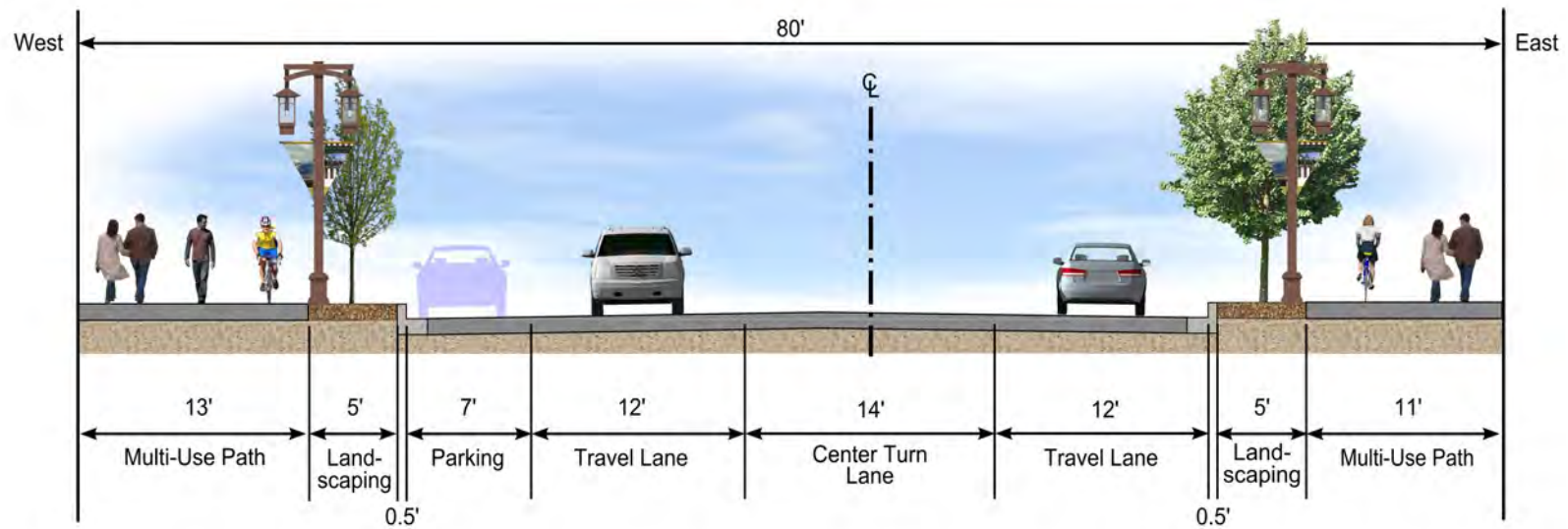


Figure 24 - Parking Options Adjacent to In Town Park



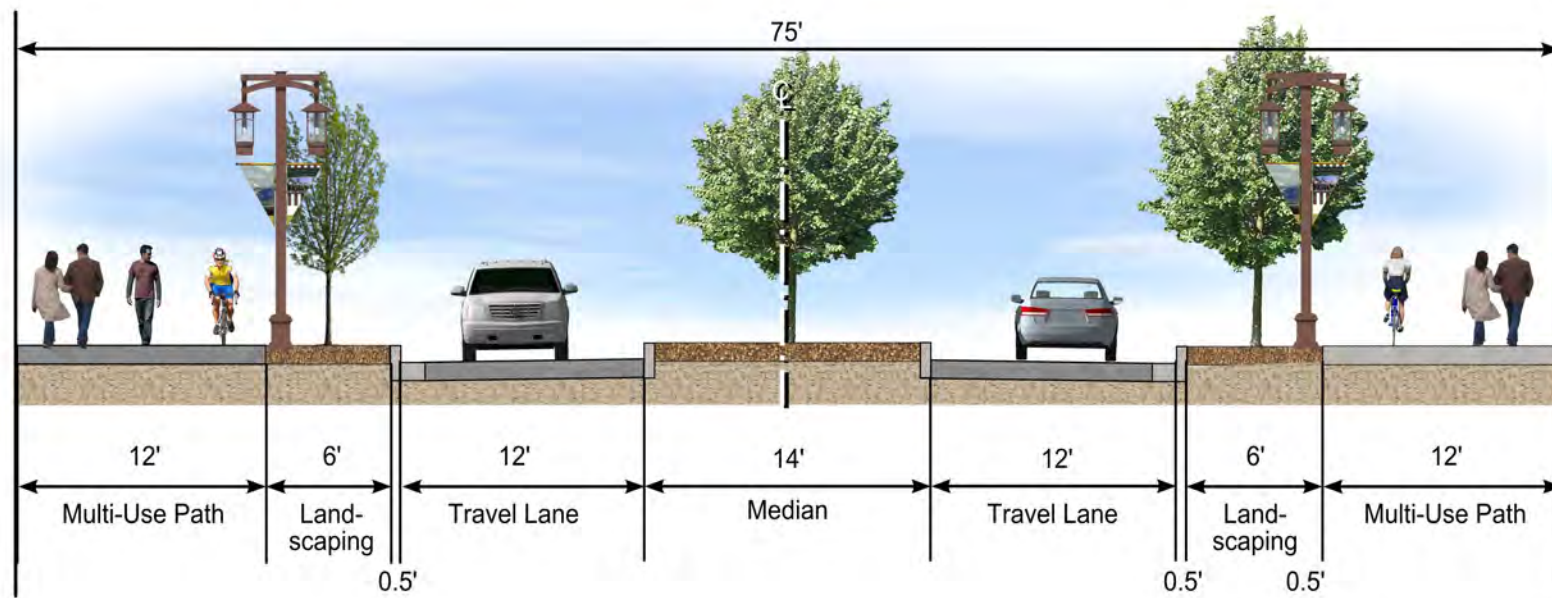
US 95 Alternate — Cedar Street to Shadow Lane

As with the previous segment, there is a desire to provide additional protection for pedestrians and cyclists, especially students, along this segment. As such, a landscape separated multi-use path has been proposed on both sides of the street. Additionally, within this segment there are few intersections and driveways that could allow for, although not require, the construction of a median. For budgetary purposes, the median has been included in case it is found desirable in the future design phases of the project to include them.



Figure 25– Cedar Street to Shadow Lane Section

Figure 26– Cedar Street to Shadow Lane Cross Alternative

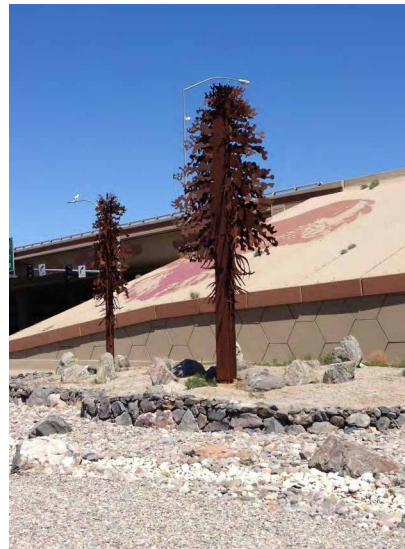


Streetscape and Urban Design Guidelines

Streetscape and urban design guidelines provide the aesthetic basis for the future revitalization of Downtown Fernley. These guidelines are not inclusive and will likely require further implementation by the City's Community Development and Public Works Departments. These guidelines are provided to help provide a comprehensive vision for how the Downtown can be revitalized through several different improvements, including landscaping, fencing, street furniture, signage and architectural enhancements.

Landscaping

Landscaping will drastically change the look and feel of the downtown corridor. Currently, there is little landscaping within the right of way, with the majority of landscaping in the corridor located on the most recently developed commercial parcels. It is understood that water for landscaping is a scarce commodity for the City and therefore, this plan has tried to remain sensitive to that constraint. It cannot, however, be understated that street trees provide a great benefit to the downtown by providing beautification, as well as shade in summer months to provide greater pedestrian comfort. While street trees are highly desirable, other elements that do not required water can also be incorporated into the Downtown. These could include sculptural "trees" and shade structures. Examples of these are shown to the right.



Street Lighting

Street lighting will be the overall most unifying feature of the streetscape. Where it may be difficult to property site street trees and other landscape in portions of the Downtown Corridor (for example on Main Street between Miller Lane and Hardie Lane), street lighting can be installed on typical sidewalks. A preliminary light standard has been selected to compliment the other architectural theming that is included with this study. During the public charrette for the project, the participants expressed a preference for the “traditional” lighting option because of the banners that were shown in the example photo. Re assessing all of the options, the “mountain modern” better captures the architectural themes, while also providing the opportunity to install banner arms for interchangeable banners throughout the Downtown. Additionally, flower baskets and other lighting and decorations (for example during the holidays) can also be added to the light poles to further enhance the Downtown. An example of these are shown to the right. With this light standard, either a single or double mast arm can be provided to allow for siting light poles in areas with more or less clearance.

It should be noted that this is not a final selection of lighting for the corridor and no specific product or colors have been specified. Rather, these lighting concepts are provided to assist with the overall vision of revitalization in Downtown Fernley.



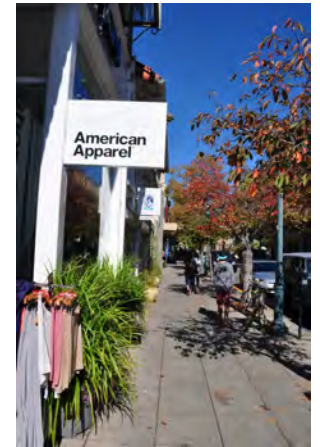
Street Furniture

Street furniture adds to the experience a visitor has in the Downtown. Benches, trash receptacles, bike racks, and other items help to portray pride in the Downtown and a desire to share that with visitors. Placed purposefully, street furniture can provide much needed seating in high demand areas, assist with the cleanliness of Downtown, and provide waypoints for visitors and residents to refer to and meet at. Some examples of these types of elements that are complimentary to the architectural and lighting components proposed in this study are provided to the right.



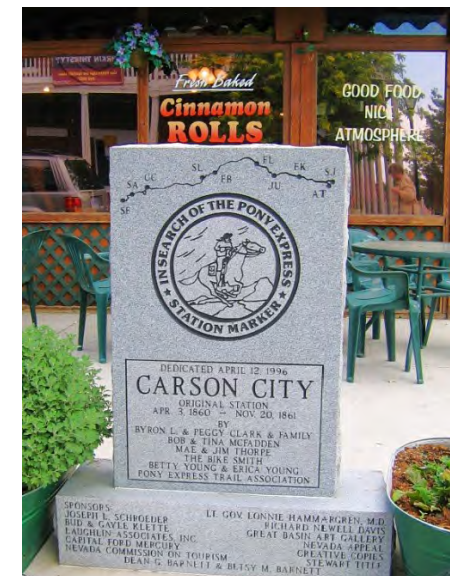
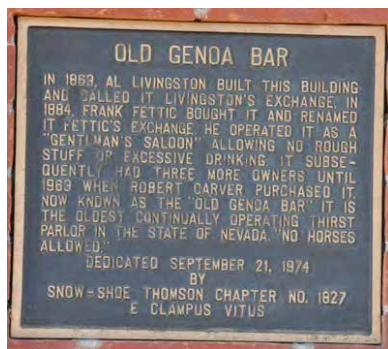
Signage

Signage in the Downtown is provided both for identifying businesses, as well as overall community way finding. Business signage in the Downtown can take on many forms, from wall signage and small monuments, to more pedestrian scale blade signage over the sidewalk. Banners and other way finding signage help visitors navigate the community, while also providing an opportunity to announce upcoming special events, parades, and other community festivals.



Historical Markers

The Stakeholder Focus Group initiated a discussion regarding the need to communicate the history of Fernley to the community and visitors. Main Street is a portion of the original Lincoln Highway, the United States first transcontinental highway that celebrated its 100 year anniversary in 2013. Additionally, the City has a longer standing history associated with the main line of the Union Pacific Railroad. These two features, coupled with many more, provide opportunities to tell the story of Fernley. This can be done through art pieces, markers, plaques, sidewalk medallions and other elements incorporated into the streetscape. Examples of these features from other communities are provided to the right.



Thematic Architecture

Architectural themes can and should vary throughout the Downtown. Not one style can capture the history and make up of the City. Further, homogenous themes, forms, and materials can detract from the Downtown and not provide a richness of design and interest that is sought.

This study seeks to provide direction for the architectural styles of Downtown, while not specifying colors, materials, or architectural elements. Rather, the intent of this document is to inspire a higher quality of architecture in Fernley, with a combination of colors, materials and styles that will create a more unique main street scene and City. The design team discussed several potential themes with the Stakeholder Focus Group, with two prominent styles coming to the forefront. The first is a kind of “modern mountain” theme that incorporates exposed timber, stone, stucco, and varying high pitched roof elements with standing seam metal roofing. Roofing can be a mix of colors, including greens and coppers. The second theme discussed with the Focus Group provides a current and historical railroad backdrop for the City. The “rail” theme promotes the use of brick, siding, and varied roof forms. With both themes, colors were preferred to be earth tones to complement the surrounding desert environment.

Examples of the local buildings that helped in inspiring the above themes are shown to the right. Conceptual interpretations of the themes with materials are provided on the following pages, including an example of how these themes and materials can be expressed in the remodeling of an existing building.



Modern Mountain Inspired Aesthetic



Painted Wood Siding

Contrasting Painted Wood Trim

Stone Veneer



Natural Wood Siding



Complimentary Accent Band

Neutral Stucco

Stained Trellis

Standing Seam Metal Awning

Pipe Railing

Stone Veneer

Rail Inspired Aesthetic



Stucco Accent Color

Stone Veneer

Neutral Stucco Base

Painted Wood Shade Structure

Metal Accent Band

Stucco Base Color



Vertical Wood Siding

Concrete Tile Shingles

Fabric Awning

Peeled Log Poles

Painted Wood Siding



Natural Heavy Timbers

Exposed Steel Brackets

Natural Wood Soffit

Neutral Stucco Base

Façade Improvement Example
Commercial Development on Southwest Corner Main/US 95A





Implementation Strategy

Implementation Plan

The project has developed an implementation plan for the Downtown Fernley Planning Study. This implementation plan consists of several parts that lay a foundation for ultimate revitalization of this central corridor for the Fernley community. Included with this implementation strategy are:

- Capital Improvement Cost Estimate
- Redevelopment Strategy

The following project estimates (Table 2) are based upon 2014 construction dollar values. The quantities used in preparing this estimate are based upon planning level documents and are not intended to include every bid item that would be expected should this be a final construction estimate. The unit prices are largely taken from local industry standard planning level construction estimates.

Soft costs and contingency were added to the total to complete the budget. Should these prices be extended into future years, it would be advisable to account for a 4% per year increase to allow for inflation, as well as other pricing fluctuations.

Additionally, the project team has prepared the following conceptual phasing matrix (Table 3), which is intended to provide assistance to the City, and NDOT for developing construction projects in conjunction with the recommendations of this planning study. This matrix is conceptual, in that,

phasing of projects and funding mechanisms are subject to change and dependent on federal and other grant funding availability at the time of ultimate construction.

The matrix includes estimated implementation time frames, based upon current needs and deficiencies, as well as feedback from local agencies and the public. Generally, these time frames are divided into:

Short-Term ±1-5 years	Mid-Term ±5-10 years	Long-Term 10+ years
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Where a cost estimate has been generated for a project, the dollar amount has been provided for planning purposes. This matrix is fluid and may be utilized in the future to reprioritize projects as necessary when additional funding and/or local priorities are modified. It should be noted also that the cost estimates identified in the matrix represent a cost for the entire segment noted. This budget amount can be further phased within the segment, as the cost estimates contained herein have been provided with a 'cost per lineal foot' metric. This allows the City and stakeholders the opportunity to further phase individual segments to better match available funding.

Also, as there are variable costs for the different alternatives for improvements to the Main Street/ US 95 Alternate intersection, they have been

provided as a separate range, depending on the alternative.

Finally, some additional thoughts and recommendations relative to redevelopment potential in the Downtown has also been provided to assist with future planning efforts. These recommendations are more or less provided as a kind of framework with which to craft future planning documents and policies that will be supported by the infrastructure improvements.

Table 2 - Preliminary Construction Cost Estimate

CONSTRUCTION UNIT COSTS			FERNLEY MAIN STREET REVITALIZATION COST ESTIMATE			
MATERIAL	PRICE	UNIT	SEGMENTS - MAIN STREET	COST/LF	LF/SEGMENT	COST/SEGMENT
AC PAVING	\$ 7.00	SF	UNION PACIFIC RAILROAD TO MILLER LANE OPTION 1 MULTI-USE PATHWAY WITH LANDSCAPING	\$ 400	3800	\$ 1,600,000
CURB & GUTTER	\$ 30.00	LF	MILLER LANE TO HARDIE LANE OPTION 2 RECONSTRUCT ROADWAY WITH CURB & GUTTER AND ADDITIONAL DRAINAGE IMPROVEMENTS	\$ 900		\$ 3,500,000
PCC SIDEWALK	\$ 8.00	SF	HARDIE LANE TO 7TH STREET OPTION 1 SIDEWALK AND LIGHTING REHAB	\$ 550	2700	\$ 1,500,000
STAMPED PCC	\$ 9.50	SF	7TH STREET TO FARM DISTRICT ROAD OPTION 2 SIDEWALK AND LIGHTING WITH CONCRETE ACCENTS	\$ 570		\$ 1,600,000
AC SIDEWALK	\$ 5.00	SF	HARDIE LANE TO 7TH STREET ALTERNATE A WITH STAMPED PCC MEDIAN	\$ 1,200	4200	\$ 5,100,000
STREET LIGHTING	\$ 200.00	LF	7TH STREET TO FARM DISTRICT ROAD LANDSCAPING ON BOTH SIDES OF THE ROADWAY WITH DECORATIVE FENCING ON THE SOUTH	\$ 300	1100	\$ 400,000
LANDSCAPE/ART	\$ 75.00	LF				
FENCING	\$ 35.00	LF				
DRAINAGE IMPROVEMENTS	\$ 50.00	LF				
PEDESTRIAN RAMPS	\$ 30.00	LF				
MEDIAN CURB	\$ 20.00	LF				
ADDITIONAL CONSTRUCTION COSTS			SEGMENTS - STATE ROUTE 95A	COST/LF	LF/SEGMENT	COST/SEGMENT
MATERIAL	PRICE	UNIT	MAIN STREET TO CEDAR STREET OPTION 1 ALTERNATE B WITH CONCRETE MULTI-USE PATH	\$ 900	1000	\$ 900,000
SOFT COSTS (INCLUDED IN SEGMENT COST)	23%		CEDAR STREET TO SHADOW LANE OPTION 2 ALTERNATE B WITH AC MULTI-USE PATH	\$ 800		\$ 800,000
CONTINGENCY	25%		CEDAR STREET TO SHADOW LANE OPTION 1 ALTERNATE A WITH CONCRETE MULTI-USE PATH AND STAMPED PCC MEDIAN	\$ 1,200	2300	\$ 2,800,000
BUILDING REMOVAL AND/OR REPAIR	\$ 75,000.00	EA	SHADOW LANE TO FARM DISTRICT ROAD OPTION 2 ALTERNATE A WITH AC MULTI-USE PATH AND STAMPED PCC MEDIAN	\$ 1,100		\$ 2,600,000
INTX SIGNAL IMPROVEMENTS	\$ 150,000.00	EA				
LANDSCAPE FEATURE	\$ 50,000.00	LS				
RIGHT OF WAY ACQUISITION COSTS	\$ 15.00	SF				
			MAIN STREET AND STATE ROUTE 95A INTERSECTION			TOTAL
			ALTERNATE 1 IMPROVE EASTBOUND MOVEMENT			\$ 40,000
			ALTERNATE 2 IMPROVE EASTBOUND AND NORTHBOUND MOVEMENT			\$ 400,000
			ALTERNATE 3 REALIGN INTERSECTION TO BE SQUARE - SHIFT EAST STREET ALIGNMENT			\$ 700,000
			ALTERNATE 4 TRANSFORM EAST STREET INTO A ONE-WAY STREET - IMPROVE EASTBOUND AND NORTHBOUND MOVEMENT			\$ 500,000
			ALTERNATE 5 ROUNDABOUT			\$ 1,200,000
			COST SUMMARY			
			SEGMENTS AND INTERSECTION SELECTION - INCLUDES HARDIE LANE TO FARM DISTRICT ROAD	SUBTOTAL	CONTINGENCY	TOTAL
			OPTION 1 WITH ALTERNATE 1 INTERSECTION:	\$ 12,340,000	\$ 3,085,000	\$ 15,425,000
			OPTION 1 WITH ALTERNATE 2 INTERSECTION:	\$ 12,700,000	\$ 3,175,000	\$ 15,875,000
			OPTION 1 WITH ALTERNATE 3 INTERSECTION:	\$ 13,000,000	\$ 3,250,000	\$ 16,250,000
			OPTION 1 WITH ALTERNATE 4 INTERSECTION:	\$ 12,800,000	\$ 3,200,000	\$ 16,000,000
			OPTION 1 WITH ALTERNATE 5 INTERSECTION:	\$ 13,500,000	\$ 3,375,000	\$ 16,875,000
			OPTION 2 WITH ALTERNATE 1 INTERSECTION:	\$ 14,040,000	\$ 3,510,000	\$ 17,550,000
			OPTION 2 WITH ALTERNATE 2 INTERSECTION:	\$ 14,400,000	\$ 3,600,000	\$ 18,000,000
			OPTION 2 WITH ALTERNATE 3 INTERSECTION:	\$ 14,700,000	\$ 3,675,000	\$ 18,375,000
			OPTION 2 WITH ALTERNATE 4 INTERSECTION:	\$ 14,500,000	\$ 3,625,000	\$ 18,125,000
			OPTION 2 WITH ALTERNATE 5 INTERSECTION:	\$ 15,200,000	\$ 3,800,000	\$ 19,000,000

*NOTE: COSTS ARE SHOWN IN 2014 DOLLAR VALUES

Table 3 - Conceptual Phasing Matrix

Program of Project	Short-Term (±1-5 years)	Mid-Term (±5-10 years)	Long-Term (10+ years)
<i>Main Street Improvements</i>			
UPRR to Miller Lane (short term multi use path option)	\$1,600,000		
UPRR to Miller Lane (long term reconstruction option)			\$3,500,000
Miller Lane to Hardie Lane (street lighting and sidewalk enhancements)	\$1,600,000		
Hardie Lane to 7th Street (reconstruct with median and sidewalk)	\$5,100,000		
7th Street to Farm District Road (landscape and fencing)		\$400,000	
<i>US 95 Alternate Improvements</i>			
Main Street to Cedar Street (multiuse path—asphalt vs. concrete path)		\$800,000—\$900,000	
Cedar Street to Shadow Lane (median, multiuse path—asphalt vs. concrete path)		\$2,600,000—\$2,800,000	
<i>Main Street/US 95A Intersection Improvements</i>			
Main Street/US 95A Intersection Improvements (range of prelim. alternatives)		\$40,000—\$1,200,000	

Redevelopment Implementation

Introduction

Transportation and land use are inextricably linked. A strategy to make major transportation and safety investments in a corridor must consider the challenges and opportunities related to the land uses along its length, since it is the transportation framework that creates the opportunity for, as well as constraints to, adjacent land use development. This section of the report addresses strategies for increasing economic development opportunities along the Downtown Fernley corridor so as to leverage the considerable public infrastructure investments that will be made in the roadway.

Drawing on national research and experience in other communities, several best practices are described that can guide the redevelopment of underutilized opportunity sites in the Downtown Corridor.

Corridor Redevelopment Principles

Virtually all American metropolitan areas contain long stretches of commercial corridors. While many downtowns have seen dramatic revitalization over the past two decades, corridor revitalization continues to lag behind. The size and scale of corridors create obstacles not quickly or easily overcome. Commercial corridors represent one of the most pervasive challenges and valuable opportunities for revitalizing American cities. In urban and rural communities, corridors are experiencing rapid declines in property values and market share. Created in a generally laissez-faire environment well suited to the first generation of low-density postwar suburbia, they are no longer

suited to the denser, more complex urban context of metropolitan America.

Characterized by low density, generally deteriorating development, swaths of surface parking, and primarily auto-oriented retail, commercial corridors see relatively little pedestrian activity and have inconsistent intensity, size, and mixes of businesses that results in corridors that change personalities often, sometimes every quarter mile. With patches of leapfrogging investment, inconsistent quality, and economic obsolescence, the aggregate effects of well-performing commercial developments that are geographically close but not physically integrated are becoming untenable. While, for example, a single automobile-oriented shopping center is easily accessible, several lined along the same arterial may not be.

The segment of Main Street and US 95 Alternate within the study area has features that resemble this leapfrog type of land pattern. While it may seem desirable from a property tax and land use position to encourage more commercial development along the entire corridor, an attractive mix of uses, including varying housing densities, may have a greater positive effect on encouraging revitalization within the core downtown node.

Focus Investment and Activity at Nodes

Resulting from the length and patchwork development of corridors, it is challenging to design a revitalization plan that simultaneously addresses the transportation and land use needs and stimulates investment across an entire strip that extends for miles.

As such, it is worthwhile to concentrate public investment and stimulate private growth along strategic nodes of development. Nodes are usually located at key crossroads along a corridor or at significant destinations (for example, City Hall). By concentrating development at nodes, market potential can be concentrated rather than diluted along great distances.

Ideally, nodes should be selected based on a site with existing character, amenities, or established uses. It is most efficient and effective to identify nodes with large, developable parcels in limited ownership in order to avoid complex land assembly and where willing partners can be found. Finally, nodal development is easier when extensive demolition can be avoided.

Over time, as nodes strengthen, the areas along the corridor in between will reap positive impacts as well. The focus of the downtown nodal development concept is to frame the Downtown Core with supportive uses that will further incentivize visitors and ultimately add additional investments in the properties Downtown

Not All Nodes are Created Equal

A corollary to the above principle is that each node may be quite different from the others. Each node may have a unique character, with some being largely commercial, others residential, and others made up of a mix of uses. Similarly, some nodes may be denser than others. This variety is actually beneficial to the corridor as it provides for a range of market-based opportunities depending on the local conditions at each site.

Evolution Will Take Time

The existing condition of Main Street and US 95 Alternate is the result of many decades of development. Change will neither occur overnight nor all at once. Achieving the vision for this corridor will be an incremental process, with some properties being developed in phases over many years, progressively moving closer to the vision. Planning and development should allow for this evolutionary process—permitting interim uses that do not completely meet the future vision, but move forward from the present while preserving future opportunity.

Balance the Automobile with Alternative Modal Opportunities

The reality is that the automobile is currently, and will continue to be, the primary mode of travel in the region. Development strategies along Main Street and US 95 Alternate must provide development opportunities that have adequate vehicular access, visibility, and parking. Through good urban design, the role of alternative modes, such as bicycle and pedestrian traffic can be encouraged and enhanced.

Role of the Public Realm in Catalyzing Development

Given that a corridor is a lengthy ribbon of transportation infrastructure with many different places along its path, the one element that can give consistency to a corridor is in the public realm. The nature of streets—travel lanes, parking, landscaping, street lighting, street furniture, and other features can provide a consistency to the corridor even though the adjacent uses may be ever changing. Since the public realm and

transportation are typically the responsibility of the public sector (City of Fernley and NDOT), transportation investments are where public investments can be targeted to best catalyze desired land use change.

Many of the public investments should be made in concert with adjacent private investments through public-private partnerships where the projects can be coordinated and the public is assured that the infrastructure investment will be met with a commensurate private investment. However, in places where the public infrastructure is particularly deteriorated, often an up-front public commitment to revitalization through infrastructure investments may be needed in order to address some of the barriers to private investment such as visual blight, poor access, lack of lighting, and pedestrian safety. A key value of these public investments is to change the perception of what the Downtown Corridors are in the marketplace. The streetscape is part of the outward brand of the community and a reinvestment in this area can have a positive change on the perception of the area as a place to invest. In struggling real estate markets where new types of uses are proposed, public investments can provide the assurance necessary to attract private investment on adjacent properties. Planned together, public-private partnerships can enhance the value of each and ensure that the resulting whole is greater than the sum of its parts. Based on results seen in downtown revitalization efforts in other communities, this public investment should result in a leverage of at least five to one over time – that is, five dollars of private investment in adjacent and nearby development for every dollar of public investment in infrastructure.

The Opportunity: A Complete Community

The areas located adjacent to the Downtown Core to the East, West and South have significant development opportunities, with the largest areas of contiguous vacant properties. The strategy behind these areas is to provide an attractive mix of uses that will strengthen the attractiveness of private investment into the Downtown Core, by encouraging visitors and residents to spend time there.

As these properties redevelop over time, they can incorporate a range of uses that meet these changing dynamics while also supporting the community's visions for a more vibrant Downtown, greater pedestrian safety and connectivity, and quality public spaces that help create a sense of place.

These uses can include:

A range of housing options: Large tracks of land to the west and south of the Downtown Core provide great opportunities for future housing development. Additional housing in close proximity that is walkable for the residents will strengthen the attractiveness of the Downtown area for restaurants and shopping options. A mix of housing opportunities is most preferable to establish a diverse and more dense population base that can support Downtown Core businesses.

Connected public spaces: To help make the properties pedestrian friendly for their own tenants and users as well as the surrounding community, pedestrian walkways should be an integral component of site redevelopment. Parking

should be efficient and parking areas should be designed to also serve as pedestrian paths where possible. With the addition of new housing, some shared open spaces will also be beneficial in order to create an outdoor amenity for residents.

Connected civic uses: Opportunities, both existing and potential, for linking civic uses with the Downtown Core exist to the east, south and west. To the west, opportunities are being investigated to create a convention center. This type of public use will compliment business (for example restaurants, motels, and shops) in the Downtown. To the east, the existing City Hall complex, in addition to the Black Rock sculpture park provide a strong civic bookend to the Downtown Core area. Finally, to the south, the Fernley Intermediate School complex frames the Downtown Core by providing an attractive opportunity for more (and higher density) housing development south of the Downtown that is walkable for students.

Additionally, it should also be noted that a strategically located connection to the neighborhoods north of the Downtown is also desirable. This connection must take into account the Union Pacific rail line and the need for a crossing at a location that most logically could line up with Silver Lace Boulevard. A crossing at this location could be for vehicles, pedestrians and cyclists. However, due to the restrictive nature of the Union Pacific's crossing criteria, it may be difficult for an at-grade crossing to be approved. This would likely then require a bridge at this location. Due to the short run-up and landing on either side of the railroad to connect the Silver Lace Boulevard to Fremont Street, it is likely that a pedestrian bridge would be the most feasible option at this location.

In all of the above examples of civic uses just outside of the Downtown Core area, providing attractive and safe pedestrian connections provides linkages for residents and visitors alike and encourages further revitalization in the Downtown.