



# Mills Main Street Corridor Study

FINAL REPORT

**DRAFT**

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**N** NELSON  
NYGAARD



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# 1 PROJECT OVERVIEW

## PURPOSE

SW Wyoming Boulevard serves as the primary corridor through the Town of Mills for residents, local business, and regional passthrough travel. Primarily oriented towards vehicular movement, the corridor lacks a cohesive consideration for access and safety of all travel modes and public space that would attract community serving retail and land uses. In recent years there has been documented desire by Mills residents, Town leadership, and the Casper Area MPO to reimagine the design of SW Wyoming Boulevard in a manner that supports economic growth, placemaking, and multimodal access.

The purpose of this study is to provide corridor improvement recommendations and redesign concepts of SW Wyoming Boulevard through the Town of Mills (see Figure 1) with the objectives of enhancing connectivity, safety, placemaking, and economic opportunity.

Figure 1 Project Study Area



## CORRIDOR PLAN HISTORY

This study builds upon previous land use analysis of the portion of Mills along SW Wyoming Boulevard directly abutting the North Platte River and relevant transportation plans that have

been most recently adopted by the Town and the Casper Area Metropolitan Planning Organization (Casper MPO). Provided below is a summary of previous planning work used to formulate the vision and concepts presented in this study.

### **River Front Property Feasibility Study Final Concept Plan (2016)**

The River Front Property Feasibility Study Final Concept Plan is a distillation of multiple concepts, stakeholder outreach, and ideas for the redevelopment of underutilized river front property directly south of SW Wyoming Boulevard. The study proposes a “Downtown Riverfront District” to attract families, the arts, and restaurants through mixed-use development to establish an activated center for the Mills community. Located on the property south of SW Wyoming Boulevard (from Johnson Avenue to First Street on the north bank of the North Platte River), the District would provide a central gathering place for the residents of Mills that can be safely accessed by all modes of transportation and connect with the existing trail system along the North Platte River. The desire for the redevelopment is to create an iconic regional destination that supports new retail and service uses while improving quality of life by providing high-caliber public space and increasing access to Mills’ prime natural asset.

Identified shared values and desires for the site are summarized below:

- Embrace the history of the site location and the Town of Mills to mold the identity of the site and ensure a sense of place.
- Attract commercial mixed-use development to allow a center to be made rather than a single destination.
- Public space should be the center of the commercial development and the heart of the green space.
- Parking can fill the sides of the commercial development and not create a barrier to pedestrians and bicycles by still leaving a riverside corridor.
- Provide visual and real connections to the adjacent river and open park-like land to the south of SW Wyoming Boulevard.
- Maximize access by providing safe pedestrian ingress/egress and easy connectivity with the regional trail system.
- Consider the site in the context of the revitalization of the wider Mills downtown area.
- Attract a year-round dining anchor tenant(s) at competitive price points that are supportive of smaller secondary retail.

Regarding multimodal transportation, the Plan proposes the concept of continuing the existing Platte River Pkwy trail west via an underpass under SW Wyoming Boulevard to provide a seamless non-motorized path of travel from the City of Casper to the site. Pedestrian crosswalks along SW Wyoming Boulevard are also recommended at First, Second, Third, and Fourth Streets.

Figure 2 Riverfront Conceptual Site Plan



Source: Mills River Front Concept Development (2016)

### Town of Mills Transportation Plan (2017)

The Town of Mills Transportation Plan serves as a guide to ensure that existing and anticipated future needs are met, transportation infrastructure is properly planned for, and funding can be identified prior to needs emerging. Based on input received the Plan establishes the following Transportation Vision:

“Mills will have planned, multi-modal transportation infrastructure and policies to improve mobility, connectivity and access for all people. Adequate funding mechanisms will be sought to implement planned projects as needs emerge. The infrastructure will enhance the quality of life in the community, improve economic vitality and promote improved safety.”

The following are recommended project actions from the Plan, which are furthered by the concepts presented in this study:

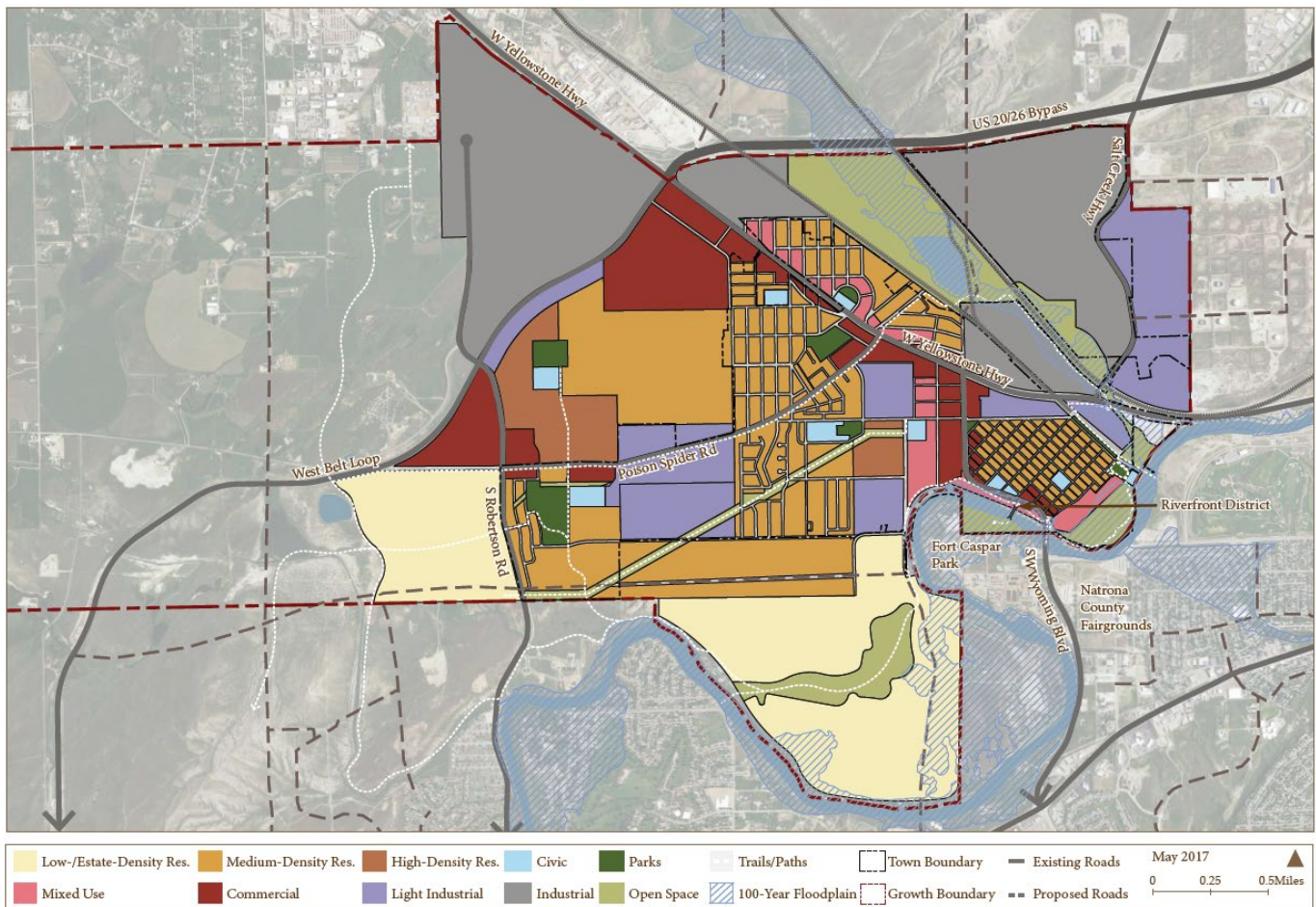
- Study opportunities to provide access across SW Wyoming Blvd to Town Hall area
- Evaluate opportunities for access to North Platte River in new Downtown area
- Expand regional pedestrian and bicycle network, including the WAPA (Western Area Power Administration) Powerline Trail
- Provide Recreational opportunities
- Provide connectivity of existing sidewalks/paths

- Prioritize sidewalk/path needs
- Adopt Complete Streets typical cross sections

### Mills Comprehensive Plan (2017)

*Uniquely Mills*, the Comprehensive Plan adopted in 2017, establishes a vision, goals, and desired future character to guide the growth and development of Mills over the next 10 years. This policy document gives broad direction to future infrastructure improvement, community amenities, and private development while providing for the health, safety, and welfare of the Town. The plan specifically integrates and builds on the conceptual designs of the *Riverfront Feasibility Study* by expanding the Downtown Riverfront District node across SW Wyoming Boulevard, identifying a Downtown Core of commercial and mixed-use to improve safety and enhance the sense of place.

Figure 3 Future Land Use (*Uniquely Mills*, 2017)



Key vision and goal statements from *Uniquely Mills* are summarized below:

**Creating a Self-Sufficient Community** - Develop a full-service community through embracing and supporting key industries, attracting entrepreneurs, and creating partnerships to supply daily needs and services.

- Expand the commercial center at West Yellowstone Highway and SW Wyoming Boulevard.

- Capitalize on the proximity to the airport by expanding commercial areas with hotels and restaurants.

**Cultivating a Community Heart** – Pioneer a distinct community identity and sense of community pride and enhance quality of life by investing in Downtown.

- Develop a Downtown Riverfront District with a riverfront park and trails to attract families, the arts, and restaurants to create the heart of the community.
- Create a plaza-like festival space that includes a band shell, usable greenway, and splash pad, among other amenities.
- Organize community events Downtown such as movies, bands, and farmers’ markets.
- Develop a unique downtown destination for residents and visitors to gather and celebrate the community.

**Revitalizing Connected Corridors** - Improve the look and feel of our corridors and gateways to promote a small-town feel, attract visitors, and balance the movement of goods and services with the safety of pedestrians and people riding bicycles.

- Enhance pedestrian connections and safety crossings. North Platte River Bridge
  - Across SW Wyoming Boulevard
  - Along the North Platte River
  - At major intersections within the SW Wyoming Boulevard Corridor.
- Promote a balance of traffic flow, beautification, and safety along SW Wyoming Boulevard.
- Improve the aesthetics of corridors to represent a small-town feel. Include design guidelines to improve the look and feel of the corridors.
- Investigate the possibility of limiting truck traffic on SW Wyoming Boulevard through coordination with WYDOT and utilization of the West Belt Loop.

### **Casper Area Long Range Transportation Plan (2020)**

*Connecting Crossroads*, the Casper Area’s Long Range Transportation Plan adopted in February 2020, identifies transportation project, program, and policy priorities for the Casper Area MPO region, which includes the Town of Mills, through the year 2048 based on robust community engagement, a needs and growth assessment, and available financial resources. The Plan, which is a federal requirement for urbanized areas with populations over 50,000, establishes a prioritized list of recommended transportation investments for the region. The Plan identifies complete street improvements that improve access and safety for all modes along the Mills Main Street Corridor (SW Wyoming Boulevard from US 20/26 to 1<sup>st</sup> Street) as a near-term priority (2020-2026) recommending an allocation of around \$2.3m in LRTP eligible funds to the potential future project. LRTP funds come from a variety of sources, a majority of which come from Federal (FHWA) and State (STIP) allocations. Other potential projects identified as near-term priorities that would have synergy with a Main Street Mills project would be the eastward extension of a multi-use pathway on 13<sup>th</sup> Street directly south of Mills and the construction of sidewalks and pedestrian scale lighting along US 20/26 where facilities end near the intersection with SW Wyoming Boulevard and N. 6<sup>th</sup> Avenue to the west.



## 2 EXISTING CONDITIONS

### LAND USE CONTEXT

SW Wyoming Boulevard is an arterial connector providing access to both neighboring communities and to highways within the greater region and beyond. A variety of uses exist along the corridor from civic (Post Office, Town Hall, and library) to neighborhood retail (a sandwich shop and gas station) to heavy industrial (concrete plant). The northern extent of the corridor connects to Highway 20/26 (West Yellowstone Highway) and consists of primarily auto-oriented development. The southern/eastern extent of the corridor follows the North Platte River to the south and historic Lower Mills to the north. Lower Mills, developed in the 1920s, is comprised of small lots and a gridded street network. Small pocket parks along the corridor include Memorial Park, located at 9<sup>th</sup> Street, and the Wishing Well/Eagle Statue Park at 1<sup>st</sup> Street.

Residents primarily obtain goods and services from the greater Casper area. The adjacency to this larger economic hub results in these goods and services not being provided within the Town of Mills; rather the economic generator for the community is in the production and supply of industrial goods and services. However, there is a strong desire by the residents of Mills and Town leadership to provide greater commercial and public space destinations.

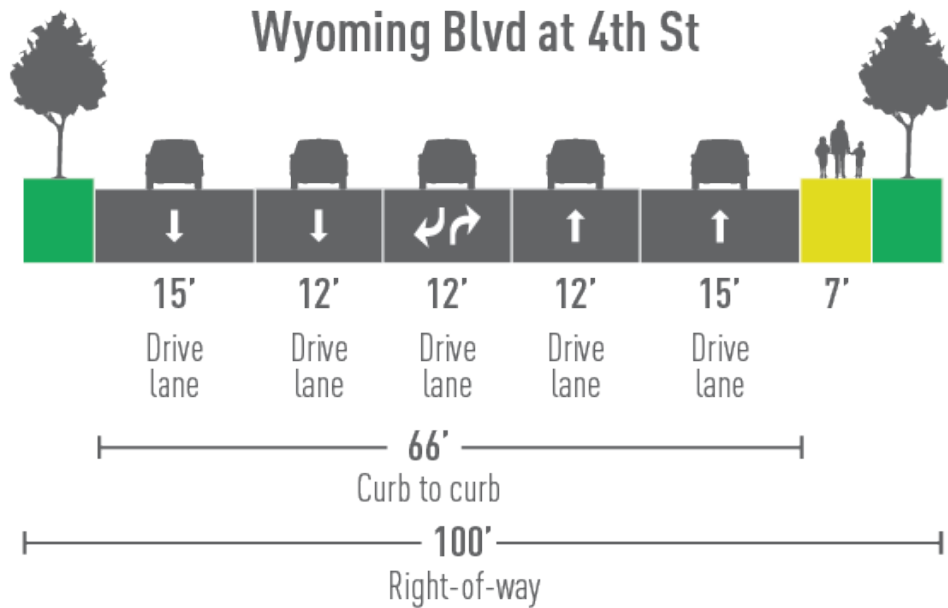
### MULTIMODAL NETWORK

At the onset of the corridor study effort, a detailed evaluation of the existing right-of-way, multimodal facilities, major connections, and street conditions were logged. The findings of the corridor's existing conditions analysis are found below, separated by mode.

### Right-of-Way and Vehicular Facilities

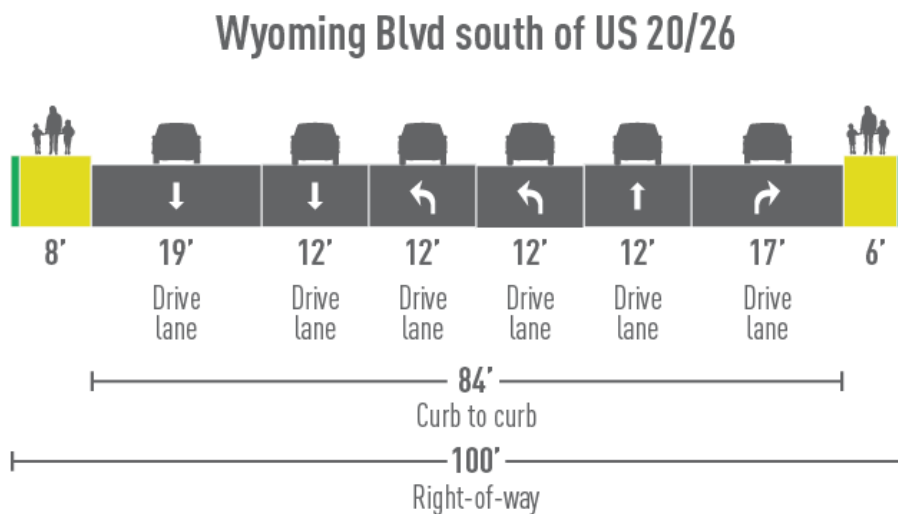
SW Wyoming Boulevard runs from US 20/26 (Yellowstone Hwy) south into the City of Casper. This study analyzes SW Wyoming Boulevard from US 20/26 to W. 13<sup>th</sup> Street. The road is classified as a principal arterial and is posted as 30-mph along the corridor. From 1<sup>st</sup> Street to Pendell Boulevard, the road is approximately 66 feet curb to curb with a 7' sidewalk on the north/east side of the road. There are five travel lanes: two lanes in each direction with a center two-way-left-turn lane. The right of way along the corridor varies from approximately 100' to 120'. Figure 4 shows a sample cross section along SW Wyoming Boulevard at 4<sup>th</sup> Street.

Figure 4 SW Wyoming Boulevard cross section at 4th Street



From Pendell Boulevard to US 20/26 the road widens from 66' to 84' curb to curb. This segment widens from the five-lane cross section at Pendell to a six-lane approach at US 20/26 to accommodate two left-turn lanes, one through lane, and a right turn lane. Figure 5 shows a sample cross section along Wyoming Boulevard south of US 20/26.

Figure 5 Wyoming Blvd cross section south of US 20/26



There are three signals along the corridor, all of which are actuated:

- SW Wyoming Boulevard and US 20/26
- SW Wyoming Boulevard and Pendell Blvd
- SW Wyoming Boulevard and W. 13<sup>th</sup> Street

All other intersections in the study area are side street stop controlled.

## **Bicycle and Pedestrian Facilities**

Currently, Mills connects to the regional trail network, which spans 45 miles across the Casper area. Within the existing town limits, there are 4.5 miles of pathways connecting to the Platte River Parkway, albeit not along the corridor. The Platte River Parkway is 11 miles long and connects to several other trails in the region<sup>1</sup>. The trail meets SW Wyoming Boulevard at 1<sup>st</sup> Street and runs on the sidewalk along SW Wyoming Boulevard on the east side of the bridge spanning the Platte River before splitting into two trails, one to the east and one to the south at W 13<sup>th</sup> Street. This trail junction avoids a road crossing via the Fort Caspar underpass, completed in 2015<sup>2</sup>. This separated junction makes the trail safer and more comfortable for trail users of all ages and abilities.

The Platte River Trails Trust supports the Platter River Trails. Further from this project's study area, the Trust is currently working to extend the trail in two phases: from SW Wyoming Boulevard south to Garden Creek Road and then from Garden Creek Road to Rotary Park.

Figure 6 shows the existing and proposed trail network within the vicinity of the SW Wyoming Boulevard study area.

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<sup>1</sup> <https://www.platterivertrails.com/>

<sup>2</sup> [https://trib.com/outdoors/case-to-stay-fit-try-the-trails/article\\_6b0aa85f-556f-5038-a0fb-a26f3ac64e31.html](https://trib.com/outdoors/case-to-stay-fit-try-the-trails/article_6b0aa85f-556f-5038-a0fb-a26f3ac64e31.html)

Figure 6 Existing and Proposed Trail Network

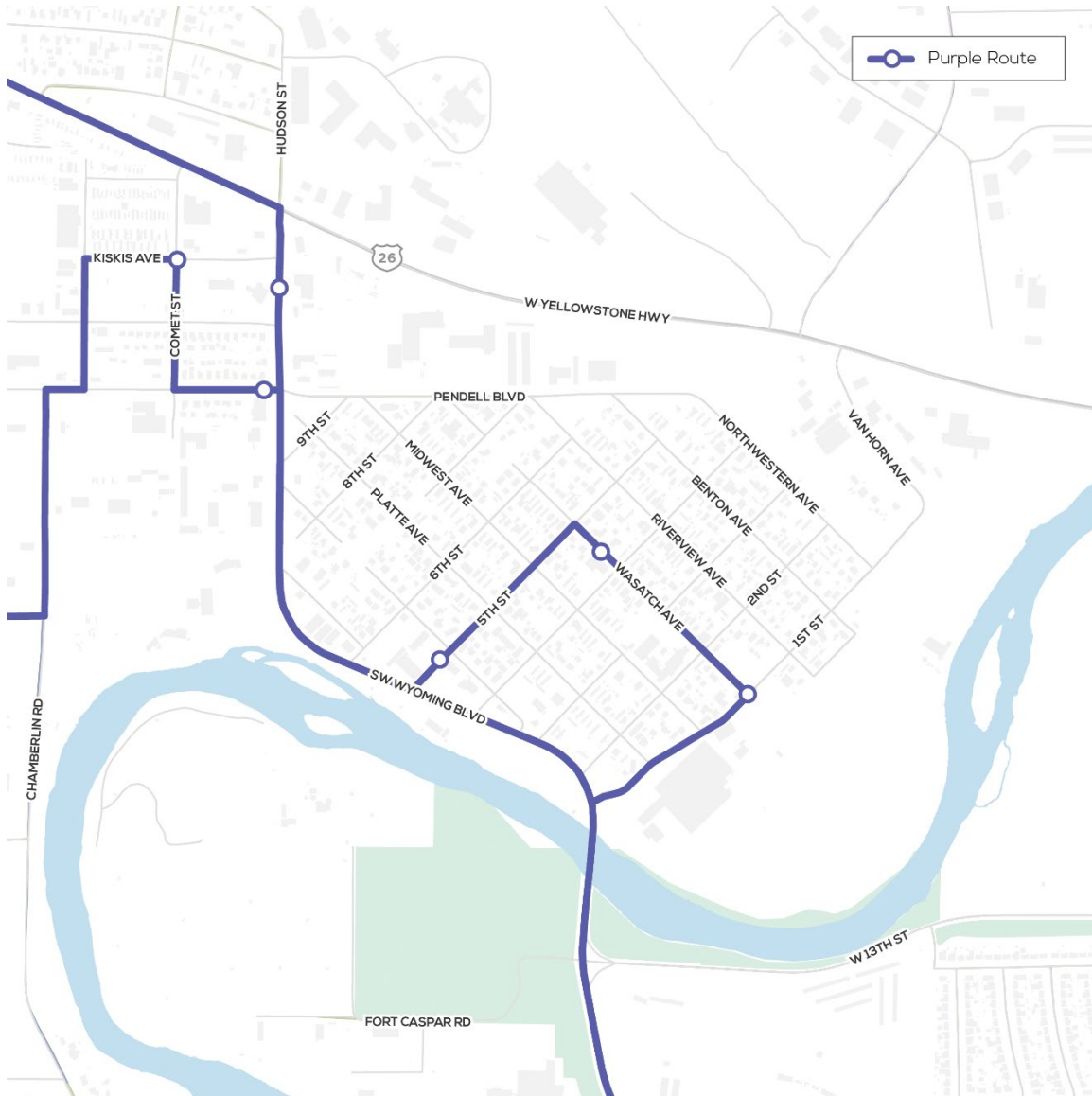


From Pendell Boulevard to US 20/26, the corridor has 5' to 7' sidewalks on both sides of the road. From 1<sup>st</sup> Street to Pendell Boulevard, the corridor has a 6.5' sidewalk on only the north/east side of the road. The only marked crosswalks across SW Wyoming Boulevard are located at the intersections of SW Wyoming Boulevard and Pendell Boulevard and SW Wyoming Boulevard and US 20/26. Along streets that intersect SW Wyoming Boulevard, sidewalks are discontinuous and vary by parcels. Sidewalks along 1<sup>st</sup> Street are not continuous between SW Wyoming Boulevard and US 20/26. Along the north side of Pendell Boulevard there are 4' wide sidewalks from SW Wyoming Boulevard to 1<sup>st</sup> Street and the Platte River Pkwy in the east and to S. 4<sup>th</sup> Avenue in the west.

## Transit Facilities

The Casper Area Transportation Coalition's (CATC) The Bus has six fixed route services through the region. The CATC Purple Route from Walmart West to Mills runs along SW Wyoming Boulevard. The route runs hourly from 7 AM to 6 PM Monday through Friday, excluding major holidays. There is one stop along the study corridor at 305 SW Wyoming Boulevard, with three additional stops north of Wyoming and one just west on Pendell Boulevard (see Figure 7).

Figure 7 Transit Network



## TRAFFIC ANALYSIS

A high-level examination of vehicular traffic operations was conducted as part of the existing conditions phase of the corridor planning effort. The purpose of the traffic analysis was to perform sensitivity testing on a variety of street reconfigurations and evaluate general intersection operations at signalized intersections along the corridor. The results of the analysis informed alternatives development and ensured non-starter street configurations were not selected for further evaluation and presentation to stakeholders during community outreach.

### Daily Capacity

Average daily traffic (ADT) data obtained in 2019 from WYDOT along the segment varies from 10,000 vehicles per day (vpd) to 15,000 vpd. The highest volume, 14,300 vpd, was observed between W. 13<sup>th</sup> Street and 1<sup>st</sup> Street. The volume at the intersection of 1<sup>st</sup> Street and SW Wyoming Boulevard splits, with approximately 2,600 vpd along 1<sup>st</sup> Street and 12,500 along SW Wyoming Boulevard. This split shows vehicles using 1<sup>st</sup> Street as a cut through to US 20/26 which was confirmed by field observations and Town staff.

Roadway level of service (LOS) can be calculated for road segments based on the HCM 2010 Generalized Daily Service Volumes for Urban Street Facilities. This approach provides a high level of understanding of congestion and roadway capacity across multiple segments, in addition to the more detailed intersection analysis. This method assumes LOS C as the best possible score. Definitions of LOS C through F for roadway segments based on total number of lanes are summarized below in Figure 8. Note the number of lanes assumes there are added turn pockets at intersections.

Figure 8 Level of Service Definitions for Roadway Segments

Level of Service	Average Daily Traffic		
	2-Lane Road	4-Lane Road	6-Lane Road
C	0-5,900	0-11,300	0-16,300
D	5,901-15,400	11,301-31,400	16,300-46,400
E	15,401-19,900	31,401-37,900	46,401-54,300
F	>19,900	>37,900	>54,300

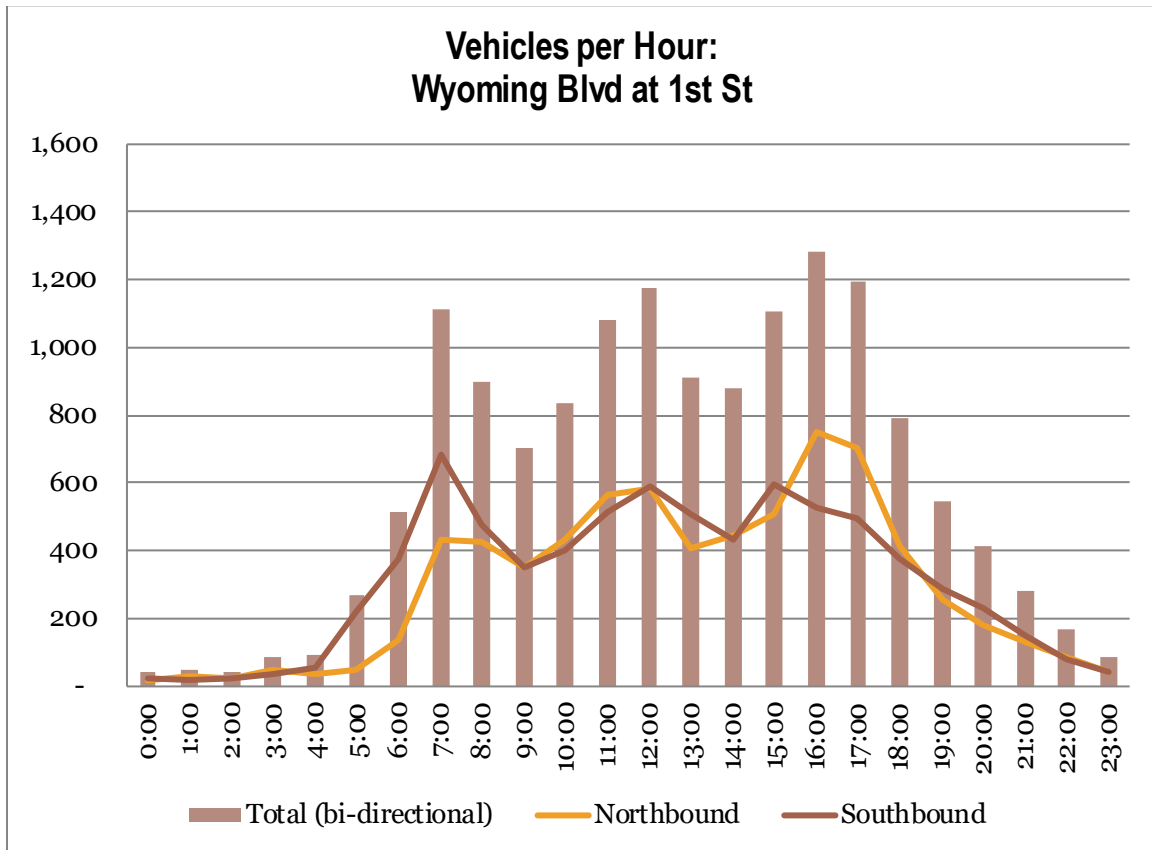
WYDOT considers LOS A through C acceptable for congestion conditions and LOS D for National Highway System (NHS) arterial in rural and urban areas. SW Wyoming Boulevard is classified as an NHS arterial in an urbanized area. Under this classification, LOS D or 31,400 vpd would be considered acceptable traffic flow conditions along SW Wyoming Boulevard, which would be classified as a 4-lane road. The maximum existing volume along SW Wyoming Boulevard is 14,300 vehicles per day, therefore the corridor would **operate at an acceptable level of service as a 2-lane roadway (LOS D)** per WYDOT standards.

### Lane Capacity

Traffic counts from 2019 at SW Wyoming Boulevard and 1<sup>st</sup> Street show peak AM traffic volumes between 7:00 and 8:00 AM and peak PM traffic volumes between 4:00 and 5:00 PM. Research

from Messer and Fambro<sup>3</sup> shows a standard 2-phase signal operating at a LOS C allows approximately 1,200 vehicles per lane per hour. Assuming the signals along SW Wyoming Boulevard are all two-phase, this yields a 2,400 vehicle per hour capacity for each direction of Wyoming Boulevard (two-lane), far higher than the 800 vehicles per hour maximum counted in any single direction in 2019. Based on this analysis method and accounting for conservative capacity reduction assumptions at the signals due to additional phasing, **the corridor would still have excess capacity at all hours of the day.**

Figure 9 Graph of vehicles per hour at Wyoming Blvd and 1st St



## TRAVEL TIME STUDY

A travel time study was conducted on November 5, 2019 for the project limits from US 20/26 to W. 13<sup>th</sup> Street. Travel time runs were conducted for morning, afternoon, and midday peak hours for northbound and southbound directions.

## Travel Time Findings

In the northbound direction, the longest travel time recorded, 200 seconds (approximately 3.3 minutes), was in the PM peak beginning at 5:43 PM. In the southbound direction the longest

<sup>3</sup> <http://onlinepubs.trb.org/Onlinepubs/trr/1977/644/644-005.pdf>

travel time recorded, 179 seconds (approximately 3.0 minutes), was in the PM peak beginning at 5:23 PM. **Error! Reference source not found.** and

below average delay at signalized intersections as well as the average travel time in minutes by direction for each time period studied.

**Figure 10 Northbound Travel Time Study Summary**

Northbound Delay/Travel Time	Time Period		
Location	AM Peak	Mid-Day	PM Peak
13th St Average Delay (s)	7	4	3
Pendell Blvd Average Delay (s)	2	3	2
US 20/26 Byp. Average Delay (s)	29	21	47
<b>Average Corridor Average Travel Time (min)</b>	<b>2.6</b>	<b>2.5</b>	<b>2.9</b>

**Figure 11 Southbound Travel Time Study Summary**

Southbound Delay/Travel Time	Time Period		
Location	AM Peak	Mid-Day	PM Peak
US 20/26 Byp. Average Delay (s)	3	3	5
Pendell Blvd Average Delay (s)	5	2	2
13th St Average Delay (s)	1	1	9
<b>Average Corridor Average Travel Time (min)</b>	<b>2.2</b>	<b>2.1</b>	<b>2.3</b>

As seen from the average travel times in the tables above, vehicles moving along the entire study corridor does not see much variance in travel time between time of day, particularly in the southbound direction. Observations showed that travel times were governed by the posted speed limit, which most vehicles adhered to. Consistent speed of most vehicles along the corridor contributed to the low variance in travel times within each peak period observed, as well as between time periods.

## Signal Delay Evaluation

Overall, the signals operate efficiently with minimal delay during most times of day. Detailed notes on signal evaluation are found below:

### Wyoming Blvd and W 13<sup>th</sup> St

During all time periods, the signal at SW Wyoming Boulevard and W. 13th Street has a measured average vehicle delay of **less than 10 seconds** for through movements along SW Wyoming Boulevard in both the northbound and southbound directions, suggesting the SW Wyoming Boulevard approaches operate at a **LOSA**. During arrivals where there were not conflicting phase calls, the test vehicle's presence triggered the signal to turn to the SW Wyoming Boulevard phase, resulting in zero delay.



### Wyoming Blvd and Pendell Blvd

During all time periods, the signal at SW Wyoming Boulevard and Pendell Boulevard has a measured average vehicle delay of **less than 10 seconds** in both the northbound and southbound directions, suggesting the SW Wyoming Boulevard approaches operate at a **LOS A**.

The efficient movement of traffic along SW Wyoming Boulevard at W. 13<sup>th</sup> Street and Pendell Boulevard leads to believe the signals are actuated and timed for optimal flow along SW Wyoming Boulevard. Additionally, these signals both have the capacity to accommodate higher volumes along SW Wyoming Boulevard before approaching unstable flow.

### Wyoming Blvd and US 20/26

During all time periods in the southbound direction, the signal at SW Wyoming Boulevard and US 20/26 has a measured average vehicle delay of **less than 10 seconds for vehicles turning right** from US 20/26 to SW Wyoming Boulevard. During the AM and midday peak in the northbound direction, the signal at SW Wyoming Boulevard and US 20/26 has a measured average vehicle delay of **20 – 30 seconds for vehicles turning left** from SW Wyoming Boulevard to US 20/26, which suggests LOS C or a stable flow. However, in the PM peak, the average vehicle delay for left turning vehicles from Wyoming have an average vehicle delay of **47.1 seconds, suggesting a LOS D for the left turn movement**.

The delay for the left turn movement at SW Wyoming Boulevard and US 20/26 is due to the higher volumes along US 20/26 and the resulting signal priority for through movements along US 20/26, and it would be reasonable to assume that this intersection operates at an acceptable level of service.

## Limitations

Since the travel time study only collected data for two approaches of the intersections and for one particular ‘routing’ in each direction, detailed intersection level of service (LOS) cannot be determined. In addition, the quantification of ‘delay’ according to manual travel time observations would not be exact to the methods of delay calculation methods in the Highway Capacity Manual. However, this data provides a general overview of major approach operations on Wyoming Boulevard.

## ISSUES & OPPORTUNITIES

Presented below are issues and opportunities synthesized from a thorough review of existing conditions and field visits that were utilized in the development of corridor alternatives.

### Issues

- The alignment of streets intersecting SW Wyoming Boulevard are skewed through the town center.
- Pedestrian crossing opportunities are limited with few protective treatments.
- Cut-through traffic on 1<sup>st</sup> Street creates left and right turning movements onto SW Wyoming Boulevard that result in some motorists jutting out onto the roadway for visibility.
- Wide turning radii allows for higher vehicle speeds at points of potential pedestrian conflict.

- Large transmission lines on the northern extent of the corridor detract visually.
- The West Belt Loop has reduced movements of heavy trucks and oversized vehicles; however, the roadway still needs to accommodate these movements to support local business.

## Opportunities

- The wide existing right-of-way allows ample opportunity for reconfiguration of the roadway, multimodal improvements, and landscaping elements.
- Travel time on the corridor is largely dictated by the posted speed limits and the perception of strict enforcement, not traffic congestion.
- The existing street grid provides the right “bones” for a walkable downtown.
- Unique natural features and viewsheds are present along the corridor.
- Existing trail facilities that could be connected to are of high quality.
- The corridor and adjacent town center are served by existing transit.
- Form-based code, similar to Casper’s Old Yellowstone District Study, could be leveraged to encourage desirable land uses on redevelopment sites.
- A pedestrian bridge at the river front redevelopment site could provide a safer and cheaper multimodal option than widening the existing bridge while enhancing the destination by providing a linkage to Fort Caspar and Centennial Park.

# 3 ENGAGEMENT

## SURVEY SUMMARY

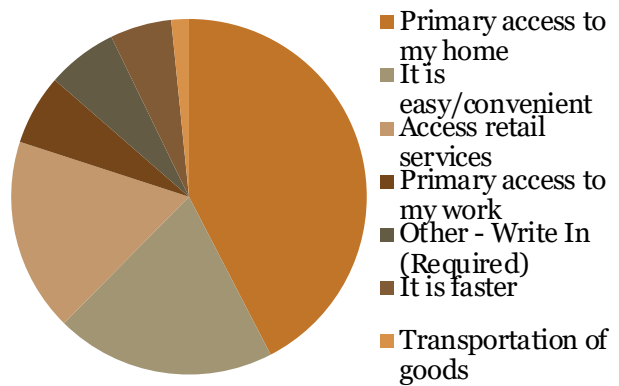
During the early stages of concept development, the public’s input was sought via a questionnaire. The purpose of the questionnaire was to understand the community’s preferences and needs for the future management and improvement of the corridor. The questionnaire was distributed via the Town’s newsletter in paper copy and online through the Town’s website, as well as the Town’s and MPO’s social media platforms. A total of 142 questionnaires were collected between March 9 and March 27, 2020. The following presents the survey results and number of responses for each question.

### Corridor Purpose

To understand who uses the Main Street corridor, the questionnaire asked for the participants’ main purpose in using the corridor. Only one answer per respondent was allowed to focus on the key uses of the corridor. The corridor is primarily used by residents and for its ease and convenience. Other responses included access to the Post Office or access to Highway 20/26.

Figure 12 Primary Purpose for Using SW Wyoming Boulevard

Primary Purpose	Percent (n=125)
Primary access to my home	42.4%
It is easy/convenient	20.0%
Access retail services	17.6%
Primary access to my work	6.4%
Other	6.4%
It is faster	5.6%
Transportation of goods	1.6%

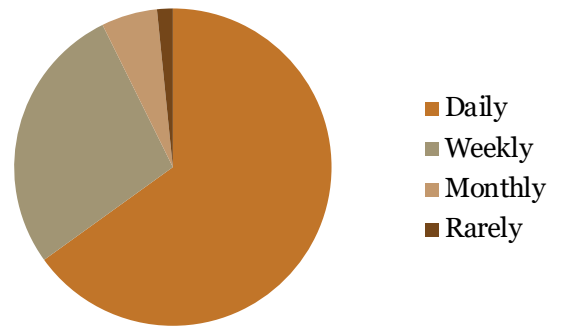


### Corridor Frequency of Use

To understand the frequency of the Main Street corridor per user, the questionnaire asked how often each respondent uses the corridor. For the majority of participants, the corridor is used on a daily or weekly basis.

Figure 13 Frequency of Using SW Wyoming Boulevard

Frequency of Use	Percent (n=125)
Daily	65.0%
Weekly	27.6%
Monthly	5.7%
Rarely	1.6%



### Transportation Mode Performance

The Mills Main Street Corridor is envisioned to provide movement for multiple modes of travel, while catalyzing economic development. Therefore, the questionnaire asked about the existing ease of travel along the corridor as well as its function and form. Ease of driving along the corridor ranked the highest of all modes. The majority of respondents' rated conditions for walking and biking either average or bad. Additionally, many respondents provided "No Opinion" to these options indicating that they are not commonly used for walking and biking and may not be inviting to these modes. The level of congestion and street maintenance is perceived as average, while the aesthetics of the corridor could be improved upon.

Figure 14 Perceived Corridor Conditions

Mode	Very Good %	Good %	Average %	Bad %	Very Bad %	No Opinion %
<b>Ease of driving (n=124)</b>	31.50%	42.70%	22.60%	2.40%	0.00%	0.80%
<b>Ease of walking (n=121)</b>	4.10%	15.70%	22.30%	27.30%	14.90%	15.70%
<b>Ease of traveling by bicycle (n=122)</b>	4.10%	13.10%	21.30%	25.40%	16.40%	19.70%
<b>Level of traffic congestion (n=123)</b>	8.90%	33.30%	48.00%	7.30%	0.80%	1.60%
<b>Street maintenance (n=124)</b>	4.80%	29.80%	46.80%	11.30%	5.60%	1.60%
<b>Aesthetics (n=122)</b>	3.30%	12.30%	27.00%	32.80%	13.10%	11.50%

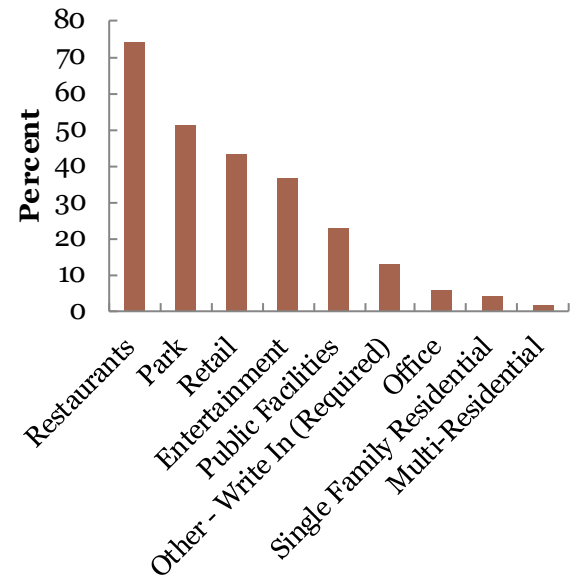
### Adjacent Land Uses

The corridor is not only a street that provides a link between places but a destination in of itself. Previously completed studies in the area have looked at the potential for entertainment and public amenities to be developed on a Town owned parcel along the corridor. The questionnaire further inquired which types of uses should be attracted to and planned for adjacent to the

corridor. Participants were able to select their top three answers; therefore, the percentages do not total. The community expressed that the corridor should include restaurants, a park, and other retail and entertainment type uses. Specific types of retail, as mentioned in the “Other” comments, included a grocery store and sit-down restaurants with outdoor seating. Others desired to include access for fishing/floating and restrooms at a park adjacent to the river. Still others wished to leave it like it is or let the private sector drive the demand.

Figure 15 Desired Future Land Uses

Adjacent Land Use	Percent (n=123)
Restaurants	74.0%
Park	51.2%
Retail	43.1%
Entertainment	36.6%
Public Facilities	22.8%
Other	13.0%
Office	5.7%
Single Family Residential	4.1%
Multi-Residential	1.6%

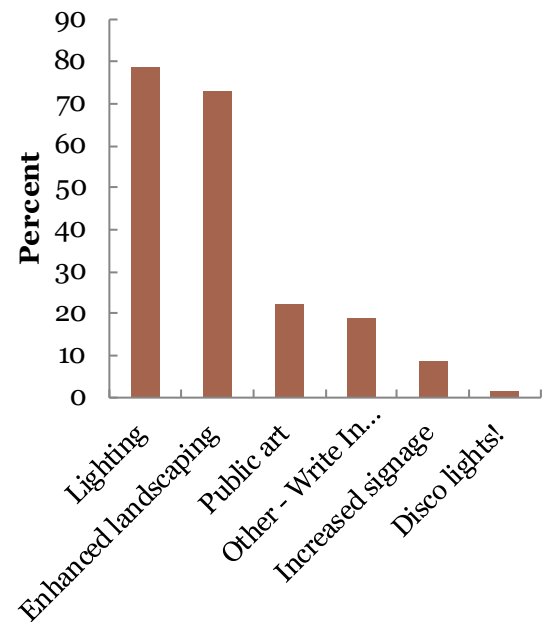


### Corridor Design

Given the goal of improving the Main Street as a key commercial node, the questionnaire asked how the community wished to see the corridor improved. Lighting and enhanced landscaping was seen as key to improving the corridor, especially to enhance the Eagle statue. Others suggested adding traffic lights, clean sidewalks, improving the facades of businesses, and enhancing the river access.

Figure 16 Desired Urban Design Improvements

Design Feature	Percent (n=126)
Lighting	78.6%
Enhanced landscaping	73.0%
Public art	22.2%
Other	19.0%
Increased signage	8.7%
Disco lights!	1.6%



### **Pedestrian and Bicycle Amenities**

The questionnaire also sought to understand what types of pedestrian/bicycle amenities the community desires, with an emphasis on what would improve the feeling of safety along the corridor. The online questionnaire provided a representative photo of each of the choices. Crosswalks, separated sidewalks, and bicycle lanes were most desired by respondents. The majority of “other” comments stated that the corridor should not or does not need to be improved with any of these types of amenities.

**Figure 17 Desired Multimodal Improvements**

<b>Pedestrian and Bicycle Amenities</b>	<b>Percent (n=118)</b>
A. Pedestrian activated crosswalks	53.4%
G. Separated sidewalks	49.2%
H. Bicycle lanes	45.8%
I. Pedestrian underpass crossing	24.6%
E. Pedestrian overpasses	23.7%
F. Pedestrian refuge islands	16.9%
D. Midblock crosswalks	16.1%
Other	11.0%
B. Raised crosswalks	9.3%
C. Pedestrian bulbouts	2.5%

### **Connection to Mills Main Street Corridor**

Questionnaire respondents were also asked to respond to key demographic questions to track general response rates comparing their connection to the corridor, residency, worklocation, and age. Respondents were primarily residents of Mills (80%) followed by the City of Casper (14%). Of Mills residents, almost half (44%) have lived in the town for more than twenty years. Thirty-seven percent of respondents indicated that their place of work is in Casper, with 19% working in Mills. In addition, respondents were asked to indicate their primary connections to the Corridor, of which two-thirds indicated using it for commuting, 40% users of the river trail, and 30% living adjacent to the corridor.

### **Additional Feedback**

Survey respondents were able to provide further comments on the Main Street Corridor in an open-ended response. The responses are summarized below:

- Attract commercial business to increase revenues, primarily a grocery store, restaurants, or coffee shops.
- Improve walkability to commercial areas from local neighborhoods.
- Improve street and sidewalk maintenance, including accessibility for strollers and people with limited abilities.

- Construct the Riverfront Park area with river access, including parking, bike paths, a boat ramp and fishing wharfs.
- There were mixed responses on whether to increase or decrease the speed, but respondents commonly did not want improvements to impede the ease of vehicle travel through the corridor.
- Enhance lighting along the corridor, specifically along bike paths and at the eagle. Lighting should be low-level.
- Add landscaping to beautify the corridor with plants, greenery, and flowers.
- Spend funds on existing infrastructure and do not add new amenities.

## STAKEHOLDER INTERVIEWS

A stakeholder Coffee Talk Session was held at the Mills Town Hall on August 12, 2020. The invited stakeholders included property and business owners along the corridor, developers and realtors, and other interested parties. The Session had nine attendees. Additional follow up conversations were facilitated with interested stakeholders that could not attend the Coffee Talk. Key comments highlighted a desire for corridor improvements to not impede traffic movement, especially for larger trucks; the need for additional information on access control and locations of medians (i.e. egress/ingress to the Post Office); and support for amenities such as landscaping and pedestrian pathways. The group suggested a modern industrial feel with some historic elements would be the best design for the corridor – adding that local Mills businesses could manufacture, and possibly donate their goods to, the corridor improvements.

## DISCUSSIONS WITH WYDOT

A stakeholder meeting with the Wyoming Department of Transportation (WYDOT) was held in July 2020 to review and discuss the Study. The goal of the meeting was to inform WYDOT of findings from the existing conditions analysis, present the three alternatives under consideration, and solicit feedback from WYDOT staff on alternatives and detailed design elements. Since SW Wyoming Boulevard is under State DOT jurisdiction, WYDOT buy-in for the preferred alternative is important in order for a smooth transition to future planning and design phases. The following design preferences and concerns were received from the meeting:

### Design Preferences

- 5-lane street configuration for maintenance and snow removal
- Acceptable to narrow lanes, but prefer keeping lanes at 11 ft or greater width
- Optimal design for medians depends on access density
- Medians are not favorable at horizontal roadway curves, such as near 1<sup>st</sup> Street and the bridge across the North Platte River
- No unsignalized crossings on the corridor, however a Rectangular Rapid Flash Beacon (RRFB) or Pedestrian Hybrid Beacon (PHB) would be acceptable if a full signalized intersection is not warranted at first but planned in the future
- In favor of closing access points and/or minor cross streets
- Right in/right out access points are preferred if medians are constructed
- Protected off-street bike facilities are always preferred over on-street striped bike lanes

## Concerns

- Low raised medians get lost in snow and high raised medians cause drift issues
- Need to accommodate current traffic volumes while considering future traffic growth
- Concern for operational concerns of a three-lane roadway alternative when construction occurs
- Trees and landscaping on medians are a concern due to maintenance and sight lines
- WYDOT would be more amendable to fully landscaped medians if the Town is willing to take over maintenance liability
- Local manufacturing companies use the corridor to transport large dump bodies as oversized loads
- Discussion of the potential to install a trail at the North Platte River bridge underpass was a non-starter due to low clearance concerns and cost to mitigate

## ALTERNATIVES OUTREACH

As part of the alternatives development process, the project team reached out to key stakeholders and the public. Participants were able to review and comment on the initial alternatives prior to the development of a preferred plan. The meetings consisted of an overview of the community-wide survey and traffic study completed at the beginning of the process, a summary of the infrastructure improvements and differences across the alternatives, and a summary of potential design palettes for the corridor.

## SUMMER FEST POP-UP

The Mills Annual Summer Fest, while delayed in 2020, was held on August 22 with much of the same fanfare and activities. Approximately 2,000 people attended throughout the day. Participants were invited to review poster board materials and take a short questionnaire via their phone or paper copy. A total of 30 responses were collected. When asked about specific amenities and improvements, pedestrian and bicycle paths garnered the most support, followed by new adjacent land uses. A natural look and feel to the corridor rated the highest followed by historic/traditional designs. Conversations throughout the event generally supported Alternative 3 as the preferred concept plan.



Figure 18 Main Street Engagement – Summer Fest 2020



## 4 ALTERNATIVES DEVELOPMENT

### DESIGN PROCESS

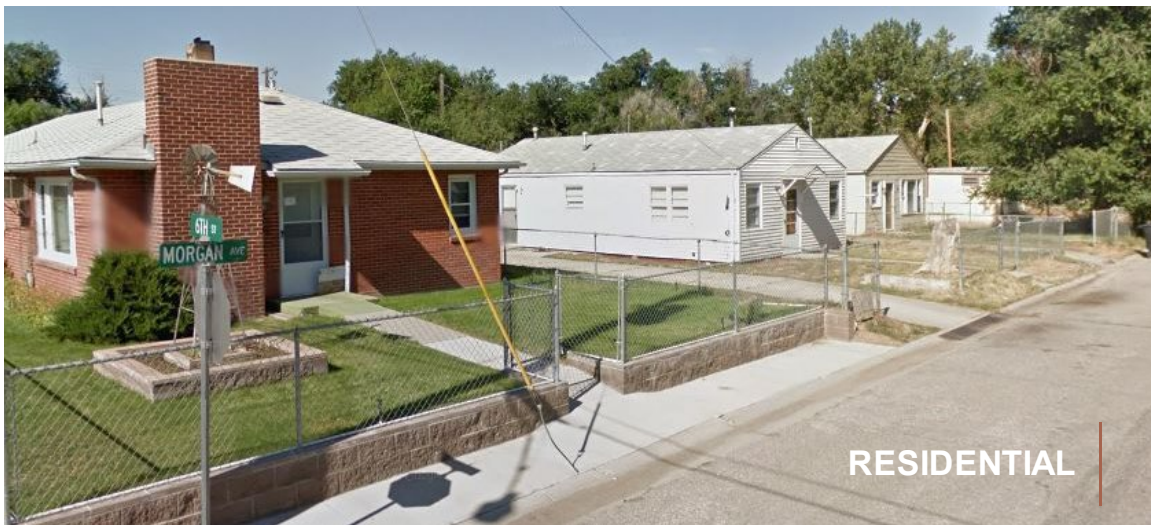
Our process aimed to focus on the shared core values and priorities identified through local conversations, community feedback, adopted local and regional plans, and the analysis of existing mobility and traffic conditions. The purpose of the design process was to develop concept alternatives for transportation network improvements along SW Wyoming Boulevard that will serve as a catalyst for transformation of the corridor into the “Main Street” of Mills and the regeneration of the riverfront that creates a vibrant gathering place that can also attract community serving businesses. The design process was rooted in the following goals:

- Create a sense of place deeply connected to the town’s historic and cultural values
- Strategically bookend the Wyoming Boulevard corridor
- Enhance mobility and safety for users of all ages and abilities throughout town

### Inspiration

The design concepts are inspired both from the existing aesthetics and land uses of Mills with consideration for best practices implemented in comparable contexts throughout the American West (see following page). First and foremost, design concepts recognize that the corridor primarily needs to be suitable for the everyday use of those who live in Mills, which is mostly residential to the north and east of the corridor. In addition, the project team recognized that the corridor is vital to the local economy as it is the conduit for several industrial uses as well as being the location for numerous smaller commercial businesses and civic buildings. The intention of the design concepts is to support and improve access to existing land uses while attracting redevelopment of the riverfront area, not in lieu of.

### Existing Aesthetics

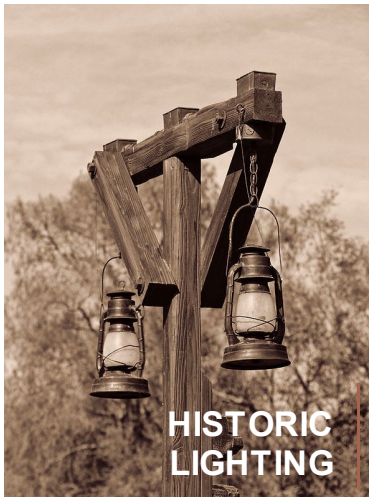


Mills Main Street Corridor Study | Final Report  
Casper Area MPO



## Best Practices Examples

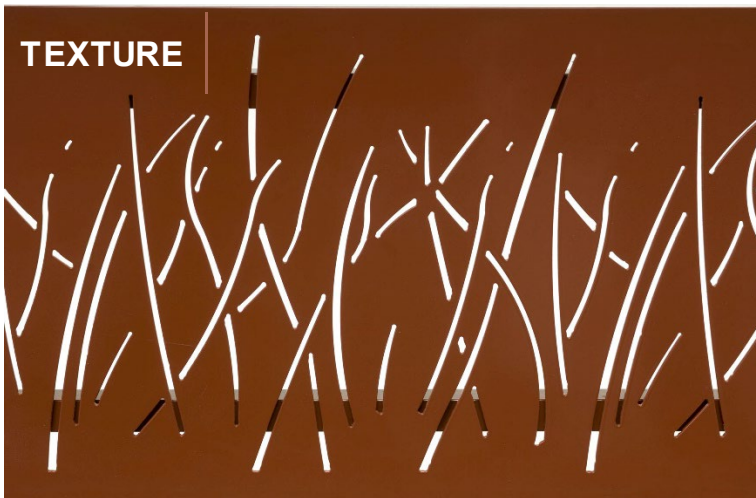




**HISTORIC LIGHTING**



**NATURAL MATERIAL**



**TEXTURE**



**STREET AMENITY**

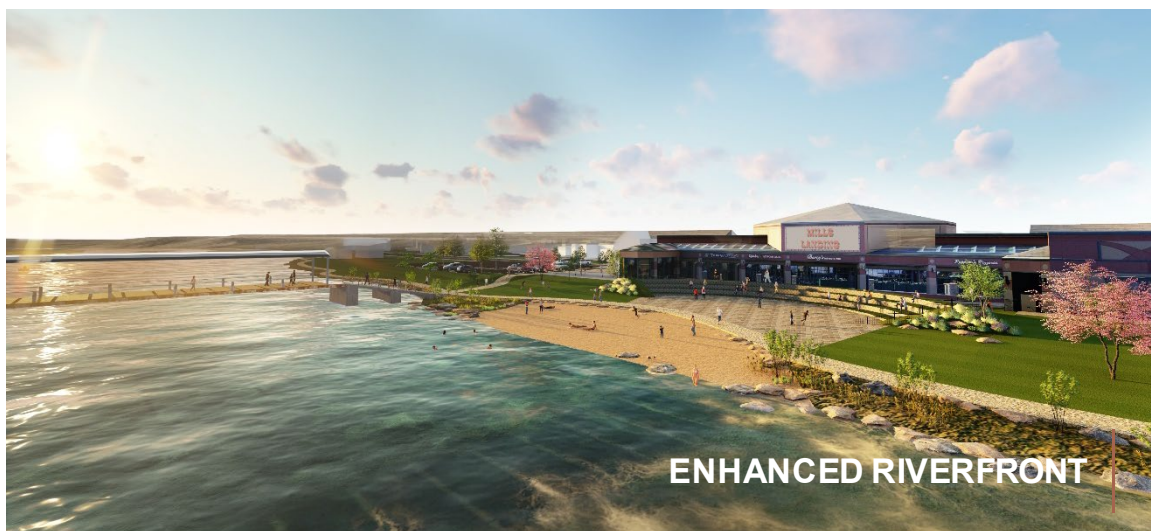


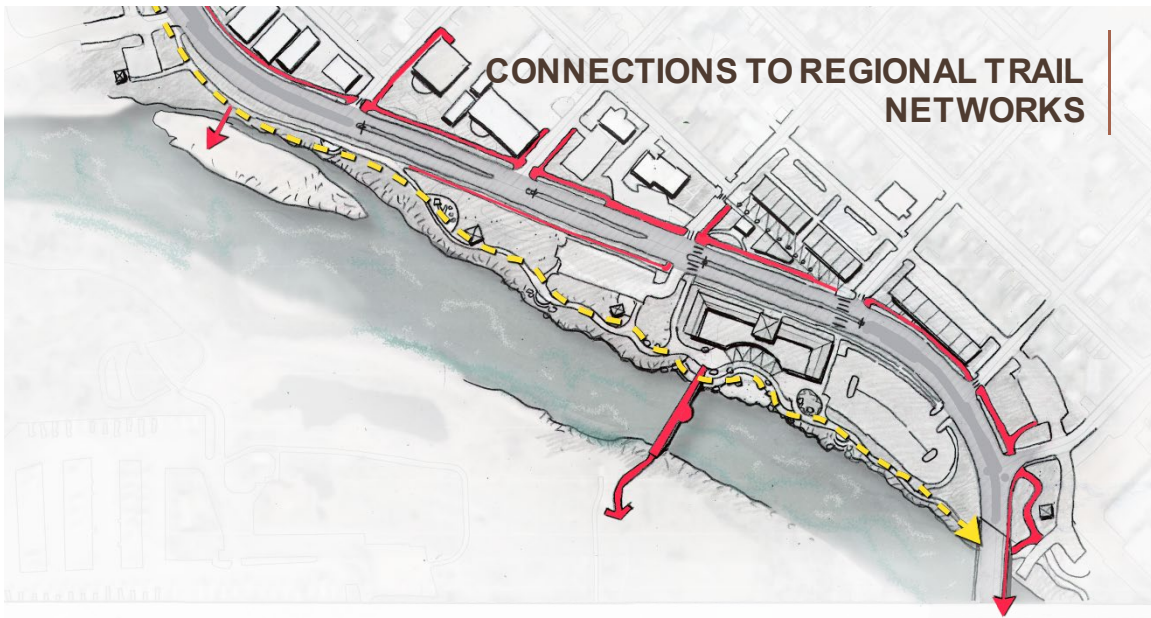
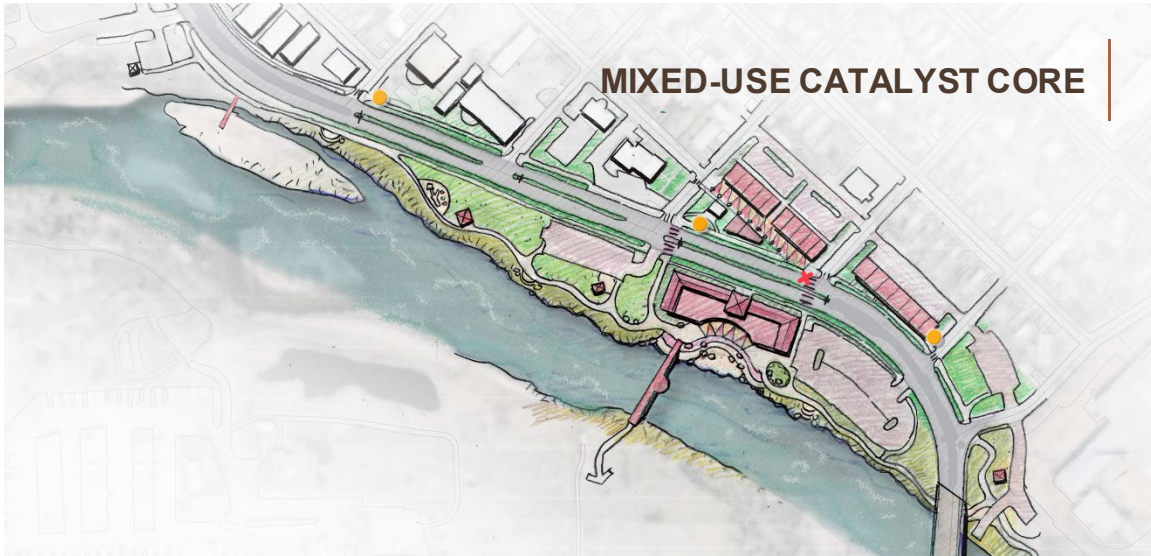
**LANDSCAPED BUFFER**

## Desired Experience

The design process and goals lead to a focus on specific desired experiences within Mills that will be tangible for residents and visitors. While maintaining a connection to key goals, the designs function to enhance experiences at a more detailed level. Primary user experiences highlighted in the designs include:

- Integrated pedestrian connectivity throughout the town
- Expanded connections to the historic Fort Caspar
- Improved access and opportunities to interact with the North Platte River





## CORRIDOR ALTERNATIVES

Presented on the following pages are cross sections of the three concept alternatives developed by the project team. Each alternative provides street design features that aim to improve safety for all users, beautify and generate a sense of place for the corridor, and improve conditions for walking and biking to reinvigorate the town core and increase access to the riverfront. As the curb-to-curb widths and land use context vary as the corridor moves from the bridge crossing the river (east to west) towards the intersection with US 20/26 (south-north) each alternative provides a “downtown view” typical of the corridor between 1<sup>st</sup> Street and 6<sup>th</sup> Street and a “north-south view” more typical of the extent of the corridor from Johnson Avenue to Kiskis Street.

The matrix presented in Figure 25 shows the technical and design differences and similarities between the three alternatives. Elements to consider include the width and number of vehicle travel lanes, the location and level of protection for bicycle and pedestrian facilities, access control, pedestrian crossings, and streetscape design features. The matrix was used by the project team at the beginning of the design process to help develop three distinct concepts for the corridor within feasibility constraints. The matrix was updated throughout the process as concepts were revised based on conversations with the community and business owners and technical input from Town, MPO, and WYDOT staff.

Alternative 1 focuses on creating a bikeable main street by adding the town’s first on-street bike lanes and consolidation of driveway access points. Alternative 2 aims to create a more multimodal Mills by reallocating a significant portion of the right-of-way to a shared-use path with wide buffers from the roadway and landscaped medians for most of the corridor. Alternative 3 is designed to revitalize the town center and unlock the riverfront as a regional destination by providing comfortable and separated facilities for both people walking and biking and landscaped medians where the riverfront meets the town center.

Consistent with technical feedback, each alternative retains a 30-mph speed limit and pockets for two-way left turns. Alternatives 1 and 3 maintain two travel lanes in each direction with a center turn lane, whereas Alternative 2 reduces the roadway to one travel lane in each direction in favor of a wide landscaped median. Alternatives 1 and 3 reduce the widths of both exterior and interior travel lanes with the intent of traffic calming – i.e. reducing vehicle speeds through driver perception and the distance to which crossing pedestrians are exposed to traffic. Alternative 2 maintains 12’ travel lanes, albeit at the expense of exterior lanes in each direction.



## Alternative 1 – Bikeable Main Street

This alternative reduces the width of all travel lanes to between 11' and 11.5' providing room for a 5' Class II striped bicycle lane in each direction. The concept would not provide medians but would limit underutilized driveway access points in some locations to reduce conflicts for people walking and biking. The concept would retain sidewalks on the side of the street closest to the center of town without buffer from the roadway.

Figure 19 Alternative 1 – Downtown Cross Section

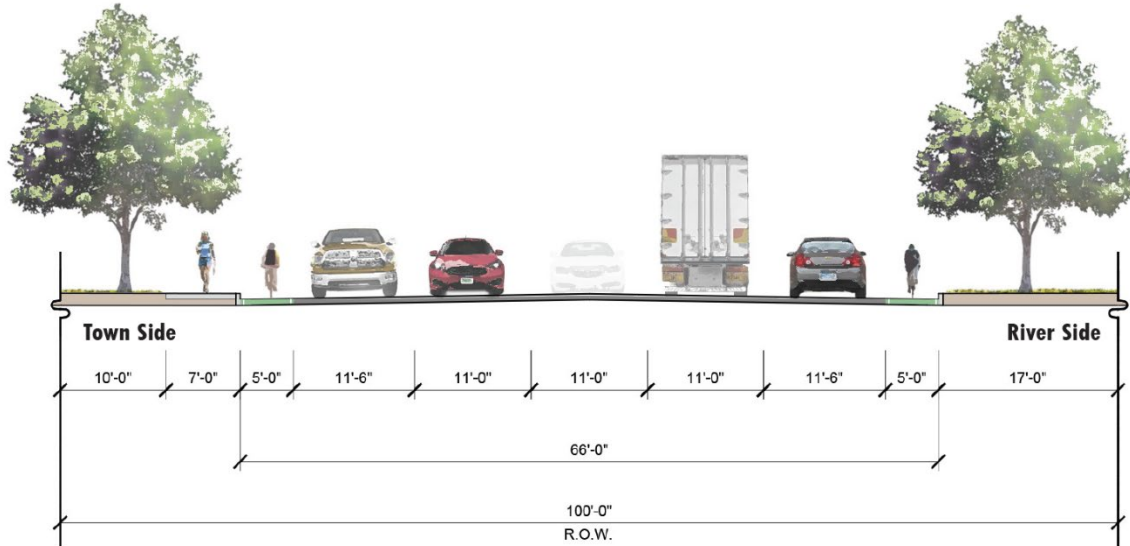
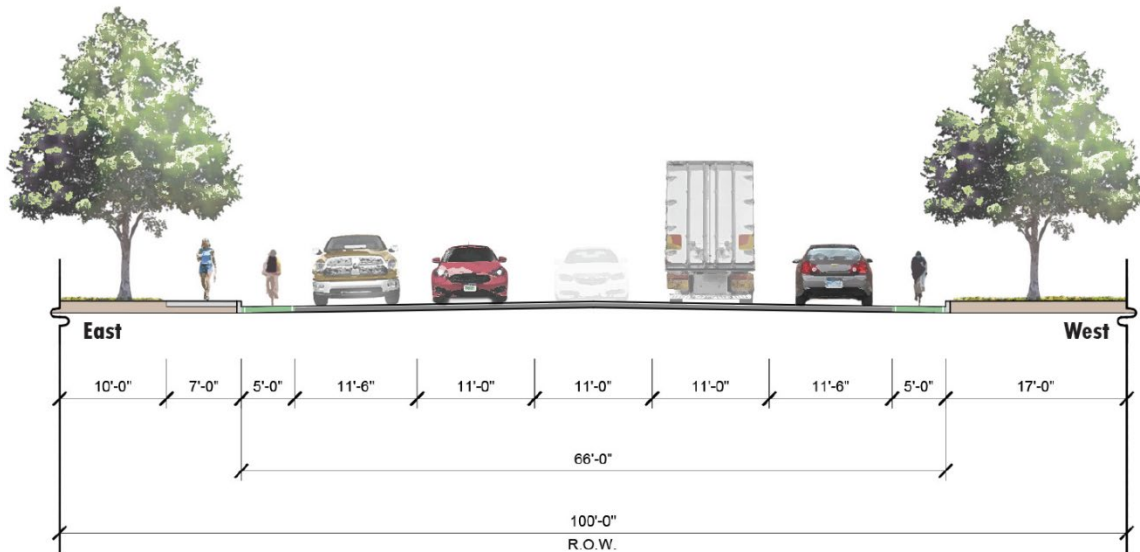


Figure 20 Alternative 1 – North/South Cross Section



## Alternative 2 – Multimodal Boulevard

This concept would remove exterior travel lanes while maintaining the 12' width of existing interior lanes. A landscaped median would extend from 1<sup>st</sup> Street to Pendell Boulevard with turn pockets at intersections. An alternating 10' shared-use path for people walking and biking would be provided on one side with 7' sidewalks and a landscape buffer provided on the opposing side.

Figure 21 Alternative 2 – Downtown Cross Section

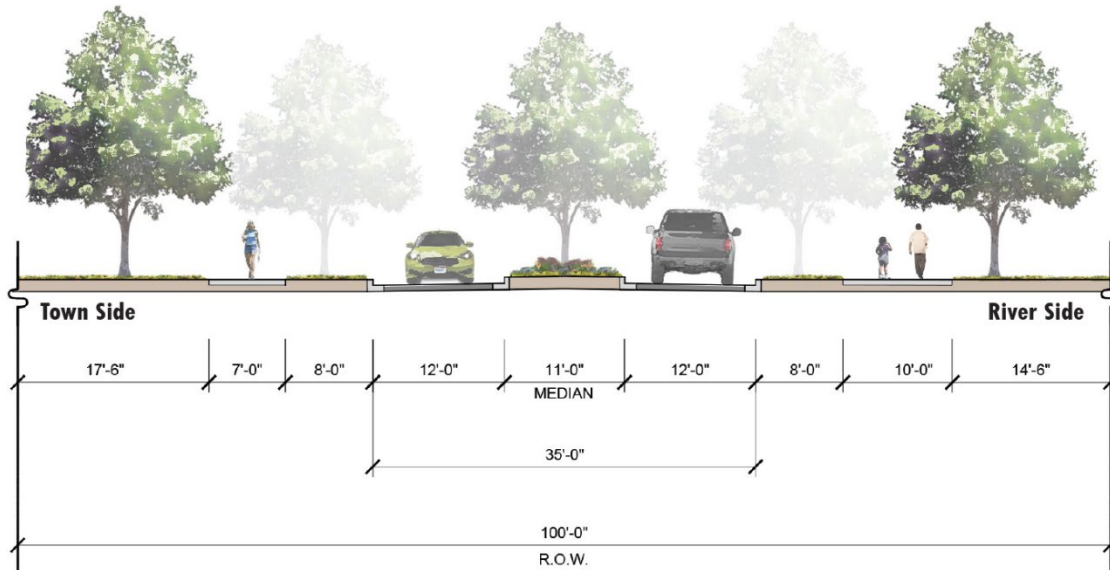
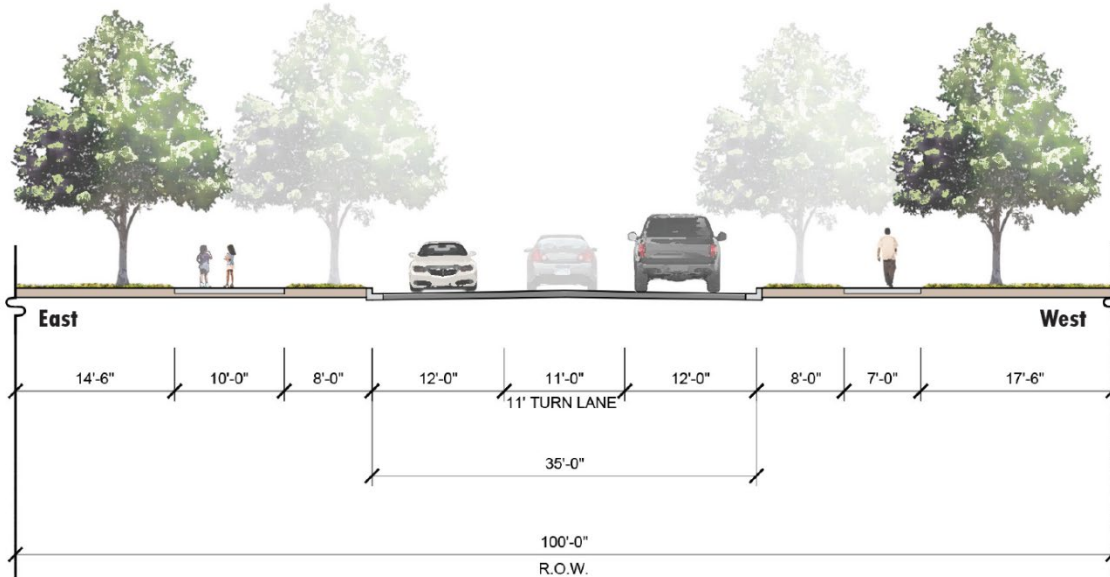


Figure 22 Alternative 2 – North/South Cross Section



### Alternative 3 – Old Mills Center: Catalyzed Destination

This alternative maintains two travel lanes in each direction, narrowing their width to 11'. A narrower median than Alternative 2 is provided, but only from 3<sup>rd</sup> Street to 6<sup>th</sup> Street. Sidewalks are provided on each side with a landscape buffer from vehicle travel lanes. A Class 1 two-way cycle track is provided on altering sides, providing the most seamless connection to the existing river trail east of 1<sup>st</sup> Street and separate facilities for all modes.

Figure 23 Alternative 3 – Downtown Cross Section

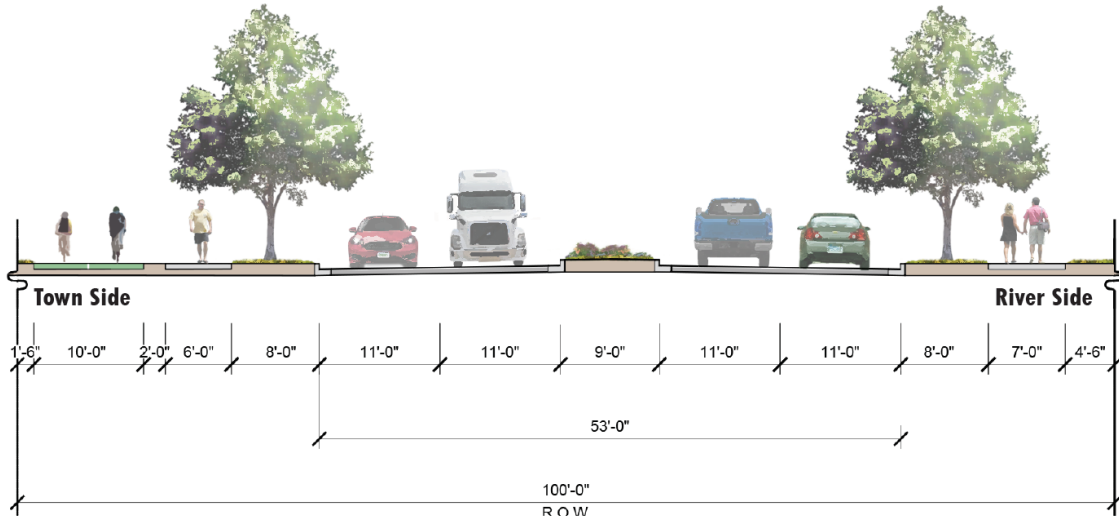


Figure 24 Alternative 3 – North/South Cross Section

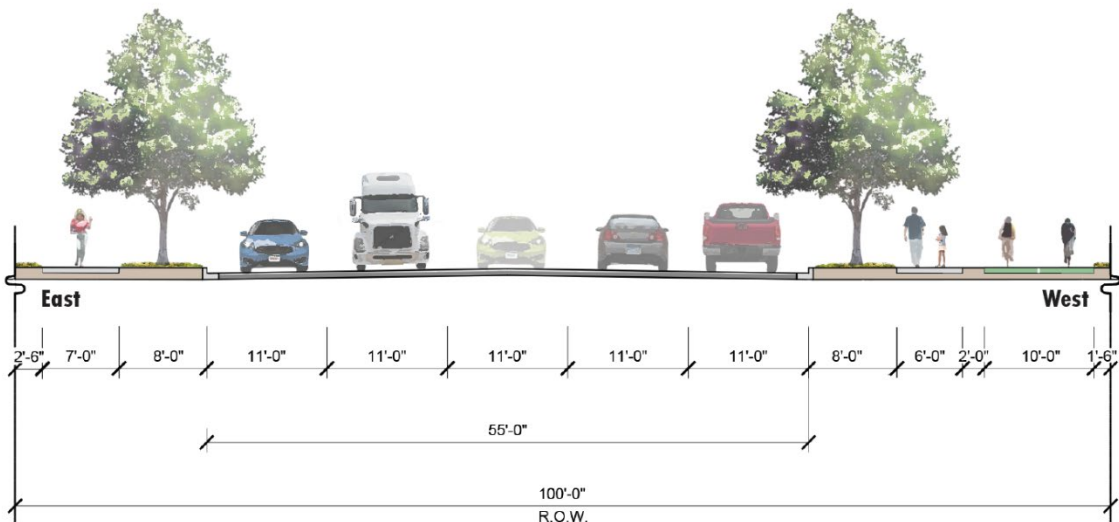


Figure 25 Evaluation Framework Matrix

Street Design Feature	Alternative 1 "Bikeable Main Street"	Alternative 2 "Multimodal Boulevard"	Alternative 3 "Old Mills Center: Catalyzed Destination"
<b>Vehicular Realm</b>			
Speed limit	No change (30 mph)		
Number of Lanes	▪ 5	▪ 3	▪ 5
Lane Width	▪ 11 to 11.5-foot travel lanes ▪ 11-foot two-way left turn lane	▪ 12-foot travel lane ▪ 11-foot two-way left turn lane	▪ 11-foot travel lane ▪ 11-foot two-way left turn lane
Median	▪ None	▪ Center turn lane becomes landscaped median between 1st St and Pendell Blvd with turn pockets at intersections	▪ Center turn lane becomes landscaped median between 3rd St and 6th St with turn pockets at intersections
Crossing Improvement at existing Crossing	▪ Refresh existing continental crosswalks at signals	▪ Refresh existing continental crosswalks at signals ▪ Shorten crossing at 1st street	▪ Refresh existing continental crosswalks at signals ▪ Shorten crossing at 1st street
Enhanced intersection crossing at redevelopment area (4th Street)	▪ None	▪ New crosswalk with RRFB (Rectangular Rapid Flash Beacon)	▪ New crosswalk with PHB (Pedestrian Hybrid Beacon) or RRFB (Rectangular Rapid Flash Beacon) with option for future signalized intersection
Street closures	▪ Close Morgan Street to vehicles	▪ No changes	▪ Close Morgan Street to vehicles
Access control	▪ Consolidate select driveway access points	▪ Potential future signal at 4th Street as part of development	▪ Consolidate select driveway access points ▪ Potential future signal at 4th Street as part of development
<b>Street Frontage/ Edge</b>			
Bikeway Infrastructure	▪ On-street bike lanes (5')	▪ Shared side path (10'): East side between US20/26 and 4th St, River side between 4th St and 1st St	▪ Exclusive off-street bikeway (10'): West side between US20/26 and 4th St, Town side between 4th St and 1st St
Pedestrian Infrastructure	▪ Complete curbside sidewalk network (7' sidewalk min.)	▪ Sidewalk with buffer from curb on both sides for entire project extents (at least 7') ▪ Sidewalk is shared with bikeway on one side of street (see Bikeway Infrastructure)	▪ Sidewalk with buffer from curb on both sides for entire project extents (6' to 7')
Trail Connections	▪ Maintain existing connection to North Platte Trail	▪ Enhanced bikeway connection to North Platte Trail	▪ Enhanced bikeway connection to North Platte Trail ▪ River side trail provides future opportunity for under bridge crossing at the river.
Streetscape (landscaping, art, amenities, etc.)	▪ None	▪ Landscaped buffers between roadway and sidewalk, sidewalk and bikeway, and medians ▪ Enhanced gateway treatment at Pendell Blvd	▪ Landscaped buffers between roadway and side path, medians ▪ Enhanced gateway treatment at Pendell Blvd
Lights	▪ Standard improved lighting - Street Lights for pedestrian and vehicle safety	▪ Pedestrian scale lighting	▪ Enhanced pedestrian scale lighting

## 5 PRESENTATION OF PREFERRED ALTERNATIVE

The Alternative 3 was determined to be the preferred concept based on presentation to and feedback from Town and MPO staff as well as the stated preferences from the community. Shared desires gathered throughout the design process that shaped selection of the preferred concept include the following:

- Maintain four travel lanes for future demand and ease of maintenance
- Provide bicycle facilities separated from vehicle traffic to make riding a bicycle comfortable for users of all ages and abilities
- Do not restrict left turn movements from residential streets
- Favor lower landscaping features on medians for visibility and snow removal
- Eliminate redundant access points
- Accommodate the operations of heavy vehicles
- Maintain slip lanes at the intersection of US 20/26 to accommodate truck turning movements
- Close Morgan Street from the corridor to 4th Street to create active public space

Provided on the following pages are a corridor plan view for the preferred concept as well as high-level 3D renders of a revitalized town center. Note, these images are meant to serve as preliminary concepts for discussion and consideration, they are not final designs. In addition to the elements previously presented, the preferred concept recommends improved pedestrian crossings with high-visibility crosswalk markings at US 20/26 and Pendell Boulevard. New pedestrian crossings are recommended to connect the town center with future riverfront development at 3<sup>rd</sup> Street and 4<sup>th</sup> Street. To seamlessly connect with the existing trail network, it is recommended that the cycle track crosses over to the north/east side of the corridor at one of these points. This cycle track could be carried through on the riverfront side to the existing trail in the future, but hydrologic and bridge height constraints require further evaluation for an underpass. The new crossings should provide Pedestrian Hybrid Beacon or RRFB (Rectangular Rapid Flash Beacon) warning devices to alert motorists of the presence of active users. Best practice design guidance for complete street features like enhanced crossings and bikeways are provided in Section Nine of *Connecting Crossroads*.

As development along the riverfront occurs, a new traffic signal may be considered at one of the crossing locations. As buildout of the riverfront parcel occurs, additions such as a pedestrian bridge crossing the river to Fort Caspar should be considered to increase regional trail connectivity as well as lending to the site as a regional destination. Other recommended features include an enhanced gateway/signage treatment at Pendell Boulevard to serve as a welcome to “Old Mills” and improved pedestrian scale lighting in areas such as near Wishing Well/Eagle Statue Park.

Figure 26 Plan View of Preferred Concept



Figure 27 Preferred Concept Render – Downtown



Figure 28 Preferred Concept Render – South of Pendell Boulevard



Figure 29 Preferred Concept Render – Riverfront Landing



Figure 30 Preferred Concept Render – Pedestrian Crossing and Activation of Town Center





## Context Palette

Streetscape amenities provide comfortable and engaging gathering areas and reinforce the unique brand and identity of the district. Components associated with three different styles have been assembled to demonstrate choices regarding the character of the streetscape amenities. The styles are conceptual in nature and are meant to suggest an overall approach to the design of the streetscape amenities, rather than illustrate the specific furnishings that will be selected for the street. Regardless of which style is preferred, integration of streetscape amenities should:

- **Connect with Downtown Mills and the North Platte River:** The design of the street will be complementary to the character of downtown and the adjacent river corridor.
- **Enhance the Traditional Character of the Main Street Corridor:** The corridor includes a diversity of land uses, including access to natural areas, industrial, commercial and residential. This blend of uses is what makes the corridor integral in enhancing the vibrancy in Mills. The design of the street will support and enhance this historic character.
- **Create a Welcoming and Unified Identity:** Streetscape amenities will help unify a vibrant look that is welcoming for the community while maintaining the corridor's function, existing efficiencies, and connections to town's rich history.

## Character Themes

### Contemporary/Industrial

The modern style is characterized by bold forms and contemporary finishes.



Bench



Trash Receptacle



Signage/Monument



Bike Rack



Wall/Fence



Lighting



**Natural**

The natural style is characterized by sinuous or irregular forms and natural finishes.



Bench



Trash Receptacle



Median Design



Bike Rack



Wall/Fence



Wall/Fence



**Historic and Traditional**

The historic style is characterized by simple forms and finishes that are inspired by and connected to the history and culture of a place.



Bench



Lighting



Gateway Feature



Signage/Monument



Bike Rack



Wall



Planters



Bike Rack



Trash Receptacle

**MITIGATION MEASURES**

Final design of the preferred concept was influenced by important stakeholder feedback, particularly with WYDOT and Westech. WYDOT is a key player in the design due to the street being under State jurisdiction and designation as a National Highway System (NHS) roadway. Westech, a manufacturing company conducting operations on 1<sup>st</sup> Street within the Town of Mills, frequently utilizes SW Wyoming Boulevard as a route for large dump truck body deliveries.

**Westech**

Through correspondence with Westech staff, the project team was able to identify details on typical truck operations particularly related to routing oversized vehicles on SW Wyoming Boulevard:

- Dump bodies require 35' of horizontal maneuvering space, and overhang at a three-foot height
- Approximately 90% of operations are oversized loads exiting the Westech facility on 1<sup>st</sup> St, with only 10% entering

- Nearly all of operations (up to 98%) utilize Wyoming Boulevard for truck movements to access US 20/26. Trucks can use 1<sup>st</sup> Ave to access US 20/26 and Salt Creek Highway en route to the US 20/26 Bypass
- About 85% of the time the trucks only take up the two lanes, however the need to have clear space into the existing middle turn lane is needed
- Pilot vehicles escort the trucks to ensure safety for other people using the roadway

Figure 31 was provided by Westech staff to show the shape of the vehicle along with vehicle dimensions. The operational information provided allowed for the project team to make the following mitigations related to alternatives development and preferred alternative selection:

1. A single lane configuration with a median will not allow for truck movements, and therefore was not selected as the preferred alternative
2. Any median or curbside landscaping will be required to have no planting or low planting with a maximum height of three feet for a 35' width, inclusive of travel lane widths

Discussions with Westech should continue as the project evolves into more detailed design phases, and the opportunity of rerouting most operations via the 1<sup>st</sup> St to US 20/26 route mentioned above should be explored.

Figure 31 Westech Dump Body on Oversized Load Truck (35' maneuvering clearance)



## WYDOT

Following an alternatives review meeting with WYDOT staff, several takeaways were established that influenced further design development and preferred alternatives selection:

1. **Travel Lanes:** WYDOT's preference was to keep a four/five-lane roadway and maintain at least 11-foot travel lanes. Although the existing conditions capacity analysis showed the potential to reduce travel lanes based on excess capacity, the three-lane Alternative 2 was not selected as the preferred alternative. Eleven-foot lanes were also ensured throughout the corridor.
2. **Medians:** The project team was informed of the challenges affiliated with landscaped medians related to snow accumulation and removal. As a mitigation, previously recommended medians throughout the entire study corridor on certain alternatives were removed to only include medians in the core area of the "Mills Downtown" between 3<sup>rd</sup> and 6<sup>th</sup> St. Medians at curved roadway segments were also excluded for consideration, and the detailed form of landscaping (i.e. trees or low-cover planting) will be decided at a later stage of design in discussions with WYDOT and other key stakeholders. The FHWA's Safety Office has promoted the evidence-based safety benefits of raised medians for pedestrians and motor vehicles<sup>4</sup>.
3. **Bikeway:** Safety concerns associated with truck traffic on curved roadways adjacent to unprotected on-street bikeways was included as a mitigation, with Alternative 1 not selected for further evaluation. The preferred concept (Alternative 3) incorporates a protected off-street bikeway throughout the study area, meeting the request of WYDOT.

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<sup>4</sup> U.S. Department of Transportation, Federal Highway Administration, Guidance Memorandum on Consideration and Implementation of Proven Safety Countermeasures (Washington, DC: July 2008). <http://safety.fhwa.dot.gov/policy/memo071008/>

## 6 IMPLEMENTATION

This study lays the foundation for further planning and design and will help to bolster both public and private developer interest along SW Wyoming Boulevard in Mills. To make Mills Main Street a reality, several actions will need to be carried forward. As this corridor study lies within the State right-of-way, within the Town of Mills, and is directly adjacent to a large waterfront property, many stakeholders will be involved in the future of the Mills Main Street corridor planning and design efforts. The following components are ideas that the project team recommends further evaluation and study to advance the Mills Main Street vision into tangible improvements.

### Public-Private Partnership

As with the 2016 River Front Property Feasibility Study, this corridor study is aimed at showcasing opportunities to bringing the Town of Mills closer to the beauty of the North Platte River. While the corridor's preferred alternative can technically be implemented by itself, the Town should continue to reach out to interested land developers to express interest in potential partnerships to develop the key riverfront parcel, important parcels on SW Wyoming Boulevard, as well as the buildout of the preferred concept.

Collaboration with developers will be extremely important to ensure safe multimodal facilities can integrate with waterfront trails, commercial access, and key crossing locations for people walking and biking. With developer coordination, there may be opportunities to fund off-street trails and paths that can connect to public sidewalk and bike infrastructure on a future Mills Main Street.

### Design Development

This corridor study lays the framework for advancing the preferred alternative into preliminary design phases, such as a Preliminary Engineering Report (PER), or a 30% Design phase, and beyond. An important aspect of the preferred alternative is the recommendation for maintaining the same number of vehicular travel lanes, and therefore it is not anticipated that significant additional traffic analysis would be necessary to move into design phases.

Important elements still needing to be examined that can have significant effects on design include:

- **Right-of-way acquisition:** Thoroughly examine parcels that may be repurposed.
- **Utility survey:** Ensure underground utilities and overhead transmission lines located within the study area are not inhibited with the implementation of the preferred alternative.
- **Lighting:** Conduct a lighting analysis to identify specific locations for new lighting including illumination needs, existing infrastructure, and maintenance considerations.
- **Landscaping:** Conduct an agronomy analysis to assess appropriate plant species or xeriscaping techniques suitable to the corridor given concerns with snow storage, snow removal chemicals, watering, and sightlines.
- **Stakeholder needs:** Consult local businesses and County facilities who are located along or rely on the corridor to ensure critical access points remain intact with the closure of any streets or installation of medians.

- **Transit:** Coordinate with CATC on the location of a future transit stop serving the waterfront development. For operational purposes, CATC recommends that any future stops are located on-street as opposed to within the development, which may cause delay. On-street stops can utilize the generous landscaped buffer zone to provide amenities such as benches and shelters, allow for wheelchair ramp accommodations, and directly link the stop to the proposed sidewalk and cycle track. A future riverside (southbound) stop can be placed at the proposed crosswalk location that would provide safer crossings across SW Wyoming Boulevard for transit riders.
- **Phasing:** Coordination with private development, WYDOT paving plans, and funding support will help to determine if certain components of the preferred alternative can be implemented in early phases.

If designs for the corridor are carried forward, design of the public right-of-way should not preclude integrated infrastructure with future private development along the riverfront, including but not limited to:

- Vehicular access points in the form of driveways and signalized intersections
- Pedestrian crossing locations that connect Mills to the waterfront
- Future riverfront trail integration with the project's proposed off-street bikeway

### Future Engagement

As the goal of Mills Main Street is to create an enjoyable space for the people of Mills and surrounding areas, the public should be involved in further design phases. The preferred plan includes changes to access along the corridor that will affect business and residents. This corridor plan created a productive dialogue with Mills Town staff, the public, and important industries that utilize the corridor. Coordination with WYDOT will be equally as important, particularly when design reaches plan specification and engineering (PS&E) phases. Appropriate channels for project delivery will need to be consulted to streamline a State right-of-way corridor plan.