PARKING & TRANSPORTATION
MEETING AGENDA

February 12, 2026

1. ROLL CALL
2. APPROVAL OF MINUTES
   a. January 8, 2026 Minutes
3. INFORMATIONAL ITEMS ON THE AGENDA
   a. On February 14, 2026 the Fat Tire Classic will be going up Main St at 5:00 pm and the Mardi Gras Parade will be starting at 7:00 pm.
4. NOTICE TO CONTEST PARKING TICKETS
5. NEW BUSINESS
   a. Request to set up a vendor tent in the History and Information Center Parking Lot during the Sturgis Motorcycle Rally.
   b. Speed Control Device Ordinance
   c. Additional Sidewalk for 2026
   d. 2026 Forks, Corks, and Kegs Trolley use
   e. 2026 Livery License Applications
   f. Parking on Burnham Avenue during special events
6. OLD BUSINESS

7. INFORMATIONAL ITEMS NOT ON AGENDA

   (Items considered but no action will be taken at this time.)
8. **Adjournment**
   a. Next Meeting February 26, 2026

CITY OF DEADWOOD
PARKING AND TRANSPORTATION COMMITTEE

JANUARY 8, 2026

1. ROLL CALL:

The City of Deadwood Parking and Transportation Committee met Thursday, January 8, 2026, in the Commission Room in City Hall. Justin Lux called the meeting to order at 9:00 a.m. Present were Justin Lux, Cory Shafer, Amanda Kille, Kevin Kuchenbecker, Trent Mohr, Lornie Stalder, Cory Percy, John Rystrom, Misty Trewhella, Andy Goodwin and Lacy Goeringer. Commissioner Mike Johnson was present.

Absent was Tom Riley.

2. APPROVAL OF MINUTES: December 11, 2025

Minutes for the meeting on Thursday, December 11, 2025, were approved unanimously by a motion from Ms. Trewhella and a second by Mr. Stalder.

3. INFORMATIONAL ITEMS ON AGENDA: None

4. NOTICE TO CONTEST PARKING TICKETS:

a. Evelyn Lyon: Dead Storage and Tow Bill: Dead storage violation from December. She was invited to be at the P&T meeting but she was not present. CSO Nash explained the circumstances leading up to the ticket. She is currently compliant. Discussion. Motion to deny by Mr. Stalder, second by Mr. Kuchenbecker; motion carried.

5. NEW BUSINESS:

a. Consolidation of Jacob's Gallery and Mustang Sally's Trolley Stops: Mr. Lux indicated he would like to get the trolley stop installed up at the new parking lot on Deadwood Hill; with that new stop, in order to maintain the trolley schedule similar to what it is currently, he wants to combine these two stops as they are not very far apart into one stop at the Bodega. This will shave enough time to accommodate the new stop on the hill. There is a stop across the street at the Old Style. Discussion. Motion to authorize the consolidation of Jacob's Gallery and Mustang Sally's trolley stops to one location by Mr. Kuchenbecker, second by Mr. Stalder; motion carried.

6. OLD BUSINESS:

a. 3 Shine Street RR Parking Application: Veronica Carolyn White: Mr. Lux indicated Ms. White was not able to make the meeting because she got a flat tire on the way here. Ms. White built a vestibule onto the house which eliminated her off-street parking spot. She is not the resident, she rents the house out. The application is because she lacks a parking space, not because she is elderly or disabled and therefore, she does not meet the criteria for a reserved residential parking space.

Discussion. Her option is to lease parking spaces in the garage for convenient parking. Move to deny by Mr. Kuchenbecker, second by Mr. Stalder; motion carried.

7. INFORMATIONAL ITEMS NOT ON AGENDA: None

8. ADJOURNMENT:

With no further business for the committee to consider, Mr. Kuchenbecker moved to adjourn, second by Mr. Stalder; motion carried. **Next meeting is January 22, 2026, at 9:00 am.**

Respectfully Submitted,

Rhonda McGrath, Recording Secretary
**** Audio from the meeting is posted on the "S" drive.

Chapter 10.29

AN ORDINANCE ESTABLISHING WARRANTS, PROCEDURES, AND STANDARDS FOR INSTALLATION, MODIFICATION, AND REMOVAL OF SPEED HUMPS AND SPEED BUMPS ON PUBLIC STREETS

10.29.010 PURPOSE AND INTENT

The purpose of this Ordinance is to:
(a) Improve neighborhood safety and livability by managing vehicular speeds on appropriate public streets using engineered vertical deflection devices (speed humps/bumps);
(b) Establish clear, objective warrants and processes for evaluating requests;
(c) Ensure installations comply with accepted practices, do not impede emergency services or public transit, and consider ADA, drainage, and maintenance;
(d) Provide consistent standards for design, placement, signing, marking, and evaluation.

10.29.020 DEFINITIONS

For purposes of this Ordinance:
(a) “Speed hump” means a paved vertical deflection device typically 12–14 feet in travel length and 3–4 inches in height, designed to reduce 85th percentile speeds to approximately 15–25 mph.
(b) “Speed bump” means a shorter vertical deflection device typically 1–3 feet in travel length and 2–4 inches in height, generally used in off□street parking areas and private drives; when on public streets, bumps are limited to very low□speed contexts.
(c) “85th percentile speed” means the speed at or below which 85 percent of vehicles travel under free□flow conditions.
(d) “Local street” means a public street primarily providing access to abutting properties.
(e) “Collector street” means a public street that collects traffic from local streets and feeds to arterials.
(f) “Arterial street” means a higher□order street designed to provide mobility; generally not eligible for vertical deflection.
(g) “Qualified petition area” means the frontage or block segment proposed for treatment and any directly adjacent segments expected to be materially affected by deflection.

10.29.030 APPLICABILITY

(a) Speed humps may be considered on local streets and, where appropriate, on low□volume collectors with posted speeds ≤ 25 mph.
(b) Speed bumps are generally prohibited on public streets; they may be considered in special contexts with posted speeds ≤ 20 mph and where the Parking and Transportation Committee determines bumps are appropriate (e.g., short approaches to mid□block crossings).
(c) Vertical deflection devices are prohibited on:
(1) Arterials unless the Parking and Transportation Committee approve and alternative mitigation is infeasible;
(2) Streets with posted speeds ≥ 25 mph;
(3) Streets with grades > 8% over the proposed device footprint or that grade within 100 feet;
(4) Locations within 200 feet of a signalized intersection;
(5) Locations that would create unsafe conditions due to curves, sight distance, or drainage constraints, as determined by the Parking and Transportation Committee.
(6) May not be installed in months that may impact snow removal and shall be removed prior to the winter season as determined by the Public Works Director.

10.29.040 WARRANTS (MINIMUM THRESHOLDS)

A location is eligible for speed hump consideration only if ALL baseline criteria (A) are met and at least ONE primary warrant in (B) is satisfied. Secondary warrants (C) prioritize installations among eligible locations.

(A) Baseline Eligibility:
(1) Street classification: local or low□volume collector.
(2) Posted speed: ≤ 25 mph.
(3) Continuous paved width: ≤ 40 feet (unless a lane□narrowing plan is included).
(4) Block length between control points: ≥ 600 feet, measured center□to□center of stop control or speed□limiting features.
(5) No exclusion per Section 3(c).

(B) Primary Warrants (any one of the following):
(1) Speed: 85th percentile speed is ≥ 7 mph over posted limit, measured over at least 48 hours with automated counters during typical conditions; OR mean speed exceeds posted limit by ≥ 5 mph.
(2) Safety: Three (3) or more correctable speed□related crashes within the most recent 36 months on the subject segment (excludes deer strikes and parking lot incidents).
(3) Volume & Speed Combined: Average Daily Traffic (ADT) ≥ 200 and 85th percentile speed ≥ 5 mph over posted limit.

(4) Vulnerable Users: Documented pedestrian generators (school, park, trail crossing, senior housing) with mid□block crossing needs and observed speeding (≥ 5 mph over).

(C) Secondary Warrants/Priority Factors:
(1) Presence of school zone or marked crossing.
(2) Sidewalk gap with demonstrated pedestrian activity.
(3) Crash severity weighting.
(4) Proximity to park, play area, or senior facility.
(5) Documented noncompliance after signage/education enforcement.

10.29.050 REQUESTS AND PETITIONS

(a) Residents, neighborhood associations, schools, or City departments may submit written requests to the Parking and Transportation Committee.
(b) For petition□initiated requests, signatures from at least 60% of addresses fronting the qualified petition area are required for a location to proceed to study. The Parking and Transportation Committee may waive or adjust the threshold for safety□driven City□initiated studies.
(c) The petition shall describe the problem, desired location(s), and contact persons.

10.29.060 STUDY AND EVALUATION

(a) Upon receipt of a complete request or qualified petition, the Parking and Transportation Director shall conduct a traffic study including, as applicable:
(1) Speed measurements (85th percentile, mean speed);
(2) ADT and peak□hour volume;
(3) Crash history (36 months);
(4) Drainage, pavement condition, utilities;
(5) Emergency response routing/impacts and trolley operations (if applicable);
(6) Pedestrian/bicycle activity and crossing needs;
(7) Alternative measures (signing, striping, enforcement).
(b) The Parking and Transportation Director shall issue a written determination citing warrants met/not met, proposed device type and quantity after a decision is made by the Parking and Transportation Committee.

10.29.070 DESIGN AND PLACEMENT STANDARDS

(a) Devices shall conform to generally accepted guidance such as ITE Traffic Control Devices Handbook and FHWA/ITE Neighborhood Traffic Calming references and the Manual on Uniform Traffic Control Devices (MUTCD) for signing and marking.
(b) Speed Humps (default):
(1) Profile: parabolic or sinusoidal; 12–14 ft length; 3–3.5 in height.
(2) Spacing: 260–500 ft between devices along a corridor, coordinated with control points and driveways.
(3) Lateral placement: full□roadway width; consider split humps where center turn lanes exist.
(4) Signage and markings: advance warning (W17□1 or successor), object markers, pavement markings per MUTCD; install advisory speed plaques as determined by study.
(c) Speed Bumps (limited use per Section 3(b)):
(1) Profile: 1–3 ft length; 2–3 in height; apply only where 10–20 mph operating speed is desired and geometry supports very low speed (e.g., near mid□block crossings).
(2) Spacing: 200–300 ft if used in series.
(d) Placement limitations:
(1) ≥ 250 ft from signalized intersections and ≥ 150 ft from stop□controlled intersections; ≥ 150 ft from sharp curves.
(2) Avoid locations near drainage inlets where ponding may occur.
(3) Maintain minimum 50 ft clearance from major driveways and fire hydrants.
(4) Provide detectable warnings and maintain ADA□compliant paths at crossings.
(e) Materials: asphalt or pre□formed rubber/composite devices rated for snowplow service; installation per manufacturer and City standards.

10.29.080 EMERGENCY SERVICES AND TRANSIT COORDINATION

(a) The Parking and Transportation Committee may consult Fire and Police regarding proposed installations and consider routing, response times, and alternative mitigation.
(b) Where fixed□route trolley service operates, the Parking and Transportation Director should be consulted; avoid devices along routes unless coordinated.

10.29.090 PUBLIC NOTICE AND FEEDBACK

(a) Prior to installation, the City shall notify affected properties within 300 ft of the proposed device(s) and post notice on the City website.
(b) The Parking and Transportation Director may conduct a neighborhood meeting and accept written comments for 14 calendar days prior to installation.

10.29.100 PILOTING, MONITORING, AND REMOVAL

(a) New corridors may be designated as pilot installations subject to post-installation monitoring (speed, volume, crash review, resident feedback).
(b) If adverse impacts occur (e.g., diversion causing safety concerns, significant emergency response delays), the Parking and Transportation Committee may recommend modification or removal.
(c) Removal requires

1) Parking and Transportation Committee determination or
2) petition with signatures from ≥ 60% of addresses originally affected, plus Parking and Transportation Committee approval.

(d) Seasonal removal as determined by the Public Works Director.

10.29.110 AUTHORITY; ADMINISTRATION

(a) The Parking and Transportation Committee is authorized to administer this Ordinance, conduct studies, approve or deny requests, and adopt technical standards consistent with this Ordinance.
(b) Appeals of determinations may be filed to the City Commission within 30 days; Commission may affirm, modify, or remand.

10.29.120 SEVERABILITY

If any provision of this Ordinance is held invalid, the remainder shall not be affected.

City of Deadwood, South Dakota

Neighborhood Traffic Calming Petition — Speed Hump Request

Instructions:
- This petition requests a traffic engineering study to evaluate speed humps on a public street.
- At least 60% of property owners or occupants fronting the proposed segment must sign.
- Print clearly. Incomplete or illegible entries may not be counted.
- Return to: City Engineer, Deadwood Public Works Department (address/email).

Proposed Location

Street Name: _____ Block Length: _____

From (cross street): _____ To: _____

Reason for Request

- ☐ Excessive speeding
- ☐ Pedestrian safety concern
- ☐ Crash history
- ☐ Other (describe): _____

Contact Person

Name: _____ Address: _____

Phone: _____ Email: _____

Petition Signatures (support study and, if warranted, installation)

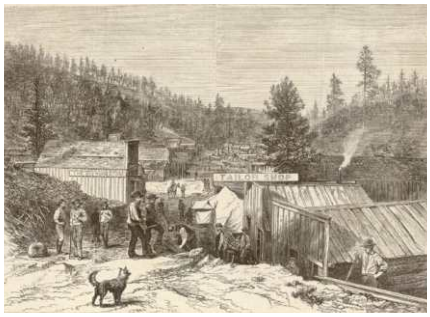
#	Printed Name	Address	Signature	Owner/Occupant
1				☐ Owner ☐ Occup
2				☐ Owner ☐ Occup
3				☐ Owner ☐ Occup
4				☐ Owner ☐ Occup
5				☐ Owner ☐ Occup
6				☐ Owner ☐ Occup
7				☐ Owner ☐ Occup
8				☐ Owner ☐ Occup
9				☐ Owner ☐ Occup
10				☐ Owner ☐ Occup
11				☐ Owner ☐ Occup
12				☐ Owner ☐ Occup
13				☐ Owner ☐ Occup
14				☐ Owner ☐ Occup
15				☐ Owner ☐ Occup

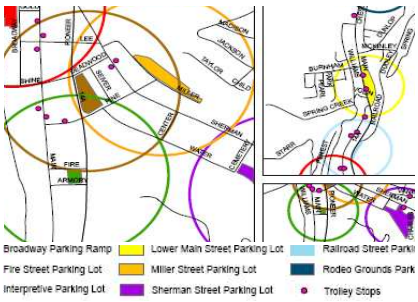
Minimum Requirement

Total properties fronting segment: _____ Signatures required (60%): _____

Date Submitted: _____ Received by City: _____

Note: Owner/Occupant indication is for verification; signatures should be from property owners or current occupants fronting the segment.
This form is for petitioning a study. Final installation is subject to engineering warrants, City Engineer determination, and City policy.





CITY OF DEADWOOD

Pedestrian Circulation and Enhancement Study

December 2008

Prepared for

South Dakota DOT
Connecting South Dakota and the Nation

In cooperation with

DEADWOOD SOUTH DAKOTA

U.S. Department of Transportation
Federal Highway Administration

Prepared by

RFM Transportation Consultants, LLC

with

NJS ENGINEERING

Table of Contents

EXECUTIVE SUMMARY

The City of Deadwood began in 1876 as a pedestrian-oriented town. Since that time, its economic base has evolved from mining to gaming and the introduction of gaming in 1989 has had impacts on almost every aspect of the community from housing and neighborhoods to marketing and economic diversity. Beginning in May and lasting through August of each summer, the City's population of approximately 1,400 swells with visitors and those catering to the tourism and gaming industries.

The recommendations contained in the Deadwood Pedestrian Circulation and Enhancement Study are intended to promote a higher quality of life for the community and a better experience for these visitors by providing safe, efficient, and desirable pedestrian travel for all individuals. The purpose of this plan is to provide The South Dakota Department of Transportation (SDDOT) and the City of Deadwood with tools and resources that will enable these entities to effectively plan and implement pedestrian facilities throughout the study area that can be successfully integrated and programmed into a multi-modal transportation system.

The specific objectives of the study, as set forth by the Study Advisory Team are as follows:

- Develop an implementation strategy that will assess existing and future pedestrian demand and needs
- Identify locations in the study area that are not in compliance with the Americans with Disabilities Act (ADA) and Section 504
- Establish performance standards, evaluate alternatives, and refine existing or recommend new pedestrian services in the study area
- Prepare a plan for coordinating pedestrian investments to achieve a system which is integrated with local, state, and federal plans and regulations
- Create a final product for use by city and state agencies which addresses policy and operational issues affecting the implementation of recommended pedestrian improvements

The various phases of development of the Deadwood Pedestrian Circulation Plan occurred over a ten-month period between March 2008 and December 2008. The process was broken down into five general tasks. These five main study tasks were:

1. Project Initiation and Data Collection
2. Stakeholder and Community Involvement
3. Analysis of Existing Conditions
4. Evaluation of Solutions
5. Development of the Recommended Plan

With ongoing guidance by the Study Advisory Team (made up of local, state, and federal stakeholders), these tasks culminated in this plan document.

The overall state of pedestrian issues in the City of Deadwood is a result and combination of five major factors: pre-automobile city layout and amenities, Black Hills topography as defined by Deadwood and Whitewood Creeks, seasonal tourism largely driven by gaming, the relative remoteness of the town, and the past and present desire to provide safe facilities for pedestrians.

In Deadwood, as in most any municipality, the opportunities that exist for enhanced pedestrian facilities and operation are tempered by some very real constraints. These constraints were found to include high turnover of pedestrian population, conflicts with major traffic arterials, landforms (terrain and water courses), and historical designation

Analysis of the existing setting and pedestrian activity within the Deadwood study limits yielded the following general needs:

- Improved pedestrian access to Main Street from areas east of Pioneer Way
- Upgrades to existing sidewalks on accessible routes
- Construction of critical sidewalk segments where missing
- Citywide upgrades to existing signage, striping, lighting, and signal equipment
- Consideration of major pedestrian flow needs with respect to impending redevelopment

The exploration of these needs and constraints led to the development of the Pedestrian Solutions Plan.

The Solutions Plan is a vision for the ultimate state of pedestrian enhancement in Deadwood. It includes over eighty individual projects ranging in cost from under $2,000 to over $3 million. Fully implemented, it would rebuild approximately 2.3 miles of existing sidewalk and would construct another 2.7 miles of new sidewalk. It also provides the tools for bringing the City systematically into compliance with ADA and Section 504 legislation.

Having the vantage point of nearly 20 years of history, it is now certain that the gaming experiment which began in Deadwood in 1989 did what it was intended to do. Beginning in May and lasting through August of each summer, the City's population of approximately 1,400 swells with visitors and those catering to the tourism and gaming industries. The historic streets of Deadwood come alive with increased pedestrian and motor activity, brought not only by the casinos, but the historical and natural trademarks of this town that the casinos have helped to save.

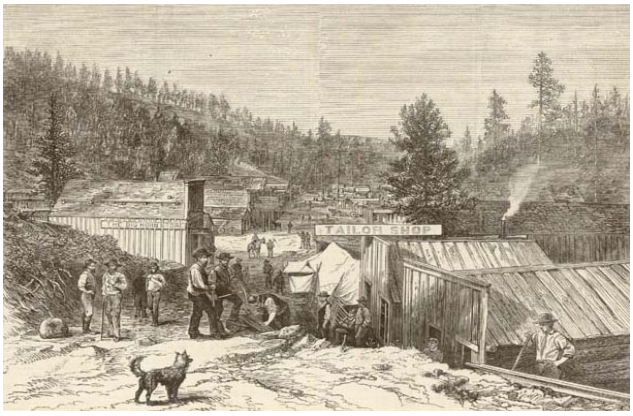
As Deadwood's Comprehensive Historic Preservation Plan of 1990 documents, the introduction of gaming to the City has had impacts on almost every aspect of the community from housing and neighborhoods to marketing and economic diversity. This document points out that "the lifestyle of a community is a part of preservation. Deadwood is a living, dynamic community and preservation must also be focused on its economy." Indeed, Deadwood is not a handsomely preserved museum display. It is a rare place where visitors experience history by shopping its stores, dining at its restaurants, and, of course, walking its streets.

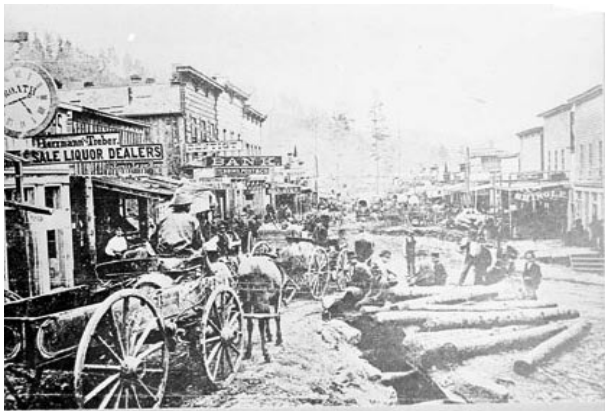
Special events like Kool Deadwood Nites highlight the successes of Deadwood's tourism industry.

Background

Deadwood began as a pedestrian-oriented town. From its outset in 1876, miners and goods arrived via horse and wagon, 175 miles from the railroad. Direct railroad service arrived roughly 15 years later, and automobiles were probably not common for another 15 years after that. Horse-drawn and later electric streetcars were employed within the town. Consequently, Deadwood shares the characteristics of older cities that have required retrofits for anything automobile related.

In recent years, pedestrian and motor activity has climbed with the coming of the gaming industry. Special events like the Black Hills Motorcycle Rally (Sturgis), Days of 76, and Kool Deadwood Nites attract thousands of additional visitors each summer. Along with the increases in local visitor activity, attention has been brought to pedestrian issues nationwide. The American with Disabilities Act of 1990 requires adequate accessible routes to be provided for all users. Also, many cities around the country are suffering from the effects caused by imbalanced transportation systems like rising energy costs, air pollution, and traffic congestion. Only recently have some cities begun to realize the need for alternative modes of transportation. It has become obvious to these cities that healthy, inexpensive, and environmentally friendly modes of transportation must be established to optimize accessibility and quality of life.





Early street scenes in Deadwood illustrate how pedestrian activity is the basis of the City's current form.

Study Purpose and Objectives

The purpose of this plan is to provide the South Dakota Department of Transportation (SDDOT) and the City of Deadwood with tools and resources that will enable these entities to effectively plan and implement pedestrian facilities throughout the study area that can correct accessibility deficiencies, improve safety, and be successfully integrated and programmed into a multi-modal transportation system.

The recommendations contained in this plan are intended to promote a higher quality of life for the community and a better experience for visitors by providing safe, efficient, and desirable pedestrian travel for all individuals. These recommendations are also intended to promote a more livable community by connecting people with places. This document is intended to serve as a guide to assist local planning and SDDOT with funding allocations and project prioritization.

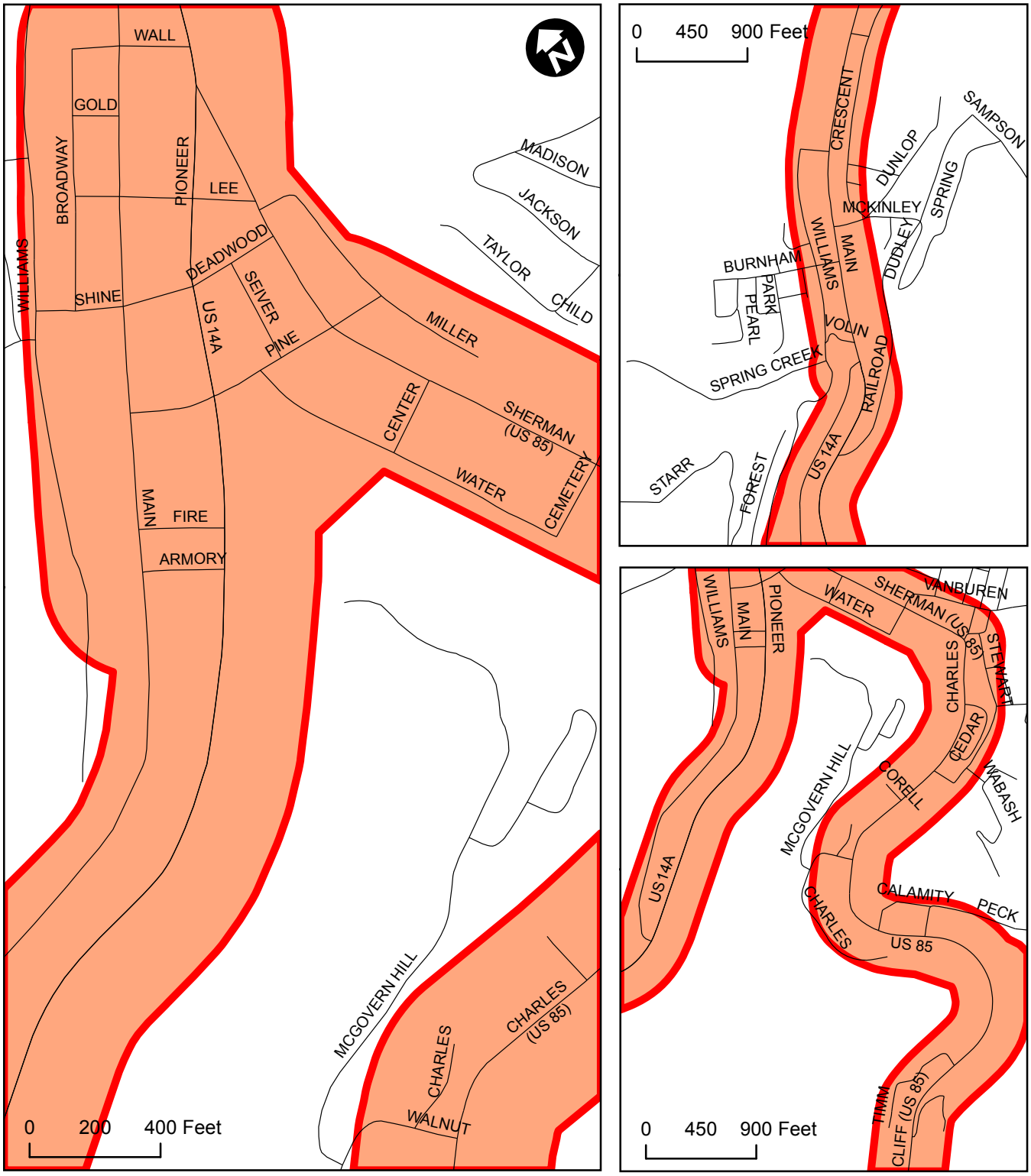
The specific objectives of the study, as set forth by the Study Advisory Team that was established for this project are as follows:

- Develop an implementation strategy that will assess existing and future pedestrian demand and needs
- Identify locations in the study area that are not in compliance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973 (Section 504)
- Establish performance standards, evaluate alternatives, and refine existing or recommend new pedestrian services in the study area
- Prepare a plan for coordinating pedestrian investments to achieve a system which is integrated with local, state, and federal plans and regulations
- Create a final product for use by city and state agencies which addresses policy and operational issues

Study Area

The study area consists of the bulk of the City Limits of Deadwood and contains the vast majority of the civic, commercial, institutional, and other community land uses found within the City. Because of the lack of necessary accessible routes in most residential areas and because of immense challenges and undue financial burden of meeting current accessible sidewalk guidelines given Deadwood's topography, some residential areas are not included within the study area.

The limits follow the alignments of US 14A and US 85 through town and include a buffer area approximately 600 feet wide along these routes. Additional area is included in downtown off of the state route system to include the major pedestrian activity along Main Street.



Legend

Study Area

Pedestrian Circulation and Enhancement Study Area

The various phases of development of the Deadwood Pedestrian Circulation and Enhancement Study occurred over a ten-month period between March 2008 and December 2008. The process was broken down into five general tasks. These five main study tasks were:

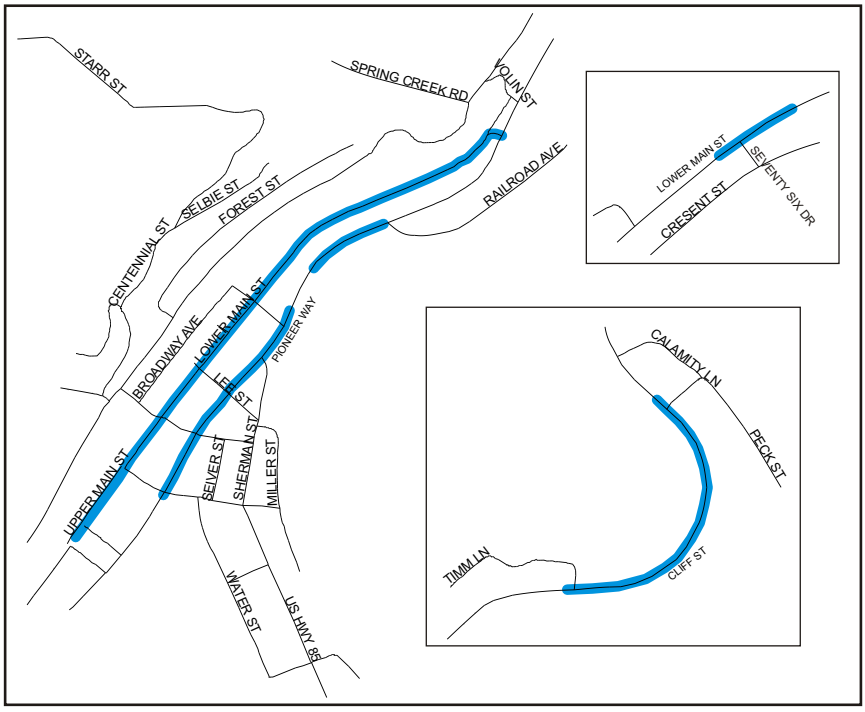
- Project Initiation and Data Collection
- Stakeholder and Community Involvement
- Analysis of Existing Conditions
- Evaluation of Solutions
- Development of the Recommended Plan

Project Initiation and Data Collection

Preliminary data for the project were provided by the SDDOT and included planimetric data (roads, buildings, parcels, etc.), topographic data, historic traffic counts, aerial photography, and existing sidewalk inventory information for state route segments. Much of this data are GIS-based and are the sources of many of the maps and some of the analyses included in this document.

Other data were collected by the consultant team and included sidewalk inventory of non-state route segments including street-level photography, pedestrian counts, and other field issues like signing, signals, etc. As determined by the Study Advisory Team, special and significant effort was given to completion of the pedestrian counts conducted for this study.

In order to document and analyze the pedestrian activity within the City of Deadwood, a schedule of pedestrian data collection was completed. Counts were made for extended periods (generally 11 hours) during a period of lesser tourist activity (May 16-17), during a period of high tourist activity (July 17-18), and during a special event (August 22-23). Counts were made at strategic intersection and mid-block locations across the study area.



Major segments of Cliff Street, Pioneer Way, and Main Street were surveyed for pedestrian crossing activity during May, July, and August. The Study Advisory Team determined these pedestrian count locations (shown in blue) with local knowledge of areas of high pedestrian activity.

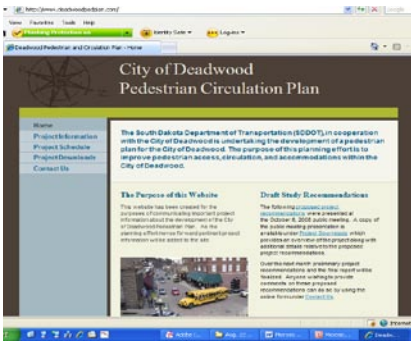
A field inventory of sidewalks included sidewalk termini, width, curb height, cross-slope, surface material, horizontal and vertical cracks, in-sidewalk obstructions, and curb ramps.

Stakeholder and Community Involvement

A key component of the plan development was agency involvement. One aspect of this involvement was ensuring that city departments and local agencies were participants in the process. Prior to undertaking the plan, the SDDOT and City designated a Study Advisory Team to guide the development of the plan. The Team was formed to oversee the major project milestones, provide technical input, and to monitor the progress of the planning process. This team was made up of SDDOT officials, City administration and technical staff, and other local community and business leaders. The Study Advisory Team consisted of the following:

City of Deadwood - Mayor Francis Toscana
Deadwood Public Works - Jim Raysor
Deadwood Police Department - Kelly Fuller
Lead-Deadwood School District - Tim Kosters
Deadwood Chamber of Commerce & Visitors Bureau - George Milos
First Gold Hotel and Casino - Brad Hemmah
SDDOT Project Development - Steve Gramm
SDDOT Transportation Inventory Management - Jeff Brosz
SDDOT Rapid City Region - Dan Staton
Federal Highway Administration - Mark Hoines
Deadwood Citizen - Henry Cordes

In addition to ongoing guidance from the Study Team, special efforts were made to obtain feedback from other interested groups. Two public meetings and one meeting each with the Chamber of Commerce and City Council were held to discuss the draft proposals of the plan. A website was also established to give current progress of the study and as a tool for public feedback throughout the effort.



A project-dedicated website was built to distribute information and solicit feedback.

Analysis of Existing Conditions

Using the information gathered during the data collection process, a baseline condition for the study area was determined. This condition includes facts about the pedestrian environment in Deadwood like numbers of pedestrian crossings, critical crossing locations and patterns, conflict areas, and the amount of missing or unsatisfactory sidewalk. This information was also used to create GIS data that can be used in the future for additional analysis, if desired. Information gathered from the Advisory Team and from the public input process was also used to formulate the baseline conditions of the study area.

Determination of Project Prioritization Criteria

Using guidance from the Study Advisory Team, a set of criteria were established to help determine how pedestrian needs should be prioritized. Two aspects of project prioritization were derived: (1) determining the most critical condition aspects of the existing sidewalk (for example, is having adequate sidewalk width more or less important than having adequate cross-slope?) and (2) determining an overall set of criteria for all projects. This second set of criteria is used more comprehensively to assist in decision making as it allows different types of projects to be compared based on the same set of benefit criteria. These overall criteria are (in order of importance): benefit to pedestrian safety, relative ease of implementation, expansion of the accessible pedestrian network, benefit to existing and future development, and compliance to the Manual on Uniform Traffic Control Devices (MUTCD).

Development of the Solutions Plan

Combining the infrastructure and pedestrian activity data with on-site observations yielded a set of technical recommendations, referred to as the Solutions Plan. The Solutions Plan is the basis of this document and the major product of the study effort. It contains project recommendations, a relative benefit score, planning-level estimated costs, and a benefit/cost ratio for like-projects.

The overall state of pedestrian issues in the City of Deadwood is a result and combination of five major factors: pre-automobile city layout and amenities, Black Hills topography as defined by Deadwood and Whitewood Creeks, seasonal tourism largely driven by gaming, the relative remoteness of the town, and the past and present desire to provide safe facilities for pedestrians. The existing conditions are explained in these terms, each containing the following subtopics:

- Pre-automobile city layout and amenities: town scale, parking, transit (trolley), historic considerations
- Black Hills topography as defined by Deadwood and Whitewood Creeks: accessibility, bridges
- Seasonal tourism largely driven by gaming: pedestrian volumes, critical locations, peak times of pedestrian activity, pedestrian population
- Relative remoteness of the town: traffic, roadway cross-sections
- Past and present desire to provide safe facilities: existing sidewalks and trails, signing, signals, marking

Pre-Automobile City Layout and Amenities

Deadwood is a great place to walk. The scale of buildings, proximity of interesting destinations, comfortable streetscapes, and dynamic atmosphere all make for a pleasant pedestrian experience. These features are largely due to the early establishment of the city and the relatively small amount of growth that has occurred since the arrival of the automobile.

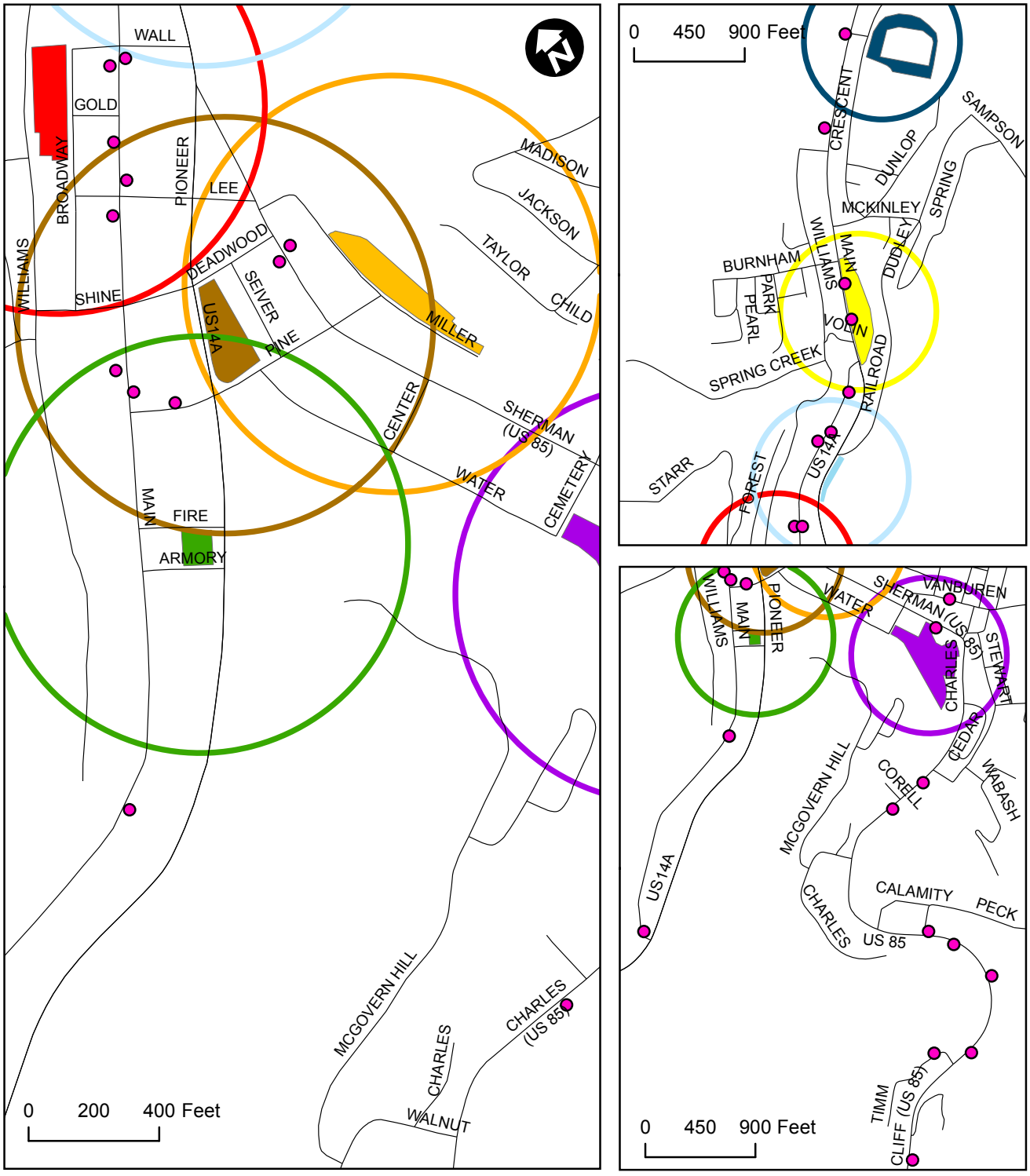
However, these same characteristics which make walking enjoyable in the downtown area, can make arriving as a pedestrian difficult. For example, all parking in downtown Deadwood has been retrofitted and, at times, can be scarce. So, while it's pleasant not to see or traverse large surface parking lots on foot, it is also more inconvenient to park away from a destination and walk or take transit to it.

The historic nature of the town is also a two-sided coin. It is among the most significant aspects of modern Deadwood and should not be compromised. The historical designations have a proven record of successfully protecting and promoting this as a special place. At the same time, these designations may prevent the implementation of major traffic or pedestrian improvements if the project would compromise the setting's historical aesthetic.

Most parking lots, like the Lower Main lot, require a short walk to the central downtown area.

The Presidential Neighborhood typifies the traditional design of Deadwood's residential areas.

On the next page:
Municipal parking lots and trolley stops provide good service for typical peak tourist activity. Each lot is shown with a corresponding ring. These rings are 1/4 mile in diameter, meaning that walking from the parking lot to the outside of the ring takes approximately three minutes.



Legend

- Broadway Parking Ramp
- Fire Street Parking Lot
- Interpretive Parking Lot
- Lower Main Street Parking Lot
- Miller Street Parking Lot
- Sherman Street Parking Lot
- Railroad Street Parking
- Rodeo Grounds Parking
- Trolley Stops

Existing Parking Lots and Trolley Stops

Black Hills Topography as Defined by Deadwood and Whitewood Creeks

Resident pedestrians are more affected by the challenging grades of Deadwood than visitors. In fact, except for walking to or through Mount Moriah Cemetery, most visitors will not be challenged by grades at all. Where grades do exist, they are steep and creative means of pedestrian access have been employed throughout the years. Steep sidewalks, elevated sidewalks with steps, and full staircases are used in Deadwood's residential areas to provide access along streets and to individual residences. In some areas, steep terrain has resulted in narrow street construction having no sidewalks or very narrow ones. Adding sidewalks in these areas would likely be prohibitively expensive and not worth the impacts to serve only a few houses on streets with light traffic.

Topographic maps convey the challenges of all types of transportation in this part of the Black Hills

Another aspect of sidewalk provision is the creeks of Deadwood. Though the paths cut by Deadwood and Whitewood Creeks define the modern town, pedestrian movement across the creeks is generally easy. The US 85 alignment follows Whitewood Creek and US 14A follows Deadwood Creek. There are three primary bridge crossings in the southern part of the study area and pedestrian facilities on these bridges are good.

Creek crossings along Cliff Street are adequate. This one has three separate non-auto bridges.

Landmark trees and street slopes affect sidewalk construction in the Presidential Neighborhood.

Accessible street design is not feasible in some locations. The US Access Board explains accessibility this way: "A pedestrian circulation system (sidewalks, street crossings, shared-use paths in the public right-of-way) is a program that a local government provides for its citizens. And it is the general availability of this program to people with disabilities that must be evaluated when considering the existing pedestrian environment. Full compliance with facility standards developed for new construction and alterations may not be required to achieve program access. Program accessibility can be thought of as providing a basic level of usability. It targets high-priority access improvements-such as curb ramps-that eliminate major barriers to the use of existing facilities, so that people with disabilities are not excluded from participation. The program accessibility obligation for existing facilities does not require a covered entity to take any action that it can demonstrate would result in... undue financial and administrative burdens." - Accessible Rights of Way: A Design Guide, Section 2.3

Seasonal Tourism Driven by Gaming

By far, the tourist industry has the greatest impact on the need for pedestrian improvements in the study area. During the course of a Saturday in July, the most active pedestrian crossing is on Main Street, just south of Deadwood Street where 2,320 Main Street crossings occur over a 11 hour period. The center of pedestrian activity is Main Street where most of the visitor-oriented destinations (casinos, hotels, restaurants, shops) are located.

Crossings of Pioneer Way can be especially intimidating for pedestrians who are visitors to Deadwood.

While pedestrian activity centers around Main Street, the most critical crossing locations are along Pioneer Way (US 14A) in downtown. This is because of the greater degree of pedestrian-traffic interaction found here as Pioneer Way is the primary traffic route through town. Pioneer Way can be crossed at Pine Street and at Deadwood Street at signalized intersections, but crossings at Lee Street and Wall Street are unsignalized.

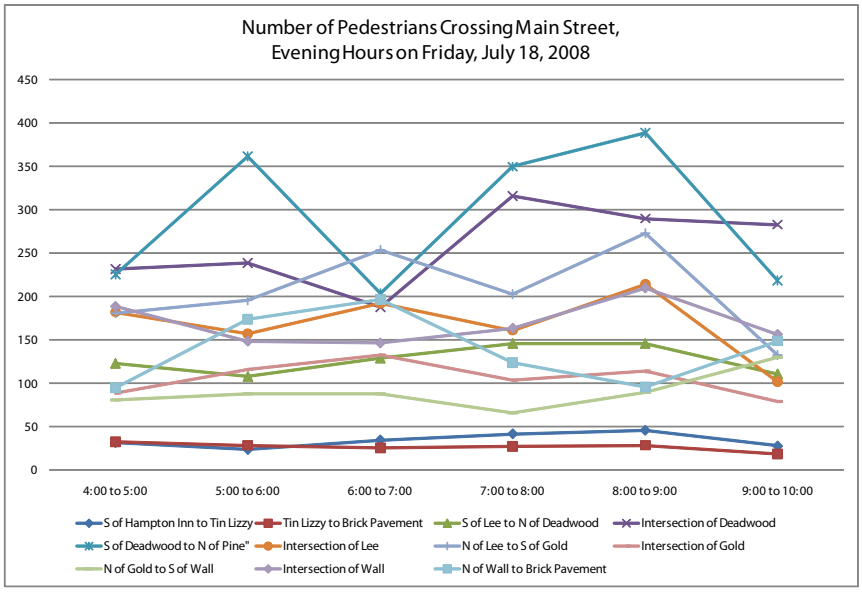
The nature of Deadwood tourism also has a particular influence on the pedestrian population. Several trends in types of visitors were noted during field visits. During afternoon and early evening hours, the pedestrian population is more represented by elderly individuals who tend to make fewer street crossings. It is not uncommon for these pedestrians to travel in large groups (as with touring groups) with some using assisting devices for walking. Characteristics of these types of walkers include slower walking speeds, slower notice of changing conditions (traffic, etc.), more reliance on curb ramps and smooth walking surfaces, and, as noted, fewer street crossings. During later evening hours, the pedestrian population shifts to younger visitors. Although these pedestrians will generally have an easier time navigating the infrastructure provided, other problems like lighting, inattention to changing conditions (traffic, etc.), willingness to make more street crossings, and intoxication all present other types of challenges.

Pedestrian facilities in the downtown area accommodate a wide variety of pedestrian types. Numbers and types of pedestrian usage can change depending on the day of the week or the time of the day. Special activities of the adjacent businesses also have impacts on how pedestrians travel on Main Street.

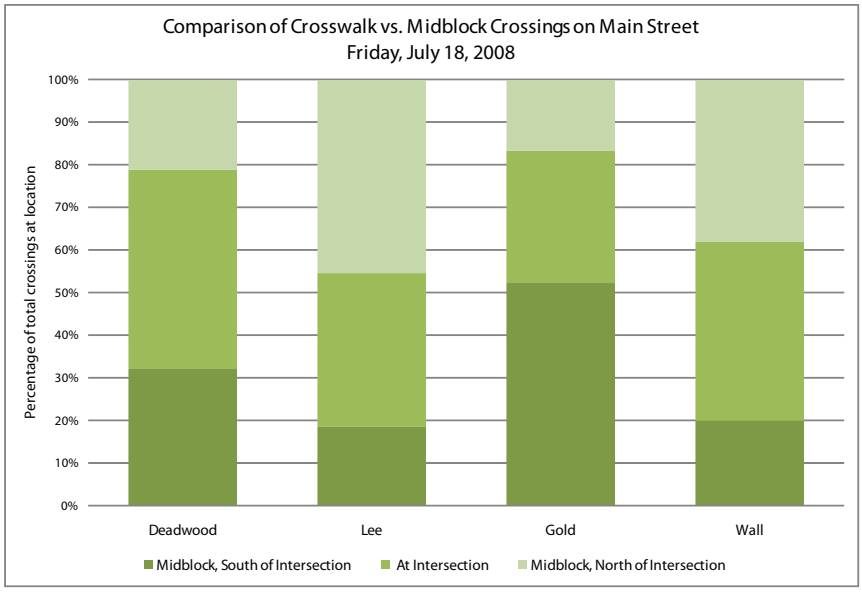
Day	Zone	Count Schedule	Peak Hour	Total Peak Hour Crossings in Zone	Total Count Crossings in Zone
Friday, May 16	Downtown (Main)	7AM-9AM & 2PM-10PM	7:15-8:15 PM	1,439	8,968
Friday, July 18	Downtown (Main)*	10AM to 10PM	8:00-9:00 PM	1,958	16,818
Friday, Aug 22	Downtown (Main) +	-	-	-	-
Friday, May 16	Downtown (14A)	7AM-9AM & 2PM-10PM	7:15-8:15 PM	512	3,487
Friday, July 18	Downtown (14A)	10AM to 10PM	8:00-9:00 PM	749	6,736
Friday, Aug 22	Downtown (14A)	2 PM to 10 PM	8:45-9:45 PM	2,825	15,935
Friday, May 16	Downtown North	7AM-9AM & 2PM-10PM	8:00-9:00 PM	65	383
Friday, July 18	Downtown North	10AM to 10PM	9:00-10:00 PM	144	670
Friday, Aug 22	Downtown North +	-	-	-	-
Friday, May 16	Rodeo	7AM-9AM & 2PM-10PM	3:15-4:15 PM	19	109
Friday, July 18	Rodeo	10AM to 10PM	7:00-8:00 PM	95	252
Friday, Aug 22	Rodeo	2 PM to 10 PM	5:15-6:15 PM	101	442
Friday, May 16	Gulch	7AM-9AM & 2PM-10PM	7:15-8:15 PM	50	175
Friday, July 18	Gulch	10AM to 10PM	7:00-8:00 PM	60	242
Friday, Aug 22	Gulch	2 PM to 10 PM	5:15-6:15 PM	113	505
Friday, May 16	School	7AM-9AM & 2PM-10PM	2:45-3:45 PM	234	672
Friday, July 18	School	10AM to 10PM	7:00-8:00 PM	153	1,438
Friday, Aug 22	School +	-	-	-	-
Friday, May 16	(14A) a.k.a jumpers	7AM-9AM & 2PM-10PM	-	-	0
Friday, July 18	(14A) a.k.a jumpers	10AM to 10PM	8:00-9:00 PM	2	7
Friday, Aug 22	(14A) a.k.a jumpers	10AM to 10PM	8:15-9:15 PM	6	19

A comparison of counts made on three different Fridays in May, July, and August 2008.

*Not including 15 minute periods at 2:00, 4:00, 6:00, and 7:30 for street performances
+ Data not collected at location due to street closure (e.g. Kool Deadwood Nights)



The top of Main Street has the highest pedestrian activity in Deadwood. Much of this activity is due to employees of the Franklin Hotel and Silverado Casino crossing between buildings.



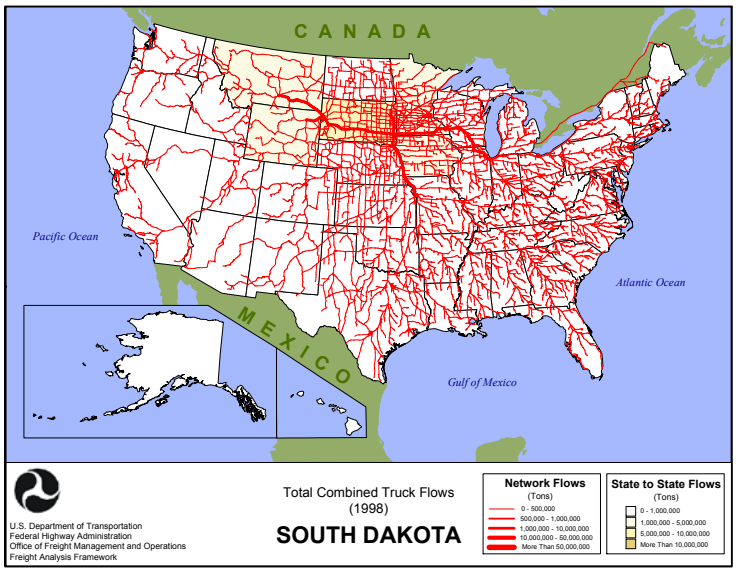
Wall Street has the highest rate of crosswalk compliance on Main Street. More midblock crossings occur between Lee and Gold Streets than anywhere else.

Relative Remoteness of the Town

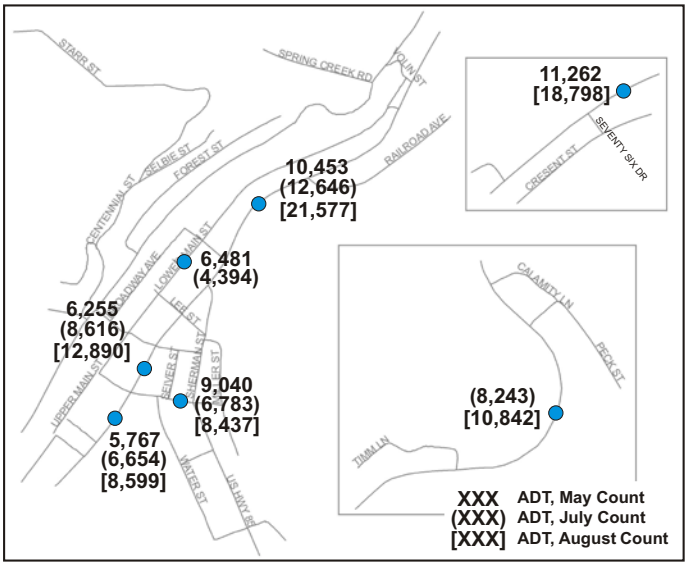
Deadwood's location has an effect on pedestrians because of the traffic patterns resulting from its position at the intersection of two major regional routes. The town is en route between a large area of western central South Dakota, northeastern Wyoming, and northwestern Nebraska, and I-90. This area is void of other good north-south interstate connectors and therefore US 85 serves a significant amount of regional traffic through Deadwood. This aspect has no real impact on primary pedestrian activity on Main Street. However, as mentioned previously, pedestrian crossing problems on Pioneer are exacerbated by the through traffic following the US 85 route on Cliff Street, Pine Street, and Pioneer Street.

Most of Deadwood's streets are two lane roadways. Pioneer Way is a four lane undivided roadway. The current official average daily traffic (ADT) on Pioneer Way is just over 10,000 vehicles per day. The extra width is beneficial for large trucks and during special events, but in general, Pioneer Way has more capacity than is needed for the traffic demand during non-peak hours.

Much of the traffic in the Black Hills is recreational and good roads here are historically widely spread. The intersection of two regional routes in Deadwood and its proximity to I-90 results in a significant amount of through traffic.



US 85 is a regional north-south route feeding the I-90 corridor. I-90 is South Dakota's primary east-west freight corridor. Source: Federal Highway Administration.



Traffic counts were collected by SDDOT concurrent with pedestrian counts for this project. Blue dots mark the count locations in this figure. The May and July counts were typical tourism off-peak and peak periods, respectively. The August count was made during a special event weekend.

Past and Present Desire to Provide Safe Facilities

Leaders of Deadwood, past and present, are to be commended for attempts to provide sidewalk connections in their town. A walking audit performed for this study noted multiple locations where some form of sidewalk has been constructed where it took great effort to do so. This effort is representative of the town's desire to provide adequate pedestrian facilities even where it may be difficult to do so and is an admirable thing.

Provisions for pedestrian travel are generally adequate, though some improvements are needed. Crosswalks are marked where appropriate, though the striping condition is marginal. Pedestrian warning signs are present, but some need to be upgraded to current MUTCD standards. Some pedestrian signals are present, but not all signalized intersection approaches have them.

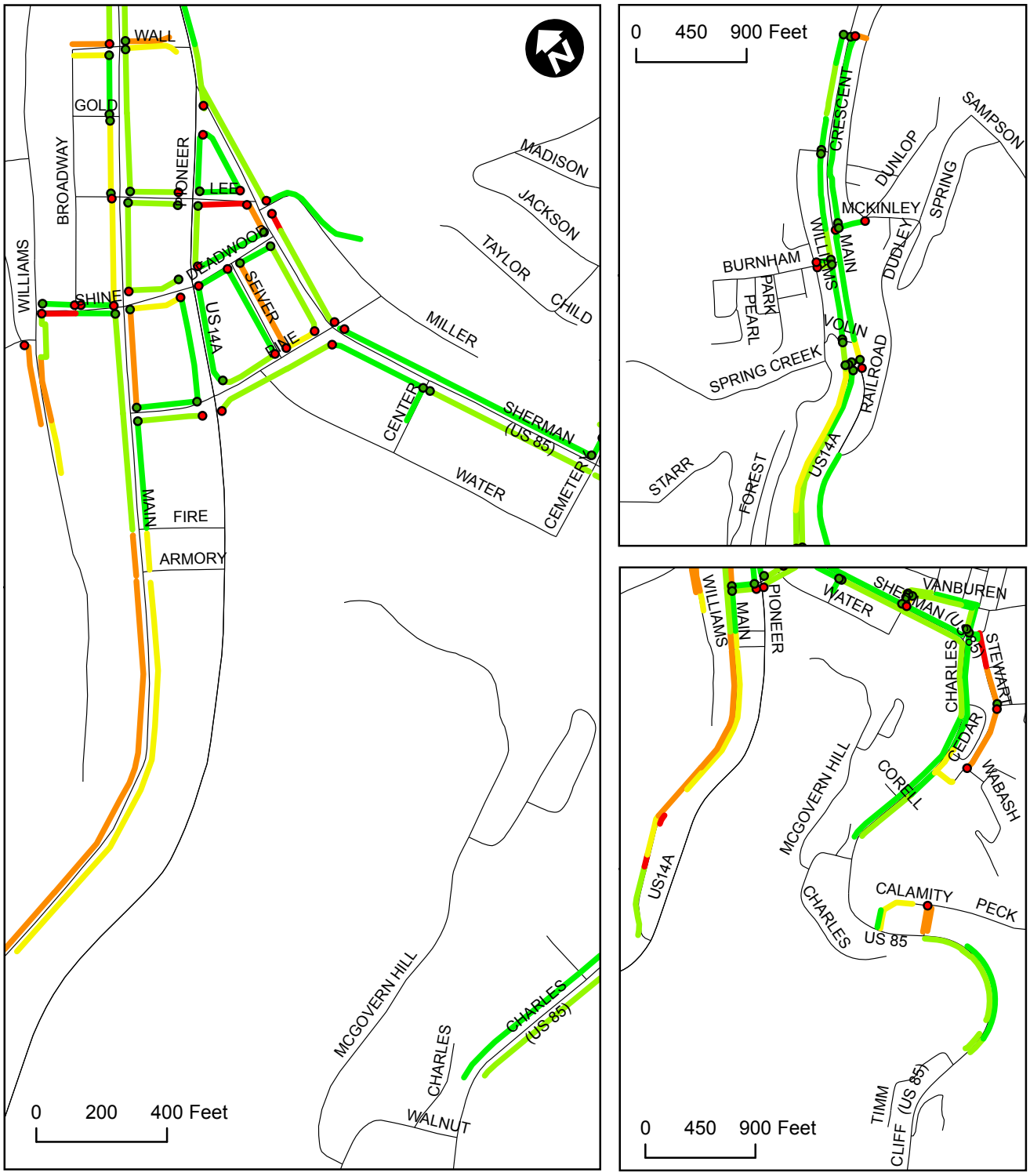
Some jurisdictions choose not to mark crosswalks at unsignalized intersections. In Deadwood, it is correctly recognized that not marking the crossings of Pioneer Way could jeopardize pedestrian travel at these intersections. Active warning beacons with push buttons have been installed, but go largely unused.

Sandy soils and the underlying brick pavers give pavement markings a short life. Markings were reapplied during the Summer of 2008.

Williams Street is an example of efforts to provide sidewalks despite difficult construction conditions.

Crosswalks are well-signed, though a few locations should be brought into MUTCD compliance. An example is at the intersection of Upper Main Street and Armory Street where a downward arrow plate (W16-7p) should be installed.

On the next pages: Maps showing relative sidewalk condition and width detail the existing condition of Deadwood's pedestrian facilities.



Legend

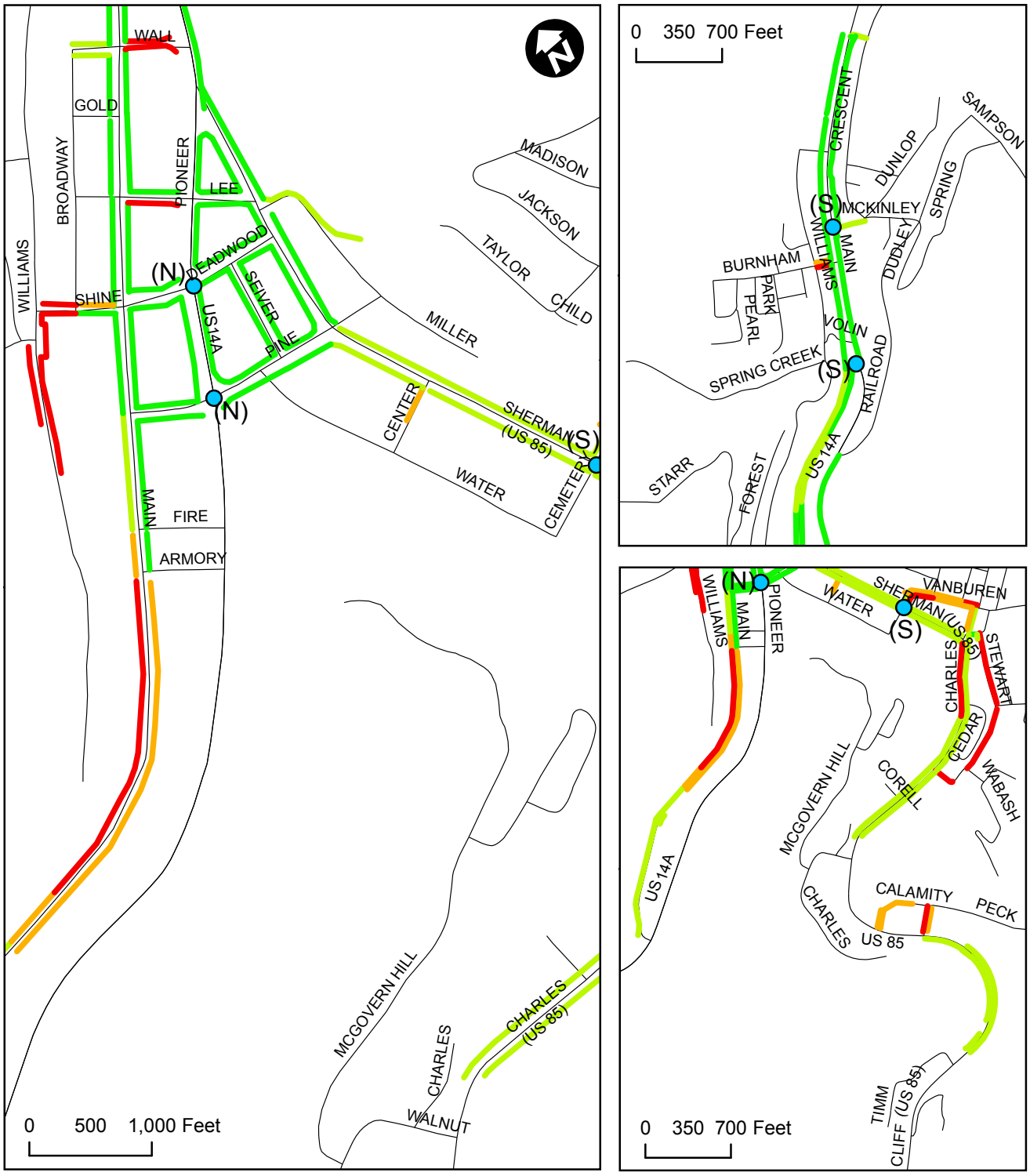
Number of non-compliant* segments per 1,000 ft of sidewalk

- 0 - 3
- 4 - 8
- 9 - 13
- 14 - 18
- More than 18

- Compliant Curb Ramps
- Non-Compliant Curb Ramps

*Includes the following compliance issues:
- Horizontal cracks > 0.5 in
- Vertical cracks > 0.25 in
- Cross-slope > 2%
- Obstructions in sidewalk (poles, fixtures, etc.)

Existing Sidewalk and Curb Ramp Condition



Legend

Sidewalk Width

- Less than 4'
- 4.0' - 4.9'
- 5.0' - 5.9'
- 6' or greater

Existing Pedestrian Signals
- (N) Non-Pedestrian-Actuated
- (S) Semi-Pedestrian-Actuated

Existing Sidewalk Width and Pedestrian Signals

As in most any municipality, the opportunities that exist for enhanced pedestrian facilities and operation in the study area are tempered by some very real constraints. In Deadwood, these constraints include:

- High turnover of pedestrian population
- Conflicts with major traffic arterials
- Landforms (terrain and water courses)
- Historical designation

Analysis of the existing transportation network and pedestrian activity within the Deadwood study limits has yielded the following general needs:

- Improved pedestrian access to Main Street from areas east of Pioneer Way
- Upgrades to existing sidewalks on accessible routes
- Construction of critical sidewalk segments where missing
- Citywide upgrades to existing signage, striping, lighting, and signal equipment
- Consideration of major pedestrian flow needs with respect to impending redevelopment

Exploration of these needs and constraints has led to the development of the Pedestrian Solutions Plan which is presented in the following section.

The Solutions Plan is presented as a vision for the ultimate state of pedestrian enhancement in Deadwood. While these improvements all appear reasonably feasible based on preliminary engineering evaluations, some will no doubt be prohibitively expensive, at least in the short term. Others will require re-evaluation during the design phase once construction details and costs are determined in greater detail. The improvements in the Solutions Plan are presented as a cohesive whole, though some pedestrian-related improvements can be broken into smaller projects for programming and funding purposes.

Each project in the Solutions Plan has been given a unique identification number. These numbers are used for reference of individual projects and are not an indication of priority, cost, or any other characteristic. To aid in analysis and project selection, the Solutions Plan is presented in several ways:

Page 17: The overall plan map shows projects in the Solutions Plan graphically.

Page 18-19: The Solutions Plan is presented in table form with all projects shown together along with benefit scores and estimated costs.

Pages 20 - 27: Projects in the plan are presented in like-project groupings. This categorization allows presentation of a benefit/cost ratio to help better relate a project's improvement efficiency to other similar projects. The project groupings are:

- New Sidewalk Construction
- Sidewalk Reconstruction
- Curb Ramp Improvements
- Signal Enhancements
- Signing and Marking
- Intersection Reconstruction
- Roadway Reconstruction
- Miscellaneous Projects.

Pages 28 - 36: Descriptions and figures are provided for many of the projects found in the Solutions Plan. It is important to note that the figures provided are illustrative sketches and are not detailed design drawings.

Project Prioritization Using Relative Benefits

There are many streets within the study area that have no sidewalks or are in need of sidewalk reconstruction. Additionally, there are many other types of pedestrian improvements recommended as part of the Solutions Plan. Because of funding constraints, these needs have been prioritized in order to address critical pedestrian needs in a logical manner, following a documented process. The relative benefit procedure uses a five criteria scoring system to determine the highest sidewalk construction and replacement needs. Each project was given a one-to-ten score (ten being the highest benefit) in each category. These scores were initially given by the consultant team then adjusted through input of the Study Advisory Team. The categories were weighted according to input from the study advisory team, and a sum of each categorical benefit score gives the total relative benefit score. The benefit categories with descriptions are as follows:

Benefit to pedestrian safety (weight 5.0): A high scoring project will have a significant impact towards safe pedestrian travel at a particular location.

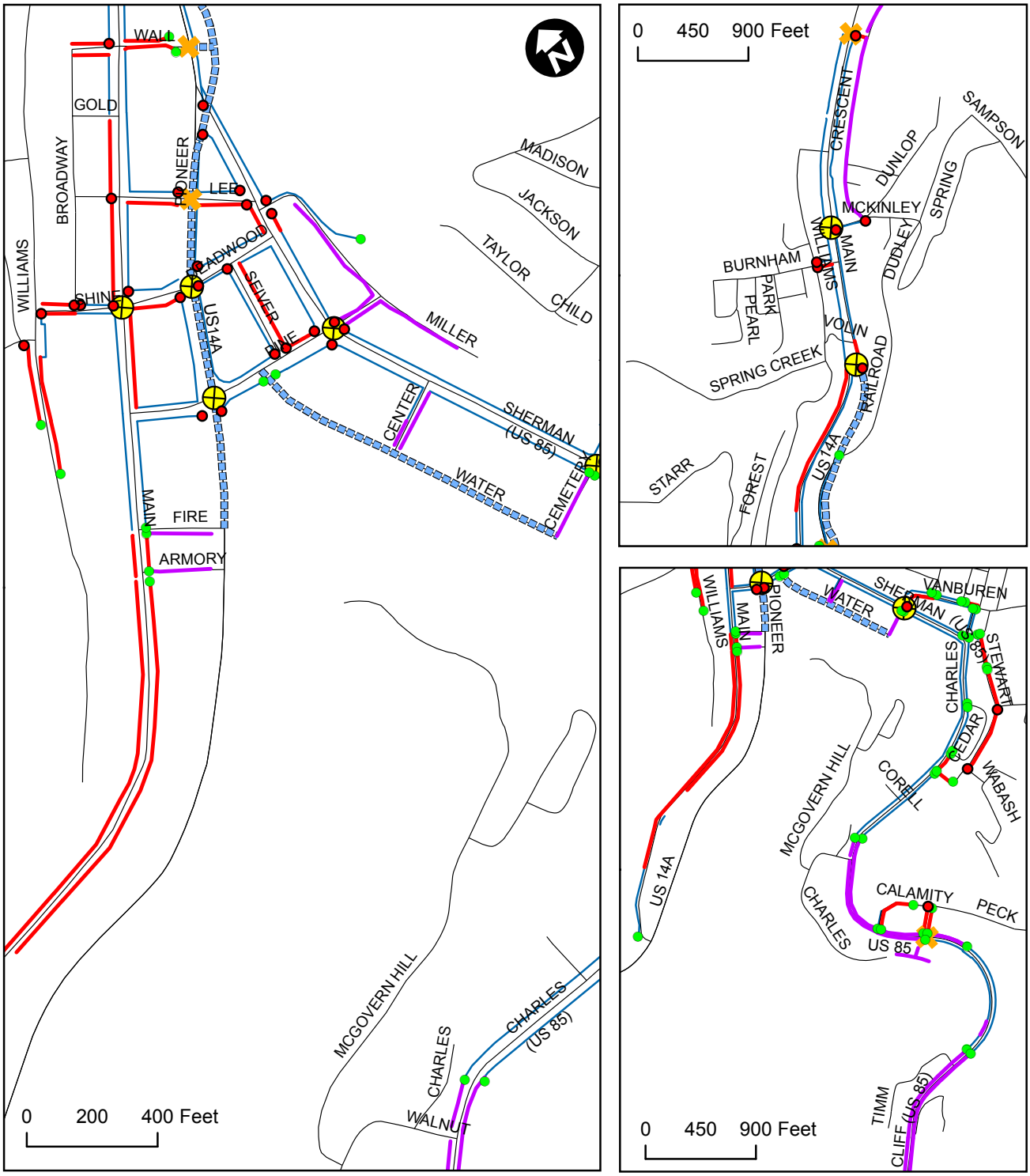
Relative ease of implementation (weight 3.67): A high scoring project can be implemented quickly, inexpensively, and with little or no environmental or right-of-way impact.

Expansion of the accessible pedestrian network (weight 3.5): A high scoring project adds mileage to the pedestrian network or makes existing portions of the network accessible that currently are not.

Benefit to existing and future development (weight 3.33): A high scoring project directly facilitates pedestrian activity to or around existing or future commercial development

Compliance to the MUTCD (weight 3.0): A high scoring project brings an existing pedestrian feature into compliance with accepted guidelines.

On the next pages: The Solutions Plan is illustrated in map and table forms with all recommended pedestrian improvements.



Legend

- Construct missing sidewalk (ID 1 - 11)
- Reconstruct existing sidewalk (ID 12 - 33)
- Existing sidewalk
- Roadway reconstruction (ID 60, 61, 64)
- Construct new curb ramp (ID 48)
- Reconstruct existing curb ramp (ID 34 - 47)
- Crosswalk improvements (ID 49, 58, 59, 63)
- Signal improvements (ID 50 - 56)

Solutions Plan

Pedestrian Solutions Plan: All Projects (Page 1 of 2)

ID	Type	Route	From	To	Length (ft)	Description	Safety (x5)	Ease of Implementation (x3.67)	Network Increase (x3.5)	Benefit to Development (x3.33)	MUTCD Compliance (x3.0)	Total Benefit	Overall Benefit Rank	Cost
1	Sidewalk construction	Cliff St (US 85)	US 385	Timm Ln	6100	Construct new sidewalk	5	8	8	3	0	92.35	9	$ 192,900
2	Sidewalk construction	Cliff St (US 85)	Burlington St	Walnut St	2160	Construct new sidewalk	7	7	9	3	0	102.18	3	$ 68,300
3	Sidewalk construction	Cemetery St (W)	Sherman St	Water St	220	Construct new sidewalk	5	6	5	3	0	74.51	21	$ 7,000
4	Sidewalk construction	Center St	Sherman St	Water St	280	Construct new sidewalk	5	6	5	3	0	74.51	21	$ 8,900
5	Sidewalk construction	Crescent Dr (E)	Dunlop Ave	Dead End	2870	Construct new sidewalk	4	7	8	5	0	90.34	11	$ 90,800
6	Sidewalk construction	Fire St (S)	Main St	Pioneer Way (US 14A)	200	Construct new sidewalk	4	7	6	2	0	73.35	22	$ 6,300
7	Sidewalk construction	Armory St (N)	Main St	Pioneer Way (US 14A)	190	Construct new sidewalk	3	7	5	1	0	61.52	26	$ 6,000
8	Sidewalk construction	Miller St (S)	Sherman St	Dead End	680	Construct new sidewalk	5	8	5	2	0	78.52	18	$ 21,500
9	Sidewalk construction	Pine St	Sherman St	Miller St	300	Construct new sidewalk	5	7	5	2	0	74.85	20	$ 9,500
10	Sidewalk construction	Main St (US 14A) (W)	Seventy Six Dr	US 85	1450	Construct new sidewalk	4	6	9	5	0	90.17	12	$ 45,900
11	Sidewalk construction	New	Super 8 Motel	Mickelson Trail	90	Construct new connection	2	4	6	6	0	65.66	24	$ 11,100
12	Sidewalk reconstruction	Burlington St	Cliff St (US 85)	Calamity Ln	400	Reconstruct sidewalk to ADA standards	1	7	1	1	0	37.52	36	$ 15,200
13	Sidewalk reconstruction	Calamity Ln (S)	Burlington St	Cliff St (US 85)	520	Reconstruct sidewalk to ADA standards	1	7	1	1	0	37.52	36	$ 19,700
14	Sidewalk reconstruction	Stewart St (E)	Charles St	Fillmore St	1530	Reconstruct sidewalk to ADA standards	1	4	2	1	0	30.01	39	$ 58,100
15	Sidewalk reconstruction	Van Buren Ave (N)	Jefferson St	Washington St	150	Reconstruct sidewalk to ADA standards	1	5	3	1	0	37.18	38	$ 5,700
16	Sidewalk reconstruction	Van Buren Ave (S)	Lincoln Ave	Cemetery St	150	Reconstruct sidewalk to ADA standards	1	5	3	1	0	37.18	38	$ 5,700
17	Sidewalk reconstruction	Cemetery St (E)	Van Buren Ave	Sherman St	140	Reconstruct sidewalk to ADA standards	1	6	3	1	0	40.85	35	$ 5,300
18	Sidewalk reconstruction	Pine St (US 85) (N)	Sherman St	Seiver St	105	Reconstruct sidewalk to ADA standards	1	7	4	3	0	54.68	28	$ 4,000
19	Sidewalk reconstruction	Seiver St (E)	Pine St	Deadwood St	330	Reconstruct sidewalk to ADA standards	1	7	3	1	0	44.52	33	$ 12,500
20	Sidewalk reconstruction	Sherman St	Deadwood St	Miller St	180	Reconstruct sidewalk to ADA standards	1	8	4	2	0	55.02	27	$ 6,800
21	Sidewalk reconstruction	Lee St (S)	Sherman St	Main St	320	Reconstruct sidewalk to ADA standards	1	8	4	4	0	61.68	26	$ 12,100
22	Sidewalk reconstruction	Deadwood St (S)	Pioneer Way (US 14A)	Main St	220	Reconstruct sidewalk to ADA standards	1	8	5	5	0	68.51	24	$ 8,300
23	Sidewalk reconstruction	Shine St	Broadway Ave	Williams St	240	Reconstruct sidewalk to ADA standards	1	6	3	2	0	44.18	34	$ 9,100
24	Sidewalk reconstruction	Williams St	S. of Denver Ave	Shine St	850	Reconstruct sidewalk to ADA standards	1	6	2	1	0	37.35	37	$ 32,300
25	Sidewalk reconstruction	Main St (W)	N. of Wall St	Pioneer Way (US 14A)	1230	Reconstruct sidewalk to ADA standards	1	8	5	4	0	65.18	25	$ 46,700
26	Sidewalk reconstruction	Main St	N. of Pioneer Way (US 14A)	Armory St	3460	Reconstruct sidewalk to ADA standards	1	8	4	1	0	51.69	30	$ 131,300
27	Sidewalk reconstruction	Main St	Armory St	Fire St	240	Reconstruct sidewalk to ADA standards	1	8	4	2	0	55.02	27	$ 9,100
28	Sidewalk reconstruction	Main St (E)	Pine St	Deadwood St	300	Reconstruct sidewalk to ADA standards	1	8	4	5	0	65.01	25	$ 11,400
29	Sidewalk reconstruction	Main St (W)	Shine St	Lee St	330	Reconstruct sidewalk to ADA standards	1	8	4	7	0	71.67	23	$ 12,500
30	Sidewalk reconstruction	Main St (W)	Lee St	Gold St	250	Reconstruct sidewalk to ADA standards	1	8	4	7	0	71.67	23	$ 9,500
31	Sidewalk reconstruction	Wall St	Pioneer Way (US 14A)	Broadway Ave	720	Reconstruct sidewalk to ADA standards	1	5	3	4	0	47.17	32	$ 27,300
32	Sidewalk reconstruction	Pioneer Way (US 14A) (E)	Main St	Volin St	160	Reconstruct sidewalk to ADA standards	1	8	4	2	0	55.02	27	$ 6,100
33	Sidewalk reconstruction	Burnham Ave (S)	Main St (US 14A)	Williams St	190	Reconstruct sidewalk to ADA standards	1	6	2	1	0	37.35	37	$ 7,200
34	Curb ramp reconstruction	Sherman St	Miller St	Miller St	N/A	All quadrants (2)	1	8	3	1	0	48.19	31	$ 6,600
35	Curb ramp reconstruction	Sherman St	Lee St	Lee St	N/A	All quadrants (2)	1	8	3	1	0	48.19	31	$ 6,600
36	Curb ramp reconstruction	Sherman St	Pioneer Way (US 14A)	Pioneer Way (US 14A)	N/A	All quadrants (2)	1	8	3	1	0	48.19	31	$ 6,600
37	Curb ramp reconstruction	Seiver St	Pine St	Pine St	N/A	All quadrants (2)	1	8	3	1	0	48.19	31	$ 6,600
38	Curb ramp reconstruction	Pioneer Way (US 14A)	Wall St	Wall St	N/A	All quadrants (2)	1	8	3	1	0	48.19	31	$ 6,600
39	Curb ramp reconstruction	Sherman St (US 85)	Pine St	Pine St	N/A	All quadrants (4)	1	8	3	1	0	48.19	31	$ 13,200
40	Curb ramp reconstruction	Main St	Deadwood St	Deadwood St	N/A	NW and NE quadrants (2)	1	8	3	1	0	48.19	31	$ 6,600
41	Curb ramp reconstruction	Pioneer Way (US 14A)	Lee St	Lee St	N/A	NW quadrant (1)	1	8	3	1	0	48.19	31	$ 3,300
42	Curb ramp reconstruction	Main St	Wall St	Wall St	N/A	NW quadrant (1)	1	8	3	1	0	48.19	31	$ 3,300
43	Curb ramp reconstruction	Sherman St (US 85)	Cemetery St	Cemetery St	N/A	SE quadrant (1)	1	8	3	1	0	48.19	31	$ 3,300
44	Curb ramp reconstruction	Pioneer Way (US 14A)	Pine St	Pine St	N/A	SW and SE quadrants (2)	1	8	3	1	0	48.19	31	$ 6,600
45	Curb ramp reconstruction	Seiver St	Deadwood St	Deadwood St	N/A	SW quadrant (1)	1	8	3	1	0	48.19	31	$ 3,300
46	Curb ramp reconstruction	Main St	Lee St	Lee St	N/A	SW quadrant (1)	1	8	3	1	0	48.19	31	$ 3,300
47	Curb ramp reconstruction	Pioneer Way (US 14A)	Deadwood St	Deadwood St	N/A	SW, SE, and NE quadrants (3)	1	8	3	1	0	48.19	31	$ 9,900
48	Curb ramp construction	Various			N/A	46 total new ramps	2	7	4	1	0	53.02	29	$ 151,800

Note: Costs are intended as planning-level estimates in 2008 dollars and do not include right-of-way or utility relocation costs.

Pedestrian Solutions Plan: All Projects (Page 2 of 2)

ID	Type	Route	From	To	Length (ft)	Description	Safety (x5)	Ease of Implementation (x3.67)	Network Increase (x3.5)	Benefit to Development (x3.33)	MUTCD Compliance (x3.0)	Total Benefit	Overall Benefit Rank	Cost
49	Intersection improvements	Cliff St (US 85)	Burlington St		N/A	Install crosswalk, standard signage	6	10	1	4	5	98.52	5	$ 1,300
50	Intersection improvements	Main St	Deadwood St		N/A	Reconstruct westbound approach. Add parking, countdown heads	8	5	2	3	6	93.34	8	$ 94,900
51	Intersection improvements	Sherman St (US 85)	Pine St		N/A	Remove pedestrian heads (all-way stop)*	2	10	0	0	10	76.7	19	$ 6,300
52	Intersection improvements	Sherman St (US 85)	Cemetery St		N/A	Update ped signals with countdown heads	4	8	1	1	8	80.19	17	$ 9,100
53	Intersection improvements	Pioneer Way (US 14A)	Pine St		N/A	Update ped signals with countdown heads	4	8	1	2	8	83.52	15	$ 9,100
54	Intersection improvements	Pioneer Way (US 14A)	Deadwood St		N/A	Update ped signals with countdown heads	4	8	1	3	8	86.85	14	$ 9,100
55	Intersection improvements	Pioneer Way (US 14A)	Main St		N/A	Update ped signals with countdown heads	4	8	1	3	8	86.85	14	$ 9,100
56	Intersection improvements	Pioneer Way (US 14A)	McKinley St		N/A	Update ped signals with countdown heads	4	8	1	1	8	80.19	17	$ 6,800
57	Signing, striping improvements	Various			N/A	Citywide enhancements	4	9	1	1	9	86.86	13	$ 6,300
58	Intersection improvements	Pioneer Way (US 14A)	Lee St		N/A	Construct refuge island, passive ped actuated beacon	10	7	2	4	2	102.01	4	$ 75,900
59	Intersection improvements	Pioneer Way (US 14A)	Wall St		N/A	Construct refuge island, passive ped actuated beacon	10	7	2	5	2	105.34	2	$ 75,900
60	Roadway reconstruction	Pioneer Way (US 14A)	Pine St	Main St	2670	Relocate Pioneer Way further east. Narrow cross-section to 2-3 lanes.	10	1	8	7	1	107.98	1	$ 3,226,200
61	Roadway reconstruction	Lower Main St (US 14A)	S. of Main St	McKinley St	1590	Relocate Pioneer Way further east. Extend Main Street.	8	3	2	10	1	94.31	7	$ 2,881,900
62	Special construction	Overhead	Water St (E. of Pioneer)	Pine St (W. of Pioneer)	170	Grade separated crossing of Pioneer	8	3	2	10	0	91.31	10	$ 1,012,000
63	Intersection improvements	Lower Main St (US 14A)	Seventy Six Dr		N/A	Apply for experimental use of and install HAWK signal	7	7	1	5	0	80.84	16	$ 75,900
64	Roadway reconstruction	Water St	Cemetery St	Pine St	1250	Reconstruct Water St to include sidewalks, traffic lanes between Sherman St lot and Pine St (maybe one way)	3	6	6	10	2	97.32	6	$ 898,200

Note: Costs are intended as planning-level estimates in 2008 dollars and do not include right-of-way or utility relocation costs.

** See page 29 for additional information.*

Pedestrian Solutions Plan: New Sidewalk Construction

ID	Type	Route	From	To	Length (ft)	Description	Safety (x5)	Ease of Implementation (x3.67)	Network Increase (x3.5)	Benefit to Development (x3.33)	MUTCD Compliance (x3.0)	Total Benefit	Categorical Benefit Rank	Cost	Benefit/ cost
2	Sidewalk construction	Cliff St (US 85)	Burlington St	Walnut St	2160	Construct new sidewalk	7	7	9	3	0	102.18	1	$ 68,300	0.15%
1	Sidewalk construction	Cliff St (US 85)	US 385	Timm Ln	6100	Construct new sidewalk	5	8	8	3	0	92.35	2	$ 192,900	0.05%
5	Sidewalk construction	Crescent Dr (E)	Dunlop Ave	Dead End	2870	Construct new sidewalk	4	7	8	5	0	90.34	3	$ 90,800	0.10%
10	Sidewalk construction	Main St (US 14A) (W)	Seventy Six Dr	US 85	1450	Construct new sidewalk	4	6	9	5	0	90.17	4	$ 45,900	0.20%
8	Sidewalk construction	Miller St (S)	Sherman St	Dead End	680	Construct new sidewalk	5	8	5	2	0	78.52	5	$ 21,500	0.37%
9	Sidewalk construction	Pine St	Sherman St	Miller St	300	Construct new sidewalk	5	7	5	2	0	74.85	6	$ 9,500	0.79%
3	Sidewalk construction	Cemetery St (W)	Sherman St	Water St	220	Construct new sidewalk	5	6	5	3	0	74.51	7	$ 7,000	1.06%
4	Sidewalk construction	Center St	Sherman St	Water St	280	Construct new sidewalk	5	6	5	3	0	74.51	8	$ 8,900	0.84%
6	Sidewalk construction	Fire St (S)	Main St	Pioneer Way (US 14A)	200	Construct new sidewalk	4	7	6	2	0	73.35	9	$ 6,300	1.16%
11	Sidewalk construction	New	Super 8 Motel	Mickelson Trail	90	Construct new connection	2	4	6	6	0	65.66	10	$ 11,100	0.59%
7	Sidewalk construction	Armory St (N)	Main St	Pioneer Way (US 14A)	190	Construct new sidewalk	3	7	5	1	0	61.52	11	$ 6,000	1.03%

Note: Costs are intended as planning-level estimates in 2008 dollars and do not include right-of-way or utility relocation costs.

Pedestrian Solutions Plan: Sidewalk Reconstruction

ID	Type	Route	From	To	Length (ft)	Description	Safety (x5)	Ease of Implementation (x3.67)	Network Increase (x3.5)	Benefit to Development (x3.33)	MUTCD Compliance (x3.0)	Total Benefit	Categorical Benefit Rank	Cost	Benefit/ cost
29	Sidewalk reconstruction	Main St (W)	Shine St	Lee St	330	Reconstruct sidewalk to ADA standards	1	8	4	7	0	71.67	1	$ 12,500	0.57%
30	Sidewalk reconstruction	Main St (W)	Lee St	Gold St	250	Reconstruct sidewalk to ADA standards	1	8	4	7	0	71.67	1	$ 9,500	0.75%
22	Sidewalk reconstruction	Deadwood St (S)	Pioneer Way (US 14A)	Main St	220	Reconstruct sidewalk to ADA standards	1	8	5	5	0	68.51	2	$ 8,300	0.83%
25	Sidewalk reconstruction	Main St (W)	N. of Wall St	Pioneer Way (US 14A)	1230	Reconstruct sidewalk to ADA standards	1	8	5	4	0	65.18	3	$ 46,700	0.14%
28	Sidewalk reconstruction	Main St (E)	Pine St	Deadwood St	300	Reconstruct sidewalk to ADA standards	1	8	4	5	0	65.01	4	$ 11,400	0.57%
21	Sidewalk reconstruction	Lee St (S)	Sherman St	Main St	320	Reconstruct sidewalk to ADA standards	1	8	4	4	0	61.68	5	$ 12,100	0.51%
20	Sidewalk reconstruction	Sherman St	Deadwood St	Miller St	180	Reconstruct sidewalk to ADA standards	1	8	4	2	0	55.02	6	$ 6,800	0.81%
27	Sidewalk reconstruction	Main St	Armory St	Fire St	240	Reconstruct sidewalk to ADA standards	1	8	4	2	0	55.02	6	$ 9,100	0.60%
32	Sidewalk reconstruction	Pioneer Way (US 14A) (E)	Main St	Volin St	160	Reconstruct sidewalk to ADA standards	1	8	4	2	0	55.02	6	$ 6,100	0.90%
18	Sidewalk reconstruction	Pine St (US 85) (N)	Sherman St	Seiver St	105	Reconstruct sidewalk to ADA standards	1	7	4	3	0	54.68	7	$ 4,000	1.37%
26	Sidewalk reconstruction	Main St	N. of Pioneer Way (US 14A)	Armory St	3460	Reconstruct sidewalk to ADA standards	1	8	4	1	0	51.69	8	$ 131,300	0.04%
31	Sidewalk reconstruction	Wall St	Pioneer Way (US 14A)	Broadway Ave	720	Reconstruct sidewalk to ADA standards	1	5	3	4	0	47.17	9	$ 27,300	0.17%
19	Sidewalk reconstruction	Seiver St (E)	Pine St	Deadwood St	330	Reconstruct sidewalk to ADA standards	1	7	3	1	0	44.52	10	$ 12,500	0.36%
23	Sidewalk reconstruction	Shine St	Broadway Ave	Williams St	240	Reconstruct sidewalk to ADA standards	1	6	3	2	0	44.18	11	$ 9,100	0.49%
17	Sidewalk reconstruction	Cemetery St (E)	Van Buren Ave	Sherman St	140	Reconstruct sidewalk to ADA standards	1	6	3	1	0	40.85	12	$ 5,300	0.77%
12	Sidewalk reconstruction	Burlington St	Cliff St (US 85)	Calamity Ln	400	Reconstruct sidewalk to ADA standards	1	7	1	1	0	37.52	13	$ 15,200	0.25%
13	Sidewalk reconstruction	Calamity Ln (S)	Burlington St	Cliff St (US 85)	520	Reconstruct sidewalk to ADA standards	1	7	1	1	0	37.52	13	$ 19,700	0.19%
24	Sidewalk reconstruction	Williams St	S. of Denver Ave	Shine St	850	Reconstruct sidewalk to ADA standards	1	6	2	1	0	37.35	14	$ 32,300	0.12%
33	Sidewalk reconstruction	Burnham Ave (S)	Main St (US 14A)	Williams St	190	Reconstruct sidewalk to ADA standards	1	6	2	1	0	37.35	14	$ 7,200	0.52%
15	Sidewalk reconstruction	Van Buren Ave (N)	Jefferson St	Washington St	150	Reconstruct sidewalk to ADA standards	1	5	3	1	0	37.18	15	$ 5,700	0.65%
16	Sidewalk reconstruction	Van Buren Ave (S)	Lincoln Ave	Cemetery St	150	Reconstruct sidewalk to ADA standards	1	5	3	1	0	37.18	15	$ 5,700	0.65%
14	Sidewalk reconstruction	Stewart St (E)	Charles St	Fillmore St	1530	Reconstruct sidewalk to ADA standards	1	4	2	1	0	30.01	16	$ 58,100	0.05%

Note: Costs are intended as planning-level estimates in 2008 dollars and do not include right-of-way or utility relocation costs.

Pedestrian Solutions Plan: Curb Ramp Improvements

ID	Type	Route	From	To	Length (ft)	Description	Safety (x5)	Ease of Implementation (x3.67)	Network Increase (x3.5)	Benefit to Development (x3.33)	MUTCD Compliance (x3.0)	Total Benefit	Categorical Benefit Rank	Cost	Benefit/ cost
48s	Curb ramp construction	Cedar St (N)	Charles St (US 85)		N/A	All quadrants (2)	4	7	4	3	0	69.68	1	$ 6,600	1.06%
48t	Curb ramp construction	Cedar St (S)	Charles St (US 85)		N/A	All quadrants (2)	4	7	4	3	0	69.68	1	$ 6,600	1.06%
48r	Curb ramp construction	Wall St	Pioneer Way (US 14A)		N/A	All quadrants (2)	3	7	4	3	0	64.68	2	$ 6,600	0.98%
48k	Curb ramp construction	Pine St	Water St		N/A	All quadrants (2)	2	7	4	3	0	59.68	3	$ 6,600	0.90%
48a	Curb ramp construction	Burlington St	Cliff St (US 85)		N/A	All quadrants (2)	2	7	4	1	0	53.02	4	$ 6,600	0.80%
48b	Curb ramp construction	Calamity St	Cliff St (US 85)		N/A	All quadrants (2)	2	7	4	1	0	53.02	4	$ 6,600	0.80%
48c	Curb ramp construction	Stewart St (S)	Charles St (US 85)		N/A	All quadrants (2)	2	7	4	1	0	53.02	4	$ 6,600	0.80%
48d	Curb ramp construction	Stewart St	Fillmore St		N/A	All quadrants (2)	2	7	4	1	0	53.02	4	$ 6,600	0.80%
48e	Curb ramp construction	Stewart St	Terrace St		N/A	All quadrants (2)	2	7	4	1	0	53.02	4	$ 6,600	0.80%
48f	Curb ramp construction	Stewart St (N)	Charles St (US 85)		N/A	All quadrants (2)	2	7	4	1	0	53.02	4	$ 6,600	0.80%
48l	Curb ramp construction	Main St	Fire St		N/A	All quadrants (2)	2	7	4	1	0	53.02	4	$ 6,600	0.80%
48m	Curb ramp construction	Main St	Armory St		N/A	All quadrants (2)	2	7	4	1	0	53.02	4	$ 6,600	0.80%
48n	Curb ramp construction	Williams St	End of Sidewalk		N/A	End of Sidewalk (2)	2	7	4	1	0	53.02	4	$ 6,600	0.80%
48o	Curb ramp construction	Main St	Pioneer Way (US 14A)		N/A	SW quadrant (1)	2	7	4	1	0	53.02	4	$ 3,300	1.61%
48p	Curb ramp construction	Pioneer Way (US 14A)	Railroad Ave		N/A	SE quadrant (1)	2	7	4	1	0	53.02	4	$ 3,300	1.61%
48q	Curb ramp construction	Miller St	End of Sidewalk		N/A	End of Sidewalk (1)	2	7	4	1	0	53.02	4	$ 3,300	1.61%
48u	Curb ramp construction	Stewart St (S)	End of Sidewalk		N/A	End of Sidewalk (1)	2	7	4	1	0	53.02	4	$ 3,300	1.61%
48v	Curb ramp construction	Charles St	End of Sidewalk		N/A	End of Sidewalk (2)	2	7	4	1	0	53.02	4	$ 6,600	0.80%
48w	Curb ramp construction	Cliff St (US 85)	Ends of Sidewalk		N/A	Ends of Sidewalk (4)	2	7	4	1	0	53.02	4	$ 13,200	0.40%
48x	Curb ramp construction	Calamity St	End of Sidewalk		N/A	End of Sidewalk (1)	2	7	4	1	0	53.02	4	$ 3,300	1.61%
48y	Curb ramp construction	Burlington St	End of Sidewalk		N/A	End of Sidewalk (1)	2	7	4	1	0	53.02	4	$ 3,300	1.61%
48j	Curb ramp construction	Cemetery St	Sherman St (US 85)		N/A	SW and SE quadrants (2)	2	6	4	1	0	49.35	5	$ 6,600	0.75%
34	Curb ramp reconstruction	Sherman St	Miller St		N/A	All quadrants (2)	1	8	3	1	0	48.19	6	$ 6,600	0.73%
35	Curb ramp reconstruction	Sherman St	Lee St		N/A	All quadrants (2)	1	8	3	1	0	48.19	6	$ 6,600	0.73%
36	Curb ramp reconstruction	Sherman St	Pioneer Way (US 14A)		N/A	All quadrants (2)	1	8	3	1	0	48.19	6	$ 6,600	0.73%
37	Curb ramp reconstruction	Seiver St	Pine St		N/A	All quadrants (2)	1	8	3	1	0	48.19	6	$ 6,600	0.73%
38	Curb ramp reconstruction	Pioneer Way (US 14A)	Wall St		N/A	All quadrants (2)	1	8	3	1	0	48.19	6	$ 6,600	0.73%
39	Curb ramp reconstruction	Sherman St (US 85)	Pine St		N/A	All quadrants (4)	1	8	3	1	0	48.19	6	$ 13,200	0.37%
40	Curb ramp reconstruction	Main St	Deadwood St		N/A	NW and NE quadrants (2)	1	8	3	1	0	48.19	6	$ 6,600	0.73%
41	Curb ramp reconstruction	Pioneer Way (US 14A)	Lee St		N/A	NW quadrant (1)	1	8	3	1	0	48.19	6	$ 3,300	1.46%
42	Curb ramp reconstruction	Main St	Wall St		N/A	NW quadrant (1)	1	8	3	1	0	48.19	6	$ 3,300	1.46%
43	Curb ramp reconstruction	Sherman St (US 85)	Cemetery St		N/A	SE quadrant (1)	1	8	3	1	0	48.19	6	$ 3,300	1.46%
44	Curb ramp reconstruction	Pioneer Way (US 14A)	Pine St		N/A	SW and SE quadrants (2)	1	8	3	1	0	48.19	6	$ 6,600	0.73%
45	Curb ramp reconstruction	Seiver St	Deadwood St		N/A	SW quadrant (1)	1	8	3	1	0	48.19	6	$ 3,300	1.46%
46	Curb ramp reconstruction	Main St	Lee St		N/A	SW quadrant (1)	1	8	3	1	0	48.19	6	$ 3,300	1.46%
47	Curb ramp reconstruction	Pioneer Way (US 14A)	Deadwood St		N/A	SW, SE, and NE quadrants (3)	1	8	3	1	0	48.19	6	$ 9,900	0.49%
48g	Curb ramp construction	Van Buren Ave	Harrison St		N/A	All quadrants (2)	2	5	4	1	0	45.68	7	$ 6,600	0.69%
48h	Curb ramp construction	Van Buren Ave	Washington St		N/A	All quadrants (2)	2	5	4	1	0	45.68	7	$ 6,600	0.69%
48i	Curb ramp construction	Van Buren Ave	Lincoln Ave		N/A	All quadrants (2)	2	5	4	1	0	45.68	7	$ 6,600	0.69%

Note: Costs are intended as planning-level estimates in 2008 dollars and do not include right-of-way or utility relocation costs.
Projects 48a - 48y are detailed subcomponents of project ID 48 (curb ramp construction) found in the master list.

Pedestrian Solutions Plan: Signal Enhancements

ID	Type	Route	From	To	Length (ft)	Description	Safety (x5)	Ease of Implementation (x3.67)	Network Increase (x3.5)	Benefit to Development (x3.33)	MUTCD Compliance (x3.0)	Total Benefit	Categorical Benefit Rank	Cost	Benefit/ cost
54	Intersection improvements	Pioneer Way (US 14A)	Deadwood St		N/A	Update ped signals with countdown heads	4	8	1	3	8	86.85	1	$ 9,100	0.95%
55	Intersection improvements	Pioneer Way (US 14A)	Main St		N/A	Update ped signals with countdown heads	4	8	1	3	8	86.85	1	$ 9,100	0.95%
53	Intersection improvements	Pioneer Way (US 14A)	Pine St		N/A	Update ped signals with countdown heads	4	8	1	2	8	83.52	2	$ 9,100	0.92%
52	Intersection improvements	Sherman St (US 85)	Cemetery St		N/A	Update ped signals with countdown heads	4	8	1	1	8	80.19	3	$ 9,100	0.88%
56	Intersection improvements	Pioneer Way (US 14A)	McKinley St		N/A	Update ped signals with countdown heads	4	8	1	1	8	80.19	3	$ 6,800	1.18%
51	Intersection improvements	Sherman St (US 85)	Pine St		N/A	Remove pedestrian heads (all-way stop)*	2	10	0	0	10	76.7	4	$ 6,300	1.22%

Note: Costs are intended as planning-level estimates in 2008 dollars and do not include right-of-way or utility relocation costs.
** See page 29 for additional information.*

Pedestrian Solutions Plan: Signing and Marking

ID	Type	Route	From	To	Length (ft)	Description	Safety (x5)	Ease of Implementation (x3.67)	Network Increase (x3.5)	Benefit to Development (x3.33)	MUTCD Compliance (x3.0)	Total Benefit	Categorical Benefit Rank	Cost	Benefit/ cost
49	Intersection improvements	Cliff St (US 85)	Burlington St		N/A	Install crosswalk, standard signage	6	10	1	4	5	98.52	1	$ 1,300	7.58%
57	Signing, striping improvements	Various			N/A	Citywide enhancements	4	9	1	1	9	86.86	2	$ 6,300	1.38%

Note: Costs are intended as planning-level estimates in 2008 dollars and do not include right-of-way or utility relocation costs.

Pedestrian Solutions Plan: Intersection Reconstruction

ID	Type	Route	From	To	Length (ft)	Description	Safety (x5)	Ease of Implementation (x3.67)	Network Increase (x3.5)	Benefit to Development (x3.33)	MUTCD Compliance (x3.0)	Total Benefit	Categorical Benefit Rank	Cost	Benefit/ cost
59	Intersection improvements	Pioneer Way (US 14A)	Wall St		N/A	Construct refuge island, passive ped actuated beacon	10	7	2	5	2	105.34	1	$ 75,900	0.14%
58	Intersection improvements	Pioneer Way (US 14A)	Lee St		N/A	Construct refuge island, passive ped actuated beacon	10	7	2	4	2	102.01	2	$ 75,900	0.13%
50	Intersection improvements	Main St	Deadwood St		N/A	Reconstruct westbound approach. Add parking, countdown heads	8	5	2	3	6	93.34	3	$ 94,900	0.10%

Note: Costs are intended as planning-level estimates in 2008 dollars and do not include right-of-way or utility relocation costs.

Pedestrian Solutions Plan: Roadway Reconstruction

ID	Type	Route	From	To	Length (ft)	Description	Safety (x5)	Ease of Implementation (x3.67)	Network Increase (x3.5)	Benefit to Development (x3.33)	MUTCD Compliance (x3.0)	Total Benefit	Categorical Benefit Rank	Cost	Benefit/ cost
60	Roadway reconstruction	Pioneer Way (US 14A)	Pine St	Main St	2670	Relocate Pioneer Way further east. Narrow cross-section to 2-3 lanes.	10	1	8	7	1	107.98	1	$ 3,226,200	0.00%
64	Roadway reconstruction	Water St	Cemetery St	Pine St	1250	Reconstruct Water St to include sidewalks, traffic lanes between Sherman St lot and Pine St (maybe one way)	3	6	6	10	2	97.32	2	$ 898,200	0.01%
61	Roadway reconstruction	Lower Main St (US 14A)	S. of Main St	McKinley St	1590	Relocate Pioneer Way further east. Extend Main Street.	8	3	2	10	1	94.31	3	$ 2,881,900	0.00%

Note: Costs are intended as planning-level estimates in 2008 dollars and do not include right-of-way or utility relocation costs.

Pedestrian Solutions Plan: Miscellaneous Projects

ID	Type	Route	From	To	Length (ft)	Description	Safety (x5)	Ease of Implementation (x3.67)	Network Increase (x3.5)	Benefit to Development (x3.33)	MUTCD Compliance (x3.0)	Total Benefit	Categorical Benefit Rank	Cost	Benefit/ Cost
62	Special construction	Overhead	Water St (E. of Pioneer)	Pine St (W. of Pioneer)	170	Grade separated crossing of Pioneer	8	3	2	10	0	91.31	1	$ 1,012,000	0.01%
63	Intersection improvements	Lower Main St (US 14A)	Seventy Six Dr		N/A	Apply for experimental use of and install HAWK signal	7	7	1	5	0	80.84	2	$ 75,900	0.11%

Note: Costs are intended as planning-level estimates in 2008 dollars and do not include right-of-way or utility relocation costs.

Projects 1 – 11: Construction of New Sidewalk

The plan calls for approximately 14,540 linear feet (2.75 miles) of new sidewalk to be added to the existing network of sidewalk within the study area. These projects typically range from 200 feet of sidewalk to enhance local travel (like projects on Armory Street, Fire Street, and Cemetery Drive) to much longer segments to provide longer-range pedestrian travel opportunities (Cliff Street, Upper Main Street, Crescent Drive).

Projects 12 – 33: Reconstruction of Existing Sidewalk

Approximately 1/3 of the City's existing sidewalk was found to be in need of some level of replacement. The main criterion for replacement was determined to be sidewalk having too much cross-slope, but other deficiencies like width and obstacles in the pedestrian path were found as well. Approximately 12,015 linear feet (2.28 miles) of sidewalk are recommended to be reconstructed as part of the Solutions Plan.

Projects 34 – 47: Reconstruction of Existing Curb Ramps

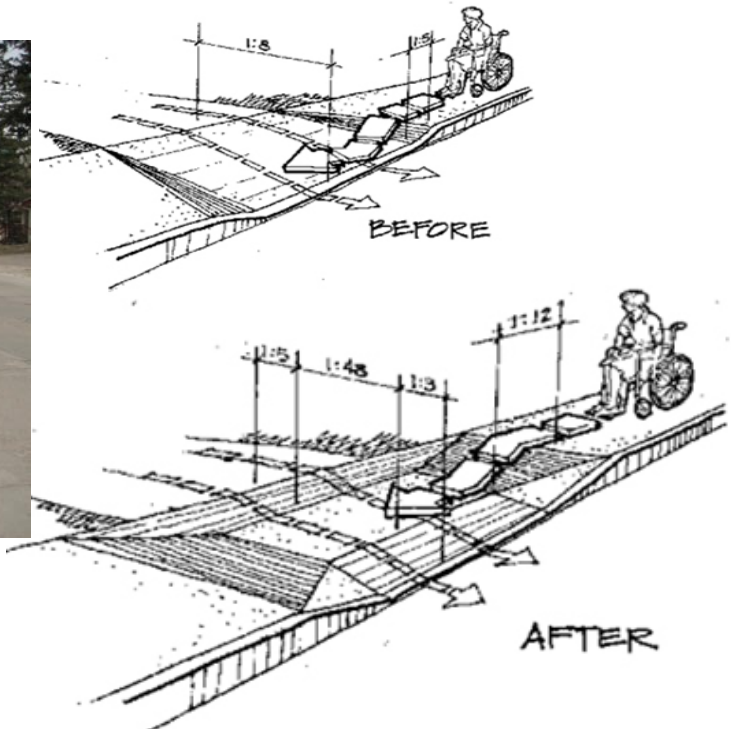
Overall, 48% of the existing curb ramps were found to be deficient by ADA standards. It is recommended that these be replaced as part of the Solutions Plan. Although listed as separate projects, it is often desirable to reconstruct curb ramps at the same time that adjacent segments of sidewalk are reconstructed, if needed.

The lack of curb ramps makes an otherwise adequate sidewalk inaccessible for some users. The plan calls for the construction of 46 new curb ramps including here at the intersection of Cliff Street and Burlington Street.

Project 48: New Curb Ramp Construction

A total of 46 new curb ramps are proposed for construction. Each individual location for these ramps is provided in the like-project list for curb ramps.

Cross-slope across driveways is a common deficiency for Deadwood sidewalks. A 36 inch wide sidewalk travel way in combination with a compound apron slope can often mitigate this type of cross slope deficiency (see sketches).



Source: Public Rights-of-Way Design Guide. United State Access Board.

Projects 49 – 56: Intersection Improvements

These projects contribute to enhanced pedestrian movement at individual intersection locations. Details of these projects are given below:

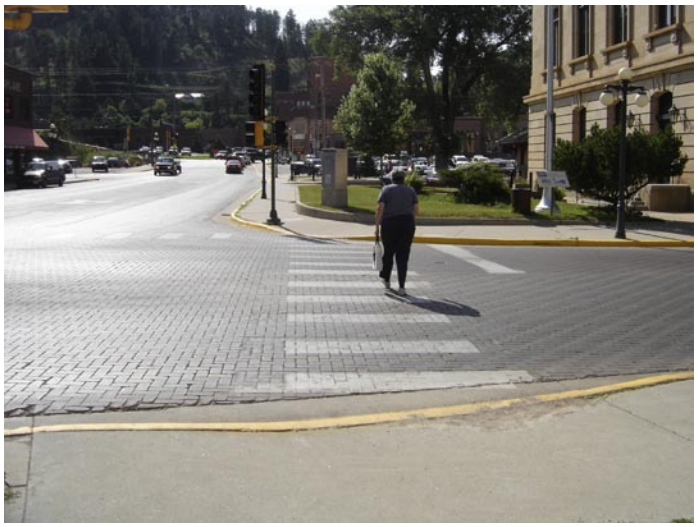
Project 49: A standard crosswalk and pedestrian warning sign (W11-2) should be installed to facilitate movement across Cliff Street to the trolley stop at the intersection of Cliff Street and Burlington Street.

Project 50: A location of major pedestrian activity, the intersection of Main Street and Deadwood Street/Shine Street should be made more pedestrian friendly. Currently, the offset alignments of Deadwood Street and Shine Street make it difficult to appropriately install pedestrian signals and stripe crosswalk locations. Pedestrians also have difficulty knowing when it is safe and legal for them to cross. To correct this situation, the western end of Deadwood Street should be realigned to Shine Street. A curb extension should be constructed along the eastern side of Main Street which, in addition to realigning the Deadwood Street approach, would also shorten the crosswalk distance across Main Street, create an enhanced pedestrian area, and potentially provide an additional area of on-street angled parking. Design of such an improvement should account for truck and bus operations at this intersection.

Project 51: The signal at the intersection of Sherman Street and Pine Street operates as a four-way stop by a flashing red indication on all four approaches. The pedestrian signal heads are not illuminated (this is proper operation for a flashing signal based on MUTCD standards). Based on the potential traffic needs of impending development (the Deadwood Grand), this signal should remain in place. If traffic conditions are not expected to warrant that this signal become operational in the near future, it is recommended that the pedestrian and vehicular signal heads be removed. However, the controller cabinet should remain at this intersection as it contains the master controller for the interconnected signals on Pioneer Way.

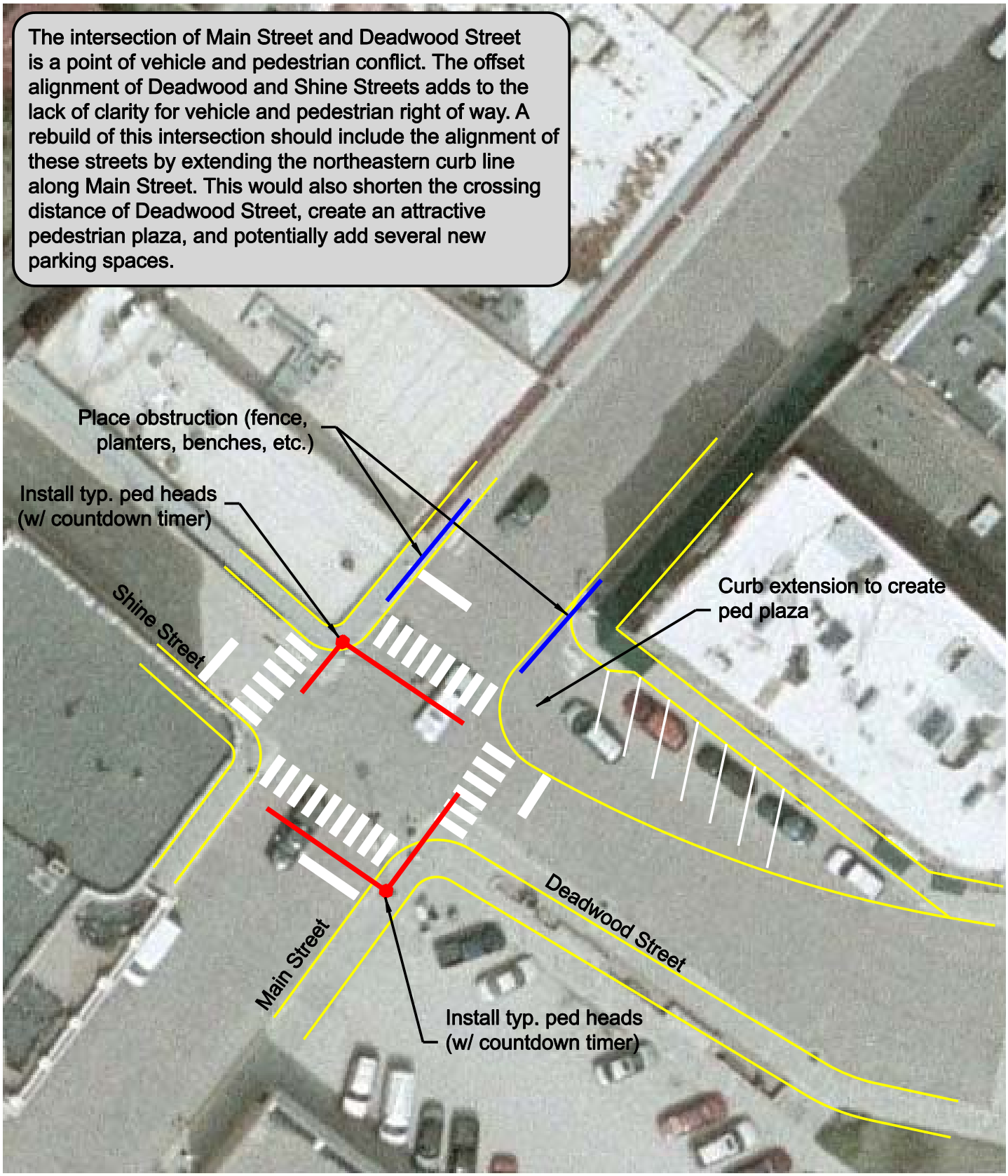
Projects 52 – 56: The upcoming edition of the MUTCD (2009) is expected to require use of countdown pedestrian signal heads at locations where pedestrian signals are in use. Replacement of all pedestrian signal heads is included in the Solutions Plan.

Pedestrian signals like this one at the intersection of Sherman Street and Cemetery Street should be updated with countdown signal heads. It is expected that countdown heads will be required on all new signal installations by the next edition of the MUTCD (expected to be effective in 2009).



Future development may warrant activation of the flashing signal at the intersection of Sherman Street and Pine Street.

On the next page: Realignment of the intersection of Main Street and Deadwood Street would have significant benefits to vehicular and pedestrian traffic.



Solutions Plan Project #50 - Main Street and Deadwood Street Improvements

GRAPHIC SCALE

0' 30' 60'

Project 57: Various Signing and Striping Enhancements

The City of Deadwood and SDDOT have maintained pedestrian-related traffic control at a high level of effectiveness and compliance. Several areas of recommended improvement are as follow:

- Pedestrian-scaled signing should be applied on the east side of Pioneer Way just north of Wall Street. These should communicate that the sidewalk ends in approximately 800'.
- Signs prohibiting the crossing of Pioneer Way should be mounted on the barrier fence along the western side of Pioneer Way between Wall Street and Railroad Street.
- In-street "State Law" signs (R1-6) can be effective at identifying crosswalk locations on Main Street.

R1-6
Source: MUTCD

Projects 58 – 63: Improved Access Across US 14A (Pioneer Way, Lower Main Street)

One of the most critical issues found in the existing conditions analysis is how pedestrians cross the four lanes of Pioneer Way. Although appropriately signed and marked, the crossings of US 14A at Wall Street, Lee Street, and Seventy-Six Drive remain intimidating to pedestrians who rely on traffic to yield at these crosswalks. The crossings of Pioneer Way at Pine and Deadwood Streets are friendlier to pedestrians because of signalization, but are wide crossings nonetheless.

Ultimately, it is recommended that Pioneer Way be reconstructed with a new cross-section and in a location more fitting with its context as an urban arterial. By reducing Pioneer Way from four lanes to a variable section having three or two lanes as appropriate, and realigning a portion of the road further east, pedestrian crossings of Pioneer Way can be made safer in some places and eliminated altogether in others. These improvements are identified as Projects 60 and 61.

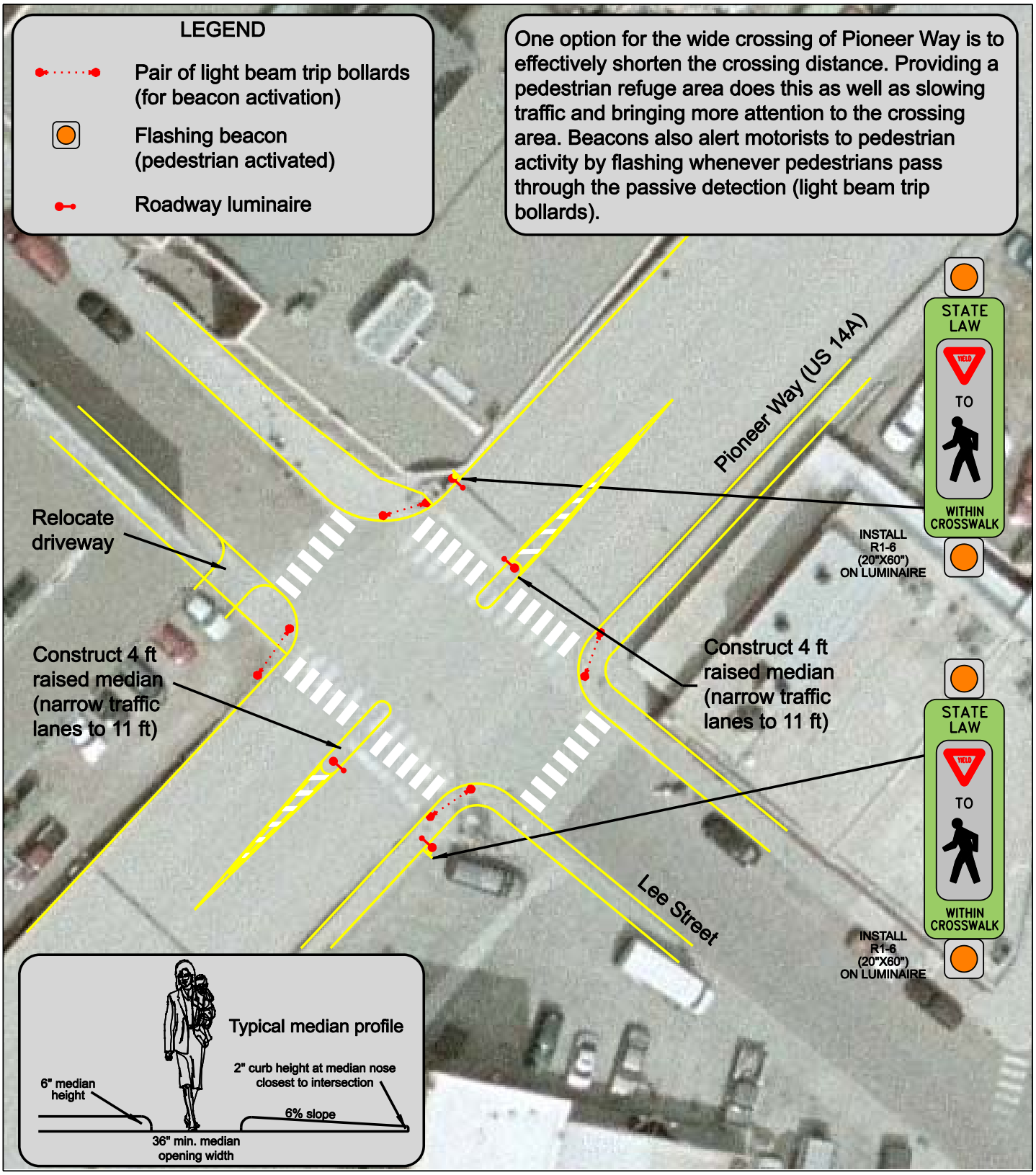
However, in the interim, improvements can be made to the unsignalized crossings of US 14A at Lee Street, Wall Street, and Seventy-Six Drive.

Projects 58 and 59: Crosswalk enhancements at Lee and Wall Streets are among the top needs in the City of Deadwood. Proposed recommendations for these locations include the construction of raised concrete medians in Pioneer Way to slow traffic and provide a refuge area for pedestrians. Also, passive beacon activation should be used because of low observed use of the existing push buttons.

Location	Log Mile	Year	Average Daily Traffic (vpd)	Truck %
US 14A (Pioneer Way) at Wall Street	40.86	2003	9,907	3%
		2004	9,890	
		2005	9,700	
		2006	9,600	
		2007	10,100	
		2027	12,164	

Source: SDDOT. As shown in this table, 20-year traffic projections for the subject segment of Pioneer Way are approximately 12,000 vehicles per day. The capacity of an urban arterial such as this one has a capacity of approximately 20,000 vehicles per day if constructed with three lanes. A three lane roadway with an urban cross-section is more in keeping with the context of Pioneer Way bisecting Deadwood's downtown.

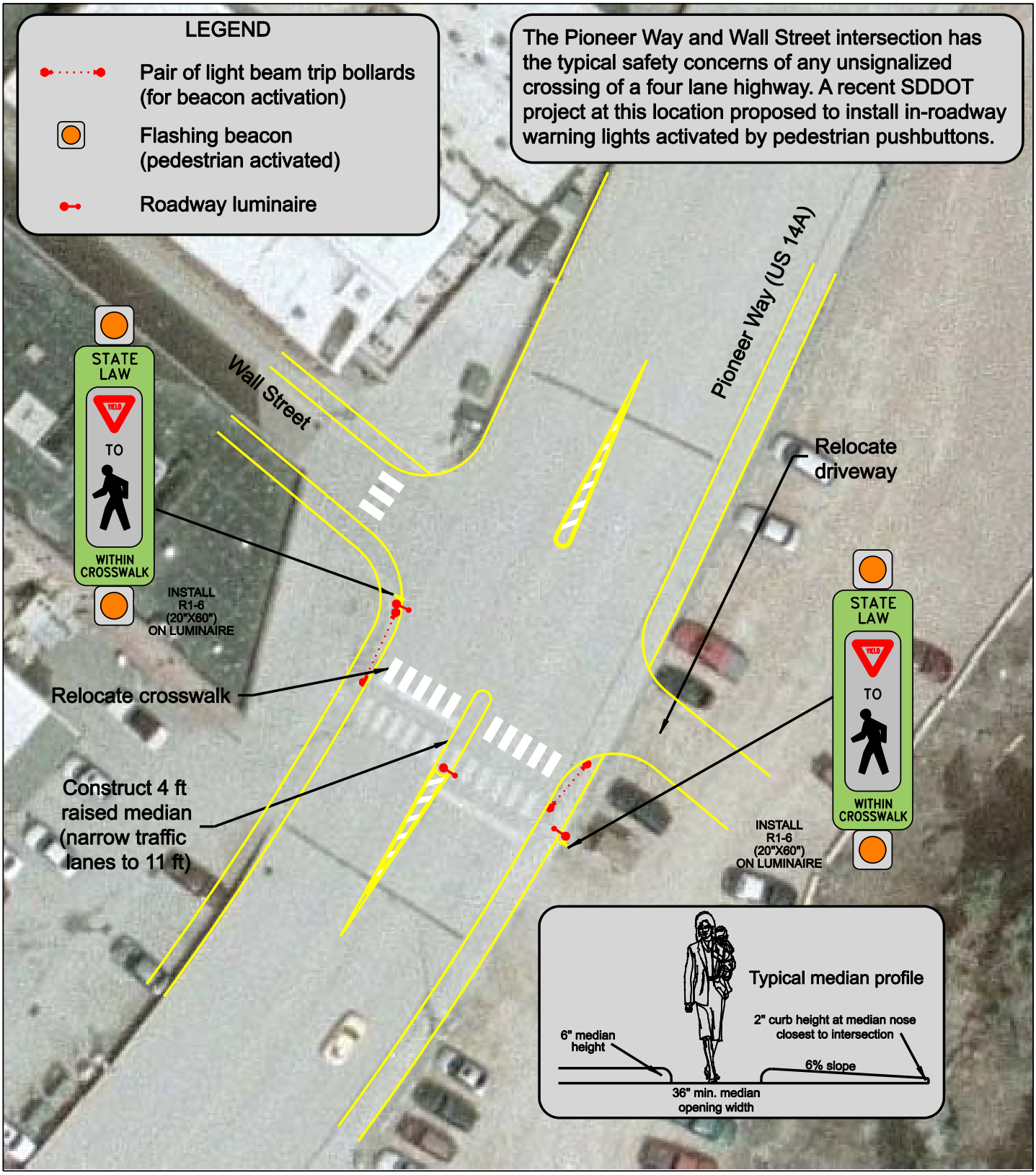
On the following pages: Improvement of the unsignalized crossings of Pioneer Way can be accomplished with relatively minor reconstruction. The ultimate solution is to rebuild Pioneer Way so that it no longer separates major parking areas from Main Street.



Solutions Plan Project #58 - Pioneer Way and Lee Street Improvements

GRAPHIC SCALE

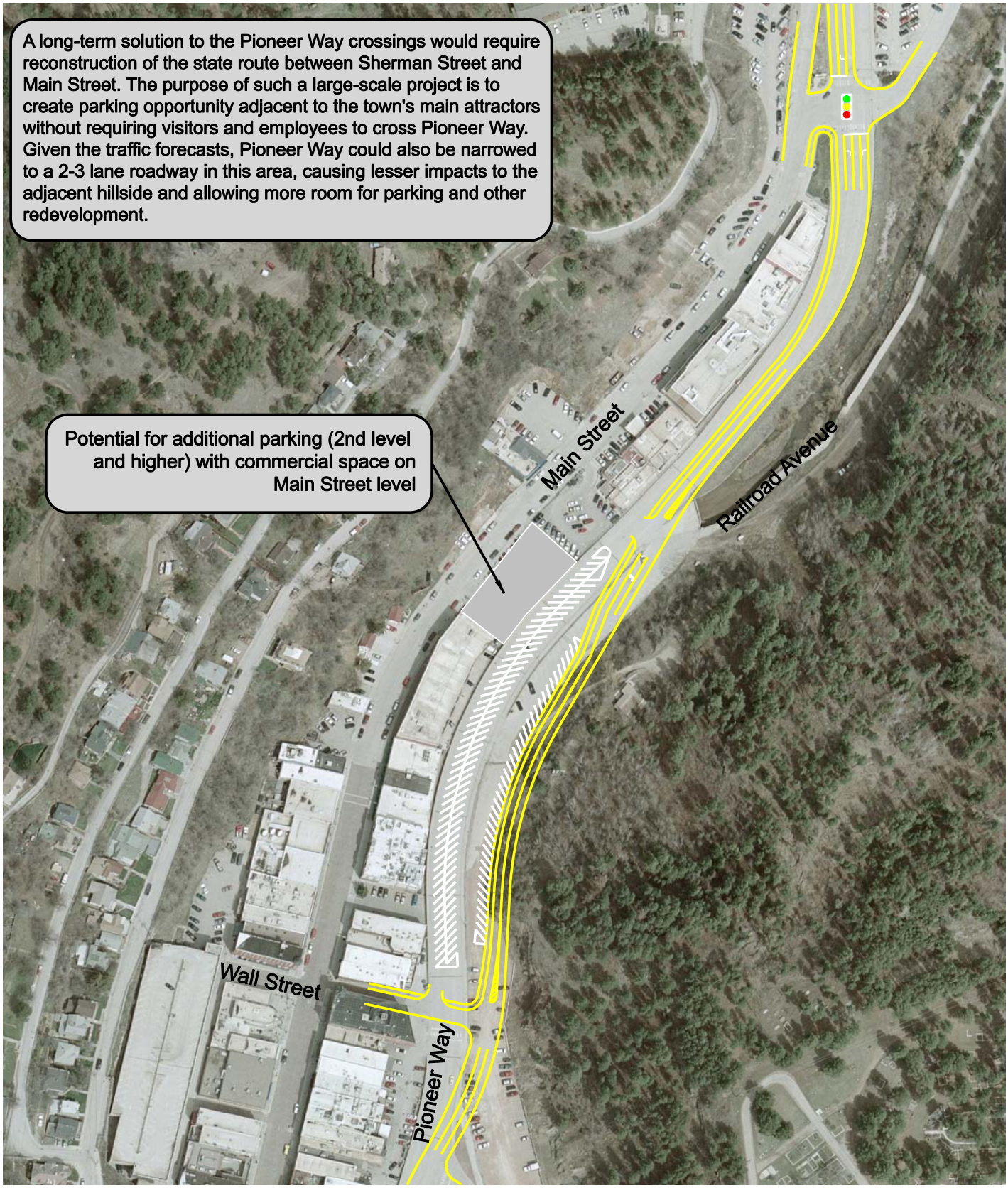
0' 30' 60'



Solutions Plan Project #59 - Pioneer Way and Wall Street Improvements

GRAPHIC SCALE

0' 30' 60'



Solutions Plan Project #60 - Pioneer Way Realignment (south)

GRAPHIC SCALE
0' 200' 400'

Solutions Plan Project #61 - Pioneer Way Realignment (north)

GRAPHIC SCALE

0' 200' 400'

Miscellaneous Projects
Some projects have special applications and will likely require further evaluation by state and local decision makers.

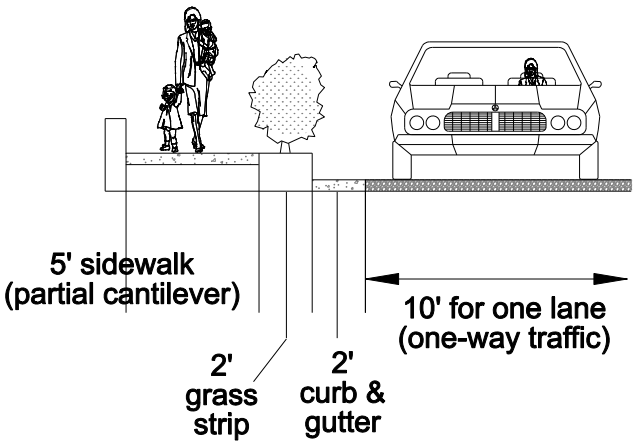
Project 62: Grade Separated Crossing of Pioneer
The topographical characteristics of the Slime Plant site make this a logical terminus of an overhead pedestrian crossing of Pioneer Way. The impact on historic preservation is a critical unknown for this project possibility.

Project 63: Installation of a HAWK Signal
Pedestrian crossings of Lower Main Street at Seventy-Six Drive are significant, but not high enough to warrant signalization. High-intensity activated crosswalk (HAWK) signals have been successfully implemented for this type of crossings. Because this traffic control device is not authorized in the MUTCD, permission for experimental use must be acquired from the FHWA.

Project 64: Reconstruction of Water Street
Water Street currently functions more as an alley serving a major parking lot used primarily by employees in adjacent buildings. This street will become a critical link to the Sherman Street parking lot with completion of the Deadwood Grand (Slime Plant).

Importance of the Deadwood Grand (Slime Plant) Project
Currently, plans are still being developed for the proposal of Deadwood's newest major attraction. The Deadwood Grand will contain hotel, casino, restaurant, and entertainment space located in the southeast quadrant of the intersection of Pine Street and Pioneer Way. From a pedestrian circulation standpoint, this project is important for several reasons:

- Currently, the southernmost major tourist attraction is the Silverado Casino, located in the northwest quadrant of the intersection of Pine Street and Pioneer Way. The opening of the Deadwood Grand will effectively extend the zone of significant pedestrian activity south one block.
- Interaction between the Deadwood Grand and existing attractions on Main Street will be critical. Especially important will be the pedestrian crossing(s) of Pioneer Way for visitors to the Deadwood Grand.
- Not all visitors to the Deadwood Grand will be able to or desire to park on-site. This will make the lots at Fire Street, Sherman Street, and the Interpretive Center even more important.



At its narrowest, Water Street is currently 13 - 15 feet wide. With redevelopment of the Slime Plant, this street will experience increased usage by vehicles and pedestrians. The narrowest portion (between Cemetery Street and Center Street should have one-way traffic flow. This sketch shows a potential reconstructed cross-section.

Redevelopment of the Slime Plant into the Deadwood Grand will have profound impacts on pedestrian travel in the City. Primary pedestrian activity will remain on Main Street, but will shift further south due to the influence of this project. A substantial increase in the number of pedestrians crossing Pioneer Way should be anticipated.

SPECIAL EVENTS

The same attractions and character of Deadwood that make it a popular summer tourist destination also make it popular for special events throughout the year. Eight special events of varying length provide special opportunities, but also special challenges for the City. These events are: Mardi Gras Weekend (February), St. Patrick's Day Weekend (March), Wild Bill Days (June), Days of '76 (July), Black Hills Motorcycle Classic (August), Kool Deadwood Nites (August), Deadwood Jam (September), Oktoberfest (October), and Deadwierd (October). During all of these events, pedestrian activity increases, and for the largest events special traffic and pedestrian planning is put into effect.

The special event traffic plan includes several major changes to the typical street network. Because the center of activity is Main Street, this road is closed between Deadwood Street and Wall Street. Between Wall Street and Pioneer Way, Main Street operates as one-way northbound. Lee Street is also closed at Main Street to allow for limited traffic (generally hotel guests) to access Main Street via Lee Street. A temporary four-way stop is also implemented at the intersection of Pioneer Way and Wall Street.

Observations were made of this plan during 2008's Kool Deadwood Nites special event. In general, it was found to work well given the increased traffic and pedestrian demands. A lack of alternative routes means that most visitors arrive from the north on US 14A. Once the Broadway parking ramp and the Lower Main Street lot are full, traffic is directed through town to more parking south of the main event area.

Perhaps the primary source of delay during event arrival is unnecessary turning movements by motorists looking for parking or unsure of where parking exists. It is recommended that additional signing be installed that would provide real-time parking information to visitors arriving from the north on Lower Main Street. This could be dynamic message signing that is updated as lots are filled. Providing this information to motorists prior to their arrival in the downtown area will improve special event traffic flow.

Main Street becomes seating during several Deadwood special events. All vehicular traffic shifts to Pioneer Way where the flow is largely governed by a temporary all-way stop at the intersection of Pioneer Way and Wall Street.

A major impetus for the Deadwood Pedestrian Circulation and Enhancement Study is the requirement for the provision of accessible transportation facilities found in the Americans with Disabilities Act of 1990 (ADA) and the Rehabilitation Act of 1973 (Section 504). These acts do not require a public agency to provide pedestrian facilities. However, they do require that, if a pedestrian facility is provided, it must be of appropriate accessible design. Agencies should incorporate these accessibility requirements in one of three ways:

1. Any new construction of pedestrian facilities should be fully compliant with the design guidelines set forth by the SDDOT in accordance with Federal accessibility guidelines.

2. Any alterations of existing facilities that provide pedestrian access within the public right-of-way should include improvements to make affected pedestrian facilities accessible if they are within the scope of the alteration project.

3. Other pedestrian projects (like those identified in this plan) that do not fall within the scope of an alteration project should be incorporated into the City's transportation planning process as stand-alone pedestrian improvement/accessibility projects.

It is anticipated that the projects presented in the Solutions Plan will be implemented by one of the three methods listed above. Implementation of these projects may also be affected by the Transition Plan of the SDDOT which is being developed to identify how the programs provided by the Department for public use will be made accessible to all users. This Transition Plan is currently in draft form and is expected to become finalized in the near future. The relative benefit scores, estimated costs, and benefit/cost ratios are all tools provided in the Solutions Plan to aid decision makers at the state and local levels in making implementation decisions. These factors as well as local knowledge, funding opportunities, and other considerations should be made a part of the implementation strategy for future pedestrian projects.

Alterations to Public Rights-of-Way

An alteration is a change to a facility in the public right-of-way that affects or could affect access, circulation, or use. Projects altering the use of the public right-of-way must incorporate pedestrian access improvements within the scope of the project to meet the requirements of the ADA and Section 504. These improvements must be done concurrently with the alteration project. Alterations include items such as reconstruction, major rehabilitation, widening, resurfacing (e.g. structural overlays and mill and fill), signal installation and upgrades, and projects of similar scale and effect.

The FHWA has determined that maintenance activities include actions that are intended to preserve the system, retard future deterioration, and maintain the functional condition of the roadway without increasing the structural capacity. These activities include, but are not limited to, thin surface treatments (nonstructural), joint repair, pavement patching (filling potholes), shoulder repair, signing, striping, minor signal upgrades, and repairs to drainage systems.

More information on how roadway alterations may require pedestrian improvements can be found at the Public Rights-of-Way Advisory Committee (PROWAC) homepage at www.access-board.gov/prowac.

Next Steps:

Adoption of the Deadwood Pedestrian Circulation and Enhancement Study. While local adoption of this document and plan may not be required, it is generally beneficial for the City to officially acknowledge its findings. This is especially true when future state-funded roadway projects affect one or more components of this plan. (Within 1 year)

Develop Pedestrian Facility Design Guidelines. Special design situations in Deadwood may warrant development of local design guidelines for sidewalks, curb ramps, etc. This will ensure uniformity and compliance in all new facility construction. (Within 2 years)

Review Capital Infrastructure Plans. Certain projects on the City's Capital Projects Plan may fit the definition of a right-of-way alteration as per ADA and Section 504. These upcoming projects should be reviewed in context of the Solutions Plan to determine if pedestrian improvements will be required. (Within 2 years)

Prepare Implementation Strategy. Using the tools in the Solutions Plan, City leaders should begin developing an approach for systematic implementation of pedestrian enhancements. Some may be completed almost immediately by City forces while others may be added to long-range statewide plans. (Within 2 years)

Implementation. Improvements should be completed as part of new transportation projects, alterations to the public right-of-way, or as stand-alone projects as determined by the implementation strategy. (Ongoing)

Return Completed Form To:
Parking and Transportation
108 Sherman Street
Deadwood, SD 57732

1876 DEADWOOD PARKING AND TRANSPORTATION

Questions Contact:
Justin Lux
(605) 578-2082 or
justin@cityofdeadwood.com

VEHICLE FOR HIRE: Horse-Drawn Vehicle

☐ Renewal ☐ New Application Year: 2026

Horse-Drawn Vehicle Type: Stagecoach/Livery Vehicle #1

Business Information

Business Name (as it will appear on license): Deadwood Alive Inc

Business Address: Box 190 Deadwood, SD 57732

Business Phone: 605-920-0258

SD Sales Tax Number: 46-0456623 *(Verified by City Finance Office)*

If business is a partnership or corporation, please provide name and address of each partner/officer

Name: Kevin Kuchenbecker Address:

Name: Jesse Allen Address:

Name: Jim Williams Address:

Person Completing Application

Applicant Name: Jesse Allen

Home Address: 501 Main St. Deadwood, SD 57732

Home Phone/ Cell Phone: 605-578-1876/605-591-9171 Date of Birth: 7-31-1982

Is the applicant also the contact person? ■ Yes ☐ No If not, who is the contact person for this application:

Contact Name: Address:

Home Phone/ Cell Phone:

Location from which the vehicle(s) will operate: Main St. Deadwood

Date(s), Time(s), Duration(s) of operation:

Insurance Company: Black Hills Insurance Agency

Policy Number: CL185291550 Expiration Date: 5/26

Previous experience in motor vehicle transportation business: 10th year of operating historic stagecoach on Main St for Deadwood alive rides and reenactments.

A general statement of reason supporting the granting of the application: Contacted through the City of Deadood for historical reenactments and stagecoach operations

Year of Vehicle	Make	Model	Seating Capacity (Excluding Driver)	License Plate #
N/A	Mud Wagon	Stage Coach	9+	N/A

Application made this 30th Day of January, 20 26 X _____
Applicant's Signature

TO BE COMPLETED BY CITY OF DEADWOOD

An annual fee of $75 has been paid to the City Finance Office as recorded on:

Receipt No: Dated:

Parking & Transportation: Approved ☐ Denied ☐

Parking & Transportation Chair Dated:

City Commission: Approved ☐ Denied ☐

Mayor Dated:

License fee is not refundable. License is not transferable

Submit completed application to:
Justin Lux, City of Deadwood Parking and Transportation Department, 108 Sherman St. Deadwood, SD 57732 • (605) 578-2082.

Requirements: Provide proof of insurance (minimum $1,000,000 liability, with City of Deadwood co-insured).

Return Completed Form To:
Parking and Transportation
108 Sherman Street
Deadwood, SD 57732

1876 DEADWOOD PARKING AND TRANSPORTATION

Questions Contact:
Justin Lux
(605) 578-2082 or
justin@cityofdeadwood.com

VEHICLE FOR HIRE: Horse-Drawn Vehicle

☐ Renewal ☐ New Application Year: 2026

Horse-Drawn Vehicle Type: Stagecoach/Livery Vehicle #2

Business Information

Business Name (as it will appear on license): Deadwood Alive Inc

Business Address: Box 190 Deadwood, SD 57732

Business Phone: 605-920-0258

SD Sales Tax Number: 46-0456623 *(Verified by City Finance Office)*

If business is a partnership or corporation, please provide name and address of each partner/officer

Name: Kevin Kuchenbecker Address:

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Date(s), Time(s), Duration(s) of operation:

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Policy Number: CL185291550 Expiration Date: 5/27

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Year of Vehicle	Make	Model	Seating Capacity (Excluding Driver)	License Plate #
N/A	Mud wagon	Stagecoach	9+	N/A

Application made this 30 Day of January, 20 2026 X _____
Applicant's Signature

TO BE COMPLETED BY CITY OF DEADWOOD

An annual fee of $75 has been paid to the City Finance Office as recorded on:

Receipt No: Dated:

Parking & Transportation: Approved ☐ Denied ☐

Parking & Transportation Chair Dated:

City Commission: Approved ☐ Denied ☐

Mayor Dated:

License fee is not refundable. License is not transferable

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Requirements: Provide proof of insurance (minimum $1,000,000 liability, with City of Deadwood co-insured).