Non-Motorized Transportation Plan
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Billings City Council July 13, 2015
Yellowstone County Commissioners July 14, 2015
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Terminology used in the Lockwood Area Non-Motorized Transportation Plan

Abbreviations

ADA  Americans with Disabilities Act
ADT  Average Daily Traffic
CDC  Centers for Disease Control and Prevention
CDP  Census Defined Place
CIP  Capital Improvement Plan
CMAQ  Congestion Mitigation and Air Quality Improvement Program
DOT  United States Department of Transportation
EPA  Environmental Protection Agency
HUD  United States Department of Housing & Urban Development
LPSD  Lockwood Pedestrian Safety District
LRTP  Long Range Transportation Plan
LWCF  Land and Water Conservation Fund
MAP-21  Moving Ahead for Progress in the 21st Century Act
MDT  Montana Department of Transportation
NHPP  National Highway Performance Program
PILT  Payment In Lieu of Taxes
PVEA  Petroleum Violation Escrow Account
RTP  Recreation Trails Program
STP  Surface Transportation Program
TAP  Transportation Alternatives Program
TSEP  Treasure State Endowment Program
VSL  Value of a Statistical Life

Definition of Key Terms

Sidewalk – An improved surface within a vehicular right-of-way, aligned with a road, constructed either adjacent to the curb or separated from the curb or travel lane, for purpose of pedestrian and non-motorized use.

Walkway – A stable surface, either paved or consisting of compacted granular fill, for the purpose of pedestrian and another non-motorized use. A walkway connects two points and is not aligned along a vehicular public right-of-way. A walkway may be in a dedicated pedestrian easement. Examples include pedestrian linkages within one site, mid-block, between subdivisions, and leading from roads to public amenities such as schools or parks.

Trail – A stable surface, either paved or consisting of compacted granular fill, within a dedicated right of way for the purpose of pedestrian and non-motorized use. A trail may or may not be aligned with a road. A trail and a sidewalk may be collocated, or may exist on opposite sides of a road.

Urban Highway System (MCA 60-2-125) – The highways and streets that are in and near incorporated cities with populations of over 5,000 and within urban boundaries established by the department [of transportation, that have been functionally classified as either urban arterials or collectors, and that have been selected by the commission, in cooperation with local government authorizes, to be placed on the urban highway system. Highway 87 and Johnson Lane are urban routes.
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**Forward**

After decades of reoccurring incidents of pedestrians being injured or killed on the roads in Lockwood, residents were finally offered a solution by Yellowstone County Board of County Commissioners. In October of 2013, the Yellowstone County Board of County Commissioners presented an opportunity for Lockwood to vote to establish its own Special District so that they could tax themselves to collect funds for the purposes of pedestrian safety. The Commissioners’ decision was influenced by a strong outcry from Lockwood residents for pedestrian safety resolutions, recorded in a study initiated by the Lockwood Steering Committee, conducted by the Montana Economic Developers Association in 2013. All parties concerned were strongly influenced by the latest fatality, where 16 year old Dustin Freese was hit by a driver in a car and killed on Becraft Lane on January 4, 2013.

On October 4, 2013, the Montana Economic Developers Association along with Yellowstone County’s Big Sky Economic Development presented the conclusion of its Lockwood Resource Team Assessment Report at a Town Hall Meeting. The purpose of the meeting was to briefly review the report, identify projects, set priorities and create working groups for action. The Pedestrian Safety group formed at that meeting, and was informed that the Yellowstone County Board of County Commissioners had offered a Resolution to elect a Special District. As the new group became organized, they attended Public Hearings on Creation of Special District and strategized to campaign for the Special District Election, to be held, February 25, 2014.

It was stated in Resolution 13-85, The Yellowstone County Board of County Commissioners received requests from several residents in the Lockwood area of the County as to whether the County could construct and maintain various improvements, such as sidewalks, trails and street lights, to enhance the safety of pedestrians and provide for alternative means of transportation in the area. The Board considered the requests and came to the conclusion that a special district may be able to construct and maintain the improvements to enhance the safety of pedestrians and provide for alternative means of transportation in the area.

Current Lockwood Pedestrian Safety Chair, Nic Talmark and Secretary, Brandy Dangerfield recruited the Freese family and many other helpful volunteers to conduct the “Do It For Dustin” Campaign in order to approve the Special District. It was with the collected efforts of all volunteers that the election passed with an astonishing 61 percent win. The Lockwood Pedestrian Safety District was formally recognized March 11, 2014.

Submitted by Brandy Dangerfield

"The Lockwood Pedestrian Safety District Advisory Board serves to honor those we have lost or that have been injured, and to protect the community as it develops."
1. Introduction

The Lockwood community includes a large, unincorporated area under the governance of Yellowstone County. For years, the area has continued to prosper with industrial, commercial and residential properties all developed under rural development standards. As a result, many roads throughout the planning area lack adequate pedestrian and bicycle facilities within the designated right-of-way. An increasing number of vehicular and pedestrian fatalities and serious injuries have been documented in the area, resulting in a public outcry for a more formal, stabilized development system.

In 2014, the Yellowstone County Board of Commissioners initiated a referendum allowable under MCA 7-11-1001 through 7-11-1029 to create a special improvement district for the purpose of enhancing pedestrian safety and provide for alternative means of transportation in the Lockwood Area. The effort was in response to increased conflicts between people walking and people driving vehicles and a lack of sufficient infrastructure to separate the two uses, causing collisions that resulted in loss of life and serious injury. The voting results were 61 percent in favor to create the district.

The Special Improvement District encompasses the same area as the Lockwood School District and affects approximately 7,750 people who reside in the District, plus many more who work there as well. The funding for the District comes from a property tax mil levy of up to 10 mills, with estimated annual revenues of about $212,697 per year.
The Special Improvement District is administered by the Yellowstone County Board of Commissioners, who seeks citizen guidance from advisory board of up to 10 members, consisting of individuals who live and work in the District.

This document outlines the work plan for the next five years, but provides long-range planning for the next 20 years. The purpose of this document is to set forth District-specific activities and to provide guidance for policy to execute the mission and vision of the Lockwood Pedestrian Safety District.

2. Mission

The Mission of the Lockwood Pedestrian Safety District is to effectively eliminate fatalities and serious injuries caused by vehicular and pedestrian conflicts throughout the Lockwood area.

3. Vision

Lockwood is a vibrant community with thriving industrial, commercial and residential neighborhoods where people of all ages and physical abilities can travel safely and efficiently without the use of an automobile.

4. Benefits of Walking

Walking is the most basic mode of transportation – it is convenient, inexpensive and an enjoyable personal preference that benefits our health and improves air quality. The best benefit of walking is good health, however, a broad range of economic and social benefits also accompany well-planned community development to support this most basic of human actions.

1. Safety: Walkable neighborhoods have lower rates of traffic fatalities – for both pedestrians and motorists – compared with automobile-orientated areas.
2. Health: Fewer than 50 percent of Americans meet the minimum guidelines for moderate physical activity – walking is the easiest and most affordable way to correct this problem.
3. Social Equity: Low-income families are more reliant on walking for essential journeys than the middle class.
4. Environmental: Transportation is responsible for one third of all greenhouse gas emissions in the United States. Converting short driving journey to walking journeys reduces this impact.
5. Transportation: One quarter of all trips in the United States are 1 mile or less, with most of the trips taken in a vehicle. Walking reduces traffic congestion and the cost of road maintenance.1 (American Walks in partnership with San Schwartz Eng)
6. Economics: Walkable communities allow for all age groups to migrate about their community. Access to retail and commercial facilities allows for all ages to purchase goods and services from community businesses.

5. Economic Value and Cost-Benefit Analysis

Economic Value in People-Orientated Communities
In 2009, the US Department of Housing and Urban Development (HUD), US Department of Transportation (DOT), and the US Environmental Protection Agency (EPA) joined together to help communities nationwide improve access to affordable housing, increase transportation options and lower transportation costs while protecting the environment. This interagency partnership is called the “Partnership for Sustainable Communities.” As a result of technical assistance and grant opportunities, the Billings Livability Partnership was formed consisting of public agencies, private businesses and concerned citizens. The Livability Principles set forth by the local and federal partnerships include the following:

- Provide more transportation choices;
- Promote equitable, affordable housing;
- Enhance economic competitiveness;
- Support existing communities;
- Coordinate and leverage federal policies and investment; and
- Value communities and neighborhoods.

Each of these principles supports the other, for example the end result of the first five bullets support the last bullet by “enhancing the unique characteristics of all communities by investing in healthy, safe and walkable neighborhoods – rural, urban or suburban.”

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2 www.americawalks.org
3 www.sustainablecommunities.gov/mission/livability-principles
The *Celebrate Lockwood* event showcased several of the Lockwood residents’ values, encompassing those principles. Recent economic development efforts have focused on Lockwood’s economic competitiveness in a thriving industrial, commercial and residential area.

**Economic Value through Quality Housing**
According to a survey of 15 real estate markets, a one-point increase in the walkability of a neighborhood as measured by WalkScore.com increased home values by $700 to $3000. People living in communities that give them the option to walk or bike to their destinations often pay less in total housing and transportation costs than those who live in areas that are more auto-dependent.

**Economic Value through a Quality Workforce**
With Yellowstone County’s unemployment rate at about 3 percent, Lockwood will want to present to potential businesses and industries the ability to attract a more qualified workforce due to its lower cost of living and high quality schools than the surrounding area. As the Affordable Care Act regulations require large businesses to provide health insurance for its employees, a healthier Lockwood workforce due to encouragements for walking and exercise may also attract businesses seeking to lower their health insurance premiums.

**Economic Value through Tourism**
Bicycle tourism is an untapped opportunity for economic development in Lockwood. The Lockwood Pedestrian Safety District encompasses the Pictograph Caves State Park, which could be a bicycling destination for tourists. Forty percent of touring cyclists visit historical sites. The needs and challenges for touring cyclists include improved road conditions, food and lodging and amenities. Thirty-nine percent of touring cyclists stay in a motel. Multi-day cyclists spent an average of $75.75 per day in Montana.

Lockwood’s proximity to Pictograph Caves State Park, Four Dances Natural Area, Future Dover Park and Billings’ Coulson/Mystic/Riverfront Park corridors could position Lockwood to attract additional hotels, restaurants, bicycle repair shops, and guiding businesses to their community. The potential of tourist-generated revenue as a source of funding for bicycling infrastructure should not be overlooked for Lockwood.

**Economic Value of a Statistical Life**
The US Department of Transportation (DOT) provides annual guidance on the treatment of the Economic Value of a Statistical Life (VSL). VSL is defined as the additional cost that individuals would be willing to bear for improvements in safety (that is, reductions in risks) that, in the aggregate, reduce the expected number of fatalities by one. The US DOT’s guidance indicates that

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4 CEOs for Cities (2009, August). Walking the walk. www.ceosforcities.org/research/walking-the-walk/

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In 2014, the US DOT placed the Value of a Statistical Life at $9.2 million dollars. This is the value of one fatality involved in a crash event.
safety is not an off-the-shelf item that can be directly purchased; therefore, the guidance indicates that the prevention of an expected fatality is assigned a single, nationwide value in each year, regardless of the age, income or other distinct characteristics of the affected population, the mode of travel or the nature of the risk. The Lockwood Pedestrian Safety District will utilize the US DOT’s annual guidance for the cost-benefit analysis for VSL purposes.

Nonfatal injuries occur more commonly than fatalities and vary in severity and probability. Therefore an Abbreviated Injury Scale (AIS) has been developed that assigns each injury class a value of VSL corresponding to a fraction of a fatality. For example, the value of a serious injury (0.105) is multiplied by $9.2 million resulting in a value of $966,000. Where safety is the primary outcome of cost-effectiveness analysis, these values help determine whether or not the cost of a government action with a non-monetary measure of benefit.

Table 1: Fraction of VSL for Nonfatal Injuries

<table>
<thead>
<tr>
<th>AIS Level</th>
<th>Severity</th>
<th>Fraction of VSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIS 1</td>
<td>Minor</td>
<td>0.003</td>
</tr>
<tr>
<td>AIS 2</td>
<td>Moderate</td>
<td>0.047</td>
</tr>
<tr>
<td>AIS 3</td>
<td>Serious</td>
<td>0.105</td>
</tr>
<tr>
<td>AIS 4</td>
<td>Severe</td>
<td>0.266</td>
</tr>
<tr>
<td>AIS 5</td>
<td>Critical</td>
<td>0.593</td>
</tr>
<tr>
<td>AIS 6</td>
<td>Unsurvivable</td>
<td>1.000</td>
</tr>
</tbody>
</table>

6. Related Documents

Billings Urban Area Long Range Transportation Plan (Kittelson & Associates, Inc., 2014)
This document also covers the Billings Area Metropolitan Planning Organization boundaries, which includes the Lockwood area. This plan covers streets and highways, public transit and transportation, truck services and facilities, rail facilities and pedestrian and bicycle facilities. This document acknowledges the Lockwood Safe Routes to School plan and the Lockwood Transportation Study, but stops short of inventory and recommendation of specific non-motorized transportation projects for Lockwood.

Lockwood School District Safe Routes to School Plan (Peaks to Plains Design PC, 2011)
This document was prepared in accordance with the Safe Routes to School funding program and evaluates walking and bicycling needs within a 2-miles radius from Lockwood Elementary and Middle Schools. The document includes the five “E’s” of the Safe Routes to School program: encouragement, education, enforcement, engineering and evaluation. The document also includes a highly statistically valid parent survey that can be used as a baseline for evaluation of the effectiveness of the Lockwood Pedestrian Safety District plan.

**Billings Area Bikeway and Trail Master Plan (Alta Planning + Design, 2011)**
This document covers the Billings Area Metropolitan Planning Organization boundaries, which includes the Lockwood area. However, little specific information is provided for Lockwood and many projects listed in the plan are within the Billings City Limits. However, many of the funding, policy and other guidelines included in this document are applicable to the Lockwood Pedestrian Safety District.

**Yellowstone County & City of Billings Growth Policy (City-County Planning, 2008)**
The 2008 adopted policy document outlines several community goals and objectives, including “Billings and surrounding County town sites need more multiple use trails.” Under transportation elements, several goals include “well maintained network of safe and interconnected sidewalks” and “ensuring equitable and safe use of public transportation facilities.” This document is currently in the process of a 2015 update.

**Lockwood Transportation Study (Marvin & Associates, 2008)**
This study was prepared to augment the 2005 Billings Urban Area Transportation Plan with Lockwood-specific recommendations for transportation. The study area for this plan encompasses a broader area than the Lockwood Pedestrian Safety District. Bike and pedestrian facilities are outlined that pathways, trails and sidewalks should be developed with all new road and infrastructure projects. In fact, the study indicates “an overwhelming desire to construct a multi-use trail along Old Hardin Road.”

**The Lockwood Community Plan (Lockwood Steering Committee, City-County Planning, 2006)**
The purpose of this plan is to assist agencies, service districts and private developers to make informed choices when determining how to accommodate new development, plan for infrastructure improvement and address changes in land use for Lockwood. This plan is not a regulatory document, but supports the City-County Growth Policy.

### 7. Demographic Analysis

**Population**
In 2010, Lockwood’s population was estimated at 7,759 people. The Lockwood urbanized area encompasses almost 28 square miles of land. If the area was incorporated, Lockwood would be considered a “City of the Second Class” according to MCA 7-1-411. Other incorporated cities of a similar size would include Laurel, Livingston, Belgrade and Miles City.

| Table 2: Lockwood CDP Population Statistics⁹ |
|----------------------------------|---|---|---|---|
|                                  | 1990 | 2000 | 2010 | 2020 (projected) |
| Population                       | 6,700 | 7,200 | 7,759 | 8,387           |
| Historic Growth Rate             | 8.5%  | 7.7%  |       | 8.1%            |
| Housing Units                    | 1,619 | 1,766 |       |                 |

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Age
The age distribution of Lockwood is generally consistent, with the median age of 35.8 years. The age distribution compared to the City of Billings or Yellowstone County indicates that a larger percentage of Lockwood residents are younger with more people under the age of 25.

Table 3: Lockwood Census Defined Place Age Cohorts, 2010 Census

Income
According to the American Communities Survey, the mean or average household income in Census Tract 8, which encompasses the more urbanized Lockwood area, was $55,017. The mean income for the State of Montana is $60,639 and Yellowstone County is $67,055.10

Table 4: Mean Household Income, 2013 American Community Survey

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10 U.S. Census Bureau, 2013 American Community Survey, Mean Income in the past 12 months, 2013 ACS 5-year estimates.
Health\textsuperscript{11}

The 2014 PRC Community Health Needs Assessment Report for Yellowstone County covers all aspects of health including physical activity, infectious diseases, birth rates and access to health providers. A total of 10.8 percent of survey respondents indicated they wanted to be more physically active, but felt unsafe due to factors such as crime or traffic. The trends are higher among women and the age 18 to 39 cohort as well as low income respondents. Over 61 percent of the survey respondents indicate that they “never” walk, bike or use transit for their daily commute. However, a large percentage (22.7%) utilizes alternative transportation at least weekly.

The same report indicates that nearly 2 in 3 Yellowstone County adults are overweight. This is statistically higher than the State of Montana. While the number of overweight adults in Yellowstone County is less than a survey in 2010, the 2014 overweight statistic is still higher than the percentage in 2005. Almost one third of Yellowstone County adults are obese. This is a statistically significant increase since 2005, when only one quarter of adults was obese. Overweight and obese adults are more likely to report multiple adverse health conditions. Among those conditions are hypertension (high blood pressure), chronic depression, arthritis/rheumatism, high cholesterol and “fair” or “poor” mental health. Overweight/obese residents were also more likely to have overweight children.

8. Existing Conditions

The Lockwood Pedestrian Safety District encompasses 47 square miles of land area. Currently, only five areas have sidewalks adjacent to public rights of way:

1. Western Security Bank at Old Hardin Road and Cole Street has five-foot wide curb sidewalks. However, the sidewalk only has about 50 percent compliance with the Americans with Disabilities Act.
2. Burger King at Old Hardin Road is adjacent to the Western Security Bank property and also has five-foot wide curb sidewalks. The intersection of Old Hardin Road and Johnson Lane does have an ADA compliant curb ramp.
3. Emerald View Trailer Court includes the following streets: Sherwood Avenue, Silverton Street, Jemstone Drive, Rockwood Street, Finley Circle, Andrick Avenue and Kallen Drive. This development has five-foot wide sidewalks.
4. Sidewalks are on Lockwood School District property adjacent to US Highway 87 from Peters Street to the intersection of Piccolo Lane and from the entrance road to the administrative area to Stonehaven Trail.
5. Hillner Lane from Piccolo Lane to Nightingale Drive has a sidewalk that was installed as a part of a Safe Routes to School project in 2012.

\textsuperscript{11} Professional Research Consultants, Inc. 2014 PRC Community Health Needs Assessment Report, Yellowstone County, Montana. 2014.
These sidewalks represent less than 2 percent of all roads within the Lockwood Pedestrian Safety District.

Figure 3: Existing Sidewalks in the Lockwood Pedestrian Safety District

9. Safety and Fatality, Serious Injury and Injury Data

According to the 2014 Billings Urban Area Long Range Transportation Plan, motor vehicles crashes generally involve multiple contributing factors, which may be related to drivers, the roadway or the vehicle(s) involved.\textsuperscript{12} Therefore, increasing safety requires a multi-agency, multi-faceted approach, consistent with this plan’s objectives.

Recently, the Montana Department of Transportation launched its “Vision Zero Montana” campaign, a multipronged initiative with the ultimate goal of eliminating deaths and injuries on Montana highways. The Montana Department of Transportation reported that in the last 10 years, 492 people died in vehicle crashes within the 18 to 25 year age range, the most out of any age cohort. Lockwood, with its high percentage of residents within this age range, makes roads in this area that should be considered a priority for safety. The Vision Zero campaign focuses on four areas: education, enforcement, engineering and emergency medical response.\textsuperscript{13}

\textsuperscript{13} www.mdt.mt.gov/visionzero/about.shtml
Pedestrian Involved Crash Statistics
According to the Montana Department of Transportation, roads located in Yellowstone County are host to an average of 43 crash events per year that involve pedestrians. Eighteen people have lost their lives as pedestrians and additional 60 people have suffered an incapacitating injury over the past 10 years as pedestrians.14

Table 5: Pedestrian-Involved Crash Injury Summary for Yellowstone County by Month (2004-2013)
The table above represents the pedestrian-involved crash injury statistics for Yellowstone County during a 10-year period. Pedestrian crash event numbers increase steadily in the months of October through December. The same statistics also show that dark light conditions contribute to a significant number of those events during those months. Also noteworthy is that almost 42 percent of the people involved in pedestrian crashes are age 25 and under.

According to MDT crash statistics, in the past five years, the area encompassing the Lockwood Pedestrian Safety District has experienced 10 crash events that have involved pedestrians. One fatality and twelve serious injuries have been documented from those events. Utilizing the Value of Statistical Life, the cost of those events has resulted in an economic loss of over 20 million dollars in five years.15

In the past five years (2009-2014), the area encompassing the Lockwood Pedestrian Safety District has experienced 10 crash events that have involved pedestrians that have resulted in one fatality and 12 serious injuries.

According to MDT statistics, pedestrian-involved crash events are occurring at an increasing frequency at intersections. Likewise, pedestrians are involved in crash events increasingly along Interstate Highways/US Routes and Secondary Routes in Yellowstone County.

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14 MDT. Pedestrian Involved Crash Injury Summary Yellowstone County, Montana (2004-2013)
15 The calculations assume the twelve serious injuries are classified as an AIS 3 level injury. All calculations utilized the 2014 value guidance.
Table 6: Pedestrian Crash Events in Yellowstone County Classified by Street Type

Bicycle Involved Crash Statistics
In Yellowstone County the number of crash events involving bicyclists has seen a decline since 2010 where a 10-year high of 50 crash events occurred. Only one fatality has occurred in the last 10 year period in 2004. Incapacitating injuries are less prevalent involving bicyclists with just over one crash event per year. The number of crash events directly correlates with the classification of roadway. Local streets have the largest number of bicycle-related crash events, followed by Interstate/US Route/Secondary routes and then County/Rural routes.

The greatest numbers of bicycle-involved crash events occur during the months of May through September as climatic conditions encourage bicycle ridership, although it should be noted that year-round crash events involving bicycles do occur.16

In the parent survey conducted for the Lockwood School District Safe Routes to Schools plan, the top issues that affected a parent’s decision to allow or not allow their child to walk or bike to/from school included distance, traffic volume along

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16 MDT. Bicycle-Involved Crash Injury Summary Data for Yellowstone County (2004-2013)
the route, traffic speed along route to school and availability of sidewalks or pathways. The same survey indicated that a change in traffic volume, sidewalks or pathways and traffic speed along the route would affect their decision to allow a student to bike or bike to/from school.\footnote{Peaks to Plains Design PC. Lockwood School District Safe Routes to School Plan. (2011)}

10. Public Involvement and Outreach

The development of the plan included two public involvement meetings. The first was held in September 2014 at the “Celebrate Lockwood” event where the Advisory Board and District were part of a greater presentation of all entities in Lockwood. Attendees were asked a variety of opinions on the newly formed district, and an initial priority projects list for the Lockwood Pedestrian Safety District was presented at this meeting.

The second public meeting was held in May 2015 for the purposes of reviewing the draft plan, reviewing the activities of the Lockwood Pedestrian Safety District and to solicit participant’s opinions on the highest priorities from the work plan. Participants provided opinions in a written format.

The aspects of the draft plan presented that surprised people the most were the extent and relevance of data and they felt that the information presented was very thorough and well researched; the progress on the Highway 87 [sidewalk] project; the availability of grant writers to the District; the safety and cost of a fatality to a community and the young population of Lockwood.

Participants were asked to state what the District could do to encourage them and others to be more active: Be persistent, consistent and resistant to naysayers; keep (or continue to keep) the public informed; complete a pedestrian project; acquire grants; communicate through email, etc; and get a project going to show some results.

In reference to the aspects of the work plan (education, encouragement, enforcement, engineering, evaluation or partnerships and funding); people felt the following were the most important: engineering was tied with partnerships and funding, followed by enforcement.

Responses regarding the District’s work that has been missing or not covered included: A solution for Piccolo Lane; sufficient support from the Board of County Commissioners; and indication that [the Board] seems to be doing an excellent job so far – the Board has accomplished a lot in a few months.

Final general thoughts provided included suggestions to work with other organizations, such as BikeWalk Montana and TrailNet; “you are doing an excellent job;” and do not be intimidated by the many hurdles of Piccolo Lane, it is a safety priority.

The participants placed dots on their highest priorities in the work plan. Those results, combined with advisory board guidance, were integrated into the activity listing in the work plan section of the document.
11. Work Plan

The work plan outlines the District’s work plan for the next five years, and the plan outlines projects desired for the next 20 years. It is separated into six areas of focus: education, enforcement, encouragement, engineering, evaluation and partnerships and funding. The estimated costs are in 2014 dollars, and do not include costs for right of way acquisition or easements.

Education
The purpose of these activities is to provide citizens of all ages with opportunities to learn more about Montana’s pedestrian and bicycle laws, crash avoidance techniques, bicycle safety checks and general advocacy and awareness.

<table>
<thead>
<tr>
<th>Activity Number</th>
<th>Activity</th>
<th>Responsibility/Potential Partners</th>
<th>When</th>
<th>Estimated Costs</th>
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<tbody>
<tr>
<td>EDU-1</td>
<td>Develop a non-motorized transportation plan.</td>
<td>LPSD</td>
<td>2015</td>
<td>$40,000</td>
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<tr>
<td>EDU-2</td>
<td>Bicycle Safety Class</td>
<td>LPSD/Lockwood School</td>
<td>Annually</td>
<td>$600</td>
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<tr>
<td>EDU-3</td>
<td>Distribute Montana Bicycle &amp; Pedestrian Laws</td>
<td>LPSD/Material from MDT</td>
<td>On-going</td>
<td>$0</td>
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<tr>
<td>EDU-4</td>
<td>Lead advocacy and awareness outreach through social media and other communication venues</td>
<td>LPSD</td>
<td>On-going</td>
<td>$0</td>
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<tr>
<td>EDU-5</td>
<td>Develop and distribute PSA’s regarding safe bicycling &amp; walking</td>
<td>Lockwood Students/LPSD</td>
<td>On-going</td>
<td>$0</td>
</tr>
<tr>
<td>EDU-6</td>
<td>Establish a presence on the Yellowstone County website</td>
<td>LPSD/Yellowstone County</td>
<td>2015</td>
<td>$0</td>
</tr>
<tr>
<td>EDU-7</td>
<td>Place informational ads regarding rules of the road/riding/walking in local newspapers</td>
<td>LPSD</td>
<td>On-going</td>
<td>$22 - $30 per ad</td>
</tr>
</tbody>
</table>

Table 9: Education Activities

Enforcement
The purpose of enforcement activities is to work with the Montana Highway Patrol and the Yellowstone County Sheriff’s department in order to effectively and consistently apply vehicular, bicycle and pedestrian laws throughout the Lockwood Area. This section also includes the review of policy documents, including developing zoning ordinances that affect development within the Lockwood Pedestrian Safety District.

<table>
<thead>
<tr>
<th>Activity Number</th>
<th>Activity</th>
<th>Responsibility/Potential Partners</th>
<th>When</th>
<th>Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENF-1</td>
<td>Develop an ordinance requiring adjacent property owner maintenance of sidewalk on public rights of way</td>
<td>City-County Planning/LPSD/County Engineering</td>
<td>2016</td>
<td>$0</td>
</tr>
<tr>
<td>ENF-2</td>
<td>Update County Road standards for the LPSD area</td>
<td>County Engineering/LPSD</td>
<td>2016</td>
<td>$0</td>
</tr>
</tbody>
</table>
**Encouragement**

The purpose of encouragement is to provide citizens with opportunities for safe, reliable transportation choices that encourage residents to exercise, commute and interact with the Lockwood community. Visibility of activities by the District will lend itself to credibility in its mission.

<table>
<thead>
<tr>
<th>Activity Number</th>
<th>Activity</th>
<th>Responsibility/Potential Partners</th>
<th>When</th>
<th>Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC-1</td>
<td>Placement &amp; maintenance of street lights at 6 school bus stops</td>
<td>LPSD/County/Yellowstone Valley Electric</td>
<td>2014</td>
<td>$624/year</td>
</tr>
<tr>
<td>ENC-2</td>
<td>Recognize businesses &amp; developers who have already installed sidewalks</td>
<td>LPSD</td>
<td>2015</td>
<td>$50</td>
</tr>
<tr>
<td>ENC-3</td>
<td>Explore &amp; co-host educational partnerships</td>
<td>LPD/Bike Walk Montana/Billings Bicycle &amp; Pedestrian Advisory Committee/Lockwood School</td>
<td>On-going</td>
<td>$0 &amp; per event, see also EDU</td>
</tr>
<tr>
<td>ENC-4</td>
<td>Distribute reflective materials to students and at businesses.</td>
<td>LPD/MDT</td>
<td>On-going</td>
<td>$0</td>
</tr>
<tr>
<td>ENC-5</td>
<td>Helmet Giveaway</td>
<td>LPD/Lockwood School/Local Hospitals</td>
<td>Annually</td>
<td>$0</td>
</tr>
<tr>
<td>ENC-6</td>
<td>Participate in Bike/Walk to School Days (May &amp; October)</td>
<td>Lockwood School/PTA/LPSD</td>
<td>Annually</td>
<td>$0</td>
</tr>
<tr>
<td>ENC-7</td>
<td>Encourage walking as an essential part of community health</td>
<td>LPD/Healthy by Design coalition</td>
<td>On-going</td>
<td>$0</td>
</tr>
<tr>
<td>ENC-8</td>
<td>Create a pedestrian way finding system</td>
<td>LPD/Yellowstone County</td>
<td>2020</td>
<td>$20,000</td>
</tr>
<tr>
<td>ENC-9</td>
<td>Participate in the Kids in Motion Program</td>
<td>LPD/City-County Planning</td>
<td>2016</td>
<td>$800</td>
</tr>
</tbody>
</table>

Table 11: Encouragement Activities
**Engineering**

The engineering section includes the planning and construction of non-motorized transportation infrastructure. The types of facilities could include sidewalks, multi-use paths, recreational trails, transit stops, signage or other ancillary features that support non-motorized transportation.

<table>
<thead>
<tr>
<th>Activity Number</th>
<th>Activity</th>
<th>Responsibility/Potential Partners</th>
<th>When</th>
<th>Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1</td>
<td>Highway 87 Sidewalk from Old Hardin Road to Peters Street</td>
<td>LPSD/MDT/Yellowstone County</td>
<td>2015</td>
<td>$285,000</td>
</tr>
<tr>
<td>ENG-2</td>
<td>Evaluate re-opening of cut-through path at East Ridge Estates</td>
<td>LPSD</td>
<td>2015</td>
<td>unknown</td>
</tr>
<tr>
<td>ENG-3</td>
<td>School Bus Stop Waiting Areas</td>
<td>LPSD/Yellowstone County</td>
<td>Even Years</td>
<td>$15,000 ea</td>
</tr>
<tr>
<td>ENG-4</td>
<td>Be craft Lane Sidewalk from the Old Hardin Road to Noblewood Drive</td>
<td>LPSD/Yellowstone County</td>
<td>2016</td>
<td>$500,000</td>
</tr>
<tr>
<td>ENG-5</td>
<td>Piccolo Lane from Old Hardin Road to Highway 87</td>
<td>LPSD/Yellowstone County</td>
<td>2018</td>
<td>$250,000</td>
</tr>
<tr>
<td>ENG-6</td>
<td>Old Hardin Road Sidewalk from Johnson Lane to Greenwood Avenue</td>
<td>LPSD/Yellowstone County</td>
<td>2020</td>
<td>$250,000</td>
</tr>
<tr>
<td>ENG-7</td>
<td>Lower Lockwood Irrigation Ditch from Rykken Circle West to Piccolo Lane</td>
<td>LPSD/Lockwood Irrigation Ditch</td>
<td>2022</td>
<td>$200,000</td>
</tr>
<tr>
<td>ENG-8</td>
<td>Old Hardin Road Sidewalk from Greenwood Avenue to Piccolo Lane</td>
<td>LPSD/Yellowstone County</td>
<td>2024</td>
<td>$410,000</td>
</tr>
<tr>
<td>ENG-9</td>
<td>Old Hardin Road Sidewalk from Piccolo Lane to Highway 87</td>
<td>LPSD/Yellowstone County</td>
<td>2026</td>
<td>$350,000</td>
</tr>
<tr>
<td>ENG-10</td>
<td>Johnson Lane from Old Hardin Road to Hillner Lane</td>
<td>LPSD/Yellowstone County/Private</td>
<td>As Developed</td>
<td>$587,000</td>
</tr>
<tr>
<td>ENG-11</td>
<td>Upper Lockwood Irrigation Ditch</td>
<td>LPSD/Lockwood Irrigation Ditch</td>
<td>Beyond 2024</td>
<td>$30/LF</td>
</tr>
<tr>
<td>ENG-12</td>
<td>Billings Bypass Sidewalk from Johnson Lane Interchange to Yellowstone River Bridge</td>
<td>MDT/Yellowstone County</td>
<td>unknown</td>
<td>$600,000</td>
</tr>
<tr>
<td>ENG-13</td>
<td>Johnson Lane north of I-90 to Yellowstone River</td>
<td>Private</td>
<td>unknown</td>
<td>unknown</td>
</tr>
<tr>
<td>ENG-14</td>
<td>Bicycle Tourist Route</td>
<td>Yellowstone County/Chamber of Commerce/Private</td>
<td>unknown</td>
<td>unknown</td>
</tr>
</tbody>
</table>

*Table 12: Engineering Activities*
Evaluation

It is vital that each of the programs listed above are consistently evaluated for their effectiveness and usefulness of human and fiscal resources. Therefore, the Advisory Board will evaluate each of the recommendations on an annual basis. Criteria for the basis of evaluation are as follows:

1. Did the activity further the mission of the LPSD? If so how?
2. Did the activity provide quantifiable data that is useful in pursuit of other activities?
3. Did the activity promote awareness or advocacy for the Lockwood community?
4. Did the activity leverage LPSD funds and/or other fiscal contributions?
5. Did the activity create long-lasting results?

<table>
<thead>
<tr>
<th>Activity Number</th>
<th>Activity</th>
<th>Responsibility/Potential Partners</th>
<th>When</th>
<th>Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVAL-1</td>
<td>Annual Review of the Non-Motorized Transportation Plan</td>
<td>LPSD/City-County Planning</td>
<td>Annual</td>
<td>$0</td>
</tr>
<tr>
<td>EVAL-2</td>
<td>Conduct Pedestrian &amp; Bicycle Counts</td>
<td>LPSD/City-County Planning/County Engineering</td>
<td>Annually in May &amp; Sept.</td>
<td>$0</td>
</tr>
<tr>
<td>EVAL-3</td>
<td>Conduct Parent &amp; Student Surveys</td>
<td>Lockwood School/LPSD</td>
<td>Annual</td>
<td>$0</td>
</tr>
<tr>
<td>EVAL-4</td>
<td>Prepare an annual budget for County Commissioner approval</td>
<td>LPSD</td>
<td>Annual</td>
<td>$0</td>
</tr>
<tr>
<td>EVAL-5</td>
<td>Develop a walk score for Lockwood</td>
<td>LPSD/Local Realtors</td>
<td>2016</td>
<td>$0</td>
</tr>
<tr>
<td>EVAL-6</td>
<td>Collect Fatality, Serious Injury &amp; Injury Data</td>
<td>City-County Planning Safety Grant/LPSD/MHP/Sheriff</td>
<td>2016</td>
<td>$0</td>
</tr>
<tr>
<td>EVAL-7</td>
<td>Collect economic data regarding sidewalks as critical infrastructure</td>
<td>LPSD/Big Sky Economic Development/Beartooth RC&amp;D</td>
<td>On-going</td>
<td>$0</td>
</tr>
<tr>
<td>EVAL-8</td>
<td>Develop a Health Impact Assessment</td>
<td>LPSD/RiverStone Health</td>
<td>2016</td>
<td>Unknown</td>
</tr>
<tr>
<td>EVAL-9</td>
<td>Retain District Consultant to execute non-infrastructure tasks and administration</td>
<td>LPSD/Yellowstone County</td>
<td>Annual</td>
<td>$20,000</td>
</tr>
</tbody>
</table>

Table 13: Evaluation Activities
**Partnerships & Funding Sources**

The execution of the five “E” section of this document will rely on quality outreach with corporate partners and citizen advocates. A well-thought-out work scope and transparency in the execution of the work builds confidence by both elected officials and constituents alike.

<table>
<thead>
<tr>
<th>Activity Number</th>
<th>Activity</th>
<th>Responsibility/Potential Partners</th>
<th>When</th>
<th>Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFS-1</td>
<td>Identify possible grant sources within a rolling 6-month time period</td>
<td>LPSD/Big Sky Economic Development/Beartooth RC&amp;D</td>
<td>On-going</td>
<td>$0</td>
</tr>
<tr>
<td>PFS-2</td>
<td>Request non-infrastructure funding opportunities from Yellowstone County</td>
<td>LPSD</td>
<td>Annual</td>
<td>$1,200</td>
</tr>
<tr>
<td>PFS-3</td>
<td>Establish a restricted funds account for non-profit donations</td>
<td>LPSD</td>
<td>2016</td>
<td>$0</td>
</tr>
<tr>
<td>PFS-4</td>
<td>Participate in meetings involving implications to taxing entities</td>
<td>LPSD</td>
<td>On-going</td>
<td>$0</td>
</tr>
<tr>
<td>PFS-5</td>
<td>Research as to the applicability of tourism as an economic development strategy and grant sources</td>
<td>LPSD</td>
<td>2017</td>
<td>$0</td>
</tr>
<tr>
<td>PFS-6</td>
<td>Establish relationship with the Healthy by Design coalition to co-promote healthy activities and outreach</td>
<td>LPSD/RiverStone Health/Healthy by Design</td>
<td>2015</td>
<td>$0</td>
</tr>
<tr>
<td>PFS-7</td>
<td>Contact Billings Clinic Trauma Surgeon regarding helmet giveaway</td>
<td>LPSD/Lockwood School</td>
<td>2015</td>
<td>$0</td>
</tr>
<tr>
<td>PFS-8</td>
<td>Identify potential corporate sponsors for events</td>
<td>LPSD</td>
<td>Annual</td>
<td>$0</td>
</tr>
<tr>
<td>PFS-9</td>
<td>Identify any in-kind donations that are available to the District</td>
<td>LPSD</td>
<td>On-going</td>
<td>$0</td>
</tr>
</tbody>
</table>

*Table 14: Partnership & Funding Activities*

**12. Infrastructure Plan (Highest Priorities)**

The infrastructure plan generally covers all engineering-related infrastructure projects. The highest priorities were identified by the Advisory Board, and then affirmed by participants in town hall meetings. The highest priority corridors have received further evaluation for the opportunities and constraints for each area.
US Highway 87 from Old Hardin Road to Peters Street
This project includes the construction of a six-foot wide sidewalk that will connect the Lockwood School to Old Hardin Road. This 2,480 feet length of sidewalk will be constructed on the south side of Highway 87 and will generally parallel the south right-of-way line. This sidewalk will connect the East Ridge Estates subdivision to Lockwood School and provide a safe passage to the commercial area at the intersection of Old Hardin Road and Highway 87. Constraints to the project include the Box Elder Creek crossing and hydraulic conflicts with right-of-way constraints at the Old Hardin Road interchange. US Highway 87 has an average daily traffic (ADT) count of 2990, which is slightly higher than Johnson Lane South and Becraft Lane.

Street Lights and Waiting Areas at Bus Stops
During the time of year between the vernal and spring equinoxes (October to March), the lack of lighting contributes to safety concerns for collection sites. Street lights were installed in 2014 at six locations where students wait for school transportation. The light allows for better visibility of waiting and walking students to the bus stops. The lights and poles are owned by Yellowstone Valley Electric, and Yellowstone County pays a monthly fee of $8.50 for five lights that were placed on existing poles and $9.50 per month for one light that required a new pole. The locations are as follows:

- Old Hardin Road and Horn Street
- Enfield Street and Springfield Avenue
- 1600 block of Dickie Road
- Greenwood Avenue and Silverton Street
- Bluebird Street and Canary Avenue
- Becraft Lane and Starlight Drive

The Lockwood Fire District and the Lockwood and Billings School Districts have indicated that the main arterials such as Becraft Lane and Old Hardin Road are collection sites for bus stops. When weather is a factor, there are no places for children to congregate, and currently they stand on the road. Snow removal from the road pushes the snow into the edges of the road, forcing students to stand in the street.

The narrow roads are built to rural standards, with no curb and gutter. During ice conditions, an uncontrolled vehicle’s momentum may not allow them to redirect their path or provide a barrier when approaching the congregated pedestrians.

It is recommended to dedicate approximately $15,000 every other year to construct a proper bus stop.
waiting area in addition to the monthly costs for street lights.

**Becraft Lane from Old Hardin Road to Noblewood Drive**

Becraft Lane is a major collector street that has documented fatality and serious injury crashes involving pedestrians. Becraft Lane has an ADT of 2,630 vehicles, just slightly less than US Highway 87. A high school bus stop is located at Becraft Lane and Starlight Drive. The Lockwood Elementary and Middle School has six bus routes in this area, including eight bus stops on Becraft Lane. Approximately 750 feet of Becraft Lane will be reconstructed as a part of the Billings Bypass project. There are over 650 households located within one half mile of the road.

Opportunities include creating a pedestrian connection to the commercial area at the Old Hardin Road and Johnson Lane intersection and to Harris Park, located south of Becraft Lane. Constraints include a power line which runs along the north side of Becraft Lane between First Interstate Bank and the irrigation canal crossing, then crosses Becraft Lane and runs along the south side of Becraft Lane between the irrigation canal crossing and Westgate Drive. Two private property owners on the north side of Becraft Lane have property lines that extend to the center of Becraft Lane.

The evaluation suggests that the path run along the north side of Becraft Lane due to the least amount of constraints. The physical constraints due to the presence of the power line are present on both sides of the road. The intersection of Westgate Drive and Becraft Lane is almost 150 feet wide, requiring specialized pedestrian facility. The high number of bus stops often results in vehicular traffic backing up and has led to other safety concerns, including drivers illegally passing buses and putting students in danger.

**Piccolo Lane from Old Hardin Road to Highway 87**

Piccolo Lane is classified as a local road which serves residential housing. Opportunities include serving the housing along the street and creating a pedestrian connection to the IGA convenience store on the southwest corner of the Piccolo Lane / Old Hardin Road intersection. Constraints include significant right-of-way constraints on both sides of the road, a line of large trees on the east side of Piccolo Lane south of Old Hardin Road, power poles on the east side of the street between US 87 and Sunrise Ave, and buildings on the west of the street immediately north of US 87.
Significant constraints limit options for a pedestrian path facility along Piccolo Lane. A five foot concrete curb-walk is recommended on the west side of the street which could stop north of the building encroachment shown in Figure 7. A between Sunrise Avenue and the southern end of the proposed sidewalk fence will have to be relocated. Piccolo Lane does have a lot of potential to become a neighborhood shareway/greenway or a woonerf in order to accommodate all types of traffic.

**Old Hardin Road from the I-90 Interchange to Noblewood Drive**

Old Hardin Road is classified as a “Minor Arterial” from the I-90 Interchange to Johnson Lane that is primarily fronted with commercial establishments although a few residences front the street. Along this route ADT counts range from 9,100 to 4,590. Old Hardin Road from Johnson Lane to Noblewood Drive has an ADT of 5,510 to 2,630 from west to east, including the Johnson Lane interchange with over 12,000 ADT. The classification of Old Hardin Road in this segment is a Major Collector. Old Hardin Road has had a fatality as a result of a vehicle/bicycle crash in 2010. There have been additional numerous other crashes involving pedestrians, resulting in injury along this road. According to the Billings Urban Area Long Range Transportation Plan, Old Hardin Road is anticipated to be reconstructed in the years beyond 2035 from its current state to a 3-lane urban roadway. The projected cost is approximately $10.5 million.

Opportunities include creating a pedestrian connection to Lockwood Park south of Old Hardin Road as well as several gas stations / convenience stores (including IGA at southwest corner of Old Hardin Road / Piccolo Lane as well as Lockwood Square, Flying J Truck Plaza, and Town Pump at the southwest, northwest, and southeast corner of the Old Hardin Road / Johnson Lane intersection, respectively). Constraints include potential right-of-way conflicts on both sides of Old Hardin Road as well as a power line on the north side of Old Hardin Road between McIntosh Drive and Noblewood Drive.

It is recommended the proposed path be placed on the south side of Old Hardin Road. Placement on this side of the road allows for several connections to convenience stores as well as Lockwood Park. Placing the path on the south side of the road also creates a better connection with the proposed paths along Piccolo Lane and Becraft Lane. More right-of-way constraints exist on the south side of Old Hardin Road; however, these can be addressed with easements.

Old Hardin Road is a corridor where the use of an irrigation canal as a location for a pedestrian path could be considered. A canal runs near Old Hardin Road the entire length of the project corridor (runs north of Old Hardin Road between Noblewood Drive and Rykken Circle west of Johnson Lane, then runs south of Old Hardin Road between Rykken Circle and US 87). Doing this would eliminate the possibility of right-of-way constraints assuming permission is given by the Lockwood Irrigation District.
Lockwood Irrigation District Ditches

Preliminary meetings with the Lockwood Irrigation District Board have indicated a positive interest in utilizing the ditch property for the placement of trails. The lower ditch runs from Maier Road to Rykken Circle and Old Hardin Road. This corridor runs parallel to Old Hardin Road and may be an alternate route to facilitate the movement of people until an appropriate solution for Old Hardin Road can be obtained.

The upper ditch runs from Dickie Road, past Coburn Road and provides an alternative trail alignment for people wishing to connect from the Johnson Lane area to Lockwood School. The alignment of this ditch facilitates the greatest potential to safely move people from the east side of the Lockwood urbanized area to the west side, plus providing trailhead opportunities for a tourism route.

The liability for the use of ditches and canals for recreational purposes has traditionally been limited by Montana’s Recreational Use Statute (MCA 70-16-Part 3). However, a District Court decision in 2014 (that is currently in appeal) has challenged that statute. If opportunities arise to construct a trail along the Lockwood Irrigation District’s facilities, all aspects of its use will be considered.

Options for the utilization of the District’s ditches include piping the ditch and placing the trail on top of the canal or running the trail immediately adjacent to the canal. The estimated costs only reflect the trail surfacing only.

13. Additional Infrastructure Routes

Johnson Lane from the I-90 Interchange to Ford Road

Johnson Lane is classified as a “Major Collector” that supports commercial, residential and rural traffic patterns. Johnson Lane at the I-90 Interchange has over 12,000 ADT and the end of Johnson Lane at US Highway 87 East is just over 1,000 ADT. This area has many undeveloped parcels that are a prime opportunity for sidewalk construction as a part of new development.

Opportunities include creating a pedestrian connection to the Lockwood School and a connection to Hillner Park. Constraints include the fact that no roads are built connecting Johnson Lane to either Sunrise Avenue or Greenwood Avenue. A potential right-of-way constraint exists along the east side of Johnson Lane south of Silverton Street.

This location provides an opportunity to use the irrigation canal to construct a pedestrian path, as allowed by the Lockwood Irrigation District. The canal runs in the area where the preferred path would be placed. It is recommended the path run along the west side of Johnson Lane from Old Hardin Road to the location of the irrigation canal, run along the north side of the canal from Johnson Lane to Greenwood Ave, run along the south side of Sunrise Ave, and along the east side of Hemlock Drive.

Johnson Lane North of I-90

Preliminary interest has been expressed by property owners to construct a trail corridor linking Johnson Lane at I-90, north to the Yellowstone River.
Billings Bypass
In 2014, the Montana Department of Transportation issued the Record of Decision regarding the new construction of a principal arterial highway connecting Interstate 90 east of Billings with Old Highway 312. The purpose is to address several transportation-related issues that stem from a lack of connectivity and lack of mobility due to major physical barriers for north-south transportation connections in the eastern Billings area.\(^{18}\) The project is in the Engineering Design phase that includes the primary and secondary corridors, interchange and intersection options and related facilities, such as bridges. The preferred alignment connects at Johnson Lane and I-90 interchange and runs through an industrial development and undeveloped areas in North Lockwood.

The Record of Decision indicates that non-motorized transportation facilities are planned to be accommodated through an 8-foot shoulder, which also serves as a vehicle break-down lane. The Record of Decision states that “bicycle and pedestrian accommodations will be taken into account during final design.” The Lockwood Pedestrian Safety District Advisory Board submitted a letter to the Yellowstone County Commission on February 24, 2015, indicating the Board’s desire for a separated facility parallel to the road to provide pedestrian safety for those using that corridor.

Bicycle Tourist Route
This route would promote bicycle tourism within the LPD. Only one hotel, the Holiday Inn Express is located in Lockwood. Utilizing that as a tourist starting point, the potential route could follow the Lockwood Irrigation District canal over to Coburn Road. Then the route could extend to the Four Dances Natural Area and Pictograph Caves State Park. With an Interstate Bridge connection, the route could extend over to Billings, connecting into the proposed “Marathon Loop.” Additionally, tourists staying at the hotel could potentially ride north towards the future Dover Park, connect to the Heights Kiwanis Bike trail and also tie into the Marathon Loop. Lockwood is poised to become a key trailhead for bicycle tourism and economic development.

14. Capital Improvements Plan (10 years)

The highest priority corridors have received further evaluation as to the feasibility of construction. The long-range capital improvements plan assumes that all easements or right-of-way acquisitions are not financed by the District. Therefore, it should be noted that the “Cumulative District Account Balance” may be required to stop-gap any land costs or unrealized grant funds. It should be noted that all estimated costs of sidewalks are in 2015 dollars and assume one six-foot wide sidewalk along each roadway, with the exception of irrigation ditch routes, which is estimated with a gravel trail.

## LOCKWOOD PEDESTRIAN SAFETY DISTRICT
### LONG RANGE (10 YEAR) PLAN

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>PROJECT COST</th>
<th>FUNDING SOURCE</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
<th>FY23</th>
<th>FY24</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 87 Sidewalk: Petars Street to Old Hardin Rd. (2400 LF)</td>
<td>$285</td>
<td>$285 INTERCAP Loan</td>
<td>$15</td>
<td>$30</td>
<td>$30</td>
<td>$30</td>
<td>$30</td>
<td>$30</td>
<td>$30</td>
<td>$30</td>
<td>$30</td>
<td>$30</td>
</tr>
<tr>
<td>Bercraft Road Sidewalk: Old Hardin Road to Noblewood Drive (6350 LF)</td>
<td>$500</td>
<td>$75 District $225 INTERCAP $200 Grants</td>
<td>$92</td>
<td>$32</td>
<td>$32</td>
<td>$32</td>
<td>$32</td>
<td>$32</td>
<td>$32</td>
<td>$32</td>
<td>$32</td>
<td>$32</td>
</tr>
<tr>
<td>Piccolo Lane: Old Hardin Road to US 87 (1100 LF)</td>
<td>$250</td>
<td>$150 District $100 Grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old Hardin Road: Johnson Lane to Greenwood Avenue (2000 LF)</td>
<td>$250</td>
<td>$150 District $100 Grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lockwood Irrigation District Lower Ditch from Rykken Circle (West) to Piccolo Lane (5900 LF)</td>
<td>$200</td>
<td>$160 District $40 Grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$160</td>
<td></td>
<td></td>
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<td>Old Hardin Road: Greenwood Avenue to Piccolo Lane (3650 LF)</td>
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<td>$250 District $160 Grants</td>
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<td>Repay Yellowstone County Advance from FY15</td>
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<td>TOTAL DISTRICT SPENDING</td>
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<tr>
<td>EXPECTED DISTRICT REVENUE</td>
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<td>CUMULATIVE DISTRICT ACCOUNT BALANCE (CONTINGENCY)</td>
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*All costs in $1,000's, 2015 dollar value*

Note that Yellowstone County’s fiscal year begins on July 1 and ends on June 30
Figure 9: Project Location Map: Old Hardin Road & Highway 87
15. Funding Sources

Yellowstone County Special District No. 1 for Lockwood Area
In 2014, the Yellowstone County Commissioners approved by citizen vote the creation of a special
district to construct and maintain improvements to enhance pedestrian safety and provide for
alternative forms of traffic in the area. The area is defined as the Boundaries of School District No. 26
(Lockwood School). The first year of the levy is tax year 2015. The estimated annual revenues are
$212,697 at 10 mills.

Billings Chamber/CVB Trails Initiative
The Billings Chamber of Commerce serves the greater Billings area. The Billings Chamber/CVB trail
initiative is to develop a trail system for the economic and healthy community benefits that result from
active transportation (to work and school and for leisure).19 The strategic priority includes the concept
of a Marathon Loop, plus vital spokes to that loop, which could include Lockwood.

Centers for Disease Control and Prevention (CDC)
The CDC’s Built Environment and Health Initiative works to improve public health by linking public health
data collection with community design decisions, improving community design decisions through the
use of tools such as Health Impact Assessments, educating decision-makers on the health impact of
community design and conducting research to identify the links between health and community design.
The CDC offers grant opportunities for the research, assessments and tools to develop a Health Impact
Assessment (HIA). An HIA evaluates objectively the potential health effects of a policy or project before
it begins. The health effect may be physical, mental or emotional. The CDC’s Healthy Places initiative
provides tools for transportation, parks, trails, children’s health and community design.20

Coal Board Grant Program
The Montana Department of Commerce and the Coal Board administers grants pursuant to 90-6-207,
MCA. Grant are available to counties, communities, school districts or other governmental units that
has had or expects to have a result of the impact of coal development, a net increase or decrease in
population. Application dates are approximately 45 days prior to a scheduled Coal Board meeting.
Lockwood (Yellowstone County) is eligible area because of the Signal Peak Mine. Funds are
appropriated every two years from the coal trust fund.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)
CMAQ funds may be used for the construction of pedestrian walkways and bicycle transportation
facilities and for carrying out non construction projects related to safe bicycle use.

INTERCAP Loan
The Montana Department of Commerce/Montana Board of Investments manages this variable rate loan
program. This program provides loans to eligible credit worthy government units, of which Yellowstone
County is in good standing. One hundred percent financing is available with no up-front cost, equity or
matching funds required. The use of the loan funds has significant flexibility (new and used equipment
and vehicles, real property improvements, preliminary engineering and grant writing.) The maximum

20 http://www.cdc.gov/healthyplaces/about.htm
term of the loan is 15 years or useful life of the project, whichever is less. The current interest rate is 1.25 percent, which is adjusted annually on February 16. Interest and principal payments are due semi-annually on February 15 and August 15.

**Land & Water Conservation Fund (LWCF)**
The LWCF was established in 1965 and is a federal reimbursement grants program administered by the Montana State Parks. Eligible projects include ball fields, open space acquisitions, public parks, swimming pools, playgrounds, picnic facilities and walking trails. Facilities directly supporting outdoor recreation areas, such as restrooms and maintenance sheds are also eligible. The maximum grant per project is $75,000, and the grant may provide up to 50 percent of the project’s total costs.

**Moving Ahead for Progress in the 21st Century Act (MAP-21)**
This is the federal legislation that funds and authorizes federal dollar spending on surface transportation. The $105 billion, two-year bill expires in May 2015. Bicycle and pedestrian projects are broadly eligible throughout the Federal-Aid and Federal Lands programs.

**National Highway Performance Program (NHPP)**
NHPP funds may be used for the construction of pedestrian walkways and bicycle transportation facilities on land adjacent to any highway on the National Highway System.

**Non-Profit Donation Restricted Funds Account**
Working with an established 501(c)3 organization, the Lockwood Pedestrian Safety District could acquire charitable donations through a restricted funds account that is dedicated to the District’s activities. Utilizing an existing organization would relieve the District of the administrative burden. However, if the Lockwood community would like to establish its own non-profit organization, it is certain to do so.

**Petroleum Violation Escrow Account (PVEA)**
PVEA funds come from fines paid by oil companies in the 70’s for violating oil price caps set by the federal government. The Department of Energy’s State Energy and Weatherization Assistance Program distributes the money at the state level through grants. PVEA funds projects with an emphasis on energy saving, including public transportation and bridge construction or maintenance.21

**Payments in Lieu of Taxes (PILT)**
PILT funds are payments to local governments that help offset losses in property taxes due to nontaxable Federal lands within their jurisdictions. These funds may be used at the County’s discretion for any governmental purpose. Yellowstone County receives just over $200,000 per year in PILT payments.

**Private Grant Sources**
Several foundations and charitable arms of businesses provide opportunities to contribute to non-motorized transportation activities. Healthcare organizations, insurance companies, oil and gas companies are all possibilities that a dedicated team of grant writers should be researching and applying for on a regular basis.

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21 Billings Area Bikeway and Trail Master Plan. Alta Planning+ Design. 2011
Recreation Trails Program (RTP)
This is a sub-category of the TAP funding, with dedicated funding to RTP. Montana State Parks administers the reimbursement grant program. Eligible projects include urban trail development, basic front and backcountry trail maintenance, restoration of areas damaged by trail use development of trailside facilities and educational and safety projects related to trails. This program requires a 20 percent match. Equipment purchases are eligible. Unlike the base TAP program, the RTP program will fund unpaved trails.

Rural Special Improvement District (RSID)
The Board of County Commissioners is authorized and empowered to order and create special improvement districts whenever the public interest or convenience may require (7-12-2102 M.C.A.). The purpose of a Rural Special Improvement District is to provide funding for improvements and maintenance of pre-existing improvements including, but not limited to streets (avenues, highways, lanes, alleys, crossings or intersections, courts, and places which have been dedicated and accepted according to the law or in common and undisputed use by the public for a period of not less than 5 years next preceding), ditches, bridges, culverts, curbs, gutters, sewers, and waterworks. A Petition to Create a Rural Special Improvement District must have the consent of at least 60 percent of the land owners located in the proposed District.

Surface Transportation Program (STP)
STP funds may be used for the construction of pedestrian walkways and bicycle transportation facilities and for carrying out non construction projects related to safe bicycle use.

Transportation Alternatives Program (TAP)
TAP was authorized under MAP-21, provides funding for programs and projects defined as transportation alternatives, including on and off road pedestrian and bicycle facilities, infrastructure projects for improving non-drive access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for the planning, design or construction of boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways. This competitive grant program requires a local match of 13.42 percent.

Treasure State Endowment Program (TSEP)
This grant program is administered by the Montana Department of Commerce with a maximum grant amount of $750,000 with applications due in the spring of even years with legislative action in the following odd year. This grant program process entails a 2-3 year process and requires a 50 percent match. Eligible uses include drinking water systems, wastewater treatment facilities, sanitary or storm sewer systems, solid waste disposal & separation systems and bridges. TSEP applications are evaluated, scored and ranked based upon seven statutory priorities. In general, projects that solve serious health and safety threats, and have a serious financial need are likely to be more competitive and ranked higher than other proposed projects. This program would only apply to bridges. Financial need for bridge projects is determined by evaluating the amount of funds available to the county that could be used towards bridges and the number of bridges that the county is responsible for maintaining.
16. Maintenance

Sidewalks provide tremendous value to communities by making walking safe and easier. Unlike bicyclists, every person is a pedestrian. The Federal Highway Administration recommends that “[g]iven that people walk despite not having facilities – for exercise, going to friends’ houses...it is neither rational nor acceptable to build places that do not have places for people to walk.”

Yellowstone County does not currently have the equipment or staff needed maintain sidewalks within their rights-of-way. Because the current regulations do not require the installation of sidewalk, there has not ever been a need to develop an ordinance regarding sidewalk maintenance. Typically, most municipalities address sidewalk installation and maintenance as the responsibility of the abutting property owner. Yellowstone County will need to develop a sidewalk construction and maintenance ordinance for the Lockwood Pedestrian Safety District.

For sidewalks placed within a right-of-way within Montana Department of Transportation jurisdiction (such as Highway 87 East), a maintenance agreement is required between MDT and the local government (Yellowstone County). An example maintenance agreement is located in the Appendix. Because of the lack of County equipment and personnel, the County will need to procure bids from maintenance companies to perform minimal sidewalk maintenance.

A case study review included the Anchorage Pedestrian Plan where winter maintenance affects winter conditions of cold, snow and ice for 6 months of the year. The Municipality of Anchorage blows sidewalks with 17 sidewalk-sized plows. The Alaska Department of Transportation and Public Facilities plow curb-walks with street-sized plows. In the Rural Road Service Area, a local property tax mill levy funds sidewalk improvements and maintenance. Additionally, members of the public are responsible for snow removal under municipal code.

Within the Lockwood Pedestrian Safety District, solutions include creating an ordinance requiring adjacent property owners to remove snow off of sidewalks. Additionally, sidewalks within a principal arterial should be maintained through a contract with a local business to remove snow and provide twice per year sweeping services. Weed control in those corridors in right-of-way is the responsibility of the governing agency. The costs to the District affiliated with maintenance are reflected in the 10 year capital improvements plan.

“An occupant of land upon which is located an accessible parking space or adjacent to a public sidewalk, shall be responsible for the removal of two inches or more of snow or one inch or more of ice.” The term “occupant” refers to either the tenant or the owner of the land.

Anchorage Municipal Code 24.80.090

22 Anchorage Metropolitan Area Transportation Solutions. Anchorage Pedestrian Plan. October 2007
17. Conclusion

The Lockwood Pedestrian Safety District is an innovative use of local government control to address the problems of people choosing alternate modes of transportation. The unique generation of the special district allows for greater flexibility to apply for other funding opportunities. To increase safety and to make Lockwood a livable community, a multi-faced approach must be taken. Building the infrastructure is not enough, a plan that embraces education, enforcement, encouragement and partnerships will have a far greater impact than engineering alone. The Lockwood Pedestrian Safety District joins the Montana Department of Transportation in its Vision Zero campaign, seeking the ultimate goal of eliminating deaths and injuries on Montana highways.