

City of Ponderay, Idaho...

Bicycle and Pedestrian Master Plan



Table of Contents

Ponderay History and Context.....	3
Needs of Walkers and Bikers.....	4
Existing Street Network.....	7
Community Process.....	9
Plan of Action.....	10
Ponderay Priorities.....	17
Implementation.....	19
Changing Policy.....	22
Resources.....	24

Ponderay is located on scenic Lake Pend Oreille in Idaho's panhandle. The village of Ponderay was founded in 1904 as a "company town." It was built on the Panhandle Smelting and Refining Company's townsite and changed status from village to city in 1964. The original townsite, built on a local roadway grid network, is known today as "Old Ponderay" and still contains the majority of single family residential structures in Ponderay. It also encompasses a small industrial park on its southwestern edge.

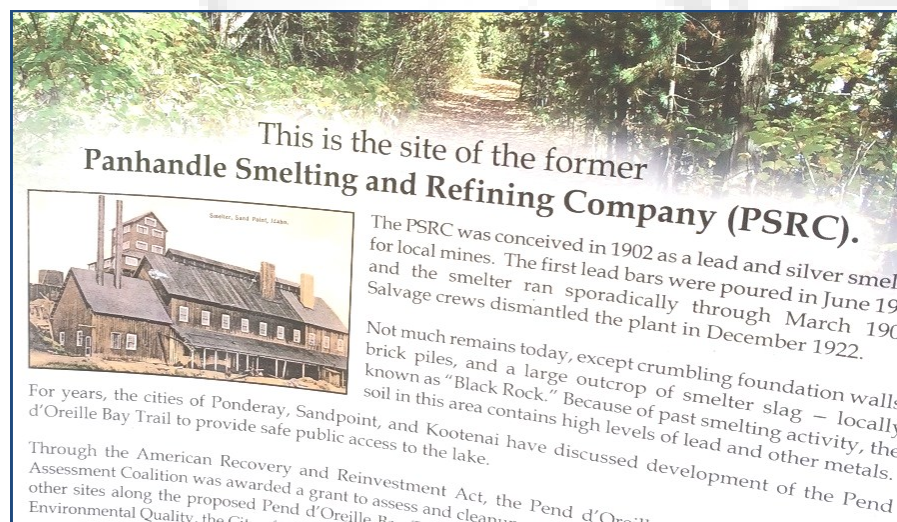
Within the last two decades Ponderay has embraced region serving large-store retail as an economic development tool which has led to substantial growth in land area, structures and residents to the north and west of Old Ponderay. In addition to the numerous commercial retail structures there are several multi-family residential developments, including one serving senior citizens.

Two railroads served the smelter as well as the timber industry in adjacent Kootenai and those railroads have always played an important role in transportation in Ponderay. Both railroads still run through the city today, with the Old Ponderay area sandwiched between. The railroad to the south creates a barrier between the city and the lake shore and the rail to the north of Old Ponderay creates a barrier between the older part of town and the newer commercial and multi-family developments.

US Highway 95 runs along the western edge of Ponderay and State Highway 200 traverses through town adjacent to the northern railroad alignment. Connections in the newer parts of town are made by several collectors and one arterial roadway with few local roadways. This relatively sparse roadway network, along with the scarce railroad crossings contributes to the challenges of connecting various parts of the city for vehicles, and especially for pedestrians and bicyclists.

Additionally the city was built without sidewalks in most areas and has considerable storm drain challenges; a very deep silt soil layer and a long wet season every spring. The city has made a concerted effort in the last decade to begin retrofitting sidewalks and other pedestrian and bicycle facilities where possible, but with limited funding and the noted storm drainage challenges it has been difficult to make headway.

Lastly, the city has a desire to connect with the Pend Oreille Bay Trail and the cities of Kootenai and Sandpoint. The trail is a work in progress and once fully completed will allow pedestrians and bicyclists a delightful travel choice with every utilitarian benefit as a roadway network.



Ponderay has its community roots firmly established in a once thriving mining presence. Ponderay is still recognizing its history while taking strides to strengthen and enhance its future. By improving the active transportation system and promoting more walking and bicycling, the community could see improved quality of life, health, and even economic conditions.

Needs of Walkers & Bikers

Human beings require space while walking or bicycling. The space we need is determined by our size and shape as well as our physical ability to move..

As pedestrians, we require buffer space to feel comfortable. We need space above and to our sides to be comfortable and avoid being struck with objects. The speed at which we move greatly differs as much as people do. Runners can run up to 10 miles per hour while mobility-impaired individuals may move at less than 1 mile per hour.



Bicyclists require just as much consideration with regard to width, height, and speed. A child riding a bike will ride at a slower speed and can be less predictable. A mother may choose to use a bicycle chariot to carry a toddler, adding both length and width to her needed space.

Yet despite these normal human tendencies both the walking and bicycling realm are seldom given the depth of thought necessary to accommodate such variability and instead a limited few design options become the default.

The intention of this section is to highlight how humans can differ and why context is such a valuable contributor to planning, design and operation of our communities' transportation infrastructure.

Dimensions of Humans: Pedestrians

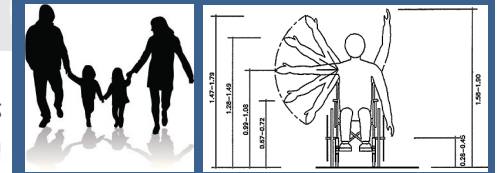
Speed: Humans move at different speeds. Federal guidelines for crosswalks require enough time be given for people to walk at a 3.5 feet per second pace or 2.38 miles per hour. In many instances this may be appropriate, but in areas with school zones, population of senior citizens, or those with mobility limitations, additional time may be appropriate given user ability.

Width: The space we occupy also extends to our sides as much as in front or behind our bodies. Generally, an adult is 12-24" wide, but with an additional six inches of comfort space, a person may need up to three feet to feel comfortable walking in a given space. If a person is wheelchair bound, walking with another adult or child, the width demands are greater. Furthermore, if in an environment with opening doors, fences, mail boxes, and street furniture, space can become narrowed and less accommodating.

Height: Though still a factor, height is generally less of an issue for walkers as it may be for bicyclists. The taller of Americans are between 6' and 6-3". To accommodate the normal height and beyond an 8' vertical minimum should be observed.

Other Needs: Other common users also need to be accommodated in various ways. A wheelchair user needs facilities to be compliant with ADA so that they are able to safely negotiate sidewalks, curb ramps, crossings and other such facilities. An elderly person using a walker for assistance is also in need of a relatively flat and smooth surface free of trip hazards. Parents pushing strollers, dog owners walking their dogs, and even the physiological changes seen in American populations with the epidemic of obesity, all have concerns and considerations when choosing how to design a pedestrian network.

Width, height, and occupied space of users can vary



Pedestrians can embody multiple user types and abilities. Travel speed, buffer spaces, and land uses can all shape the facilities used and the environments where people either flourish or struggle.

Needs of Walkers & Bikers

Though often lumped together in the same category as pedestrians, bicyclists are very much their own category of road user. A bicyclist can be a child on a small bicycle traveling at a slow speed, a novice rider on a beach cruiser type bike out for a weekend ride or an expert road rider who may travel at speeds equal to moving traffic for the purposes of commuting. Each type of rider and circumstance is unique and deserving of specific context analysis to determine facility type.

Bicyclist Type—Just as there are a wide variety of pedestrian types, there are also several bicyclist types. The newest way to view population segments was created in 2006 by Roger Geller with the city of Portland. The four types described by Mr. Geller give a more relatable illustration as to the desires of bicyclists ranging from those willing to ride in any conditions or in any traffic scenario to those totally unwilling to ride under any circumstance.

The Strong and Fearless—These are the people who will ride regardless of roadway conditions. They are “bicyclists” and riding is a strong part of their identity and they are generally undeterred by roadway conditions.

The Enthused and the Confident—Those who have been attracted to cycling because of supporting infrastructure. They are comfortable sharing the roadway with automotive traffic, but prefer to operate on their own facilities.

The Interested but Concerned—Curious about bicycling and about the need for people to lead more active lives, they would like to ride more, but are afraid to ride.

No Way, No How—This group is currently not interested in bicycling at all, for reasons of topography, inability, or simply a complete and utter lack of interest.

Sources:

<http://www.portlandoregon.gov/transportation/article/264746>

<http://bikeportland.org/2006/12/07/what-type-of-cyclist-are-you-2650>

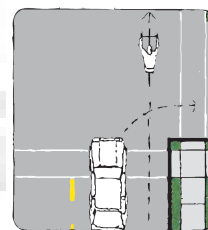
Dimensions of Humans: Bicyclists

Speed: Typically, most bike riders travel between 12-15 miles per hour. However, this can greatly vary as older riders or young children could ride slower than 10mph while expert, well-conditioned riders move as fast as 25mph.

Width: Depending on the bicycle and to a degree the rider, width is generally defined as the width of the handlebars plus buffer space of one foot on either side. However this dimension could increase with the use of panniers, a child chariot or unique bicycle.

Height: Often a bicyclist has no greater demands for vertical clearance than does a pedestrian, however that can change for taller individuals or for bike riders riding bikes with frame dimensions outside the normal sizes. Eight feet vertical clearance is regarded as the minimum for objects, signs or landscaping.

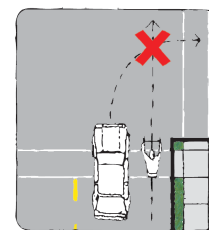
Other Needs: Often overlooked when thinking about bicyclists and their needs are other features not always synonymous with “infrastructure.” System elements such as safe, stable, and usable bike racks, space free of debris and obstruction, and a driver awareness of poor etiquette such as “right hooks” and overtaking without giving bicyclists at least a 3-foot buffer, are all critical to making a communities’ investments into bicycle infrastructure successful and valued.



YES

“Right Hook” Source:

<http://www.mybikeadvocate.com.html>



NO



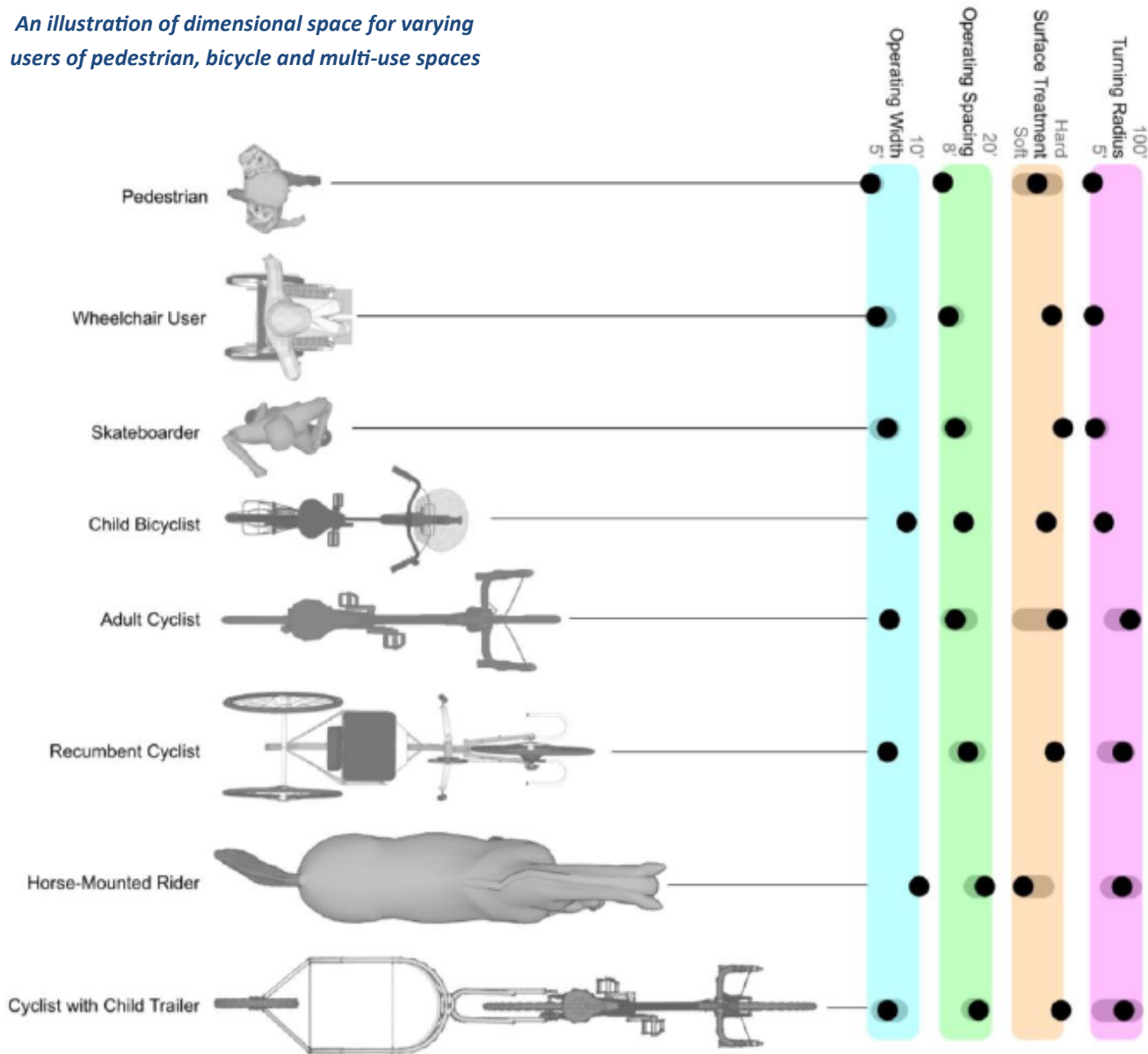
“3 Foot Rule” Source:

<http://onespeedgo.blogspot.com>

NEEDS OF WALKERS & BIKERS

Walking and biking for utilitarian trips is called active transportation and it has many community benefits. It can improve individuals and community health and well-being by encouraging a minimum amount of physical activity through routine activities. It can save money on transportation—money that can then be spent in the community on other needs. It can promote social and civic health through spontaneous interactions. Finally the cost of the facilities are low compared to other transportation improvement costs.

An illustration of dimensional space for varying users of pedestrian, bicycle and multi-use spaces



Typical operating widths, spacing requirements and turning radii depend on forward velocity as well as the experience of the operator. Skilled skateboarders frequently turn in less than the length of their own skateboards, for example. The preferred surface treatment for an adult cyclist will also depend on the type of bicycle (e.g., road or mountain or hybrid) that is being ridden as well as the purpose of the ride, for example, commuting as opposed to recreation.

Illustration: J. Scott Lane

Ponderay Existing Conditions

The city of Ponderay is virtually two cities in one—bisected by the UPRR rail corridor with few crossings, none grade-separated, creating a significant barrier to moving north and south between the historic and newer section of town. The roadway system is relatively sparse outside of the small grid of local streets in Old Ponderay, with few connections and circuitous routes.

Destinations

In addition to having most of the single family homes in the city, Old Ponderay also contains city hall, the post office, medical offices, a small industrial area, and small service and retail. It provides the only opportunity for access to the lakefront through remnants of the smelting company land and other holdings that are mostly private. Access to the lake is reached today by crossing the BNSF rail line on informal pathways at least one of which connects over private land to the end of the Pend Oreille Bay Trail.

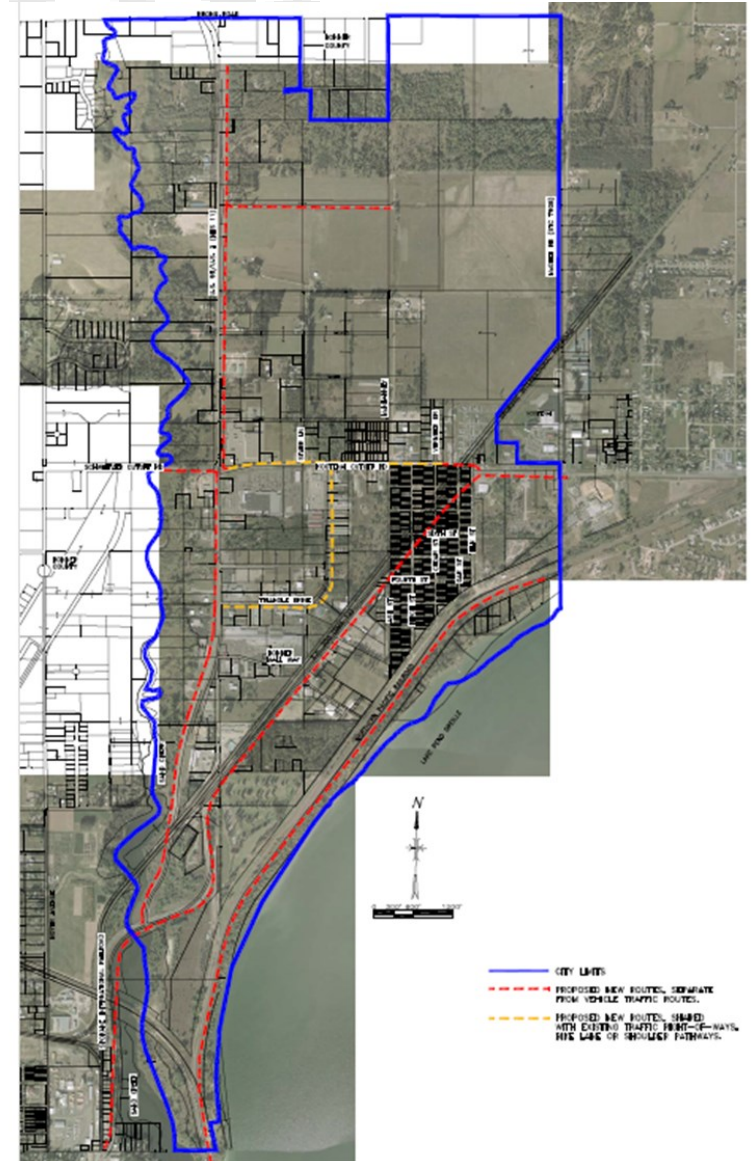
The north side of the city with US Highway 95 on the western edge has seen tremendous commercial, retail, and office growth in recent years, as well as higher density residential. There are plans for a sports complex in the northern Area of City Impact.

Barriers

As noted, connections between these two distinct sections of town are limited by the UPRR rail line with few pedestrian and bicycle access opportunities for residents in one area of town to reach the other. Those in Old Ponderay are limited in reaching shopping and job opportunities and those in the newer part of town find it hard to reach civic, recreational and service needs in the historic area. The lack of network connections, appropriate intersection enhancements and gaps in facilities create dangerous pedestrian and bicycling access to the commercial retail area especially for those likely to try and walk or bike – the residents of the multi-family developments in the newer part of town.

There are only two formal crossings of Highway 200 and the UPRR rail line in town and both are signalized. At Eastgate, on the west, there are no pedestrian and bike facilities as part of the intersection or adjacent roadway infrastructure and the intersection needs significant upgrades to serve traffic more safely. In

addition the railroad uses that section of the corridor for assembling trains and the crossing at Eastgate is often blocked for extended periods of time. On the east, at Kootenai Cutoff, a signal has been added that includes a long (in both time and distance) three-sided pedestrian crossing that connects to the multi-use pathway on the north side of Kootenai Cutoff proceeding west, and on the north side of Highway 200 proceeding east.



It is important to understand community needs and desires when designing improvements. Pedestrian and bicycle improvements are fine scale with a need to identify many details. As such the process included community members and a first-hand look at conditions.

Stakeholder Meeting– a preliminary kickoff meeting and walk around was held with city staff to discuss the desires of the residents. The discussion yielded many corridors and intersections for focus, gaps and connections to be filled or made, and links with more regional facilities like the Pend Oreille Bay Trail and US 95. Other noteworthy desires and objectives:

- ◆ Pedestrian and bicycle network should connect with transit.
- ◆ Black Rock area will be the subject of a planning initiative and should also connect with remaining network.
- ◆ Improve accessibility, safety, and crossing of Highway 200
- ◆ Improve connections between Kootenai and the Sandpoint Trail network
- ◆ Improve circulation on Triangle Drive

Walking Discussion– During the initial site visit a general walk audit was conducted to see conditions first hand, examine corridors and intersections with staff from the city and ITD, and to see the network in its normal operations. During the walk, team members were able to ask questions, understand complexities first hand and to experience several aspects of Ponderay that cannot be replicated with a conversation or by looking at maps.

Art Contest/ Public Meeting- At the conclusion of the initial Ponderay site visit, an art contest and open house were held. The purpose of the event was to gain further insight from residents of varying ages and abilities. The event was attended by city leadership and staff, local law enforcement and several citizens. The event started with a discussion of preliminary findings from the planning team, as well as a segment used to ask questions and gain insight from attendees. Some of the key desires or information gleaned from the event include:

- ◆ Kootenai Cutoff Path is well used, but often citizens use the south side of the road which has no facilities whatsoever
- ◆ Heavy desire exists to access the Shell Market off Hwy 200
- ◆ Compliance with traffic laws and traffic devices is a challenge

- ◆ Several grocery outlets are west of the residential neighborhoods and connections are desired
- ◆ Rail activity can be discouraging to bicyclists and pedestrians

Draft Action Plan and Community Review– The last step in the process was to draft this plan and have a review with community leaders and the public to ensure that nothing was missed and that the desires of the community were met. This included a second visit to Ponderay to have that discussion in person and to allow the opportunity to see any proposed changes. After review the plan was adjusted to reflect the community comment.

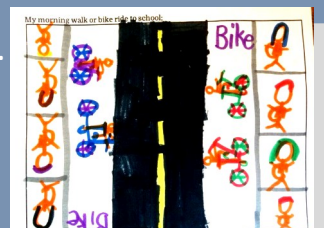
This plan is designed to be implemented. As such it includes recommendations of low cost options that the city may construct itself. In some cases these solutions are intended to be temporary while funding is pursued for more engineering intensive and expensive solutions. In other cases these solutions can last over time and also reduce maintenance costs. More expensive treatments are identified as such where they are recommended as the final solution. **In all cases a less expensive approach can suffice in the meantime.**

Community desires can be expressed beyond words or through meetings. In Ponderay, distinct “goat trails” (A) can be found in numerous places indicating a desire to access a property or span a route. Art can also be a useful medium to express desire. Children from the local elementary school did that very thing by drawing a street design (B) that doesn’t yet exist in Ponderay.

A.



B.



Existing Pedestrian and Bicycle Facilities

Highway 200, which runs adjacent to the UPRR corridor, has no pedestrian or bicycle facilities. A Sand Creek Trail spur crosses to the east side of the Highway 95 bypass south of Ponderay to the southern end of Highway 200. On the west edge of town Highway 95 has recently been rebuilt and includes a multi-use path running north/south on the east side as well as connections to the recently completed Sand Creek Trail leading to Sandpoint on the west. There is a city operated multi-use path running east/west on Kootenai Cutoff. There are few connections in the network serving pedestrians and bicyclists that could create route choices and decrease distances.



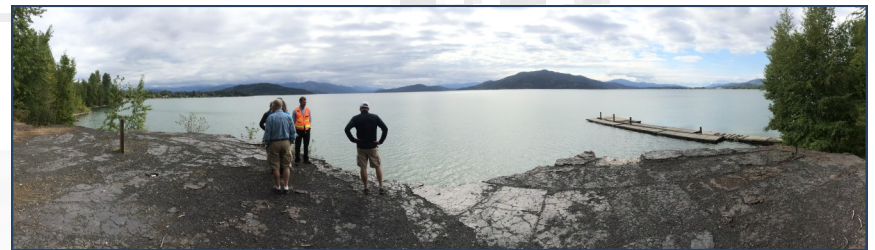
In general there few sidewalks and no bike lanes in Ponderay, however the city is making strides in introducing pedestrian infrastructure including sections with sidewalks, crosswalks, and curb ramps in the

newer parts of town. In the more historic residential areas, virtually no pedestrian infrastructure exists due in part to difficult soil and water table conditions. Drainage swales directly abut narrow pavement sections on nearly every street in old Ponderay limiting usable right of way and placement of sidewalks or side paths. Low traffic volumes and high costs of retrofitting a storm drain system have made improvements prohibitive.

Existing Plans

Ponderay participated in the Bonner County Area Transportation Plan which references a Bike and Pedestrian Master Plan Report that was developed by the Planning Committee of the North Idaho Bikeways. The multi-use paths that have been completed on Highway 95, Sand Creek and Kootenai Cutoff are part of the master plan. A concept plan to extend the Pend d'Oreille Bay Trail beyond Ponderay to Kootenai has been completed. The city is refining that concept with a feasibility study of an underpass and connection from the trail into old Ponderay across the BNSF rail corridor.

The city has also developed a Circulation Plan and technical memos that support that plan to provide details for the transportation improvements identified, such as roadway cross sections, priorities and costs. The city bases many recommendations for required improvements at the time of development on the Circulation Plan Memos which include sidewalks, side paths and bike lanes on the collector roadways cross sections. In addition the memos identify a new pathway connecting the senior citizen development in the northern section of the city, along the northern edge of the UPRR corridor, through the multi-family developments to the west, and to Triangle Drive near Schweitzer Lane.



Images from Ponderay including Kootenai Cutoff Pathway (left column), Black Rock (top, right column), Lake Pend Oreille (above) and the new Sand Creek Trail (right)

Pedestrian Realm

A high quality pedestrian and bicycle realm is highly connected and shortens distances by providing numerous route choices, offers safe facilities for all users and provides access to key destinations. Pedestrians need sidewalks, sidepaths, other defined pedestrian space and enhancements at intersections to allow safe convenient crossing of high traffic roadways. Bicyclists rely on a well identified network of safe bike facilities. The interested but concerned users (pg. 5) prefer separated facilities or routes on low traffic roadways.

Corridor Types: The future network is described within this plan according to existing routes and future routes, as well as primary and secondary corridors. **Primary Routes** are those with higher volumes of motorized and non-motorized users and are connected to land uses that are sought by or generate pedestrians. Typically, these routes are Collectors in the Functional Classification system, they may be found on arterials or local roads as well.



Secondary Routes are those with lower volumes of users and typically fewer land use attractions. A secondary route may be a local street

or street with less demand within the citywide network. Because such routes are less contentious for pedestrians they are generally safer. Improvements can be made, especially as demand changes, but priority should be with primary routes.

Primary Routes

- ♦ Highway 200
- ♦ Kootenai Cutoff
- ♦ Triangle Drive/Bonner Mall Way
- ♦ Railroad Avenue
- ♦ Larkspur Street
- ♦ 4th Street

Secondary Routes

- ♦ Fontaine Drive
- ♦ Elm Avenue
- ♦ Cedar Avenue
- ♦ Birch Avenue
- ♦ 5th Avenue
- ♦ Old Ponderay Grid

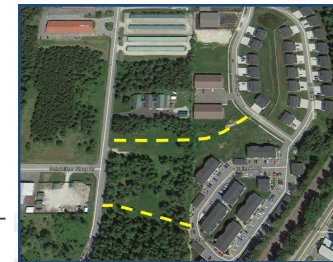
Future Corridors

The Circulation Plan identifies several new roadways. These should all be constructed with pedestrian and bicycle facilities as specified in the plan including:

- ♦ **A new pathway** from Triangle/Schweitzer Drives to Larkspur/Lupine Streets, along the north side of the UPRR rail corridor to the senior complex. This important connection between multi-family residential, commercial, retail, and civic sites to the west is currently accessed through informal pathways. Develop this pathway sooner rather than later by formalizing one or both routes (shown), continuing to the retirement complex along the UPRR corridor. This will shorten distances, provide safer routes and promote active transportation
- ♦ **Complete New Roads 2 and 3** in the plan to improve local circulation for walkers and bicyclists in the newer part of town.

Additionally:

- ♦ **Add north/south streets** (shown) connecting to New Rd 2 to help provide shorter direct access to shopping for existing and future residents. It could be extended south to the back of Bonner Mall in the future and could also be established as pathways short-term until full funding is identified.
- ♦ **Develop a new pathway** from the south end of Elm Avenue to Kootenai along the BNSF rail corridor [page 15 for details].
- ♦ **Explore** formalizing the informal pathway from Lupine crossing UPRR/Highway 200 near 4th Street in old Ponderay (below).



Key Intersections

- ⇒ Highway 200 & Kootenai Cutoff
- ⇒ Highway 200 & 4th Street
- ⇒ Kootenai Cutoff & Larkspur Road
- ⇒ Kootenai Cutoff & Triangle Drive
- ⇒ Highway 200/2/95 Interchange
- ⇒ Highway 200, UPRR & Eastgate Dr.



Potential Hwy. 200 crossing
See Page 14 for more detail

Pedestrian Realm

Highway 200

Highway 200 runs northeast from Highway 95 to the Kootenai Cutoff Road intersection. This stretch of highway is essentially the “Main Street” for old Ponderay but is built as a rural highway with numerous driveways, no sidewalks or bicycle facilities, and plans to introduce a center turn lane. Many civic and service uses take access from the highway. Clear pathways have been worn into the dirt shoulder on the south despite the presence of shrubs and weeds, and in one case a downed tree.

The width of the existing right of way makes a 10'-12' sidepath on the south side possible and practical. An at-grade asphalt sidepath similar to the nearby multi-use path on Highway 95, should be separated from the travel way by a combination of paint, reflective candles and extruded curbs with a center stripe for additional safety. Design to accommodate existing drainage swales. Define turn pockets rather than a full length center turn lane on 200 for safety. **The city and ITD should explore constructing this sidepath with upcoming resurfacing.**

Consider a future north side commuter pathway if use warrants.

Kootenai Cutoff

Kootenai Cutoff is aligned east-west in the northern section of Ponderay connecting Old Ponderay to the retail, commercial, office, industrial uses and multi-family developments in the newer part of town. Though the street has a dedicated 10'-wide sidepath on the north side, there is a beaten path on the south; clear evidence of desire and use for a facility on the south side of the road. Transit stops, significant retail destinations and direct access to multi-family residential are all located on the south. Additionally, the existing northside-only pathway requires numerous crossings of this busy roadway to access a safe facility. **These conditions warrant a 5' sidewalk on the south side of Kootenai Cutoff Road from Highway 200 to Highway 95.** This includes the 650 feet of Walmart center frontage. This project will require a CIP investment and improvements at future development. A rock fines (specified gravel) pathway could be constructed short term.



Sidepaths similar to those pictured can add both a walking and bicycling facility to Highway 200 in a safe manner.



Significant improvements on Kootenai Cutoff Road have been made, however, additional pedestrian facilities are warranted and even being forged by residents currently.



Pedestrian Realm

Triangle Drive/Bonner Mall Way

The city has recognized in its Circulation Plan that Triangle Drive and its connection to Bonner Mall Way (which connects to Highway 95) are key streets for local connectivity. They allow users a route choice that has lower traffic volumes with less congestion and fewer busy intersections than the alternative routes on Highway 95 or Kootenai Cutoff. Both streets also provide access to the mall shopping center which has important region serving tenants such as department stores, a grocery, a Department of Motor Vehicles and others.

These destinations make accommodating pedestrians important for existing and future residents. Both streets were initially built without sidewalks or bike lanes. The plan calls for bike lanes and sidewalks to be added on the northern portion. A Community Choices grant was obtained to construct the project. The new sidewalk will be built along the west side of Triangle Drive from Kootenai Cutoff to Bonner Mall Way, continue on the west side of Bonner Mall Way to the sidewalk on the face of the mall, across the front of the mall then cross the parking lot back to Bonner Mall Way/Highway 95. Details are under review. Bike lanes will also be added. **When this important project is complete placing wayfinding and maps via signage would further heighten awareness and direction for users.**

Systematic Improvements - When additional pedestrian and bicycle facilities and connections in this action plan are made, higher use by pedestrians and bicyclists should be expected. To accommodate the growth in users, improvements should be systematic. Key to implementation will be requiring the development community to provide facilities that benefit their development and the citizens of Ponderay. Recommendations include:

1. Collectors and arterials should be constructed with curb, gutter, sidewalk and bike lanes.
2. Dedicated walking space should be provided on local residential streets through sidewalks, sidepaths or other means. The city should update the technical memos with a local street showing pedestrian provision options. (see page 19)
3. All existing transit stops should be improved with curb, gutter and sidewalk at a minimum of 50'.

4. Review this plan five years from plan adoption and seek to fill any remaining gaps in the network as funding becomes available: Prioritize finishing routes with highest use and most important destinations, Highway 200, Kootenai Cut-off, and connections to Highway 95 and the elementary school in Kootenai.

Railroad Avenue

This historic road originally connected Ponderay with Sandpoint and Kootenai. The remnant is currently unpaved, aligned parallel with the BNSF railroad corridor and terminates near the golf course. **This road is a perfect fit for a permeable surface (such as rock fines) trail. An at-grade crossing of the rail corridor connecting to the Pend Oreille Bay Trail near the northern edge of the golf course should be pursued.** This solution would create a simple connection of old Ponderay with the bay trail and provide residents a safe connection to the lake. Making such an improvement and connection will require negotiations with the railroad and will not be easy, however, at-grade solutions are used in other parts of the country and are possible. The next best option—tunneling under the tracks—is very expensive.

Today the road serves little vehicle traffic. If conditions change with future development it could be rebuilt to include pedestrian and bike facilities and a connection to the rail crossing.

There is another opportunity for a crossing and connection at Railroad and Cedar avenues.

See detail page 15 on at-grade crossings and trail connections.

Larkspur Street

Many important destinations are located on Larkspur including Goodwill, Panhandle Health District and two neighborhoods with over 100 total housing units. Improved with sidewalks on the west, **the street will need full 5-foot sidewalks on the east** once the Kootenai Cutoff Road sidewalk is complete. A rock fines pathway could be constructed in the short term.

4th Street

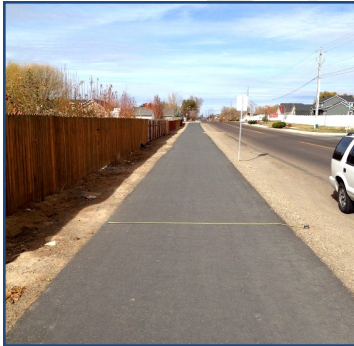
City Hall, the post office, other city buildings, and a transit stop are all located on 4th Street in Old Ponderay. **Walking facilities should be added to 4th Street choosing one of the options described in the next section (Cedar & Birch)** to provide access to these important destinations.

Pedestrian Realm

Elm Avenue

Aligned north/south Elm connects old Ponderay to Kootenai via the Kootenai Cutoff/Highway 200 intersection/path. It is a significant local connection for city residents accessing north Ponderay and the city of Kootenai, including the elementary school. At the southern terminus, the street connects with Railroad Avenue and ultimately the future Pend Oreille Bay Trail.

From the Kootenai Cutoff Road intersection south, a two-way sidepath is recommended on the east side of Elm Street. This alignment is in existing right-of-way adjacent to only two properties and both bicyclists and pedestrians would be accommodated. The pathway could be extended to the Highway 200 intersection using the existing concrete sidewalk and ramp area, though removing parking access on the west side of the existing business parcel would enhance safety for users.



A simple sidepath (Pictured in Jerome, ID) located on Elm would eliminate the need for curb, gutter, and sidewalk on both sides of the street and provide a bicycle route connecting the Kootenai Cutoff pathway to the Pend Oreille Bay Trail in the future.

Cedar Avenue, Birch Avenue and 5th Street

These four roadways are local streets in the heart of Old Ponderay, two are oriented north/south and the other two east/west. The streets connect with Highway 200 and Railroad Avenue or Elm and ultimately the Pend Oreille Bay Trail. These regional connections will likely attract more pedestrians and bicyclists in time. The streets are paved at 20' wide and serve residential areas with the exception of City Hall, the post office and a city park. Though the streets have functioned without pedestrian facilities through Ponderay's history, the continual growth in the areas north of the city and the eventual demand brought about from the trail will translate into greater need.

There are four low to medium cost options to consider for improvements to accommodate pedestrians:

1. Fill existing bioswales with a French drain system and add 5' rock fines sidepaths on top of the French drain on both sides of the streets. The sidepaths should also include a vertical element, such as candles or bollards, between the road surface and pathway to prevent on-street parking over the French drain system.

A French drain is a trench filled with gravel or rock and containing a perforated pipe to direct ground-water drainage. Its use would be an inexpensive approach to building a system of pervious walking trails on top of the deep drainage swales at the road edges. The city should engage someone experienced in designing and building French drains.



2. Make one of both pairs into one-way couplets to avoid road expansion or adding sidepaths. Stripe with one 9' travel lane, a 7' on-street parking strip on one side and a 4' pedestrian lane on the other. This would eliminate on-street parking on one side of the street and limit pedestrian facilities to one side as well.

3. Another option is to stripe 5' paths on both existing sides of the streets leaving a 10' middle travel lane. Accompany the striping pattern with signage that informs drivers that the walk space is usable in the event an opposing car approaches and on-street parking would be eliminated.

4. Construct a pedestrian boardwalk within the bioswale. Caution is needed with this solution as vehicles cannot use any of the boardwalk for on-street parking purposes. Vertical elements and/or signage should be employed to prevent this use.

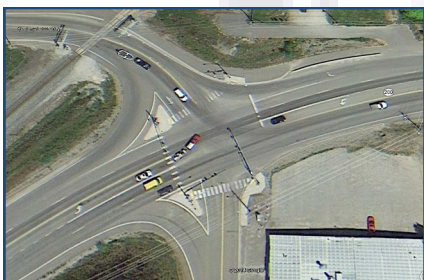


Pervious materials such as rock fines and boardwalks minimize storm-water runoff and yet maintain a viable walking surface for pedestrians.

Key Intersections

Highway 200 & Kootenai Cutoff

Perhaps the most important intersection in Ponderay, the Highway 200 & Kootenai Cutoff intersection links the historic part of the city with the newer portions and to the Kootenai Cutoff pathway. It is the only connection point by foot or bike for residents of Old Ponderay to reach the school in Kootenai. The current configuration is inefficient and unsafe for pedestrians. From the east side of Elm Street to the pathway, a person must cross and be exposed to traffic on three separate sides and wait nearly three minutes. Excessive exposure to higher volume, large freight vehicles and higher speeds should be mitigated by completing the fourth side of the crosswalk with a direct connection. Furthermore, the design does not include a marked crossing to the proposed sidepath on the south side of Highway 200.



Current configuration (above); recommended configurations (1,2)



The city and ITD should explore two possibilities to complete the fourth leg. A pedestrian refuge island, with robust signage to a zebra style crosswalk. (Fig. 1) or extend the curbs on the northeast and southeast to shorten distance and slow turning vehicles (Fig. 2); with zebra style crosswalks. Add a pedestrian-activated signal with a separate signal cycle or a delay for the vehicle green to avoid conflicts with eastbound vehicles turning left from Kootenai Cutoff to Highway 200. This will allow direct crossings, eliminate extra crossing phases, and shorten exposure time. In either case ITD should move the jersey barriers (red Fig. 2) on the pathway south 3'-4' to line up with the curb line.

Highway 200 & 4th Street

The intersection of Highway 200 and 4th Street has a skewed geometry which adds to the speed of northbound vehicles turning right on 4th Street. To complicate the issue, there are no sidewalks or vertical barriers to separate the road from walking spaces putting pedestrians and motorists in a dangerous position with limited sight lines. To address this issue, **walking spaces on both Highway 200 and 4th Street**, as described in the previous section, should be implemented. In addition, **straightening the intersection during the upcoming overlay project would slow turning vehicles and add to safety.**

Kootenai Cutoff & Larkspur Road

An ADA ramp and crosswalk on the west side of this intersection has high volumes of people crossing to access the Goodwill store, Health Department, dog park and residential areas. **A rapid flash beacon should be added.** Additionally, a new coat of paint is needed at the crosswalk to improve visibility for motorists. The north side connection also needs an ADA compliant landing in the near future.

Kootenai Cutoff & Triangle Drive

The current crossing distance of this "T" intersection is 115 feet due to the large turn radius on the east and west sides. This should be improved with a **pedestrian refuge island, robust signage to raise awareness for right turning vehicles and a zebra crosswalk.** This design is recommended to improve safety, shorten distance and raise the profile of crossing pedestrians.

Highway 200, UPRR Rail & Eastgate Drive*

A crosswalk is needed on the north side of the intersection as improvements are completed on Highway 200. The connection will link the two sections of Ponderay and important community land uses in each. The crossing will need special and specific design consideration given the rail and nature and of the traffic. If a vehicle connection is lost in the future, the city should strive to maintain a pedestrian and bicycle connection.

New pathway and UPRR Railroad Corridor*

A formalized pathway (Future Corridors Pg. 9) should cross the UPRR rail corridor and Highway 200 at grade to old Ponderay near 4th Street to promote safety and active transportation and connect many important destinations to residences north.

** Grade separated rail crossings, while ideal, are very expensive.*

Bicycle Realm—Primary routes (blue), Secondary routes (red)

Currently the city of Ponderay does not operate any bicycle facilities with the exception of the Kootenai Cutoff Road pathway. (the Highway 95 pathway is under ITD authority). In certain locations, bicycle facilities are possible and preferred, while in others, narrowness of streets and the lack of conflicting traffic volumes translates into few changes from existing configurations. As bicycle use grows this should be revisited.

Highway 200

As described in the previous section, **Highway 200 should include a 10'-12' sidepath that accommodates bicycling traffic.** The multi-use facility will permit both user types to share a given space, access Ponderay land uses, and access to the Pend Oreille Bay Trail. A path on the north can be considered in the long term to serve commuters.

Kootenai Cutoff

Currently, the road has a 10' sidepath located on the north side that allows bicycling movement to occur. For many users this may be applicable, but because of the number of driveway crossing and intersections, more confident riders who travel at above average speeds may instead choose to simply ride with traffic. **If traffic counts continue to grow and bicycling demand on the corridor coincides, dedicated bike lanes should be considered.** To achieve this, the middle turn lane may need to be eliminated. The future configuration would consist of two 10'-11' travel lanes, two 5' bike lanes, and two 2'-3' buffer spaces.

Triangle Drive/ Bonner Mall Way

As the sidewalk and bike lane project is completed on Triangle Drive/Bonner Mall Way the city should expect the design on Triangle Drive to include a minimum of 5' bike lanes. Note that travel lanes can be narrowed to 11' or even 10' if necessary. Bicycle improvements on Mall Way can include several options.

The 32-Foot Wide Section: (east of the second mall driveway to Triangle Drive). This section is without complexity and could include two 11' travel lanes, and two 5' bike lanes or two 10' travel lanes, 1' buffer spaces, and 5' bike lanes.

The 39-Foot Section: (west of second driveway to Highway 95). The bicycle lane can continue all the way to Highway 95 with

some reconfigurations. Both the median space east of the second driveway and the left turn lane accessing the same second driveway will need to be removed. This allows the travel lane and bicycle lane widths to be maintained and the buffer space increased to fill the void. Once past the western most mall driveway, the bike lane would angle towards the left turn lane at the Highway 95 approach to allow bicyclists to cross the highway and continue west or turn south and access the sidepath along the west side and ultimately the Sand Creek Trail.



A rendering to compare and contrast new versus existing design

Railroad Avenue

This road was addressed in the previous section and should be **constructed to a rock fines trail** thereby allowing bicycle use.

Larkspur Street

Adding 4 foot bike lanes and striping travel lanes to 10' is recommended on Larkspur from Kootenai Cutoff Road to Lupine. This will allow bicyclists comfort and safety to the uses on Larkspur and will slow travel design to posted speed by further defining the travel space on the road for drivers.

Elm Avenue

Described earlier, **a multi-use sidepath accommodating pedestrians and bicyclists is advised for the east side of Elm Avenue.** In addition there is an opportunity to **construct a separated pathway from the south end of Elm Avenue connecting to Kootenai at the Bonner County Historic Museum property in Kootenai's new downtown zone.** If a connection is sought at McGhee it should include a crossing of Highway 200.

Bicycle Realm

Cedar, Birch, 4th & 5th Avenues

These local streets see minimal traffic and have little space to dedicate toward bicycle facilities. Because these routes serve the historic part of Ponderay, the city could **do nothing**, add **“Share the Road” signage to raise awareness**, or add **Shared Lane Markings along with the signs**. Proper placement of the “Sharrow” stencils can be found in the MUTCD or the AASHTO *“Guide for the Development of Bicycle Facilities”* 2012.

Other Secondary Corridors

Schweitzer Plaza Drive

Schweitzer Plaza Drive has a transit stop and no facilities. Consider striping with two 10' travel lanes and two 4' bike lanes, or mark with sharrows. Add an ADA compliant ramp at the stop.

Regional Trail Connections

Pend Oreille Bay Trail

Ponderay should continue to engage consideration for future connections to the Pend Oreille Bay Trail. There are plans to extend the trail along the shoreline of Lake Pend Oreille and connect Ponderay to Kootenai and Sandpoint. The trail currently has two informal connections with Ponderay in the vicinity of Cedar Street and Railroad Avenue. A feasibility study is being conducted to determine rail corridor crossings and connections. In the short term an at-grade crossing may be possible. As constructed across the country these crossings need basic elements:

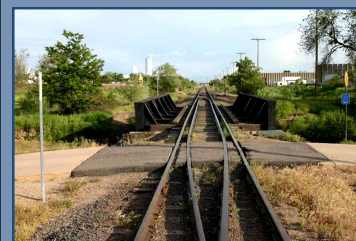
1. Proper warning signage
2. ADA compliant ramp grades
3. Drainage consideration for railroad drainage ditch
4. Solid, compact traversable surface
5. 90 degree intercept angle
6. Proper vision triangle

Sandpoint Byway Trail Connection to Highway 200

From the Byway trail spur that crosses to the east side of 95 south of the interchange of 95/200, formalize the informal path along the off ramp, continue to the rail corridor frontage road and connect to Highway 200 as far north as possible. Alternately, connect to the off-ramp shoulder to Highway 200 shoulder. Bring the Highway 200 shoulder path to the connection point.



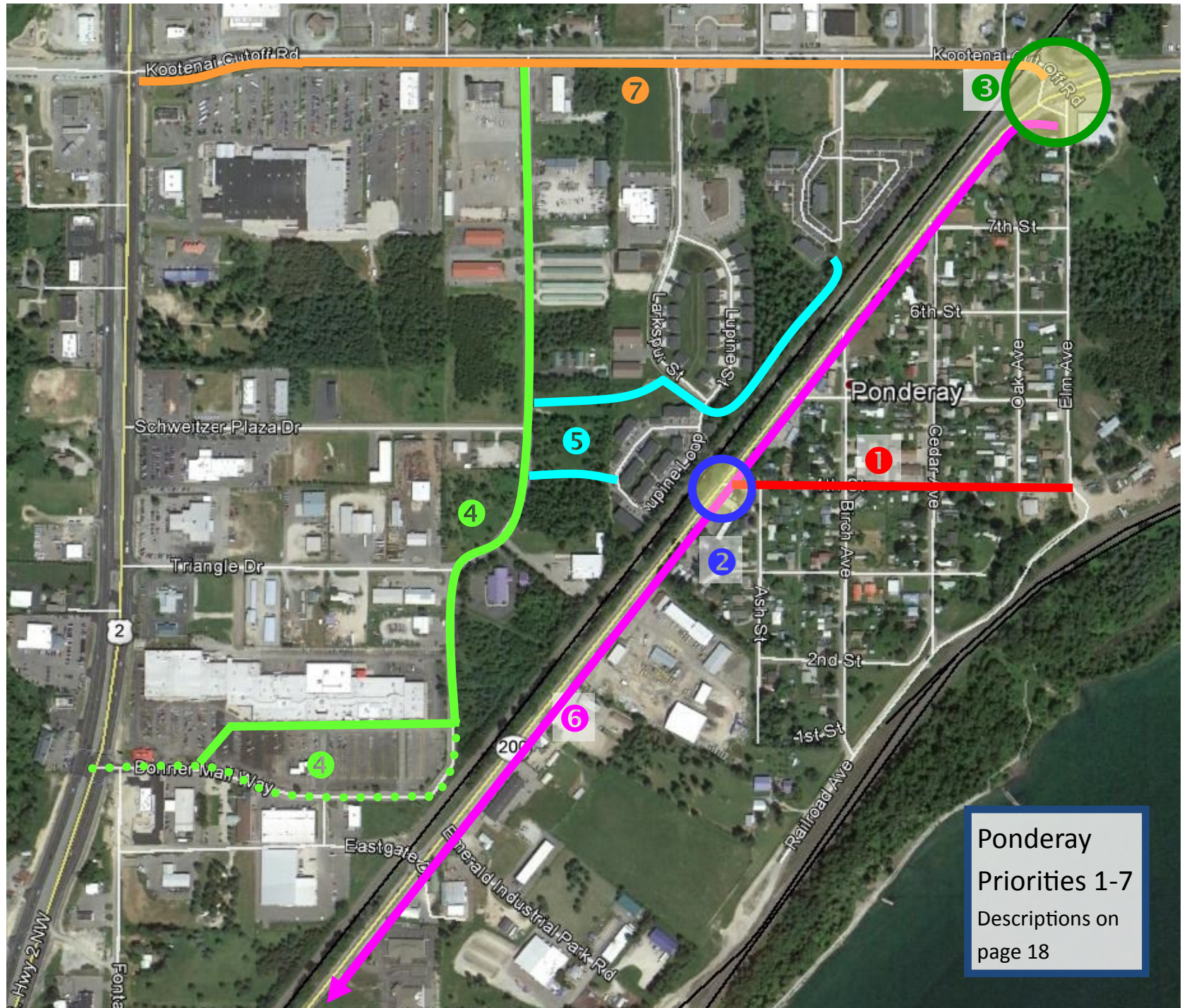
A pathway connection would need to be constructed approximately 85' in total length and 10 feet wide.



Pictured left are several examples of railroad crossings solely for the purposes of multi-use trails. The Pend Oreille Bay Trail can be connected with Ponderay via a more formal trail connection in the future. Timing for such a connection could be made now or to coincide with the future connection to Kootenai. The main complexity is that there are two crossings rather than one, but due to low volumes and very slow speeds, such a complexity should be minimal.

*Pictures Courtesy :
Americawalks.org*

P O N D E R A Y P R I O R I T I E S



Ponderay Priorities

This plan is intended to be implemented. Discussion during the final community outreach visit was used to identify the top priorities for Ponderay. Listed below, each is color coded corresponding to the map on page 17, except for #8 which is on this page.

1 Given the important destinations, transit stop, and complete lack of facilities, providing **walking space on 4th Street** should be the highest priority. This can be completed all at once or in sections using one of the methods described. The north side of the street from Cedar to Highway 200 is the highest priority section. Facilities should ultimately reach from Highway 200 to Elm Ave. on both sides of the street.

2 Improving sight distance for drivers and pedestrians at the **intersection of Highway 200 and 4th St.** is the second highest need. In the short term this can be accomplished during the upcoming overlay with pavement markings and extruded or rubber curbs sections that shorten the turn radius on the southwest corner and by bringing a walking surface to the corner on the northeast. Bringing the skew angle closer to 90° as part of this scheduled overlay would also be a benefit.

3 Adding a fourth leg to the pedestrian crossing at **Highway 200 and Kootenai Cutoff** might be the highest priority if this was a city facility. The crossing is extremely important to Ponderay residents' ability to access all destinations including the school. It will require a strong partnership with ITD to choose one of the suggested alternatives (see page 14) and complete this important safety project.

4 Completing the **Community Choices sidewalk project** (solid green) on Triangle Drive and Bonner Mall with the addition of suggested **bike lanes on Bonner Mall Way** (dashed green) will provide direct access to needed retail destinations, transit and the newly constructed pathways on Highway 95 and Sand Creek. This is the most important project that makes regional connections.

5 Informal trails from the **Lupine Loop and Larkspur to Triangle Drive and between the retirement housing and Lupine Loop along the rail corridor** provide shorter safer access to the retail and other destinations in northwest Ponderay. Formalizing these trails as soon as possible and providing a rock fines or asphalt surface will provide a significant percentage of Ponderay residents' safer and more convenient access to important destinations.

6 A **multi-use path on the south side of Highway 200** should be approached as a safety project that may be completed at the time Highway 200 is programmed for other projects. The city should begin now to work with ITD to incorporate this project as part of the ITD programming so that the opportunity is not missed to include it with any planned overlay or other project.

7 There is a clear desire path on the **south side of Kootenai Cutoff** that indicates need for an eventual sidewalk. The city should begin now providing a walking surface such as rock fines on sections as opportunities become available. Ultimately the sidewalk should stretch from Highway 95 to 200, completed with development or redevelopment or as a city-budgeted capital improvement project.

8 The **Sandpoint Byway** has a spur south of Ponderay that crosses to the east side of Highway 95 (white line). This spur should be connected to Highway 200 by formalizing the informal trail section and traveling along the railroad corridor frontage road to connect with Highway 200 (dashed yellow). In the short term work with ITD to potentially connect the trail to the Highway 95 off-ramp shoulder and Highway 200 shoulder (solid yellow).



Implementation of the recommendations made in this plan will require a menu of options ranging from typical maintenance level improvements to special projects which will require partnerships and additional funding sources.

Maintenance/Operations– projects under “maintenance” generally consist of paint, smaller improvement projects like shoulder paving and, in some instances, adding facilities such as sidewalks or paths. Many of the improvements suggested can be completed with little cost during maintenance or operations. Bike lanes, shared lane markings, crosswalks, or newly defined pedestrian walkways can be done at any time using a small crew and paint truck or paint equipment. Such equipment will likely need to be attained from the city of Sandpoint, ITD, or privately contracted when funds are available.



Paint applications can be applied using a variety of tools including by hand.

Development– new development in the city should be required to contribute to the multi-use transportation realm when appropriate. Future sidewalks, pathway connections, bike parking, and lighting are examples of elements vital to the system ripe for private investment. These systemic characteristics are common in most communities and if not constructed by the private sector will be borne by the Ponderay taxpayers.

Reconstruction– streets are often reconstructed due to damage, wear, or for significant underground utility projects. When these regularly scheduled projects are known, coordination of recommendations from this plan should be considered, reviewed and inserted into construction plans. Though improvements may take longer than anticipated by waiting for reconstruction projects, constructing new elements while reconstructing existing facilities can be financially advantageous.

Future Roadways– In the event of new streets being constructed in Ponderay, sidewalks should be constructed. Context should be considered when determining if attached or detached sidewalks are built. If the street is to carry local traffic only, bicycle facilities are likely not needed unless special circumstances are present. Bicycle facilities should also be added if the street provides collector-like functions, has above average traffic volumes, or serves land uses which will be connected with or directly access those that have an expectation of attracting or generating bicyclists.

Special Projects– These kinds of projects occur outside the realm of normal operations, development, or even reconstruction. Special projects will include joint partnerships with the railroad, pathway connections with ITD facilities, pathways in conjunction with state parks, or other such arrangements. These types of projects will take additional planning, dialogue and agreements as well as funding sources that may be grant related, endowment funds, or general purpose tax dollars.

ADA facilities should be added when possible during reconstruction or maintenance



I M P L E M E N T A T I O N

Pedestrian Realm					
Street/Intersection	Maintenance	Development	Reconstruction	Future Roadway	Special Projects
Highway 200	X		X		
Kootenai Cutoff	X				X
Triangle Drive	X				
Bonner Mall Way	X	X			X
Railroad Avenue	X	X			X
Larkspur Street		X			
Elm Avenue	X	X	X		X
Cedar Avenue	X		X		X
Birch Avenue	X		X		X
4th Avenue	X		X		X
5th Avenue	X		X		X
Highway 200 & Kootenai Cutoff	X		X		
Highway 200 & 4th Street	X		X		
Kootenai Cutoff & Larkspur Road			X		X
Kootenai Cutoff & Triangle Drive	X				X
Highway 200 & Eastgate Drive	X				X
Apartment Complex/Triangle Drive Connection		X			X
Duplex/Highway 200 Connection		X			
South of Walmart Connections		X		X	

Bicycle and Pend Oreille Bay Trail Realm					
Street/Intersection	Maintenance	Development	Reconstruction	Future Roadway	Special Projects
Highway 200	X		X		
Kootenai Cutoff	X				
Triangle Drive		X	X		X
Bonner Mall Way	X	X	X		X
Railroad Avenue	X				X
Larkspur Street	X		X		
Elm Avenue	X	X	X		X
Cedar/Birch/4th/5th Avenues	X				
South of Walmart Connections		X		X	

Policy and walkable and bikeable community designs are key components of creating desirable places. A community's capacity to serve walkers and bikers well comes from three factors. First, destinations (such as housing, retails, jobs, transportation, schools, and libraries) are located within an easy and safe walking and biking distance of each other. Second, walkable communities make pedestrian and bicycle activity possible, thus expanding transportation options, by providing safe and inviting facilities (such as sidewalks, side paths, multi-use paths, signage, pavement markings, bike lanes, intersection crossing enhancements and more) to create a network that serves a range of users . And third, regular maintenance (such as sweeping, shoveling and plowing) is provided to ensure that those facilities are in safe and inviting condition.

There are many personal and societal benefits of walking/bicycle-friendly communities that include; lower transportation costs, greater social interaction, improved community livability, support for economic development, and expanded consumer choice. Furthermore personal and public health is enhanced when there are opportunities for people of all ages and abilities to engage in routine daily physical activity in a safe environment, be it walking to a transit stop or school, commuting by bicycle to work, or playing in a neighborhood park. Land use and community design can encourage or inhibit walking and biking. Places with multiple destinations in close proximity, and transportation infrastructure that serves all users and offers multiple transportation choices have the basic framework of a walkable and bikeable community.

Ponderay has asked this team to develop a plan to serve walkers and bicyclists within the city and to acknowledge connections for those users within the larger region including to Kootenai, the Pend Oreille Bay Trail and the Sand Creek Trail system. As part of that plan this team has reviewed existing applicable policies and ordinances to look for both supporting elements and obstacles to providing that safe inviting system. Below is a table of that review including recommendations for improvement.

	What	Existing Policy	Recommendations	Actions/Tools
Ordinances	Subdivision 8.1.5 and 8.1.6	No mention of sidewalks as a requirement	Sidewalks should be clearly required, implementation may be required with roadway construction or on individual lots at development depending on the size and location of the subdivision	In order to avoid disconnected sidewalks, it is recommended to require sidewalk construction as part of a new or reconstructed roadways.
	Subdivision 9.5E.2 and 9.5E.3	Parking requirements	Parking standards are high, recognizing that Ponderay is a regional vehicle destination parking could still be reduced through lower minimum requirements, sharing and recognizing on-street spaces.	The American Planning Association published an overview of parking standards and Sandpoint has reduced their standards. See Resources.
	Subdivision 9.5E.X	None - Bicycle Parking	There are currently no bicycle parking requirements, these should be added.	See Resources
Circulation Plan	Technical Memo 2, Typical Street Sections	Figure 9, Local Street Section	Develop a local street section(s) with pedestrian facility options. Incorporate these street section options into the Circulation Plan and appropriate Technical Memos.	Sections may be a rural design without curb and gutter and incorporate new storm water drainage requirements through bioswale filtration.
	Technical Memo 2, Connectivity	None	Develop a connectivity measurement to use in analyzing new development applications and planned improvements to the existing system.	See Connectivity Standards at: http://www.idahosmartgrowth.org/best-practices/ . Scroll to code reform
	Technical Memo 3, Prioritization	Roadway Priorities Page 3	Consider moving proposed New Bike Pathway higher in priority to correct existing deficiency in safety and connectivity for residents of Lupine Street.	See Action Plan

Comprehensive Plan

What	Existing Policy	Recommendations	Actions/Tools
Chapter 2, Population & Growth; Goal 4.	City should not approve new developments without services available at time of development.	Add sub policy A. Local transportation services, including pedestrian ways will be provided by developer/land owners	(#7. Implementation Actions)
Chapter 2, Population & Growth; Goal 6. Chapter 5, Land use Goals 1. & 2. and Policy #1.	Adopt land development ordinances as tools to manage new growth; achieve wise use of land resources; manage new growth as compact, distinct, identifiable; develop a consistent set of zoning, subdivision, and development regulations.	Consider adopting a mixed use zone for the new Lakeside Village/ Old Ponderay sub-area and for subareas that could be identified within the newer part of Ponderay such as along Triangle Drive.	(#8 Implementation Action) See Model ordinances at: http://www.idahosmartgrowth.org/best-practices/ . Scroll to code reform, More detail in Resources list
Chapter 3; Schools	Coordinate development and encourage land use policies that provide safe ped/bike access for schools.	Add new Goal 3. Develop and implement plans for a safe pedestrian and bicycle network to the elementary school.	(#7. Implementation Actions)
Chapter 4, Economic Activity none. Chapter 5, Land Use, Goal 14	Encourage the development of a system of trails to connect area parks and public spaces through cooperation with surrounding cities and organizations.	Consider adding new Goal 10 to Chapter 4 such as; The city will develop strategies to promote bicycle tourism, especially by promoting and providing access to services for users of the regional trails and national bike route.	(#4, 5, 7. Implementation Actions) new Implementing Activities; # Promote bicycle tourism. # Recognize northern tier bike route in transportation plan. # Continue to work with North Idaho Bikeways, ITD and others to further develop connections from existing pathways to services.
Chapter 8 Transportation Goal 1	Maintain the street system for current users, emergency response efforts, and future generations by providing for the safe and effective circulation of vehicular and pedestrian traffic.	Strengthen by adding to words; ...maintain the street system for <u>all</u> current users, emergency response efforts, and future generations by providing for the safe and effective circulation of vehicular and pedestrian <u>and bicycle</u> traffic.	(#7. Implementation Actions) These additions recognize the interest and commitment shown by the city and its residents in a complete transportation system.
Chapter 8 Transportation Policies	No clear mention of pedestrians and bicyclists.	Add a Policy #7.: The city should; Develop and implement a safe, convenient pedestrian and bicycle network that serves major destinations and integrates with the existing transportation system.	The policies drive the capital improvement program. Adding language to existing policies or adding a policy specific to pedestrians and bicyclists would be advantageous.
Chapter 8 Transportation Policies	Address measurements used to improve the transportation system.	Add a Policy #8.: The city should; Develop a tool to measure needed improvements that recognizes all users, such as conducting regular pedestrian and bicycle counts.	Vehicle LOS is mentioned in the existing conditions analysis, no guide for ped/bike demand/impacts. Bike/Ped Count Toolkit at: http://www.idahosmartgrowth.org/category/resource/ . Scroll to Workshop Presentations.

Resources

Mixed Use Zoning

See Model Mixed Use ordinances at <http://www.idahosmartgrowth.org/best-practices/> Scroll to code reform, or go to: <http://www.idahosmartgrowth.org/app/uploads/2014/10/ZI-Mixed-Use-Activity-Center-Zone-final.pdf>

City of Victor, Traditional Neighborhood Overlay: <http://www.victorcityidaho.com/content/traditional-neighborhood-overlay>, this link has policy language – contact City of Victor for code language.

Connectivity Standards

See Connectivity Standards at: <http://www.idahosmartgrowth.org/best-practices/>. Scroll to code reform or <http://www.idahosmartgrowth.org/app/uploads/2014/10/Z4-Connectivity-Standards-final.pdf>

Street Design

Find an overview of National Association of City Transportation Organizations guidelines at: <http://www.nyc.gov/html/dot/downloads/pdf/2012-nacto-urban-street-design-guide.pdf> and at: <http://www.ssti.us/wp/wp-content/uploads/2013/11/NACTO-SSTI-webinar-Nov19-20131.pdf>

City of Hailey Idaho Municipal Code, Title 18-Mobility Design, Chapter 6 Street Design Guidelines and Standards: [http://www.haileycityhall.org/Codes Plans/documents/Title18MobilityDesignOrd1131binder.pdf](http://www.haileycityhall.org/Codes%20Plans/documents/Title18MobilityDesignOrd1131binder.pdf)

Bike Parking

Overview of bike parking standards, VPTI on-line encyclopedia: <http://www.vtpi.org/tm/tm85.htm> City of Emmett, Idaho Design Manual, Page 34 has concise standards for bike parking. <http://www.co.gem.id.us/development-services/ordinances-amendments/DesignReviewManual.pdf>

Bike/Pedestrian Counts

Find a toolkit for conducting manual pedestrian and bicycle counts at <http://www.idahosmartgrowth.org/category/resource/>, scroll to Workshop Presentation and Materials or find .pdf at : <http://www.idahosmartgrowth.org/app/uploads/2014/04/BikePed-Toolbox-FINAL-8-30-13.pdf>

Parking Standards

American Planning Association Parking Solutions, Planning Advisory Service guidance: <https://www.planning.org/pas/infopackets/subscribers/pdf/eip24part1.pdf>

City of Sandpoint Municipal Code Title 9-Zoning, Chapter 5-Off Street parking http://www.sterlingcodifiers.com/codebook/index.php?book_id=437

More

School Policies

Find Model policies for school wellness and transportation at: <http://www.idahosmartgrowth.org/best-practices/> Scroll to Safe Routes to School or go to: <http://www.idahosmartgrowth.org/app/uploads/2014/05/Model-School-Policies.pdf>