

Section 3 Multi-Use Trails Plan





Multi-Use Trails Bicycle, Pedestrian, & Transit Plan

3. MULTI-USE TRAILS

The trail network establishes a network of multi-use paths that serve the City's recreational needs as well as enhance the overall network of bicycle and pedestrian facilities. The projects were refined based on input received through the Alternatives Analysis process and input from the PMT, AC, youth stakeholders, and general public.



The planned trail network for Pendleton is detailed in Table 3-1 and shown in Figure 3-1. Prospectus sheets are provided in the following table that offer more information on each project including a detailed project description, prioritization, cost estimate, and potential funding sources.



Multi-Use Trails Bicycle, Pedestrian, & Transit Plan

Planned Multi-Use Trails

Table 3-1 Multi-Use Trail Projects

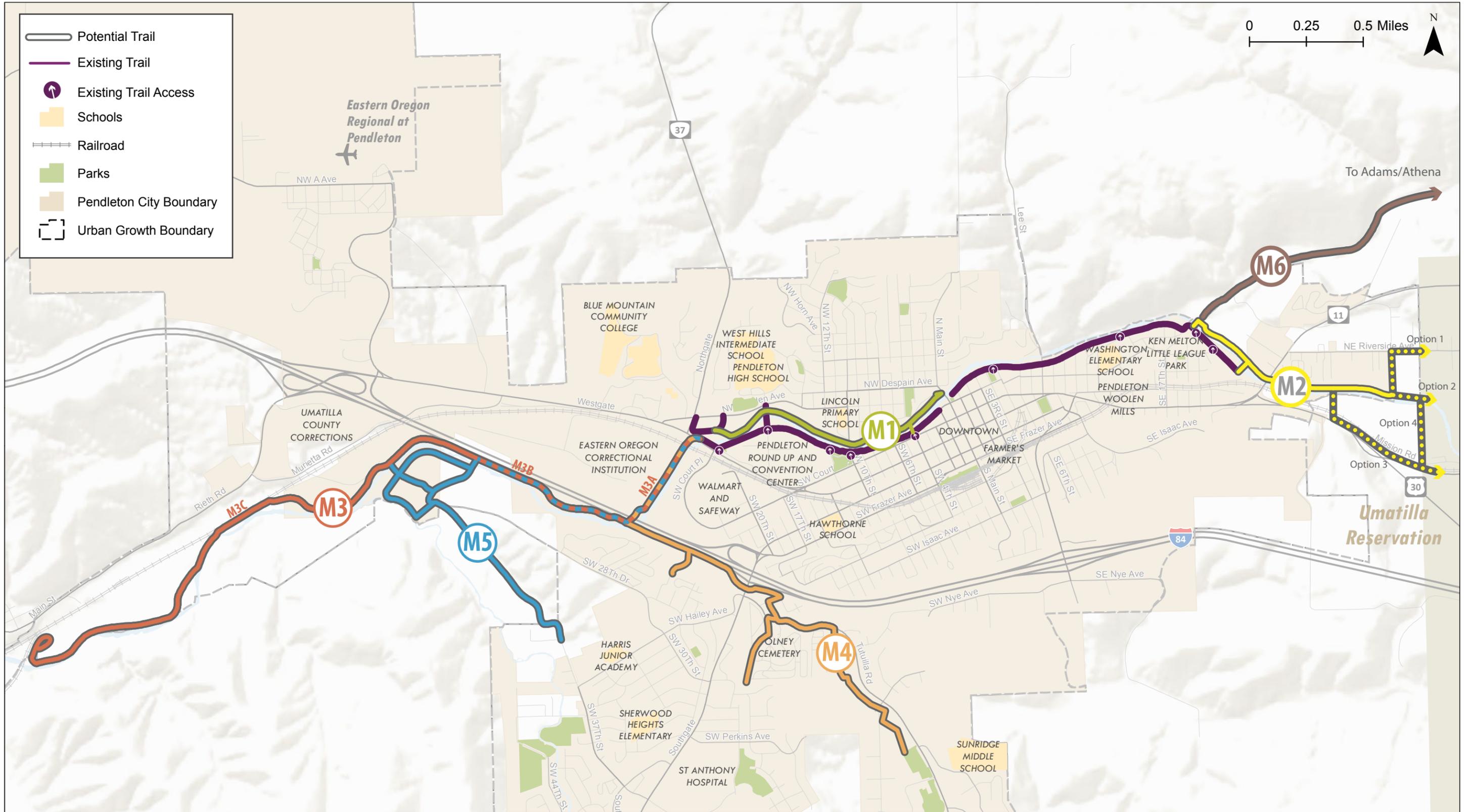
Project # (Fig 3-1)	Project Description	Project Benefit	Priority	Planning Level Cost Estimate
M1	Paved multi-use trail from Westgate to S Main Street for 1.2 miles along the north side of the Umatilla River.	Trail would provide school connections, recreational opportunities for residences on the north side of the Umatilla river, and opportunities for loop walks along both sides of the river.	Medium	\$1,950,000
M2	Paved multi-use trail extending from the eastern terminus of the River Walk for 1.4 miles along an existing levee on the south side of the river to Pendleton city limits.	A River Walk extension would provide a comfortable off-street connection between Pendleton and the Umatilla Indian Reservation, with the potential for CTUIR to develop a trail on the reservation creating an off-street connection to Mission and employment at the CTUIR Governance Center.	Medium	\$2,450,000
M3	Multi-use trail (hard surface, soft surface, or both) extending 3.9 miles from the western terminus of the River Walk along the Flood District #1 levee.	This trail would provide recreational opportunities to walk, horseback ride or mountain bike to areas west of Pendleton. Completion of the eastern portion of this trail opens up opportunities for several other potential trails in the western and southern parts of the city.	High	\$3,850,000
M4	Paved multi-use trail extending 2.0 miles trail along Tutuilla Creek and then along a sewer easement out to Grecian Heights Park.	Trail would enhance walk and bicycle access to a school and Grecian Heights Park, providing an alternate route to both Southgate Road and Tutuilla Road. Trail would also create recreational opportunities and a connection to the beautiful trails in Olney Cemetery which are open to the public during the day.	Medium	\$4,650,000
M5	Paved multi-use trail extending 1.2 miles project from the Umatilla River to SW 37th Street along the McKay Creek drainage channel.	This trail would provide recreational opportunities and, with the completion of other trails, could form a comfortable alternative route to Southgate Road.	Low	\$5,850,000
M6	A soft-surface multi-use trail extending along an old rail right-of-way east of Pendleton out to Adams and Athena.	This trail would create recreational opportunities walking, mountain biking, and equestrian trips of various lengths.	Low	\$4,250,000

Note: Land acquisition is not included in the planning level cost estimates. Annual maintenance costs for new trails are estimated to require ¼ FTE per mile.

Potential Multi-Use Trail Phasing Options

This planning process resulted in the identification of options for phasing the implementation of select trails:

- M1 includes a proposed pedestrian/bicycle bridge at 4th which could be implemented as a stand-alone project, which would reduce the cost of this trail project.
- M3 was divided into three segments (M3A, M3B and M3C) as illustrated in Figure 3-1, because implementation of certain segments of M3 would allow for connecting trails M4 (requires M3A) and M5 (requires M3A and M3B) to the existing River Walk. M3A and M3B could be implemented first to open up opportunities for these other trails. Alternatively M3B and M3C could be implemented first with the connection across the freeway back to the River Walk, which requires excavation, occurring later.
- M4 – Requires M3A to connect to the existing River Walk. M4 could be implemented as a stand-alone project at first, with the connection back to the River Walk (M3A) occurring later.
- M5 - Requires M3A and M3B to connect to the existing River Walk. M5 could be implemented as a stand-alone project at first, with the connection back to the River Walk (M3A and M3B) occurring later.



**Multi-Use Trails Overview
Pendleton, Oregon**

**Figure
3-1**

Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl
Data Source: The City of Pendleton



Multi-Use Trails

Bicycle, Pedestrian, & Transit Plan



Multi-Use Trails Bicycle, Pedestrian, & Transit Plan

Project #M1

North side of Umatilla River

Description:

Paved multi-use trail from Westgate to S Main Street for 1.2 miles along the north side of the Umatilla River.

Benefit:

Trail would provide school connections, recreational opportunities for residences on the north side of the Umatilla river, and opportunities for loop walks along both sides of the river.

Category: Bicycle; Pedestrian



Time Frame: Long-Term

Priority: Medium



Cost: \$1,950,000

Potential Funding Sources: Various federal grants, Statewide Transportation Improvement Program (STIP) "Enhance" process, Oregon Parks and Recreation Recreational Trails Grants, CIP, SDCs

Potential Project Partners: Private property owners

How Does the Project Rank Against Transportation Goals?

Feasibility



Connectivity



Accessibility



Destinations Served



Health/Safety



Population Served



Economic Impact



Project Location/Images:

NORTH SIDE OF UMATILLA RIVER (M1)

EXTENT
From Westgate to S Main Street

LENGTH
1.2 miles

DESTINATIONS

- Pendleton High School
- Aquatic Center
- Pioneer Park
- Pendleton Center for the Arts
- Rudy Rada Skatepark

POTENTIAL BENEFIT

- Connections to schools.
- Recreational opportunities for residences on north side of river.
- Opportunities for loop walks along both sides of the river.

OPPORTUNITIES

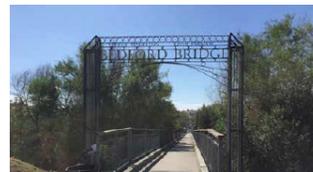
- The majority of this alignment is on city owned land, including an abandoned railroad alignment, which reduces costs.
- There is adequate room for a trail to pass under the 10th Street Bridge.
- Trail could include a new pedestrian and bicycle bridge at 4th to create a connection to the existing River Walk at Pioneer Park.
- The pedestrian/bicycle bridge could be implemented as a stand alone project, which would reduce the cost of this project.

CONSTRAINTS

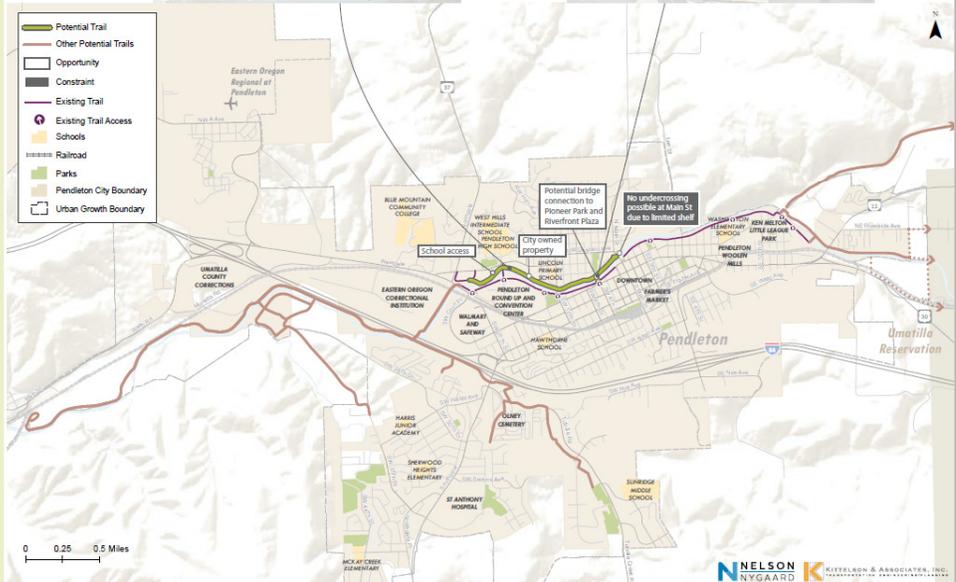
- A few parcels in this alignment are not owned by the city, necessitating coordination with property owners to identify partnering opportunities.
- The new potential connection to the River Walk via a new bridge at 4th would require a look at environmental impacts.



This trail would enhance access to the north side of the Umatilla River. Source: Wikimedia Commons / Alex Baskarov



A new pedestrian and bicycle bridge at 4th could be included as part of this project to create a connection to the existing River Walk at Pioneer Park.



NORTH SIDE OF UMATILLA RIVER (M1)

EXTENT
From Westgate to S Main Street

LENGTH
1.2 miles

DESTINATIONS

- Pendleton High School
- Aquatic Center
- Pioneer Park
- Pendleton Center for the Arts
- Rudy Rada Skatepark

POTENTIAL BENEFIT

- Connections to schools,
- Recreational opportunities for residences on north side of river,
- Opportunities for loop walks along both sides of the river.

OPPORTUNITIES

- The majority of this alignment is on city owned land, including an abandoned railroad alignment, which reduces costs.
- There is adequate room for a trail to pass under the 10th Street Bridge.
- Trail could include a new pedestrian and bicycle bridge at 4th to create a connection to the existing River Walk at Pioneer Park.
- The pedestrian/bicycle bridge could be implemented as a stand alone project, which would reduce the cost of this project.

CONSTRAINTS

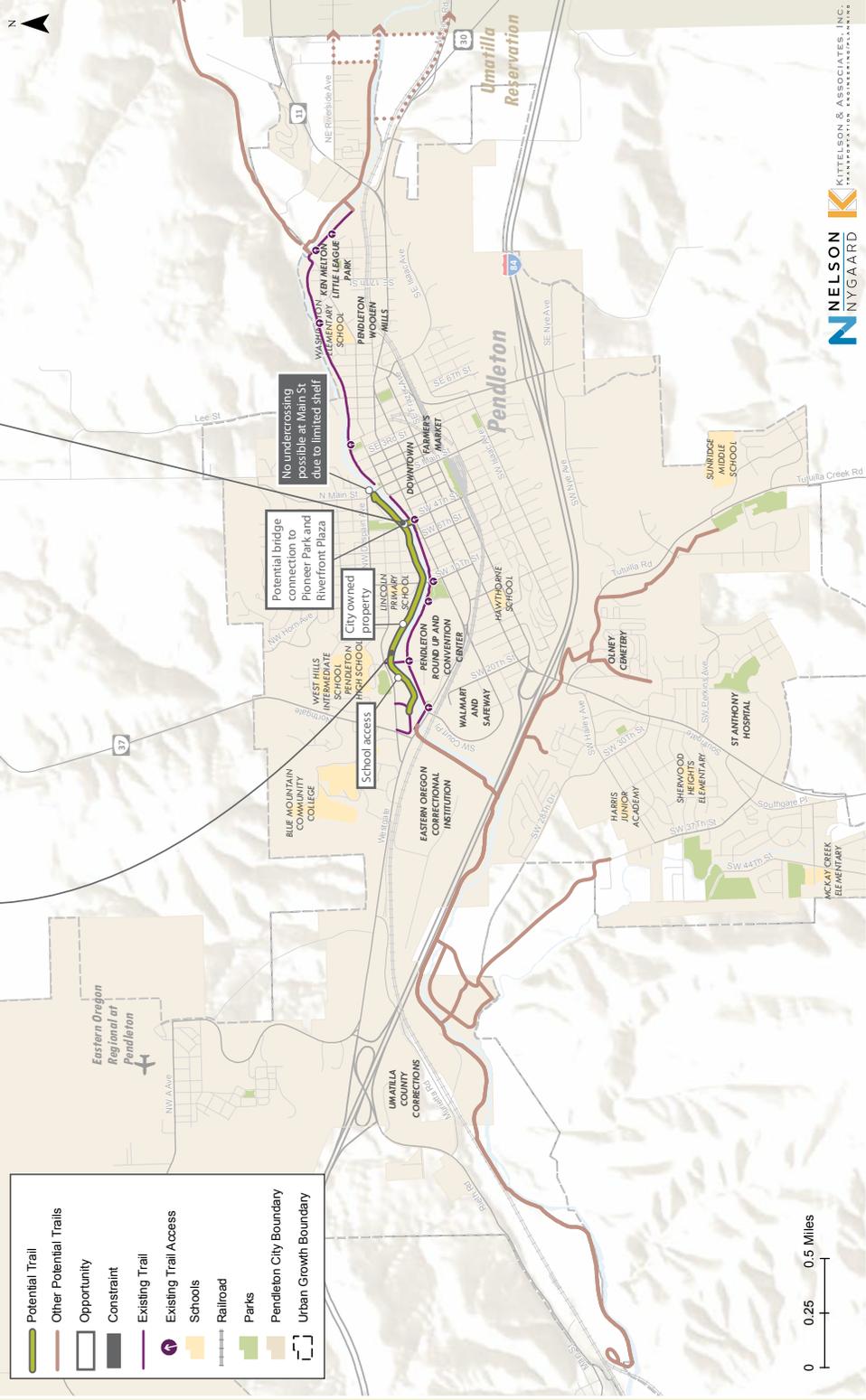
- A few parcels in this alignment are not owned by the city, necessitating coordination with property owners to identify partnering opportunities.
- The new potential connection to the River Walk via a new bridge at 4th would require a look at environmental impacts.



This trail would enhance access to the north side of the Umatilla River. Source: Wikimedia Commons / Alex Bakharev



A new pedestrian and bicycle bridge at 4th could be included as part of this project to create a connection to the existing River Walk at Pioneer Park.





Multi-Use Trails Bicycle, Pedestrian, & Transit Plan

Project #M2

River Walk Extension to East City Limits

Description:

Paved multi-use trail extending from the eastern terminus of the River Walk for 1.4 miles along an existing levee on the south side of the river to Pendleton city limits.

Benefit:

A River Walk extension would provide a comfortable off-street connection between Pendleton and the Umatilla Indian Reservation, with the potential for CTUIR to develop a trail on the reservation creating an off-street connection to Mission and employment at the CTUIR Governance Center.

Category: Bicycle; Pedestrian



Time Frame: Long-Term

Priority: Medium



Cost: \$2,450,000

Potential Funding Sources: Various federal grants, STIP "Enhance" process, Oregon Parks and Recreation Recreational Trails Grants, CIP, SDCs

Potential Project Partners: Coordination with CTUIR required to connect with a potential alignment on the Reservation; Umatilla County

Project Goals:

Feasibility



Connectivity



Accessibility



Destinations Served



Health/Safety



Population Served



Economic Impact



Project Location/Images:

RIVERWALK EXTENSION TO EAST CITY LIMITS (M2)

EXTENT

From eastern extent of River Walk to city limits

LENGTH

1.4 miles

DESTINATIONS

- Umatilla Indian Reservation/Mission
- Downtown Pendleton

POTENTIAL BENEFIT

- Would provide a comfortable off-street connection between jobs and housing in the Umatilla Indian Reservation/Mission and the City of Pendleton.
- Would provide an off-street connection to CTUIR Governance Center, which is the largest employer in the region.

OPPORTUNITIES

- Project would come off of the existing levee on the south side of river. There is no levee on north side of river, but the city does have some easements that could be used for public trail access on the north side.
- There are multiple potential alignments possible for community discussion with regards to the proximity of the trail to the river.
- There is the potential to add a barrier to the north side of Mission Road to create a two-way separated bicycle facility to Mission. This would require approximately two feet of additional pavement and no additional right-of-way.

CONSTRAINTS

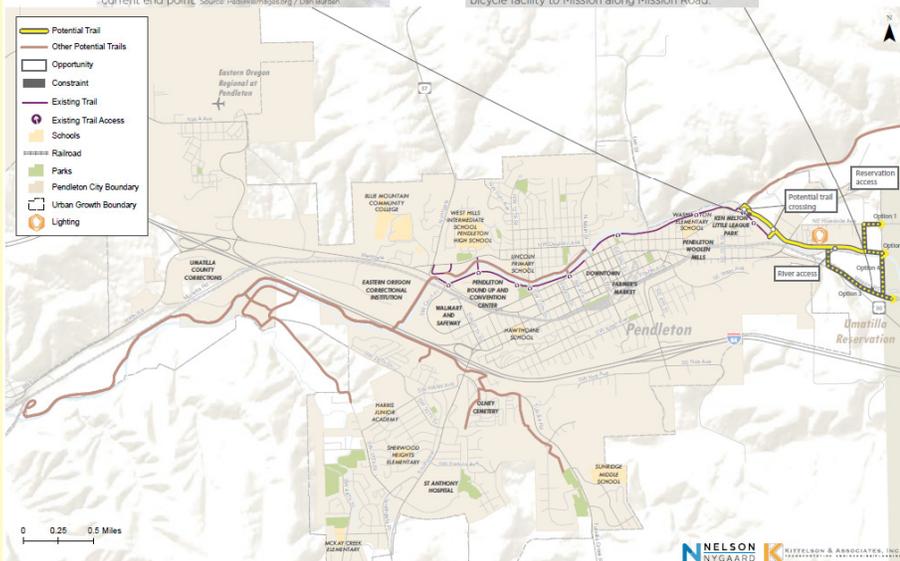
- New bridge required to connect with the existing River Walk (impacts cost and need to assess environmental impacts).
- Coordination with the CTUIR in regards to a future alignment within the Umatilla Indian Reservation, to inform Pendleton's decision on whether the trail within Pendleton should traverse above the Umatilla River or along it.



This project would extend the River Walk east of its current end point. Source: PedBikeMap.org / Dan Barber



There is an opportunity to create a barrier-separated bicycle facility to Mission along Mission Road.





Multi-Use Trails Bicycle, Pedestrian, & Transit Plan

Project #M3

Trail Along City and District #1 Levees

Description: Multi-use trail (hard surface, soft surface, or both) extending 3.9 miles from the western terminus of the River Walk along the Flood District #1 levee.

Benefit: This trail would provide recreational opportunities to walk, horseback ride or mountain bike to areas west of Pendleton. Completion of the eastern portion of this trail opens up opportunities for several other potential trails in the western and southern parts of the city.

Category: Bicycle; Pedestrian  

Time Frame: Long-Term

Priority: High 

Cost: \$3,850,000

Potential Funding Sources: Various federal grants, STIP "Enhance" process, Oregon Parks and Recreation Recreational Trails Grants CIP, SDCs

Potential Project Partners: City could take over District #1 levee from Umatilla County Commissioners; Property owners / adjacent property owners

Project Goals:

Feasibility



Connectivity



Accessibility



Destinations Served



Health/Safety



Population Served



Economic Impact



Project Location/Images:

TRAIL ALONG CITY AND DISTRICT #1 LEVEES (M3)

EXTENT

From Westgate Pl southwest along Flood District #1 levee to cul-de-sac near the train tracks

LENGTH

3.9 miles

DESTINATIONS

- Eastern Oregon Correctional Institute
- Umatilla River

POTENTIAL BENEFIT

- Would provide recreational opportunities and a comfortable facility for kids and other members of the community to access downtown Pendleton.
- Would provide access to large employment area, and opportunities for fishing and/or boating access.
- This trail alignment would form the backbone for other potential trail alignments.

OPPORTUNITIES

- Opportunity for the city to discuss taking over the Flood District #1 levee from the Umatilla County Commissioners and maintain it at some level of flood protection.
- Opportunity to provide parallel hard and soft surface trails to accommodate equestrian and mountain bike demand.
- This trail could be implemented in two phases.

CONSTRAINTS

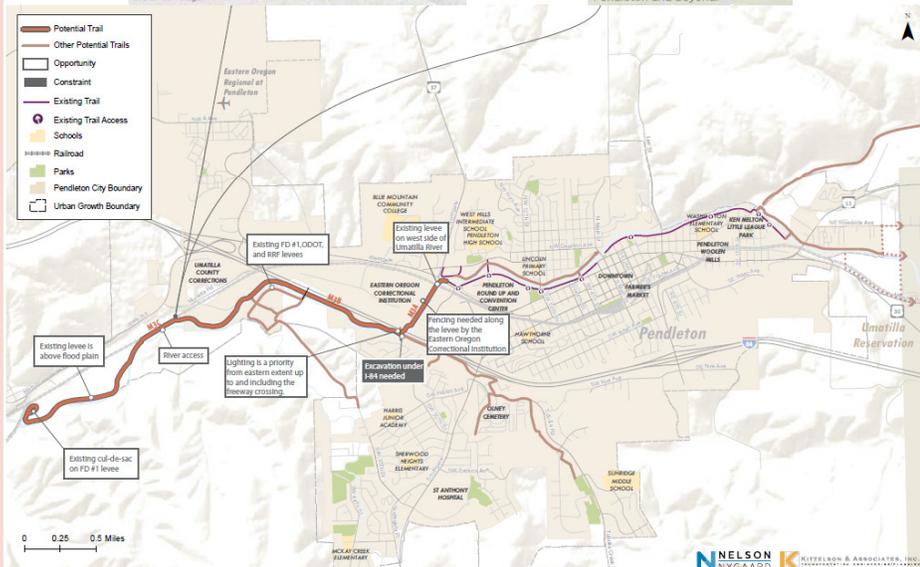
- Crossing under the I-84 bridge will require excavation.
- Extending the trail beyond the existing levee to Rieth Road would be a separate project due to additional coordination needed to cross an active rail line.



This trail would serve equestrian demand in this area. Source: BLM Oregon



This trail would open up opportunities for a variety of other trails that could become part of a network of off-street paths in Pendleton and beyond.



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TRAIL ALONG CITY AND DISTRICT #1 LEVEES (M3)

EXTENT

From Westgate Pl southwest along Flood District #1 levee to cul-de-sac near the train tracks

LENGTH

3.9 miles

DESTINATIONS

- Eastern Oregon Correctional Institute
- Umatilla River

POTENTIAL BENEFIT

- Would provide recreational opportunities and a comfortable facility for kids and other members of the community to access downtown Pendleton.
- Would provide access to large employment area, and opportunities for fishing and/or boating access.
- This trail alignment would form the backbone for other potential trail alignments.

OPPORTUNITIES

- Opportunity for the city to discuss taking over the Flood District #1 levee from the Umatilla County Commissioners and maintain it at some level of flood protection.
- Opportunity to provide parallel hard and soft surface trails to accommodate equestrian and mountain bike demand.
- This trail could be implemented in two phases.

CONSTRAINTS

- Crossing under the I-84 bridge will require excavation.
- Extending the trail beyond the existing levee to Rieth Road would be a separate project due to additional coordination needed to cross an active rail line.

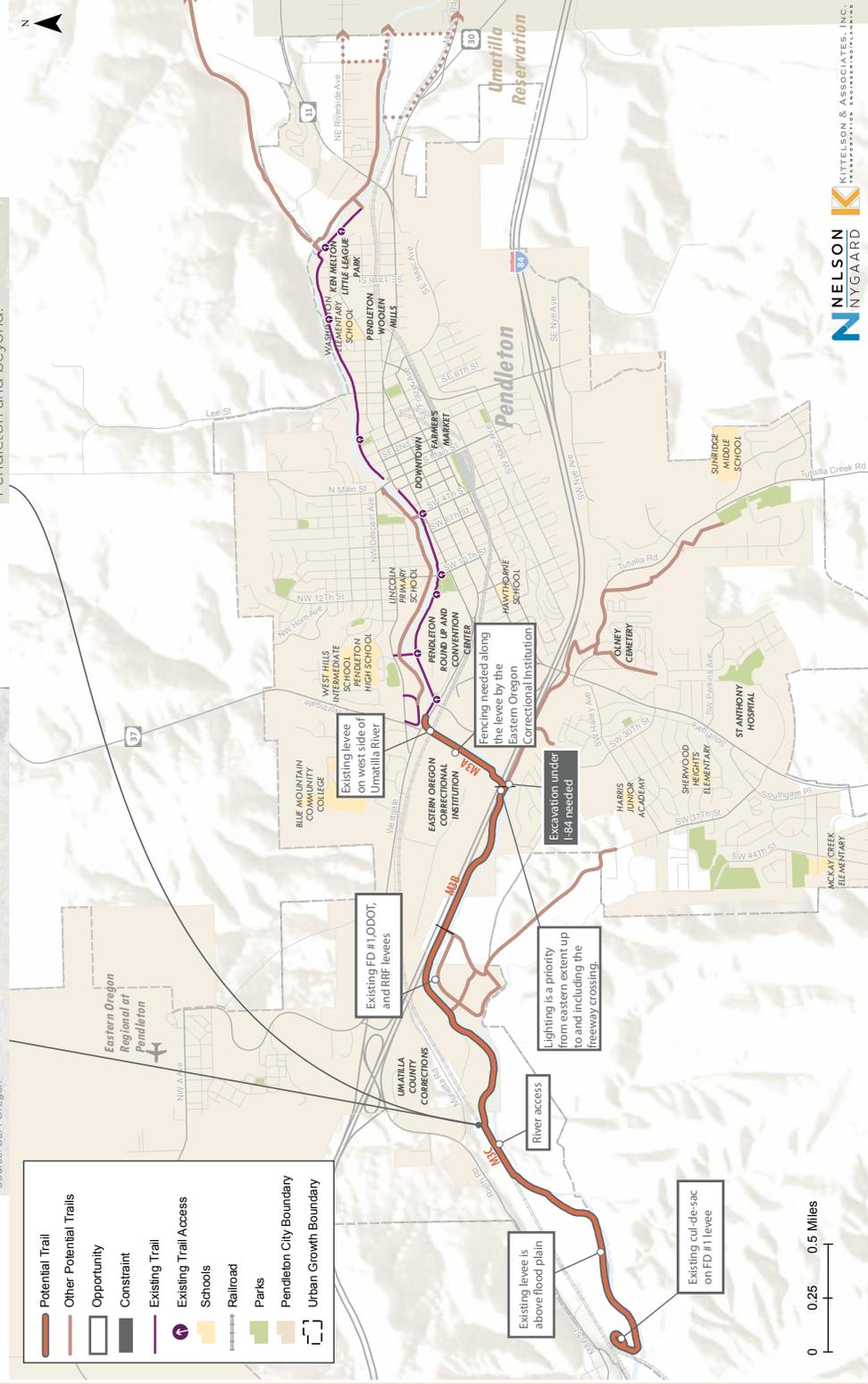


This trail would serve equestrian demand in this area.

Source: BLM Oregon



This trail would open up opportunities for a variety of other trails that could become part of a network of off-street paths in Pendleton and beyond.





Multi-Use Trails Bicycle, Pedestrian, & Transit Plan

Project #M4 Sewer Easement to Grecian Heights Park

Description: Paved multi-use trail extending 2.0 miles trail along Tutuilla Creek and then along a sewer easement out to Grecian Heights Park.

Benefit: Trail would enhance walk and bicycle access to a school and Grecian Heights Park, providing an alternate route to both Southgate Road and Tutuilla Road. Trail would also create recreational opportunities and a connection to the beautiful trails in Olney Cemetery which are open to the public during the day.

Category: Bicycle; Pedestrian   **Time Frame:** Long-Term **Priority:** Medium 

Cost: \$4,650,000 **Potential Funding Sources:** Various federal grants, STIP "Enhance" process, Oregon Parks and Recreation Recreational Trails Grants, CIP, SDCs

Potential Project Partners: Olney Cemetery, Private property owners (to renegotiate easements)

Project Goals:



Project Location/Images:

SEWER EASEMENT TO GRECIAN HEIGHTS PARK (M4)

EXTENT
From Tutuilla Creek to Grecian Heights Park

LENGTH
2.0 miles

DESTINATIONS

- Grecian Heights Park
- Olney Cemetery
- Sunridge Middle School

POTENTIAL BENEFIT

- Opportunity to create a connection that would enhance access to schools and residential walking and biking access to Grecian Heights Park.
- Would create an alternate route to Southgate and take advantage of the beautiful trails in the Cemetery which are open to the public during the day, which is not currently well known to the public.

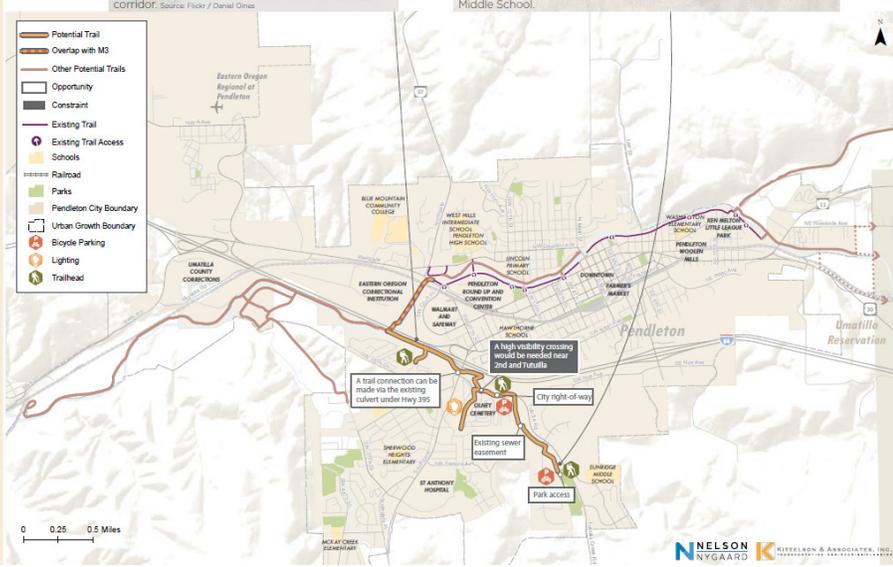
OPPORTUNITIES

- City owned right of way along the edge of Olney Cemetery and an existing sewer easement leading to the northwestern edge of Grecian Heights Park reduces right-of-way costs.
- The low speed, low traffic environment along 2nd Street represents a potential on-street connection to Hwy 395 at the northern edge of this alignment.

CONSTRAINTS

- Requires developing a high visibility crossing at or near Tutuilla and 2nd Street to facilitate safe passage to the sewer easement on the south side of Tutuilla.
- Potential wetland issues near the area of the culvert under Hwy 395. Requires frontage upgrades along private property on Tutuilla (two property owners).

This trail requires completion of a portion of the City and District #1 Levees (Trail M3), shown as the dashed line on this map. The above characteristics describe the Sewer Easement Trail (solid line), while the overlapping trail segments (dashed) are described in M3.



SEWER EASEMENT TO GRECIAN HEIGHTS PARK HEIGHTS PARK (M4)

EXTENT
From Tutuilla Creek to Grecian Heights Park

LENGTH
2.0 miles

DESTINATIONS

- Grecian Heights Park
- Olney Cemetery
- Sunridge Middle School

POTENTIAL BENEFIT

- Opportunity to create a connection that would enhance access to schools and residential walking and biking access to Grecian Heights Park.
- Would create an alternate route to Southgate and take advantage of the beautiful trails in the Cemetery which are open to the public during the day, which is not currently well known to the public.

OPPORTUNITIES

- City owned right of way along the edge of Olney Cemetery and an existing sewer easement leading to the northwestern edge of Grecian Heights Park reduces right-of-way costs.
- The low speed, low traffic environment along 2nd Street represents a potential on-street connection to Hwy 395 at the northern edge of this alignment.

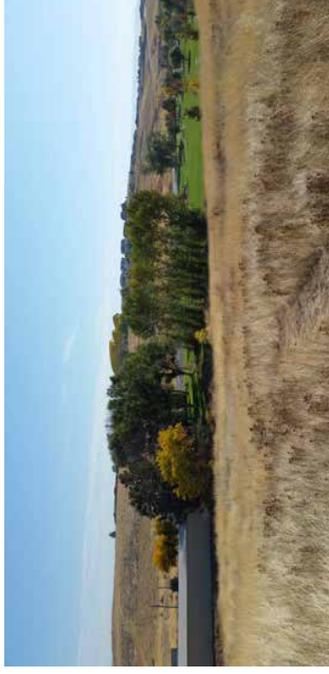
CONSTRAINTS

- Requires developing a high visibility crossing at or near Tutuilla and 2nd Street to facilitate safe passage to the sewer easement on the south side of Tutuilla.
- Potential wetland issues near the area of the culvert under Hwy 395. Requires frontage upgrades along private property on Tutuilla (two property owners).

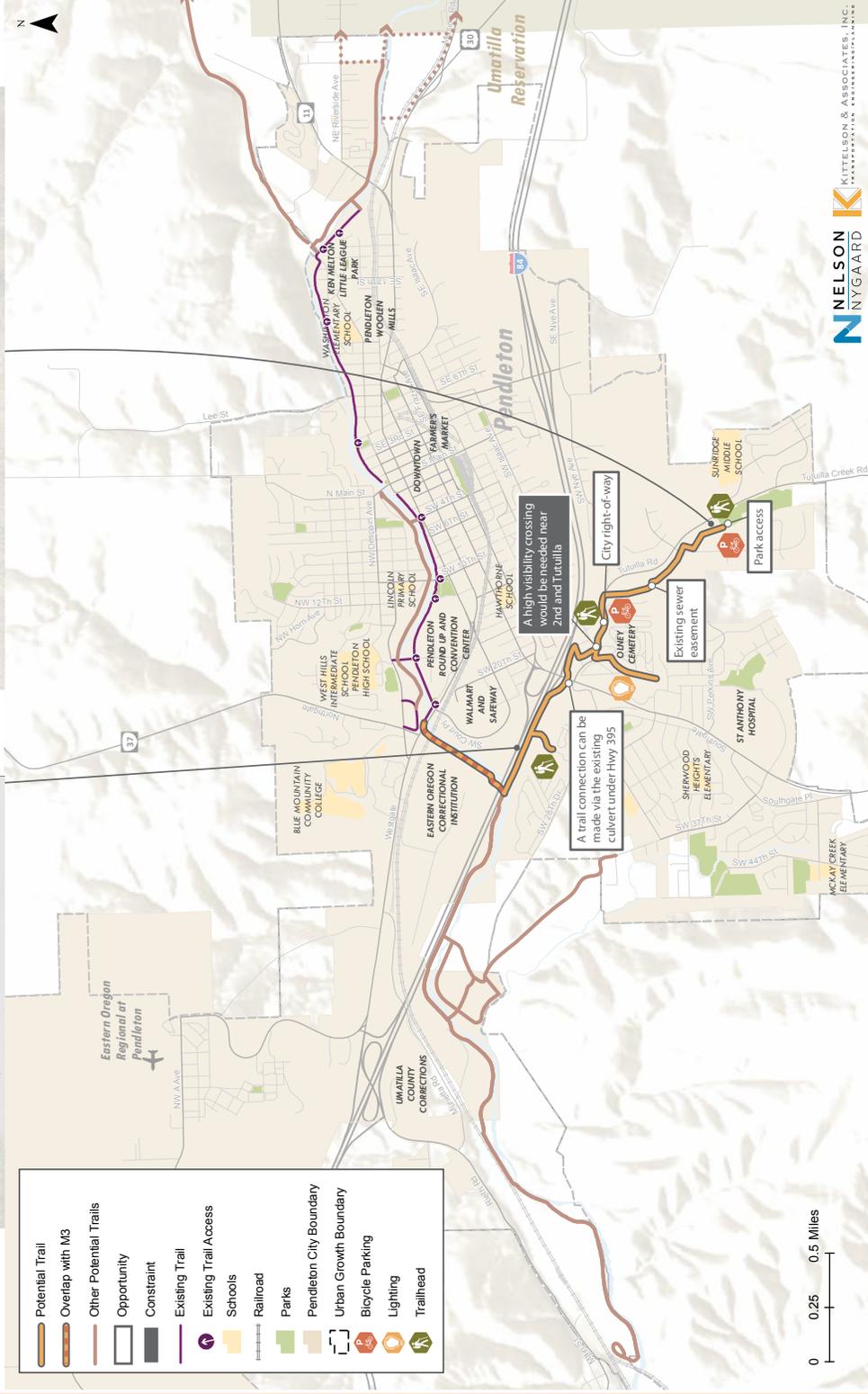
This trail requires completion of a portion of the City and District #1 Levees Trail (M3), shown as the dashed line on this map. The above characteristics describe the Sewer Easement Trail (solid line), while the overlapping trail segments (dashed) are described in M3.



Portions of this trail would travel alongside the I-84 corridor. Source: Flickr / Daniel Olmes



This trail would provide access to Grecian Heights Park and Sunridge Middle School.





Multi-Use Trails Bicycle, Pedestrian, & Transit Plan

Project #M5

McKay Creek Drainage

Description:

Paved multi-use trail extending 1.2 miles project from the Umatilla River to SW 37th Street along the McKay Creek drainage channel.

Benefit:

This trail would provide recreational opportunities and, with the completion of other trails, could form a comfortable alternative route to Southgate Road.

Category: Bicycle; Pedestrian



Time Frame: Long-Term

Priority: Low



Cost: \$5,850,000

Potential Funding Sources: Various federal grants, STIP "Enhance" process, Oregon Parks and Recreation Recreational Trails Grants CIP, SDCs

Potential Project Partners: Private property owners (to renew/re negotiate right-of-way agreements/easements)

Project Goals:

Feasibility



Connectivity



Accessibility



Destinations Served



Health/Safety



Population Served



Economic Impact



Project Location/Images:

MCKAY CREEK DRAINAGE (M5)

EXTENT

From Umatilla River to SW 37th Street

LENGTH

1.2 miles

DESTINATIONS

- Umatilla River
- Downtown Pendleton (with completion of westward River Walk extension)
- Community Park
- McKay Park
- Harris Junior Academy
- Sherwood Heights Elementary
- McKay Creek Elementary

POTENTIAL BENEFIT

- Offers a recreational opportunity in the densely populated area west of Hwy 395.
- Would provide off-street trail access to the trail along Flood District #1 Levee (see potential trail #3) and potentially downtown Pendleton.
- This trail would provide a comfortable alternative to traveling along Southgate Road.

OPPORTUNITIES

- City-owned property near Umatilla River and a sewer easement to SW 37th Street reduces right-of-way costs.

CONSTRAINTS

- Requires coordination with three property owners to make sewer easement open to public access.

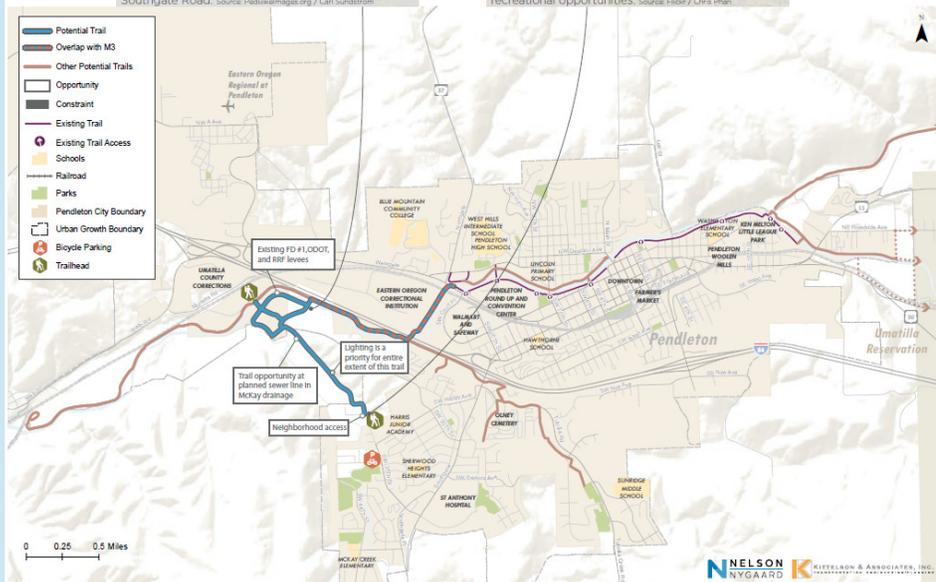
This trail requires completion of a portion of the City and District #1 Levees' Trail (M3), shown as the dashed line on this map. The above characteristics describe the McKay Creek Drainage Trail (solid line), while the overlapping trail segments (dashed) are described in M3.



This trail would provide for recreational opportunities and a comfortable alternative to traveling along Southgate Road. Source: Pexels/Image.org / Carl Sundstrom



Neighborhood access points to the trail can include signage directing residents to destinations and recreational opportunities. Source: Flickr / Chris Ryan



MCKAY CREEK DRAINAGE (M5)

EXTENT

From Umatilla River to SW 37th Street

LENGTH

1.2 miles

DESTINATIONS

- Umatilla River
- Downtown Pendleton (with completion of westward River Walk extension)
- Community Park
- McKay Park
- Harris Junior Academy
- Sherwood Heights Elementary
- McKay Creek Elementary

POTENTIAL BENEFIT

- Offers a recreational opportunity in the densely populated area west of Hwy 395.
- Would provide off-street trail access to the trail along Flood District #1 Levee (see potential trail #3) and potentially downtown Pendleton.
- This trail would provide a comfortable alternative to traveling along Southgate Road.

OPPORTUNITIES

- City-owned property near Umatilla River and a sewer easement to SW 37th Street reduces right-of-way costs.

CONSTRAINTS

- Requires coordination with three property owners to make sewer easement open to public access.

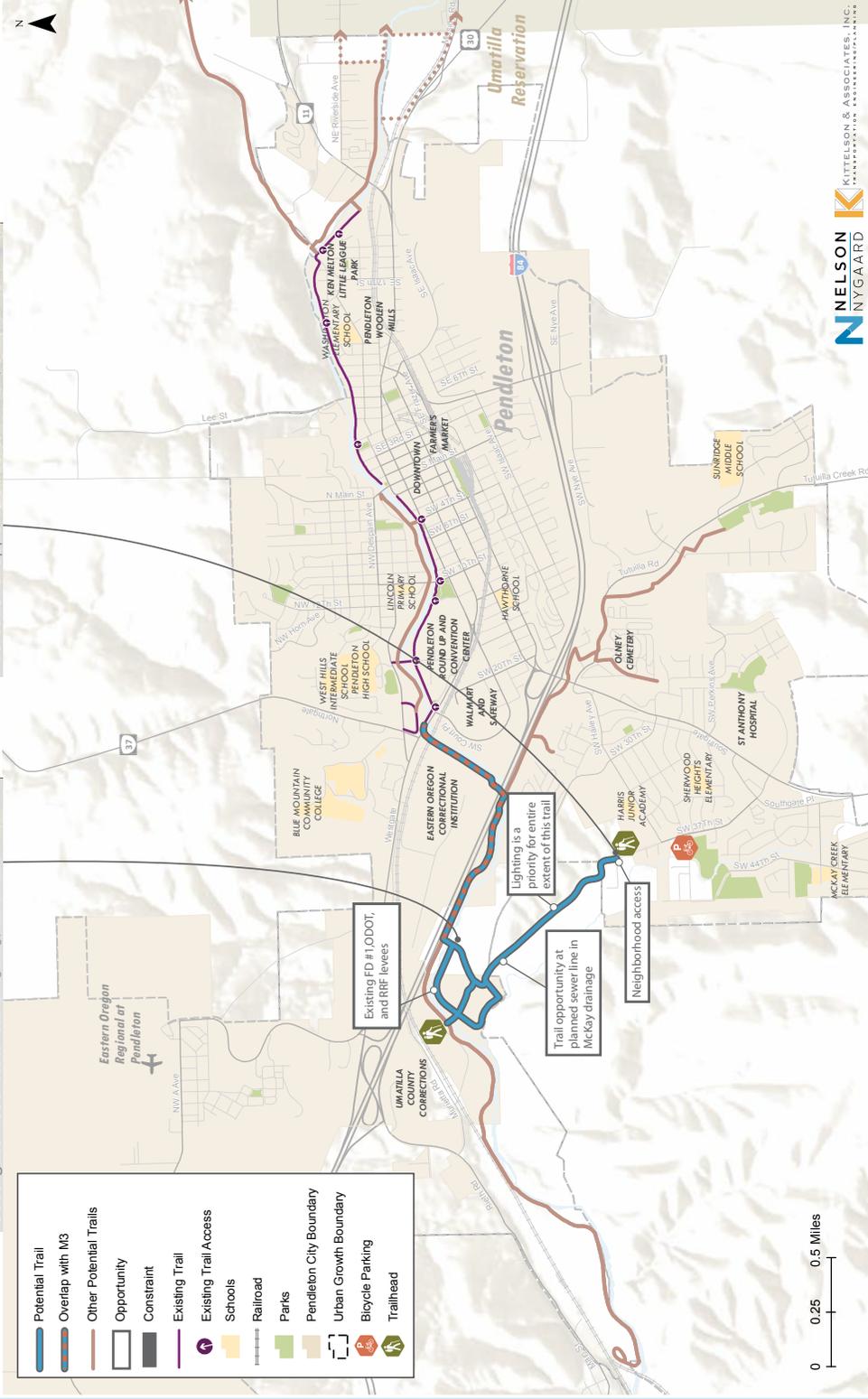
This trail requires completion of a portion of the City and District #1 Levees Trail (M3), shown as the dashed line on this map. The above characteristics describe the McKay Creek Drainage Trail (solid line), while the overlapping trail segments (dashed) are described in M3.



This trail would provide for recreational opportunities and a comfortable alternative to traveling along Southgate Road. Source: [PiedBikeImages.org / Carl Sumder.com](https://www.flickr.com/photos/carlsumder/10000000000/)



Neighborhood access points to the trail can include signage directing residents to destinations and recreational opportunities. Source: [Flickr / Chris Phan](https://www.flickr.com/photos/chrisphan/10000000000/)





Multi-Use Trails Bicycle, Pedestrian, & Transit Plan

Project #M6

Trail to Adams/Athena

Description:

A soft-surface multi-use trail extending along an old rail right-of-way east of Pendleton out to Adams and Athena.

Benefit:

This trail would create recreational opportunities walking, mountain biking, and equestrian trips of various lengths.

Category: Bicycle; Pedestrian



Time Frame: Long-Term

Priority: Low



Cost: \$4,250,000

Potential Funding Sources: Various federal grants, STIP "Enhance" process, Oregon Parks and Recreation Recreational Trails Grants, rails to trails grants, CIP, SDCs

Potential Project Partners: Coordination with Umatilla County as project is outside city limits, Private property owners

Project Goals:

Feasibility



Connectivity



Accessibility



Destinations Served



Health/Safety



Population Served



Economic Impact



Project Location/Images:

TRAIL TO ADAMS/ATHENA (M6)

EXTENT

From Pendleton city limits to Adams/Athena

LENGTH

-12 to 15+ miles to Adams
-17 to 20+ miles to Athena

DESTINATIONS

- Adams
- Athena
- Westin
- Blue Mountains

POTENTIAL BENEFIT

- Potential for longer walks or bicycle rides, as well as a connection to Adams and Athena for long distance recreational riding.
- This would be a soft-surface trail for walking, equestrian and mountain bike use.
- This trail could eventually continue past Athena to Weston and then connect to the Blue Mountains, which would create an incredible long distance bike route.

OPPORTUNITIES

- Old railroad grade that extends from the Pendleton little league parks out to Adams and Athena.

CONSTRAINTS

- New bridge required to connect with existing River Walk (cost and need to assess environmental impacts).
- Would require partnerships with Umatilla County to develop this project as it is outside of the Pendleton city limits.
- Requires identifying all applicable property owners and establishing an old right-of-way.



This trail would be soft surface and open to people on foot, mountain bikes and horses.



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TRAIL TO ADAMS/ATHENA (M6)

EXTENT
From Pendleton city limits to Adams/Athens

LENGTH
-12 to 15+ miles to Adams
-17 to 20+ miles to Athens

DESTINATIONS

- Adams
- Athens
- Westin
- Blue Mountains

POTENTIAL BENEFIT

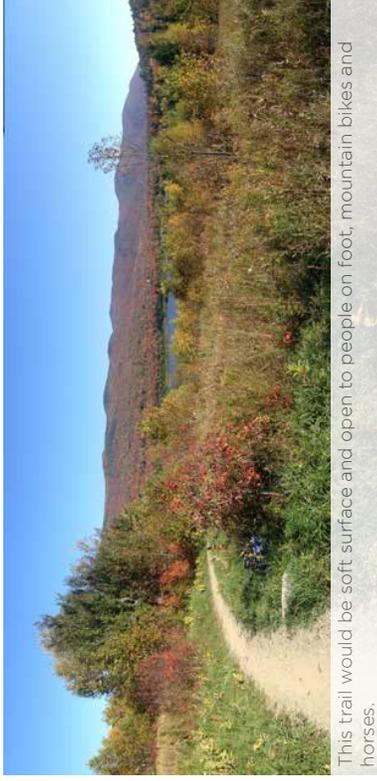
- Potential for longer walks or bicycle rides, as well as a connection to Adams and Athens for long distance recreational riding.
- This would be a soft-surface trail for walking, equestrian and mountain bike use.
- This trail could eventually continue past Athens to Weston and then connect to the Blue Mountains, which would create an incredible long distance bike route.

OPPORTUNITIES

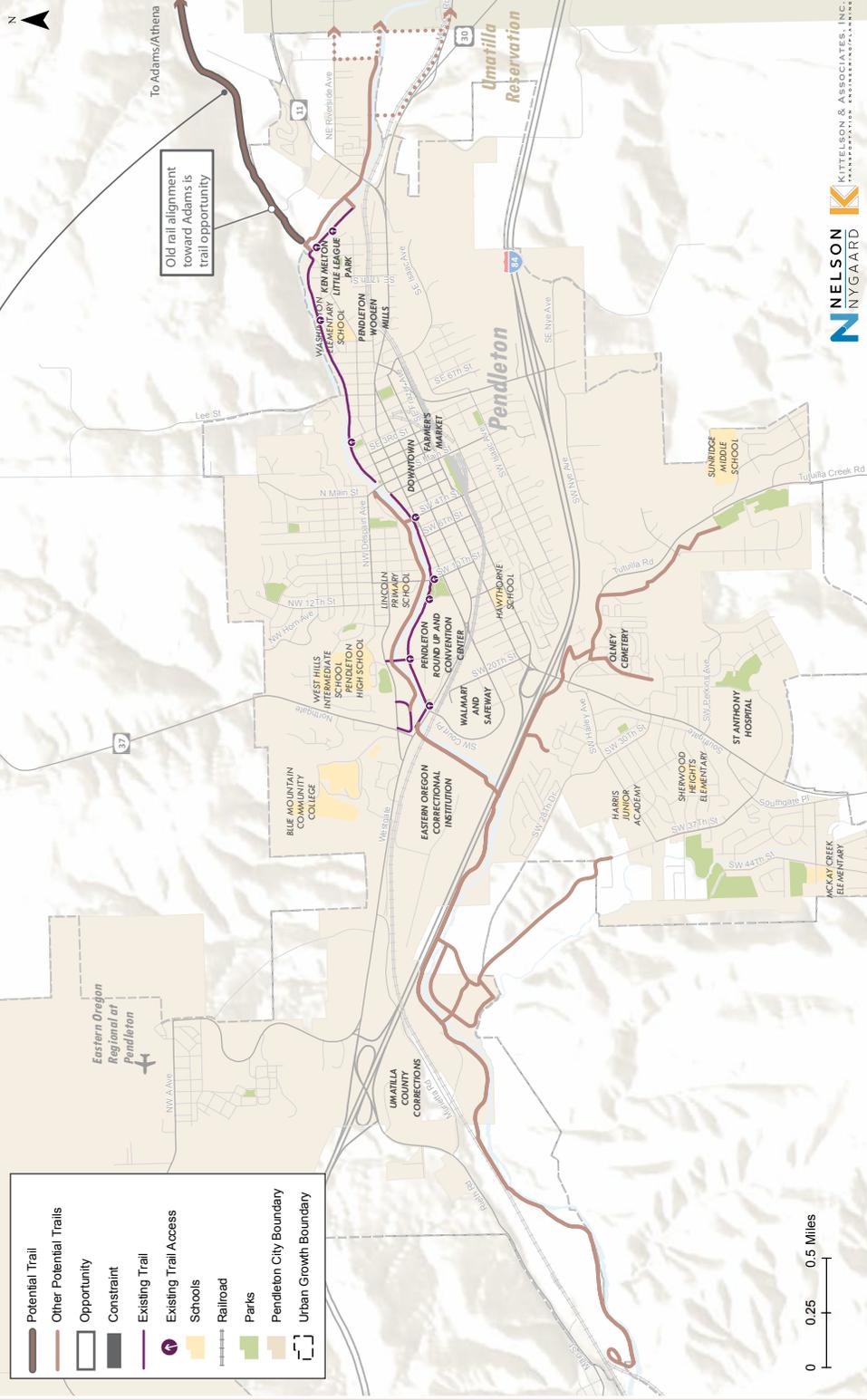
- Old railroad grade that extends from the Pendleton little league parks out to Adams and Athens.

CONSTRAINTS

- New bridge required to connect with existing River Walk (cost and need to assess environmental impacts)
- Would require partnerships with Umatilla County to develop this project as it is outside of the Pendleton city limits.
- Requires identifying all applicable property owners and establishing an old right-of-way.



This trail would be soft surface and open to people on foot, mountain bikes and horses.



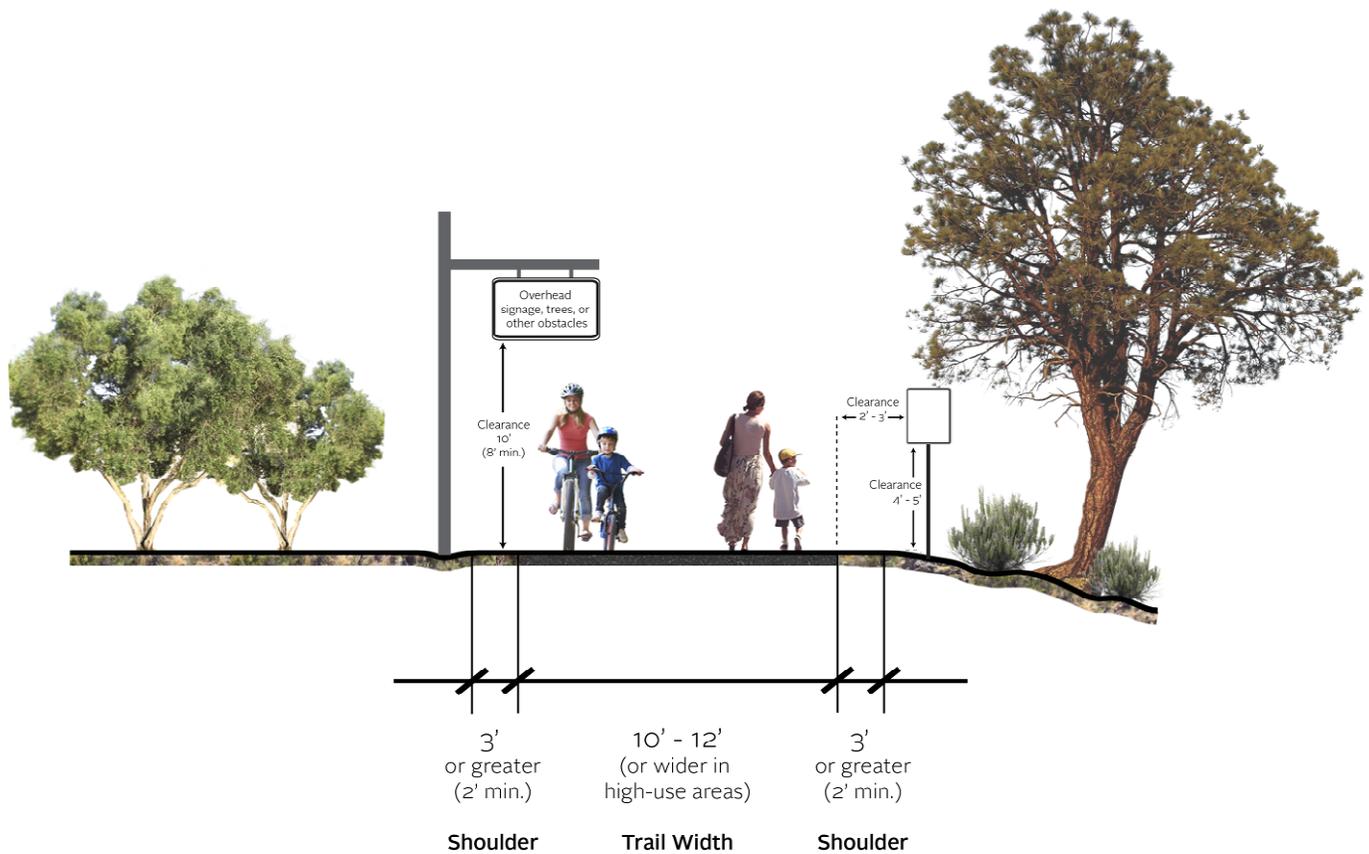


Multi-Use Trails Bicycle, Pedestrian, & Transit Plan

Multi-Use Trail Standards

A trail cross section standard has been developed as part of this plan that identifies guidelines and standards that should be used for the development and design of future multi-use trails in Pendleton. Refer to ODOT’s Bicycle and Pedestrian Design Guide (2011) or the AASHTO Guide for the Development of Bicycle Facilities for more information. The AASHTO guide should be consulted for geometric design standards such as sight-distance, and horizontal and vertical curves.

Figure 3-8 Multi-Use Trail Standard



Trail and Shoulder Width

A two-way trail width of 10’ is recommended, with a minimum of 8’ at constrained points. Trails in high demand areas, where a variety of user types is expected, can be 12’ or more in width.

A clear shoulder width of 3’ (2’ minimum) should be provided on both sides of the trail.

Slope/ADA Compatibility

Trails should be designed not to exceed a 5% grade or 2% cross-slope for user comfort and ADA compliance. Steeper grades are permitted for short segments, provided there is sufficient sight distance, good horizontal alignment and sufficient width. For more guidance, consult “Designing Sidewalks and Trails for Access” (Publication: FHWA-EP-01-027) and <https://www.access-board.gov/guidelines-and-standards/streets-sidewalks>.



Multi-Use Trails Bicycle, Pedestrian, & Transit Plan

Sight Distance/Curvature

Visibility of the areas surrounding trails can enhance security and comfort of trail users. Clear sight distances, especially in secluded areas, is important to creating an attractive trail network that serves multiple user types. Additionally, sight distances can improve safety when trails cross roadways so that drivers can see approaching trail users. At tunnels or undercrossings, trail users should be able to see through to the other end.

Curves may require striping, especially when a curve limits sight distances, to ensure separation of bi-directional traffic.

Wayfinding

Wayfinding signage directs people to the trail, directs trail users to key destinations, and can orient trail users to their location within the city. Wayfinding signage for the trail network should utilize consistent design and colors, and generally be provided wherever a trail crosses a roadway or intersects with another trail. Signage with street names can be provided at roadway crossings and access points.

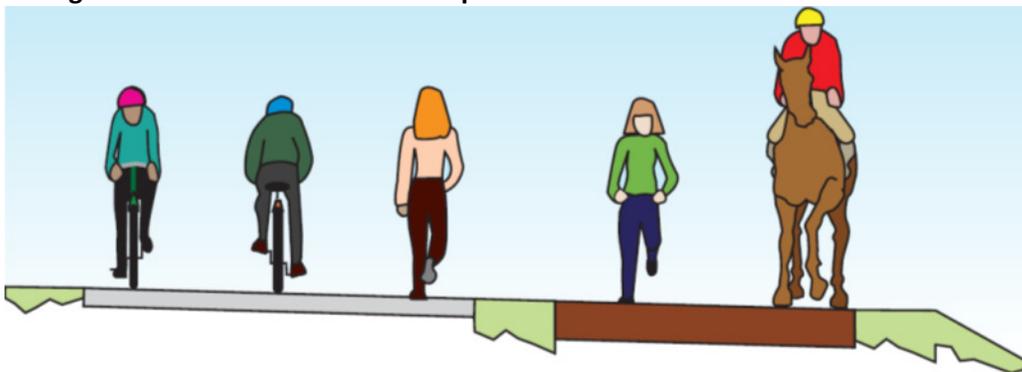
Surface Type/Materials

Trails should be designed with sufficient structural depth for the subgrade soil type and to support occasional maintenance and emergency vehicles. Although individual trails should be individually designed to meet local conditions, the Oregon Bicycle and Pedestrian Design Guide provides sample designs. Concrete surfacing is recommended, even though initial construction costs are higher, because it assures a smooth ride and lower maintenance costs over time.

Pervious pavement can be considered in circumstances where sub-grade is poor or where the area is environmentally sensitive. However, this surface requires careful maintenance.

If equestrians are expected to use the trail, both soft surface and paved trails could be located adjacent to each other, as shown below.

Figure 3-9 Paved Trail with Separate Soft Surface Trail



Source: ODOT Bicycle & Pedestrian Guide