

Project Information

Project: City of Rock Island Loop Trail Integration Plan

Prepared for: City of Rock Island, Washington

5 N. Garden Ave.

Rock Island, WA 98850

Plan Adopted: TBD

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Table of Contents

Executive Summary	7
Introduction	2
Goal What is Active Transportation? Background	3
Existing Conditions Assessment	5
Community Engagement Process	7
Stakeholder FeedbackPublic Events	
Route Alternatives – Preferred Routes	10
Hydro Park to Rock Island City of Rock Island Connections and Pathways	
Summary of Recommendations	18







Table of Figures

Figure 1. Existing portion of Apple Capital Loop Trail in East Wenatchee	4
Figure 2. Location of existing Apple Capital Loop Trail	4
Figure 3. Study area vicinity map	5
Figure 4. Social Media Flyer Advertising Events	7
Figure 5. TREAD public engagement events at the Rock & Grill and Hydro Park	
Figure 6. Priority Nodes	9
Figure 7. Reasons to use the Loop Extension	9
Figure 8. FHWA Bicyclist Design User Profiles	10
Figure 9. Existing informal trail	77
Figure 10. Separated trail (independent from roadway)	12
Figure 11. Existing informal trail can be seen along the shoreline	12
Figure 12. Existing roadside berm	13
Figure 13. Grade-separated trail	13
Figure 14. Horizontally-separated trail	14
Figure 15. Horizontally-separated trail example	14
Figure 16. Existing barrier-separated trail	15
Figure 17. Barrier-separated trail	15
Figure 18. Putters Pond, on the eastern side of Rock Island	17
Figure 19. Overview Map	18







Executive Summary

Introduction

This document summarizes a planning-level study with the goal of identifying how the community of Rock Island can connect with the Wenatchee Valley's greatest amenity, the Apple Capital Loop Trail. The City of Rock Island has identified the need to enhance active transportation opportunities for pedestrians and cyclists. This plan identifies the key areas and routes for active transportation in the study area, with a series of pathways within the Rock Island community and connecting Rock Island to East Wenatchee (both public and private).

This plan is intended to be further used by the City of Rock Island, TREAD, Douglas County, and any other recreational or transportation stakeholders to develop design-level trail documents and to plan for future work or grant applications.

Study Area

The study area largely follows SR 28 between East Wenatchee and the eastern city limits of Rock Island. The western end of the study area is located in Hydro Park at the current terminus of the Apple Capital Loop Trail.

Summary of Recommendations

A total of 11.3 miles of proposed non-motorized pathways have been identified as part of this report. These pathways can be implemented individually or in sections to eventually create a looped system that connects residents of Rock Island to their town and to the Apple Capital Loop Trail. A fully integrated nonmotorized trail system would also connect residents and visitors of Wenatchee and East Wenatchee to businesses in Rock Island. This system of trails also provides options for the future to expand non-motorized transportation even further to Spanish Castle, Crescent Bar, and Quincy.



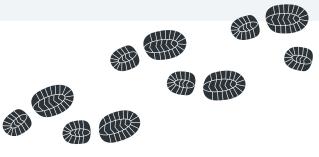




Introduction

The City of Rock Island has identified the need to enhance active transportation opportunities for pedestrians and cyclists. Major destinations such as schools, parks, community gathering places, and residential neighborhoods are not connected by safe active transportation infrastructure, making it difficult and risky to get around town and to nearby communities without a car.

With the creation of a trail loop extension, the City aims to improve the environment for cyclists and pedestrians, creating a reliable network that connects different destinations throughout the city and beyond.



Goal

The goal of this planning-level study is to develop a document that identifies how the City of Rock Island's community can connect with the Wenatchee Valley's greatest recreational amenity, the Apple Capital Loop Trail. This plan identifies the key areas and routes for active transportation in the study area, with a series of pathways within the Rock Island community and connecting Rock Island to East Wenatchee (both public and private). This document is intended to be further used by the City of Rock Island, TREAD, Douglas County, and any other recreational or transportation stakeholders to develop design-level trail documents and to plan for future work or grant applications.



Photo by Ken Lund, CC BY-SA 2.0







What is Active Transportation?

Active transportation is any self-propelled, human-powered mode of transportation, such as walking or bicycling. While this plan mainly focuses on the needs of people walking and cycling, active transportation improvements can benefit multiple other forms of transportation like skateboarding and scooters, as well as wheelchairs and other mobility-BIKE assistance methods. BIKE RUN WALK GLIDE GLIDE GLIDE WALK GLIDE BIKE









Figure 1. Existing portion of Apple Capital Loop Trail in East Wenatchee

Background

Apple Capital Loop Trail

The Loop Trail is a paved, regional trail that runs through the Wenatchee Valley, following a series of riverside parks along both sides of the Columbia River in Wenatchee and East Wenatchee. The trail crosses the Odabashian Bridge (Highway 97) on the north side of town and the Pedestrian Bridge to the south, creating a paved recreational loop that is well-used in all seasons. A few paved Loop Trail spurs also exist; on the east side of the Pedestrian Bridge, a spur follows the Columbia River for 2.2 miles with a southern terminus at Hydro Park. This trail supports local and regional active transportation trips.

Previous Studies

A previous SR 28 Corridor Study, produced on behalf of the Chelan-Douglas Transportation Council, was completed in September 2022 with the goals of assessing active transportation needs in the area and evaluating future SR 28 design concepts in terms of their ability to serve the needs of the community. This report identified the segment of SR 28 from East Wenatchee to Rock Island as a key regional corridor that is expected to experience



significant growth with the planned economic expansion of Chelan, Douglas, and Grant Counties. While this study was focused on SR 28 roadway improvements, it also identified extension of the Loop Trail along the roadway corridor as a potential future improvement.







Existing Conditions Assessment 4th St SE Pangborn Memorial Airport 8th St SE 10th St SE Rock Island Rd Hydro ROCK ISLAND **Existing Apple Capital** Loop Trail endpoint Figure 3. Study area vicinity map

Apple Capital Loop Trail

As noted in the previous section, the Apple Capital Loop Trail is a paved, regional trail that runs through the Wenatchee Valley with a southern terminus at Hydro Park in East Wenatchee. This trail supports local and regional pedestrian and bicycle trips. The Loop Trail is typically 10 to 12 feet wide and runs between SR 28 and the Columbia River, with some segments that parallel the highway and others that parallel the river. In one trail segment, west of the boat launch intersection, the Loop Trail runs parallel to SR 28 and is separated from the highway shoulder by a concrete barrier. In all other segments of the corridor, the two facilities are separated by vegetation and often have different profiles, with the Loop Trail closer to the elevation of the Columbia River

SR 28

Much of the study area runs along SR 28 between East Wenatchee and Rock Island. Within the study area, the SR 28 right-of-way width is typically 100 feet. SR 28 throughout the study area typically has one travel lane per direction without a separating median barrier,



Apple Capital Loop Trail in East Wenatchee. Photo by Thayne Tuason, CC BY-SA 4.0







with a posted speed limit of 60 mph. The highway widens for left-turn lanes at several intersections: S Lyle Avenue, S Mary Avenue, S Nile Avenue, Perry Avenue S, Rock Island Road (East), Riverside Place, and Rock Island Drive. At the western end of the corridor, approaching downtown Rock Island, SR 28 has a posted speed limit of 40 mph and three northbound approach lanes at the intersection with 3rd Street SE. The intersection of SR 28 and 3rd Street SE is the only signalized intersection in the study area; all other intersections along SR 28 are stop-controlled (with stop signs on the cross-streets only).

Other Study Area Corridors

Within the study area, Rock Island Road, Rock Island Avenue/Saunders Avenue, and Battermann Road all include one travel lane and a shoulder in each direction, with no widening at intersections. Rightof-way widths for these roads is generally 50 feet or less. All intersections along these corridors are stop-controlled (with stop signs on the cross-streets only).

Within the Rock Island city limits, Saunders Avenue has sidewalks on one or both sides of the roadway. The remaining segments of these corridors have no sidewalks or bicycle lanes.



Photo by Jimmy Emerson, DVM, CC BY-NC-ND 2.0







Community **Engagement Process**

Public engagement was an important step to ensure the residents of Rock Island and those who would use the trail had a chance to provide feedback on the vision for this trail extension. The goal of this study was to identify how the City of Rock Island can connect with the Apple Capital Loop Trail; an aspect of this plan, and an important piece of making it a success, was reaching out to the community of Rock Island and current trail users. Feedback on how the trail could be used most effectively informs design decisions for implementation.

Stakeholder Feedback

The engagement process started with reaching out to stakeholders to guide the direction of future outreach efforts. TREAD attended a Rock Island City Council Meeting on May 11, 2023 and SCJ Alliance attended a Pathways Group Meeting on May 12, 2023. During these sessions, the following questions were asked:

- 1. How would you use this pathway?
- 2. How should we prioritize connections to community nodes?
- 3. What is your preferred route(s)?

Participants responded that they would use this trail primarily for recreation and exercise, but also to reach waypoints like the school, parks, and housing, and that there should be parking options available to access the trail. They noted that the trail would be more desirable along SR 28 if it could follow along the river and stay off the highway.

Public Events

To capture more informal feedback on the Rock Island Loop Trail Extension study concept, TREAD set up booths on June 24, 2023 at



Hydro Park from 11-1 pm, and on June 27, 2023 at The Rock Bar and Grill from 3-6 pm.

There were approximately 40 participants at the two events, and CAFÉ provided translation services to reach as much of the community as possible.









At these events, TREAD provided a 3-page, 11"x17" handout to participants that showed concepts for pathways types and alternative locations to connect Hydro Park to Rock Island. Participants were encouraged to take a copy of the handouts and use highlighters to mark their preferred pathway options. These results were compiled on the Community Feedback Results Map and used to inform the Preferred Route.

TREAD also asked for feedback from participants on priority nodes within Rock Island (summarized in Figure 6) as well as how the community would use this pathway (summarized in Figure 7).





Figure 5. TREAD public engagement events at the Rock Bar & Grill (left) and Hydro Park (right)







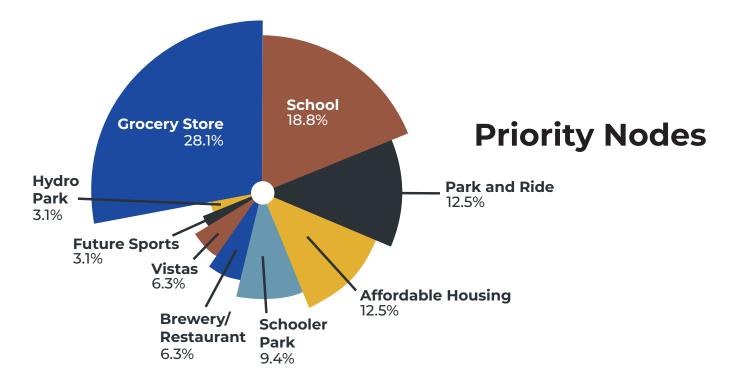


Figure 6. Priority Nodes

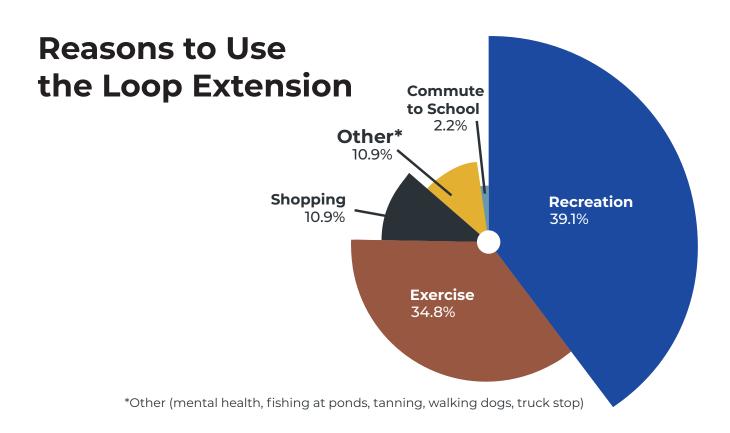


Figure 7. Reasons to use the Loop Extension







Route Alternatives – Preferred Routes

Hydro Park to Rock Island

As previously mentioned, an SR 28 Corridor Study was previously submitted to the Chelan-Douglas Transportation Council in September 2022. This report identified the segment of SR 28 from East Wenatchee to Rock Island as a key regional corridor that is expected to experience significant growth with the planned economic expansion of Chelan, Douglas, and Grant Counties. This study was focused on roadway improvements; however, it also included extension of the Loop Trail along the roadway corridor.

Community input, and the desire to create the safest, most enjoyable pathway between Hydro Park and Rock Island resulted in a recommendation for a pathway off the highway wherever possible. Anecdotally, the trail users of the existing Apple Capital Loop Trail, as well as the participants in public outreach efforts, largely fall into the "Interested but Concerned" category defined by FHWA in Figure 8. Design alternatives for this user type emphasize the safety, comfort, connectivity, and cohesion of the network.

BICYCLIST DESIGN USER PROFILES

Interested **but Concerned**

51%-56% of the total population

Often not comfortable with bike lanes, may bike on sidewalks even if bike lanes are provided; prefer off-street or separated bicycle facilities or quiet or traffic-calmed residential roads. May not bike at all if bicycle facilities do not meet needs for perceived comfort.

Somewhat Confident

5-9% of the total population

Generally prefer more separated facilities, but are comfortable riding in bicycle lanes or on paved shoulders if need be.

Highly Confident

4-7% of the total population

Comfortable riding with traffic; will use roads without bike lanes.



TOLERANCE

HIGH STRESS TOLERANCE

Figure 8. FHWA Bicyclist Design User Profiles









Figure 9. Existing informal trail

Pathway Type A: Separated Trail

To identify locations where the pathway could potentially deviate from the highway, SCJ Alliance conducted a site visit on May 27, 2023. Four key cross sections were identified that would provide a higher level of safety and comfortability along the trail.









Figure 10. Separated trail (independent from roadway)

Figure 10 shows the ideal cross-section. This would be a pathway independent of the highway, greatly increasing trail users' sense of safety from cars and providing a quieter, calmer environment. Due to development along the Columbia River and steep grades along the shoreline, only two locations were identified that could utilize this cross-section. Within Hydro Park, this trail type can be used to connect the existing terminus of the Apple Capital Loop Trail to parking lots for access and to the trail continuation along SR 28. Additionally, there is an existing informal dirt trail through Stateowned property along the Columbia River further to the east. That trail can be seen in the aerial imagery in Figure 11. Following this trail alignment would provide an enjoyable, offhighway experience and utilize existing scenic viewpoints and river access.



Figure 11. Existing informal trail can be seen along the shoreline.









Figure 12. Existing roadside berm

Pathway Type B: Grade-Separated Trail

Although the rest of the pathway from Hydro Park to Rock Island needs to more closely follow SR 28 due to right-of-way and geographical constraints, other alternatives to a roadside trail were identified. Figure 13 shows a grade-separated trail that could follow existing berms along the highway, while still lying within WSDOT right-of-way. This trail type feels safer by being elevated above the highway and provides better views than a roadside trail would.



Figure 13. Grade-separated trail







Pathway Type C: Horizontally-Separated Trail

Where an existing roadside berm does not exist, some sections of the pathway could have significant horizontal separation from SR 28 as shown in Figure 14. The WSDOT right-of-way varies significantly, and in some cases the trail could be over 50 feet from the edge of road.

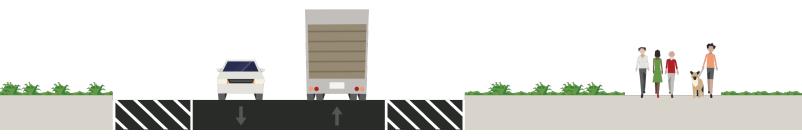


Figure 14. Horizontally-separated trail



Figure 15. Horizontally-separated trail example









Figure 16. Existing barrier-separated trail

Pathway Type D: Barrier-Separated Trail

The final section identified would entail a pathway located closer to the highway, protected by a barrier (as shown in Figure 16). Depending on available funding, this barrier could also serve to screen the highway from the trail.

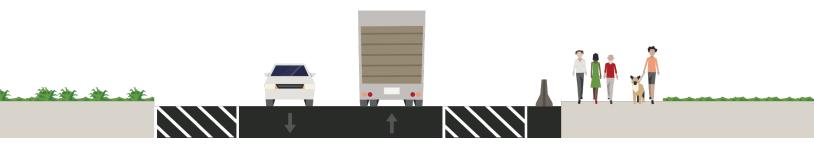


Figure 17. Barrier-separated trail

This trail section from Hydro Park to Rock Island would likely follow the south side of SR 28 for the entire length of the trail. To connect to the City of Rock Island, multiple highway crossing locations were considered. WSDOT's plans for a roundabout at the intersection of Rock Island Drive and SR 28 near BJ's Auto Truck Plaza could be combined with this effort to provide a crosswalk and safe pedestrian and cyclist crossing into town.











Community members identified a need for pathways within the City to safely reach waypoints via nonmotorized methods of transportation.

Many of the streets within Rock Island have excess capacity based on current traffic volumes. In other words, there is plenty of publicly-owned space currently used for cars that could be re-allocated for pedestrians and bicyclists. Rock Island, like many small towns, has developed in a way that is largely dependent on cars. Building a city in this way requires more public space be used for driving and parking rather than public enjoyment. A commitment to developing bike lanes, sidewalks, and shareduse pathways would help reduce the town's dependence on cars and encourage healthy habits like exercise and spending time outdoors.

Rock Island should consider the following:

- Adding bike lanes and sidewalks along Rock Island Road
- Developing a lakeside trail for recreational opportunities
- Making minor changes such as signage, traffic-calming, and sharrows to low-traffic, slow-speed roadways to make them bike and pedestrian friendly







Rock Island Commuter Route

Rock Island Road between Big Bow Lake and Parkway Drive likely has enough right-of-way to implement bike lanes and sidewalks. It already serves as the primary connection between destinations like Rock Island Elementary, the Rock Bar & Grill, and Schooler Park. Adding designated lanes for pedestrians and cyclists would make the road safer for all users and encourage more non-motorized transportation within town. Providing space for pedestrians on both sides of the street ensures that anyone can get around safely on foot, including children, seniors, and those with disabilities.

Rock Island Lake Loop

Rock Island is defined by the lakes and ponds that border town. They provide easy access for both the community and visitors to fishing and to nature. The City has a unique opportunity to connect Big Bow Lake and Hideaway Lake via a looped, recreational paved trail. Partnering with Chelan PUD could help preserve these shorelines for future generations while also providing ample recreational opportunities.

Rock Island Road Connector

Rock Island Road between SR 28 and Big Bow Lake is a busy section of road that currently does not have a safe route for pedestrians or bicyclists. It is currently difficult to pull out on SR 28 from Rock Island Road, and the intersection could be improved by traffic control measures and/or a marked pedestrian crossing. If the pathway from Hydro Park to Rock Island is developed, this could be a primary pedestrian crossing into the west end of town. This section of Rock Island Road could be improved by a sharrow or a shared-used path. Limited rightof-way in this area and the topography would make this a challenge, but creative solutions could make this a pedestrian friendly and enjoyable recreational corridor.

Riverside Drive Connector

The low traffic volumes and low speeds on Riverside Drive and 3rd Street SW would make it a good connection between Rock Island Road, Rock Island Drive, and SR 28 if other pathway sections were also completed.



Figure 18. Putters Pond, on the eastern side of Rock Island







Summary of Recommendations

A total of 11.3 miles of proposed non-motorized pathways have been identified as part of this report. These pathways can be implemented individually or in sections to eventually create a looped system that connects residents of Rock Island to their town and to the Apple Capital Loop Trail. A fully integrated non-motorized trail system would also connect residents and visitors of Wenatchee and East Wenatchee to businesses in Rock Island. This system of trails also provides options for the future to expand non-motorized transportation even further to Spanish Castle, Crescent Bar, and Quincy. Detailed maps of each trail segment can be found in Appendix A.



Figure 19. Overview Map







Appendix

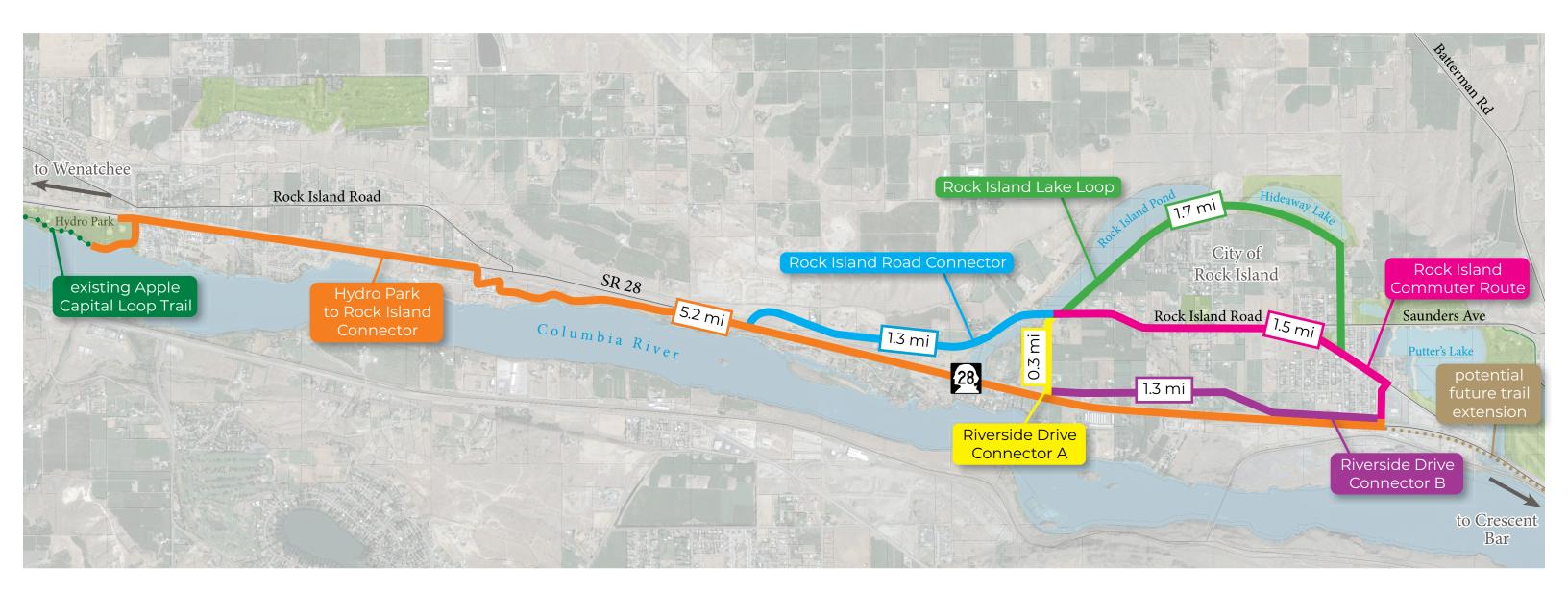
Appendix A.	. Proposed Tr	ail Segment	Detail Sheet	s20
Appendix B.	. Cost Opinio	n Document		28





















separation from roadway

Pathway with horizontal separation from roadway

- Significant available space within WSDOT right-of-way to install trail with separation from roadway.
- State- and Chelan County PUD-owned land along river for portion of route.
- Coordinate with planned intersection improvements at Rock Island Drive and SR 28 at BJ's to safely connect trail users to town.
- Potential future extension toward Spanish Castle and Crescent Bar.
- Potential future connection to Rock Island Industrial Redevelopment Site.
- Total Project Cost Opinion \$16,551,000 (2023 Dollars)

SUMMARY

This <u>5.2 mile</u> section of trail would be the primary connector between Hydro Park and the City of Rock Island. The pathway would maintain separation from the highway wherever possible to create a safe and efficient pathway and extend the Apple Capital Loop Trail. This alignment allows for future expansion of the trail toward Crescent Bar.

Rock Island Loop Trail Integration Plan

Challenges

Pathway with barrier separation

from roadway



Access through neighborhood.

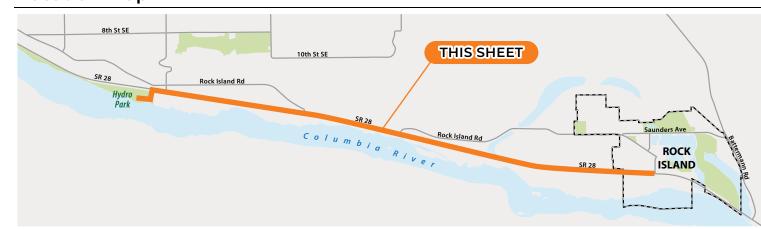


Highway crossing would need to be coordinated with intersection improvements.



Limited space would require barrier-separated pathway.

Location map



HYDRO PARK TO ROCK ISLAND CONNECTOR (SR 28)











Opportunities

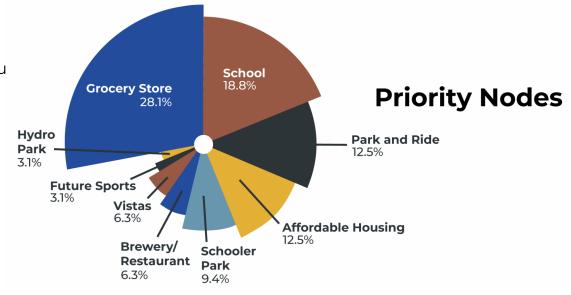
roadway.

- Connect major waypoints within Rock Island making it easier to get to schools, parks, and local businesses.
- · Improve pedestrian safety by creating a continuous pathway through town and getting pedestrians off of the road.
- · Connect existing sidewalk segments.
- · Safe connection to Link Transit bus stops.
- · Encourage non-motorized transportation within town.
- Total Project Cost Opinion \$7,430,000 (2023 Dollars)

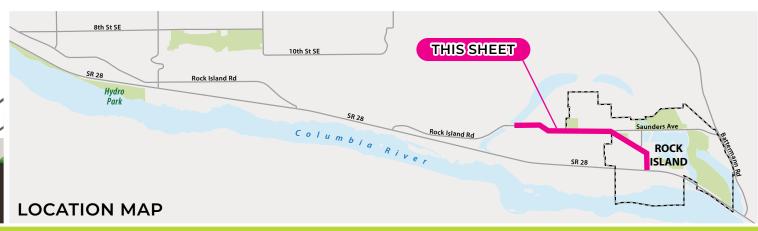
Challenges

Limited right-of-way in some sections wou require working with property owners.

Utility pole conflicts.







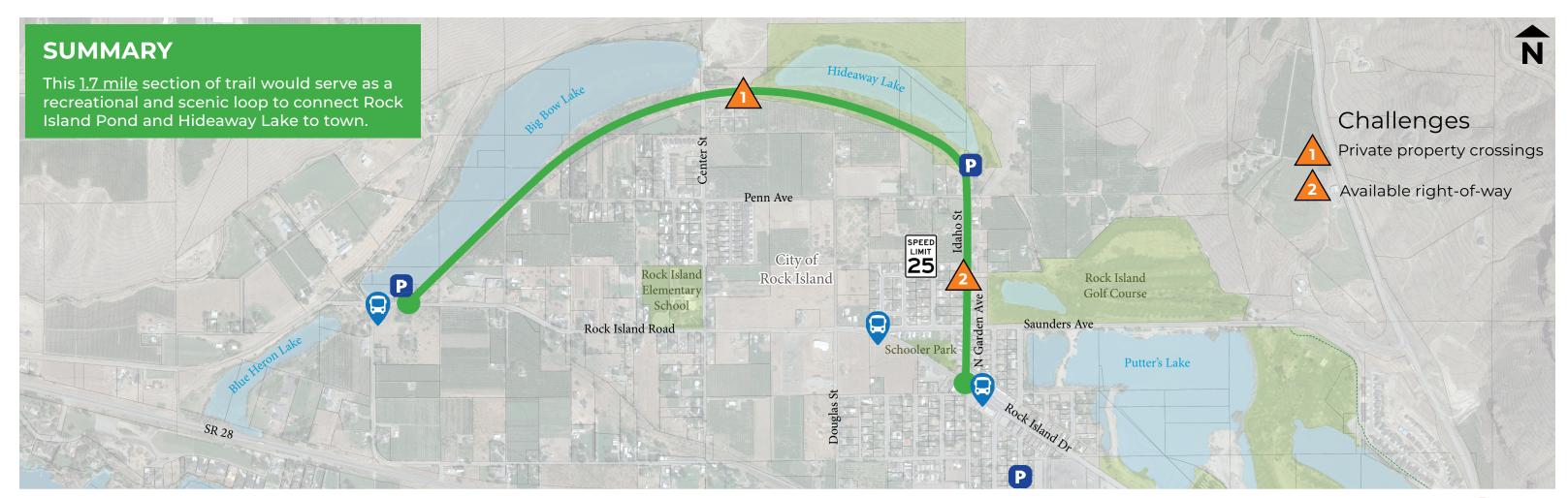
ROCK ISLAND COMMUTER ROUTE

Rock Island
WASHINGTON







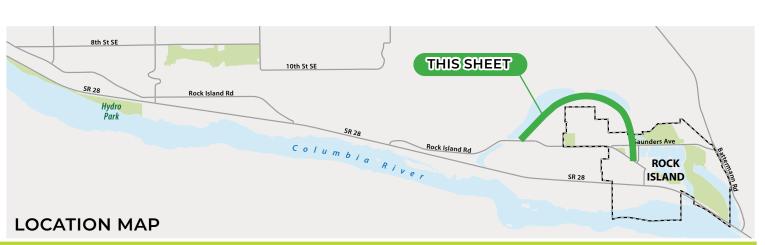




Opportunities & Partnerships

- The majority of the lake shoreline property is owned by Chelan County PUD.
- Scenic recreational trail with lake access similar to Apple Capital Loop Trail sections in Wenatchee.
- · High level of safety due to off-road trail.
- Total Project Cost Opinion \$5,865,000 (2023 Dollars)





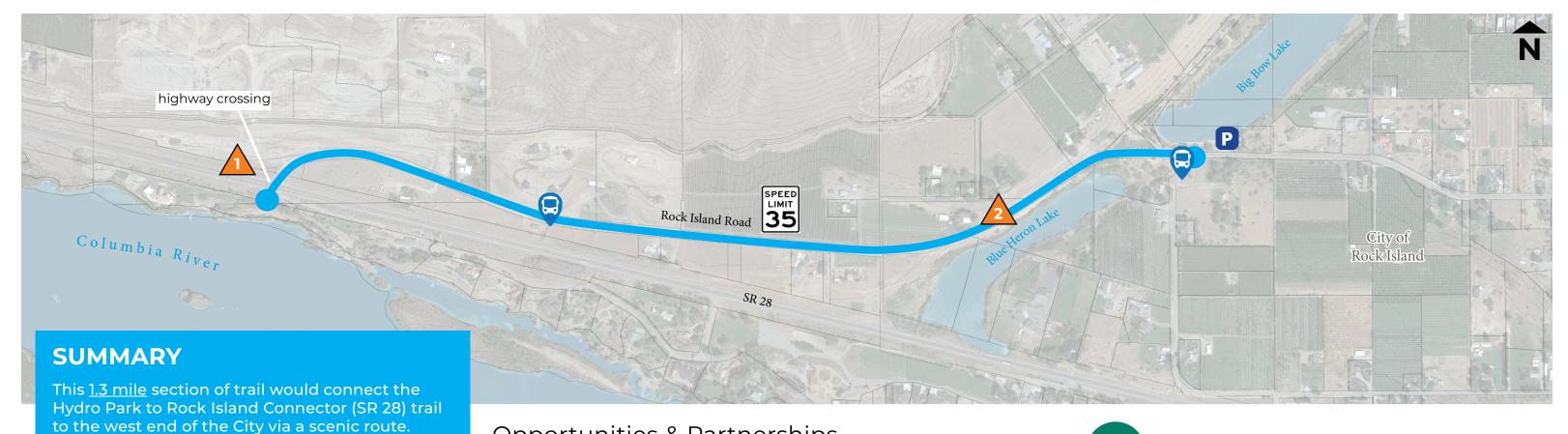
ROCK ISLAND LAKE LOOP

Rock Island Loop Trail Integration Plan









Challenges



Highway crossing.

Limited public right-of-way space and steep slopes along Blue Heron Lake.

Opportunities & Partnerships

- This pathway section could use a variety of cross-sections including bike lanes, sidewalks, sharrows, or shared-use paths.
- · Connect other trail sections together to create a looped system.
- Utilize a cantilevered trail section along Blue Heron Lake to create scenic pathway into the West end of town.
- Partner with WSDOT to construct highway crossing. This could be a at-grade crossing, coinciding with intersection improvements, or a non-motorized underground crossing.
- · Total Project Cost Opinion \$11,214,000 (2023 Dollars)









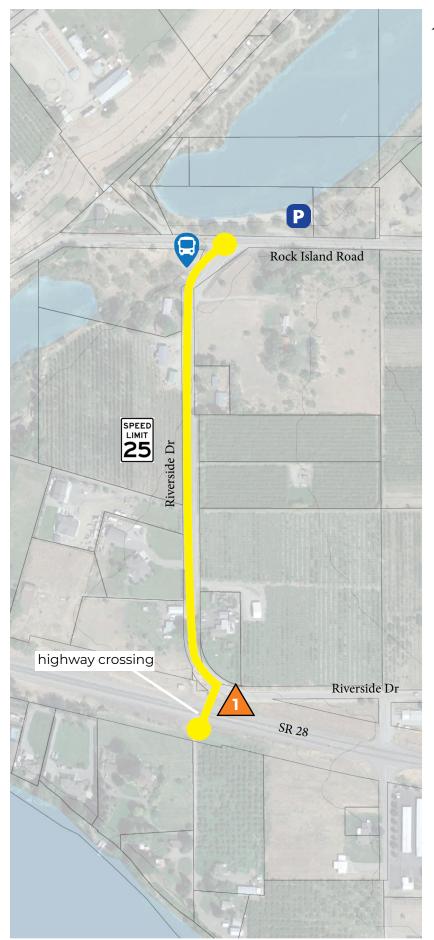
ROCK ISLAND ROAD CONNECTOR









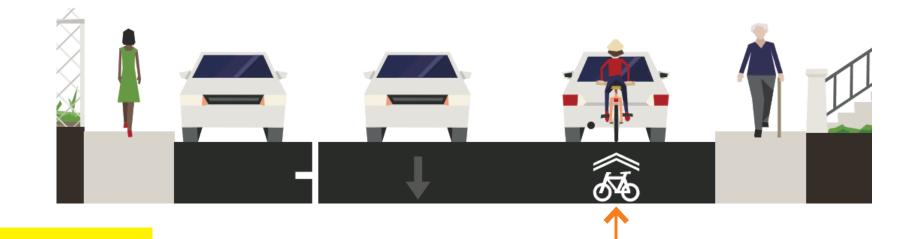




Challenges



Highway crossing



SUMMARY

This <u>0.3 mile</u> section of trail would serve as a residential connector between the Hydro Park to Rock Island Connector and the Rock Island Commuter Route. It would serve as a connection to the City of Rock Island further to the west than the crossing at Rock Island Drive.

Opportunities & Partnerships

- Utilize a "sharrow" road section.
- Connect other trail sections together to create a looped system.
- Partner with WSDOT on a design to develop a non-motorized undercrossing that could involve raising the profile of SR 28.
- · Total Project Cost Opinion \$3,552,000 (2023 Dollars)



existing Apple Capital Loop tunnel in East Wenatchee

What's a "sharrow"?

A sharrow is a shared lane environment for bicycles and automobiles. It reinforces the legitimacy of bicycle traffic on the street and recommends proper cyclist positioning. They are primarily used where there is not space for bike lanes or on low speed, low traffic volume roadways.





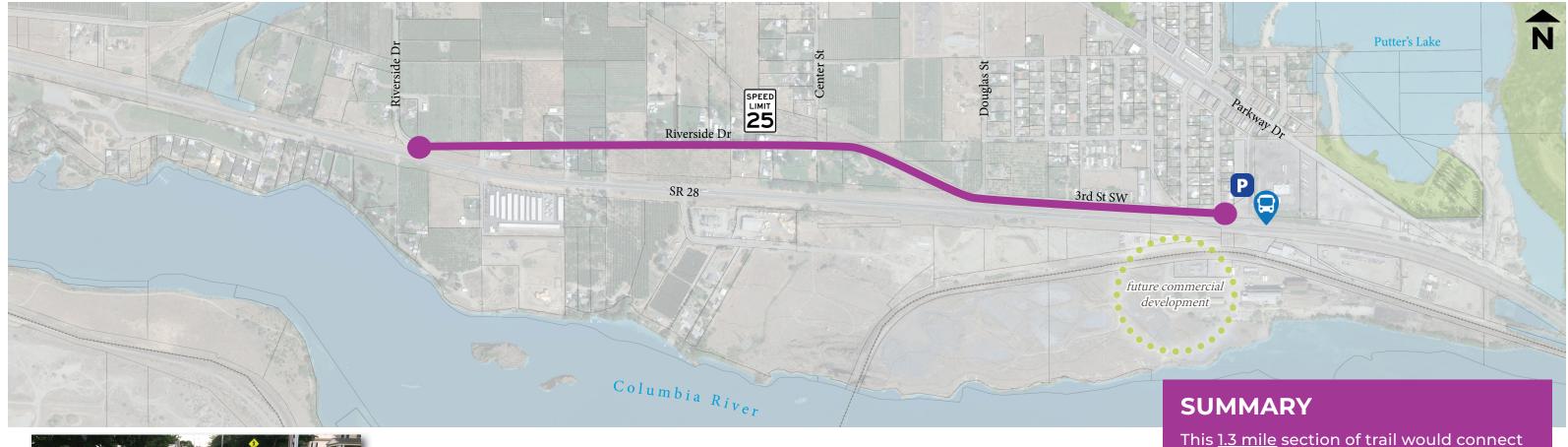
RIVERSIDE DRIVE CONNECTOR A













What's a "sharrow"?

A sharrow is a shared lane environment for bicycles and automobiles. It reinforces the legitimacy of bicycle traffic on the street and recommends proper cyclist positioning. They are primarily used where there is not space for bike lanes or on low speed, low traffic volume roadways.

Opportunities

- · Utilize a "sharrow" road section.
- · Connect other trail sections together to create a looped system.
- Create a bypass for the Hydro Park to Rock Island Connector for those who feel more comfortable further off the highway.
- · Potential future residential connection to Rock Island Industrial Redevelopment Site.
- Total Project Cost Opinion \$170,000 (2023 Dollars)



RIVERSIDE DRIVE CONNECTOR B

Rock Island Loop Trail Integration Plan





the Riverside Drive Connector A trail to the east end of town. This would serve as a residential connector to other trail sections.





ROCK ISLAND

Appendix A. Proposed Trail **Segment Detail Sheets**







Appendix B. Cost Opinion Documents







Client: City of Rock Island

Project: Loop Trail Integration Plan

Section: SR 28 Hydro Park to Rock Island Connector

Length (Miles) 5.2 Cost/Mile: \$3,182,885

Trail Type A: Separated Trail (A)

> Length: 4154 Cost Per Ft \$275

Cost of Trail Type per Segment \$1,142,350

Shared Use Pathway (Separated from Highway) (B) Trail Type B:

> Length: 15554 Cost Per Ft \$350

Cost of Trail Type per Segment \$5,443,900

Trail Type C: Shared Use Pathway (horizontally separated from Highway) ©

> Length: 2001 Cost Per Ft \$350

Cost of Trail Type per Segment \$700,350

Shared Use Pathway (horizontally separated with Barrier) (D) Trail Type D:

> Length: 6518 Cost Per Ft \$425

Cost of Trail Type per Segment \$2,770,150

Trail Type E: **Barrier Protected & Cantilevered Pathway E**

> 651 Length: Cost Per Ft \$1,500

Cost of Trail Type per Segment \$976,500

Construction Costs \$11,033,250 Construction Contingency (Planning Level) 20% \$2,206,650

Construction Administration \$1,059,192

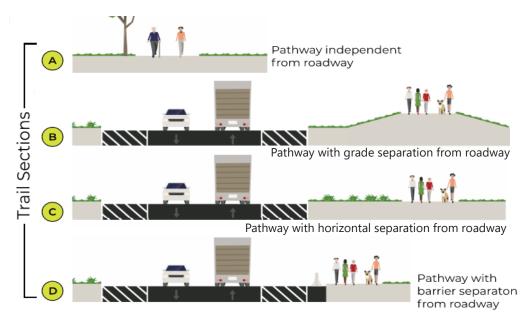
Right of Way 5% \$661,995 **Preliminary Engineering** 12% \$1,588,788

Estimated Project Cost

PE	\$1,589,000
RW	\$662,000
CN	\$14,300,000

Total \$16,551,000 (2023 Dollars)





Assumptions:

The roundabout at Rock Island Road is a separate project. SR28 does not need re-aligned and/or channelization remains the same





City of Rock Island Client:

Project: Loop Trail Integration Plan

Section: **Rock Island Commuter Route**

Length (Miles) 1.5 Cost/Mile: \$4,953,333

Trail Type: Full Street Improvements (2 Bike Lanes and 2 Sidewalks)

> Length: 3271 Cost Per Ft \$1,200

Cost of Trail Type per Segment \$3,925,200

Trail Type B: Half Street Improvements (1 sidewalk, 2 bike lanes)

> Length: 1332 Cost Per Ft \$900

Cost of Trail Type per Segment \$1,198,800

Trail Type C: ReChannelization to remove parking and add Bike Lanes

> Length: 3200 Cost Per Ft \$40

Cost of Trail Type per Segment \$128,000

\$5,252,000 **Construction Costs** Construction Contingency (Planning Level) \$787,800 15% **Construction Administration** \$483,184 Right of Way 3% \$181,194

Preliminary Engineering \$724,776 12%

Estimated Project Cost

PE	\$725,000
RW	\$182,000
CN	\$6,523,000

\$7,430,000 (2023 Dollars)

Assumptions:

Riverside Drive to Center Street: Full rebuild to incorporate sidewalks on both sides and have bike lanes.

Center Street to Douglas Street: Half street improvements to widen for bike lanes and adding one sidewalk to the south side.

Douglas Street to SR 28: Rechannelization of the existing lanes to remove street side parking and add bike lanes in both direcitons





City of Rock Island Client:

Project: Loop Trail Integration Plan

Section: **Rock Island Lake Loop**

Cost/Mile: \$3,450,000 Length (Miles) 1.7

Trail Type A: Separated Trail (A)

> 6610 Length: Cost Per Ft \$275

Cost of Trail Type per Segment \$1,817,750

Trail Type B: Half Street Improvements (1 sidewalk, 2 bike lanes)

> Length: 2000 Cost Per Ft \$1,000

Cost of Trail Type per Segment \$2,000,000

Construction Costs \$3,817,750 Construction Contingency (Planning Level) \$763,550 20% **Construction Administration** 8% \$366,504 8% \$366,504 Right of Way **Preliminary Engineering** 12% \$549,756

Estimated Project Cost

PE	\$550,000
RW	\$367,000
CN	\$4,948,000

\$5,865,000 (2023 Dollars)





Assumptions:

Garden Ave/Idaho Avenue would be a half street improvement to add 2 bike lanes and 1 sidewall Land easements and negotiations would be required for the independent trail thru the PUD properties





Client: **City of Rock Island**

Project: **Loop Trail Integration Plan**

Section: **Rock Island Commuter Route 2**

Cost/Mile: \$8,626,154 Length (Miles) 1.3

Half Street Improvements (1 sidewalk, 2 bike lanes) Trail Type:

> Length: 7300 Cost Per Ft \$1,000

Cost of Trail Type per Segment \$7,300,000

Trail Type B:

Length: Cost Per Ft

Cost of Trail Type per Segment \$0



Construction Costs \$7,300,000 Construction Contingency (Planning Level) 20% \$1,460,000 **Construction Administration** \$700,800 Right of Way 8% \$700,800 **Preliminary Engineering** 12% \$1,051,200

Assumptions:

Higher risk of right of way impacts

Estimated Project Cost

PE	\$1,052,000
RW	\$701,000
CN	\$9,461,000

Total \$11,214,000 (2023 Dollars)





City of Rock Island Client:

Project: **Loop Trail Integration Plan** Section: **Riverside Drive Connector A**

Length (Miles) Cost/Mile: \$11,840,000 0.3

Trail Type A: SR 28 Undercrossing

> 150 Length: Cost Per Ft \$15,000

Cost of Trail Type per Segment \$2,250,000

Trail Type B: ReChannelization to remove parking and add Bike Lanes

> Length: 1550 Cost Per Ft \$40

Cost of Trail Type per Segment \$62,000

Construction Costs		\$2,312,000
Construction Contingency (Planning Level)	20%	\$462,400
Construction Administration	8%	\$221,952
Right of Way	8%	\$221,952
Preliminary Engineering	12%	\$332,928

Estimated Project Cost

PE	\$333,000
RW	\$222,000
CN	\$2,997,000

Total \$3,552,000 (2023 Dollars)

Assumptions:

This estimate includes the cost of raising SR 28 approximately 6-ft to install a 3 sided structure under SR28





Client: City of Rock Island

Project: **Loop Trail Integration Plan** Section: **Riverside Drive Connector B**

Cost/Mile: Length (Miles) 1.3 \$130,769

Trail Type A: ReChannelization to add Bike Lanes/sharrows

> Length: 6400 Cost Per Ft \$20

Cost of Trail Type per Segment \$128,000

Trail Type B:

Length: Cost Per Ft

Cost of Trail Type per Segment \$0

\$128,000 **Construction Costs** Construction Contingency (Planning Level) \$12,800 10% **Construction Administration** 8% \$11,264 Right of Way 0% \$0 Preliminary Engineering 12% \$16,896

Estimated Project Cost

PE	\$17,000	
RW	\$0	
CN	\$153,000	

Total \$170,000 (2023 Dollars)

Assumptions:

Channelization improvements only to create a sharrow road and or painted bike lanes (edge lines Also includes additional signing





