December 3rd, 2025

South Hill Mobility

Overview

1. Meet the Team
2. Project Objectives
3. Potential Solutions
4. Pros and Cons
5. Pedestrian Sidewalk Improvements
6. Closing Remarks

Introductions

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Project Objective

South Hill's main road, Meridian Ave is congested, and there are few ways of getting around South Hill without a car.

Our objective is to suggest a transportation proposal for improvements to Meridian Ave as well as the surrounding areas that would help relieve the stress on Meridian, and give the community more ways of getting around.

Project Goals

Our project goal is to create a detailed proposal containing recommendations on how to reduce congestion within South Hill, particularly along Meridian using various strategies, including, but not limited to:

Project Goal 1

Traffic & Safety Improvements

- Limiting left turns into and out of businesses along Meridian
- Reducing the number of Curb Cuts

In an effort to encourage traffic onto adjacent streets.

Project Goal 2

Pedestrian Improvements

Making it safe and pleasant to walk in South Hill, especially from residential to commercial areas.

Project Goal 3

Bike Improvments

Improving bicycle infrastructure options to better connect neighborhoods to the central spine of Meridian, to schools, and to other neighborhoods.

Project End Product

By the end of this presentation, you will receive:

- List of pedestrian sidewalk improvements with examples
- Ideas for curb cut reductions, block redesign
- Potential street connections to enhance pedestrian mobility
- Map of current and potential bike paths
- Pros and Cons for each potential solution

Proposed Solutions

Proposed Solutions:

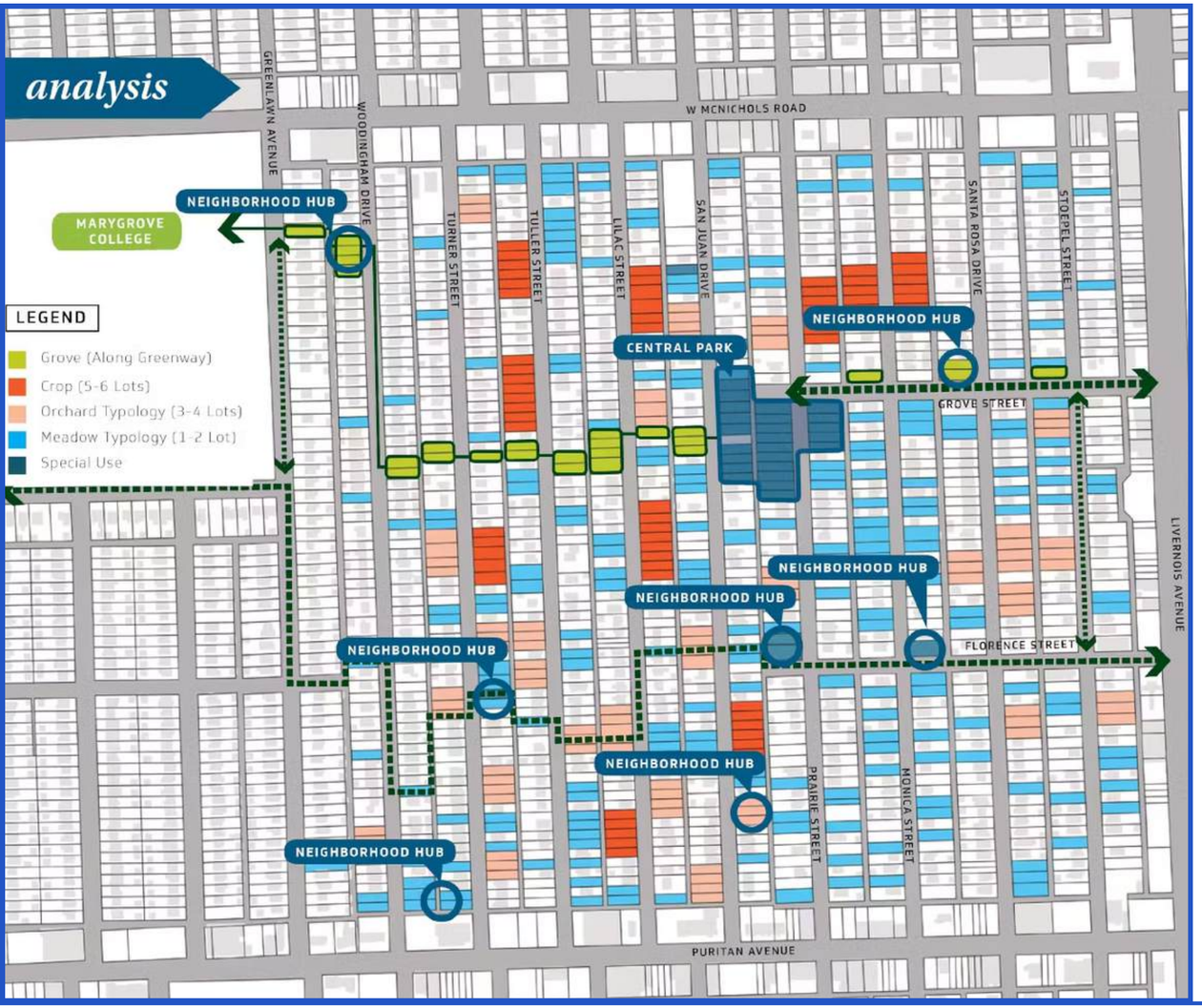
Expanded Bike Trails

South Hill, as well as Pierce County in general, has a lack of bicycle infrastructure that makes it difficult to use modes of transportation other than a car.

Studies have shown that for Americans, 25% of all car trips are one mile or under. Bike infrastructure has proven to be a good solution to reduce short car trips and ease congestion along Meridian, which is the top complaint we hear from residents

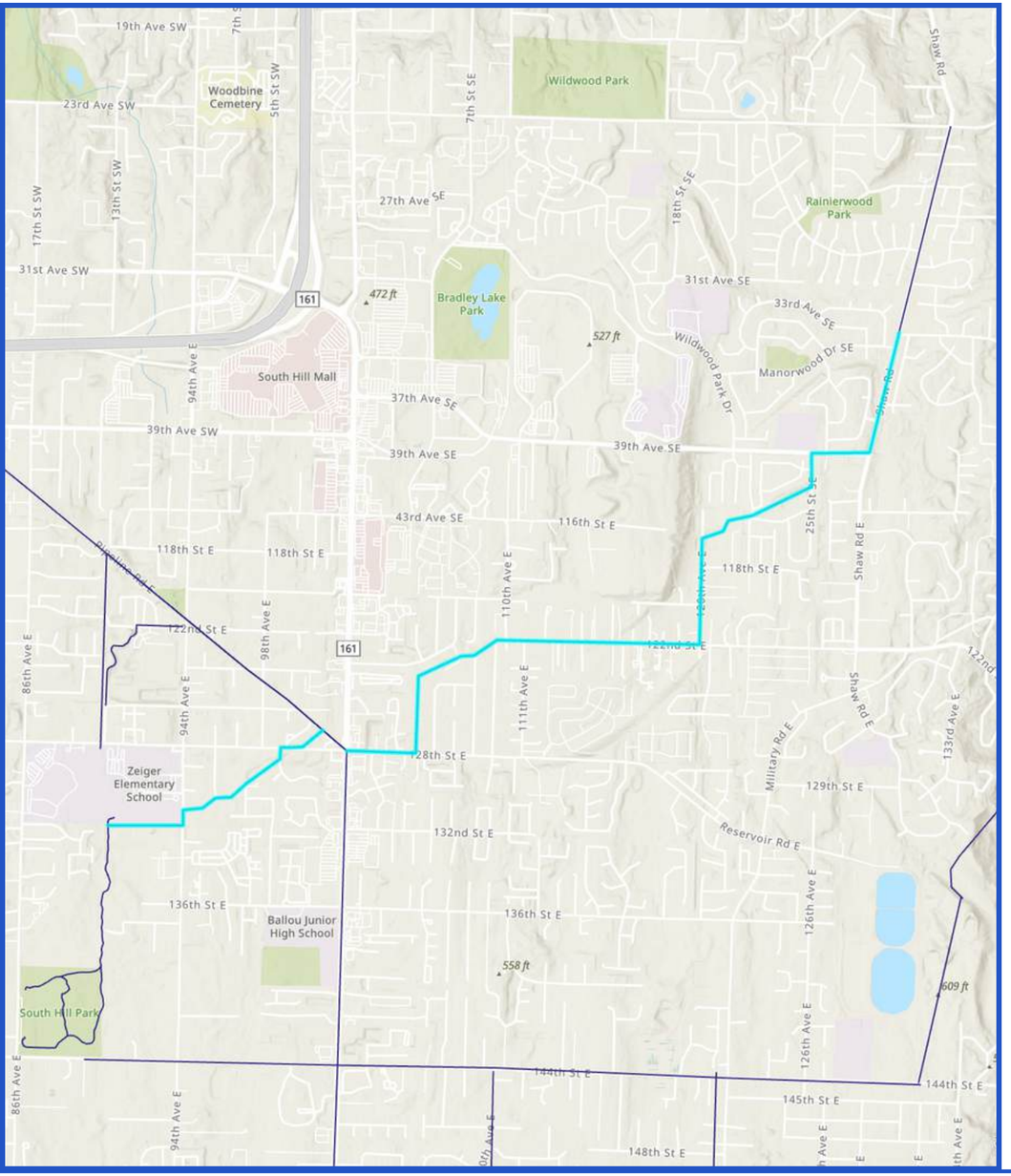
South Hill has a number of good corridors to develop bike lanes on, and Pierce County has an ambitious long range bike plan.

Case Study:
Expanded Bike Trails



Fitzgerald neighborhood Detroit created a greenway through abandoned lots, high community support, social benefits

- Created parks when veering through abandoned lots
- connected community assets
- overall very successful



Proposed Solutions:

Expanded Bike Trails

New bike trail under utility Right of Way

- Would connect existing and future bike routes
- Would connect community assets, make connecting more schools very easy
- Veers out of occupied properties
- Would pave unpaved suburban sidewalks
- Unused properties will be ***turned into community space***

Expanded Bike Trails - Pros & Cons

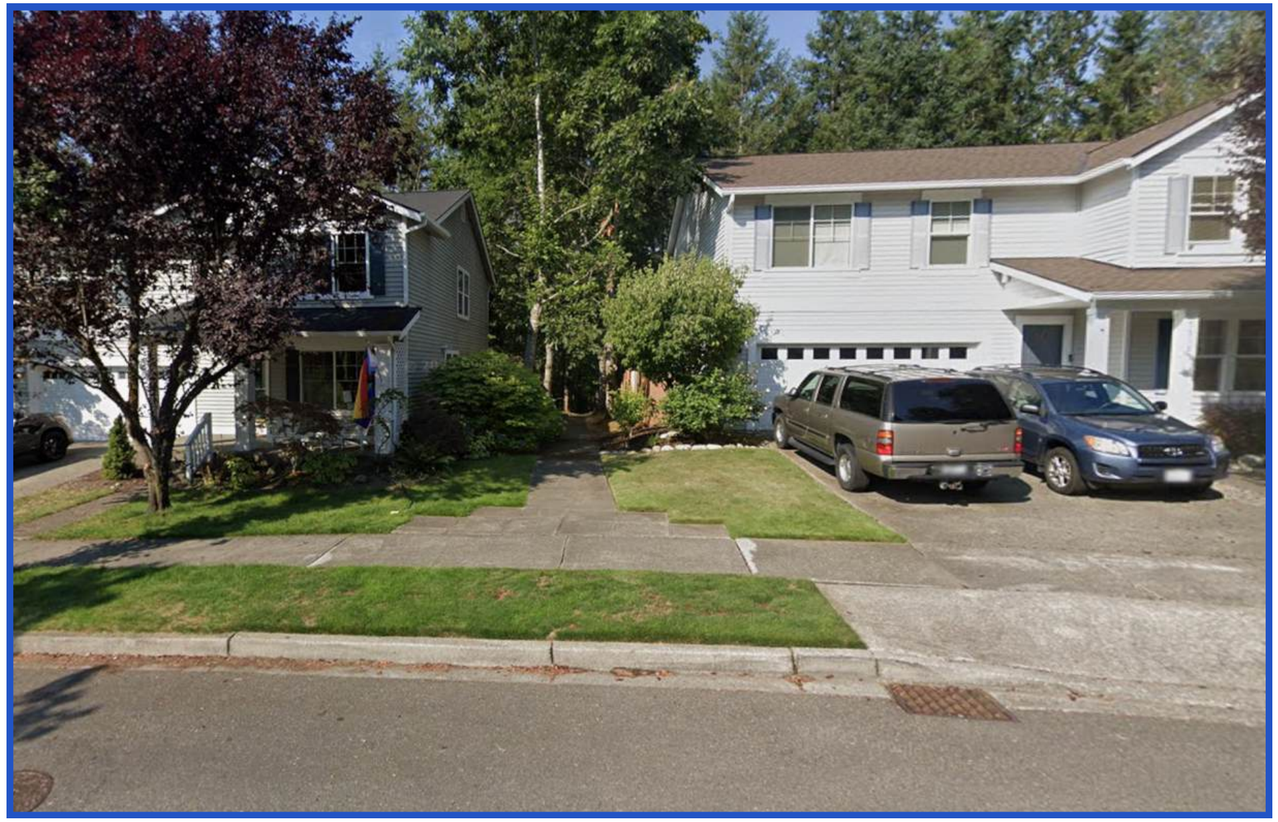
Pros

- Improves community health
- Builds community trust
- Reduces traffic congestion
- Backbone of future bike network
- Everyone loves parks!

Cons

- High construction cost
- Some land acquisition
- Potential for eminent domain
- If inadequate community engagement, may be unpopular

Proposed Solutions: Footpath Connections



Source: Google Maps

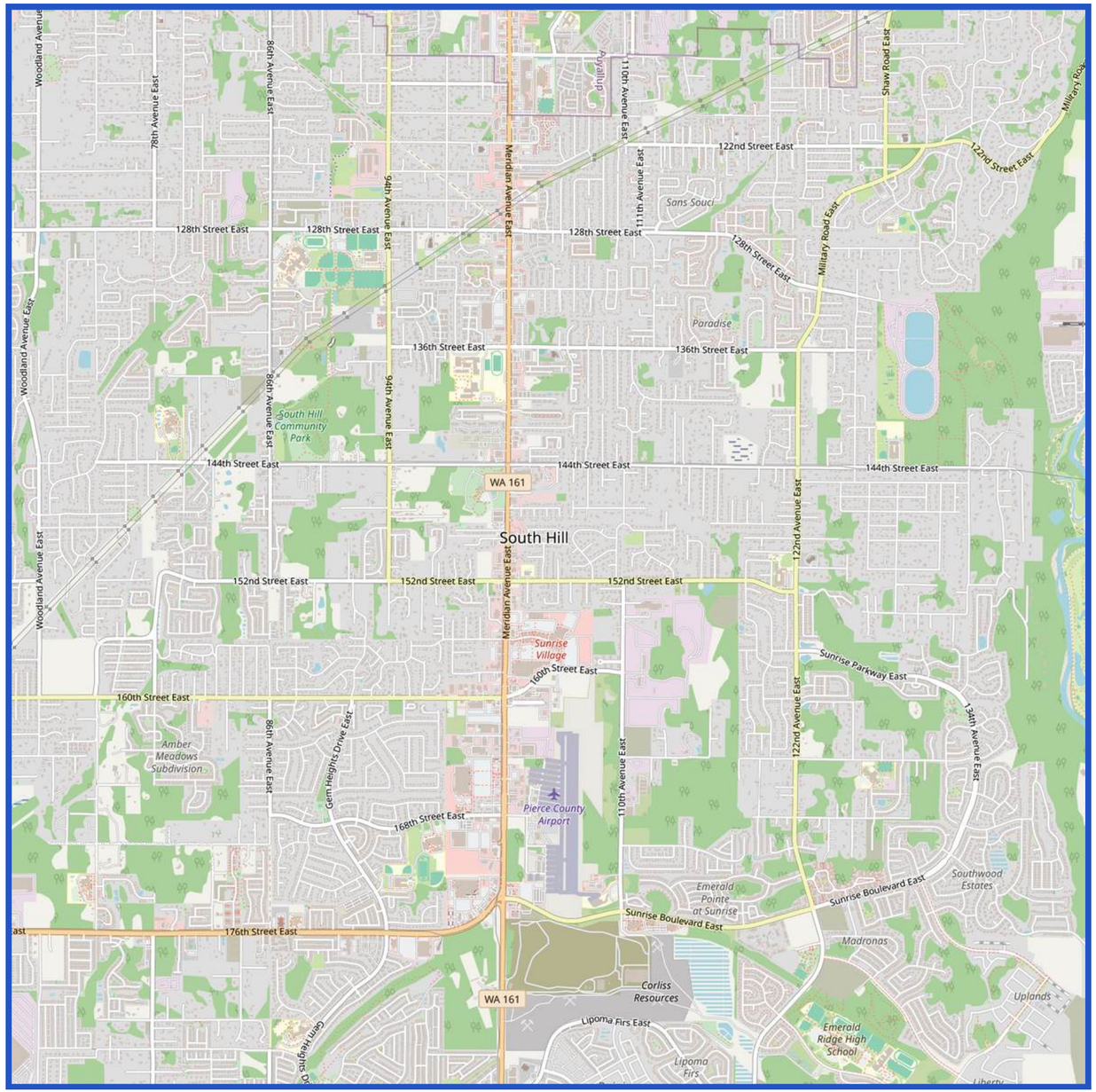
Modern suburban road design prioritizes:

- Isolated communities
- High-speed and high throughput
- Cul-de-sacs and dead ends dissuade non-local traffic

This results in:

- Isolating pedestrians from destinations
- Long commutes due to disconnected grid

Footpaths that cut through suburban blocks may mitigate this connectivity issue while retaining low traffic streets, enabling more non-car trips. (Naghibi , n.d.; Gaynair et. al., 2020)



Source:
Open Street Map

Proposed Solutions: Footpath Connections

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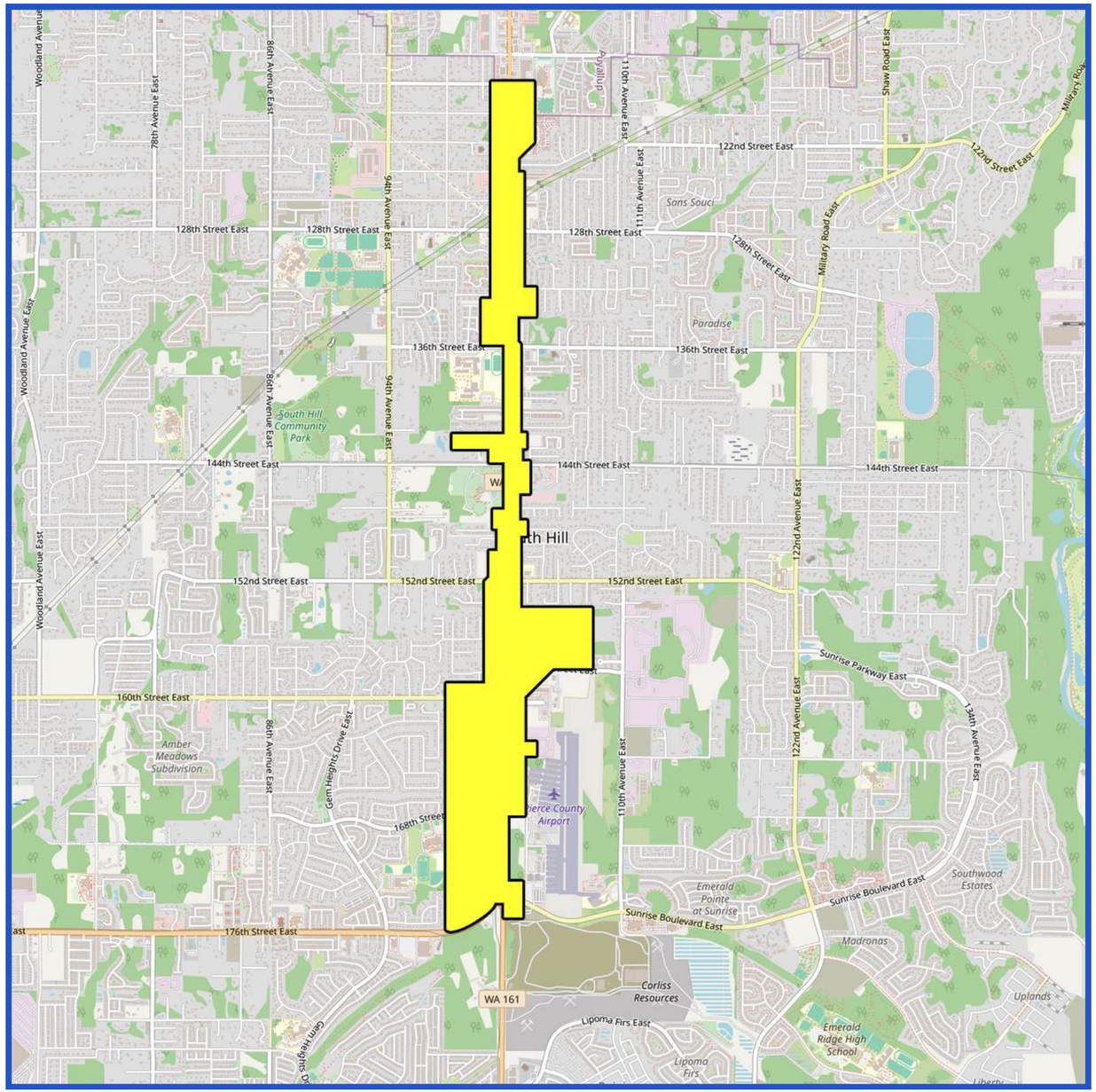
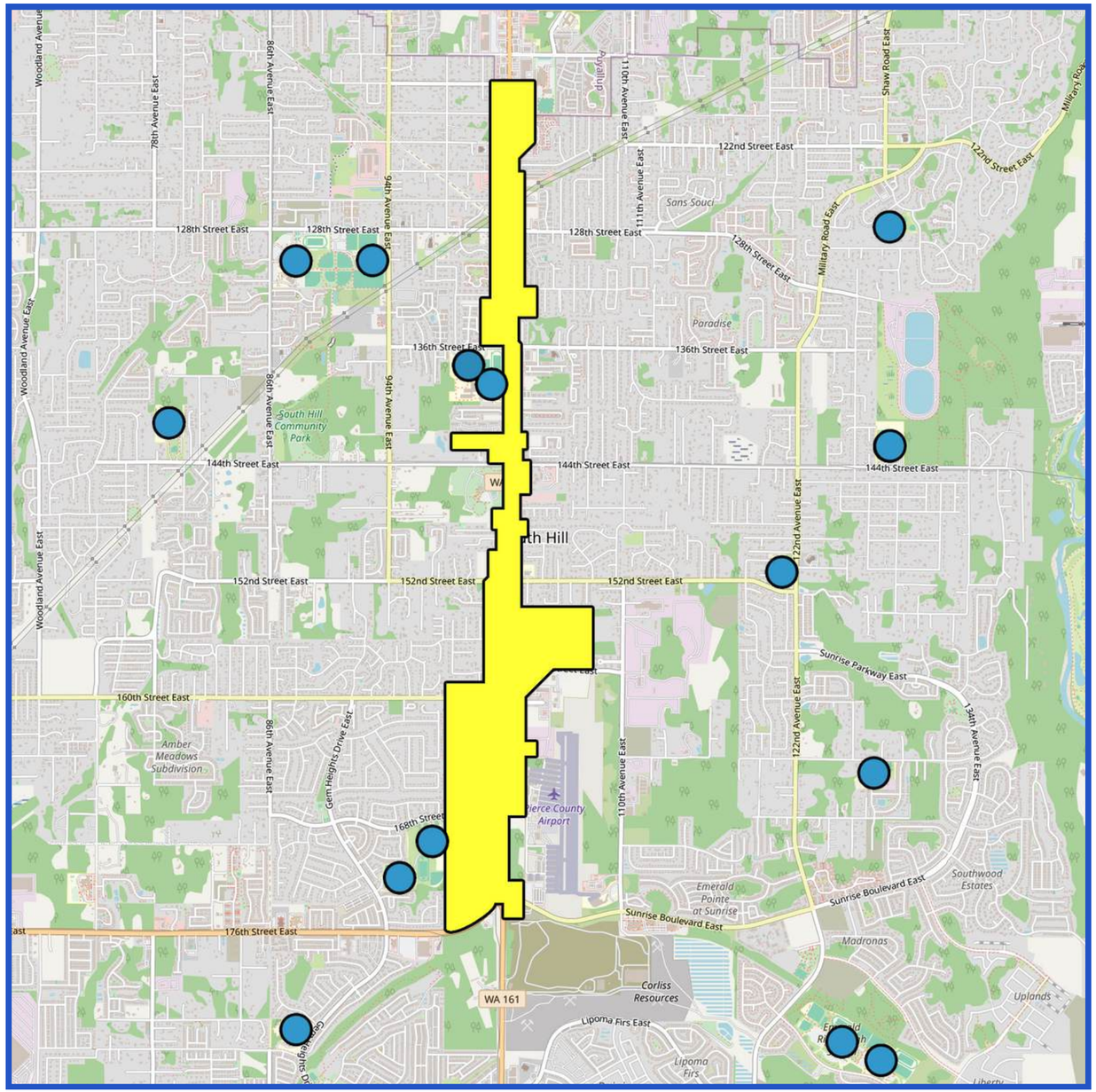


Source:
Open Street Map

Legend

Commercial Activity

Proposed Solutions: Footpath Connections

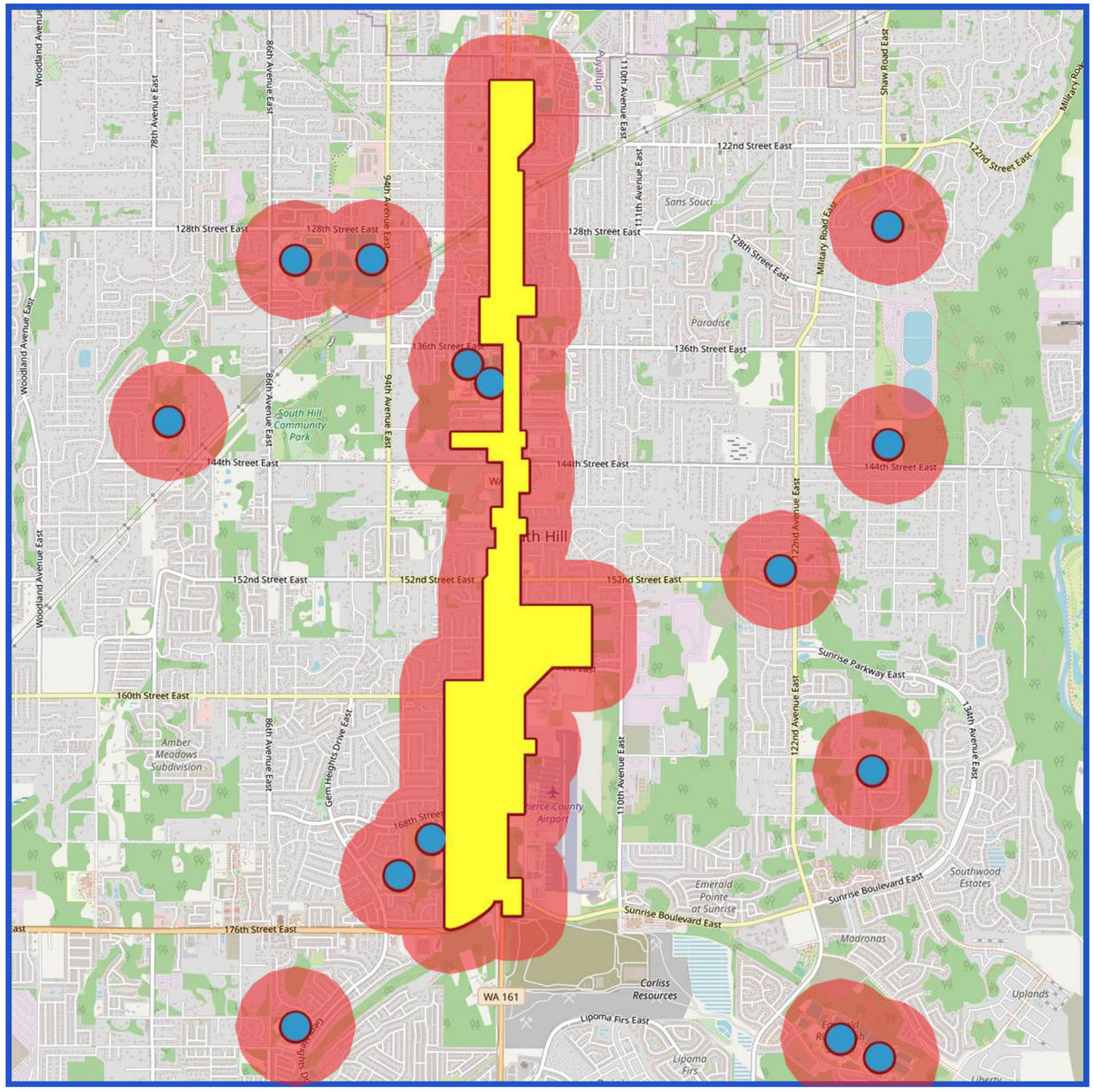


Source:
Open Street Map

Legend

- Commercial Activity
- School Location

Proposed Solutions: Footpath Connections

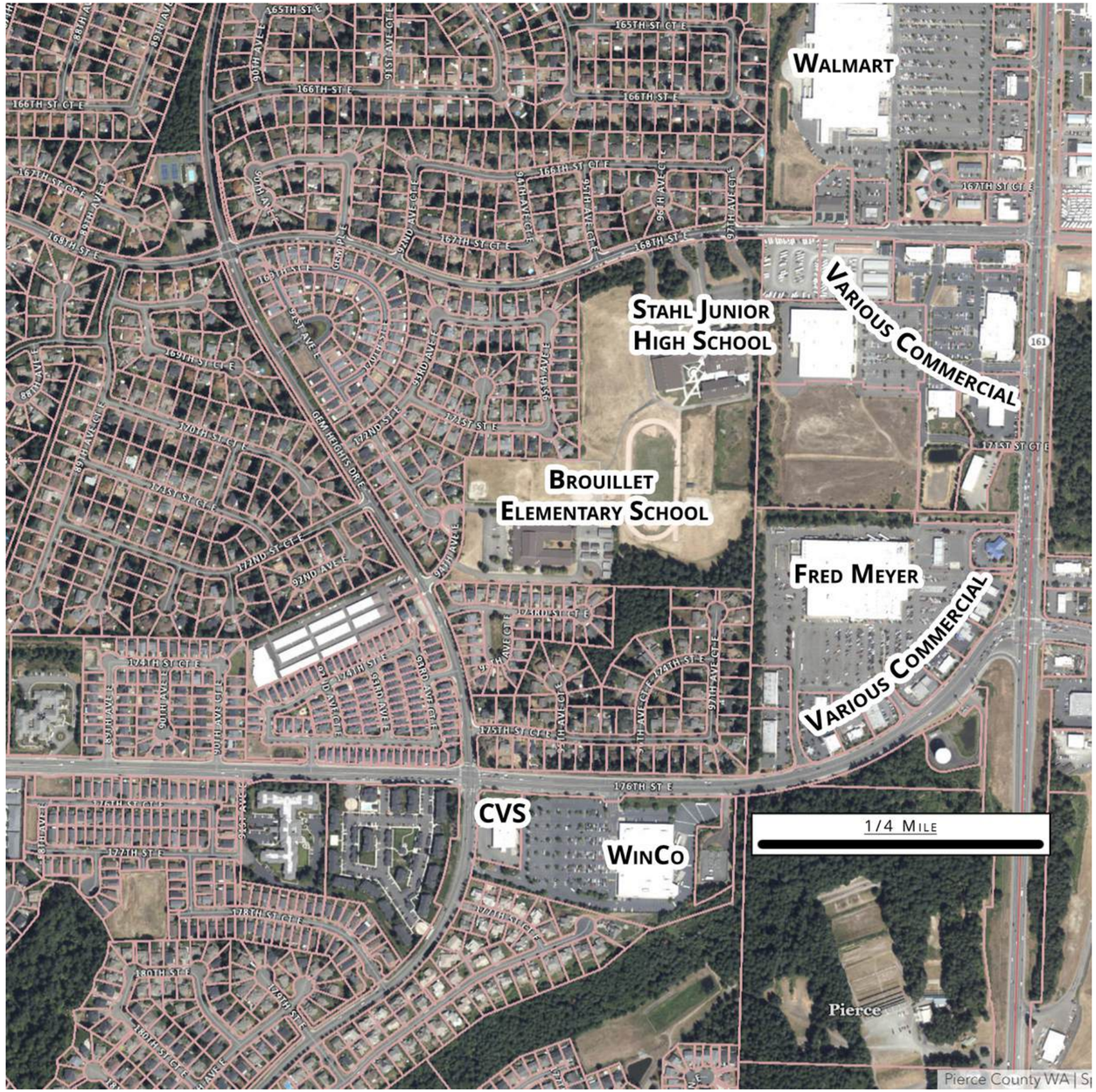


Legend

- Commercial Activity
- School Location
- 1/4 Mile Radius

Source:
Open Street Map

Proposed Solutions: Footpath Connections



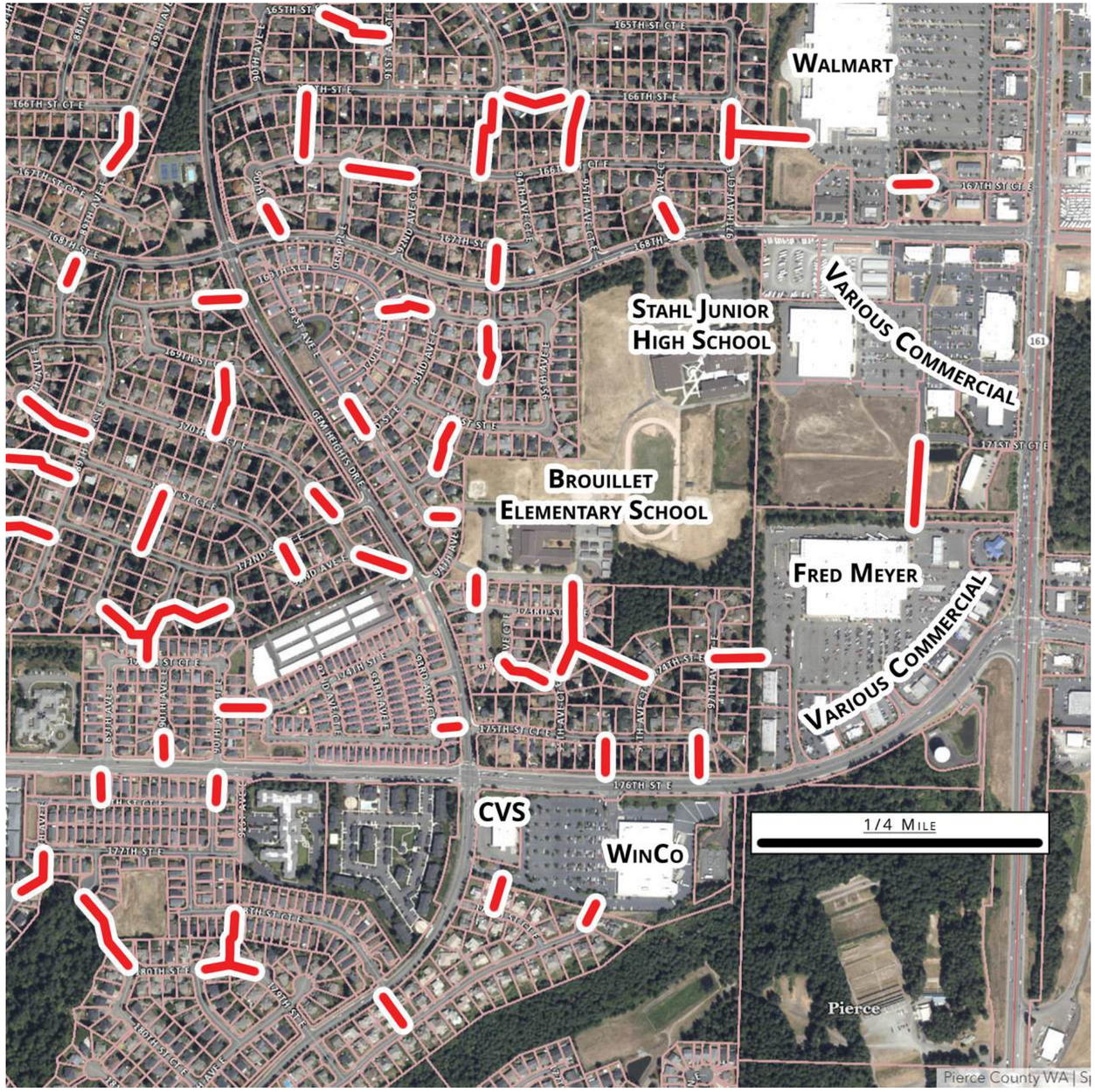
Legend

Property Lines

CVS Point of Interest

Source:
Pierce County
Spatial Services

Proposed Solutions: Footpath Connections



Legend

- Property Lines
- CVS — Point of Interest
- Suggested Path Routes

Source:
Pierce County
Spatial Services

Footpath Connections - Pros & Cons

Pros

- Incorporate community space into pathway design
- focus on health, community, not transit benefits of bike and walking paths
- Use pedestrian/multimodal paths to connect key community assets e.g. Libraries, schools

Cons

- Often requires maintenance
- Reduced privacy
- Residents must relinquish property to the county
    - This later leads to higher development costs
- Would need to acquire parts of homeowner’s property

Proposed Solutions:

Reducing Curb Cuts

Excessive curb cuts along Meridian create safety hazards both for drivers having to make dangerous left turns and pedestrians walking in South Hill. This is backed up by numerous traffic safety studies, which have found a positive correlation between the density of commercial curb cuts, or driveways, and

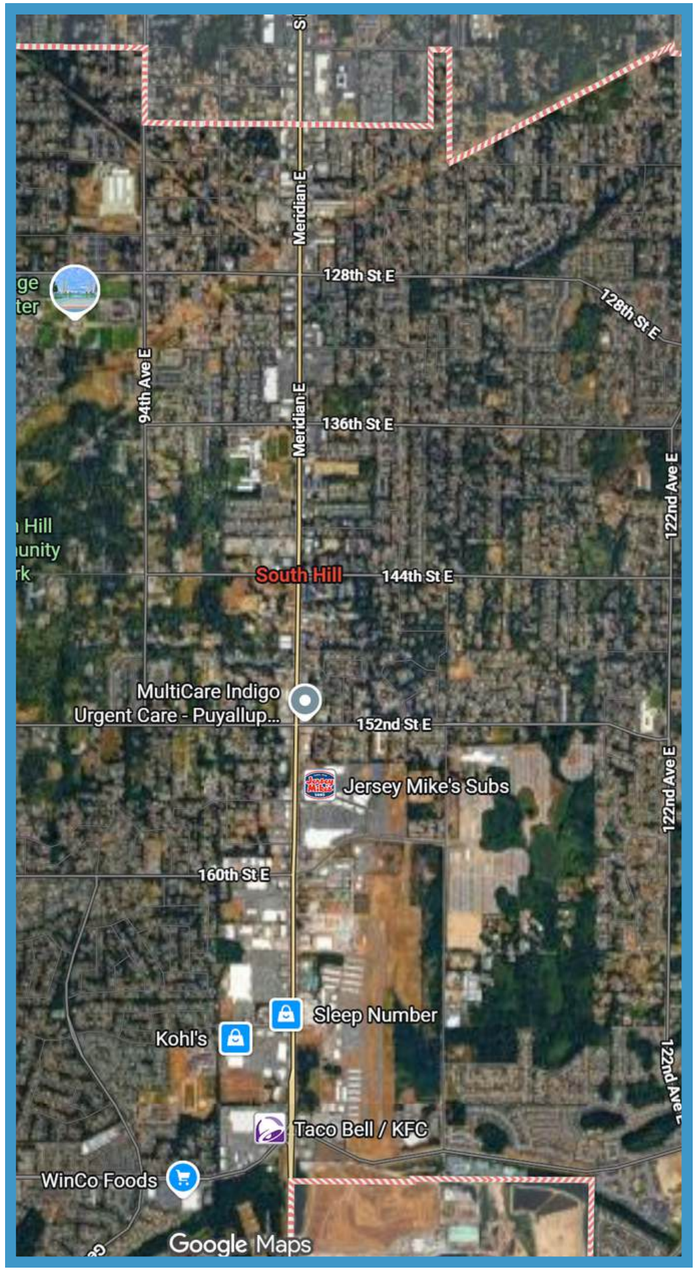
Closing and, if feasible, removing unsignalized curb cuts fronting onto Meridian will improve safety along the road, make walking more attractive, and also reduce traffic congestion.

Access to businesses will be diverted onto east-west arterials as seen in this diagram. This will effectively isolate Meridian from any dangerous unsignalized turning maneuvers.

Williamson, Michael, and Huaguo Zhou. “A Study of Safety Impacts of Different Types of Driveways and Their Density.” Procedia - Social and Behavioral Sciences 138 (July 2014): 576–83. https://doi.org/10.1016/j.sbspro.2014.07.241.

Proposed Solutions:

Reducing Curb Cuts



Here are our proposed curb cut reductions for the extent of Meridian that is within the South Hill Jurisdiction.

The photo on the right is an example of the very start of Meridian.

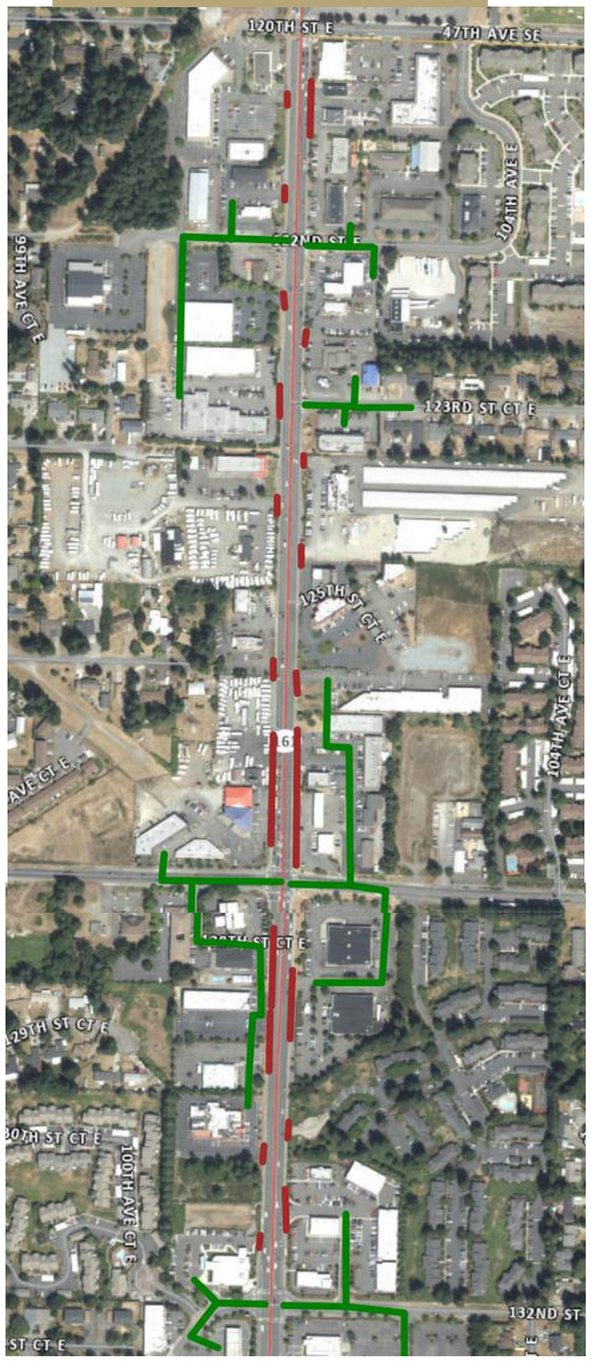
Additionally, we are providing a reference photo of the extent of Meridian the group is looking at.

- This means we are looking from 120th Street to 176th Street/Sunset Boulevard

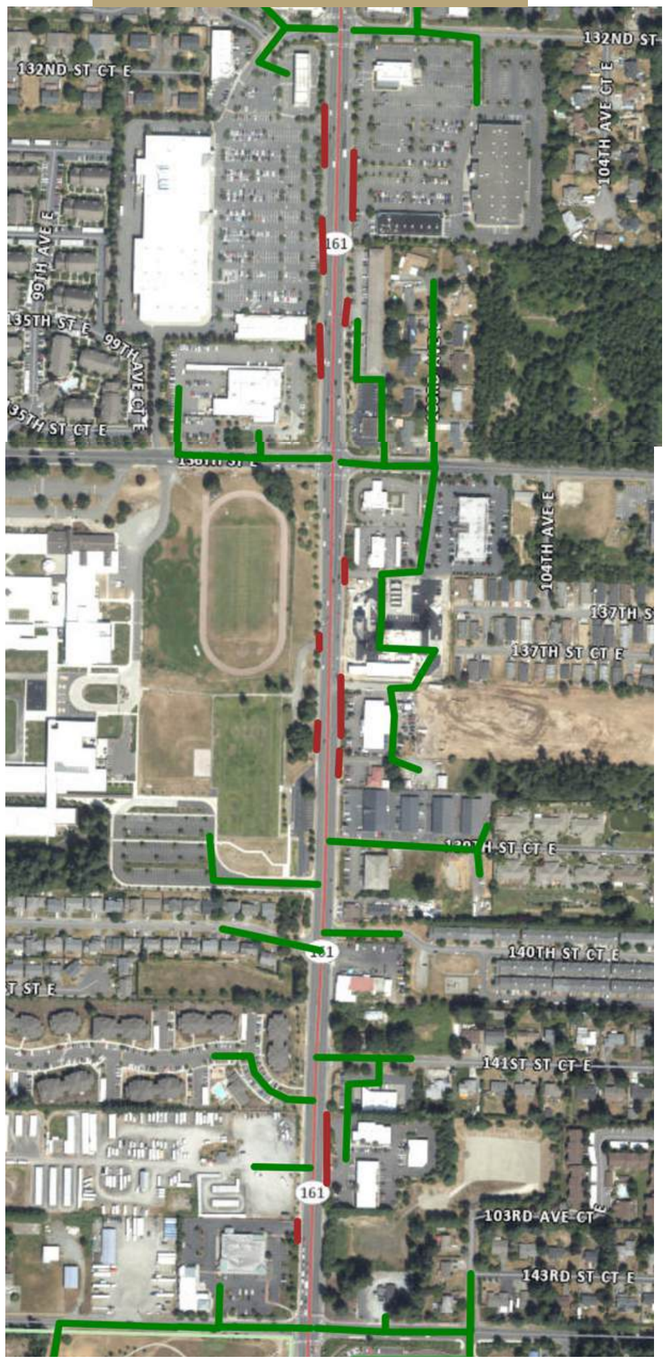
Red lines denote areas on the sidewalk where there would be removal of curb cut/driveways.

Red lines denote areas on the sidewalk where there would be removal of curb cut/driveways.

Beginning in 120th Street



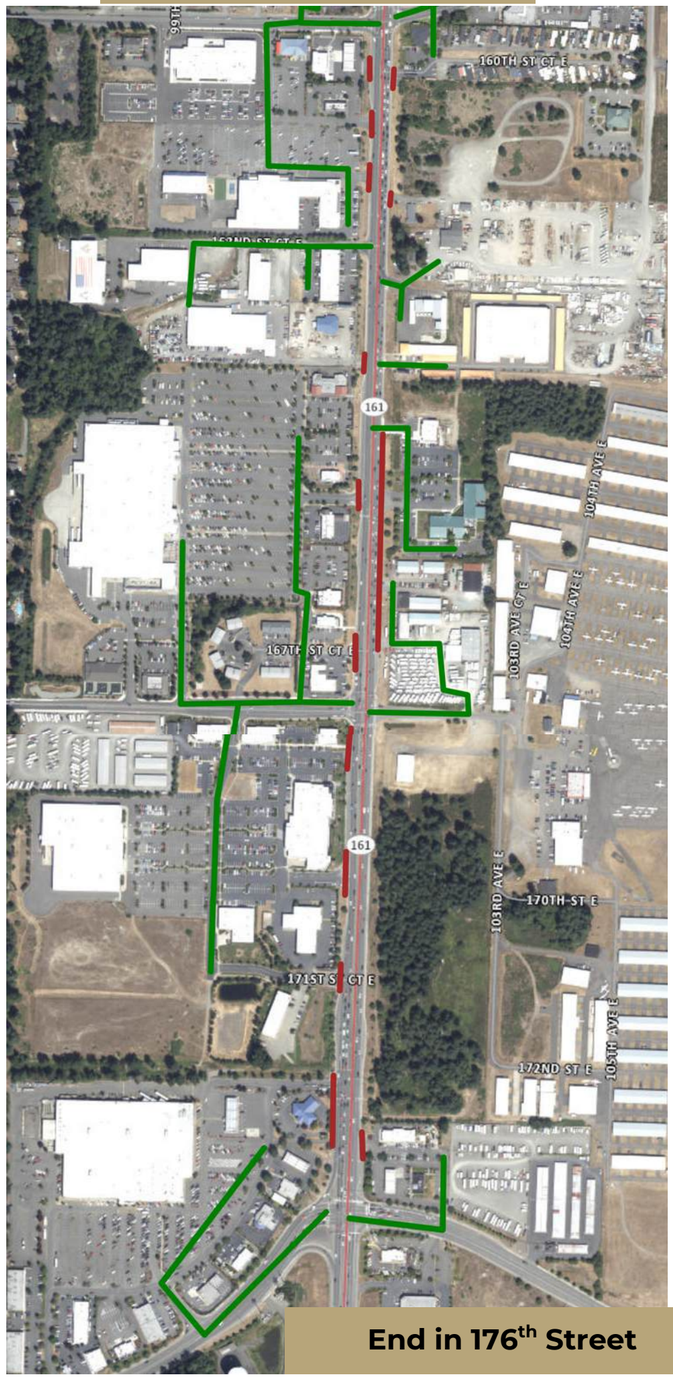
Beginning in 132nd Street



Red lines denote areas on the sidewalk where there would be removal of curb cut/driveways.

Beginning in 144th Street

Beginning in 160th Street



End in 176th Street

Potential Design

Case Studies

Both this commercial street in Tucson Arizona, and this school in Minneapolis are examples of how planters, posts and other “temporary” infrastructure can be used to calm traffic and take space for pedestrians.

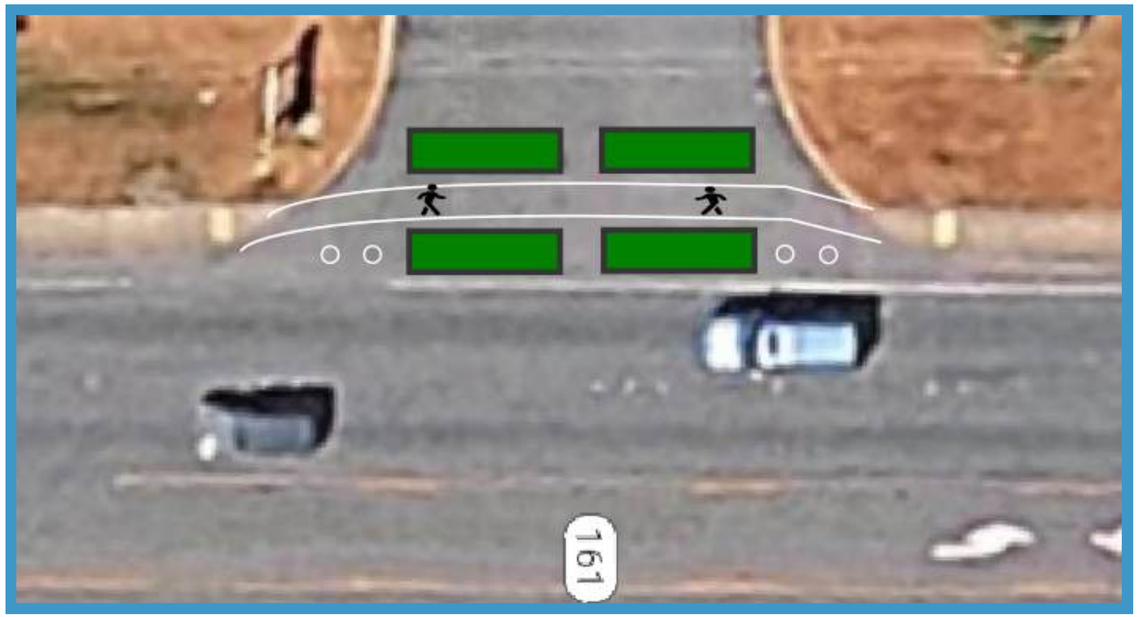
Adapting and using this existing, recognizable, and inexpensive design will help make this project cheaper, quicker and more achievable.

Potential Design

New sidewalk infrastructure is expensive and burdensome on the county, so a more tactical solution using planter boxes, flex posts, and street markings can be a cheap interim solution, before the county or a developer can redo the road and sidewalk

Current Condition

Future Condition



Reducing Curb Cuts - Pros and Cons

Pros:

- Safer pedestrian experience
- Less left turn car traffic
- More consistent traffic flow/speed
- Congruent with WSDOT’s goals

Cons:

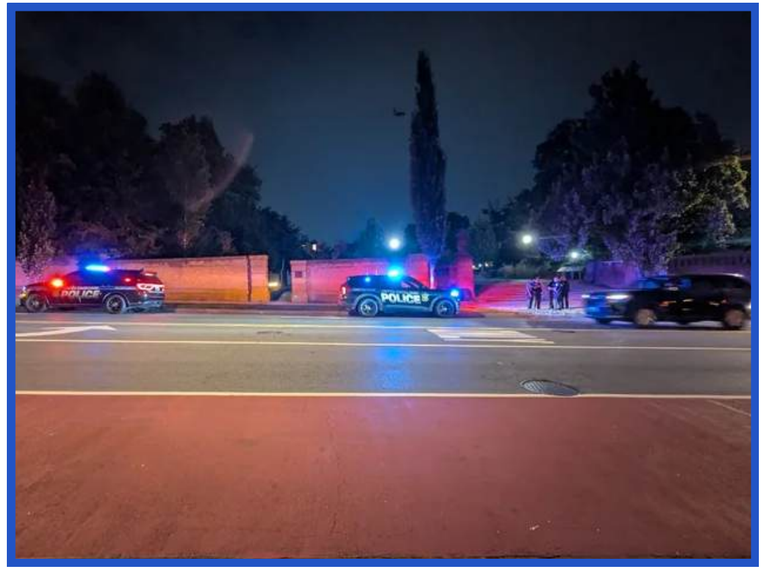
- Politically dubious
- Pushback from residents and businesses
- Complicated roadway regulatory structures

Pedestrian Sidewalk Improvements

Pedestrian Sidewalk Improvements:

Topics

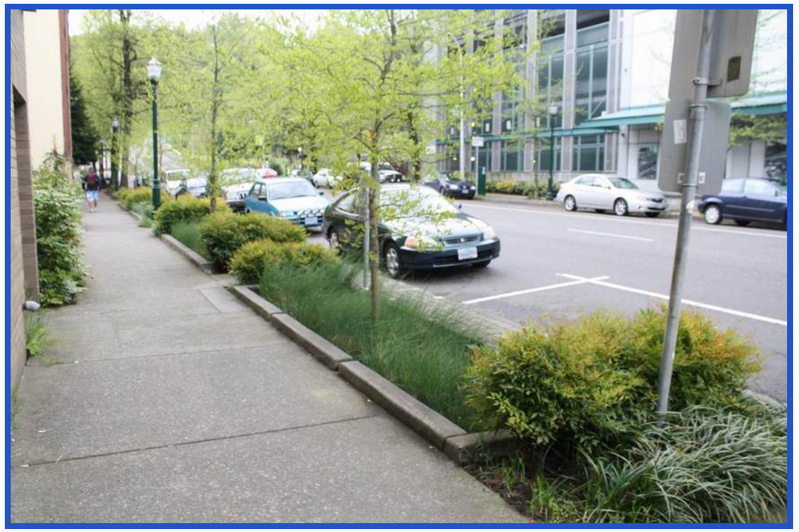
- Lighting
- Protected sidewalks
- Tree Canopy Cover
- ADA Improvements



Lighting:

- Expanding lighting can increase pedestrian visibility for cars, pedestrian perceived safety.
- A study found that by increasing the intensity of horizontal light resulted in an increase of available time for drivers to respond (Freedman, et al. 1975).
- Different displays of sidewalk & street lighting can affect how much pedestrians can see and feel safe around other pedestrians.
    - Lights that point directly down make it hard to see outside of the illuminated area, whereas lights that illuminate up or all round spread the light out better for pedestrians to see farther than when the light is directly pointing at something

Janoff, M. S., Freedman, M., & Koth, B. (1977). Driver and Pedestrian Behavior-The Effect of Specialized Crosswalk Illumination. Journal of the Illuminating Engineering Society, 6(4), 202–208. https://doi.org/10.1080/00994480.1977.10747815

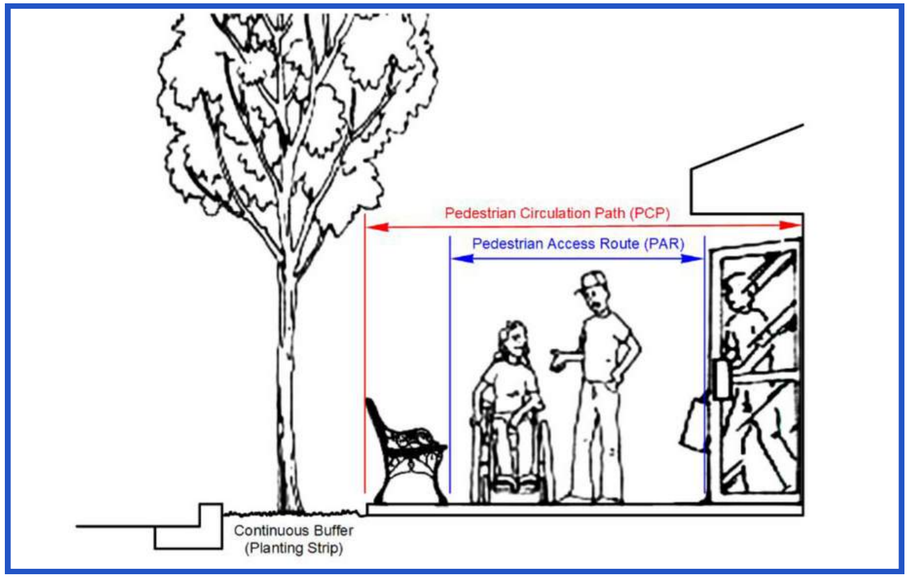


Sidewalk Buffer:

Protected sidewalks can come if many forms, for the sake of this presentation we are talking about sidewalk buffers.

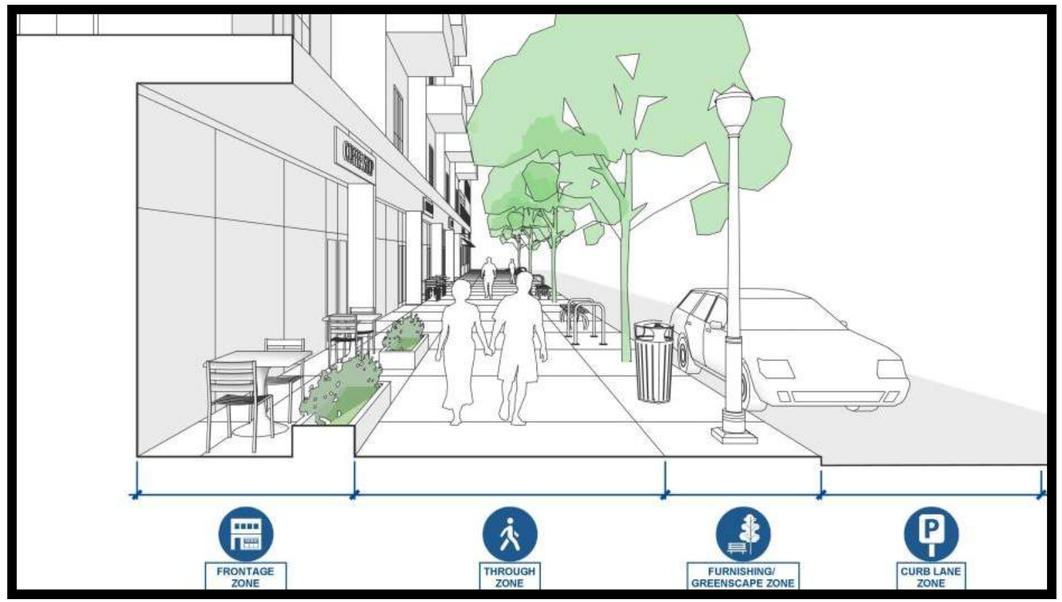
Landscaping can be a very useful way separate the pedestrian from the vehicle right of way. It also helps make the pedestrian feel more removed from the street.

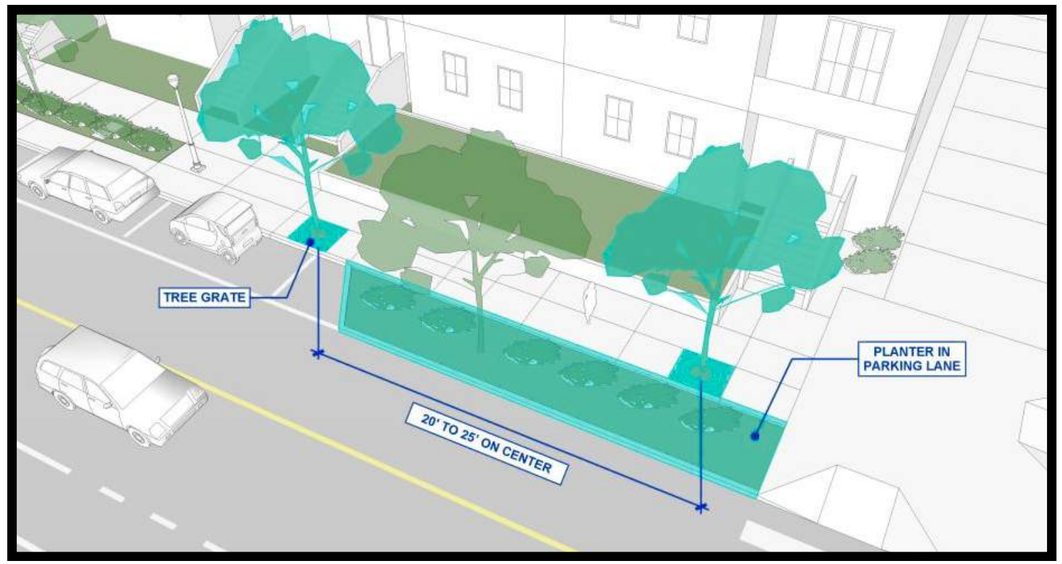
Although landscaping buffers do not dramatically effect the speed of a car if it were to loss control and leave the street, it does help encourage people walk by providing a more enjoyable environment



WSDOT. (2024)

WSDOT. (2024). Pedestrian Facilities. WSDOT Design Manual M 22-01.23, Chapter 1510. https://wsdot.wa.gov/publications/manuals/fulltext/M22-01/1510.pdf#page=1.58



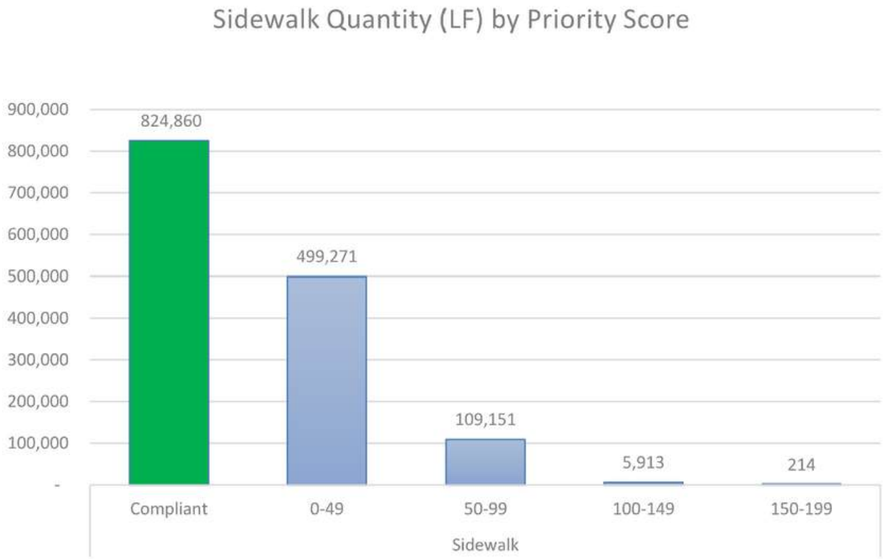


Tree Canopy Cover:

Tree canopy cover not only beautifies the sidewalk but also provides added coverage for pedestrians from sun and rain.

- Increasing the tree canopy cover for South Hill can help entice residents to walk more, expanding walking to work and leisure exercise.
- Tree canopy cover help to regulate sidewalk temperatures during hot summer months. Helping those who rely on this pathway to get to work, stay cool.

Seattle's Canopy Cover—Trees | seattle.gov. (n.d.). Retrieved November 30, 2025, from https://www.seattle.gov/trees/management/canopy-cover



Pierce County Planning and Public Works. (2019). American with Disabilities Act Transition Plan for Public Rights-of-way. p. 23. https://www.piercecountywa.gov/DocumentCenter/View/148229/Adopted-ADA-Transition-Plan-2025-Update_FINAL#page=159.70

Oregon Department of Transportation

ADA Improvements:

Pierce County ADA Sidewalk Compliance

- Width: Sidewalks must be a minimum of 36 inches wide, with exceptions for shorter sections.
- Turns: The walkway needs to be at least 42 inches wide when making a turn and 48 inches wide when leaving the turn.
- Passing Spaces: If the sidewalk is less than 60 inches wide, passing spaces are required every 200 feet.
- Materials: Sidewalks must be made with hard materials like concrete, asphalt, or wood. Loose gravel or unbound materials are not compliant.
- Slip Resistance: Ensure sidewalks are slip-resistant to prevent hazards for users with walking aids.
- Cross Slope equal to or less than 1.5%

There should also be special attention paid to make sure intersection ramps face the correct direction, and don’t lead individuals into the middle of the intersection.

With the ADA Transition Plan, it is imperative that all improvements made to the sidewalks of Meridian comply with ADA requirements.
This will also make it so the infrastructure doesn't not need to be redone in the future to comply with the transition plan.

Pierce County. (2025). American with Disabilities Act Transition Plan for Public Rights-of-way. https://www.piercecountywa.gov/DocumentCenter/View/148229/Adopted-ADA-Transition-Plan-2025-Update_FINAL#page=159.70

Closing Remarks

Summary:

- As a whole these changes will help to reinforce the county's vision for South Hill, along with letting Meridian act as a true local highway instead of a stroad, as well creating a safer walking environment for pedestrians.
- It will improve pedestrian connectivity between residential and commercial areas and also introduce safe and effective bikeways.
- These proposals will make getting around South Hill safer and simpler for every road user, as well as being able to be implemented on top of the new County masterplan.

Thank You

We appricate your feedback through questions at this time.

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