

Washington Street Traffic Calming Demonstration

Informing the Comprehensive Street Program

Transportation Committee Briefing
September 16, 2020

Neighborhood Partnership Thank you!

Washington Street neighbors assembled a small group to work with City Staff.

Many thanks to:

Charlie and Harriet Cannon

Bruce McComas

Dorothy Cotton

Paul Marks

Margaret Takaki



Socially distanced, we met 4 times at
County Courthouse Park

Existing Local Traffic Calming Examples

The City has a history of encouraging traffic calming and it is one of the **top requests of residents.**



Water Street
Lane Constriction



F-Street
Speed Humps and
Medians

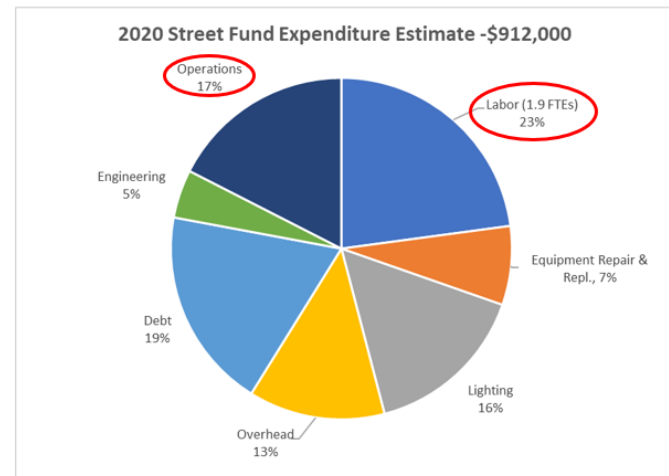


Sheridan Street
Median – School Zone

How can we better support traffic calming in neighborhoods?

Considerations:

- Balance with other needs
- Function of the street
- Safety
- Funding and costs
- Unintended outcomes
- Maintenance
- Community involvement



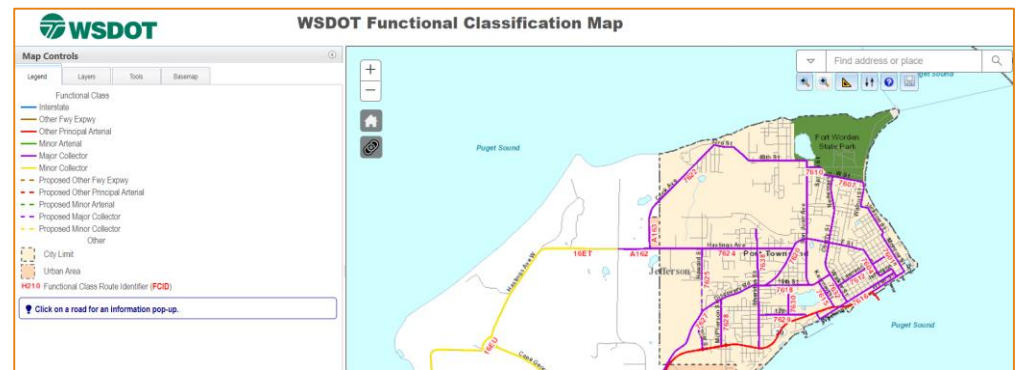
Estimated investment on the ground including labor and materials/services = \$370,000

Comprehensive Street Program

Two Foundational Principles

1. Street function must be evaluated for impacts – City responsibility in terms of managing the transportation network. This principle includes evaluating unintended consequences. Traffic calming does not equate to lowering volumes of arterial streets.
2. Lower vehicle speeds and improve safety. This principle is the root reason for traffic calming.

The City arterial streets are part of the State and National Transportation System



Traffic Calming - Applying Best Available Science

Large open roads with wide shoulders encourage higher speeds. Based on 1950's design principles for moving high volumes of traffic quickly.



Typical Rural Arterial – Not well suited for urban environment

Traffic Calming - Applying Best Available Science

Studies have shown traffic calming is best achieved by changing the driver's experience such that the driver desires to travel slower for safety. Effective traffic calming results in reduced speed without additional enforcement of speed limits.



Narrowing lanes, creating constrictions and the feeling of constriction naturally slows traffic. Water Street is a great example with parked cars. Street trees also create the perception of closed in road.

Washington Street Demonstration Outcomes

1. Example of working in partnership with neighborhood rather than individuals.
2. Development of common understandings.
3. Opportunity to consider options
4. Testing effectiveness – 60 day trial period
5. Funding partnership
 - Neighborhood funding materials
 - City providing labor for installation

Mini-traffic circle example,
common in Seattle



Washington Street Demonstration Details

Working with the neighborhood, 3 options were evaluated.

1. Medians
2. Mini Traffic Circles
3. Radar Board



Other options for the future.

1. Restriping without centerline
2. Speed limit changes – Requires engineering study and Council approval.

Evaluation - Medians

Effectiveness: Medians are effective in slowing traffic by changing sightlines and creating the perception of constriction. F Street is a great example of implementation of medians.

Placement: Placement of medians are challenging due to impacts on adjoining property owner and to the side of the road.

Cost: Medians are estimated at \$10,000 for materials primarily due to the cost of concrete which must be contracted by the City. Other factors such as paving shoulders and drainage add to the cost. This cost assumes that the City will do all the work except concrete forming/pouring and asphalt placement



Evaluation - Mini Traffic Circles

Effectiveness: Modeled after Seattle's traffic circle program, they are effective in slowing traffic by changing sightlines, creating the perception of constriction, and forcing a slow turn when turning off the street. Typically these circles are 13 ft wide; however, due to constraints, we recommend a 6-8' diameter circle.

Placement: Placement of circles depend on the intersection and utility conflicts. Typically, impacts to adjoining property owners are less than medians due to being located in an intersection. Pavement widening may need to happen to support pedestrian traffic and the shoulder.

Cost: Circles are estimated at \$5,000 for materials assuming precast solutions can be utilized. Other factors such as paving shoulders and drainage add to the cost. This cost assumes that the City will do all the work except asphalt placement.



Evaluation – Speed Radar Boards

Effectiveness: Speed radar feedback signs are typically installed for school zones. These measures are effective with enforcement for small areas. They become less effective with time and generally do not calm traffic except for the specific location which they are installed. Speed radar signs typically do not slow traffic below the posted speed.

Placement: These signs can be placed relatively simply when they are solar powered. They are not easily moved once installed and thus placement should be considered carefully.

Cost: Radar feedback signs are estimated at \$5,000 each for materials. This cost assumes that the City will do all the work except asphalt placement.



Preferred Option

The neighborhood preferred option is to go with the two traffic circles and requested re-striping in the coming years.



Ex. Permanent Installation



Ex. Test Installation

Test Installation

We will evaluate speeds and traffic operations over a 60 day trial period.

85th Percentile Speeds in October of 2019 was measured at approximately 28 mph.

Volumes in October 2019 ranged from 3,400 to 3,700 vehicles per day.



Neighborhood Participation

Upon completion of the test period, the Washington Street neighbors are committed to raising funding for a permanent installation.

How does neighborhood participation work across the City given different levels of income and neighborhood coordination?

- Recommend neighborhood mini-grant program
- Encourage neighborhood collaboration
- City would facilitate an open and transparent process

Applying this Demonstration

Utilizing this demonstration project to inform the Comprehensive Street Program, will provide the City Council with information for prioritization of Street funding resources. This demonstration will also illustrate to the public how implementation of traffic calming can be applied across the City in a partnership.

The objective of this demonstration is to garner support for development of a program to continue to effectively implement traffic calming throughout the City.

Questions/Discussion

