Woodbury Avenue, Bartlett Street Traffic Calming Trials

- Public Meeting
- November 8th, 2023



Meeting Agenda

- Introductions
- Woodbury Avenue Speed Cushions
- ► Bartlett Street Mini-Roundabout
- Next Steps
- Questions and Comments

Woodbury Avenue Existing Conditions

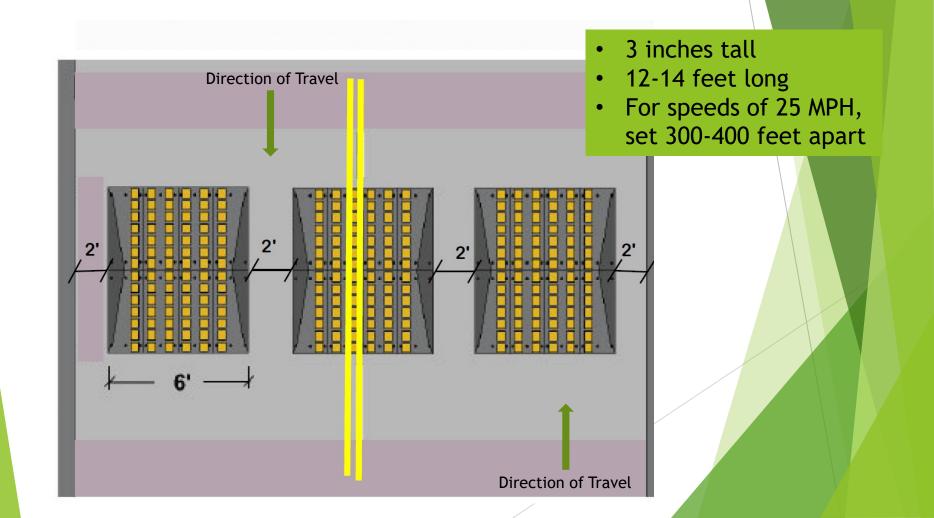
- Posted Speed Limit 25 MPH
- Actual Speeds Without Speed Cushions
 - Average range 28-32 MPH
 - 85th percentile 32-36 MPH
- Meets traffic calming warrants
 - 85th Percentile speeds are ≥ 7-10 MPH over posted limit
 - Average speeds are ≥ 5 MPH over posted limit
 - 5% of speeds are ≥ 10 MPH over posted limit
- ▶ 35 accidents from 2018-2022, from Granite Street to Bartlett Street. No more than one per year on average at highest locations. Not a high crash experience.

Woodbury Avenue Not a Typical Arterial

Characteristic	Typical Arterial Roadway	Woodbury Avenue
High Truck Traffic		×
High Bus Traffic		×
Speeds Over 40 MPH		×
4 lanes of traffic		×
Parallel Local Roads		×
High Traffic Volumes	\	~
Emergency Response Route		✓

Therefore, speed cushions could be suitable.

Speed Cushion Specifications



Woodbury Avenue Project Timeline



1st Public Meeting

Median Islands proposed



6 Apr. 2023

Speed Cushions Trial approved by Parking and Traffic Safety Committee



Aug. 2023

Speed Cushions Moved to Second Location - mid-August

2nd Public MeetingSpeed Cushions proposed

30 Mar. 2023

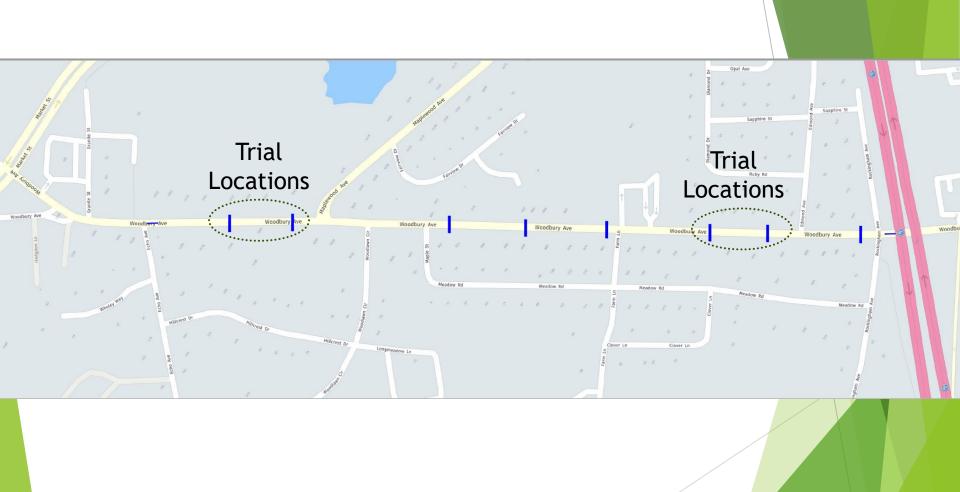
First Set of Speed Cushions Installed by DPW

22 June 2023

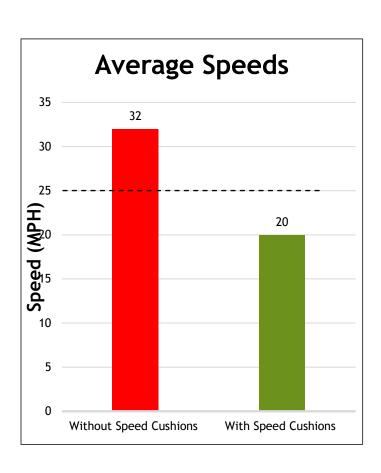
Speed Cushions Removed

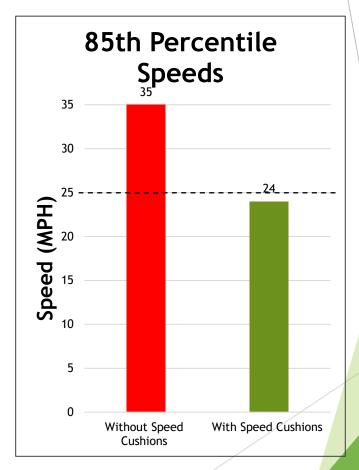
10 Oct. 2023

Previously Agreed Upon Traffic Calming Locations



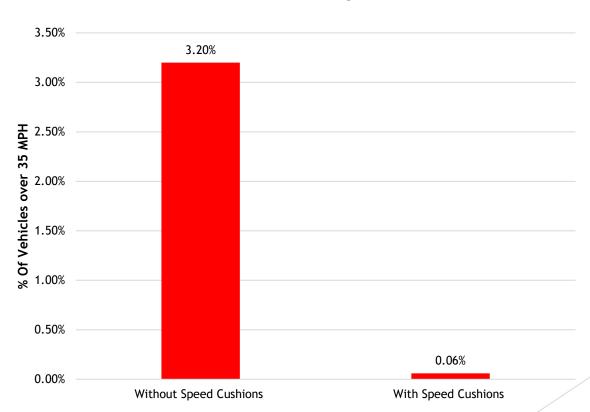
Woodbury Avenue Vehicle Speeds





Woodbury Avenue Extreme Speeders

Percent of Vehicles Traveling over 35 MPH



Speed Cushion Pros and Cons

PROS

- Effective at reducing speeds and maintaining consistent speeds
- Accommodates most users, including emergency services, school buses, garbage trucks, delivery trucks, motorcycles, bicycles
- Don't impact drainage
- Little to no impact on parking

CONS

- Possible noise impacts
- Some emergency vehicles can't fully straddle
- Causes congestion at cushions when some vehicles slow excessively
- Aesthetics of cushions, signs and markings

Woodbury Avenue Recommendation

Construct 8 sets of speed cushions along Woodbury Avenue as previously proposed and agreed upon with neighborhood.



Bartlett Street Mini-Roundabout



Existing All-Way Stop

Pros

- Vehicles slow when going through intersection
- Sight lines not critical

Cons

- Not warranted based on traffic volumes
 - ► Should be close to 50/50 split
 - ► Actually 85/15 split
- ► Low compliance, respect
- Confusing and potentially dangerous for pedestrians expecting traffic to stop
- Many neighborhood complaints regarding compliance
- ► Not eligible for RRFBs

Roundabout Timeline



Public Informational Meeting on Entire Bartlett Street project

 Roundabout was preferred alternative for Thornton intersection



20 Apr. 2023

Temporary mini-Roundabout installed on April 20, 2023.



2023-2024

Bidding of Project Construction

Parking and Traffic Safety Committee approved trial of roundabout

2 Feb. 2023

Mini-Roundabout removed October 11, 2023.

11 Oct. 2023

Construction of Project

Summer 2024



Bartlett Street Speeds With Roundabout

- Posted Speed Limit = 20 MPH
- At Pine Street
 - Average Speeds = 26 MPH
 - ▶ 85th percentile speeds = 30 MPH
- Straight through roundabout
 - Average speeds = 17 MPH
 - ▶ 85th percentile speeds = 20 MPH
- Between Thornton and Dennett Street
 - Average Speeds = 19 MPH
 - ▶ 85th percentile speeds = 22 MPH

Traffic Volumes

- Bartlett Street outbound
 - Prior to Roundabout = 2/3 turn left onto Thornton
 - With Roundabout = 2/3 continue straight to Dennett
 - After Roundabout removed = 50/50 split
 - ▶ No change in overall volume of traffic
 - Bartlett still desirable route to avoid Bypass and Circle
- Pedestrian volume = 12 during peak hours
 - Less than 20 peds/hour, which is minimum for warranting crosswalk.



Mini-Roundabout Pros and Cons

- Pros
 - Significant and consistent speed reduction
 - No aggressive left turns
 - Pedestrians know what drivers will do
 - Can be driven over by larger vehicles if needed
 - Size is compliant with industry design standards
 - Less noise from vehicle braking and acceleration
 - Better air quality
 - Can be used with RRFBs at crosswalks
- Cons
 - Learning curve for drivers and pedestrians
 - ▶ Slightly more difficult to maintain

Sample Aesthetics



Possible Alternatives



- Raised Intersection like Maplewood Avenue at Central Ave. (no stop signs on Bartlett)
- All-Way Stop

Next Steps

Woodbury Avenue

- Final Design of Traffic Calming Measures Winter 2023/24
- Construction Bidding Spring 2024
- Reconstruction of roadway/Implementation of permanent measures - Fall 2024

Bartlett Street

- Selection of Preferred Alternative
- Construction Bidding Fall 2023
- Construction Spring 2024

Questions and Comments