

Speed Humps

Consideration for Traffic Calming Use

December 9, 2025





Purpose

- Future Agenda Item Request by Mayor Daggett to have a future City council discussion on the possibility of speed humps in Flagstaff and how they could work with snow operations
- Discuss findings related to speed humps and how they can be added to our existing traffic calming toolbox



Traffic Calming Overview

- Residential Traffic Management Guide (RTMG) is used to define the process for addressing traffic concerns in neighborhoods
- Broken into four categories:
 1. Speeding Issues
 2. Excessive volume
 3. Pedestrian crossings
 4. Bicycle facilities
- Threshold for speeding concerns: Percentage of vehicles traveling more than 5 mph above the speed limit must be greater than 30%.
- Program considers residential, commercial local, and minor collector roadways



Existing Toolbox

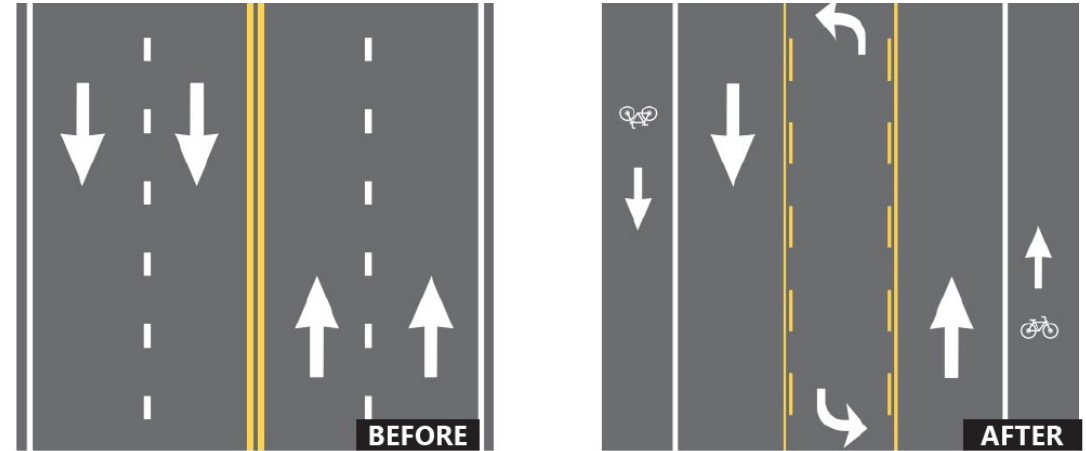


- Speeding

- Targeted Enforcement
- Signing or Striping changes
- Radar Feedback Signs
- Lane Reductions
- Curb Extensions
- Speed Tables
- Medians
- Pedestrian Refuge Islands
- Traffic Circles

- Volume and Cut Through

- Half Closure
- Full Closure
- Diagonal Diverter



Striping Changes



Diagonal Diverter



Existing Toolbox

- Crossing
 - Striped crosswalk and pedestrian signage
 - Curb Extensions
 - Pedestrian refuge islands
- Bicyclists
 - Shared Lane Markings
 - Striped bicycle lanes
 - Buffered bicycle lanes
 - Advisory bicycle lanes



Pedestrian Refuge Island



Advisory Bike Lane



New and Existing Neighborhoods



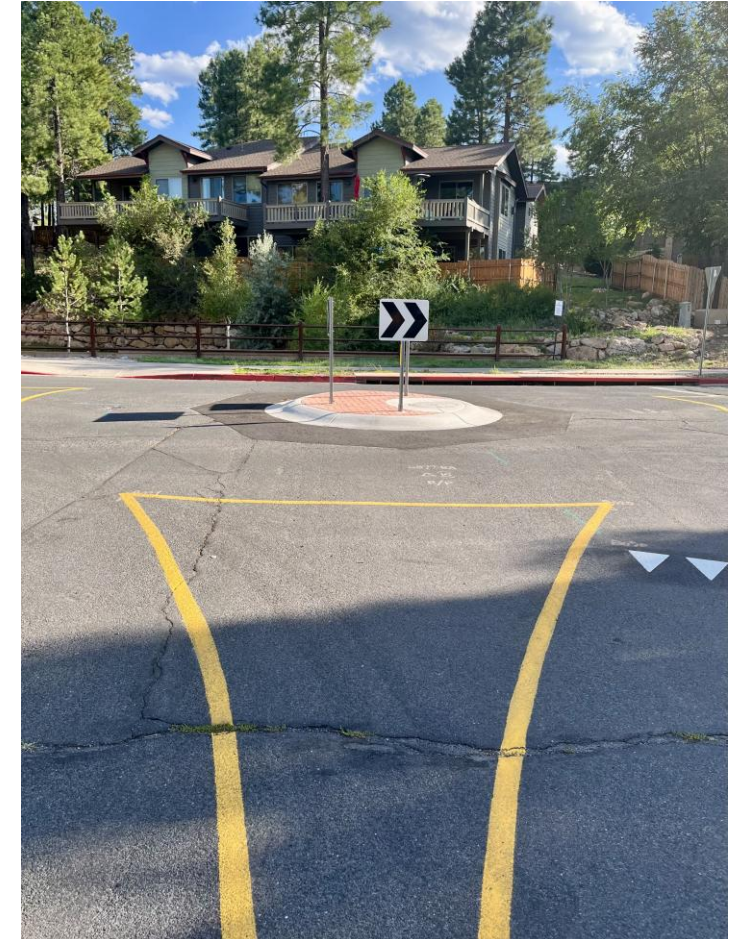
- New developments are designed with quality of life in mind
 - Length of straight segments is limited, use of roadway curvature required, minimum intersection spacing, and other traffic calming measures as needed when primary factors cannot be met
 - No houses fronting collectors
 - Far less speed concerns in these newer areas
- Older developments were not designed with the same considerations and most speed concerns come from these areas
- In most cases, traffic calming requests are not linked to a safety issue as most do not have crashes.



Completed Traffic Calming Projects



	Percentage of vehicles traveling more than 5 mph above the speed limit before improvement	Percentage of vehicles traveling more than 5 mph above the speed limit after improvement
University Medians	22%	11%
University Circles	22%	4%
Woodland Circles	16%	4%
Fremont Art	32%	19%



Woodland Dr Traffic Circle



Speed Hump Overview

- Speed Humps are an effective traffic calming tool
 - Reduce speeds on local roads by 5-13 mph in the vicinity of the installation
- Used in many AZ cities and peer cities that get comparable snow amounts
- Low cost, approximately \$7,500 ea.
- Low maintenance
- Address quality of life issues



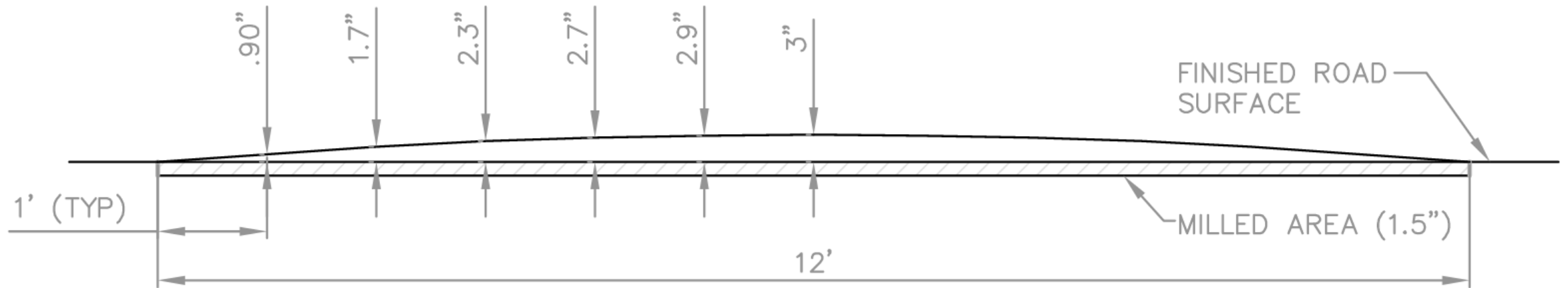
Speed Hump



Speed Hump Overview

- Typical Dimensions

- 3 to 4 inches high, with a majority towards a 3 to 3.5 inch maximum
- 12 to 14 feet in the direction of travel



Speed Hump Profile Example



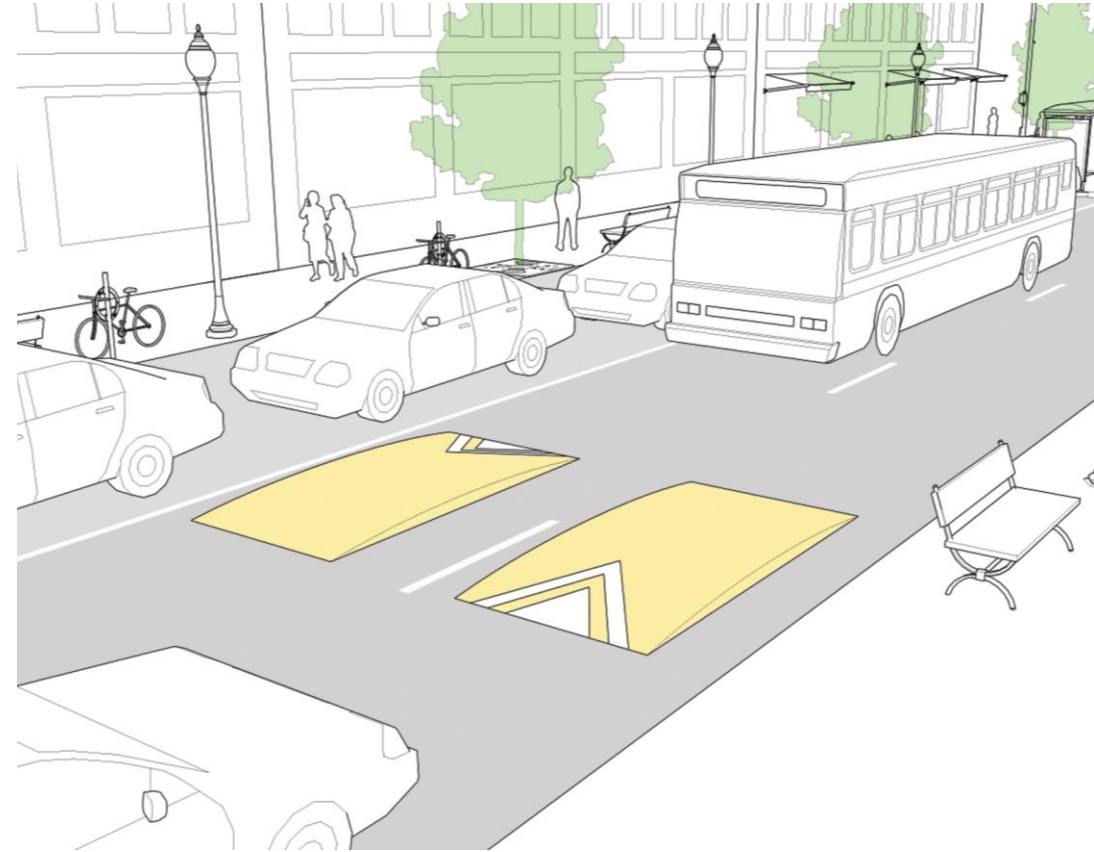
Thresholds for Speed Humps

- Existing threshold for speeding concerns
 - Percentage of vehicles traveling more than 5 mph above the speed limit must be greater than **30%**.
- Speed humps are more cost effective
 - Thresholds can be lowered for this specific tool
 - Proposed to make threshold be **10%** of vehicles traveling more than 5 mph above the speed limit



Where Speed Humps Can Go

- Most cities limit use of speed humps to local and some minor collector roads
- Avoid 'critical routes'
 - Frequently used by Fire and emergency response
 - Priority plow routes
 - Transit routes
- Plan to use speed cushions on minor collectors to allow emergency response vehicles to straddle the cushion and minimize delay



Speed Cushions



Engineering Considerations

- Minimum of two speed humps spaced 250 to 600 feet apart
- Limited to roads with grades at 8% or less
- Allow on roads with all curb types including no curb
 - Utilize signs to block shoulders when applicable
- Intersection spacing to nearest speed hump
 - 250 feet from a signalized intersection
 - 100 feet from collector/local intersections
 - 25 ft from local/local intersections



Costs

- Currently there is no annual budget for traffic calming
- Many cities allow or make citizens pay for a portion of speed humps
- Some options
 - Allow citizens to pay to increase the priority
 - Make citizens pay for a portion based on % speeding
 - Make citizens pay a portion based on volumes





Other Considerations

Fire

- Response times could go up. Less speed humps to go over on a road, the faster response
- Straddling a speed cushion could be a preferred method

Police Department

- If done properly, will reduce enforcement needs in neighborhoods that are currently monitored

Public Works

- Plowing operations could be slower in neighborhoods with speed humps
- Slowing over the speed humps can create a higher snow berm in front of houses
- Will increase maintenance needs due to increased signing and markings

Stormwater

- Location of speed humps will need to be reviewed by Stormwater
- Older streets were designed for lower flow and speed humps could impact drainage



Conclusion

- Staff will revise the Residential Traffic Management Guide to include speed humps in the toolbox for residential traffic concerns.
- Take the revised RTMG to Transportation Commission in February
- Once Transportation Commission approves the updated RTMG, speed humps will be a new tool for addressing speeding concerns

Thank you

