Neighborhood Traffic Management Program **City Council** January 25, 2021 SPRINGS Todd Frisbie, PE, PTOE OLYMPIC CITY USA **City Traffic Engineer**

What is NTMP?



Neighborhood Traffic Management Program

The term "Traffic Calming" is used to describe methods of altering the behavior of drivers to suit the character of the area they move through. The most apt example of this character occurs where a local street is used by motorists as a short cut from one arterial to another.

Traffic Engineering utilizes an investigative process in determining if traffic calming measures are warranted on residential roadways. The following criteria are evaluated:

- The roadway in question is a cut-through route between thoroughfares
- The roadway in question is not a major or minor arterial

NTMP Process



- Traffic Engineering Contact
 - Citizen Outreach with Traffic Concerns

Discuss Concerns/Determine Process

Does roadway meet criteria for a study?

Traffic Condition Assessment/Decision Point

- 24hr Speed/Volume Data Collection
- Does roadway meet threshold for calming intervention?

Public Process (TBD)

- Neighborhood Meeting to Discuss Proposed Calming Measures
- Implementation Plan
- Installation

Assessment of Effectiveness

6-12 Month Follow-Up Data

Traffic Assessment



Traffic Data Collection

EQUIPMENT:

- Individual Lane Counters
- Uses Vehicle Magnetic Imaging
- ✤ Count Accuracy = +/- 1% for 95% of Vehicles

OTHER DATA COLLECTION:

- Turning Movement Counts
- Delay Studies
- Tube Counts
- Video Counts

DATA TYPES:

- Volumes
- Speeds
- Vehicle Classification



Qualifying Criteria



- Average speeds equal 10mph+ over posted speed limit
- Volumes > 45% above expected
 - Per FHWA standard of 8.2 vehicle trips per household
- ✤ Active crash history







Traffic Calming Tool Box



- Increased Enforcement
- Neighborhood Entry Features
- Lane Narrowing
- Roadway Diet
- Traffic Control Signage
- Chicanes
- Roadway Medians/Islands
- Traffic Circle/Roundabout
- Roadway Dip (limited)
- Road Closure/One-Way





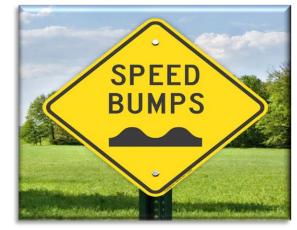


Traffic Calming Tool Box



Speed bumps/humps?

- Previous Traffic Engineering guidance
- Industry trending away
 - Increase noise levels for residents
 - Emergency response times
 - Expensive to remove
 - Reduce fuel efficiency
 - Modern vehicle suspensions reduce effectiveness
 - Wear and tear on vehicles





2020 NTMP Efforts



- 264 Requests
- 209 Studies
- ✤ 17 signal and all-way stop studies
- Calming measures implemented
 - Radar-Activated Flashing Signage 8 locations
 - ✤ All-Way Stops 4 locations
 - Striping 4 locations
 - Speed Limit/Other Signage 2 locations
 - Road Closures 1 location
- A Neighborhood meetings

NTMP Example Volume Mitigation



2861 Deliverance Dr. (E of Union Blvd.)

Roadway Width: 34' # of Homes: 75 Reported Crashes (7yr): 7

DATA TYPE	EB	WB	AVG./TOTAL
ADT Volumes	475	544	1,019
Average Speeds (posted speed 25 mph)	30mph	30mph	30mph

- Assessment: At 1,019 vehicles/day, volumes are 65% above expected. Crash history well above average at 7 (reported) accidents in 7 years.
- Traffic Calming Application: Close Reuben Dr. access between Deliverance Dr. and Montarbor Dr. to reduce volumes and hit-and-run crashes.

NTMP Example Speed Mitigation



2805 Avondale Dr.

Roadway Width: 39'

Posted Speed: 25 mph

DATA TYPE	NB (downhill direction)	SB
Average Speeds (before)	35 mph	29 mph
Average Speeds (after)	31 mph	29 mph

Traffic Calming Application: Roadway narrowing by use of a parking stripe (both sides)

NTMP Example Road Diet



Cascade Avenue South of Fontanero

Posted Speed: 30 mph

DATA TYPE	Before Road Diet	After Road Diet
Average Speeds	38 mph	34 mph
% of vehicles 10 mph over posted speed	37%	10%
% of vehicles 15 mph over posted speed	11%	1%
Volume (Average Daily Traffic)	8,882	8,814

Significant reduction in vehicles traveling 10 mph or more above the speed limit





