#### Neighborhood Project Update

Poinsettia Lane Completion Thursday, Nov. 21, 2019

#### Agenda

- Traffic study overview
- Carlsbad Residential Traffic Management Program
- Project updates
- Questions

#### Introductions

John Kim
City Traffic Engineer, City of Carlsbad

Arthur Black
Senior Transportation Planner, LSA

#### Traffic Investigation

- Potential traffic impacts of Poinsettia completion
- Signal warrant analysis
- Respond to public concerns raised at last meeting

#### Impact Analysis

- Traffic expected to transition to Poinsettia Lane
- Traffic volumes should decrease on Ambrosia Lane,
   Aviara Parkway and Cassia Road

#### Impact Analysis

- Analysis used city's mobility and vehicle-level service
- Addressed new state regulations
- Project is not expected to result in significant impacts

#### Traffic Control Evaluation

- Nine evaluation criteria for traffic signals
- Traffic signals are recommended:
  - Poinsettia/Cassia
  - Poinsettia/Oriole and Skimmer
  - Entrance to Poinsettia 61 development



#### Public Concerns

- El Camino Real/Poinsettia Lane Southbound Right-Turn Lane
- Existing conditions
- Future cut-through traffic

#### El Camino Real/Poinsettia Lane

- Dedicated southbound right-turn lane was previously removed
- Widening of roadway would require retaining wall, relocation of utilities and encroaching on preserved land
- Intersection anticipated to perform at a satisfactory level of service without the dedicated right-turn lane

## 10 Year Crash History



## Existing Conditions - Vehicle Speed

Roadway Segment	Posted Speed Limit	85 <sup>th</sup> Percentile Speed	Observations Exceeding 85 <sup>th</sup> Percentile by mph					
			10 mph	15 mph	20 mph	25 mph		
Poinsettia Lane (Ambrosia Lane to Cassia Road)								
Day 1	50	33	4	0	0	0		
Day 2		33	4	0	0	0		
Cassia Road (Poinsettia Lane to El Camino Real)								
Day 1	35	29	30	16	5	0		
Day 2		29	29	12	3	0		
Ambrosia Lane (Poinsettia Lane to Aviara Parkway)								
Day 1	40	33	5	0	0	0		
Day 2		34	0	0	0	0		
Mimosa Drive (Oriole Court to Aviara Parkway)								
Day 1	25	25	0	0	0	0		
Day 2		25	0	0	0	0		
Dove Lane (Moorhen Place to El Camino Real)								
Day 1	35	29	0	0	0	0		
Day 2		30	0	0	0	0		
mph = miles per hour	_		<u> </u>	·				

# Potential For Future Cut-Through Traffic

- Travel is not shorter for all potential routes
- Potential for cut-through traffic:
  - Westbound on Poinsettia Lane to Plaza Paseo Real
  - From Plaza Paseo Real returning to Cassia neighborhoods
  - To/from the north on El Camino Real and to/from west on Poinsettia Lane

# Residential Traffic Management Program

- Three potential disruptions are identified in the report:
  - Speeding on Cassia Road (westbound, downhill)
  - Potential for cut-through along Oriole Court Moorhen Place-Dove Lane leaving Plaza Paseo Real
  - Potential for cut-through on Cassia Road between north El Camino Real and west Poinsettia Lane
- Toolbox includes Education, Engineering, Enforcement, and Enhancement

## Potential Actions for City Consideration

- Targeted police enforcement on Cassia Road
- Traffic signal at Poinsettia Lane/Cassia Road
- Entry treatment at entrance to Oriole Court
- Signal timing at El Camino Real/Dove Lane
- Signal timing at Poinsettia Lane/Cassia Road

#### Results of the Report

- Established baseline conditions for future comparison
- If future conditions warrant action, the report provides recommendations for City consideration

#### **Before Gap Closure (2018) Traffic Condition Summary**

Roadway Segment	Roadway Volume	Typical Speed	>5 mph over Speed Limit?	Collisions over Past 10 Years
Poinsettia Lane (Ambrosia Lane to Cassia Road)	9,789	33	N	3
Cassia Road (Poinsettia Lane to El Camino Real)	9,290	30	Υ	6
Ambrosia Lane (Poinsettia Lane to Aviara Parkway)	3,321	34	N	12
Mimosa Drive (Oriole Court to Aviara Parkway)	679	25	N	1
Dove Lane (Moorhen Place to Black Skimmer Road)	368	30	N	0

mpn = miles per nour

# Carlsbad's Residential Traffic Management Program

#### What is Traffic Calming?

- Encourages drivers to travel at a target speed
- Doesn't punish drivers traveling at speed limit
- Self-enforcing

## Why not STOP Signs?

- NOT recommended for speed control
  - Unnecessary stops
  - Causes driver frustration
  - Not self-enforcing
  - Not environmentally friendly
- STOP sign requests can be analyzed outside of traffic calming

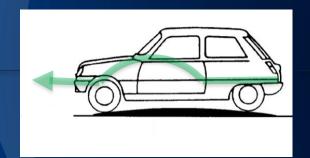


#### Traffic Calming Basics

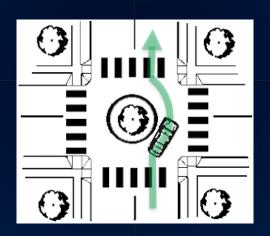
- Vehicle speeds determined by how a road looks
- Roadway character can be altered by implementing features at regularly spaced intervals
- Spacing of 400-600 feet is appropriate for residential streets (25 mph)
- Placing traffic calming features every 400-600 feet can change driver behavior and reduce speeds

### How Traffic Calming Works

Vertical Deflection



Horizontal Deflection



#### Other Methods

- Speed feedback signs
- Road diets
- Road narrowing

## Tools - Speed Cushion



#### Tools - Raised Crosswalk



# Tools – Traffic Circle

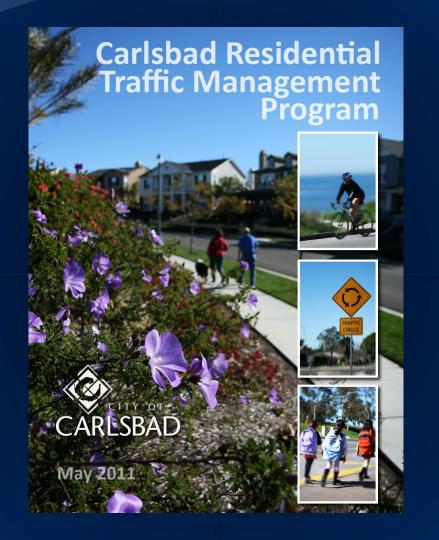


#### Tools - Chicane



# Tools - Speed Feedback Signs





## Carlsbad Residential Traffic Management Program (CRTMP)

- Phase I Education and enforcement
  - >> Phone call
- Phase II Cost Effective Traffic Calming
  - >> Requires community support
- Phase III Traditional Traffic Calming
  - >> Only considered if Phase II is not effective

#### Carlsbad Residential Traffic Management Program (CRTMP)

- Establishes process to implement traffic calming
- Identifies a qualifying threshold of 32 mph
- Community support is ESSENTIAL for success
- Community survey
- With support traffic calming can be implemented

#### Past Successes

- Donna Drive
- Sierra Morena Avenue
- Esfera Street
- Levante Street
- Magnolia Avenue
- Pontiac Drive

- Chestnut Avenue
- Victoria Avenue
- Cadencia Street (Upper)
- Daisy Avenue
- Corintia Street
- Harbor Drive

#### Current Streets

- Amargosa Drive
- Basswood Avenue
- Hillside Drive
- Avenida Diestro
- Estrella De Mar Road (North)

- La Golondrina Street
- Avenida Pantera
- Segovia Way
- Cadencia Street (Lower)
- Harwich Drive

#### Project Timeline

- Construction of the road extension and bridge is expected to be complete in mid 2020
- Budget approved for signals at Poinsettia Lane/Cassia Road and Poinsettia Lane/Oriole and Skimmer Courts
- Post-construction monitoring after traffic patterns established

# Questions