

RANCHO SERENO/BUTTERFIELD **NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM**

COUNCIL DISTRICT 5 PROJECT COUNCIL PRESIDENT CYNTHIA D. BORREGO

505.338.0988







INTRODUCTIONS

- Jonathon Kruse, PE, PTOE
 - Lee Engineering
- Susan Vigil
 - Policy Analyst, Council President Cynthia D. Borrego, MPA, District 5
- Diane Dolan
 - Council Special Projects Analyst
- Tim Brown, PE, PTOE
 - City of Albuquerque Traffic Engineering Manager
- Amanda Herrera, PE
 - NTMP Project Manager

PRESENTATION OUTLINE

- Neighborhood Traffic Management Program (NTMP)
- NTMP Process
- Rancho Sereno Evaluation
- Traffic Calming Options
- Public Input
- Conclusion

NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM

The goal: to address speeding and cut-through traffic on local residential streets using a set of traffic-calming tools.

Key Aspects:

- Public involvement
- Improve traffic safety
- Evaluate safety issues & recommend improvements
- Subject to CABQ's NTMP Policy Manual



NTMP PROCESS

Steps & Procedure:

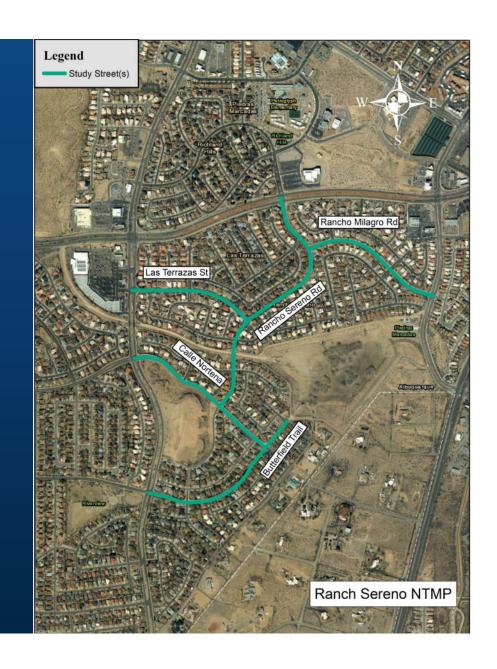
- 1. Residents or CABQ Staff identify potential NTMP candidate roads/neighborhoods
- 2. Data collection & evaluation
- 3. Public Input meeting #1
- 4. Evaluation and narrowing/ranking of calming alternatives
- 5. Public Input meeting #2
- 6. Recommendation for preferred alternative(s)
- 7. Consideration for implementation

RANCHO SERENO DATA & EVALUATION

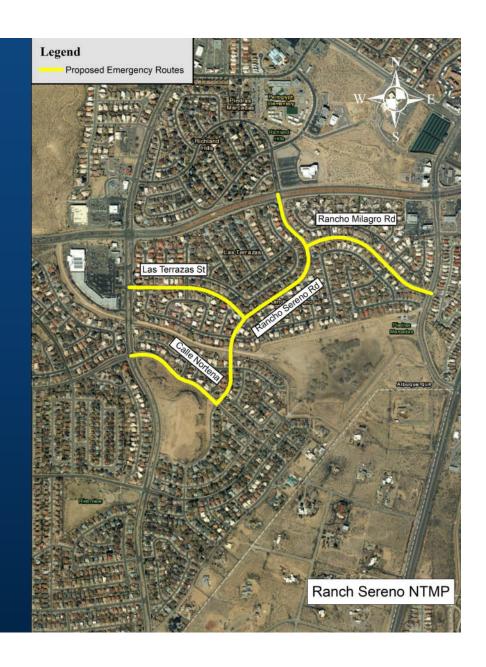
Topics:

- Proposed Emergency Routes
- Crashes
- NTMP Options

DATA COLLECTION (Study Area)



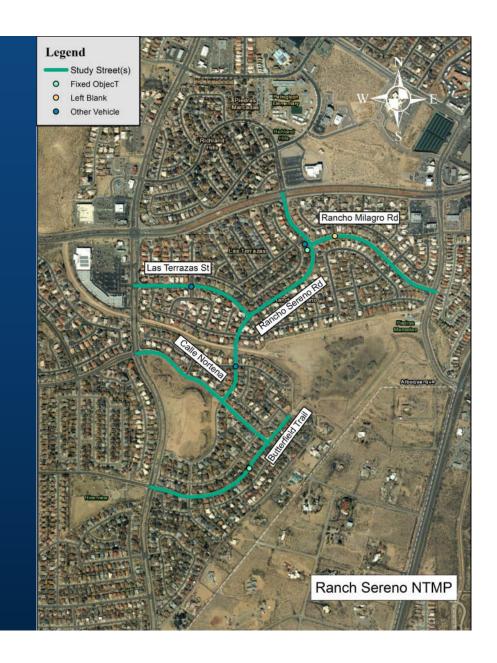
DATA
COLLECTION
(Proposed
Emergency
Routes)



DATA COLLECTION (Crashes by Type)

Takeaways:

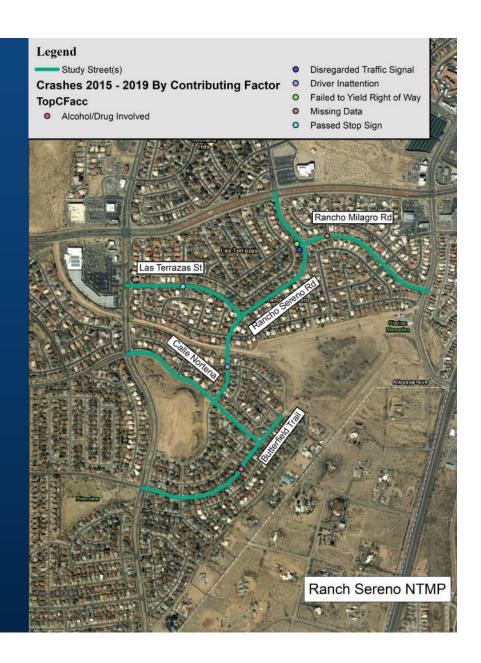
- Total of 6
- Majority are "Other Vehicle"
- High number of "Fixed Object"



DATA COLLECTION (Crashes by Top Contributing Factor)

Takeaways:

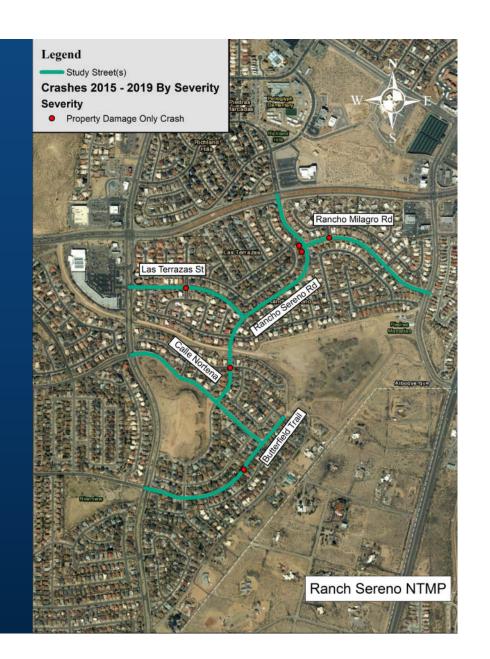
1 reported as "Driver Inattention"



DATA COLLECTION (Crashes by Severity)

Takeaways:

 All "Property Damage Only"



TRAFFIC CALMING OPTIONS

Overview

- Chosen for applicability
- No particular order
- CABQ's NTMP Toolbox
- Public input on supported measures
- Survey

TARGETED POLICE ENFORCEMENT

Description

 Targeted police enforcement is the deployment of officers to specific streets or neighborhoods for a period of time to conduct radar speed enforcement and enforcement of traffic laws



Advantages

- Highly effective in reducing speeding and other traffic law violations including stop sign running and illegal turns
- Can be deployed on short notice and for the specific hours for which problems have been identified
- Results are immediate
- Can reduce crashes related to speeding and other violations.
- Low cost if used temporarily
- Does not affect emergency vehicles
- Targets violators without affecting normal traffic
- Can promote public education regarding new devices or restrictions

Disadvantages

- Effectiveness may be temporary, especially if the enforcement is deployed only once
- · Enforcement is limited to APD availability



RADAR SPEED TRAILER

Description

 Radar speed trailers are mobile units placed on the side of the road that use radar to sense an oncoming vehicle's speed and display that speed back to the approaching driver

Advantages

- Have been shown to be effective in prompting some speeding drivers to slow down
- Can be deployed on short notice and easily moved
- Results are immediate
- Deployment is low cost
- Does not slow emergency vehicles
- Alerts violators without affecting normal traffic

Disadvantages

- Effectiveness may be temporary once removed
- Limited to APD availability
- · Requires enough space to set up, and may reduce available parking
- · Units are subject to vandalism
- Some drivers may try to register a high speed





PERMANENT RADAR SPEED SIGN

Description

 Post-mounted signs on side of road that use radar to sense and display speeds back to driver

Advantages

- Visual reminder of drivers' speeds have been shown to prompt some speeding drivers to slow down
- Do not Slow down emergency vehicles
- Radar speed signs alert violators without affecting normal traffic

- Effectiveness may reduce over time as regular drivers become desensitized
- Some drivers may ignore the signs
- Some drivers may try to register a high speed
- Units and solar panels are subject to vandalism or theft



CENTERLINE/EDGE LINE/LINE STRIPING

Description

Used to designate travel lanes, bicycle lanes, parking lanes and and/or stripping

Advantages

- Striping is relatively easy
- Traffic striping does not slow emergency vehicles

- Regular maintenance is required, needs to be repainted about every 4 years.
- Removal of pre-existing traffic stripes leave unsightly marks on roadway.
- Effectiveness may be low



SPEED REDUCTION MARKING

Description

• A series of various shapes of transverse pavement markings set at progressively reduced spacing, intended to enhance the driver's perspective of speed.



Advantages

Markings are relatively easy and low-cost to install

- Long-term effectiveness is undocumented
- Regular maintenance is required



SPEED LIMIT SIGNAGE

Description

Regulatory speed limit signs

Advantages

- Signs provide a clear indication of speed limit
- Relatively easy and low-cost to install
- Speed limit signs do not slow emergency vehicles

- Signs alone do not guarantee responsible driving behavior
- Overuse of signs creates visual clutter that leads to a loss of effectiveness
- Speed limit signs below 25 MPH will not be respected
- Signs require regular maintenance



RAISED PAVEMENT MARKERS

Description

 Raised pavement markers (RPMs) are 4 inch diameter by 3/4 inch high nonreflective markers that are affixed to the pavement, providing tactile feedback to drivers

Advantages

- Relatively easy and low cost to install
- RPMs do not slow emergency vehicles

- RPMs must be replaced as they become dislodged over time
- RPMs should not be used on any streets where the roads may be plowed after snowfall
- Residents may complain of noise from vehicles driving over RPMs





RAISED CROSSWALK

Description

 A raised pedestrian crosswalk is a speed table with crosswalk markings and signage to channelize pedestrians crossing a road

Advantages

- Improved safety for pedestrians and vehicles
- Effective at slowing travel speed, but not to the extent of speed humps
- Possible traffic volume decreases at locations where cut-through traffic is a problem
- Typically preferred by EMS compared with speed humps

- · Drainage impacts need to be considered in the design
- May increase noise and air pollution
- Textured materials are expensive, if used
- May inadvertently divert local trips to another route to avoid the calming measure



NECKDOWNS AND BULBOUTS

Description

 Raised curb extensions at intersections that reduce the roadway width from curb to curb, increasing pedestrian comfort and safety

Advantages

- Decreases vehicle speeds
- Reduces pedestrian crossing distance
- Clearly delineates areas of pedestrian activity

- May reduce on-street parking
- · Complicates drainage design
- Reduces bicycle lane and/or side of road area used by bicyclists
- May slow right-turning emergency response vehicles



LANE NARROWING WITH CENTER ISLAND/PEDESTRAIN REFUGE

Description

• Construction of a center island on a wider street can serve to reduce the width of the travel lanes and to provide a pedestrian refuge area

Advantages

- Decreases vehicle speeds
- · Reduces pedestrian crossing distance
- Clearly delineates areas of pedestrian activity
- Opportunity for landscaping, visual enhancement, and neighborhood enhancement

Disadvantages

- May reduce on-street parking
- Longer islands may impact driveway access and result in U-turns
- May impact snow removal operations



ROAD NARROWING/DETACHED SIDEWALKS

Description

 Sidewalk that is separated from a curb by grass, trees, landscaping, street lights, or other streetscape elements

Advantages

- Increases pedestrian safety and reduces the width of pedestrian crossings
- Enhances streetscape
- Reduces vehicle speeds

- Landscaping maintenance may be required
- Detached sidewalks are not as effective as physical measures in slowing speeds
- Expensive



TRAFFIC CIRCLE

Description

 Traffic circles are raised islands, placed in intersections, around which traffic circulates. Yield signs can be used as traffic controls at the approaches of the traffic circle

Advantages

- Effective at slowing travel speed
- Improves safety
- Provides increased access to main street from side street

Disadvantages

- Slows emergency vehicles and can be difficult for large vehicles to circumnavigate
- May eliminate some on-street parking
- May require modifications to curb, gutter, and sidewalks





ROUNDABOUT

Description

 Roundabouts require traffic to circulate counterclockwise around a center island. Unlike traffic circles, roundabouts are used on higher volume streets to allocate right-of-way among competing movements

Advantages

- Enhanced safety compared to traffic signals or stop signs
- · Minimize queuing at approaches
- Less expensive to operate than traffic signals
- · Generally, aesthetically pleasing if well landscaped

- May be difficult for large vehicles to circumnavigate
- Must be designed so that the circulating lane does not encroach on the crosswalks
- · May reduce on-street parking
- · Landscaping must be maintained by the residents or by the municipality





CHICANE

Description

 Chicanes are curb extensions that alternate from one side of the roadway to the other, forming s-shaped curves

Advantages

- Offer visual traffic calming effect by reducing line of sight
- Can reduce pedestrian crossing distance
- Reduces travel speeds
- Negotiable by emergency vehicles
- Provide opportunities for streetscaping

- May divert traffic to adjacent roadways
- The effect on vehicle speeds is limited
- May require bicyclists to merge with vehicular traffic for a short distance
- May require removal of some on- street parking
- Curb realignment and landscaping can be costly, especially if there are drainage issues







LATERAL SHIFT

Description

• A lateral shift consists of curb extensions along straight streets that cause travel lanes to jog. It is like a chicane, however the roadway alignment only shifts once

Advantages

- Community acceptance is generally higher
- Fewer maintenance issues than a comparable method
- Does not reduce traffic volumes unless design includes a lane reduction
- Negotiable by emergency vehicles

Disadvantages

- Impacts snow maintenance
- May require additional effort to properly design
- · May reduce on-street parking



SPEED HUMP

Description

 Speed humps consist of raised pavement placed across the entire roadway width creating a vertical deflection to slow vehicles

Advantages

- Decreases vehicle speeds
- Discourages cut through traffic
- Inexpensive and easy to construct

- May cause speeding between humps
- May divert traffic to an adjacent neighborhood street
- May increase noise levels as vehicles decelerate and accelerate



SPEED TABLE

Description

 Speed tables are trapezoidal shaped speed humps with a flat section in the middle and ramps on the ends

Advantages

- · Effective at slowing travel speed
- Possible reduction in traffic volumes depending on available alternate routes
- Possible decrease in collisions
- In cases with crosswalk, increases pedestrian visibility and likelihood that driver yields to pedestrian
- Typically preferred by EMS compared with speed humps

Disadvantages

- May inadvertently divert local drivers to another route to avoid the calming measure
- Textured materials can be expensive, if used
- May increase noise and air pollution
- May not be appropriate along bus or emergency routes
- Drainage impacts need to be considered in the design





SPEED CUSHION

Description

• Speed Cushions are rubber speed humps with a mild raise in elevation

Advantages

- · Effective at slowing travel speed
- Minimal construction impacts and can be removed easily
- Possible decrease in collisions
- In cases with crosswalk, increases pedestrian visibility and likelihood that driver yields to pedestrian
- Typically preferred by EMS compared with speed humps
- Can be constructed with breaks for EMS wheel spacings

Disadvantages

- May inadvertently divert local drivers to another route to avoid the calming measure
- Susceptible to damage from snowplows
- May increase noise and air pollution





SPEED KIDNEY

Description

 Speed Kidneys are an arrangement of three speed lumps elongated with a curvilinear shape in the direction of traffic. The main speed lumps of the speed kidney are placed in the travel lane, while a complimentary speed lump is placed between the lanes

Advantages

- Decreases vehicle speeds
- Discourages cut through traffic
- Inexpensive and easy to construct

- May cause speeding beyond the speed kidney
- May divert traffic to an adjacent neighborhood street
- May increase noise levels as vehicles decelerate and accelerate



PUBLIC INPUT

QUESTIONS?



505.338.0988





SURVEY AND OTHER INFORMATION

- 1. Survey posted to cabq.gov/traffic
 - 1. https://forms.office.com/r/HCqrzTMVCq
 - 2. QR Code to right
- 2. Presentation slides posted to cabq.gov/traffic
- 3. Email any questions comments & concerns to: ddolan@cabq.gov
 - 1. Diane Dolan, Council Special Project Analyst, 505-768-3186
- 4. Deadline for survey and comment: October 12, 2021
- 5. https://www.cabq.gov/council/find-your-councilor/district-5/rancho-sereno-butterfield-traffic-calming-study/?092421

