Boulder’s Neighborhood Speed Management Program
APA Colorado

October 3, 2018
Why speed management?

- Quality of life
- Safety
- Active transportation user comfort
Speed kills

<table>
<thead>
<tr>
<th>SPEED (MPH)</th>
<th>STOPPING DISTANCE (FT)*</th>
<th>CRASH RISK (%)†</th>
<th>FATALITY RISK (%)†</th>
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<tbody>
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<td>10–15</td>
<td>25</td>
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<td>20–25</td>
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<td>30–35</td>
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<td>40+</td>
<td>118</td>
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* Stopping Distance includes perception, reaction, and braking times.

What is the Neighborhood Speed Management Program (NSMP)?

- Boulder’s traffic calming program for residential neighborhoods
  - Engineering – speed humps, traffic circles, raised crosswalks, etc.
  - Education – mobile radar speed displays, rental radar gun, yard signs
  - Enforcement – photo radar vans, collaboration with BPD
  - Evaluation – before and after data collection, qualitative surveys, ongoing feedback with residents and Transportation Advisory Board (TAB)

- Support Boulder’s Transportation Master Plan and Vision Zero
  - Improve livability in neighborhoods
  - Walking and bike trips are more comfortable and residents feel safer
    - Multimodal travel supports the city’s overall climate and sustainability goals
  - Reducing speeds can help reduce the frequency and severity of crashes
Background and NSMP Development

Background

1994 – Neighborhood Traffic Mitigation Program (NTMP, predecessor to NSMP) began development

2000 – NTMP adopted by City Council

2003 – Funding for the Engineering Treatments, Evaluation and Administration of the NTMP was eliminated

2003-2016 – Mitigation constructed as part of Capital Projects and Hazard Elimination Program funded projects (external funding and separate public processes)

October 2016 – Options presented to Council for future of NTMP; selected option was to develop new NTMP guidelines which restore engineering treatments
## NSMP Program Development – Engagement Process

<table>
<thead>
<tr>
<th>Event Description</th>
<th>February</th>
<th>March</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
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<tr>
<td>Meeting #1 - Neighborhood perspectives and input on program goals (02/21)</td>
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<td>Neighborhood toolkit (03/08 online)</td>
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<td>Community Meeting #3 - Program framework (04/27)</td>
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<td>Informational Item to City Council</td>
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<td>Provide Staff and TAB recommendations to Council (08/01)</td>
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Background and New Program Development

Community Involvement Methods

- **Information shared using** – Website content and program materials (e.g. Neighborhood Toolkit), social media channels, NextDoor, City newsletter, email lists (Constant Contact), and media outreach

- **Input gathered using** – Three neighborhood meetings, two online questionnaires, direct email correspondence, TAB meetings

Results by the numbers:

- Averaged **25 attendees per neighborhood meeting**
- Over **1,000 contacts** through questionnaires
- **1,400 clicks to NTMP website** driven through four-day social media ad campaign
Background and New Program Development

Input Received:

• Mitigation of speeding vehicles remains the top priority
  • Other impacts of the program were discussed (traffic volume, mobility, environmental issues)
  • Engineering treatments are considered most effective part of the program

• Interest to have multiple opportunities to be involved (online and in-person) on more complex projects and to have the TAB provide recommendations at several points in the project selection process

• Impact to emergency response times is a key consideration – coordination with the Police and Fire Department on all projects

• Funding should mainly be provided through the program with opportunities for neighborhood contributions
NSMP – Draft Guidelines

Program Goals:

- **Safety** - Enhance neighborhood livability by reducing speeding traffic
- **Neighborhood involvement** - Involve neighborhood residents in addressing neighborhood-identified speeding issues
- **Data-based prioritization** - Use clear evidence and a documented process to support the prioritization of neighborhood traffic calming activities and identify impacts of such activities (i.e., impacts to traffic diversion)
- **Emergency response interaction** - Effectively address the public safety interests of emergency responders
- **Policy and planning relationships** - Reflect the overall city transportation and environmental policies and values with emphasis in Toward Vision Zero and the Transportation Master Plan
NSMP Program Guidelines and Process
NSMP Program Guidelines and Process

- Residents apply for traffic calming by submitting a registration form and petition
  - Petition must have 1 signature from 30% of households on block, or 20 signatures from block
  - All registration forms are automatically enrolled for education and enforcement

- City staff collects speed and traffic volume data to determine eligibility for engineering
  - Collected over one week
  - ADT is average of 3 days
  - 85th percentile speed must be ≥ 3 mph over speed limit to move forward
    - Highest day is used to qualify
NSMP Program Guidelines and Process

- Staff creates a preliminary list of complex and/or simple projects based qualifying applications
  - Simple project: ≤ $10,000 total cost, not on a critical emergency response route (CERR), little to no traffic diversion
  - Complex project: higher cost, on a CERR, impacts to other streets/travel modes, need of complex engagement process

- Staff scores each proposed project based on criteria outlined in NSMP guidelines

- Transportation Advisory Board (TAB) reviews staff work and recommends whether or not to move forward

- After any changes and notification to applicants/community, a public hearing is held before TAB makes a recommendation to finalize list and proceed with project development
# NSMP Project Scoring Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Points allocated</th>
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<tbody>
<tr>
<td>Speed</td>
<td>Three (3) points for each mile per hour greater than the speed limit (Maximum of 45 points)</td>
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<tr>
<td>Traffic Volume (Vehicles per day)</td>
<td>One (1) point for every thousand (1000) vehicles per day (Maximum of 20 points). Volume data will be rounded to the nearest 100 vehicles per day; Traffic volume of less than 1000 vehicles per day receives one point</td>
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<tr>
<td>Crashes</td>
<td>Five (5) points for each reported speed related crash in the past five years (No point maximum)</td>
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**Sidewalks and bike routes**

- Maximum of 4 points
  - No points for detached sidewalks
  - One (1) point for attached sidewalks
  - Two (2) points for no sidewalks

**Activity generators**

- Five (5) points for projects within one block of a school, park, neighborhood commercial area; or including unprotected crossing treatment in the block

All sidewalk and bike route scores with have a 2x multiplier for streets with traffic volume equal to, or greater than, 4,000 vehicles per day.
# NSMP Recommendation Process and Implementation Schedule

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<thead>
<tr>
<th>ID</th>
<th>Program step</th>
<th>18-Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
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### Design & Implementation

**Simple Project Track**

- **4s-A** Neighborhood forum
- **4s-B** Recommendation at TAB
- **4s-C** Final Design
- **4s-D** Construction

**Complex Project Track**

- **4c-A** Internal coordination
- **4c-B** Neighborhood meeting series
- **4c-C** Recommendation at TAB
- **4c-D** City Council Call-up
- **4c-E** Final Design
- **4c-F** Construction

### Actions

- Action taken by neighbor(s): Facilitated by Program Coordinator
- Council Call-up
- TAB recommendation
- Contract
NSMP Simple Projects

- Currently speed humps only (budget and other constraints)
- In 2018, 10 simple projects were installed city-wide
NSMP Complex Projects

- Currently evaluating list of 18 projects

- Can be:
  - Speed cushions
  - Raised crossings and intersections
  - Medians and crossing islands
  - Curb extensions (bulb-outs, choke downs, diverters, chicanes)
  - Traffic circles
  - Radar speed displays
  - On-street parking

- $100,000 total cost per project (NSMP budget is $250,000)
NSMP Educational Tools

- Yard signs
- Mobile radar speed displays
- Radar gun rental
- “Paint the Pavement”
NSMP Enforcement Tools

- Photo Radar Van enforcement
- BPD response to complaints
- BPD regular enforcement
NSMP Evaluation Tools

• Before and after data collection
  • 85th percentile speeds and volumes
    • On streets that are traffic calmed and adjacent streets

• Qualitative data
  • Survey of residents on streets that are traffic calmed
  • Direct feedback from public to staff, policy makers
Questions?
Thank You!