



Sunnyvale

Neighborhood Traffic Calming Program & Policy Study

City Council Study Session
June 18, 2024

Agenda

1. Purpose
2. Project Overview
3. Existing Traffic Calming Program
4. Community & Stakeholder Outreach Summary
5. Traffic Calming Program in Comparable Cities
6. Next Steps & Discussion Items



Sunnyvale

Purpose

Goal for the City Council Study Session

- Share project progress and community feedback received to date
- Receive information needed to help Council take an action on:
 - ◆ Allow traffic calming on Collectors and/or Arterials
 - ◆ Update speed and/or volume thresholds
 - ◆ Add new traffic calming measures to our toolkit
 - ◆ Update the Neighborhood Traffic Calming Program (NTCP) process



Sunnyvale

Project Overview

Project Overview

- Sunnyvale Neighborhood Traffic Calming Policy and Program
 - ◆ Council Policy 1.2.4 adopted in 1997
 - ◆ Program established in 1997 and updated in 2004
- Study Issue DPW 22-06
 - ◆ To re-evaluate and identify possible updates to the Policy and Program
- Scope
 - ◆ Examine other cities' programs and best practices
 - ◆ Review traffic calming measures available for use
 - ◆ Identify possible changes to the program and policy



Study Process/Timeline





Sunnyvale

Existing Traffic Calming Program

Existing Traffic Calming Program

- Purpose of Traffic Calming:
 - ◆ Discourage Speeding and Cut-thru Traffic on Local Residential Streets
- Council Policy 1.2.4 Traffic Calming



Existing Traffic Calming Program (cont'd)

- Resident initiated/Petition
- Qualifying Criteria:
 - ◆ Roadway Classification
 - ◆ Speeding Thresholds
 - 85th percentile speed > 32 mph
 - 95th percentile speed > 35 mph
 - ◆ Traffic Volume Threshold
 - > 1,000 vehicles per day



Existing Stage 1 Traffic Calming Measures

 A white radar speed trailer with a digital display showing the number '10' in red. A speed limit sign is mounted on the trailer, indicating 'SPEED LIMIT 25'.	 A residential street with a speed feedback sign on a pole. The sign displays 'YOUR SPEED' and has a small screen showing a speed limit of 25.	
Radar Speed Trailer	Radar Speed Feedback Sign	
 A police officer standing next to a silver car with red and blue emergency lights activated on the roof.	 A street with the name 'Blackhawk' painted in white on the asphalt. The street is marked with yellow and white lines.	 A speed limit sign mounted on a post in the center of a two-lane road. The sign reads 'SPEED LIMIT 25' and 'DRIVE WITH CARE'.
Enforcement	Signing & Striping	In-roadway Sign

Existing Traffic Calming Program (cont'd)

- Follow-up data collection in 3 - 6 months
- If Stage 1 measures are not effective, proceed to Stage 2
 - ◆ Two Rounds of Community Outreach
 - ◆ Neighborhood Consensus \geq 60% and 100% within 100 feet of device
- Council Approval
 - ◆ Funding and Implementation



Existing Stage 2 Traffic Calming Measures



Speed Hump

Speed Cushion



Speed Table

Traffic Circle

Curb Extension, Choker,
Chicane

Existing Stage 2 Traffic Calming Measures (Cont'd)



Median Entry/Exit Island



Median Barrier



Mid-Block Raised Median



Forced Turn Island, Barrier,
Channelization



Diagonal Diverter

Existing Stage 2 Traffic Calming Measures (Cont'd)



One-Way Street



One-Way Choker, Half-Closure, Semi-Diverter



Woonerf



Street-Closure, Cul-de-sac

Traffic Calming Request Summary

	Sunnyvale Traffic Calming Requests			
	Number of Requests		% of Total Requests	
	All	2018-2023	All	2018-2023
Total requests	231	147	100%	100%
Request did <u>not</u> qualify for traffic calming study	180	135	78%	92%
Roadway classified as "Collector"	75	57	33%	39%
Roadway classified as "Arterial"	5	4	2%	3%
Local residential streets without neighborhood consensus	92	68	40%	46%
Non-residential street	1	1	0%	1%
Private Property	7	5	3%	3%
Request qualified for traffic calming study	51	12	22%	8%
Study in-progress	4	4	2%	3%
Stage 1 measure under construction	4	3	2%	2%
Stage 1 measure implemented	3	0	1%	0%
Stage 2 measure implemented	12	0	5%	0%
Collected data did not meet thresholds	28	5	12%	3%



Sunnyvale

Community & Stakeholder Outreach Summary

Outreach Overview

- Community Meeting (hybrid) – Nov. 2023
 - ◆ 14 attended in-person, 11 online
- Online Survey – Oct. 31 to Dec. 7, 2023
 - ◆ 37 responses
- Stakeholder Meeting with DPS – Mar. 2024

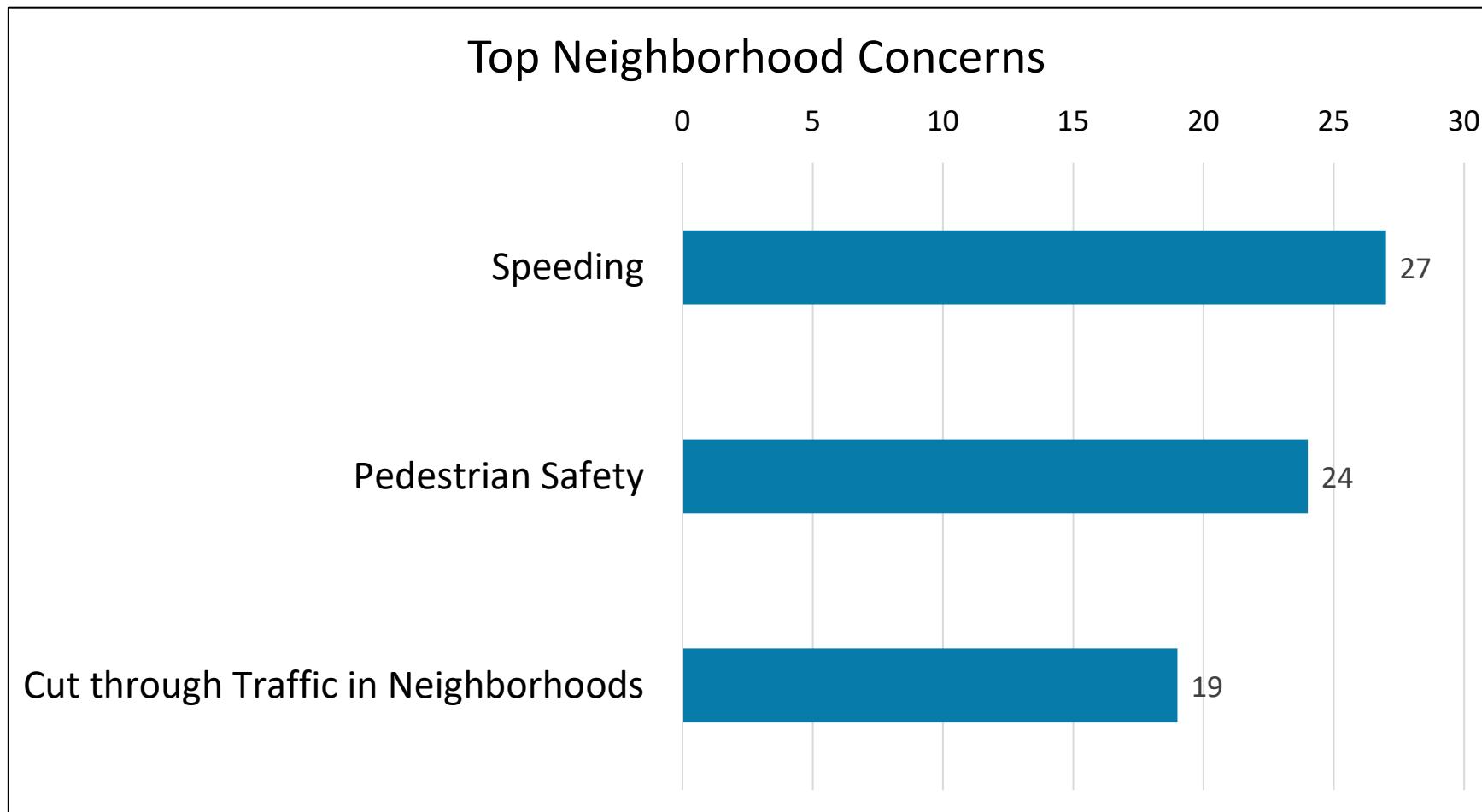


Things We Heard

- Make “Collectors” eligible for traffic calming
- How to address safety issues outside of NTCP?
- Need clarifications on the process of the NTCP
- Want to skip Stage 1 Measures

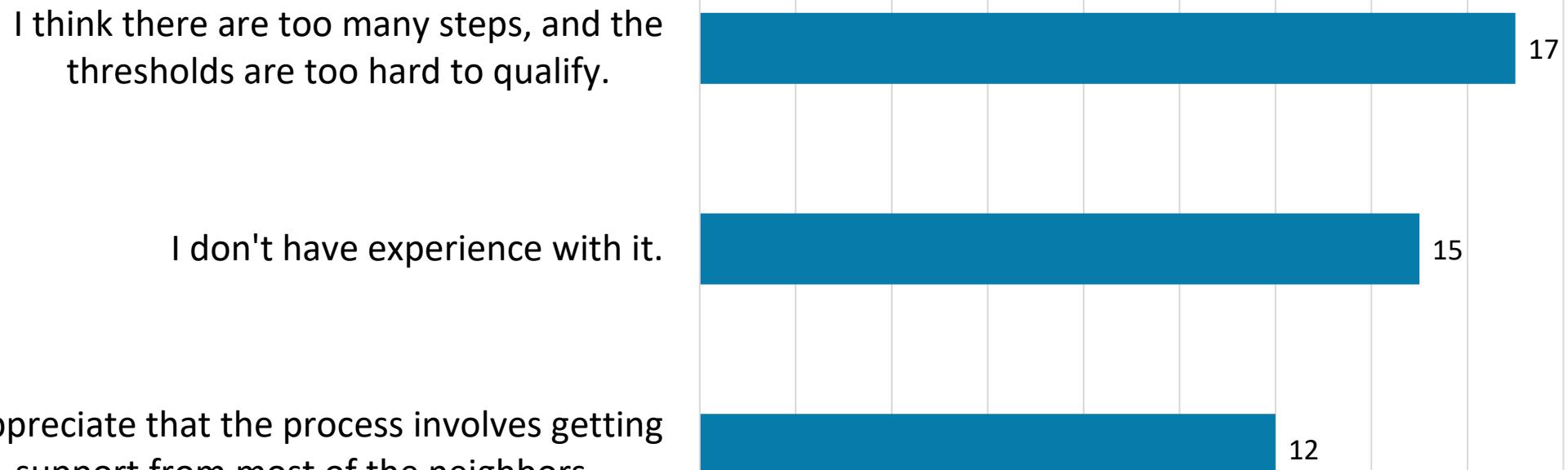


Online Survey Response



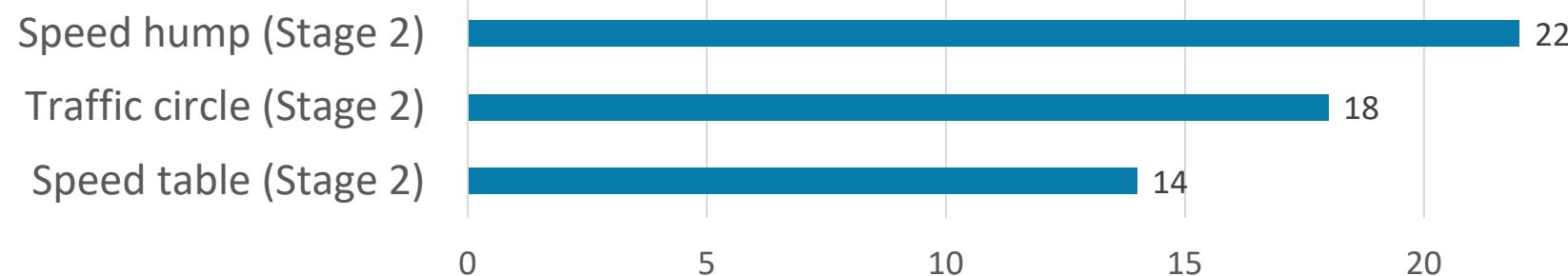
Online Survey Response

Top Comments on the City's Current Traffic Calming Program

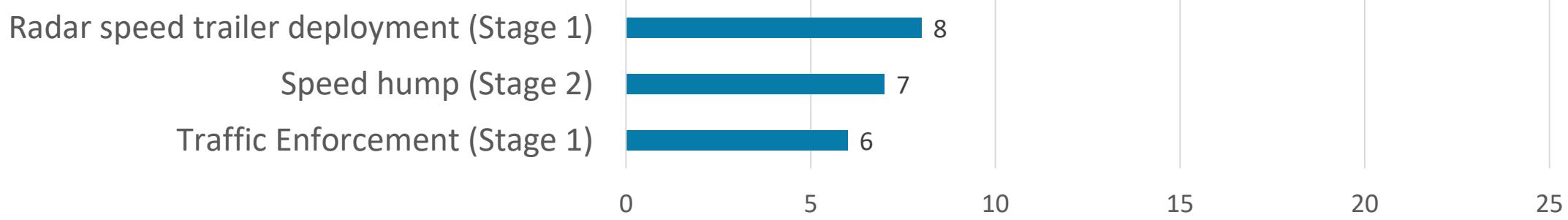


Comment on Traffic Calming Measures

Most Preferred Traffic Calming Measures by Respondents



Least Preferred Traffic Calming Measures by Respondents



* Combines workshop responses with online survey responses from respondents not present at workshop

DPS Meeting Summary

- Existing traffic calming measures work for DPS
- Balanced approach to ensure measure effectiveness and DPS response times
- Traffic calming measures on collectors and arterials will impact response times



Sunnyvale

Traffic Calming Program in Comparable Cities

Review of Neighborhood Traffic Calming Programs

- Reviewed recently adopted/modified NTCP in 8 comparable cities within the Bay Area
 - Mountain View
 - Cupertino
 - Campbell
 - Redwood City
 - Fremont
 - San Carlos
 - Livermore
 - Gilroy



Qualifying
Criteria



Traffic Calming
Measures

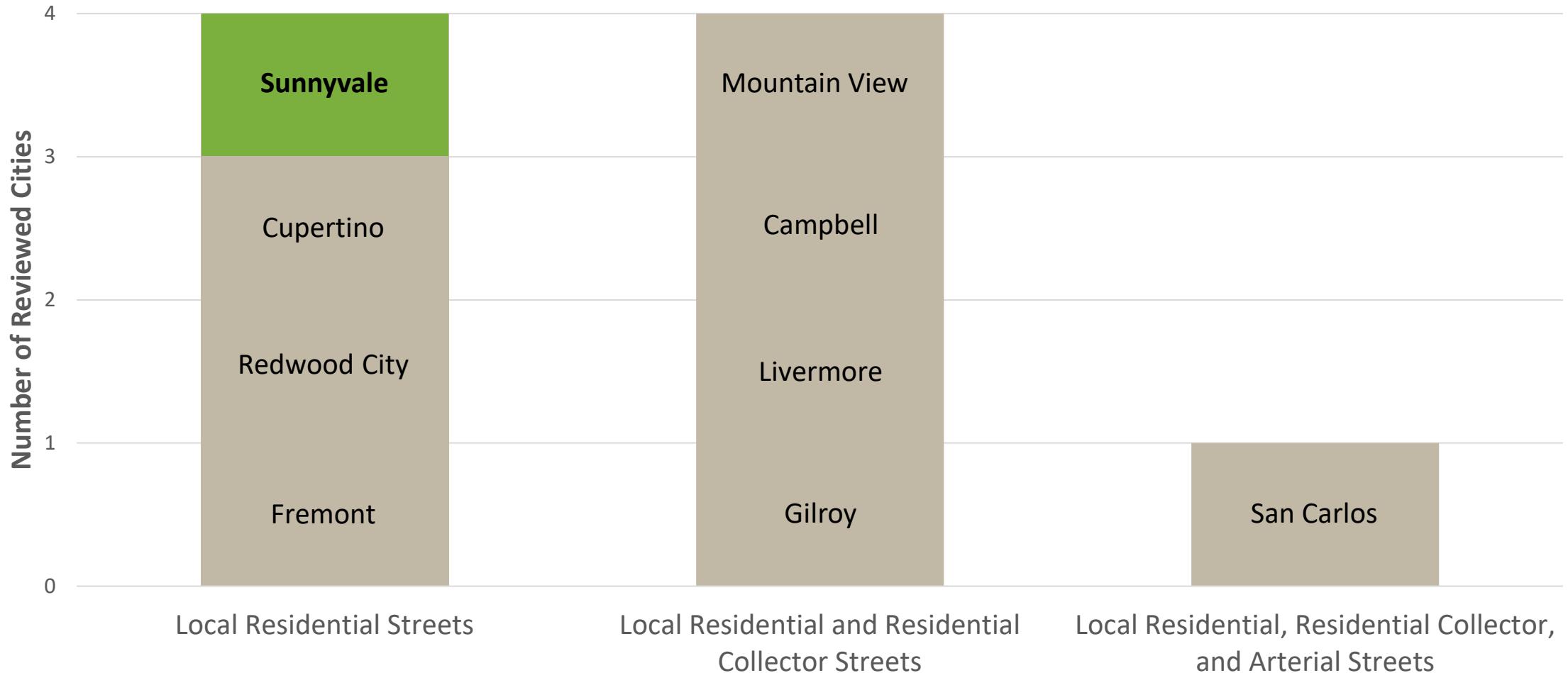


Implementation
Process

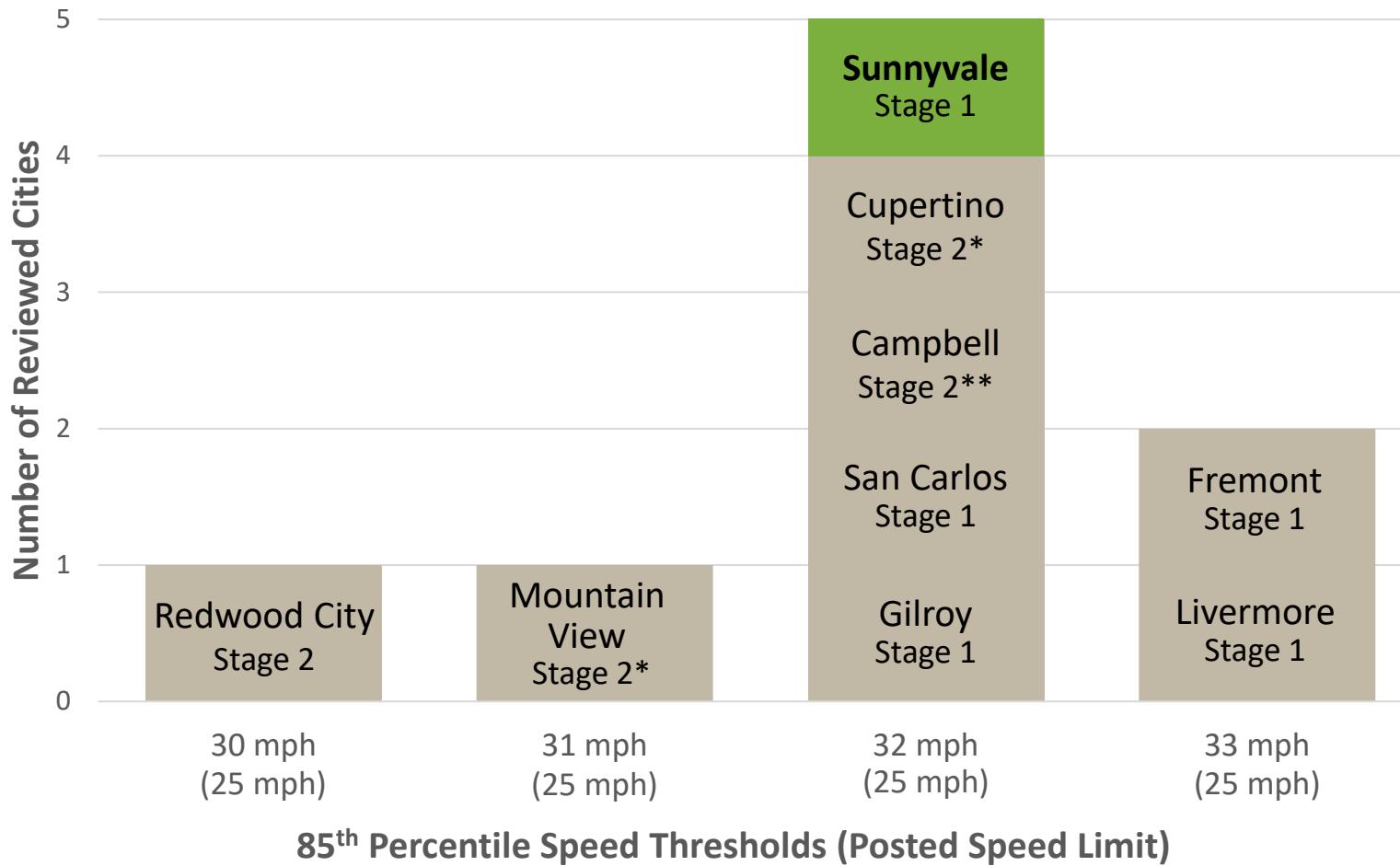


Funding &
Prioritization

Qualifying Criteria – Roadway Classification



Qualifying Criteria – 85th Percentile Speed (Local Residential Streets)

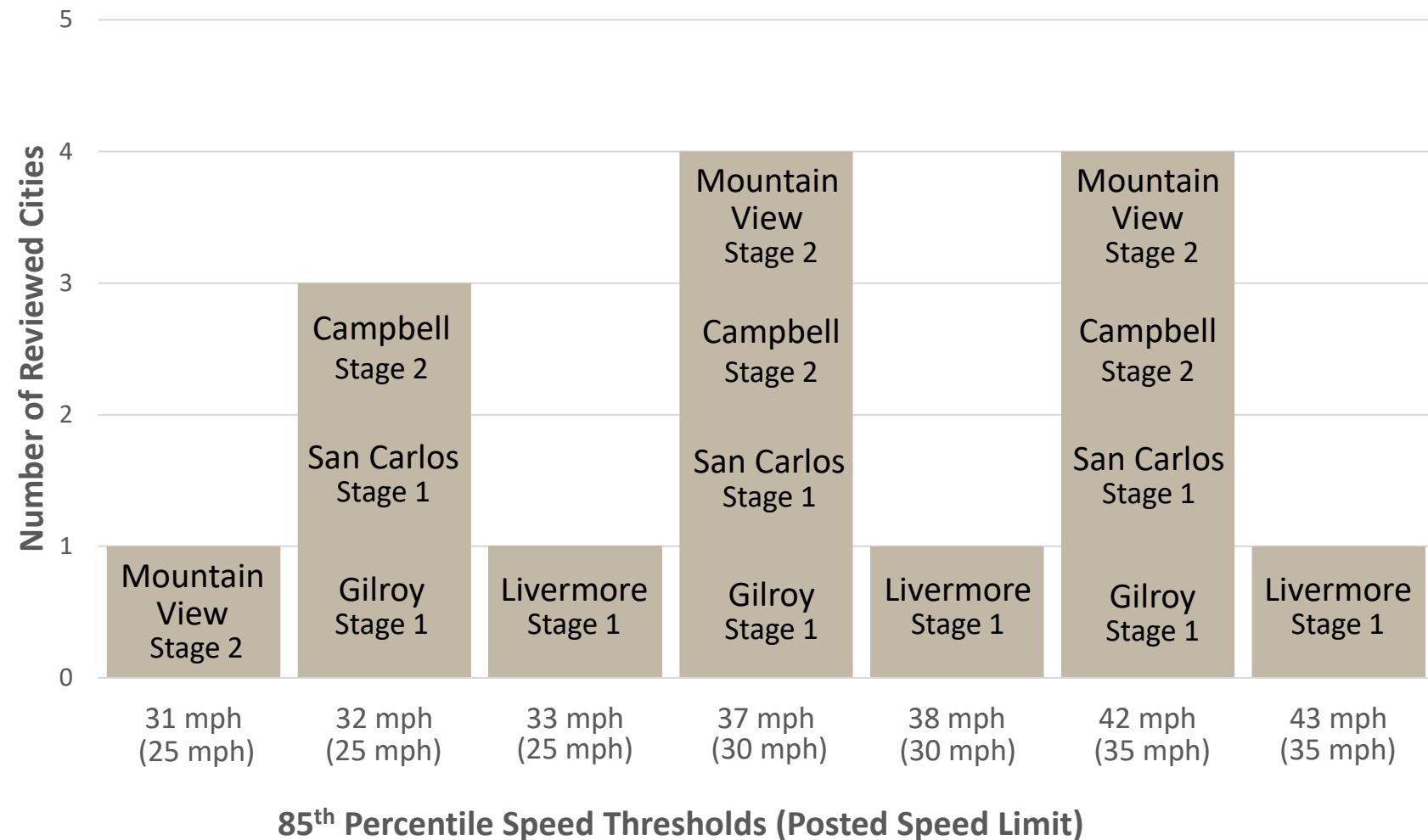


Sunnyvale - or
95th percentile speed >
35 mph

*Mountain View and
Cupertino use 30 mph as
threshold in school zones

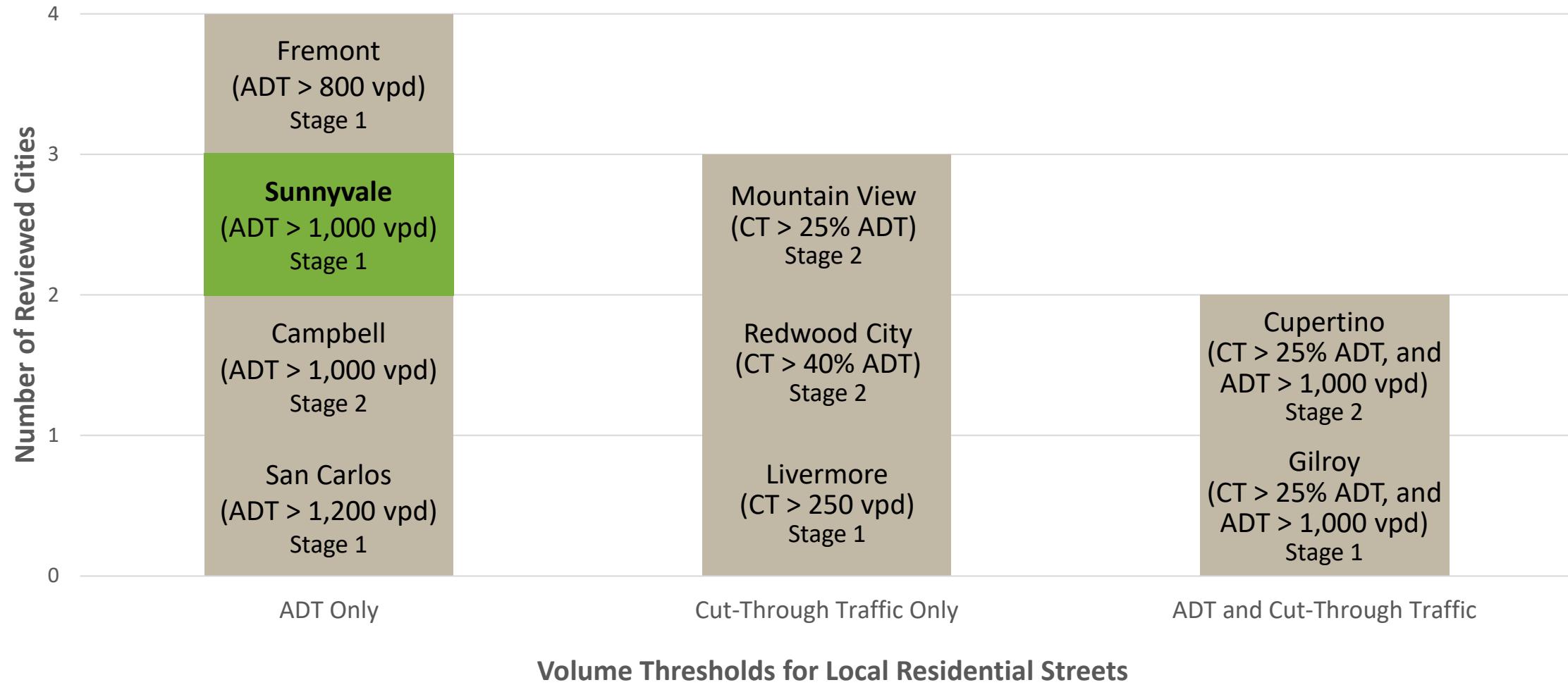
** Campbell requires
both speed and volume
to exceed the threshold

Qualifying Criteria – 85th Percentile Speed (Residential Collector Streets)

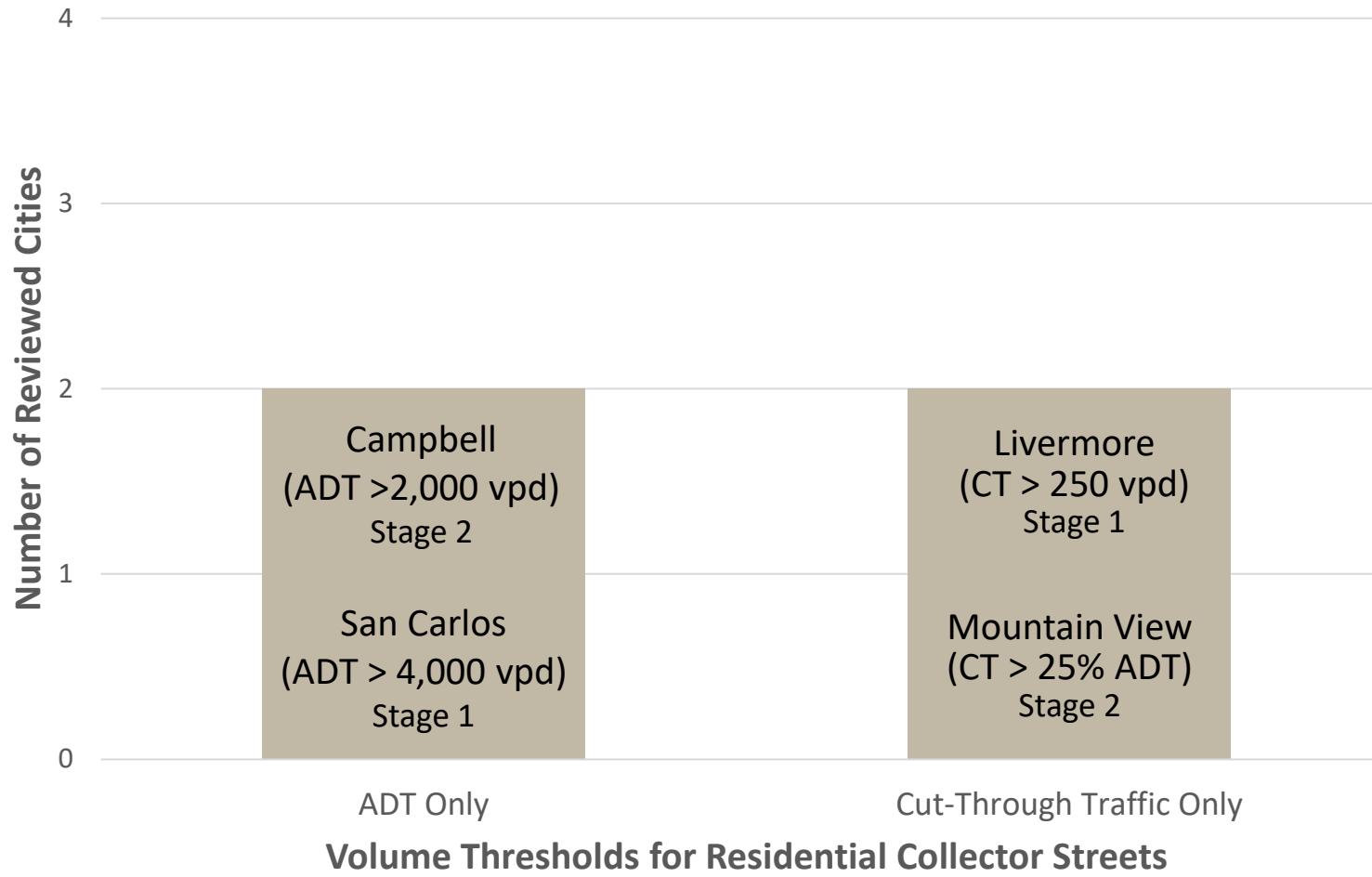


- Mountain View – or 150 vehicles with speed $> 85^{\text{th}}$ percentile per day
- San Carlos - uses same thresholds on Arterial Streets
- Gilroy - or 70% traffic exceeds posted speed limit

Qualifying Criteria – Volume (Local Residential Streets)



Qualifying Criteria – Volume (Residential Collector Streets)



- San Carlos uses $ADT > 13,000$ vpd as threshold for Arterial Streets
- Gilroy only uses speed threshold for Residential Collector Streets

Traffic Calming Measures Included in Reviewed City's NTCPs

Measure	Sunnyvale	Mountain View	Cupertino	Campbell	Redwood City	Fremont	San Carlos	Livermore	Gilroy
Non-Physical Measures (Stage 1)									
Radar Speed Trailer Deployment	X	X	X	X	X	X	X	X	X
Traffic Enforcement Action	X			X	X	X	X	X	X
Traffic Signage and Pavement Marker	X	X	X	X	X	X	X	X	X
Community Outreach/Education				X		X	X	X	X
Physical Measures (Stage 2)									
Vertical Deflection									
Speed Hump	X	X	X	X	X		X		
Speed Cushion/Lump	X					X	X	X	X
Speed Table/Raised Crosswalk	X	X	X		X	X	X	X	
Raised Intersection		X							
Horizontal deflection									
Traffic Circle	X	X	X	X	X	X	X	X	X
Roundabout	X	X	X				X	X	X
Street Width Reduction									
Curb Extension/Choker/Chicane	X	X	X	X	X	X	X	X	X
Median Island	X	X	X	X	X	X	X	X	X
Routing Restriction									
Median Barrier, Forced Turn Island, Barrier, Channelization	X	X			X		X		
Diagonal Diverter	X	X			X		X		
One-Way Street	X	X					X		
One-Way Choker, Half-Closure or Semi-Diverter	X	X					X		
Street Closure and Cul-de-sac	X	X							
Woonerf	X	X							

Potential New Traffic Calming Measures

	
<p>Community Outreach/Education (Stage 1)</p>	<p>Raised Intersection (Stage 2)</p>
<p>Pros</p> <ul style="list-style-type: none">• Resident participation• Education on traffic calming• Direct discussion with the public on traffic problems <p>Cons</p> <ul style="list-style-type: none">• Increase staff resources need	<p>Pros</p> <ul style="list-style-type: none">• Slow traffic and decrease traffic volume• Improve pedestrian safety• Calming two streets at once <p>Cons</p> <ul style="list-style-type: none">• Impact emergency response time• Special consideration for drainage

Comparison of Stage 1 Measures Implementation Process

Initiation

Petition Required:
Sunnyvale $\geq 50\%$

Redwood City 2 residents
Rest 1 resident

Eligibility

- Roadway classification
- 5 cities require data collection for thresholds evaluation
- 4 cities have no requirements if implementing signage and striping

Implementation

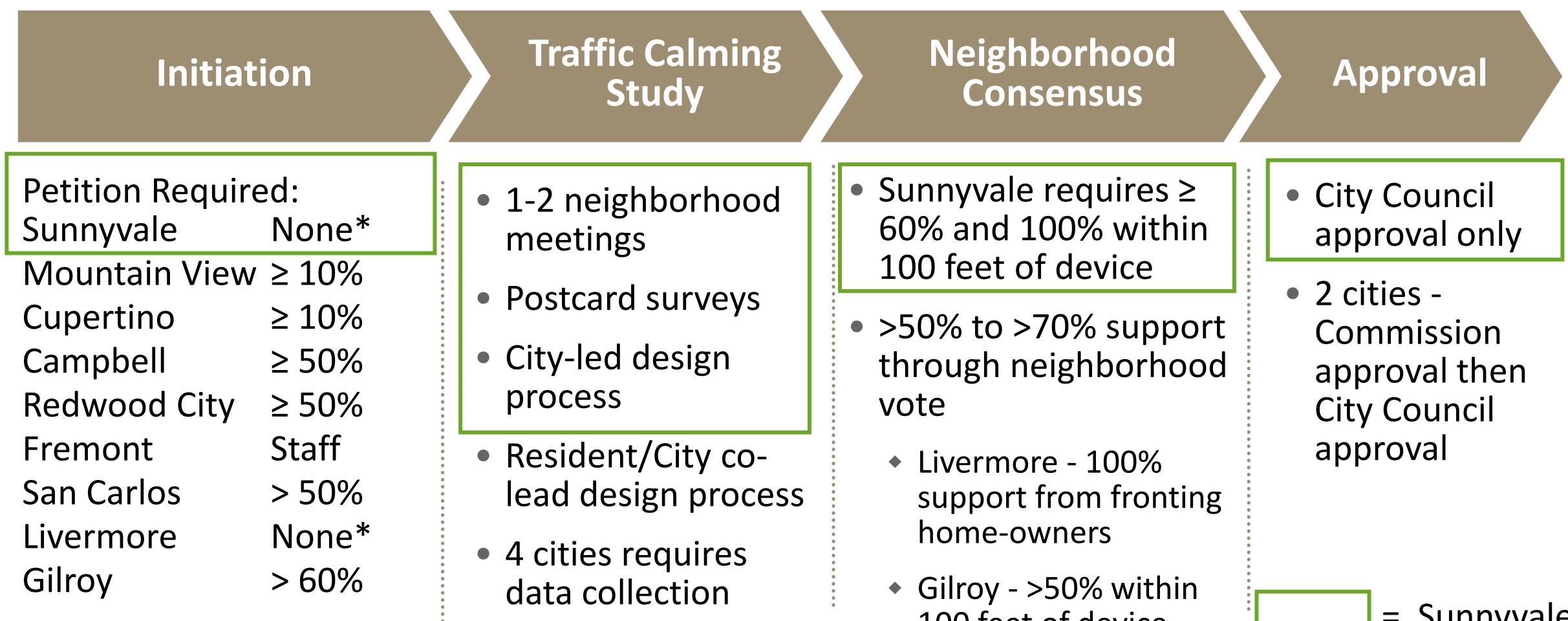
- Implement if meets criteria
- San Carlos staff may use engineering judgement to proceed to Stage 2 if they feel Stage 1 will not work

Follow-up Data Collection

- 5 cities conduct a follow-up data collection to determine effectiveness
- 4 cities do not require follow-up data

= Sunnyvale's process

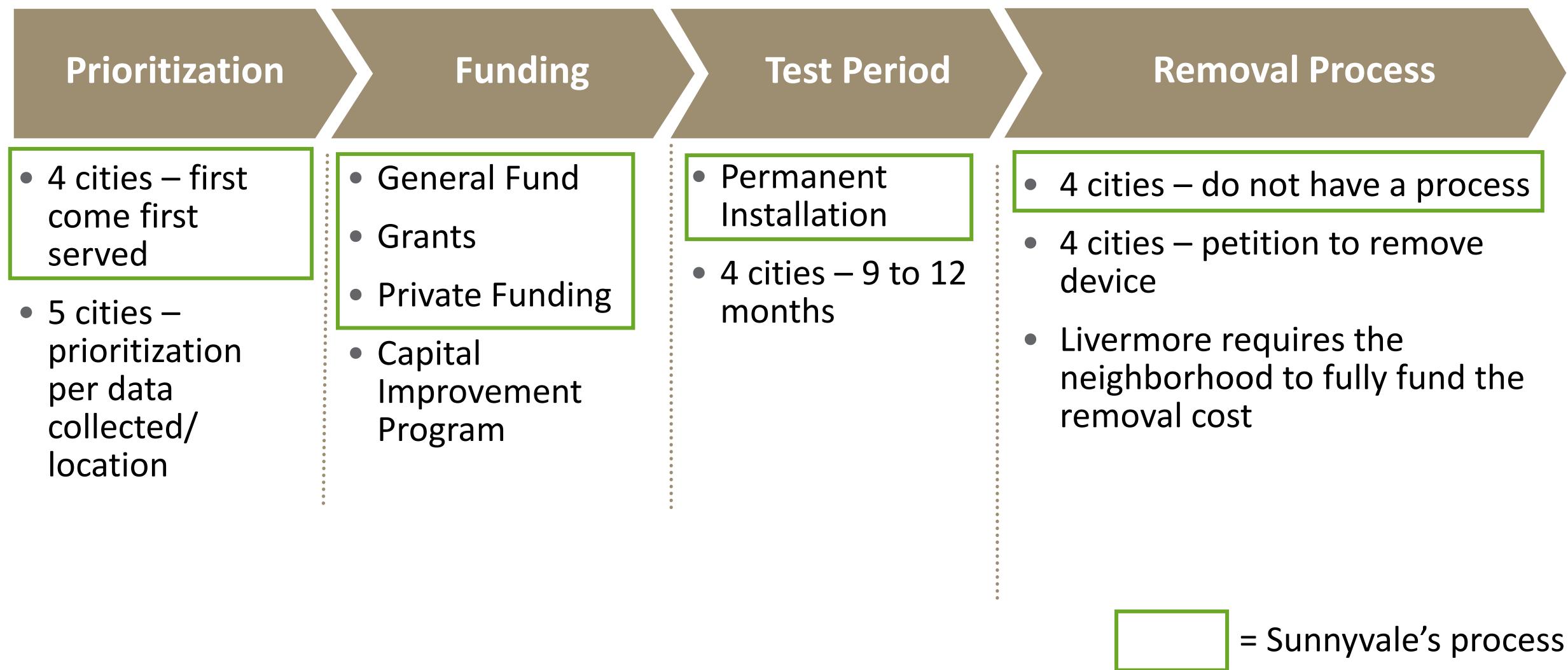
Comparison of Stage 2 Measures Implementation Process



*Not required if Stage 1 is not successful

= Sunnyvale's process

Comparison of Stage 2 Measures Implementation Process (cont'd)

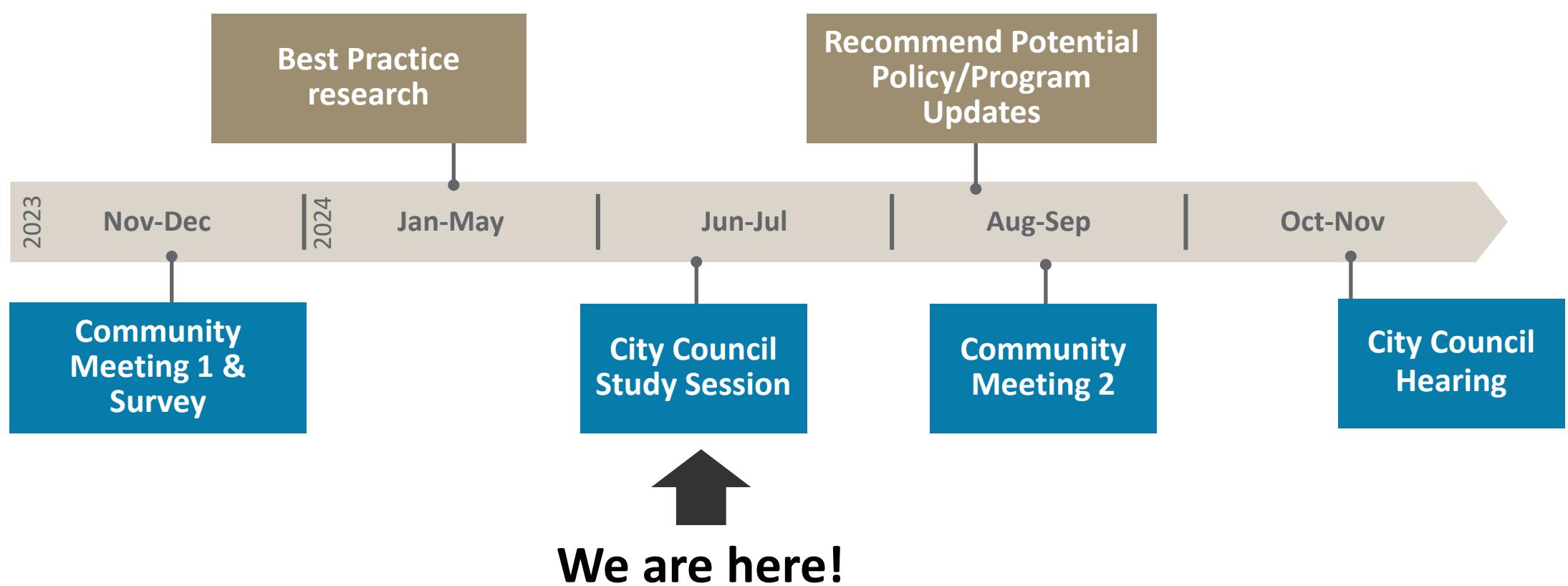




Sunnyvale

Next Steps & Discussion Items

Study Process/Timeline



Goal for the City Council Study Session

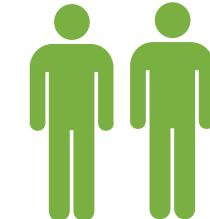
- Share projects progress and community feedback received to date
- Receive information needed to help Council take an action on

Staff Recommendation

- Potential Changes to the NTCP:
 - ◆ **Not to Expand Qualifying Streets** beyond Local Residential Streets
 - Impact emergency response times
 - Designed for higher speeds and higher volumes
 - Traffic diversion to local streets
 - ◆ **Update to speed and/or volume thresholds**
 - Remove 95th percentile threshold
 - ◆ Only cover outliers
 - ◆ Have not met this criteria in previous studies

Staff Recommendation

- Potential Changes to the NTCP (Cont'd):
 - ◆ **Add new traffic calming measures** to our toolkit
 - Stage 1 – Community Outreach/Education
 - Stage 2 – Raised Intersection
 - ◆ **Changes to the NTCP process**
 - Neighborhood Consensus to implement Stage 2 measures
 - ◆ Keep requirement of $\geq 60\%$ support
 - ◆ Remove requirement of 100% support from homeowners within 100 feet of device





Sunnyvale

Thank you!