

# MONTEREY RD. COMPLETE STREET PILOT PROJECT



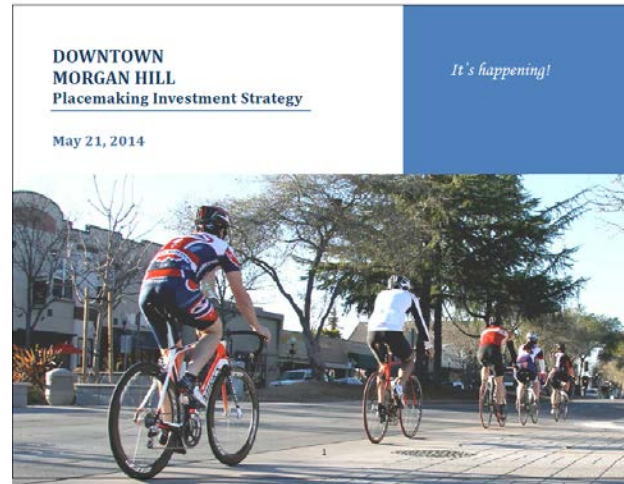
Morgan Hill City Council Meeting  
August 5, 2015



**WHY?**

# GUIDING DOCUMENTS

- General Plan
- Redevelopment Plan
- Downtown Specific Plan
- Parks, Trails & Bikeways Master Plans
- Tourism Strategy
- Downtown Placemaking Investment Strategy



# GENERAL PLAN POLICIES

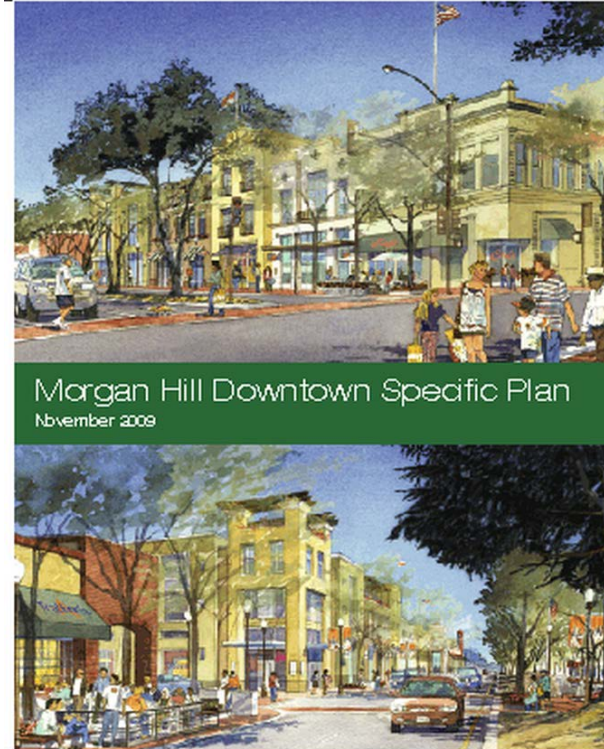
- **Circulation Goal 9.** A circulation system based on Smart Growth and Sustainable Communities strategies; reflecting a balanced, safe, **multi-modal** transportation system, especially in Downtown where pedestrian, bicycle and transit facilities will be emphasized along with vehicular facilities.
- **Policy 1d.** ....., a **pedestrian-friendly** vibrant downtown that emphasizes non-auto transportation modes, energy conservation, **reduction of air and noise pollution**, and the integrity of scenic and/or hillside areas.
- **Policy 2b.** **Congestion** on Monterey Rd. in Downtown Morgan Hill will be **tolerated** in order to promote a pedestrian friendly character and favor transit oriented development.
- **Policy 3o.** Strive to **accommodate** all modes of travel on arterial streets, and improve the Butterfield Corridor, Monterey Road Corridor, and Hale/Santa Teresa Corridor to the extent feasible as well landscaped **multi-modal** boulevards.



# DOWNTOWN SPECIFIC PLAN

## CH.3 MULTI-MODAL CIRCULATION AND STREETSCAPES

- Plan supports 2 or 4 lanes.
- Plan recommends steps to **slow traffic** speed in order to make crossing easier and the district **pedestrian friendly**.
- **Removal of speed bumps** is recommended with road narrowing.
- **Bike lanes** or bike “sharrows” are encouraged.







Make Downtown the most....  
walkable,  
bike-friendly,  
urban,  
family-oriented, and  
transit oriented  
Neighborhood in Morgan Hill



# WHAT DO WE EXPECT OF OUR STREETS?

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THEN

Speed  
Mobility  
Safety

NOW

Multi-Modal Options

Public Health/Safety

Economic Development

Environmental Quality

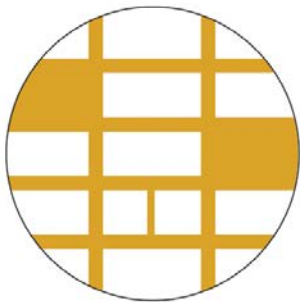
Community Building/Livability

Equity



# PROLIFERATION OF TOOLS & GUIDANCE

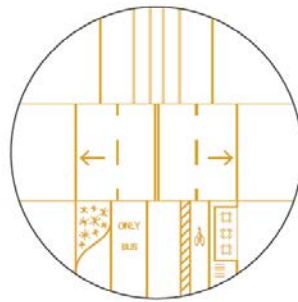




Streets Are  
Public Spaces



Great Streets are  
Great for  
Businesses



Streets Can  
Be Changed



Design for  
Safety



Streets are  
Ecosystems



Act Now!



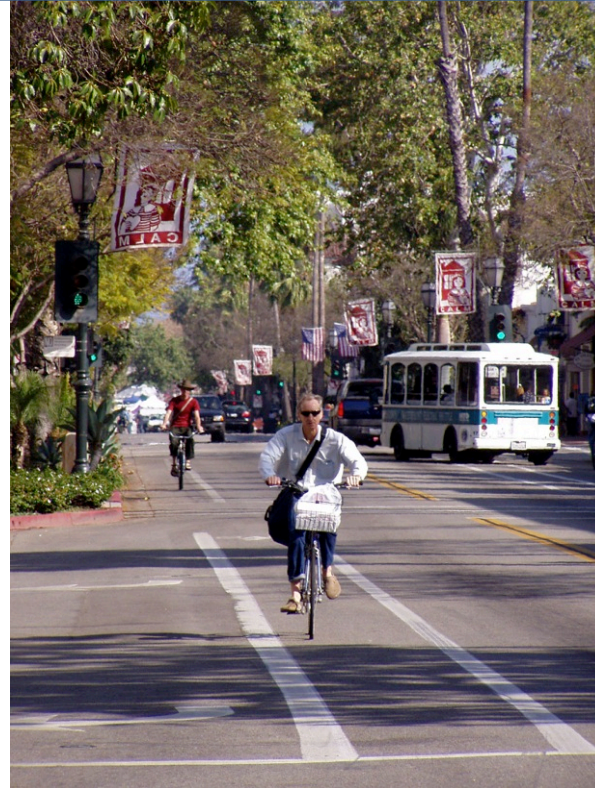
# U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION



- **Complete Streets balance safety and efficiency.**
  - Complete streets are designed and operated to enable safe and efficient access for pedestrians, bicyclists, motorists and transit riders of all ages and abilities.
- **Complete Street networks provide connections and choice.**
  - Street networks are the building blocks of a community. Creating communities with an interconnected roadway network of smaller streets offers multiple options for efficient local travel at moderate speeds, with safer, more direct routes for walking and bicycling.

# COMPLETE STREETS POLICIES

A Complete Streets policy ensures that the entire right of way is planned, designed, operated and maintained to provide safe access for all users.



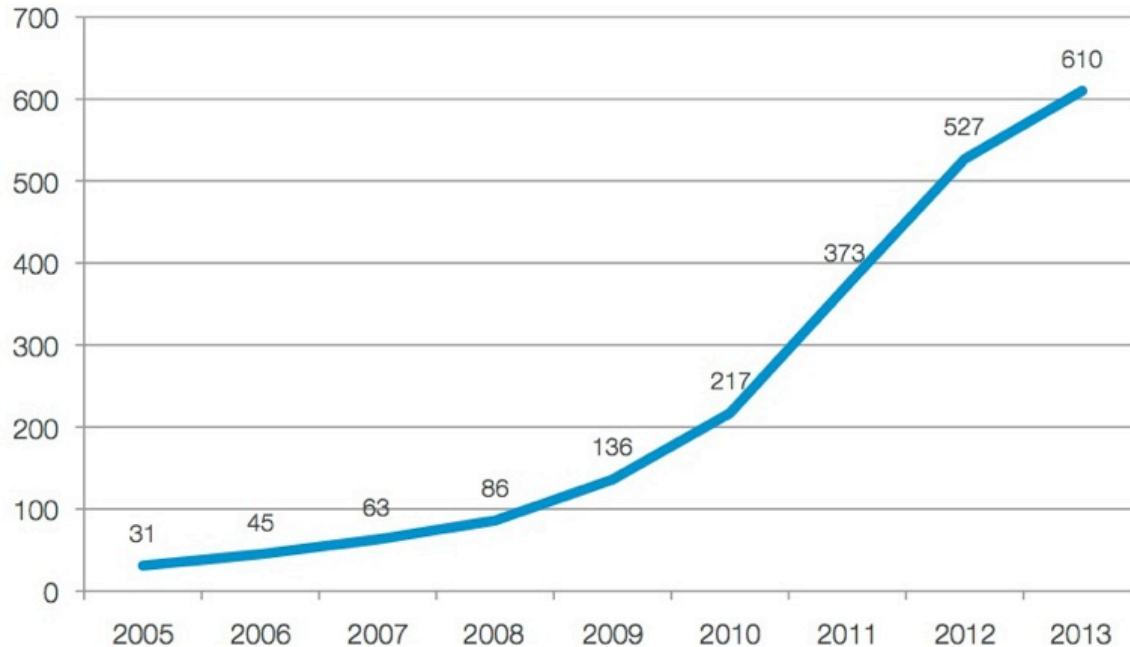
# COMMUNITIES ACROSS THE NATION

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- Nationwide, a total of **712** jurisdictions have adopted such policies to create safer, multimodal transportation networks.
- In 2014, more than **70** jurisdictions adopted Complete Streets policies that allow safe access to destinations for everyone, regardless of age, ability, income or ethnicity, and no matter how they travel.

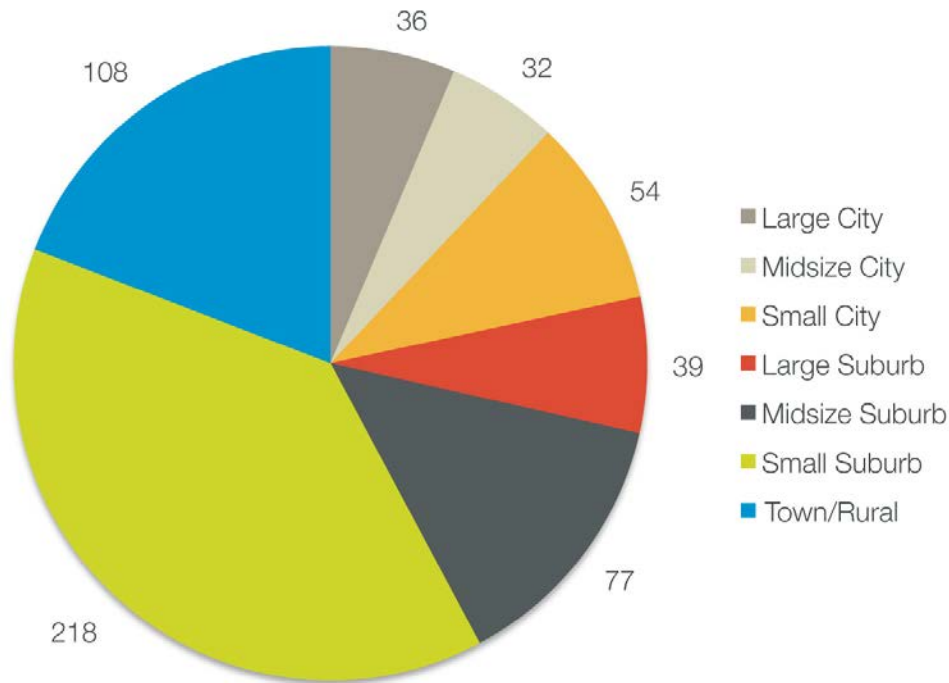
# POLICY ADOPTION & ISSUE AWARENESS

Number of Complete Streets policies nationwide, 2005–2013



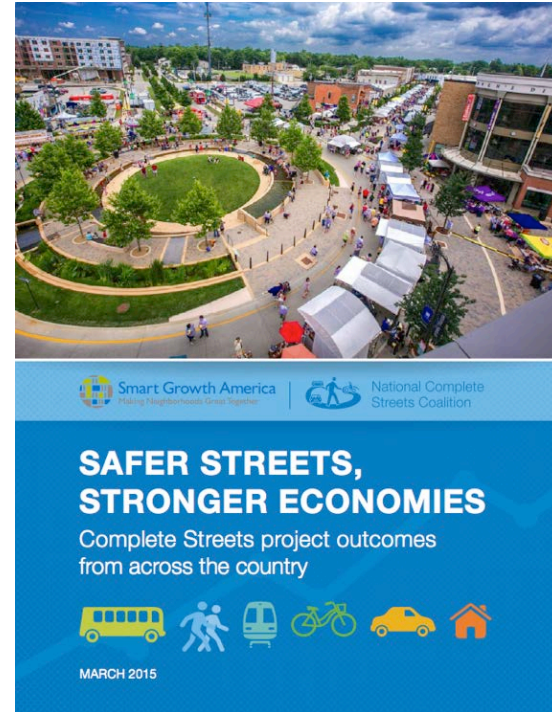


# MUNICIPALITIES WITH COMPLETE STREETS POLICIES BY SIZE, 1971-2014



# SAFER STREETS, STRONGER ECONOMIES

- Improved safety
- Increased biking and walking
- Mix of increases and decreases in auto traffic
- Remarkably affordable
- Support increased employment and higher property values.
- [www.smartgrowthamerica.org/research/safer-streets-stronger-economies](http://www.smartgrowthamerica.org/research/safer-streets-stronger-economies)



# BENEFITS OF COMPLETE STREETS

According to the Walkable and Livable Communities Institute, Benefits include:

- Motorist: Safety 25- 40% improvement
- Traffic moves with greater uniformity
- Compact intersections more efficient
- Greater cost savings
- Turns are easier
- Senior friendly (as motorists)
- Others:
- Senior friendly (as pedestrians)
- Supports transit, walking and bicycling
- Emergency response friendly
- Increased property values (and tax base)
- Community economic development



# Monterey Road Complete Street

## Pilot Performance Monitoring

Bryan Jones, PE, PTP, AICP

August 5, 2015





# Collaborative Approach



MORGAN HILL  
DOWNTOWN  
ASSOCIATION



Harris & Associates.

# Complete Street Objectives

- **Improve livability and economic vitality**
- **Enhance pedestrian environment**
- **Accommodate bicyclists safely**
- **Reduce noise and air pollution**
- **Create attractive, thriving and vibrant community gathering places**
- **Foster a safe and inviting experience for all**
- **Preserve mobility for those accessing businesses, schools, services, transit, and other key destinations**



# Pilot Periods

Today ↘



Pre-Pilot  
Pre-Feb. 18<sup>th</sup>



Mid-Pilot  
Feb. 18<sup>th</sup>–Apr. 18<sup>th</sup>



Council Check-in  
May 20<sup>th</sup>



End-Pilot  
Apr. 19<sup>th</sup>–July 10<sup>th</sup>



Council Check-in  
Aug. 5<sup>th</sup>

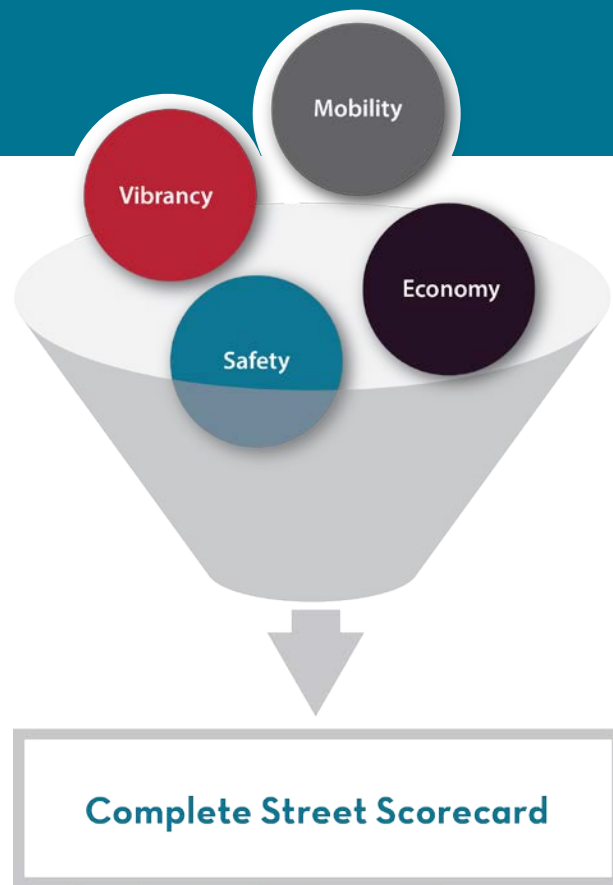
# End-Pilot Results



# Performance Measures

- Motor Vehicle Speed
- Emergency Response Time
- Pedestrian Counts
- Reported Safety Concerns
- Travel Time Reliability
- Bicycle Counts
- Pedestrian Delay

- Bicyclist Demographics
- Transit Ridership
- Traffic Diversion
- Resident Opinion
- Collisions
- Parking Turnover
- Noise
- Business Opinion



# Safety



Emergency  
Response Time

**NO CHANGE**

No emergency runs routed through Downtown over 8 minutes in total response time



Motor  
Vehicle Speeds

**NO CHANGE**

85<sup>th</sup> percentile speed remained at 27 mph throughout the pilot



Collisions

**8→10**

Increase in the number of no report and report collisions



Reported  
Safety Concerns

**0→2**

Only reported safety concerns during pilot occurred during end-pilot period

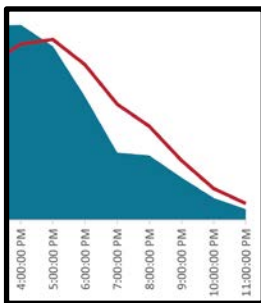
# Economy



Parking  
Occupancy

**↑ 16%**

The number of occupied parking spaces increased from 43% to 50% and the turnover rate increased



Greater Evening  
Activity

**↑ 7-8pm**

The number of vehicles driving to or through Downtown increased during the later evening hours



Business  
Sales

**↑ 4 ↓ 2**

Four out of six businesses that participated in Economic Vitality Survey reported an increased in sales compared to 2014



Business  
Opinion

**↓ 20%**

Businesses in favor of permanent implementation decreased from 50% to 40%

# Vibrancy



Outdoor  
Noise

↓ 26%

The outdoor sound intensity  
decreased from  
70. LAeq to 69 LAeq



Number of  
Pedestrians

↑ 6%

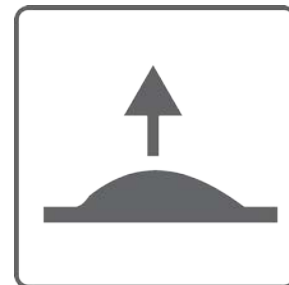
The number of people  
walking around Downtown  
increased from 348 to 368



Kids biking  
Downtown

↑ x 7

The number of kids bicycling  
in Downtown increased  
from 7 to 50



Speed  
Cushion

REMOVED

Removal of speed bumps  
created a friendlier outdoor  
dining environment



# Mobility



Number of  
People Biking

**↑ x 3**

The number of bicyclists  
nearly tripled (74 to 214)



Large & loud  
Truck Traffic

**↓ 20%**

More than 400 pick-up  
trucks, semi-trucks no longer  
use Downtown as a bypass



Travel Time  
Reliability

**↑ 5 secs**

Travel time predictability  
improved from 20 seconds to  
15 seconds



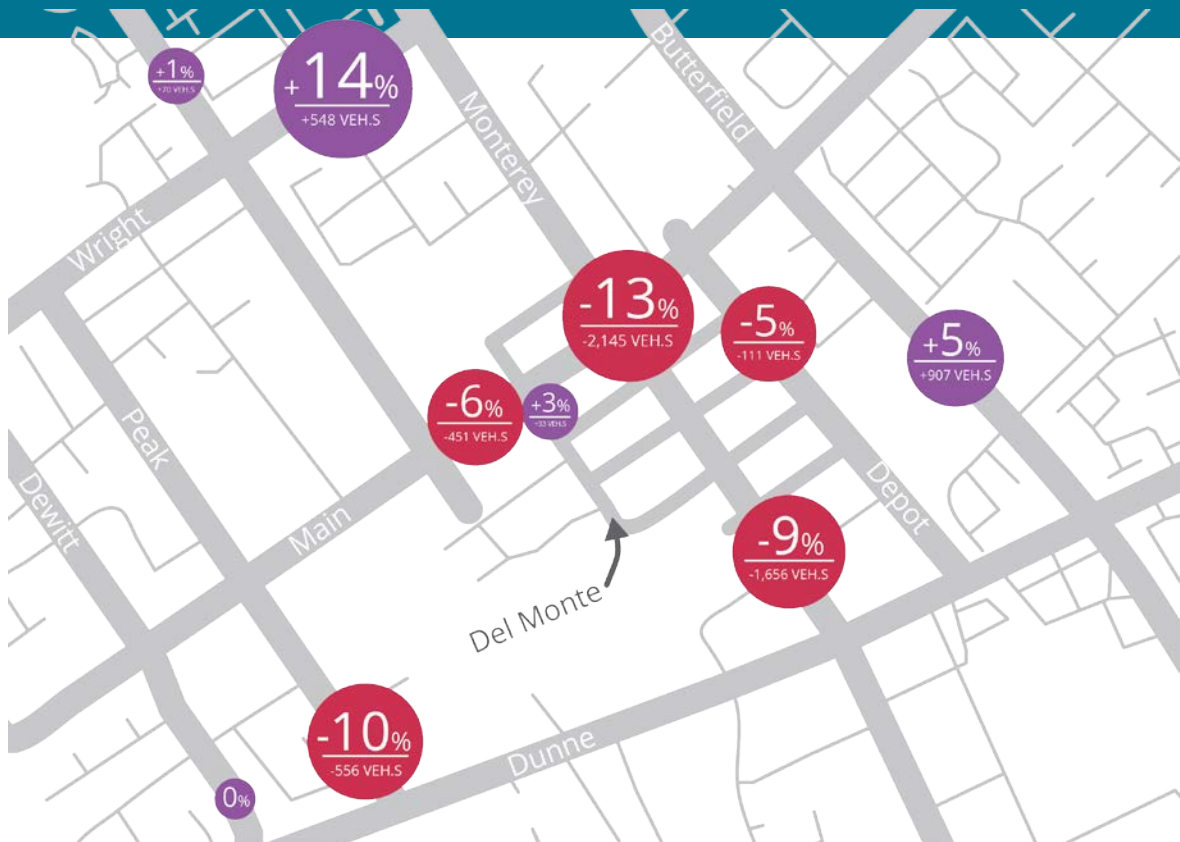
Total AM  
Commute Time

**↓ 12 secs**

Average travel time through  
Downtown improved from 50  
seconds to 38 seconds

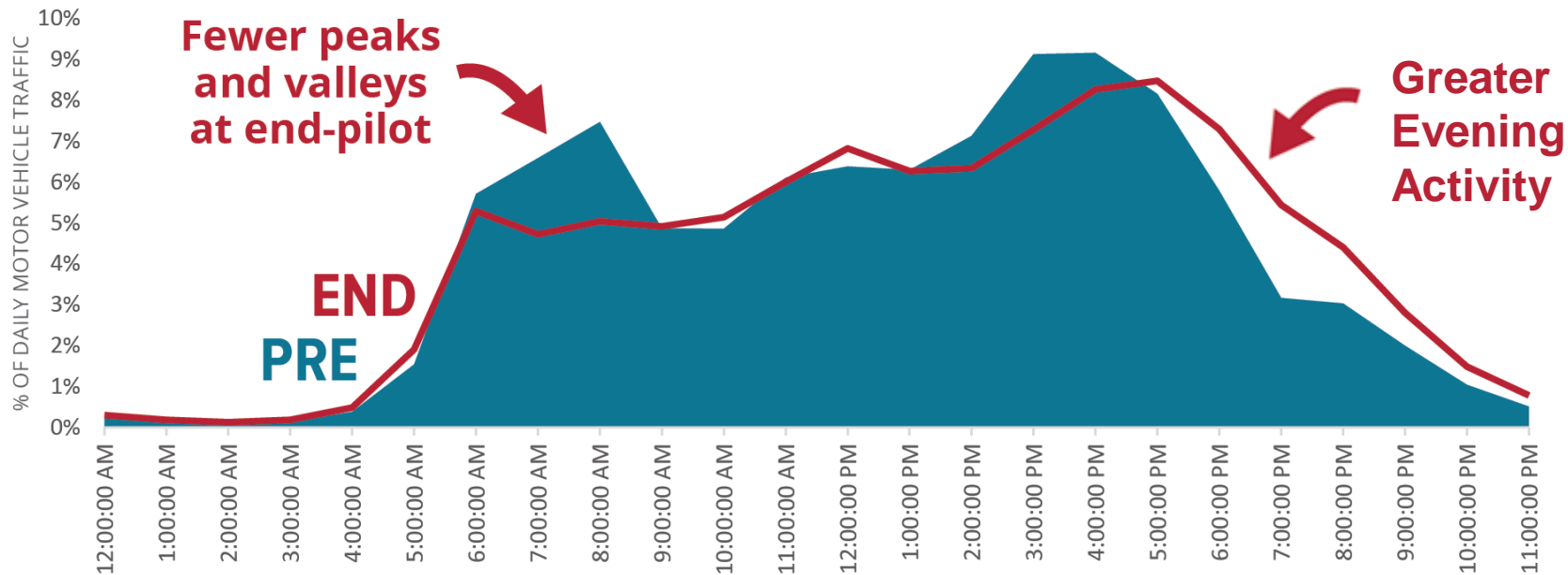
# Mobility

**20% of loud and large vehicles shifted to Butterfield**



# Mobility

## MOTOR VEHICLE VOLUMES ARE MORE EVENLY DISTRIBUTED



# Complete Street Scorecard

Pre-Pilot		Performance Level					Calculations			
Performance Measure		1	2	3	4	5	Value	Level	Weight	Score
Safety	Emergency Response Time	4	3	2	1	0	0	5	9	44
	Motor Vehicle Speed	27	25	23	21	19	27	1	9	9
	Reported Safety Concerns	4	3	2	1	0	0	5	4	21
	Collisions	10	8	6	4	2	8	2	7	14
Mobility	Travel Time Reliability	00:24	00:19	00:15	00:11	00:06	00:20	2	8	15
	Bicycle Counts	0	50	100	150	200	74	2	4	8
	Pedestrian Delay	E	D	C	B	A	A	5	6	30
	Transit Ridership	359	363	368	372	376	369	2	4	8
	Traffic Diversion	62%	58%	54%	50%	48%	58%	2	6	11
Vibrancy	Noise	72.0	71.0	70.0	69.0	68.0	70.3	3	5	15
	Bicyclist Demographics	20%	25%	30%	40%	45%	28%	3	4	13
	Pedestrian Counts	325	350	375	400	425	348	2	8	16
	Parking Occupancy	0.43	0.46	0.50	0.54	0.57	0.43	1	6	6
	Resident Survey	30%	40%	50%	60%	70%	35%	2	7	13
Economy	Sales	-	-	-	-	-	-	-	9	0
	Business Survey	30%	40%	50%	60%	70%	50%	3	6	19
Complete Street Score										241
Complete Street Goal										275

❖ Community identified performance measures and their relative value

❖ Consolidated all 15 performances measures into 1 Score using weighting from resident survey

Pre-Pilot Score was 241

# Complete Street Scorecard

Pre-Pilot		Performance Level					Calculations			
Performance Measure		1	2	3	4	5	Value	Level	Weight	Score
Safety	Emergency Response Time	4	3	2	1	0	0	5	9	44
	Motor Vehicle Speed	27	25	23	21	19	27	1	9	9
	Reported Safety Concerns	4	3	2	1	0	0	5	4	21
	Collisions	10	8	6	4	2	8	2	7	14
Mobility	Travel Time Reliability	00:24	00:19	00:15	00:11	00:06	00:20	2	8	15
	Bicycle Counts	0	50	100	150	200	74	2	4	8
	Pedestrian Delay	E	D	C	B	A	A	5	6	30
	Transit Ridership	359	363	368	372	376	369	2	4	8
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	Resident Survey	30%	40%	50%	60%	70%	35%	2	7	13
Economy	Sales	-	-	-	-	-	-	-	9	0
	Business Survey	30%	40%	50%	60%	70%	50%	3	6	19
Complete Street Score										241
Complete Street Goal										275

❖ Set a goal that showed a 10-15% improvement over the baseline

❖ To show a measureable increase with the pilot project, a goal of 275 points was chosen

# Complete Street Scorecard

Pre-Pilot		Performance Level					Calculations			
Performance Measure		1	2	3	4	5	Value	Level	Weight	Score
Safety	Emergency Response Time	4	3	2	1	0	0	5	9	44
	Motor Vehicle Speed	27	25	23	21	19	27	1	9	9
	Reported Safety Concerns	4	3	2	1	0	0	5	4	21
	Collisions	10	8	6	4	2	8	2	7	14
	Travel Time Reliability	00:24	00:19	00:15	00:11	00:06	00:20	2	8	15
Mobility	Bicycle Counts	0	50	100	150	200	74	2	4	8
	Pedestrian Delay	E	D	C	B	A	A	5	6	30
	Transit Ridership	359	363	368	372	376	369	2	4	8
	Traffic Diversion	62%	58%	54%	50%	46%	55%	2	6	11
	Noise	72.0	71.0	70.0	69.0	68.0	70.3	3	5	15
Vibrancy	Bicyclist Demographics	20%	25%	30%	40%	45%	28%	3	4	13
	Pedestrian Counts	325	350	375	400	425	348	2	8	16
	Parking Occupancy	0.43	0.46	0.50	0.54	0.57	0.43	1	6	6
	Resident Survey	30%	40%	50%	60%	70%	35%	2	7	13
	Sales	-	-	-	-	-	-	-	9	0
Economy	Business Survey	30%	40%	50%	60%	70%	50%	3	6	19
	Complete Street Score									241
Complete Street Goal										275

Mid-Pilot		Performance Level					Calculations			
Performance Measure		1	2	3	4	5	Value	Level	Weight	Score
Safety	Emergency Response Time	4	3	2	1	0	0	5	9	44
	Motor Vehicle Speed	27	25	23	21	19	27	1	9	9
	Reported Safety Concerns	4	3	2	1	0	0	5	4	21
	Collisions	10	8	6	4	2	6	3	7	21
	Travel Time Reliability	00:24	00:19	00:15	00:11	00:06	00:52	1	8	8
Mobility	Bicycle Counts	0	50	100	150	200	170	4	4	16
	Pedestrian Delay	E	D	C	B	A	A	5	6	30
	Transit Ridership	359	363	368	372	376	366	5	4	19
	Traffic Diversion	62%	58%	54%	50%	46%	56%	3	6	17
	Noise	72.0	71.0	70.0	69.0	68.0	69.7	3	5	15
Vibrancy	Bicyclist Demographics	20%	25%	30%	40%	45%	43%	5	4	21
	Pedestrian Counts	325	350	375	400	425	331	1	8	8
	Parking Occupancy	0.43	0.46	0.50	0.54	0.57	0.45	2	6	11
	Resident Survey	30%	40%	50%	60%	70%	34%	1	7	7
	Sales	-	-	-	-	-	-	-	9	0
Economy	Business Survey	30%	40%	50%	60%	70%	56%	4	6	28
	Complete Street Score									271

End-Use		Performance Level					Calculations			
Performance Measure		1	2	3	4	5	Value	Level	Weight	Score
Safety	Emergency Response Time	4	3	2	1	0	0	5	9	44
	Motor Vehicle Speed	27	25	23	21	19	27	1	9	44
	Reported Safety Concerns	4	3	2	1	0	2	3	4	12
	Collisions	10	8	6	4	2	10	1	7	7
	Travel Time Reliability	00:24	00:19	00:15	00:11	00:06	00:15	3	8	23
Mobility	Bicycle Counts	0	50	100	150	200	214	5	4	20
	Pedestrian Delay	E	D	C	B	A	A	5	6	30
	Transit Ridership	359	363	368	372	376	379	5	4	19
	Traffic Diversion	62%	58%	54%	50%	46%	41%	5	6	26
	Noise	72.0	71.0	70.0	69.0	68.0	68.5	4	5	20
Vibrancy	Bicyclist Demographics	20%	25%	30%	40%	45%	39%	4	4	17
	Pedestrian Counts	325	350	375	400	425	368	3	8	24
	Parking Occupancy	0.43	0.46	0.50	0.54	0.57	0.50	3	6	17
	Resident Survey	30%	40%	50%	60%	70%	32%	1	7	7
	Sales	-	-	-	-	-	-	-	9	0
Economy	Business Survey	30%	40%	50%	60%	70%	40%	2	6	13
	Complete Street Score									289

**Pre-Pilot Score: 241**

**Mid-Pilot Score: 271**

**End-Pilot Score: 289**

**Complete Street Pilot Project exceeded its goal by 14 points**



# Bottom Line

- ✓ Decrease weaving between lanes
- ✓ Decrease jockeying for position at traffic signals
- ✓ Improve the pedestrian experience
- ✓ Reduce outdoor noise levels
- ✓ Make crossing Monterey Road easier for pedestrians
- ✓ Improve bicyclist comfort levels
- ✓ Create Public space
- ✗ Reduce travel speeds
- ✗ Provide secure bicycle parking

# RECOMMENDATION RATIONALE

- 1) The single lane configuration advances the long-held **vision** of making downtown the most walkable, bike friendly, urban, family-oriented and transit oriented neighborhood in Morgan Hill.
- 2) The single lane configuration implements key objectives of the General Plan, Downtown Specific Plan, the Placemaking Investment Strategy and many other Downtown **guiding and planning documents**.
- 3) The single lane configuration with bicycle lanes is part of and complements the City's other placemaking **investments** that provide for more parking, new parks and trails, public plaza, public art, and streetscape and infrastructure improvements in the Downtown.
- 4) Creation of bike lanes and pedestrian-friendly spaces support Morgan Hill's vision for a **healthy community**.



# RECOMMENDATION RATIONALE

- 5) The bike lanes have created a **friendlier, diverse**, and more **inviting** environment for **children and families**.
- 6) **Butterfield** was built as a commuter route and driving patterns have begun to **shift** as demonstrated by a five percent increase in vehicle count during the pilot project.
- 7) Downtown is emerging as a **dining destination** being recognized regionally and the single lane configuration will continue to nurture the outdoor dining experience.
- 8) Downtown is a business district that serves the entire city, but it is also a **neighborhood** with a growing residential base.
- 9) Downtown is an amenity to **larger employers** and having a fun, attractive and thriving downtown is one of the elements that the young creative minds consider for when making employment choices.



# THE MAIN POLICY CONSIDERATION

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Do we want Downtown to serve as a commuter  
roadway for South County?

Or

Do we implement the community's vision to make  
Downtown a pedestrian-friendly, multi-modal  
neighborhood?

# RECOMMENDATION

1. Adopt a resolution approving the permanent implementation of the single travel lane (in each direction) complete street project through Downtown.
2. Direct staff to explore the following complete street enhancements:
  - a) Reducing the width of the travel lane to reduce the driver field of view and reduce speeding
  - b) Studying signal timing at the intersection of Monterey Road and Main Avenue and potential conversion of the outside westbound travel lane to a shared through/right-turn lane and evaluate northbound and southbound left-turn movement operations
  - c) Adding advance yield bars, green pavement markings, rectangular rapid flashing beacons, decorated crosswalks, and other safety enhancements
  - d) Adding bicycle racks and bicycle corrals in Downtown, particularly along Monterey Road and Third Streets
  - e) Exploring other improvements to signal timing at key intersections to improve flow of traffic
  - f) Continuing to monitor business health through State Department of Revenue Quarterly Sales Tax Receipt Data
  - g) Widening and adding buffers along the existing bicycle lanes between Cochrane Road and Main Avenue and adding bicycle way-finding between Coyote Creek Trail and Downtown
3. Direct staff to develop design and safety standards to facilitate the voluntary use of parking spaces along Monterey Road as restaurant/retail expansion areas.
4. Direct staff to continue to pursue funding opportunities, including grants, for the construction of Hale Avenue.
5. Direct staff to continue to explore educational, way-finding signage and enforcement activities that reinforces using Butterfield Road as a truck route (as Monterey Road is not a designated truck route) and for commuting.
6. Direct staff to develop and implement a strategy to increase the STIP (State Transportation Improvement Program) priority of funding for the widening of Interstate 101.

# QUESTIONS?

