

Safe Routes to Schools

Program Evaluation

November 7, 2016



DRAFT

MARIN COUNTY SAFE ROUTES TO SCHOOLS

PROGRAM EVALUATION

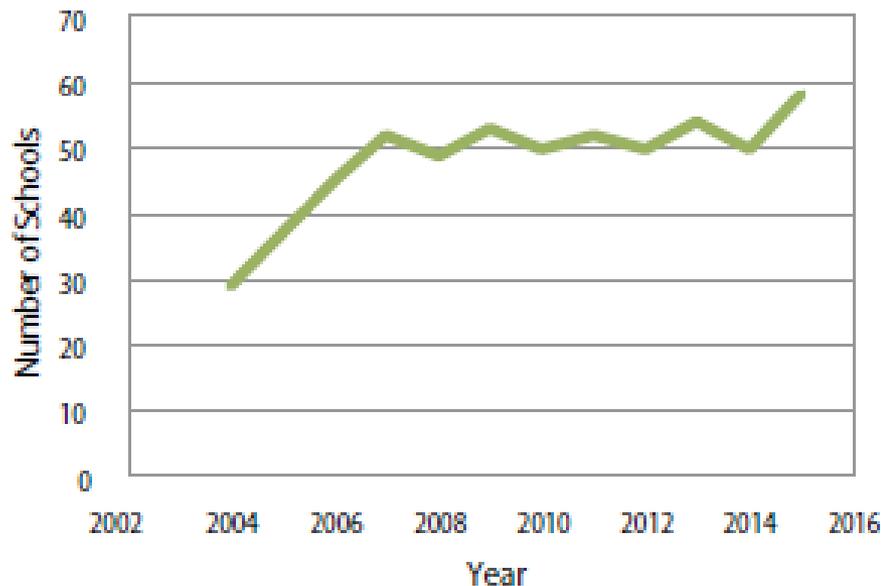


SEPTEMBER 2016



Participating Schools

Figure 2. Number of Schools Participating in SR25
(2004-2015)



- 2000-2001 school year
5 schools during the inaugural year
- 2014-2015 school year
58 schools representing
14 school districts



Participating Schools

- Elementary Schools
- Middle Schools
- High Schools
- Private Schools



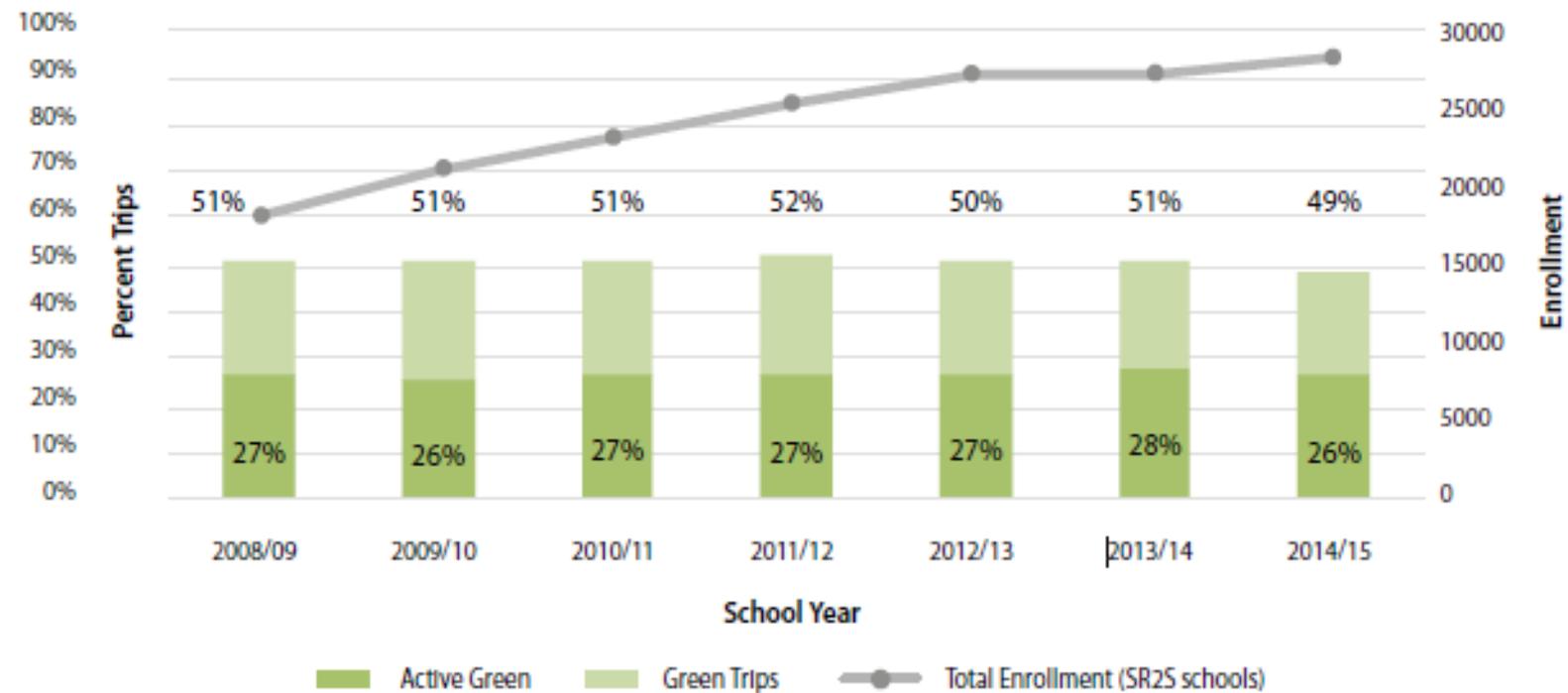
Travel Mode Shift Summary



Active Green Trips	Green Trips	Vehicle Trips
<ul style="list-style-type: none"> • Walk • Bicycle • Other 	<ul style="list-style-type: none"> • Active Green • Carpool • School Bus • Transit 	<ul style="list-style-type: none"> • Family Vehicle (single-student)

Travel Mode Shift Summary

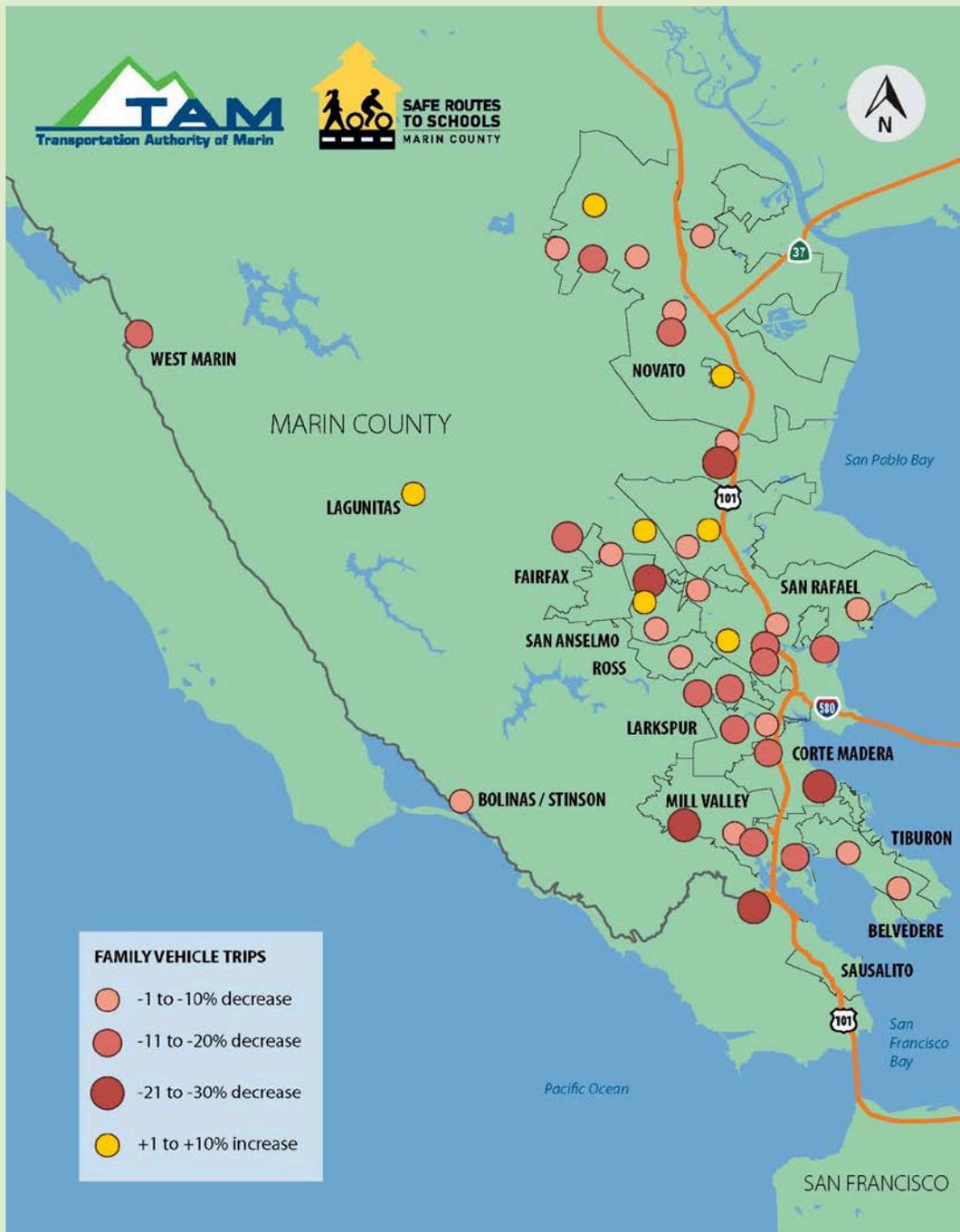
Figure 4. Countywide Active Green and Green Trips / Enrollment



Travel Mode Shift Summary (Cont.)

Figure 5. Countywide Active Green and Green Trips and Enrollment





Changes to Family Vehicle Trips

- ▼ -1 to 10% decrease: 41%
- ▼ -11 to -20% decrease: 31%
- ▼ -21 to -30% decrease: 12%
- ▲ +1 to 10% increase: 16%



Primary Green Trip Factors

- Administration
- Team Leader
- Education
- Encouragement



Primary Green Trip Factors

- Green Infrastructure
- Busing
- Neighborhood Schools
- Crossing Guards



Evaluation Summary of Participating Schools

School Name	Baseline			2014/2015 Trips		2014/2015 School Trips by Mode							Factors ¹							
	Semester	Green Trips	Active Green Trips	Green Trips	Active Green Trips	Walk	Bike	Other	School Bus	Public Transit	Carpool	Family Vehicle	Amintistration	Team Leader	Education	Encouragement	Green Infrastructure	Busing ²	Neighborhood Schools ³	Crossing Guards ⁴
Bahia Vista Elementary School (K-5)	Fall 2002	49%	45%	67%	60%	60%	0%	0%	0%	0%	6%	34%	L	L	H	M	H	N	Y	3
Brookside Elementary School (K-5)	Fall 2001	37%	16%	61%	55%	41%	9%	5%	0%	0%	6%	40%	H	H	H	H	H	N	Y	1
Mill Valley Middle School (6-8)	2003	49%	29%	66%	54%	25%	26%	3%	0%	1%	11%	34%	H	H	H	H	H	T	N	6
Henry Hall Middle School (5-8)	Fall 2009	54%	38%	72%	50%	19%	29%	2%	7%	10%	6%	29%	H	L	H	M	H	T	N	2
Park Elementary School (K-5)	2004	44%	34%	53%	50%	39%	7%	4%	0%	0%	3%	47%	L	L	H	M	M	N	Y	2
Neil Cummins Elementary School (K-4)	2001	52%	25%	61%	49%	23%	21%	5%	0%	0%	13%	39%	H	H	H	H	H	N	N	3(1)
Ross School (K-8)	Fall 2001	43%	36%	53%	48%	24%	17%	7%	0%	0%	5%	46%	L	H	H	H	M	N	Y	4(1)
A. E. Kent Middle School (5-8)	2001	48%	34%	58%	47%	32%	11%	4%	0%	0%	11%	42%	H	H	H	H	M	T	N	4
Old Mill School (K-5)	2003	17%	16%	57%	47%	40%	4%	4%	1%	0%	10%	43%	H	H	H	H	M	N	Y	2
Wade Thomas Elementary School (K-5)	2002	47%	40%	48%	42%	27%	12%	3%	0%	0%	7%	52%	M	M	M	H	M	N	Y	0
Manor Elementary School (K-5)	Fall 2000	39%	24%	48%	39%	19%	18%	2%	0%	0%	9%	52%	H	H	H	H	H	N	N	3
The Cove School (K-5)	Fall 2014	59%	43%	54%	38%	17%	17%	4%	5%	3%	9%	46%	H	H	H	H	M	T	N	1
Miller Creek Middle School (6-8)	2004	69%	20%	70%	36%	23%	12%	1%	26%	0%	9%	30%	H	H	H	H	M	Y	N	2
Bacich Elementary School (K-5)	Fall 2001	28%	20%	45%	35%	24%	7%	4%	0%	0%	10%	55%	M	H	H	H	M	N	N	2(1)
Del Mar Middle School (6-8)	Fall 2004	58%	22%	58%	34%	13%	20%	1%	13%	2%	9%	42%	L	L	M	L	M	Y	N	6
Mary E. Silveira Elementary School (K-5)	2006	55%	30%	55%	32%	27%	4%	1%	17%	0%	6%	45%	L	L	H	L	M	Y	Y	1
Lynwood Elementary School (K-5)	2004	35%	25%	41%	32%	31%	1%	0%	0%	0%	8%	59%	L	L	M	M	M	N	N	2
Tamalpais Valley Elementary School (K-5)	2000	17%	17%	42%	30%	20%	9%	1%	0%	0%	11%	61%	L	M	H	M	M	N	N	2
Laurel Dell Elementary School (K-5)	2004	45%	17%	60%	27%	22%	4%	1%	28%	0%	6%	40%	H	H	H	H	M	Y	N	0
Sinaloa Middle School (6-8)	Spring 2012	61%	34%	51%	27%	14%	13%	1%	2%	4%	18%	50%	M	M	H	H	M	N	N	4

Evaluation Summary of Participating Schools (Cont.)

School Name	Baseline			2014/2015 Trips		2014/2015 School Trips by Mode							Factors ¹							
	Semester	Green Trips	Active Green Trips	Green Trips	Active Green Trips	Walk	Bike	Other	School Bus	Public Transit	Carpool	Family Vehicle	Administration	Team Leader	Education	Encouragement	Green Infrastructure	Busing ²	Neighborhood Schools ³	Crossing Guards ⁴
West Marin Elementary School (2-8)	2009	54%	17%	62%	26%	19%	7%	1%	34%	0%	3%	38%	M	H	M	H	M	Y	N	0
Edna Maguire Elementary School (K-5)	2004	38%	23%	36%	26%	15%	10%	1%	0%	0%	14%	60%	H	H	H	H	H	N	N	2
Bolinas-Stinson School (K-8)	Fall 2002	72%	12%	72%	25%	9%	12%	4%	44%	0%	4%	28%	M	H	H	H	M	Y	N	1
Tamalpais High School (9-12)	2004	52%	19%	47%	25%	16%	7%	2%	4%	8%	11%	53%	L	L	L	L	H	T	N	0
Valecito Elementary School (K-5)	2000	56%	24%	40%	25%	21%	3%	0%	9%	0%	7%	60%	H	M	H	M	M	Y	N	2
Hamilton Meadow Park K-8 (K-8)	Fall 2001	45%	28%	38%	25%	21%	1%	3%	2%	1%	10%	60%	L	L	H	L	M	N	N	1
Pleasant Valley Elementary School (K-5)	Fall 2003	28%	14%	37%	25%	13%	10%	3%	2%	0%	10%	63%	L	M	H	M	M	N	N	2
Bel Aire Elementary School (3-5)	Fall 2002	57%	19%	56%	24%	15%	7%	2%	22%	1%	10%	44%	L	M	H	M	M	Y	N	3(1)
Hidden Valley Elementary School (K-5)	Fall 2008	60%	30%	47%	24%	10%	14%	1%	2%	5%	16%	53%	H	H	H	H	M	Y	N	2
Rancho Elementary School (K-5)	2003	43%	12%	39%	24%	21%	2%	1%	0%	1%	14%	61%	L	L	M	M	L	N	N	3
Sun Valley Elementary School (K-5)	2004	41%	15%	48%	23%	16%	6%	1%	15%	0%	10%	52%	H	H	H	H	M	Y	N	2
Glenwood Elementary School (K-5)	2000	46%	26%	45%	23%	15%	7%	1%	10%	0%	12%	55%	L	L	H	M	M	Y	Y	2(1)
Loma Verde Elementary School (K-5)	2008	40%	16%	34%	23%	18%	3%	2%	0%	0%	11%	66%	H	M	H	L	M	N	N	1
Lu Sutton Elementary School (K-5)	2004	34%	23%	40%	22%	18%	3%	2%	1%	0%	16%	60%	L	M	H	M	M	N	N	3
James B. Davidson Middle School (6-8)	Fall 2010	63%	19%	66%	21%	16%	4%	1%	26%	5%	15%	34%	M	L	H	L	M	Y	N	1
Coleman Elementary School (K-5)	Spring 2008	42%	12%	43%	21%	14%	4%	3%	12%	0%	11%	58%	L	H	H	H	M	Y	N	1
Strawberry Point School (K-5)	2006	24%	15%	36%	21%	18%	3%	1%	1%	0%	13%	64%	M	M	H	M	M	N	N	4(3)
Dixie Elementary School (K-5)	Fall 2003	51%	19%	45%	19%	14%	5%	1%	21%	0%	4%	55%	L	L	H	L	M	Y	N	1
San Ramon Elementary School (K-5)	2006	41%	22%	36%	18%	14%	4%	0%	5%	0%	13%	64%	L	M	H	M	M	N	N	3
White Hill Middle School (6-8)	2006	67%	11%	80%	17%	6%	10%	1%	0%	57%	6%	19%	H	L	H	M	M	Y	N	3

Evaluation Summary of Participating Schools (Cont.)

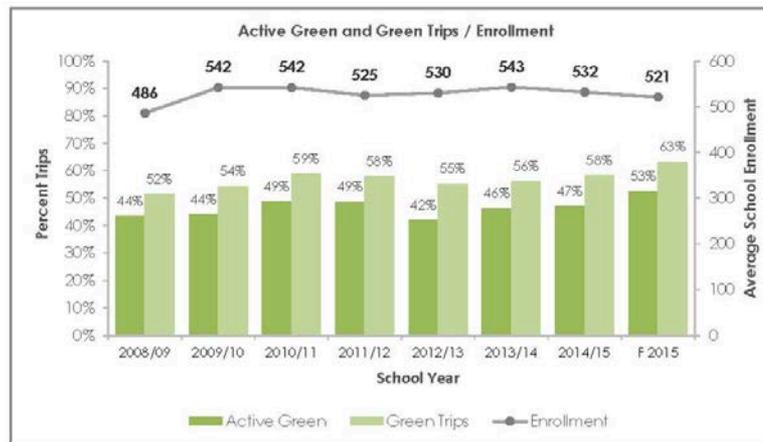
School Name	Baseline			2014/2015 Trips		2014/2015 School Trips by Mode							Factors ¹							
	Semester	Green Trips	Active Green Trips	Green Trips	Active Green Trips	Walk	Bike	Other	School Bus	Public Transit	Carpool	Family Vehicle	Administration	Team Leader	Education	Encouragement	Green Infrastructure	Busing ²	Neighborhood Schools ³	Crossing Guards ⁴
San Domenico School (K-12)	Spring 2012	70%	19%	75%	17%	16%	2%	0%	46%	0%	12%	25%	H	H	H	H	M	Y	N	0
Redwood High School (9-12)	2009	47%	17%	43%	16%	8%	7%	1%	4%	7%	16%	57%	L	H	M	M	M	T	N	0
Olive Elementary School (K-5)	2004	30%	9%	36%	14%	11%	3%	1%	5%	0%	17%	64%	H	L	M	L	M	N	N	1
San Jose Middle School (6-8)	Fall 2011	58%	12%	50%	13%	10%	3%	1%	2%	10%	25%	50%	M	L	L	L	L	T	N	3
Terra Linda High School (9-12)	Fall 2014	37%	12%	41%	13%	9%	3%	2%	0%	8%	20%	59%	M	H	L	H	M	T	N	0
Marin Horizon School (K-12)	Fall 2001	32%	4%	38%	11%	7%	5%	0%	16%	0%	12%	61%	M	M	M	M	H	N	N	0
Lagunitas Elementary School (K-8)	Fall 2000	40%	16%	39%	10%	4%	5%	1%	18%	1%	11%	62%	M	M	M	M	M	Y	N	0
Marin Primary & Middle School (K-8)	2008	16%	10%	22%	10%	3%	7%	1%	5%	0%	6%	78%	L	L	L	L	M	N	N	1
Venetia Valley Elementary School (K-8)	2002	46%	13%	40%	9%	8%	1%	0%	25%	0%	5%	60%	L	L	L	L	M	Y	N	2
Reed Elementary School (K-2)	2003	36%	8%	37%	8%	4%	4%	0%	15%	0%	14%	64%	L	L	L	L	M	Y	N	2
St. Anselm School (K-8)	2006	22%	11%	26%	8%	4%	4%	0%	0%	0%	18%	75%	L	M	M	M	M	N	N	0
St. Patrick School (K-8)	2001	45%	23%	24%	8%	6%	2%	0%	0%	0%	16%	76%	L	M	M	M	H	N	N	1
Saint Hilary School (K-8)	Fall 2012	21%	3%	29%	7%	2%	5%	0%	0%	9%	14%	72%	L	L	L	L	L	T	N	0
Mount Tamalpais School (K-8)	2003	64%	6%	46%	4%	4%	0%	0%	37%	0%	6%	55%	L	L	M	L	M	Y	N	0
Our Lady of Loretto School (K-8)	2004	12%	1%	17%	4%	4%	0%	0%	0%	0%	13%	83%	L	L	M	L	L	N	N	0
Lycée Français de San Francisco	Fall 2010	8%	8%	27%	3%	1%	1%	0%	13%	0%	12%	75%	M	H	M	M	L	N	N	0
Sir Francis Drake High School (9-12)	Fall 2004	66%	25%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	M	H	H	H	M	T	N	0
Cascade Canyon School (K-8)	Fall 2009	26%	15%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	L	M	L	L	M	N	N	1
Short Elementary School (K-4)	Fall 2012	63%	7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	L	L	L	L	M	Y	N	0

Sample School Travel Mode Summary

Marin County Safe Routes to School Program Student Travel Tally Report Summary



A. E. Kent Middle School (5-8) Kentfield Elementary School District



School Year	School Trips by Mode						
	Walk	Bike	Other	School Bus	Public Transit	Carpool	Family Vehicle
Fall 2015	35%	16%	2%	0%	0%	11%	36%
2014 / 15	32%	11%	4%	0%	0%	11%	42%
2013 / 14	31%	12%	4%	0%	0%	10%	43%
2012 / 13	29%	10%	4%	1%	1%	12%	45%
2011 / 12	34%	14%	1%	0%	1%	9%	42%
2010 / 11	35%	12%	2%	0%	1%	10%	41%
2009 / 10	32%	11%	2%	0%	0%	10%	46%
2008 / 09	31%	12%	1%	0%	1%	8%	49%

Source: Marin County Safe Routes to School Student Tallies

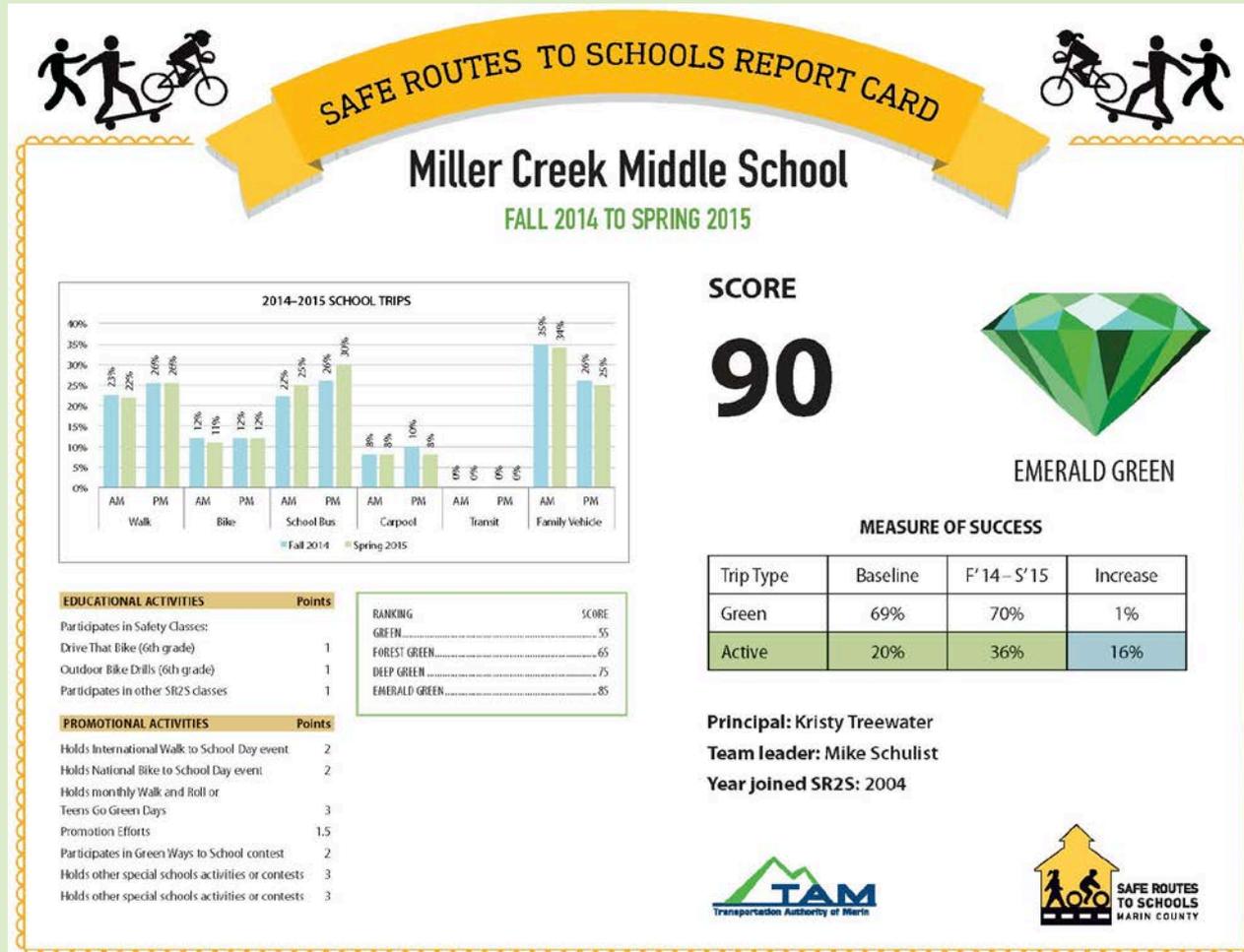
Notes:

"Active Green Trips" represent the sum of walk, bike, and other trips.

"Green Trips" represent the sum of non-family vehicle trips.

"Other" represents trips by non-motorized travel modes not categorized as walk or bike.

Sample School Report Card



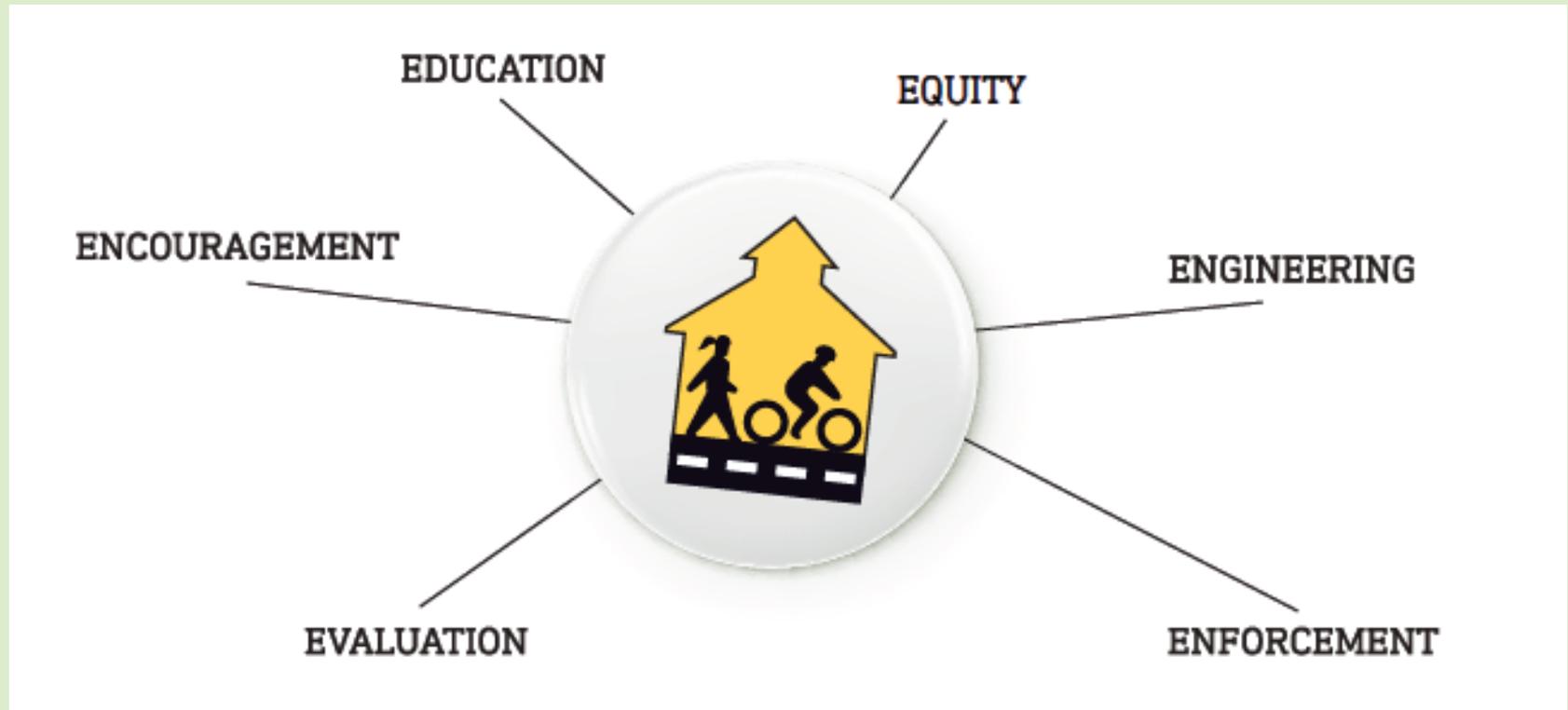
Safe Routes to Schools Task Forces

Area	District Task Forces	Neighborhood Safe Streets Committees
Mill Valley	Mill Valley	Almonte*
Tiburon, Belvedere	Reed	
Ross, San Anselmo, Fairfax	Ross Valley	Butterfield, Oak Manor
Novato	Novato	
Kentfield	Kentfield	McAllister
San Rafael		Terra Linda, Canal , Davidson
Larkspur, Corte Madera	Twin Cities*	Cove
West Marin	West Marin	



*New in 2016

Program Overview



Education Programs

TITLE	GRADE
Classroom Teaching	
Poster Art	All grades
Stop Look and Listen	2
Bike Safety	4
Traffic Safety	4
Drive Your Bike: Part I	6
Bike Commute 101*	Middle and High
Field Training	
Walk Around the Block	2
Bike Rodeo	4
Drive Your Bike: Part II	6
Bicycle Field Trip	Middle and High
Family Biking I	Parents and Elementary

TITLE	GRADE
Assemblies	
Polar Bear Assembly*	Elementary
"Go Green" Assembly	Middle
Presentations	
3D Bike Maps	Middle
Distracted Driving*	High
Marketing Strategy & Transportation*	Middle and High
The Cost of Transportation*	High
Transit Race & Scavenger Hunt ¹	High
Travel Journal*	Middle
Other	
Bicycle Blender	Middle and High
What Do I Stand For?	Middle and High

*New Since 2011 Evaluation

Education Programs – New Since 2011

- Bike Commute 101
- Polar Bear Assembly
- Distracted Driving



Education Programs – New Since 2011 (Cont.)

- Marketing Strategy & Transportation
- Cost of Transportation
- Travel Journal



Encouragement Programs

TITLE	GRADE
Events	
Go Green Days*	Middle and High
International Walk to School Day (iWalk)	All grades
National Bike to School Day*	All grades
Walk and Roll Wednesdays	Elementary
Contests	
Go Green Contests	Middle and High
Green Sneaker Challenge*	Elementary and Middle
Green Ways to Schools*	Elementary
Pollution Punchcard	Elementary
Other	
Active 4 Me*	Elementary and Middle
SchoolPool	All grades



Encouragement Programs – New Since 2011

- Go Green Days
- National Bike to School Day

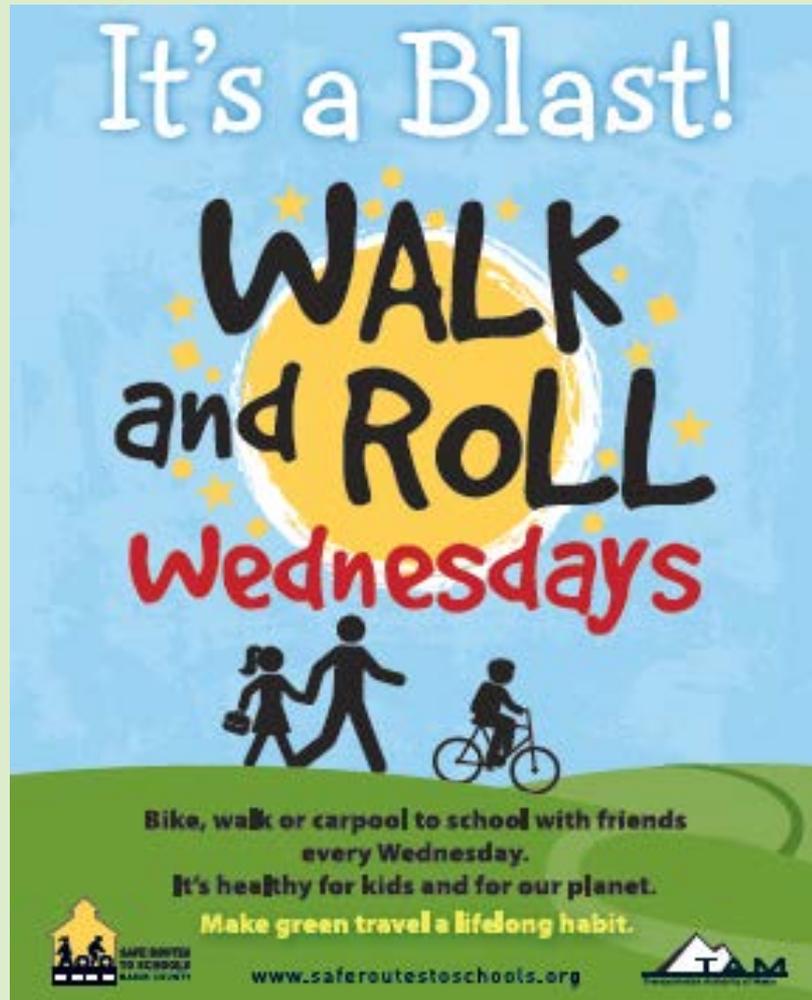


Encouragement Programs – New Since 2011 (Cont.)

- Green Sneaker Challenge
- Green Ways to Schools
- Active4.Me



Walk and Roll Wednesdays



It's a Blast!

WALK and ROLL Wednesdays



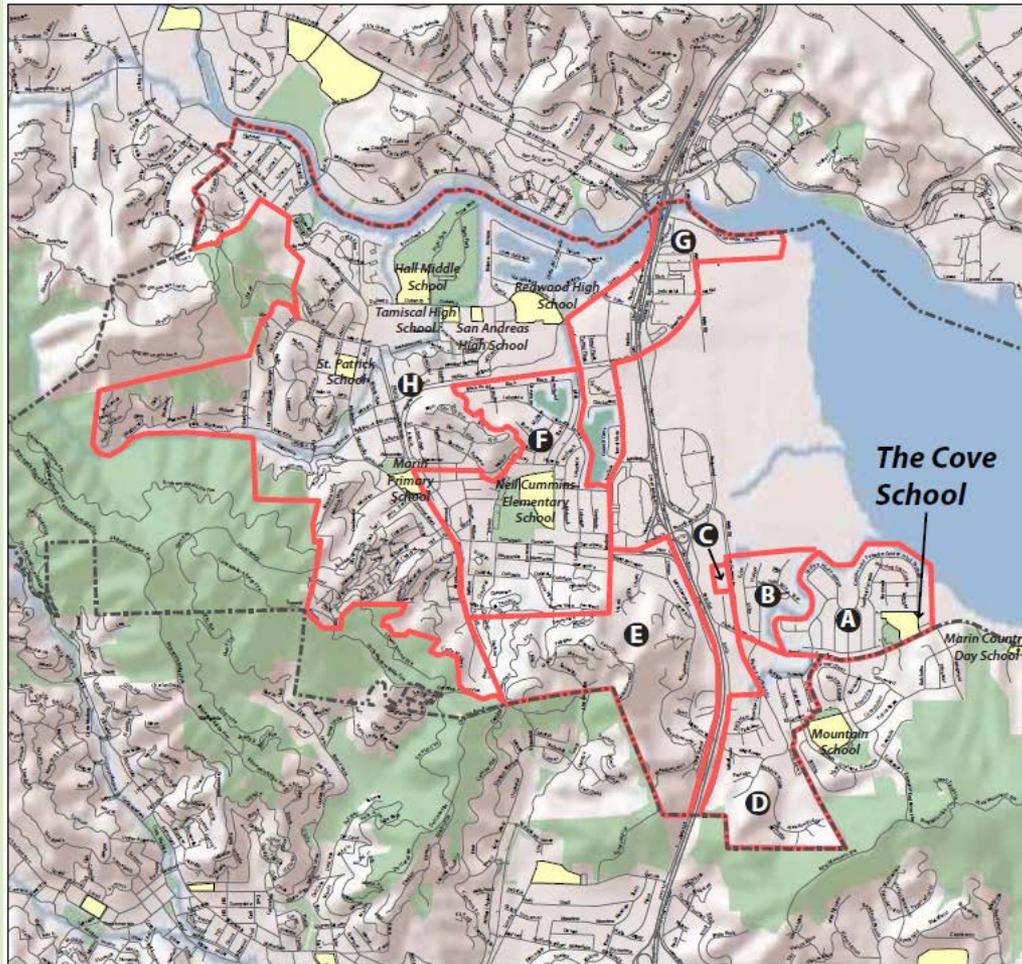
Bike, walk or carpool to school with friends every Wednesday.
It's healthy for kids and for our planet.
Make green travel a lifelong habit.



www.saferoutestoschools.org



Schoolpool Trip-Matching



SchoolPool Neighborhood Map

The Cove School

Larkspur-Corte Madera School District

Neighborhoods

- A. Mariner Cove
- B. Marina Village/Mariner Cove
- C. San Clemente Place
- D. Granada/Madera del Presidio
- E. Meadowsweet/Upper Chapman
- F. Pixley Tract/Madera Garden/Lower Chapman
- G. Madera Garden/Tamal Vista/Greenbrae East
- H. North and West of Neil Cummins

-  Schools
-  Enrollment Boundaries
-  Parks and Open Space
-  Neighborhood Boundaries

0 0.5 1 Miles



5/22/2014

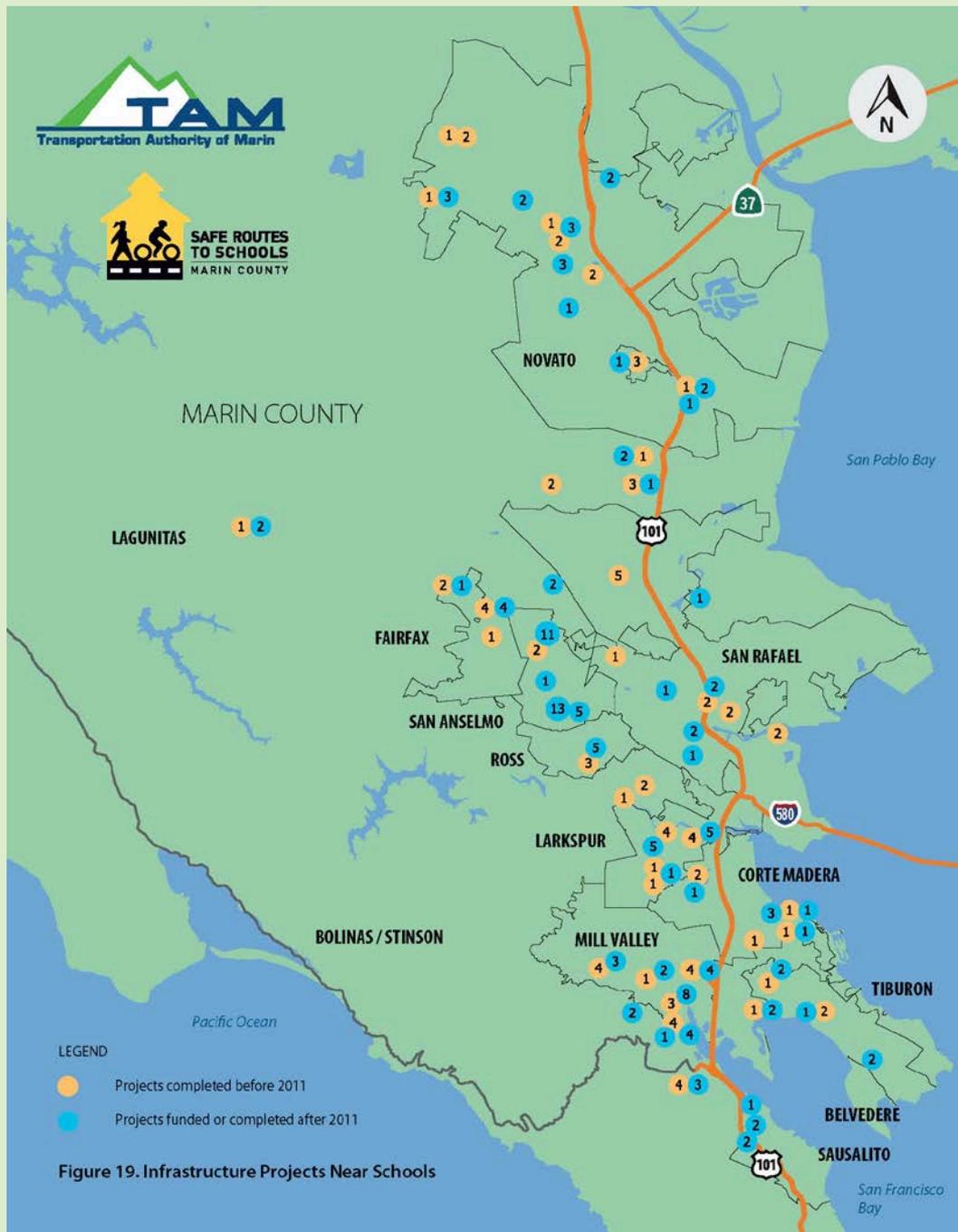


Engineering

- School Area Signage
- Pavement Markings
- Bicycle Lanes
- High-Visibility Crosswalks
- Traffic Calming
- Curb extensions and Curb Ramps

Engineering (Cont.)

- Pedestrian Refuge Islands
- New Traffic Controls
- Multi-Use Pathways
- New Sidewalks
- Rectangular Rapid Flashing Beacons
- Radar Speed Feedback Signs



Pedestrian and Bicyclist Enhancements



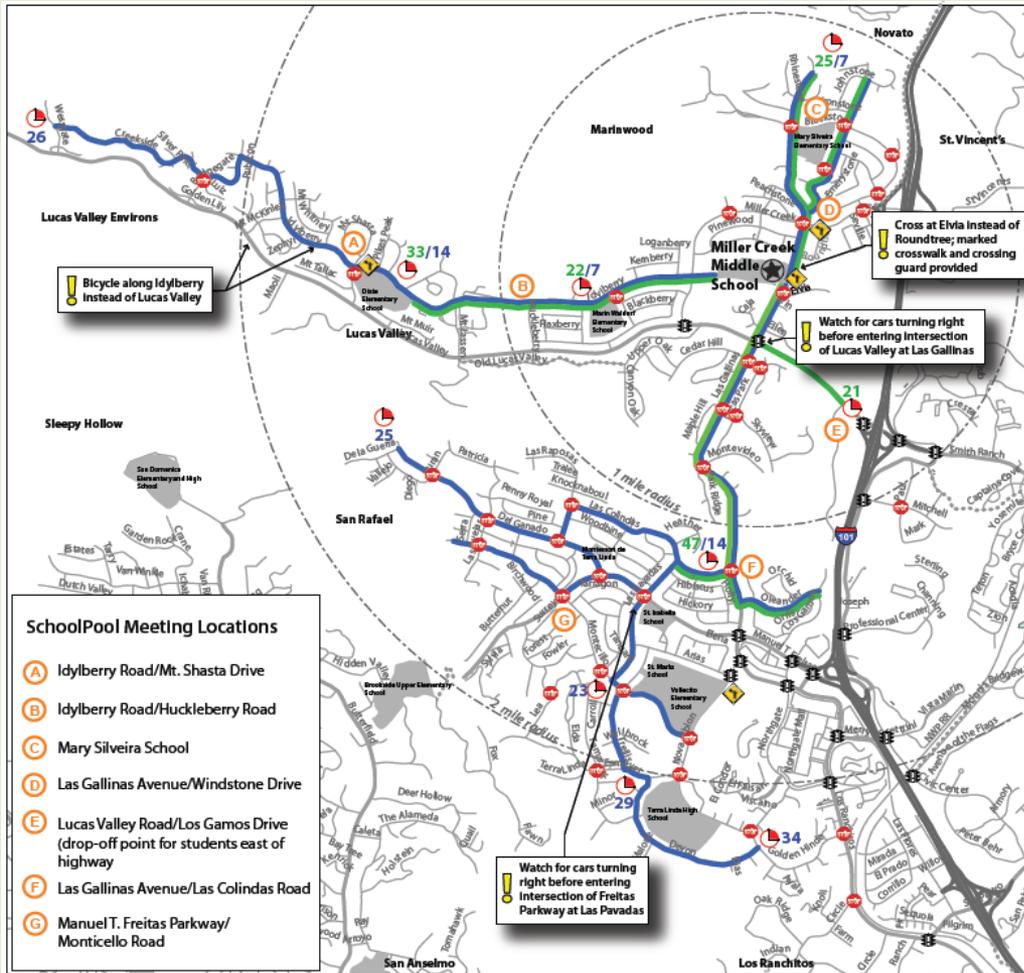
Pedestrian and Bicyclist Enhancements



Pedestrian and Bicyclist Enhancements



Sample School Route Map

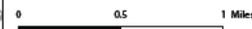


Suggested Routes to School

Miller Creek Middle School

Legend

- Recommended Walking Route
- Recommended Bicycling Route
- X SchoolPool Meeting Location
- Multi-Use Path
- STOP All-Way Stop
- ◆ Crossing Guard
- T Traffic Signals
- ⌚ Estimated Walking/Bicycling Time

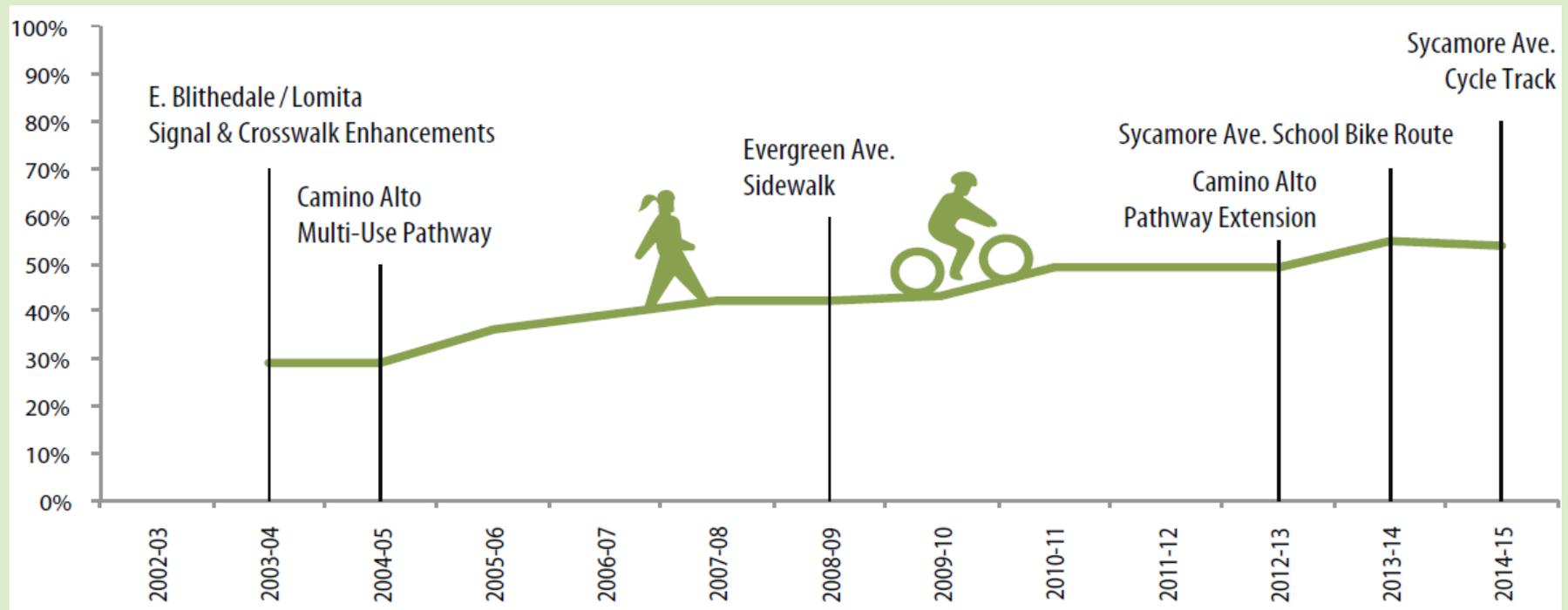


9/25/2014



Infrastructure Projects and Active Trips

Example: Mill Valley Middle School



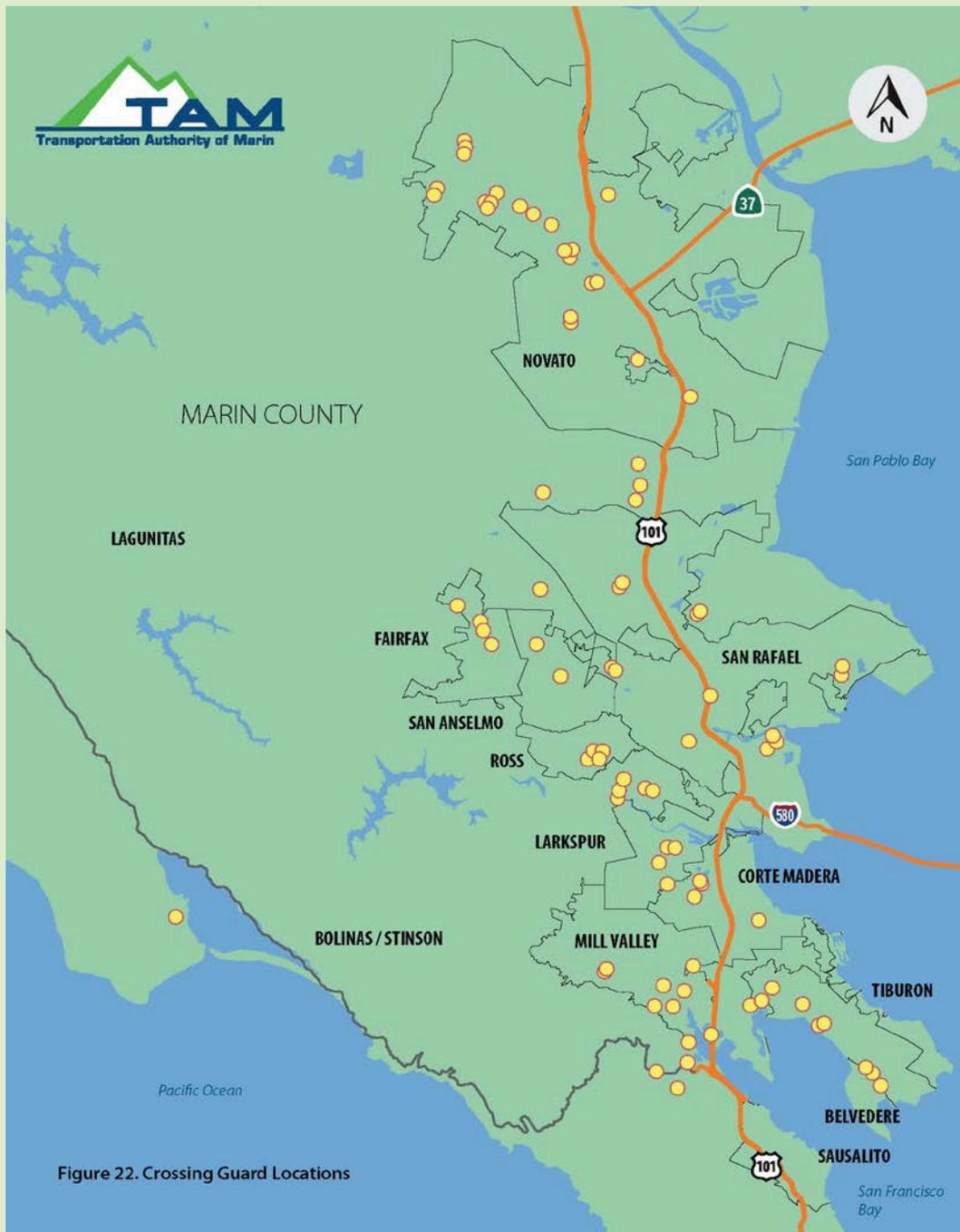
Enforcement

- Law Enforcement
- Crossing Guards
- Streets Smarts Campaign



Crossing Guard Program

- Directly managed by TAM
- Over 80 locations
- Two locations funded through school district



Elements of Street Smarts

- Banners and Signs
- Brochures
- Community Outreach
- Neighborhood Kits
- Website
- Press Coverage

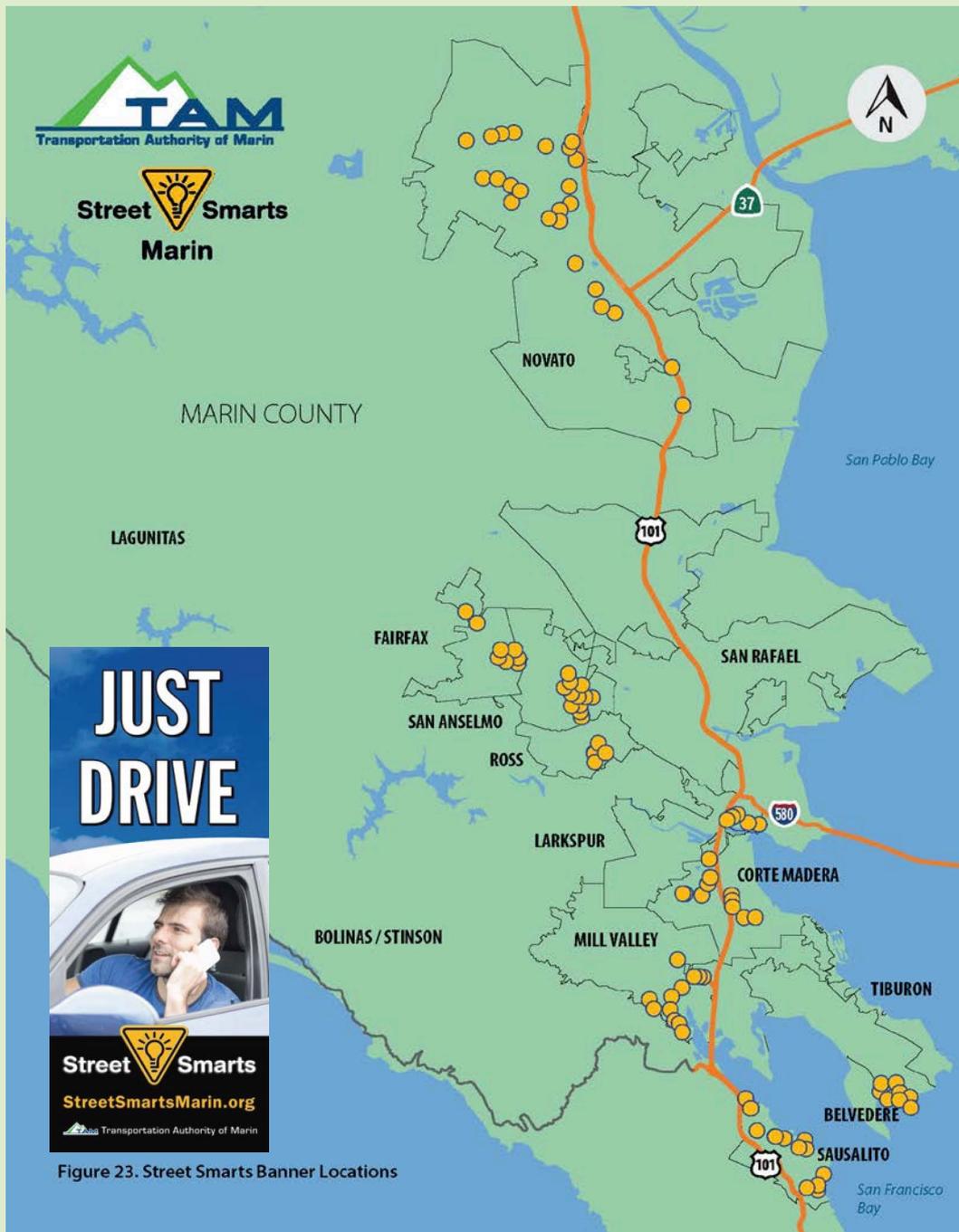
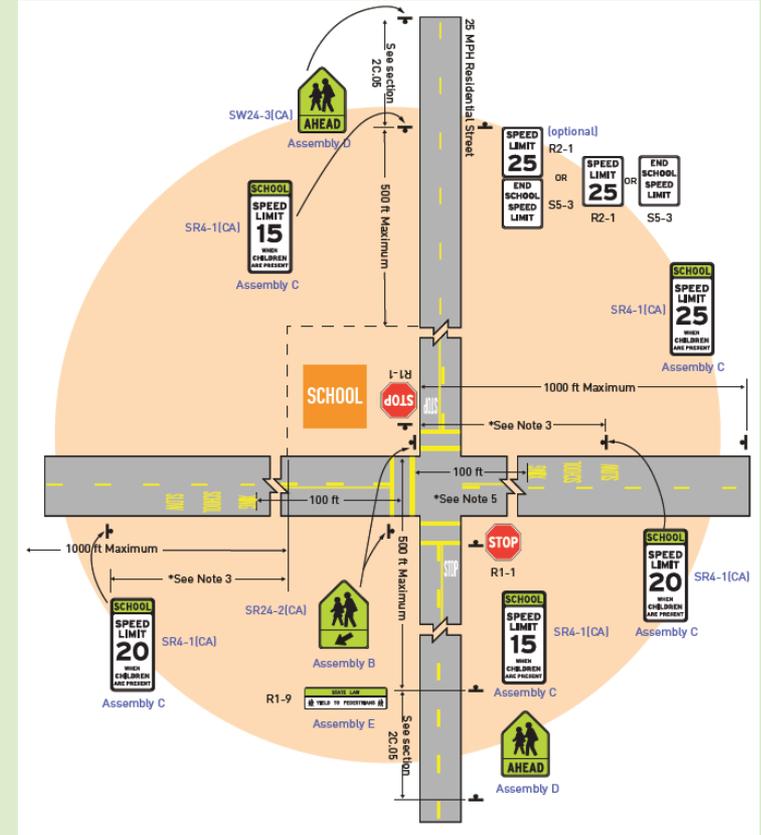


Figure 23. Street Smarts Banner Locations

San Anselmo 15 MPH School Speed Zones



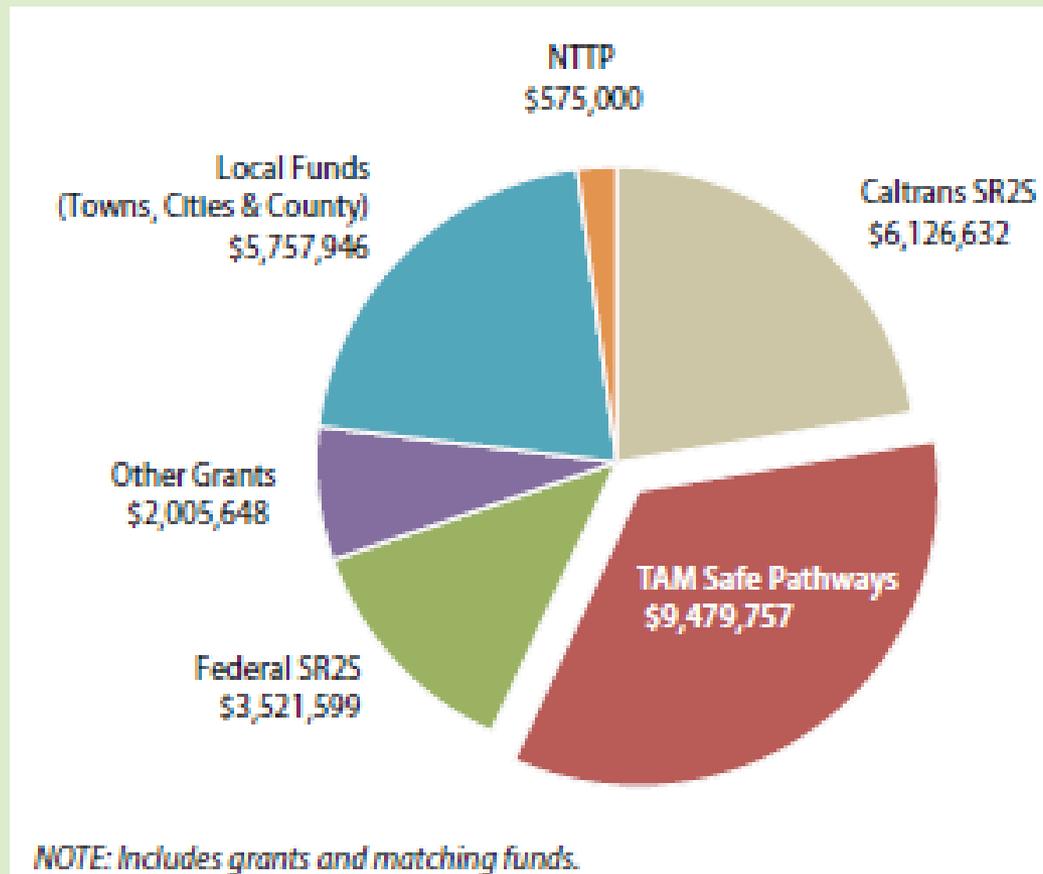
Funding

Marin's SR25 program has been funded through a variety of sources:

- ▶ Federal SRTS
- ▶ State SR25
- ▶ One Bay Area Grant (OBAG) from MTC
- ▶ Transportation Enhancement Program
- ▶ Bicycle Transportation Account (Caltrans)
- ▶ TAM Safe Pathways
- ▶ Local TFCA (TAM)
- ▶ Transportation for Livable Communities (MTC)
- ▶ Bicycle Facilities Program (BAAQMD)
- ▶ Regional TFCA (BAAQMD)
- ▶ Local Jurisdictions' general funds
- ▶ Office of Traffic Safety
- ▶ Highway Safety Improvement Program (HSIP) (Caltrans)
- ▶ School districts and Individual Schools
- ▶ \$10 Vehicle Registration Fee (VRF) (TAM)

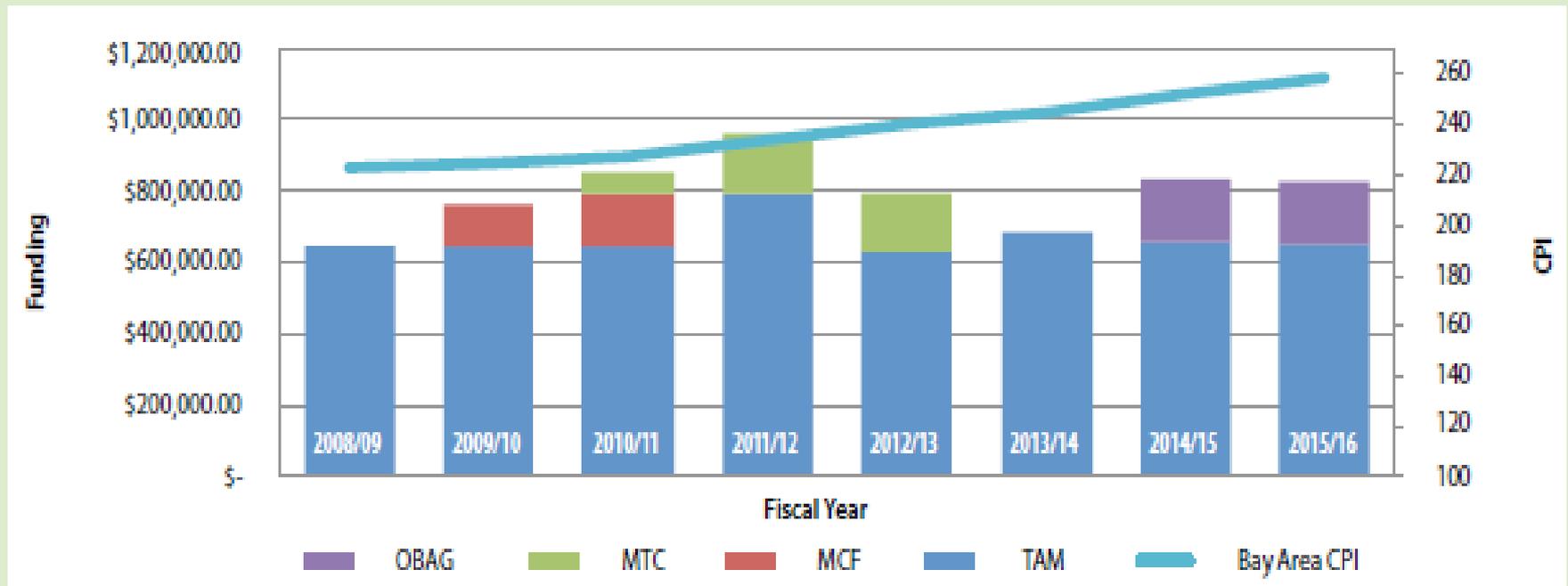
Funding

Infrastructure Funding



Funding

Program Budget from Various Funding Sources



Recommendations – Education

- Bicycle Safety
Provide bicycle safety education program to meet increasing needs of children at earlier ages.
- Teens Go Green – High Schools
Provide education program to meet increasing needs of children at later ages.
- Distracted Driving (Street Smarts)
Provide focused Street Smarts education programs to target driver safety.

Recommendations – Encouragement

- SchoolPool Marin

Continue to collaborate with Task Forces to prepare neighborhood SchoolPool maps and Suggested Route to School maps.

- Bi-Lingual Program

Expand the bi-lingual program outreach to more students at underserved schools.

- Walk and Roll Wednesdays

Continue to expand contests in elementary and middle schools.

Recommendations – Encouragement (Cont.)

- Green Ways to School
Offer in-classroom contests to elementary schools every three years on a rotating basis to prevent teacher burn-out with implementation.
- Green Sneaker / Hopscotch Challenge
Continue to expand contests in elementary and middle schools.
- Teens Go Green – Middle School
Outreach to teachers and students at more schools to host events.

Recommendations – Encouragement (Cont.)

- Teens Go Green – Middle School
Outreach to teachers and students at more schools to host events.
- Active4.me
Continue to promote program at team leader meetings and provide supplies upon request.

Recommendations – Engineering

- Support Task Forces and Public Works Departments to Identify Short-term Projects
Continue to provide engineering and safety improvement support to public works departments.
- Suggested Routes to School Maps
Continue to provide route maps for schools

Recommendations – Engineering (Cont.)

- Prepare Plans for Longer-term Infrastructure Projects

Focus infrastructure/safety improvements on high vehicular volume corridors and in areas with high levels of school enrollment.

Recommendations – Evaluation

- Annual Student Tallies and Parent Surveys
Continue evaluating the program through the use of student tallies and parent surveys.
- Student Travel Trends Matrix
Continue, on a year-to-year basis, to populate and assess the school travel trends to identify potential strategies to further increase green trips.

Recommendations – Funding

- Secure Supplemental Program Funding
Leverage TAM's Measure A and Measure B funding to secure outside supplemental funding of \$150,000 to \$250,000 annually to achieve SR2S program objectives.

Recommendations – Funding (Cont.)

- Secure Funding for Infrastructure Improvements
Continue to seek outside funding for implementation of capital infrastructure projects.
- Identify Short-Term and Longer-Range Safe Pathways Projects
Continue to identify safe pathways projects.

Recommendations – Polices and School Busing

- Institutionalize Partnerships

Continue working with municipal and school officials to institutionalize the program

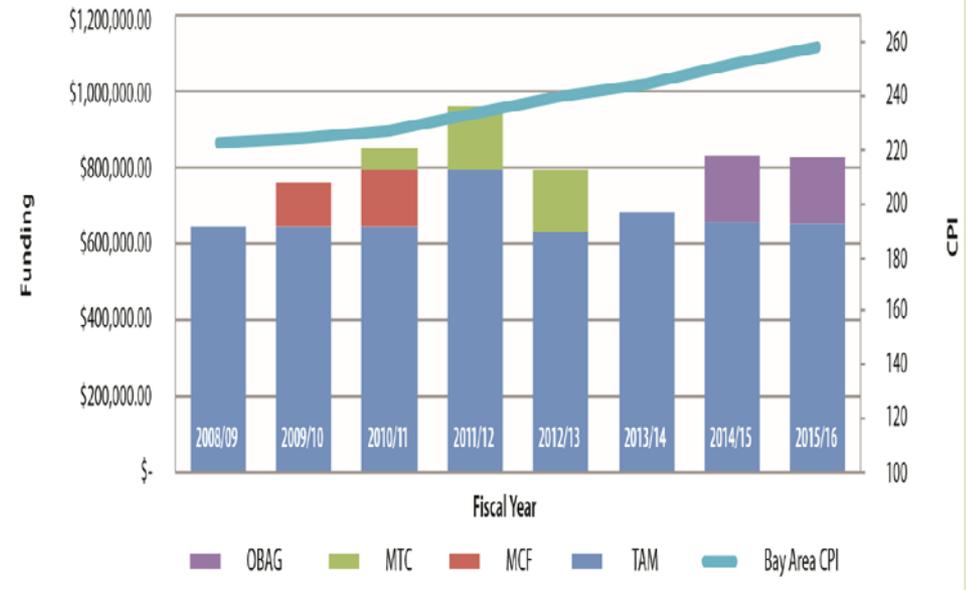
- School Busing

Continue supporting public transit and reintroduction of yellow school bus.

Program Funding

- Program has been funded by:
 - TAM Measures A and B
 - Outside grant funding
- Overall program funds have fluctuated over the years
- SR2S program demands have increased
- CPI has increased

Figure 25. Program Budget from Various Funding Sources



Program Funding

- Ideal annual program funding is \$1,000,000
- Measures A and B provide about 75% of the ideal funding (currently \$730,000)
- Over the past three years the program has been about 90% funded using:
 - Measures A and B
 - OBAG 1 Grant (expires in 2016/17)

Program Funding

OBAG 1 Grant provided:

- Supplemental funding for Task Force coordination (including bilingual resources)
- Teen program enhancements
- SchoolPool organizing and mapping
- Updating Travel Plans
- Creating Suggested Route to School maps
- Focusing improvements on congested traffic corridors

Program Funding

- Recent OBAG 2 request would provide about \$77,500 per year; helping to fund 80-85% of the overall program's needs:
 - Pedestrian and bicycle education
 - Bicycle clubs for middle school underserved children
 - High school distracted driving awareness
 - "Green growth" encouragement program
 - Expansion of high school program
 - Expansion of bilingual program's outreach
 - Preparation of additional Suggested Route to School maps
- TAM will continue to seek outside grant funds

Questions



Safe Routes to Schools

Program Evaluation

November 7, 2016

