



Lynwood Elementary School Travel Plan



SAFE ROUTES
TO SCHOOLS
MARIN COUNTY



Transportation Authority of Marin

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1. Purpose

1.1. SR2S Planning, Implementation and Monitoring

The Lynwood Elementary School Travel Plan is the blueprint for identifying and prioritizing Safe Routes to School (SR2S) programs, resources, and capital improvements. The Travel Plan also documents program activities and impacts on school-related travel that can be used to assess the success of the SR2S program over time, and important school-specific transportation policies and operations.

The Travel Plan differs from most plans in that it is not a snapshot in time but a living document; one that is repeatedly updated and modified to reflect school staff, community, and parent input along with technical information and lessons learned. This input is primarily captured by a SR2S task force that meets periodically to identify and address new concerns. For more information on Safe Routes to School partnerships in Marin County, visit www.saferoutestoschools.org

1.2. Marin County Measure A

The Transportation Sales Tax Measure Expenditure Plan approved by voters as Measure A in November 2004 dedicates an estimated \$332 million in local sales tax revenues to transportation needs in Marin County. Approximately \$36.5 million (11%) of the sales tax expenditure has been earmarked to reduce school related congestion and safer access to schools. These funds are allocated to three sub-strategies, or programs:

- Safe Routes to School (SR2S)
- Crossing Guards
- Safe Pathways to School

The Safe Pathways infrastructure program is integral to the success of the overall strategy; it is the capital improvement element of the Safe Routes to School program. As a stated policy in the *Transportation Authority of Marin (TAM) Measure A – Transportation Sales Tax Strategic Plan Update (2009)*, all projects eligible for Safe Pathways funding must be identified in Safe Routes plans. The Lynwood Elementary School Travel Plan qualifies as such a plan and identifies potential capital projects eligible for Safe Pathways funding.

2. Lynwood Elementary School Profile

2.1. School Location

1320 Lynwood Drive, Novato
Principal: Ivy Morrith

2.2. Enrollment and Demographics

In the 2008-2009 school year, approximately 392 students were enrolled in Lynwood Elementary School. **Table 1** shows the number of students enrolled per grade. **Table 2** shows the ethnicity of the student population in 2008-2009.

Table 1: Lynwood Elementary School Enrollment by Grade, 2008-09

Grade Level	Enrollment
Kindergarten	67
Grade 1	66
Grade 2	67
Grade 3	41
Grade 4	78
Grade 5	73
Total	392
<i>Source: California Department of Education</i>	

Table 2: Lynwood Racial and Ethnic Subgroups, 2008-09

Racial and Ethnic Subgroup	Number of Students	Percent of Students
African American	21	5.4%
American Indian or Alaska Native	2	0.5%
Asian	22	5.6%
Filipino	3	0.8%
Hispanic or Latino	212	54.1%
Multiple or No Response	6	1.5%
Pacific Islander	0	0%
White (Not Hispanic)	126	5.2%
<i>Source: California Department of Education</i>		

2.3. Free Lunch Enrollment

62% of students are enrolled in the free or reduced lunch program.

2.4. Existing Conditions

This section describes the physical conditions around Lynwood Elementary School. Physical conditions include school entrances, traffic controls, crosswalks, crossing guards, transit, and bicycle racks.

School Entrances

- **Primary School Entrance:** Sunset Parkway

Crossing Guards

- **Location of TAM Crossing Guards:** S. Novato Blvd. and Sunset Parkway

Transit

- **School Bus Availability:** only “overflow” students have transportation
- **Public Transit Availability:** Public transportation is available on S. Novato Blvd.
- **Special Transit Needs Offered:** N/A

Bike Racks

- **Location of Bike Racks:** Between the 20 and 30 buildings
- **Number of Bike Spaces:** Approximately 100
- **Rack Condition:** Satisfactory

2.5. Policies

Pick Up and Drop Off

- **Location:** Circle in the front of the school.
- **Policy:** Parents come around the circle and drop off/pick up their students.

Parking

- **Staff parking** Staff parking lot
- **General Public Parking** Side streets – Lynwood Drive, Sunset Parkway, S. Novato
- **Policy** Most of the spots in the lots are marked staff; first come first serve

Bicycle Policy

- Bicycles riders must have helmets and be older than 1st grade; no skateboards (or scooters) are allowed at school.

2.6. Classroom Education

Lynwood takes full advantage of the free safety programs offered through Safe Routes to Schools.

Lynwood offers the following classes annually, typically in the spring.

2nd Grade

- Stop Look and Listen
- Walk Around the Block

4th Grade

- Helmet Safety
- Traffic Safety Game Show
- Bicycle Rodeo

2.7. Encouragement Programs

Lynwood participates in the yearly International Walk to School Day on the first Wednesday in October. For one Walk to School Day, a parent donated a bicycle for a raffle prize.

Lynwood also has participated in the annual Frequent Rider Miles contest and the Pollution Punch Card contest each spring except for the spring of 2009.

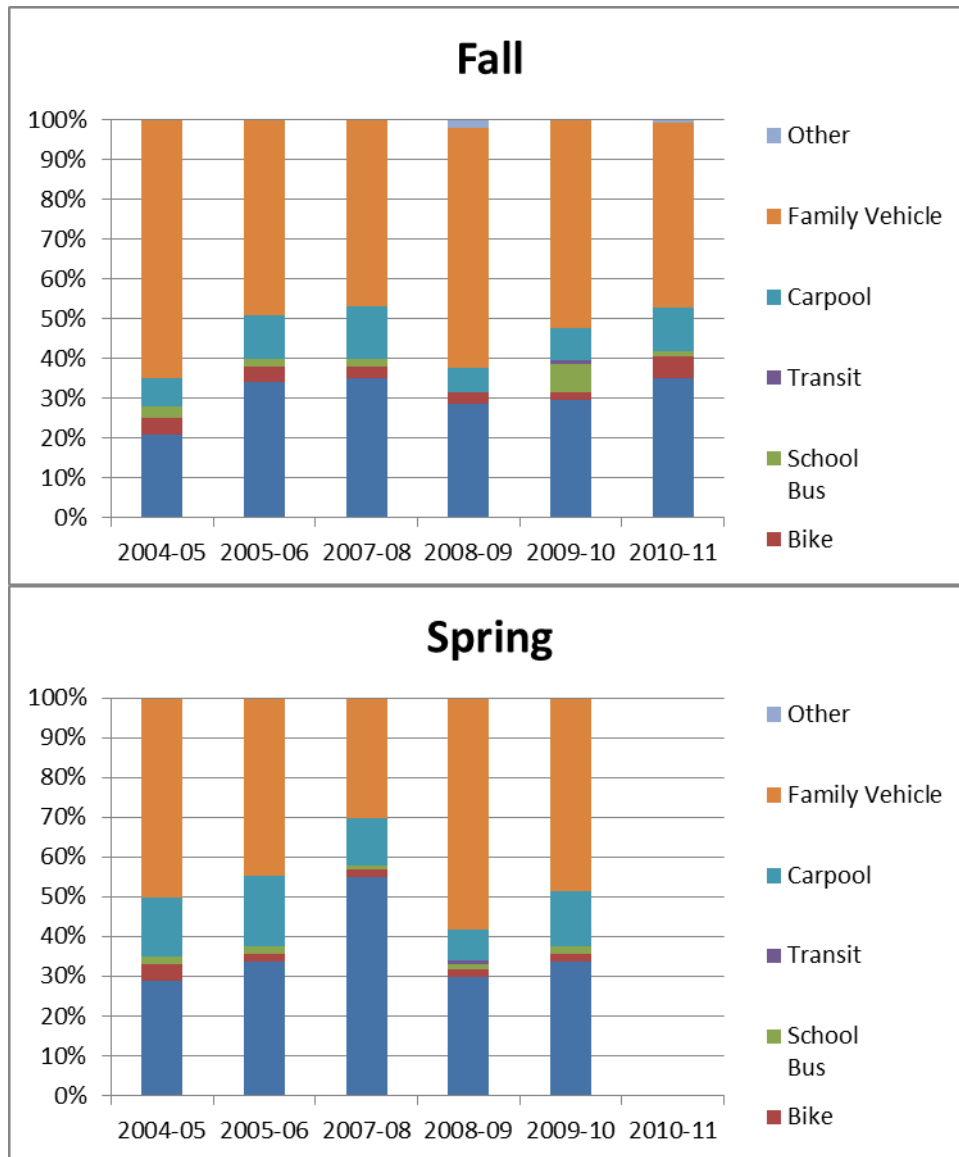
2.8. Student Surveys

Lynwood School has conducted student surveys since the 2004-05 school year, with the exception of 2006-07. Teachers ask students to raise their hands in response to the mode they used to get to school. **Table 3** shows the survey results.

Table 3: How Students Got To School

Year	Fall						
	Walk	Bike	School Bus	Transit	Carpool	Family Vehicle	Other
2004-05	21%	4%	3%		7%	65%	
2005-06	34%	4%	2%		11%	49%	
2007-08	35%	3%	2%		13%	47%	0%
2008-09	29%	3%	0%	0%	6%	61%	2%
2009-10	30%	2%	7%	1%	8%	53%	0%
2010-11	35%	5%	1%	0%	11%	46%	1%
Year	Spring						
	Walk	Bike	School Bus	Transit	Carpool	Family Vehicle	Other
2004-05	29%	4%	2%		15%	50%	
2005-06	34%	2%	2%		18%	45%	
2007-08	55%	2%	1%		12%	30%	0%
2008-09	30%	2%	1%	1%	8%	58%	0%
2009-10	34%	2%	2%	0%	14%	49%	0%
2010-11							

Figure 1 shows how children got to school from 2004 through 2010. The charts show the percentage of each mode choice and stack the mode choices to show the total percentage of students surveyed. Mode choice varies little between seasons. Students driven alone was the most popular mode choice, while riding the bus was the least popular. On average, over 30% of students



reported walking to school.

Figure 1: How Children Got To School

3. Barriers and Opportunities

3.1. Parent Survey

Team leaders administered volunteer parent/guardian surveys as part of the 2003-04 travel plan process. The survey was distributed at school.

Travel Behavior

Most parents are most likely to drive their children to school, rather than walk, bike or carpool. Since Lynwood’s participation in the SR2S program there has been a steady decline in single occupant vehicles, especially in the spring. **Table 4** shows travel mode during morning and afternoon hours.

Table 4: Lynwood Commute Behavior

	Not Often	1-2 days a week	3-4 days a week	Every day	Totals	Everyday as Percent of Total by Mode	Everyday as Percent of Total
AM Commute Habits							
Drive	5	11	19	141	176	80%	47%
Walk	3	16	13	47	79	59%	16%
Bike	4	6	2	7	19	37%	2%
Carpool	2	3	3	7	15	47%	2%
Bus	0	2	5	5	12	42%	2%
Totals	14	38	42	207	301		
PM Commute Habits							
Drive	5	12	16	121	154	79%	43%
Walk	5	15	11	42	73	58%	15%
Bus	0	4	6	10	20	50%	4%
Carpool	2	4	4	8	18	44%	3%
Bike	3	1	4	7	15	47%	3%
Totals	15	36	41	188	280		

Distance to School

Approximately half of respondents live within a half mile of school. Another 20% live within a mile for a total of 57 %. Up to one half mile is considered walking distance while up to one mile is considered biking distance.

Table 5: Distance to School

Distance to School	Count	Percent of Total Surveyed
1/4 mile or less	61	25%
1/2 to 1 mile	49	20%
Over 2 miles	46	19%
No Response	33	14%
1/4 to 1/2 mile	28	12%
Between 1 - 2 miles	25	10%
Total	242	

Concerns

When asked “Why you drive your child to school (check all that apply)” the top responses cited included “safety” and “convenience.” **Table 5** lists parent concerns from most to least common.

Table 5: Parental Concerns

Concern	Percent of Total Surveyed (N=242)
Safety	56%
Convenience	39%
Stranger Danger	33%
Age	33%
Too Far	31%
Weather	27%
Distance	25%
Work	25%
Speeding	24%
Dangerous Crossings	20%
Late	12%
Backpack	7%
Dogs	6%
Carrying Projects	5%
Steepness	4%
Sidewalk	3%
Paths	3%
Maps	2%
Bike Storage	0%
Child not following Safety Rules	0%

Potential Opportunities

When asked under what circumstances they would allow their child to walk or bike to school, parents’ top responses were if the child was “with other children,” and “paths were separated from traffic.” Crossing Guards” also elicited a strong response total and a crossing guard has been added to one location since the survey took place. These responses reflect some of the solutions to the issues described above.

Table 6: Potential Opportunities to Increase Walking and Bicycle Among Children

Opportunities	Percent of Total Responses (N=242)
with Other Children	40%
Paths Separated from Traffic	19%
Crossing Guard	16%
with Other Parents	12%
Safety Training	10%
Bike Storage	9%
Cars Slowed Down	6%
Better Sidewalks and Bike Paths	1%

3.2. Walkabout Notes

A walkabout was held at the Lynwood Elementary School on January 20, 2006. Several issues were identified at the intersections of Lynwood and Sunset, Sunset and Novato Blvd., and parking lot. The following were notes from the walkabout:

- The Sidewalk next to the school parking lot is too low and too narrow. The fence needs to be moved to provide a wider walking area – responsibility – School District
- Lynwood and Sunset – the cars ignore the crosswalk. There is poor visibility and no one stops. Cars speed through there. People are rushing to make the light. Also, cars back up around the corner from parents dropping off children. Also creates a visibility issue.
- Sunset and Novato Blvd. The cars turning left to the north do not yield to pedestrians or cars going straight the other way. The side street island limits visibility. “Was better when it was a four-way stop.” The left turn is permissive, not protective. Need a left turn arrow and possibly signal timing to favor pedestrians.
- Staff parking lot is a major walking area for children coming from the apartments. Would like a pathway through the fence to the playground – responsibility – School District.

4. Programs and Projects

4.1. Engineering Design Concepts

Design Concepts

Based on the walkabout and Task Force meetings, a series of Design Concepts summarized briefly below, were prepared. **Appendix A** shows these concepts in more detail.

Proposed Improvements to School Parking Lot

- Install bollards along northwest side of parking lot to create a separated and protected pedestrian walkway. Construct a raised sidewalk along the southwest side of parking lot and create a new pedestrian entrance to school playground.
- Move fence in front of school back 10-15 feet from driveway and replace existing curb with higher curb.

Proposed Intersection Improvements to Sunset Parkway

- Lynwood Drive: Construct curb extensions at north and east corners of Lynwood Drive and Sunset Parkway and construct a refuge island in the median of Sunset Parkway to reduce pedestrian crossing distances and exposure time in the roadway. Restripe crosswalks with high-visibility yellow school ladder striping.
- Novato Boulevard: Install Leading Pedestrian Intervals at crosswalks, which gives pedestrians the walk signal before motor vehicles are given the green light. This helps pedestrians establish themselves in the crosswalk and can reduce turning conflicts between motorists and pedestrians. Option to install protected left-turn arrows for motorists on Sunset Parkway.

Update Signage and Markings

A variety of signage improvements are recommended to improve the visibility and consistency of markings at the crossings in the vicinity of the school. All signage and pavement markings should be updated with the California MUTCD 2006 standards.

5. Implementation Matrix

Implementation plans for the Novato School District are summarized in the District Travel Plan. Please refer to that plan for implementation efforts.

Appendix A: Engineering Design Concepts

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RECOMMENDED INTERSECTION IMPROVEMENTS

LYNWOOD DRIVE AND SUNSET PARKWAY CROSSING

BEFORE



Intersection of Lynwood and Sunset showing current conditions.

AFTER



Intersection of Lynwood & Sunset, showing proposed crossing improvements

Recommendations:

- A** Construct 6-foot curb extensions at north and east corners of Lynwood Drive and Sunset Parkway
- B** Construct an island refuge in median of Sunset Parkway
- C** Restripe crosswalks with high visibility ladder design
- This plan reduces crosswalk length from one 100 foot crosswalk to two 14 foot crosswalks.



SUNSET PARKWAY AND S. NOVATO BOULEVARD

EXISTING CONDITIONS



Intersection of Sunset and South Novato, showing pedestrians crossing South Novato

Recommendations:

- D** Consider installation of protected left-turn arrows for Sunset Parkway
- E** Install leading pedestrian signals at crosswalks



Leading Pedestrian Interval (LPI)
Walk sign turns on before motor vehicles are given green light.

SAFE ROUTES TO SCHOOL IMPROVEMENT PLAN FOR LYNWOOD SCHOOL

10/31/07



Figure 2: Recommended Intersection Improvements

RECOMMENDED IMPROVEMENTS TO SCHOOL PARKING LOT



Recommendations:

- A** Install bollards to create a separate pedestrian walkway along northwest side of parking lot
- B** Construct raised concrete sidewalk along southwest side of parking lot
- C** Remove one parking space, create new entrance to school playground and continue path into playground
- D** In front of school, move fence back 5-10 feet from driveway
- E** Replace existing curb with higher curb

EXISTING CONDITIONS



Pick-up drop-off area in front of school. This plan recommends that the fence be moved back 5-10 feet and a taller curb be constructed.



Location of future raised pathway showing area where students will enter school grounds



Back parking lot, looking northeast, showing future site of bollard-separated path

PROPOSED BOLLARD PATH



Photosimulation of back parking lot with bollard-separated path installed

DRAFT
4/28/06

SAFE ROUTES TO SCHOOL IMPROVEMENT PLAN FOR LYNWOOD SCHOOL

April 2006



Figure 3: Recommended Improvements for the School Parking Lot

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