

Appendix K

SCHOOL SURVEY

RESULTS

- H.1 Elementary School Parent Survey Results
- H.2 High School Student Survey Results

Parent Survey About Walking and Biking to School

Encuesta Sobre ir Caminando o Andando en Bicicleta a la Escuela

Thank you for taking the Parent Survey for the **Ontario Active Transportation Master Plan** effort! Please fill out each bubble completely like this: ●

Gracias por tomar la Encuesta de Padres para el Plan Maestro de Transporte Activo. Por favor llene cada burbuja completamente como esta: ●

1. What is the school of the child who brought home this survey?
¿En qué escuela esta el niño que trajo esta encuesta al hogar?

2. What is the grade of the child who brought home this survey?
¿En qué grado esta el niño que trajo esta encuesta al hogar?

- Pre-K K 1st 2nd 3rd
 4th 5th 6th 7th 8th
 9th 10th 11th 12th

3. Is the child who brought home this survey male or female?
¿El niño que trajo a casa la encuesta es niño o niña?

- Male/Niño Female/Niña Prefer not to say/
 Prefiero no decirlo

4. How many children do you have in Kindergarten through 12th grade? ¿Cuántos niños tiene usted entre Kindergarten y el 12mo grado?

- 1 2 3 4 5+

5. How far does your child live from school?
¿A qué distancia vive su niño de la escuela?

- Less than 1/4 mile 1/4 mile up to 1/2 mile
 Menos de 1/4 milla Entre 1/4 y 1/2 milla
 1/2 mile up to 1 mile 1 mile up to 2 miles
 Media milla hasta 1 milla Entre 1 y 2 millas
 More than 2 miles Do not know
 Más de 2 millas No lo sé

6. On most days, how does your child arrive at school?
(Select one choice, fill in bubble) La mayoría de los días, ¿cómo va su niño a la escuela? (Seleccione una opción, rellene la burbuja)

- Walk Caminando Bike Bicicleta
 School Bus Transit (city bus, subway, etc.)
 Autobús escolar Tránsito (autobús de la ciudad, subterráneo, etc.)
 Carpool (Children from other families)
 Compartiendo el viaje en auto con niños de otras familias
 Family Vehicle (only children in your family)
 Vehículo de la familia (solo con niños de la familia)
 Other Otro

7. On most days, how does your child leave from school?
(Select one choice, fill in bubble) La mayoría de los días, ¿cómo regresa su niño a la casa después de la escuela?
(Seleccione una opción, rellene la burbuja)

- Walk Bike
 Caminando Bicicleta
 School Bus Transit (city bus, subway, etc.)
 Autobús escolar Tránsito (autobús de la ciudad, subterráneo, etc.)
 Carpool (Children from other families)
 Compartiendo el viaje en auto con niños de otras familias
 Family Vehicle (only children in your family)
 Vehículo de la familia (solo con niños de la familia)
 Other Otro

8. How long does it normally take your child to get to school?
(Select one choice, fill in bubble) Normalmente, ¿cuánto tiempo tarda su niño en llegar a la escuela? (Seleccione una opción, rellene la burbuja)

- Less than 5 minutes 5 - 10 minutes
 Menos de 5 minutos 5 a 10 minutos
 11 - 20 minutes More than 20 minutes
 11 a 20 minutos Más de 20 minutos
 Don't know / Not sure
 No lo sé / No estoy seguro/a

9. How long does it normally take your child to travel home from school?
(Select one choice, fill in bubble) Normalmente, ¿cuánto tiempo tarda su niño en llegar a casa de la escuela? (Seleccione una opción, rellene la burbuja)

- Less than 5 minutes 5 - 10 minutes
 Menos de 5 minutos 5 a 10 minutos
 11 - 20 minutes More than 20 minutes
 11 a 20 minutos Más de 20 minutos
 Don't know / Not sure
 No lo sé / No estoy seguro/a

10. Has your child asked you for permission to walk or bike to/from school in the last year? ¿En el último año, le ha pedido permiso su hijo para caminar o andar en bicicleta hacia o desde la escuela?

- Yes/Sí No/ No

11. At what grade would you allow your child to walk or bike to/from school without an adult? ¿En qué grado permitiría que su hijo camine o ande en bicicleta solo a/o de la escuela?

- Pre-K K 1st 2nd 3rd
 4th 5th 6th 7th 8th
 9th 10th 11th 12th
 I would not feel comfortable at any grade
 No me sentiría cómodo/a en ningún grado

Parent Survey About Walking and Biking to School Encuesta Sobre ir Caminando o Andando en Bicicleta a la Escuela

12. Which of the following issues affected your decision to allow, or not allow, your child to walk or bike to/from school? (Select ALL that apply) ¿Cuál de las siguientes problemas afecto su decisión de permitir o no permitir que su niño camine o ande en bicicleta a la escuela? (Seleccione todas las que correspondan)

- Distance (Distancia).....
- Time (Tiempo).....
- Child's before or after school activities
(Actividades antes o después de la escuela)
- Speed of traffic along route (Velocidad del tráfico en la ruta).....
- Amount of traffic along route (Cantidad de tráfico en la ruta).....
- Adults to walk or bike with (Adultos que acompañen a su niño).....
- Sidewalks or pathways (Aceras o caminos).....
- Safety of intersections and crossings
(Seguridad de las intersecciones y cruces)
- Crossing guards (Guardias de cruce peatonal).....
- Violence or crime (Violencia o crimen).....

13. Would you probably let your child walk or bike to/from school if this problem were changed or improved? (Select one choice per line, fill in bubble) ¿Probablemente dejarías a tu hijo caminar o andar en bicicleta a / desde escuela si este problema fue cambiado o mejorado? (Seleccione uno elección por línea, rellene la burbuja)

- Yes/Sí No/ No Not Sure (No estoy seguro/a)
- Yes/Sí No/ No Not Sure (No estoy seguro/a)
- Yes/Sí No/ No Not Sure (No estoy seguro/a)
- Yes/Sí No/ No Not Sure (No estoy seguro/a)
- Yes/Sí No/ No Not Sure (No estoy seguro/a)
- Yes/Sí No/ No Not Sure (No estoy seguro/a)
- Yes/Sí No/ No Not Sure (No estoy seguro/a)
- Yes/Sí No/ No Not Sure (No estoy seguro/a)
- Yes/Sí No/ No Not Sure (No estoy seguro/a)
- Yes/Sí No/ No Not Sure (No estoy seguro/a)
- My child already walks or bikes to/from school.
Mi hijo(a) ya viaja a pié o en bicicleta a/desde la escuela.

14. In your opinion, how much does your child's school encourage or discourage walking and biking to/from school?
En su opinión, ¿cuánto apoyo provee la escuela de su niño a caminar y andar en bicicleta para ir o regresar de la escuela?

- Strongly Encourages Encourages Neither Discourages Strongly Discourages
Anima Fuertemente Anima Ni uno ni otro Desalienta Desalienta Furtemente

15. How much fun is walking or biking to/from school for your child?
¿Qué tan DIVERTIDO es caminar o andar en bicicleta hacia o desde la escuela para su niño?

- Very Fun Fun Neutral Boring Very Boring
Muy Divertido Divertido Neutral Aburrido Muy Aburrido

16. How healthy is walking or biking to/from school for your child?
¿Qué tan SANO es caminar o andar en bicicleta hacia o desde la escuela para su niño?

- Very Healthy Healthy Neutral Unhealthy Very Unhealthy
Muy Sano Sano Neutral Malsano Muy Malsano

17. What is the highest grade or year of school you have completed?
¿Cuál es el grado o el año más alto de educación que usted ha terminado?

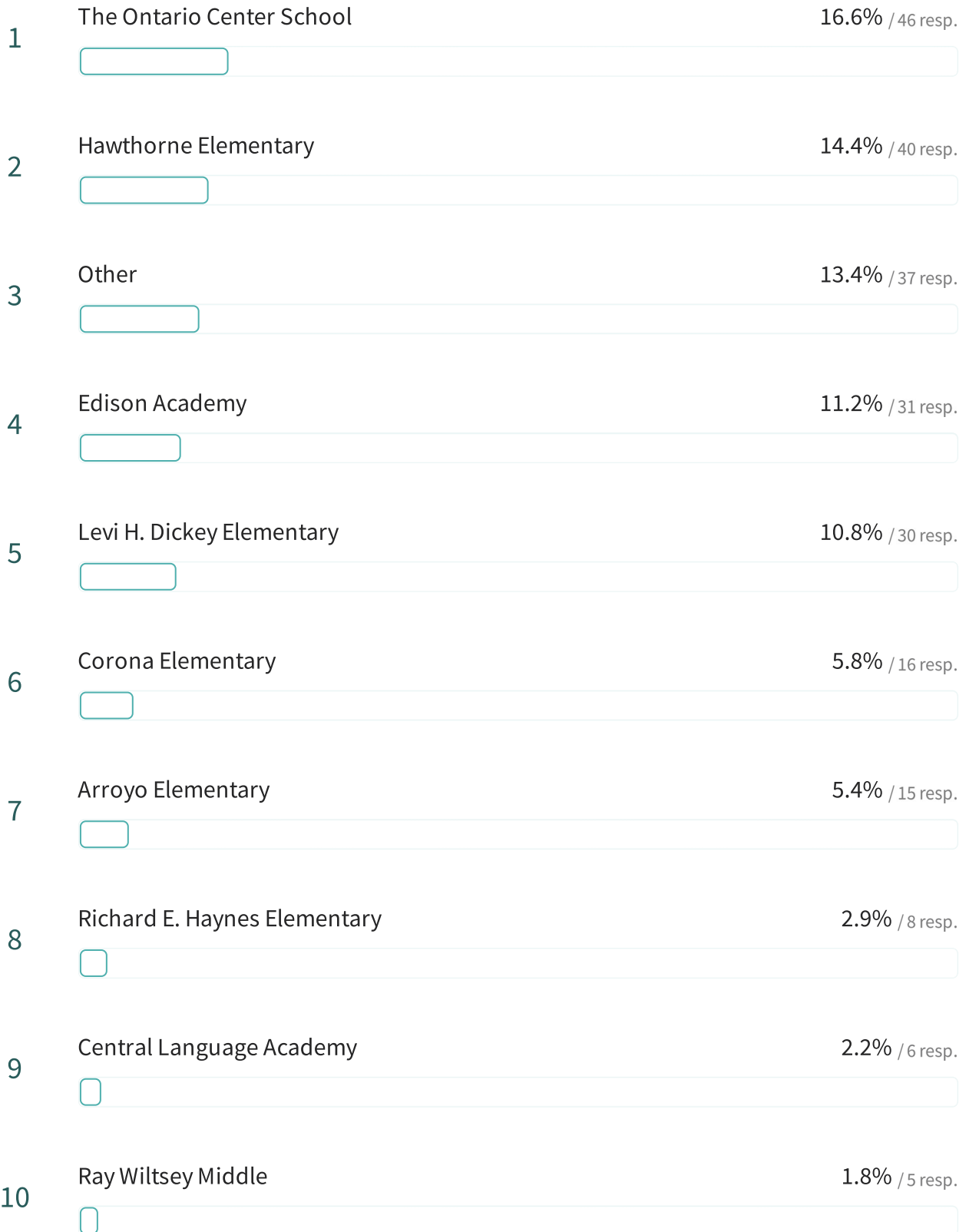
- Grade 1 through 8 (Elementary)
Grados 1 a 8 (Escuela primaria)
- Grade 9 through 11 (Some High school)
Grados 9 a 11 (alguna High school/ secundaria)
- Grade 12 or GED
Grado 12 o GED (graduado High School/secundaria)
- College 1 to 3 years (Some college or technical school)
Universidad 1 a 3 años (alguna universidad o escuela técnica)
- College 4 years or more (College graduate)
Universidad 4 años o más (graduado de a universidad)
- Prefer not to answer
Prefiero no contestar

Elementary Parent Survey

277 responses

What is the school of the child that will be represented in this survey?

277 out of 277 answered

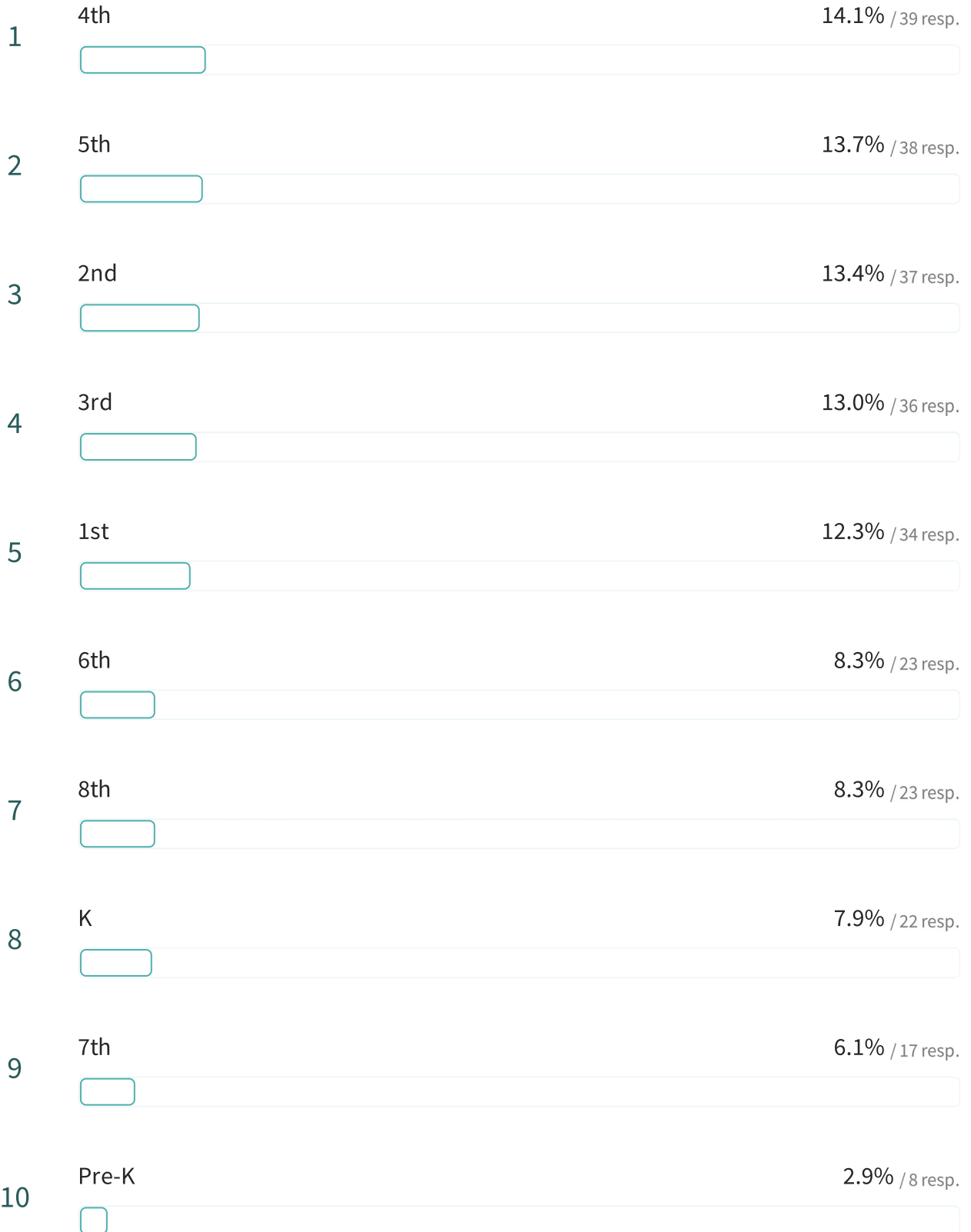


11	Woodcrest Junior High	1.8% / 5 resp.
12	De Anza Middle	1.4% / 4 resp.
13	Del Norte Elementary	1.4% / 4 resp.
14	El Camino Elementary	1.4% / 4 resp.
15	Sultana Elementary	1.4% / 4 resp.
16	Vineyard Elementary	1.4% / 4 resp.
17	Mission Elementary	1.1% / 3 resp.
18	Bon View Elementary	0.7% / 2 resp.
19	Creek View Elementary	0.7% / 2 resp.
20	Euclid Elementary	0.7% / 2 resp.
21	Liberty Elementary	0.7% / 2 resp.
22	Oaks Middle	0.7% / 2 resp.

23	Ranch View Elementary	0.7% / 2 resp.
24	Vista Grande Elementary	0.7% / 2 resp.
25	Berlyn Elementary	0.4% / 1 resp.
26	Grace Yokley Middle	0.0% / 0 resp.
27	Mariposa Elementary	0.0% / 0 resp.
28	Mountain View Elementary	0.0% / 0 resp.

What is the grade of the child that will be represented in this survey?

277 out of 277 answered



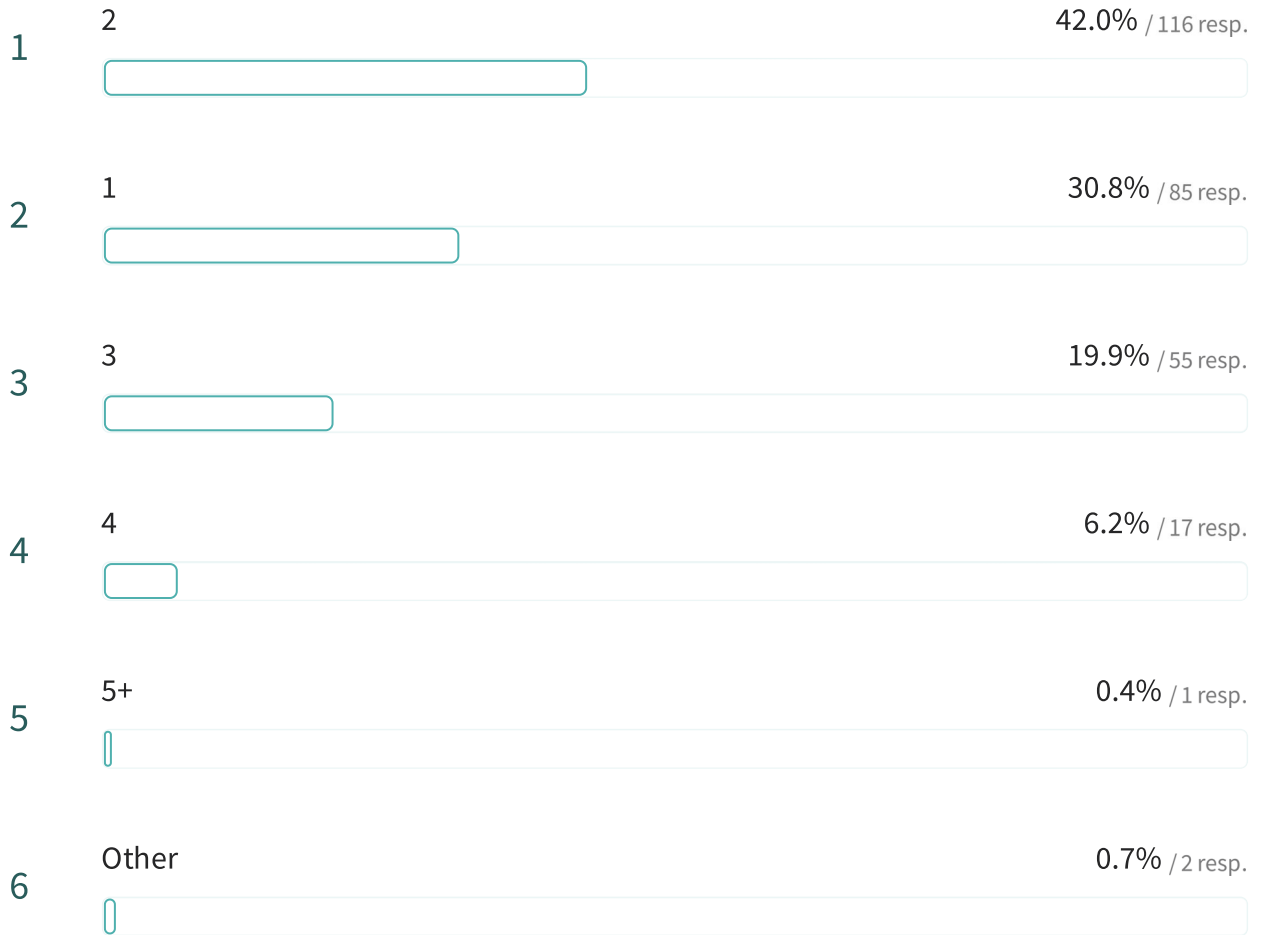
Is the child who will be represented in this survey male or female?

274 out of 277 answered



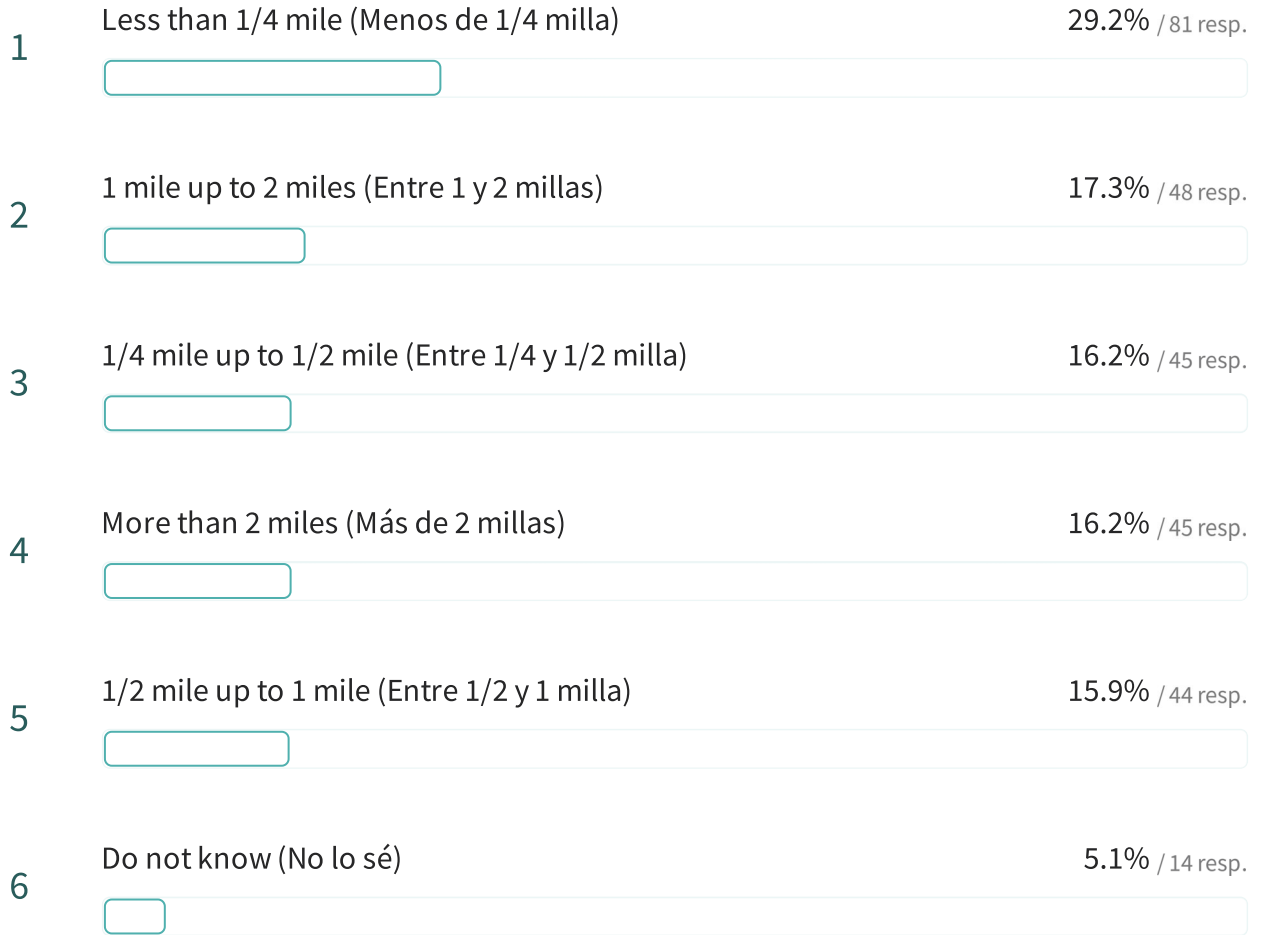
How many children do you have in Kindergarten through 12th grade?

276 out of 277 answered



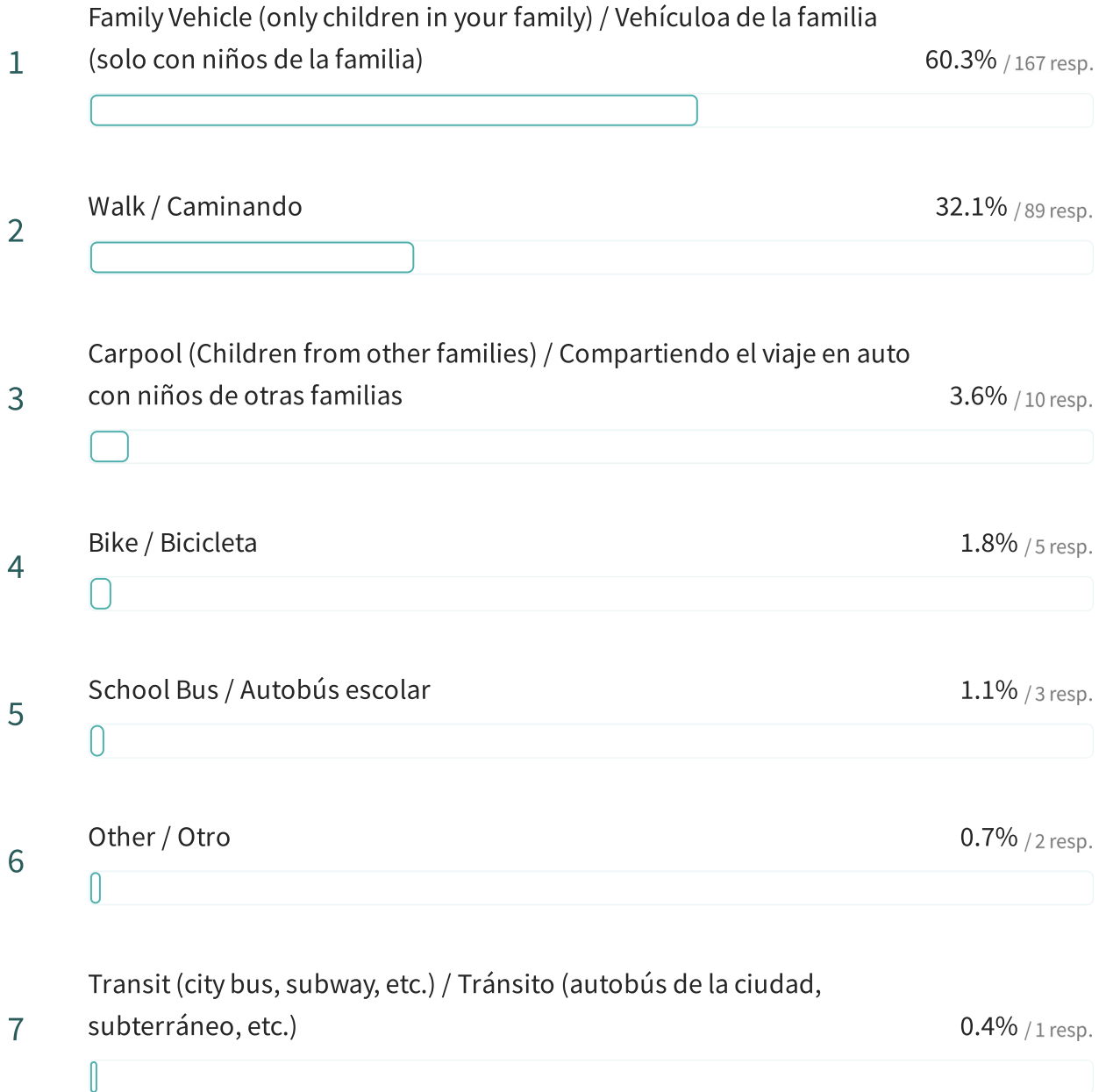
How far does your child live from school?

277 out of 277 answered



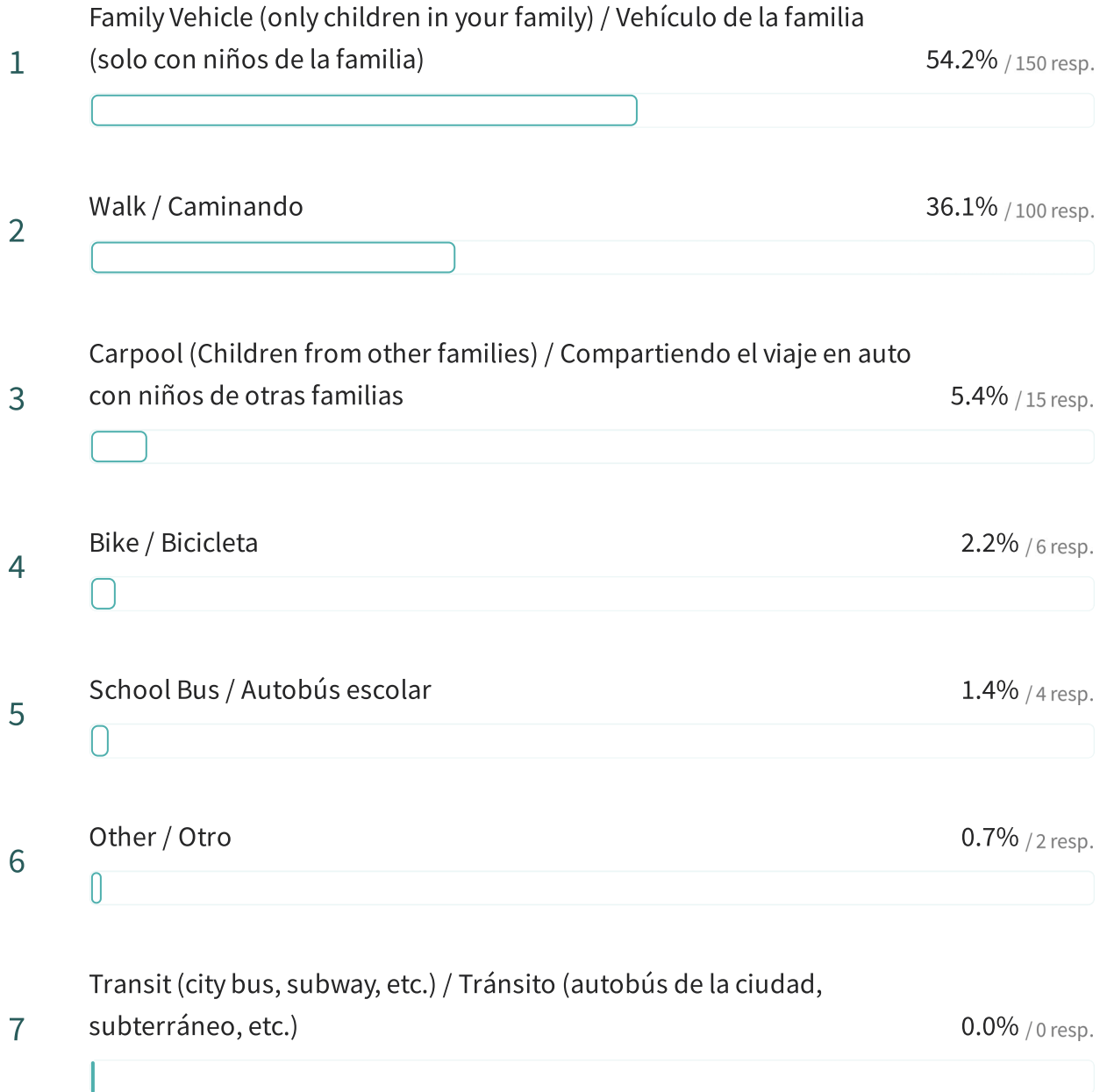
On most days, how does your child **arrive** at school? (Select one choice)

277 out of 277 answered



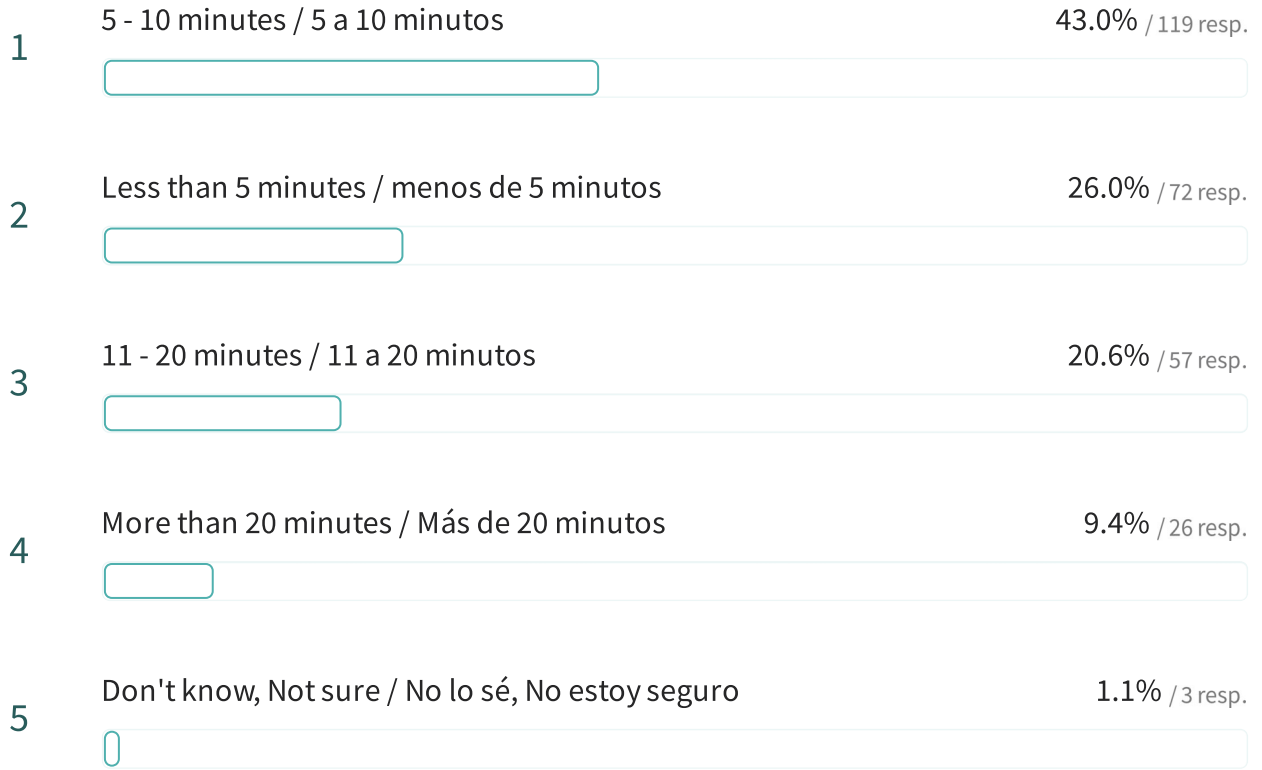
On most days, how does your child **leave** from school? (Select one choice)

277 out of 277 answered



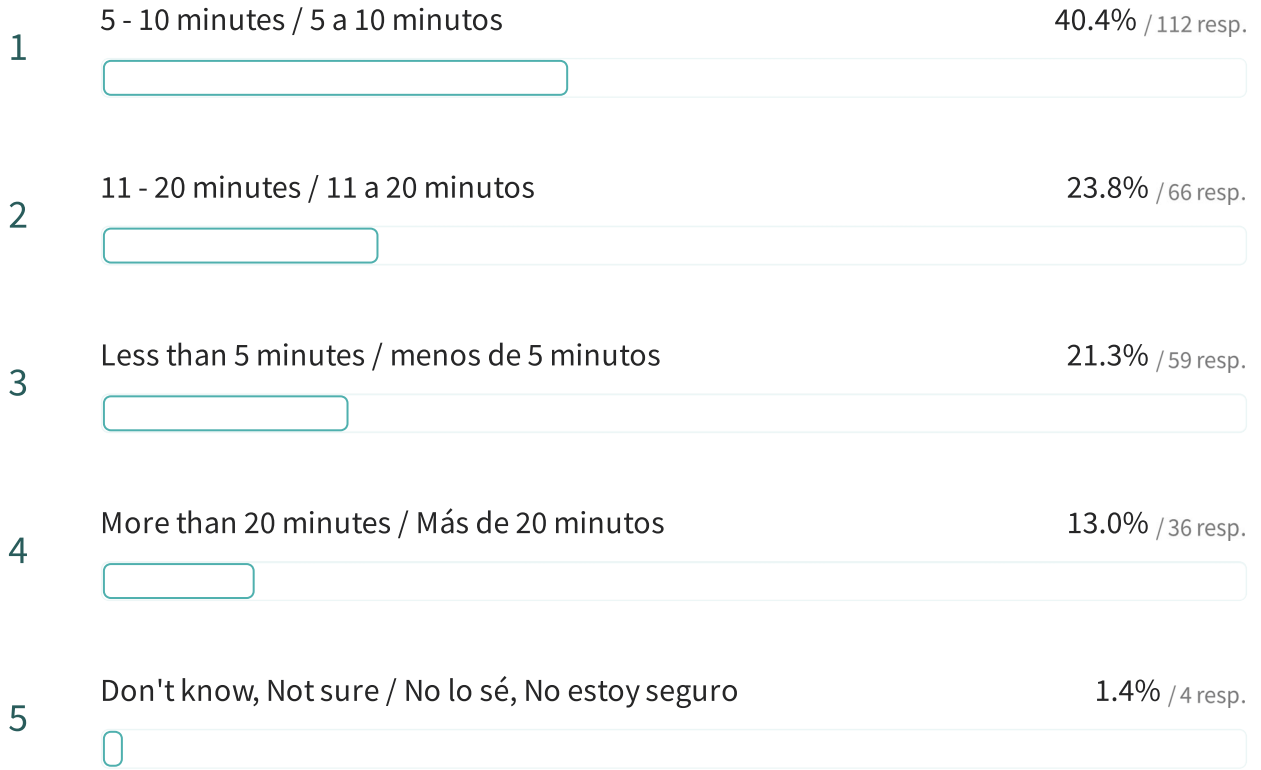
How long does it normally take your child to get to school? (Select one choice)

277 out of 277 answered



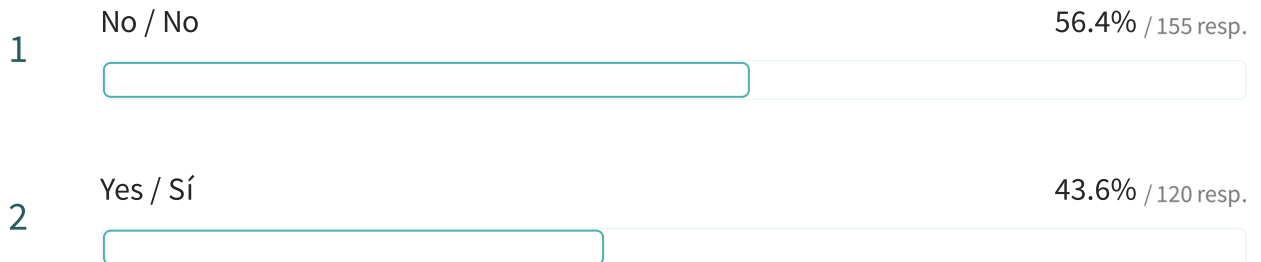
How long does it normally take your child to travel home from school? (Select one choice)

277 out of 277 answered



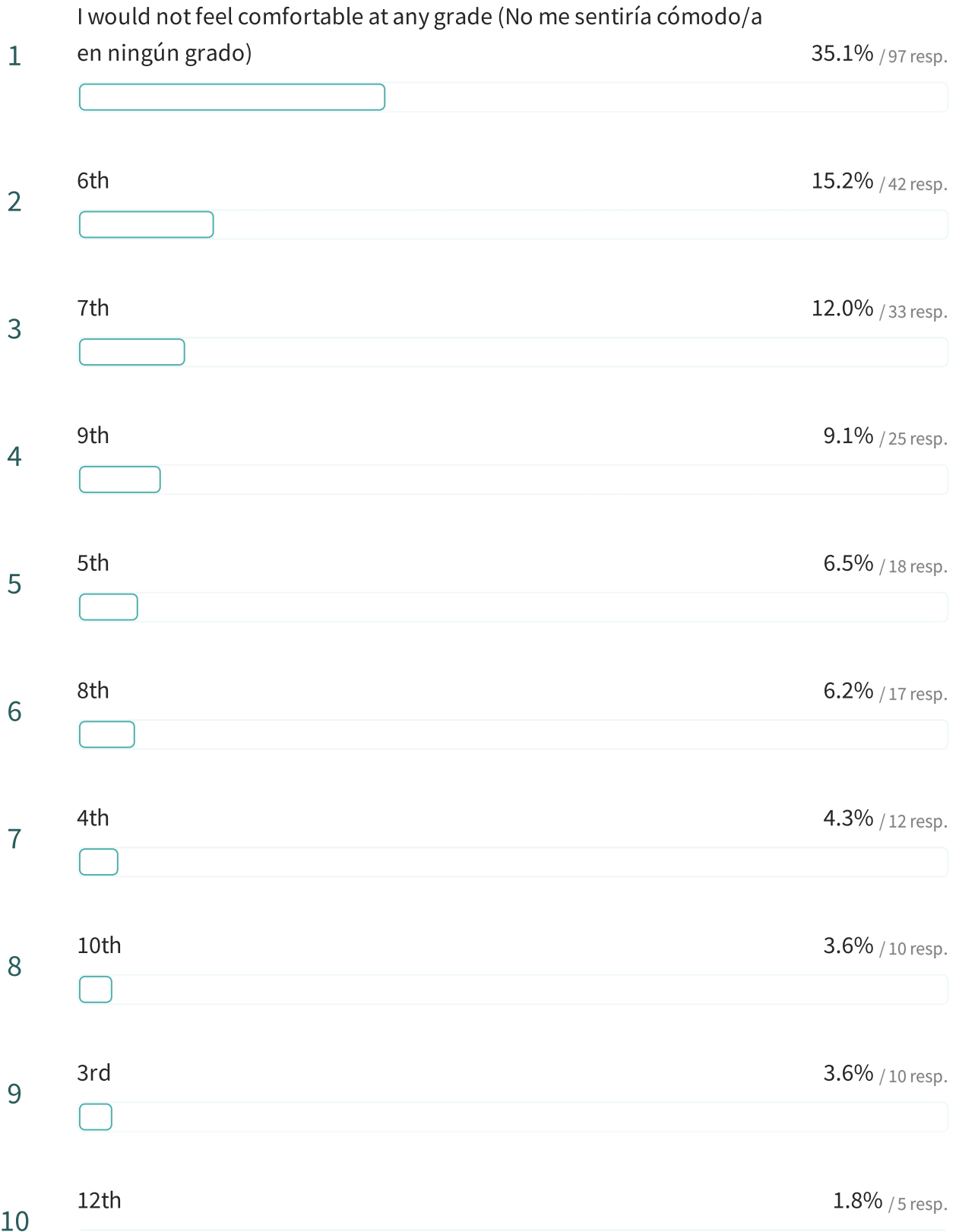
Has your child asked you for permission to walk or bike to/from school in the last year?

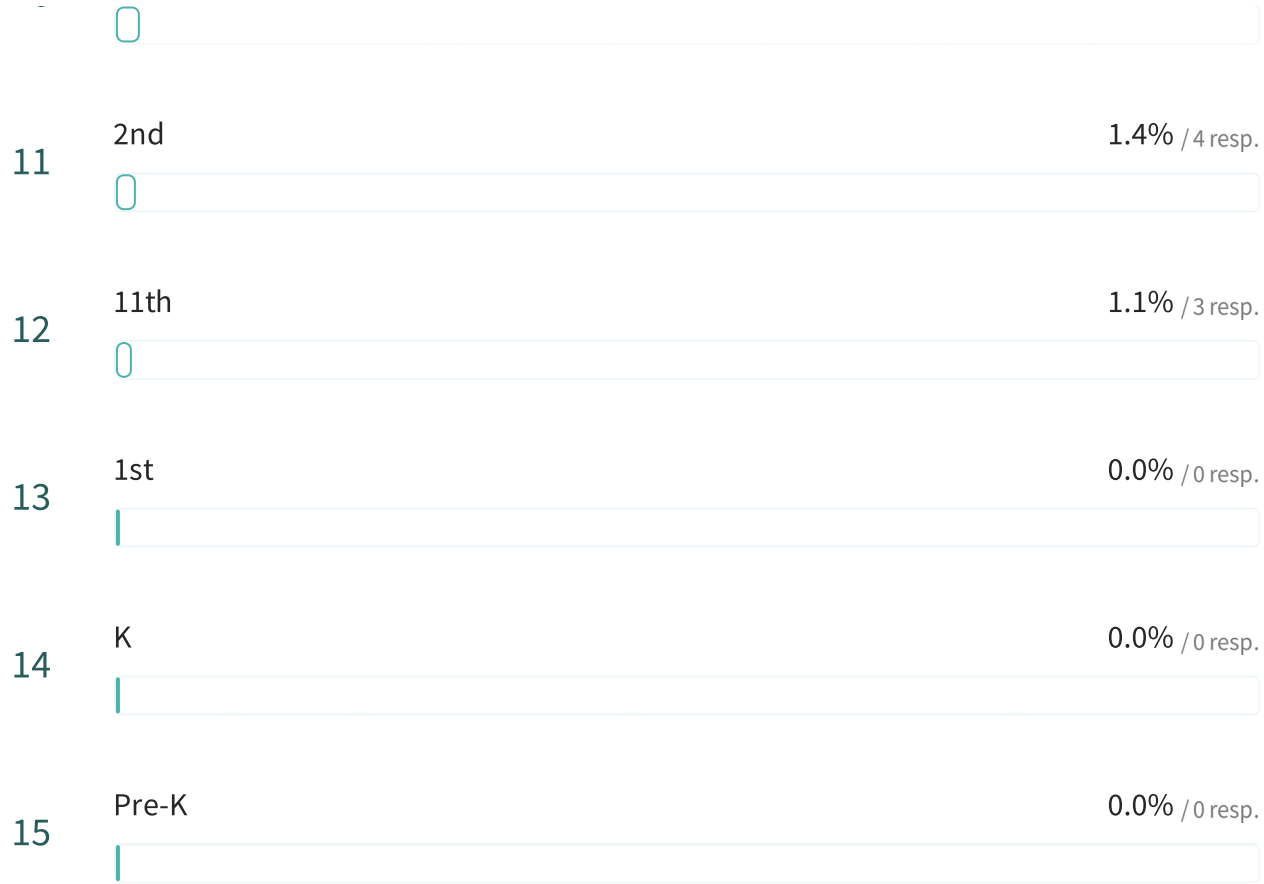
275 out of 277 answered



At what grade would you allow your child to walk or bike to/from school without an adult?

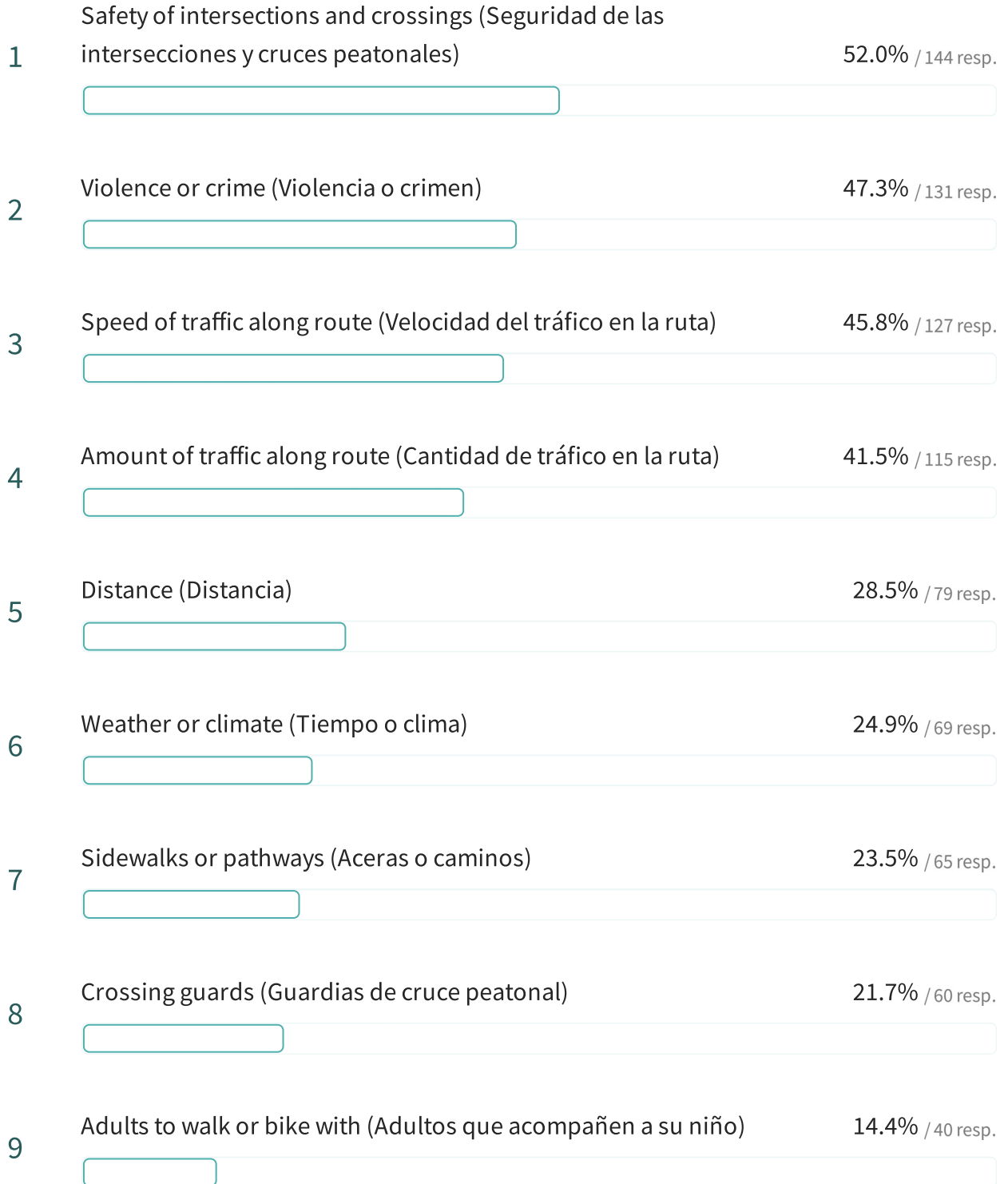
276 out of 277 answered

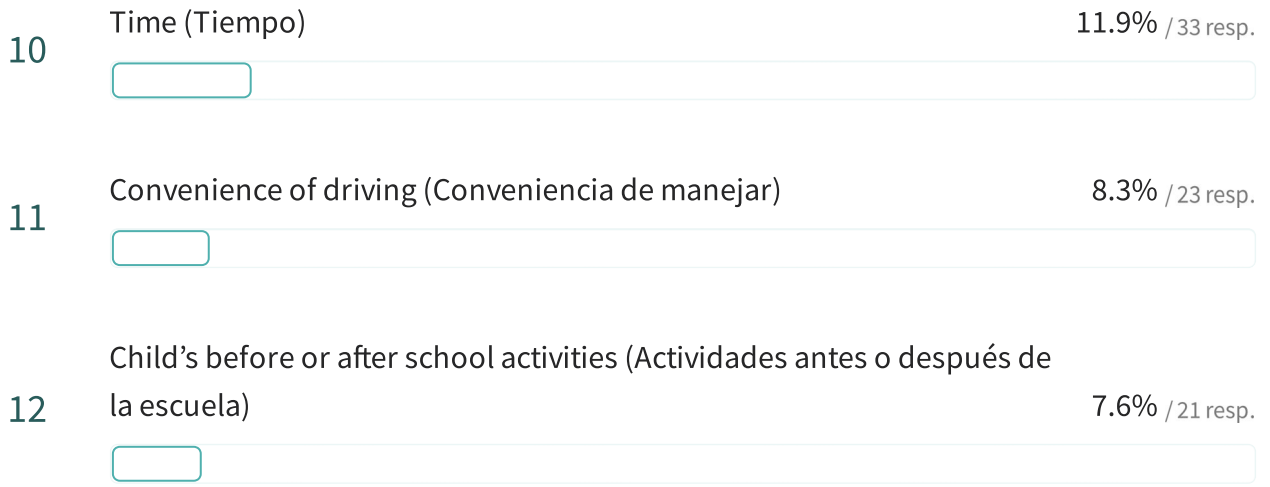




Which of the following issues affected your decision to allow, or not allow, your child to walk or bike to/from school?

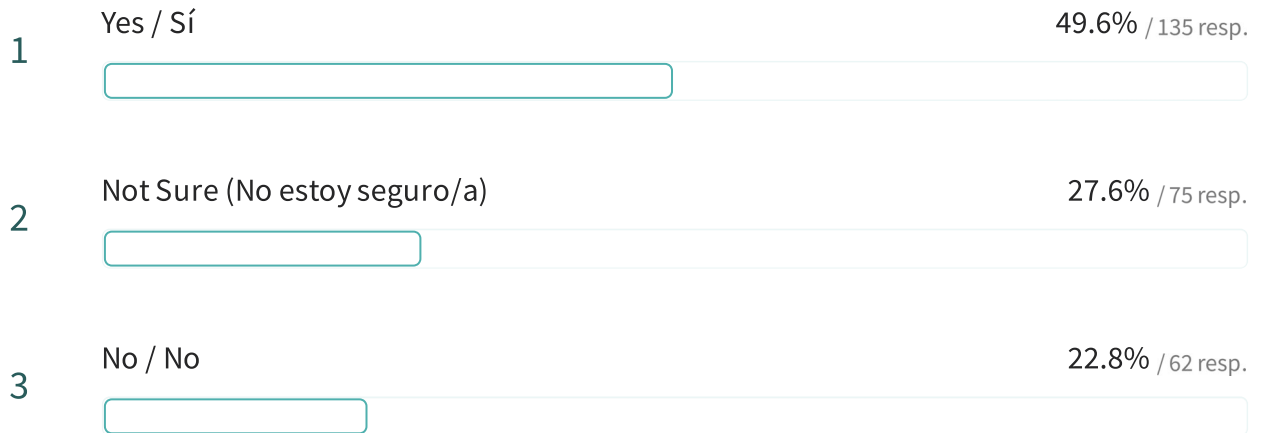
277 out of 277 answered





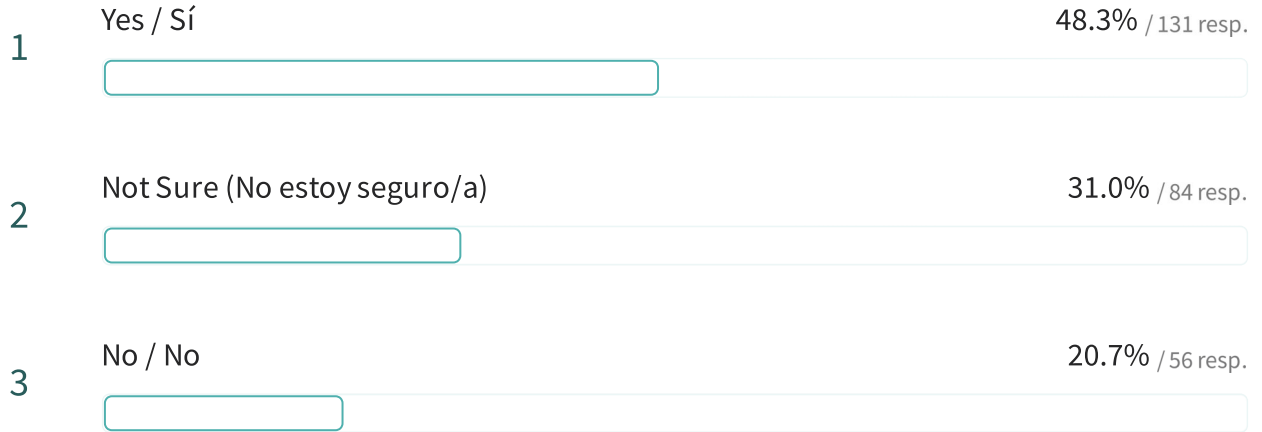
Distance (Distancia)

272 out of 277 answered



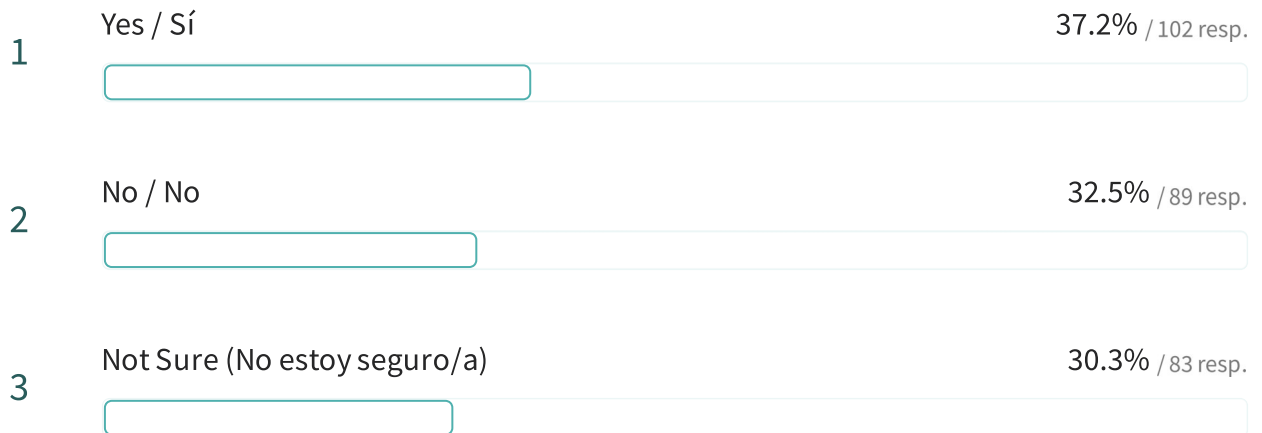
Time (Tiempo)

271 out of 277 answered



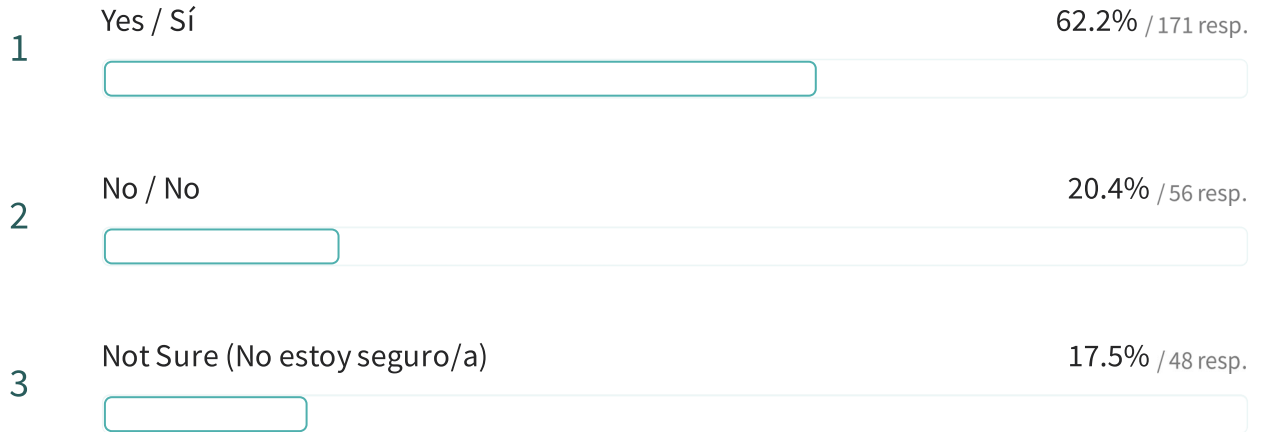
Child's before or after school activities (Actividades antes o después de la escuela)

274 out of 277 answered



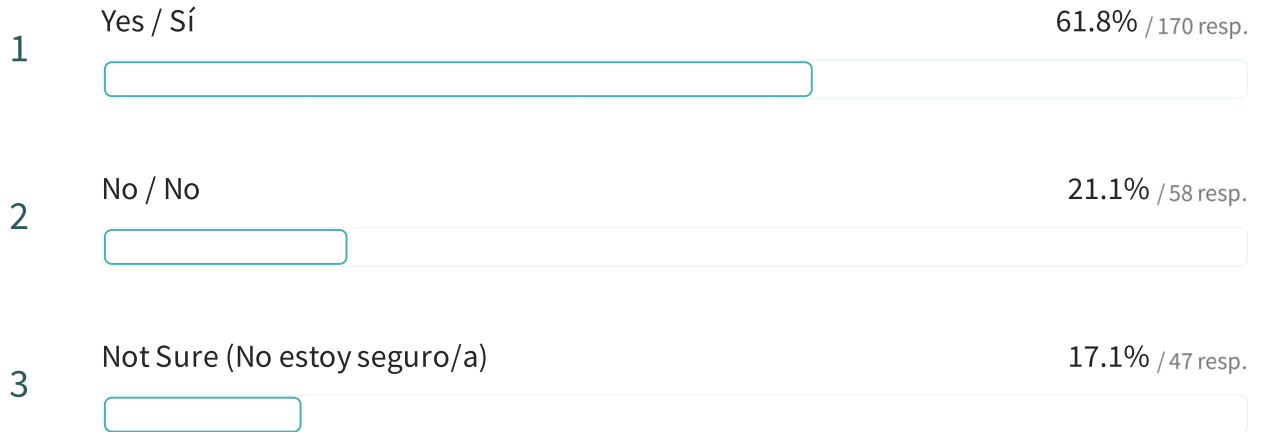
Speed of traffic along route
(Velocidad del tráfico en la ruta)

275 out of 277 answered



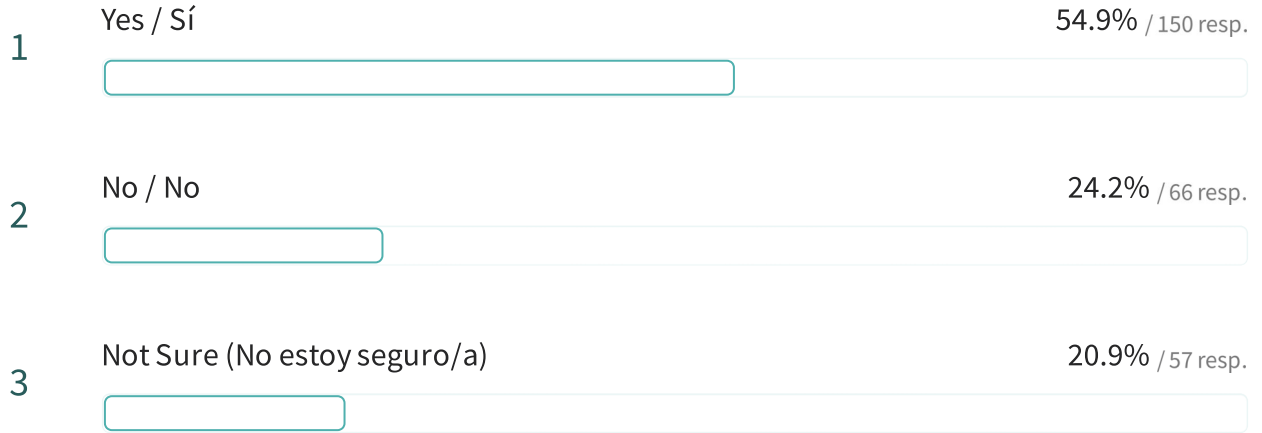
Amount of traffic along route
(Cantidad de tráfico en la ruta)

275 out of 277 answered



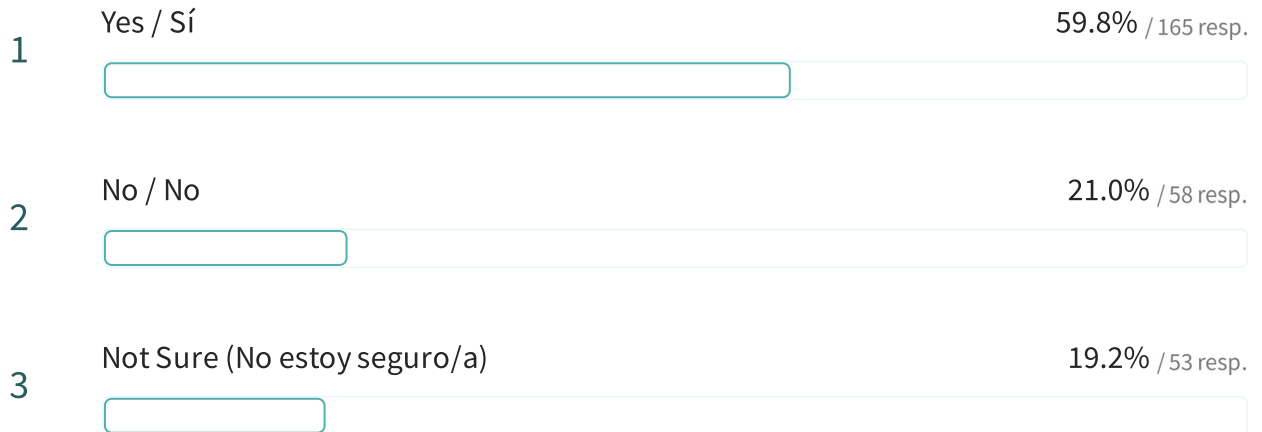
Adults to walk or bike with
(Adultos que acompañen a su niño)

273 out of 277 answered



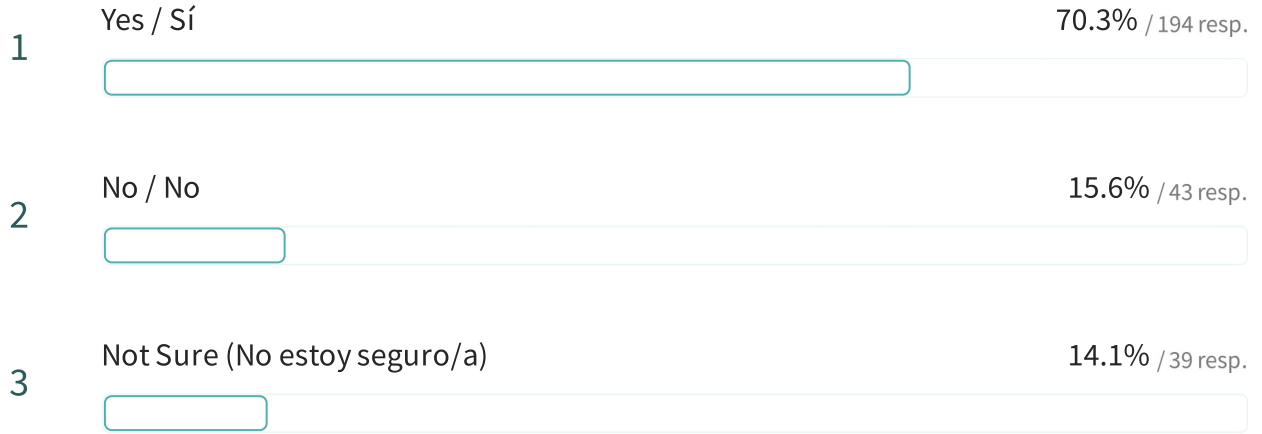
Sidewalks or pathways (Aceras o caminos)

276 out of 277 answered



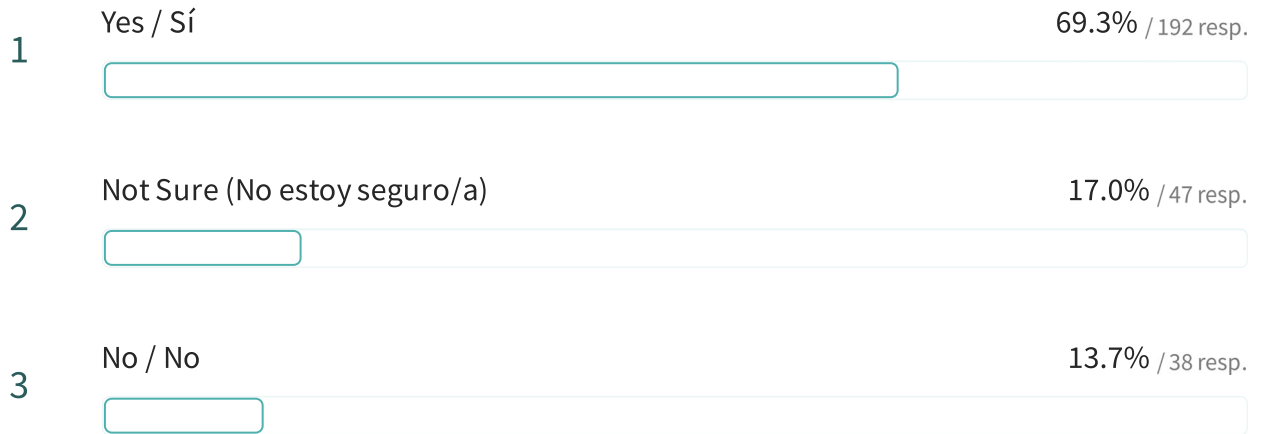
Safety of intersections and crossings (Seguridad de las intersecciones y cruces peatonales)

276 out of 277 answered



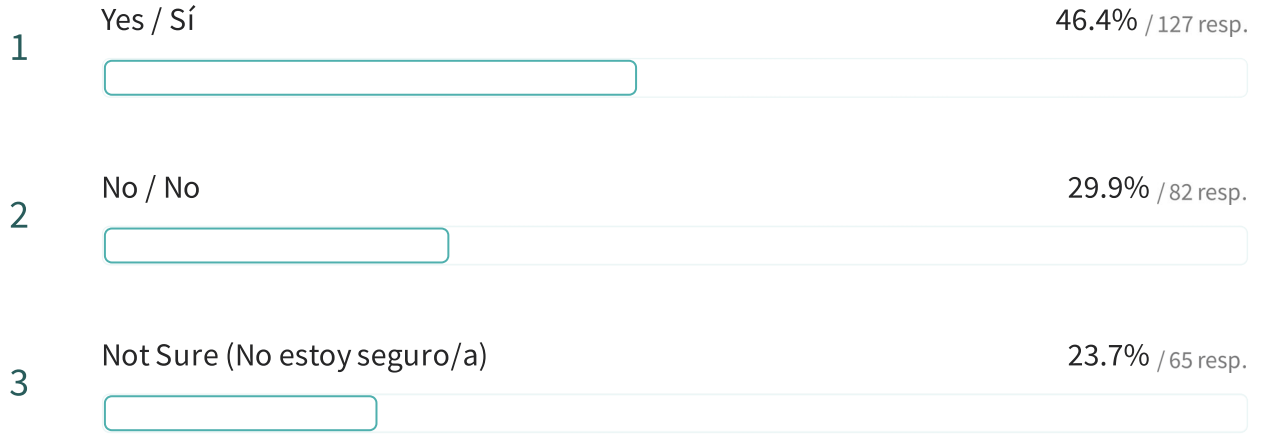
Crossing guards (Guardias de cruce peatonal)

277 out of 277 answered



Violence or crime (Violencia o crimen)

274 out of 277 answered

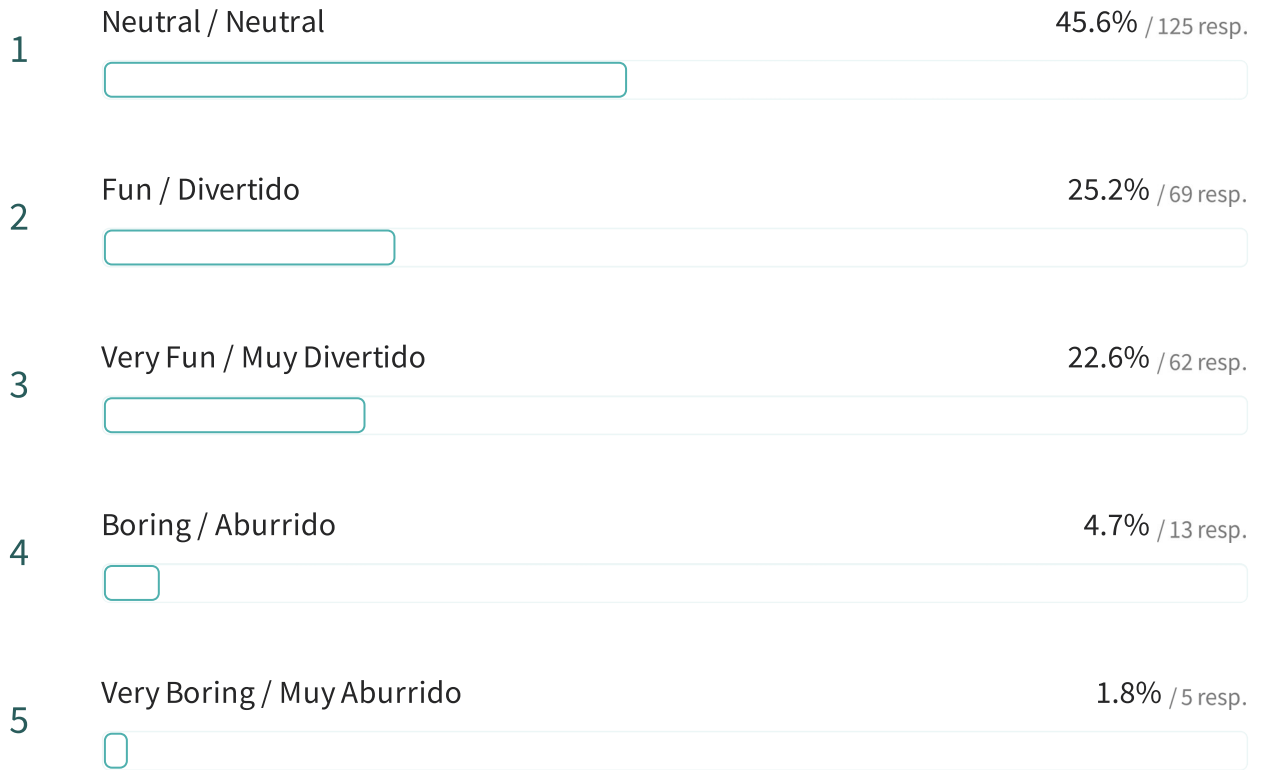


In your opinion, how much does your child's school encourage or discourage walking and biking to/from school?
272 out of 277 answered



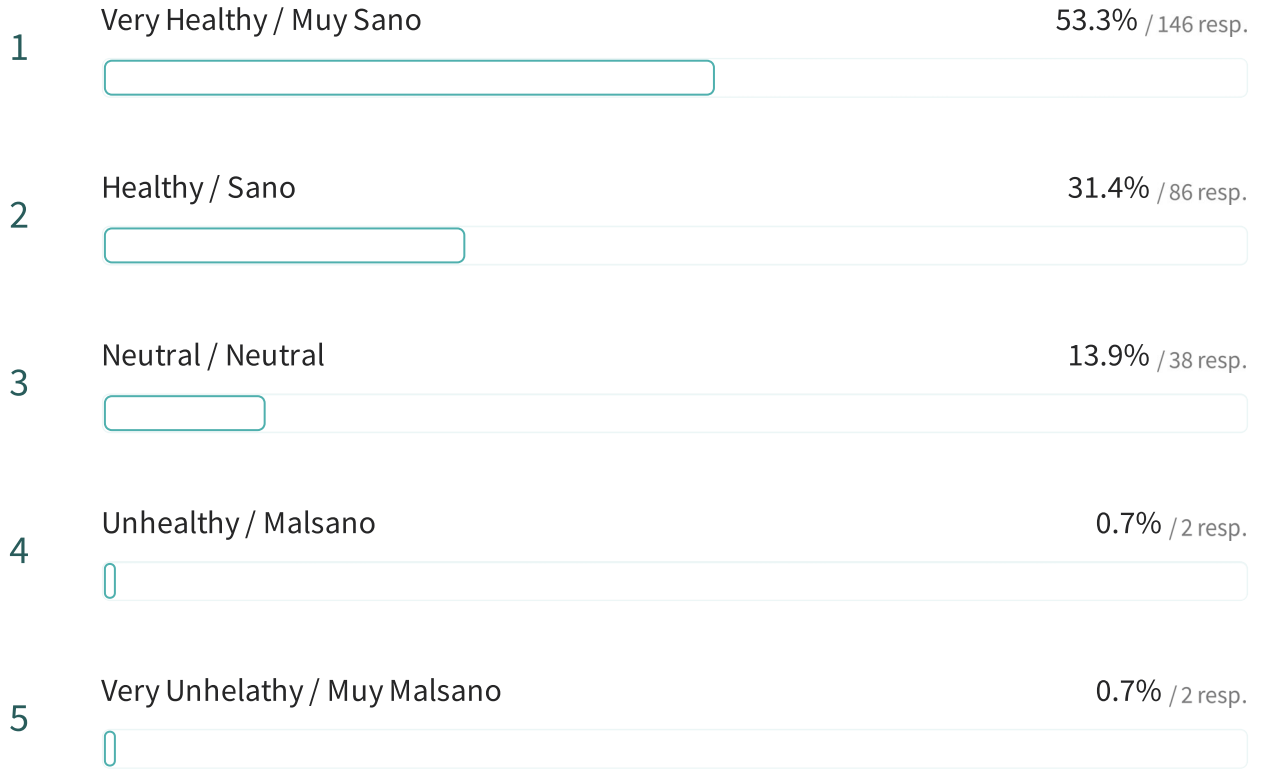
How much fun is walking or biking to/from school for your child?

274 out of 277 answered



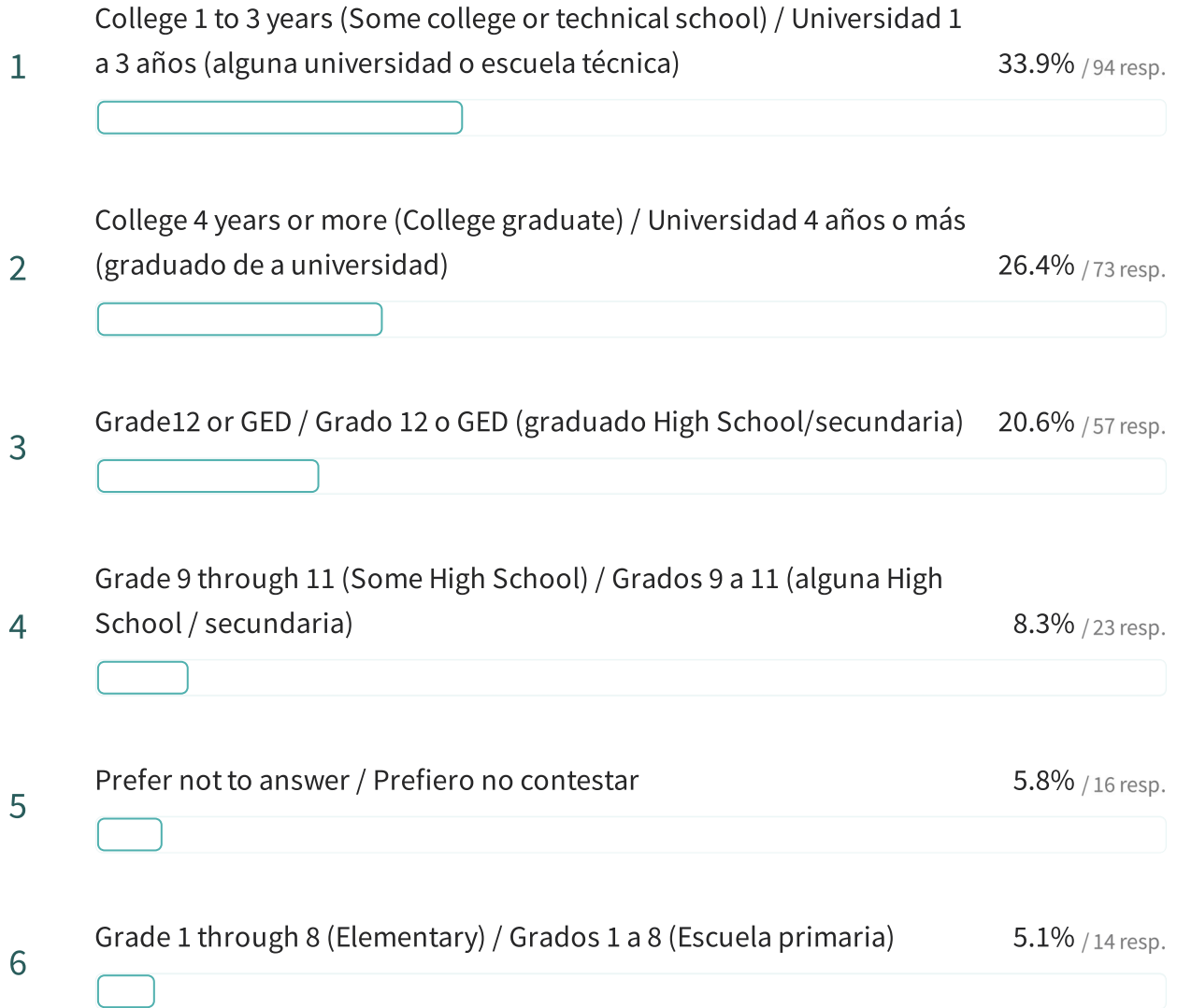
How healthy is walking or biking to/from school for your child?

274 out of 277 answered



What is the highest grade or year of school you have completed?

277 out of 277 answered

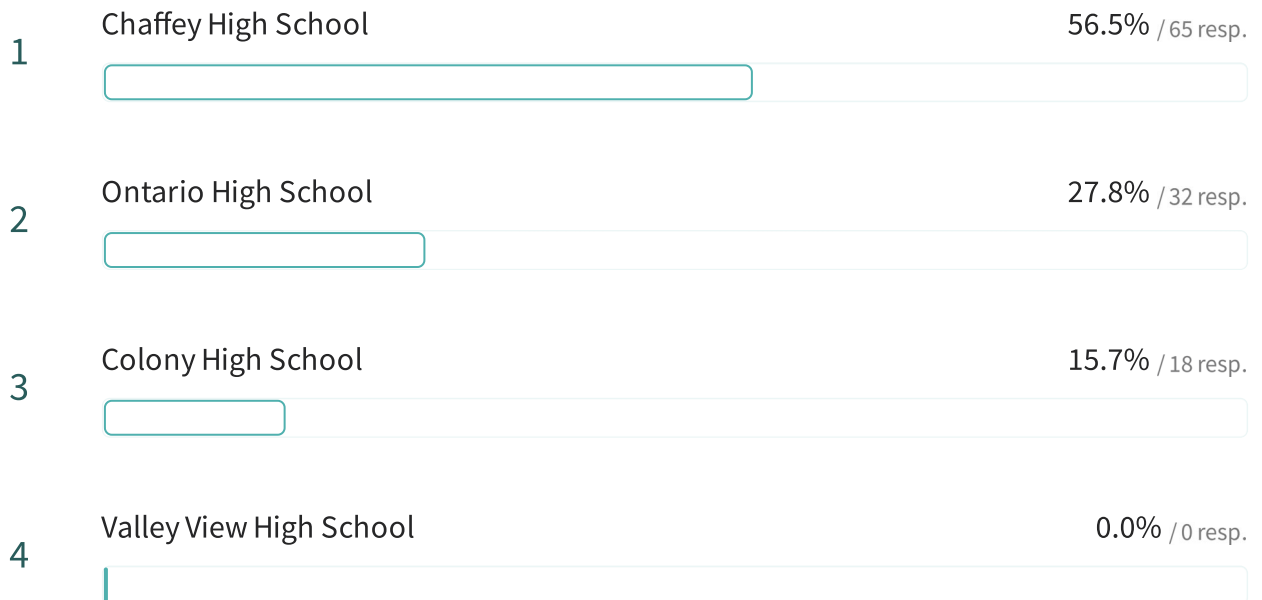


High School Survey

115 responses

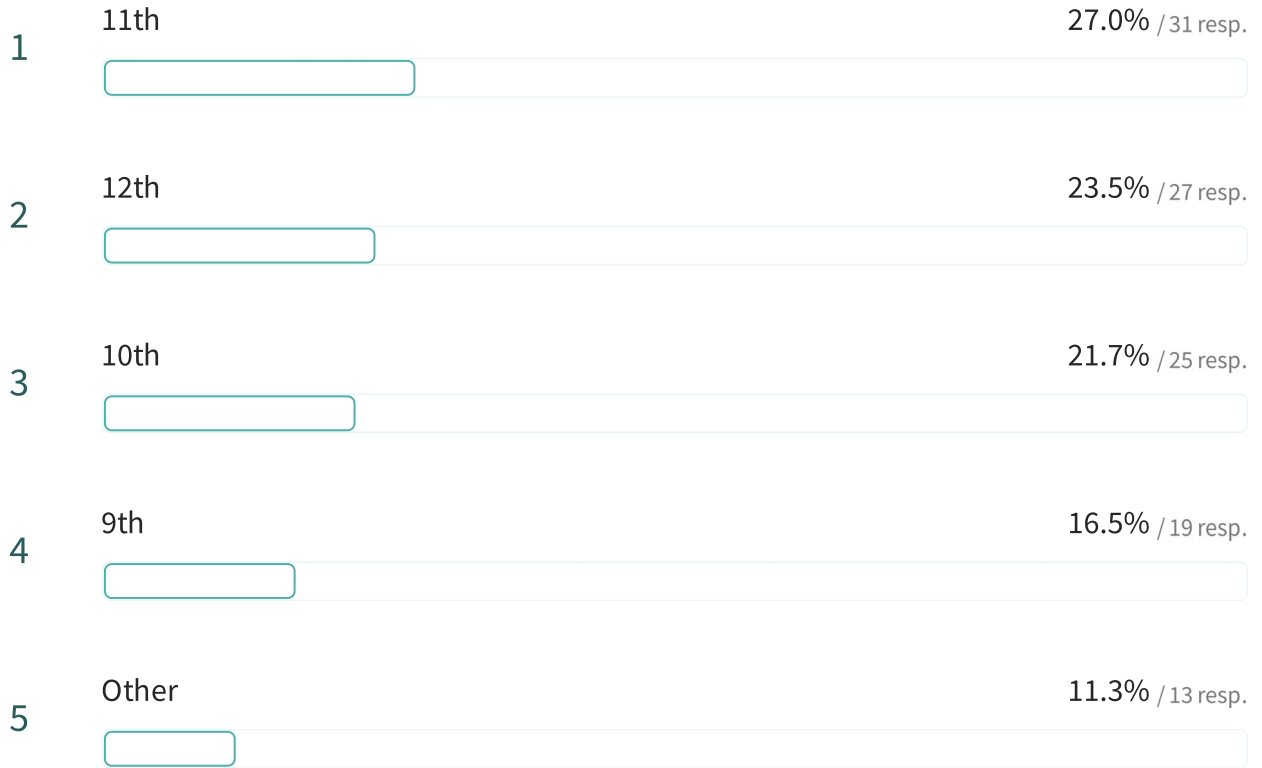
Which school do you go to?

115 out of 115 answered



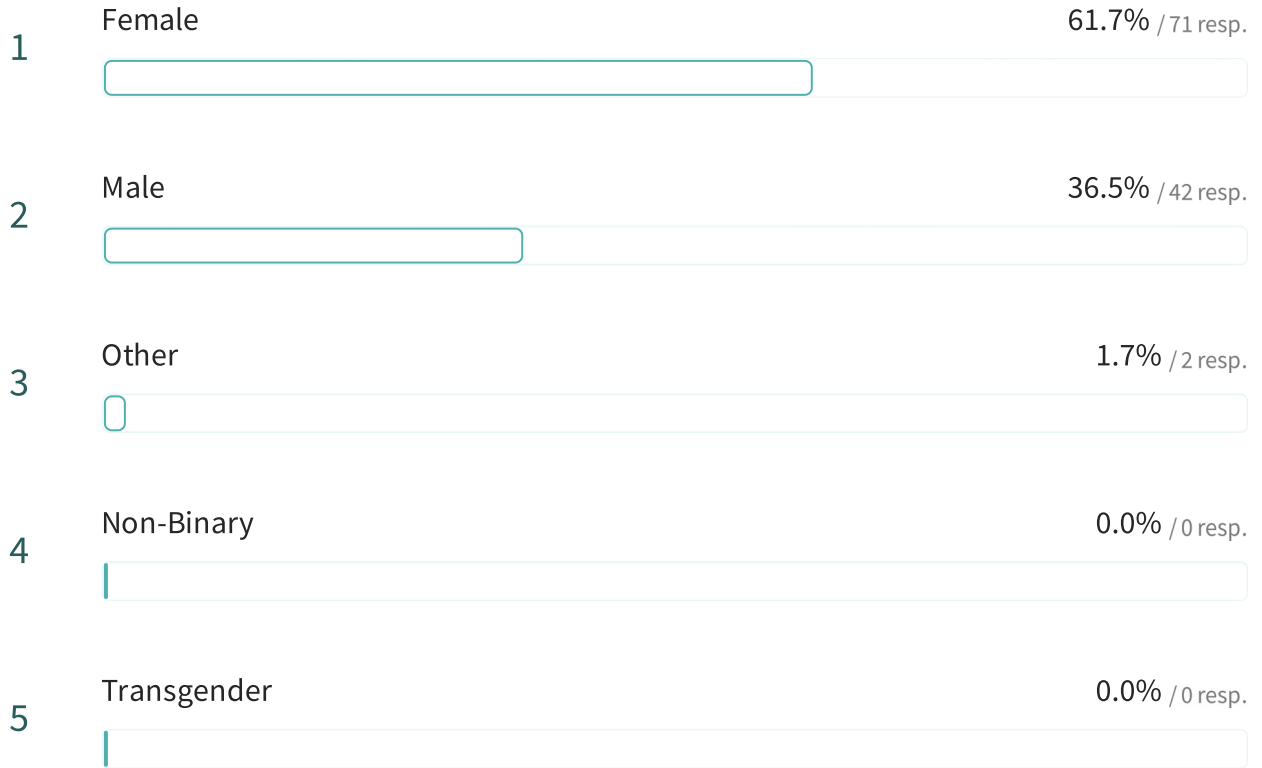
What grade are you in?

115 out of 115 answered



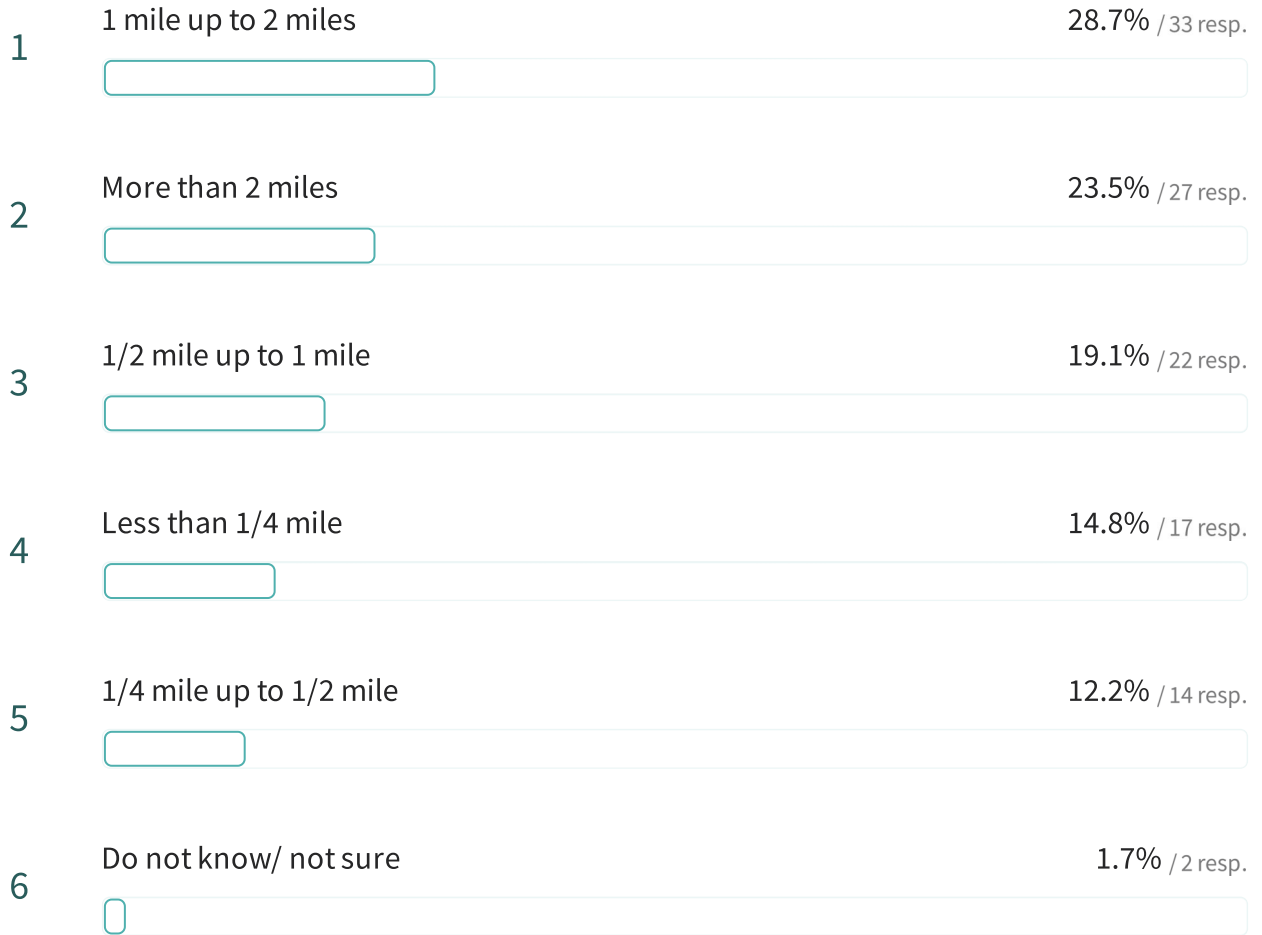
Which gender do you most identify with?

115 out of 115 answered



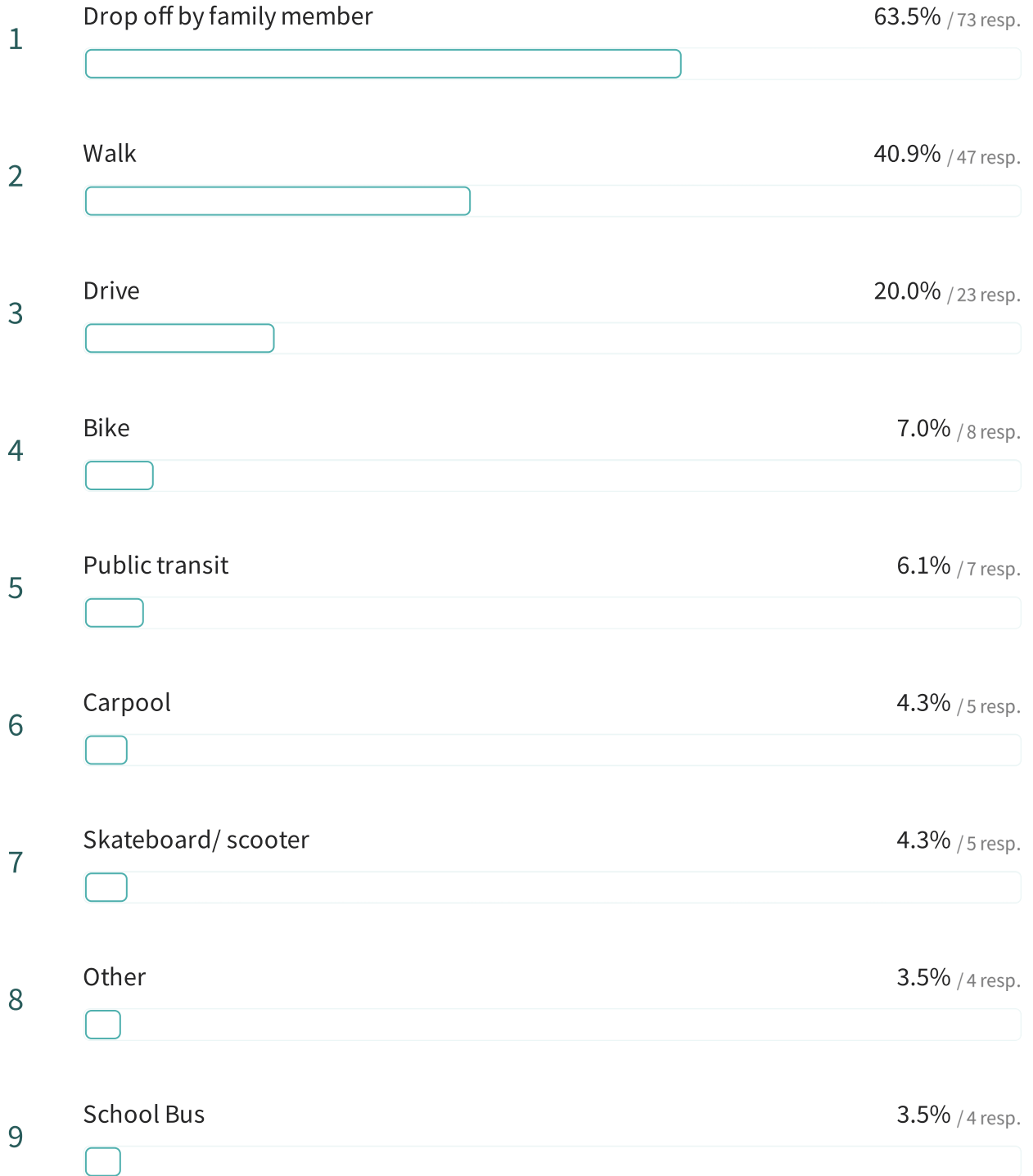
How far do you live from school?

115 out of 115 answered



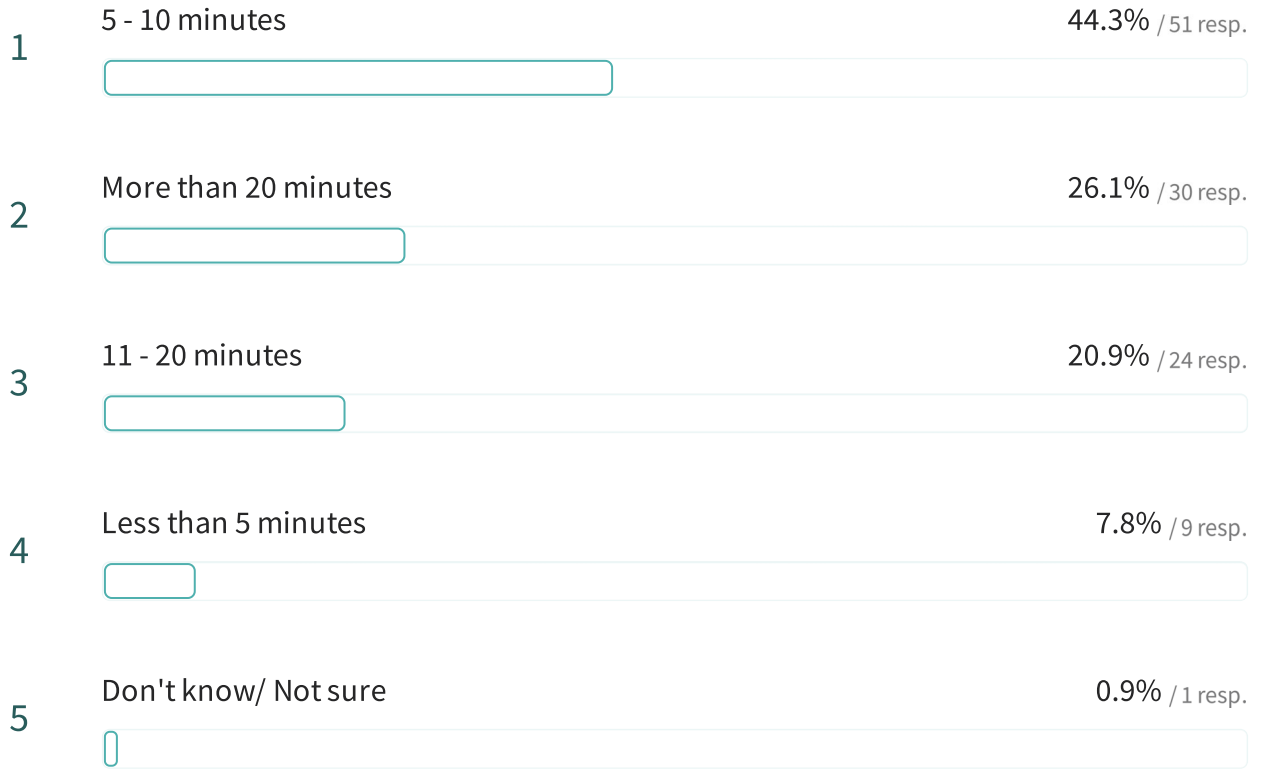
On most days, how do you get to and from school?

115 out of 115 answered



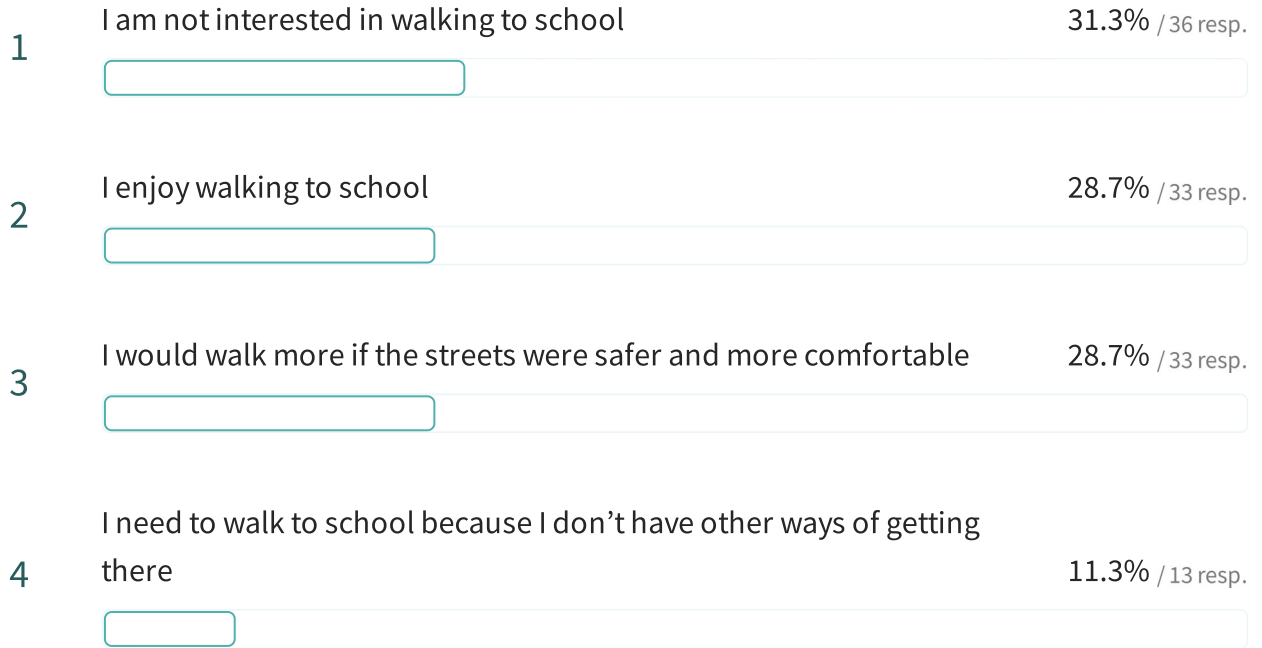
How long does it normally take for you to get to and from school?

115 out of 115 answered



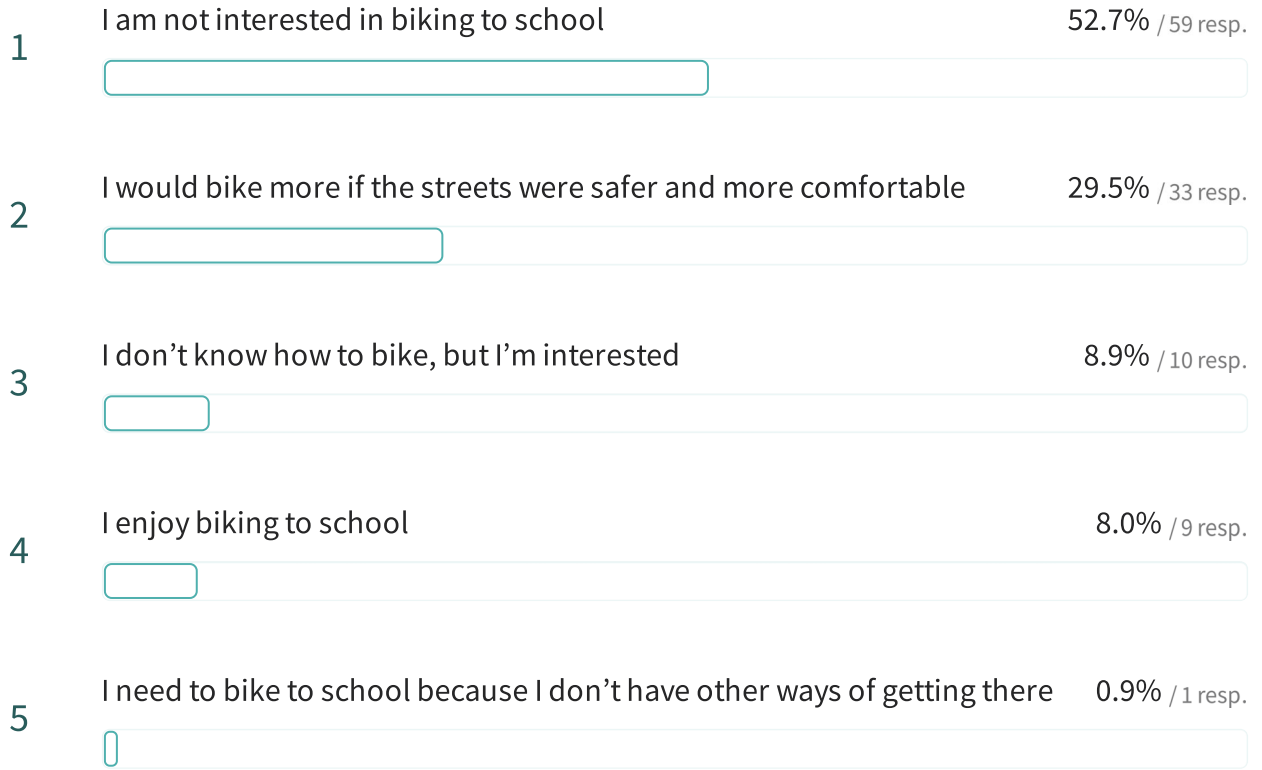
What best describes your attitude toward walking to school?

115 out of 115 answered

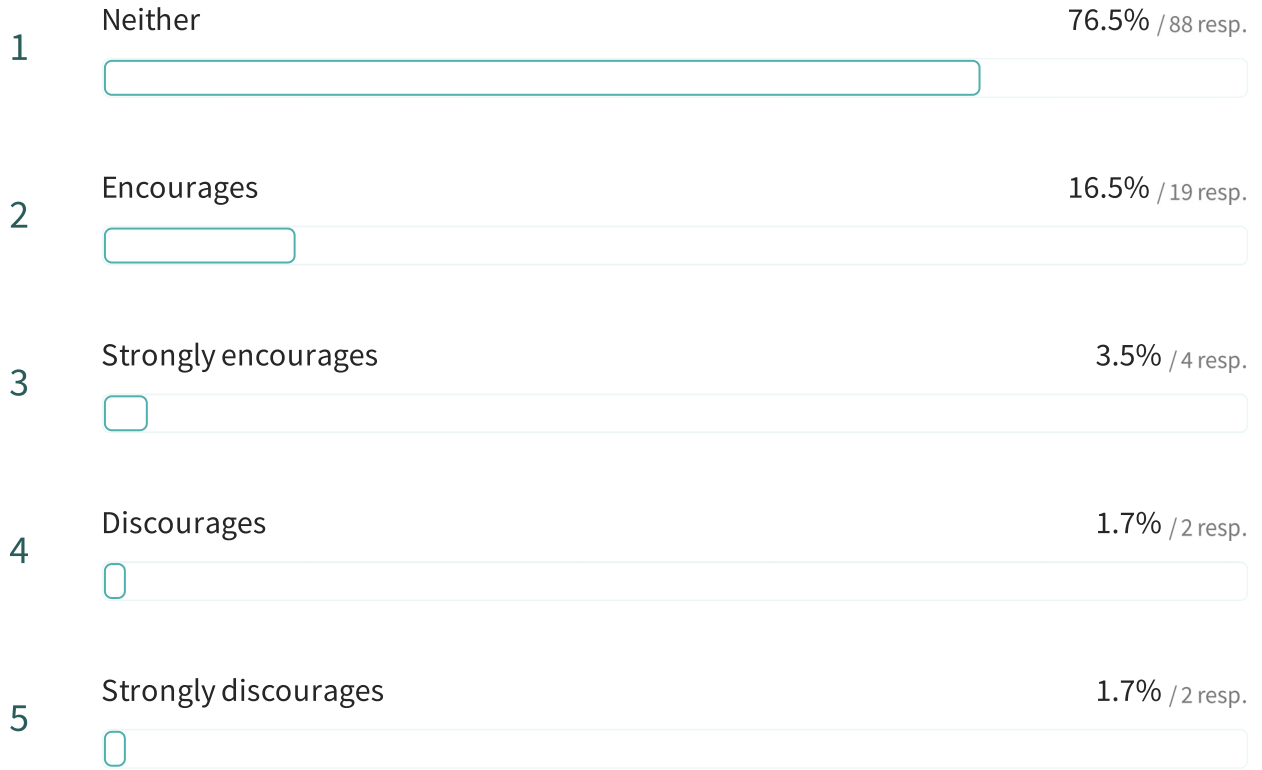


What best describes your attitude toward biking to school?

112 out of 115 answered

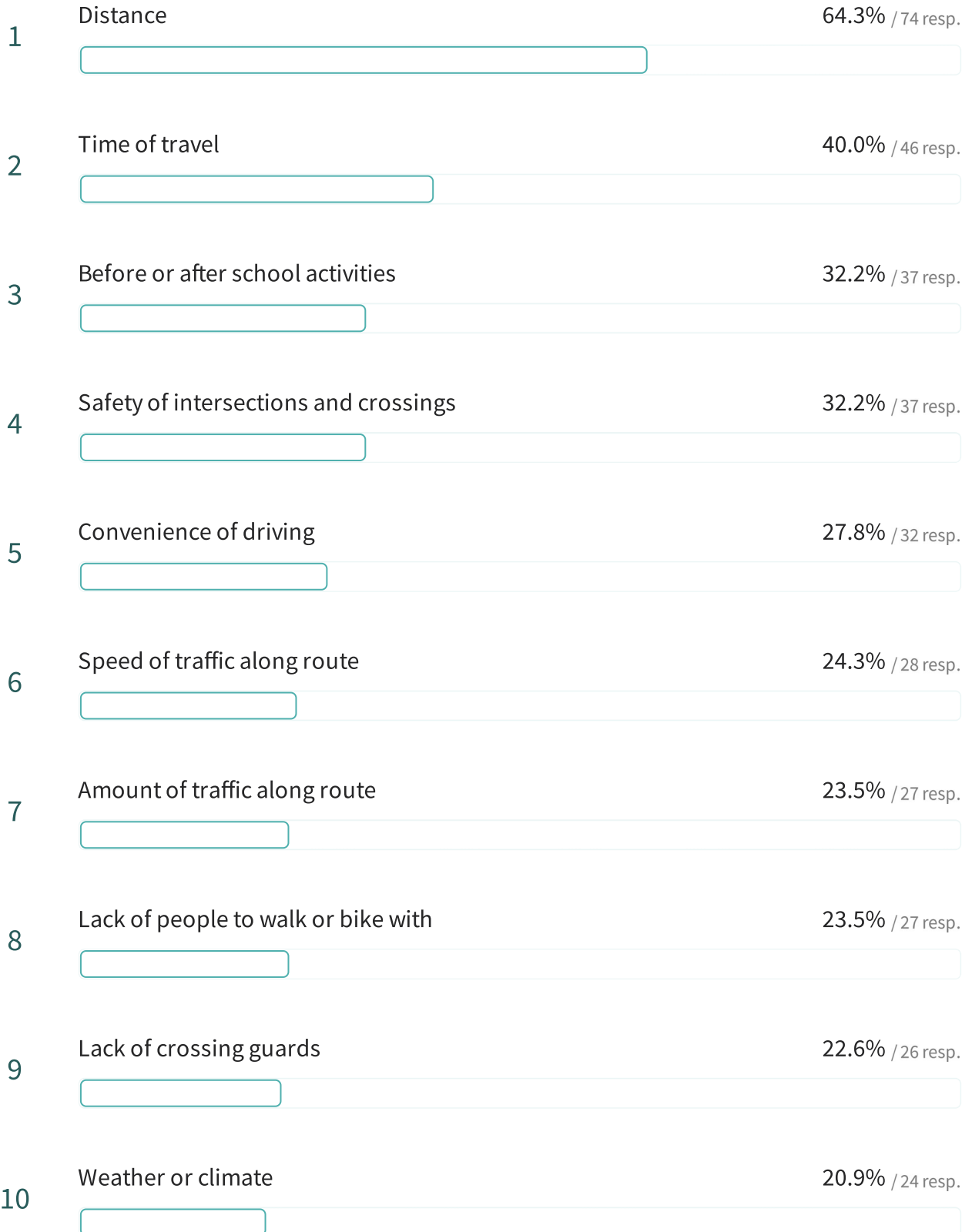


In your opinion, how much does your school encourage or discourage walking and biking to and from school?
115 out of 115 answered



Which of the following affected your decision on whether to walk or bike to and from school?

115 out of 115 answered





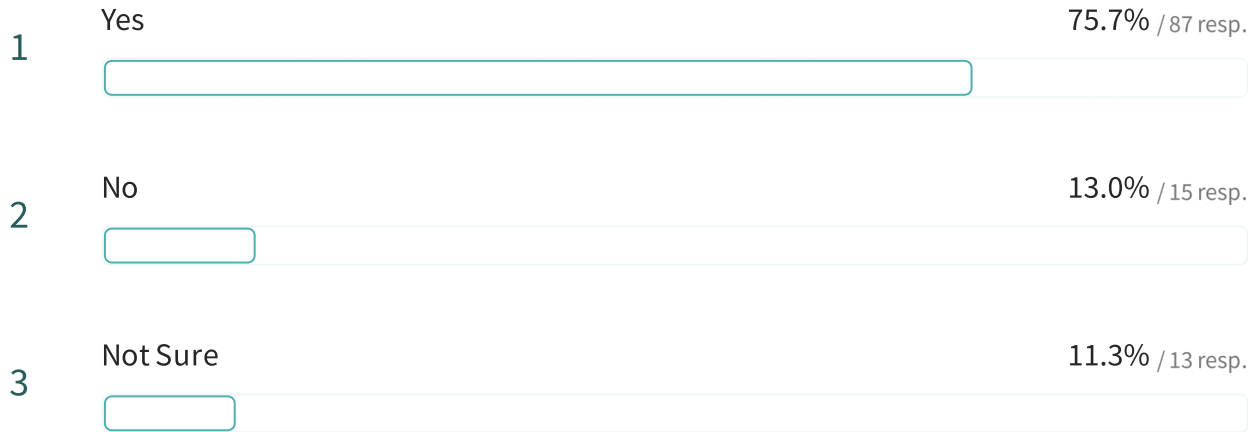
Shorter distance to and from school

114 out of 115 answered



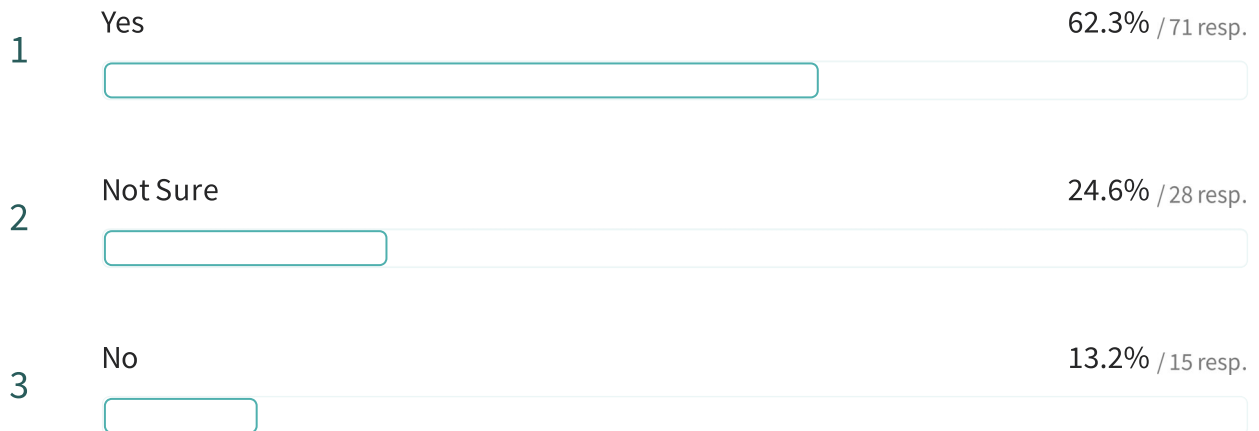
Shorter travel time to and from school

115 out of 115 answered



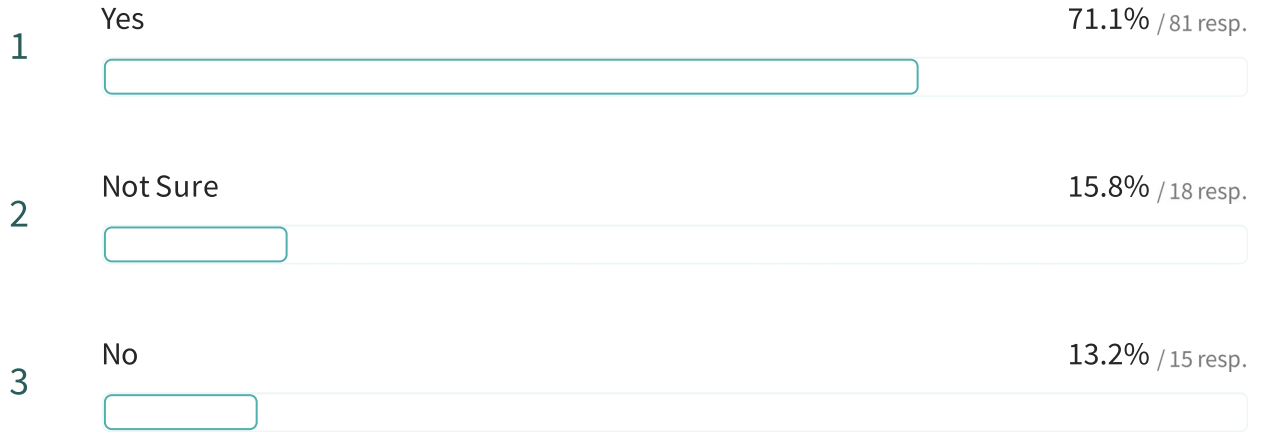
Lower speed of traffic along the walking/biking route

114 out of 115 answered



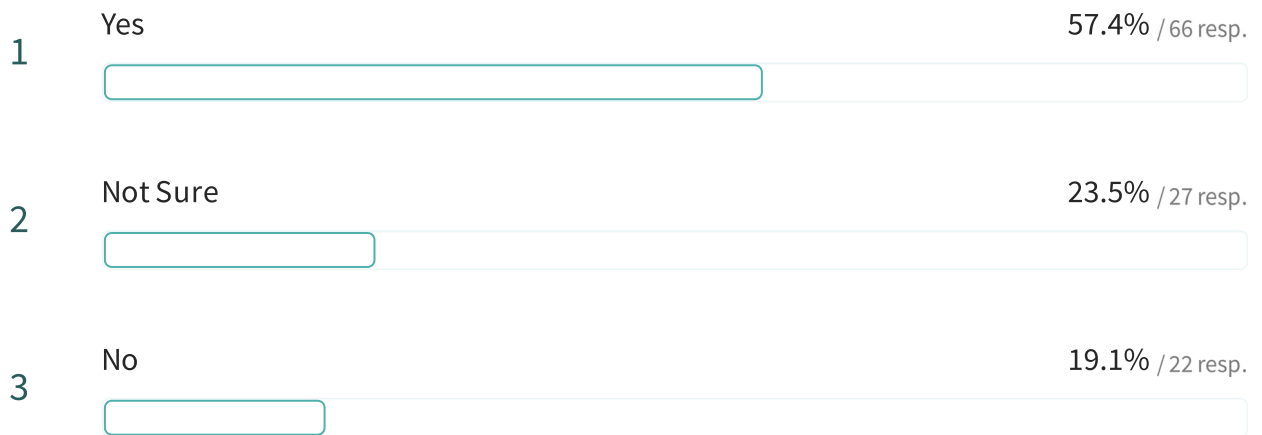
Less traffic along the walking/biking route

114 out of 115 answered



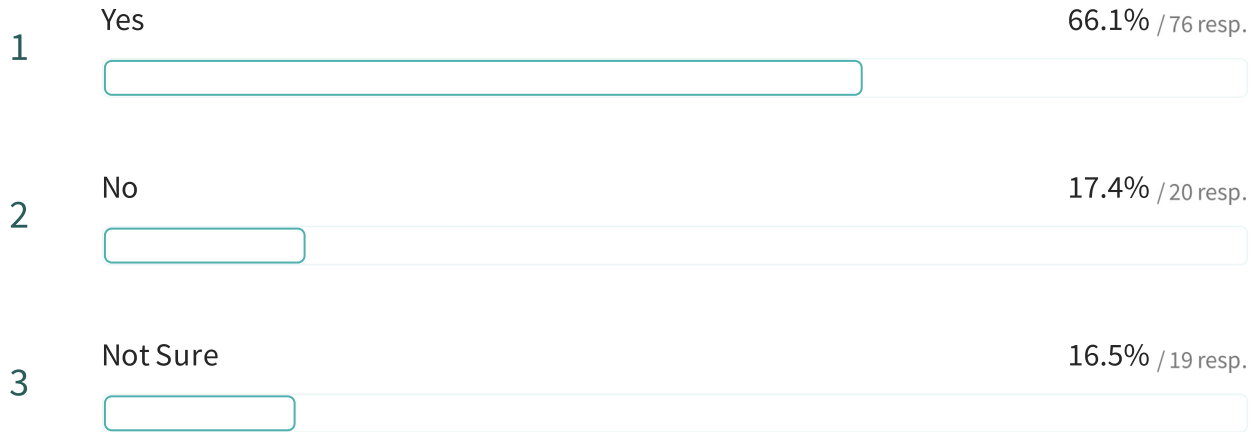
More people to walk or bike with

115 out of 115 answered



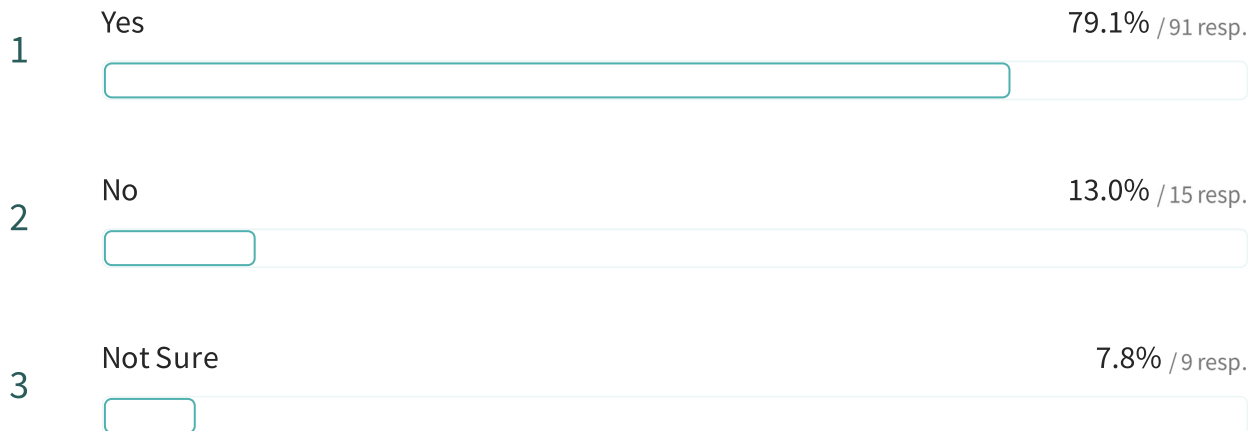
More pedestrian/ bicycle infrastructure

115 out of 115 answered



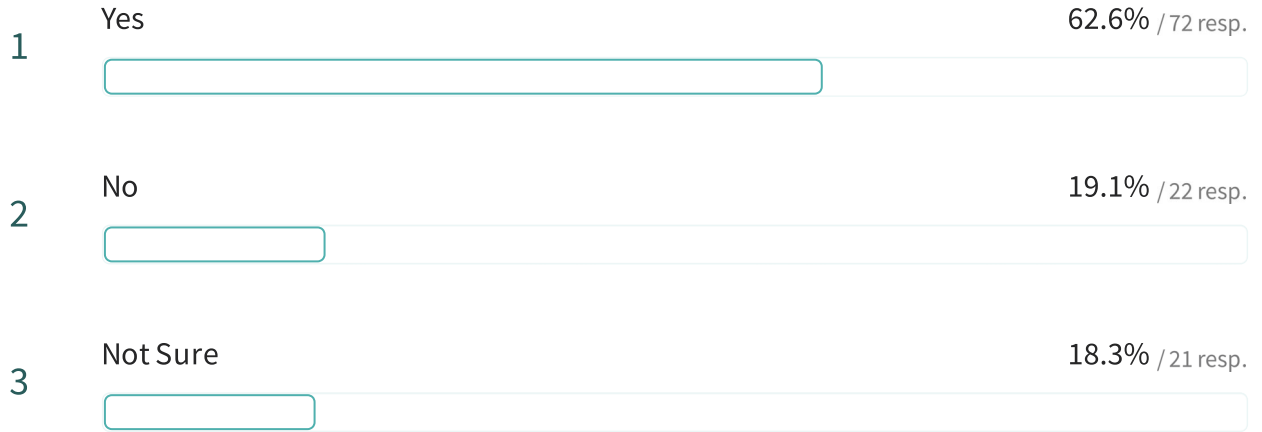
Safer intersections and crossings

115 out of 115 answered



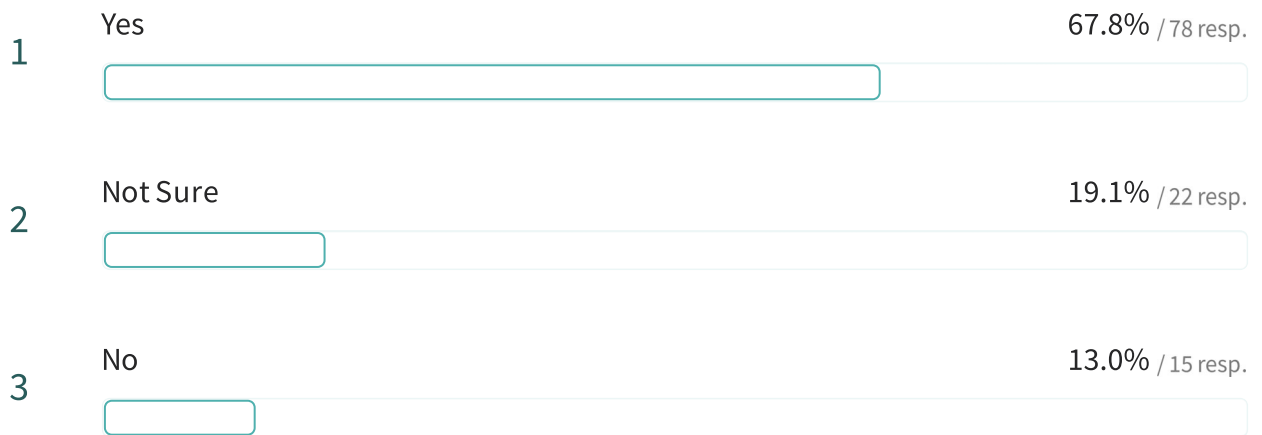
More crossing guards available

115 out of 115 answered



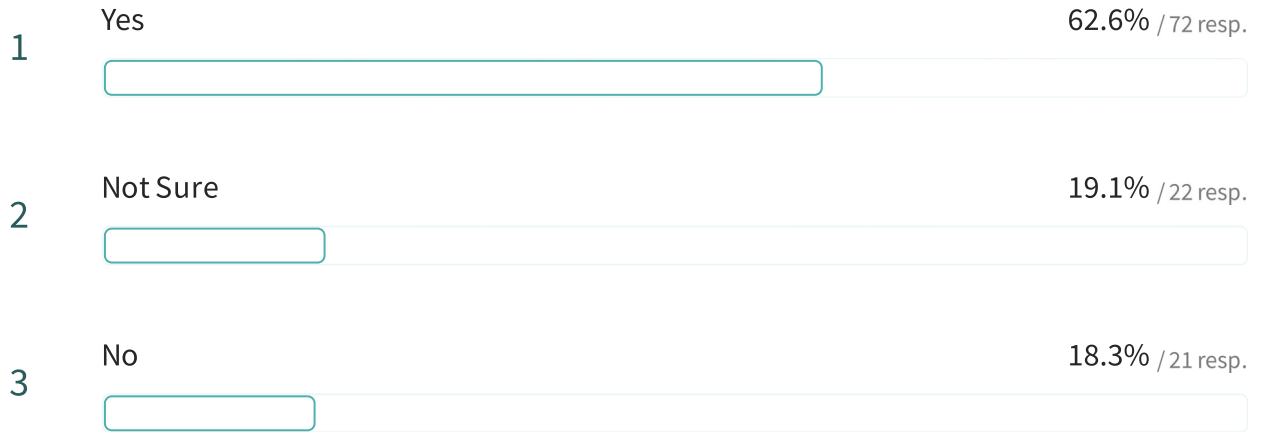
Less violence or crime

115 out of 115 answered



Better protection from the weather (eg. shade)

115 out of 115 answered



Parent Survey Report: One School in One Data Collection Period

School Name: Bon View Elementary School

Set ID: 16336

School Group: ATP Cycle 1

Month and Year Collected: May 2017

School Enrollment: 0

Date Report Generated: 05/22/2017

% Range of Students Involved in SRTS: Don't Know

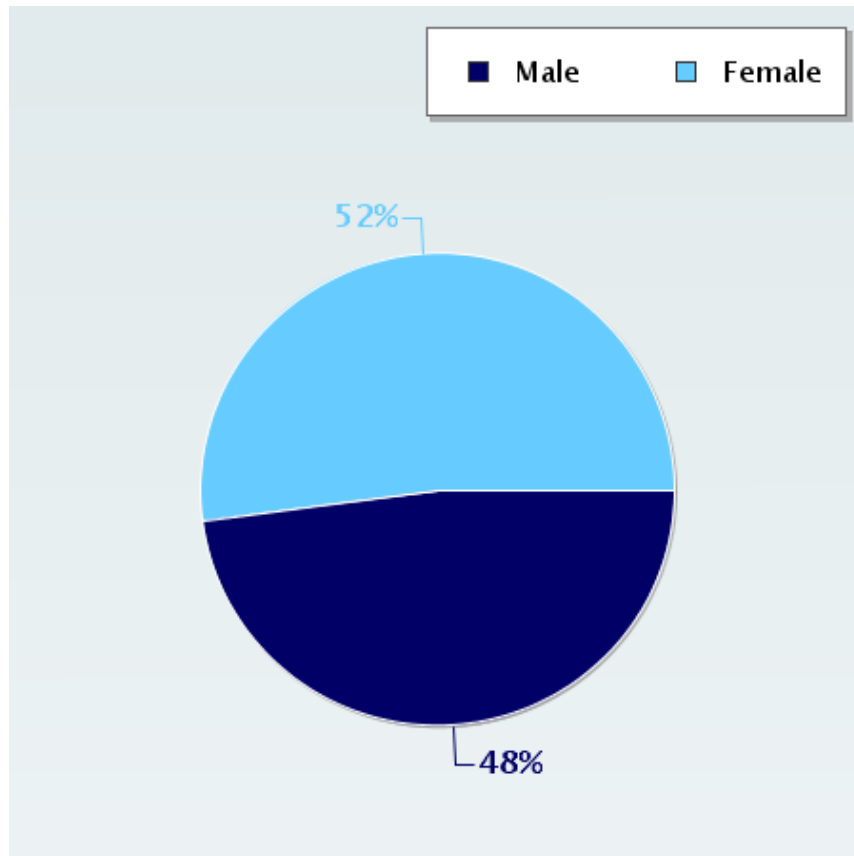
Tags:

Number of Questionnaires Distributed: 0

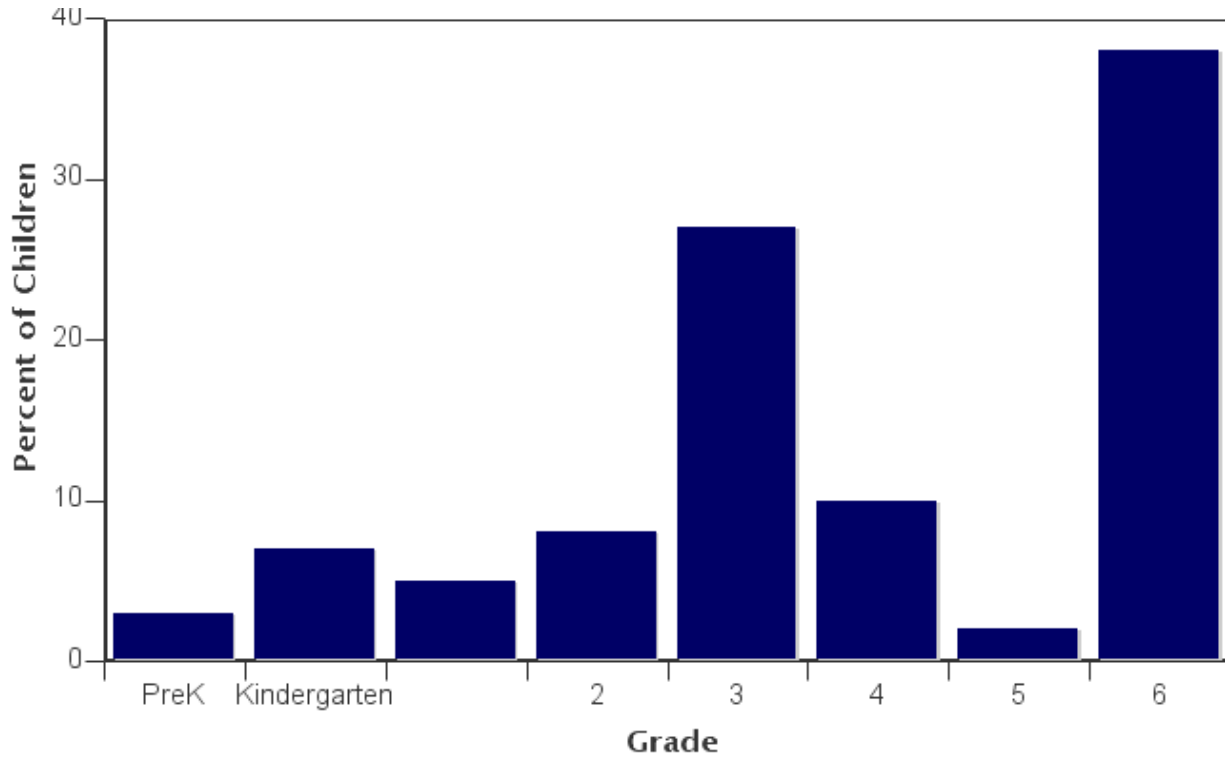
Number of Questionnaires Analyzed for Report: 95

This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

Sex of children for parents that provided information



Grade levels of children represented in survey



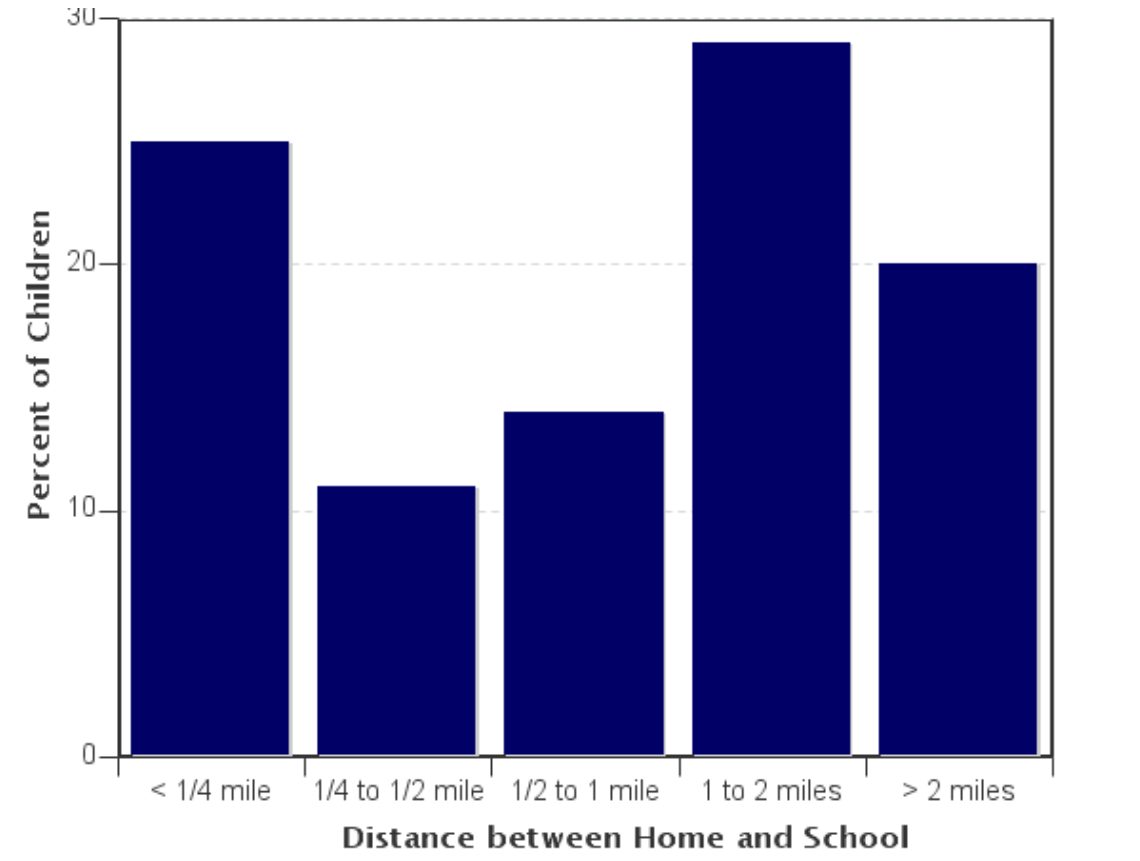
Grade levels of children represented in survey

Grade in School	Responses per grade	
	Number	Percent
PreK	3	3%
Kindergarten	6	7%
1	5	5%
2	7	8%
3	25	27%
4	9	10%
5	2	2%
6	35	38%

No response: 0

Percentages may not total 100% due to rounding.

Parent estimate of distance from child's home to school

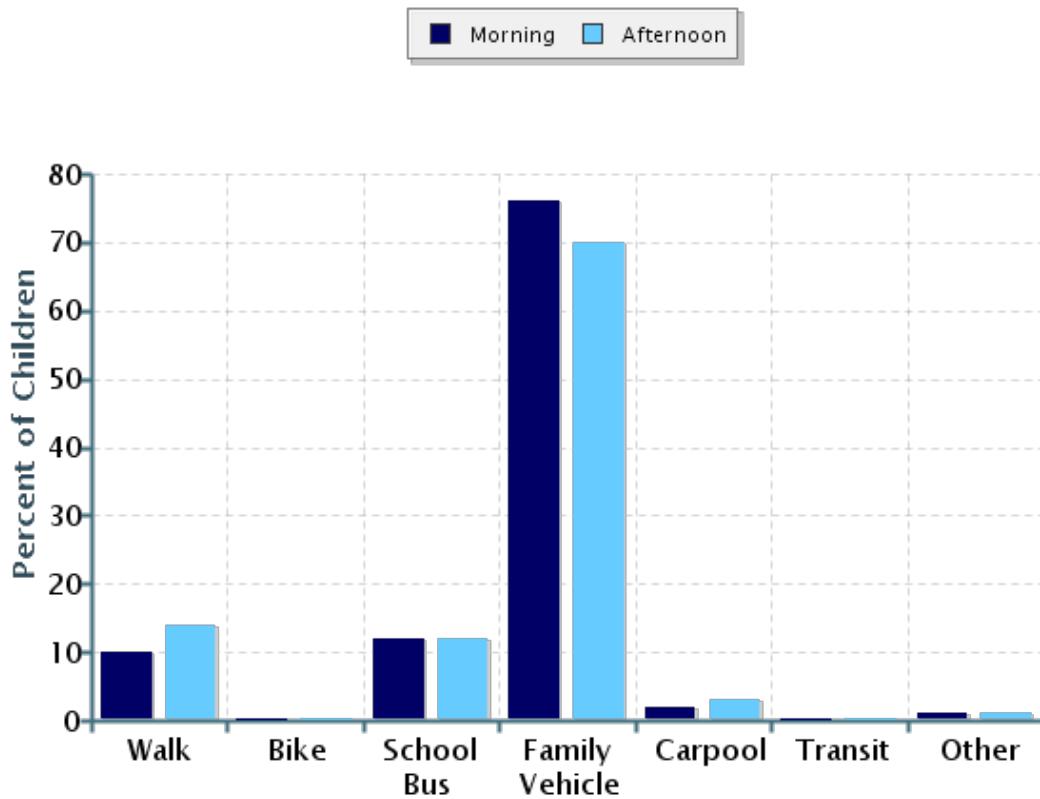


Parent estimate of distance from child's home to school

Distance between home and school	Number of children	Percent
Less than 1/4 mile	21	25%
1/4 mile up to 1/2 mile	9	11%
1/2 mile up to 1 mile	12	14%
1 mile up to 2 miles	24	29%
More than 2 miles	17	20%

Don't know or No response: 12
 Percentages may not total 100% due to rounding.

Typical mode of arrival at and departure from school



Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	94	10%	0%	12%	76%	2%	0%	1%
Afternoon	74	14%	0%	12%	70%	3%	0%	1%

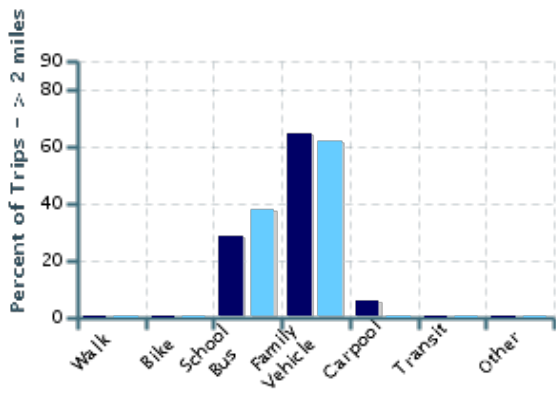
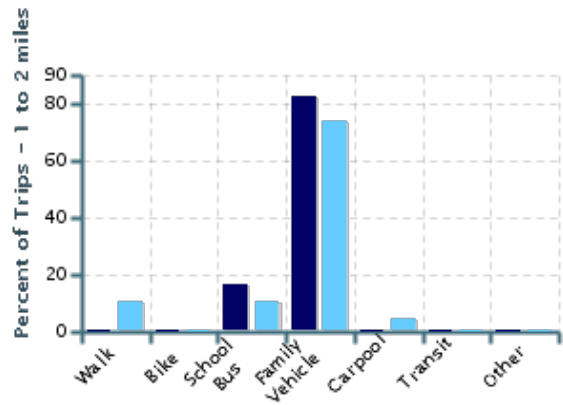
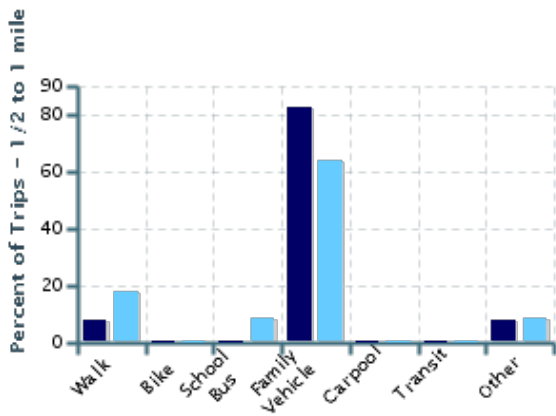
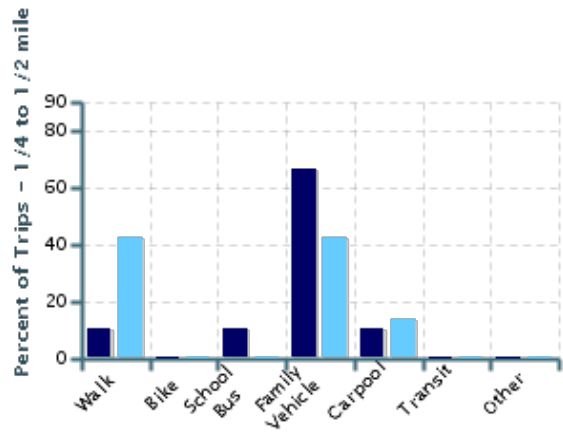
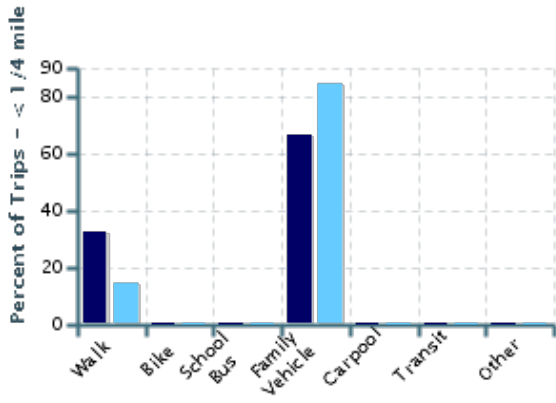
No Response Morning: 1

No Response Afternoon: 21

Percentages may not total 100% due to rounding.

Typical mode of school arrival and departure by distance child lives from school

■ Morning ■ Afternoon



Typical mode of school arrival and departure by distance child lives from school

School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	21	33%	0%	0%	67%	0%	0%	0%
1/4 mile up to 1/2 mile	9	11%	0%	11%	67%	11%	0%	0%
1/2 mile up to 1 mile	12	8%	0%	0%	83%	0%	0%	8%
1 mile up to 2 miles	24	0%	0%	17%	83%	0%	0%	0%
More than 2 miles	17	0%	0%	29%	65%	6%	0%	0%

Don't know or No response: 12

Percentages may not total 100% due to rounding.

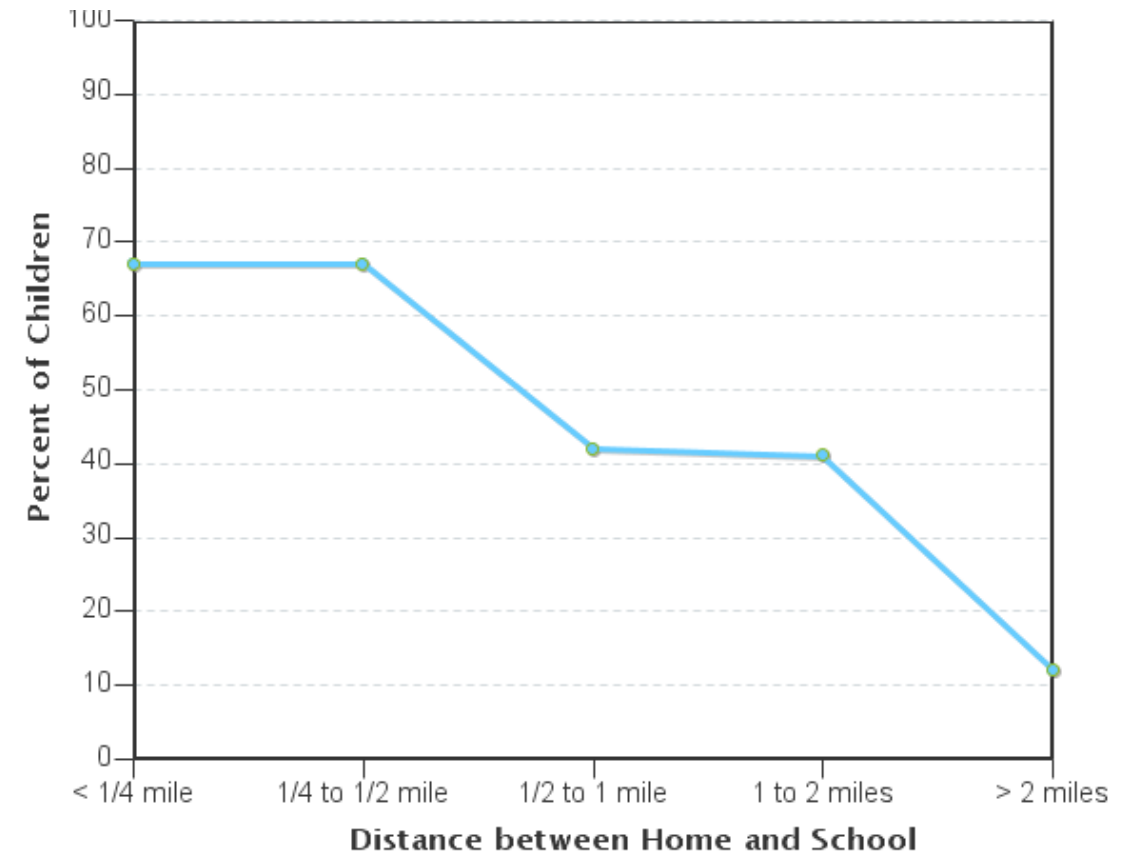
School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	13	15%	0%	0%	85%	0%	0%	0%
1/4 mile up to 1/2 mile	7	43%	0%	0%	43%	14%	0%	0%
1/2 mile up to 1 mile	11	18%	0%	9%	64%	0%	0%	9%
1 mile up to 2 miles	19	11%	0%	11%	74%	5%	0%	0%
More than 2 miles	13	0%	0%	38%	62%	0%	0%	0%

Don't know or No response: 32

Percentages may not total 100% due to rounding.

Percent of children who have asked for permission to walk or bike to/from school by distance they live from school



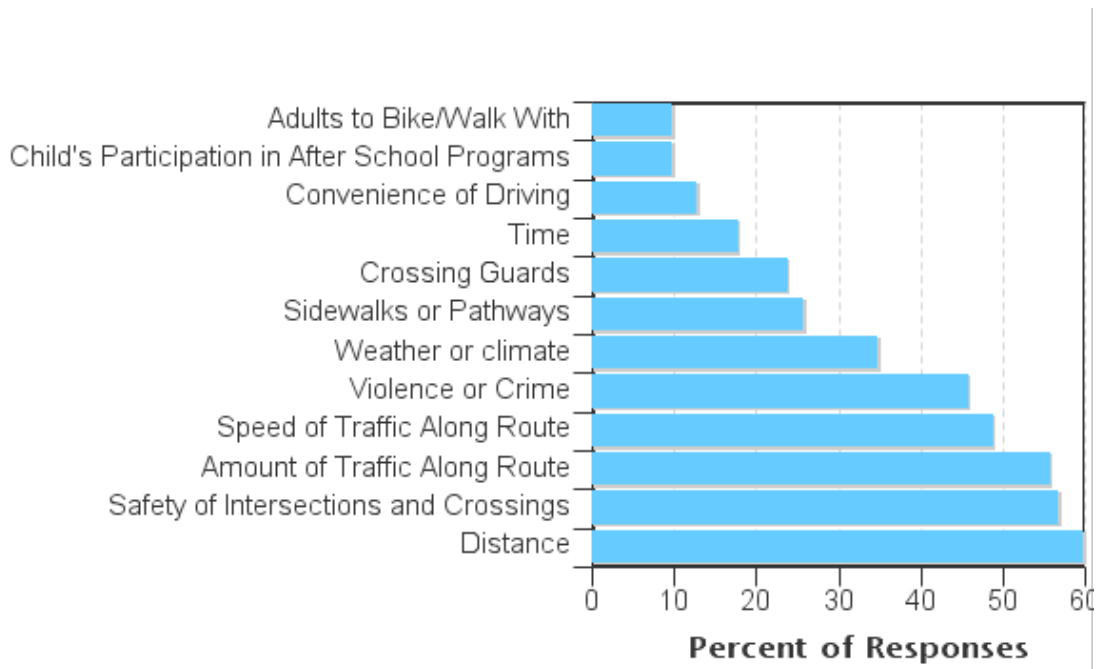
Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	34	67%	67%	42%	41%	12%
No	44	33%	33%	58%	59%	88%

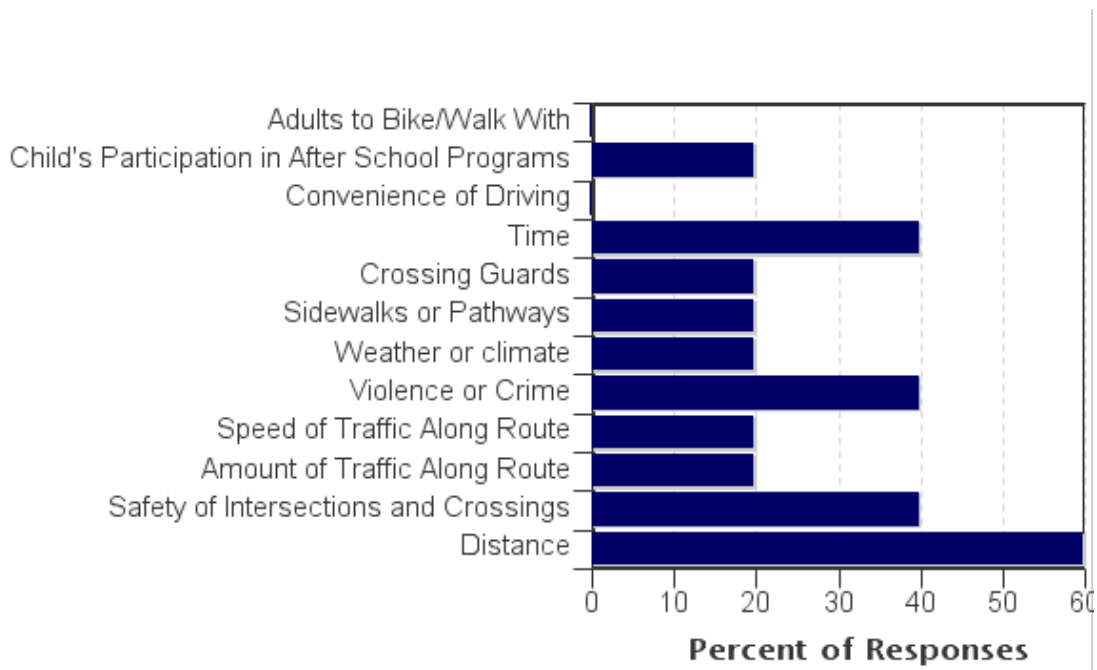
Don't know or No response: 17

Percentages may not total 100% due to rounding.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by
parents of children who already walk or bike to/from school

Issue	Child does not walk/bike to school	Child walks/bikes to school
Distance	60%	60%
Safety of Intersections and Crossings	57%	40%
Amount of Traffic Along Route	56%	20%
Speed of Traffic Along Route	49%	20%
Violence or Crime	46%	40%
Weather or climate	35%	20%
Sidewalks or Pathways	26%	20%
Crossing Guards	24%	20%
Time	18%	40%
Convenience of Driving	13%	0%
Child's Participation in After School Programs	10%	20%
Adults to Bike/Walk With	10%	0%
Number of Respondents per Category	82	5

No response: 8

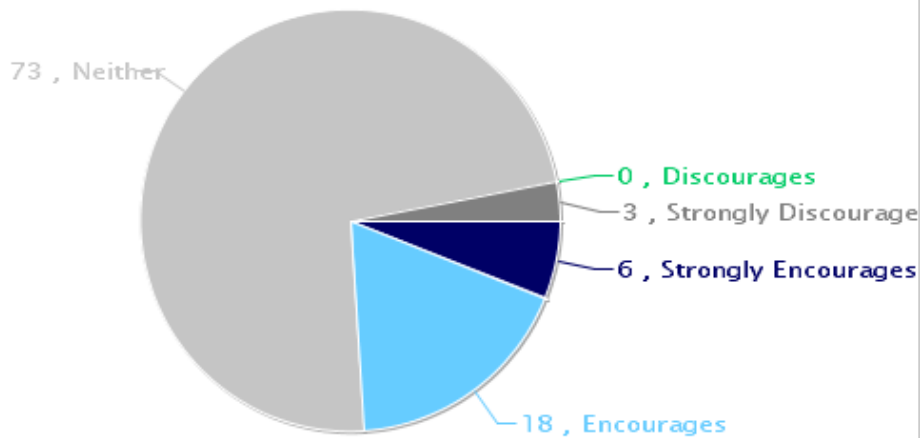
Note:

--Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.

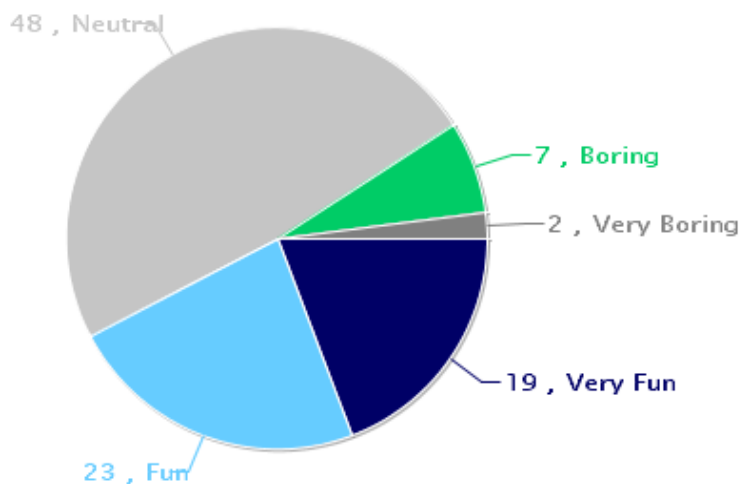
--Each column may sum to > 100% because respondent could select more than issue

--The calculation used to determine the percentage for each issue is based on the 'Number of Respondents per Category' within the respective columns (Child does not walk/bike to school and Child walks/bikes to school.) If comparing percentages between the two columns, please pay particular attention to each column's number of respondents because the two numbers can differ dramatically.

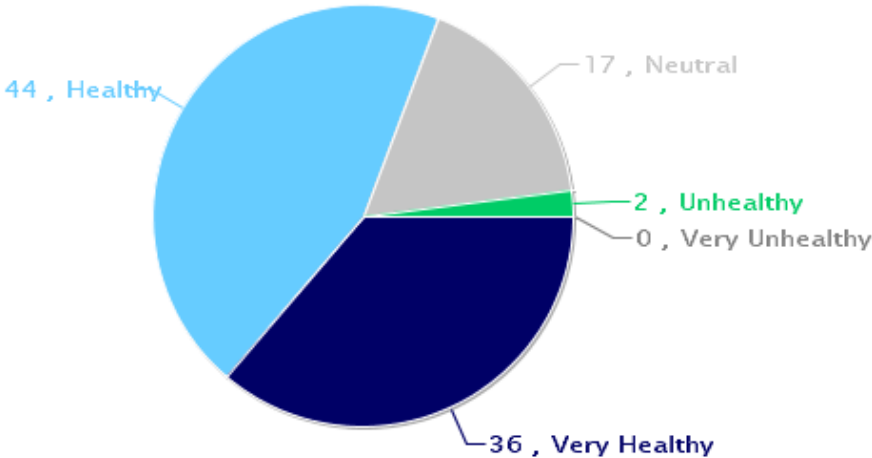
Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school



Parents' opinions about how much fun walking and biking to/from school is for their child



Parents' opinions about how healthy walking and biking to/from school is for their child



Comments Section

SurveyID	Comment
1542248	Having a bus to take the kids to and from school.
1542255	I have back pain and knee pain for which it makes it harder for me to take my kids walking or riding our bikes.
1542656	I would love to have crossing guards at Cucamonga Ave. and Philadelphia St.
1542752	It is healthy and enjoyable to walk to school but in this case, my daughter can not because of the distance.
1542740	We live 1.2 miles from school. If a bus picked up and dropped off I might feel more comfortable with a shorter walk through residential streets.
1542747	I don't think its safe to ride his bike to school because it is dangerous.
1542253	Sometimes I have seen cars that do not respect the Crossing Guards.
1542256	Police patrolling schools before and after a school, enforcing traffic laws and keeping predators away from our kids would be great.
1542598	We need more crossing guards. None at Campus and Philadelphia.
1542669	I wouldn't let my daughter walk to or from school because I don't think it's safe no matter what age.
1542685	For the safety of my children and peace of mind and heart, I prefer to take them personally.
1542790	When the kids stay after school we do walk.
1542791	When the kids stay after school we do walk.
1542257	have a crossing Guard at south campus Avenue and East Philadelphia Street.
1542600	The fact the minor being exposed to loose dogs, homeless activity under 60 Frwy. and Campus Ave. is a serious concern.
1542619	To have police patrolling schools before & after school enforce traffic laws & help keep predators away would be great!
1542623	It is still healthy for kids to walk.
1542746	Violence and crime are my biggest concerns besides distracting driving. A neighbor (adult) got ran over in our neighborhood a couple of weeks ago.
1542757	I think it is very dangerous to walk to school. On occasion I have had to and they trample me and my son. There is a lot of traffic and I don't think there is way to fix it. Also at the intersections of the streets it is dangerous. You also have to cross Freeway 60 which has a lot of traffic at that time and there is not one person to help cross the pedestrians except for the one at the school. To let him walk or go on a bicycle is my responsibility and I don't want it to end with a bad situation because of a bad decision. Thank you for your attention.

1542788	It is healthy to walk to school but it is not secure to cross the streets. There is not respect for the pedestrians.
1542715	Bus drivers are usually on time, can be improved.
1542249	My child requires busing for her medical condition and walking is not an option for my kids.
1542714	There should be a crossing guard on Bon View between Philadelphia and Francis where the crosswalk is located by the park.
1542750	I did not answer questions 13 and 14. The distance to school is far. Thank you.

Parent Survey Report: One School in One Data Collection Period

School Name: Corona Elementary School

Set ID: 16322

School Group: ATP Cycle 1

Month and Year Collected: May 2017

School Enrollment: 0

Date Report Generated: 05/18/2017

% Range of Students Involved in SRTS: Don't Know

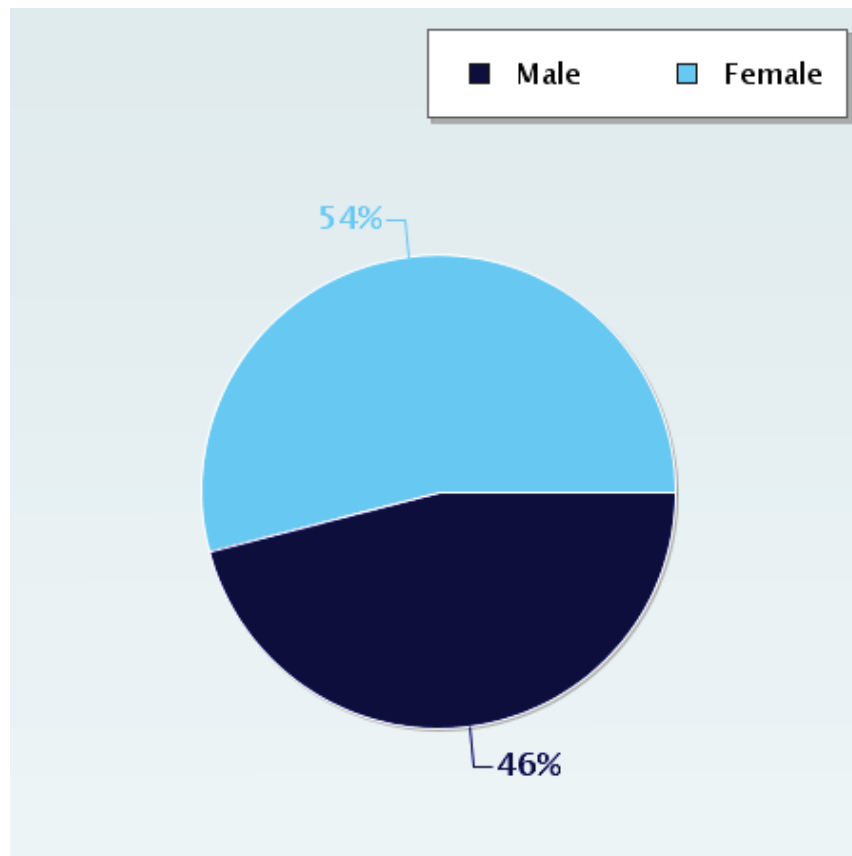
Tags:

Number of Questionnaires Distributed: 0

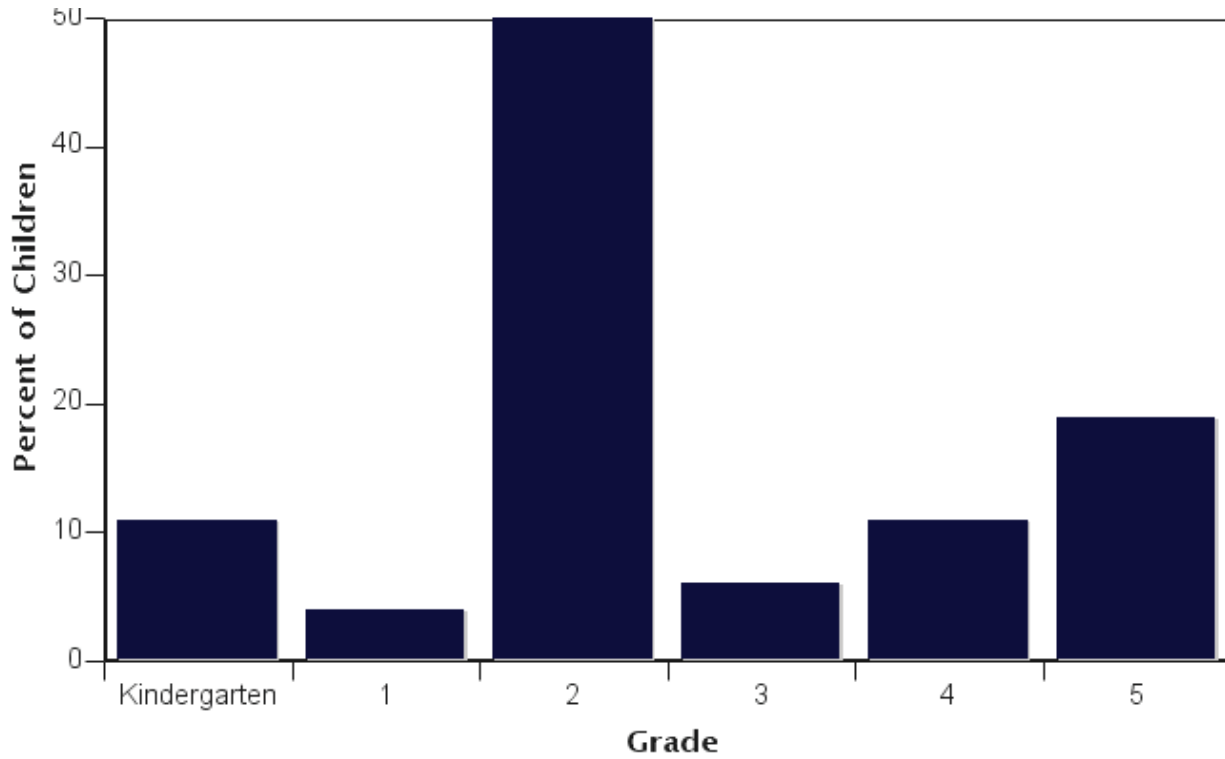
Number of Questionnaires Analyzed for Report: 57

This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

Sex of children for parents that provided information



Grade levels of children represented in survey



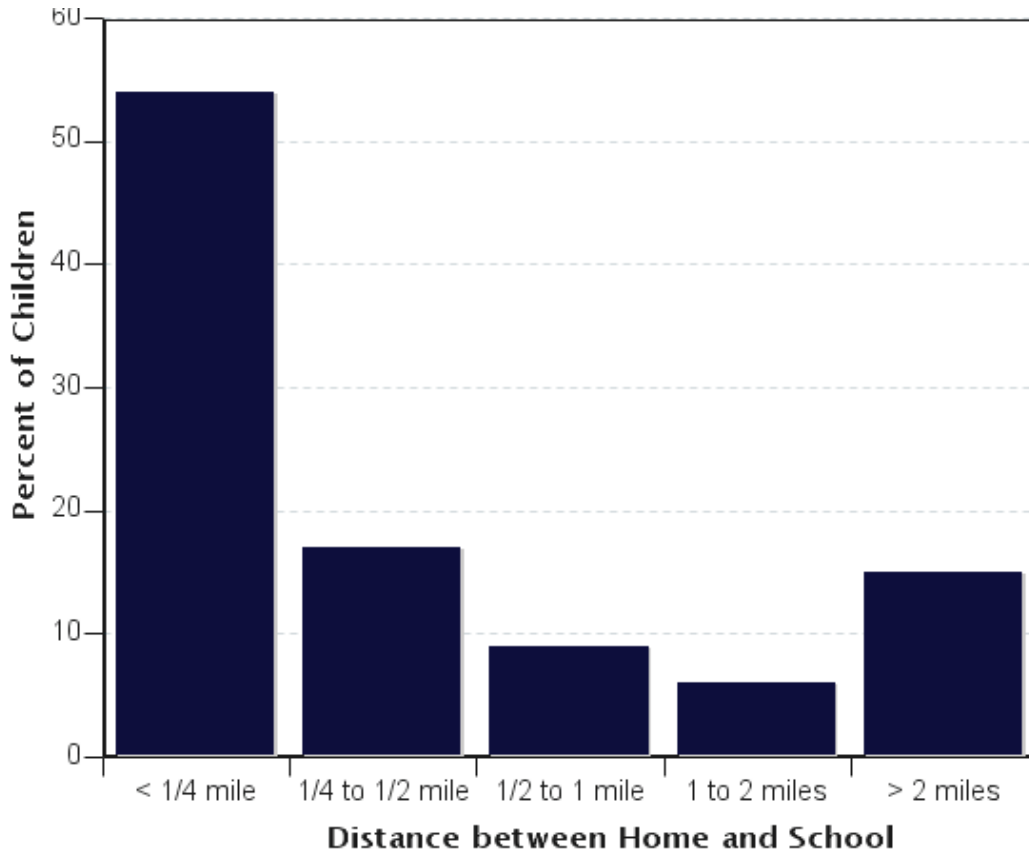
Grade levels of children represented in survey

Grade in School	Responses per grade	
	Number	Percent
Kindergarten	6	11%
1	2	4%
2	27	50%
3	3	6%
4	6	11%
5	10	19%

No response: 0

Percentages may not total 100% due to rounding.

Parent estimate of distance from child's home to school



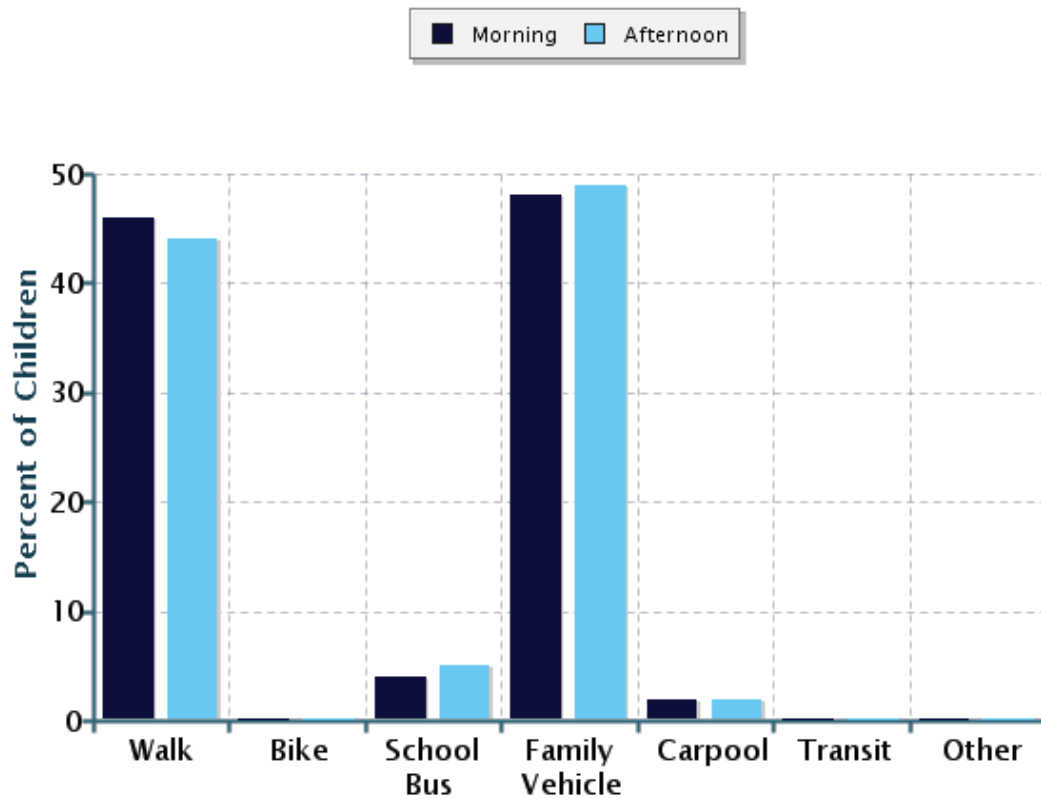
Parent estimate of distance from child's home to school

Distance between home and school	Number of children	Percent
Less than 1/4 mile	29	54%
1/4 mile up to 1/2 mile	9	17%
1/2 mile up to 1 mile	5	9%
1 mile up to 2 miles	3	6%
More than 2 miles	8	15%

Don't know or No response: 3

Percentages may not total 100% due to rounding.

Typical mode of arrival at and departure from school



Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	56	46%	0%	4%	48%	2%	0%	0%
Afternoon	43	44%	0%	5%	49%	2%	0%	0%

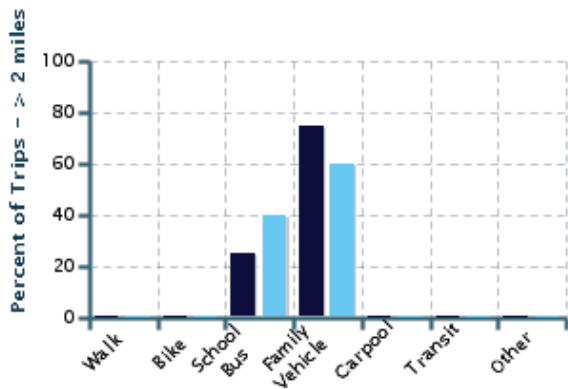
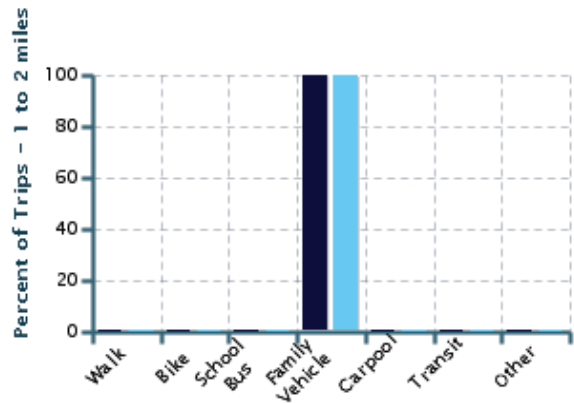
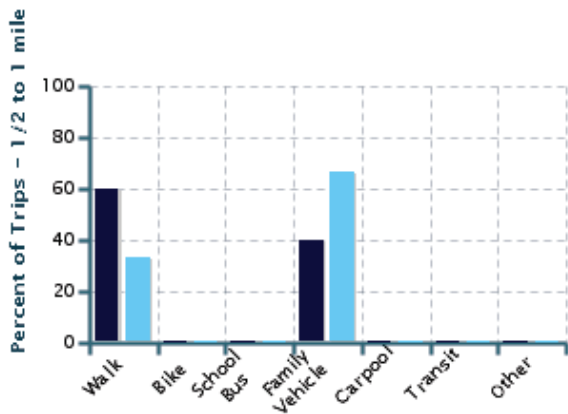
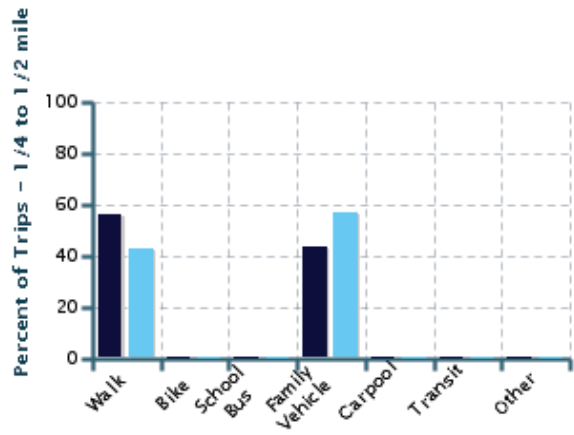
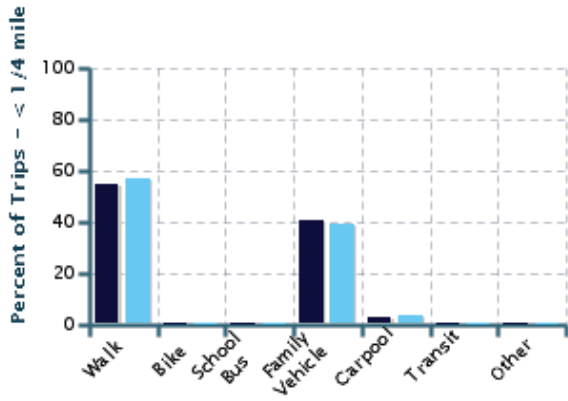
No Response Morning: 1

No Response Afternoon: 14

Percentages may not total 100% due to rounding.

Typical mode of school arrival and departure by distance child lives from school

■ Morning ■ Afternoon



Typical mode of school arrival and departure by distance child lives from school

School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	29	55%	0%	0%	41%	3%	0%	0%
1/4 mile up to 1/2 mile	9	56%	0%	0%	44%	0%	0%	0%
1/2 mile up to 1 mile	5	60%	0%	0%	40%	0%	0%	0%
1 mile up to 2 miles	3	0%	0%	0%	100%	0%	0%	0%
More than 2 miles	8	0%	0%	25%	75%	0%	0%	0%

Don't know or No response: 3

Percentages may not total 100% due to rounding.

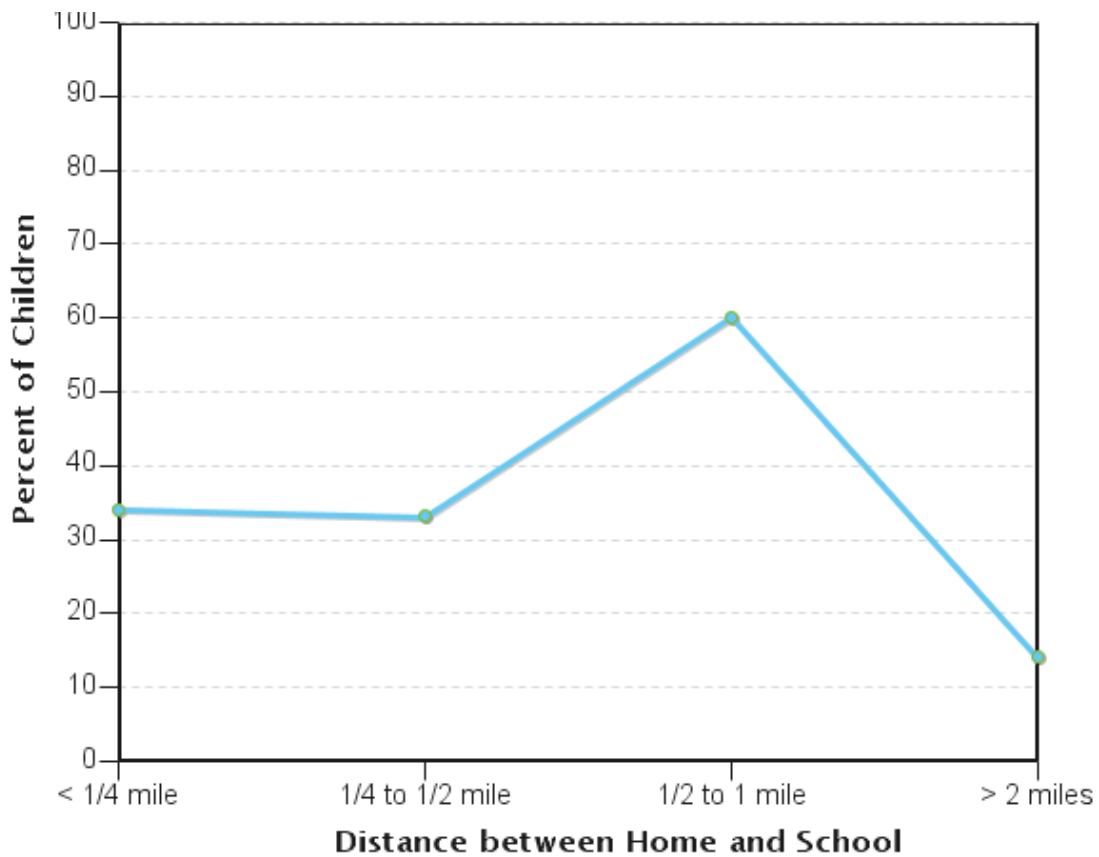
School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	23	57%	0%	0%	39%	4%	0%	0%
1/4 mile up to 1/2 mile	7	43%	0%	0%	57%	0%	0%	0%
1/2 mile up to 1 mile	3	33%	0%	0%	67%	0%	0%	0%
1 mile up to 2 miles	3	0%	0%	0%	100%	0%	0%	0%
More than 2 miles	5	0%	0%	40%	60%	0%	0%	0%

Don't know or No response: 16

Percentages may not total 100% due to rounding.

Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

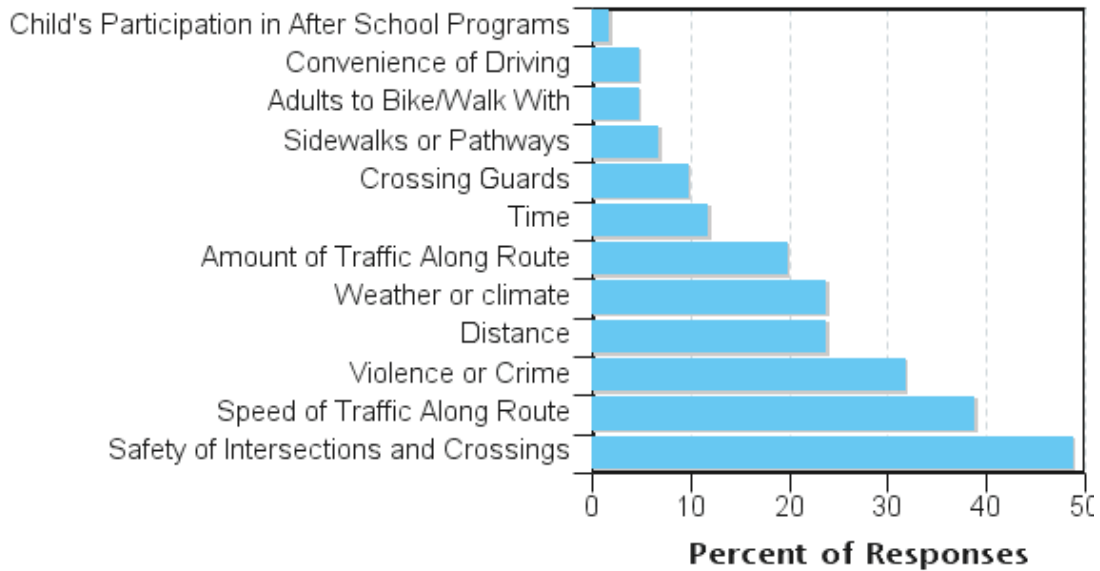


Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

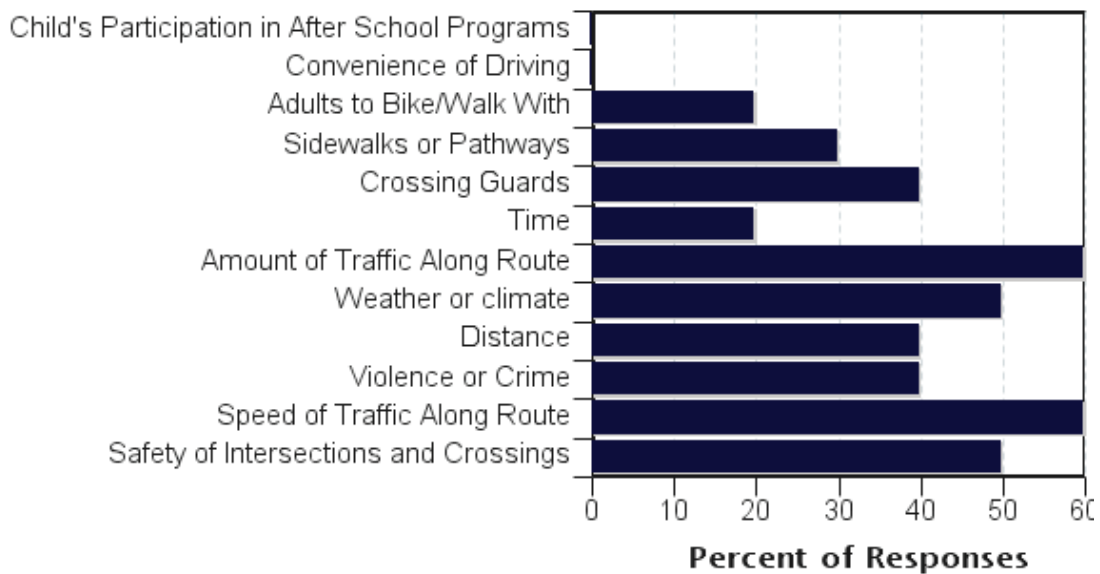
Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	17	34%	33%	60%	0%	14%
No	36	66%	67%	40%	100%	86%

Don't know or No response: 4
 Percentages may not total 100% due to rounding.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by
parents of children who already walk or bike to/from school

Issue	Child does not walk/bike to school	Child walks/bikes to school
Safety of Intersections and Crossings	49%	50%
Speed of Traffic Along Route	39%	60%
Violence or Crime	32%	40%
Distance	24%	40%
Weather or climate	24%	50%
Amount of Traffic Along Route	20%	60%
Time	12%	20%
Crossing Guards	10%	40%
Sidewalks or Pathways	7%	30%
Adults to Bike/Walk With	5%	20%
Convenience of Driving	5%	0%
Child's Participation in After School Programs	2%	0%
Number of Respondents per Category	41	10

No response: 6

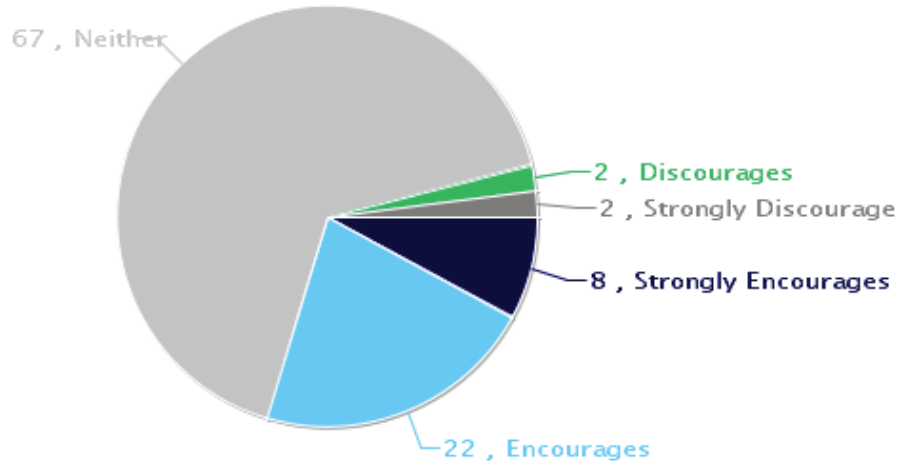
Note:

--Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.

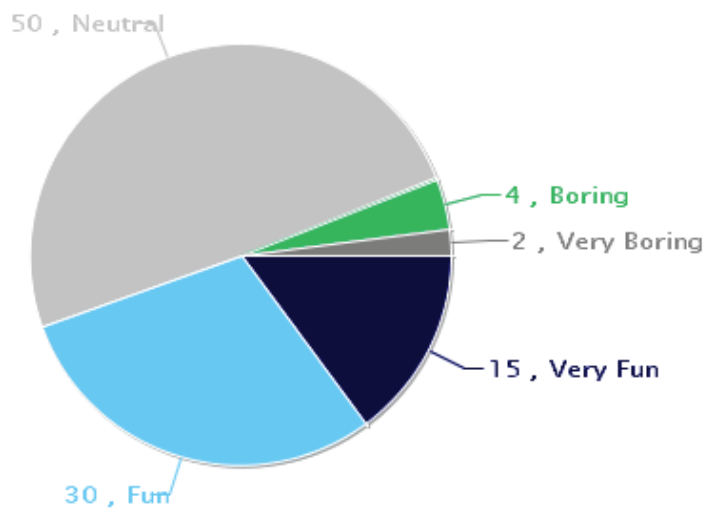
--Each column may sum to > 100% because respondent could select more than issue

--The calculation used to determine the percentage for each issue is based on the 'Number of Respondents per Category' within the respective columns (Child does not walk/bike to school and Child walks/bikes to school.) If comparing percentages between the two columns, please pay particular attention to each column's number of respondents because the two numbers can differ dramatically.

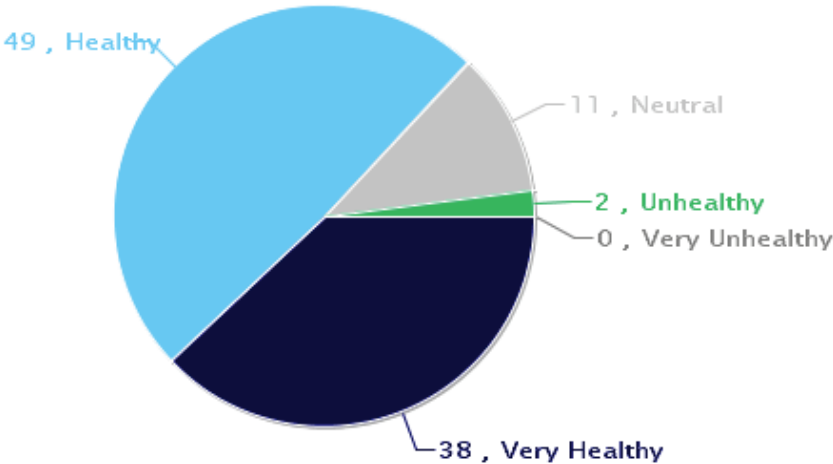
Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school



Parents' opinions about how much fun walking and biking to/from school is for their child



Parents' opinions about how healthy walking and biking to/from school is for their child



Comments Section

SurveyID	Comment
1541829	Walking is healthy and they arrive at school with enthusiasm.
1541870	My daughter is happy walking home from school but we don't feel safe in the area we live in.
1541876	Previously we walked home from school with our son but now I can not make it at that time. But, it is healthy and enjoyable for the kids.
1541894	Fix roads/sidewalks - gets flooded.
1541950	The City should fix the sewers on Fourth because when it rains it is hard to get my child to school.
1541850	When it rains, the streets get really flooded. A Crossing Guard at COrona and Hamilton St. would be helpful.
1541874	When it rains the streets flood in the pedestrian crossing.
1541877	I do not take my son walking or on a bike because I have to take another child to another school that is further and I don't have enough time.
1541878	Not everyone has the opportunity to walk to school because of the distance.
1541879	No comment.
1541816	I appreciate your concern to protect our children from harm.
1541817	That there is more surveillance for the kids.
1541819	That the street lights have more time to cross the kids and the streets around the school are repaired for when it rains because they are like pools and the kids can not walk and they arrive at school wet.
1541821	That the street lights have more time for the kids to cross and the streets around the school are repaired for when it rains cause they are like pools and kids can not walk.
1541900	I don't have to waste much time walking to school.
1541834	For safety, I prefer my kids are accompanied to school.
1541892	I'd feel more comfortable letting my child walk to school if he had a "buddy system".
1541905	We have to focus on the parents that drive fast in the parking lots trying to cut in front of other cars. The first danger the students face is in the parking lot.
1541947	The streets are always busy but its dangerous walking because cars drive very fast and don't stop at stop signs on intersections and exiting streets.
1541940	There should be a crossing guard near the street of COrona.

Parent Survey Report: One School in One Data Collection Period

School Name: El Camino Elementary School

Set ID: 16297

School Group: ATP Cycle 2

Month and Year Collected: May 2017

School Enrollment: 0

Date Report Generated: 05/18/2017

% Range of Students Involved in SRTS: Don't Know

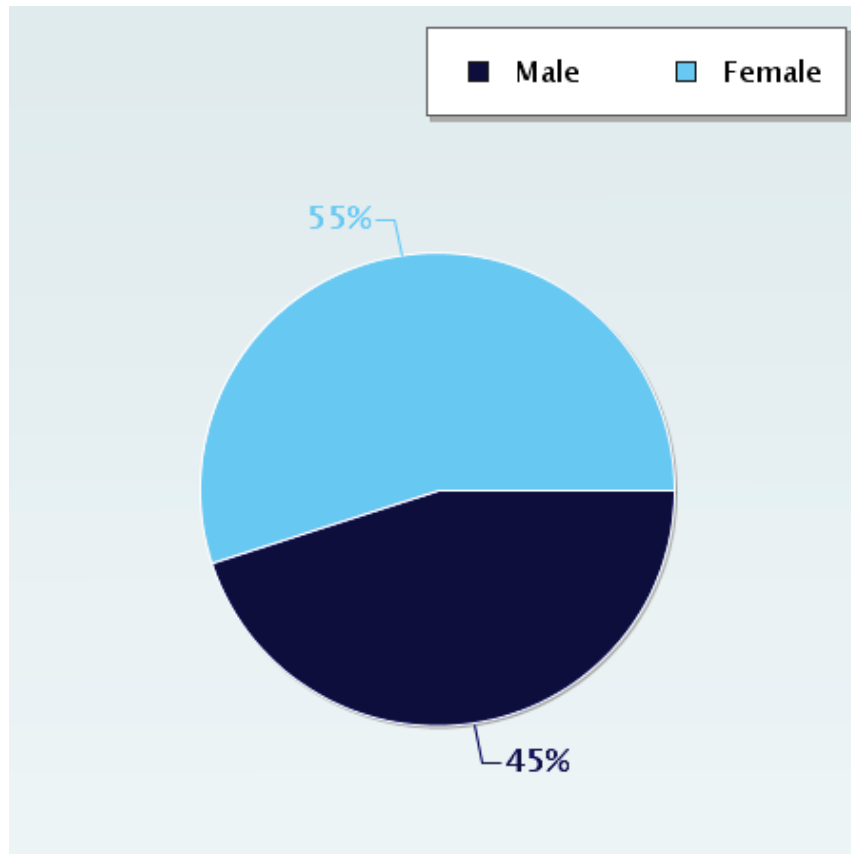
Tags:

Number of Questionnaires Distributed: 0

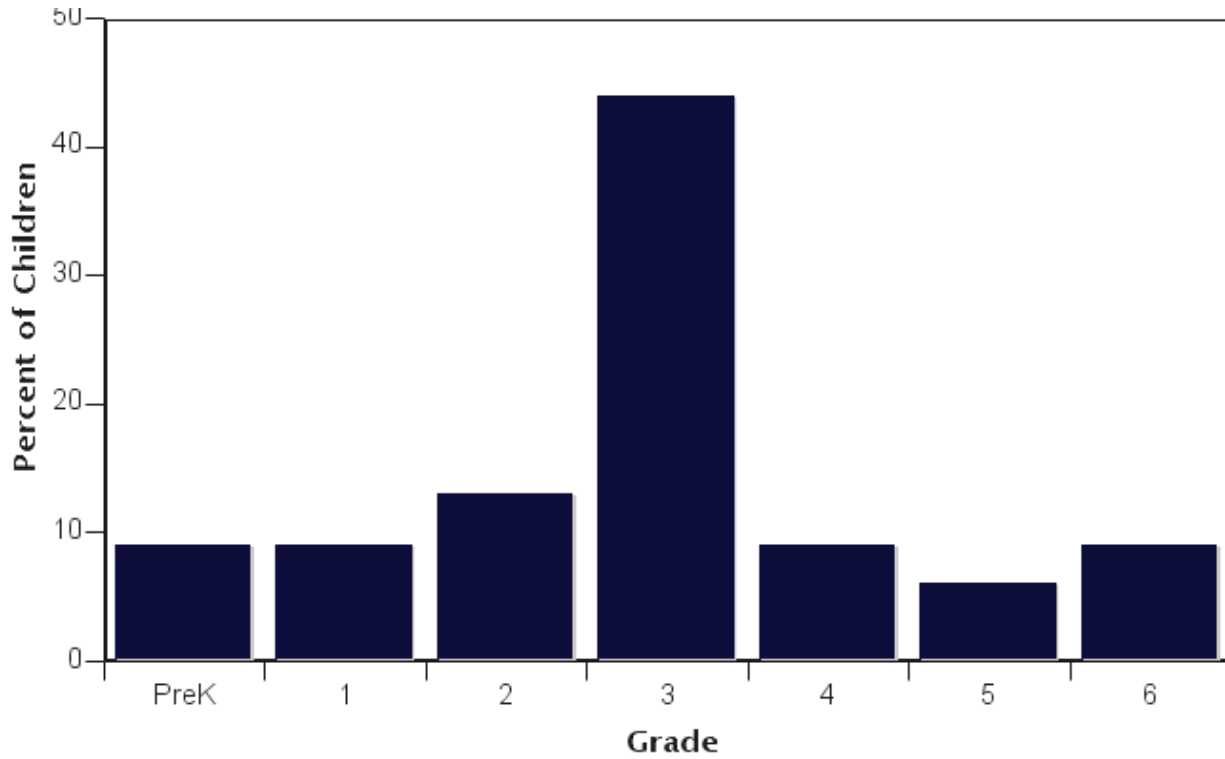
Number of Questionnaires Analyzed for Report: 33

This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

Sex of children for parents that provided information



Grade levels of children represented in survey



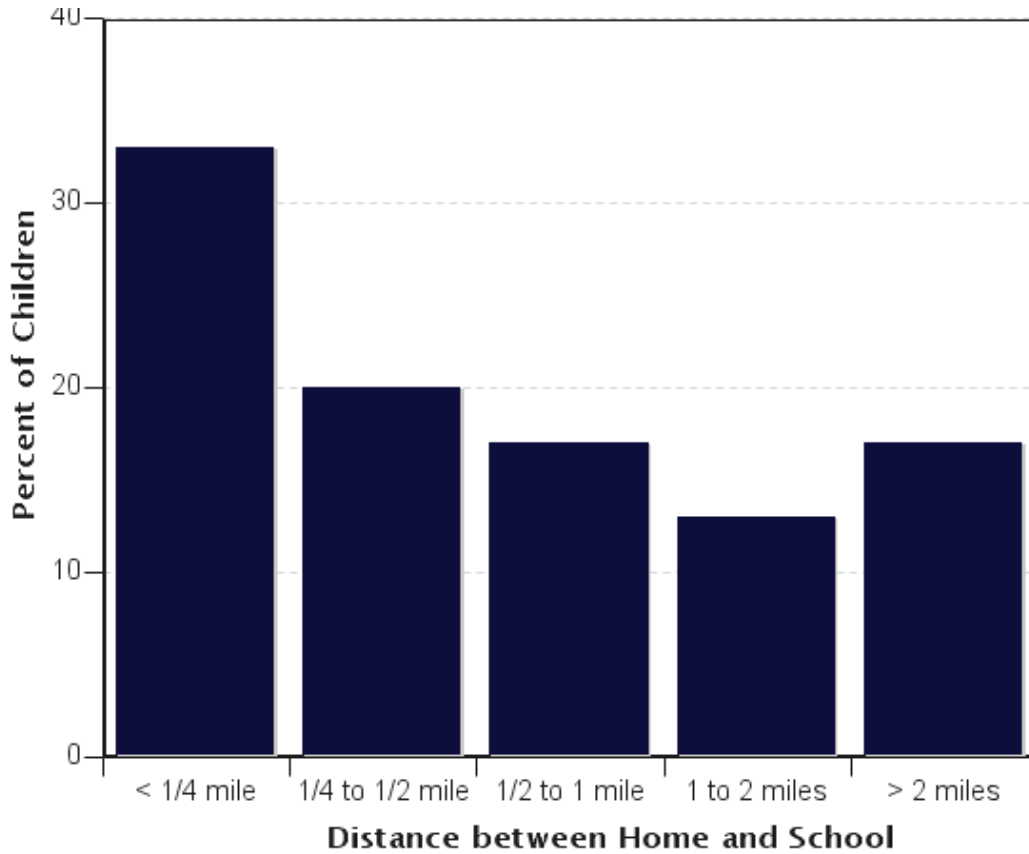
Grade levels of children represented in survey

Grade in School	Responses per grade	
	Number	Percent
PreK	3	9%
1	3	9%
2	4	13%
3	14	44%
4	3	9%
5	2	6%
6	3	9%

No response: 0

Percentages may not total 100% due to rounding.

Parent estimate of distance from child's home to school

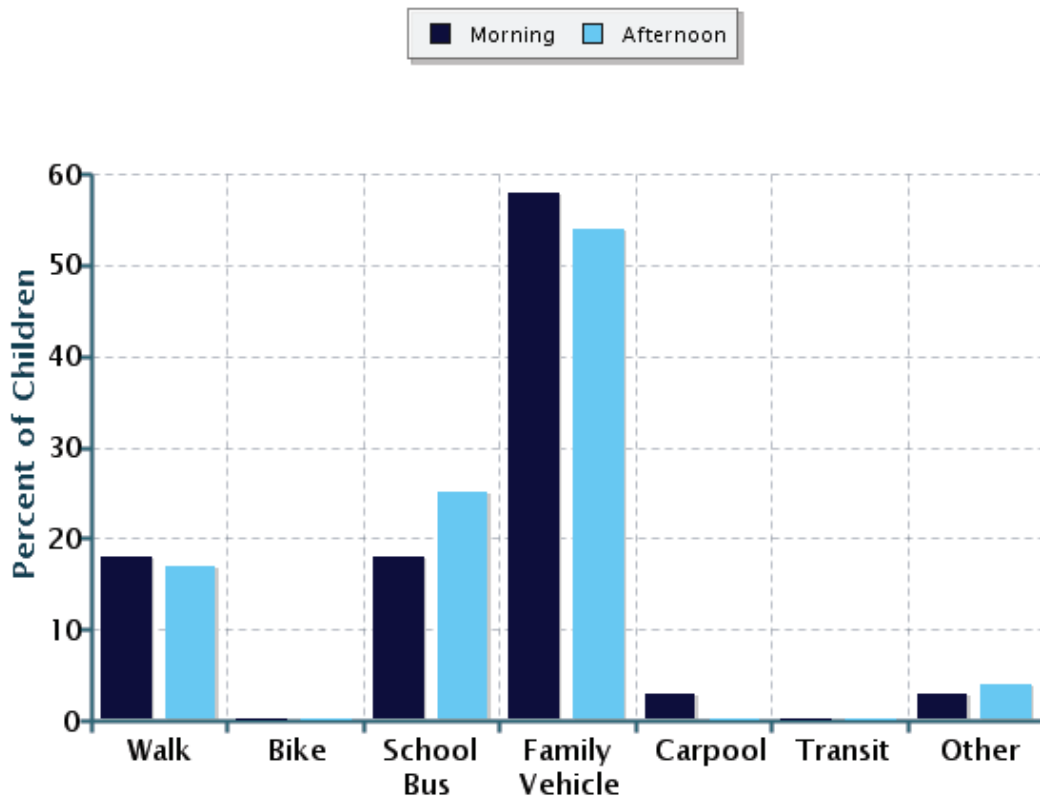


Parent estimate of distance from child's home to school

Distance between home and school	Number of children	Percent
Less than 1/4 mile	10	33%
1/4 mile up to 1/2 mile	6	20%
1/2 mile up to 1 mile	5	17%
1 mile up to 2 miles	4	13%
More than 2 miles	5	17%

Don't know or No response: 3
 Percentages may not total 100% due to rounding.

Typical mode of arrival at and departure from school



Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	33	18%	0%	18%	58%	3%	0%	3%
Afternoon	24	17%	0%	25%	54%	0%	0%	4%

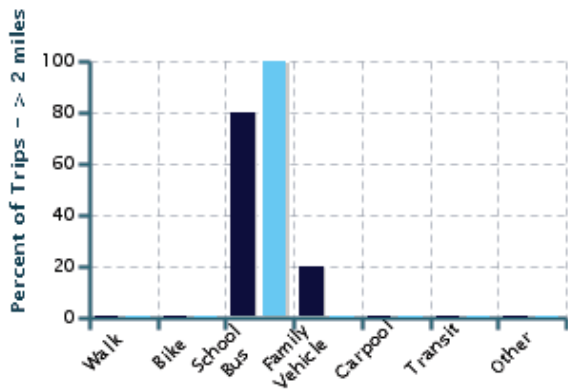
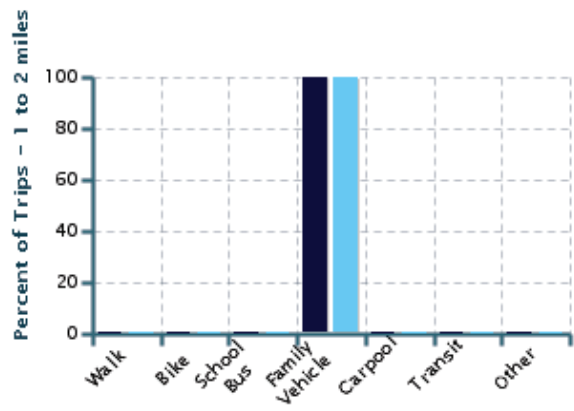
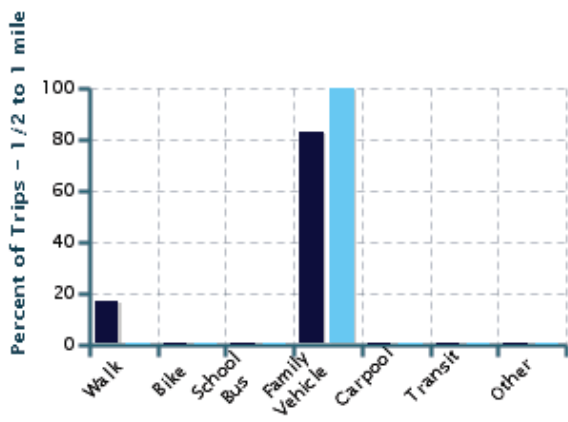
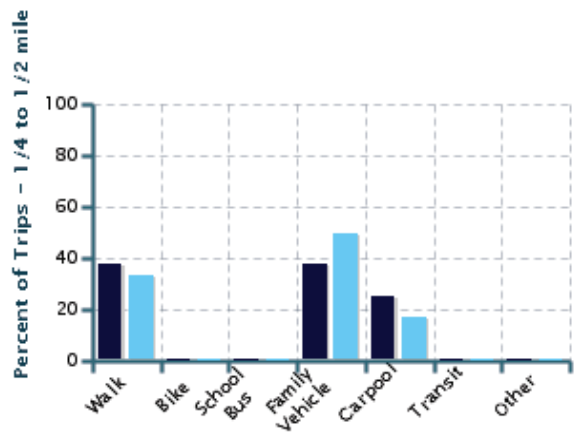
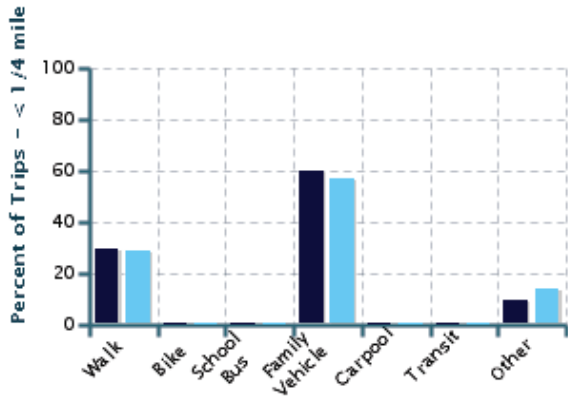
No Response Morning: 0

No Response Afternoon: 9

Percentages may not total 100% due to rounding.

Typical mode of school arrival and departure by distance child lives from school

■ Morning ■ Afternoon



Typical mode of school arrival and departure by distance child lives from school

School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	10	30%	0%	0%	60%	0%	0%	10%
1/4 mile up to 1/2 mile	6	33%	0%	0%	50%	17%	0%	0%
1/2 mile up to 1 mile	5	20%	0%	0%	80%	0%	0%	0%
1 mile up to 2 miles	4	0%	0%	0%	100%	0%	0%	0%
More than 2 miles	5	0%	0%	80%	20%	0%	0%	0%

Don't know or No response: 3

Percentages may not total 100% due to rounding.

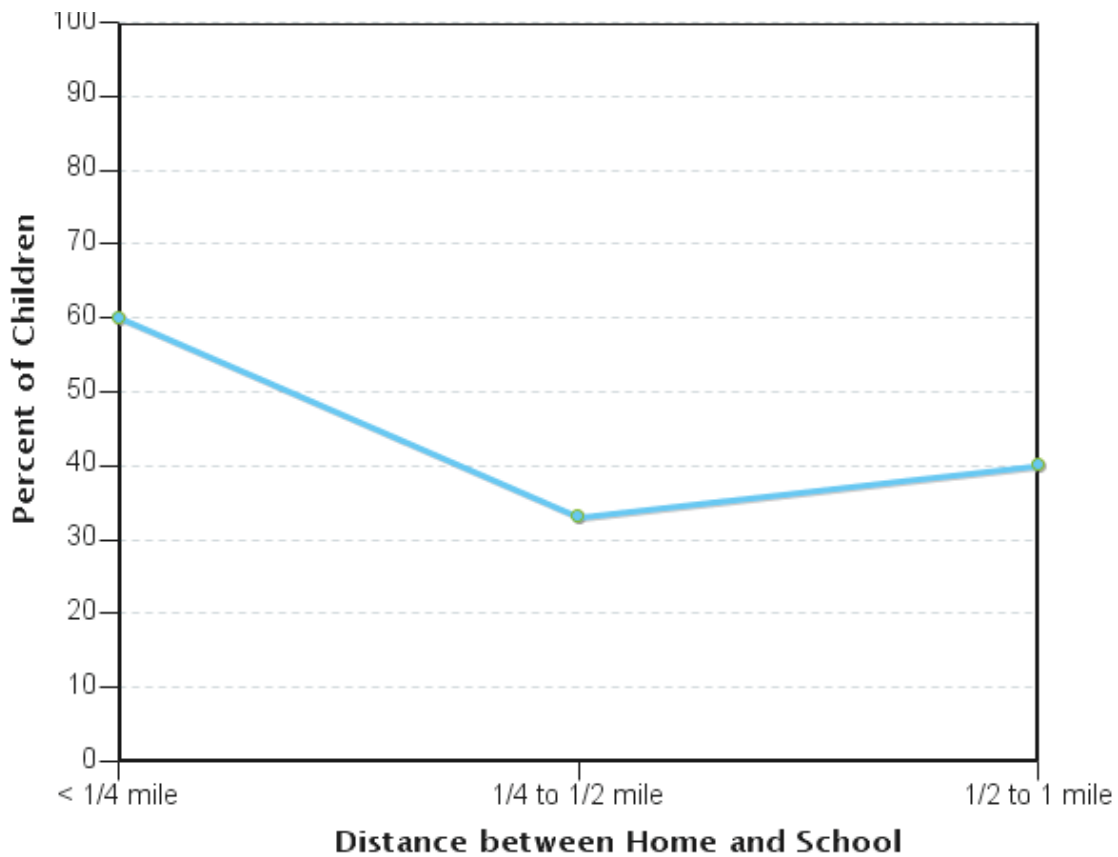
School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	7	29%	0%	0%	57%	0%	0%	14%
1/4 mile up to 1/2 mile	4	25%	0%	0%	75%	0%	0%	0%
1/2 mile up to 1 mile	2	0%	0%	0%	100%	0%	0%	0%
1 mile up to 2 miles	4	0%	0%	0%	100%	0%	0%	0%
More than 2 miles	5	0%	0%	100%	0%	0%	0%	0%

Don't know or No response: 11

Percentages may not total 100% due to rounding.

Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

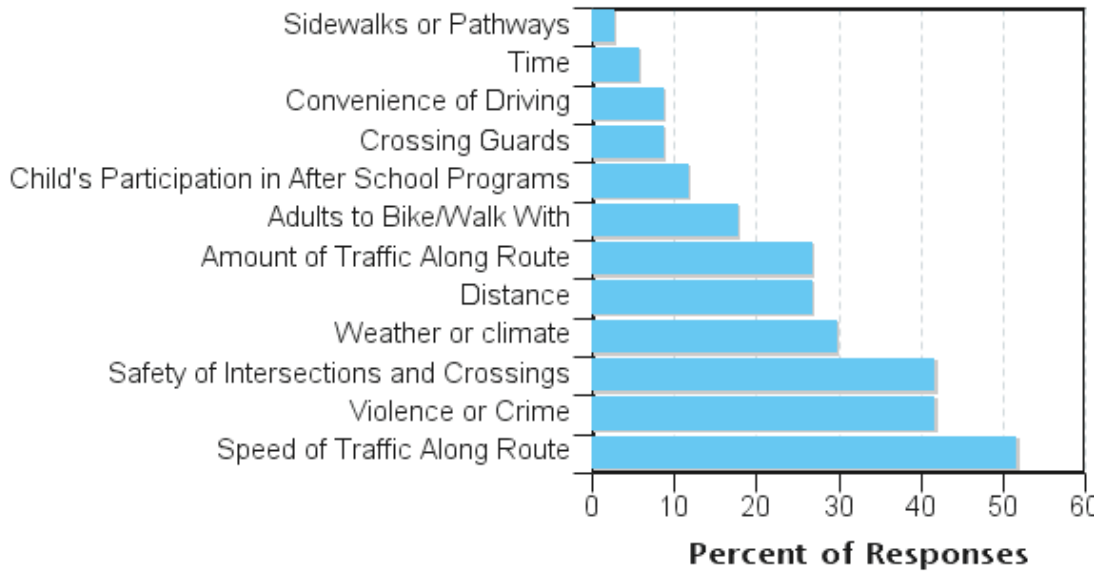


Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	10	60%	33%	40%	0%	0%
No	20	40%	67%	60%	100%	100%

Don't know or No response: 3
 Percentages may not total 100% due to rounding.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school

Issue	Child does not walk/bike to school	Child walks/bikes to school
Speed of Traffic Along Route	52%	0
Violence or Crime	42%	0
Safety of Intersections and Crossings	42%	0
Weather or climate	30%	0
Distance	27%	0
Amount of Traffic Along Route	27%	0
Adults to Bike/Walk With	18%	0
Child's Participation in After School Programs	12%	0
Crossing Guards	9%	0
Convenience of Driving	9%	0
Time	6%	0

Sidewalks or Pathways	3%	0
Number of Respondents per Category	33	0

No response: 0

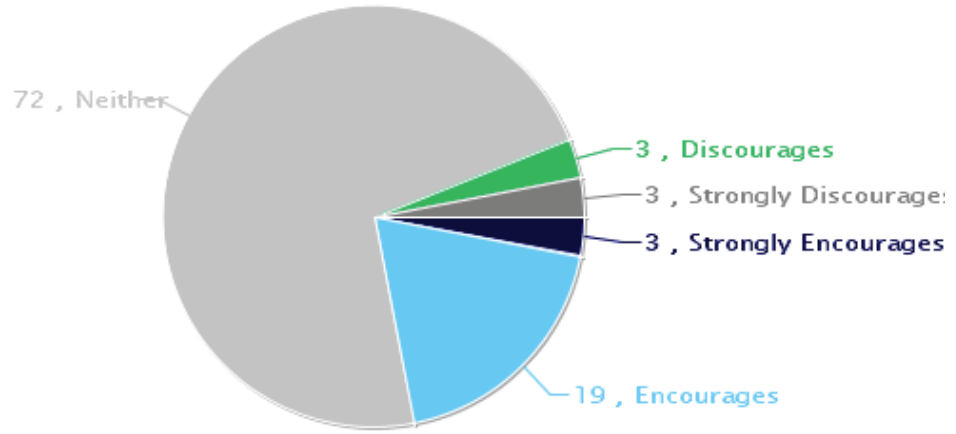
Note:

--Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.

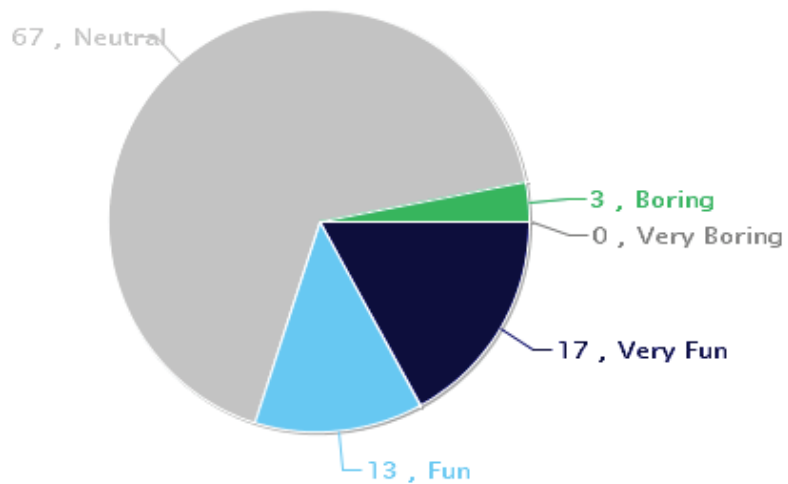
--Each column may sum to > 100% because respondent could select more than issue

--The calculation used to determine the percentage for each issue is based on the 'Number of Respondents per Category' within the respective columns (Child does not walk/bike to school and Child walks/bikes to school.) If comparing percentages between the two columns, please pay particular attention to each column's number of respondents because the two numbers can differ dramatically.

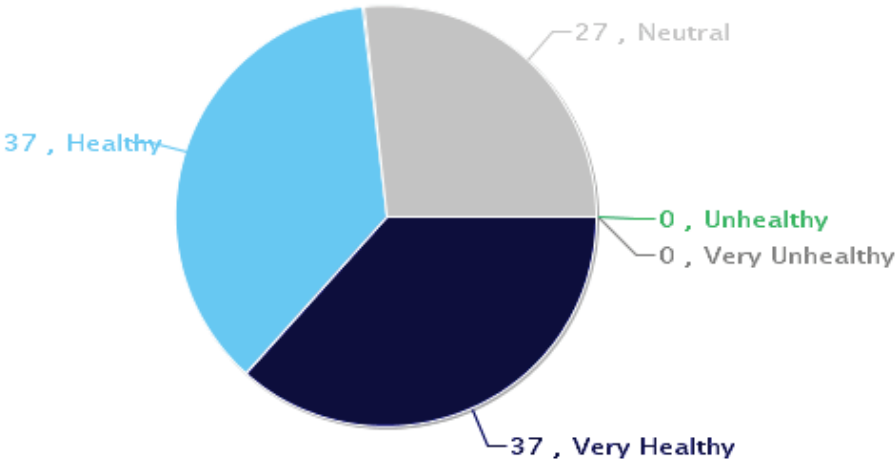
Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school



Parents' opinions about how much fun walking and biking to/from school is for their child



Parents' opinions about how healthy walking and biking to/from school is for their child



Comments Section

SurveyID	Comment
1541754	It is very crowded with cars inside of the school
1541787	I won't let her ride a bike or walk alone but i would like it to be a safer street so she can ride her bike with adult supervision,
1541790	My daughters walk to school but with an adult because the intersection is dangerous and the cars pass rapidly.
1541805	I would love if my daughter would use a bike to school but I am afraid because of the traffic and that she would alone on her way to school.
1541745	Would like to see more crossing guards or pedestrian lights so kids can cross safely walk signal traffic light (5th St. at Helen Ave. and 5th St. and Benson Ave.)
1541751	The City should have a stop on Benson and W Princeton St. corner to better control traffic and make it safer for kids to walk home.
1541737	My child would have to cross thru Anthony Munoz Park, like a lot of kids do, and there are a lot of bums and weird people in cars. You guys should work with the City to fix this.
1541750	The City should have stop on Benson and W. Princeton St. corner to better control traffic and make it safer for kids to walk home.
1541763	My son is autistic boy. He can't walk, isn't used to the bike. For me, the school bus is the safest.
1541772	Unsafe streets are not safe to send our kids walking to school.

Parent Survey Report: One School in One Data Collection Period

School Name: Euclid Elementary School

Set ID: 16323

School Group: ATP Cycle 1

Month and Year Collected: May 2017

School Enrollment: 0

Date Report Generated: 05/22/2017

% Range of Students Involved in SRTS: Don't Know

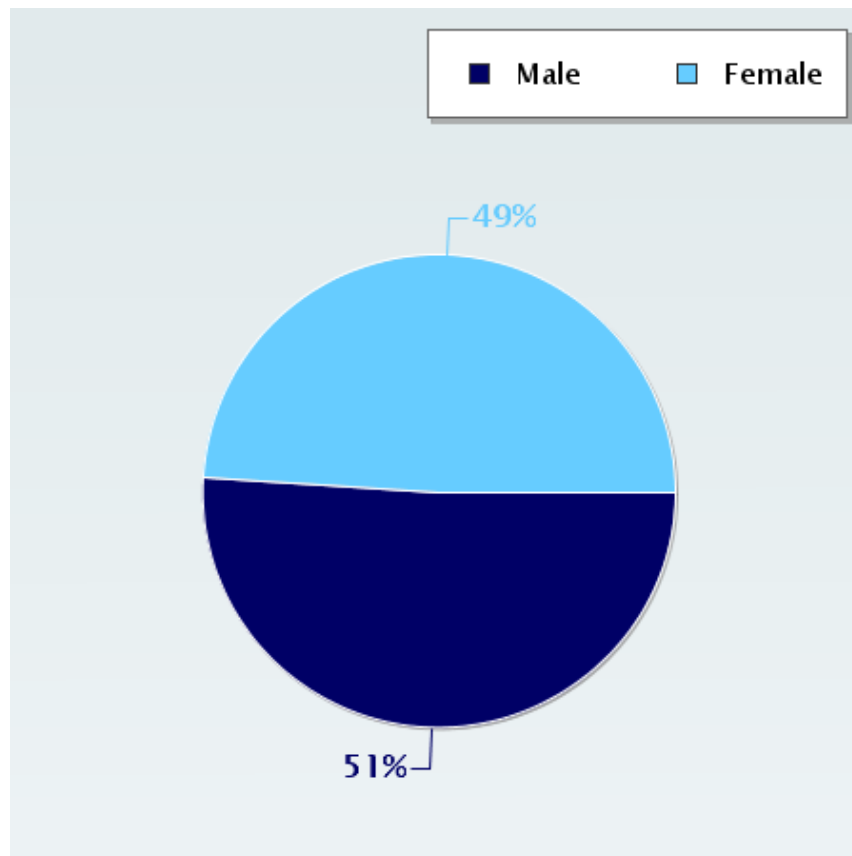
Tags:

Number of Questionnaires Distributed: 0

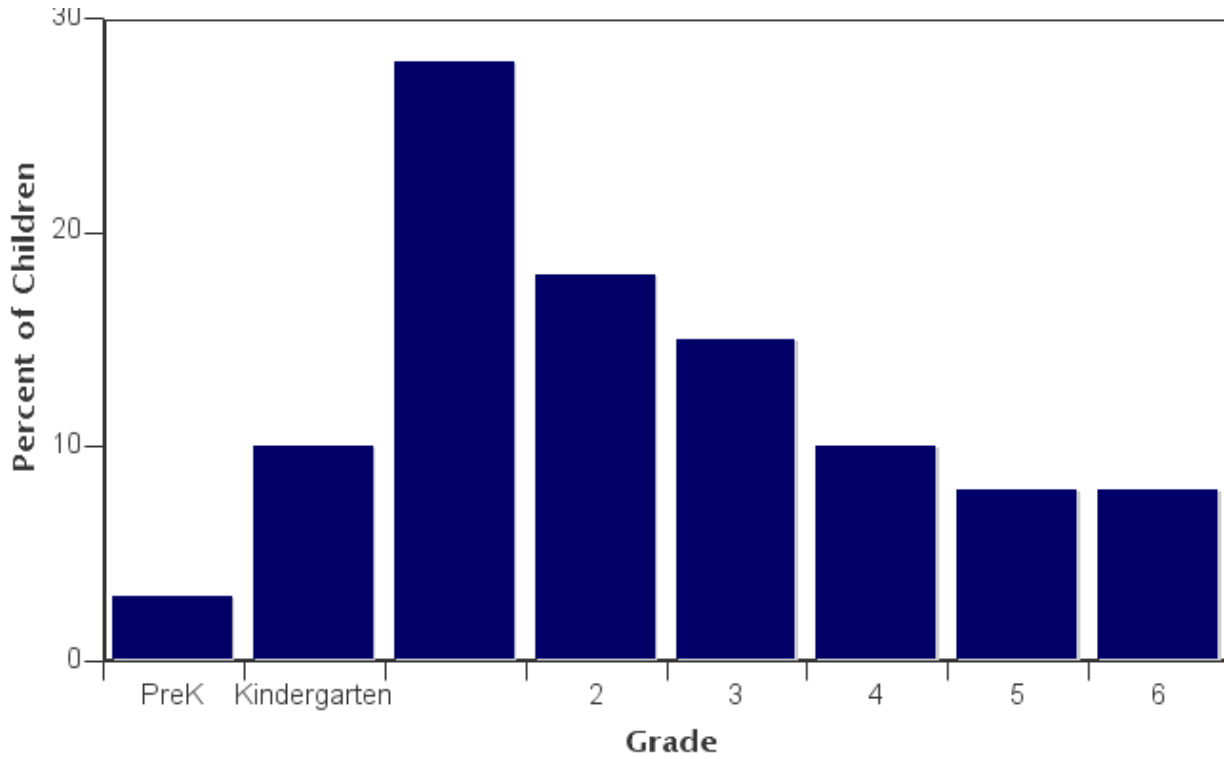
Number of Questionnaires Analyzed for Report: 44

This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

Sex of children for parents that provided information



Grade levels of children represented in survey



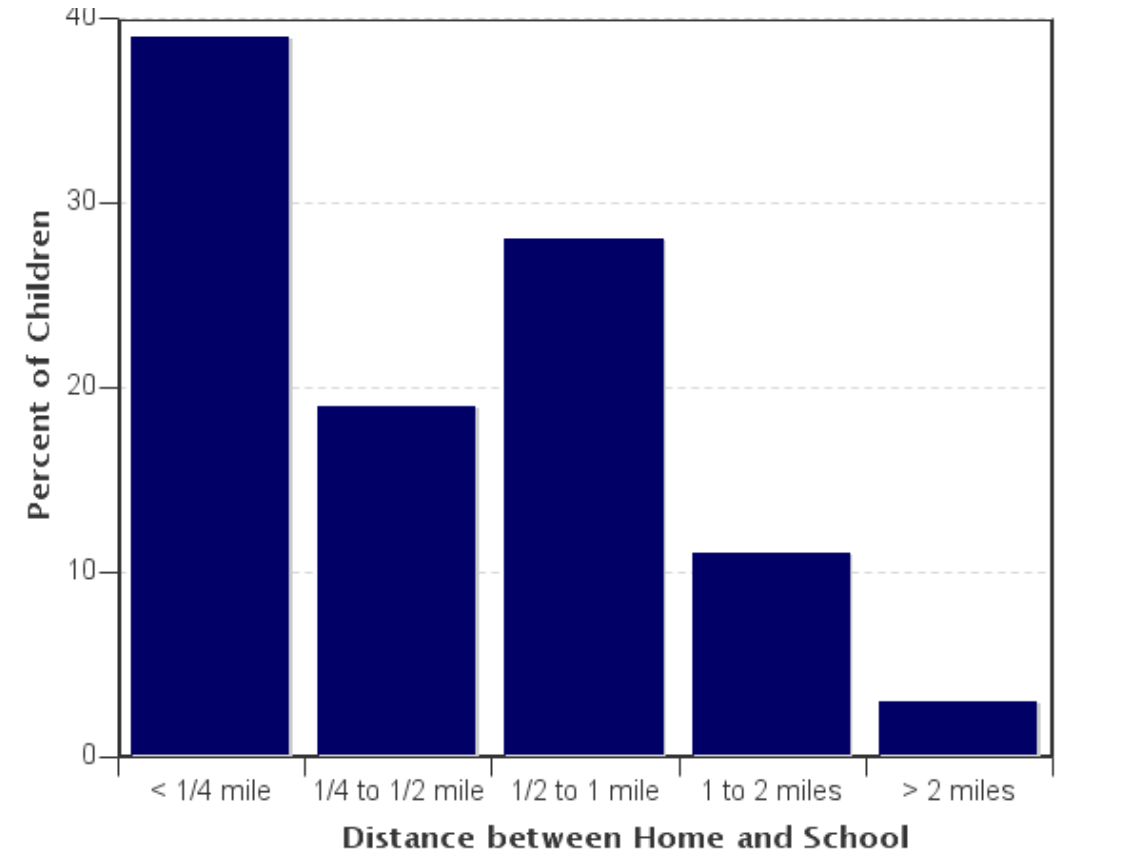
Grade levels of children represented in survey

Grade in School	Responses per grade	
	Number	Percent
PreK	1	3%
Kindergarten	4	10%
1	11	28%
2	7	18%
3	6	15%
4	4	10%
5	3	8%
6	3	8%

No response: 0

Percentages may not total 100% due to rounding.

Parent estimate of distance from child's home to school

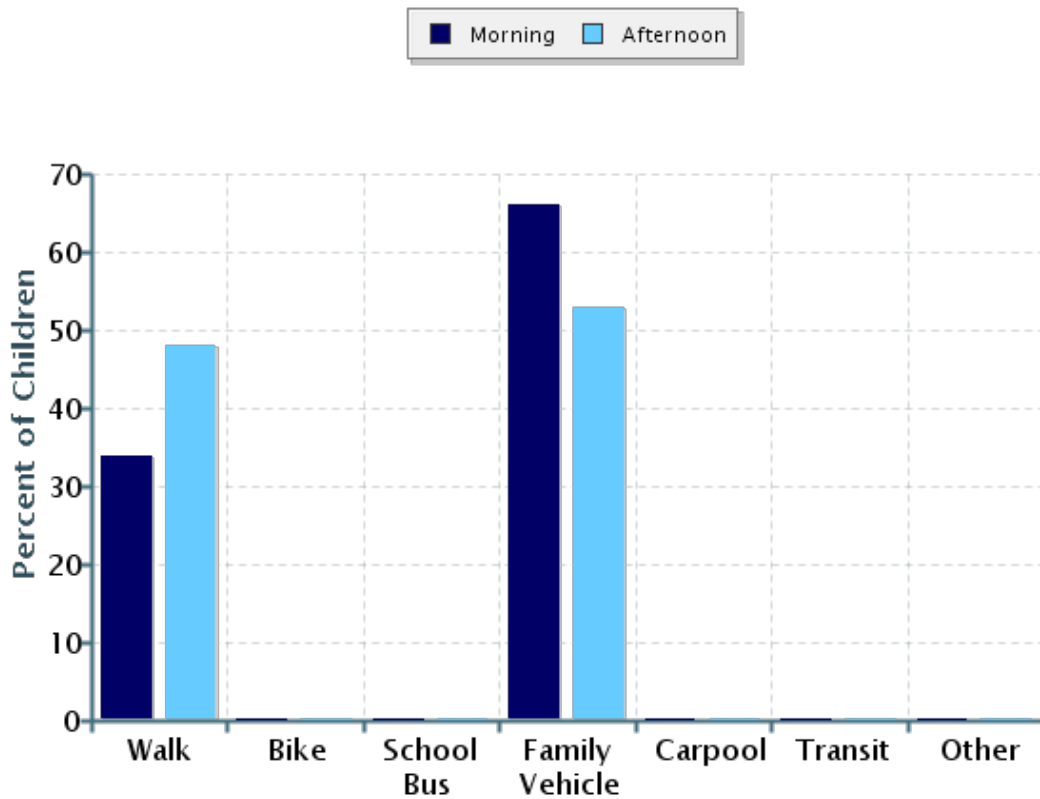


Parent estimate of distance from child's home to school

Distance between home and school	Number of children	Percent
Less than 1/4 mile	14	39%
1/4 mile up to 1/2 mile	7	19%
1/2 mile up to 1 mile	10	28%
1 mile up to 2 miles	4	11%
More than 2 miles	1	3%

Don't know or No response: 8
 Percentages may not total 100% due to rounding.

Typical mode of arrival at and departure from school



Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	41	34%	0%	0%	66%	0%	0%	0%
Afternoon	40	48%	0%	0%	53%	0%	0%	0%

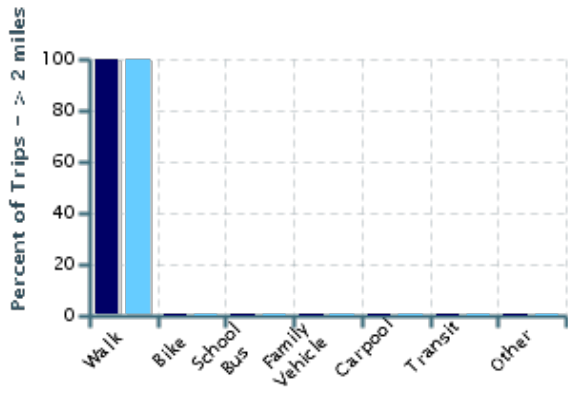
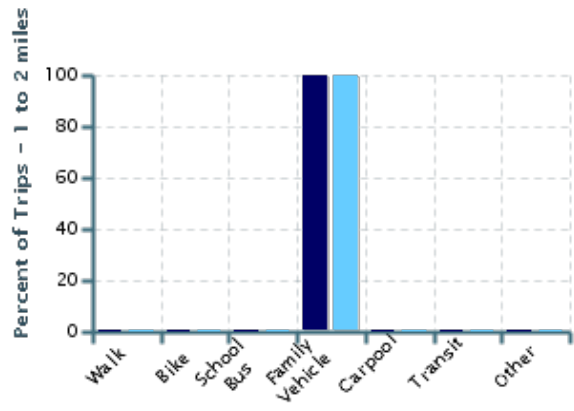
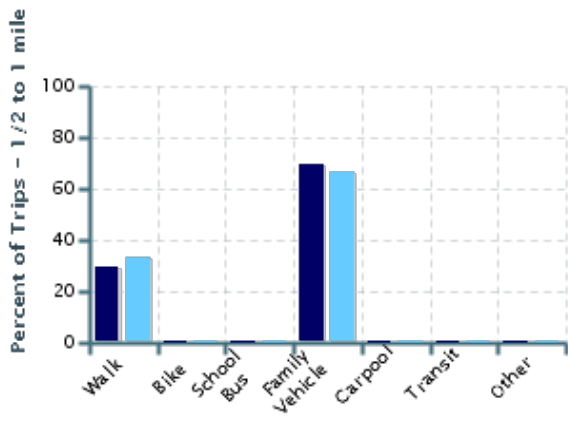
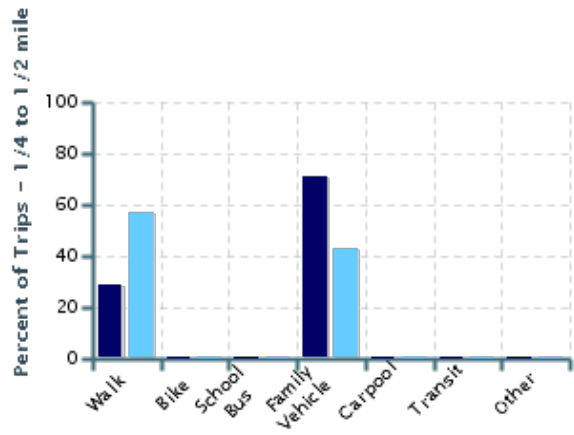
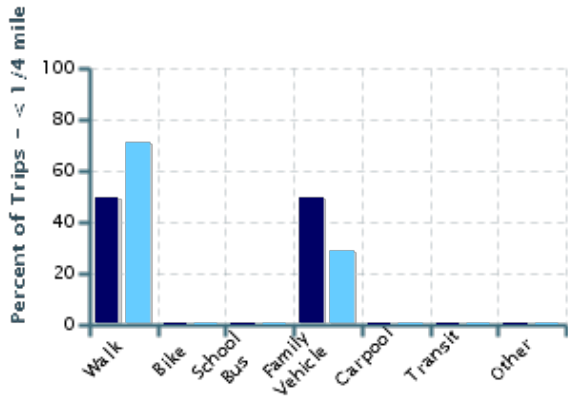
No Response Morning: 3

No Response Afternoon: 4

Percentages may not total 100% due to rounding.

Typical mode of school arrival and departure by distance child lives from school

■ Morning ■ Afternoon



Typical mode of school arrival and departure by distance child lives from school

School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	14	50%	0%	0%	50%	0%	0%	0%
1/4 mile up to 1/2 mile	7	29%	0%	0%	71%	0%	0%	0%
1/2 mile up to 1 mile	10	30%	0%	0%	70%	0%	0%	0%
1 mile up to 2 miles	4	0%	0%	0%	100%	0%	0%	0%
More than 2 miles	1	100%	0%	0%	0%	0%	0%	0%

Don't know or No response: 8

Percentages may not total 100% due to rounding.

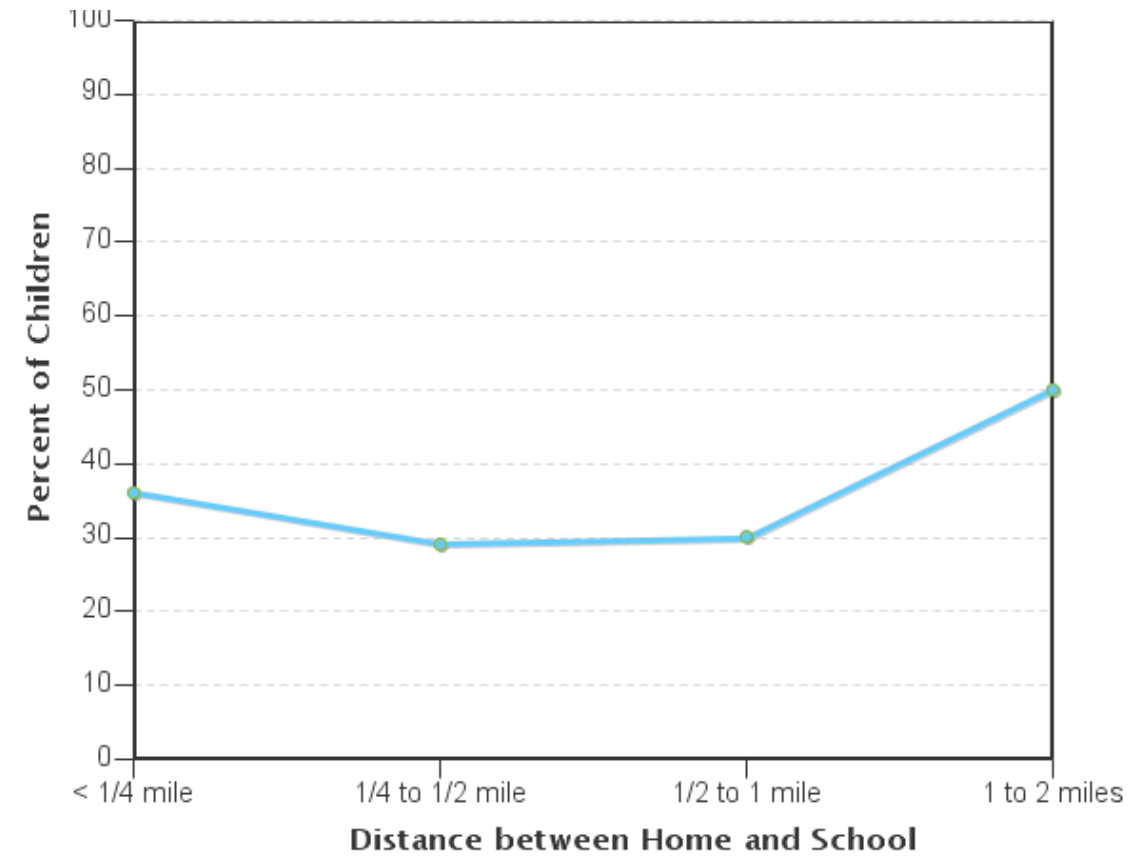
School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	14	71%	0%	0%	29%	0%	0%	0%
1/4 mile up to 1/2 mile	7	57%	0%	0%	43%	0%	0%	0%
1/2 mile up to 1 mile	9	33%	0%	0%	67%	0%	0%	0%
1 mile up to 2 miles	4	0%	0%	0%	100%	0%	0%	0%
More than 2 miles	1	100%	0%	0%	0%	0%	0%	0%

Don't know or No response: 9

Percentages may not total 100% due to rounding.

Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

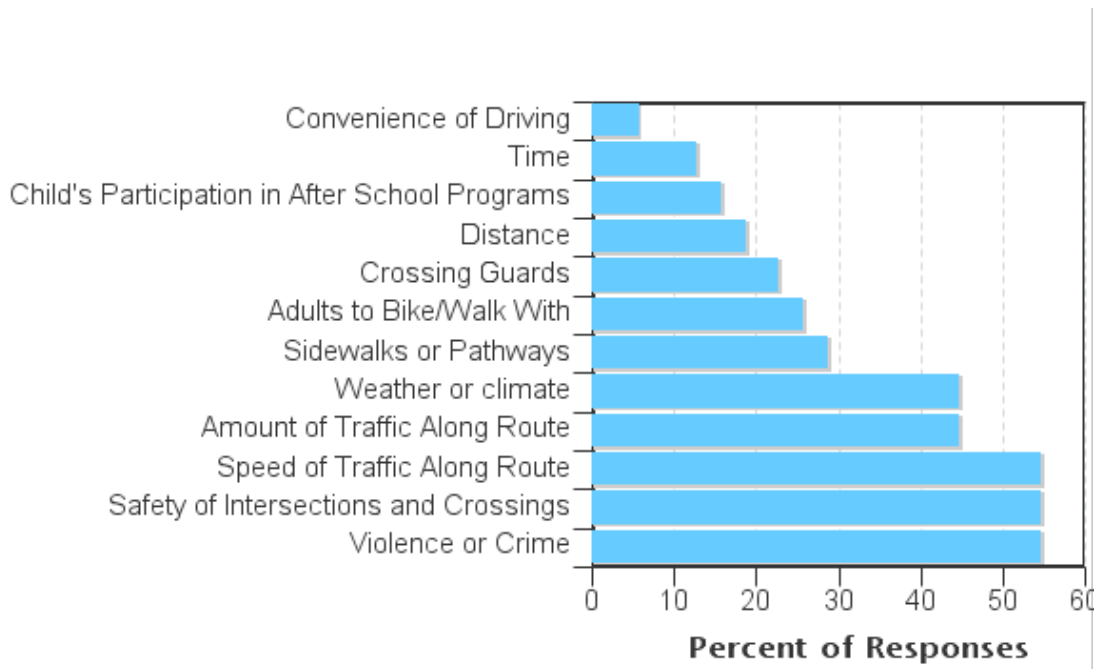


Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

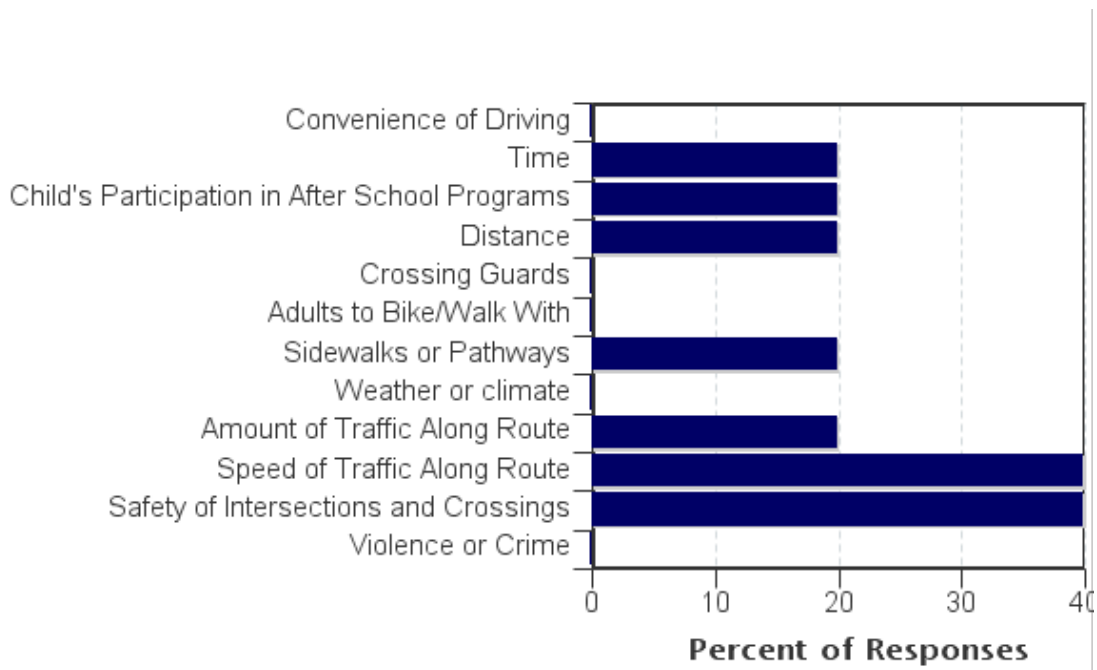
Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	12	36%	29%	30%	50%	0%
No	24	64%	71%	70%	50%	100%

Don't know or No response: 8
 Percentages may not total 100% due to rounding.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by
parents of children who already walk or bike to/from school

Issue	Child does not walk/bike to school	Child walks/bikes to school
Violence or Crime	55%	0%
Safety of Intersections and Crossings	55%	40%
Speed of Traffic Along Route	55%	40%
Amount of Traffic Along Route	45%	20%
Weather or climate	45%	0%
Sidewalks or Pathways	29%	20%
Adults to Bike/Walk With	26%	0%
Crossing Guards	23%	0%
Distance	19%	20%
Child's Participation in After School Programs	16%	20%
Time	13%	20%
Convenience of Driving	6%	0%
Number of Respondents per Category	31	5

No response: 8

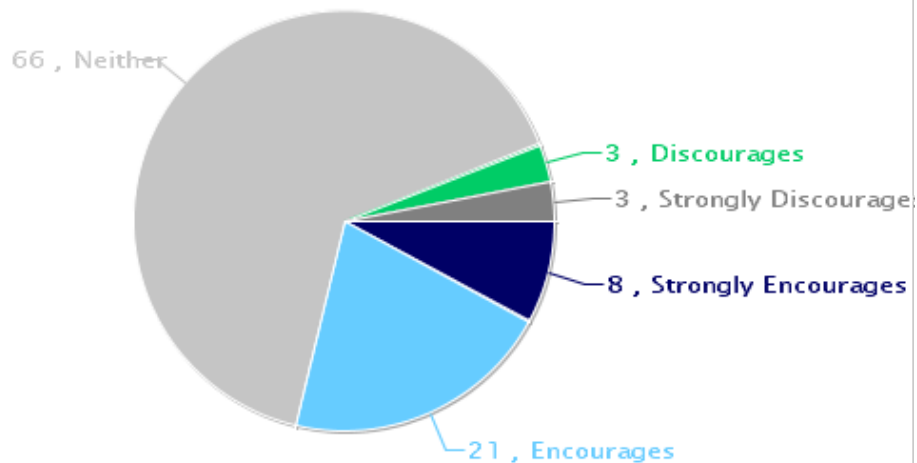
Note:

--Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.

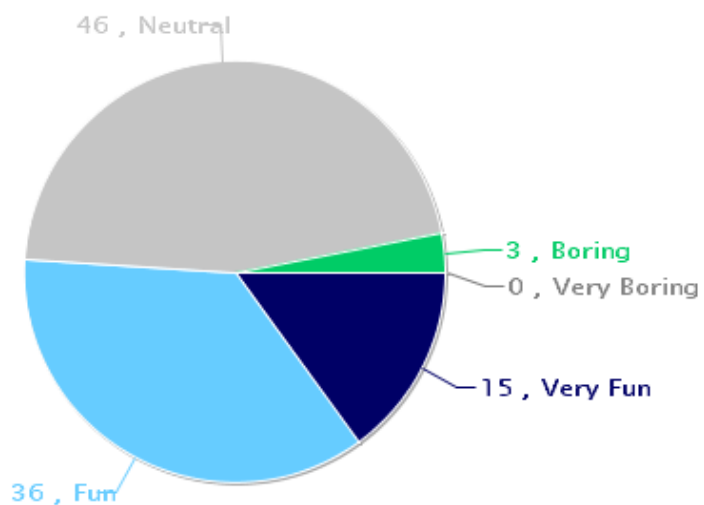
--Each column may sum to > 100% because respondent could select more than issue

--The calculation used to determine the percentage for each issue is based on the 'Number of Respondents per Category' within the respective columns (Child does not walk/bike to school and Child walks/bikes to school.) If comparing percentages between the two columns, please pay particular attention to each column's number of respondents because the two numbers can differ dramatically.

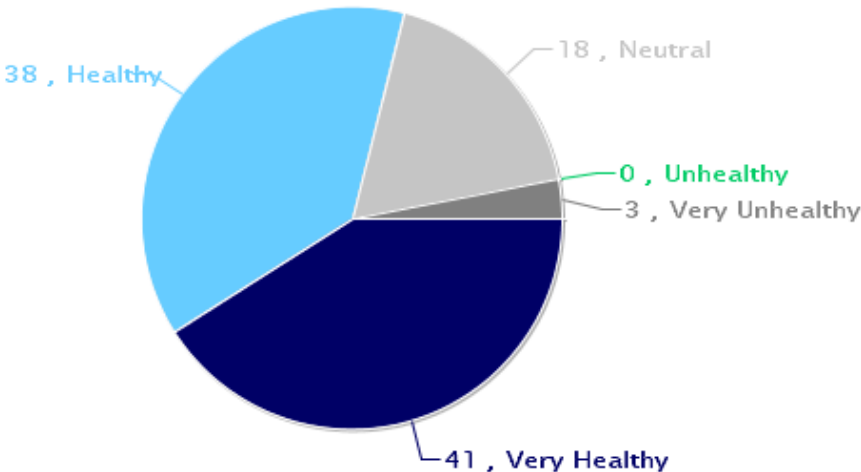
Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school



Parents' opinions about how much fun walking and biking to/from school is for their child



Parents' opinions about how healthy walking and biking to/from school is for their child



Comments Section

SurveyID	Comment
1542023	We believe if parents have time to walk with their children to and from school it is perfectly fine.
1542030	She is too young to walk or bike to school alone, but we enjoy biking/walking together.
1542047	Too many accidents on Euclid Street. people do not respect the speed limit during school hours.
1542048	Question #10 my child is too young to walk alone, Question 311 does not apply.
1542075	Too much traffic on Euclid!! and too many cars stopping and speeding on Euclid and Belmont, Euclid and Ralston during school peak hours.
1542050	They trust driving in a vehicle more than walking to school due to traffic conditions.
1542073	More Crossing Guards
1542025	What should I do if there is always a car blocking walking path on Vine and Ralston?

Parent Survey Report: One School in One Data Collection Period

School Name: Vineyard Elementary School

Set ID: 16333

School Group: ATP Cycle 1

Month and Year Collected: May 2017

School Enrollment: 0

Date Report Generated: 05/22/2017

% Range of Students Involved in SRTS: Don't Know

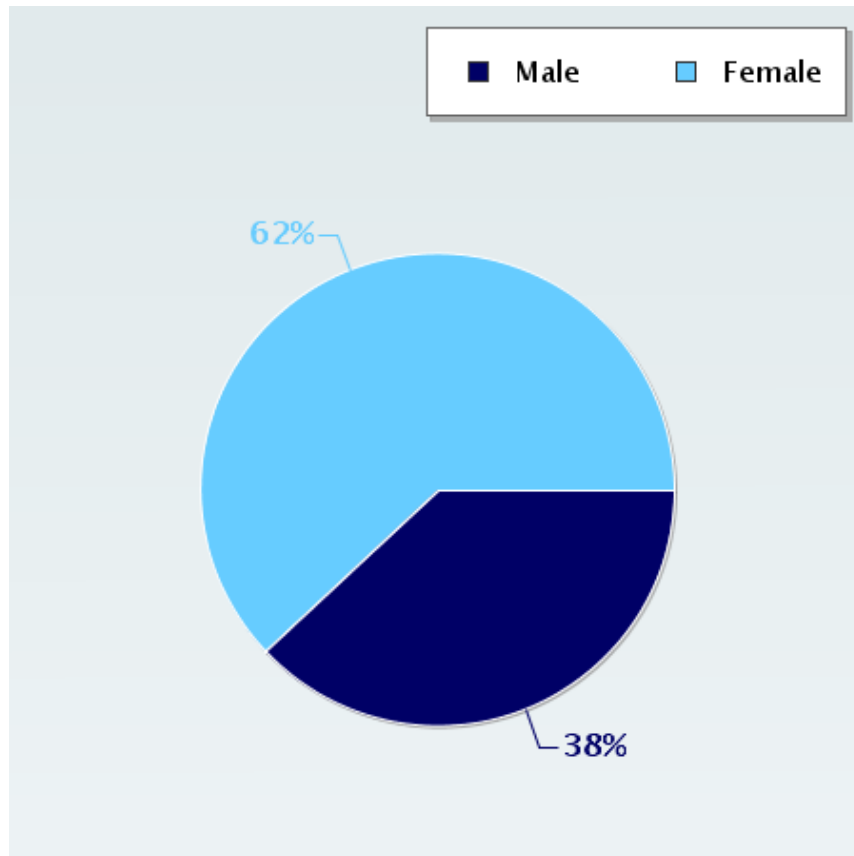
Tags:

Number of Questionnaires Distributed: 0

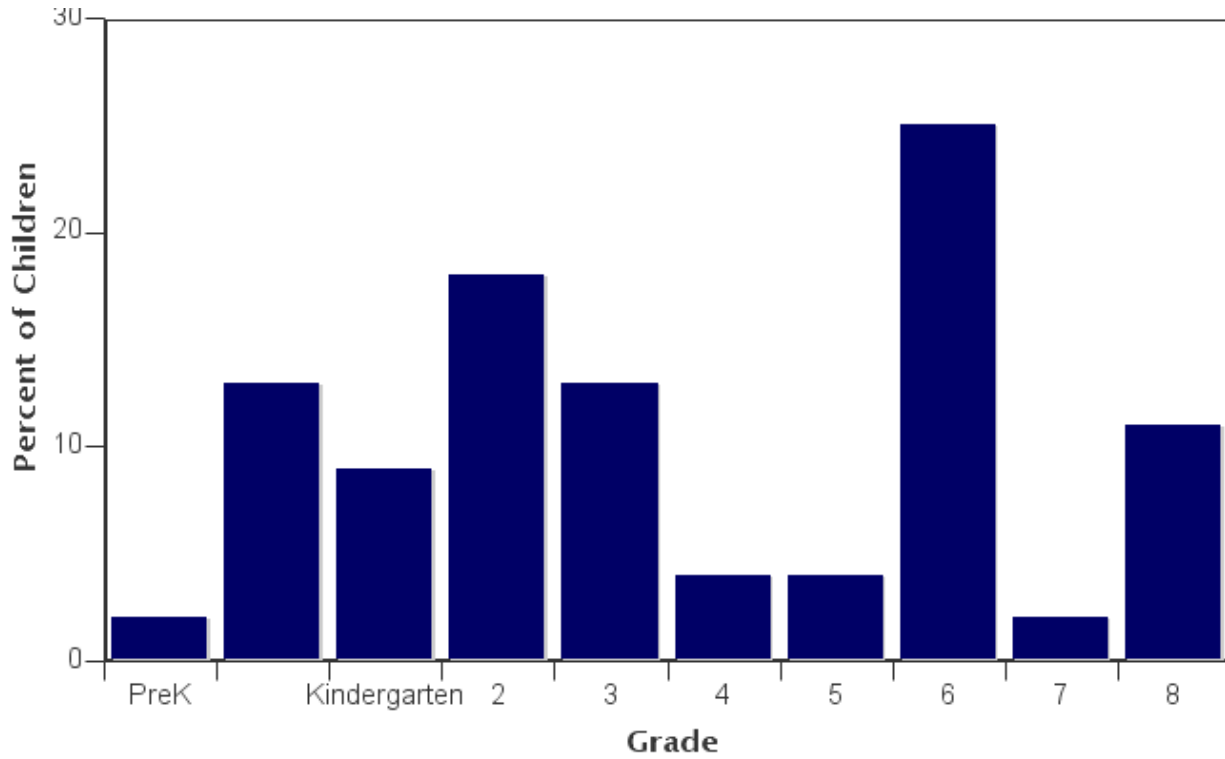
Number of Questionnaires Analyzed for Report: 56

This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

Sex of children for parents that provided information



Grade levels of children represented in survey



Grade levels of children represented in survey

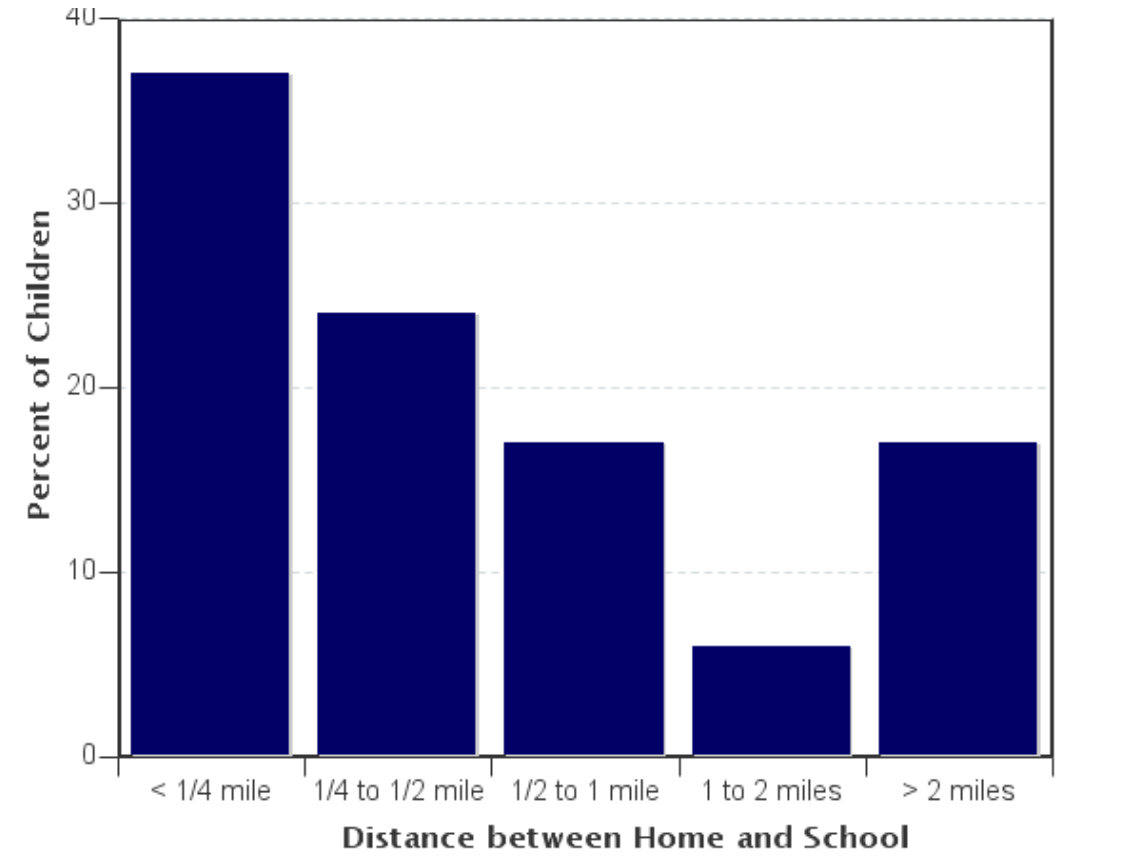
Grade in School	Responses per grade	
	Number	Percent
PreK	1	2%
Kindergarten	7	13%
1	5	9%
2	10	18%
3	7	13%
4	2	4%
5	2	4%
6	14	25%
7	1	2%

8	6	11%
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No response: 0

Percentages may not total 100% due to rounding.

Parent estimate of distance from child's home to school

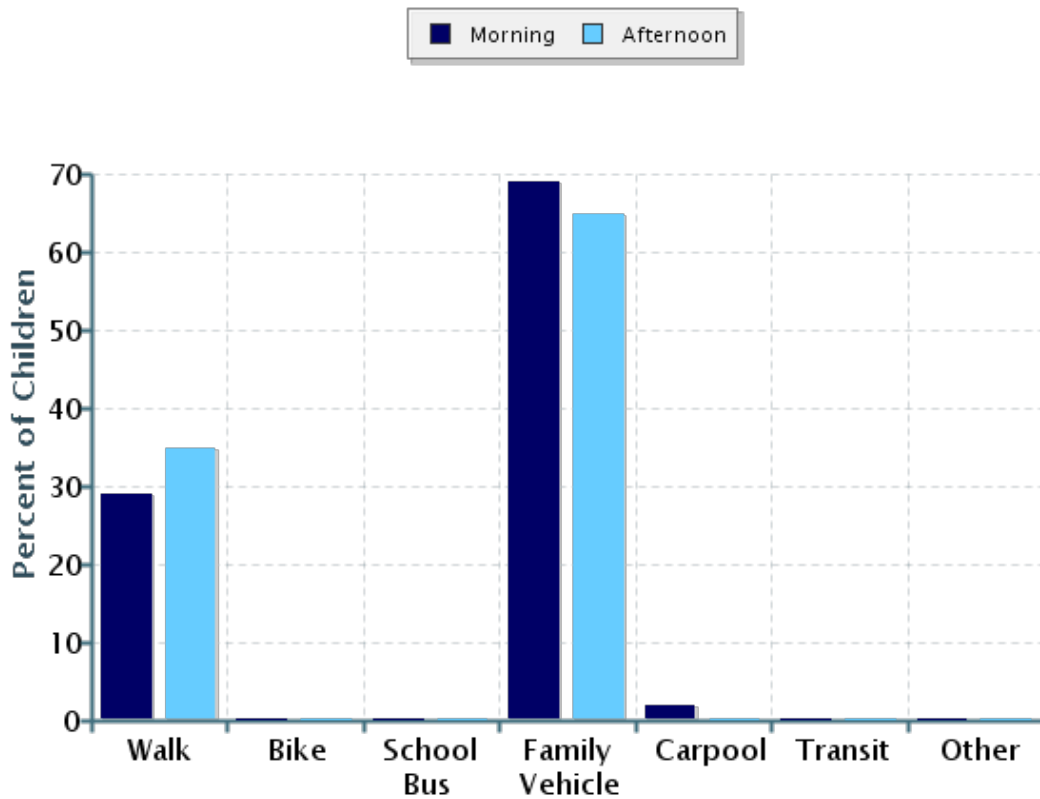


Parent estimate of distance from child's home to school

Distance between home and school	Number of children	Percent
Less than 1/4 mile	20	37%
1/4 mile up to 1/2 mile	13	24%
1/2 mile up to 1 mile	9	17%
1 mile up to 2 miles	3	6%
More than 2 miles	9	17%

Don't know or No response: 2
 Percentages may not total 100% due to rounding.

Typical mode of arrival at and departure from school



Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	55	29%	0%	0%	69%	2%	0%	0%
Afternoon	55	35%	0%	0%	65%	0%	0%	0%

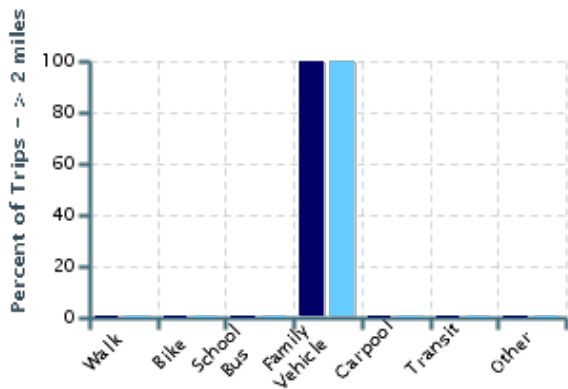
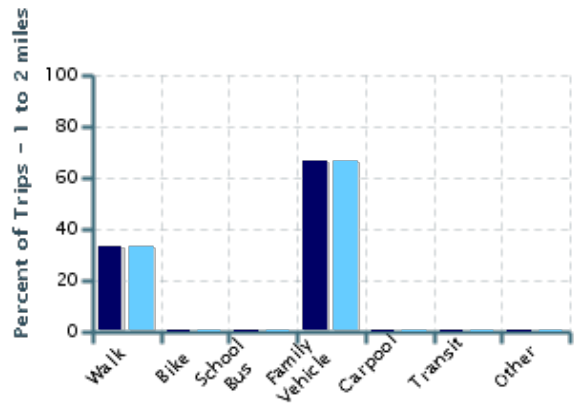
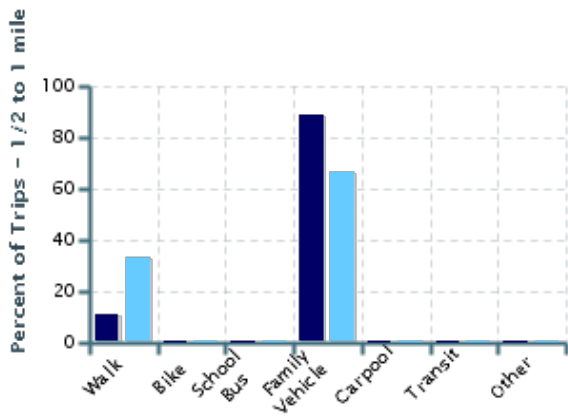
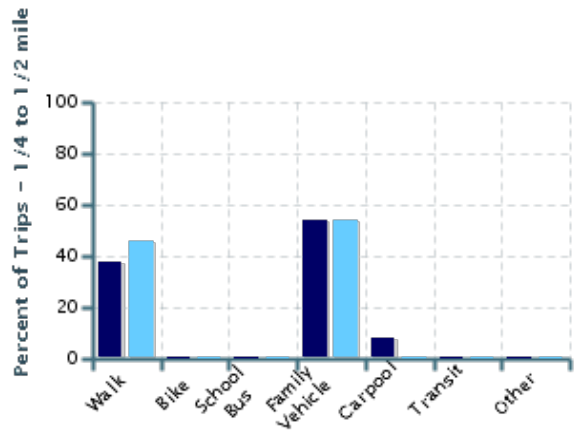
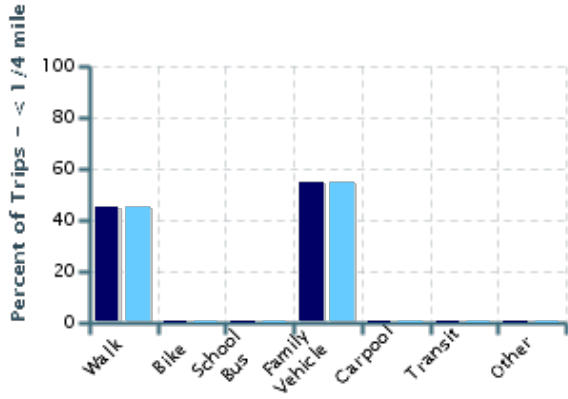
No Response Morning: 1

No Response Afternoon: 1

Percentages may not total 100% due to rounding.

Typical mode of school arrival and departure by distance child lives from school

■ Morning ■ Afternoon



Typical mode of school arrival and departure by distance child lives from school

School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	20	45%	0%	0%	55%	0%	0%	0%
1/4 mile up to 1/2 mile	13	38%	0%	0%	54%	8%	0%	0%
1/2 mile up to 1 mile	9	11%	0%	0%	89%	0%	0%	0%
1 mile up to 2 miles	3	33%	0%	0%	67%	0%	0%	0%
More than 2 miles	9	0%	0%	0%	100%	0%	0%	0%

Don't know or No response: 2

Percentages may not total 100% due to rounding.

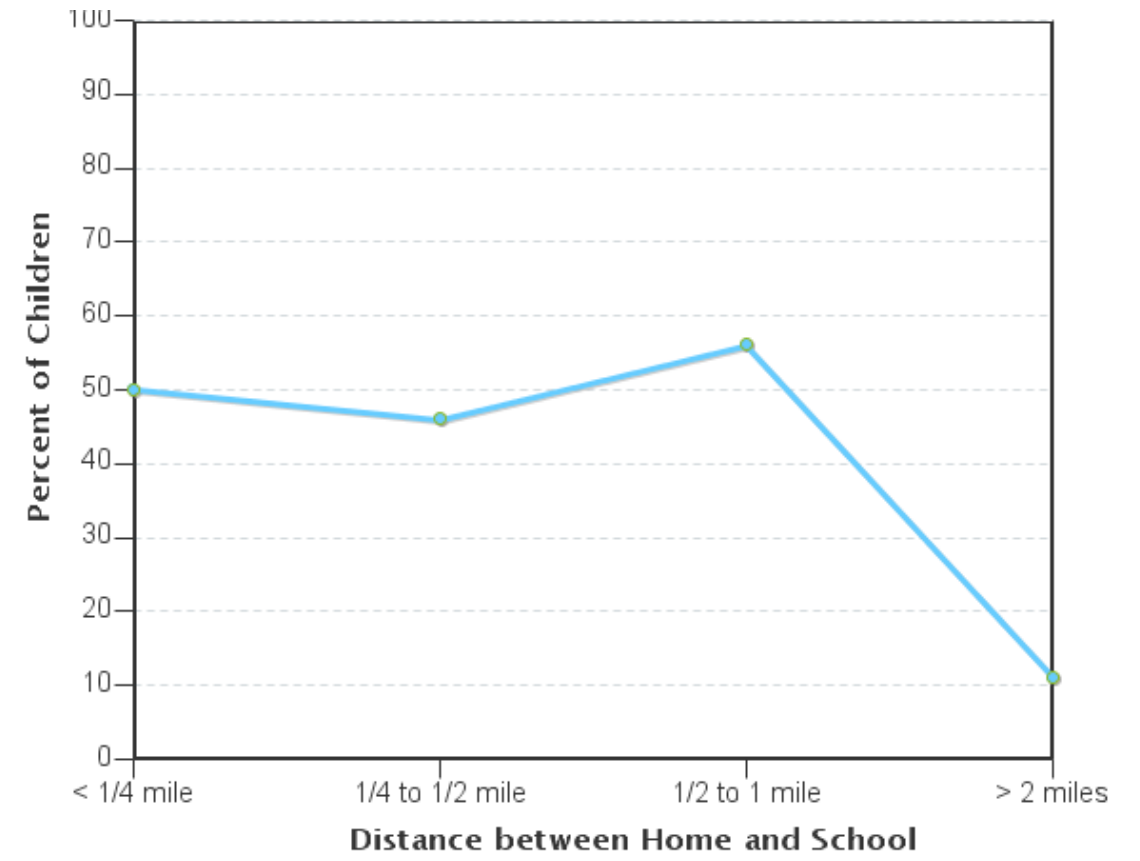
School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	20	45%	0%	0%	55%	0%	0%	0%
1/4 mile up to 1/2 mile	13	46%	0%	0%	54%	0%	0%	0%
1/2 mile up to 1 mile	9	33%	0%	0%	67%	0%	0%	0%
1 mile up to 2 miles	3	33%	0%	0%	67%	0%	0%	0%
More than 2 miles	9	0%	0%	0%	100%	0%	0%	0%

Don't know or No response: 2

Percentages may not total 100% due to rounding.

Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

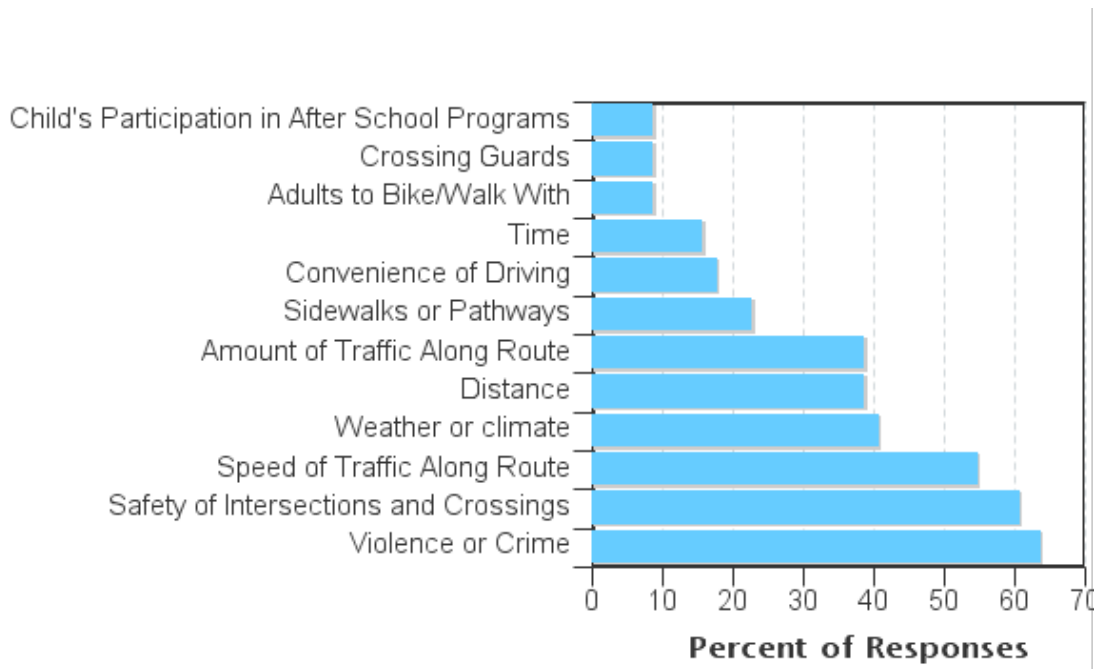


Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

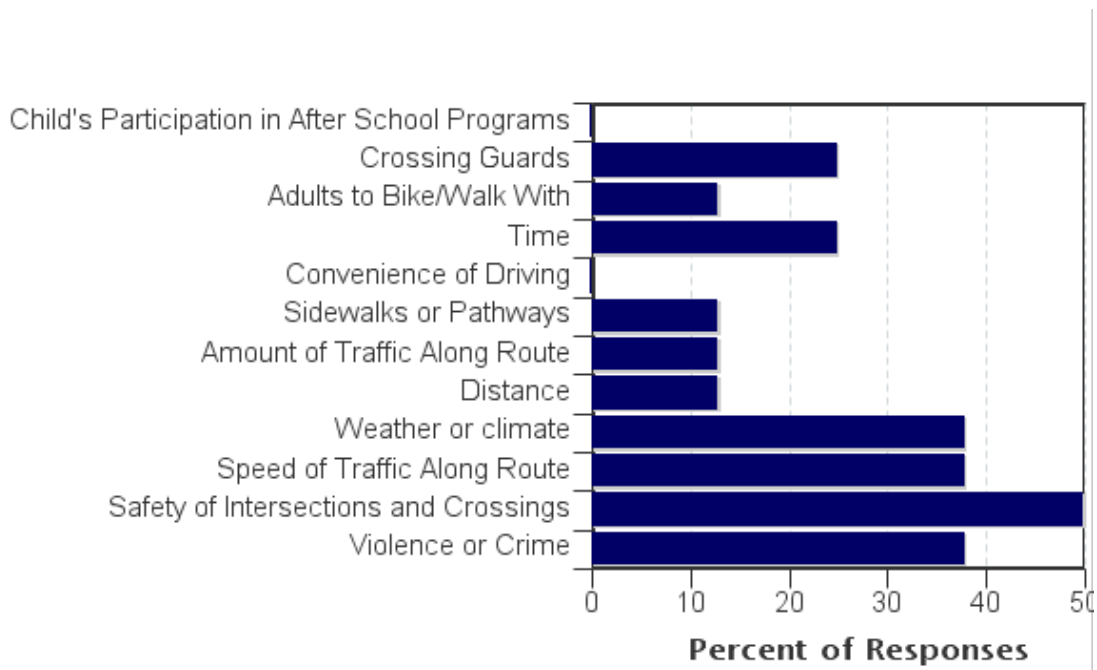
Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	22	50%	46%	56%	0%	11%
No	32	50%	54%	44%	100%	89%

Don't know or No response: 2
 Percentages may not total 100% due to rounding.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by
parents of children who already walk or bike to/from school

Issue	Child does not walk/bike to school	Child walks/bikes to school
Violence or Crime	64%	38%
Safety of Intersections and Crossings	61%	50%
Speed of Traffic Along Route	55%	38%
Weather or climate	41%	38%
Distance	39%	13%
Amount of Traffic Along Route	39%	13%
Sidewalks or Pathways	23%	13%
Convenience of Driving	18%	0%
Time	16%	25%
Adults to Bike/Walk With	9%	13%
Crossing Guards	9%	25%
Child's Participation in After School Programs	9%	0%
Number of Respondents per Category	44	8

No response: 4

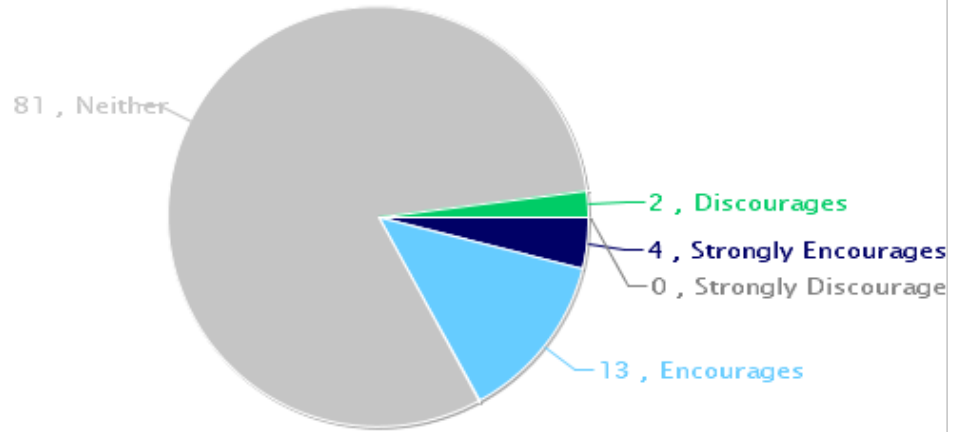
Note:

--Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.

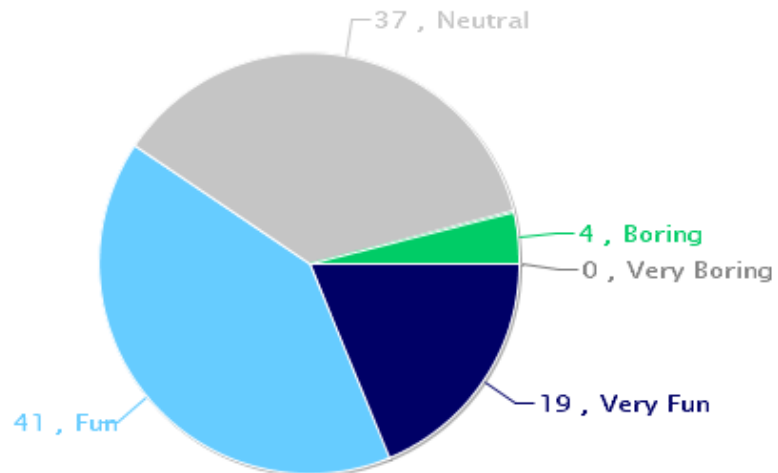
--Each column may sum to > 100% because respondent could select more than issue

--The calculation used to determine the percentage for each issue is based on the 'Number of Respondents per Category' within the respective columns (Child does not walk/bike to school and Child walks/bikes to school.) If comparing percentages between the two columns, please pay particular attention to each column's number of respondents because the two numbers can differ dramatically.

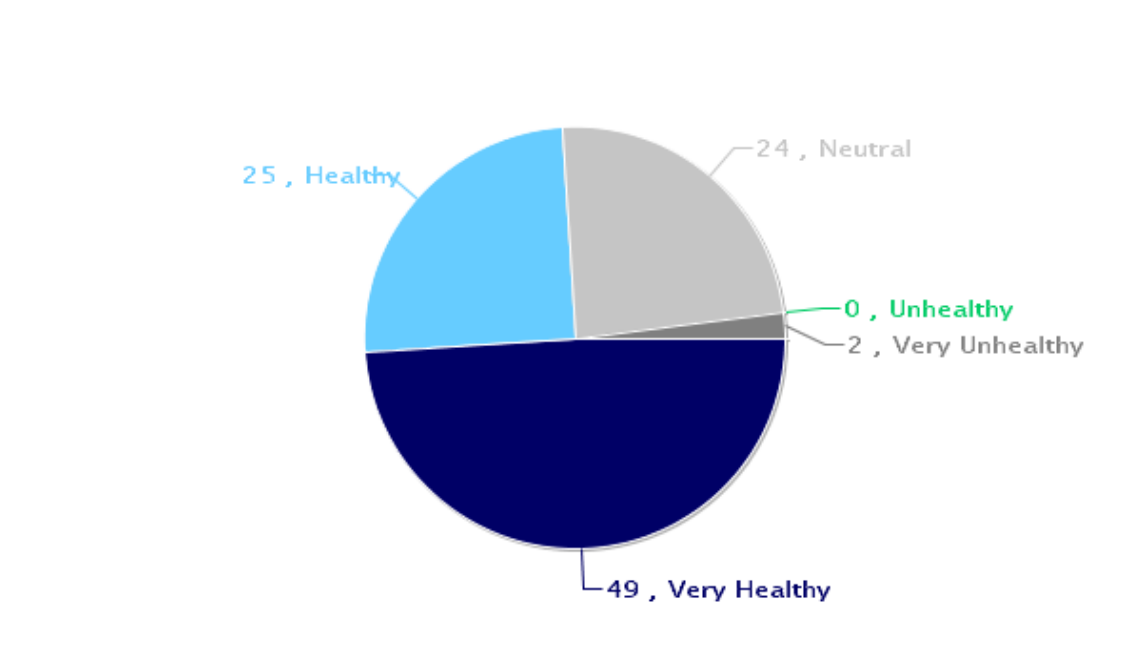
Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school



Parents' opinions about how much fun walking and biking to/from school is for their child



Parents' opinions about how healthy walking and biking to/from school is for their child



Comments Section

SurveyID	Comment
1542114	Crime is an issue. My children won't be allowed to walk without an adult.
1542130	The crossguards are not so reliable at Vineyard Elementary. Most of them start walking back before the children reach the sidewalk. Except Virginia, she was great. I'd like her back.
1542132	I would walk my daughter if I had the time
1542155	Both parents work and due to time restrictions we must drive to school, I would love to walk with them.
1542170	Due to construction equipment, street has become even unsafe than before. We need two crossing guards, please, or a stop sign.
1542179	I would not let my child walk or ride bike because ive seen fights near my home right after school.
1542090	We need a crosswalk on 5th Street and El Dorado Ave, in addition to a crossing guard.
1542106	My child does not walk alone. Crime too high, a major issue for me.
1542144	I can not even allow my children go to the park due to the homeless problem in our area. I have also seen them using and passing out drugs among them.
1542151	Although there is a specified speed limit for school areas there are very few vehicles that follow these limits.
1542171	The crosswalk at Vineyard STEM needs a stop light or stop sign. It is very unsafe with cars traveling at 45 MPH and faster.
1542145	I would like a crossing guard on 6th Street and Baker.
1542150	We only don't always walk because of 6th and Grove. While it's our turn to cross, cars still want to turn and we've almost gotten hit more than once.
1542183	I only feel comfortable if I walk with them to/from school
1542115	Drivers have no respect for the crossguard when she is crossing the kids.
1542139	It wouldn't hurt for Police to be around when the kids exit school

Appendix L

OUTREACH TO BUSINESSES

- I.1 Introduction
- I.2 Main Themes

I.1 Introduction

The City of Ontario values the business sector's opinion about active transportation. As part of the Ontario Active Transportation Master Plan, a business outreach strategy was developed. Businesses were identified by geography and size to ensure there was equitable representation of small, medium, and large businesses as well as places in the north, south, east and west of the City. The intent was to gather input from a variety of businesses about mobility issues and transportation demand management.

A focus group was organized in September 2019, but it did not attract the business representatives. It was to be held in person at the City of Ontario. The City sent out emails as well as made individual phone calls to more than 20 businesses.

As an alternative to the focus groups, a combination of interviews and a survey questionnaire were used to gather input from the businesses in 2020. A total of 20 businesses, plus the Ontario Chamber of Commerce and Ontario Convention/Visitors Bureau were asked to participate.

All 22 business entities received an online survey questionnaire that asked specific questions about walking, bicycling and connections to transit. Additionally, there was an email request to the targeted businesses to provide any additional comments.

Each individual business was contacted by email and telephone to set up one-on-one interviews. A total of 7 businesses were willing to be a part of the telephone interviews. These business participants included:

- Cardenas Market
- Hyatt Place Ontario/ Rancho Cucamonga
- Uline Distribution
- City Rentals
- Prologis
- Ontario Chamber of Commerce
- Ontario Convention and Visitors Bureau

I.2 Main Themes

Three main themes emerged from the guided discussions. These themes include the preferred transportation demand management mode, transportation issues, and active transportation solutions. Business leaders also shared many insightful quotes.

TRANSPORTATION MODE

The most popular type of transportation was the automobile. Meanwhile when asked the question about alternative transportation modes, the first choice was carpooling. When prompted about active transportation choices, transit or shuttles were most often mentioned. There were few discussions about walking, only in reference to improvements at intersections, but not as a form of commute. In fact, one business commended the City of Ontario for the signal improvement with turn pockets at 4th Street and Vineyard Avenue.

TRANSPORTATION ISSUES

The biggest transportation issue that business leaders shared was traffic congestion. Specific traffic congestion was cited at the I-15 and I-10 freeways, near the airport and during events at the convention center. When discussing traffic, the conversation led to the relationship of auto dependency and parking availability. Although traffic was an issue, most businesses did not see parking as a problem nor the need to change parking. There seems to be a tolerance for traffic congestion, despite people's dislike toward it.

TRANSPORTATION SOLUTIONS

Business leaders were asked about improvements that could be made to walking, bicycling and connections to transit. Their suggestions covered a variety of ideas, but no common themes could be derived. One business leader mentioned that the company will be adding bicycle parking to a new development.

Other businesses made suggestions for the City or agencies to make improvements that range from pedestrian wayfinding near the Convention Center, shuttles between hotels/convention center/airport/Ontario Mills, transportation network companies at Metrolink Stations, dedicated bicycle lanes, longer signal timing for senior/disabled, partnerships with IE Connections, and transportation incentives for employers.

"Working from home offsets transportation commuting, during COVID pandemic, but there is still traffic." - Ontario Chamber of Commerce

"The City has done a good job with traffic calming and signal timing" - City Rentals

"Our company is willing to expand our business because there is good access to freeways and there is support from the City." - Uline

"Our community relies on local supermarkets, where some shoppers take public transportation." - Cardenas Market

"Transportation incentives can help with employee retention." - Ontario Chamber of Commerce.

"There is a need for shuttle or shared bus route connections between hotels, convention center and airport, similar to Anaheim's ARTs bus." - Ontario Convention and Visitors Bureau.

BUSINESS STAKEHOLDER INTERVIEW QUESTIONS GUIDE



WHAT: BUSINESS STAKEHOLDER INTERVIEW

Tell us about transportation, as it relates to your business, employees and customers, as well as the community at large!

The City of Ontario has been actively seeking opportunities to improve active transportation through biking, walking and access to transit. The purpose of the interview is to gather input from the business community for the Active Transportation Master Plan (ATMP), known as Get Around Ontario. The insights from the business stakeholders will be used to inform the City's ATMP recommendations.



SAMPLE CONVERSATION TOPICS

Has your business/company been able to shift to a telecommute/working from home model?
Will this be the new work culture?

Did your business/company make COVID changes that impact employee decisions to bike, walk or take transit (not enough parking, incentives or economic)

Do you think improvements on XYZ corridor, near your business, would influence workers to bike, walk or take transit?

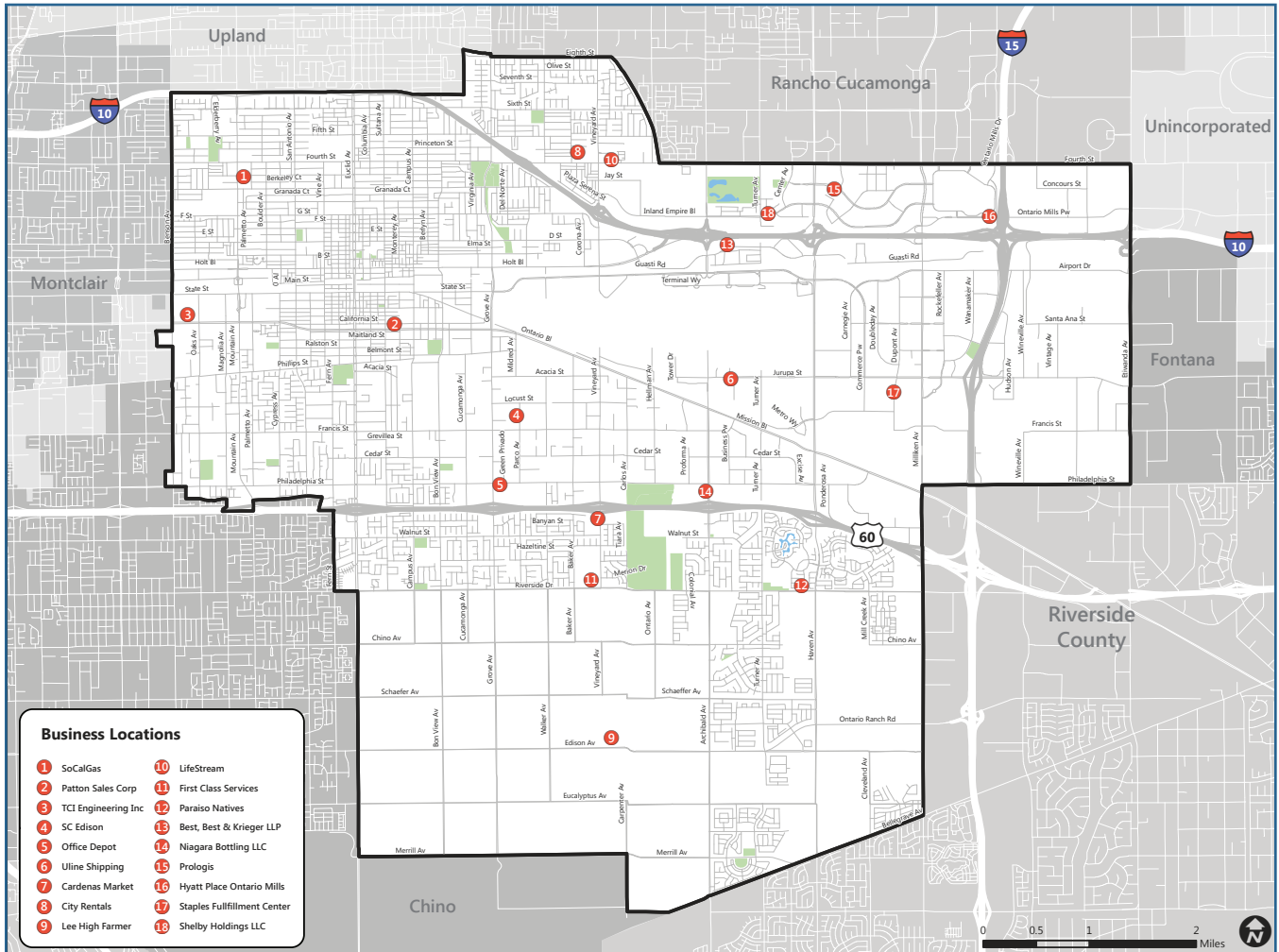
Are there program recommendations such as ABC that will be an incentive for employees to bike, walk or take transit?

Is there any transportation solution that you want to share, that can help your business / company?

Questions? Call (909) 906-6974 or email GetAround@OntarioCA.gov.

In partnership with:





Map of businesses reached for participation in the outreach effort

Appendix M

HIGH PRIORITY

CORRIDOR

FACTSHEETS

VINE AVENUE

The Vine Avenue- Fern Avenue Corridor runs through the majority of the City in the north-south direction. It is predominately comprised of residential land uses and offers access to many local schools, as well as Downtown Ontario. Located in between routes such as Euclid Avenue and San Antonio Avenue which have higher vehicular traffic volume, the corridor offers many opportunities to serve as an alternative route to the two roadways.

Corridor Length: 3.11

Extents: 4th Street to Philadelphia Street

Connectivity To: Colony High School, Vina Danks Middle School, Downtown Ontario, Euclid Elementary School, Mt Zion Christian School

Primary Land Use: Residential

Functional Classification: Local Road

Existing bikeways?: None

Truck Route?: No

Planned Effort (s): Non-Motorized Transportation Plan

Bikeway Facilities Cost: \$96,500

RECOMMENDATION & DISCUSSION

Vine Avenue and Fern Avenue are two-lane local streets located in a predominately residential neighborhood. Together with the surrounding residential land use, the corridor experiences relatively low traffic volumes, characteristics that create a good environment for a Class III Bike Boulevard.

Planning-level costs for Class III Bike Boulevards included sharrow markings and bike route signage. The costs assumed there would be no modifications to the roadway lane geometry to accommodate the bikeway facility.

Further analysis of this corridor should be completed to determine if traffic calming measures such as traffic circles, curb extensions, or chicanes could be considered. The City may also consider low-cost traffic calming measures along the corridor such as edgeline striping where the roadway geometry permits, together with the Class III Bike Boulevard implementation.

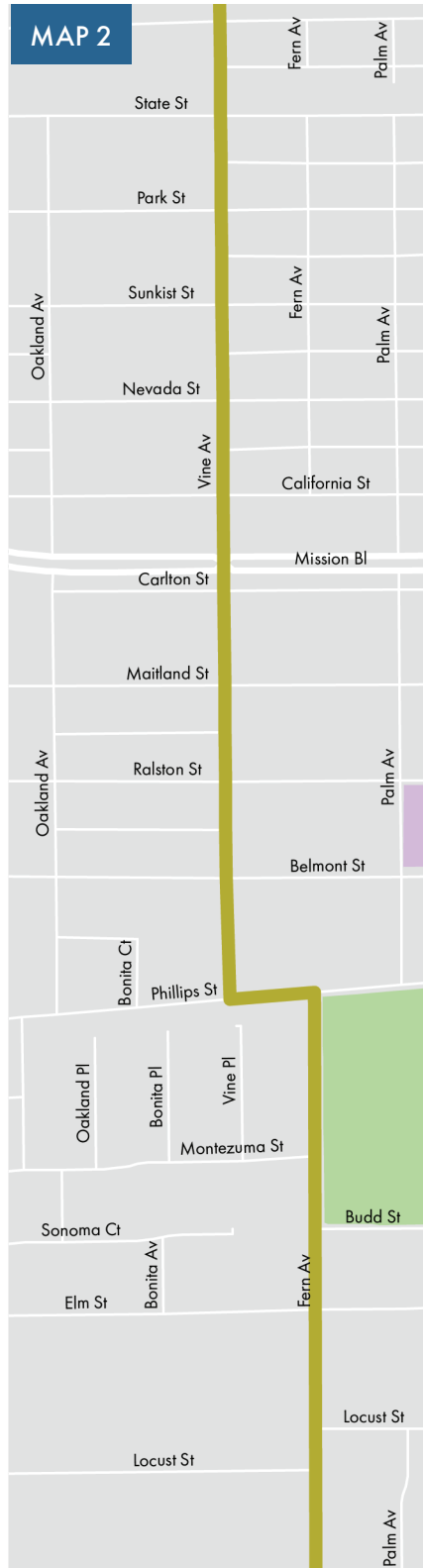
The City should conduct drainage evaluations and speed surveys to determine the most context-appropriate treatment. Additional studies that should be undertaken include pavement conditions, vehicular traffic studies, and traffic warrants. Verification of all existing underground/overhead utilities should be completed during the design phase.

Note: Please refer to Chapter 4.6 Design Guidelines and Appendix O: Design Guidelines Factsheets for more information regarding implementation.

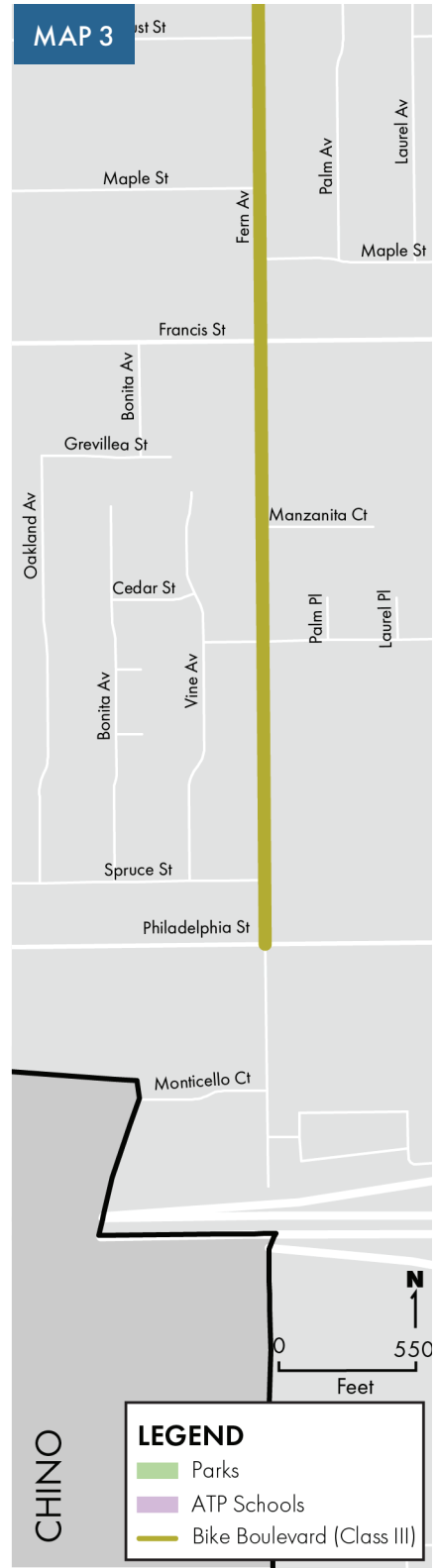
CORRIDOR EXTENTS



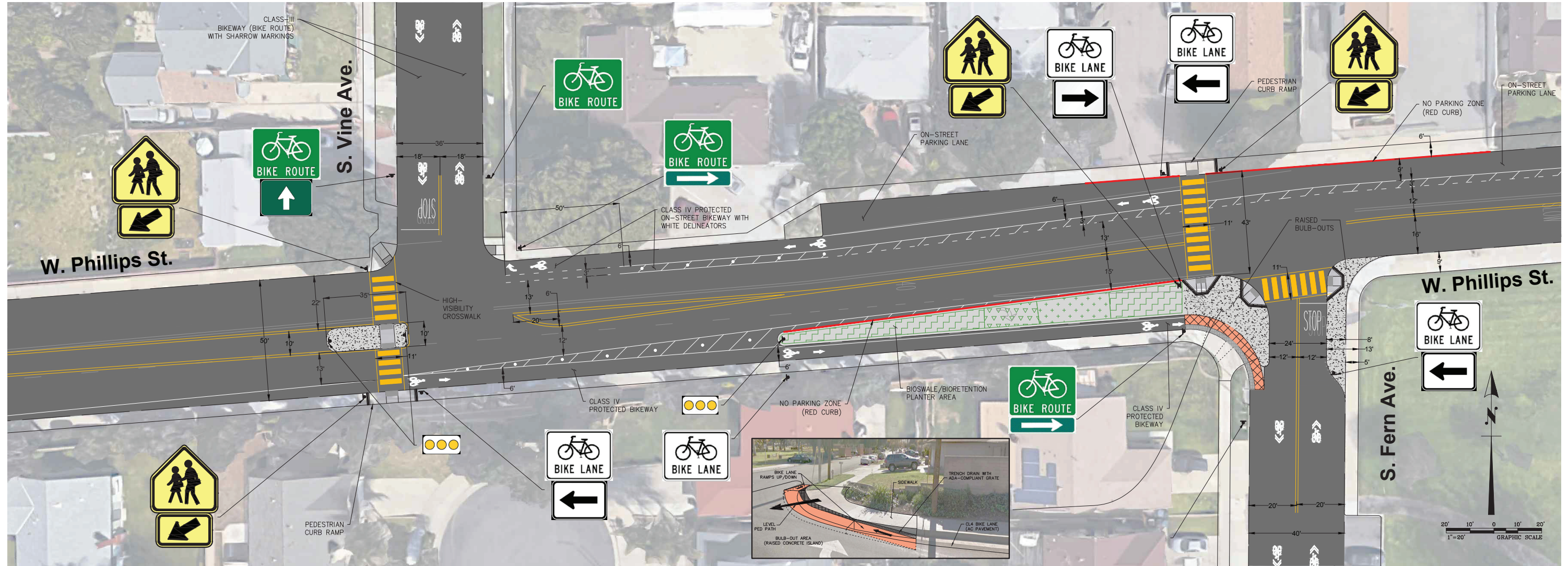
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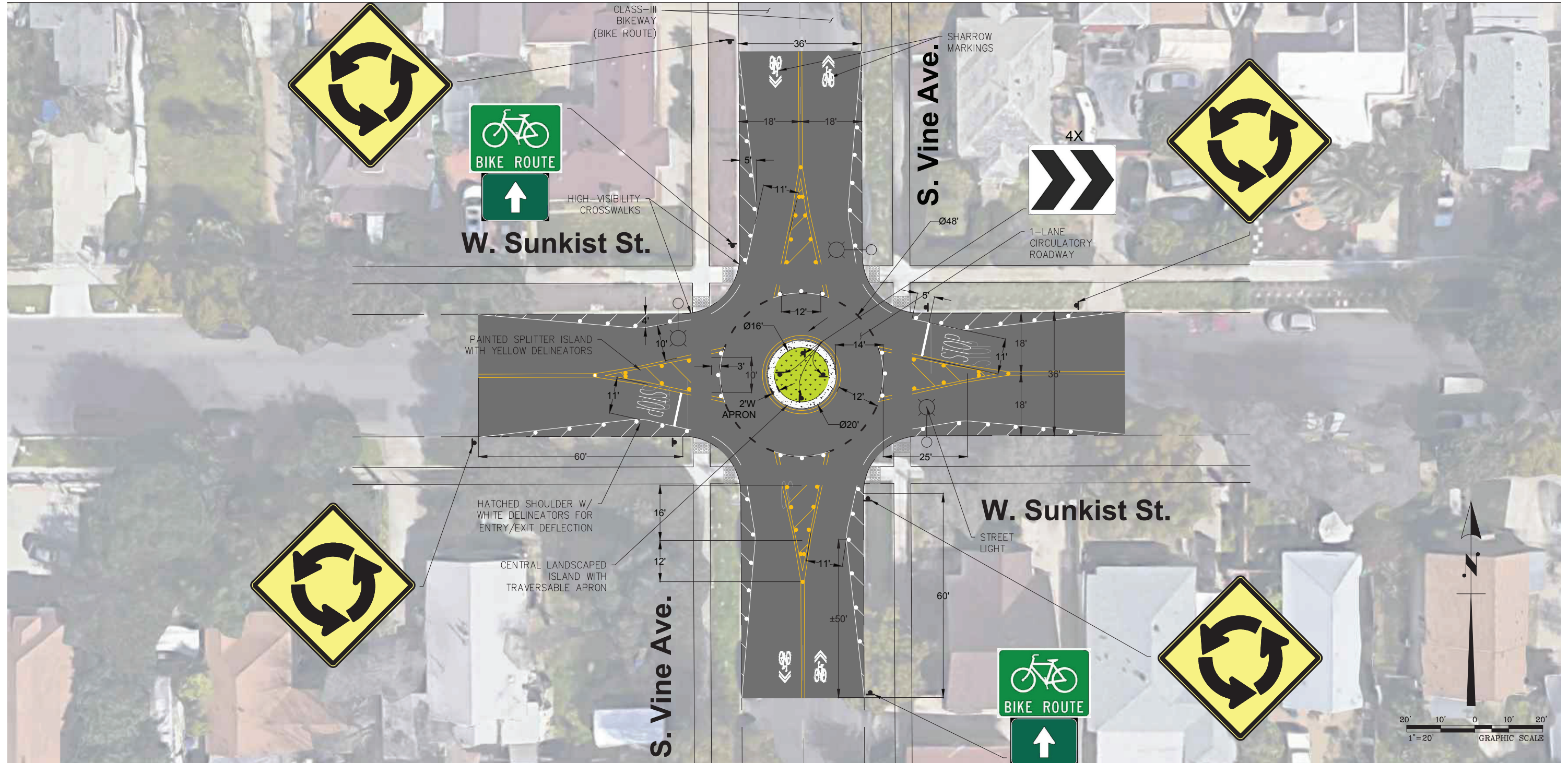
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CONCEPT PLAN: VINE AVENUE - PHILLIPS STREET - FERN AVENUE

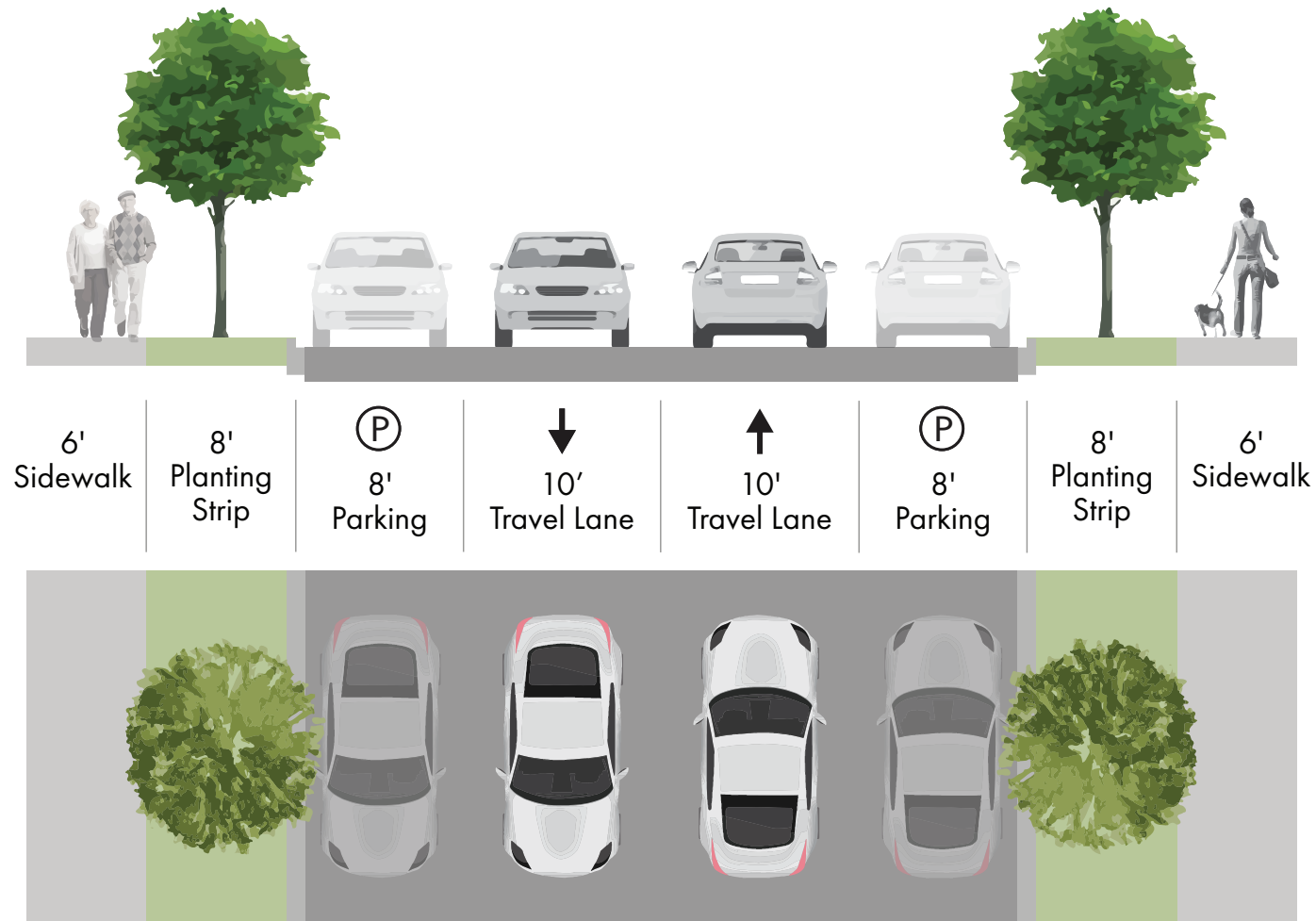


CONCEPT PLAN: VINE AVENUE & SUNKIST STREET

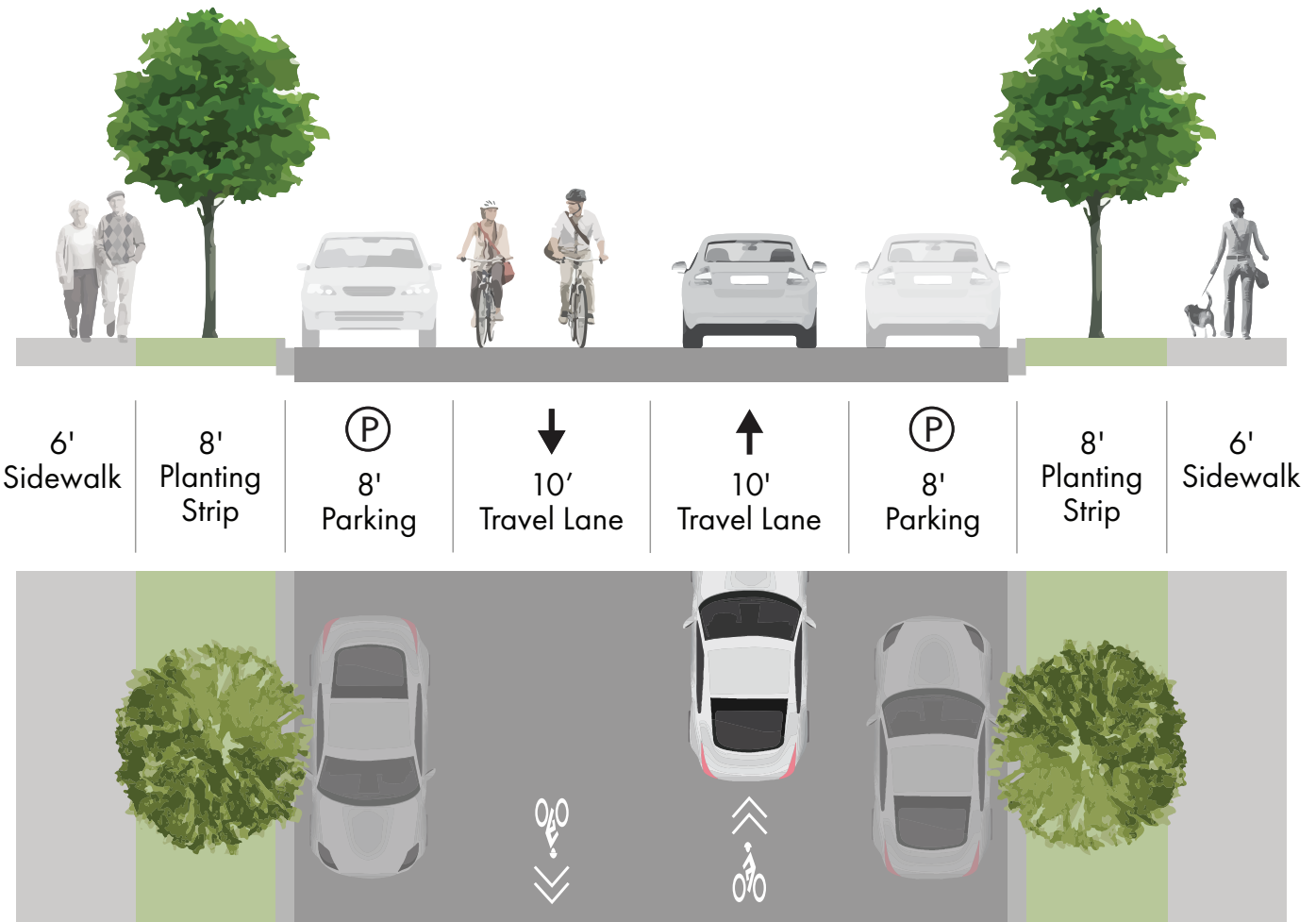


CROSS SECTION: VINE AVENUE (South of C Street along Vine Avenue)

Existing Conditions



Proposed Conditions



NOCTA STREET

The Nocta Street Corridor runs through the City in the east-west direction. It begins with Stoneridge Court at Benson Avenue, and passes through Vesta Street, B Street, Nocta Street, and Imperial Avenue before it terminates at D Street. It is predominately comprised of residential land uses and offers access to many parks, schools, as well as Downtown Ontario. The Corridor runs parallel to Holt Boulevard to the south which has higher vehicular traffic, and offers many opportunities to serve as an alternative route.

Corridor Length: 3.58

Extents: Benson Ave to D St via Imperial Ave

Connectivity To: Commercial areas, James R. Byrant Park, Downtown Ontario, Ontario Town Square, Ontario City Hall, James Galanis Park

Primary Land Use: Residential

Functional Classification: Local Road

Existing Bikeways?: None

Truck Route:? No

Planned Effort (s): Non-Motorized Transportation Plan, Complete Streets Safety Assessment, Transformative Climate Communities (TCC) Project Location

Bikeway Facilities Cost: \$110,900

RECOMMENDATION & DISCUSSION

The Nocta Street Corridor is located in a predominately residential neighborhood and has low traffic volume. These characteristics create a good environment for a Class III Bike Boulevard.

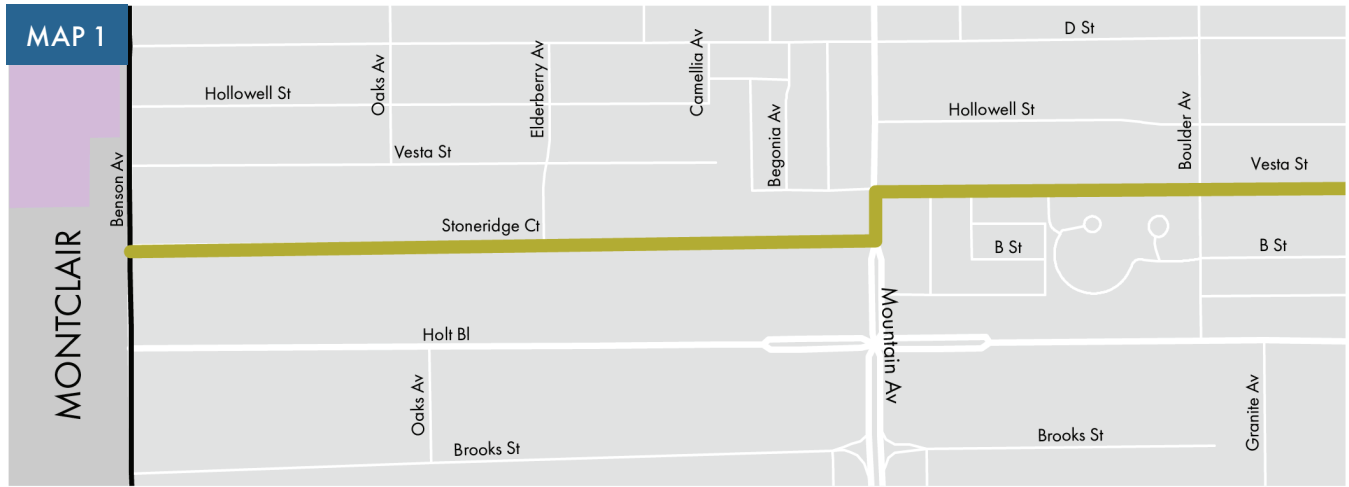
Planning-level costs for Class III Bike Boulevards included sharrow markings and bike route signage. The costs assumed there would be no modifications to the roadway lane geometry to accommodate the bikeway facility.

There are existing traffic calming measures on roadway segments east of Nocta Street with similar roadway characteristics as this corridor. Depending on the context, traffic calming measures such as traffic circle, curb extension, or chicane could be considered for the corridor. Furthermore, some of the segments are misaligned at many intersection locations; the City should consider bike wayfinding signage to improve access to the facility.

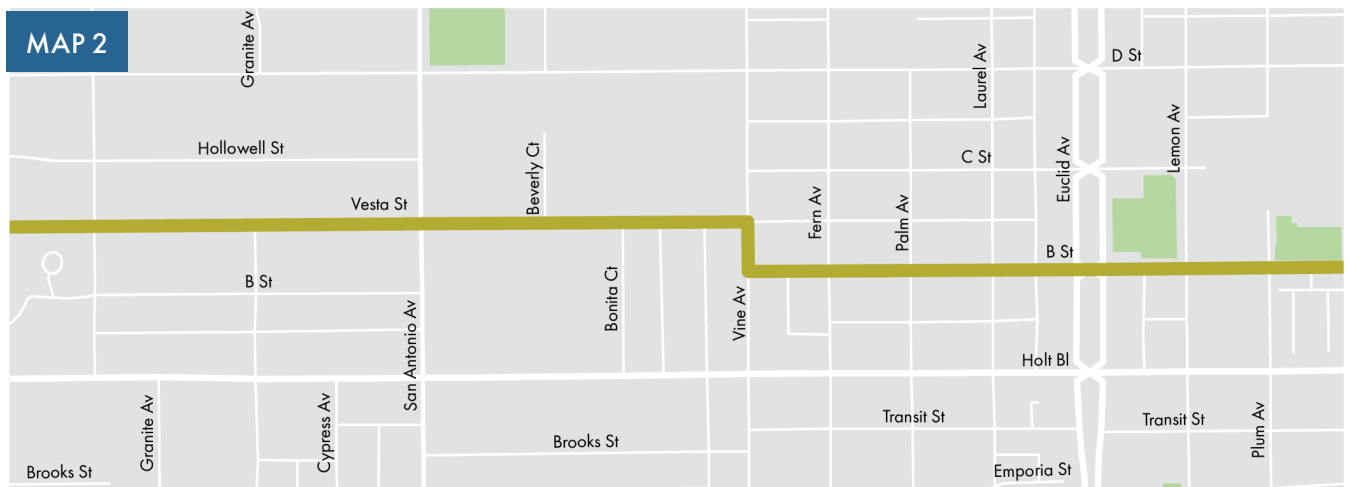
The City should conduct drainage evaluations and speed surveys to determine the most context-appropriate treatment. Additional studies that should be undertaken include pavement conditions, vehicular traffic studies, and traffic warrants. Verification of all existing underground/overhead utilities should be completed during the design phase.

Note: Please refer to Chapter 4.6 Design Guidelines and Appendix O: Design Guidelines Factsheets for more information regarding implementation.

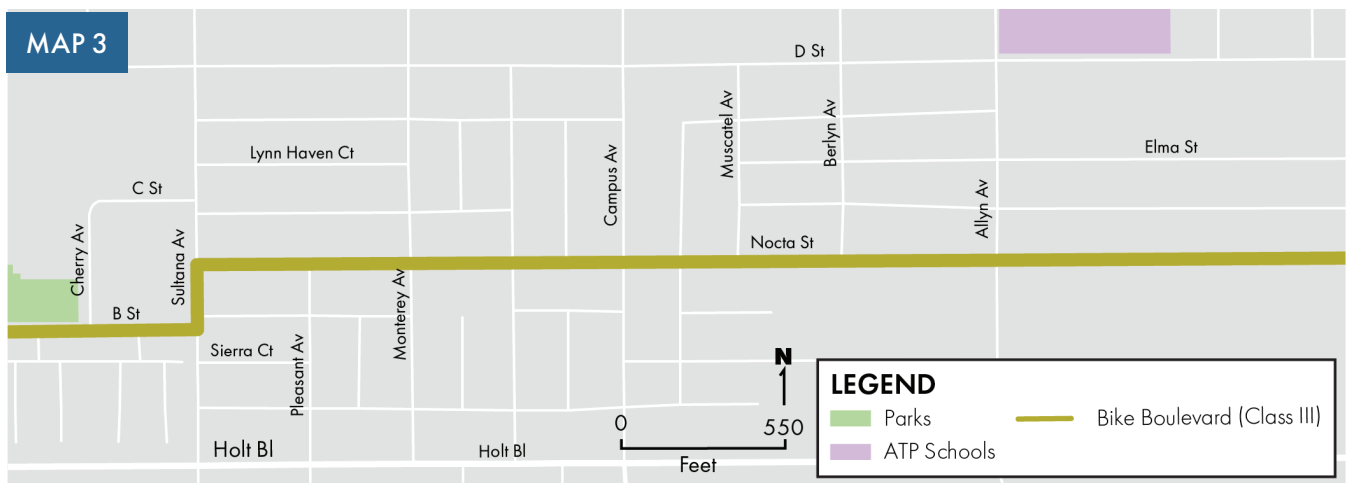
CORRIDOR EXTENTS



Continue in Map 2



Continue in Map 3

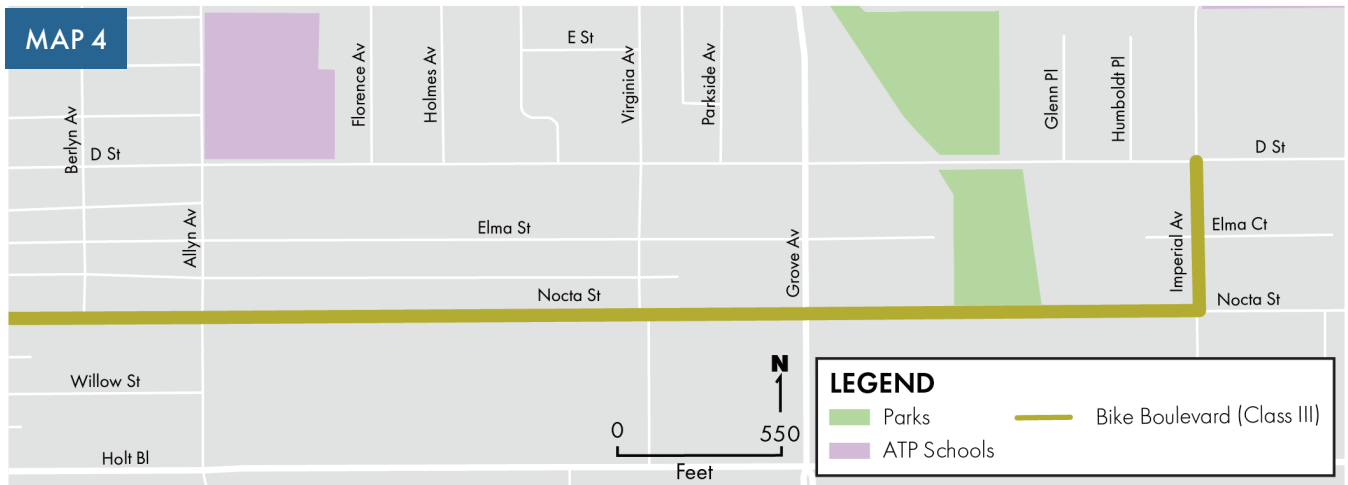


LEGEND

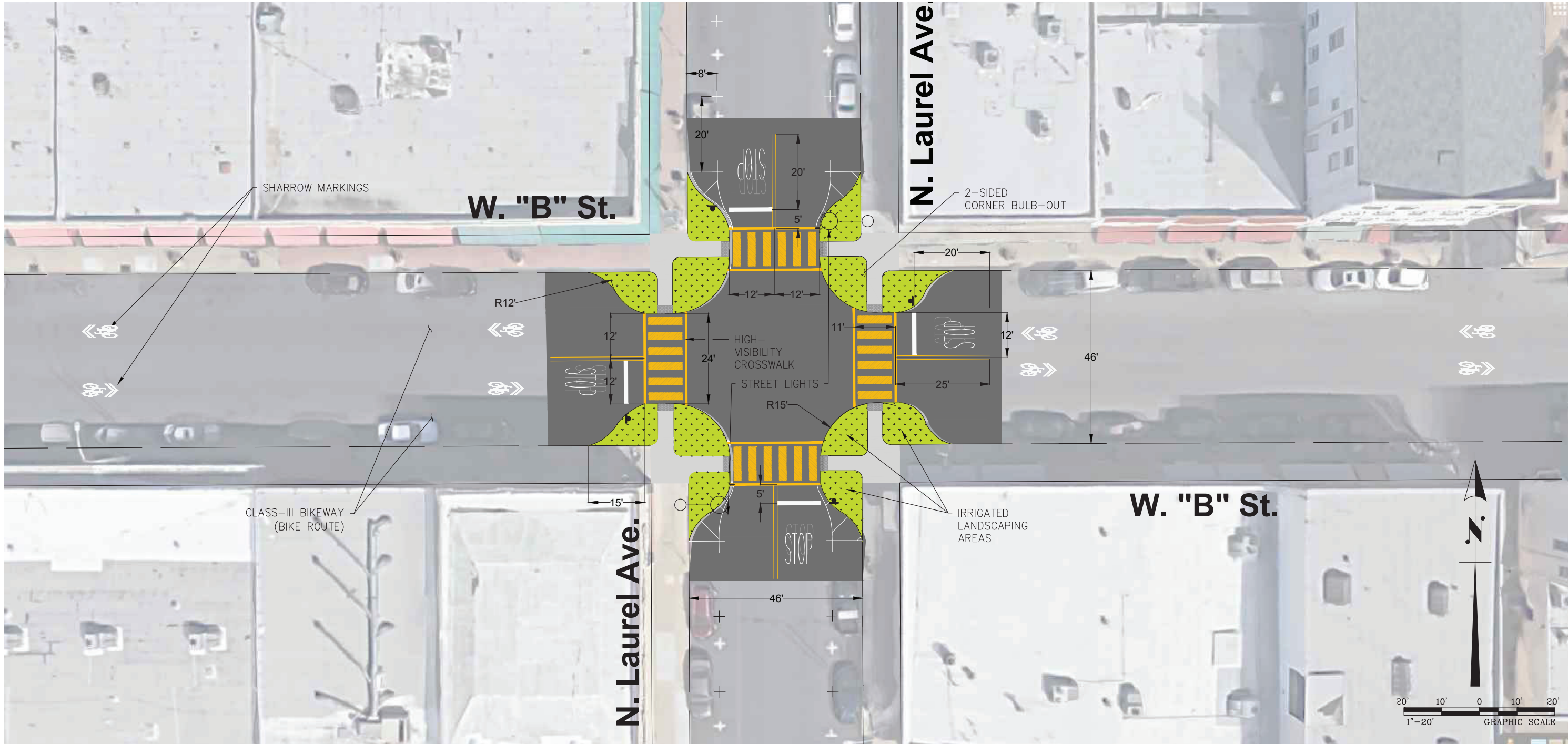
- Parks
- ATP Schools
- Bike Boulevard (Class III)

Continue in Map 4

CORRIDOR EXTENTS (CONT.)

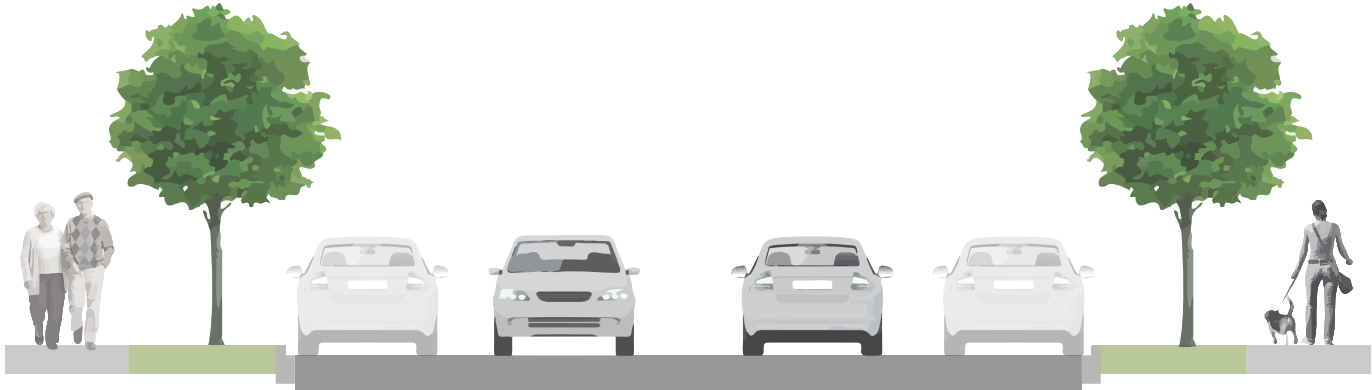


CONCEPT PLAN: B STREET & LAUREL AVENUE

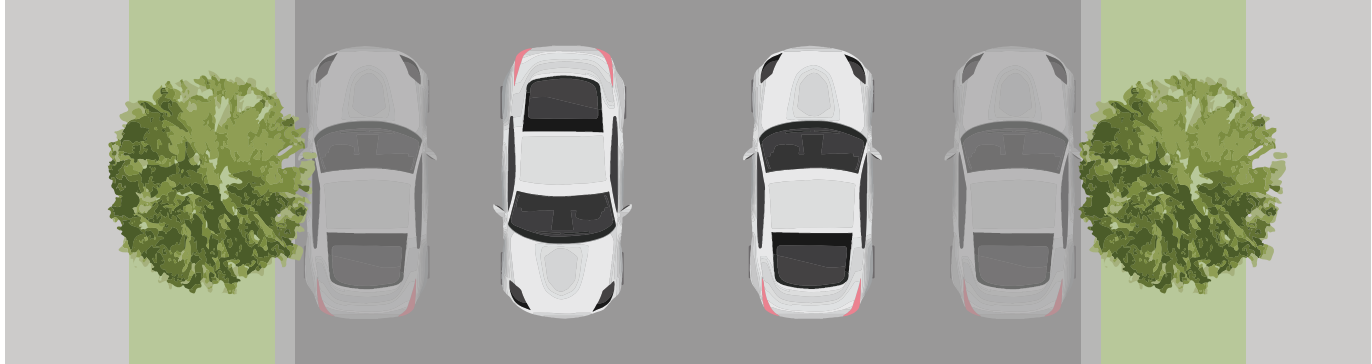


CROSS SECTION: NOCTA STREET (East of Plum Avenue along B Street)

Existing Conditions



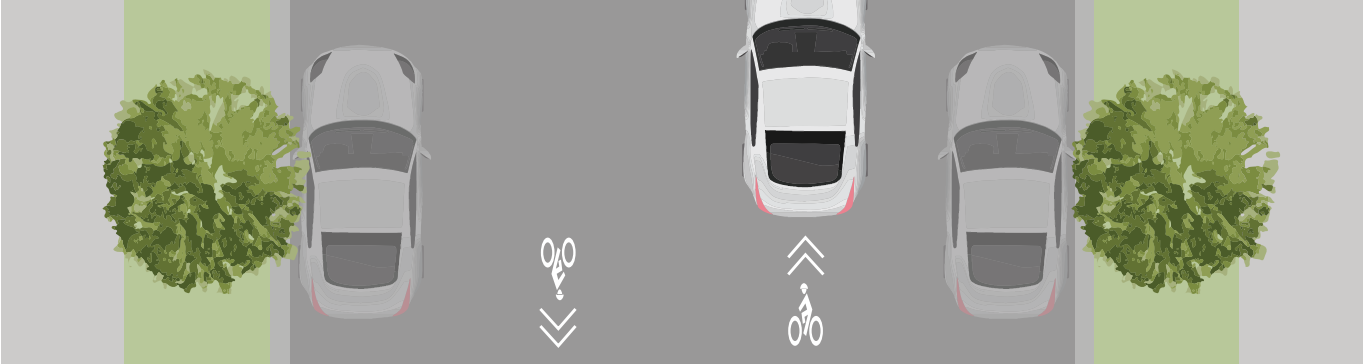
6' Side-walk	8' Planting Strip	(P) 8' Parking	↓ 12' Travel Lane	↑ 12' Travel Lane	(P) 8' Parking	8' Planting Strip	6' Side-walk
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Proposed Conditions



6' Side-walk	8' Planting Strip	(P) 8' Parking	↓ 12' Travel Lane	↑ 12' Travel Lane	(P) 8' Parking	8' Planting Strip	6' Side-walk
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4TH STREET

The 4th Street Corridor traverses the City in the east-west direction. Between Benson Avenue and Grove Avenue, the predominate land use is residential and the functional classification of the roadway is a Collector Street. Between Grove Avenue and Etiwanda Avenue, the land uses are more diverse and the roadway functional classification is Other Principal Arterial. The Corridor provides connectivity to many local parks, schools, and commercial areas, as well as regional destinations such as Toyota Arena and the Ontario Mills.

Corridor Length: 8.99

Extents: Benson Ave to Etiwanda Ave

Connectivity To: El Camino Elementary, Gibbs Park, Anthony Munoz Park, Elderberry Elementary, commercial areas, Chaffey High School, Vina Danks Middle School, John Galvin Park, Cucamonga-Guasti Regional Park, Toyota Arena, Ontario Mills

Primary Land Use: Residential

Functional Classification:

Collector, Other Principal Arterial

Existing Bikeways?: None

Truck Route?: Partial

Planned Effort (s): Complete Streets Safety Assessment, Non-Motorized Transportation Plan

Bikeway Facilities Cost:

\$560,800

RECOMMENDATION & DISCUSSION

4th Street is a two- to four-lane roadway that is part of the City’s backbone street system with varying roadway widths and abutting land uses. 4th Street - West (i.e., west of Euclid Avenue) serves predominately residential neighborhoods, while the 4th Street - East (east of Euclid Avenue) serves a mix of both commercial and residential uses.

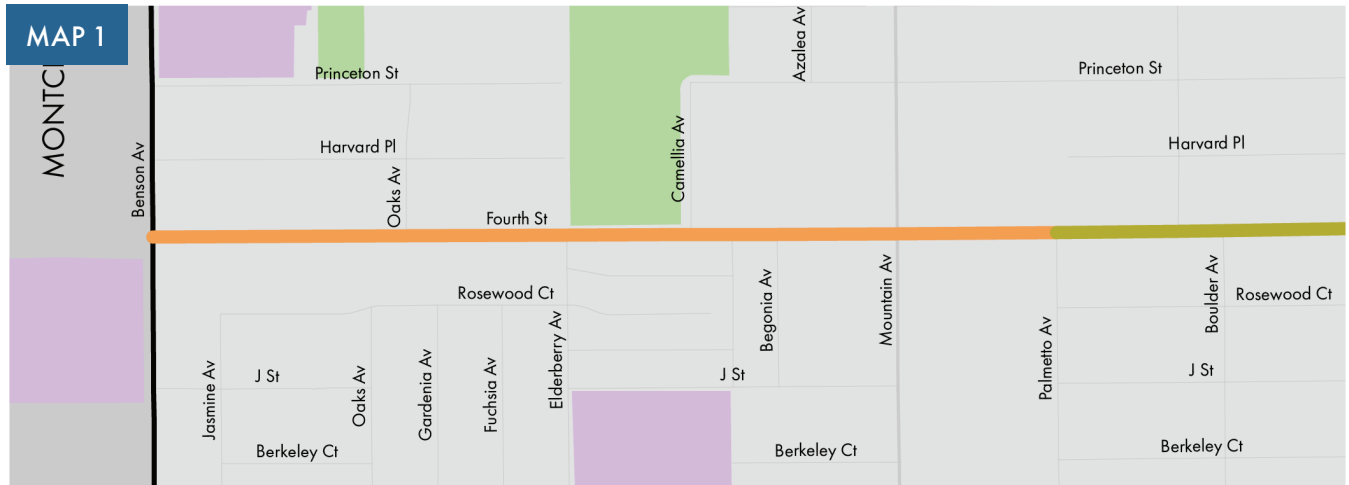
Along the 4th Street - West segment, the City is recommended to install a Class III Bike Route/Boulevard. The planning-level costs developed for these facilities included sharrow markings and bike route signage. Further analysis of the corridor should be completed to determine if traffic calming measures such as traffic circles or curb extensions could be considered. The City may also consider low-cost traffic calming measures along the corridor such as edgeline striping where the roadway geometry permits, together with the Class III bikeway facilities implementation.

For the 4th Street - East segment, the City is recommended to install a Class II Bike Lane to improve bike access and close existing gaps in the bicycle network. Presently, several sections have bike lanes on the north side of the roadway, but not on the south side. The Class II Bike Lane implementation costs included bike lane signing and striping. When the City is ready to implement the Class II Bike Lane during the design phase, further analysis on the existing roadway should be completed to determine the extent to which the existing lane geometry can be restriped to include a Class II Buffered Bike Lane for added bicyclist safety.

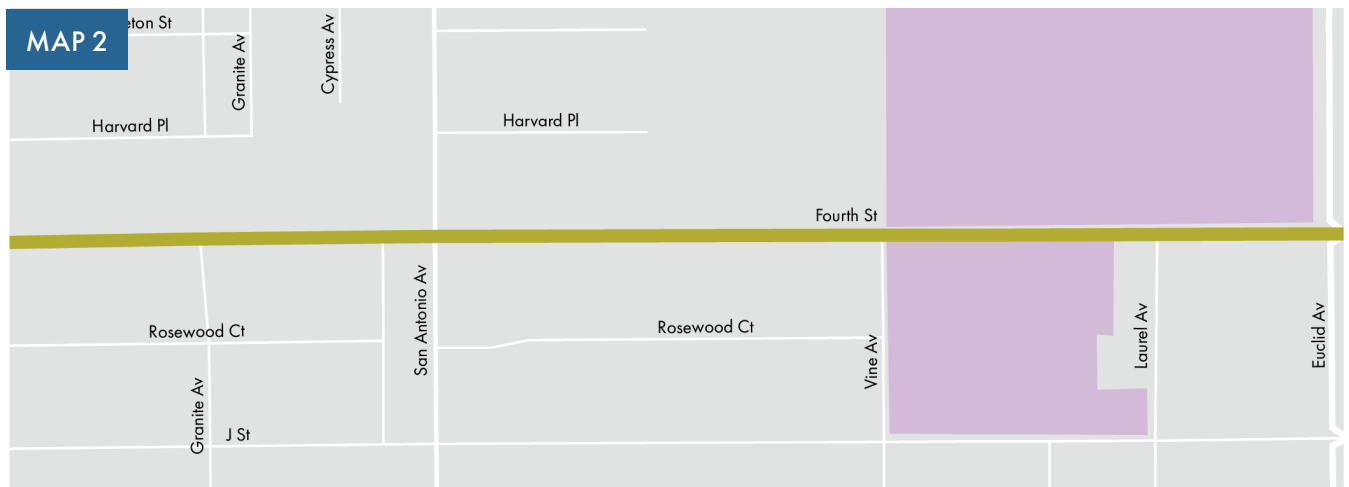
The City should conduct drainage evaluations and speed surveys to determine the most context-appropriate treatment. Additional studies that should be undertaken include pavement conditions, vehicular traffic studies, and traffic warrants. Verification of all existing underground/overhead utilities should be completed during the design phase.

Note: Please refer to Chapter 4.6 Design Guidelines and Appendix O: Design Guidelines Factsheets for more information regarding implementation.

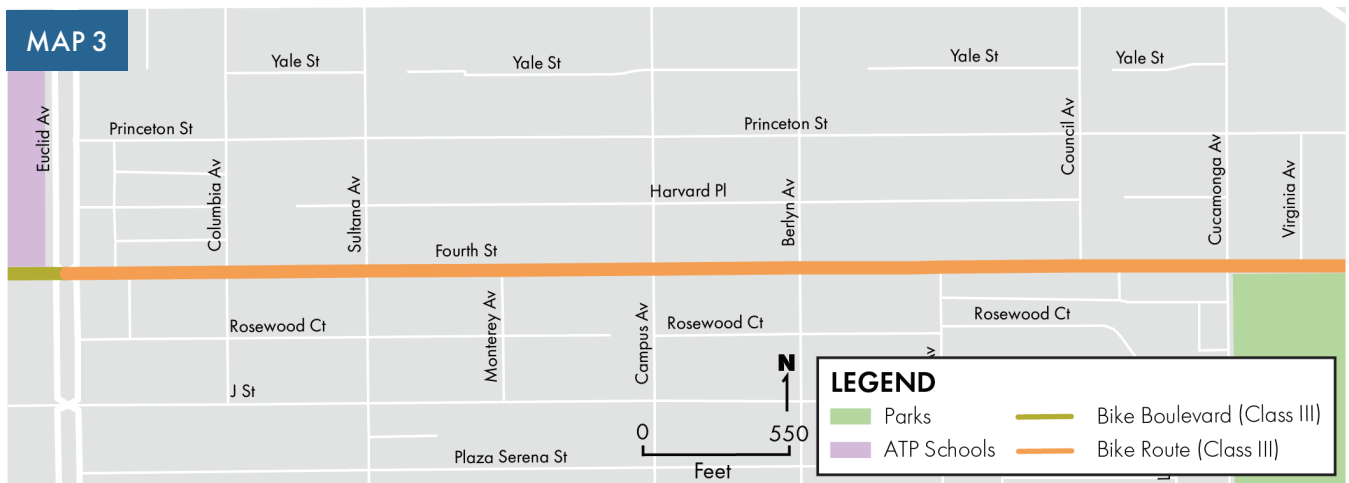
CORRIDOR EXTENTS



Continue in Map 2

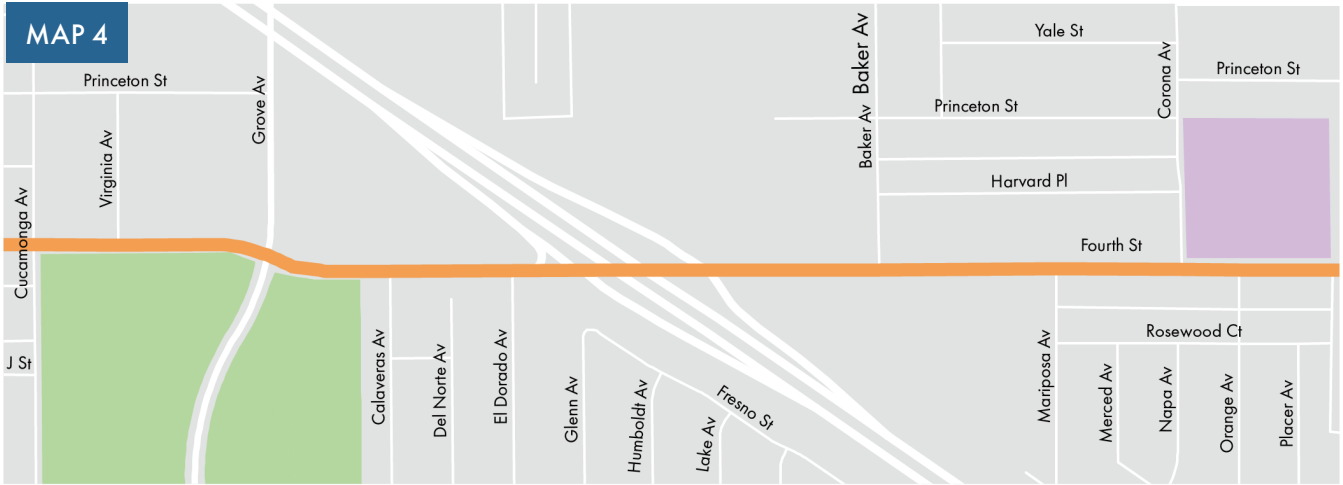


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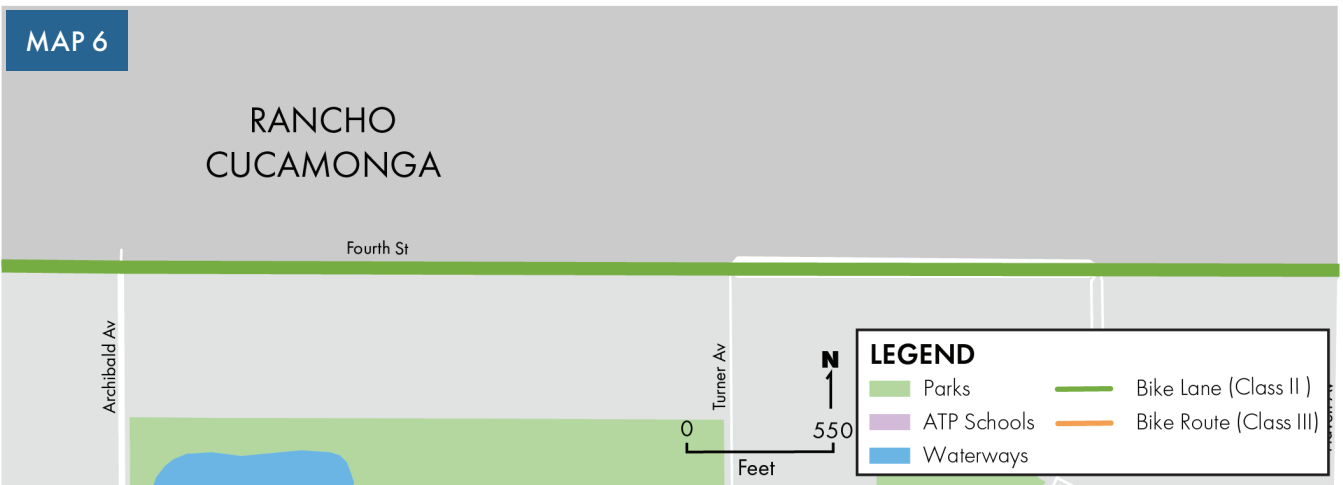
CORRIDOR EXTENTS (CONT.)



Continue in Map 5



Continue in Map 6

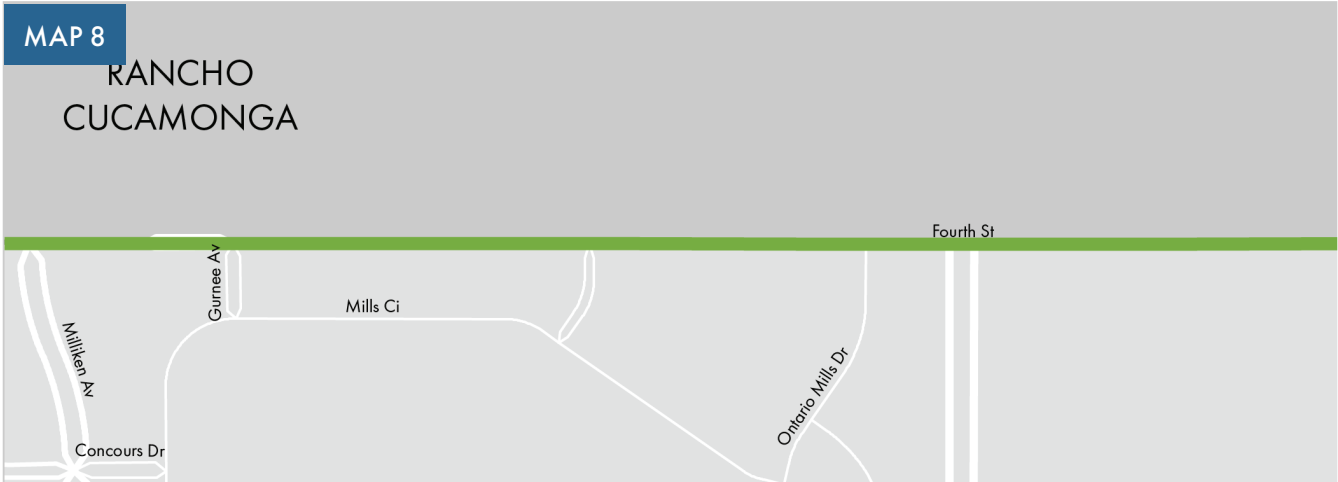


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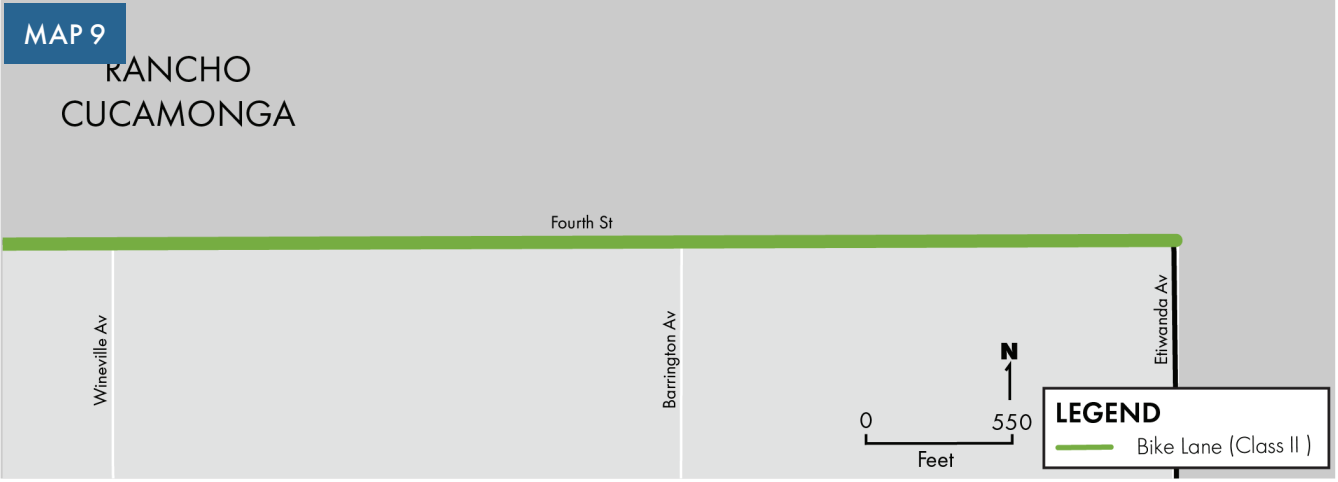
CORRIDOR EXTENTS (CONT.)



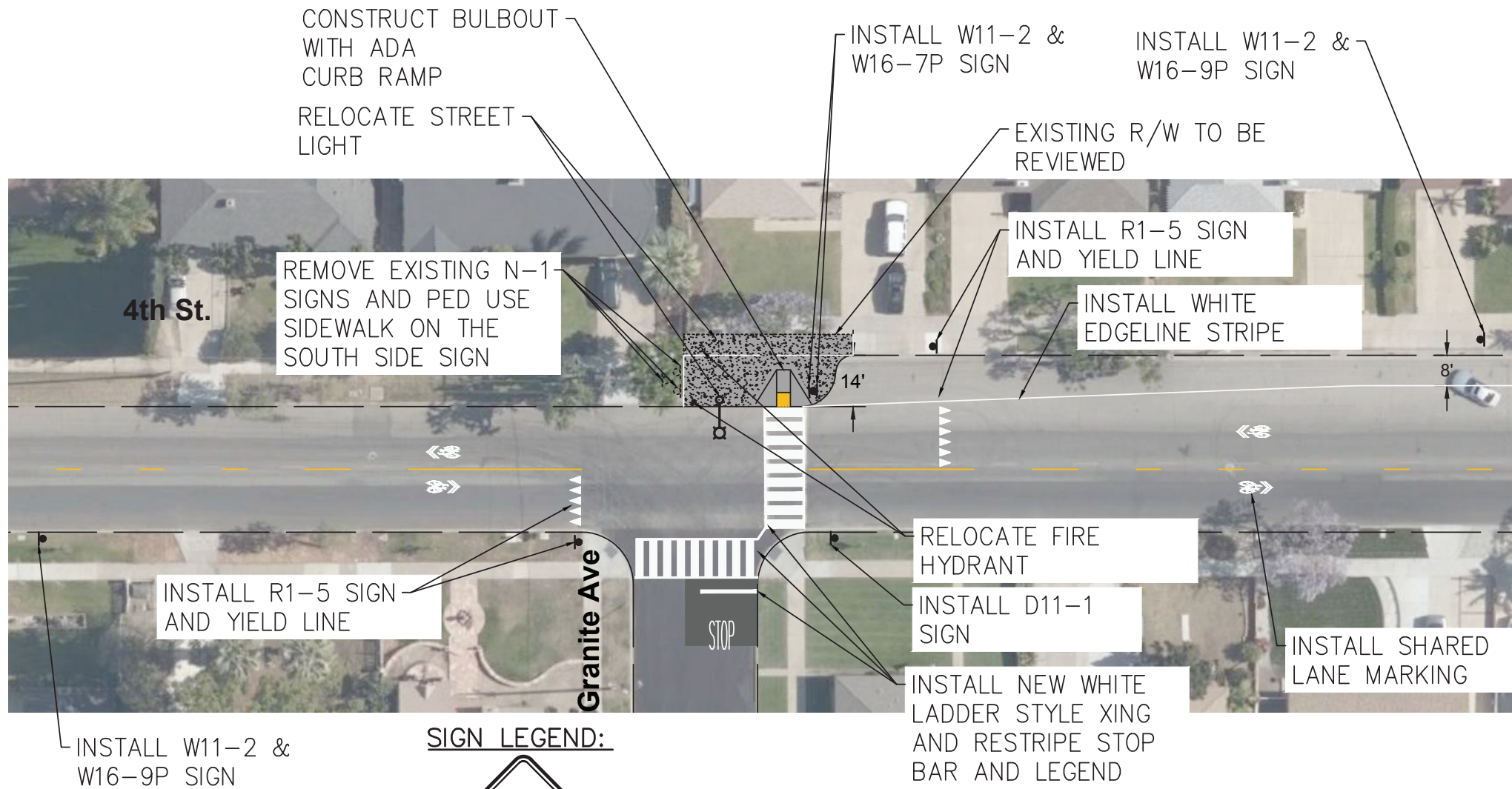
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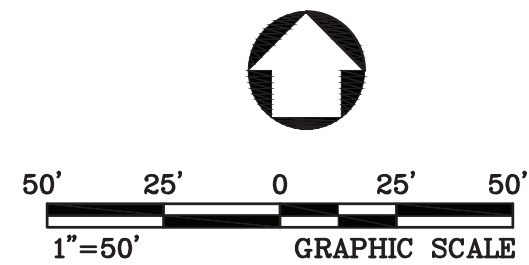
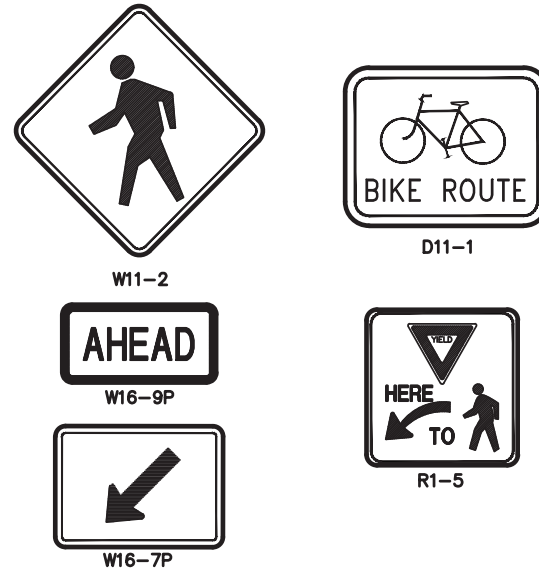
Continue in Map 9



CONCEPT PLAN: FOURTH STREET AND GRANITE AVENUE

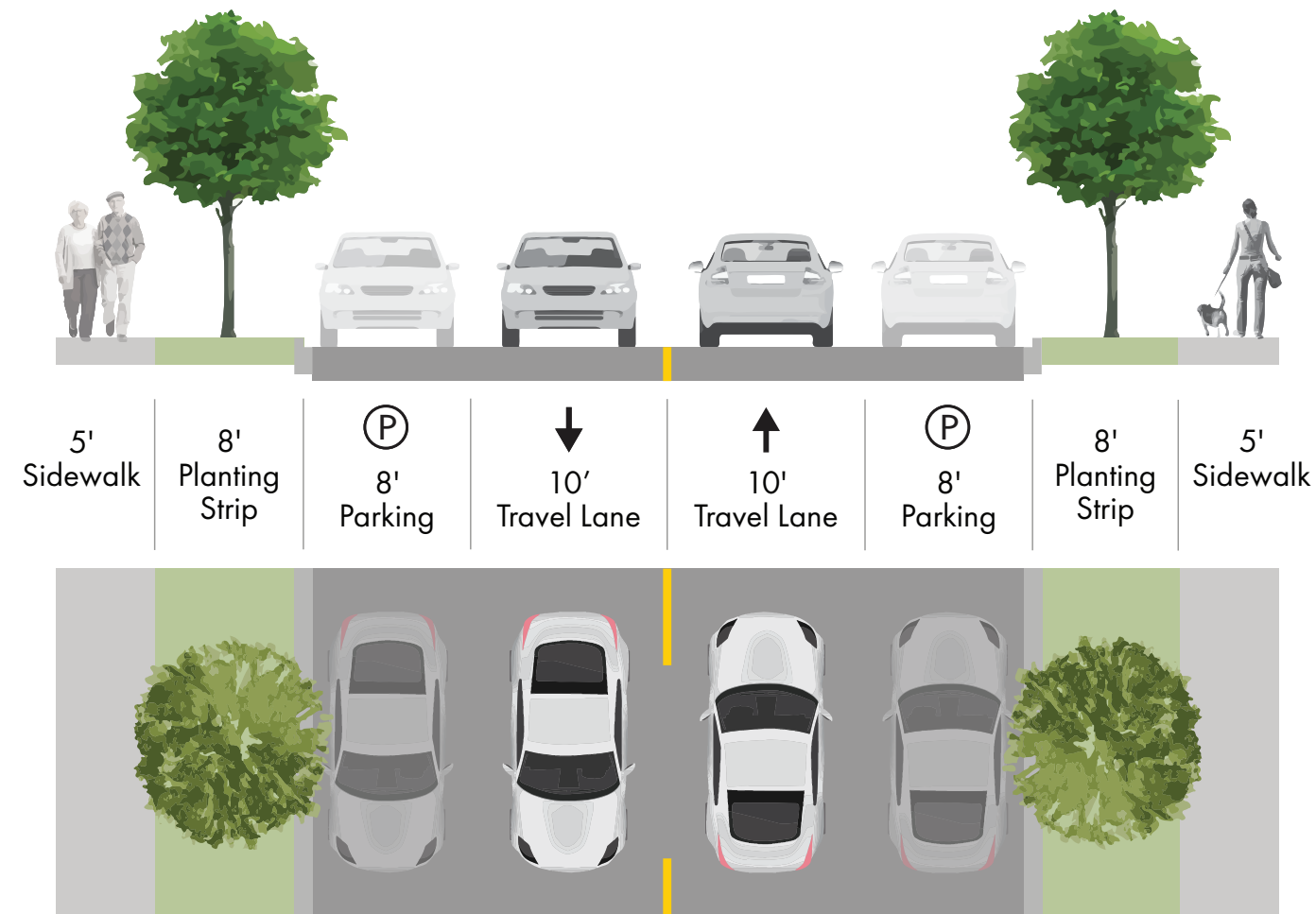


SIGN LEGEND:

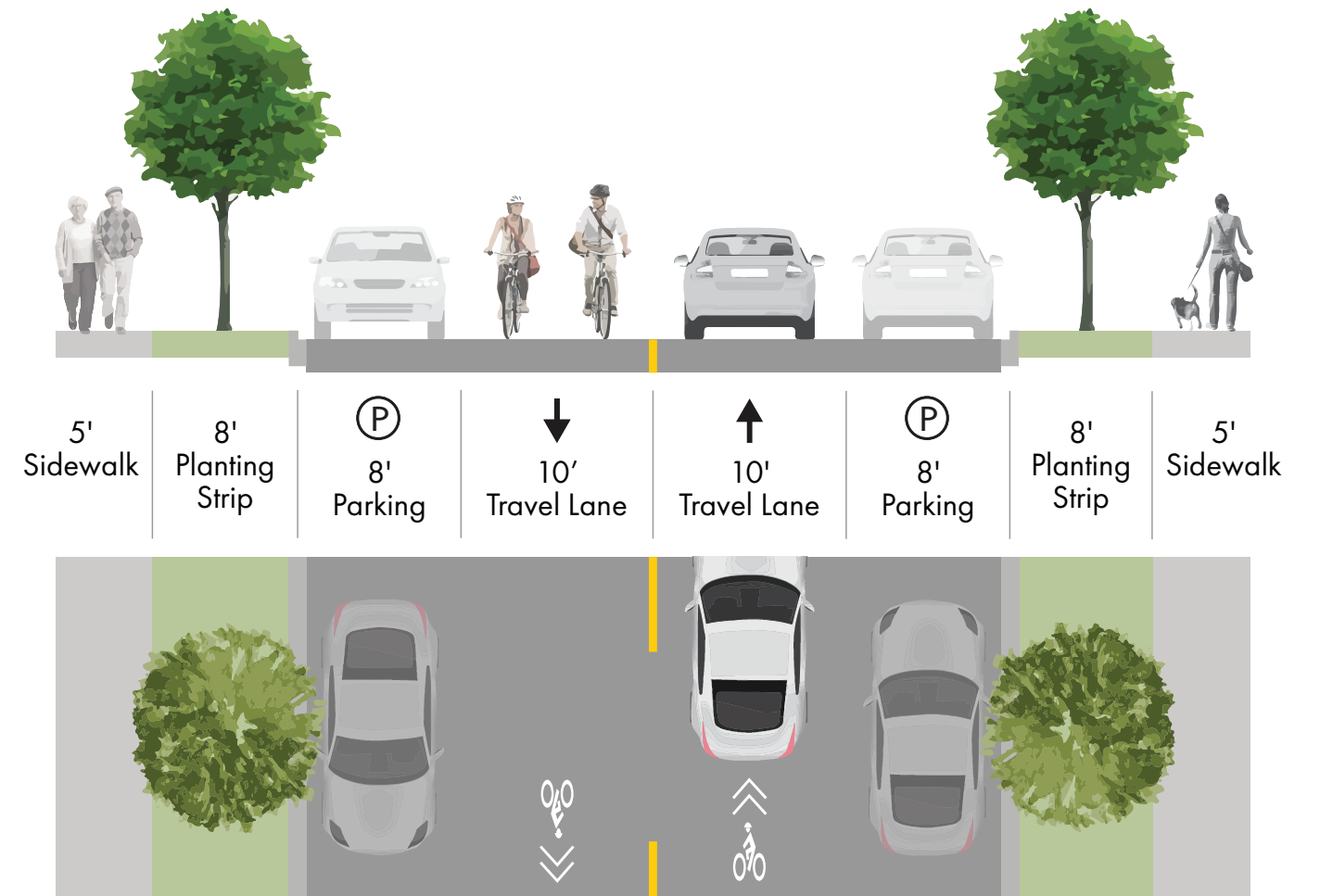


CROSS SECTION: FOURTH STREET (West of Concept Plan Location)

Existing Conditions

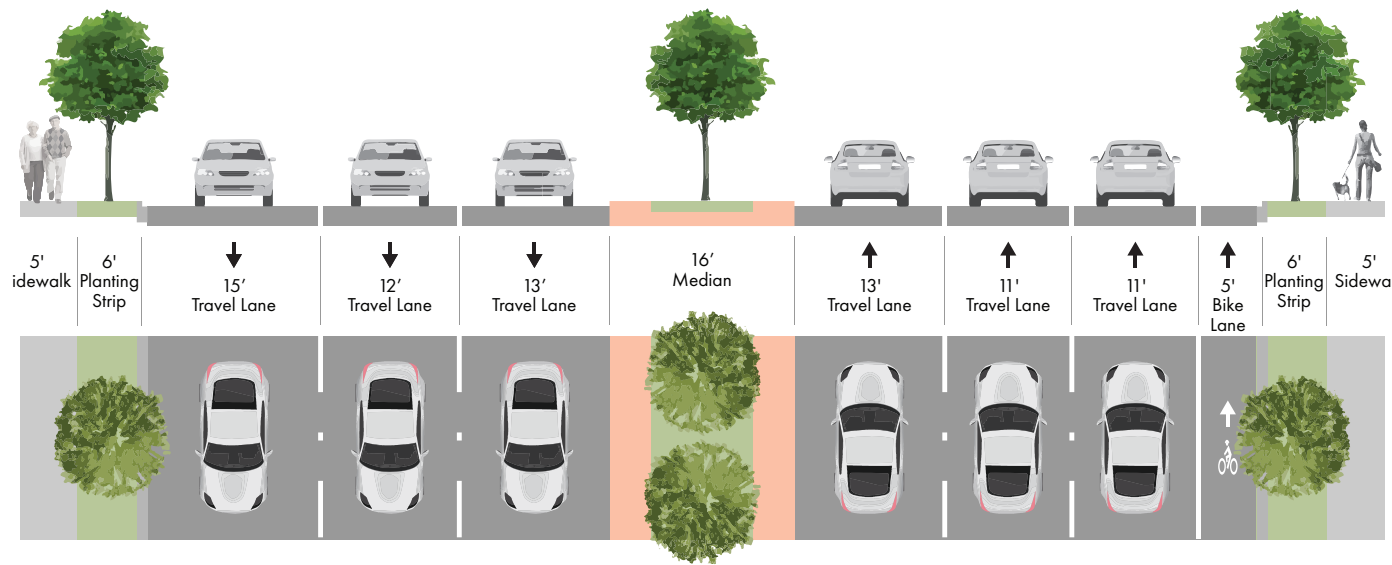


Proposed Conditions

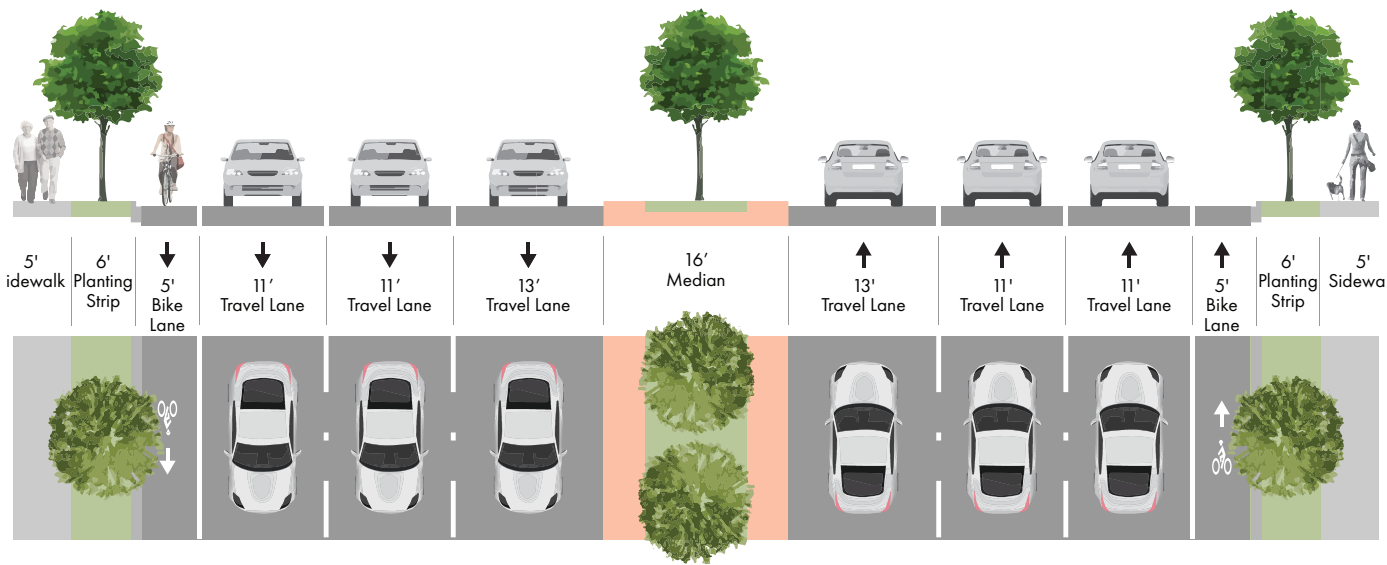


CROSS SECTION: FOURTH STREET (West of Milliken Avenue)

Existing Conditions



Proposed Conditions



CAMPUS AVENUE

The Campus Avenue Corridor runs through the majority of the City in the north-south direction. It is predominately comprised of residential land uses in the northern and southern portions, and industrial land uses in the mid-portion. The Corridor provides access through major barriers to connectivity such as the I-10, SR-60, and railroad tracks.

Corridor Length: 5.06

Extents: 1-10 to Riverside Dr

Connectivity To: Berlyn Elementary, Kindred Hospital Ontario, commercial activities at Holt Blvd, Huerta del Valle Garden, industrial warehouses (employment opportunities), Kimball Park, neighborhood park on Riverside Dr, Woodcrest Junior High School, Liberty Elementary School, Maclin Open Air Market

Primary Land Use:

Residential, Industrial

Functional Classification:

Collector, Minor Arterial

Existing Bikeways?: None

Truck Route?: No

Planned Effort (s):

Transformative Climate Communities (TCC) project between 6th St and D St

Bikeway Facilities Cost:

\$316,900

RECOMMENDATION & DISCUSSION

Campus Avenue has various land uses and varying roadway widths. On the northern segment from 8th St to Holt Boulevard, a Class III Bike Boulevard is recommended for the predominately residential area.

Planning-level costs for Class III Bike Boulevards included sharrow markings and bike route signage. The costs assumed there would be no modifications to the roadway lane geometry to accommodate the bikeway facility.

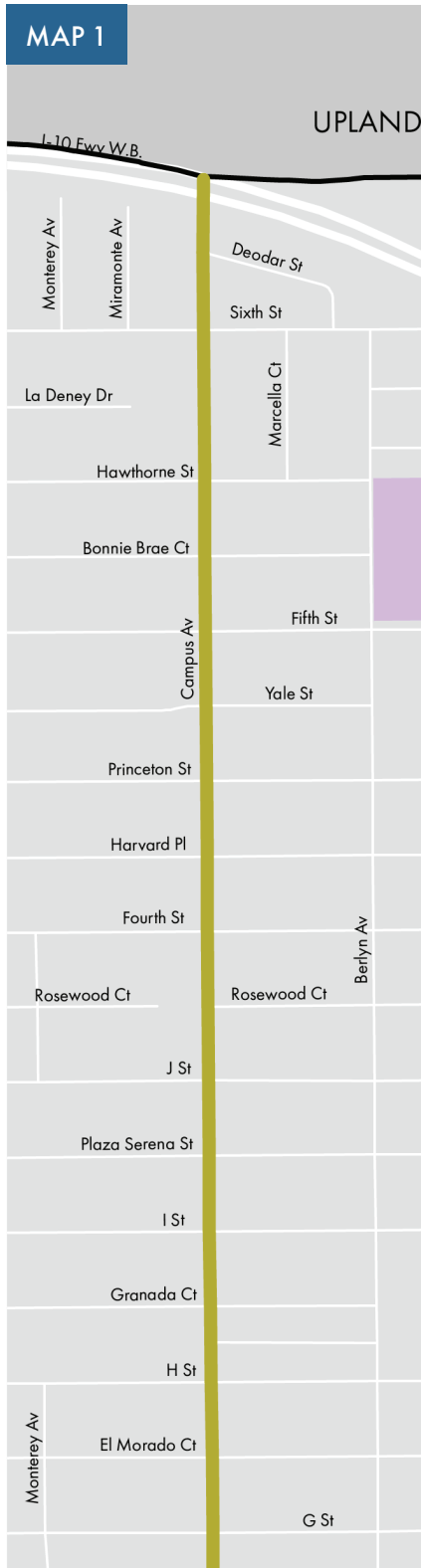
Further analysis of this corridor should be completed to determine if a traffic calming measure like a traffic circle, curb extension, or chicane could be considered for the various segments.

For the southern segment on Campus Avenue from Holt Boulevard to Riverside Drive, Class II Bike Lanes are recommended. While developing the cost for the southern segment, it was assumed there would be some lane reconfiguration with potential reductions of on-street parking to accommodate the bikeway facility. The City should consider Class II Buffered Bike Lanes for future improvements and traffic signal improvements for bicyclists at the intersections where there are proposed bike facilities for both approaches (i.e. Campus Avenue at Mission Boulevard).

The City should conduct drainage evaluations and speed surveys to determine the most context-appropriate treatment. Additional studies that should be undertaken include pavement conditions, vehicular traffic studies, and traffic warrants. Verification of all existing underground/overhead utilities should be completed during the design phase.

Note: Please refer to Chapter 4.6 Design Guidelines and Appendix O: Design Guidelines Factsheets for more information regarding implementation.

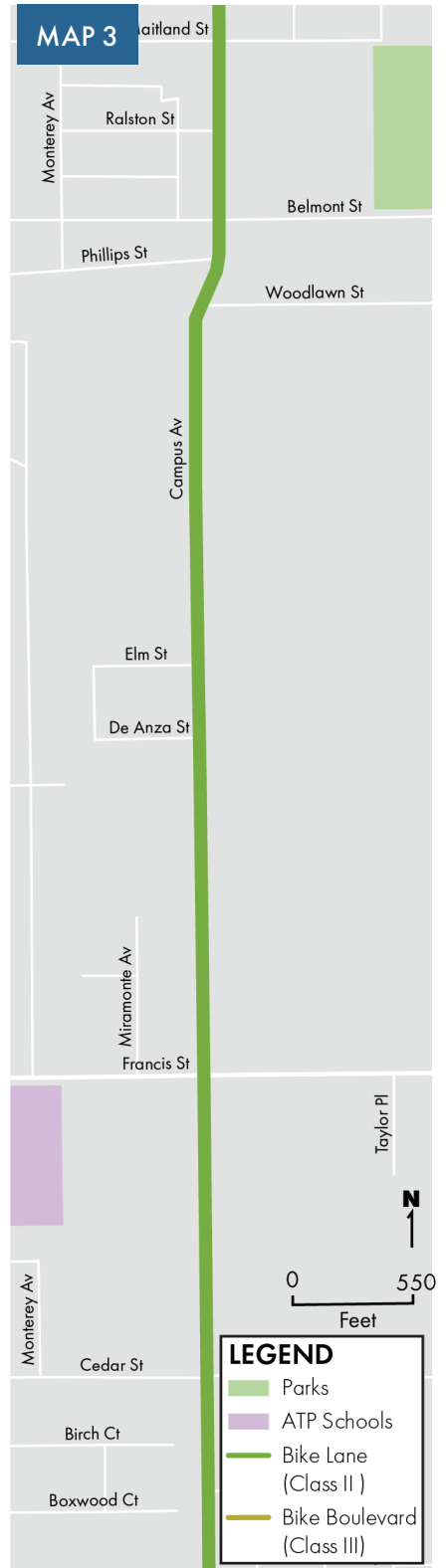
CORRIDOR EXTENTS



Continue in Map 2



Continue in Map 3

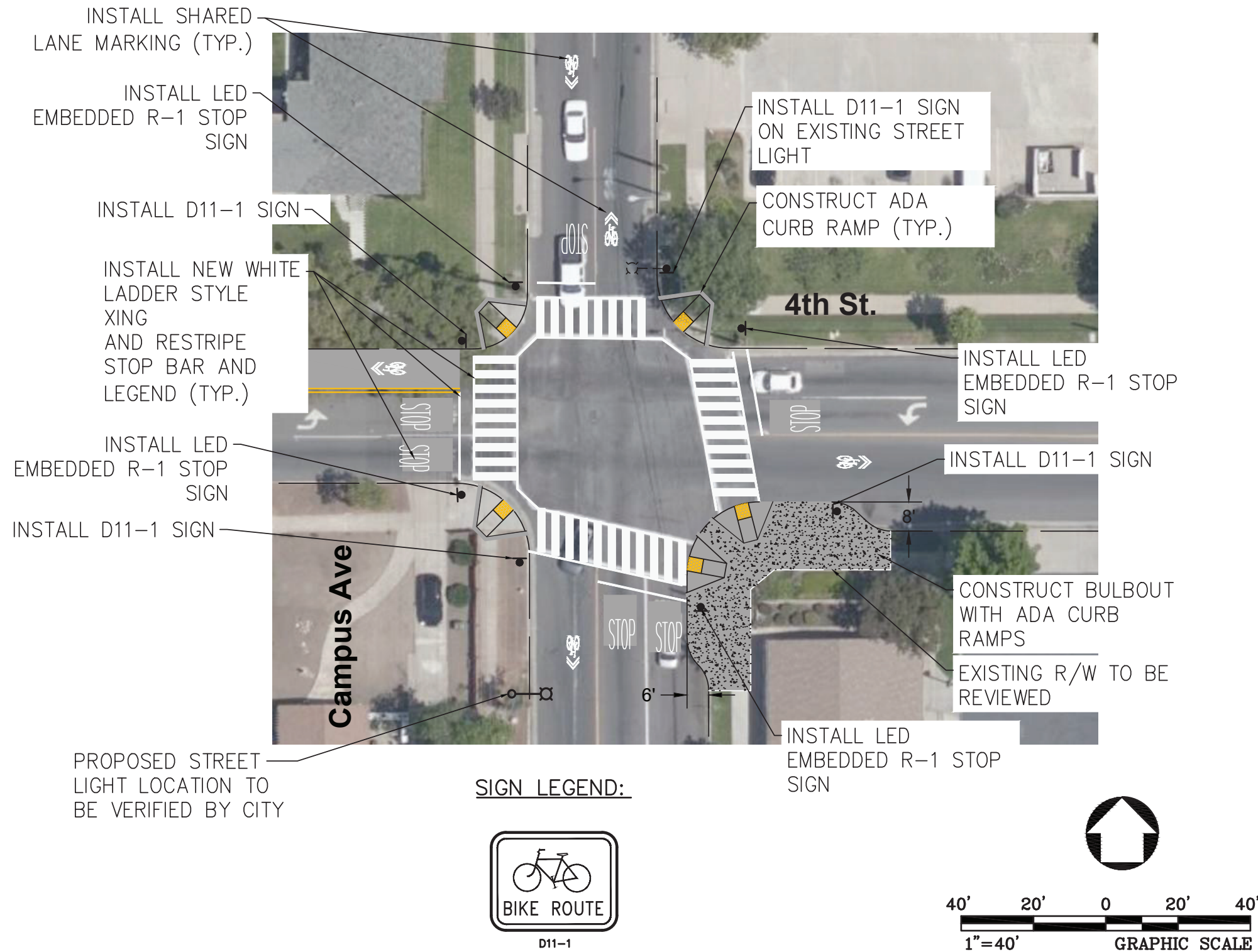


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CORRIDOR EXTENTS (CONT.)

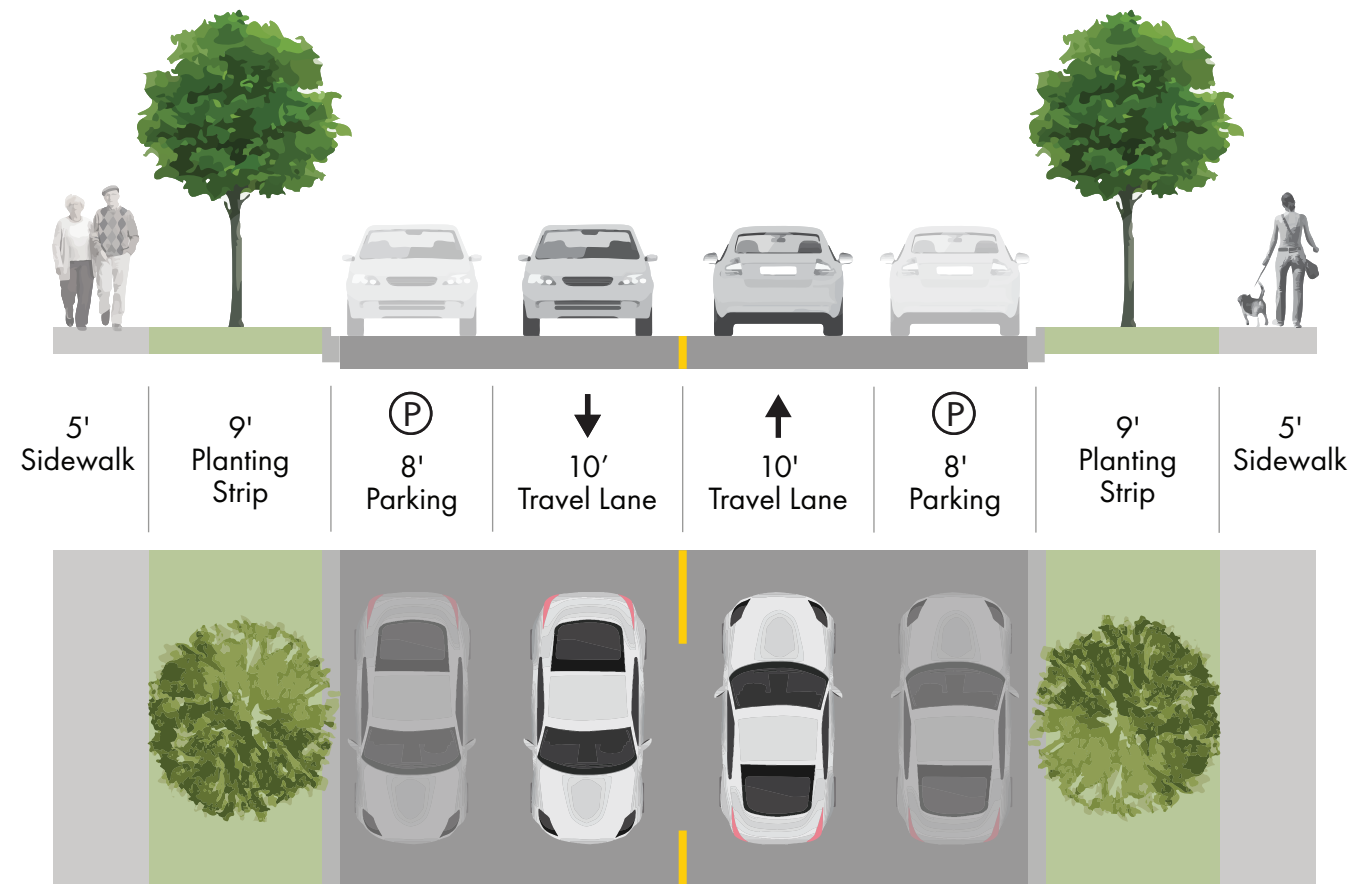


CONCEPT PLAN: CAMPUS AVENUE AND FOURTH STREET

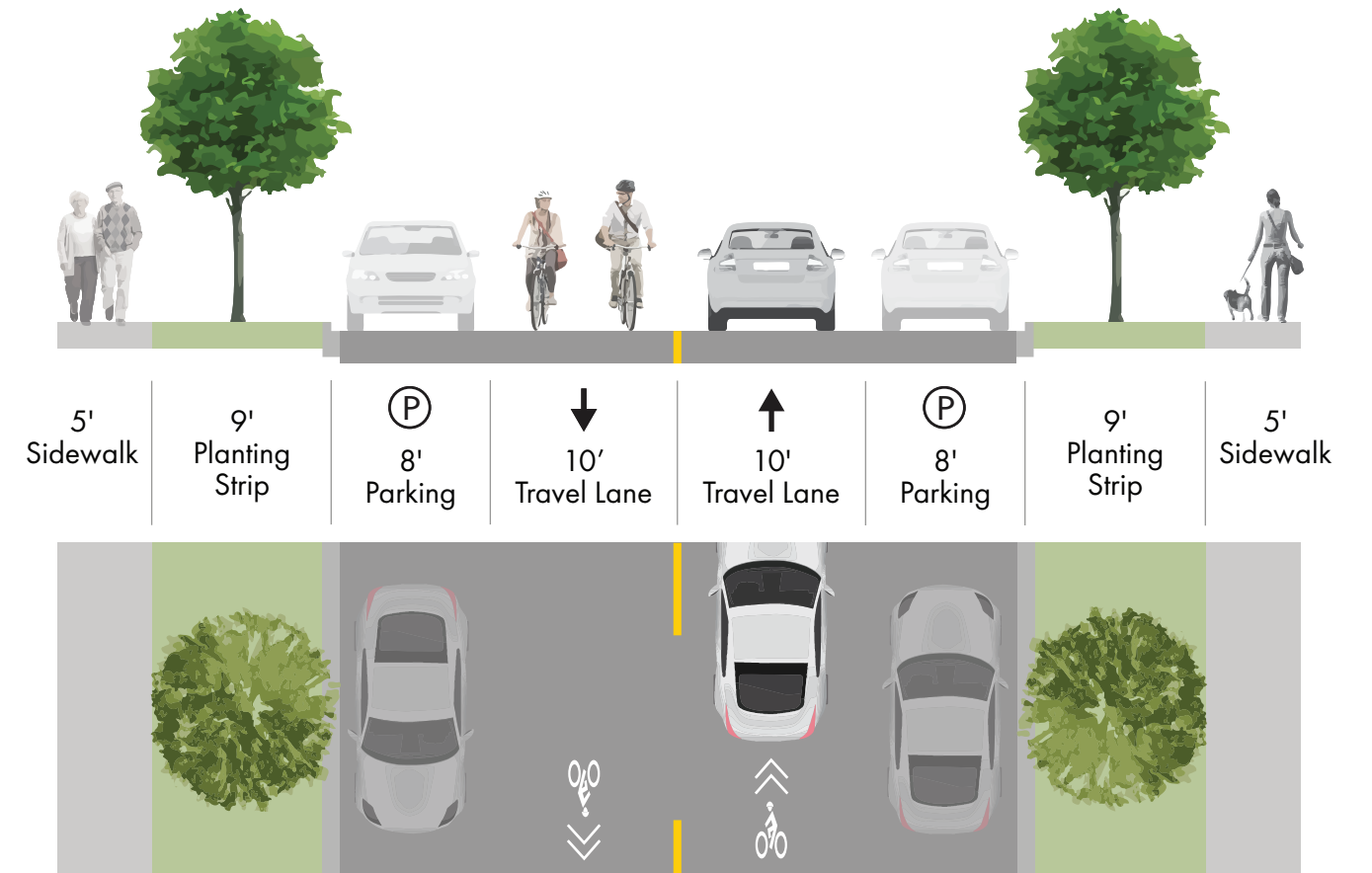


CROSS SECTION 1: CAMPUS AVENUE (South of Concept Plan Location)

Existing Conditions

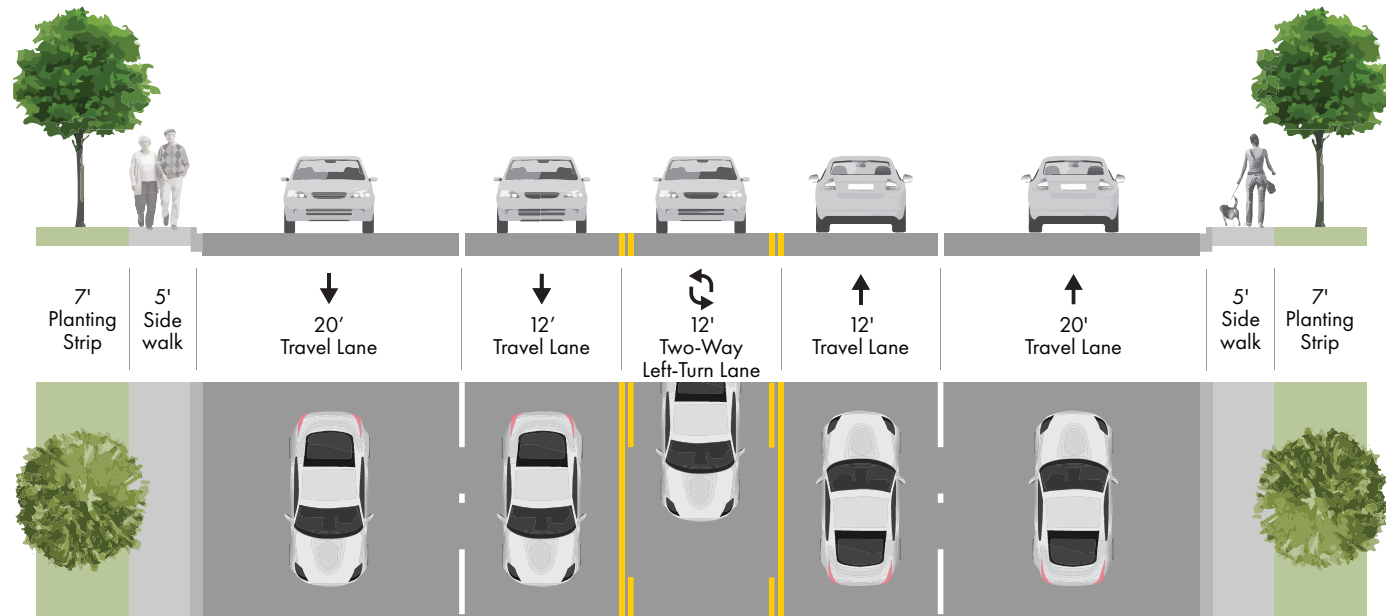


Proposed Conditions

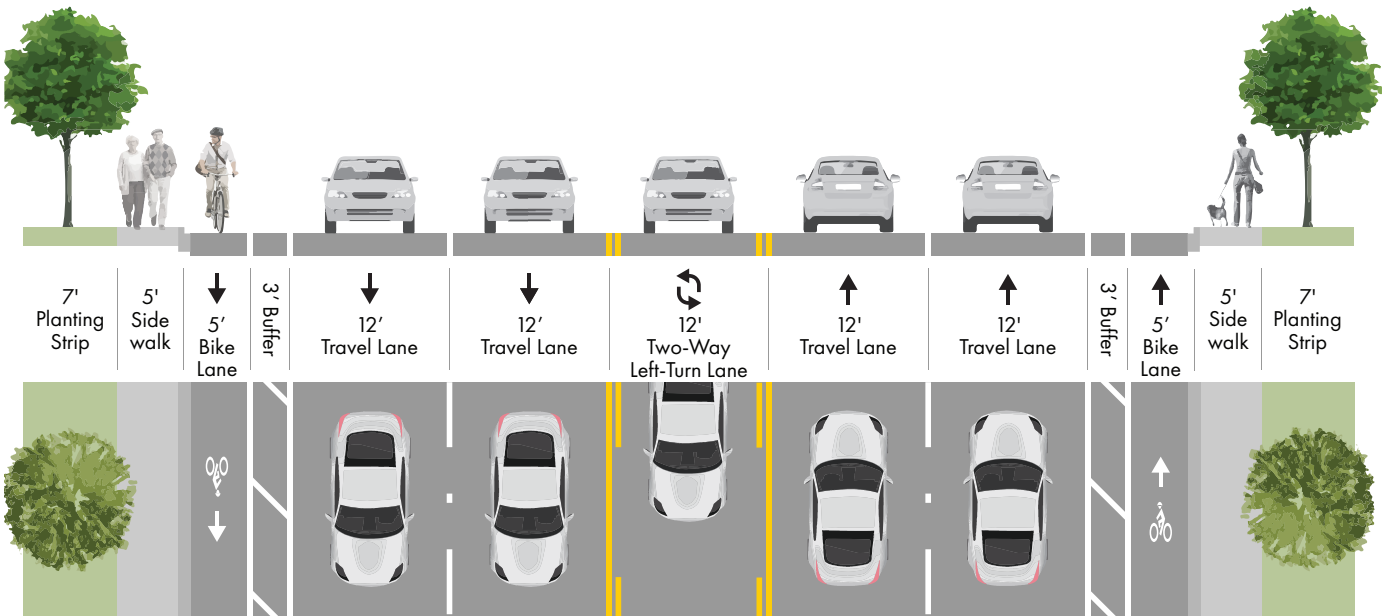


CROSS SECTION 2: CAMPUS AVENUE (North of Francis Street)

Existing Conditions



Proposed Conditions



ARCHIBALD AVENUE

The Archibald Avenue Corridor traverses through the City in the north-south direction. It begins near the northern terminus at Jurupa Street and ends at the southern terminus at Remington Avenue. The northern portion of the corridor is comprised of industrial land uses while the southern portion is defined by Ontario Ranch.

Corridor Length: 4.92

Extents: Jurupa St to Remington Ave

Connectivity To: Industrial warehouses (employment opportunities), commercial areas, Celebration Park

Primary Land Use: Residential, Industrial

Functional Classification: Other Principal Arterial

Existing Bikeways?: None

Truck Route?: Yes

Planned Effort (s): Non-Motorized Transportation Plan

Bikeway Facilities Cost: \$6,523,400 (excludes the cost for Archibald Ave between Jurupa St and SR-60 which is identified for additional studies)

RECOMMENDATION & DISCUSSION

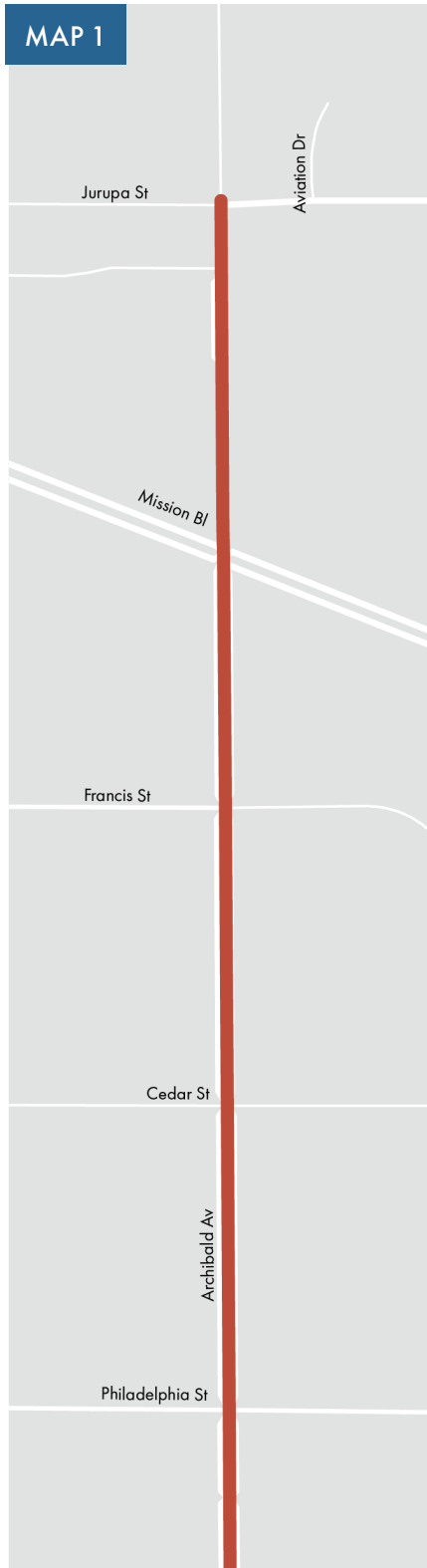
Archibald Avenue is a principal north-south arterial with roadway lane geometry that varies from 4 to 6 lanes, with a combination of raised medians and two-way left-turn lane center dividers. The northern segment of the corridor between Jurupa Street and State Route 60 is identified for additional studies. This means further studies are needed to determine the most appropriate bikeway facilities.

The southern portion of Archibald Avenue between State Route 60 and Riverside Drive is recommended for Class II Bike Lanes and a Class I Shared-Use Path on the west side. The planning-level cost estimates for the Class I Shared-Use Path includes the construction of a paved, two-way bicycle/pedestrian path adjacent to a sidewalk. This segment is undergoing many developments; if desired, the City may consider a one-way shared-use path with landscaped buffers on both sides of the roadway.

The City should conduct drainage evaluations and speed surveys to determine the most context-appropriate treatment. Additional studies that should be undertaken include pavement conditions, vehicular traffic studies, and traffic warrants. Verification of all existing underground/overhead utilities should be completed during the design phase.

Note: Please refer to Chapter 4.6 Design Guidelines and Appendix O: Design Guidelines Factsheets for more information regarding implementation.

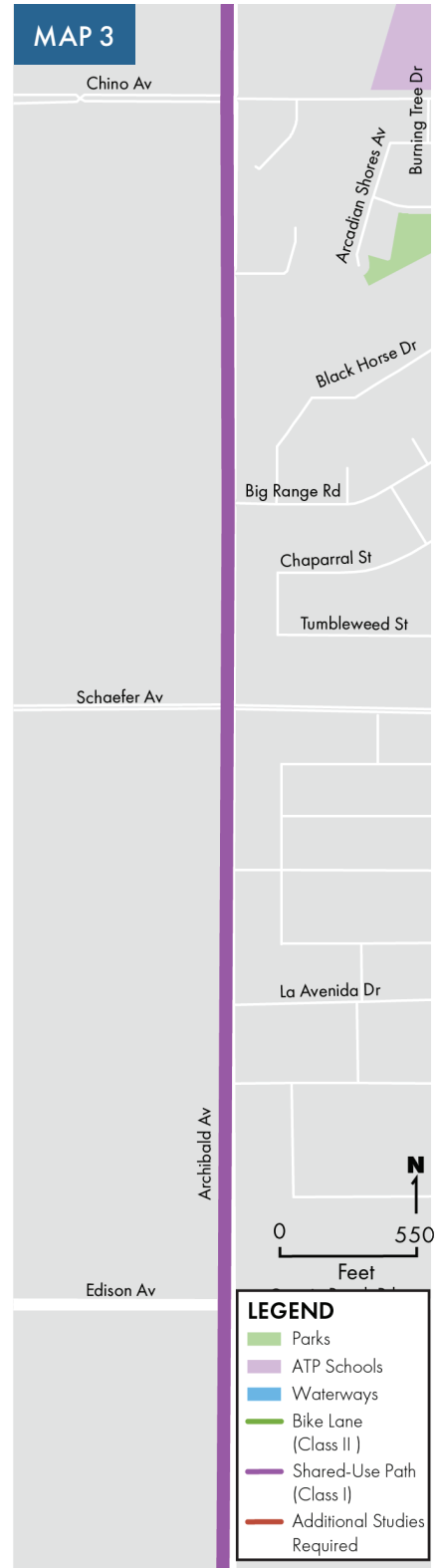
CORRIDOR EXTENTS



Continue in Map 2



Continue in Map 3



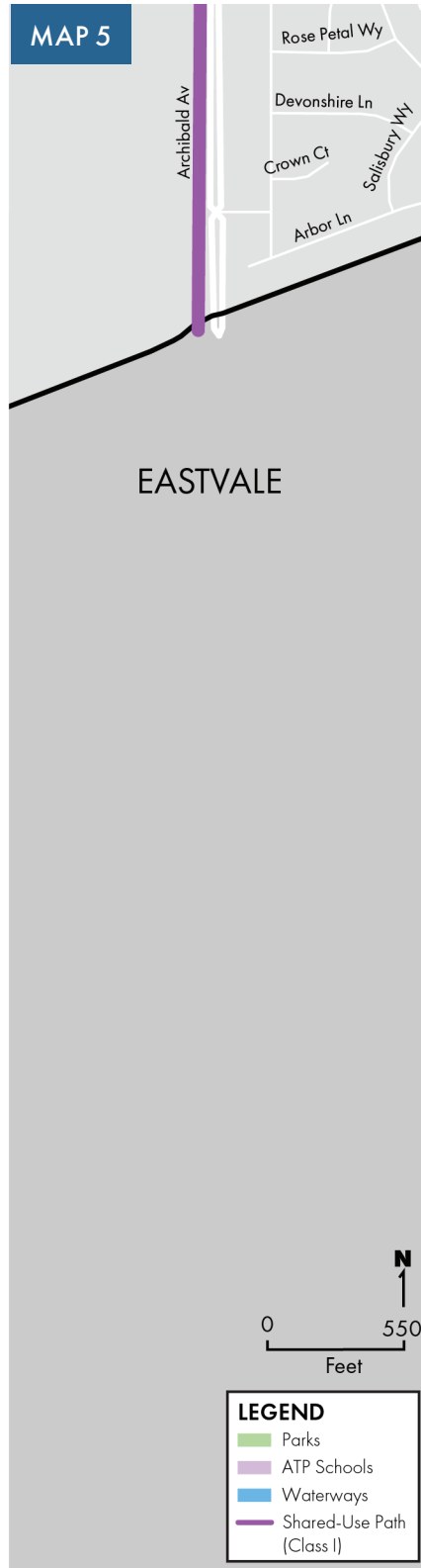
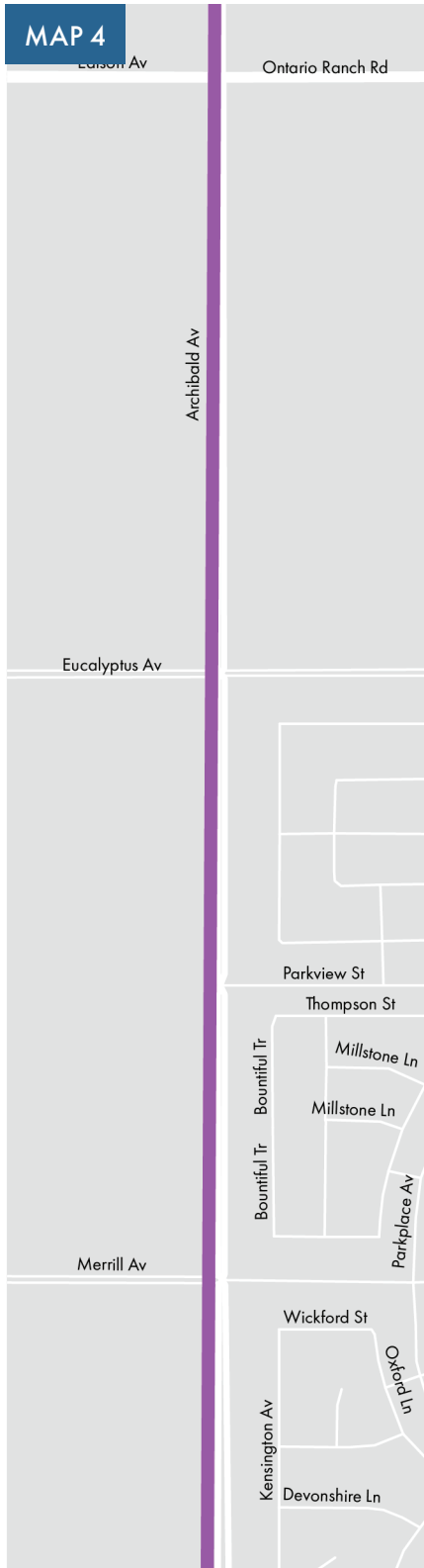
Continue in Map 4

0 550 Feet

LEGEND

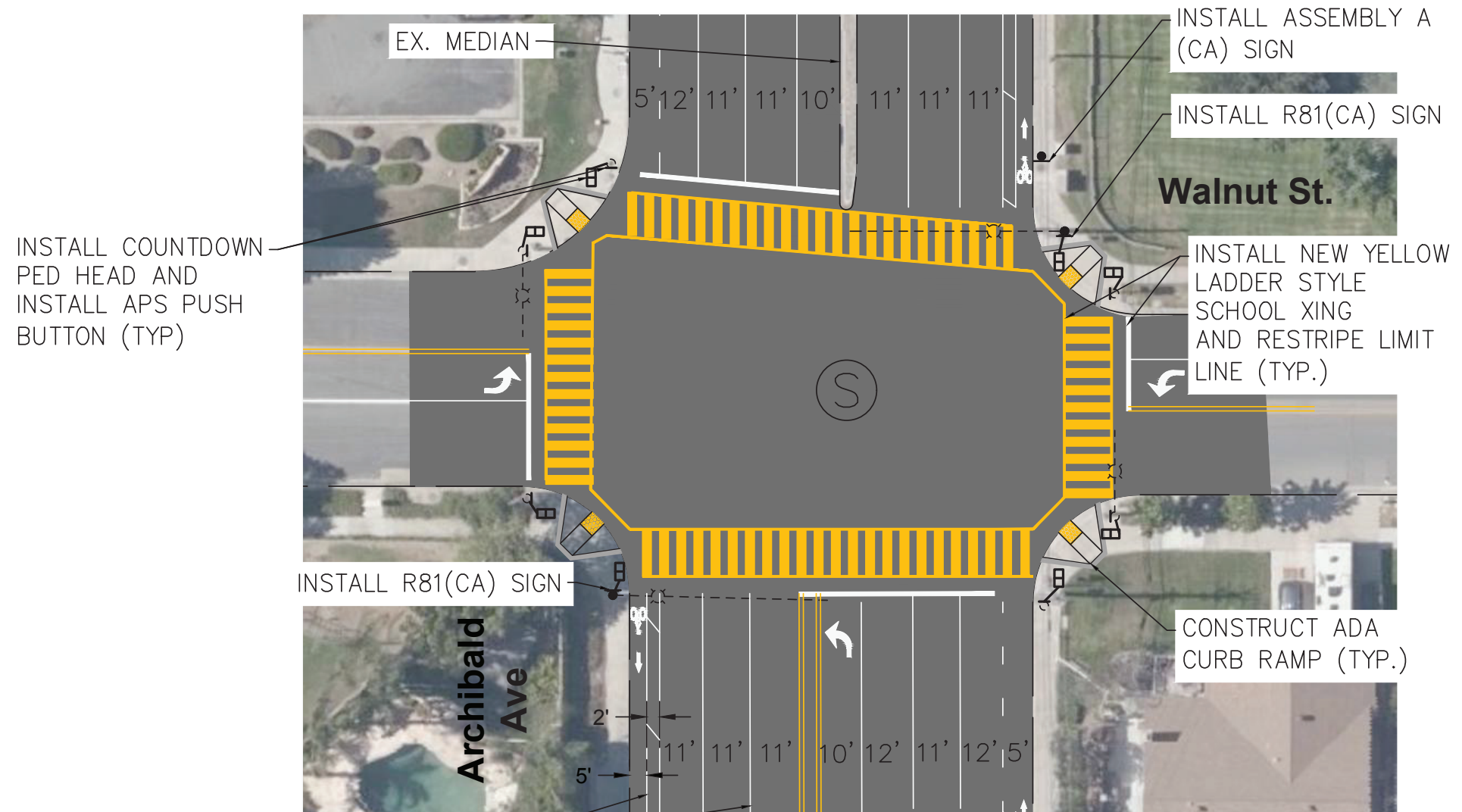
- Parks
- ATP Schools
- Waterways
- Bike Lane (Class II)
- Shared-Use Path (Class I)
- Additional Studies Required

CORRIDOR EXTENTS (CONT.)



Continue in Map 5

CONCEPT PLAN: ARCHIBALD AVENUE AND WALNUT STREET



RESTRIPE LANE LINES AND INSTALL CLASS II WITH BUFFER (TYP.)

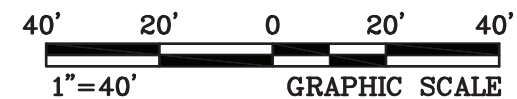
SIGN LEGEND:



ASSEMBLY A(CA)

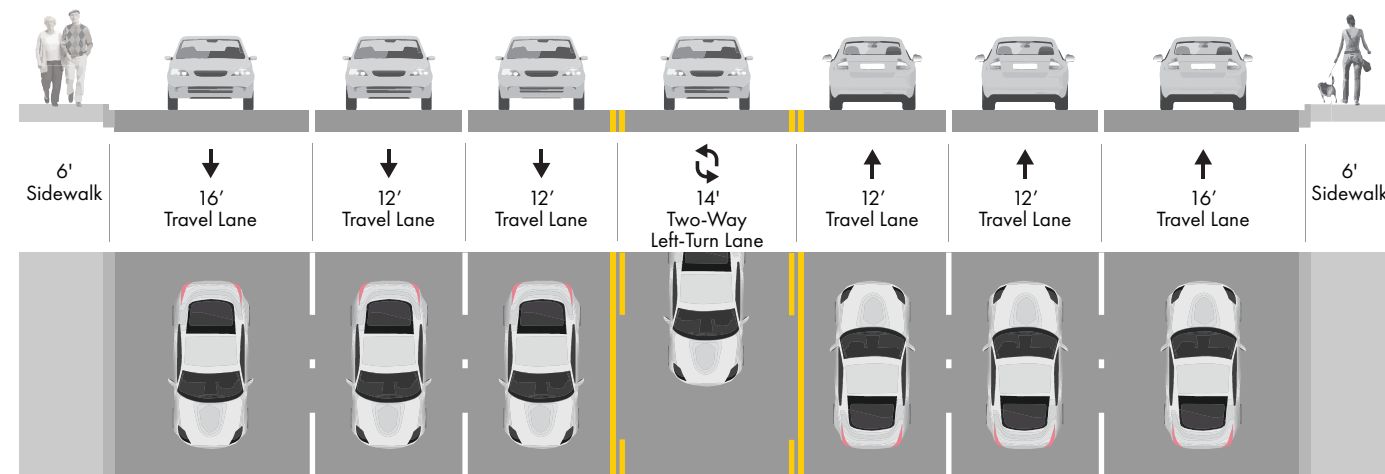


R81(CA)

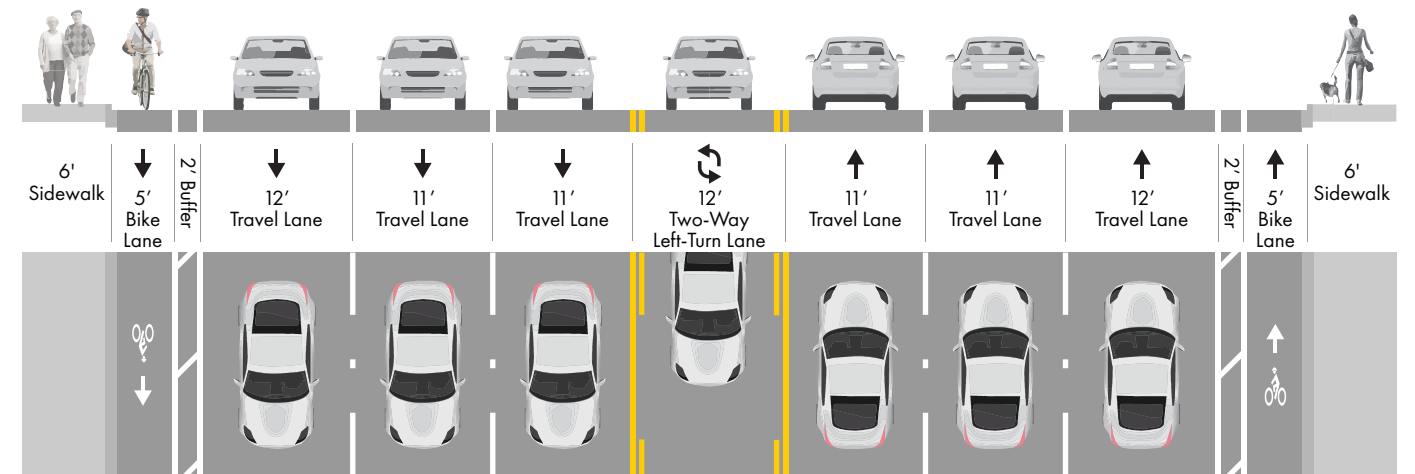


CROSS SECTION: ARCHIBALD AVENUE (South of Concept Plan Location)

Existing Conditions



Proposed Conditions



WALNUT STREET

The Walnut Street Corridor runs through residential neighborhoods south of the SR-60 in the east-west direction. It is predominately comprised of residential land uses, and it provides connectivity to many local parks and schools.

Corridor Length: 2.5

Extents: Fern Ave to Vineyard Ave

Connectivity To: Commercial area, Kimball Park, Woodcrest Junior High School, Liberty Elementary School, Levi H. Dickey Elementary School

Primary Land Use: Residential

Functional Classification: Collector

Existing Bikeways?: None

Truck Route?: No

Planned Effort (s): None

Bikeway Facilities Cost: \$218,500

RECOMMENDATION & DISCUSSION

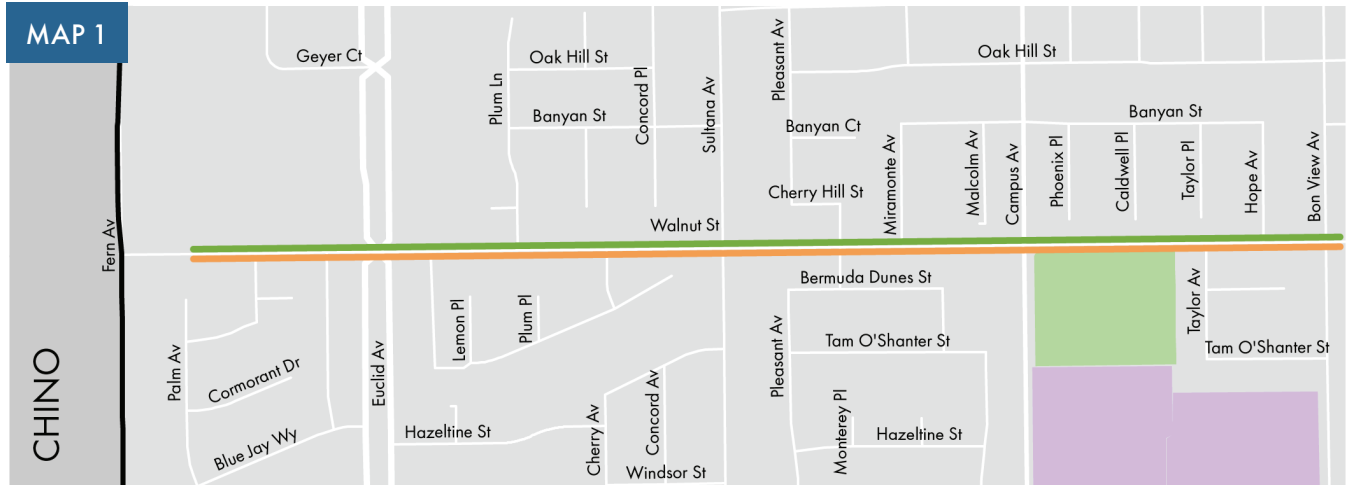
Walnut Street is a four - lane roadway with a two –way left turn and on-street parking for the majority of the corridor segments. Class II Bike Lanes are recommended, and for segments where there is insufficient width for the bike facilities, Class III Bike Routes are recommended.

The planning-level cost estimates for the corridor were based on implementation for the Class II Bike Lanes to arrive at a more conservative estimate. The cost estimates assumed there would be some lane reconfiguration with potential reductions of on-street parking to accommodate the bikeway facilities.

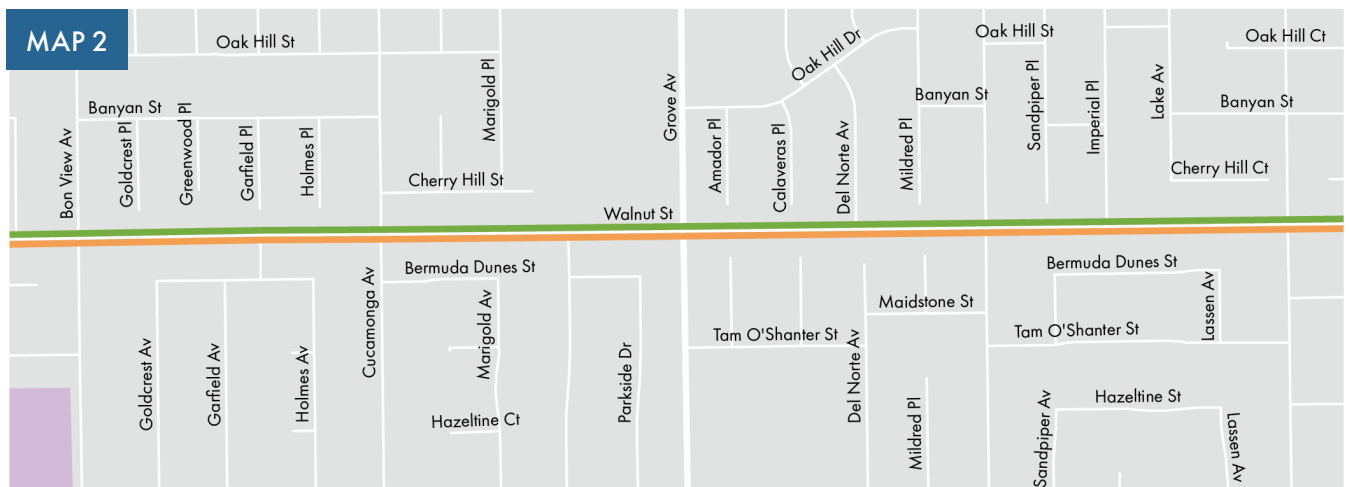
The City should conduct drainage evaluations and speed surveys to determine the most context-appropriate treatment. Additional studies that should be undertaken include pavement conditions, vehicular traffic studies, and traffic warrants. Verification of all existing underground/overhead utilities should be completed during the design phase.

Note: Please refer to Chapter 4.6 Design Guidelines and Appendix O: Design Guidelines Factsheets for more information regarding implementation.

CORRIDOR EXTENTS



Continue in Map 2

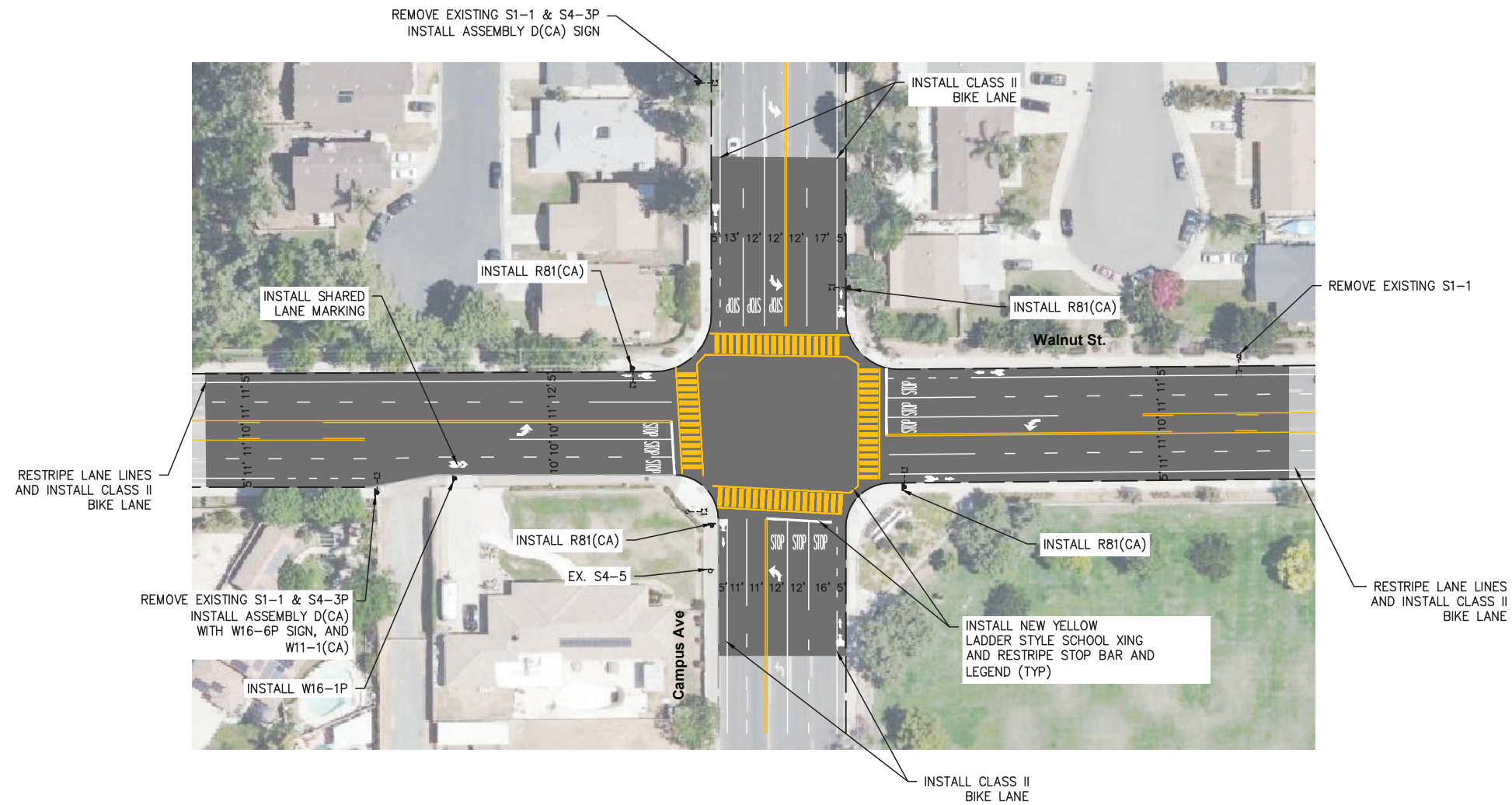


Continue in Map 3



Continue in Map 4

CONCEPT PLAN: CAMPUS AVENUE AND WALNUT STREET



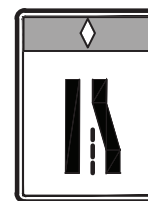
SIGN LEGEND:



R81(CA)



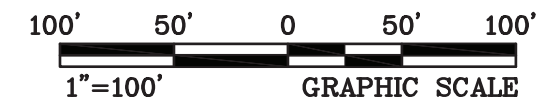
ASSEMBLY D(CA)
W16-6P



W11-1(CA)

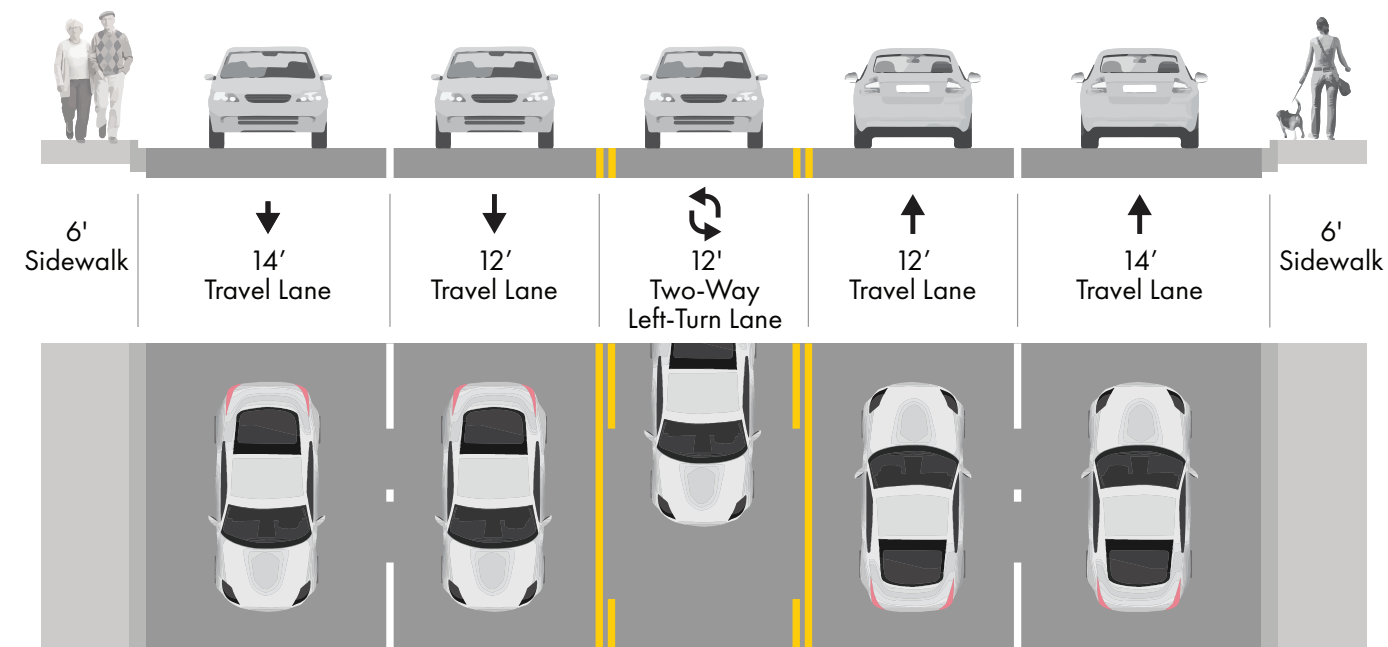


W16-1P

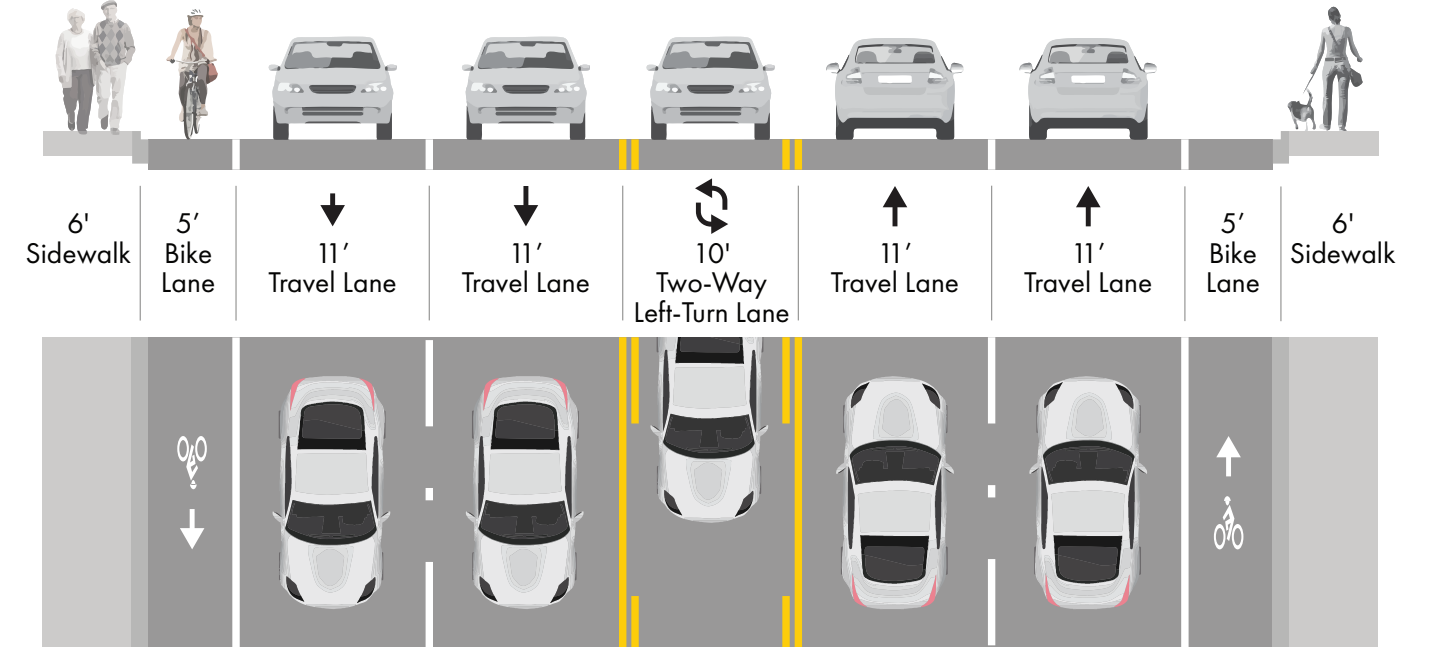


CROSS SECTION: WALNUT STREET (East of Concept Plan Location)

Existing Conditions



Proposed Conditions



MISSION BOULEVARD

The Mission Boulevard Corridor traverses through the entirety of the City in the east-west direction. The corridor is predominately comprised of industrial and commercial land uses. The roadway has a functional classification of Other Principal Arterial. The roadway geometry is primarily characterized by wide travel lanes, a large center median, and gaps in the sidewalk infrastructure. The Corridor provides access to many local and regional destinations such as Bon View Community Center, Oaks Middle School, and East Ontario Metrolink Station.

Corridor Length: 7.33

Extents: Benson Ave to Milliken Ave

Connectivity To: Mission Elementary, Oaks Middle School, Cypress Park, Sam Alba Memorial Park, Bon View Park and Community Center, industrial areas east of Grove Ave, East Ontario Metrolink Station

Primary Land Use: Industrial

Functional Classification: Other Principal Arterial

Existing Bikeways?: None

Truck Route?: Yes

Planned Effort (s): Non-Motorized Transportation Plan

Bikeway Facilities Cost: \$486,400 (The total cost doesn't include the segment between Benson Ave to Bon View Ave that has existing PS&E plans)

RECOMMENDATION & DISCUSSION

Mission Boulevard is a four-lane roadway with center - raised and striped medians and on-street parking along various segments. The City is currently developing engineering plans for Class II Buffered Bike Lanes between Benson Avenue and Bon View Avenue, to provide continuous bicycle connectivity across the city in the east-west direction.

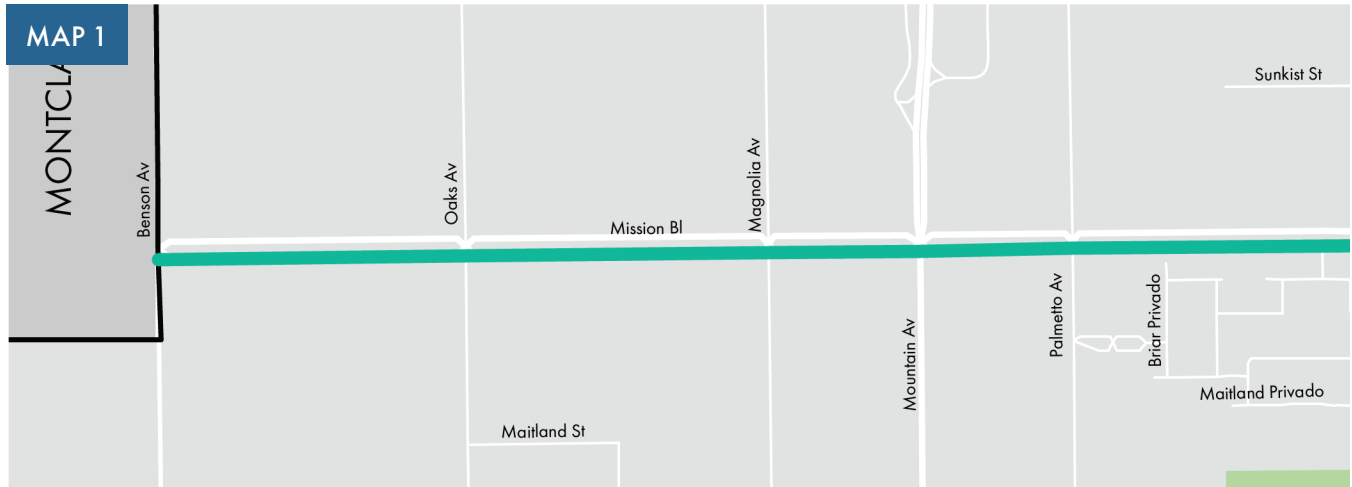
Planning-level cost estimates were developed for Class II Buffered Bikeway improvements on Mission Boulevard, including, primarily, bike lane signage and striping costs. The estimated cost ranges can vary from segment to segment, depending on the extent to which existing conditions and roadway lane geometries must be modified to accommodate the bikeway improvements.

Several roadway segments throughout the eastern portion of Mission Boulevard could be modified as part of the next phase of the City's Class II Buffered Bike Lane project. The modifications may include design components such as on-street parking reductions, bridge widening, or utility relocations. Traffic signal modifications were not included in the developed cost estimates for the Mission Boulevard corridor; however, it is recommended that the City consider the possibility of implementing traffic signal upgrades and other related intersection improvements when future improvements occur along this corridor. These improvements could include video/loop detection for bicyclists, signal timing modifications and/or bicyclist pushbuttons.

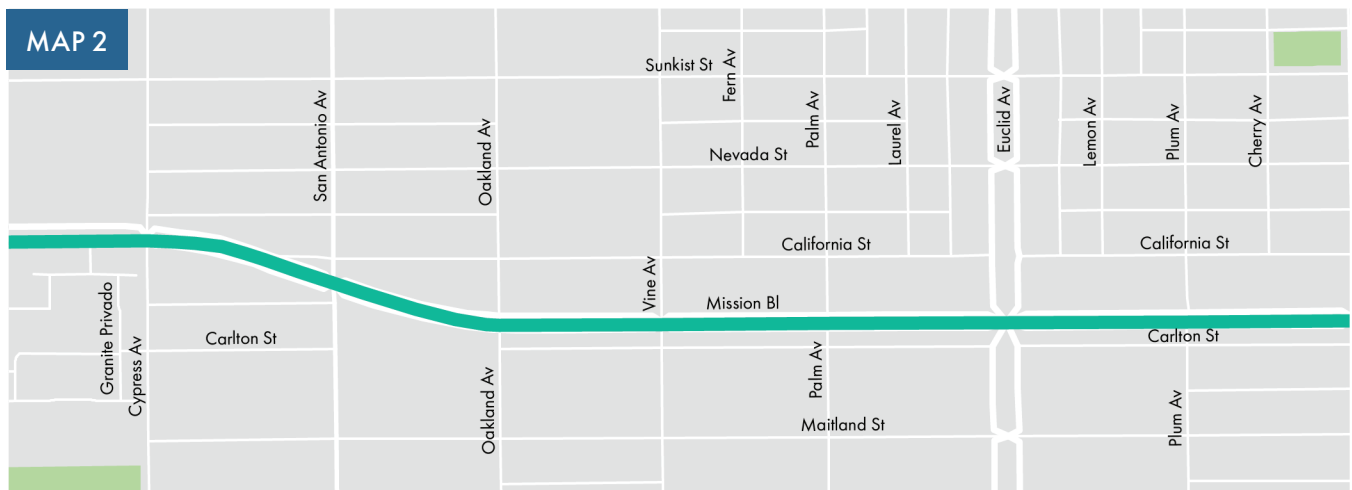
The City should also conduct drainage evaluations and speed surveys to determine the most context-appropriate treatment. Additional studies that should be undertaken include pavement conditions, vehicular traffic studies, and traffic warrants. Verification of all existing underground/overhead utilities should be completed during the design phase.

Note: Please refer to Chapter 4.6 Design Guidelines and Appendix O: Design Guidelines Factsheets for more information regarding implementation.

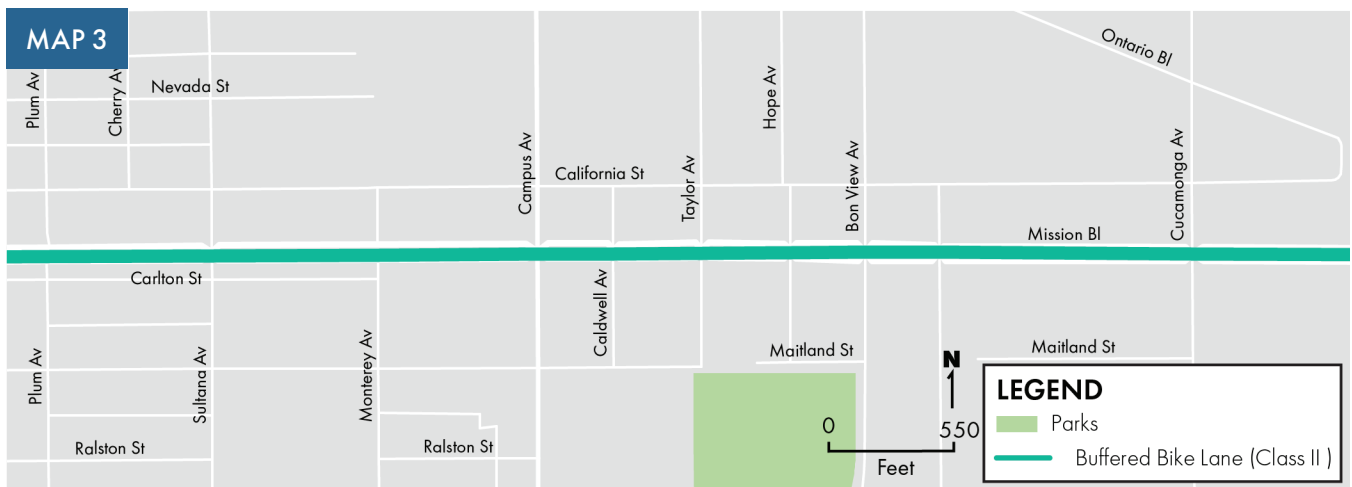
CORRIDOR EXTENTS



Continue in Map 2

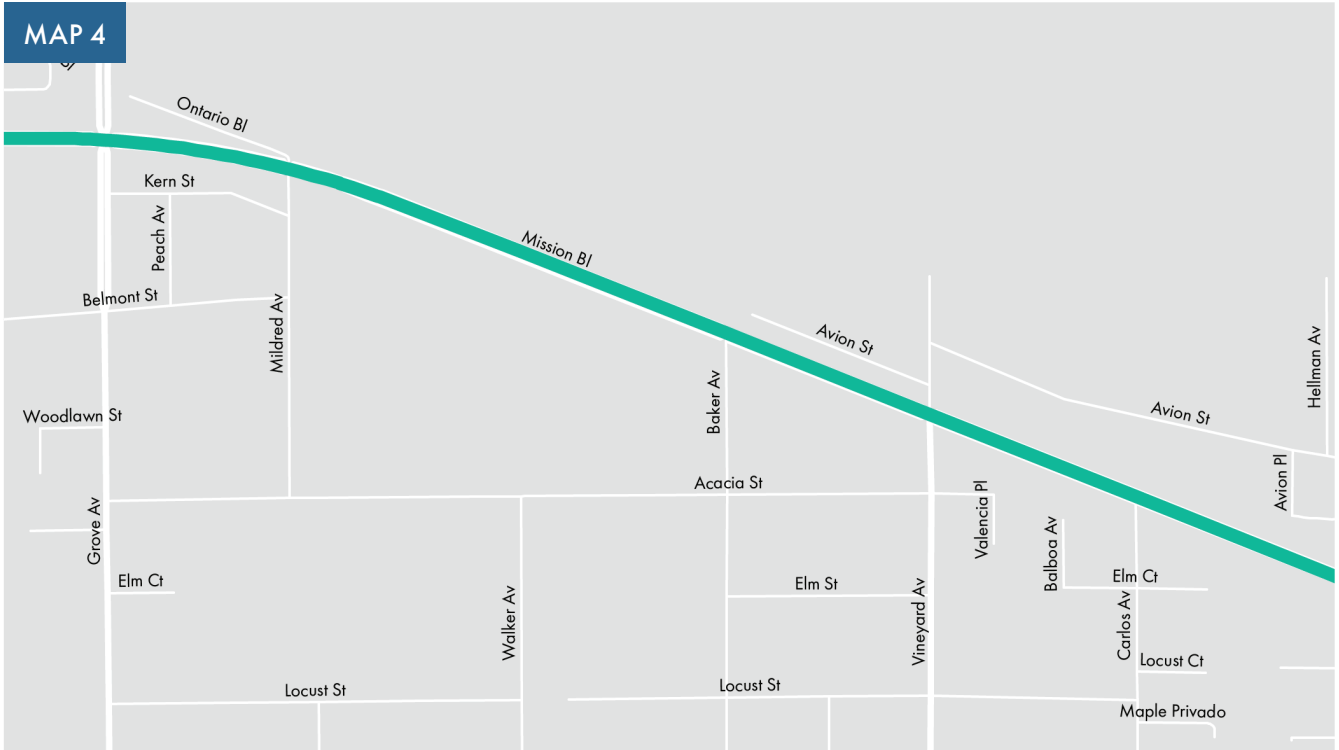


Continue in Map 3

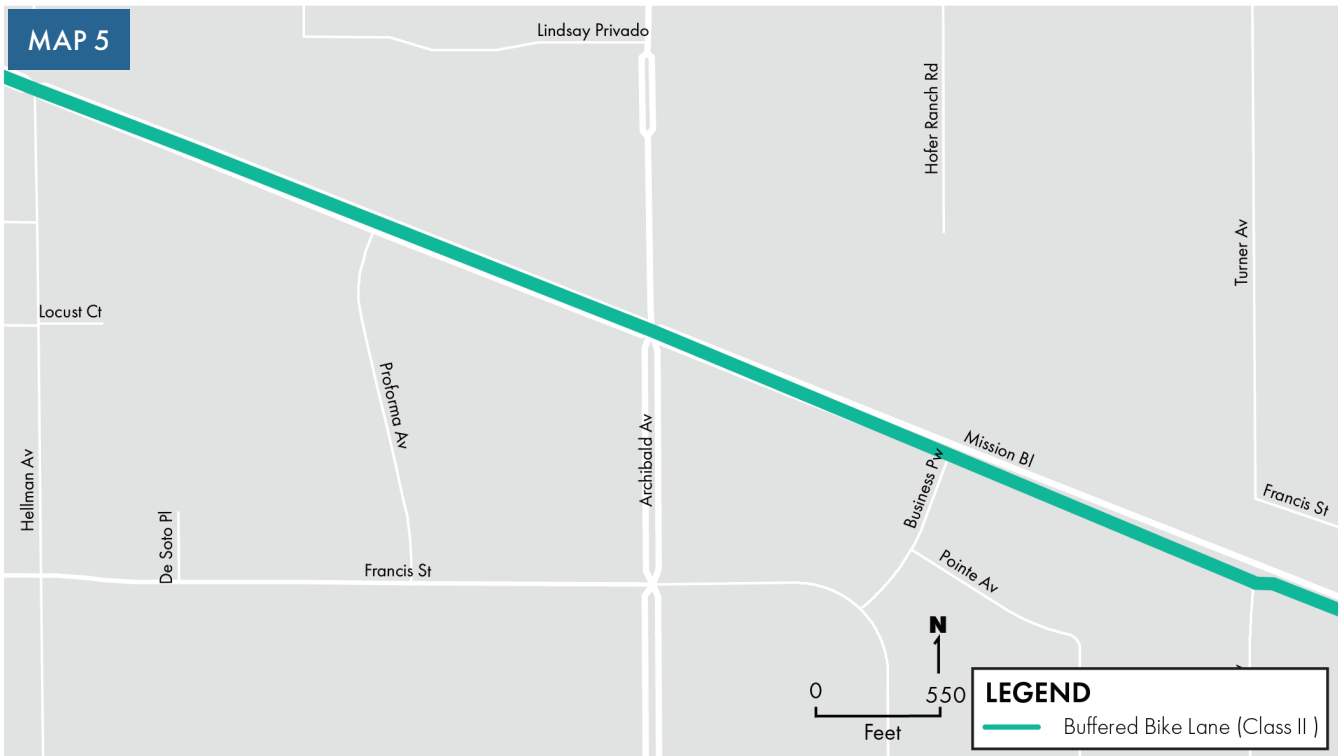


Continue in Map 4

CORRIDOR EXTENTS

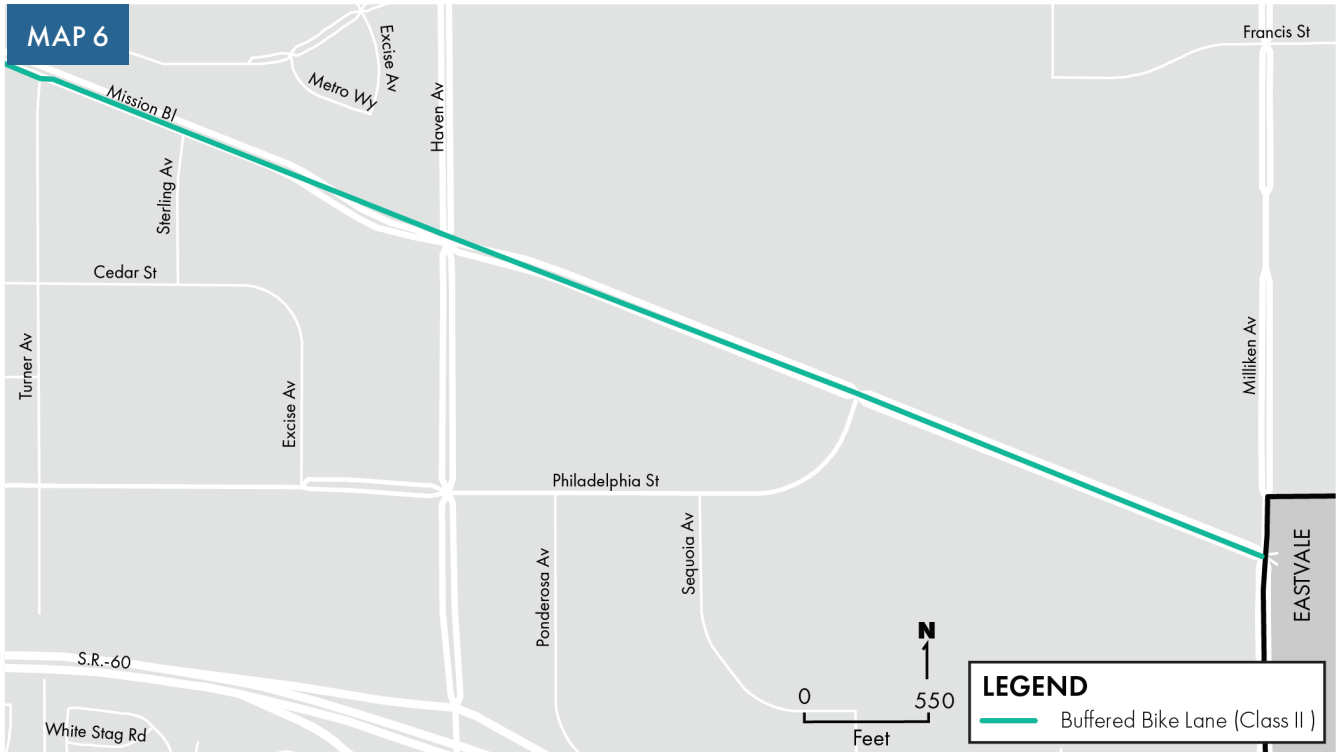


Continue in Map 5

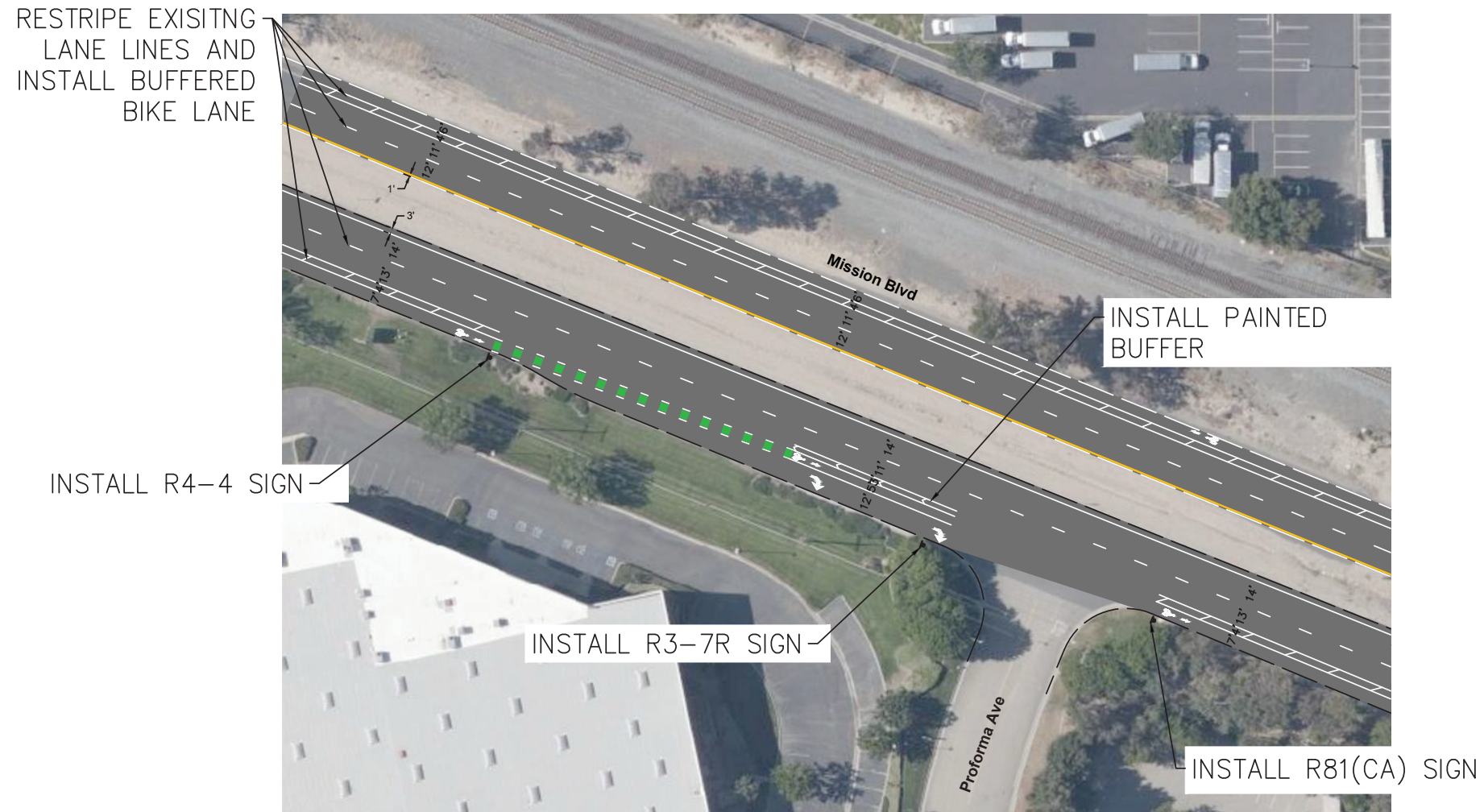


Continue in Map 6

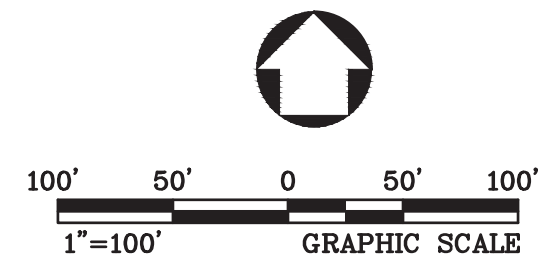
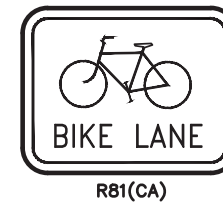
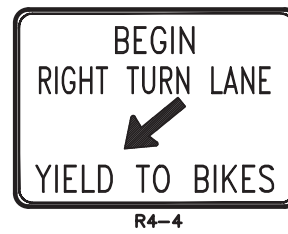
CORRIDOR EXTENTS



CONCEPT PLAN: MISSION BOULEVARD AND PROFORMA AVENUE

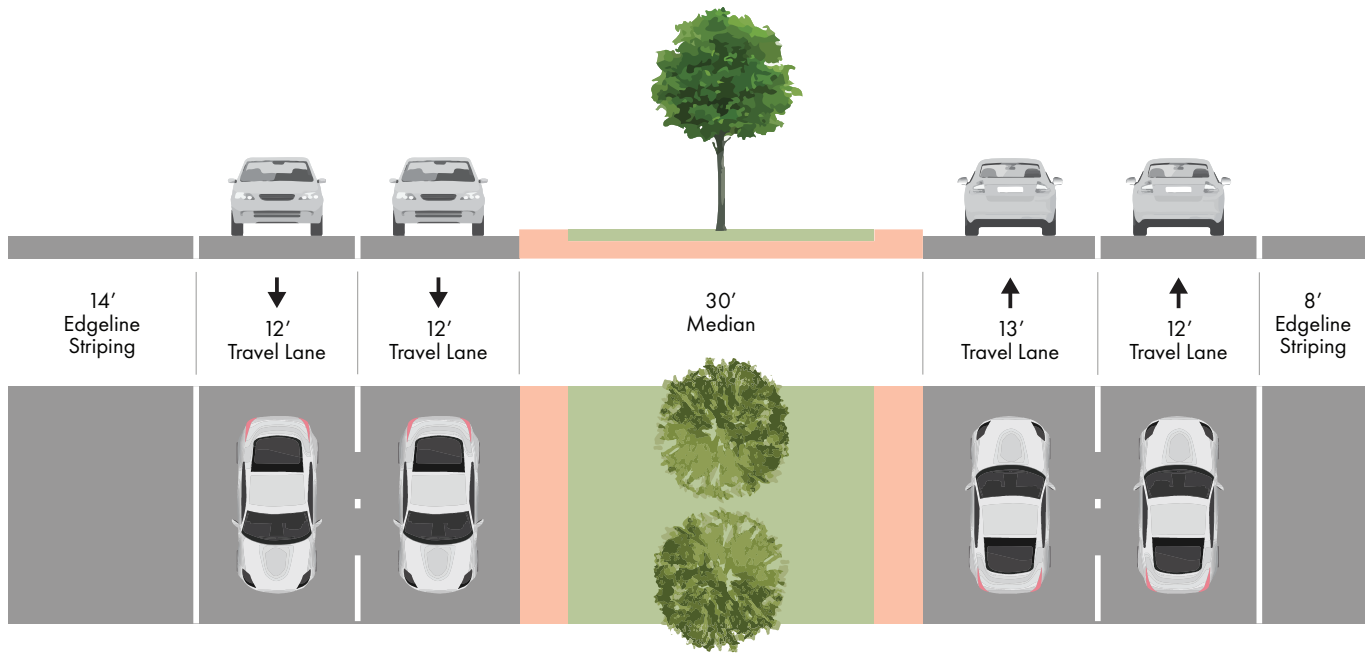


SIGN LEGEND:

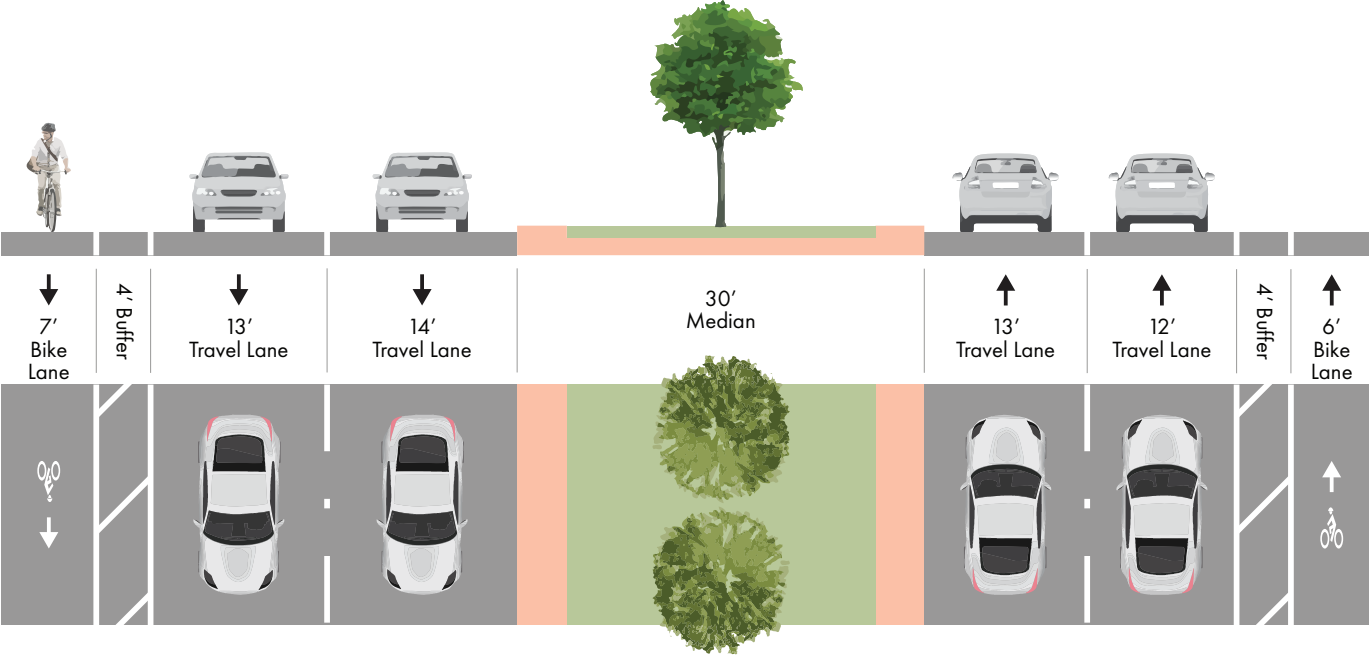


CROSS SECTION: MISSION BOULEVARD (East of Concept Plan Location)

Existing Conditions



Proposed Conditions



Appendix N

SAFE ROUTES TO

SCHOOL

FACTSHEETS



Page 1

Provides a description of the school along with a map of treatments. See notes.

Note: Enrollment data are retrieved for the 2017-2018 school year

LEVI H. DICKEY ELEMENTARY SCHOOL
2840 South Forca Ave, Ontario, CA 91761 | Chino Valley Unified School District (CVUSD) | Enrollment: 506

Levi H. Dickey Elementary School sits in the center of a residential neighborhood north of Riverside Dr. The School is bounded by Walnut St. on the north, Forca Ave. on the east, Riverside Dr. on the south, and Grove Ave. to the west.

Map Legend:

- Intersection Recommendations (Intersection ID)
- New Intersection Recommendations (Consider Recommendation ID)
- Remove Treatment (Consider Recommendation ID)

Note: Road segment map for pavement marking of all existing stop-controlled intersections. Road ID network shown. Sufficient network south of it exists.

40 CITY OF ONTARIO

RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Grove Avenue & Deerfield Court

- Install Pedestrian Hybrid Beacon, if and when pending warrants are successful. Install R10-23 on east side for both directions if PHB is installed.
- Install new yellow ladder style school crossing on the south leg if and when proposed Pedestrian Hybrid Beacon is installed.
- Repaint existing yellow school crossing with new yellow ladder style school crossing on the west and east legs.
- Install stop line with R10-6 sign in advance of proposed Pedestrian Hybrid Beacon if and when installed for north and south approach.
- Install 25 feet of red paint on the north and south side of Deerfield Court on the west and east approach to Grove Avenue.

Intersection B – Forca Avenue & School Pick Up and Drop Off East

- Install yield teeth markings on north and south approach w/ R1-5 signs if and when proposed RRFB is installed.
- Remove existing S1-1 and W16-7P on both approaches if and when proposed RRFB is installed.
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage facing north and south for both approaches.
- Repaint existing school crossing with new yellow ladder style school crossing.
- Install two new ADA compliant curb ramps with detectable warning surfaces. Curb ramp design requires driveway redesigns. All work shall be ADA compliant regardless of design.

Intersection C – Walker Avenue & St. Andrew Street

- Install new Assembly B (CA) sign facing north for the south approach and south for the north approach.
- Remove existing S1-1 and W16-7P if and when proposed Assembly B (CA) is installed.
- Repaint existing south leg crosswalk with yellow ladder style school crossing.
- Install new yellow ladder style school crossing on the west leg.

Intersection D – Grove Avenue & Walnut Street

- Install accessible pedestrian system push button and count down pedestrian heads at each leg of the intersection and for each direction of travel.
- Repaint existing white standard crosswalk with new white ladder style crosswalk.
- Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface at each corner of the intersection.

Intersection E – Walnut Street & Forca Avenue

- Repaint existing school crossing with new yellow ladder style school crossing at each leg of the intersection.
- Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface at each corner of the intersection.
- Install 25 feet of red paint leading into the Walnut Street on the south and north approach on the east and west side of the roadway.
- Remove existing S1-1 facing east on the westbound approach to the intersection.
- Install new Assembly D (CA) 220 feet east of the intersection on the westbound approach.

APPENDIX N: SAFE ROUTES TO SCHOOLS FACTSHEETS 41

Page 2

Lists the recommendations in more depth

Page 3+

If applicable, the list of recommendations continues on additional pages

RECOMMENDATIONS BY KEY SEGMENTS

Grove Avenue

- ID 26 / ID 20: Install new speed feedback sign with Assembly C (CA) sign
- ID 21: Install new Assembly D (CA) sign
- ID 12: Repaint existing standard white crosswalk with new white ladder style crosswalk.

Deerfield Court

- ID 14: Repaint existing yellow school crossing with new yellow ladder style school crossing

Forca Avenue

- ID 14: Repaint existing yellow school crossing with new yellow ladder style school crossing
- ID 48: Install 25 speed legend pavement marking B
- ID 16: Install new yellow ladder style school crossing
- ID 18 / ID 21: Remove existing Assembly A (CA) and replace with Assembly D (CA)
- ID 20 / ID 18: Remove existing Assembly C (CA) and replace with Assembly A (CA)
- ID 21: Remove existing Assembly D (CA)
- ID 15: Install new standard white crosswalk

Deerfield St

- ID 18: Install new Assembly A

St. Andrews Street

- ID 21: Install new Assembly D (CA)

Walnut Avenue

- ID 15: Install new standard white crosswalk
- ID 18 / ID 21: Remove existing Assembly A (CA) and replace with Assembly D (CA)
- ID 41: Install SLOW SCHOOL XING

pavement marking 100ft from Intersection C, and remove existing SLOW SCHOOL XING pavement marking if and when proposed install is completed

- ID 21: Install new Assembly D (CA) sign
- ID 13*: Repaint existing standard white crosswalk with white ladder style crossing at each leg of the intersection with Walnut Street
- ID 50*: Install 25 feet of red paint leading into the Walnut Street on the south and north approach on the east and west side of the roadway

42 CITY OF ONTARIO

Notes on Recommendations:

Recommendations are separated into two types: "Recommendations by Intersection" and "Recommendations by Segment".

"Recommendations by Intersection" are listed in alphabetical order, and have the following symbol: **(B)**

"Recommendations by Segment" have an ID # that corresponds with a treatment. Installation of treatments has the following symbol: **(20)**

Certain recommendations call for the removal of existing infrastructure. Removal of treatments has the following symbol: **(20)**

Table N.1 Recommendation Codes provides the list of ID #s and the respective treatment.

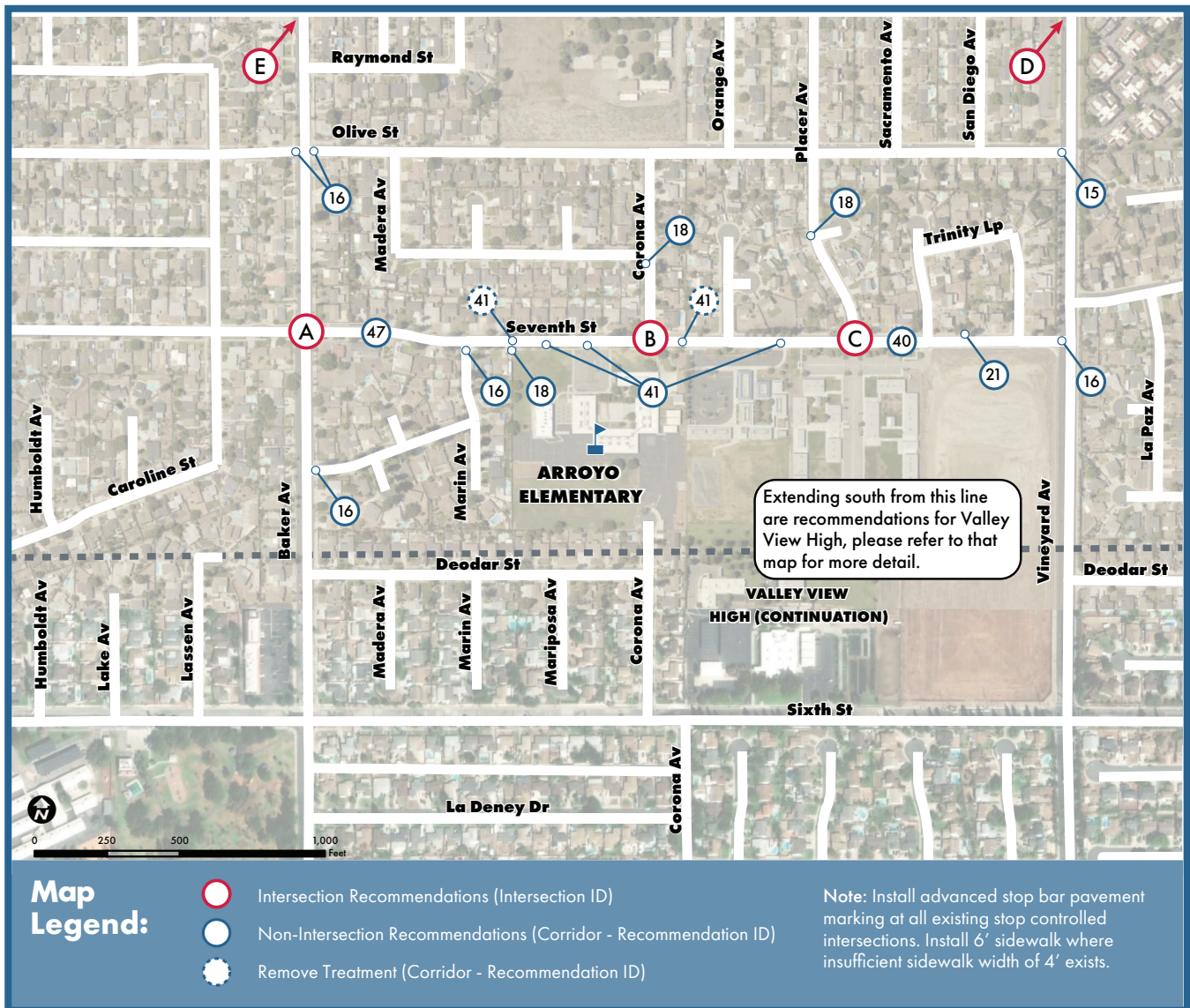
ID#	Corresponding Treatment	ID#	Corresponding Treatment
1	Sidewalk	27	R26A (CA) Signage
2	Rectangular Rapid Flashing Beacons (RRFBs) with S1-1 and W16-7P signage	28	R1-5 Signage
3	Pedestrian Hybrid Beacon Signal (PHB) with R10-23 signage on mast arm	29	S5-3 Signage
4	Traffic Signal	30	R3-5 Signage
5	Overhead Advanced Flashing Beacon	31	R10-23 Signage
6	Intersection Control Beacon	32	R9-2 Signage
7	Accessible Pedestrian Signal (APS)	33	R49 (CA) Signage
8	Raised Curb Extension (Bulb -Out)	34	R9-3BP Signage
9	Painted Curb Extension (Bulb -Out)	35	R9-3 Signage
10	ADA Curb Ramp (Improve)	36	W5-1 Signage
11	ADA Curb Ramp (New)	37	W13-1P (any MPH) Signage
12	Median Refuge Island	38	W3-1 Signage
13	Repaint Standard white crosswalk	39	Yield Marking
14	Repaint standard yellow crosswalk with yellow ladder style school crosswalk	40	Centerline Stripe
15	New Standard white crosswalk	41	SLOW SCHOOL XING Pavement marking
16	New yellow ladder style school crosswalk	42	PED XING Pavement Marking
17	Stop Sign	43	STOP AHEAD Pavement Marking
18	Assembly A (CA) Signage	44	SCHOOL AHEAD Pavement Marking
19	Assembly B (CA) Signage	45	SCHOOL Pavement Marking
20	Assembly C (CA) Signage	46	Stop Line
21	Assembly D (CA) Signage	47	Edgeline Stripe
22	S1-1 Signage	48	"35" pavement marking or other number
23	S4-5 Signage	49	KEEP CLEAR pavement marking
24	W11-2 Signage	50	Red Curb Paint
25	W16-5P/W16-7P/W16-9P	51	R2-1 Signage
26	Speed Feedback Sign	52	Other Recommendations

Table N.1: Recommendation Codes

ARROYO ELEMENTARY SCHOOL

1700 E 7th St, Ontario, CA 91764 | Ontario-Montclair School District (OMSD) | Enrollment: 392

Arroyo Elementary School is located near the northern border of Ontario. It resides in a residential neighborhood north of the I-10 Freeway, and it is adjacent to Valley View High School. The school is bounded by 7th Street to the north, Vineyard Avenue to the east, 6th Street to the south, and Baker Avenue to the west. Nearby destinations within a half mile include Vineyard Park and religious institutions.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Seventh Street & Baker Avenue

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Remove R1-1 STOP sign, right turn pavement marking, and taper striping at northwest corner
- Install Assembly D (CA) school sign at southeast corner
- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the north, east, and south legs of the intersection
- Install red paint at northwest corner 120 feet north and 25 feet west, at northeast corner 25 feet north and 30 feet east, at southwest corner 25 feet west and 25 feet south, and at southeast corner 25 feet east and 70 feet south

Intersection B – Seventh Street & Corona Avenue

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest and northeast corners of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the southwest corner of the intersection
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at northwest and southwest corners
- Remove existing S1-1 w/ W16-7P sign at northeast and southwest corners
- Install yield line markings 40 feet in advance east of school crossing and 20 feet in advance of school crossing on west

Intersection C – Seventh Street & Placer Avenue

- Install Assembly A (CA) school signage at northwest corner

- Remove existing S4-5 sign at northwest corner

Intersection D – Vineyard Avenue & Eighth Street

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners
- Install new white ladder style crosswalk at all legs

Intersection E – Eighth Street & Baker Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners
- Install new white ladder style crosswalk at west, south, and east legs

RECOMMENDATIONS BY KEY SEGMENTS

Baker Avenue & Caroline Street

- ID 16: Install new yellow ladder style school crosswalk

Deerfield Court

- ID 14: Repaint existing yellow school crossing with new yellow ladder style school crossing

Seventh Street & Marin Avenue

- ID 16: Install new yellow ladder style school crosswalk

Seventh Street & Vineyard Avenue

- ID 16: Install new yellow ladder style school crosswalk

Olive Street & Vineyard Avenue

- ID 15: Install new white ladder style crosswalk

Corona Avenue & Highland Street

- ID 18: Install Assembly A (CA) school signage

Placer Avenue

- ID 18: Install Assembly A (CA) school sign

Baker Avenue

- ID 15: Install new white ladder style crosswalk

Seventh Street

- ID 18: Install Assembly A (CA) school sign
- ID 21: Install Assembly D (CA) school sign. Tree trimming / maintenance may be required
- ID 41: Install "SLOW SCHOOL XING"

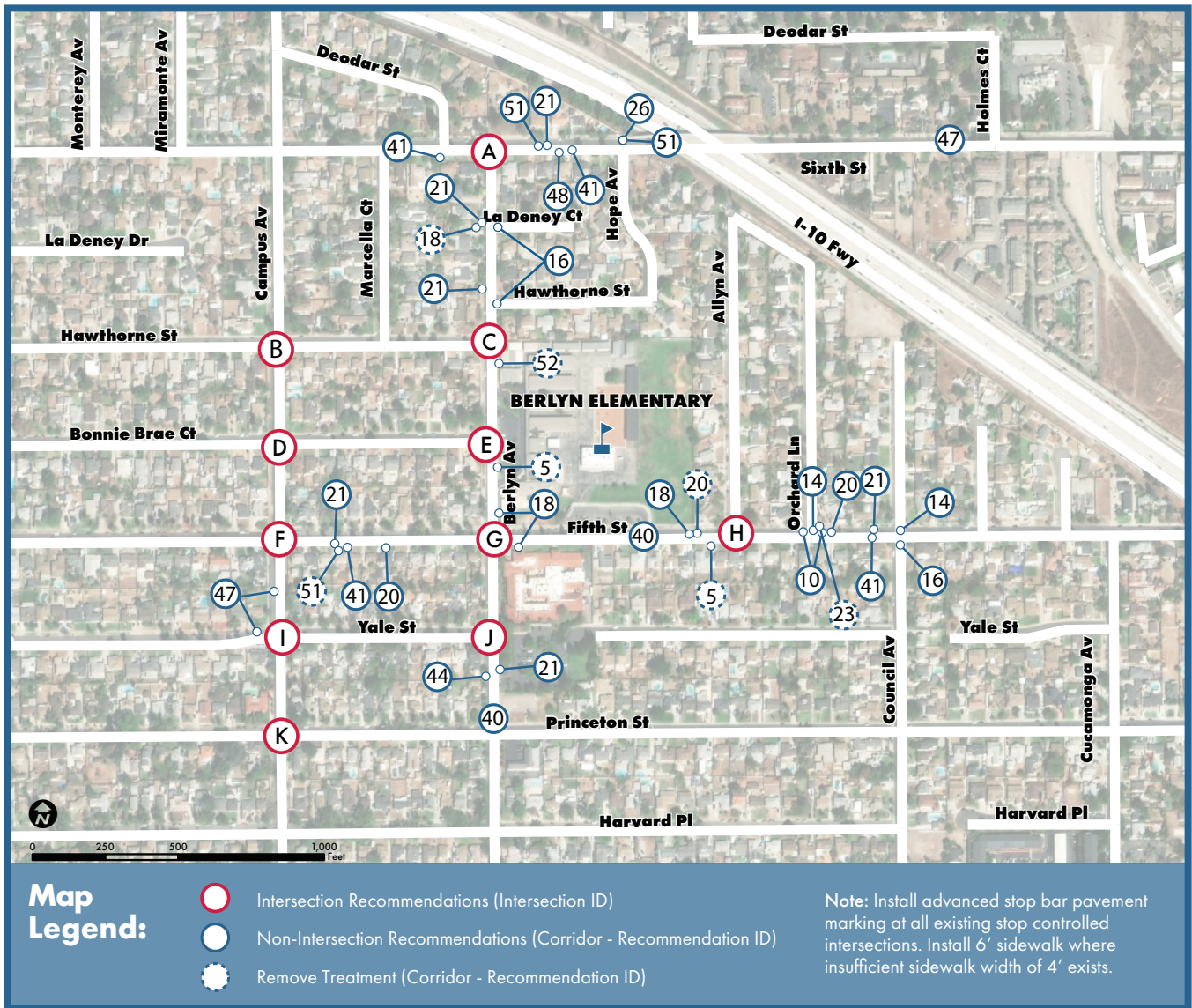
pavement marking in yellow paint on eastern and western marking and on approach to school crossing 100 feet in advance on center marking

- ID 41: Remove existing "SLOW SCHOOL XING" if and when yield marking and new pavement markings are installed
- ID 40: Install centerline striping from Marin Avenue to Vineyard Ave
- ID 47: Install edgeline striping 8 feet from the curb from Baker Avenue to Vineyard Avenue on both sides of Seventh Street

BERLYN ELEMENTARY SCHOOL

1320 N Berlyn Ave, Ontario, CA 91764 | Ontario-Montclair School District (OMSD) | Enrollment: 764

Situated in the middle of a residential neighborhood just south of the 10 Freeway and east of Euclid Ave., Berlyn Elementary School is bounded by 6th St. to the north, Allyn Ave. to the east, 5th St. to the south, and Berlyn Ave. to the west. Local destinations located within a mile of the school include religious institutions and fast food eateries.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Berlyn Avenue & Sixth Street

- Repaint existing crossing with new yellow ladder styled school crossing at the east leg of intersection
- Install new yellow ladder style school crosswalk at the south leg of the intersection
- Install yield line markings 20 feet in advance of school crossing for eastbound and westbound traffic
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the north and southeast corners of the intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the southeast corner of the intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the southeast corner of the intersection. If bulb-out design conflicts with the residential driveway to the west, a painted bulb-out with bollards may be considered
- Remove existing Assembly B (CA) if and when proposed RRFB is installed at the north and southeast corners of the intersection.
- Install 25 feet of red paint on both sides of the roadway along Berlyn Avenue, south of the intersection
- Install 25 feet of red paint on both sides of the roadway along Sixth Street, east of the intersection
- Install 25 feet of red paint on the east curb of the roadway along Sixth Street, west of the intersection

Intersection B – Hawthorne Street & Campus Avenue

- Install new standard white crosswalk at the east and west leg of the intersection
- Improve and/or reconstruct existing ramp to

be ADA compliant with DWS at all corners of intersection

Intersection C – Hawthorne Street & Berlyn Avenue

- Repaint existing crossing with new yellow ladder styled school crossing at the south leg of intersection
- Install new yellow ladder style school crosswalk at the west leg of intersection.
- Install Assembly B (CA) school signage at the southwest and southeast corners of the intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the southeast corner of the intersection. If bulb-out design conflicts with the residential driveway to the west, a painted bulb-out with bollards may be considered
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the southwest corner of the intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the northwest corner of the intersection. Perpendicular south facing curb ramp design should be maintained
- Remove existing / outdated school pedestrian signage at the northwest and southeast corner of the intersection
- Install 25 feet of red paint on both sides of roadway along Hawthorne Street
- Install 20 feet of red paint at the intersection between Berlyn Avenue and Hawthorne Street

RECOMMENDATIONS BY INTERSECTIONS

- Install 25 feet of red paint along Berlyn Avenue on both sides of the roadway to the south of the intersection
- Install 25 feet of red paint along Berlyn Avenue on the west side of the roadway, north of the intersection

Intersection D – Bonnie Brae Court & Campus Avenue

- Install new standard white crosswalk at the east and west leg of the intersection.
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of intersection

Intersection E – Walnut Street & Parco Avenue

- Repaint existing crossing with new yellow ladder styled school crossing at the south leg of intersection
- Install new yellow ladder style school crosswalk at the west leg of intersection
- Install Assembly B (CA) school signage at the southwest and southeast corners of the intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the southwest and southeast corners of the intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the northwest corner of the intersection. Perpendicular south facing curb ramp design should be maintained
- Remove existing/outdated school pedestrian signage at the northwest corner of the intersection
- Install 25 feet of red paint on both sides of roadway along Bonnie Court

- Install 25 feet of red paint at the intersection intersection between Berlyn Avenue and Bonnie Brea Court
- Install 25 feet of red paint along Berlyn Avenue on both sides of the roadway to the south of the intersection
- Install 25 feet of red paint along Berlyn Avenue on the west side of the roadway north of the intersection

Intersection F – Fifth Street & Campus Avenue

- Install new yellow ladder style school crosswalk at the east leg of the intersection
- Repaint existing crossing with new yellow ladder styled school crossing at the north leg of intersection
- Repaint existing crossing with new yellow ladder styled school crossing at the west leg of intersection if/when raised bulbouts are installed to better align the crossing
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the southwest corner of the intersection
- Install R2-1 "SPEED LIMIT 35" sign mounted to the speed feedback sign post at the southeast corner of intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners except the southwest corners of intersection
- Install 25 feet of red paint on both sides of the roadway along Campus Ave to the north and south of the intersection
- Install 21 feet of red paint on the east side of the roadway along Fifth Street and 28 feet of red paint on the west side of the roadway west of the intersection
- Install 25 feet of red paint on the east side of the roadway along Fifth Street east of the intersection

RECOMMENDATIONS BY INTERSECTIONS

Intersection G – Walnut Street & Parco Avenue

- Repaint existing crossing with new yellow ladder styled school crossing at all legs of intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install 25 feet of red paint on both sides of the roadway along Fifth Street to the east and west of the intersection
- Install 25 feet of red paint on both sides of the roadway along Berlyn Avenue to the north and south of the intersection

Intersection H – Fifth Street & Allyn Avenue

- Remove existing crosswalk at the east leg of intersection
- Repaint existing crossing with new yellow ladder styled school crossing at the north and west leg of intersection
- Install Assembly B (CA) school signage at the northwest and southwest corners of intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the northeast corner of the intersection. Design should include a west facing perpendicular curb ramp
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at northwest corner of the intersection
- Remove existing / outdated school pedestrian signage to the northeast corner of the intersection
- Install 25 feet of red paint on both sides of the roadway along Allyn Ave, north of the intersection
- Install 25 feet of red paint at the intersection between Fifth Street and Allyn Avenue

- Install 25 feet of red paint along Fifth Street on the east side of the roadway, west of the intersection

Intersection I – Yale Street & Campus Avenue

- Install new standard white crosswalk at the west and east leg of intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the northeast corner of the intersection. Design should include a south facing perpendicular curb ramp
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of intersection except the northwest corner

Intersection J – Yale Street & Berlyn Avenue

- Install new yellow ladder style school crosswalk at the west leg of the intersection
- Install new ADA compliant curb ramp with DWS at the northwest and southwest corners of the intersection
- Remove existing Assembly A (CA) school signage at the northeast corner of the intersection

Intersection K – Princeton Street & Campus Avenue

- Install new standard white crosswalk at the east and west legs of intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of intersection

RECOMMENDATIONS BY KEY SEGMENTS

Sixth Street

- ID 47: Install edgeline striping 8 feet from the curb on both sides of roadway from Campus Avenue to Holmes Court
- ID 51: Install R2-1 "SPEED LIMIT 35" sign mounted to the speed feedback sign post for westbound traffic
- ID 26: Repair or replace existing Vehicle Speed Feedback sign for westbound
- ID 41: Install SLOW "SCHOOL XING"
- ID 48: Move "35" marking if and when proposed R2-1 35mph sign is removed
- ID 51: Remove existing R2-1 SPEED LIMIT 35 sign
- ID 21: Install Assembly D (CA) school signage
- ID 41: Install SLOW SCHOOL XING

Berlyn Avenue

- ID 40: Install centerline stripe from Sixth Street to Princeton Street
- ID 43: Install "STOP AHEAD" pavement markings for northbound traffic on approach to STOP controlled intersection
- ID 21: Install Assembly D (CA) school signage
- ID 18: Install Assembly A (CA) school signage north of intersection "G"
- ID 5: Remove existing / outdated school pedestrian signage
- ID 52: Remove or level existing / unused driveway close to Intersection C
- ID 21: Install Assembly D (CA) school signage
- ID 18: Remove existing Assembly A (CA) school signage north of intersection "C"
- ID 21: Install Assembly D (CA) school signage

Berlyn & La Deney Court

- ID 16: Install new yellow ladder style school crosswalk at the east leg of the intersection

Berlyn & Hawthorne Street

- ID 16: Install new yellow ladder style school crosswalk at the east leg of the intersection

Fifth Street & Campus

- ID 40: Install Centerline striping along Fifth Street from Campus Avenue to Council Avenue
- ID 41: Install "SLOW SCHOOL XING" pavement markings if and when proposed Assembly D (CA) west of the intersection of Council Avenue and Fifth Street

Fifth Street & Council Avenue

- ID 14: Repaint existing crossing with new yellow ladder styled school crossing at the north leg of the intersection
- ID 16: Install new yellow ladder style school crosswalk at the south leg of the intersection

Fifth Street & Orchard Lane

- ID 14: Repaint existing crossing with new yellow ladder styled school crossing at the north leg intersection
- ID 23: Remove existing S4-5 signage at the northeast corner
- ID 20: Install Assembly C (CA) school signage
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at both corners of Orchard Lane

Fifth Street

- ID 21: Install Assembly D (CA) school signage
- ID 5: Remove existing/outdated school

RECOMMENDATIONS BY KEY SEGMENTS

- pedestrian signage west of Intersection H.
- ID 20: Remove existing Assembly C (CA) school signage
- ID 18: Install Assembly A (CA) school signage
- ID 18: Install Assembly A (CA) school signage
- ID 41: Install "SLOW SCHOOL XING" pavement markings if and when proposed Assembly D (CA) for eastbound traffic
- ID 20: Install Assembly C (CA) school signage
- ID 51: Remove existing R2-1 SPEED LIMIT 35 sign
- ID 21: Install Assembly D (CA) school signage

Campus Avenue

- ID 47: Install edgeline striping 10 feet from the curb along Campus Avenue from Fifth Street to Yale Street on the west side of the roadway for southbound traffic

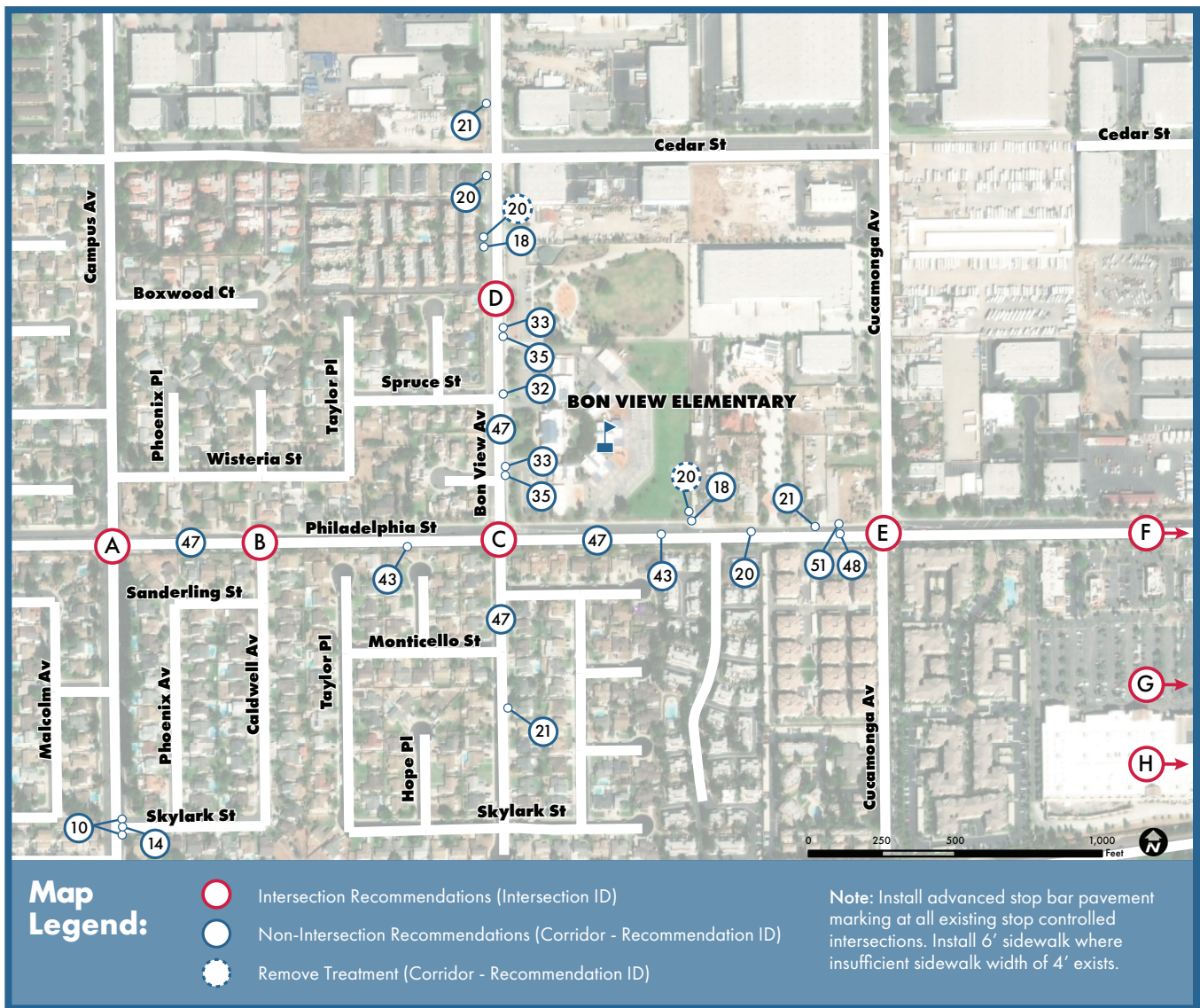
Yale Avenue

- ID 47: Install edgeline striping 8 feet from the curb along Yale Street

BON VIEW ELEMENTARY SCHOOL

2121 S Bon View Ave, Ontario, CA 91761 | Ontario-Montclair School District (OMSD) | Enrollment: 694

Bounded by Cedar St. to the north, Cucamonga Ave. to the east, Philadelphia St. to the south, and Bon View Ave. to the west, Bon View Elementary School sits in between a residential and industrial area. Nearby destinations include South Bon View Park and a shopping center half a mile east of the school along Philadelphia St. which contains several fast food eateries.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Philadelphia Street & Campus Avenue

- Repaint existing crosswalks with new white ladder style crosswalk at all legs of the intersection
- Improve or reconstruct existing curb ramps at the northwest corner of the intersection to be ADA compliant with DWS
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection B – Philadelphia Street & Caldwell Avenue

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the south leg of the intersection
- Improve or reconstruct existing curb ramps at the southwest and southeast corners of the intersection to be ADA compliant with DWS
- Install Assembly D (CA) sign at the southeast corner of the intersection

Intersection C – Philadelphia Street & Bon View Avenue

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install Assembly A (CA) sign at the northeast and southeast corners of the intersection
- Install roadway restriping on the east leg of the intersection, to reduce tapered right-turn lane to accommodate bulb-out

Intersection D – Bon View Avenue Midblock Crossing

- Repaint existing school crosswalk with new yellow ladder style school crosswalk
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the west and east corner of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the west and east corners of the intersection
- Remove existing S1-1 with W16-7P signs at the northwest and southeast corners of the intersection
- Install roadway restriping to reduce lane width including installation of a two-way center left-turn lane. Install yield line markings on the north and south legs of the intersection, if and when proposed RRFB is installed
- Remove “40 MPH” speed legend pavement marking on the south leg of the intersection

Intersection E – Philadelphia Street & Cucamonga Avenue

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection F – Philadelphia Street & Cucamonga Avenue

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection.
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for

RECOMMENDATIONS BY INTERSECTIONS

each crossing

Intersection G – Grove Avenue & Lowes

Intersection

- Repaint existing crosswalk with new white ladder style crosswalk at the north leg of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at the northwest, southwest, and northeast corners of the intersection for each crossing
- Improve or reconstruct existing curb ramps at the northeast corner of the intersection to be ADA compliant with DWS

Intersection H – Grove Avenue & SR-60 WB On/
Off Ramp

- Repaint existing crosswalk with new white ladder style crosswalk at the west and east legs of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Replace existing R9-3 sign on the northeast and southeast corners of the intersection
- Install R9-3 sign on the northwest corner of the intersection

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Campus Avenue & Skylark Street

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the east leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the northeast and southeast corners of the intersection to be ADA compliant with DWS

Bon View Avenue & Wisteria Court

- ID 35/33: Install R9-3 sign in conjunction with R49 (CA) "NO PED CROSSING USE CROSSWALK" sign on the east side of the intersection

Philadelphia Street

- ID 43: Install "STOP AHEAD" pavement marking
- ID 18: Install Assembly A (CA) sign
- ID 20: Install Assembly C (CA) sign
- ID 21 – Install Assembly D (CA) sign
- ID 51 - Install R2-1 40 MPH SPEED LIMIT sign
- ID 48: Install speed legend pavement parking 40 MPH
- ID 47: Install edge line striping 10 feet from the curb on the south side of the roadway between Campus Avenue and Cucamonga Avenue

Bon View Avenue

- ID 47: Install edge line striping 10 feet from the curb on both sides of the roadway between Cedar Street and Philadelphia Street
- ID 40: Install centerline stripe from Philadelphia Street to Skylark Street
- ID 35/33: Install R9-3 sign in conjunction with R49 (CA) "NO PED CROSSING USE CROSSWALK" sign

- ID 18: Install Assembly A (CA) sign
- ID 20: Install Assembly C (CA) sign
- ID 21: Install Assembly D (CA) sign

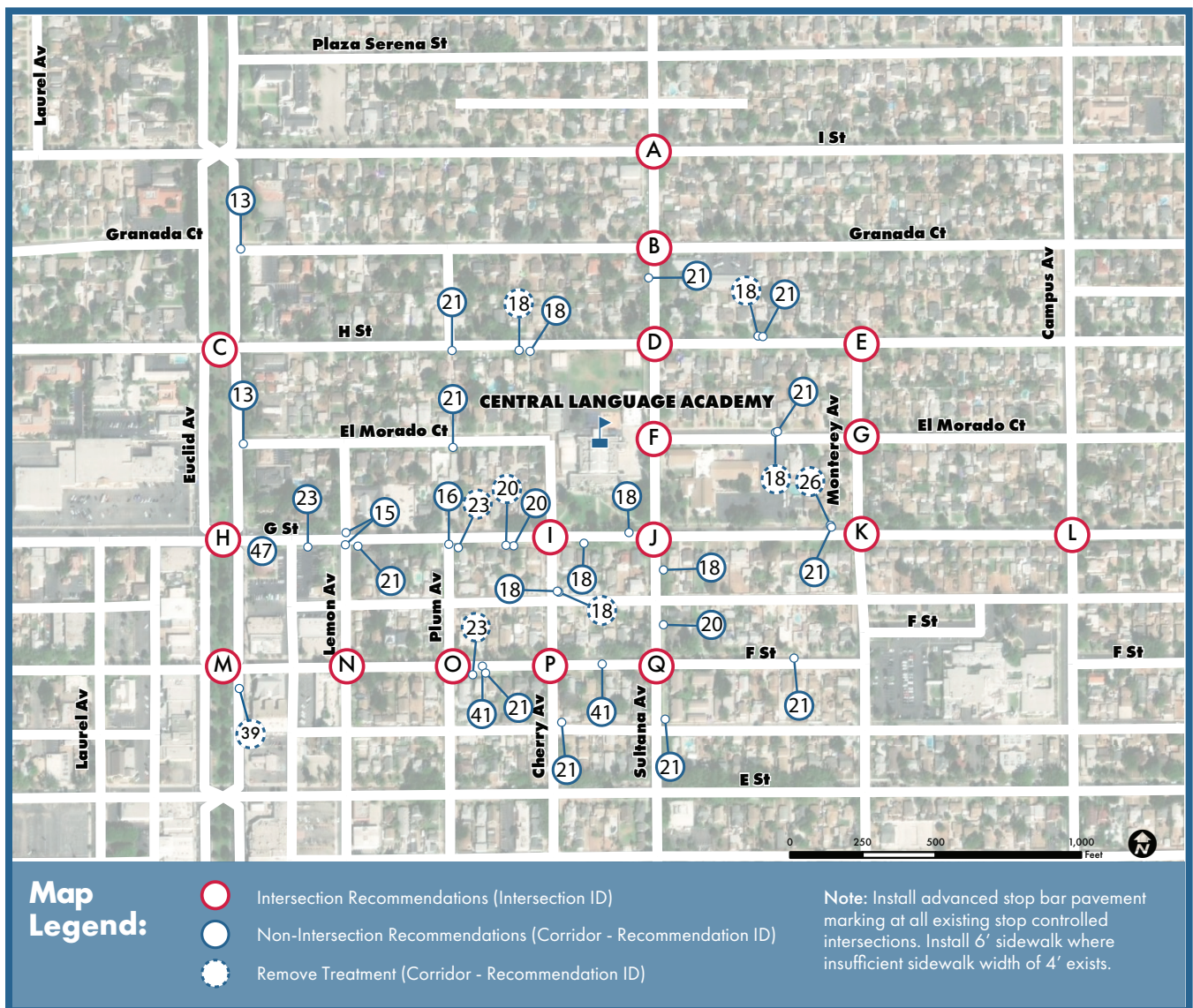
*Grove Avenue & SR-60 EB On/Off Ramp

- ID 13: Repaint existing crosswalk with new white ladder style crosswalk at the west, east, and south legs of the intersection
- ID 7: Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- ID 10: Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS
- ID 34: Replace existing R9-3 sign with R9-3BP sign on the northeast and northwest corners of the intersection

CENTRAL LANGUAGE ACADEMY

415 East G St, Ontario, CA 91764 | Ontario-Montclair School District (OMSD) | Enrollment: 706

Positioned in a residential neighborhood east of Euclid Ave., Central Language Academy is bounded by H St. to the north, Sultana Ave. to the east, G St. to the south, and Euclid Ave. to the west. Local destination located with half a mile distance include a variety of shops, restaurants, fast-food places, religious institutions, and medical centers



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Sultana Avenue & I Street

- Repaint existing crossing with new white ladder styled crossing at all legs of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection

Intersection B – Sultana Avenue & Granada Court

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection
- Repaint existing crossing with new yellow ladder styled school crossing at the west and east leg of the intersection

Intersection C – Euclid Avenue & H Street

- Repaint existing crossing with new white ladder styled crossing at the east leg of the intersection
- Install R9-2 “CROSS ONLY AT CROSSWALKS” sign at the corners of the landscaped median island

Intersection D – Sultana Avenue & H Street

- Install new yellow ladder styled school crossing at the north and east leg of the intersection
- Repaint existing crossing with new yellow ladder styled school crossing at the west and south leg of the intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Remove existing Assembly B (CA) sign at the southwest corner of the intersection
- Install 25 feet of red curb paint on both sides of the roadway to the north, south, east and west of the intersection

Intersection E – Monterrey Avenue & H Street

- Install new ADA compliant curb ramp with DWS at the southwest and southeast corners of the intersection
- Install new white ladder style crosswalk at the south leg of the intersection

Intersection F – Sultana Avenue & El Morado Court

- Repaint existing crossing with new yellow ladder styled school crossing at the east leg of intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northeast and southeast corners of the intersection
- Install Assembly A (CA) school signage along Sultana Avenue, west of Intersection F, for southbound traffic

Intersection G – Monterrey Avenue & El Morado Court

- Install new ADA compliant curb ramp with DWS at all corners of the intersection
- Install new white ladder style crosswalk at the north and south legs of the intersection

Intersection H – Euclid Avenue & G Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection including the landscaped median
- Install accessible pedestrian system push button and count down pedestrian heads at all crossings of the intersection
- Repaint existing crossing with new white ladder styled crossing at all legs of the intersection

RECOMMENDATIONS BY INTERSECTIONS

Intersection I – Chery Avenue & G Street

- Repaint existing crossing with new yellow ladder styled school crossing at the east leg of the intersection
- Install new yellow ladder style school crosswalk at the north and south legs of the intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install 25 feet of red paint on both sides of the roadway to the north, south, east, and west of the intersection

Intersection J – Sultana Avenue & G Street

- Install raised bulb-out with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Repaint existing crossing with new yellow ladder styled school crossing at all legs of the intersection
- Install 25 feet of red curb paint on both sides of the roadway to the north, south, east, and west of the intersection

Intersection K – Monterrey Avenue & G Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection
- Install new white ladder style crosswalk at the north and south legs of the intersection

Intersection L – Campus Avenue & G Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection
- Repaint existing crossing with new white ladder styled crossing at all legs of the intersection
- Install 25 feet of red curb paint on both

sides of the roadway to the north, south, east, and west of the intersection

Intersection M – Euclid Avenue & F Street

- Remove existing crosswalk at the south leg of northbound and southbound traffic intersection
- Repaint existing crossing with new white ladder styled crossing at the north leg of northbound and southbound intersection, and the west and east leg of the intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at all corners of the north legs of the intersection
- Install pedestrian actuated RRFB with W11-2 and W16-7P signage at all corners of the north leg of the intersection
- Remove existing W11-2 pedestrian signage at the northwest and southeast corners of the intersection
- Install R9-2 "CROSS ONLY AT CROSSWALKS" sign at the corners of the southern landscaped median of the intersection
- Install yield teeth markings w/ R1-5 sign at the southeastern leg of the intersection

Intersection N – Lemon Avenue & F Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection
- Install new white ladder style crosswalk at the east and west legs of the intersection

RECOMMENDATIONS BY INTERSECTIONS

Intersection O – F Street & Plum Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection
- Install new white ladder style crosswalk at the south and north legs of the intersection

Intersection P – Cherry Avenue & F Street

- Install new yellow ladder style school crosswalk at the north, south, and east legs of the intersection
- Install Assembly B (CA) school signage at the northeastern and southeastern corners of the intersection
- Install new ADA compliant curb ramp with DWS at the northwestern corner of the intersection
- Install 25 feet of red curb paint on both sides of the roadway to the north, south, west, and east of the intersection

Intersection Q – Sultana Avenue & F Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection
- Install new yellow ladder style school crosswalk at the east and west legs of the intersection

RECOMMENDATIONS BY KEY SEGMENTS

Sultana Avenue

- ID 21: Install Assembly D (CA) school signage for southbound traffic
- ID 18: Install Assembly A (CA) school signage for northbound traffic
- ID 20: Install Assembly C (CA) school signage for northbound traffic
- ID 21: Install Assembly D (CA) school signage for northbound traffic

Cherry Avenue

- ID 18: Remove existing / outdated Assembly A (CA) school signage
- ID 18: Install Assembly A (CA) school signage for northbound traffic
- ID 21: Install Assembly D (CA) school signage for northbound traffic

Euclid Avenue

- ID 39: Remove existing yield pavement markings along Euclid Avenue for northbound traffic

Granada Court & Euclid Avenue

- ID 13: Repaint existing crossing with new white ladder styled crossing at the east leg of Granada Court and Euclid Avenue

H Street

- ID 21: Install Assembly D (CA) school signage for eastbound traffic
- ID 18: Remove existing Assembly A (CA) school signage
- ID 18: Install Assembly A (CA) school signage for eastbound traffic.
- ID 18: Remove existing / outdated Assembly A (CA) school signage
- ID 21: Install Assembly D (CA) school signage for westbound traffic

RECOMMENDATIONS BY KEY SEGMENTS

Euclid Avenue & El Morado Court

- ID 13: Repaint existing crossing with new white ladder styled crossing at the east leg of El Morado Court and Euclid Avenue

El Morado Court

- ID 21: Install Assembly D (CA) school signage for eastbound traffic
- ID 18: Remove existing / outdated Assembly A (CA) school signage for eastbound traffic
- ID 21: Install Assembly D (CA) school signage for westbound traffic

G Street

- ID 47: Install Edgeline Striping along the southern curb between Euclid Avenue and Lemon Ave
- ID 23: Install S4-5 sign eastbound traffic
- ID 21: Install Assembly D (CA) school signage for eastbound traffic
- ID 20: Remove existing Assembly C (CA) school signage
- ID 20: Install Assembly C (CA) school signage for eastbound traffic
- ID 18: Install Assembly A (CA) school signage for westbound traffic
- ID 26: Remove and relocated existing "35 MPH" speed limit sign
- ID 21: Install Assembly D (CA) for westbound traffic

G Street & Lemon Avenue

- ID 15: Install new white ladder style crosswalk at the north and south legs of the G Street and Lemon Ave

G Street & Plum Avenue

- ID 16: Install new yellow ladder style school crosswalk at the south leg of the intersection

- ID 23: Remove existing S4-5 signage at the southeast corner of the intersection

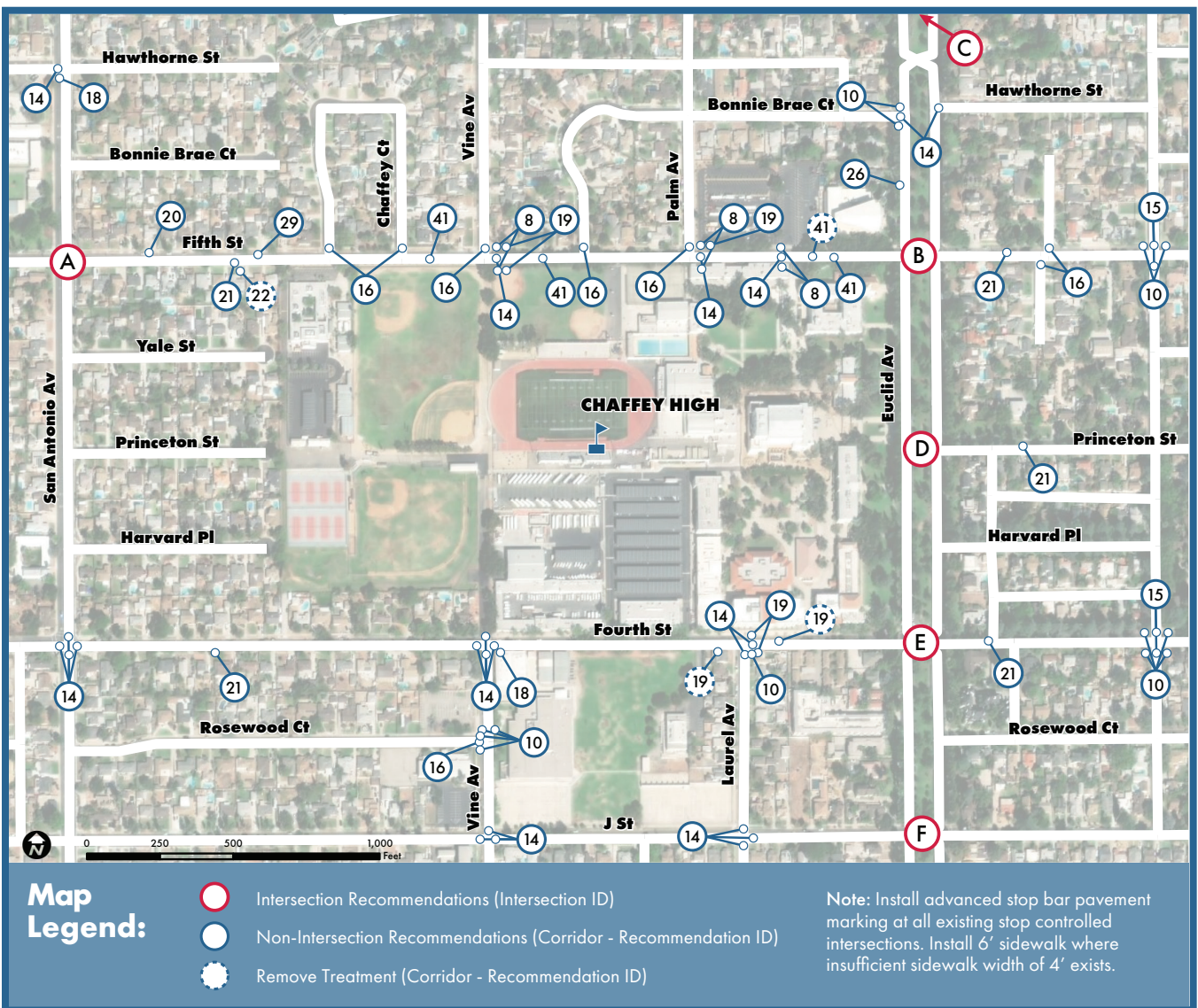
F Street

- ID 23: Remove existing S4-5 signage
- ID 41: Install "SLOW SCHOOL XING" pavement markings if and when proposed Assembly D (CA) for eastbound traffic
- ID 21: Install new Assembly D (CA) for eastbound traffic
- ID 41: Install "SLOW SCHOOL XING" pavement markings if and when proposed school crossing is installed for westbound traffic
- ID 21: Install new assembly D (CA) signage for westbound traffic

CHAFFEY HIGH SCHOOL

1245 North Euclid Ave, Ontario, CA 91762 | Chaffey Joint Union High School District (CJUHSD) | Enrollment: 3268

Chaffey High School stands at the entrance of a residential neighborhood just south of the 10 Freeway. It is bounded by 5th St. to the north, Euclid Ave. to the east, 4th St. to the south, and San Antonio Ave to the west.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – San Antonio Avenue & Fifth Street

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection.
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install STOP control R1-1 sign with LED lights embedded at each approach, when existing R1-1 sign is removed
- Install Assembly A (CA) sign north and west legs of the intersection for northbound and westbound traffic
- Remove duplicate R26A (CA) sign west of the intersection

Intersection B – Euclid Street & Fifth Street

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection C – Euclid Street & Sixth Street

- Repaint existing crosswalks with new white ladder style crosswalk at all legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection D – Euclid Street & Princeton Street

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the south legs of the intersection
- Install yellow ladder style school crosswalk at the east leg of the intersection
- Improve or reconstruct existing curb ramps at the southwest and southeast corners of the intersection to be ADA compliant with DWS
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at the southwest, southeast, and northeast corners, and on the south median of the intersection for each crossing

Intersection E – Euclid Street & Fourth Street

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at the southwest, southeast, and northeast corners, and on the south median of the intersection for each crossing

Intersection F – Euclid Street & J Street

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the north, west, and east legs of the intersection
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the northeast and northwest corners, and on the north median of the intersection
- Remove existing curb ramps on the southwest and southwest corners, and

RECOMMENDATIONS BY INTERSECTIONS

on the south median of the intersection, if and when proposed RRFB's are installed; inclusive of landscaping elements

- Remove existing school crosswalks at the south leg of the intersection
- Install R49 (CA) sign at the west and east corners of the south median, if and when proposed RRFB's are installed

RECOMMENDATIONS BY KEY SEGMENTS

San Antonio Avenue & Hawthorne Street

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the west leg of the intersection
- ID 18: Install Assembly A (CA) sign at the southwest corner of the intersection for southbound traffic

J Street & Laurel Avenue

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the north, east, and south legs of the intersection

Vine Street & J Street

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the north, west, and east legs of the intersection

Vine Street & Rosewood Court

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the north leg of the intersection
- ID 16: Install yellow ladder style school crosswalk at the west leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the northwest, northeast, and southeast corners of the intersection to be ADA compliant with DWS

Fourth Street & San Antonio Avenue

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection

Fourth Street & Vine Avenue

- ID 14: Repaint existing school crosswalk with new yellow ladder style school

RECOMMENDATIONS BY KEY SEGMENTS

- crosswalk at all legs of the intersection
- ID 18: Install Assembly A (CA) sign at the southeast corner of the intersection for eastbound traffic

Fourth Street & Laurel Avenue

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection
- ID 19: Install Assembly B (CA) sign at the northeast and southeast corners of the intersection for eastbound and westbound traffic
- ID 10: Improve or reconstruct existing curb ramps at the southeast corner of the intersection to be ADA compliant with DWS
- ID 19: Remove Assembly B (CA) sign at the west and east legs of the intersection

Fourth Street

- ID 21: Install Assembly D (CA) sign

Fourth Street & Columbia Avenue

- ID 15: Install new standard white crosswalk at all legs of the intersection
- ID 10: Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

Princeton Street

- ID 21: Install Assembly D (CA) sign

Fifth Street

- ID 21: Install Assembly D (CA) sign
- ID 20: Install Assembly C (CA) sign
- ID 21: Install Assembly D (CA) sign
- ID 29: Install S5-3 END SCHOOL SPEED LIMIT sign
- ID 22: Remove existing S1-1 pedestrian signage

- ID 41: Install "SLOW SCHOOL XING" pavement marking
- ID 41: Remove "SLOW SCHOOL XING" pavement marking
- ID 8: Install raised bulb-outs with covered trench drains to permit continuous gutter flow

Fifth Street & College Way

- ID 16: Install yellow ladder style school crosswalk at the north and south legs of the intersection

Fifth Street & Columbia Avenue

- ID 15: Install new standard white crosswalk at the north and south legs of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the northwest and northeast corners of the intersection to be ADA compliant with DWS

Fifth Street & Chaffey Court

- ID 16: Install yellow ladder style school crosswalk at the north leg of the intersection

Fifth Street & Vine Avenue

- ID 16: Install yellow ladder style school crosswalk at the north and east legs of the intersection
- ID 8: Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northeast and southeast corners of the intersection
- ID 19: Install Assembly B (CA) sign at the northeast and southeast corners of the intersection, if and when the proposed crossing is installed

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Fifth Street & Bonnie Brae Court

- ID 16: Install yellow ladder style school crosswalk at the north leg of the intersection

Fifth Street & Palm Avenue

- ID 16: Install yellow ladder style school crosswalk at the north leg of the intersection
- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the east leg of the intersection
- ID 8: Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northeast and southeast corners of the intersection
- ID 19: Install Assembly B (CA) sign at the northeast corner of the intersection, if and when the other sign is removed 40 feet east

Euclid Avenue

- ID 26: Install speed feedback sign
- ID 21: Install Assembly D (CA) sign

Euclid Avenue & Bonnie Brae Court

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the west and east legs of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the northwest and southwest corners of the intersection to be ADA compliant with DWS

*San Antonio Avenue & Sixth Street

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection
- ID 17: Install STOP control R1-1 sign with LED lights embedded at the northwest and southeast corners of the intersection for northbound and southbound traffic, when

existing R1-1 sign is removed

- ID 26/20: Install new speed feedback sign with Assembly C (CA) sign approximately 280 feet north of Hawthorne Street for southbound traffic

*Vine Avenue and Berkeley Street

- ID 16: Install yellow ladder style school crosswalk at the west leg of the intersection

*Vine Avenue and I Street

- ID 16: Install yellow ladder style school crosswalk at all legs of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the northeast and southeast corners of the intersection to be ADA compliant with DWS

*Vine Avenue

- ID 21: Install Assembly D (CA) sign approximately 140 feet north of I street for northbound traffic

*Euclid Avenue and I Street

- ID 16 : Install yellow ladder style school crosswalk at the east and south legs of the intersection

*Euclid Avenue and Sultana Avenue

- ID 15: Install new standard white crosswalk at all legs of the intersection
- ID 10: Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS
- ID 13: Repaint existing crosswalks with new white ladder style crosswalk at all legs of the intersection
- ID 10: Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

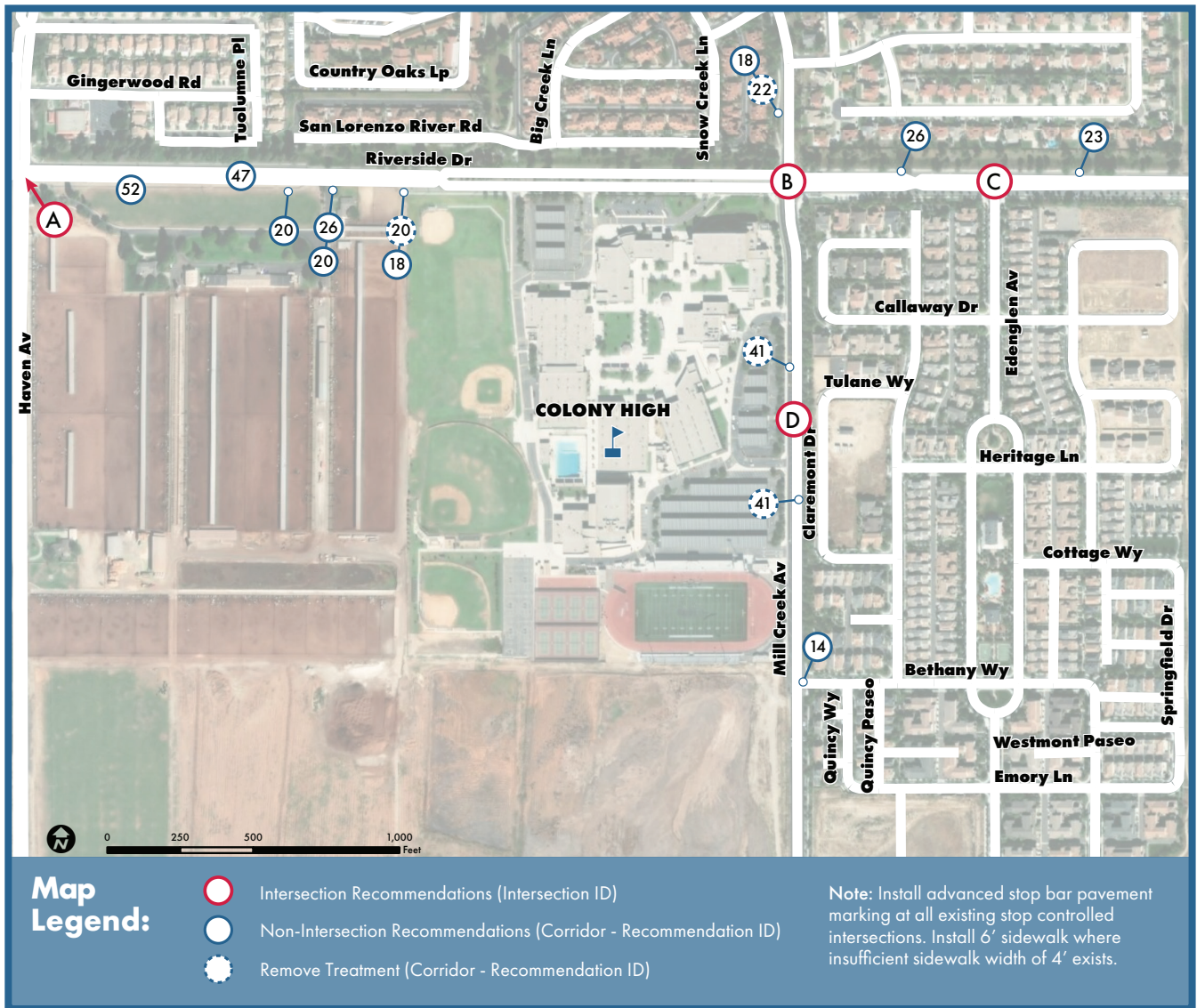
- ID 50: Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on all legs

Note: Please find recommendations west of San Antonio Avenue in the Hawthorne Elementary School section.

COLONY HIGH SCHOOL

3850 E Riverside Dr, Ontario, CA 91761 | Chaffey Joint Union High School District (CJUHSD) | Enrollment: 2090

Nestled in between a residential neighborhood and dairy farms, Colony High School is bounded by East Riverside Dr. to the north, Mill Creek Ave. to the east, Chino Ave. to the south, and Haven Ave. to the west. Creekside Village East Park is located within half a mile to the school.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Haven Avenue & Riverside Drive

- Repaint existing school crossing with new yellow ladder style school crossing at each leg of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface at the northwest and northeast corners
- If no roadway widening is planned, install painted bulb out that extend to the edge of the turning radius (~ 3 feet) vehicular R/W and is inclusive of bollards. Extend the paved area of the corner for the southwest and southeast corners

Intersection B – Riverside Drive & Mill Creek Avenue

- Repaint existing school crossing with new yellow ladder style school crossing at each leg of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface at the northwest and northeast corners
- Install new Assembly A (CA) facing east for westbound travel 20 feet west of the intersection on the north side of the road

Intersection C – Riverside Drive & Edenglen Avenue

- Repaint existing crossing with new white ladder style crossing at the south and east

legs of the intersection

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at the northeast, southeast, and southwest corners of the intersection for each crossing
- Remove existing S4-5 sign and install new Assembly D (CA) located 20 feet east of the intersection on the north side of the roadway for westbound travel

Intersection D – Mill Creek Avenue & Drop Off Loop S/O Riverside Drive

- Repaint existing school crossing with new yellow ladder style school crossing
- Install Pedestrian Hybrid Beacon, if and when pending warrants are successful. Install R10-23 on mast arm for both directions if PHB is installed
- Install stop line with R10-6 sign in advance of proposed Pedestrian Hybrid Beacon if and when installed for north and south approaches
- Install a median refuge island for pedestrians which includes an accessible pedestrian push button if and when Pedestrian Hybrid Beacon is installed
- Remove old signal flashers on the north and south approaches if and when proposed Pedestrian Hybrid Beacon is installed
- Install accessible pedestrian system push button and count down pedestrian heads at the existing crossing if and when the Pedestrian Hybrid Beacon is installed
- Remove existing an Antonio Avenue
- Install new speed feedback sign with Assembly C (CA) sign approximately 280 feet north of Hawthorne Street for southbound traffic

RECOMMENDATIONS BY KEY SEGMENTS

Riverside Drive

- ID 52: Clear asphalt side path of debris and obstruction. Repair and widen as needed to maintain at least a 3 foot width if no roadway widening is planned from Haven Avenue to school property where sidewalk is existing
- ID 47: Install 8 feet edgeline striping from Haven Avenue to school property where sidewalk is existing
- ID 21: Install new Assembly D (CA) signage
- ID 26/20: Install new speed feedback sign with Assembly C (CA) signage
- ID 20/18: Remove existing Assembly C (CA) and install new Assembly A (CA) signage
- ID 26: Install new speed feedback sign with existing Assembly C (CA)
- ID 23: Install S4-5 school signage

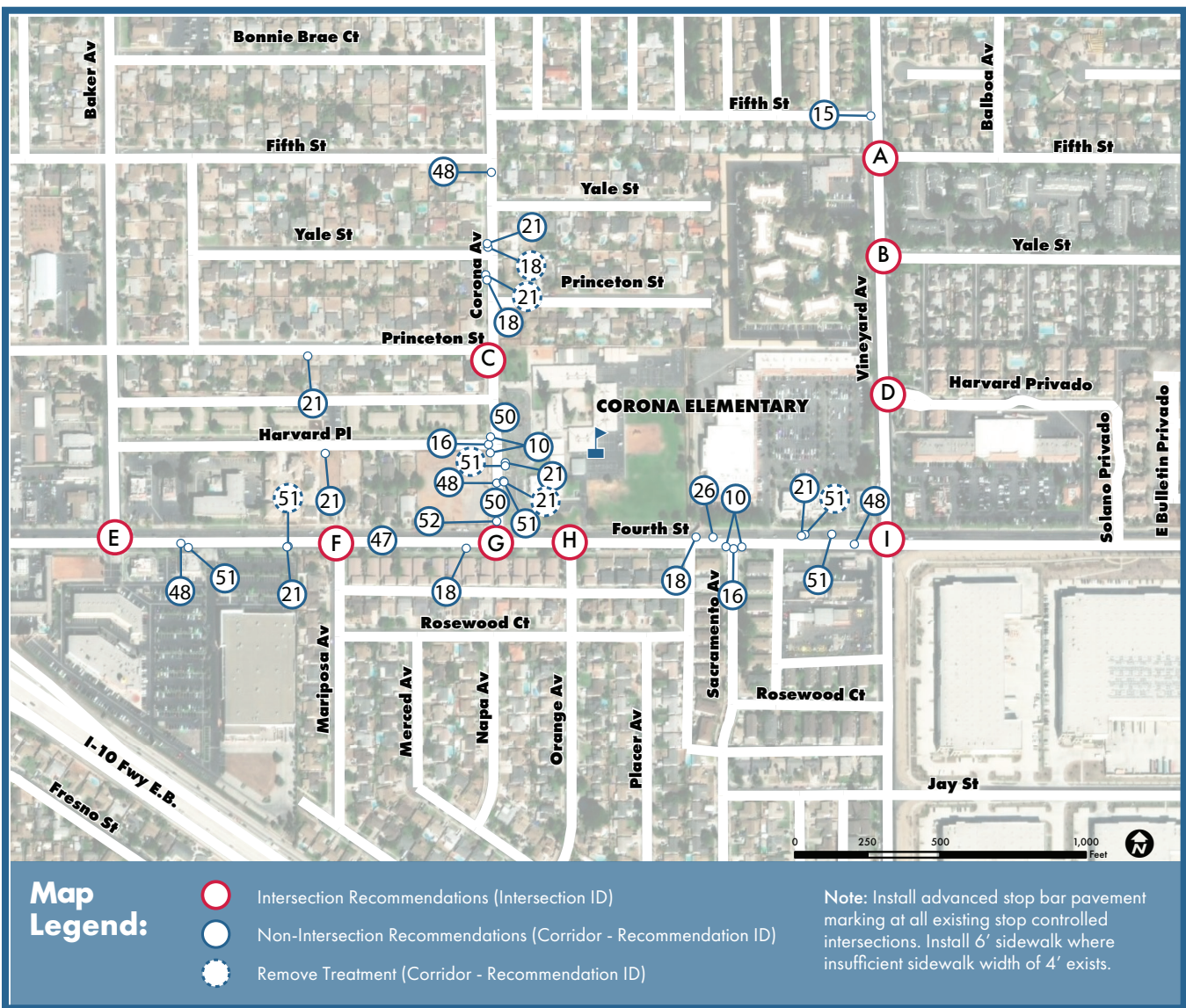
Mill Creek Avenue

- ID 22/18: Remove existing S1-1 sign and install new Assembly A (CA) sign
- ID 41: Remove existing "SLOW SCHOOL XING" pavement marking if and when proposed Pedestrian Hybrid Beacon is installed at intersection "D"
- ID 14: Repaint existing school crossing with new yellow ladder style school crossing

CORONA ELEMENTARY SCHOOL

1140 N Corona Ave, Ontario, CA 91764 | Ontario-Montclair School District (OMSD) | Enrollment: 552

Near the northern border of Ontario, Corona Elementary school is placed in between a residential neighborhood just northwest of an industrial area. The school is bounded by E Princeton St. to the north, Vineyard Ave. to the east, 4th St. to the south, and Corona Ave. west. Local destinations within a half mile include retail stores, restaurants, and fast food eateries split between three shopping centers along 4th St.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Vineyard Avenue & Fifth Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northeast and southeast corners of intersection
- Install new standard white crosswalk at the east leg of intersection

Intersection B – Vineyard Avenue & Yale Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northeast and southeast corners of intersection
- Install new standard white crosswalk at the east leg of intersection

Intersection C – Corona Avenue & Princeton Street

- Repaint existing crossing with new yellow ladder styled school crossing at the south leg of intersection
- Install new yellow ladder style school crosswalk at the west leg of intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the northwest, southwest, and southeast corners of the intersection
- Install 25 feet of red paint on both sides of the roadway west of the intersection along Princeton Street
- Install 25 feet of red curb paint on the west side of the roadway and 18 feet on the east side of the roadway, south of the intersection along Corona Avenue
- Install 25 feet of red paint at the intersection, north of Princeton Street
- Install 15 feet of red paint on the west side of the roadway along Corona Avenue, north of the intersection

Intersection D – Vineyard Avenue & Harvard Privado

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northeast and southeast corners of intersection
- Install new standard white crosswalk at the east leg of intersection

Intersection E – Baker Avenue & Fourth Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of intersection
- Repaint existing crossing with new white ladder styled crossing at all legs of intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection F – Mariposa Avenue & Fourth Street

- Install new yellow ladder style school crosswalk at the south leg of intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the southwest and southeast corners of intersection
- Install Vehicle Speed Feedback sign at the southeast corner of intersection
- Remove or trim hedges at intersection corners to maintain pedestrian visibility

Intersection G – Corona Avenue & Fourth Street

- Repaint existing crossing with new yellow ladder styled school crossing at the north and east leg of intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and northeast corners of the

RECOMMENDATIONS BY INTERSECTIONS

intersection

- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the southeast corner of the intersection. Bulb-out design should extent to cover most of the existing curb area. Bulb-outs should include object markers for detection/visibility
- Extend pedestrian crossing time and implement leading pedestrian interval modifications. Additional signal modifications may be required to optimize signal phases
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads for crossing support on the north and east legs of the intersection in each crossing direction

Intersection H – Orange Avenue & Fourth Street

- Repaint existing crossing with new yellow ladder styled school crossing at the south leg of intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the southwest and southeast corners of the intersection
- Remove or trim hedges at intersection corners to maintain pedestrian visibility

Intersection I – Vineyard Avenue & Fourth Street

- Repaint existing crossing with new white ladder styled crossing at all legs of intersection and additional turn lane sidewalk
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

RECOMMENDATIONS BY KEY SEGMENTS

Corona Avenue

- ID 48: Install 25 speed legend pavement marking along Corona Avenue
- ID 18: Remove existing Assembly A (CA) school signage
- ID 21: Install Assembly D (CA) school signage
- ID 21: Remove existing Assembly D (CA) school signage.
- ID 18: Install Assembly A (CA) school signage
- ID 50: Install 90 feet of red paint on the east side of the roadway
- ID 16: Install new yellow ladder style school crosswalk at the west leg of Corona Avenue and Harvard Place
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and southwest corners of the intersection
- ID 21: Install Assembly D (CA) school signage for northbound traffic
- ID 48: Install 25 speed legend pavement marking for northbound traffic
- ID 21: Remove existing / outdated Assembly D (CA) school signage for northbound traffic
- ID 51: Install R2-1 25 "SPEED LIMIT" sign for northbound traffic
- ID 52: Restripe lane geometries to widen southbound lanes to extend the left turn pocket and avoid obstructing the right turn lane with excess queueing in the left turn lane
- ID 50: Install 250 feet of red paint along Corona Avenue on the west side of the roadway and 185 feet of red paint on the east side of the roadway between Harvard Place and Fourth Street

RECOMMENDATIONS BY KEY SEGMENTS

Fourth Street

- ID 47: Install edgeline striping 8 feet from the curb along Fourth Street from Mariposa Avenue to Sacramento Avenue approximately
- ID 48: Install 45 speed legend pavement marking at each eastbound travel lane east of Intersection "E"
- ID 51: Install R2-1 45 "SPEED LIMIT" signage for eastbound traffic.
- ID 51: Remove existing R2-1 45 "SPEED LIMIT" signage
- ID 21: Install Assembly D (CA) school signage for eastbound traffic
- ID 18: Install Assembly A (CA) school signage for eastbound traffic.
- ID 18: Install Assembly A (CA) school signage for westbound traffic
- ID 26: Install Vehicle Speed Feedback sign for westbound traffic
- ID 51: Remove existing R2-1 45 "SPEED LIMIT" signage along Fourth Street
- ID 21: Install Assembly D (CA) school signage along Fourth Street for westbound traffic
- ID 51: Install R2-1 45 "SPEED LIMIT" signage for westbound traffic
- ID 48: Install 45 speed legend pavement marking at each eastbound travel lane

Fourth Street & Sacramento Avenue

- ID 16: Install new yellow ladder style school crosswalk at the south leg of the intersection
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the southwest and southeast corner of the intersection

Vineyard Avenue

- ID 15: Install new standard white crosswalk

at the west leg of Vineyard Avenue and Fifth Street

Vine Street and Rosewood Court

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the north leg of the intersection
- ID 16: Install yellow ladder style school crosswalk at the west leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the northwest, northeast, and southeast corners of the intersection to be ADA compliant with DWS

Princeton Street

- ID 21: Install Assembly D (CA) school signage for eastbound traffic

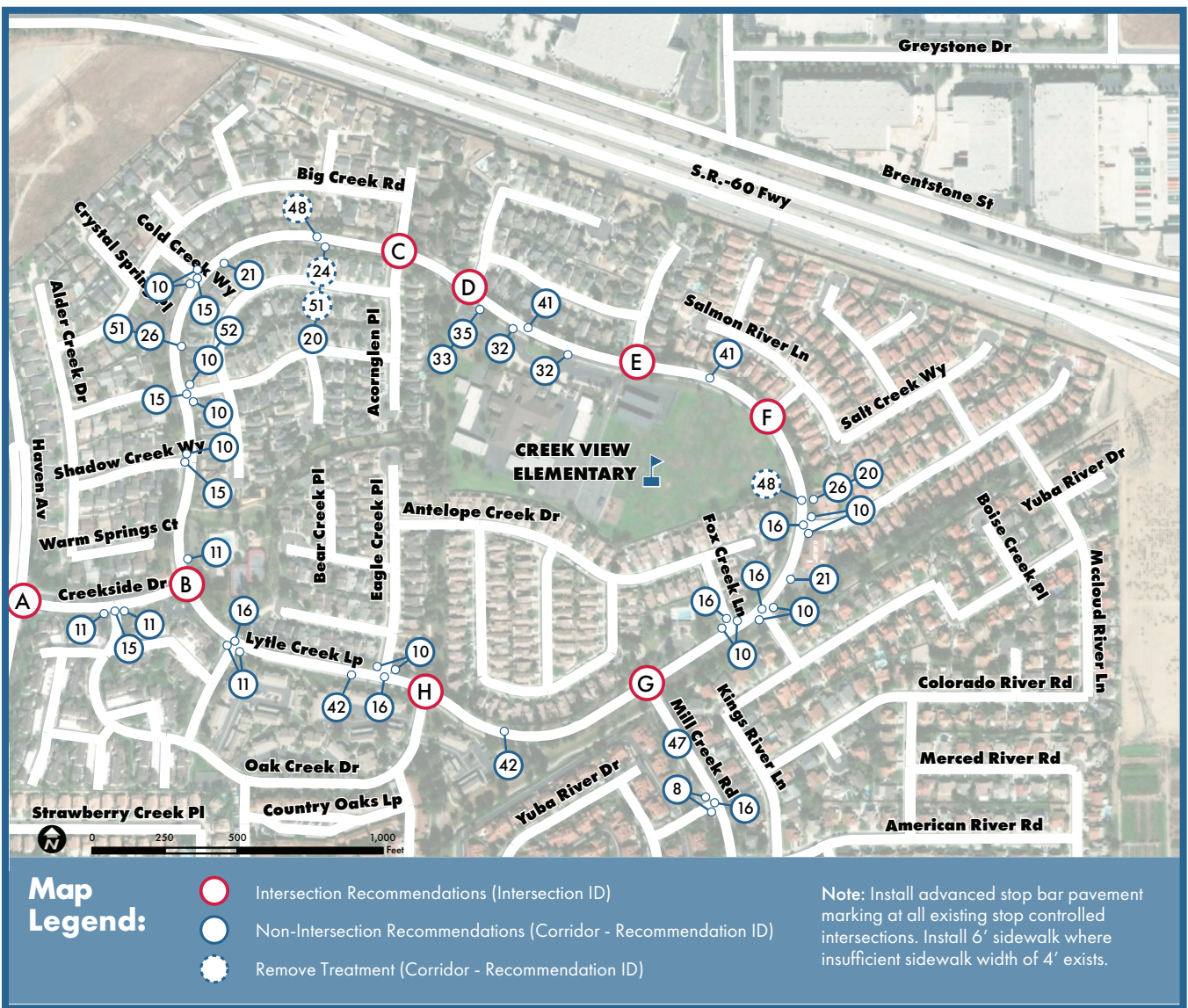
Harvard Place

- ID 21: Install Assembly D (CA) school signage for eastbound traffic. crosswalk at all legs of the intersection

CREEK VIEW ELEMENTARY SCHOOL

3742 Lytle Creek Loop, Ontario, CA 91761 | Mountain View School District (MVSD) | Enrollment: 614

Nestled within a residential neighborhood, Creek view Elementary School is located near the eastern border of Ontario, just below the 60 Freeway. Creekside Village East Park is a local destination which is located within less than half a mile to the School on Lytle Creek Loop.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Haven Avenue & Creekside Drive

- Repaint existing school crossing with new yellow ladder style school crossing at the north, west, and south legs of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection

Intersection B – Creekside Drive & Lytle Creek Loop

- Install new white standard crosswalk at the west, south, and north legs of the intersection
- Install raised bulb out that extends 8 feet and includes covered trench drains to permit continuous gutter flow at each corner of the intersection

Intersection C – Intersection C – Lytle Creek Loop & Acorn Glen Place

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection
- Repaint existing school crossing with new yellow ladder style school crossing at the north and south legs of the intersection
- Install Assembly A (CA) if and when existing Assembly C (CA) is removed at the southeast corner of the intersection 20 east of the intersection

Intersection D – Lytle Creek Loop & Aliso Creek Drive

- Install pedestrian actuated RRFB with S1-1 and W16-7P signage facing east and west

for both approaches

- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the north, east, and west corners of the intersection.
- Install yield teeth markings on east and west approach w/ R1-5 signs if and when proposed RRFB is installed
- Repaint existing yellow school crossing with yellow ladder style school crossing for the west leg of the intersection
- Install new yellow ladder style school crossing at the north leg of the intersection
- Remove existing S1-1 and W16-7P signage if and when proposed RRFB is installed since updated signs will be used

Intersection E – Lytle Creek Loop & Silverado Creek Place

- Install pedestrian actuated RRFB with S1-1 and W16-7P signage facing east and west for both approaches
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the northwest, northeast, and southeast corners of the intersection.
- Install yield teeth markings on east and west approach w/ R1-5 signs if and when proposed RRFB is installed
- Repaint existing yellow school crossing with yellow ladder style school crossing for the east leg of the intersection
- Install new yellow ladder style school crossing at the north leg of the intersection
- Remove existing S1-1 and W16-7P signage if and when proposed RRFB is installed since updated signs will be used
- Install R9-3 and R49 (CA) signage at the southwest corner of the intersection facing north to facilitate proper crosswalk usage

RECOMMENDATIONS BY INTERSECTIONS

Intersection F – Lytle Creek Loop & Stone Creek Way

- Install new assembly A (CA) at the north corner of the intersection facing southeast
- Remove existing school crossing on the west leg of the intersection
- Remove existing S1-1 and W16-7P signage at the north and west corners of the intersection if and when proposed crosswalk is removed

Intersection G – Lytle Creek Loop & Mill Creek Avenue

- Repaint existing yellow school crossing with yellow ladder style school crossing for the west, south, and east legs of the intersection
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at all corners of the intersection

Intersection H – Lytle Creek Loop & Oak Creek Drive

- Install new white crossing at the east and south legs of the intersection
- Install yield teeth markings on east and west approach w/ R1-5 signs if and when proposed white crossing is installed
- Install W11-2 with W16-7P at the northeast and southeast corners of the intersection if and when proposed crossing is installed
- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the northeast, southeast, and southwest corners of the intersection, if and when proposed white crossing is installed

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Lytle Creek Loop

- ID 11: Install new ramp to be ADA compliant with new detectable warning surface
- ID 15: Install new white standard crosswalk
- ID 16: Install new yellow ladder style school crossing
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface
- ID 52: Improve visibility at intersection by cutting back landscaping that interferes with line of sight
- ID 26: Install new speed feedback sign
- ID 51: Install speed limit sign R2-1
- ID 21: Install new Assembly D (CA)
- ID 20: Install new Assembly C (CA)
- ID 24/51: Remove existing W11-2 and R2-1 signage if and when proposed RRFB is installed
- ID 48: Remove existing speed limit legend marking if and when proposed RRFB is installed and associated signage is removed
- ID 32: Install R9-2 signage to facilitate and direct proper crosswalk usage
- ID 35/33: Install R9-3 and R49 (CA) facing north to facilitate proper crosswalk usage
- ID 41: Install new "SLOW SCHOOL XING" pavement marking
- ID 42: Install new PED XING pavement marking if and when proposed crossing is installed at Intersection "H"
-

Creekside Drive

- ID 11: Install new ramp to be ADA compliant with new detectable warning surface
- ID 15: Install new white standard crosswalk

Mill Creek Avenue

- ID 47: Install 8 foot edgeline striping from Lytle Creek Loop to American River Road

- ID 16: Install new yellow ladder style school crossing
- ID 8: Install raised bulb-out with covered trench drains to permit continuous gutter flow
- *ID 16: Install new yellow ladder style school crossing at the east leg of the intersection with American River Road
- *ID 8: Install raised bulb-out with covered trench drains to permit continuous gutter flow at the northeast and southeast corners of the intersection with American River Road

Creekside Drive & Deer Creek Loop

- *ID 13: Repaint existing white crossing with new white standard crossing at the north and east legs
- *ID 8: Install raised bulb out that extends 8 feet and includes covered trench drains to permit continuous gutter flow at the northwest, northeast, and southeast corners.
- *ID 11: Install raised bulb-out with covered trench drains to permit continuous gutter flow at the northwest, northeast, and southeast corners of the intersection

DE ANZA MIDDLE SCHOOL

1450 South Sultana Ave, Ontario, CA 9176 | Ontario-Montclair School District (OMSD) | Enrollment: 589

De Anza Middle School sits in the middle of a residential neighborhood just east of Euclid Ave. It is bounded by Acacia St. to the north, Sultana Ave. to the east, Locust St. to the south, and Euclid Ave. to the west. Local destinations within half a mile consists of De Anza Park, a grocery store, fast food restaurants, and a shopping center on Euclid Ave. south of the school.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Sultana Avenue & Phillips Street

- Install new standard white crosswalk at all legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

Intersection B – Sultana Avenue & Acacia Street

- Install yellow ladder style school crosswalk at the north, west, and east legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS
- Install STOP control R1-1 sign at the northwest and southeast corners of the intersection for northbound and southbound traffic, if and when warrant is met
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on all legs
- Install Assembly C (CA) sign, if and when the intersection is converted to an all-way stop controlled intersection
- Remove Assembly D (CA) sign, if and when the intersection is converted to an all-way stop controlled intersection

Intersection C – Acacia Street & Pleasant Avenue

- Install yellow ladder style school crosswalk at the north and south legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

Intersection D – Sultana Avenue Midblock School Crossing

- Install yellow ladder style school crosswalk

at crossing

- Install new ADA compliant curb ramps with DWS at the west and east corners of the intersection
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the west and east corners of the intersection, if and when existing Assembly B (CA) sign is removed
- Remove existing Assembly B (CA) sign on the west and east corners of the intersection, if and when proposed RRFB is installed
- Install yield teeth marking with R1-5 sign at the west and east legs of the intersection, if and when proposed RRFB is installed

Intersection E – Sultana Avenue & Locust Street (North)

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the east and south legs of the intersection
- Improve or reconstruct existing curb ramps at the northeast, southeast, and southwest corners of the intersection to be ADA compliant with DWS
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the southeast and southwest corners of the intersection
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on the south and east legs, and on the east side of the roadways extending north. Install 50 feet of red curb paint on the west leg of the intersection, extending north from the south leg crossing
- Install 6 foot wide sidewalk entering 80 feet in length on the west leg of the intersection. Ensure unused curb ramp depressions are removed, uniform pavement texture is installed, and obstructions are removed

RECOMMENDATIONS BY INTERSECTIONS

Intersection F – Pleasant Avenue & Locust Street

- Install yellow ladder style school crosswalk at the north and south legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

Intersection G – Monterey Avenue & Locust Street

- Install yellow ladder style school crosswalk at the north and south legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Sultana Avenue & Locust Street (South)

- ID 16: Install yellow ladder style school crosswalk at the west leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the northwest and southwest corners of the intersection to be ADA compliant with DWS

Euclid Avenue & Locust Street

- ID 15: Install new standard white crosswalk at the east leg of the intersection
- ID 10 - Improve or reconstruct existing curb ramps at the northeast and southeast corners of the intersection to be ADA compliant with DWS

Euclid Avenue & De Anza Circle

- ID 15: Install new standard white crosswalk at the east leg of the intersection
- ID 10 - Improve or reconstruct existing curb ramps at the northeast and southeast corners of the intersection to be ADA compliant with DWS

Euclid Avenue & Budd Street

- ID 15: Install new standard white crosswalk at the east leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the northeast and southeast corners of the intersection to be ADA compliant with DWS

Euclid Avenue & Acacia Street

- ID 15: Install new standard white crosswalk at the east leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the northeast and southeast corners of the intersection to be ADA compliant with DWS

Sultana Avenue

- ID 21: Install Assembly D (CA) sign
- ID 20: Install/remove Assembly C (CA) sign
- ID 18: Install Assembly A (CA) sign
- ID 41: Remove "SLOW SCHOOL XING" pavement marking
- ID 52: Remove "END SCHOOL ZONE" signage
- ID 29: Install S5-3 "END SCHOOL SPEED LIMIT" sign

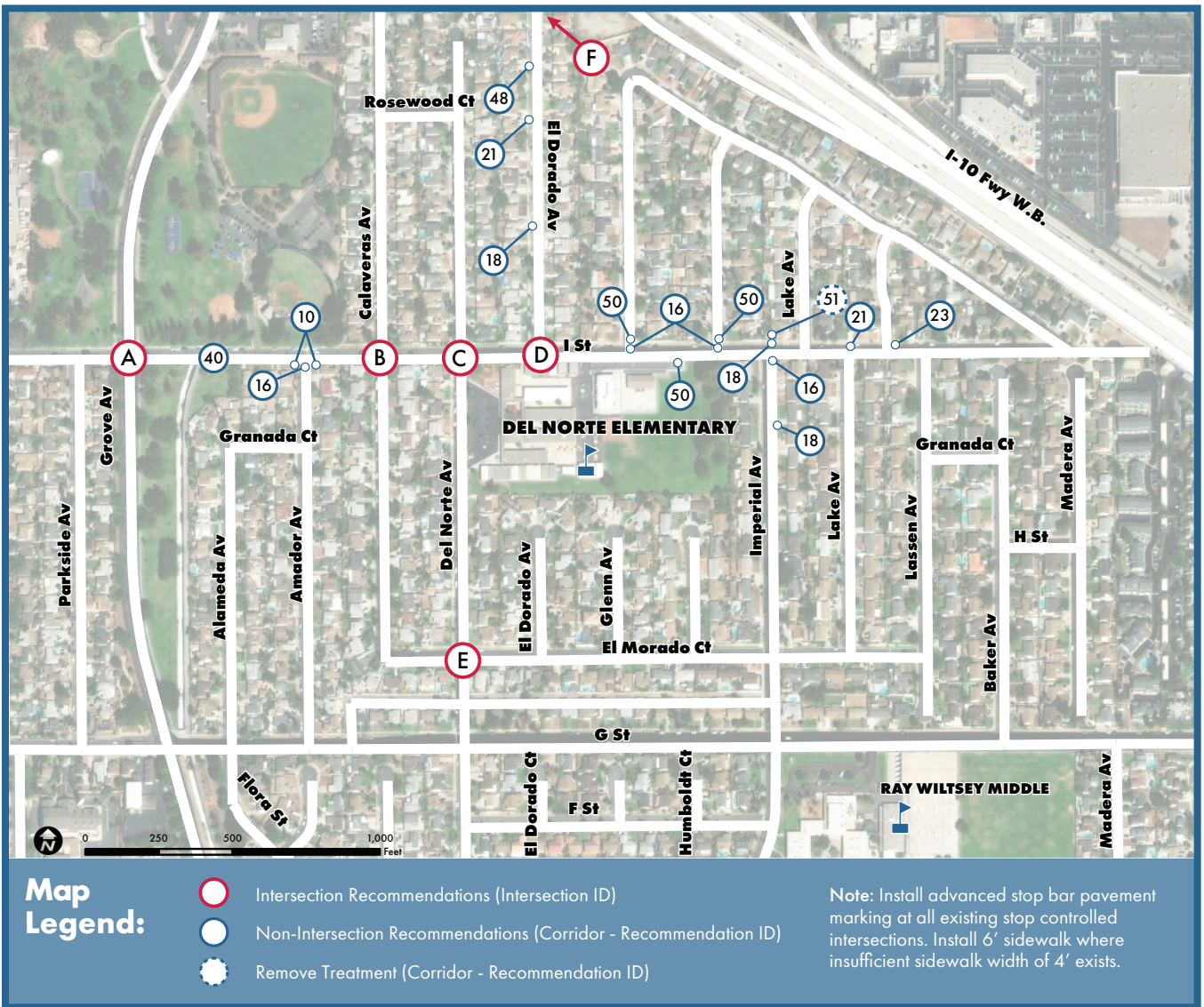
*Sultana Avenue & Belmont Street

- *ID 15: Install new standard white crosswalk at all legs of the intersection
- *ID 11: Install new ADA compliant curb ramps with DWS at all corners of the intersection

DEL NORTE ELEMENTARY SCHOOL

850 Del Norte Ave, Ontario, CA 91764 | Ontario-Montclair School District (OMSD) | Enrollment: 515

Del Norte Elementary School is located within a residential neighborhoods which is wedged in between the 10 Freeway and G St. It is bounded by I St. to the north, Imperial Ave. to the east, G St. to the south, and Del Norte Ave. to the west. Local destinations within a half mile radius consists of Jay Littleton Ball Park, John Galvin Park, and Memorial Grove Park.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Grove Avenue & I Street

- Install new standard white crosswalk at all legs of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

Intersection B – Monterey Avenue & Locust Street

- Install yellow ladder style school crosswalk at the north and south legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

Intersection C – I Street & Del Norte Avenue

- Install yellow ladder style school crosswalk at all legs of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on all legs

Intersection D – I Street & El Dorado Avenue

- Install yellow ladder style school crosswalk at the north and west legs of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest, northeast, and southwest corners of the intersection
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on the north and west

legs, and on the north side of the roadway extending outward on the east legs

Intersection E – Del Norte Avenue & El Morado Court

- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS
- Install yellow ladder style school crosswalk at the east leg of the intersection

Intersection F – Fourth Street & El Dorado Avenue

- Install new standard white crosswalk at the west and south legs of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at the northwest, southwest, and southeast corners of the intersection for each crossing

RECOMMENDATIONS BY KEY SEGMENTS

I Street & Amador Avenue

- ID 16: Install yellow ladder style school crosswalk at the south leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps the southwest and southeast corners of the intersection to be ADA compliant with DWS

I Street & Glen Avenue

- ID 16: Install yellow ladder style school crosswalk at the north leg of the intersection
- ID 50: Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on the north leg of the intersection, and on the north side of the roadway extending outward on the west and east legs

I Street & North School Driveway

- ID 50: Install 25 feet of red curb paint on the south side of the roadway, extending outward from the driveway on the west and east legs

I Street & Humboldt Avenue

- ID 16: Install yellow ladder style school crosswalk at the north leg of the intersection
- ID 50: Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on the north leg of the intersection, and on the north side of the roadway extending outward on the west and east legs

I Street & Imperial Avenue

- ID 16: Install yellow ladder style school crosswalk at the south leg of the intersection
- ID 20: Install Assembly C (CA) sign on the north side of the intersection
- ID 51: Remove R2-1 "35 MPH SPEED

LIMIT" sign on the north side of the intersection

I Street & Lake Avenue

- ID 21: Install Assembly D (CA) sign on the north side of the intersection

I Street & Lassen Avenue

- ID 23: Install S4-5 school signage on the north side of the intersection

I Street

- ID 40: Install centerline stripe from Grove Avenue to Fresno Street

Imperial Avenue

- ID 18: Install Assembly A (CA) sign. Install SW24-1 (CA) with W116-6P (Left) sign

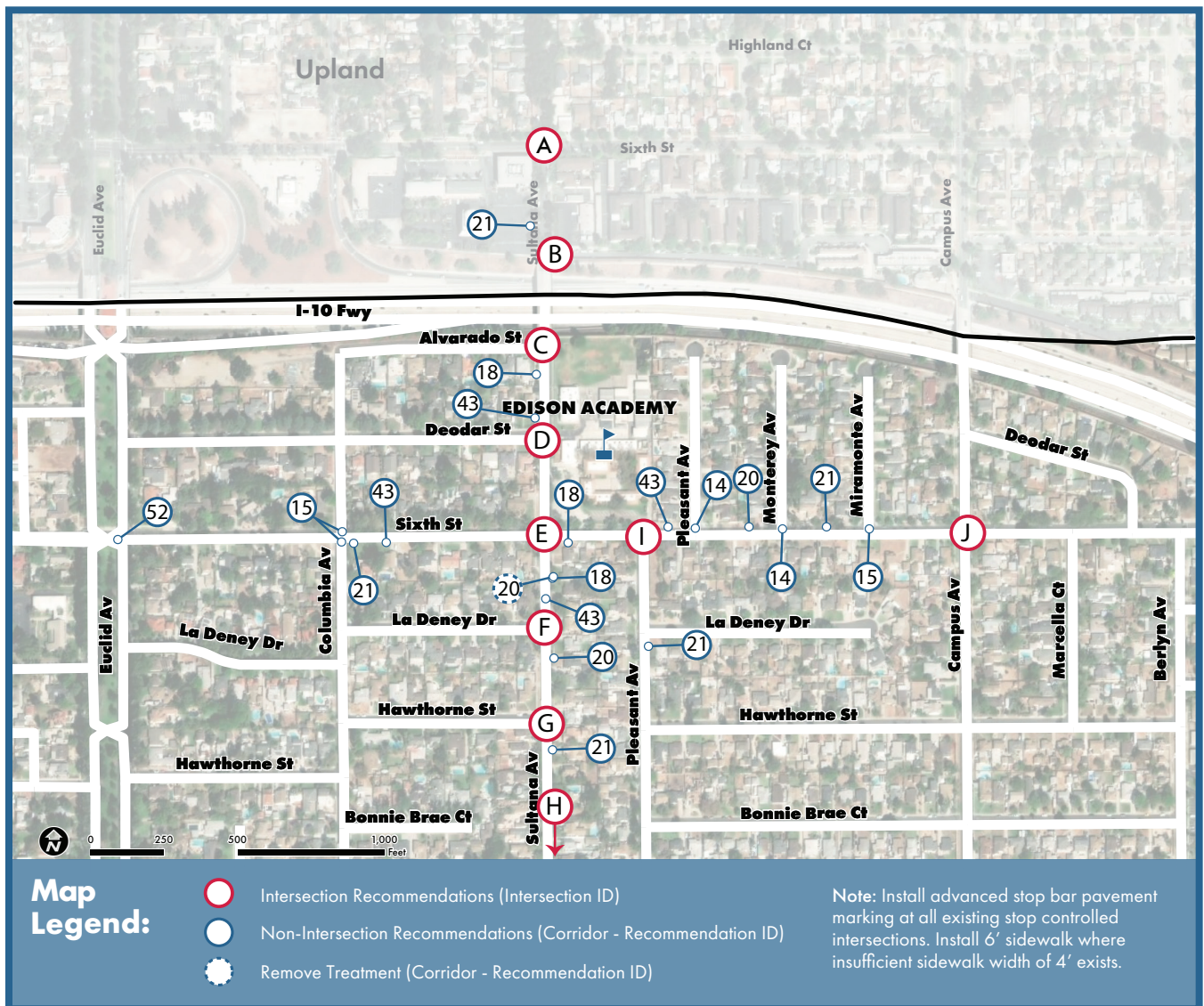
El Dorado Avenue

- ID 18: Install Assembly A (CA) sign with SW24-1 (CA) sign
- ID 21: Install Assembly D (CA) sign with SW24-3 (CA) sign
- ID 48: Install speed legend pavement parking 25 MPH

EDISON ACADEMY

515 East 6th St, Ontario, CA 91764 | Ontario-Montclair School District (OMSD) | Enrollment: 767

Just south of the northern border of Ontario, Edison Academy sits right below the 10 Freeway in the middle of a residential neighborhood east of Euclid Ave. The school is bounded by the 10 Freeway to the north, Campus Ave. to the east, 6th St. to the south, and Sultana Ave. to the west. Local destinations within a half a mile to the school consists of a few medical offices, some religious institutions, and Olivedale park.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Seventh & Sultana Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection
- Repaint existing crossing with new yellow ladder styled school crossing at the south, west, and east leg of the intersection

Intersection B – Richland Street & Sultana Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northeast and southeast corners of the intersection
- Install new yellow ladder style school crosswalk at the east leg of the intersection
- Install stop line prior to crosswalk
- Install Assembly C (CA) school signage at the northwest corner of the intersection

Intersection C – Alvarado Street & Sultana Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and southwest corners of the intersection
- Install new yellow ladder style school crosswalk at the leg of the intersection

Intersection D – Alvarado Street & Sultana Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and southwest corners of the intersection
- Repaint existing crossing with new yellow ladder styled school crossing

Intersection E – Sixth Street & Sultana Avenue

- Repaint existing crossing with new yellow ladder styled school crossing at all legs of the intersection

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install 25 feet of red curb paint on both sides of the roadway to the west, east, north, and south of the intersection

Intersection F – La Denev Drive & Sultana Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and southwest corners of the intersection
- Install new yellow ladder style school crosswalk at the leg of the intersection

Intersection G – Hawthorne Street & Sultana Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and southwest corners of the intersection
- Install new or repaint standard white crosswalk at the leg of the intersection

Intersection H – Fifth Street & Sultana Avenue

- Install new ADA compliant curb ramp with DWS at all corners of the intersection
- Repaint existing crossing with new white ladder styled crossing at all legs of the intersection
- Install 25 feet of red curb paint on both sides of the roadway to the west and east, and south the intersection
- Install 25 feet of red curb paint on the east side of the roadway to the north of the intersection

RECOMMENDATIONS BY INTERSECTIONS

Intersection I – Pleasant Avenue & Sixth Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at both corners of the intersection
- Repaint existing crossing with new yellow ladder styled school crossing at leg of intersection
- Install Assembly A (CA) school signage at the northwest corner of the intersection

Intersection J – Sixth Street & Campus Avenue

- Install new ADA compliant curb ramp with DWS at all corners of the intersection
- Repaint existing crossing with new white ladder styled crossing at all legs of intersection
- Install 25 feet of red curb paint on both sides of the roadway to the north, south, east, and west of the intersection

RECOMMENDATIONS BY KEY SEGMENTS

Sultana Avenue

- ID 21: Install Assembly D (CA) school signage north of Richland Street
- ID 18: Install Assembly A (CA) school signage
- ID 43: Install “STOP AHEAD” pavement markings for southbound traffic on approach to STOP controlled intersection north of Deodar Street
- ID C: Remove existing Assembly C (CA) school signage south of intersection E.
- ID 18: Install Assembly A (CA) school signage
- ID 43: Install “STOP AHEAD” pavement markings for northbound traffic on approach to STOP controlled intersection north of La Deney Drive
- ID 20: Install Assembly C (CA) school signage
- ID 21: Install Assembly D (CA) school signage

Sixth Street & Euclid Avenue

- ID 52: Recommendations for this intersection are shown on the corresponding Chaffey HS map

Sixth Street & Columbia Avenue

- ID 15: Install new or repaint standard white crosswalk at the south and north legs

Sixth Street & Pleasant Avenue

- ID 14: Repaint existing crossing with new yellow ladder styled school crossing

Sixth & Monterey Avenue

- ID 14: Repaint existing crossing with new yellow ladder styled school crossing

RECOMMENDATIONS BY KEY SEGMENTS

Sixth Street & Miramonte Avenue

- ID 15: Repaint existing crossing with new yellow ladder styled school crossing

Sixth Street

- ID 21: Install Assembly D (CA) school signage east of Columbus Avenue
- ID 43: Install "STOP AHEAD" pavement markings for eastbound traffic on approach to STOP controlled intersection
- ID 18: Install Assembly A (CA) school signage
- ID 43: Install "STOP AHEAD" pavement markings for westbound traffic on approach to STOP controlled intersection
- ID 20: Install Assembly C (CA) school signage along Sixth Street east of Pleasant Avenue
- ID 21: Install Assembly D (CA) school signage

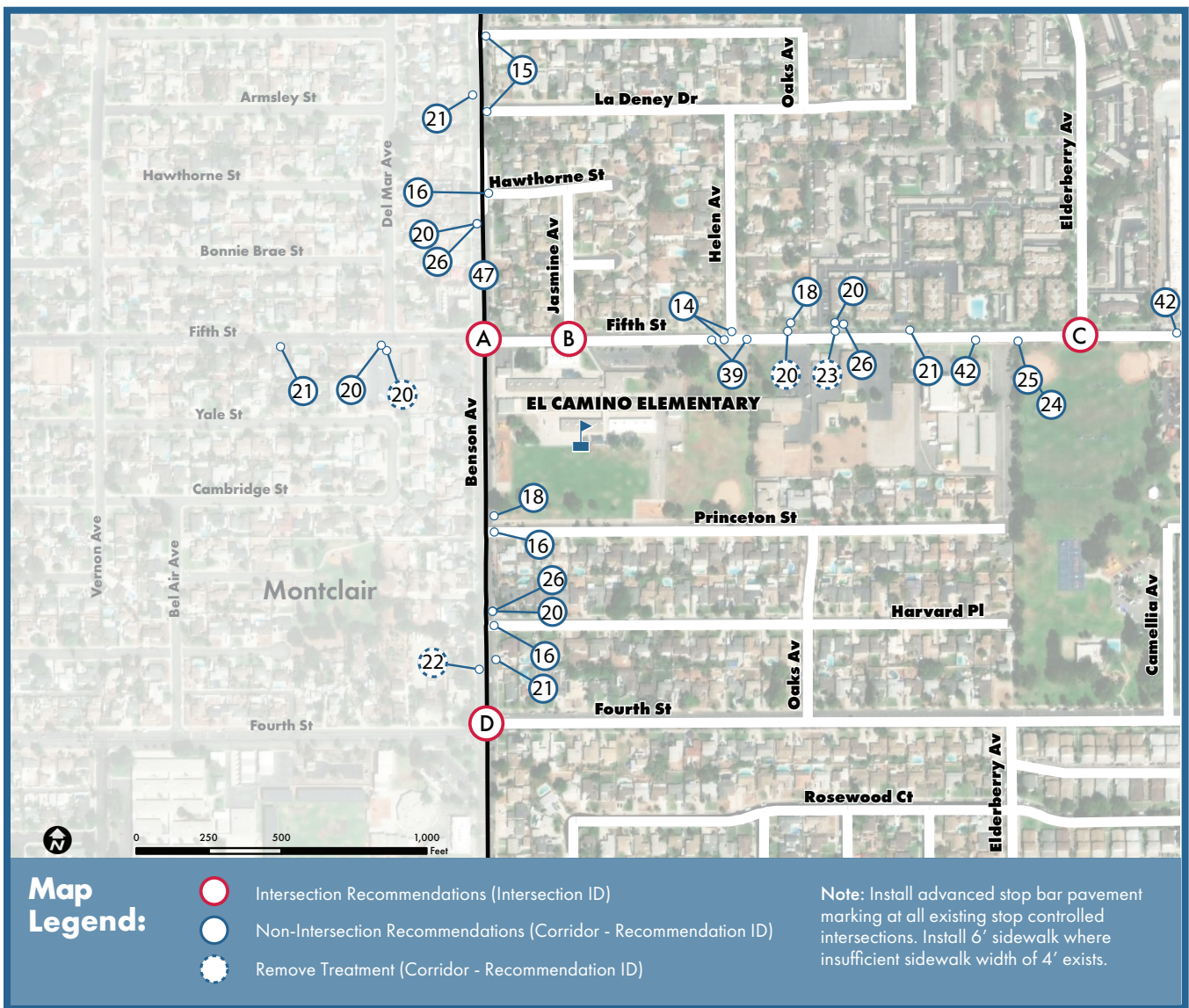
Pleasant Avenue & La Deney Drive

- ID 21: Install Assembly D (CA) school signage at the southeast corner of the intersection

EL CAMINO ELEMENTARY SCHOOL

1525 West 5th St, Ontario, CA 91762 | Ontario-Montclair School District (OMSD) | Enrollment: 447

El Camino Elementary School is positioned on the eastern border of the City on Benson Ave. in a residential neighborhood south of the 10 Freeway. It is bounded by W 5th St. to the north, Mountain Ave. to the east, 4th St. to the south, and Benson Ave. to the west. Local destinations within a half mile to the school include Gibbs Park, Anthony Munoz Park, Sunrise Park, and Golden Girls Softball Field.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Benson Avenue & Fifth Street

- Repaint existing school crosswalks with yellow ladder style school crosswalk at all legs of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Remove existing R1-1 STOP sign at all corners of the intersection
- Remove existing Assembly C (CA) school signage at the southeast corner of the intersection
- Install Assembly A (CA) school signage at the southwest and southeast corner of the intersection

Intersection B – Fifth Street & Jasmine Avenue

- Install new yellow ladder style school crosswalk at the north leg of intersection
- Repaint existing crossing with new yellow ladder styled school crossing at the east leg of the intersection
- Install yield line markings 20 feet in advance of school crossing for eastbound and westbound traffic
- Widen existing curb ramp at the southeast corner of the intersection

Intersection C – Fifth Street & Elderberry Avenue

- Install new yellow ladder style school crosswalk at the north leg of intersection.
- Repaint existing crossing with new white ladder style crossing at the west leg of intersection
- Remove existing W11-2 w/ W16-9P pedestrian signage at the northwest and southwest corners of the intersection
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the northwest and

southwest corners of the intersection

- Install yield line markings 20 feet in advance of school crossing for eastbound and westbound traffic

Intersection D – Benson Avenue & Fourth Street

- Install intersection control beacon in conjunction with proposed lighting (at least 2 corners with new luminaries) and matches recommendations shown on the Montclair ATP/SRTS Plans
- Repaint existing crossing with new yellow ladder styled school crossing that matches recommendations shown on the Montclair ATP/SRTS Plans at the west, east, and south leg of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow and matches recommendations shown on the Montclair ATP/SRTS Plans at the southwest and southeast corners of the intersection
- Install painted bulb-outs with vertical bollards and match the recommendations shown on the Montclair ATP/SRTS Plans at the northwest corner of the intersection

RECOMMENDATIONS BY KEY SEGMENTS

Benson Avenue

- ID 47: Install edge line striping 8 feet from the curb on both sides of the roadway from Sixth Street to Fourth Street
- ID 21: Install Assembly D (CA) school signage between Benson Avenue and Armsley Square and Benson Avenue and La Deney Dr Street for southbound traffic
- ID 22: Remove existing S1-1 between Benson Avenue and Harvard Place and Benson Avenue and Fourth Street for southbound traffic
- ID 21: Install Assembly D (CA) school signage between Benson Avenue and Harvard Place and Benson Avenue and Fourth Street for northbound traffic

Benson Avenue & Armsley Square

- ID 15: Install new white ladder style crosswalk at east leg of intersection

Benson Avenue & La Deney Drive

- ID 15: Install new white ladder style crosswalk at east leg of intersection

Benson Avenue & Hawthorne Street

- ID 16: Install new yellow ladder style school crosswalk at leg of intersection
- ID 26/20: Install Vehicle Speed Feedback sign with Assembly C (CA) passing Benson Avenue and Hawthorne Street for southbound traffic

Benson Avenue & Princeton Street

- ID 18: Install Assembly A (CA) school signage at the northeast corner of the intersection for northbound traffic
- ID 16: Install new yellow ladder style school crosswalk at the east leg of the intersection

Benson Avenue & Harvard Place

- ID 26/20: Install Vehicle Speed Feedback sign with Assembly C (CA) at the northeast corner of the intersection for northbound traffic
- ID 16: Install new yellow ladder style school crosswalk at the east leg of the intersection

*Benson Avenue & Sixth Street

- ID 15: Install new white ladder style crosswalk at all legs of intersection

Palo Verde Street & Del Mar Avenue

- ID 20: Remove existing /outdated Assembly C (CA) school signage at the southwest corner of intersection
- ID 20: Install Assembly C (CA) school signage at the southwest corner of intersection

Fifth Street & Helen Avenue

- ID 14: Repaint existing crossing with new yellow ladder styled school crossing at the north and west leg of the intersection
- ID 39: Install yield line markings 20 feet in advance of school crossing for westbound and east bound traffic

Fifth Street

- ID 18: Install Assembly A (CA) school signage for westbound traffic
- ID 20: Remove existing Assembly C (CA) school signage
- ID 23: Remove existing S4-5 signage
- ID 20: Install Assembly C (CA) school signage for westbound traffic
- ID 26: Install Vehicle Speed Feedback sign for westbound traffic.
- ID 21: Install Assembly D (CA) school signage for westbound traffic

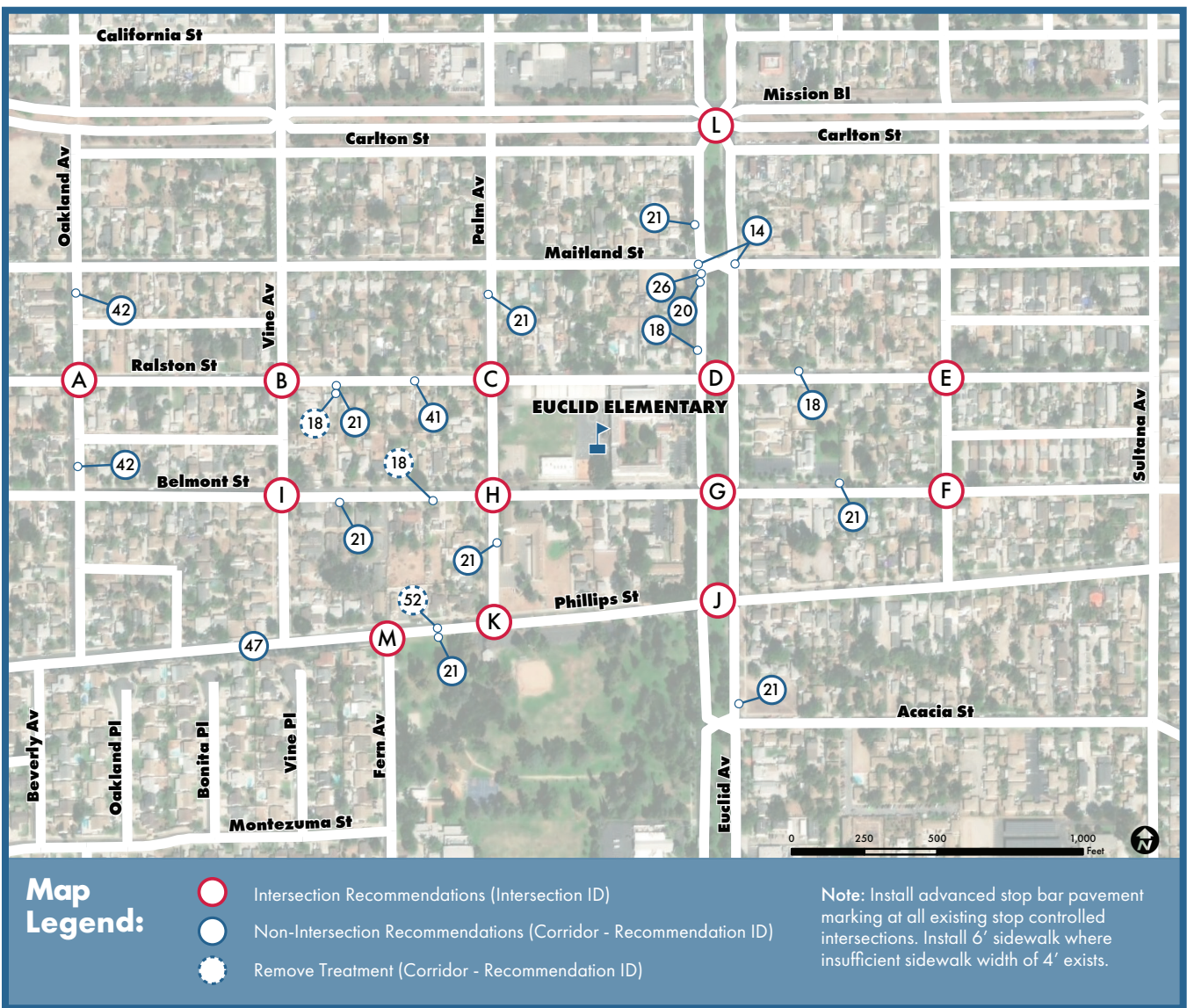
RECOMMENDATIONS BY KEY SEGMENTS

- ID 42: Install "PED XING" pavement marking.
- ID 25/24 - Install W16-9P AHEAD sign to existing W11-2 signage for eastbound traffic
- ID 42: Install "PED XING" pavement marking

EUCLID ELEMENTARY SCHOOL

515 East 6th St, Ontario, CA 91764 | Ontario-Montclair School District (OMSD) | Enrollment: 725

Euclid Elementary School sits at the entrance of a residential neighborhood facing Euclid Ave just south of Mission Blvd. It is bounded by Ralston St. to the north, Euclid Ave. to the east, Belmont St. to the south, and Palm Ave. to the west. Local destinations for the school consist of a church, De Anza Park, and a couple of fast food eateries along Euclid Ave.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Oakland Avenue & Ralston Street

- Install new standard white crosswalk at the west, east, and south legs of the intersection
- Install W11-2 and W16-9P signage at the southwest and southeast corners of the intersection
- Improve or reconstruct existing curb ramps at the northeast corner of the intersection to be ADA compliant with DWS
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on the west, east, and south legs of the intersection, and on the west side of the north leg
- Install yield teeth marking with R1-5 sign at the north and south legs of the intersection

Intersection B – Vine Avenue & Ralston Street

- Install new standard white crosswalk at the west, east, and south legs of the intersection
- Install W11-2 and W16-9P signage at the southwest and southeast corners of the intersection
- Improve or reconstruct existing curb ramps at the southeast corner of the intersection to be ADA compliant with DWS maintain north-facing perpendicular curb ramp design
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on all legs
- Install yield teeth marking with R1-5 sign at the north and south legs of the intersection
- Install R2-1 25 MPH SPEED LIMIT sign at the southeast corner of the intersection for eastbound traffic

Intersection C – Palm Avenue & Ralston Street

- Repaint existing school crosswalk with new

yellow ladder style school crosswalk at the north, east, and south legs of the intersection

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on all legs
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the northeast and southeast corners of the intersection
- Remove existing school crosswalk at the west leg of the intersection, if and when proposed yield marking are installed
- Install yield teeth marking with R1-5 sign at the west and east legs of the intersection, if and when proposed RRFB is installed
- Install Assembly A (CA) sign at the southeast corner of the intersection, for eastbound traffic

Intersection D – Euclid Avenue & Ralston Street

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the west and east legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS
- Install R9-3 sign in conjunction with R49 (CA) "NO PED CROSSING USE CROSSWALK" sign facing south on both corners of the south median
- Install R9-2 "CROSS ONLY AT CROSSWALKS" sign on both corners of the north median

Intersection E – Ralston Street & Plum Avenue

- Install new standard white crosswalk at the north, west, and south legs of the intersection

RECOMMENDATIONS BY INTERSECTIONS

- Improve or reconstruct existing curb ramps at the northeast, southeast, and southwest corners of the intersection to be ADA compliant with DWS
- Install W11-2 and W16-7P signage at the northwest and southwest corners of the intersection
- Install yield teeth marking with R1-5 sign at the west and east legs of the intersection

Intersection F – Belmont Street & Plum Avenue

- Install new standard white crosswalk at the north, west, and east legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS
- Install W11-2 and W16-7P signage at the northwest and northeast corners of the intersection
- Install yield teeth marking with R1-5 sign at the north and south legs of the intersection

Intersection G – Euclid Avenue & Belmont Street

- Repaint existing crosswalk with new yellow ladder style school crosswalk at the north, west, and east legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection and on both corners of the north median to be ADA compliant with DWS
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection on both corners of the north median at each crossing
- Install Assembly A (CA) sign on the northeast corner for northbound traffic
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all

corners of the intersection

Intersection H – Palm Avenue & Belmont Street

- Install yellow ladder style school crosswalk at the south leg of the intersection
- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the north and east legs of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the northeast and southeast corners of the intersection
- Remove Assembly B (CA) sign on the northeast and southeast corners of the intersection, if and when proposed RRFB is installed
- Install Assembly A (CA) sign at the southeast corner of the intersection for eastbound traffic
- Install yield teeth marking with R1-5 sign at the west and east legs of the intersection
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on the north, west, and east legs of the intersection, and on the east side of the south leg

Intersection I – Belmont Street & Vine Avenue

- Install new standard white crosswalk at the north, west, and east legs of the intersection
- Install W11-2 and W16-7P signage at the northwest and northeast corners of the intersection
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on all legs
- Install yield teeth marking with R1-5 sign at the north and south legs of the intersection

RECOMMENDATIONS BY INTERSECTIONS

- Install R2-1 25 MPH SPEED LIMIT sign at the southeast corner for eastbound traffic

Intersection J – Euclid Avenue & Phillips Street

- Install yellow ladder style school crosswalk at the west and east legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection and on both corners of the north median to be ADA compliant with DWS
- Install speed feedback sign in conjunction with proposed Assembly C (CA) sign at the northeast corner of the intersection
- Remove Assembly C (CA) signs at the northeast corner of the intersection and the east corner of the north median

Intersection K – Phillips Street & Palm Avenue

- Install yellow ladder style school crosswalk at the north leg of the intersection
- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the east leg of the intersection
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on the north and east legs, and on the north side of the west leg. Install 50 feet of red curb paint on the south leg of the intersection, extending west from the east leg crosswalk
- Install yield teeth marking with R1-5 sign at the west and east legs of the intersection, if and when proposed RRFB is installed
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the northeast and southeast corners of the intersection

Intersection L – Phillips Street & Fern Avenue

- Install yellow ladder style crosswalk at the south and west legs of the intersection

- Install raised bulb-out with covered trench drains to permit continuous gutter flow at the southwest corner of the intersection
- Install R10-15 sign and remove duplicate R3-7 right turn sign on the southwest corner of the intersection.
- Install right turn lane on the west leg of the intersection, if and when 8 foot tapered edgeline and bulb-out are installed
- Install bioswale per City ATP Cycle 5 specs leading into the intersection on the eastbound approach and taper
- Install new Assembly B (CA) signs if and when the proposed west leg crosswalk is installed

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Euclid Avenue & Maitland Street

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk
- ID 26: Install speed feedback sign

Euclid Avenue & Acacia Street

- ID 21: Install Assembly D (CA) sign

Oakland Avenue

- ID 42: Install "PED XING" white pavement marking on approach to Ralston Street pedestrian crossing

Ralston Street

- ID 21: Install Assembly D (CA) sign
- ID 18: Install/Remove Assembly A (CA) sign
- ID 41: Install "SLOW SCHOOL XING" pavement marking

Phillips Street

- ID 47: Install edge line striping 8 feet from the curb on the south side of the roadway between Fern Avenue and Beverly Avenue

Belmont Street

- ID 21: Install Assembly D (CA) sign
- ID 18: Install/Remove Assembly A (CA) sign

Euclid Avenue

- ID 18: Install Assembly A (CA) sign
- ID 21: Install Assembly D (CA) sign

*Euclid Avenue and Mission Boulevard

- ID 13: Repaint existing crosswalks with new white ladder style crosswalk at the west, east, and south legs of the intersection
- ID 7: Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the

intersection for each crossing. Install on the west and east medians of the intersection

- ID 10: Improve or reconstruct existing curb ramps on the west and east medians of the intersection to be ADA compliant with DWS
- ID 33: Install R49 (CA) sign mounted on railing pointed south on west and east side of north median of intersection

*San Antonio Avenue and Ralston Street

- ID 15: Install new standard white crosswalk at the west, east, and south legs of the intersection
- ID 8: Install raised bulb-out with covered trench drains to permit continuous gutter flow at the southeast corner of the intersection
- ID 2/22/25: Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the southwest and southeast corners of the intersection
- ID 39/28: Install yield teeth marking with R1-5 sign at the north and south legs of the intersection, if and when proposed RRFB is installed
- ID 50: Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on all legs. On the north leg, install 10 feet of red curb paint on the west side

*San Antonio Avenue

- ID 24/25: Install W11-2 and W16-7P signage south of Maitland Street for southbound traffic, and north of Belmont Street for northbound traffic
- ID 42: Install "PED XING" white pavement marking adjacent to proposed W11-2 and W16-7P

GRACE YOKLEY MIDDLE SCHOOL

2947 South Turner Ave, Ontario, CA 91761 | Mountain View School District (MVSD) | Enrollment: 892

Situated just south of Colony High along Riverside Drive, Grace Yokley Middle School is located near the eastern border of Ontario and is placed between a residential neighborhood and dairy farms. The School is bounded by the 60 Freeway to the north, Haven Ave. to the east, Riverside Dr. to the south, and Turner Ave. to the west. Creekside Park is immediately adjacent to the school and various other eateries located half a mile west of the school along Riverside Dr.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Turner Avenue & Hazeltine Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and southwest corners of the intersection
- Install new yellow ladder style school crosswalk at the west leg of the intersection

Intersection B – Turner Avenue & St. Andrews Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and southwest corners of the intersection
- Install new yellow ladder style school crosswalk at the west leg of the intersection
- Install new Assembly A (CA) facing north 25 feet south of the intersection on the west side of the road

Intersection C – Turner Avenue & Mid-Block School Crossing (Dunes Street)

- Install Pedestrian Hybrid Beacon, if and when pending warrants are successful to control north/south movements. Install R10-23 on mast arm for both directions if Pedestrian Hybrid Beacon is installed
- Install accessible pedestrian system push button and count down pedestrian heads at each leg of the intersection and for east/west movements
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the east and west corners of the intersection
- Removed existing Assembly A (CA) sign at the east corner of the intersection
- Install stop line and R10-6 signage if and when proposed PHB is installed for the north and south approaches
- Install 25 feet of red paint on each side of

the west corner of the intersection

Intersection D – Turner Avenue & Merino Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and southwest corners of the intersection
- Install new yellow ladder style school crosswalk at the west leg of the intersection
- Removed Existing Assembly C (CA) sign facing south at the northeast corner of the intersection
- Install Assembly A (CA) if and when proposed Assembly C (CA) sign is removed

Intersection E – Turner Avenue & Riverside Drive

- Install new yellow ladder style school crosswalk at each leg of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Turner Avenue

- ID 26: Install new speed feedback sign
- ID 47: Install edgeline stripe six to eight feet from the curb from Arcadian Shores Road to Riverside Drive on both sides of the road except for on approach to intersections
- ID 41: Removed existing "SLOW SCHOOL XING" pavement marking if and when proposed PHB is installed at intersection "C"
- ID 21: Install new Assembly D (CA) sign
- ID 5: Remove existing overhead pedestrian beacon if and when proposed Pedestrian Hybrid Beacon is installed at intersection "C"
- ID 20: Install Assembly C (CA) sign
- ID 51: Install R2-1 speed limit sign
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface
- ID 15: Install new white standard crossing

Riverside Drive

- ID 52: Install sidewalk eight feet wide 250 feet in length
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface
- ID 15: Install new white standard crossing

Riverside Drive & Archibald Avenue

- *ID 13: Repaint existing white crossings at each leg of the intersection
- *ID 7: Install accessible pedestrian system push button and count down pedestrian heads at each leg of the intersection and for each direction of travel.

Walnut Street & Peachtree Place

- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with new

detectable warning surface at the northwest and northeast corners of the intersection

- *ID 15: Install new white standard crossing at the north leg of the intersection
- *ID 17/46: Install STOP sign, line, and pavement legend for the south leg if and when warrant is met

Walnut Street & Plainfield Drive

- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and northeast corners of the intersection
- *ID 15: Install new white standard crossing at the north leg of the intersection
- *ID 17/46: Install STOP sign, line, and pavement legend for the south leg if and when warrant is met

Turner Avenue & Day Creek

- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northeast and southeast corners of the intersection
- *ID 15: Install new white standard crossing at the north, west, and south legs of the intersection

Day Creek & Deer Creek Loop

- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest, southwest, and northeast corners of the intersection
- *ID 11: Install new ramp to be ADA compliant with new detectable warning surface at the southeast corner of the intersection
- *ID 15: Install new white standard crossing at the north, west, and south legs of the intersection

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

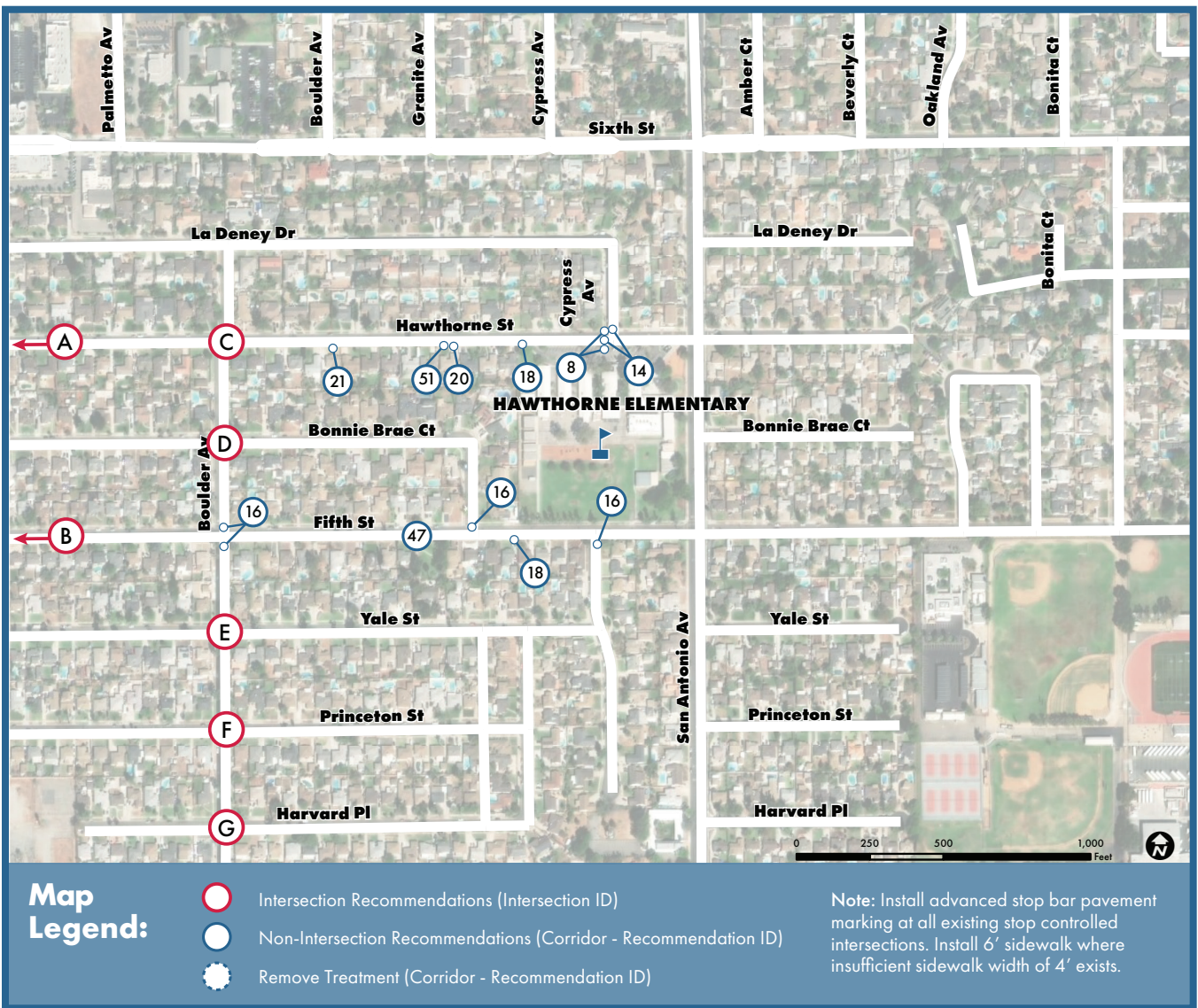
Turner Avenue & Golden Trails Street

- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface at each corner of the intersection
- *ID 15: Install new white standard crossing at the west, and east legs of the intersection

HAWTHORNE ELEMENTARY SCHOOL

705 West Hawthorne St, Ontario, CA 91762 | Ontario-Montclair School District (OMSD) | Enrollment: 762

Bounded by Hawthorne St. to the north, San Antonio Ave. to the east, 5th St. to the south, and Boulder Ave. to the west, Hawthorne Elementary is located near the northern border of Ontario and is situated in the middle of a residential neighborhood just northwest of Chaffey High School. Some local destinations include a Walmart Supercenter, Edwards Movie Theatre, and various other restaurants and retailers less than a mile away traveling west on Hawthorne St.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Mountain Avenue & Hawthorne Street

- Repaint existing crosswalks with new white ladder style crosswalk at the north, west, and east legs of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection B – Mountain Avenue & Fifth Street

- Repaint existing crosswalks with new white ladder style crosswalk at all legs of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection C – Boulder Avenue & Hawthorne Street

- Install yellow ladder style school crosswalk at the north and south legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

Intersection D – Boulder Avenue & Bonnie Brae Court

- Install yellow ladder style school crosswalk at the west and east legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

Intersection E – Boulder Avenue & Yale Street

- Install new standard white crosswalk at the east and west legs of the intersection
- Improve or reconstruct existing curb ramps

at northwest, northeast, and southwest corners of the intersection to be ADA compliant with DWS

Intersection F – Boulder Avenue & Princeton Street

- Install new standard white crosswalk at all legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

Intersection G – Boulder Avenue & Harvard Place

- Install new standard white crosswalk at west and east legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Hawthorne Street & Cypress Avenue

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the north and west legs of the intersection
- ID 8: Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest and southwest corners of the intersection

Hawthorne Street

- ID 18: Install Assembly A (CA) sign
- ID 20/51: Install Assembly C (CA) sign. If roadway is already 25 MPH, install R2-1 25 MPH SPEED LIMIT sign
- ID 21: Install Assembly D (CA) sign

Fifth Street

- ID 47: Install edge line striping 8 feet from the curb on both sides of the roadway between Boulder Avenue and San Antonio Avenue
- ID 18: Install Assembly A (CA) sign

Boulder Avenue & Fifth Street

- ID 16: Install yellow ladder style school crosswalk at the north and south legs of the intersection

Fifth Street & Granite Avenue

- ID 16: Install yellow ladder style school crosswalk at the north leg of the intersection

Fifth Street & Cypress Avenue

- ID 16: Install yellow ladder style school crosswalk at the south leg of the intersection

*San Bernardino Street & Mountain Avenue

- ID 15: Install new standard white crosswalk at all legs of the intersection

- ID 7: Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

*San Bernardino Street & Palmetto Avenue

- ID 15: Install new standard white crosswalk at the south leg of the intersection
- ID 13: Repaint existing crosswalk with new white ladder style crosswalk at the south leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps at northwest, southwest, and southeast corners of the intersection to be ADA compliant with DWS
- ID 9: Install painted bulb-outs with vertical bollards at the northwest corner of the intersection
- ID 39/28: Install yield teeth marking with R1-5 sign at the west and east legs of the intersection
- ID 47: Install edge line striping 8 feet from the curb on the north side of the roadway

*San Bernardino Street & Boulder Avenue

- ID 13: Repaint existing crosswalk with new white ladder style crosswalk at the north leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps at northwest and northeast corners of the intersection to be ADA compliant with DWS

*San Bernardino Street & Granite

- ID 13: Repaint existing crosswalk with new white ladder style crosswalk at the east leg of the intersection
- ID 15: Install new standard white crosswalk at the south leg of the intersection
- ID 8: Install raised bulb-outs with covered

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

trench drains to permit continuous gutter flow at the northeast corner of the intersection

- ID 39/28: Install yield teeth marking with R1-5 sign at the west and east legs of the intersection
- ID 24/25: Remove W11-2 and W16-7P signage at the southwest corner of the intersection
- ID 24/25: Install W11-2 and W16-7P signage at the southeast corner of the intersection

*San Bernardino Street

- ID 42: Install "PED XING" white pavement marking 240 feet west and 330 feet east of Granite Avenue
- ID 25: Install advanced pedestrian crossing warning sign W11-2 and W16-9P
- ID 47: Install edge line striping 8 feet from the curb on the north side of the roadway between Granite Avenue and San Antonio Avenue

*Hawthorne Street and Palmetto Avenue

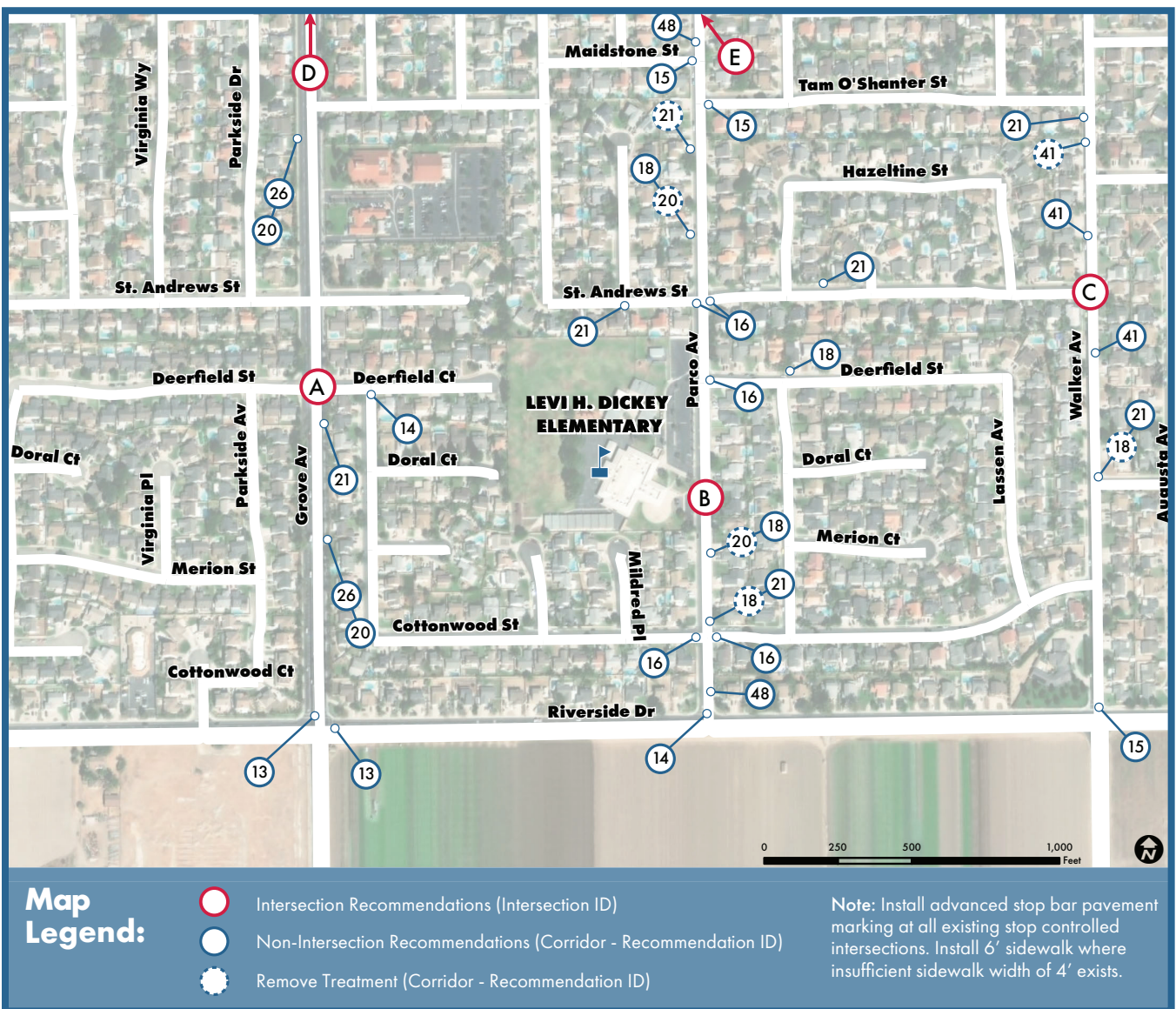
- ID 15: Install new standard white crosswalk at the north and south legs of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the southeast corner of the intersection to be ADA compliant with DWS

Note: Please see Chaffey High School for recommendations along San Antonio Avenue and to the east

LEVI H. DICKEY ELEMENTARY SCHOOL

2840 South Parco Ave, Ontario, CA 91761 | Chino Valley Unified School District (CVUSD) | Enrollment: 506

Levi H. Dickey Elementary School sits in the center of a residential neighborhood north of Riverside Dr. The School is bounded by Walnut St. on the north, Parco Ave. on the east, Riverside Dr. on the south, and Grove Ave. to the west.



RECOMMENDATIONS BY INTERSECTIONS

**Intersection not shown on map*

Intersection A – Grove Avenue & Deerfield Court

- Install Pedestrian Hybrid Beacon, if and when pending warrants are successful. Install R10-23 on mast arm for both directions if PHB is installed.
- Install new yellow ladder style school crossing on the south leg if and when proposed Pedestrian Hybrid Beacon is installed.
- Repaint existing yellow school crossing with new yellow ladder style school crossing on the west and east legs.
- Install stop line with R10-6 sign in advance of proposed Pedestrian Hybrid Beacon if and when installed for north and south approach
- Install 25 feet of red paint on the north and south side of Deerfield Court on the west and east approach to Grove Avenue

Intersection B – Parco Avenue & School Pick Up and Drop Off Exit

- Install yield teeth markings on north and south approach w/ R1-5 signs if and when proposed RRFB is installed
- Remove existing S1-1 and W16-7P on both approaches if and when proposed RRFB is installed
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage facing north and south for both approaches
- Repaint existing school crossing with new yellow ladder style school crossing
- Install two new ADA compliant curb ramps with DWS. Curb ramp design requires driveway redesign. All work shall be ADA compliant regardless of design.

Intersection C – Walker Avenue & St. Andrew Street

- Install new Assembly B (CA) sign facing

north for the south approach and south for the north approach

- Remove existing S1-1 and W16-7P if and when proposed Assembly B (CA) is installed
- Repaint existing south leg crosswalk with yellow ladder style school crossing
- Install new yellow ladder style school crossing on the west leg

Intersection D – Grove Avenue & Walnut Street

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Repaint existing white standard crosswalk with new white ladder style crosswalk
- Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface at each corner of the intersection

Intersection E – Walnut Street & Parco Avenue

- Repaint existing school crossing with new yellow ladder style school crossing at each leg of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection
- Install 25 feet of red paint leading into the Walnut Street on the south and north approach on the east and west side of the roadway
- Remove existing S1-1 facing east on the westbound approach to the intersection
- Install new Assembly D (CA) 220 feet east of the intersection on the westbound approach

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Grove Avenue

- ID 26/20: Install new speed feedback sign with Assembly C (CA) sign
- ID 21: Install new Assembly D (CA) sign
- ID 13: Repaint existing standard white crosswalk with new white ladder style crosswalk

Deerfield Court

- ID 14: Repaint existing yellow school crossing with new yellow ladder style school crossing

Parco Avenue

- ID 14: Repaint existing yellow school crossing with new yellow ladder style school crossing
- ID 48: Install 25 speed legend pavement marking
- ID 16: Install new yellow ladder style school crossing
- ID 18/21: Remove existing Assembly A (CA) and replace with Assembly D (CA)
- ID 20/18: Remove existing Assembly C (CA) and replace with Assembly A (CA)
- ID 21: Remove existing Assembly D (CA)
- ID 15: Install new standard white crosswalk

Deerfield St

- ID 18: Install new Assembly A (CA)

St. Andrews Street

- ID 21: Install new Assembly D (CA)

Walker Avenue

- ID 15: Install new standard white crosswalk
- ID 18/21: Remove existing Assembly A (CA) and replace with Assembly D (CA)
- ID 41: Install SLOW SCHOOL XING

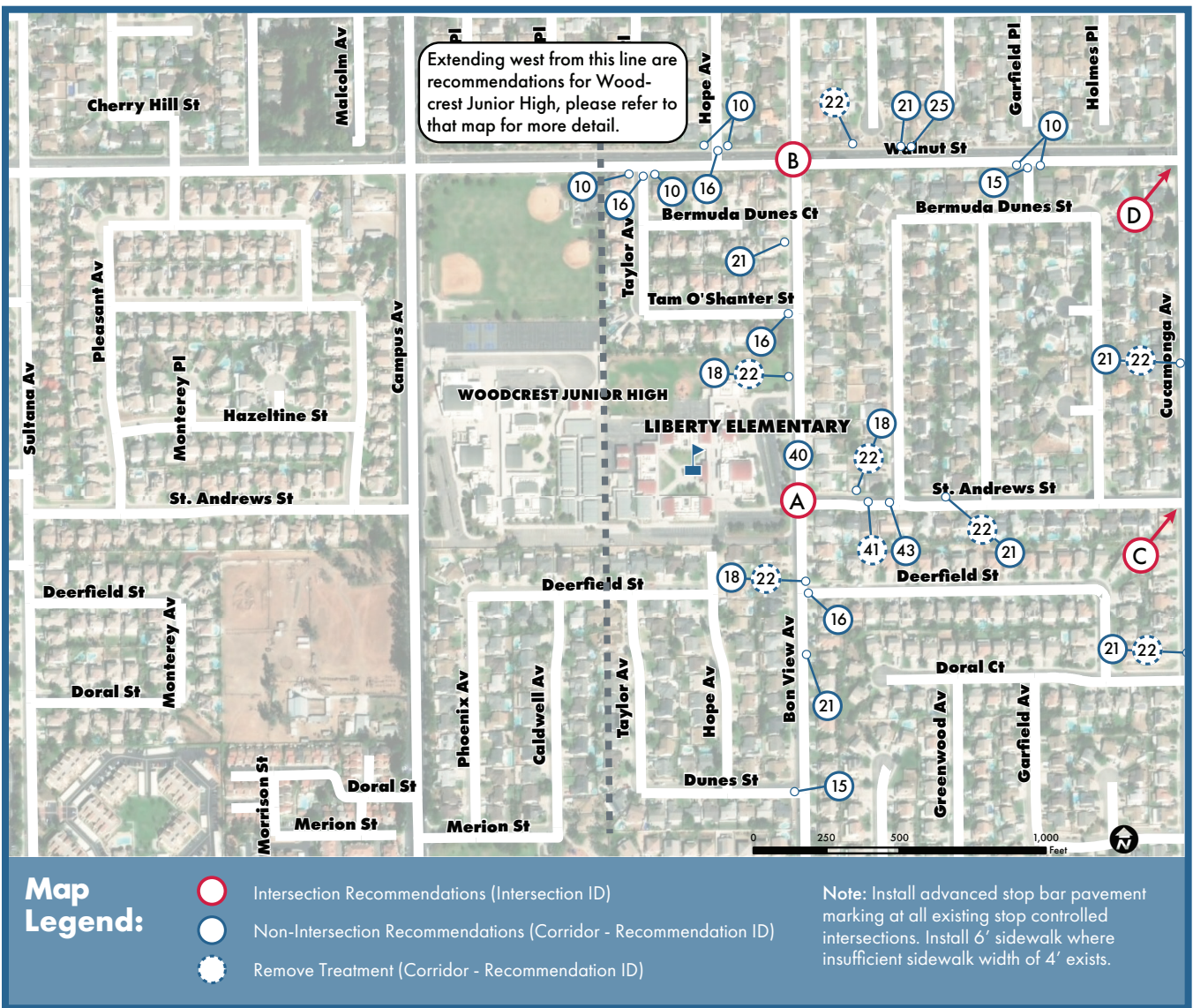
pavement marking 100ft from Intersection C, and remove existing SLOW SCHOOL XING pavement marking if and when proposed install is completed

- ID 21: Install new Assembly D (CA) sign
- *ID 13: Repaint existing standard white crosswalk with white ladder style crossing at each leg of the intersection with Walnut Street
- *ID 50: Install 25 feet of red paint leading into the Walnut Street on the south and north approach on the east and west side of the roadway

LIBERTY ELEMENTARY SCHOOL

2730 South Bon View Ave, Ontario, CA 91761 | Chino Valley Unified School District (CVUSD) | Enrollment: 642

At the center of a residential neighborhood and immediately to the right of Woodcrest Junior High, Liberty Elementary School is located near the western border of Ontario. It is bounded by Walnut St. to the north, Bon View Ave. to the east, and Campus Ave. to the west. Nearby destination within a mile to the school consists of Kimball Park and several retail shops and fast food eateries.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – St. Andrews Street & Bon View Avenue

- Repaint existing yellow school crossings with yellow ladder style school crossings at the south and east legs
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the southwest and southeast corners of the intersection
- Install Assembly B (CA) facing north and south for the south and north approach respectively
- Remove existing S1-1 and W16-7P signs if and when proposed Assembly B (CA) signs are installed
- Install 25 feet of red paint on each side of the south, west, and north approaches to the intersection

Intersection B – Walnut Street & Bon View Avenue

- Repaint existing yellow school crossings with yellow ladder style school crossings at the west, south, and east legs
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection
- Install 25 feet of red paint leading on the east and west side of Bon View Avenue on the north and south approach to Walnut Street

Intersection C – St. Andrews Street & Cucamonga Avenue

- Install new yellow ladder style school crossing
- Repaint existing yellow school crossing with yellow ladder style school crossing at the south leg
- Improve and/or reconstruct existing ramp to be ADA compliant with new detectable

warning surface at each corner of the intersection

- Install 25 feet of red paint on both sides of each approach to the intersection

Intersection D – Walnut Street & Cucamonga Avenue

- Repaint each leg of the intersection with new white ladder style crosswalks
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection

RECOMMENDATIONS BY KEY SEGMENTS

Bon View Avenue

- ID 40: Install centerline stripe along full extent of corridor (Walnut Street to Riverside Drive)
- ID 21: Install new Assembly D (CA)
- ID 16: Install new yellow ladder style school crossing
- ID 18/22: Remove existing S1-1 and install Assembly A (CA)
- ID 15: Install new standard white crosswalk
- *ID 15: Install new standard white crosswalk at the east and west legs of the intersection with Cottonwood Street, and for the north leg of the intersection with Riverside Drive

Cucamonga Avenue

- ID 21/22: Remove existing S1-1 and W16-9P and install new Assembly D (CA)
- ID 15: Install new standard white crosswalk

Walnut Street

- ID 15: Install new standard white crosswalk
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface
- ID 21: Install new Assembly D (CA)
- ID 22: Remove existing S1-1
- ID 16: Install new yellow ladder style school crossing
- ID 25: Install W16-6P (left) school signage

St. Andrews Street

- ID 21/22: Remove existing S1-1 and W16-9P and install new Assembly D (CA)
- ID 43: Install "STOP AHEAD" pavement marking in white
- ID 41: Remove existing "SLOW SCHOOL XING"

MARIPOSA ELEMENTARY SCHOOL

1605 East D St, Ontario, CA 91764 | Ontario-Montclair School District (OMSD) | Enrollment: 679

Mariposa Elementary School is located on 1605 E D St. near the northern border of Ontario. It is located in the center of a residential neighborhood immediately adjacent to Ray Wiltsey Middle School south of the 10 Freeway. The school is bounded by G St. to the north, Corona Ave. to the East, D St. to the south, and Imperial Ave. to the west. Local destinations include Veterans memorial Park, James Galanis Park, and a commercial area located east of the school traveling on D St.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Grove Avenue & D Street

- Repaint existing crosswalk with new white ladder style crosswalk at all legs of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection B – D Street & Madera Privado/School Crosswalk

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the east leg of the intersection
- Install yellow ladder style school crosswalk at the south leg of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northeast, southeast, and southwest corners of the intersection
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the northeast and southeast corners of the intersection
- Install yield teeth marking with R1-5 sign at the west and east legs of the intersection
- Remove Assembly B (CA) sign at the at the northeast and southeast corners

Intersection C – St. Andrews Street & Cucamonga Avenue

- Repaint existing crosswalk with new white ladder style crosswalk at all legs of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Improve or reconstruct existing curb ramps at the southeast corner of the intersection to be ADA compliant with DWS

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

G Street & Imperial Avenue

- ID 18: Install Assembly A (CA) sign at the southwest corner of the intersection

D Street & Corona Avenue

- ID 16: Install yellow ladder style school crosswalk at the north and south legs of the intersection

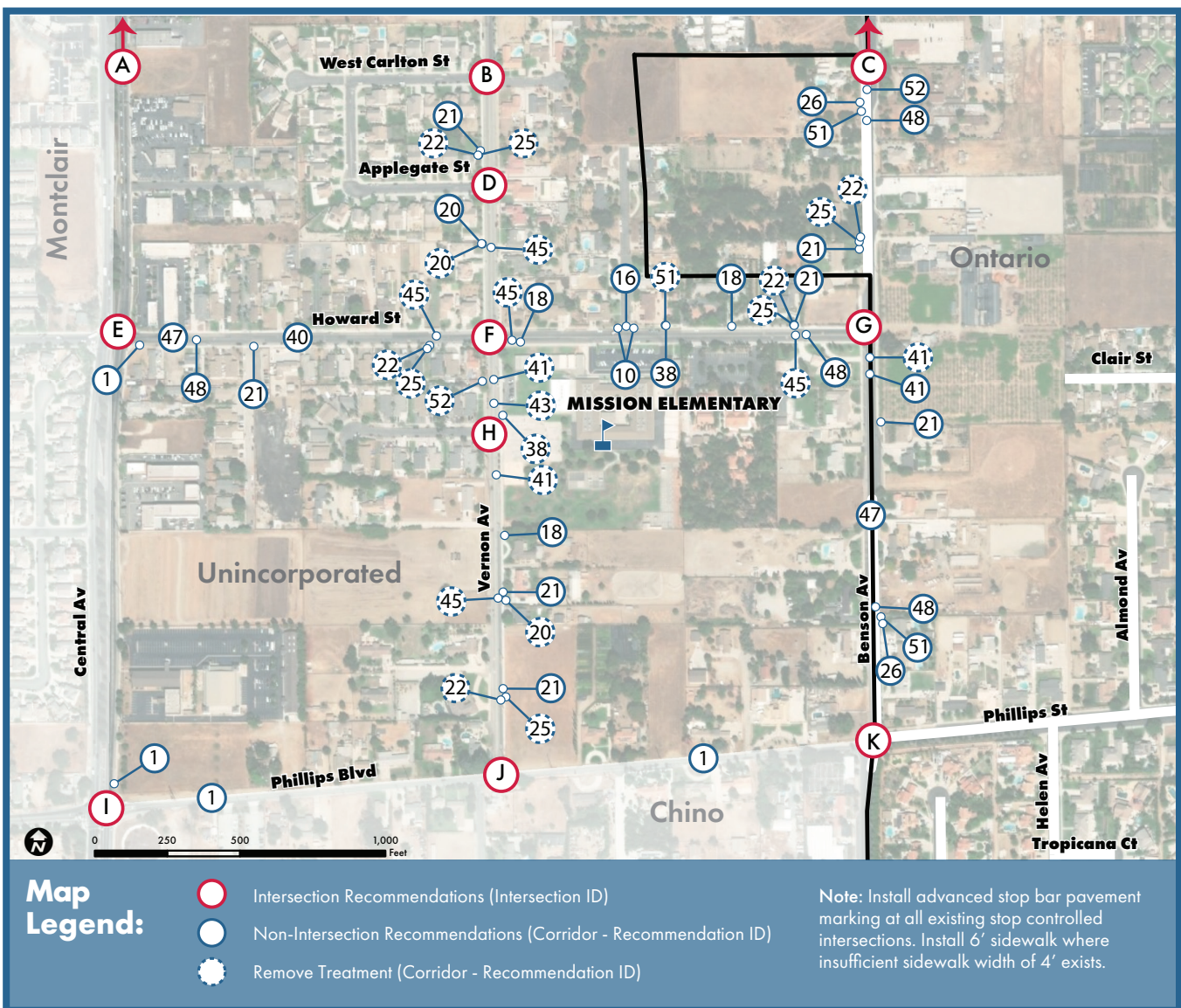
D Street

- *ID 52: Install wayfinding signage approximately 600 feet east of Grove Avenue to encourage use of pedestrian path
- ID 21: Install Assembly D (CA) sign
- ID 18: Remove Assembly A (CA) sign
- ID 47: Install edge line striping 8 feet from the curb on both sides of the roadway between Imperial Avenue and Placer Privado Street

MISSION ELEMENTARY SCHOOL

5555 Howard St, Ontario, CA 91762 | Ontario-Montclair School District (OMSD) | Enrollment: 711

Located within a residential neighborhood, Mission Elementary School is bounded by Howard St. to the north, Benson Ave. to the east, Phillips Blvd. to the south, and Vernon Ave. to the west. Local destinations within a half mile to the school consists of several religious institutions and fast food eateries.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Central Avenue & Mission Boulevard

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection B – Vernon Avenue & West Carlton Street

- Install new or repaint standard white crosswalk at the west and east leg of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all the corners of the intersection

Intersection C – Benson Avenue & Mission Boulevard

- Install new white ladder style crosswalk at all legs of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS. Widen existing curb ramp/ pedestrian refuge
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Continue edgeline striping, south of the intersection, up to the intersection

Intersection D – Vernon Avenue & Applegate Street

- Install new yellow ladder style school crosswalk at the west leg of the intersection

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and southwest corners of the intersection

Intersection E – Central Avenue & Howard Street

- Signal modifications. Added phases may be needed if/when a new crosswalk is installed at the south leg of the intersection to allow for pedestrian crossings
- Shorten raised median to allow for installation of a crosswalk at the south leg of the intersection. Pavement markings may need to be modified
- Install new white ladder style crosswalk at the south leg of intersection
- Repaint existing crossing with new white ladder style crossing at the north, east, and west leg of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection F – Vernon Avenue & Howard Street

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Repaint existing crossing with new yellow ladder styled school crossing
- Install Assembly A (CA) school signage at the southwestern corner of the intersection.
- Install 25 feet of red curb paint along both sides of the roadway, north and south of the intersection
- Install 25 feet of red paint on both sides of the roadway west of the intersection. Install

RECOMMENDATIONS BY INTERSECTIONS

25 feet of red curb paint on the northern roadway, east of the intersection

Intersection H – Vernon Avenue & Clair Street

- Repaint existing crossing with new yellow ladder styled school crossing at the north leg of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest and northeast corners of the intersection
- Remove existing S1-1 w/ W16-7P sign at the northwestern and northeastern corner of the intersection
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the northwestern and northeastern corner of the intersection
- Install 25 feet of red curb paint on both sides of the roadway north of the intersection
- Install 25 feet of red curb paint at the intersection of Vernon Avenue and Clair Street

Intersection I – Central Avenue & Phillips Boulevard

- Install new white ladder style crosswalk at all legs of the intersection
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection J – Vernon Avenue & Phillips Boulevard

- Install new ADA compliant curb ramp with DWS at the northwestern and eastern corners of the intersection
- Install sidewalk 6 feet wide entering 1340 feet in length at the northeastern side of the roadway. Paved shoulder should be considered as an alternative

Intersection K – Benson Avenue & Phillips Street

- Repaint existing white crossing at the eastern leg of the intersection
- Install new ADA compliant curb ramp with DWS at the northwestern corner of the intersection

RECOMMENDATIONS BY KEY SEGMENTS

Central Avenue

- ID 1: Install sidewalk 6 feet wide entering 32 feet in length along Central Ave on the east side of the roadway, north of the intersection

Vernon Avenue

- ID 22/25: Remove existing S1-1 w/ W16-9P signage
- ID 21: Install Assembly D (CA) school signage for southbound traffic
- ID 20: Remove existing / outdated Assembly C (CA) school signage
- ID 20: Install Assembly C (CA) school signage for southbound traffic
- ID 45: Remove "SCHOOL" pavement marking south of intersection D for southbound traffic
- ID 22: Remove existing S1-1 w/ S4-3P signage
- ID 41: Remove existing "SLOW SCHOOL XING" pavement marking if and when proposed RRFB is installed
- ID 43: Remove "STOP AHEAD" pavement marking
- ID 38: Remove existing W3-1
- ID 41: Remove existing "SLOW SCHOOL XING" pavement marking if and when proposed RRFB is installed
- ID 18: Install Assembly A (CA) school signage for northbound traffic
- ID 45: Remove "SCHOOL" pavement marking
- ID 20: Remove existing / outdated Assembly C (CA) school signage
- ID 21: Install Assembly D (CA) school signage for northbound traffic
- ID 22/25: Remove existing S1-1 w/ W16-9P signage
- ID 21: Install Assembly D (CA) school

signage north of Intersection J for northbound traffic

Benson Avenue

- ID 47: Install edgeline striping feet from the curb on the east side of the roadway along Benson Avenue from Mission Boulevard down to Phillips Street
- ID 52: Install a left turn lane through roadway restriping two include a through/right-turn lane as well. Can be used to narrow all travel lanes
- ID 48: Install 40 speed legend pavement marking for southbound traffic
- ID 51: Install R2-1 "40 SPEED LIMIT" sign for southbound traffic
- ID 26: Install vehicle speed feedback sign for southbound traffic
- ID 22/25: Remove existing S1-1 with W16-9P signage
- ID 21: Install Assembly D (CA) school signage for southbound traffic
- ID 41: Remove existing SLOW SCHOOL XING south of Intersection G
- ID 41: Install new "SLOW SCHOOL XING" pavement marking 100ft in advance of school crossing
- ID 21: Install Assembly D (CA) school signage south of Intersection G for northbound traffic
- ID 48: Install 40 speed legend pavement marking for northbound traffic
- ID 51: Install R2-1 "40 SPEED LIMIT" sign for northbound traffic, north of intersection K.
- ID 26: Install vehicle speed feedback sign for northbound traffic

Howard Street

- ID 1: Install sidewalk 6 feet wide entering

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

- 105 feet in length
- ID 47: Install edgeline striping 8 feet from the curb along Howard Street from Central Avenue to Benson Avenue
- ID 40: Install centerline striping along Howard Street from Central Avenue to Vernon Avenue
- ID 48: Install 25 speed legend pavement marking for eastbound traffic
- ID 21: Install Assembly D (CA) school signage for eastbound traffic
- ID 45: Remove "SCHOOL" pavement marking
- ID 22/52: Remove existing S1-1 with S4-3P sign
- ID 45: Remove "SCHOOL" pavement marking
- ID 18: Install Assembly A (CA) school signage
- ID 16: Install new yellow ladder style school crosswalk at the intersection of Howard Street and Bel Air Avenue
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and northeast corners of the intersection
- ID 51: Remove existing R2-1 "25 SPEED LIMIT" sign
- ID 38: Install W3-1 stop ahead warning sign for westbound traffic
- ID 18: Install Assembly A (CA) school signage for westbound traffic
- ID 22/52: Remove existing S1-1 with S4-3P sign
- ID 21: Install Assembly D (CA) school signage for westbound traffic
- ID 45: Remove "SCHOOL" pavement marking
- ID 48: Install 25 speed legend pavement marking for westbound traffic

Phillips Boulevard

- ID 1: Install sidewalk 6 feet wide along the northern curb entering 1275 feet in length. Install sidewalk 6 feet wide along the northern curb entering 1340 feet in length. Paved shoulder should be considered as an alternative

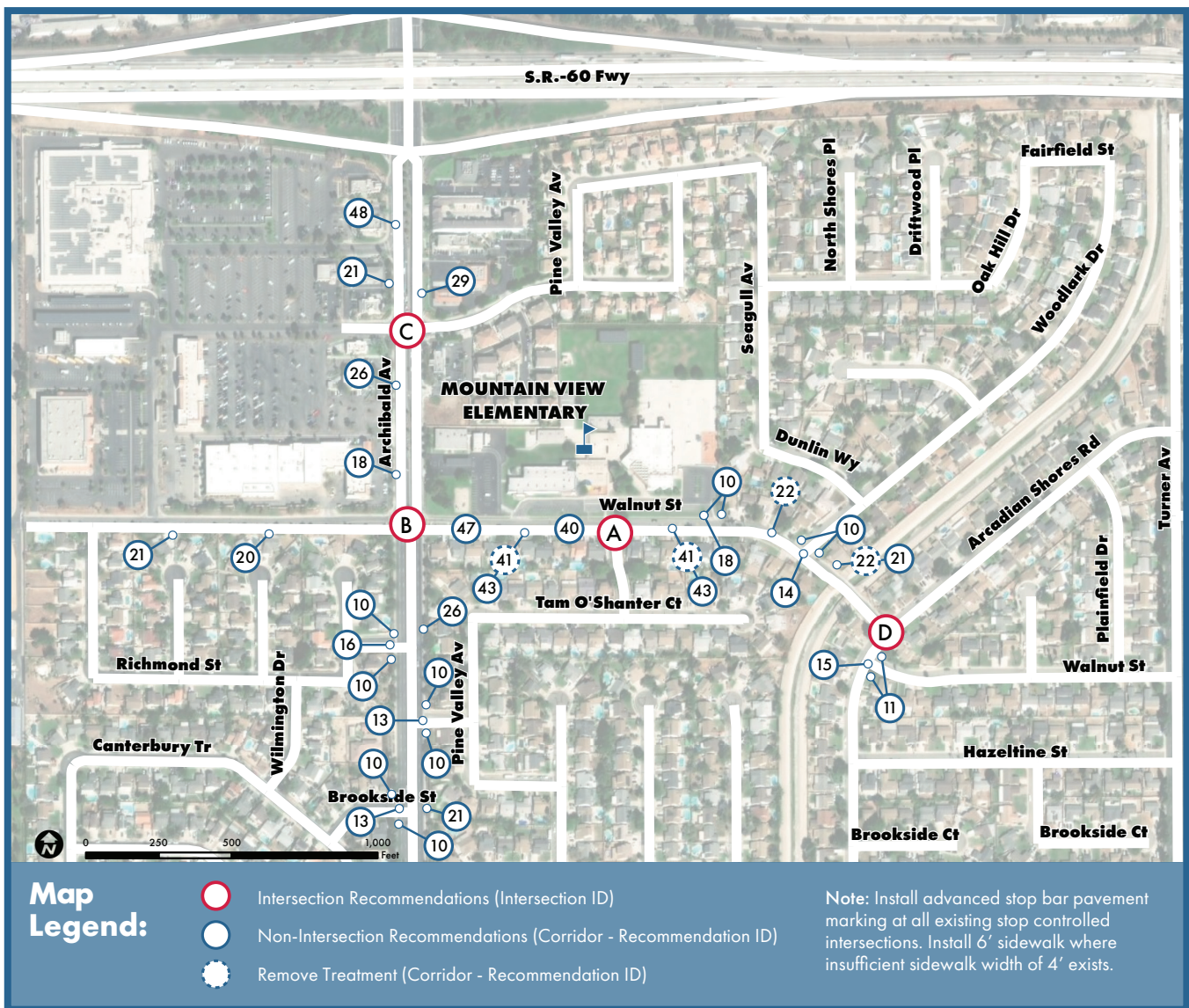
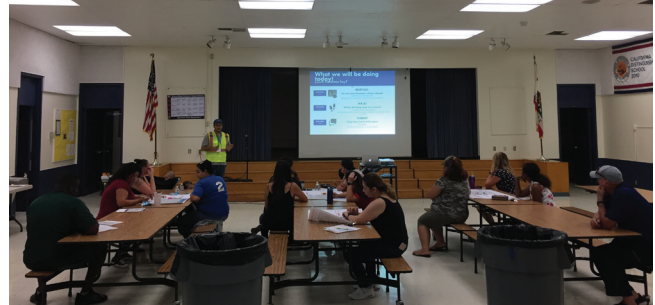
*Venus Avenue and Mission Boulevard

- ID 15: Install new white ladder style crosswalk at the south leg of the intersection.
- ID 1: Install sidewalk 6 ft wide entering 200 feet in length south of the intersection along Vernon Avenue on the western side of the roadway
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS on the southwestern corner of the intersection
- ID 22/52: Remove existing S1-1 w/ S4-3P signage
- ID 41: Remove existing SLOW SCHOOL XING pavement marking if and when proposed RRFB is installed for southbound traffic

MOUNTAIN VIEW ELEMENTARY SCHOOL

2825 East Walnut St, Ontario, CA 91761 | Mountain View School District (MVSD) | Enrollment: 485

Mountain View Elementary is near the eastern border of Ontario and sits within a residential community. To the right of a commercial area and just south of the 60 Freeway, the school is bounded by the 60 freeway to the north, Turner Ave. to the east, Walnut St. to the south, and Archibald Ave. to the west. Local destinations within half a mile to the school includes Westwind Park, and a shopping center with several restaurants and a religious institution immediately west of the school.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Walnut Street & Turnstone Avenue

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest, southwest, and southeast corners of the intersection
- Repaint existing yellow school crosswalk with yellow ladder style school crosswalk at the west and south legs of the intersection
- Install red paint 25 leading into each school crossing on both sides of the road for each approach

Intersection B – Archibald Avenue & Walnut Street

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection
- Repaint existing yellow school crosswalk with yellow ladder style school crosswalk at each leg of the intersection
- Install new Assembly A (CA) facing south 25 feet north of the intersection on the east side of the roadway

Intersection C – Vernon Avenue & Phillips Boulevard

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection
- Remove raised center median obstruction within the north leg crosswalk
- Repaint existing white standard crosswalk at each leg of the intersection

Intersection D – Walnut Street & Arcadian Shores Road

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the north and west corners of the intersection
- Install new curb ramp be ADA compliant with DWS at the south corner of the intersection
- Install new white standard crossing at the west and south legs of the intersection
- Trim overgrown shrubbery that obstructs visibility of pedestrians

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Archibald Avenue

- ID 48: Install “45” speed legend pavement marking across all lanes
- ID 21: Install new Assembly D (CA) sign
- ID 29: Install S5-3 “END SCHOOL SPEED LIMIT” signage
- ID 26: Install new speed feedback sign
- ID 18: Install new Assembly A (CA) sign
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface
- ID 16: Install new yellow ladder style school crosswalk
- ID 13: Repaint existing white standard crosswalk
- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface at the northwest and southwest corners of the intersection with Cog Hill Court
- *ID 15: Install new white standard crossing at the west leg of the intersection with Cog Hill Court

Walnut Street

- ID 21: Install new Assembly D (CA) sign
- ID 20: Install new Assembly C (CA) sign
- ID 47: Install edgeline stripe six to eight feet from the curb from Archibald Avenue to Arcadian Shored Road on both sides of the road except for on approach to intersections
- ID 40: Install centerline stripe from Archibald Avenue to Arcadian Shored Road on both sides of the road except for through intersections
- ID 41/43: Remove existing “SLOW SCHOOL PAVEMENT” marking and install “STOP AHEAD” pavement marking in the same location

- ID 18: Install new Assembly A (CA) sign
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with new detectable warning surface
- ID 14: Repaint existing yellow school crosswalk with yellow ladder style school crosswalk
- ID 22/21: Remove existing S1-1 and replace with Assembly D (CA) sign

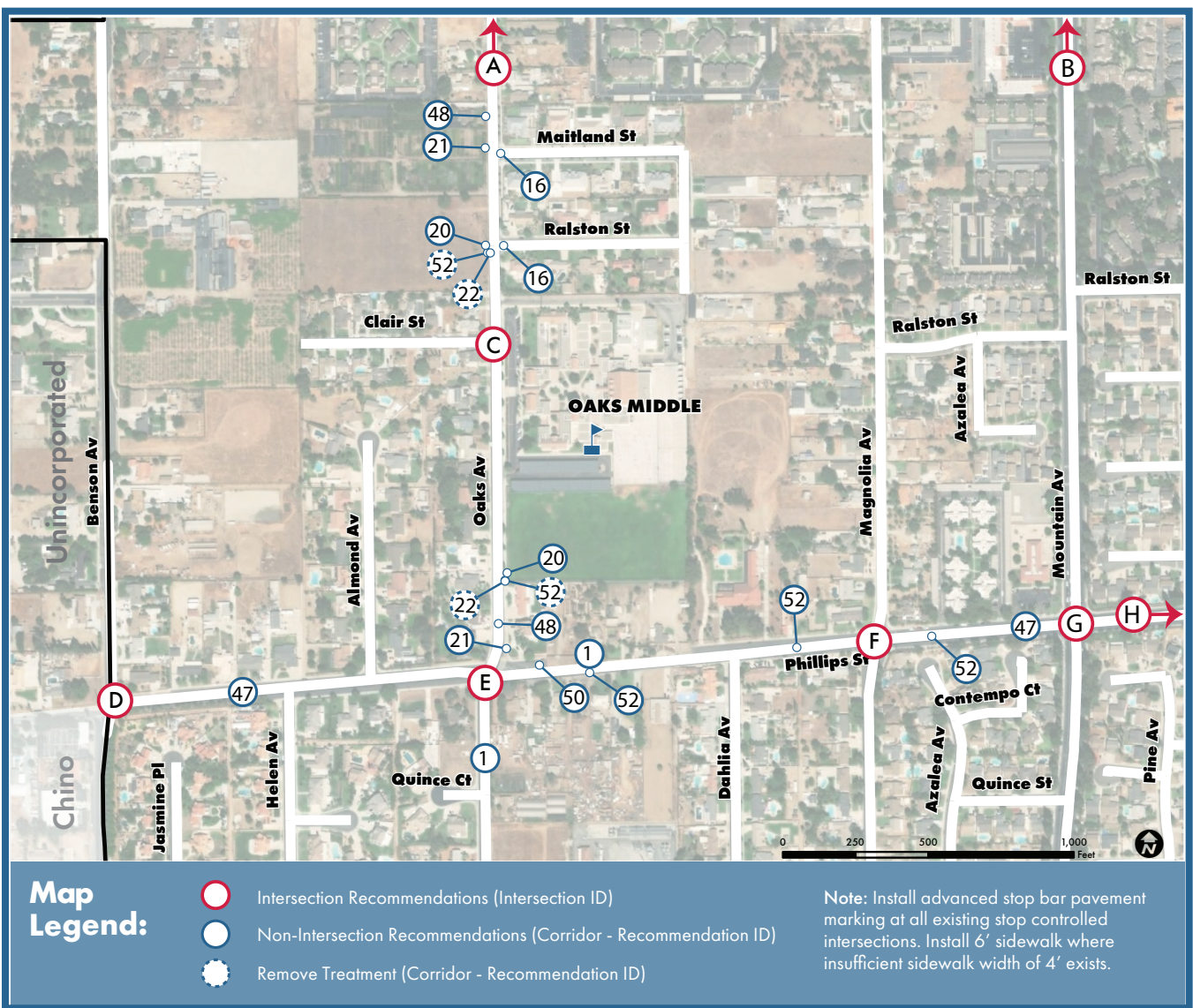
Arcadian Shores Road

- ID 11: Install new ramp to be ADA compliant with new detectable warning surface
- ID 15: Install new white standard crossing

OAKS MIDDLE SCHOOL

1221 South Oaks Ave, Ontario, CA 91762 | Ontario-Montclair School District (OMSD) | Enrollment: 876

Near the western border of Ontario, Oaks Middle School is located in the middle of a residential neighborhood west of Mountain Ave. and north of Phillips St. It is bounded by Mission Blvd. to the north, Magnolia Ave. to the east, Phillips St. to the south, and Oaks Ave. to the west. Local destinations within a half mile to the school include a few fast food restaurants and a religious institution.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Oaks Avenue & Mission Boulevard

- Install white ladder style crosswalk at the south leg of intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the southwest and southeast corners of the intersection. May consider widening / reducing corner radius at the southwest corner

Intersection B – Mountain Avenue & Mission Boulevard

- Install white ladder style crosswalk at all legs of the intersection
- Install accessible pedestrian system push button and count down pedestrian heads at all corners of intersection including the median refuge island

Intersection C – Oaks Avenue & Clair Street

- Install yellow ladder style school crosswalk at the west leg of intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest, southwest, and southeast corners of the intersection
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the southwest and southeast corners of the intersection
- Remove existing S1-1 with W16-7P sign at the southwest and southeast corners of the intersection
- Install yield line markings 20 feet in advance of school crossing to the north and south of intersection

Intersection D – Benson Avenue & Phillips Street

- Install advanced STOP bar pavement markings for eastbound traffic
- Install painted bulb out that narrows the

vehicular R/W and is inclusive of bollards. Extend STOP location to be better aligned to north-west corner of the intersection

- Install Edgeline Striping along Benson Avenue and ending along Phillips Boulevard on the southwest corner of intersection

Intersection E – Mountain Avenue & Mission Boulevard

- Install yellow ladder style school crosswalk at the east leg of intersection
- Install sidewalk 6 feet wide entering 1340 feet in length at the southeast corner of intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northeast corner of intersection
- Install raised bulb out that extends 8 feet and includes covered trench drains to permit continuous gutter flow at the northwest corner of intersection
- Install painted bulb out that narrows the vehicular R/W and is inclusive of bollards following the edgeline striping and maintaining vehicle access to the residential driveway to the east of the intersection
- Install Edgeline Striping. Accommodate right turn lane onto Oaks Ave for northbound traffic
- Install 25 feet of red paint on both sides of the roadway along Oaks Ave to the north and south of the intersection
- Install 25 feet of red paint along Phillips Street at the northwest corner of intersection.

Intersection F – Magnolia Avenue & Phillips Street

- Install white ladder style crosswalk at all legs of the intersection
- Install raised bulb out that extends 6 to 8 feet and includes covered trench drains to

RECOMMENDATIONS BY INTERSECTIONS

permit continuous gutter flow at all corners of the intersection

- Realign stop line if / when crosswalks are installed at the north, west, and south leg of the intersection
- Install 25 feet of red curb paint on both sides of the roadway along Phillips Street, west and east of the intersection
- Install 25 feet of curb paint on the east side of the roadway, south of the intersection along Magnolia Avenue
- Install 25 feet of curb paint on the west side of the roadway, north of the intersection along Magnolia Avenue

Intersection G – Mountain Avenue & Phillips Street

- Install white ladder style crosswalk at all legs of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all the legs of the intersection
- Install two accessible pedestrian system push button and count down pedestrian heads at the northeast and southeast corner of the intersection
- Install accessible pedestrian system push button and count down pedestrian heads at the northwest and southwest corners of the intersection

Intersection H – Palmetto Avenue & Phillips Street

- Install white ladder style crosswalk at all legs of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners of the intersection except for the southeast corner

RECOMMENDATIONS BY KEY SEGMENTS

Oaks Avenue

- ID 48: Install Speed Legend pavement marking (25 MPH) for southbound traffic just south of Intersection A.
- ID 21: Install Assembly D (CA) school signage for southbound traffic, west of Maitland Street.
- ID 16: Install yellow ladder style school crosswalk at the east leg of Oaks Avenue and Maitland Street.
- ID 16: Install yellow ladder style school crosswalk at the east leg of Oaks Avenue and Ralston Street.
- ID 22/52: Remove existing S1-1 with S4-3P signage west of Ralston Street.
- ID 20: Install Assembly C (CA) school signage west of Ralston Street for southbound traffic.
- ID 22/52: Remove existing S1-1 with S4-3P signage north of Intersection E.
- ID 20: Install Assembly C (CA) school signage north of Intersection E for northbound traffic. .
- ID 48: Install Speed Legend pavement marking (25 MPH) north of Intersection E for northbound traffic.
- ID 21: Install Assembly D (CA) school signage north of Intersection E for northbound traffic.
- ID 1: Install sidewalk 6 feet wide entering 1340 feet in length along Oaks Avenue from Phillips Avenue down to Locust Street.

- of intersection E along the northern curb.
- ID 1: Install sidewalk 8 feet wide along the northern roadway east of Intersection E. Asphalt or decomposed granite sidepath with edgeline striping and pedestrian barriers if raised sidewalks is not feasible. Roadway resurfacing may be required.
- ID 52: City may consider implementing a speed survey to potentially reduce posted speed limits at this segment due to lack of sidewalk, high pedestrian use and narrow roadway.
- ID 47: Install Edgeline Striping 8 feet from the curb on both sides of the roadway between Dahlia Avenue and Mountain Avenue.
- ID 52: Restripe roadway to accommodate roadway narrowing to 1 travel lane in the westbound direction east of Intersection E. Improvements should include lane striping, W4-2, and appropriate pavement markings.
- ID 52: Restripe roadway to realign existing lane widths and accommodate parking, travel lanes, and turn lanes (drop parking approaching intersections):
 - Parking - 8'
 - Travel - 12'
 - Travel - 12'
 - Travel - 12'
 - Travel - 12'
 - Parking - 8'

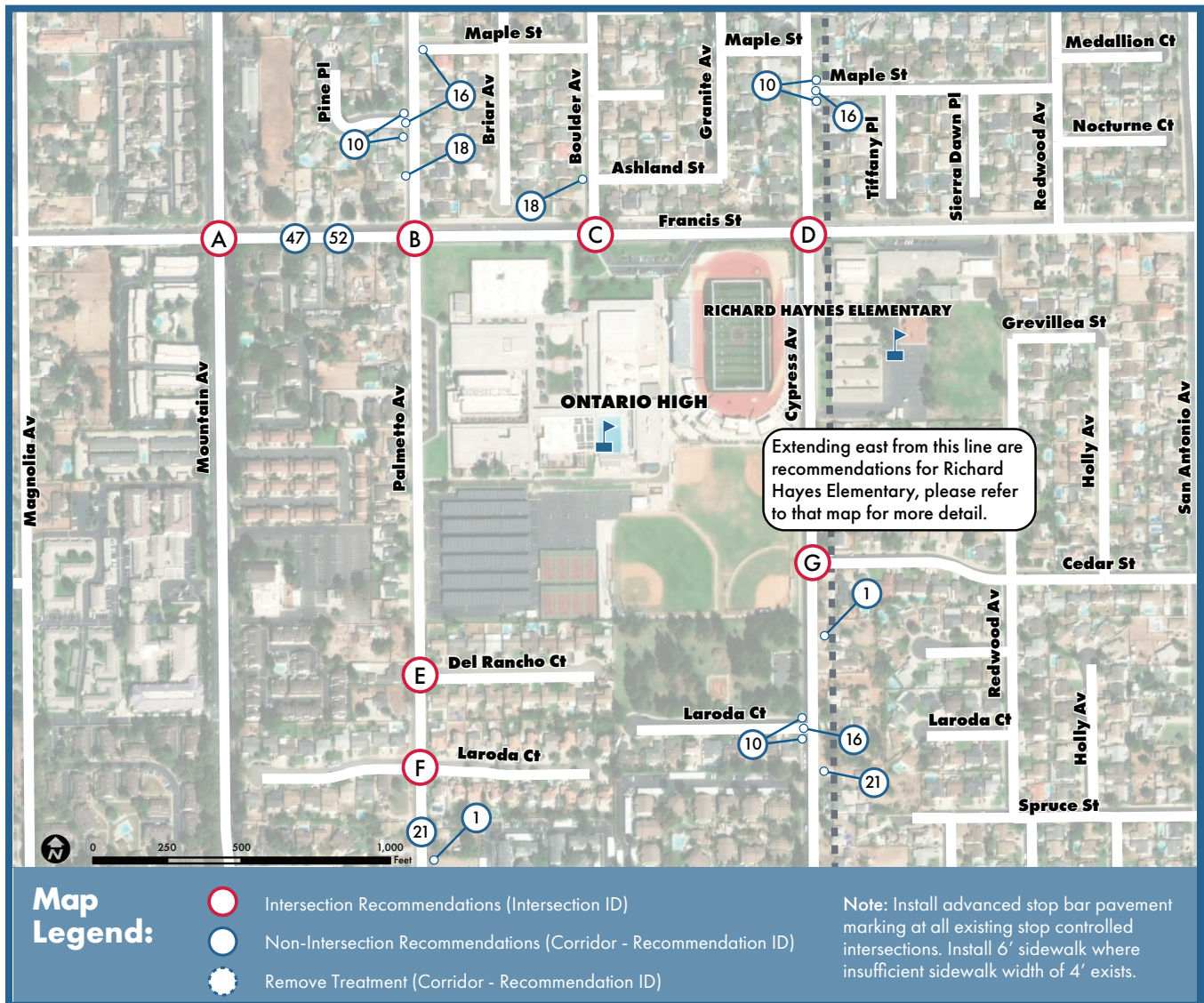
Phillips Street

- ID 47: Install Edgeline Striping from Benson Avenue to Oaks Avenue. Taper to allow proper vehicle alignment at western limit. Install Edgeline Striping 8 feet from the curb along the northern curb.
- ID 50: Install 105 feet of red curb paint east

ONTARIO HIGH SCHOOL

901 West Francis St, Ontario, CA 91762 | Chaffey Joint Union High School District (CJUHSD) | Enrollment: 2385

Sitting just west of Haynes Elementary School, Ontario High School is nestled within a residential neighborhood near the western border of Ontario. It is bounded by Francis St. to the north, Cypress Ave. to the east, Philadelphia St. to the south, and Palmetto Ave. to the west. Local destinations within a mile to the school include Del Rancho Park, Stater Brothers Market, and several fast food restaurants.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Francis Street & South Mountain Avenue

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners
- Repaint existing yellow school crossings with yellow ladder style school crossings at all legs

Intersection B – Francis Street & Palmetto Avenue

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest, northeast, and southeast corners of the intersection
- Install raised single-sided bulb-out with covered trench drains to permit continuous gutter flow at the southwest corner of the intersection
- Repaint existing crossings with yellow ladder style school crossings at east and south legs
- Install new yellow ladder style school crosswalk at north leg
- Install Assembly A (CA) school signage at southeast corner

Intersection C – Francis Street & Boulder Avenue

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the southwest corner of the intersection. If drainage concerns prevent a raised bulb-out design, a paint bulb-out may be considered

- Install raised single-sided bulb-out with covered trench drains to permit continuous gutter flow at the southwest corner of the intersection
- Install Pedestrian Hybrid Beacon at west leg crossing, if and when pending warrants are successful. Install R10-23 on mast arm for both directions if PHB is installed
- Repaint existing yellow school crossings with yellow ladder style school crossings at west leg
- Install new yellow ladder style school crosswalk at north leg
- Install stop line at existing Yield Line Pavement marking west of intersection and 30 feet east of intersection if and when proposed PHB is installed
- Install R10-6 sign at existing Yield Line Pavement marking west of intersection and 30 feet east of intersection if and when proposed PHB is installed
- Remove existing Assembly B (CA) at northwest and southwest corners
- Remove advanced Yield Line Pavement markings west of intersection along eastbound
- Francis Street and east of intersection along westbound Francis Street if and when proposed PHB is installed
- Remove existing SLOW SCHOOL XING pavement marking west of intersection along eastbound Francis Street if and when proposed PHB is installed

Intersection D – Francis Street & South Cypress Avenue

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest, northeast, and southwest corners of the intersection

RECOMMENDATIONS BY INTERSECTIONS

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at southeast corner
- Remove approach taper from right turn lane of eastbound Francis Street approach to the intersection if and when edgeline striping and bulb outs are installed
- Repaint existing yellow school crossings with yellow ladder style school crossings at all legs. Crosswalk at south leg may need to be realigned if/when bulb outs are installed at the intersection

Intersection E – South Palmetto Avenue & Del Rancho Court

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northeast and southeast corners
- Install new yellow ladder style school crosswalk at east leg

Intersection F – South Palmetto Avenue & La Roda Court

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners
- Install new yellow ladder style school crosswalk at east and west legs

Intersection G – Cypress Avenue & Cedar Street

- Install Assembly A (CA) school signage at northeast corner
- Remove existing/outdated Assembly A (CA) school signage at northeast corner
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northeast and southeast corners
- Repaint existing crossing with new yellow ladder styled school crossing at east leg

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Francis Street

- ID 52: Lane Management (Mountain Avenue to Cypress Avenue) – Remove 1 travel lane in each direction to accommodate a 10 feet 2-way center left turn lane and a 5 feet class II bike lane in each direction. Roadway alignment will be:
 - Parking Lane - 8'
 - Class II Bike Lane - 5'
 - Travel Lane - 12'
 - 2-way Center Left Turn Lane 10'
 - Travel Lane - 12'
 - Class II Bike Lane - 5'
 - Parking Lane - 8'
- ID 47: Install Edgeline Striping 8 feet from curb along north side of the roadway from Mountain Avenue to Cypress Avenue except at intersections
- ID 47: Install Edgeline Striping 8 feet from curb along south side of the roadway from Mountain Avenue to 210 feet west of Palmetto Avenue and from Palmetto Avenue to Cypress Avenue except at intersections

South Palmetto Avenue & Pine Place

- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northwest and southwest corners
- ID 16: Install new yellow ladder style school crosswalk at west leg

South Palmetto Avenue & Maple Street

- ID 16: Install new yellow ladder style school crosswalk at east leg

South San Antonio Avenue & Maple Street

- ID 16: Install new yellow ladder style school crosswalk at east leg

South Palmetto Avenue

- ID 18: Install Assembly A (CA) school signage
- ID 21: Install Assembly D (CA) school signage
- *ID 1: Install sidewalk 6 feet wide along southbound direction from second driveway south of Laroda Court to Philadelphia Street except at driveways

Boulder Avenue

- ID 18: Install Assembly A (CA) school signage

South Cypress Avenue

- ID 16: Install new yellow ladder style school crosswalk at east leg
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS
- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northwest and southwest corners of Locust Street and northeast and southeast corners of Jacaranda Street
- ID 1: Install sidewalk 6 feet wide entering 98 feet in length
- ID 21: Install Assembly D (CA) school signage

South Mountain Avenue & West Philadelphia Street

- ID 7: Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- ID 16: Install new yellow ladder style school crosswalk at all legs
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners

RECOMMENDATIONS BY KEY SEGMENTS

South Palmetto Avenue & West Philadelphia Street

- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northeast and northwest corners
- ID 16: Install new yellow ladder style crosswalk at north leg

Cypress Avenue & West Philadelphia Street

- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northeast, southeast, and northwest corners
- ID 16: Install new yellow ladder style school crosswalk at west and south legs
- ID 14: Repaint existing crossings with yellow ladder style school crossings at north and east legs
- ID 1: Install sidewalk 133 feet wide entering 6 feet in length around northwest corner and 381 feet in length at northeast corner along Philadelphia Street

South Palmetto Avenue & Maple Street

- ID 13/15: Install new or repaint standard white crosswalk at west leg

South Palmetto Avenue & Locust Street

- ID 13/15: Install new or repaint standard white crosswalk at east leg

South Palmetto Avenue & Jacaranda Street

- ID 13/15: Install new or repaint standard white crosswalk at west leg

South Cypress Avenue & Jacaranda Street

- ID 13/15: Install new or repaint standard white crosswalk at west leg

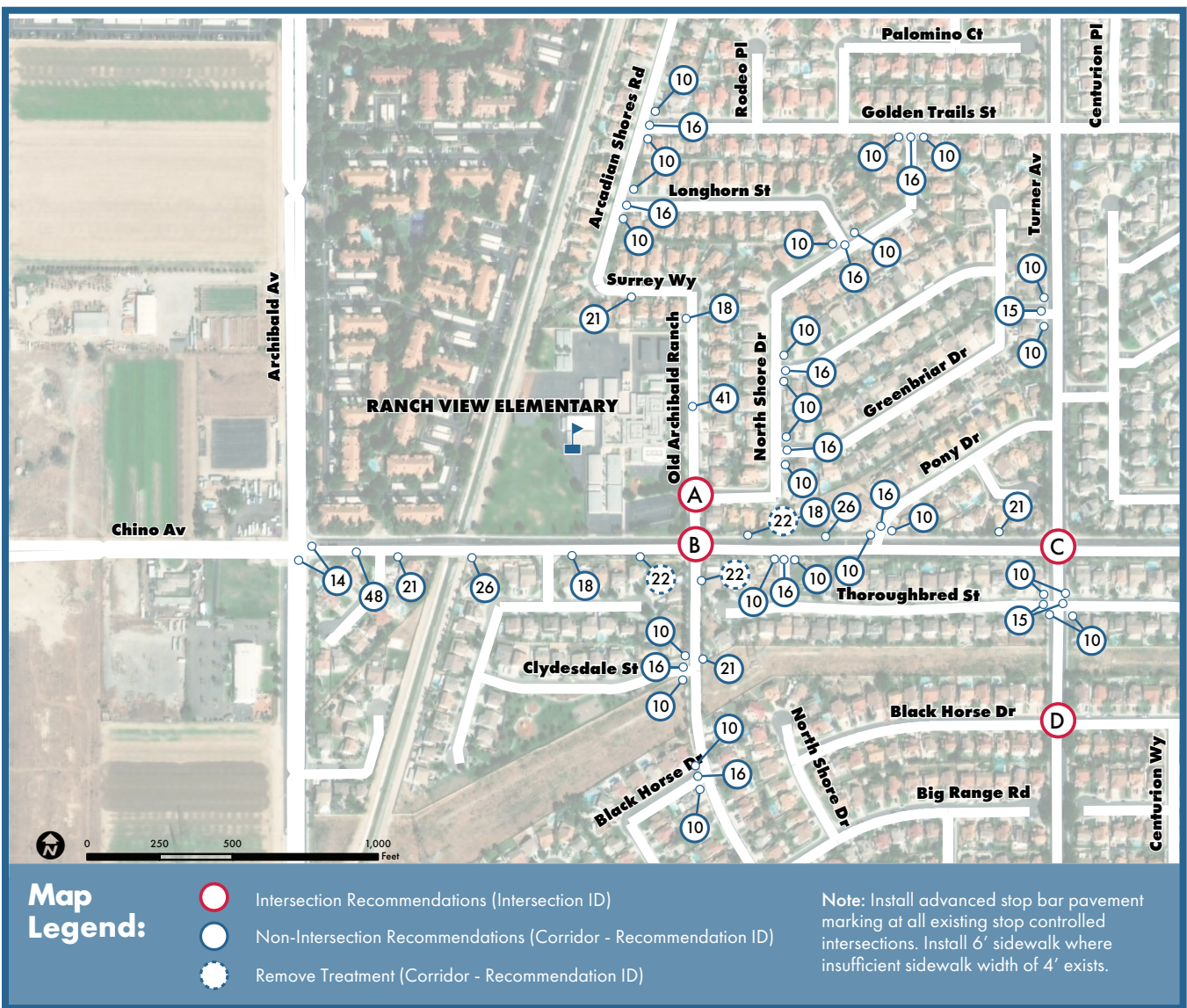
South Cypress Avenue & Locust Street

- ID 13/15: Install new or repaint standard white crosswalk at east leg

RANCH VIEW ELEMENTARY SCHOOL

3300 S Old Archibald Ranch Rd, Ontario, CA 91761 | Mountain View School District (MVSD) | Enrollment: 564

Near the eastern border of Ontario, Ranch View Elementary School is located in a residential neighborhood south of E Riverside Dr. in between Archibald and Haven Ave. It is bounded by Riverside Dr. to the north, Turner Ave. to the east, Chino Ave. to the south, and Archibald Ave. to the west. Local destination within a half mile to the school includes a couple shopping centers on Riverside Dr. and Archibald Ave.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Old Archibald Ranch & Stallion Way

- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the northeast and northwest corners of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with nDWS at the northwest, northeast, and southeast corners
- Install yield line markings 20 feet in advance of school crossing if and when the proposed RRFB is installed
- Install new yellow ladder style school crossing in tandem with the proposed RRFB

- Install yield line markings 20 feet in advance of school crossing if and when the proposed RRFB is installed

Intersection B – Old Archibald Ranch & Chino Avenue

- Repaint existing school crossing with new yellow ladder style school crossing at the north, west, and south legs of the intersection

Intersection C – Turner Avenue & Chino Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each leg of the intersection
- Repaint existing school crossing with new yellow ladder style school crossing

Intersection D – Turner Avenue & Black Horse Drive

- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the northeast and northwest corners of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS surface at each leg of the intersection
- Repaint existing white crossing with new standard white crossing on the north leg of the intersection
- Install new standard white crossing at the east and west legs of the intersection

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Old Archibald Avenue

- ID 18: Install new Assembly A (CA) sign
- ID 41: Install "SLOW SCHOOL XING" pavement marking if and when new crossing is install at Intersection A
- ID 22: Remove existing S1-1 signage
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS
- ID 16: Install new standard white crossing
- ID 21: Install new Assembly D (CA)
- *ID 15: Install new white standard crosswalk at each leg of the intersection with Chaparral Street
- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each leg of the intersection with Chaparral Street

Surrey Way

- ID 21: Install new Assembly D (CA)

Arcadian Shores Road

- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS
- ID 16: Install new standard white crossing

Chino Avenue

- ID 16: Install new yellow ladder style school crosswalk at east leg

South Palmetto Avenue

- ID 14: Repaint existing school crossing with new yellow ladder style school crossing
- ID 48: Install 40 Speed Legend Pavement marking across each lane
- ID 21: Install new Assembly D (CA) signage
- ID 26: Install Vehicle Speed Feedback sign
- ID 18: Install new Assembly A (CA) signage
- ID 22: Remove existing S1-1 signage

- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS
- ID 16: Install new standard white crossing

North Shore Drive

- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS
- ID 16: Install new standard white crossing

Turner Avenue

- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS
- ID 15: Install new white standard crosswalk
- *ID 15: Install new white standard crosswalk at the east leg of the intersection with Wing Street; and install at the west and east legs of the intersection with Grey Fox Lane
- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and southwest corners of the intersection with Grey Fox Lane

Turner Avenue & Chaparral Street

- *ID 15: Install new white standard crosswalk at the west and east legs of the intersection
- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection

Turner Avenue & Schaefer Avenue

- *ID 15: Install new white standard crosswalk at each leg of the intersection

Burning Tree Drive

- *ID 15: Install new white standard crosswalk at the west leg of the intersection of Big Range Road and at the intersection of Tumbleweed Street

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection of Big Range Road and at the intersection of Tumbleweed Street

RAY WILTSEY MIDDLE SCHOOL

1450 East G St, Ontario, CA 91764 | Ontario-Montclair School District (OMSD) | Enrollment: 1096

Ray Wiltsey Middle School is located in the center of a residential neighborhood immediately adjacent to Mariposa Elementary School south of the 10 Freeway. The school is bounded by G St. to the north, Vineyard Ave. to the east, D St. to the south, and Imperial Ave. to the west. Local destinations within a half mile to the school include Veterans Memorial Park, James Galanis Park, and a commercial area located east of the school traveling on G St.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Grove Avenue & G Street

- Install new white ladder style crosswalk at all legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection B – G Street & Del Norte Avenue

- Install yellow ladder style school crosswalk at the north, east, and south legs of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage at the northeast and southeast corners of the intersection
- Remove Assembly B (CA) sign on the northeast and southeast corners of the intersection, if an when RRFB is installed
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on all legs
- Install yield teeth marking with R1-5 sign at the west and east legs of the intersection

Intersection C – G Street & Imperial Avenue

- Install yellow ladder style school crosswalk at all legs of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on all legs

Intersection D – Imperial Avenue & El Morado Court

- Install yellow ladder style school crosswalk at the west and east legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS

Intersection E – Imperial Avenue & D Street

- Install yellow ladder style school crosswalk at all legs of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Imperial Avenue & F Street

- ID 16: Install yellow ladder style school crosswalk at the west leg of the intersection

Imperial Avenue & Flora Street

- ID 16: Install yellow ladder style school crosswalk at the west leg of the intersection

Imperial Avenue

- ID 18: Install Assembly A (CA) sign
- ID 22: Remove existing S1-1 school sign

G Street

- ID 52: Install shared lane pavement marking where roadway narrows between Alameda Avenue and Amador Avenue (one rec not shown on map to the west)
- ID 1: Install 4 foot to 6 foot wide sidewalk on the south side of G Street between Corona Avenue and Vineyard Avenue, if and when land is developed to the south
- ID 41: Install "SLOW SCHOOL XING" pavement marking
- ID 21: Install Assembly D (CA) sign
- ID 29: Install S5-3 END SCHOOL SPEED LIMIT sign
- ID 29: Remove S5-3 END SCHOOL SPEED LIMIT sign
- ID 51: Install R2-1 40 MPH SPEED LIMIT sign
- ID 43: Install "STOP AHEAD" pavement marking

*G Street & Alameda Avenue

- ID 15: Install new white ladder style crosswalk at the north and south legs of the intersection

*G Street & Amador Avenue

- ID 15: Install new white ladder style

crosswalk at the north leg of the intersection

G Street & Baker Avenue

- ID 16: Install yellow ladder style school crosswalk at the north leg of the intersection
- ID 26: Remove speed feedback sign

G Street & Madera Avenue

- ID 16: Install yellow ladder style school crosswalk at the south leg of the intersection

*G Street & Corona Avenue

- ID 15: Install new white ladder style crosswalk at the south leg of the intersection
- ID 11: Install new ADA compliant curb ramps with DWS at the southwest and southeast corners of the intersection
- ID 1: Install 4 foot to 6 foot wide sidewalk on the east side of Corona Avenue, if and when land is developed to the east

*G Street & Vineyard Avenue

- ID 15: Install new white ladder style crosswalk at the west and south legs of the intersection
- ID 7: Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at the northwest, southwest, and southeast corners of the intersection for each crossing

RICHARD E. HAYES ELEMENTARY SCHOOL

715 West Francis St, Ontario, CA 91762 | Ontario-Montclair School District (OMSD) | Enrollment: 806

Richard E. Haynes Elementary School is located near the western border of Ontario. It is situated just east of Ontario High School within a residential neighborhood. The School is bounded by Francis St. to the north, San Antonio Ave. to the east Philadelphia St. to the south, and Cypress Ave. to the west. Local destinations within a mile include Del Rancho Park, Cardenas Market, several fast food restaurants, and a religious institution.



RECOMMENDATIONS BY INTERSECTIONS

**Intersection not shown on map*

Intersection A – Francis Street & Redwood Avenue

- Install Assembly C (CA) school signage at northwest corner
- Remove existing S4-5 signage at northwest corner
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northeast and northwest corners
- Install new yellow ladder style school crosswalk at north leg

Intersection B – Francis Street & South San Antonio Avenue

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northeast, northwest, and southeast corners of the intersection
- Repaint existing crossings with yellow ladder style school crossings at all legs

Intersection C – Redwood Avenue & Cedar Street

- Install new ADA compliant curb ramp with DWS at all corners of the intersection
- Repaint existing crossing with new yellow ladder styled school crossing at north, east, and west legs

*Intersection D – Francis Street & South Fern Avenue

- Repaint existing crossing with new white ladder style crossing at north and west legs
- Install new white ladder style crosswalk at east and south legs. Crosswalk may need to be realigned if/when bulb-out is installed at this intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the southeast corner of the intersection

*Intersection E – South San Antonio Avenue & West Philadelphia Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northeast, northwest, and southwest corners
- Install new ADA compliant curb ramp with DWS at southeast corner of the intersection
- Repaint existing crossings with new white ladder style crossings at all legs

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

South San Antonio Avenue & Maple Street

- ID 16: Install new yellow ladder style school crosswalk at east leg

*South Hickory Avenue & West Philadelphia Street

- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northeast and northwest corners
- ID 16: Install new yellow ladder style school crosswalk at north leg

*Francis Street & South Bonita Court

- ID 15: Install new white crosswalk at south leg

*Philadelphia Street & Redwood Ave

- ID 15: Install new white crosswalk at south leg

Francis Street

- *ID 1: Install sidewalk 6 feet wide entering 270 feet in length from east end of church
- ID 18: Install Assembly A (CA) school signage
- ID 20: Remove existing Assembly C (CA) school signage
- ID 21: Install Assembly D (CA) school signage
- ID 52: Lane Management (Cypress Avenue to San Antonio Avenue) – Remove 1 westbound travel lane to accommodate a 5 feet class II bike lane in each direction.

Roadway alignment will be:

- 8' parking lane
- 5' class II bike lane
- 12' travel lane
- 12' travel lane
- 5' class II bike lane
- 8' parking lane
- *ID 52: Lane Management (San Antonio

Avenue to Fern Avenue) – Remove 1 travel lane in each direction to accommodate a 10 feet 2-way center left turn lane and a 5 feet class II bike lane in each direction.

Roadway alignment will be:

- 8' parking lane
- 5' class II bike lane
- 12' travel lane
- 10' 2-way center left turn lane
- 12' travel lane
- 5' class II bike lane
- 8' parking lane
- *ID 52: Lane Management (Fern Avenue to Euclid Avenue) – Remove 1 travel lane in each direction to accommodate a 5' class II bike lane in each direction. Where the roadways narrows, on-street parking will be removed including the segments nearest Euclid Avenue. Roadway alignment will be:
 - 8' parking lane
 - 5' class II bike lane
 - 11' travel lane
 - 11' travel lane
 - 5' class II bike lane
 - 8' parking lane
- ID 47: Install Edgeline Striping 8 feet from curb along eastbound direction from Cypress Avenue to 100 feet west of San Antonio Avenue except at intersections
- ID 47: Install Edgeline Striping 6 feet from the curb to maintain roadway alignment along eastbound direction from 100 feet west of San Antonio Avenue to San Antonio Avenue
- *ID 47: Install Edgeline Striping 8 feet from the curb to maintain roadway alignment along eastbound direction from San Antonio Avenue to Bonita Court
- *ID 52: Widen the roadway to accommodate 8 feet of on street parallel

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

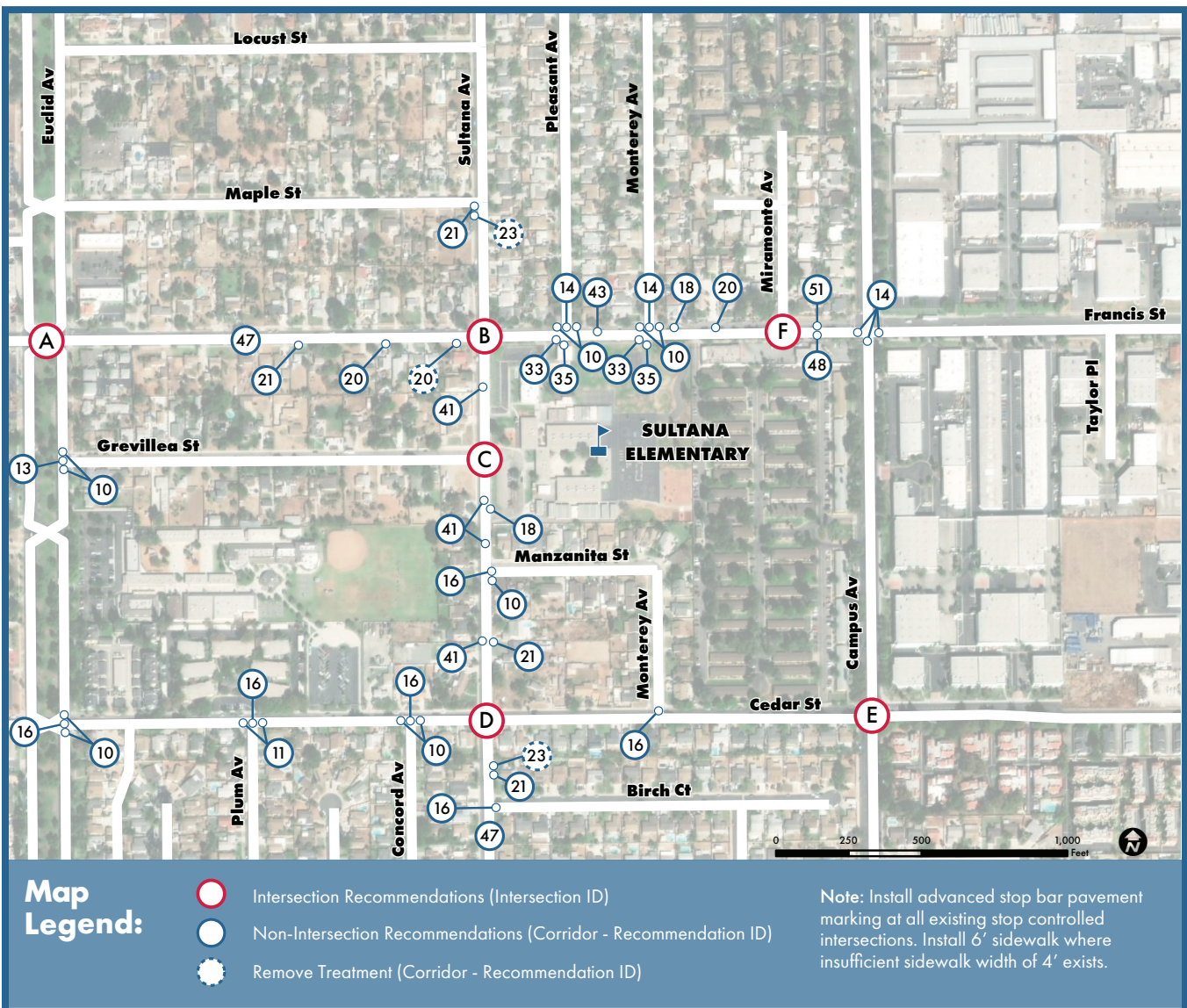
parking with a curb and gutter along westbound direction from east end of church to 270 feet east

- ID 47: Install Edgeline Striping 8 feet from curb along westbound direction from Cypress Avenue to San Antonio Avenue except at intersections
- ID 47: Install Edgeline Striping 8 feet from curb to maintain roadway alignment along westbound direction from San Antonio Avenue to end of east driveway of church
- *ID 47: Install Edgeline Striping 8 feet from curb to maintain roadway alignment along westbound direction from end of new roadway widening to midpoint between Fern Avenue and Euclid Ave except at intersections and bulb-out

SULTANA ELEMENTARY SCHOOL

1845 South Sultana Ave, Ontario, CA 91761 | Ontario-Montclair School District (OMSD) | Enrollment: 769

Located within a residential neighborhood west of an industrial area, east of Euclid Ave, and north of the 60 freeway, Sultana Elementary School is bounded by Francis St. to the north, Campus Ave. to the east, Cedar St. to the south, and Sultana Ave. to the west. Local destinations within a half mile to the school include a shopping center On Euclid Ave. and Francis St. with a Cardenas Market and several eateries and shops.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Euclid Avenue and Francis Street

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection
- Improve or reconstruct existing curb ramps at all corners of the intersection to be ADA compliant with DWS
- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Intersection B – Sultana Avenue and Francis Street

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on all legs
- Install Assembly A (CA) sign at the southwest and southeast corners of the intersection

Intersection C – Sultana Avenue and Grevillea Street

- Install yellow ladder style school crosswalk at the north and west legs of the intersection
- Remove existing school crosswalk at the north leg of the intersection
- Install new curb ramps at the northwest and northeast corners of the intersection to be ADA compliant with DWS
- Improve or reconstruct existing curb ramps at the northwest and southwest corners of the intersection to be ADA compliant with DWS
- Install 25 feet of red curb paint on both

sides of the roadway, extending outward from the intersection on the south leg. Install 75 feet of red curb paint on both sides of the roadway, extending outward from the intersection on the west leg. Install 75 feet of red curb paint on the west side, and 90 feet of red curb paint on the east side of the roadway, extending outward from the intersection on the north leg

- Remove S1-1 and W16-7P signage at the northwest corner of the intersection
- Install R49 (CA) sign with R9-3 at the southeast corner of the intersection
- Remove stop line pavement marking at the north leg of the intersection

Intersection D – Sultana Avenue and Cedar Street

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the east and south legs of the intersection
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install Assembly B (CA) sign at the southwest and southeast corners of the intersection
- Install 25 feet of red curb paint on both sides of the roadway, extending outward from the intersection on all legs

Intersection E – Campus Avenue and Cedar Street

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the east leg of the intersection
- Install new standard white crosswalk at the south leg of the intersection
- Improve or reconstruct existing curb ramps at the northwest, northeast, and southeast corners of the intersection to be ADA compliant with DWS
- Install pedestrian actuated RRFB with S1-1

RECOMMENDATIONS BY INTERSECTIONS

and W16-7P signage at the southwest and southeast corners of the intersection

- Install yield line markings 20 feet in advance of intersection on the north and south legs of the intersection, if and when proposed RRFB is installed

Intersection F – Francis Street and Miramonte Avenue

- Repaint existing school crosswalk with new yellow ladder style school crosswalk at the north leg of the intersection
- Improve or reconstruct existing curb ramps at the northwest and northeast corners of the intersection to be ADA compliant with DWS
- Install Assembly D (CA) sign at the northwest corner of the intersection
- Remove existing R2-1 “35 MPH SPEED LIMIT” sign at the northwest corner of the intersection

RECOMMENDATIONS BY KEY SEGMENTS

Euclid Avenue & Grevillea Street

- ID 10: Improve or reconstruct existing curb ramps at the northeast and southeast corners of the intersection to be ADA compliant with DWS
- ID 13: Repaint existing crosswalk with new white ladder style crossing at the east leg of the intersection

Euclid Avenue & Cedar Street

- ID 10: Improve or reconstruct existing curb ramps at the northeast and southeast corners of the intersection to be ADA compliant with DWS
- ID 16: Install yellow ladder style school crosswalk at the east leg of the intersection

Cedar Street & Plum Avenue

- ID 10: Improve or reconstruct existing curb ramps at the northeast and southeast corners of the intersection to be ADA compliant with DWS
- ID 16: Install yellow ladder style school crosswalk at the north leg of the intersection

Cedar Street & Concord Avenue

- ID 10: Improve or reconstruct existing curb ramps at the northeast and southeast corners of the intersection to be ADA compliant with DWS
- ID 16: Install yellow ladder style school crosswalk at the north leg of the intersection

Francis Street & Campus Avenue

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the west, east, and south legs of the intersection

Cedar Street & Monterey Avenue

- ID 16: Install yellow ladder style school crosswalk at the north leg of the intersection

Sultana Avenue & Birch Court

- ID 16: Install yellow ladder style school crosswalk at the east leg of the intersection

Sultana Avenue & Manzanita Street

- ID 16: Install yellow ladder style school crosswalk at the east leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the southeast corner of the intersection to be ADA compliant with DWS

Sultana Avenue & Maple Street

- ID 21: Install Assembly D (CA) sign at the southwest corner of the intersection
- ID 23: Remove existing S4-5 sign at the southwest corner of the intersection

Francis Street & Pleasant Avenue

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the north leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the northwest and northeast corners of the intersection to be ADA compliant with DWS
- ID 33/35: Install R49 (CA) sign with R9-3 at the south leg of the intersection

Francis Street & Monterey Avenue

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at the north leg of the intersection
- ID 10: Improve or reconstruct existing curb ramps at the northwest and northeast corners of the intersection to be ADA compliant with DWS

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

- ID 33/35: Install R49 (CA) sign with R9-3 at the south leg of the intersection

Francis Street

- ID 21: Install Assembly D (CA) sign
- ID 20: Install/remove Assembly C (CA) sign
- ID 43: Install "STOP AHEAD" pavement marking
- ID 48: Install speed legend pavement parking 35 MPH
- ID 51: Install R2-1 35 MPH SPEED LIMIT sign
- ID 47: Install edge line striping 8 feet from the curb on both sides of the roadway between Euclid Avenue and Campus Avenue

Sultana Avenue

- ID 41: Install "SLOW SCHOOL XING" pavement marking
- ID 47: Install edge line striping 8 feet from the curb on both sides of the roadway between Francis Street and Philadelphia Street
- *ID 51: Install R2-1 35 MPH SPEED LIMIT sign between Philadelphia Street and Boxwood Court for northbound traffic
- *ID 41: Install "SLOW SCHOOL XING" pavement marking between Boxwood Court and Birch Court
- ID 21: Install Assembly D (CA) sign
- ID 18: Install Assembly A (CA) sign
- ID 23: Remove existing S4-5 sign at the southwest corner of the intersection

*Philadelphia Street and Cherry Avenue

- ID 16: Install yellow ladder style school crosswalk at the north leg of the intersection

*Philadelphia Street and Sultana Avenue

- ID 14: Repaint existing school crosswalk with new yellow ladder style school crosswalk at all legs of the intersection
- ID 8: Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection

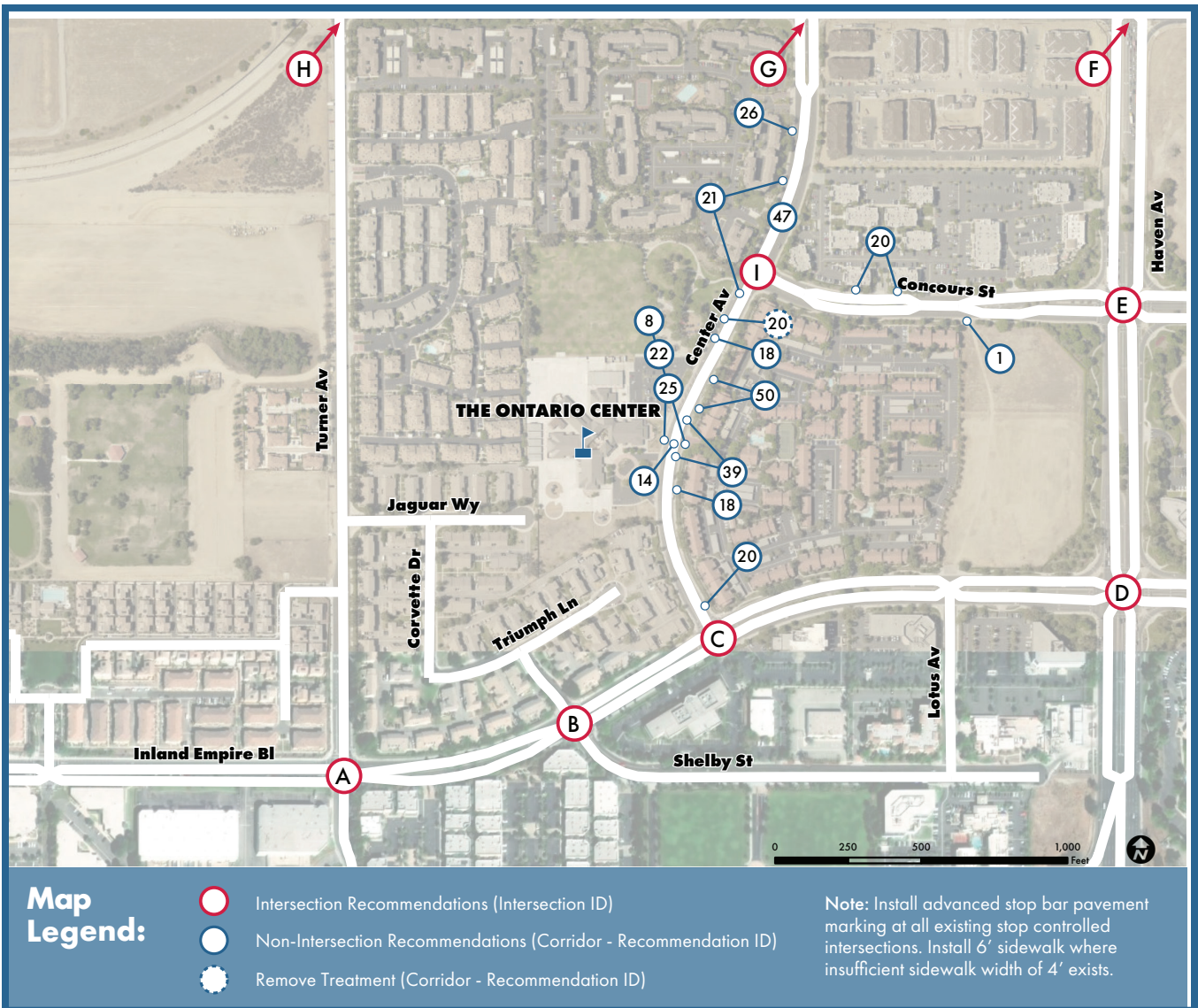
*Sultana Avenue and Boxwood Court

- ID 16: Install yellow ladder style school crosswalk at the east leg of the intersection

ONTARIO CENTER

835 North Center Ave, Ontario, CA 91764 | Cucamonga School District (CSD) | Enrollment: 662

The Ontario Center School is located within a residential neighborhood north of a commercial office area north of the 10 Freeway. The school is bounded by Fourth St. to the north, N Center Ave. to the east, Inland Empire Blvd. to the south, and Turner Ave. to the west. Local destinations within a half mile to the school includes Ontario Motor Speedway Park and several commercial office areas and eateries along Inland Empire Blvd. and Haven Ave.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Inland Empire Boulevard & Turner Avenue

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Repaint existing crossing with new white ladder styled crossing at all legs

Intersection B – Inland Empire Boulevard & E Shelby Street

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Repaint existing yellow school crossings with yellow ladder style school crossings at all legs

Intersection C – Inland Empire Boulevard & Center Avenue

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Install new ADA compliant curb ramp with DWS at southeast and southwest corners of the intersection
- Repaint existing yellow school crossings with yellow ladder style school crossings at north, east, and west legs

Intersection D – Inland Empire Boulevard & Haven Avenue

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Repaint existing crossing with new white ladder styled crossing at all legs and right-

turn slip lanes

- Install yield teeth markings w/ R1-5 sign at right-turn slip lane for northbound, southbound, and westbound traffic

Intersection E – Haven Avenue & Concoors Street

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Repaint existing crossing with new white ladder styled crossing at all legs and right-turn slip lanes
- Install yield teeth markings w/ R1-5 sign at right-turn slip lane for northbound, southbound, and westbound traffic

Intersection F – Haven Avenue & Fourth Street

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Install new ADA compliant curb ramp with DWS at northeast corner
- Repaint existing crossing with new white ladder styled crossing at all legs
- Remove extra pedestrian push button at northeast corner
- Install yield teeth markings w/ R1-5 sign at right-turn slip lane for northbound traffic

Intersection G – Fourth Street & Center Avenue

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Repaint existing crossing with new white ladder styled crossing at all legs
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northeast,

RECOMMENDATIONS BY INTERSECTIONS

northwest, and southwest corners

Intersection H – Sultana Avenue and Francis Street

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners

Intersection I – Center Avenue & Concours Street

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners
- Repaint existing yellow school crossings with yellow ladder style school crossings at all legs
- Install 30 feet of red paint at southeast corner along Center Avenue

RECOMMENDATIONS BY KEY SEGMENTS

Center Avenue

- ID 26: Install Vehicle Speed Feedback sign
- ID 21: Install Assembly D (CA) school signage
- ID 20: Install Assembly C (CA) school signage
- ID 20: Remove existing Assembly C (CA) school signage
- ID 18: Install Assembly A (CA) school signage
- ID 8: Install raised bulb out that extends 8 feet and includes covered trench drains to permit continuous gutter flow
- ID 22/25: Install pedestrian actuated RRFB with S1-1 and W16-7P signage
- ID 14: Repaint existing crossing with new yellow ladder styled school crossing
- ID 39: Install yield line markings 20 feet in advance of school crossing on northbound traffic
- ID 39: Install yield line markings 20 to 40 feet in advance of school crossing on southbound traffic
- ID 47: Install edgeline striping 8 feet from the curb along northbound direction from Inland Empire Boulevard to dedicated right-turn lane except at intersections and driveways and along southbound direction from Fourth Street to Concours Street except at intersections and driveways
- ID 50: Install 25 feet of red paint along northbound direction before new school crossing and after intersection

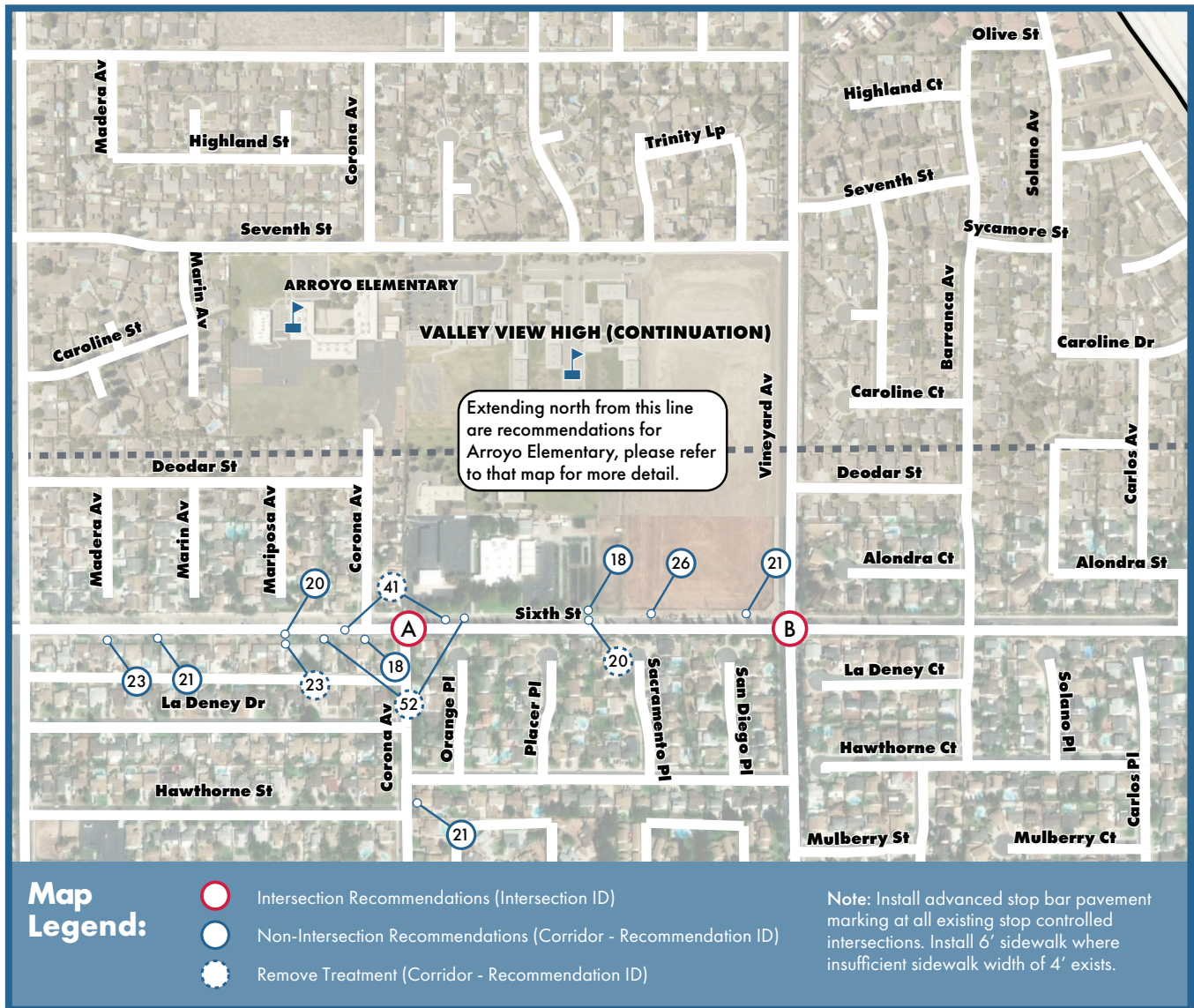
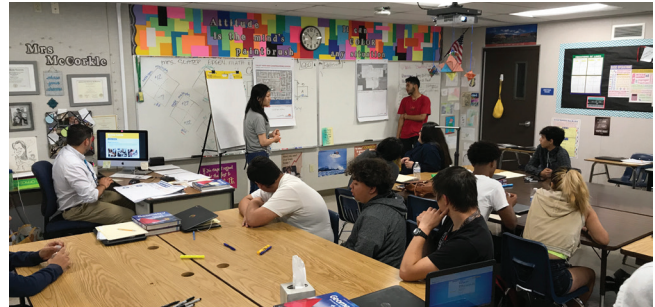
Concours Street

- ID 1: Install sidewalk 6 feet wide entering 55 feet in length
- ID 20: Install Assembly C (CA) school signage

VALLEY VIEW HIGH (CONTINUATION) SCHOOL

1801 East 6th St, Ontario, CA 91764 | Cucamonga School District (CSD) | Enrollment: 446

Positioned near the northern border of Ontario, Valley View High School is located in a residential neighborhood adjacent to Arroyo Elementary School north of the 10 Freeway. It is bounded by 7th St. to the north, Vineyard Ave. to the east, 6th St. to the south, and Baker Ave. to the west. Local destinations within a half mile to the school include Vineyard Park, a religious institutions, and a shopping center with a Cardenas Market and several restaurants.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Sixth Street & Corona Avenue

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest, southwest, and southeast corners of the intersection
- Install Pedestrian Hybrid Beacon west of intersection, if and when pending warrants are successful. Install R10-23 on mast arm for both directions if PHB is installed
- Install new yellow ladder style school crosswalk across south segment of Corona Avenue
- Remove existing S1-1 w/ W16-7P sign at southwest and northeast corner
- Install stop line in advance of the crosswalk if/when PHB is installed
- Remove existing advanced yield lines if/when PHB is installed east and west of intersection
- Install R10-6 sign at southwest and northeast corners if/when PHB is installed

Intersection B – Sixth Street & Vineyard Avenue

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Repaint existing crossing with new yellow ladder styled school crossing

RECOMMENDATIONS BY KEY SEGMENTS

Corona Avenue

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest, southwest, and southeast corners of the intersection
- Install Pedestrian Hybrid Beacon west of intersection, if and when pending warrants are successful. Install R10-23 on mast arm for both directions if PHB is installed
- Install new yellow ladder style school crosswalk across south segment of Corona Avenue
- Remove existing S1-1 w/ W16-7P sign at southwest and northeast corner
- Install stop line in advance of the crosswalk if/when PHB is installed
- Remove existing advanced yield lines if/when PHB is installed east and west of intersection
- Install R10-6 sign at southwest and northeast corners if/when PHB is installed

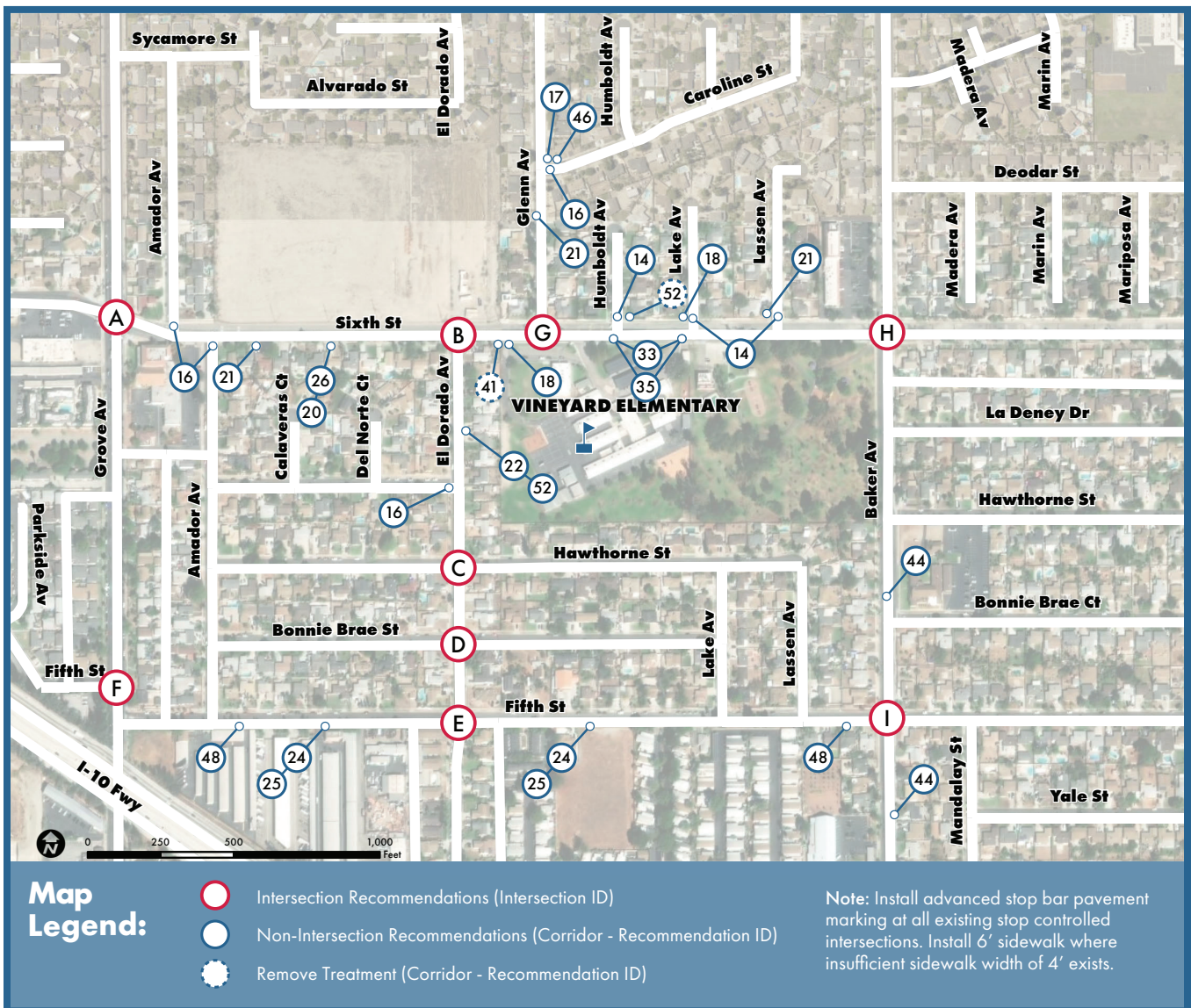
Sixth Street

- ID 23: Install S4-5 sign
- ID 21: Install Assembly D (CA) school sign
- ID 23: Remove existing S4-5 sign
- ID 20: Install Assembly C (CA) school sign
- ID 41: Remove existing SLOW SCHOOL XING if and when PHB is installed
- ID 52: Remove existing mast arm flasher if and when proposed PHB is installed
- ID 18: Install Assembly A (CA) school signage southwest of intersection
- ID 20: Remove existing Assembly C (CA) school sign
- ID 26: Install Vehicle Speed Feedback Sign in conjunction with Assembly C (CA)

VINEYARD ELEMENTARY SCHOOL

1500 East 6th St, Ontario, CA 91764 | Ontario-Montclair School District (OMSD) | Enrollment: 786

Adjacent to Vineyard Park, Vineyard Elementary School is positioned just north of the 10 freeway. Located in residential area, the school is surrounded by East 6th street to the north, North Baker Ave. to the east, East 5th St to the south, and North El Dorado Ave to the west.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – East Sixth Street & Grove Avenue

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Repaint existing crossings with yellow ladder style school crossings at all legs

Intersection B – East Sixth Street & North El Dorado Avenue

- Install new yellow ladder style crosswalk at south leg
- Remove existing Assembly C (CA) school signage at southeast corner
- Remove existing pedestrian beacon if/when PHB is installed at the pedestrian crossing at southeast corner

Intersection C – East Hawthorne Drive & North El Dorado Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northwest corner
- Install new yellow ladder style crosswalk at west and east legs

Intersection D – East Bonnie Brae Street & North El Dorado Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at all corners
- Install new yellow ladder style crosswalk at west and east legs

Intersection E – East Fifth Street & North El Dorado Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northwest and northeast corners
- Install new white ladder style crosswalk at north, east, and south legs

- Remove R-1 35 SPEED LIMIT sign at southeast corner
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage if and when proposed crossing is installed at northeast and southeast corners

Intersection F – East Fifth Street & North Grove Avenue

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at northwest, northeast, and southeast corners for each crossing
- Repaint existing crossings with yellow ladder style school crossings at west and south legs

Intersection G – Sixth Street & Glenn Avenue

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest and northeast corners of the intersection. Design should include an east facing perpendicular curb ramp for northwest corner
- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the southwest corner of the intersection
- Remove school pavement markings if/when PHB is installed at the pedestrian crossing east of intersection
- Remove existing SLOW SCHOOL XING if/when PHB is installed east of intersection
- Remove existing advanced yield pavement markings if/when PHB is installed at the pedestrian crossing
- Install stop line in advance of the crosswalk if/when PHB is installed east of intersection where SLOW SCHOOL XING is removed and west of intersection where yield pavement markings is removed

RECOMMENDATIONS BY INTERSECTIONS

- Install red paint at northwest corner 40 feet west, at northeast corner 25 feet north and 30 feet east, at southwest corner 25 feet west, and at south leg 25 feet west and 75 feet east of intersection
- *ID 52: Install R10-6 sign on east and west approach to crossing at Glenn Avenue, if and when PHB is installed.
- *ID 3: Install Pedestrian Hybrid Beacon, if and when pending warrants are successful. Install R10-23 on mast arm for both directions if PHB is installed

Intersection H – Sixth Street & Baker Avenue

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Repaint existing crossings with new yellow ladder style school crossings at all legs
- Install red paint at northwest corner 65 feet west, at northeast corner 35 feet north and 25 feet east, at southwest corner 25 feet west, and at southeast corner 25 feet east and 25 feet south

Intersection I – Sixth Street & Baker Avenue

- Repaint existing crossing with new white ladder styled crossing at all legs
- Install red paint at northwest corner 35 feet north and 25 feet west, at northeast corner 20 feet north and 25 feet east, at southwest corner 25 feet west and 80 feet south, and at southeast corner 15 feet east and 80 feet south

RECOMMENDATIONS BY KEY SEGMENTS

Sixth Street & Amador Avenue

- ID 16: Install new yellow ladder style crosswalk at north and south legs of intersection

Sixth Street & Humboldt Avenue

- ID 52: Remove existing pedestrian beacon if/when PHB is installed at the pedestrian crossing at northeast corner
- ID 14: Install new or repaint standard yellow crosswalk
- ID 33/35: Install R9-3 w/ R49 (CA) signage facing north

Sixth Street & Lake Avenue

- ID 14: Install new or repaint standard yellow crosswalk
- ID 18: Install Assembly A (CA) school signage
- ID 33/35: Install R9-3 w/ R49 (CA) signage

Sixth Street & Lassen Avenue

- ID 14: Install new or repaint standard yellow crosswalk
- ID 21: Install Assembly D (CA) school signage

Sixth Street

- ID 21: Install Assembly D (CA) school signage along eastbound direction after Amador Avenue
- ID 26/20: Install Vehicle speed feedback sign in conjunction with proposed Assembly C (CA) signage
- ID 41: Remove existing SLOW SCHOOL XING if/when PHB is installed
- ID 18: Install new Assembly A (CA)

RECOMMENDATIONS BY INTERSECTIONS

Glenn Avenue & Caroline Street

- ID 17 : Install STOP control (R1-1) sign if and when warrant is met at northeast corner
- ID 46 : Install advanced STOP bar pavement markings
- ID 16: Install new yellow ladder style crosswalk at east leg

Glenn Avenue

- ID 21: Install Assembly D (CA) school signage

North El Dorado Avenue

- ID 22/52: Install S1-1 with W16-6P sign
- ID 16: Install new yellow ladder style crosswalk at La Deney Drive intersection

Baker Avenue

- ID 44: Install STOP AHEAD pavement marking

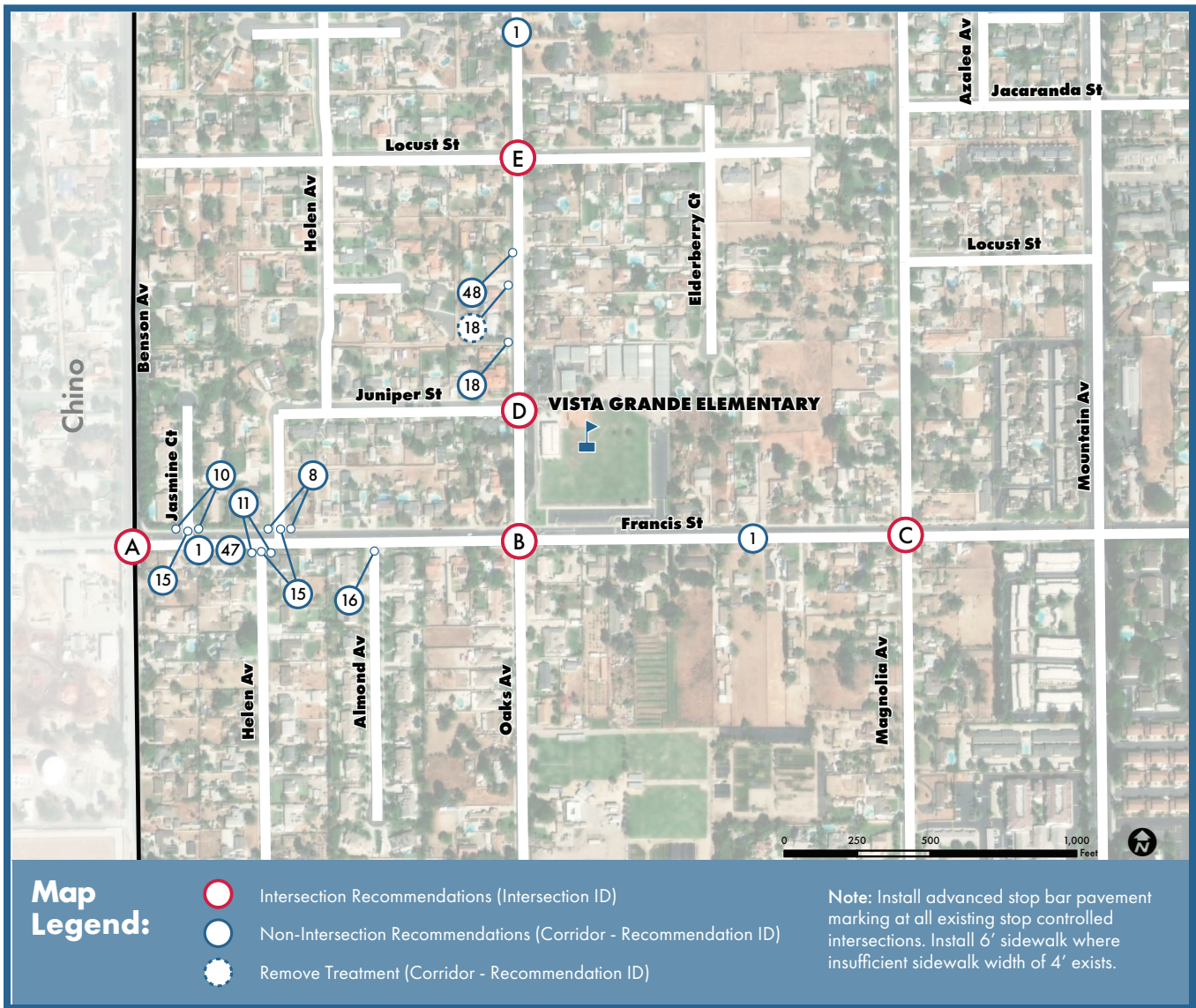
Fifth Street

- ID 24/25: Install W11-2 w/ W16-9P sign
- ID 48: Install 35 speed legend pavement marking

VISTA GRANDE ELEMENTARY SCHOOL

1390 West Francis St, Ontario, CA 91762 | Ontario-Montclair School District (OMSD) | Enrollment: 456

Vista Grande Elementary stands in the middle of a residential neighborhood north of the 60 Freeway. The school is bounded by Locust St. to the north, Mountain Ave. to the east, Francis St. to the south, and Oaks Ave. to the west. Local destinations located within a half mile to the school includes a farmers market and fast food eateries along Mountain Ave.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – South Benson Avenue & Francis Avenue

- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at northeast and southeast corners
- Install new white ladder style crosswalk at east leg

Intersection B – Francis Avenue & South Oaks Avenue

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the southwest and southeast corners of the intersection
- Install 6 feet wide sidewalk from intersection to 110 feet west along westbound direction of Francis Street and from intersection to 235 feet north along southbound direction of Oaks Avenue
- Repaint existing crossing with new yellow ladder styled school crossing at north, east, and south legs
- Install edgeline striping 6 feet from the curb along northbound direction along Oaks Avenue from intersection to Juniper Street

Intersection C – Francis Avenue & South Magnolia Avenue

- Install new ADA compliant curb ramp with DWS on southwest and southeast corners of the intersection
- Install sidewalk 6 feet wide on southwest of the intersection entering 485 feet in length from 235 feet west of the intersection to existing sidewalk along Magnolia Avenue and entering 290 feet in length from south of existing sidewalk
- Install sidewalk 6 feet wide on southeast of the intersection entering 75 feet in length from south of existing sidewalk along

Magnolia Avenue and entering 360 feet in length north of existing sidewalk along Magnolia Avenue turning onto Francis Avenue

Intersection D – South Oaks Avenue & Juniper Street

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the southwest, northwest, and northeast corners of the intersection. Design should be a north-facing perpendicular curb ramp to discourage crossing east for southwest corner
- Install new yellow ladder style school crosswalk on west leg of the intersection
- Repaint existing crossing with new yellow ladder styled school crossing on north leg of intersection
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage and remove existing Assembly B (CA) if and when proposed RRFB is installed on northwest and northeast corners of the intersection
- Install red paint after new or repainted crosswalks 20 feet west of intersection along eastbound Juniper Street, 25 feet west of intersection along westbound Juniper Street, and 25 feet north of intersection along southbound Oaks Avenue

Intersection E – South Oaks Avenue & Locust Street

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at all corners of the intersection
- Install Assembly D (CA) school signage along Oaks Avenue on southwest corner
- Install new yellow ladder style school crosswalk on west and east legs

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Francis Avenue

- ID 1: Install 400 feet of sidewalk 6 feet wide between Benson Avenue and Helen Ave; Install 200 feet of sidewalk 6 feet wide east of Helen Avenue
- ID 47: Install edgeline striping 8 feet from the curb along eastbound direction from Benson Avenue to 140 feet west of Almond Avenue except at intersections and driveways
- ID 47: Install edgeline striping 10 feet from the curb along eastbound direction from 140 feet west of Almond Avenue to Oaks Avenue except at intersections and driveways
- ID 47: Install edgeline striping that tapers from 10 feet from the curb at Mountain Avenue to 8 feet from the curb at Magnolia Avenue along eastbound direction
- ID 47: Install edgeline striping that tapers from 10 feet from the curb at Oaks Avenue to 8 feet from the curb at Magnolia Avenue along eastbound direction
- ID 47: Install edgeline striping 10 feet from the curb along westbound direction from 125 feet west of Oaks Avenue to Benson Avenue except at intersections and driveways
- ID 47: Install edgeline striping 8 feet from the curb along westbound direction from after Vista Grande ES to Magnolia Avenue except at intersections and driveways
- ID 47: Install Edgeline Striping that tapers from 10 feet at Mountain Avenue to 8 feet at Magnolia Avenue along westbound direction
- ID 1: Install sidewalk 6 feet wide along eastbound direction of Francis Avenue from 335 feet west of Magnolia Avenue entering 300 feet in length westward

Francis Avenue & Jasmine Court

- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS
- ID 15: Install new white ladder style crosswalk at north leg

Francis Avenue & South Helen Avenue

- ID 11: Install new ADA compliant curb ramp with DWS at southwest and southeast corners of the intersection
- ID 8: Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the northwest and northeast corners of the intersection
- ID 15: Install new white ladder style crosswalk at north and south legs

Francis Avenue & South Almond Avenue

- ID 16: Install new yellow ladder style school crosswalk at south leg

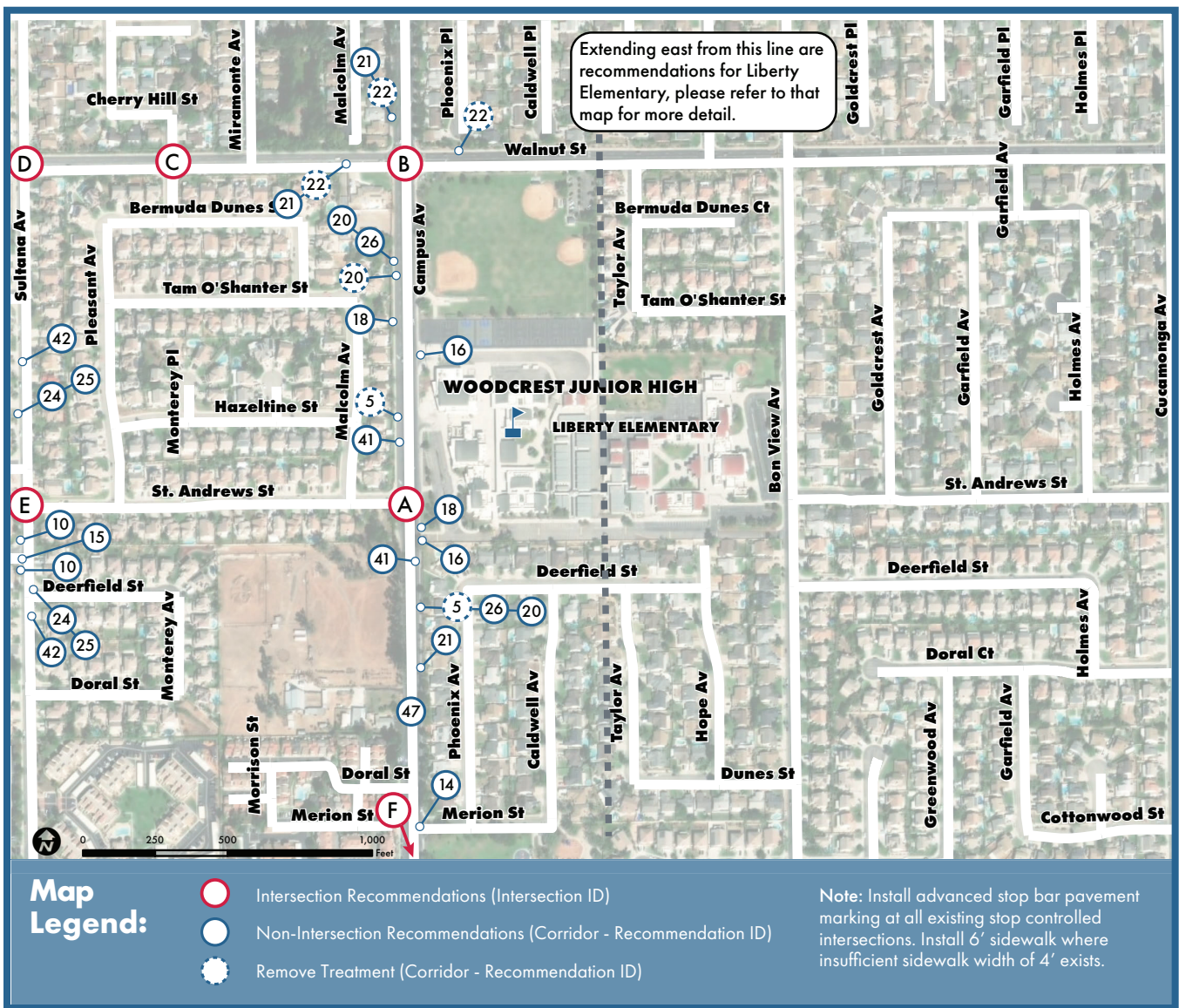
South Oaks Avenue

- ID 18: Install Assembly A (CA) school signage
- ID 18: Remove existing/outdated Assembly A (CA) school signage
- ID 48: Install "25 MPH" speed legend pavement markings
- ID 1: Install sidewalk 6 feet wide entering 1300 feet in length along northbound direction from first driveway north of Locust Street to Phillips Boulevard
- *ID 48: Install "25 MPH" speed legend pavement markings 570 feet north of Locust Street

WOODCREST JUNIOR HIGH SCHOOL

2725 South Campus Ave, Ontario, CA 91761 | Chino Valley Unified School District (CVUSD) | Enrollment: 408

Woodcrest Junior High is situated at the center of a residential neighborhood immediately to the left of Liberty Elementary School. It is bounded by Walnut St. to the north, Bon View Ave. to the east, Riverside Dr. to the south, and Campus Ave. to the west. Nearby destination within a mile to the school consists of a CVS, Kimball Park, and several retail shops and fast food eateries.



RECOMMENDATIONS BY INTERSECTIONS

Intersection A – Campus Avenue & St. Andrews Street

- Install raised bulb-outs with covered trench drains to permit continuous gutter flow at the southwest and southeast corners of the intersection. Design should provide a seamless transition for vehicles pulling into the pick-up area
- Install pedestrian actuated RRFB with S1-1 and W16-7P signage facing north and south for both approaches
- Install yield teeth markings on north and south approach w/ R1-5 signs if and when proposed RRFB is installed
- Install 25 feet of red paint on both sides of the eastbound approach and 25ft on both sides of the north/south approach
- Repaint existing yellow school crossing with yellow ladder style school crossing for the west and south legs

Intersection B – Campus Avenue & Walnut Street

- Repaint existing yellow school crossing with yellow ladder style school crossing for the north, east, south, and west legs
- Remove existing S4-5 sign facing north 25 feet south of the intersection
- Install R2-1 "45 SPEED LIMIT" sign for southbound travel from the intersection
- Install "45" speed legend pavement marking across each southbound travel lane from the intersection

Intersection C – Walnut Street & Monterey Avenue

- Install new white standard crossing on the north and south legs of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection

Intersection D – Walnut Street & Sultana Avenue

- Install new white standard crossing on the north and south legs of the intersection
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection

Intersection E – Sultana Avenue & St. Andrews Street

- Install new white standard crosswalk at the south and east legs
- Install W11-2 w/ W16-7P pedestrian signage if and when proposed white standard crosswalk is installed for north and south approaches
- Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northeast, southeast, and southwest corners
- Install 25 feet of red paint leading into the proposed white standard crossing

Intersection F – Campus Avenue & Riverside Drive

- Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing
- Install new yellow ladder style school crossing at each leg of the intersection
- Install two new ADA compliant curb ramps with DWS at the southeast leg for north and west crossing

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

Campus Avenue

- ID 14: Repaint existing school crossing with yellow ladder style school crossing
- ID 47: Install edgeline striping 8 feet from the curb along full extent of corridor from Riverside Drive to Walnut Street
- ID 21: Install new Assembly D (CA)
- ID 5: Remove existing overhead advanced flashing beacon if and when proposed RRFB is installed
- ID 26/20: Install new speed feedback sign with Assembly C (CA) sign
- ID 16: Install new yellow ladder style school crossing
- ID 18: Install new Assembly A (CA)
- ID 41: Install new "SLOW SCHOOL XING" pavement marking if and when proposed RRFB is installed
- ID 20: Remove existing Assembly C (CA) if and when proposed speed feedback sign is installed with Assembly C (CA)
- ID 22: Remove existing S1-1 if and when proposed Assembly D (CA) is installed

Walnut Street

- ID 22: Remove existing S1-1 sign
- ID 21: Install new Assembly D (CA)
- *ID 26: Install new speed feedback sign 100 feet east of the intersection with Euclid Avenue

Sultana Avenue

- ID 42: Install PED XING pavement marking if and when proposed white standard crosswalk is installed
- ID 24 / ID 25: Install W11-2 w/ W16-9P pedestrian signage if and when proposed white standard crosswalk is installed
- ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with new

detectable warning surface

- ID 15: Install new white standard crosswalk
- *ID 15: Install new white standard crosswalk at the north leg of the intersection with Riverside Drive

Walnut Street & Cherry Avenue

- *ID 15: Install new white standard crossing on the south leg of the intersection
- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the southwest and southeast corner of the intersection

Walnut Street & Plum Lane

- *ID 15: Install new white standard crossing on the north leg of the intersection
- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northwest and northeast corner of the intersection

Walnut Street & Euclid Avenue

- *ID 15: Install new white standard crossing at each leg of the intersection
- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at each corner of the intersection
- *ID 7: Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Euclid Avenue & Merino Street

- *ID 15: Install new white standard crossing at the east, south, and west legs of the intersection
- *ID 7: Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the

RECOMMENDATIONS BY KEY SEGMENTS

**Recommendation or Segment not shown on map*

intersection for each crossing

- *ID 10: Improve and/or reconstruct existing ramp to be ADA compliant with DWS at the northeast corner

Euclid Avenue & Riverside Drive

- *ID 15: Install new white standard crossing at each leg of the intersection
- *ID 7: Install accessible pedestrian system (APS) push buttons and count down pedestrian heads at all corners of the intersection for each crossing

Appendix O

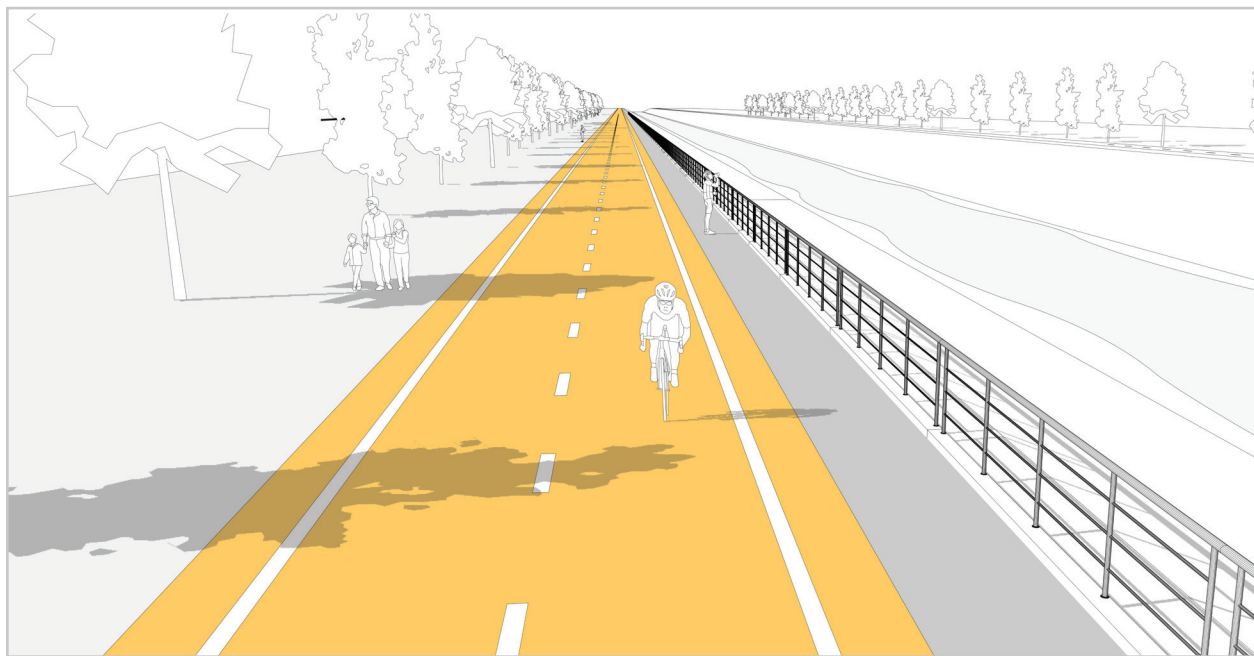
DESIGN

GUIDELINES

FACTSHEETS

CLASS I: OFF-STREET BIKE PATH

A Class I Off-Street Bike Path is a completely separated facility for the exclusive use of bicycles and pedestrians with crossflow by motor vehicles minimized. It can be used as a recreational route or as a high-speed commute route when motor vehicle and pedestrian conflicts are minimized.



DESIGN GUIDANCE

Notes

- Generally used to serve corridors not served by streets and highways or where wide right-of-way exists.
- Can provide recreational opportunities or serve as commute routes.

Minimums

One-way: 9'

5' traveled-way + 2' left shoulder + 2' right shoulder

Two-way: 12' (10' if between railings on structure)

8' traveled-way + 2' left shoulder + 2' right shoulder

Vertical clearance: 8' over path, 7' over shoulders

Cross slope: 1%

Separation between the edges of the bikeway &

roadway: 5' + standard shoulder width

Horizon curvature radius: 90' (20MPH); 160'

(25MPH); 260' (30MPH); or use warning signing/

striping if smaller

Stopping Sight Distance: 125' (20MPH); 175'

(25MPH); 230' (30MPH)

Maximums

Superelevation/Cross slope: 2%

Grade: 5%

Preferred width:

One-way: Not preferred unless (1) there is a rare, specific need for one-way travel; or (2) two one-way bike paths are meant to be parallel and adjacent to each other within the same wide right-of-way

Two-way: 16' (10' traveled way + 3' left shoulder + 3' right shoulder), 18'+ if possible (12' traveled way + 3' left shoulder + 3' right shoulder)

Preferred vertical clearance: 10'

Preferred sustained grade: 2%

Entry control: Use fixed obstacle posts only when other measures have failed to stop unauthorized motor vehicle entry

IMPLEMENTATION

- Bike paths immediately adjacent to streets/highways are not recommended, due to introducing major conflicts at intersections with vehicles, transit passengers at stops, and vehicle occupants crossing the path.
- Per the CVC, pedestrians may use the bike path unless there is an adjacent pedestrian facility (immediate or with a buffer) to the bike path—e.g., fence, railing, wall, landscaping—in which case they are required to use the facility.
- Can be appropriate along roads with higher traffic volumes and higher vehicle speeds as well as away from roadways at parks, greenbelts, and utility corridors.

KEY CONCERNS

- Transitions to/from/across vehicle roadways and intersections.
- Sight distance and maintaining STOP/YIELD controls where the bikeway crosses other paths of travel.
- Ensure a minimum 2' clearance (3' preferred) from the edge of the bike path traveled-way to obstructions.
- Drainage (consider drainage ditch for hillsides of heavy flows).
- Lighting.

ADDITIONAL REFERENCES & GUIDELINES

Caltrans HDM - <https://dot.ca.gov/-/media/dot-media/programs/design/documents/hdm-complete-final-070120-a11y.pdf>

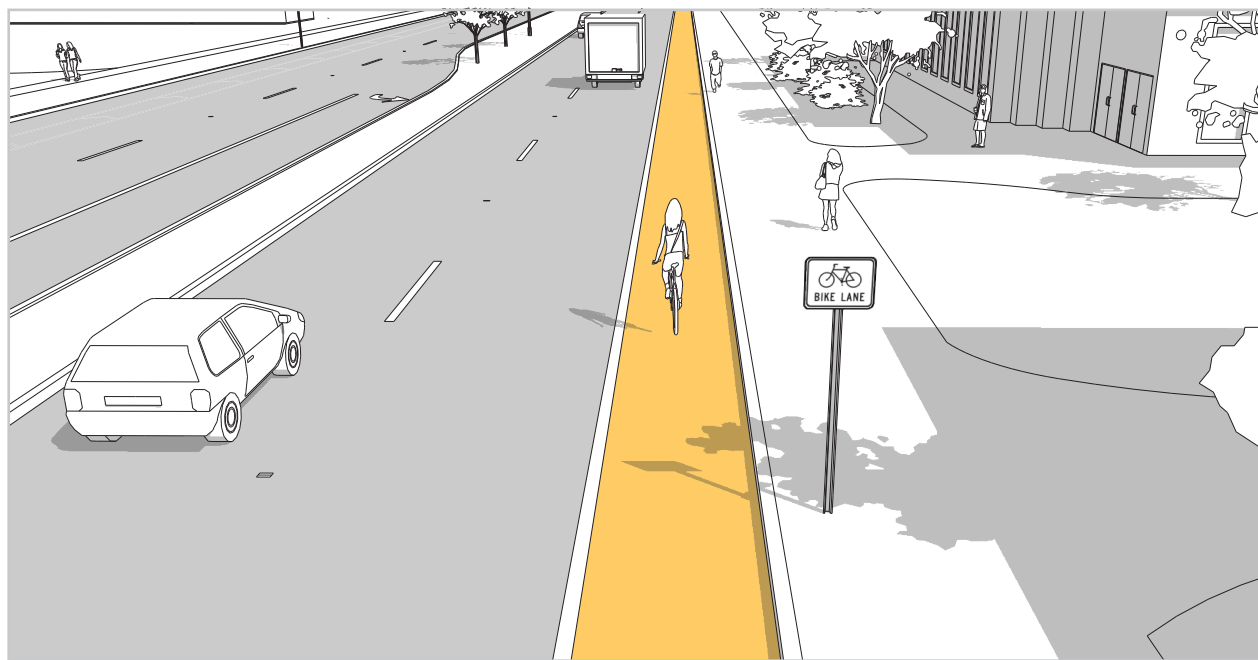
Topic 1003 - Bikeway Design Criteria; Section 1003.1 - Class I Bikeways (Bike Paths)

FHWA Bikeway Selection Guide, Feb. 2019 - https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf

AASHTO Guide for the Development of Bicycle Facilities - <https://njdotlocalaidrc.com/perch/resources/aashto-gbf-4-2012-bicycle.pdf>

CLASS II: BIKE LANE

A Class II Bike Lane is a portion of the roadway that is designated by striping, signing, and/or pavement markings for the exclusive use of bicyclists. They are established along streets and corridors where there is significant demand, and where there are distinct needs that can be served by them.



DESIGN GUIDANCE

Notes:

- **Guidance at intersections:** Terminate the solid stripe between 50' (short blocks <400') and 200' (long blocks, or speeds >35MPH) prior to the intersection where right turns are permitted from the outer through travel lane, and use a dashed line carried to or near the intersection.
- At trap right-turn lanes, terminate the solid bike lane with a gap of $\geq 100'$ (or distance "d" per CAMUTCD 2C.05 for posted speeds >40MPH) to the beginning of a striped right-turn-only lane, and continue the solid bike lane lines to the left of the right-turn-only lane.
- Where there is an added right-turn-only lane, terminate the solid bike lane and use dotted lines (Caltrans Detail 39A) from the upstream end of the right-turn-only lane taper to the beginning of a striped right-turn-only lane where the solid bike lane lines should continue to the left of the right-turn-only lane.
- Dashed lines across the right-turn-only lane should not be used on extremely long lanes, or where there are double right-turn-only lanes; in such cases, all bike lane striping should be dropped to permit judgment by the bicyclists to prevail.
- Consider having the measurement from the edge of the gutter, not the curb. Consider a maximum width to prevent vehicles from driving in the bike lane.

Minimums:

Adjacent to curb face or on-street parking lane: 5' (includes gutter pan width) or adjacent parking lane

Adjacent to right-turn only lane: 4' (≤ 40 MPH posted speed) or 6' (>40 MPH), with right-hand stripe 8" wide per Caltrans Detail 38A

Adjacent to roadside with no parking or curb: 4'

Maximums:

Cross slope: 3% (resurfacing/widening to match the ex. cross slope)

IMPLEMENTATION

- Can be appropriate on roads with moderate traffic volumes and moderate vehicle speeds.
- Can be appropriate on higher speed roadways if increased width is provided for the bike lane.

KEY CONCERNS

- Reducing travel lane width to add/widen bike lanes - need to consider factors such as vehicle speeds, truck volumes, alignment, bike lane width, sight distance, presence of on-street parking.
- Connectivity with existing bicycle facilities (see local General or Specific Plan).
- Bicycle signal controls.
- Integration with existing lane configurations, driveways, and roadside features.

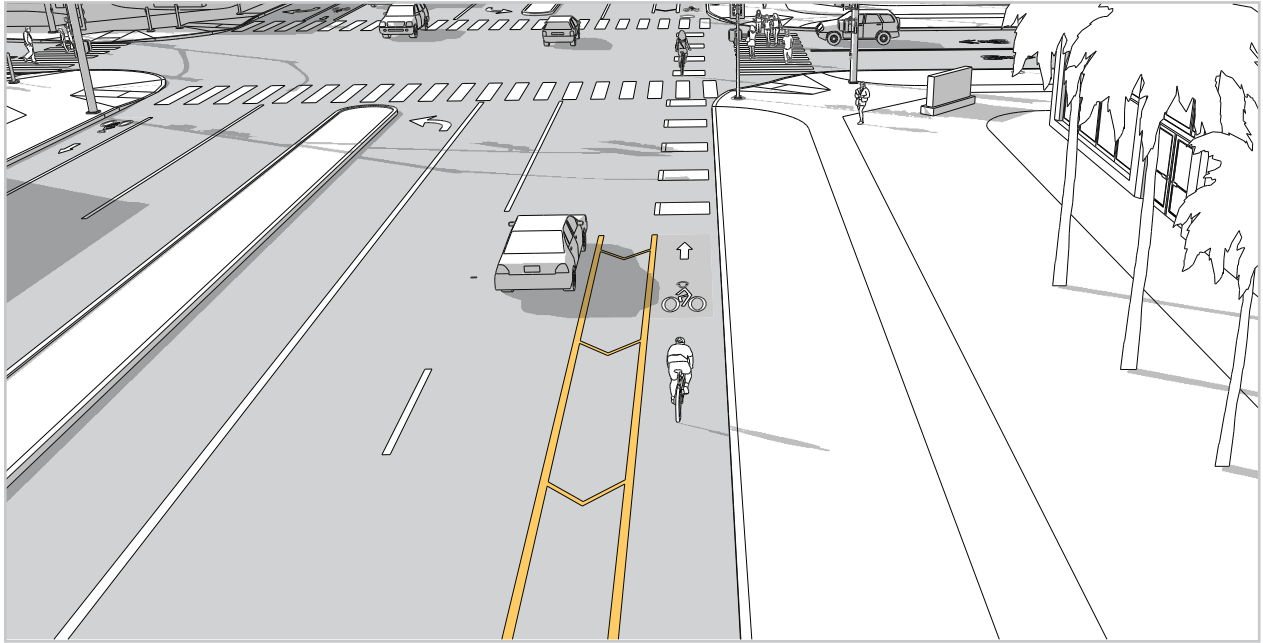
ADDITIONAL REFERENCES & GUIDELINES

Caltrans Highway Design Manual (HDM) - Chapter 300 Topic 301.2 & 302; Figure 301.2

California MUTCD - Figures 9C-1, 9C-3, 9C-4, 9C-4(CA), 9C-5, 9C-6, 9C-102(CA), 9C-103(CA)

CLASS II: BUFFERED BIKE LANE

A Class II Buffered Bike Lanes is a conventional bicycle lane (i.e., Class II Bike Lane) paired with a designated buffer space composed of painted stripes and pavement markings adjacent to the bike lane. The striped separation from vehicular traffic can decrease exposure, increase the perceived user level of comfort, provide a space for bicyclists to pass one another without encroaching into the motor vehicle travel lane, and also encourage bicyclists to ride outside of the door zone when the buffer is placed between the bike lane and adjacent on-street parked cars.





DESIGN GUIDANCE

Notes

- Requires additional maintenance when compared to a conventional bicycle lane, such as keeping the facility free of potholes, broken glass, and other debris.
- Requires additional right-of-way or roadway space to accommodate buffer alongside bike lane.
- **Signage:** Standard and special signage for bike lanes should be installed based on MUTCD guidelines. For example: Bike Lane Sign (R81(CA)), BEGIN (R81A(CA)), END (R81B(CA)), No Parking Bike Lane Signs (R7-9, R7-9a), Bicycle Regulatory Signs (R9-5, R9-6, etc.)

Minimums

1.5' (bound by two solid lines without interior markings)

Buffer with interior markings (chevron or diagonal):
4' or greater

Maximums

There are no stated maximum geometric requirements beyond those prescribed for Class II bikeways without the buffer zone.

IMPLEMENTATION

- Can be appropriate on roads with moderate traffic volumes and moderate vehicle speeds.
- Can be appropriate on higher speed roadways if increased width is provided for the bike lane or buffer.

KEY CONCERNS

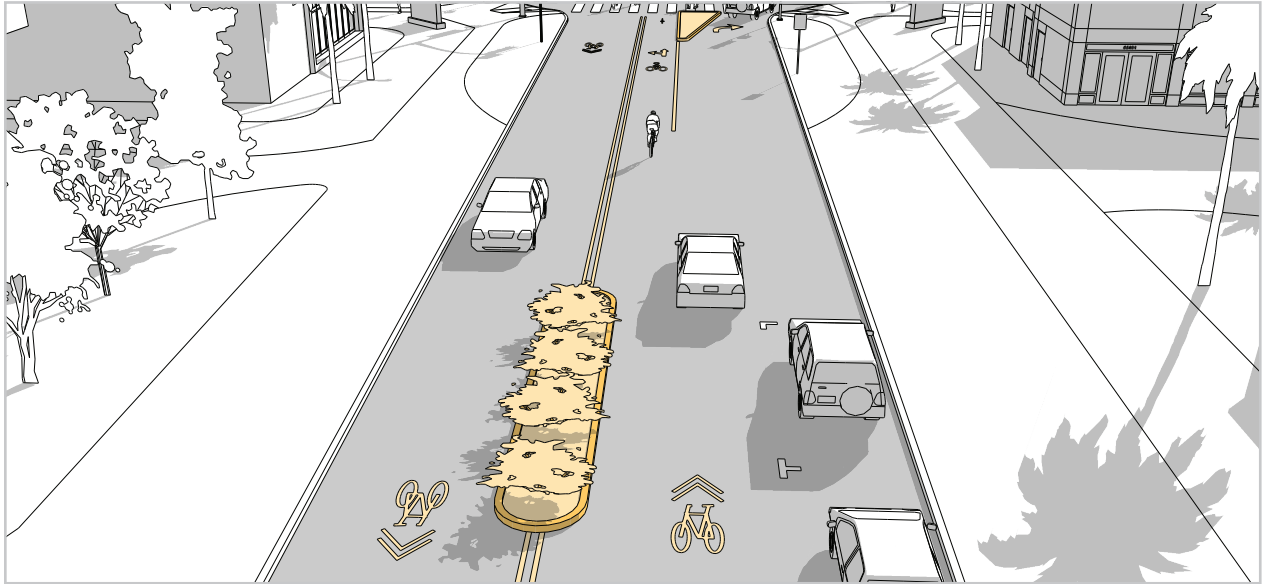
- Striping configuration to allow vehicles to cross buffer zone to enter/exit driveways.
- Ensuring that the traveled way for motor vehicles, adjacent to the buffered bikeway area, is afforded sufficient space to maintain the agency's desired/allowable travel lane widths for each travel lane
- If raised devices are desired within the buffer area, then the bikeway classification must change to a separated bike lane and the designer shall adhere to the guidelines and requirements for Class IV Bikeways

ADDITIONAL REFERENCES & GUIDELINES

California MUTCD - Figure 9C-104(CA)

CLASS III: BIKE BOULEVARD

A Class III Bike Boulevard is a special type of bike route where a street is designed to accommodate bicyclists with a wide variety of skill levels. Bike boulevards offer all of the features of a signed or marked shared lane with added considerations, such as traffic calming elements, and traffic diversion techniques that restrict thru-traffic restrictions for motor vehicle traffic while allowing bicyclists to proceed through. Bicycle boulevards promote low-speed and low-volume streets that cannot accommodate or do not need exclusive bike lanes.



Allan Crawford



DESIGN GUIDANCE

Notes:

- Mainly applied on collectors, Downtown streets, other pedestrian priority areas, and local/neighborhood street roadways.
- Increases comfort for bicyclists by reducing motorist speeds and volumes, if diverters or roundabouts are included.
- Connects residential roads to commercial corridors/community services.
- **Signage:** Special signage designating roadways as bicycle boulevards could be designed and installed. Specific signage for bike routes shall be installed based on CA MUTCD guidelines. For example: Bicycles May Use Full Lane Sign (R4-11), Bicycle Route Signs (M1-8, M1-8a, M1-9), Bicycle Route Sign Auxiliary Plaques, Reference Location Signs (D10-1 through D10-3) and Intermediate Reference Locations (D10-1a through D-103a).

Minimums

Shared-lane element of bike boulevards (pavement markings):

- Street Width 14' or more: 13' from a lateral reference point (curb or edgeline)
- Street Width less than 14': Center of the effective lane width

Maximums

No specified maximum geometric requirements are new to Class III bikeway facilities.

IMPLEMENTATION

- Can be appropriate on roads with low traffic volumes and low vehicle speeds.
- If combined with other features such as traffic calming features, implementation for such items may impact where bicycle boulevards may be implemented.

KEY CONCERNS

- Resident/business push back where on-street parking is removed.
- Continuity of bike boulevard elements at major/busy/built-out intersections.
- Varying roadway widths, narrow shoulders.
- Driveway crossings for existing commercial uses can create conflict points.
- May require additional paved surface (bulb-outs) to provide sidewalk space for pedestrians.
- Diversion designs can restrict vehicle movements if used.
- Traffic volumes should generally be less than 3,000 vehicles per day.

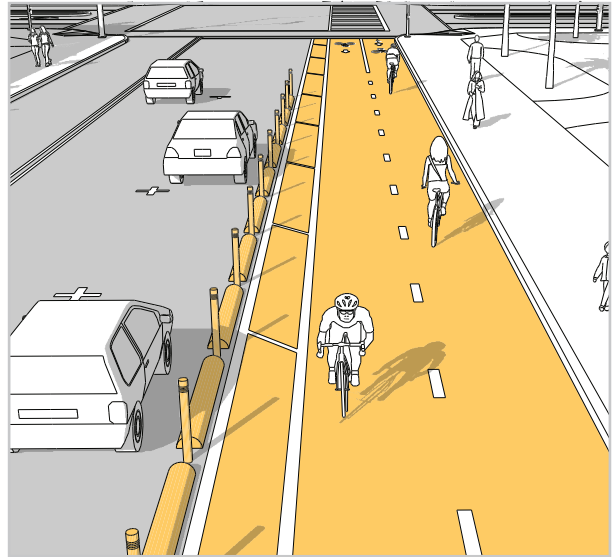
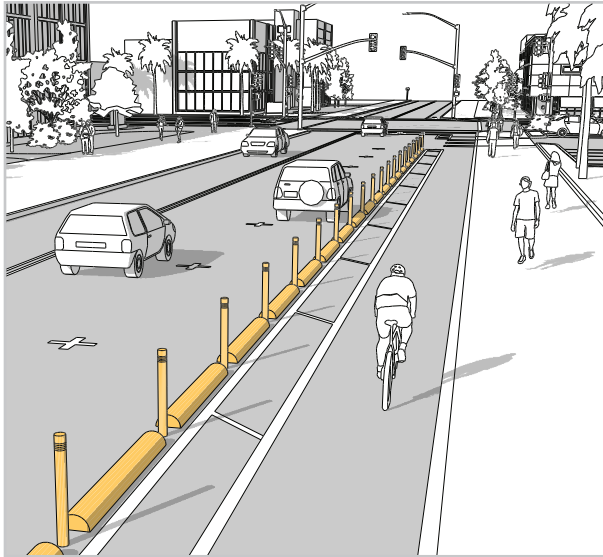
ADDITIONAL REFERENCES & GUIDELINES

California MUTCD - Figure 9C-108(CA)

CLASS IV: ON-STREET SEPARATED BIKEWAY

A Class IV Separated Bikeway, also known as a cycle track or protected bike lane, is a one- or two-way bikeway for the exclusive use of bicycles that includes a physical, vertical barrier between bicyclists and motor vehicle traffic within the roadway. It combines the user experience of a bike path with the on-street infrastructure of a conventional bike lane.

An **on-street separated bikeway** is located on the street level that includes a physical barrier between bicyclists and motor vehicle traffic within the roadway.





DESIGN GUIDANCE

Notes:

Preferred geometrics:

- Clear Bike Lane Width (one-way): 7'
- Separation Width or Buffer: 3'

Minimums

Clear Bike Lane Width (one-way): 5' (4' when located at accessible parking or a bus stop)

Clear Bikeway Width (2-way): Use Class I standards

Separation Width or Buffer:

- Between an on-street parking lane and the edge of the traveled way: 3' (5' if accessible parking)
- No On-Street Parking: 2'

Maximums

No maximum geometrics specified

IMPLEMENTATION

- Can be appropriate on roads with higher traffic volumes and higher vehicle speeds.
- Local jurisdictions must be involved when analyzing these impacts with local residents, businesses, and advocacy groups and deciding what features are to be included in the street modification.
- Adding a Class IV Bikeway into an already built-out street environment usually requires a reevaluation of service needs and a level of service analysis for capacity because some transportation feature(s) may need to be reduced or eliminated (e.g., vehicular lanes, shoulder, parking, sidewalk).

KEY CONCERNS

- Crossing points at intersections, alleys, and driveways.
- Unloading and loading zones, transit stops and valet parking areas.
- Selection of vertical element separation type.
- Separation width, bikeway width, bikeway approach tapers.
- Maintenance.
- Traffic control work zones through separated bikeways.

ADDITIONAL REFERENCES & GUIDELINES

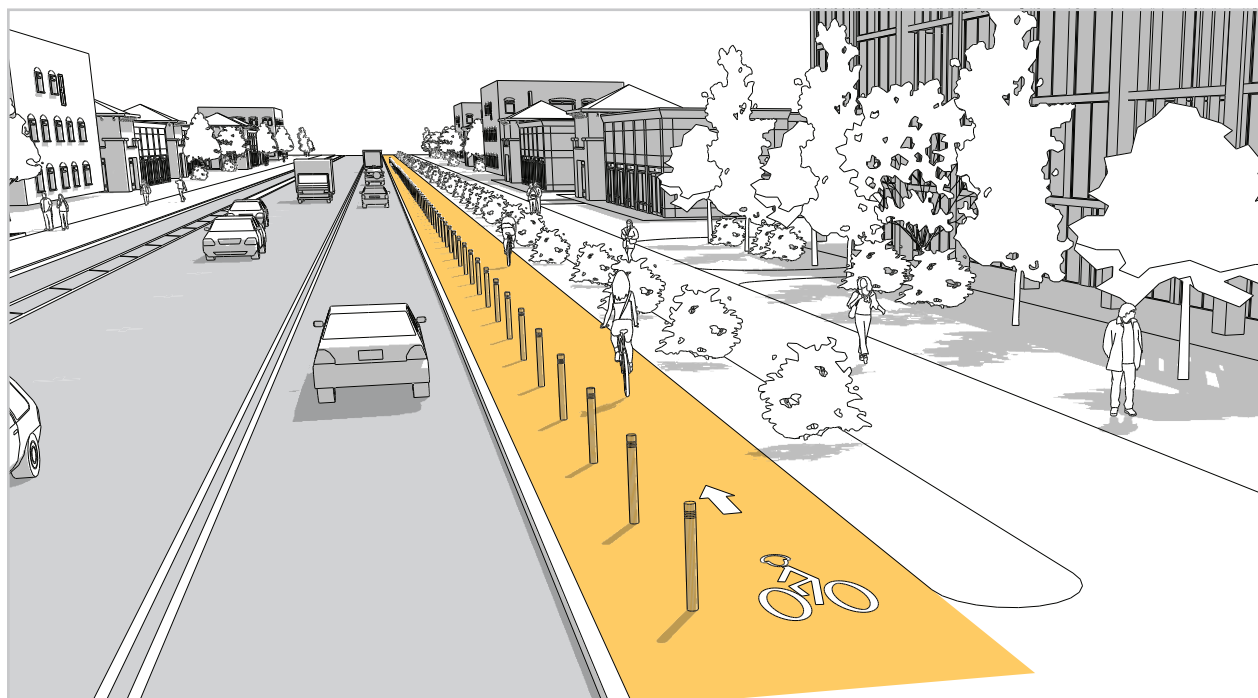
Caltrans Class IV Bikeway Guidance Design Info Bulletin #89; Caltrans HDM Chapter 1000

Protected Bikeways Act of 2014 (Assembly Bill 1193 - Ting, Chapter 495; FHWA Separated Bike Lane Planning and Design Guide (FHWA Guide)

HDM Topical 105 for pedestrian access route clearance within the remaining sidewalk width

CLASS IV: RAISED SEPARATED BIKEWAY

A Class IV Raised Separated Bikeway is a separated bikeway typically designed to be either at the same grade as the adjacent sidewalk or set at an intermediate level mountable curb between the roadway and sidewalk.



Credit: NACTO

DESIGN GUIDANCE

Notes

Preferred geometrics:

- Clear Bike Lane Width (one-way): 7'
- Clear Bikeway Width (2-way): Use Class I standards
- Separation Width or Buffer: 3'

Minimums

Clear Bike Lane Width (one-way): 5' (4' when located at accessible parking or a bus stop)

Clear Bikeway Width (2-way): Use Class I standards

Separation Width or Buffer:

- On-street, between an on-street parking lane and the edge of the traveled way: 3'
- On-street, with No On-Street Parking: 2'
- On the sidewalk, between the edge of the traveled way (no on-street parking) and the edge of the vertical element separating the bikeway and buffer: 1.5' (may include landscaping)
- On the sidewalk, between the edge of the traveled way (with on-street parking) and the edge of the vertical element separating the bikeway and buffer: 3' (may include landscaping)

Maximums

No maximum geometrics specified.

IMPLEMENTATION

- The separated bikeway may be raised vertically to an elevation higher than the finished grade of the roadway, but should not be raised at intersections, alleys, and driveways.
- For partial sidewalk conversions, the part of the sidewalk used for the separated bikeway is separated by a continuous detectable element (barrier, planers, curb, flexible post; however, these elements may be omitted) and can no longer be used by pedestrians.

KEY CONCERNS

- Ensure adequate ADA clearance for pedestrians on walkable portions of the sidewalk.
- Design for sidewalk and above-grade treatments at driveways and intersections.

ADDITIONAL REFERENCES & GUIDELINES

Caltrans Class IV Bikeway Guidance Design Info Bulletin #89

Caltrans HDM - Chapter 1000

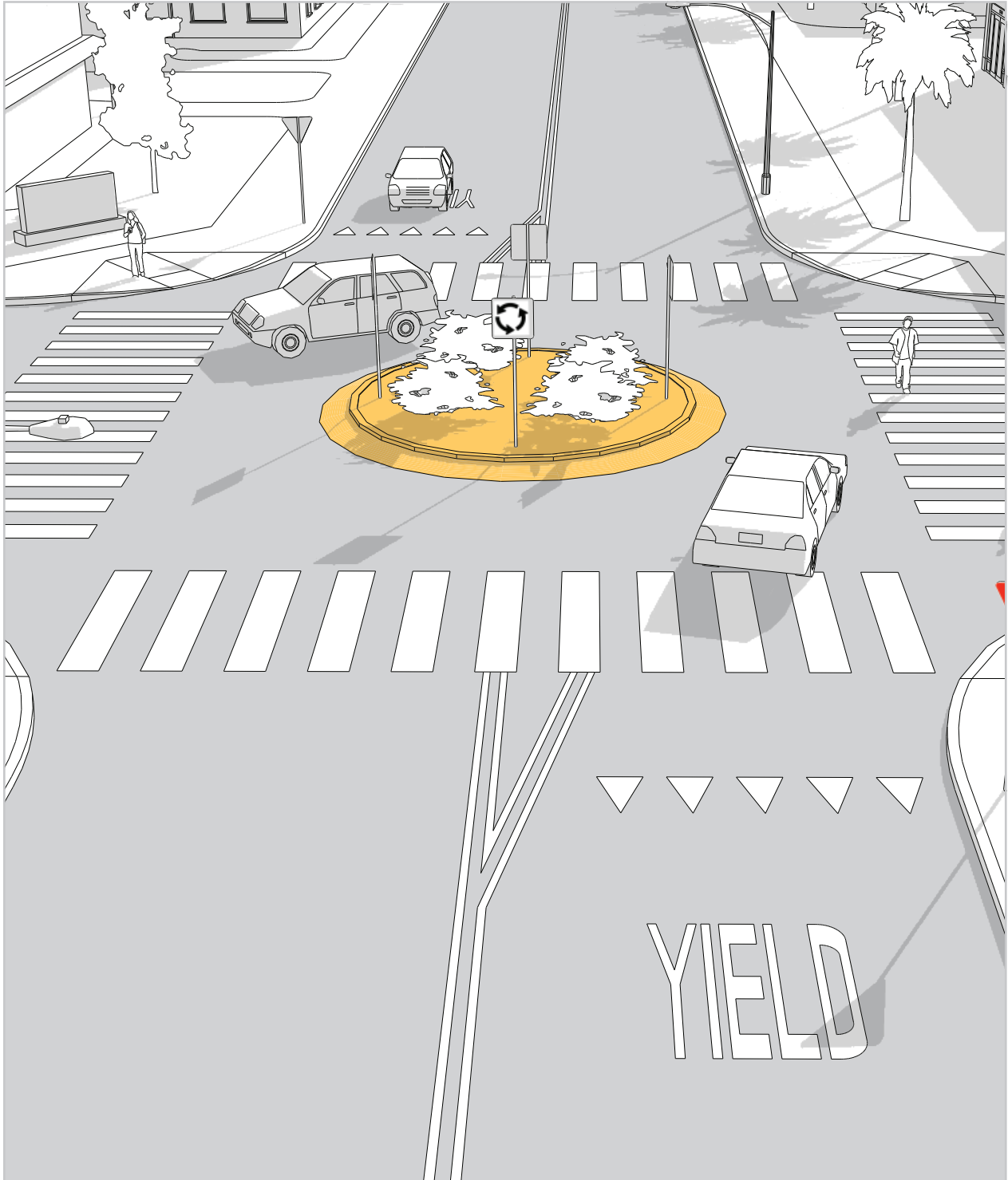
Protected Bikeways Act of 2014 (Assembly Bill 1193 - Ting, Chapter 495)

FHWA Separated Bike Lane Planning and Design Guide

HDM Topical 105 for pedestrian access route clearance within the remaining sidewalk width

TRAFFIC CIRCLE

Traffic circles, also known as mini roundabouts, feature a circular island in the center of an intersection. They are typically used at un-signalized intersections to help lower speeds, while still promoting a continuous flow of traffic.





DESIGN GUIDANCE

Notes

If space is available, the planting of trees and shrubs within the traffic circle can heighten the traffic calming effect, but must be maintained to keep sight distance at a maximum.

Minimums

Diagonal Corner Clearance: 15'

Need to follow design minimums of (1) the design vehicle using the roundabout (passenger cars, single unit/ multiple unit trucks, emergency vehicles, etc.); and (2) the individual components of the traffic circle:

- Central Island
- Turning paths
- Entry width and entrance lines
- Circulatory width and roadway
- Accessible pedestrian crossings/crosswalks
- Traffic control devices

Maximums

Entry speed (MPH): 15-20

Approach lanes: 1

Inscribed Circle Diameter: 45'-90'

IMPLEMENTATION

- Appropriate at the intersection of two local roads in urban and suburban settings with one-way or two-way streets.
- Appropriate for relatively low-speed streets (Some jurisdictions have limits at 30 MPH).
- Can be appropriate at low - volume streets.
- Not appropriate along a primary emergency route and on streets that provide access to emergency medical services.
- Transit routes should not have a left turn at these locations.
- Typically not appropriate along a primary access route to a commercial or industrial site.

KEY CONCERNS

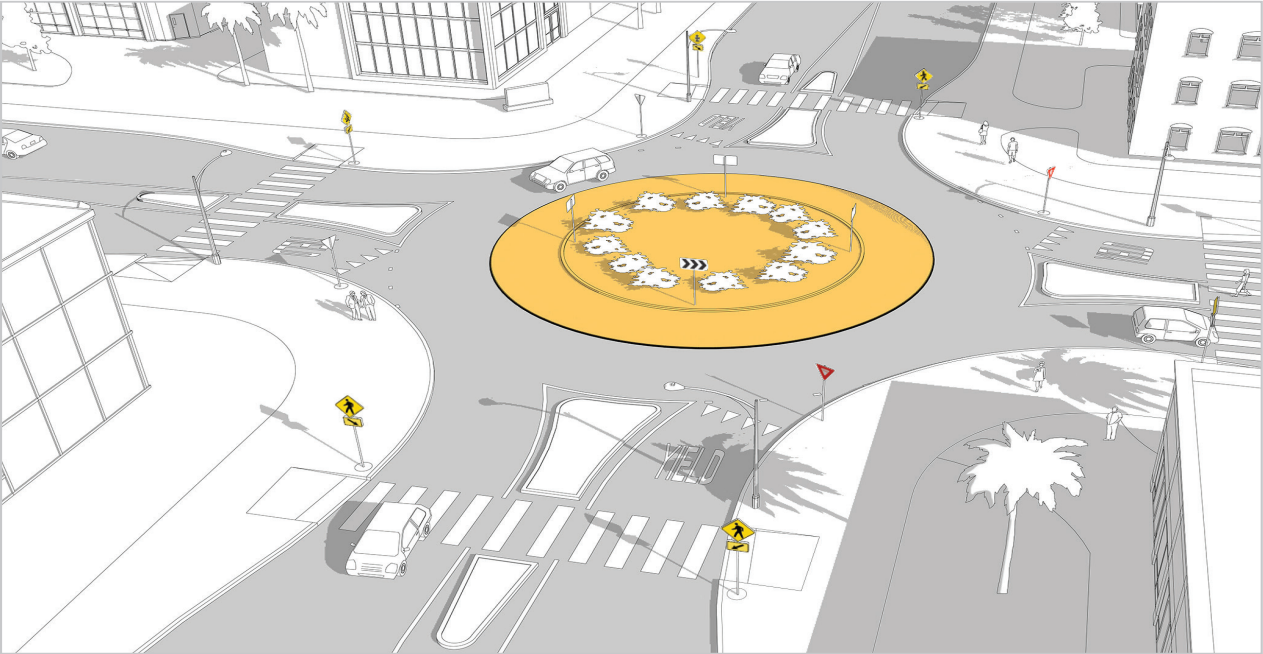
- Lane width and turning radius should be highly considered.

ADDITIONAL REFERENCES & GUIDELINES

NACTO Urban Street Design Guide - https://safety.fhwa.dot.gov/speedmgt/ePrimer_modules/module3.cfm

ROUNDBABOUT

A roundabout directs motorists into the intersection and guides counterclockwise travel around the circular island. Featuring yield controls for all approaches, roundabout designs typically include raised medians to channelize approaching traffic. Without unnecessary stops, they help slow vehicle speeds while better facilitating the flow of vehicle traffic, bicyclists, and pedestrians.



DESIGN GUIDANCE

Notes

- Splitter Islands with crosswalks preferred length is 45' (15' first islands, 10' wide crosswalk, 20' second island)
- The preferred crosswalk location should be 20'-25' upstream of the entrance line.

Minimums

Need to follow design minimums of (1) the design vehicle using the roundabout (passenger cars, single unit/multiple unit trucks, emergency vehicles, etc.); and (2) the individual components of the Roundabout:

- Central Island
- Splitter island and deflection parameters
- Entry width and entrance line
- Circulatory width and roadway
- Accessible pedestrian crossings
- Landscape strips
- Traffic control devices
- Central island

Must ensure adequate stopping sight distance (SSD) at every point within the roundabout, on each entering/exiting approach, and with other conflicting users (pedestrians/bikes) within the roadway. Must ensure adequate intersection sight distance (ISD) for vehicles entering the roundabout with those already circulating in it, and those entering at immediate upstream points.

Maximums

Entry speed (MPH):

Single-lane RAB = 20-25

Multi-lane RAB = 25-30

Approach lanes:

Single-lane RAB = 1

Multi-lane RAB = 3

Inscribed Circle Diameter:

Single-lane RAB: 90'-180'

Multi-lane RAB: 150'-300'

IMPLEMENTATION

- Appropriate at the intersection of two local roads in urban and suburban settings with one-way or two-way streets
- Recommended posted speed limit of 30 MPH (35 MPH 85th percentile speed).
- Generally recommended for streets with daily traffic volumes of no more than 15,000 vehicles.
- Appropriate along a primary emergency route and on streets that provide access to emergency medical services.
- Although a transit vehicle can negotiate the turn, in general, transit routes should not include a left turn at a small modern roundabout or mini-roundabout.
- Can be applied along a primary access route to a commercial or industrial site.

KEY CONCERNS

- May be inappropriate for use on corners where frequent right turns are made by trucks or buses, which require a larger turning radius and thus preclude curb return radius reductions.
- Curb extensions must not intervene with the adjacent drive lanes, bicycle lanes, or roadway shoulders.

ADDITIONAL REFERENCES & GUIDELINES

FHWA-SA-10-007 - Mini Roundabouts technical summary

NCHRP 762: FHWA Roundabouts Information Guide (FHWARD- 00-067)

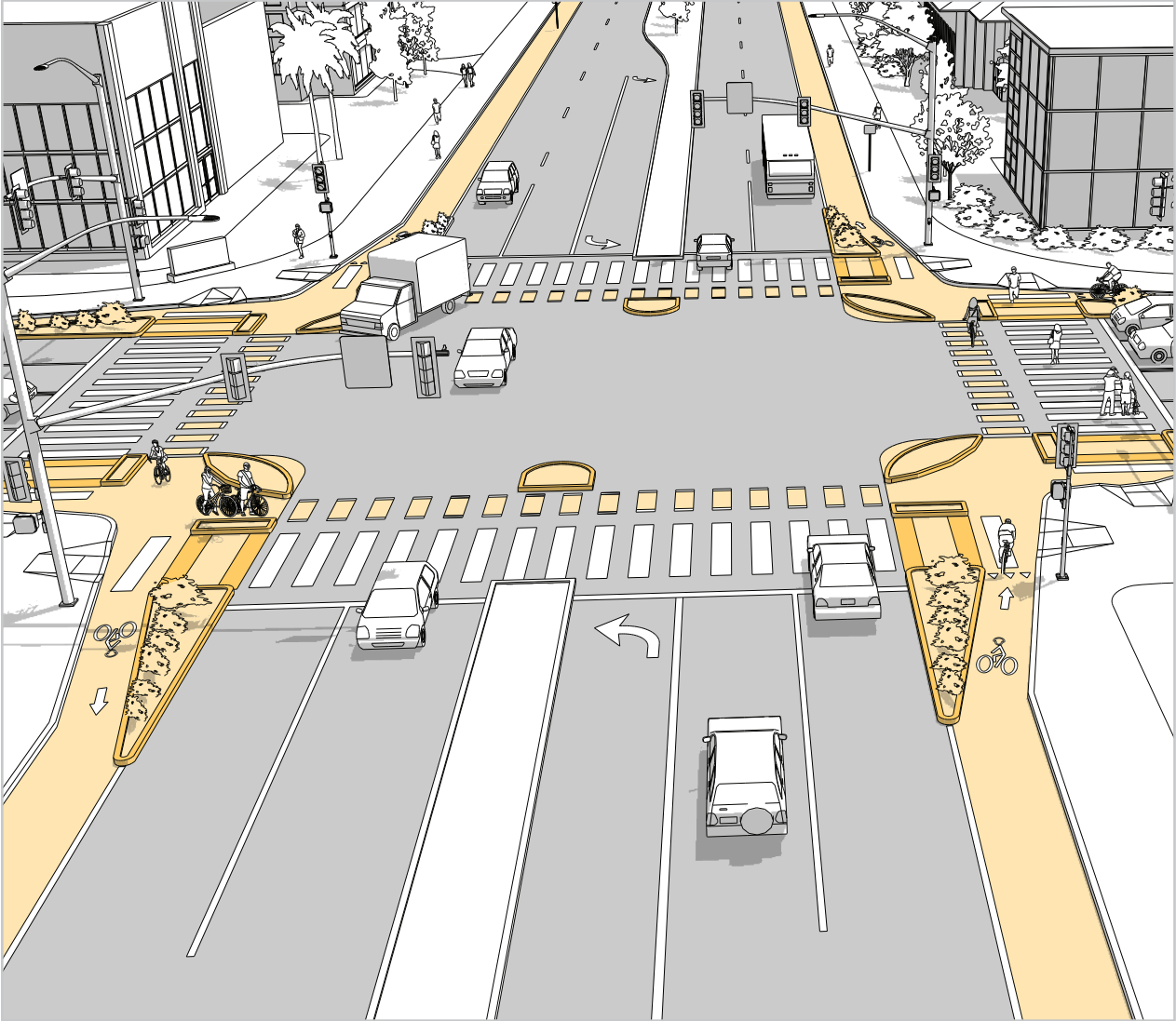
California MUTCD - Chapter 3C - Roundabout Markings

Highway Design Manual Topic 405.10

City of Ontario Traffic and Transportation Guidelines

PROTECTED INTERSECTION

A protected intersection redesigns the traditional mixing zone that persists where a bicycle lane ends and the right turn lane begins. The design places bicyclists in a separated channel from motor vehicles and pedestrians at the intersection, improving yield rates amongst all users of the intersection.



IMPLEMENTATION

Most commonly found on streets with parking-protected bike lanes or buffered bike lanes. Can be implemented on most streets where improved bike comfort is desired with modifications to the typical design.

ADDITIONAL REFERENCES & GUIDELINES

NACTO Urban Bikeway Design Guide and Global Street Design Guide

Evolution of the Protected Intersection, 2015 Alta Planning



DESIGN GUIDANCE

Notes

Setbacks:

- Setback larger than 20' may increase turn speed.
- Larger than 25' treated as a separate intersection.
- Typically 14'-20' setback preferred.

Minimums

- Corner safety island should have a radius of 15' to 20'.
- Pedestrian refuge island should be a minimum of 8'.
- Pedestrian island width is typically 6.5' to 14'.
- Crossing setback should be approximately 19'.

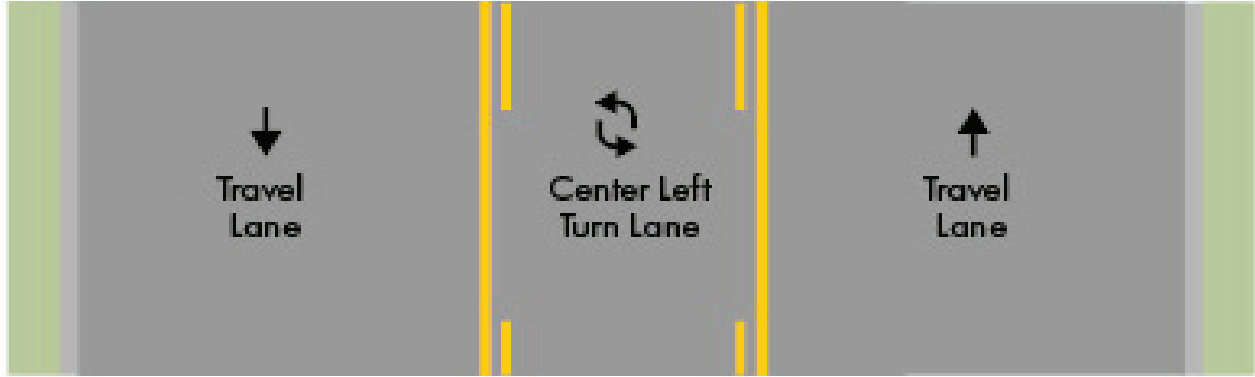
Maximums

- Crossing setback is typically 19'.
- Pedestrian Island, if 6' or wider put detectable warning surface placed both sides.

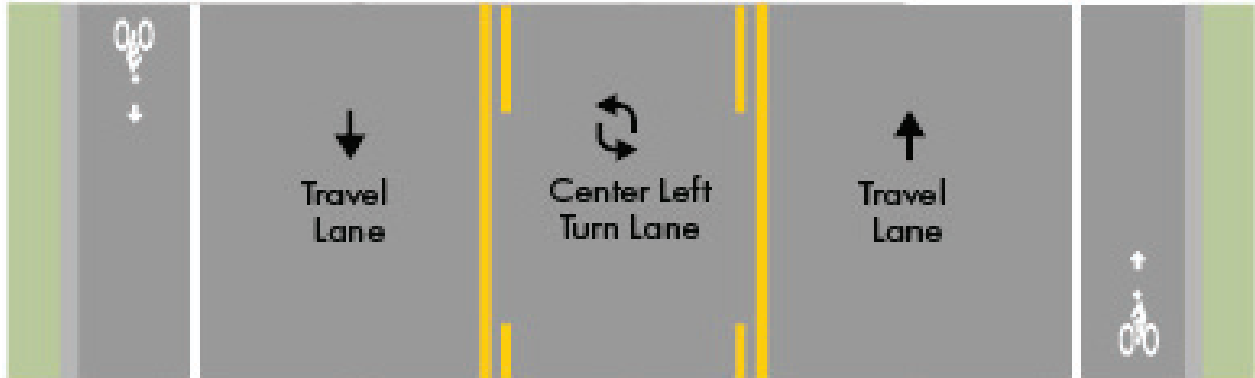
ROADWAY RECONFIGURATION

Also known as a road diet, a roadway reconfiguration typically involves reducing the number of lanes to better accommodate other roadway users. The treatment reallocates roadway space for other purposes, potentially adding turn lanes, bus lanes, pedestrian refuge islands, bike lanes, sidewalks, or landscaping.

Before



After



DESIGN GUIDANCE

Notes

- Should follow recommended widths for all lanes including travel lanes, bikeways, and parking.

Minimums

Caltrans:

- 12' on State Highways >45MPH; all State Highways connecting to a freeway interchange (2-lane highway = all lanes; multi-lane hwy = outermost lane in each direction)
- 11' on State Highways ≤40MPH and truck annual average daily traffic (AADT) <250/lane

Shoulder width (includes Class II bikeway area and gutter pan) on State Highways:

- Left: 4-lane highways = 5'; 6+ lane highways = 8'; 45MPH w/ curbed median=2'; ≤35MPH=none
- Right: 8' for all multi-lane highways, and where on-street parking is provided plus the minimum required bike lane width
- Adjacent to abutment/retaining walls: 10'

Non-Caltrans Facilities

- 12' on most high-volume highways;
- 11' where pedestrian crossings, right-of-way, or existing development imposes on available lane widths;
- 10' lanes are acceptable on low-speed facilities;
- 9' lanes may be appropriate on low-volume roads in rural and residential areas

AASHTO:

- 9' wide - low-volume roads in rural and residential areas
- 10' for most vehicular travel lanes
- 10' for turn lanes
- 11' for lanes to accommodate large volumes of trucks, buses, or larger vehicles

Maximums

Refer to Caltrans HDM for lane width maximum design values (see "Lane Narrowing" design guideline)

IMPLEMENTATION

- Appropriate on all types of roads in urban and suburban settings.
- Common at 4-lane roadways.
- Can be appropriate for all typical speed limits.
- Can be appropriate for any volume that can be accommodated by the revised cross-section; the commonly-referenced threshold is a peak hour volume of 1,000 vehicles per post-implementation through travel lane; a lower volume indicates a road diet is likely feasible; higher volume requires further investigation.
- Can be appropriate along a primary emergency route and on streets that provide access to emergency medical services.
- Can be appropriate along a bus transit route.
- Can be appropriate along a primary access route to a commercial or industrial site.

ADDITIONAL REFERENCES & GUIDELINES

FHWA's Road Diet Information Guide.

FHWA's Traffic Calming ePrimer - Module 3

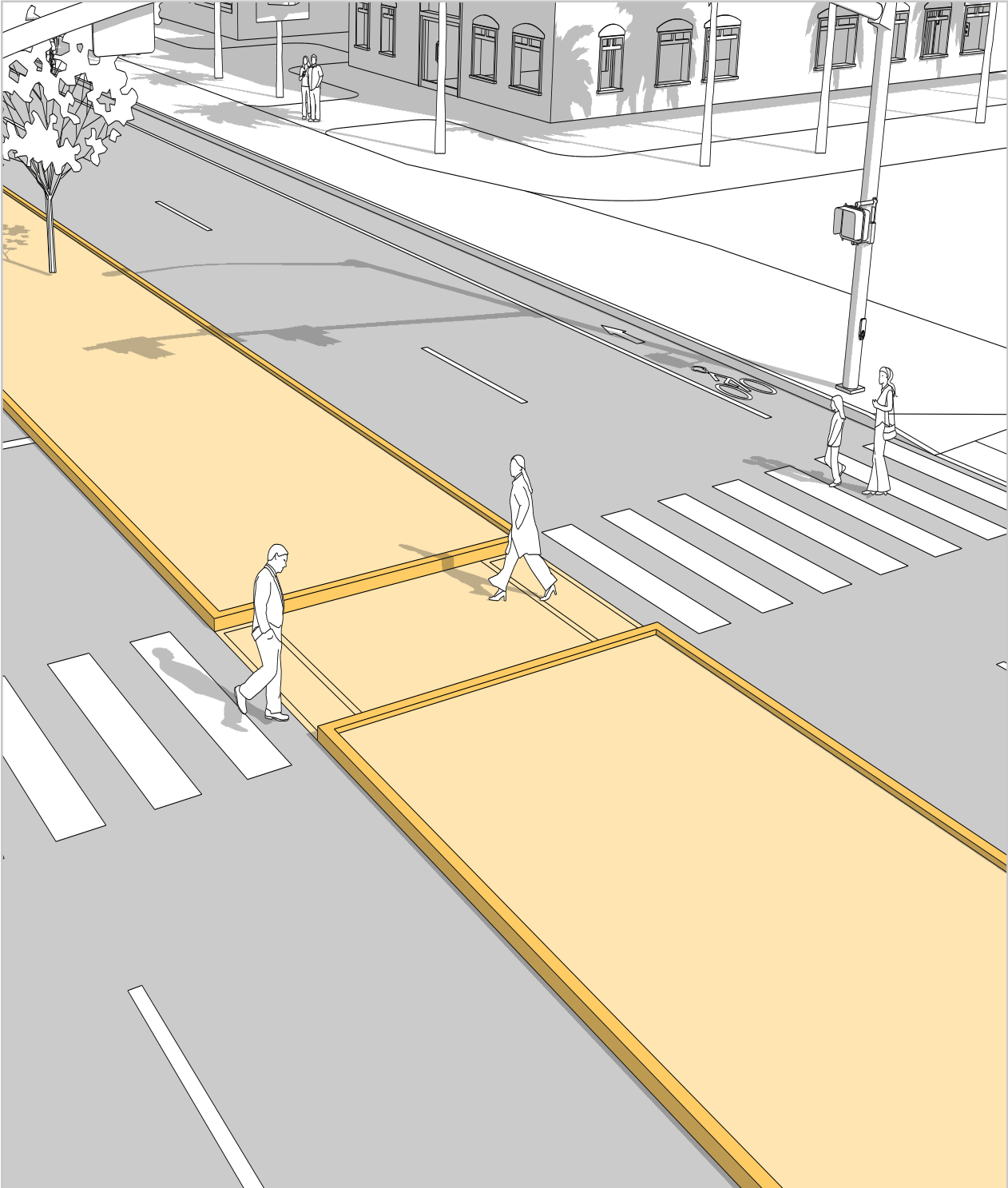
A Policy on Geometric Design of Highways and Streets

City of Ontario Design Standards 1051 - 1061

NCHRP Report 362, Roadway Widths for Low-Traffic Volume Roads

MEDIAN LANDSCAPE REFUGE ISLAND

A median landscape refuge island is a raised barrier in the center of the roadway that is typically filled with various types of foliage and serves as an aid to pedestrian movement by providing a protected space for pedestrians to cross the roadway.

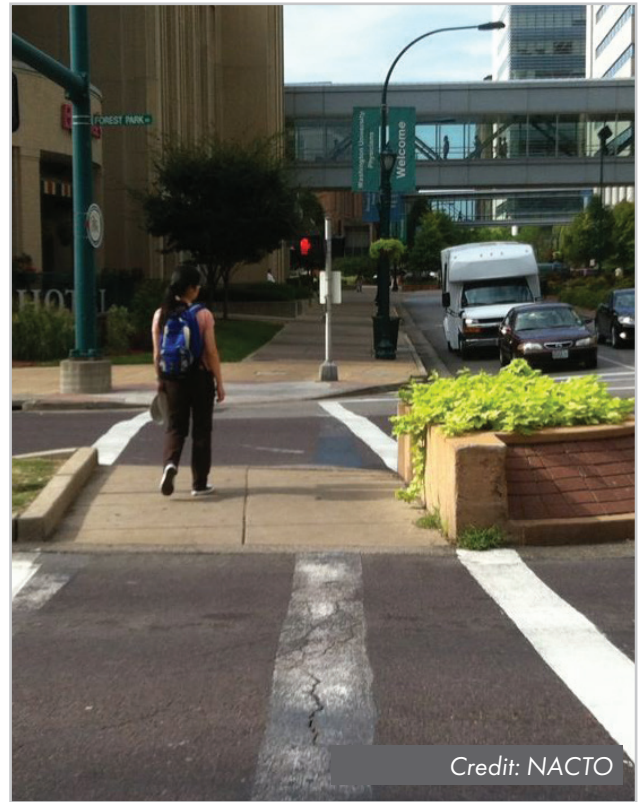


Bikeways

Intersections & Crossings

Roadway

Traffic Control



Credit: NACTO

DESIGN GUIDANCE

Notes

- Cross slopes in medians greater than 65' should be treated as separate roadways.

Minimums

- Minimum Width: 6', 8' preferred.
- The area should be at least 50 square feet in area, preferably 75 square feet
- Curbed, elongated divisional median islands should not be less than 4' wide and 20' long

Maximums

Maximum Width: 12'

IMPLEMENTATION

- Appropriate only on two-way streets.
- Typically installed only on a roadway with an urban cross-section.
- Can be appropriate on any roadway with a typical urban speed limit.
- Can be appropriate at all levels of traffic volume.
- Can be appropriate along a primary emergency route and on streets that provide access to emergency medical services.
- Can be appropriate along bus routes.
- Typically not appropriate along a primary access route to a commercial or industrial site due to the needs of large trucks.

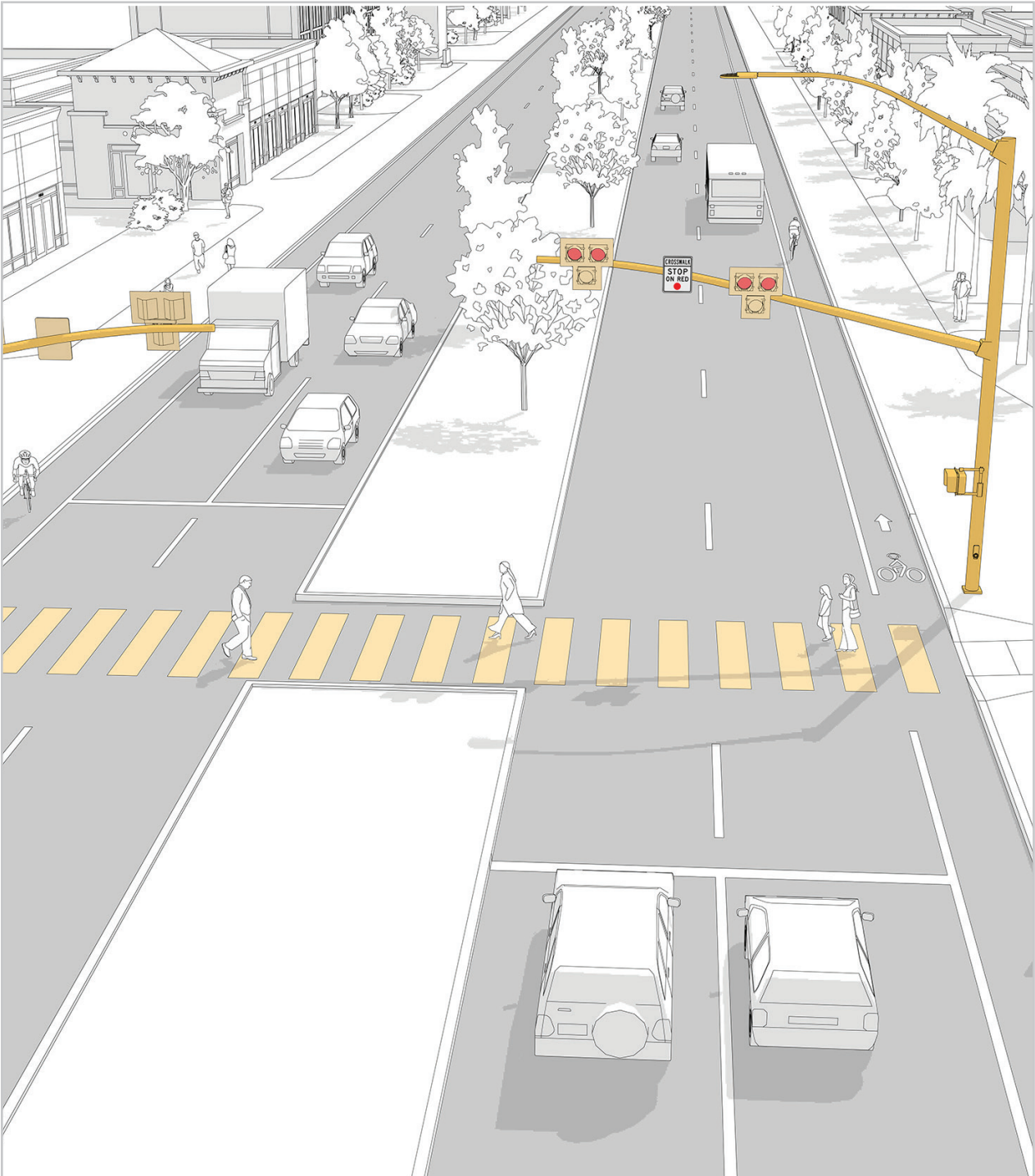
ADDITIONAL REFERENCES & GUIDELINES

City of Ontario Standards 1109 and 1215

Caltrans HDM index 305.2 - Median Cross Slope

PEDESTRIAN HYBRID BEACON

A pedestrian hybrid beacon (PHB) is a traffic control device used to increase motorists' awareness of pedestrian crossings at an uncontrolled marked crosswalk location. A PHB is distinct from pre-timed traffic signals and constant flash warning beacons because it is only activated by pedestrians when needed.

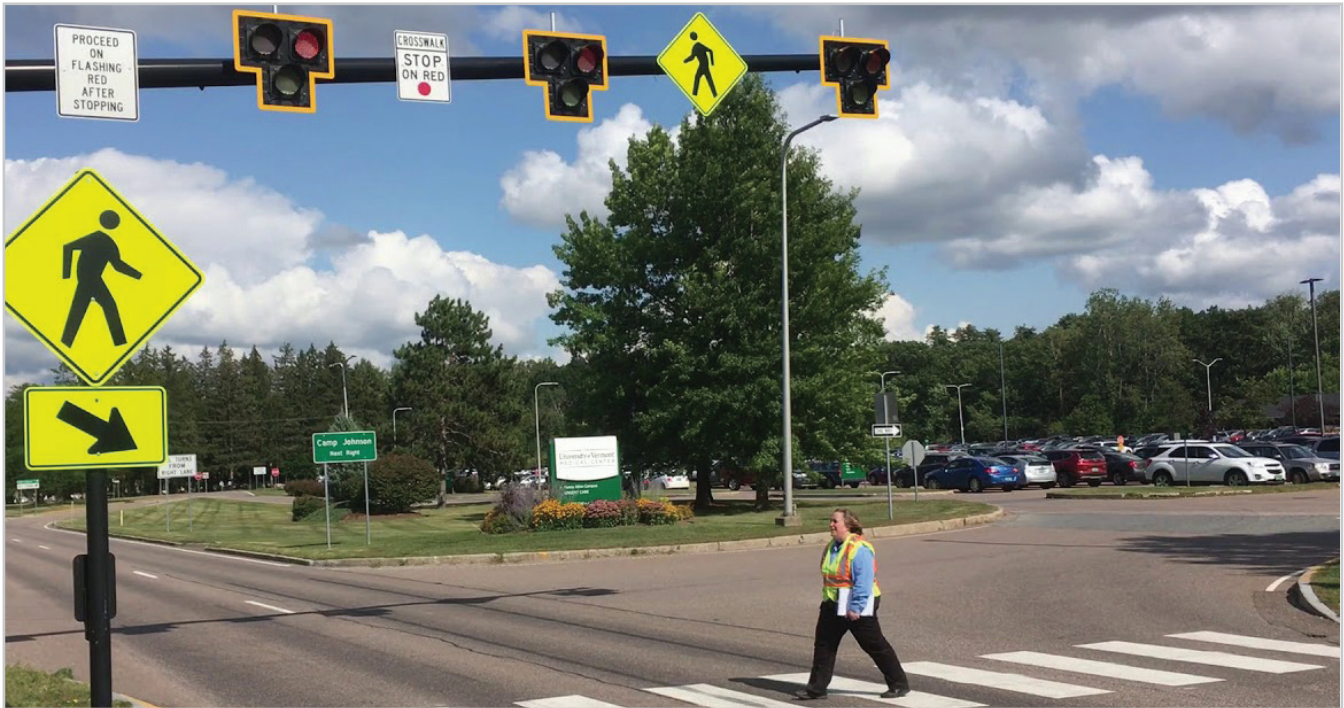


Bikeways

Intersections & Crossings

Roadway

Traffic Control



DESIGN GUIDANCE

Notes

- Adequate site distance should be provided at least 100' in advance of the crossing and 20' after the crossing.

Minimums

- Install 2 pedestrian hybrid beacon facing major street
- Pedestrian Hybrid Beacons should be installed at least 100' from side streets.

Maximums

Design maximums should follow those for signalized traffic control devices in the CA MUTCD

IMPLEMENTATION

- May be appropriate at locations where a traffic signal does not meet warrants.
- Must be installed at locations with a marked crosswalk.
- May be appropriate on roadways with high and low speed following figure 4F-1 and figure 4F-2 of the CA MUTCD.
- Should be placed at least 100' from side streets or driveways that are controlled by STOP or YIELD signs.

KEY CONCERNS

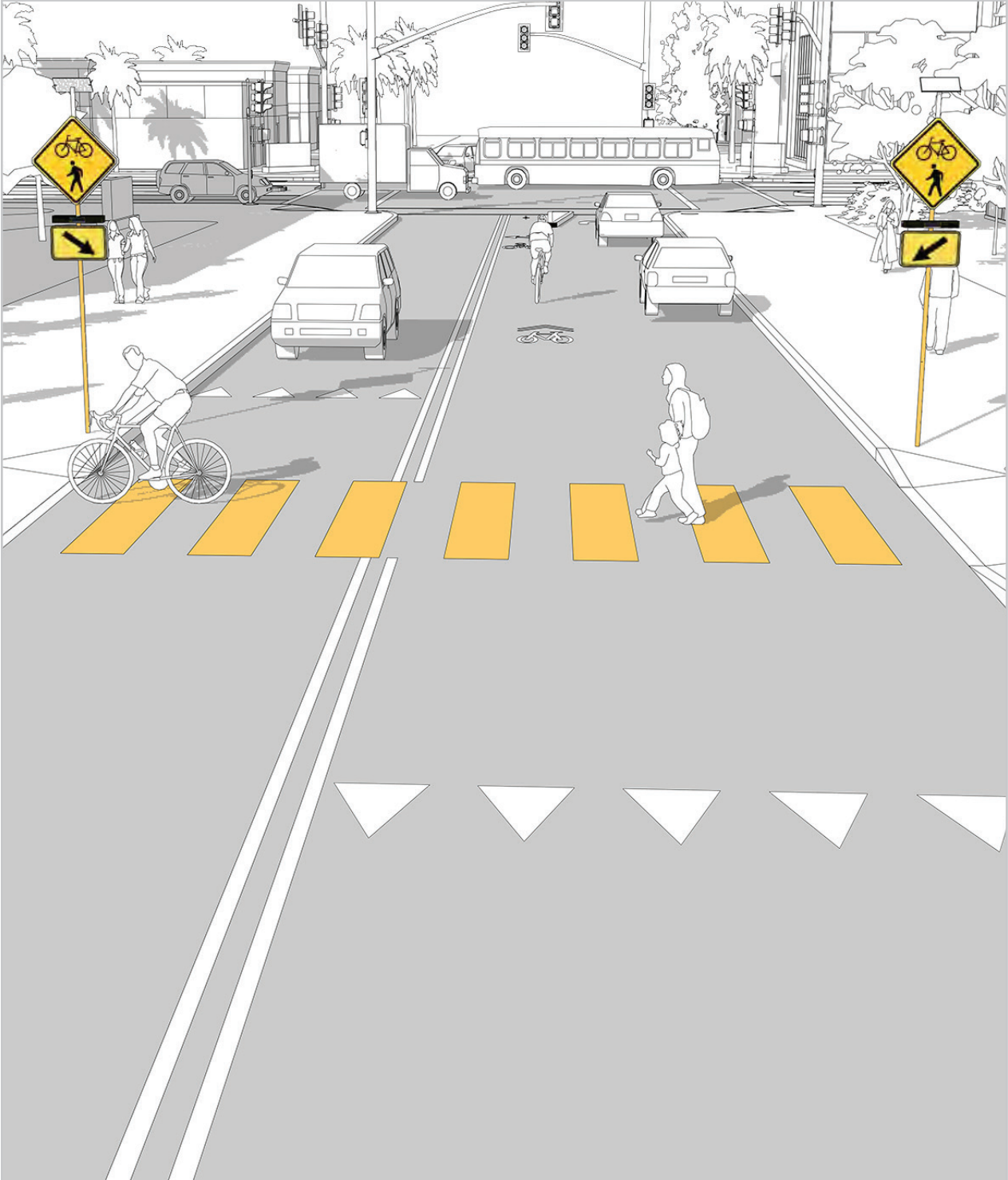
- On each approach of the crosswalk, a stop line is required.
- Advance stop lines should be used on multi-lane crossings to reduce the potential for second threat collisions.

ADDITIONAL REFERENCES & GUIDELINES

CA MUTCD Chapter 4F

RECTANGULAR RAPID FLASHING BEACON

Rectangular Rapid Flashing Beacons (RRFBs) are a type of active warning beacon that combines a pedestrian warning sign with user-activated light emitting diodes (LEDs). The device flashes amber when activated through a pedestrian push button or by pedestrian detection.





DESIGN GUIDANCE

Notes

Beacons shall be flashed at a rate of not less than 50 or more than 60 times per minute.

Minimums

The illuminated period of each flash shall be a minimum 1/2 of the total cycle.

Maximums

The illuminated period of each flash shall be a maximum 2/3 of the total cycle.

IMPLEMENTATION

- Appropriate at uncontrolled marked crosswalks with the exception of roundabout crossings controlled by YIELD signs.

KEY CONCERNS

- Use in combination with a crosswalk, wheelchair ramps, advance warning signs or pavement markings, and overhead lighting.
- Usually implemented at high volume pedestrian crossings.

ADDITIONAL REFERENCES & GUIDELINES

FHWA Interim Approval 21 (IA-21)

Appendix P

COST ESTIMATES:

BIKE NETWORK

ASSUMPTIONS



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Class I- Shared Use Path Cost Assumptions
 Date: 3/26/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$715,500	\$715,500
1.01	Traffic control	1	LS	\$357,750	\$357,750
1.02	Construction survey and monumentation	1	LS	\$357,750	\$357,750
GENERAL SUBTOTAL					\$1,431,000
SIGNING & STRIPING- Shared-use path					
Class I					
2	Class I bike lane signing and striping (pavement legend and sign at approx. 400' spacing)	26400	LF	\$4	\$105,600
2.01	PCC Sidewalk (shared used path)	396000	SF	\$8	\$3,168,000
2.02	PCC curb and gutter	26400	LF	\$50	\$1,320,000
2.03	Asphalt Concrete pavement	3960	TON	\$150	\$594,000
2.04	Demo/Unclassified Excavation	14700	CY	\$70	\$1,029,000
SIGNING & STRIPING SUBTOTAL					\$6,216,600
TOTAL					\$7,647,600
30% CONTINGENCY					\$2,294,280
10% DESIGN					\$764,760
6% CONSTRUCTION ENGINEERING					\$458,856
GRAND TOTAL					\$11,165,496

*The grand total cost is based on a sample segment of 5 miles
 Cost for Class II Bike Lane per LF = \$422.94/Lf
 Cost for Class II Bike Route per mile = \$2,233,000/mi



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Class II Bike Lane Cost Assumptions
 Date: 3/26/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$18,500	\$18,500
1.01	Traffic control	1	LS	\$9,250	\$9,250
1.02	Construction survey and monumentation	1	LS	\$9,250	\$9,250
GENERAL SUBTOTAL					\$37,000
SIGNING & STRIPING- Bike Lane,Bike Route/Blvd					
Class II Bike Lane					
2	Remove striping	1	LS	\$15,840	\$15,840
2.01	Lane line striping (2 lane roadway)	15840	LF	\$1	\$15,840
2.02	Class II bike lane signing and striping (pavement legend and sign at approx. 400' spacing)	15840	LF	\$7	\$110,880
SIGNING & STRIPING SUBTOTAL					\$142,560
TOTAL					\$179,560
30% CONTINGENCY					\$53,868
10% DESIGN					\$17,956
6% CONSTRUCTION ENGINEERING					\$10,774
GRAND TOTAL					\$262,158

*The grand total cost is based on a sample segment of 3 miles
 Cost for Class II Bike Lane per LF = \$16.55/lf
 Cost for Class II Bike Route per mile = \$87,400/mi



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Class II Bike Lane with Buffer Cost Assumptions
 Date: 3/26/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$15,800	\$15,800
1.01	Traffic control	1	LS	\$7,900	\$7,900
1.02	Construction survey and monumentation	1	LS	\$7,900	\$7,900
GENERAL SUBTOTAL					\$31,600
SIGNING & STRIPING- Bike Lane,Bike Route/Blvd					
Class II Bike Lane with Buffer					
2	Remove striping	1	LS	\$15,840	\$15,840
2.01	Lane line striping (2 lane roadway)	15840	LF	\$1	\$15,840
2.02	Class II bike lane with buffer signing and striping (pavement legend and sign at approx. 400' spacing)	15840	LF	\$8	\$126,720
SIGNING & STRIPING SUBTOTAL					\$158,400
TOTAL					\$190,000
30% CONTINGENCY					\$57,000
10% DESIGN					\$19,000
6% CONSTRUCTION ENGINEERING					\$11,400
GRAND TOTAL					\$277,400

*The grand total cost is based on a sample segment of 3 miles
 Cost for Class II Bike Lane per LF = \$17.52/lf
 Cost for Class II Bike Route per mile = \$92,500/mi



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Class III Bike Route Cost Assumptions
 Date: 3/26/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$9,800	\$9,800
1.01	Traffic control	1	LS	\$4,900	\$4,900
1.02	Construction survey and monumentation	1	LS	\$4,900	\$4,900
GENERAL SUBTOTAL					\$19,600
SIGNING & STRIPING- Bike Lane,Bike Route/Blvd					
Class III Bike Route					
2	Install sharrow marking- Class III Bike Blvd on Campus Ave (assuming 500' spacing)	75	EA	\$500	\$37,500
2.01	Signange for Class III Bike Route (both sides)	18900	LF	\$1	\$18,900
SIGNING & STRIPING SUBTOTAL					\$56,400
TOTAL					\$76,000
30% CONTINGENCY					\$22,800
10% DESIGN					\$7,600
6% CONSTRUCTION ENGINEERING					\$4,560
GRAND TOTAL					\$110,960

* The grand total cost is based on a sample segment of 3.5 miles
 Cost for Class III Bike Route per LF = \$5.87/lf
 Cost for Class III Bike Route per mile = \$31,000/mi

Appendix Q

COST ESTIMATES:

SAFE ROUTES TO

SCHOOL

NOTES AND ASSUMPTIONS FOR SAFE ROUTES TO SCHOOL COST ESTIMATES

The planning-level cost estimates for the 31 different schools include all the recommendations by segment and recommendations by intersections called out in "Appendix N. Safe Route to School Factsheets". The estimates include a subtotal cost for different improvements such as traffic signal, signing and striping, and street improvements, as well as the grand total for each school.

The quantities were gathered from the locations mentioned in Appendix N and some assumptions were made on the extents of locations that included removals and/or miscellaneous items.

For some of the line items like traffic signal hardware, the existing conditions were verified to identify what needed to be updated or removed.

For the installation of striping, a linear foot unit of measure was used. This line item includes improvements like a lane line, edgeline striping and the restriping of a stop bar. For other striping improvements such as crosswalks, an average length was used to find an average cost, and one unit cost was assumed for all crosswalks, which allowed for the quantification of crosswalks per location.

The recommendations also included street improvements. Some assumptions were made for line items such as a raised curb extension. An average cost for this type of improvement was developed and raised curb extensions were quantified per each location.

All planning/level costs developed in this plan incorporate a general contingency cost buffer and account for mobilization, traffic control, and construction survey and monumentation.



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: El Camino ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$56,800	\$56,800
1.01	Traffic control	1	LS	\$28,400	\$28,400
1.02	Construction survey and monumentation	1	LS	\$28,400	\$28,400
GENERAL SUBTOTAL					\$113,600
STREET IMPROVEMENTS					
2	Bulb out-Raised curb extension	6	EA	\$50,000	\$300,000
2.01	Painted bulb out with flex post	1	LS	\$500	\$500
2.02	Construct ADA curb ramp	1	EA	\$4,400	\$4,400
STREET IMPROVEMENTS SUBTOTAL					\$304,900
SIGNING & STRIPING					
3	Install striping	6500	LF	\$2	\$13,000
3.01	Install ladder x-walk	22	EA	\$480	\$10,560
3.02	Install pavement marking(stop legend, yield marking, etc)	36	EA	\$500	\$18,000
3.03	Furnish and install sign and post	10	EA	\$500	\$5,000
3.04	Furnish and install sign on existing post	1	EA	\$100	\$100
3.05	Furnish and install LED embedded stop sign	4	EA	\$3,050	\$12,200
3.06	Furnish and install intersection beacon	1	EA	\$17,000	\$17,000
3.07	Furnish and install speed feedback sign	3	EA	\$12,000	\$36,000
3.08	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
3.09	Remove existing sign	11	EA	\$100	\$1,100
SIGNING & STRIPING SUBTOTAL					\$147,960
TOTAL					\$566,460
30% CONTINGENCY					\$169,938
10% DESIGN					\$56,646
6% CONSTRUCTION ENGINEERING					\$33,988
GRAND TOTAL					\$827,032



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Hawthorne ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$51,200	\$51,200
1.01	Traffic control	1	LS	\$25,600	\$25,600
1.02	Construction survey and monumentation	1	LS	\$25,600	\$25,600
GENERAL SUBTOTAL					\$102,400
TRAFFIC SIGNAL					
2	Remove existing ped head	22	EA	\$300	\$6,600
2.01	Remove existing pedestrian push button	22	EA	\$150	\$3,300
2.02	Furnish and install APS push button	22	EA	\$1,850	\$40,700
2.03	Furnish and install countdown ped head	22	EA	\$1,500	\$33,000
TRAFFIC SIGNAL SUBTOTAL					\$83,600
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	3	EA	\$50,000	\$150,000
3.01	Painted bulb out with flex post	1	LS	\$500	\$500
3.02	Construct ADA curb ramp	25	EA	\$4,400	\$110,000
SIGNING & STRIPING SUBTOTAL					\$260,500
SIGNING & STRIPING					
4	Install striping	5300	LF	\$2	\$10,600
4.01	Install ladder x-walk	41	EA	\$480	\$19,680
4.02	Install pavement marking (stop legend, yield marking, etc)	33	EA	\$500	\$16,500
4.03	Furnish and install sign and post	5	EA	\$500	\$2,500
4.04	Remove existing sign	3	EA	\$100	\$300
SIGNING & STRIPING SUBTOTAL					\$49,580
TOTAL					\$496,080
30% CONTINGENCY					\$148,824
10% DESIGN					\$49,608
6% CONSTRUCTION ENGINEERING					\$29,765
GRAND TOTAL					\$724,277



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Chaffey HS
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$157,400	\$157,400
1.01	Traffic control	1	LS	\$78,700	\$78,700
1.02	Construction survey and monumentation	1	LS	\$78,700	\$78,700
GENERAL SUBTOTAL					\$314,800
TRAFFIC SIGNAL					
2	Remove existing ped head	54	EA	\$300	\$16,200
2.01	Remove existing pedestrian push button	54	EA	\$150	\$8,100
2.02	Furnish and install APS push button	54	EA	\$1,850	\$99,900
2.03	Furnish and install countdown ped head	54	EA	\$1,500	\$81,000
TRAFFIC SIGNAL SUBTOTAL					\$205,200
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	10	EA	\$50,000	\$500,000
3.01	Construct ADA curb ramp	60	EA	\$4,400	\$264,000
3.02	Unclassified excavation (Remove existing curb ramp at J St after RRFB installation)	25	CY	\$70	\$1,750
3.03	Landscape (Remove existing curb ramp at J St after RRFB installation)	700	SF	\$25	\$17,500
SIGNING & STRIPING SUBTOTAL					\$783,250
SIGNING & STRIPING					
4	Install red curb paint	200	LF	\$3	\$600
4.01	Install striping	3100	LF	\$2	\$6,200
4.02	Install ladder x-walk	97	EA	\$480	\$46,560
4.03	Install pavement marking (stop legend, yield marking, etc)	73	EA	\$500	\$36,500
4.04	Furnish and install sign and post	24	EA	\$500	\$12,000
4.05	Furnish and install LED embedded stop sign	8	EA	\$3,050	\$24,400
4.06	Furnish and install speed feedback sign	2	EA	\$12,000	\$24,000
4.07	Furnish and install RRFB system	2	EA	\$35,000	\$70,000
4.08	Remove existing sign	12	EA	\$100	\$1,200
4.09	Remove existing striping	350	LF	\$1	\$350
SIGNING & STRIPING SUBTOTAL					\$221,810
TOTAL					\$1,525,060
30% CONTINGENCY					\$457,518
10% DESIGN					\$152,506
6% CONSTRUCTION ENGINEERING					\$91,504
GRAND TOTAL					\$2,226,588



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Edison Academy
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$45,100	\$45,100
1.01	Traffic control	1	LS	\$22,550	\$22,550
1.02	Construction survey and monumentation	1	LS	\$22,550	\$22,550
GENERAL SUBTOTAL					\$90,200
STREET IMPROVEMENTS					
2	Bulb out-Raised curb extension	4	EA	\$50,000	\$200,000
2.01	Construct ADA curb ramp	24	EA	\$4,400	\$105,600
SIGNING & STRIPING SUBTOTAL					\$305,600
SIGNING & STRIPING					
3	Install red curb paint	575	LF	\$3	\$1,725
3.01	Install striping	1400	LF	\$2	\$2,800
3.02	Install ladder x-walk	28	EA	\$480	\$13,440
3.03	Install pavement marking(stop legend, yield marking, etc)	35	EA	\$500	\$17,500
3.04	Furnish and install sign and post	12	EA	\$500	\$6,000
3.05	Remove existing sign	1	EA	\$100	\$100
SIGNING & STRIPING SUBTOTAL					\$41,565
TOTAL					\$437,365
30% CONTINGENCY					\$131,210
10% DESIGN					\$43,737
6% CONSTRUCTION ENGINEERING					\$26,242
GRAND TOTAL					\$638,553



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Berlyn ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$139,300	\$139,300
1.01	Traffic control	1	LS	\$69,650	\$69,650
1.02	Construction survey and monumentation	1	LS	\$69,650	\$69,650
GENERAL SUBTOTAL					\$278,600
STREET IMPROVEMENTS					
2	Bulb out-Raised curb extension	17	EA	\$50,000	\$850,000
2.01	Construct ADA curb ramp	23	EA	\$4,400	\$101,200
2.02	Unclassified excavation (Remove existing unused driveway)	5	CY	\$70	\$350
2.03	Landscape (Remove existing unused driveway)	115	SF	\$25	\$2,875
2.04	PCC curb and gutter	15	LF	\$50	\$750
STREET IMPROVEMENTS SUBTOTAL					\$955,175
SIGNING & STRIPING					
3	Install striping	10300	LF	\$2	\$20,600
3.01	Install red curb paint	964	LF	\$3	\$2,892
3.02	Install ladder x-walk	30	EA	\$480	\$14,400
3.03	Install pavement marking(stop legend, yield marking, etc)	42	EA	\$500	\$21,000
3.04	Furnish and install sign and post	17	EA	\$500	\$8,500
3.05	Furnish and install sign on existing post	2	EA	\$100	\$200
3.06	Furnish and install speed feedback sign	1	EA	\$12,000	\$12,000
3.07	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
3.08	Remove existing sign	15	EA	\$100	\$1,500
3.09	Remove existing striping	100	LF	\$1	\$100
SIGNING & STRIPING SUBTOTAL					\$116,192
TOTAL					\$1,349,967
30% CONTINGENCY					\$404,990
10% DESIGN					\$134,997
6% CONSTRUCTION ENGINEERING					\$80,998
GRAND TOTAL					\$1,970,952



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Central Language Academy
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$126,000	\$126,000
1.01	Traffic control	1	LS	\$63,000	\$63,000
1.02	Construction survey and monumentation	1	LS	\$63,000	\$63,000
GENERAL SUBTOTAL					\$252,000
TRAFFIC SIGNAL					
2	Remove existing ped head	12	EA	\$300	\$3,600
2.01	Remove existing pedestrian push button	12	EA	\$150	\$1,800
2.02	Furnish and install APS push button	12	EA	\$1,850	\$22,200
2.03	Furnish and install countdown ped head	12	EA	\$1,500	\$18,000
TRAFFIC SIGNAL SUBTOTAL					\$45,600
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	11	EA	\$50,000	\$550,000
3.01	Construct ADA curb ramp	49	EA	\$4,400	\$215,600
SIGNING & STRIPING SUBTOTAL					\$765,600
SIGNING & STRIPING					
4	Install red curb paint	1000	LF	\$3	\$3,000
4.01	Install striping	2300	LF	\$2	\$4,600
4.02	Install ladder x-walk	52	EA	\$480	\$24,960
4.03	Install pavement marking (stop legend, yield marking, etc)	49	EA	\$500	\$24,500
4.04	Furnish and install sign and post	28	EA	\$500	\$14,000
4.05	Furnish and install RRFB system	2	EA	\$35,000	\$70,000
4.06	Remove existing sign	11	EA	\$100	\$1,100
4.07	Remove existing striping	285	LF	\$1	\$285
SIGNING & STRIPING SUBTOTAL					\$142,445
TOTAL					\$1,205,645
30% CONTINGENCY					\$361,694
10% DESIGN					\$120,565
6% CONSTRUCTION ENGINEERING					\$72,339
GRAND TOTAL					\$1,760,242



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Mariposa ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$35,700	\$35,700
1.01	Traffic control	1	LS	\$17,850	\$17,850
1.02	Construction survey and monumentation	1	LS	\$17,850	\$17,850
GENERAL SUBTOTAL					\$71,400
TRAFFIC SIGNAL					
2	Remove existing ped head	16	EA	\$300	\$4,800
2.01	Remove existing pedestrian push button	16	EA	\$150	\$2,400
2.02	Furnish and install APS push button	16	EA	\$1,850	\$29,600
2.03	Furnish and install countdown ped head	16	EA	\$1,500	\$24,000
TRAFFIC SIGNAL SUBTOTAL					\$60,800
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	3	EA	\$50,000	\$150,000
3.01	Construct ADA curb ramp	1	EA	\$4,400	\$4,400
SIGNING & STRIPING SUBTOTAL					\$154,400
SIGNING & STRIPING					
4	Install striping	5400	LF	\$2	\$10,800
4.01	Install ladder x-walk	16	EA	\$480	\$7,680
4.02	Install pavement marking (stop legend, yield marking, etc)	9	EA	\$500	\$4,500
4.03	Furnish and install sign and post	3	EA	\$500	\$1,500
4.04	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
4.05	Remove existing sign	3	EA	\$100	\$300
SIGNING & STRIPING SUBTOTAL					\$59,780
TOTAL					\$346,380
30% CONTINGENCY					\$103,914
10% DESIGN					\$34,638
6% CONSTRUCTION ENGINEERING					\$20,783
GRAND TOTAL					\$505,715



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Del Norte ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$63,500	\$63,500
1.01	Traffic control	1	LS	\$31,750	\$31,750
1.02	Construction survey and monumentation	1	LS	\$31,750	\$31,750
GENERAL SUBTOTAL					\$127,000
TRAFFIC SIGNAL					
2	Remove existing ped head	14	EA	\$300	\$4,200
2.01	Remove existing pedestrian push button	12	EA	\$150	\$1,800
2.02	Furnish and install APS push button	12	EA	\$1,850	\$22,200
2.03	Furnish and install countdown ped head	14	EA	\$1,500	\$21,000
TRAFFIC SIGNAL SUBTOTAL					\$49,200
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	7	EA	\$50,000	\$350,000
3.01	Construct ADA curb ramp	14	EA	\$4,400	\$61,600
SIGNING & STRIPING SUBTOTAL					\$411,600
SIGNING & STRIPING					
4	Install striping	3600	LF	\$2	\$7,200
4.01	Install red curb paint	600	LF	\$3	\$1,800
4.02	Install ladder x-walk	19	EA	\$480	\$9,120
4.03	Install pavement marking (stop legend, yield marking, etc)	13	EA	\$500	\$6,500
4.04	Furnish and install sign and post	6	EA	\$500	\$3,000
4.05	Remove existing sign	1	EA	\$100	\$100
SIGNING & STRIPING SUBTOTAL					\$27,720
TOTAL					\$615,520
30% CONTINGENCY					\$184,656
10% DESIGN					\$61,552
6% CONSTRUCTION ENGINEERING					\$36,931
GRAND TOTAL					\$898,659



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Ray Wiltsey Middle
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$113,000	\$113,000
1.01	Traffic control	1	LS	\$56,500	\$56,500
1.02	Construction survey and monumentation	1	LS	\$56,500	\$56,500
GENERAL SUBTOTAL					\$226,000
TRAFFIC SIGNAL					
2	Remove existing ped head	12	EA	\$300	\$3,600
2.01	Remove existing pedestrian push button	12	EA	\$150	\$1,800
2.02	Furnish and install APS push button	12	EA	\$1,850	\$22,200
2.03	Furnish and install countdown ped head	12	EA	\$1,500	\$18,000
TRAFFIC SIGNAL SUBTOTAL					\$45,600
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	12	EA	\$50,000	\$600,000
3.01	Construct ADA curb ramp	10	EA	\$4,400	\$44,000
3.02	PCC sidewalk	5700	SF	\$8	\$45,600
3.03	PCC curb and gutter	950	LF	\$50	\$47,500
SIGNING & STRIPING SUBTOTAL					\$737,100
SIGNING & STRIPING					
4	Install striping	1000	LF	\$2	\$2,000
4.01	Install red curb paint	368	LF	\$3	\$1,104
4.02	Install ladder x-walk	31	EA	\$480	\$14,880
4.03	Install pavement marking (stop legend, yield marking, etc)	33	EA	\$500	\$16,500
4.04	Furnish and install sign and post	8	EA	\$500	\$4,000
4.05	Furnish and install sign on existing post	1	EA	\$100	\$100
4.06	Furnish and install speed feedback sign	1	EA	\$12,000	\$12,000
4.07	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
4.08	Remove existing sign	6	EA	\$100	\$600
SIGNING & STRIPING SUBTOTAL					\$86,184
TOTAL					\$1,094,884
30% CONTINGENCY					\$328,465
10% DESIGN					\$109,488
6% CONSTRUCTION ENGINEERING					\$65,693
GRAND TOTAL					\$1,598,531



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Corona ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$58,300	\$58,300
1.01	Traffic control	1	LS	\$29,150	\$29,150
1.02	Construction survey and monumentation	1	LS	\$29,150	\$29,150
GENERAL SUBTOTAL					\$116,600
TRAFFIC SIGNAL					
2	Remove existing ped head	20	EA	\$300	\$6,000
2.01	Remove existing pedestrian push button	20	EA	\$150	\$3,000
2.02	Furnish and install APS push button	20	EA	\$1,850	\$37,000
2.03	Furnish and install countdown ped head	20	EA	\$1,500	\$30,000
2.04	Signal timing modifications (leading ped interval+extend ped xing time)	1	LS	\$5,000	\$5,000
TRAFFIC SIGNAL SUBTOTAL					\$81,000
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	4	EA	\$50,000	\$200,000
3.01	Construct ADA curb ramp	21	EA	\$4,400	\$92,400
3.02	Landscape (hedges at 4th St and Mariposa Ave)	740	SF	\$25	\$18,500
SIGNING & STRIPING SUBTOTAL					\$310,900
SIGNING & STRIPING					
4	Install striping	3270	LF	\$2	\$6,540
4.01	Install red curb paint	683	LF	\$3	\$2,049
4.02	Install ladder x-walk	21	EA	\$480	\$10,080
4.03	Install pavement marking (stop legend, yield marking, etc)	17	EA	\$500	\$8,500
4.04	Furnish and install sign and post	9	EA	\$500	\$4,500
4.05	Furnish and install sign on existing post	3	EA	\$100	\$300
4.06	Furnish and install speed feedback sign	2	EA	\$12,000	\$24,000
4.07	Remove existing sign	6	EA	\$100	\$600
SIGNING & STRIPING SUBTOTAL					\$56,569
TOTAL					\$565,069
30% CONTINGENCY					\$169,521
10% DESIGN					\$56,507
6% CONSTRUCTION ENGINEERING					\$33,904
GRAND TOTAL					\$825,001



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Arroyo ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$64,000	\$64,000
1.01	Traffic control	1	LS	\$32,000	\$32,000
1.02	Construction survey and monumentation	1	LS	\$32,000	\$32,000
GENERAL SUBTOTAL					\$128,000
TRAFFIC SIGNAL					
2	Remove existing ped head	8	EA	\$300	\$2,400
2.01	Remove existing pedestrian push button	8	EA	\$150	\$1,200
2.02	Furnish and install APS push button	8	EA	\$1,850	\$14,800
2.03	Furnish and install countdown ped head	8	EA	\$1,500	\$12,000
TRAFFIC SIGNAL SUBTOTAL					\$30,400
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	7	EA	\$50,000	\$350,000
3.01	Construct ADA curb ramp	8	EA	\$4,400	\$35,200
SIGNING & STRIPING SUBTOTAL					\$385,200
SIGNING & STRIPING					
4	Install striping	7800	LF	\$2	\$15,600
4.01	Install ladder x-walk	16	EA	\$480	\$7,680
4.02	Install red curb paint	345	LF	\$3	\$1,035
4.03	Install pavement marking (stop legend, yield marking, etc)	26	EA	\$500	\$13,000
4.04	Furnish and install sign and post	8	EA	\$500	\$4,000
4.05	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
4.06	Remove existing sign	4	EA	\$100	\$400
4.07	Remove existing striping	260	LF	\$1	\$260
SIGNING & STRIPING SUBTOTAL					\$76,975
TOTAL					\$620,575
30% CONTINGENCY					\$186,173
10% DESIGN					\$62,058
6% CONSTRUCTION ENGINEERING					\$37,235
GRAND TOTAL					\$906,040



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Vineyard ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$50,900	\$50,900
1.01	Traffic control	1	LS	\$25,450	\$25,450
1.02	Construction survey and monumentation	1	LS	\$25,450	\$25,450
GENERAL SUBTOTAL					\$101,800
TRAFFIC SIGNAL					
2	Remove existing ped head	20	EA	\$300	\$6,000
2.01	Remove existing pedestrian push button	20	EA	\$150	\$3,000
2.02	Furnish and install APS push button	20	EA	\$1,850	\$37,000
2.03	Furnish and install countdown ped head	20	EA	\$1,500	\$30,000
2.04	Furnish and install ped hybrid beacon on mast arm on 6th St	2	EA	\$17,000	\$34,000
2.05	Furnish and install service cabinet	1	EA	\$6,500	\$6,500
2.06	Remove existing mast arm flasher	2	EA	\$3,200	\$6,400
TRAFFIC SIGNAL SUBTOTAL					\$122,900
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	3	EA	\$50,000	\$150,000
3.01	Construct ADA curb ramp	7	EA	\$4,400	\$30,800
SIGNING & STRIPING SUBTOTAL					\$180,800
SIGNING & STRIPING					
4	Install striping	1000	LF	\$2	\$2,000
4.01	Install ladder x-walk	30	EA	\$480	\$14,400
4.02	Install red curb paint	700	LF	\$3	\$2,100
4.03	Install pavement marking (stop legend, yield marking, etc)	23	EA	\$500	\$11,500
4.04	Furnish and install speed feedback sign	1	EA	\$12,000	\$12,000
4.05	Furnish and install sign and post	11	EA	\$500	\$5,500
4.06	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
4.07	Remove existing sign	2	EA	\$100	\$200
4.08	Remove existing striping	250	LF	\$1	\$250
4.09	Stop Warrant	1	LS	\$5,000	\$5,000
SIGNING & STRIPING SUBTOTAL					\$87,950
TOTAL					\$493,450
30% CONTINGENCY					\$148,035
10% DESIGN					\$49,345
6% CONSTRUCTION ENGINEERING					\$29,607
GRAND TOTAL					\$720,437



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Valley View HS
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$37,200	\$37,200
1.01	Traffic control	1	LS	\$18,600	\$18,600
1.02	Construction survey and monumentation	1	LS	\$18,600	\$18,600
GENERAL SUBTOTAL					\$74,400
TRAFFIC SIGNAL					
2	Remove existing ped head	8	EA	\$300	\$2,400
2.01	Remove existing pedestrian push button	8	EA	\$150	\$1,200
2.02	Furnish and install APS push button	8	EA	\$1,850	\$14,800
2.03	Furnish and install countdown ped head	8	EA	\$1,500	\$12,000
2.04	Furnish and install ped hybrid beacon on mast arm on 6th St	4	EA	\$17,000	\$68,000
2.05	Furnish and install service cabinet	1	EA	\$6,500	\$6,500
2.06	Remove existing mast arm flasher	2	EA	\$3,200	\$6,400
TRAFFIC SIGNAL SUBTOTAL					\$111,300
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	3	EA	\$50,000	\$150,000
SIGNING & STRIPING SUBTOTAL					\$150,000
SIGNING & STRIPING					
4	Install striping	100	LF	\$2	\$200
4.01	Install ladder x-walk	5	EA	\$480	\$2,400
4.02	Install pavement marking (stop legend, yield marking, etc)	6	EA	\$500	\$3,000
4.03	Furnish and install speed feedback sign	1	EA	\$12,000	\$12,000
4.04	Furnish and install sign and post	13	EA	\$500	\$6,500
4.05	Remove existing sign	4	EA	\$100	\$400
4.06	Remove existing striping	250	LF	\$1	\$250
SIGNING & STRIPING SUBTOTAL					\$24,750
TOTAL					\$360,450
30% CONTINGENCY					\$108,135
10% DESIGN					\$36,045
6% CONSTRUCTION ENGINEERING					\$21,627
GRAND TOTAL					\$526,257



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: The Ontario Center
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$64,600	\$64,600
1.01	Traffic control	1	LS	\$32,300	\$32,300
1.02	Construction survey and monumentation	1	LS	\$32,300	\$32,300
GENERAL SUBTOTAL					\$129,200
TRAFFIC SIGNAL					
2	Remove existing ped head	64	EA	\$300	\$19,200
2.01	Remove existing pedestrian push button	64	EA	\$150	\$9,600
2.02	Remove existing extra pedestrian push button (4th St at Haven Ave)	1	EA	\$150	\$150
2.03	Furnish and install APS push button	64	EA	\$1,850	\$118,400
2.04	Furnish and install countdown ped head	64	EA	\$1,500	\$96,000
TRAFFIC SIGNAL SUBTOTAL					\$243,350
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	2	EA	\$50,000	\$100,000
3.01	Construct ADA curb ramp	14	EA	\$4,400	\$61,600
3.02	PCC sidewalk	330	SF	\$8	\$2,640
3.03	PCC curb and gutter	55	LF	\$50	\$2,750
SIGNING & STRIPING SUBTOTAL					\$166,990
SIGNING & STRIPING					
4	Install striping	2900	LF	\$2	\$5,800
4.01	Install red curb paint	75	LF	\$3	\$225
4.02	Install ladder x-walk	42	EA	\$480	\$20,160
4.03	Install pavement marking (stop legend, yield marking, etc)	10	EA	\$500	\$5,000
4.04	Furnish and install sign and post	16	EA	\$500	\$8,000
4.05	Furnish and install speed feedback sign	1	EA	\$12,000	\$12,000
4.06	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
4.07	Remove existing sign	1	EA	\$100	\$100
SIGNING & STRIPING SUBTOTAL					\$86,285
TOTAL					\$625,825
30% CONTINGENCY					\$187,748
10% DESIGN					\$62,583
6% CONSTRUCTION ENGINEERING					\$37,550
GRAND TOTAL					\$913,705



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Oaks Middle
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$102,600	\$102,600
1.01	Traffic control	1	LS	\$51,300	\$51,300
1.02	Construction survey and monumentation	1	LS	\$51,300	\$51,300
GENERAL SUBTOTAL					\$205,200
TRAFFIC SIGNAL					
2	Remove existing ped head	16	EA	\$300	\$4,800
2.01	Remove existing pedestrian push button	18	EA	\$150	\$2,700
2.02	Furnish and install APS push button	18	EA	\$1,850	\$33,300
2.03	Furnish and install countdown ped head	16	EA	\$1,500	\$24,000
TRAFFIC SIGNAL SUBTOTAL					\$64,800
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	8	EA	\$50,000	\$400,000
3.01	Painted bulb out with flex post (Phillips Blvd at Benson Ave)	1	LS	\$1,800	\$1,800
3.02	Painted bulb out with flex post (Phillips Blvd at Oaks Ave)	1	LS	\$1,500	\$1,500
3.03	Construct ADA curb ramp	11	EA	\$4,400	\$48,400
3.04	PCC sidewalk	12640	SF	\$8	\$101,120
3.05	PCC curb and gutter	1915	LF	\$50	\$95,750
SIGNING & STRIPING SUBTOTAL					\$648,570
SIGNING & STRIPING					
4	Install striping	6500	LF	\$2	\$13,000
4.01	Install red curb paint	355	LF	\$3	\$1,065
4.02	Install ladder x-walk	25	EA	\$480	\$12,000
4.03	Install pavement marking (stop legend, yield marking, etc)	22	EA	\$500	\$11,000
4.04	Furnish and install sign and post	7	EA	\$500	\$3,500
4.05	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
4.06	Remove existing sign	4	EA	\$100	\$400
SIGNING & STRIPING SUBTOTAL					\$75,965
TOTAL					\$994,535
30% CONTINGENCY					\$298,361
10% DESIGN					\$99,454
6% CONSTRUCTION ENGINEERING					\$59,672
GRAND TOTAL					\$1,452,021



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Mission ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$139,700	\$139,700
1.01	Traffic control	1	LS	\$69,850	\$69,850
1.02	Construction survey and monumentation	1	LS	\$69,850	\$69,850
GENERAL SUBTOTAL					\$279,400
TRAFFIC SIGNAL					
2	Remove existing ped head	30	EA	\$300	\$9,000
2.01	Remove existing pedestrian push button	30	EA	\$150	\$4,500
2.02	Furnish and install APS push button	33	EA	\$1,850	\$61,050
2.03	Furnish and install countdown ped head	32	EA	\$1,500	\$48,000
2.04	Traffic signal modifications (Central Ave at Howard St)	1	LS	\$10,000	\$10,000
TRAFFIC SIGNAL SUBTOTAL					\$122,550
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	8	EA	\$50,000	\$400,000
3.01	Construct ADA curb ramp	26	EA	\$4,400	\$114,400
3.02	Unclassified excavation	14	CY	\$70	\$980
3.03	Asphalt concrete pavement	28	TON	\$150	\$4,200
3.04	PCC sidewalk	17750	SF	\$8	\$142,000
3.05	PCC curb and gutter	2960	LF	\$50	\$148,000
SIGNING & STRIPING SUBTOTAL					\$809,580
SIGNING & STRIPING					
4	Install striping	9650	LF	\$2	\$19,300
4.01	Install red curb paint	250	LF	\$3	\$750
4.02	Install ladder x-walk	24	EA	\$480	\$11,520
4.03	Install pavement marking (stop legend, yield marking, etc)	22	EA	\$500	\$11,000
4.04	Furnish and install sign and post	17	EA	\$500	\$8,500
4.05	Furnish and install RRFB system	2	EA	\$35,000	\$70,000
4.06	Furnish and install speed feedback sign	2	EA	\$12,000	\$24,000
4.07	Remove existing sign	14	EA	\$100	\$1,400
4.08	Remove existing striping	710	LF	\$1	\$710
SIGNING & STRIPING SUBTOTAL					\$147,180
TOTAL					\$1,358,710
30% CONTINGENCY					\$407,613
10% DESIGN					\$135,871
6% CONSTRUCTION ENGINEERING					\$81,523
GRAND TOTAL					\$1,983,717



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Vista Grande ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$131,700	\$131,700
1.01	Traffic control	1	LS	\$65,850	\$65,850
1.02	Construction survey and monumentation	1	LS	\$65,850	\$65,850
GENERAL SUBTOTAL					\$263,400
STREET IMPROVEMENTS					
2	Construct ADA curb ramp	8	EA	\$4,400	\$35,200
2.01	Bulb out-Raised curb extension	11	EA	\$50,000	\$550,000
2.02	PCC sidewalk	22530	SF	\$8	\$180,240
2.03	PCC curb and gutter	3755	LF	\$50	\$187,750
SIGNING & STRIPING SUBTOTAL					\$953,190
SIGNING & STRIPING					
3	Install striping	6300	LF	\$2	\$12,600
3.01	Install red curb paint	70	LF	\$3	\$210
3.02	Install ladder x-walk	8	EA	\$480	\$3,840
3.03	Install pavement marking (stop legend, yield marking, etc)	15	EA	\$500	\$7,500
3.04	Furnish and install sign and post	2	EA	\$500	\$1,000
3.05	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
3.06	Remove existing sign	3	EA	\$100	\$300
SIGNING & STRIPING SUBTOTAL					\$60,450
TOTAL					\$1,277,040
30% CONTINGENCY					\$383,112
10% DESIGN					\$127,704
6% CONSTRUCTION ENGINEERING					\$76,622
GRAND TOTAL					\$1,864,478



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Richard Haynes ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$45,500	\$45,500
1.01	Traffic control	1	LS	\$22,750	\$22,750
1.02	Construction survey and monumentation	1	LS	\$22,750	\$22,750
GENERAL SUBTOTAL					\$91,000
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	4	EA	\$50,000	\$200,000
3.01	Construct ADA curb ramp	12	EA	\$4,400	\$52,800
3.02	PCC sidewalk	3930	SF	\$8	\$31,440
3.03	PCC curb and gutter	655	LF	\$50	\$32,750
SIGNING & STRIPING SUBTOTAL					\$316,990
SIGNING & STRIPING					
4	Install striping	5800	LF	\$2	\$11,600
4.01	Install ladder x-walk	20	EA	\$480	\$9,600
#REF!	Install pavement marking (stop legend, yield marking, etc)	20	EA	\$500	\$10,000
#REF!	Furnish and install sign and post	3	EA	\$500	\$1,500
#REF!	Remove existing sign	2	EA	\$100	\$200
SIGNING & STRIPING SUBTOTAL					\$32,900
TOTAL					\$440,890
30% CONTINGENCY					\$132,267
10% DESIGN					\$44,089
6% CONSTRUCTION ENGINEERING					\$26,453
GRAND TOTAL					\$643,699



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Ontario High
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$109,200	\$109,200
1.01	Traffic control	1	LS	\$54,600	\$54,600
1.02	Construction survey and monumentation	1	LS	\$54,600	\$54,600
GENERAL SUBTOTAL					\$218,400
TRAFFIC SIGNAL					
2	Remove existing ped head	16	EA	\$300	\$4,800
2.01	Remove existing pedestrian push button	16	EA	\$150	\$2,400
2.02	Furnish and install APS push button	16	EA	\$1,850	\$29,600
2.03	Furnish and install countdown ped head	16	EA	\$1,500	\$24,000
2.04	Furnish and install ped hybrid beacon on mast arm on 6th St	2	EA	\$17,000	\$34,000
2.05	Furnish and install service cabinet	1	EA	\$6,500	\$6,500
TRAFFIC SIGNAL SUBTOTAL					\$101,300
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	10	EA	\$50,000	\$500,000
3.01	Construct ADA curb ramp	32	EA	\$4,400	\$140,800
3.02	PCC sidewalk	3300	SF	\$8	\$26,400
3.03	PCC curb and gutter	550	LF	\$50	\$27,500
SIGNING & STRIPING SUBTOTAL					\$694,700
SIGNING & STRIPING					
4	Install striping	4700	LF	\$2	\$9,400
4.01	Install ladder x-walk	35	EA	\$480	\$16,800
4.02	Install pavement marking (stop legend, yield marking, etc)	28	EA	\$500	\$14,000
4.03	Furnish and install sign and post	10	EA	\$500	\$5,000
4.04	Remove existing sign	3	EA	\$100	\$300
4.05	Remove existing striping	570	LF	\$1	\$570
SIGNING & STRIPING SUBTOTAL					\$46,070
TOTAL					\$1,060,470
30% CONTINGENCY					\$318,141
10% DESIGN					\$106,047
6% CONSTRUCTION ENGINEERING					\$63,628
GRAND TOTAL					\$1,548,286



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: De Anza Middle
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$37,000	\$37,000
1.01	Traffic control	1	LS	\$18,500	\$18,500
1.02	Construction survey and monumentation	1	LS	\$18,500	\$18,500
GENERAL SUBTOTAL					\$74,000
STREET IMPROVEMENTS					
2	Construct ADA curb ramp	41	EA	\$4,400	\$180,400
2.01	PCC sidewalk	480	SF	\$8	\$3,840
2.02	PCC curb and gutter	80	LF	\$50	\$4,000
SIGNING & STRIPING SUBTOTAL					\$188,240
SIGNING & STRIPING					
3	Install striping	950	LF	\$2	\$1,900
3.01	Install red curb paint	375	LF	\$3	\$1,125
3.02	Install ladder x-walk	23	EA	\$480	\$11,040
3.03	Install pavement marking (stop legend, yield marking, etc)	4	EA	\$500	\$2,000
3.04	Furnish and install sign and post	13	EA	\$500	\$6,500
3.05	Furnish and install RRFB system	2	EA	\$35,000	\$70,000
3.06	Remove existing sign	6	EA	\$100	\$600
3.07	Remove existing striping	200	LF	\$1	\$200
3.08	Stop Warrant	1	LS	\$5,000	\$5,000
SIGNING & STRIPING SUBTOTAL					\$98,365
TOTAL					\$360,605
30% CONTINGENCY					\$108,182
10% DESIGN					\$36,061
6% CONSTRUCTION ENGINEERING					\$21,636
GRAND TOTAL					\$526,483



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Euclid ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$169,700	\$169,700
1.01	Traffic control	1	LS	\$84,850	\$84,850
1.02	Construction survey and monumentation	1	LS	\$84,850	\$84,850
GENERAL SUBTOTAL					\$339,400
TRAFFIC SIGNAL					
2	Remove existing ped head	17	EA	\$300	\$5,100
2.01	Remove existing pedestrian push button	17	EA	\$150	\$2,550
2.02	Furnish and install APS push button	17	EA	\$1,850	\$31,450
2.03	Furnish and install countdown ped head	17	EA	\$1,500	\$25,500
TRAFFIC SIGNAL SUBTOTAL					\$64,600
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	16	EA	\$50,000	\$800,000
3.01	Construct ADA curb ramp	30	EA	\$4,400	\$132,000
3.02	Bioswale(materials, testing) at Fern Ave and Philipps Ave	1400	SF	\$42	\$58,800
SIGNING & STRIPING SUBTOTAL					\$990,800
SIGNING & STRIPING					
4	Install striping	2750	LF	\$2	\$5,500
4.01	Install red curb paint	1470	LF	\$3	\$4,410
4.02	Install ladder x-walk	46	EA	\$480	\$22,080
4.03	Install pavement marking (stop legend, yield marking, etc)	56	EA	\$500	\$28,000
4.04	Furnish and install sign and post	48	EA	\$500	\$24,000
4.05	Furnish and install sign on existing post/railing	4	EA	\$100	\$400
4.06	Furnish and install RRFB system	4	EA	\$35,000	\$140,000
4.07	Furnish and install speed feedback sign	2	EA	\$12,000	\$24,000
4.08	Remove existing sign	8	EA	\$100	\$800
4.09	Remove existing striping	80	LF	\$1	\$80
SIGNING & STRIPING SUBTOTAL					\$249,270
TOTAL					\$1,644,070
30% CONTINGENCY					\$493,221
10% DESIGN					\$164,407
6% CONSTRUCTION ENGINEERING					\$98,644
GRAND TOTAL					\$2,400,342



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Sultana ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$116,800	\$116,800
1.01	Traffic control	1	LS	\$58,400	\$58,400
1.02	Construction survey and monumentation	1	LS	\$58,400	\$58,400
GENERAL SUBTOTAL					\$233,600
TRAFFIC SIGNAL					
2	Remove existing ped head	12	EA	\$300	\$3,600
2.01	Remove existing pedestrian push button	12	EA	\$150	\$1,800
2.02	Furnish and install APS push button	12	EA	\$1,850	\$22,200
2.03	Furnish and install countdown ped head	12	EA	\$1,500	\$18,000
TRAFFIC SIGNAL SUBTOTAL					\$45,600
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	12	EA	\$50,000	\$600,000
3.01	Construct ADA curb ramp	31	EA	\$4,400	\$136,400
SIGNING & STRIPING SUBTOTAL					\$736,400
SIGNING & STRIPING					
4	Install striping	11300	LF	\$2	\$22,600
4.01	Install red curb paint	765	LF	\$3	\$2,295
4.02	Install ladder x-walk	34	EA	\$480	\$16,320
4.03	Install pavement marking (stop legend, yield marking, etc)	61	EA	\$500	\$30,500
4.04	Furnish and install sign and post	17	EA	\$500	\$8,500
4.05	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
4.06	Remove existing sign	7	EA	\$100	\$700
4.07	Remove existing striping	120	LF	\$1	\$120
SIGNING & STRIPING SUBTOTAL					\$116,035
TOTAL					\$1,131,635
30% CONTINGENCY					\$339,491
10% DESIGN					\$113,164
6% CONSTRUCTION ENGINEERING					\$67,898
GRAND TOTAL					\$1,652,187



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Bon View ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$69,400	\$69,400
1.01	Traffic control	1	LS	\$34,700	\$34,700
1.02	Construction survey and monumentation	1	LS	\$34,700	\$34,700
GENERAL SUBTOTAL					\$138,800
TRAFFIC SIGNAL					
2	Remove existing ped head	32	EA	\$300	\$9,600
2.01	Remove existing pedestrian push button	27	EA	\$150	\$4,050
2.02	Furnish and install APS push button	27	EA	\$1,850	\$49,950
2.03	Furnish and install countdown ped head	32	EA	\$1,500	\$48,000
TRAFFIC SIGNAL SUBTOTAL					\$111,600
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	6	EA	\$50,000	\$300,000
3.01	Construct ADA curb ramp	10	EA	\$4,400	\$44,000
SIGNING & STRIPING SUBTOTAL					\$344,000
SIGNING & STRIPING					
4	Install striping	8300	LF	\$2	\$16,600
4.01	Install ladder x-walk	26	EA	\$480	\$12,480
4.02	Install pavement marking (stop legend, yield marking, etc)	9	EA	\$500	\$4,500
4.03	Furnish and install sign and post	16	EA	\$500	\$8,000
4.04	Furnish and install sign on existing post	5	EA	\$100	\$500
4.05	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
4.06	Remove existing sign	9	EA	\$100	\$900
4.07	Remove existing striping	255	LF	\$1	\$255
SIGNING & STRIPING SUBTOTAL					\$78,235
TOTAL					\$672,635
30% CONTINGENCY					\$201,791
10% DESIGN					\$67,264
6% CONSTRUCTION ENGINEERING					\$40,358
GRAND TOTAL					\$982,047



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Levi H Dickey ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$23,400	\$23,400
1.01	Traffic control	1	LS	\$11,700	\$11,700
1.02	Construction survey and monumentation	1	LS	\$11,700	\$11,700
GENERAL SUBTOTAL					\$46,800
TRAFFIC SIGNAL					
2	Remove existing ped head	8	EA	\$300	\$2,400
2.01	Remove existing pedestrian push button	8	EA	\$150	\$1,200
2.02	Furnish and install APS push button	8	EA	\$1,850	\$14,800
2.03	Furnish and install countdown ped head	8	EA	\$1,500	\$12,000
2.04	Furnish and install ped hybrid beacon on mast arm on 6th St	1	EA	\$17,000	\$17,000
2.05	Furnish and install service cabinet	1	EA	\$6,500	\$6,500
TRAFFIC SIGNAL SUBTOTAL					\$53,900
STREET IMPROVEMENTS					
3	Construct ADA curb ramp	9	EA	\$4,400	\$39,600
SIGNING & STRIPING SUBTOTAL					\$39,600
SIGNING & STRIPING					
4	Install striping	1600	LF	\$2	\$3,200
4.01	Install red curb paint	360	LF	\$3	\$1,080
4.02	Install ladder x-walk	30	EA	\$480	\$14,400
4.03	Install pavement marking (stop legend, yield marking, etc)	40	EA	\$500	\$20,000
4.04	Furnish and install sign and post	18	EA	\$500	\$9,000
4.05	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
4.06	Furnish and install speed feedback sign	2	EA	\$12,000	\$24,000
4.07	Remove existing sign	11	EA	\$100	\$1,100
4.08	Remove existing striping	200	LF	\$1	\$200
SIGNING & STRIPING SUBTOTAL					\$107,980
TOTAL					\$248,280
30% CONTINGENCY					\$74,484
10% DESIGN					\$24,828
6% CONSTRUCTION ENGINEERING					\$14,897
GRAND TOTAL					\$362,489



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Woodcrest Junior High
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$51,500	\$51,500
1.01	Traffic control	1	LS	\$25,750	\$25,750
1.02	Construction survey and monumentation	1	LS	\$25,750	\$25,750
GENERAL SUBTOTAL					\$103,000
TRAFFIC SIGNAL					
2	Remove existing ped head	27	EA	\$300	\$8,100
2.01	Remove existing pedestrian push button	27	EA	\$150	\$4,050
2.02	Furnish and install APS push button	27	EA	\$1,850	\$49,950
2.03	Furnish and install countdown ped head	27	EA	\$1,500	\$40,500
2.04	Remove existing ped beacon	2	EA	\$3,200	\$6,400
TRAFFIC SIGNAL SUBTOTAL					\$109,000
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	3	EA	\$50,000	\$150,000
3.01	Construct ADA curb ramp	36	EA	\$4,400	\$158,400
SIGNING & STRIPING SUBTOTAL					\$308,400
SIGNING & STRIPING					
4	Install striping	5300	LF	\$2	\$10,600
4.01	Install red curb paint	220	LF	\$3	\$660
4.02	Install ladder x-walk	43	EA	\$480	\$20,640
4.03	Install pavement marking (stop legend, yield marking, etc)	39	EA	\$500	\$19,500
4.04	Furnish and install sign and post	12	EA	\$500	\$6,000
4.05	Furnish and install RRFB system	1	EA	\$35,000	\$35,000
4.06	Furnish and install speed feedback sign	3	EA	\$12,000	\$36,000
4.07	Remove existing sign	5	EA	\$100	\$500
SIGNING & STRIPING SUBTOTAL					\$128,900
TOTAL					\$649,300
30% CONTINGENCY					\$194,790
10% DESIGN					\$64,930
6% CONSTRUCTION ENGINEERING					\$38,958
GRAND TOTAL					\$947,978



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Liberty ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$28,800	\$28,800
1.01	Traffic control	1	LS	\$14,400	\$14,400
1.02	Construction survey and monumentation	1	LS	\$14,400	\$14,400
GENERAL SUBTOTAL					\$57,600
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	2	EA	\$50,000	\$100,000
3.01	Construct ADA curb ramp	18	EA	\$4,400	\$79,200
3.02	PCC sidewalk	300	SF	\$8	\$2,400
3.03	PCC curb and gutter	50	LF	\$50	\$2,500
SIGNING & STRIPING SUBTOTAL					\$184,100
SIGNING & STRIPING					
4	Install striping	3500	LF	\$2	\$7,000
4.01	Install red curb paint	460	LF	\$3	\$1,380
4.02	Install ladder x-walk	22	EA	\$480	\$10,560
4.03	Install pavement marking (stop legend, yield marking, etc)	22	EA	\$500	\$11,000
4.04	Furnish and install sign and post	13	EA	\$500	\$6,500
4.05	Remove existing sign	9	EA	\$100	\$900
4.06	Remove existing striping	100	LF	\$1	\$100
SIGNING & STRIPING SUBTOTAL					\$37,440
TOTAL					\$279,140
30% CONTINGENCY					\$83,742
10% DESIGN					\$27,914
6% CONSTRUCTION ENGINEERING					\$16,748
GRAND TOTAL					\$407,544



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Ranch View ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$48,500	\$48,500
1.01	Traffic control	1	LS	\$24,250	\$24,250
1.02	Construction survey and monumentation	1	LS	\$24,250	\$24,250
GENERAL SUBTOTAL					\$97,000
STREET IMPROVEMENTS					
3	Construct ADA curb ramp	51	EA	\$4,400	\$224,400
SIGNING & STRIPING SUBTOTAL					\$224,400
SIGNING & STRIPING					
4	Install striping (limit line)	2000	LF	\$2	\$4,000
4.01	Install ladder x-walk	42	EA	\$480	\$20,160
4.02	Install pavement marking (stop legend, yield marking, etc)	49	EA	\$500	\$24,500
4.03	Furnish and install sign and post	11	EA	\$500	\$5,500
4.04	Furnish and install RRFB system	2	EA	\$35,000	\$70,000
4.05	Furnish and install speed feedback sign	2	EA	\$12,000	\$24,000
4.06	Remove existing sign	3	EA	\$100	\$300
SIGNING & STRIPING SUBTOTAL					\$148,460
TOTAL					\$469,860
30% CONTINGENCY					\$140,958
10% DESIGN					\$46,986
6% CONSTRUCTION ENGINEERING					\$28,192
GRAND TOTAL					\$685,996



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Mountain View ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$61,700	\$61,700
1.01	Traffic control	1	LS	\$30,850	\$30,850
1.02	Construction survey and monumentation	1	LS	\$30,850	\$30,850
GENERAL SUBTOTAL					\$123,400
TRAFFIC SIGNAL					
2	Remove existing ped head	16	EA	\$300	\$4,800
2.01	Remove existing pedestrian push button	16	EA	\$150	\$2,400
2.02	Furnish and install APS push button	16	EA	\$1,850	\$29,600
2.03	Furnish and install countdown ped head	16	EA	\$1,500	\$24,000
TRAFFIC SIGNAL SUBTOTAL					\$60,800
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	5	EA	\$50,000	\$250,000
3.01	Construct ADA curb ramp	23	EA	\$4,400	\$101,200
3.02	Unclassified Excavation (median nose removal)	1	CY	\$70	\$70
3.03	Asphalt concrete pavement	1	TON	\$150	\$150
3.04	Landscape	285	SF	\$25	\$7,125
SIGNING & STRIPING SUBTOTAL					\$358,545
SIGNING & STRIPING					
4	Install striping	4300	LF	\$2	\$8,600
4.01	Install red curb paint	335	LF	\$3	\$1,005
4.02	Install ladder x-walk	18	EA	\$480	\$8,640
4.03	Install pavement marking (stop legend, yield marking, etc)	15	EA	\$500	\$7,500
4.04	Furnish and install sign and post	9	EA	\$500	\$4,500
4.05	Furnish and install speed feedback sign	2	EA	\$12,000	\$24,000
4.06	Remove existing sign	2	EA	\$100	\$200
4.07	Remove existing striping	200	LF	\$1	\$200
SIGNING & STRIPING SUBTOTAL					\$54,645
TOTAL					\$597,390
30% CONTINGENCY					\$179,217
10% DESIGN					\$59,739
6% CONSTRUCTION ENGINEERING					\$35,843
GRAND TOTAL					\$872,189



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Grace Yokley MS
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$55,000	\$55,000
1.01	Traffic control	1	LS	\$27,500	\$27,500
1.02	Construction survey and monumentation	1	LS	\$27,500	\$27,500
GENERAL SUBTOTAL					\$110,000
TRAFFIC SIGNAL					
2	Remove existing ped head	16	EA	\$300	\$4,800
2.01	Remove existing pedestrian push button	16	EA	\$150	\$2,400
2.02	Furnish and install APS push button	16	EA	\$1,850	\$29,600
2.03	Furnish and install countdown ped head	16	EA	\$1,500	\$24,000
2.04	Furnish and install ped hybrid beacon on mast arm on 6th St	2	EA	\$17,000	\$34,000
2.05	Furnish and install service cabinet	1	EA	\$6,500	\$6,500
2.06	Remove existing ped beacon	2	EA	\$3,200	\$6,400
TRAFFIC SIGNAL SUBTOTAL					\$107,700
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	2	EA	\$50,000	\$100,000
3.01	Construct ADA curb ramp	28	EA	\$4,400	\$123,200
3.02	PCC sidewalk	2000	SF	\$8	\$16,000
3.03	PCC curb and gutter	250	LF	\$50	\$12,500
SIGNING & STRIPING SUBTOTAL					\$251,700
SIGNING & STRIPING					
4	Install striping	6900	LF	\$2	\$13,800
4.01	Install red curb paint	50	LF	\$3	\$150
4.02	Install ladder x-walk	25	EA	\$480	\$12,000
4.03	Install pavement marking (stop legend, yield marking, etc)	19	EA	\$500	\$9,500
4.04	Furnish and install sign and post	8	EA	\$500	\$4,000
4.05	Furnish and install speed feedback sign	2	EA	\$12,000	\$24,000
4.06	Remove existing sign	3	EA	\$100	\$300
4.07	Remove existing striping	200	LF	\$1	\$200
SIGNING & STRIPING SUBTOTAL					\$63,950
TOTAL					\$533,350
30% CONTINGENCY					\$160,005
10% DESIGN					\$53,335
6% CONSTRUCTION ENGINEERING					\$32,001
GRAND TOTAL					\$778,691



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Colony High
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$53,100	\$53,100
1.01	Traffic control	1	LS	\$26,550	\$26,550
1.02	Construction survey and monumentation	1	LS	\$26,550	\$26,550
GENERAL SUBTOTAL					\$106,200
TRAFFIC SIGNAL					
2	Remove existing ped head	20	EA	\$300	\$6,000
2.01	Remove existing pedestrian push button	20	EA	\$150	\$3,000
2.02	Furnish and install APS push button	21	EA	\$1,850	\$38,850
2.03	Furnish and install PPB post	1	EA	\$2,000	\$2,000
2.03	Furnish and install countdown ped head	20	EA	\$1,500	\$30,000
2.04	Furnish and install ped hybrid beacon on mast arm on 6th St	2	EA	\$17,000	\$34,000
2.05	Furnish and install service cabinet	1	EA	\$6,500	\$6,500
2.06	Remove existing signal flasher	2	EA	\$3,200	\$6,400
TRAFFIC SIGNAL SUBTOTAL					\$126,750
STREET IMPROVEMENTS					
3	Construct ADA curb ramp	4	EA	\$4,400	\$17,600
3.01	PCC sidewalk (After roadway widening on Riverside Dr)	15200	SF	\$8	\$121,600
3.02	PCC curb and gutter	1900	LF	\$50	\$95,000
3.03	Median Refuge Island	1	LS	\$9,000	\$9,000
SIGNING & STRIPING SUBTOTAL					\$243,200
SIGNING & STRIPING					
4	Install striping	1430	LF	\$2	\$2,860
4.01	Install ladder x-walk	12	EA	\$480	\$5,760
4.02	Install pavement marking (stop legend, yield marking, etc)	6	EA	\$500	\$3,000
4.03	Furnish and install sign and post	11	EA	\$500	\$5,500
4.04	Furnish and install speed feedback sign	2	EA	\$12,000	\$24,000
4.05	Remove existing sign	3	EA	\$100	\$300
4.06	Remove existing striping	250	LF	\$1	\$250
SIGNING & STRIPING SUBTOTAL					\$41,670
TOTAL					\$517,820
30% CONTINGENCY					\$155,346
10% DESIGN					\$51,782
6% CONSTRUCTION ENGINEERING					\$31,069
GRAND TOTAL					\$756,017



Preliminary Engineers Cost Estimate

City: Ontario
 Project: Ontario ATP
 Location: Creek View ES
 Date: 3/25/2021

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
GENERAL					
1	Mobilization	1	LS	\$197,800	\$197,800
1.01	Traffic control	1	LS	\$98,900	\$98,900
1.02	Construction survey and monumentation	1	LS	\$98,900	\$98,900
GENERAL SUBTOTAL					\$395,600
TRAFFIC SIGNAL					
2	Remove existing ped head	8	EA	\$300	\$2,400
2.01	Remove existing pedestrian push button	8	EA	\$150	\$1,200
2.02	Furnish and install APS push button	8	EA	\$1,850	\$14,800
2.03	Furnish and install countdown ped head	8	EA	\$1,500	\$12,000
TRAFFIC SIGNAL SUBTOTAL					\$30,400
STREET IMPROVEMENTS					
3	Bulb out-Raised curb extension	24	EA	\$50,000	\$1,200,000
3.01	Construct ADA curb ramp	33	EA	\$4,400	\$145,200
3.02	Landscape	100	SF	\$25	\$2,500
SIGNING & STRIPING SUBTOTAL					\$1,347,700
SIGNING & STRIPING					
4	Install striping	2800	LF	\$2	\$5,600
4.01	Install ladder x-walk	31	EA	\$480	\$14,880
4.02	Install pavement marking (stop legend, yield marking, etc)	40	EA	\$500	\$20,000
4.03	Furnish and install sign and post	17	EA	\$500	\$8,500
4.04	Furnish and install RRFB system	2	EA	\$35,000	\$70,000
4.05	Furnish and install speed feedback sign	2	EA	\$12,000	\$24,000
4.06	Remove existing sign	8	EA	\$100	\$800
4.07	Remove existing striping	100	LF	\$1	\$100
SIGNING & STRIPING SUBTOTAL					\$143,880
TOTAL					\$1,917,580
30% CONTINGENCY					\$575,274
10% DESIGN					\$191,758
6% CONSTRUCTION ENGINEERING					\$115,055
GRAND TOTAL					\$2,799,667