

Lafayette Local Road Safety Plan



Local Road Safety Plan Task Force Meeting #2

10/25/2022

Welcome and Introductions

Presenters

- Patrick Golier, City of Lafayette, City Project Manager
- Diane Xiao, Toole Design, Consultant Project Manager
- Lauren Pepe, Toole Design, Consultant Deputy Project Manager
- Sarah Abel, Toole Design, Consultant Principal In Charge

Welcome and Introductions

Name	Title/Role
Teresa Geringer	Lafayette City Council, Mayor
Susan Candell	Lafayette City Council
Mike Moran	City of Lafayette Public Works
Patrick Golier	City of Lafayette Engineering
Greg Brown	Lafayette Transportation and Circulation Commission
<u>Stella Wortherspoon</u>	Alternate, Lafayette Transportation and Circulation Commission
Colin Clarke	Contra Costa Transportation Authority
Greg Barnes	Lafayette School District

Name	Title/Role
Tommy Rodriguez	Acalanes School District
Kirstin Riker	511 Contra Costa
<u>Chief Ben Alldritt</u>	Lafayette Police Department
<u>Chris Bachman</u>	Contra Costa Fire Protection District
<u>Luz Gomez</u>	Contra Costa Health Services
Emily Warming	Contra Costa Health Services
Katie Santos	Lafayette Chamber of Commerce
Mark Dreger	At-Large Community Member
Jenifer Paul	At-Large Community Member

Today's agenda for discussion

- Updated goals and objectives that will guide the development of the Plan
- Review of crash analysis findings
- **Identify priority locations for safety**
- Discuss upcoming field visits
- Review of upcoming public engagement activities

Meeting norms and agreements

- Meeting will be recorded.
- Camera on is encouraged.
- Use raise hand function; mute if not speaking.
- Speak your truth and recognize that others' truths are true for them.
- Give everyone a chance to participate equally; avoid dominating.
- Listen as an ally, not an adversary.
- Ask for clarification; don't make assumptions.

Updated Goals and Objectives



Goals

Goal 1: *Engage with the local community, stakeholders, and different city agencies to better understand factors that are affecting the traffic safety of roadway users within the City of Lafayette.*

- **Objective:** Develop a project Task Force to help guide the development of the LRSP.
- **Objective:** Develop project website to share LRSP progress, engagement opportunities, project updates, ~~and~~ draft deliverables, and roadway safety educational materials.
- **Objective:** Host a public meeting, ~~event~~ and attend pop-up events throughout the community, and launch an online survey to engage the public to share project updates and collect local knowledge, concerns, and opportunities.
- **Objective:** Provide project updates and collect input/feedback through public hearings with City Council and the City's Transportation & Circulation Commission.
- **Objective:** Develop an interactive webmap and survey to collect from the public location-based safety related concerns.

Goals

Goal 2: *Promote a safety culture throughout the community and within different agencies.*

- **Objective:** Maintain regular communication with public and with City partners the importance of traffic safety to create a culture of safety in Lafayette. Continuous engagement and education efforts, including through social media and other virtual channels, should be maintained to help contribute to a safety culture that values human life over expediency and self-interest. Everyone must think about their role in contributing to a safe transportation system. This means knowing and following the law, looking out for one another, and using good judgment.
- **Objective:** Include people from various departments, agencies, businesses, and the community in the development of the plan to ensure everyone has a role to play in creating a safe Lafayette to live, work, and play in.

Goals

Goal 3: Implement a data-driven approach, supplemented by public input, to identify where and why traffic roadway collisions resulting in fatalities and serious injuries and near-misses are occurring, and which locations feel unsafe, and which locations have risk factors that may result in collisions in the future.

- **Objective:** Conduct a systemic and proactive collision analysis of Lafayette's road network.
- **Objective:** Use quality data and the latest analytical processes to better understand crash causation and crash risk.
- **Objective:** Identify high priority locations using historical crash data and analysis, proactive systemic safety analysis, stakeholder and public input, and an in-person field visits.

Goals

Goals 4: *Prioritize traffic safety ~~countermeasures actions~~ and programmatic recommendation investments to advance Lafayette's Vision Zero goals.*

- **Objective:** Identify ~~countermeasures actions~~ utilizing strategies across all traffic safety disciplines, engineering, enforcement, education, emergency medical services, and emerging technologies.
- **Objective:** Develop a safety ~~action~~~~countermeasure~~ toolbox that includes systemic and effective low-cost~~short-~~ and longer-term ~~countermeasures actions~~ that are specific to Lafayette's crash patterns.
- **Objective:** Produce a list of engineering projects pulling from resources included in the safety ~~countermeasure action~~ toolbox aimed at improving roadway safety for all.
- **Objective:** Include an assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize safety.

Goals

Goals 5: Produce a plan to build safer streets for all.

- **Objectives:** Use the safety ~~countermeasure~~ actions toolbox and priority locations to proactively address crash risk throughout Lafayette.
- **Objective:** Utilize the best available data and publicly collected feedback to produce a prioritized list of engineering projects that can be submitted for grant application processes.
- **Objective:** Conduct a cost-benefit analysis for all potential projects in the LRSP as part of the prioritization analysis.
- **Objective:** Ensure that the plan includes recommendations and tools that will enable the city to measure safety trends, ~~and~~ update the progress of the plan over time, and be competitive for grant funding.
- **Objective:** Increase the number of people walking, rolling, and biking in Lafayette.

Questions?

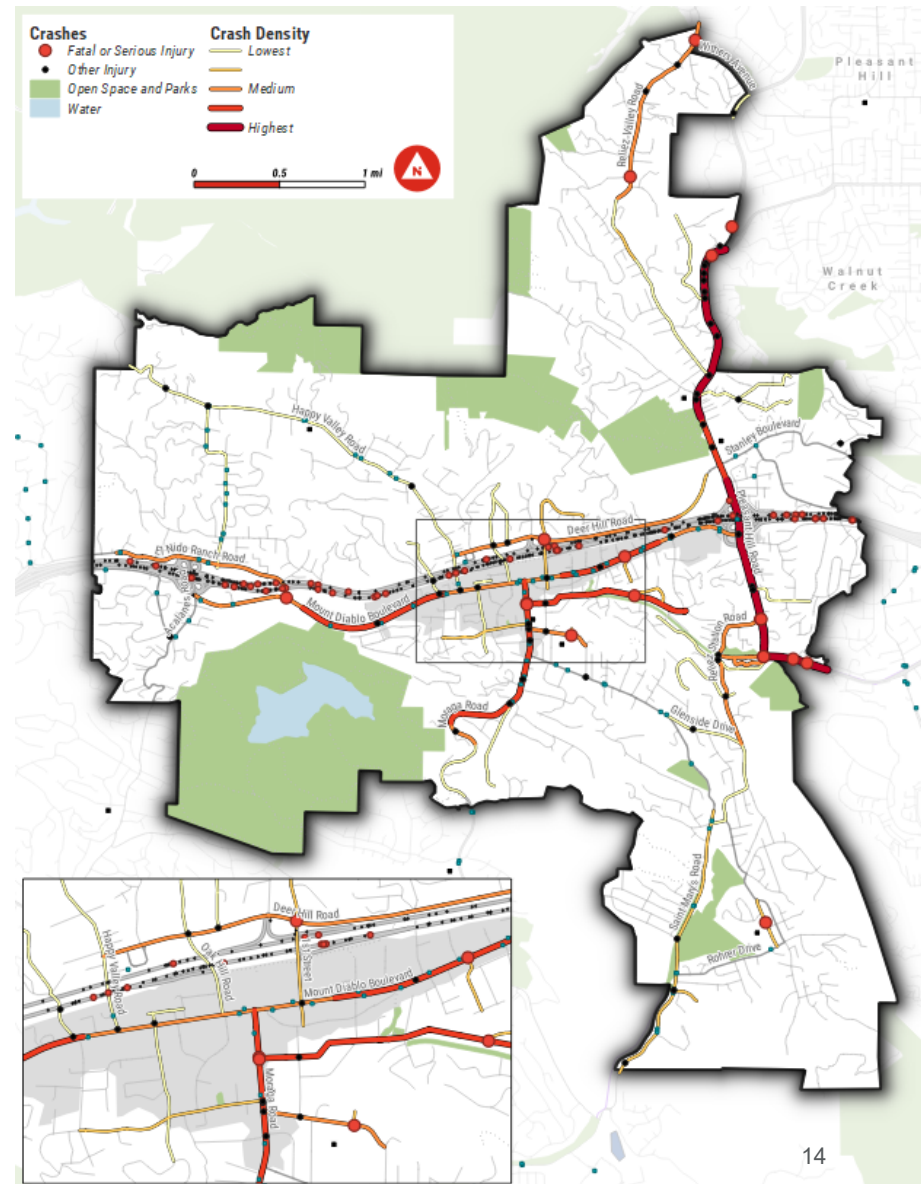
Crash Analysis Findings



Safety Statistics

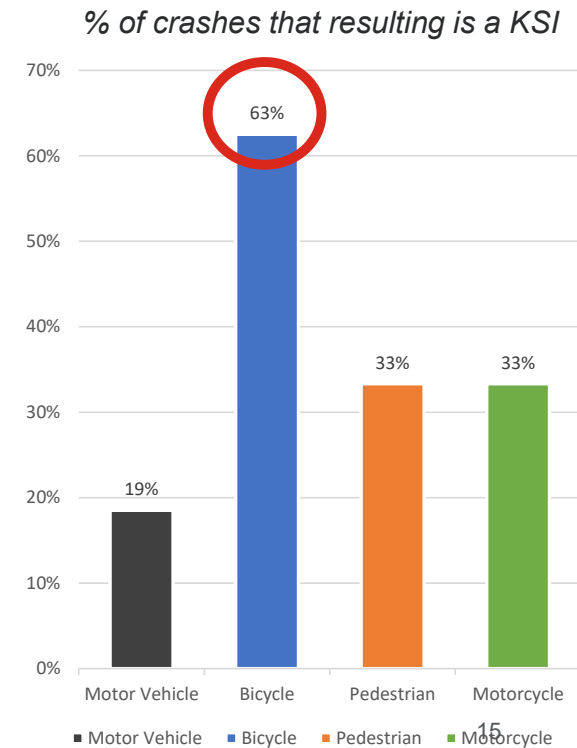
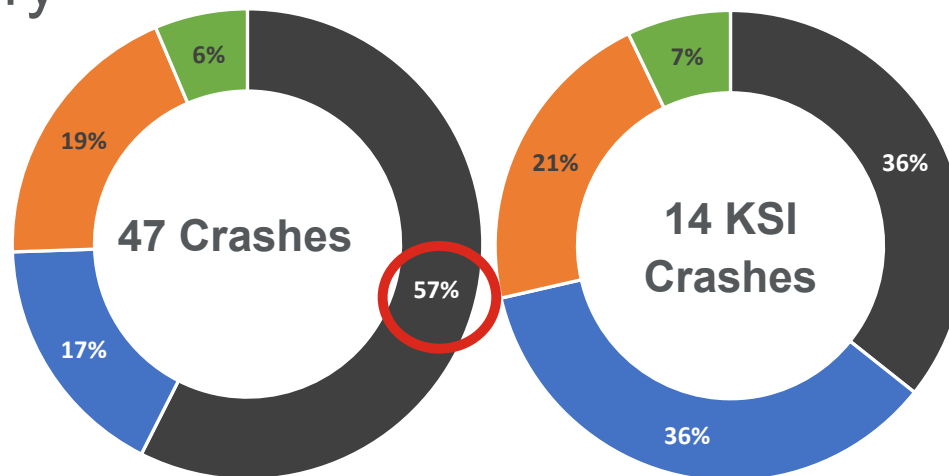
- 408 crashes (2017-2021)
 - 361 (35 KSI) along CA-24
 - **47 (14 KSI) local streets**
- Crashes concentrated along busier streets

KSI = Fatal or Serious Injury



Safety Statistics

- Bicyclist, pedestrian, and motorcyclists are most at risk for serious injury



Safety Statistics



Most Fatal and Serious Injury Crashes Occurred at Unsignalized Intersections



Functional Classification

Streets with higher functional classification accounted for the largest share of fatal and serious injury crashes



Posted Speed Limit

35 mph account for the largest share of crashes and KSI crashes



Safety Statistics



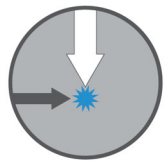
Lighting

Most crashes occurred during daylight conditions



Solo- fixed object

These crash type are the most frequent crashes occurring in Lafayette



Perpendicular

Many crashes occurred when vehicle movements were perpendicular at the time of the crash



Safety Statistics



People aged 20-24

Younger people are disproportionately affected by crashes



Older adults

Older adults are more likely to suffer from a fatal or serious injuries than others

*Only victim information was analyzed



Safety Statistics

Crash Location Type (Intersection vs. Segment)

Location Type	Control Type	# of Crashes	% of Crashes	# of KSI	% of KSI	% of Crashes Resulted in KSI	Total EPDO	% of EPDO	Avg. EPDO
Intersection	Signalized	13	28%	2	14%	15%	316	12%	24.31
	Unsignalized	20	43%	7	50%	35%	1,450	54%	72.50
Intersection Total		33	70%	9	64%	27%	1,766	66%	53.52
Segment	None	14	30%	5	36%	36%	899	34%	64.21
Total		47	100%	14	100%	30%	2,665	100%	56.70

Safety Statistics

Functional Classification

Functional Classification	# of Crashes	# KSI	% of Crashes Resulted in KSI	Total EPDO	Avg. EPDO	Miles	Crashes Per Mile	KSI per Mile	EPDO Per Mile
Residential	7	3	43%	612	87.43	111.9	0.06	0.03	5.47
Tertiary	11	2	18%	354	32.18	20.8	0.53	0.10	17.00
Secondary	19	7	37%	1,301	68.47	6.7	2.85	1.05	195.39
Primary	10	2	20%	398	39.80	2.3	4.27	0.85	169.93
Total	47	14	30%	2,665	56.70	162.4	0.29	0.09	16.41

Safety Statistics

Posted Speed Limit

Highest Speed Limit	# of Crashes	# KSI		Total EPDO	Avg. EPDO	Miles	Crashes Per Mile	KSI per Int	EPDO Per Int
25	7	3	43%	612	87.43	113.1	0.06	0.03	5.41
30	6	0	0%	51	8.50	35.3	0.17	0.00	1.45
35	23	7	30%	1,254	54.52	10.4	2.22	0.67	120.84
40	5	1	20%	225	45.00	1.2	4.16	0.8	187.09
45	3	2	67%	336	112.00	1.5	2.05	1.37	229.41
55	3	1	33%	187	62.33	0.6	5.30	1.77	330.17
Total	47	14	30%	2,665	56.70	162.4	0.29	0.09	16.41

Safety Statistics

Lighting conditions

Lighting Condition	# of Crashes	% of Crashes	# KSI	% KSI	% of Crashes Resulted in KSI	Total EPDO	% of EPDO	Avg. EPDO
Daylight	31	66%	11	79%	35%	2,005	75%	64.68
Dark - Street Lights	10	21%	2	14%	20%	429	16%	42.90
Dark - No Street Lights	3	6%	0	0%	0%	23	1%	7.67
Dusk - Dawn	1	2%	1	7%	100%	191	7%	191.00
-	1	2%	0	0%	0%	11	0%	11.00
Dark - Street Lights Not Functioning	1	2%	0	0%	0%	6	0%	6.00
Total	47	100%	14	100%	30%	2,665	100%	56.70

Safety Statistics

Crash Type

Crash Type	# of Crashes	% of Crashes	# KSI	% KSI	% of Crashes Resulted in KSI	Total EPDO	% of EPDO	Avg. EPDO
Hit Object	10	21%	2	14%	20%	398	15%	39.80
Broadside	8	17%	2	14%	25%	423	16%	52.88
Vehicle/Pedestrian	7	15%	2	14%	29%	346	13%	49.43
Sideswipe	6	13%	3	21%	50%	570	21%	95.00
Head-On	6	13%	2	14%	33%	350	13%	58.33
Overtaken	5	11%	2	14%	40%	363	14%	72.60
Rear End	4	9%	1	7%	25%	209	8%	52.25
Unknown	1	2%	0	0%	0%	6	0%	6.00
Total	47	100%	14	100%	30%	2,665	100%	56.70

Safety Statistics

Movement Type

Relative Direction	# of Crashes	% of Crashes	# of KSI	% of KSI	% of Crashes Resulted in KSI	Total EPDO	% of EPDO	Avg. EPDO
Solo	16	34%	5	36%	31%	952	36%	59.50
Perpendicular	10	21%	4	29%	40%	805	30%	80.50
Same	10	21%	3	21%	30%	594	22%	59.40
Unknown	8	17%	1	7%	13%	182	7%	22.75
Opposite	3	6%	1	7%	33%	132	5%	44.00
Total	47	100%	14	100%	30%	2,665	100%	56.70

Safety Statistics

Victim Age

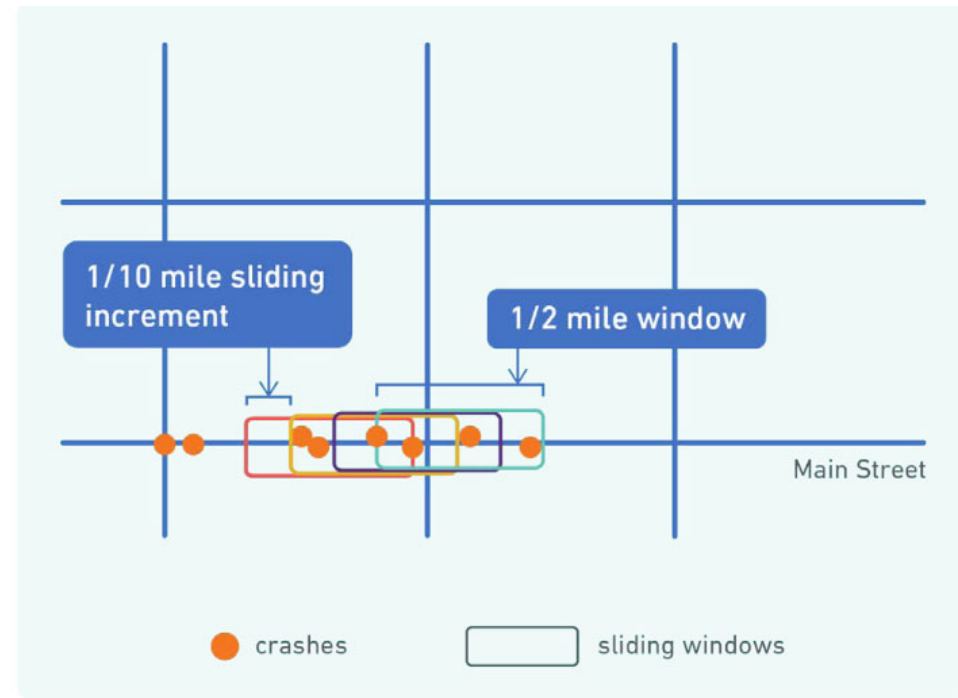
Age	Victims	KSI Victims	% of Victims	% of KSI Victims	Share of Population ⁵	Victims: Population Ratio	KSI Victims: Population Ratio	% Crashes resulting in KSI
0 - 4	1	0	2%	0%	4%	0.40	-	0.0%
5 - 9	2	0	3%	0%	8%	0.42	-	0.0%
10 - 14	5	3	8%	19%	9%	0.92	2.14	60.0%
15 - 19	2	0	3%	0%	6%	0.52	-	0.0%
20 - 24	6	0	10%	0%	3%	2.77	-	0.0%
25 - 29	5	0	8%	0%	4%	2.26	-	0.0%
30 - 34	3	1	5%	6%	4%	1.27	1.64	33.3%
35 - 39	2	0	3%	0%	5%	0.67	-	0.0%
40 - 44	3	1	5%	6%	7%	0.70	0.90	33.3%
45 - 49	5	1	8%	6%	8%	0.98	0.76	20.0%
50 - 54	5	2	8%	13%	10%	0.83	1.28	40.0%
55 - 59	2	0	3%	0%	7%	0.43	-	0.0%
60 - 64	4	2	6%	13%	6%	1.02	1.97	50.0%
65 - 69	3	0	5%	0%	5%	0.89	-	0.0%
70 - 74	4	2	6%	13%	5%	1.25	2.43	50.0%
75 - 79	4	3	6%	19%	4%	1.51	4.38	75.0%
80 - 84	2	0	3%	0%	2%	1.61	-	0.0%
85 +	3	1	5%	6%	2%	2.25	2.91	33.3%
Unknown	1	0	2%	0%	0%			

Questions?

Safety Statistics

Safer Street Priority Finder

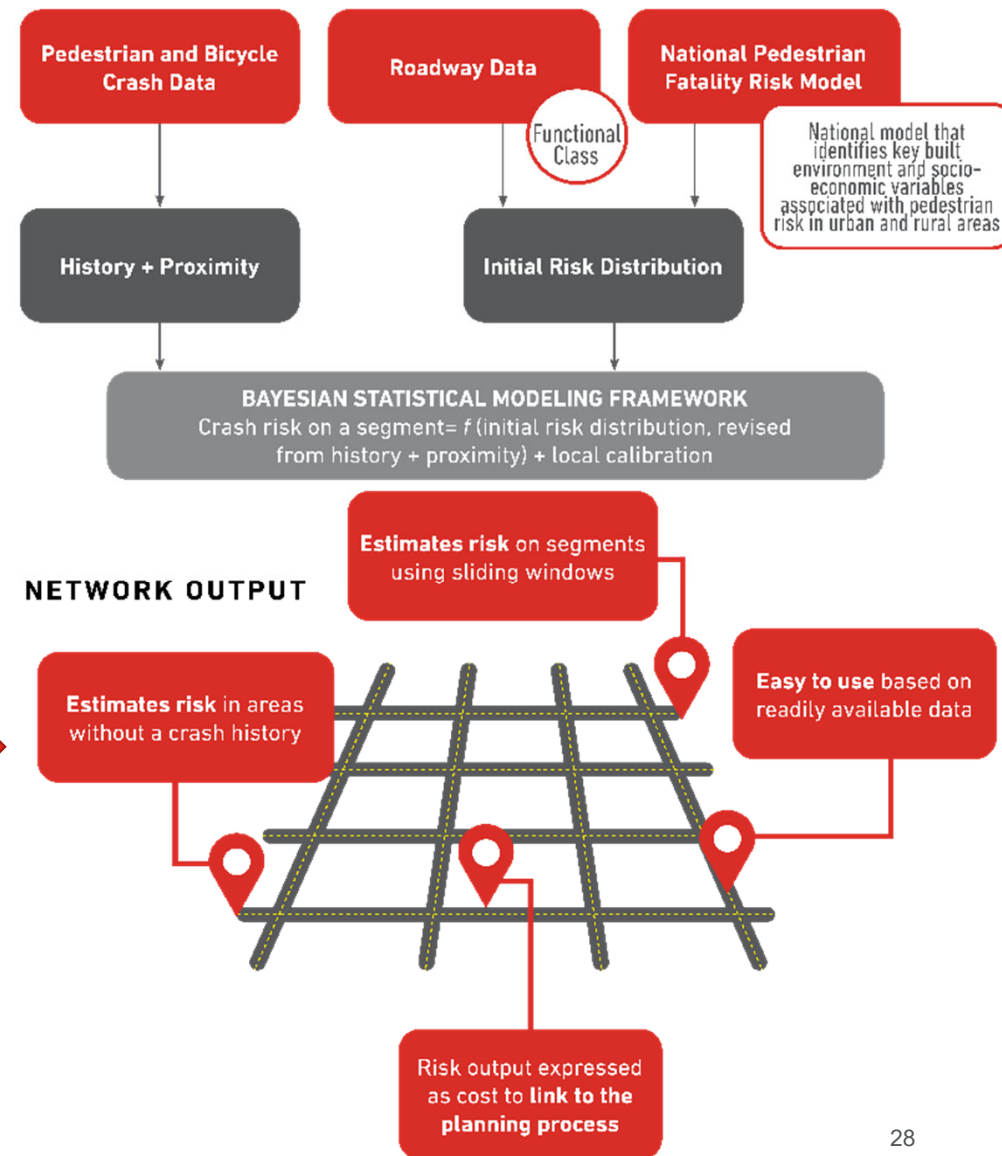
1. Sliding Window Analysis for **identifying historic crash density**
 - **Key Output:** corridors with highest concentration of crashes and KSI crashes for bicycle, pedestrian and motor vehicle using only historical crash data
2. Safer Streets Model for estimating **future crash risk**
 - **Key Output:** corridors with highest potential risk for **bicycle** and **pedestrian** crashes to occur in the future using both historical crash data and a statistical model.



Safety Statistics

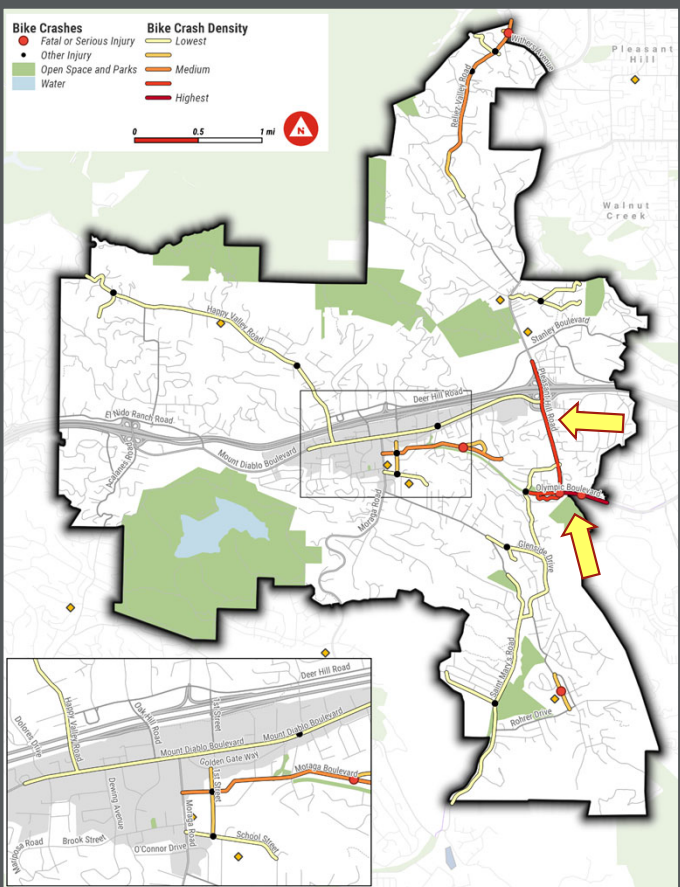
Safer Street Priority Finder

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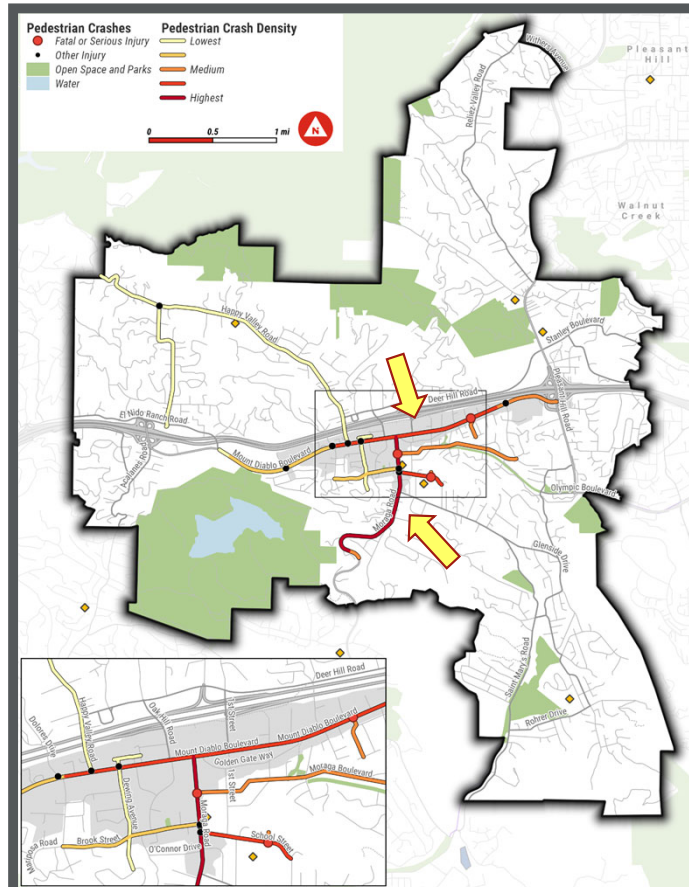


Crashes per Mile

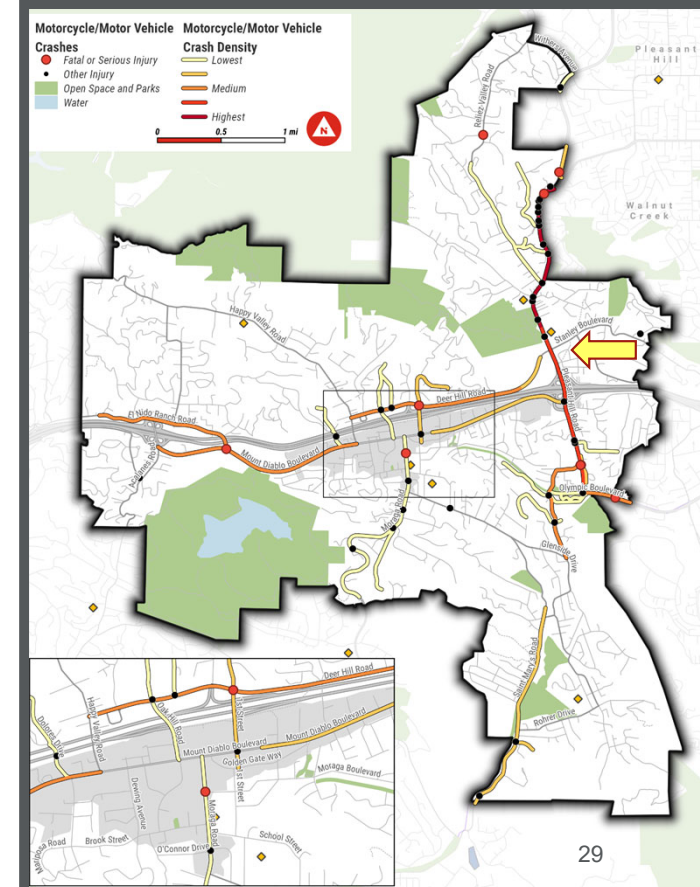
Bicycle Crashes



Pedestrian Crashes

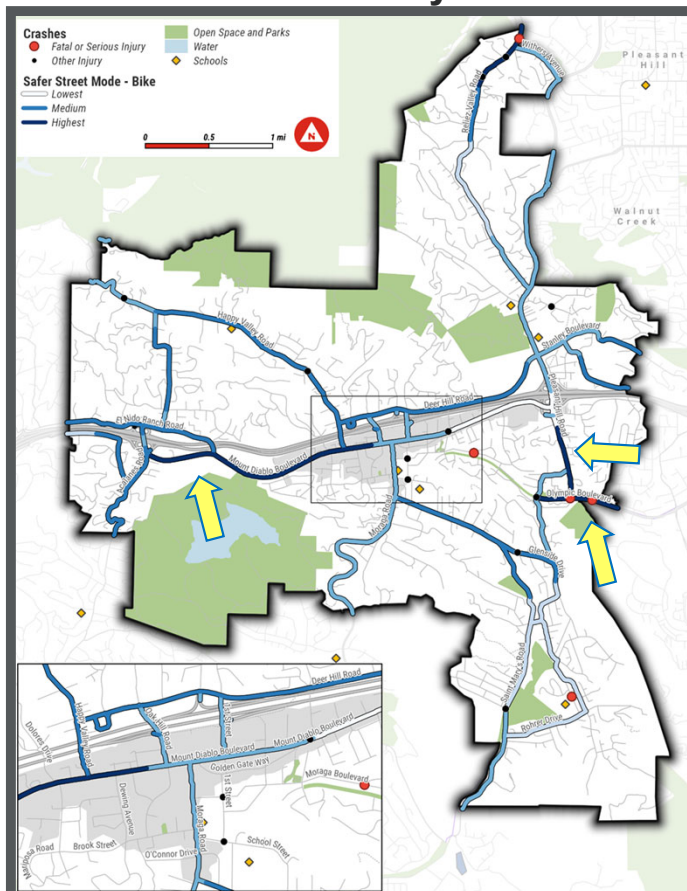


Motor Vehicle Crashes

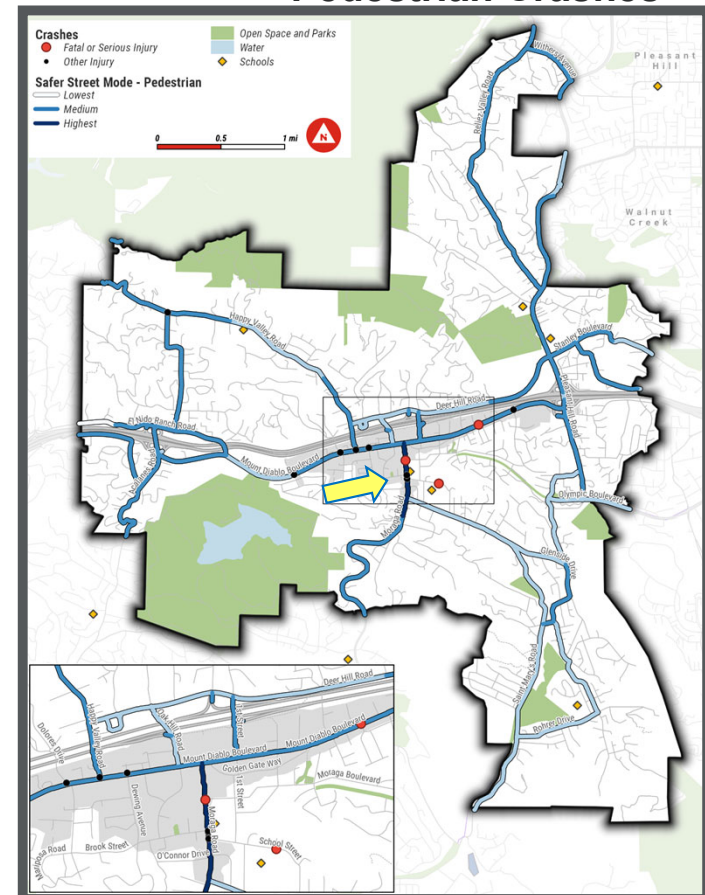


Estimated Risk

Bicycle Crashes



Pedestrian Crashes



Priority Locations



Priority Locations

- Locations with the highest crash density
- Locations with highest estimate crash risk for bicycle and pedestrian crashes
- **Build upon Task Force Knowledge**
- **Community Feedback**

Preliminary list:

- **Mt Diablo Blvd**
- **Pleasant Hill Rd**
- **Olympic Blvd**
- **Moraga Rd**

Priority Locations

Preliminary list:

- Mt Diablo Blvd from Acalanes Rd to Pleasant Hill Rd
- Pleasant Hill Rd from Old Tunnel Rd to Olympic Blvd
- Olympic Blvd from Reliez Station Rd to Newell Ct
- Moraga Rd from Mt Diablo to St Marys Rd

Task Force:

- *Does this reflect your experience?*
- *Are there other unsafe streets in Lafayette?*
- *Are there specific locations along these road with safety issues?*

Upcoming Field Visits

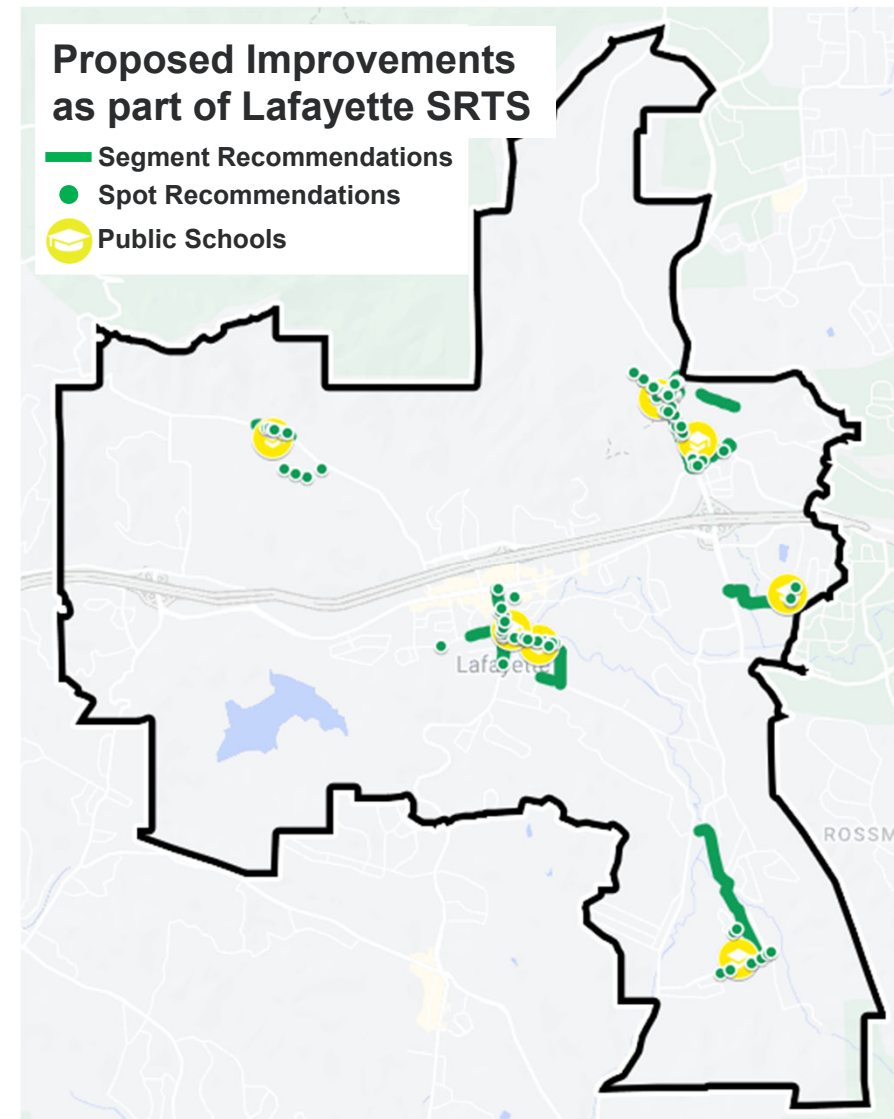


Field Visits

- Built off the preliminary list
- Visit Priority Locations to assess possible treatments and interactions
- Develop location profiles for Priority Locations

Field Visits

- Overlap between this project and the Safe Route to School project
 - Pleasant Hill Rd field visit as part of Acalanes HS and Springhill ES
 - Moraga Rd field visit as part of Stanley MS Lafayette ES



Questions?

Upcoming Public Engagement Activities



Upcoming Public Engagement

- Webmap is now live and open until November 20th:
www.tinyURL.com/LafayetteLRSP
- Pop-up tabling at [Trick or Treat event](#) (Mt. Diablo Boulevard) on Friday October 28th
- Virtual Public Meeting on November 16th or 17th at 6:00pm

Questions?

Next steps



Next Steps

- Follow-up email and materials coming
- VZ Task Force Meeting #3:
 - Mid December- Please fill out poll on Date and Time that works best
 - <https://www.when2meet.com/?17371665-HoFyW>
- Priority locations & Location profiles
- Emphasis Area & Safety Action Toolbox
- Help us get the word out about the webmap survey! www.tinyURL.com/LafayetteLRSP

T'OOLE
DESIGN

Thank you

www.tooledesign.com