Grand Street Safety Improvement Project Recommendations

Transportation Commission Special Meeting
June 21, 2023

CITY OF ALAMEDA

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Grand Street: Three Segments

Staff Recommendation to Council

- Adopt a Design Concept for a continuous Two-Way Bikeway from Shore Line Drive to Clement Avenue
- Utilize local funds so that construction can begin in 2024 for Segments A and 2025 for Segment B

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Background

- **November 2022 - Council approved street design for Shore Line to Encinal (Segment A and B) as part of a re-paving project**
  - Constrained by curb-to-curb dimension
  - Constrained by existing repaving budget
  - Staff committed to review entire corridor
- **January 2023 - Staff retained new transportation consultant to review entire corridor**
  - Direction to explore alternatives without budget and curb-to-curb constraints
  - Paid special attention to citywide importance of unique north-south connection
- **January – July 2023 - Staff and consultant study corridor alternatives and community preferences**
  - Three new alternatives developed: all raised bikeways
  - Two community workshops: one in-person, one virtual. Online comment form.
  - Staff recommendations to Transportation Commission & City Council

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Why is Grand Street important?


Cross Alameda Trail


Shore Line Dr

Grand Street

A critical connector:

- Northern to southern waterfront
  - One of only two north/south streets between Eighth St and Park St
- Cross Alameda Trail and Shore Line Dr, two major east-west, low stress bikeways (both two-way bikeways)

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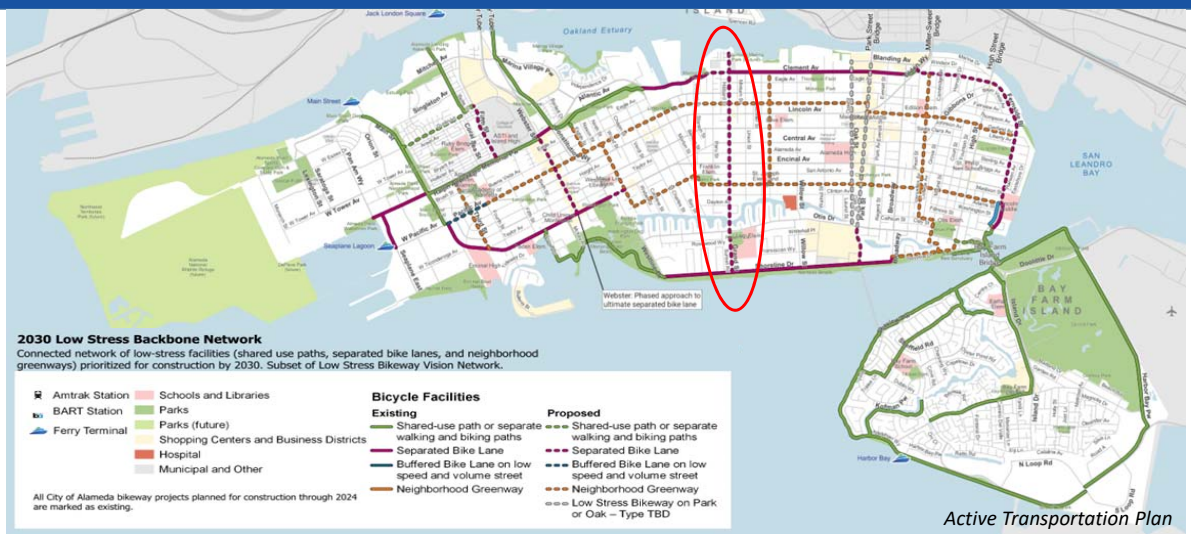
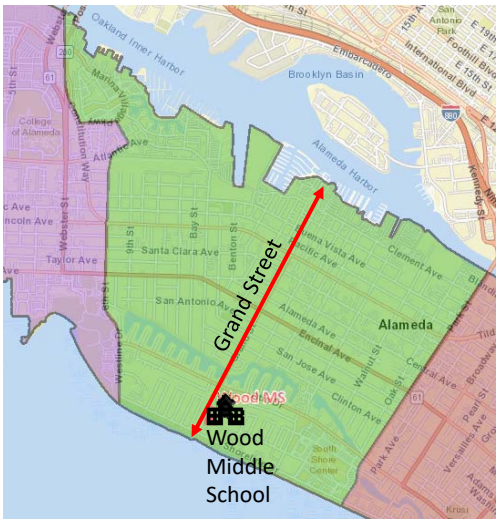
Important Link in Citywide Low Stress Network



Active Transportation Plan

A Key School Access Route

Grand St travels through the center of Wood Middle School enrollment area (*shown in green*)



Map of AUSD middle school enrollment areas

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A High Injury Corridor

- **City of Alameda,** *Vision Zero Action Plan*
- **Countywide**, *Alameda CTC Countywide Active Transportation Plan*
- **Region**, *MTC regional High Injury Network*

Collisions on Grand St disproportionately affect youth and elders. 2013 -2022 data:

- 39% of bicyclists injured in collisions were youth under age 18
- 86% of pedestrians injured or killed in collisions were elders age 65+

Bicycle High Injury Corridors Map, Vision Zero Action Plan

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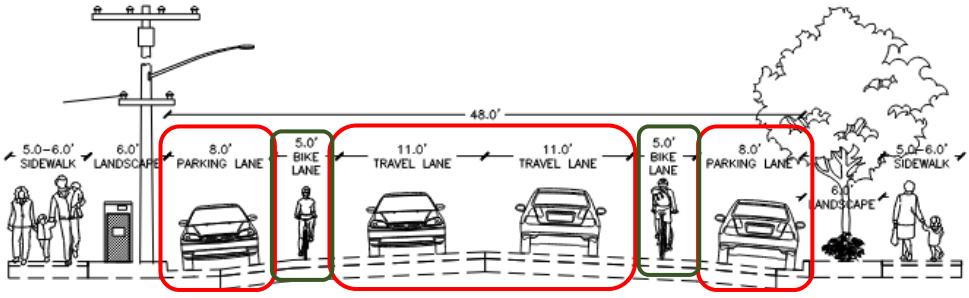
Grand Street Today



TYPICAL SECTION
EXISTING CONDITIONS

- 2 Travel lanes (11')
- 2 Parking lanes (8')
- 2 Sidewalks (5-6')
- 2 Standard unprotected bike lanes (5')
- 2 Landscaping areas (6')
- Street is 48' wide (curb to curb)

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Corridor Study Goals - Updated

- **Improve safety for all consistent with recently approved Active Transportation Plan and other policy goals**
  - People walking, bicycling and driving, and youth, seniors and those with disabilities
- **Design for the full length of Grand Street corridor from Shore Line to Clement**
  - Conditions vary over corridor's 20 blocks
- **Consider the full width of the public right-of-way, including sidewalks**
  - Not just the street from curb-to-curb
- **Consider costs and funding**
  - Don't lose the $827,000 in grant funds due to delays, and balance costs & benefits
- **Consider phased construction over time**
  - Deliver project in phases (similar to Cross Alameda Trail implementation)
  - Important to move quickly to address safety concerns

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Staff Recommendations

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Previous action vs current recommendations

	Council-Approved Design (Nov 2022), also recommended by Transportation Commission	Staff Recommendations (June 2023)
Full Corridor	Pedestrian crossing improvements, ADA improvements	Pedestrian crossing improvements, ADA improvements
Segment A: Shoreline to Otis	2-way bikeway on east side next to Wood School	**2-way bikeway** on east side next to Wood School. *Begin construction 2024*.
Segment B: Otis to Encinal	1-way parking/bollard-protected bikeways on each side of street	**2-way bikeway** on east side of street. *Use local funds to begin construction 2025.*
Segment C: Encinal to Clement	TBD with further study	**2-way bikeway** on east side of street. *Seek grant funds to begin construction by 2030.*

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Segment A: Shore Line to Otis
2-way bikeway on east side

- Approved by Council in 2022
- Parking/bollard-protected, on east side of street, next to Wood School
- Fully funded using $827,000 grant funding (+ local funds)
- Will be ready for construction in 2024
- Strong community support
- No changes

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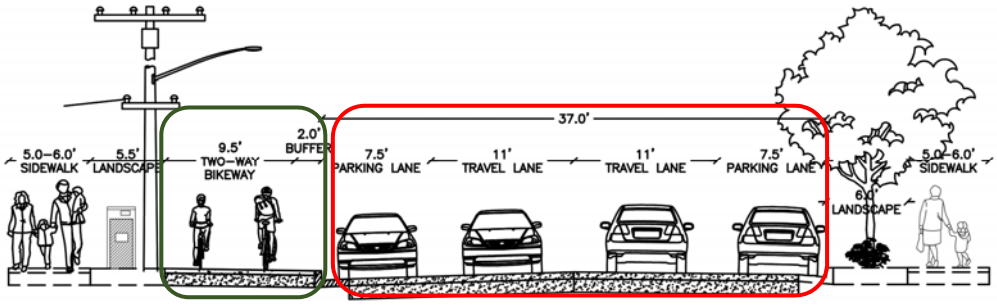
Segments B and C: Otis to Clement
Raised 2-way Bikeway on east side (Alt #1)



TYPICAL SECTION

- Moves curb 11 ft. to create 2-way raised bikeway on east side of Grand
- Street width curb to curb is reduced from 48’ to 37’ wide
- Parking on both sides, at curb

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Why Alternative #1?

- Creates continuous 2-way bikeway for full Grand St corridor
- Allows people biking to pass one another while riding in same direction
- Allows children to ride side-by-side on way to/from school
- Protects people biking with curb separation between parked cars and bikeway
- Intersection improvements will reduce conflicts between turning motorists and bicyclists:
  - Signalized: Add bike-only signals to provide a separate phase for people bicycling and walking
  - Un-signalized: Raise bikeway through intersections
- Less striping and plastic bollards
- Parking is at curbs, not floating
- Less parking loss (5% to 15% total reduction)

Community input:
- General consensus that Alt 1 is the best option
- Some concerns about safety of a two-way bikeway at driveways and intersections

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Alternatives studied and not recommended

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3 other options

- Council-Approved Design: 1-way parking/bollard-protected bikeways on each side of street
- Alternative #2: 1-way raised bikeways on each side of street
- Alternative #3: Enhanced raised 1-way bikeway

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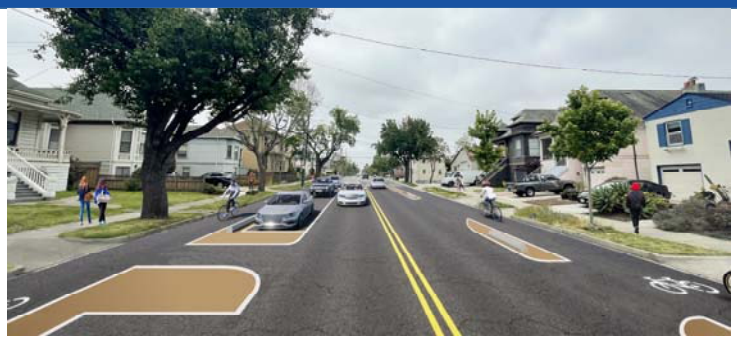
Council-Approved Design: 1-way parking/bollard-protected bikeways



- Bikeways on both sides of street, protected by parked cars or bollards
- Parking for half blocks only, on each side of street ("chicane")
- 60-75% parking loss
- More frequent driveways in Segment C, so more parking impacts than Segment B

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Alternative #2: Raised 1-way Bikeways

- Moves curbs 6' on both sides of street, for 1-way raised bikeway on each side of street
- Street is reduced from 48' to 36' wide
- Narrowest bikeways and curb-to curb width of all Alternatives
- More expensive than Council-Approved and Alternative #1

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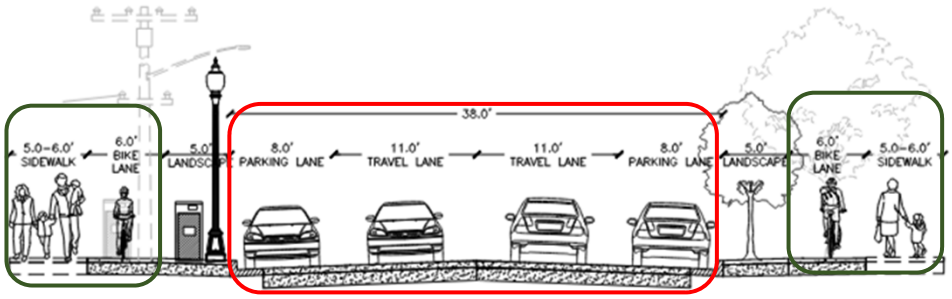
Alternative #3: Enhanced Raised 1-way Bikeways



- Moves curb 5' on each side of street, reducing street from 48' to 38' wide
- Moves all utilities and replaces mature trees to allow for 1-way bikeways next to sidewalks
- Most expensive and takes longest to build of all alternatives

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Recommendation

- Endorse preferred Design Concept for the Grand Street Safety Improvement Project for a **continuous Two-Way Bikeway from Shore Line Drive to Clement Avenue**
- *Staff are recommending to Council that local funds be used so that construction can begin in 2024 for Segments A and 2025 for Segment B*
- Next Step: City Council Meeting – July 18

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EXTRA SLIDES

Cost Comparison

Design	Cost Estimate	*Increase over Council-Approved design*
Council-Approved Design		
Segment A: Shore Line to Otis - Fully funded with grant	*$ 1,500,000*	
Segment B: Otis to Encinal	$ 2,970,000	
Segment C: Encinal to Clement	$ 4,080,000	
Total (Segments B+C)	**$ 7,050,000**	
Alternative #1: Raised 2-way bikeway		
Segment B: Otis to Encinal	$ 5,610,000	*$ 2,640,000*
Segment C: Encinal to Clement	$ 7,720,000	*$ 3,640,000*
Total (Segments B+C)	**$ 13,330,000**	*$ 6,280,000*
Alternative #2: Raised 1-way bikeways		
Segment B: Otis to Encinal	$ 6,880,000	*$ 3,910,000*
Segment C: Encinal to Clement	$ 9,690,000	*$ 5,610,000*
Total (Segments B+C)	**$ 16,570,000**	*$ 9,520,000*
Alternative #3: Enhanced raised 1-way bikeways		
Total (Segments B+C)	**$ 24,370,000**	*$17,320,000*

Costs estimates are total costs: construction, design, construction management, escalation, and contingencies.

Parking Comparison

Design	Percent of Existing Parking Removed
Council-Approved	60-70%
Alternative #1: Raised 2-way bikeway	5-15%
Alternative #2: Raised 1-way bikeways	10-30%
Alternative #3: Enhanced raised 1-way bikeways	10-30%

Ranges are estimates, and are primarily based on amount of red curb added at driveways, to be determined based on site conditions, best practices and safety.

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RW42

Implementation Timing Comparison

Design	Estimated Year to Begin Construction
Council-Approved	Segments A and B in 2024 Segment C in 2026 (grant funds needed)
Alternative #1: Raised 2-way bikeway	Segment A in 2024 **Segment B in 2025 (if all local funds); in 2026-27 (if grant funds)** Segment C by 2030 (grant funds needed)
Alternative #2: Raised 1-way bikeways	Segment A in 2024 **Segment B in 2025 (if all local funds); in 2026-27 (if grant funds)** Segment C by 2030 (grant funds needed)
Alternative #3: Enhanced raised 1-way bikeways	Segment A in 2024 **Segment B in 2028-29 (with grant funds)** Segment C by 2030 (grant funds needed)

Timing based on estimates of availability of, and success in securing, grant funds.

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Slide 26

RW42 Clarify, that implementation (sooner) in staff report is based on LOCAL funds.

Rochelle Wheeler, 6/12/2023

Alternatives are similar in many ways

	Council Approved Design	Alternative 1 *(Recommended)*	Alternative 2	Alternative 3
2 travel lanes	✓	✓	✓	✓
Pedestrian improvements	✓	✓	✓	✓
Low stress, separated bike lanes	✓	✓	✓	✓
Bikeway raised to sidewalk level		✓	✓	✓
Auto parking on both sides of street, at the curbs		✓	✓	✓
Curb to curb street width narrowed		✓	✓	✓

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