




**City Council
Study Session**

**Item No. 2, RTC 21-1290
Study Session on a Potential
Quiet Zone and Vision Zero
Policy**

November 16, 2021

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**City of
Santa Clara**
The Center of What's Possible

Study Session Agenda

Part 1 – Quiet Zone

- Staff Presentation
- Questions

Part 2 – Vision Zero

- Staff Presentation
- Questions

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Quiet Zone Agenda

- Background / Definition
- Quiet Zone Establishment
- Considerations
- Cost and Schedule



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Federal Train Horn Rule

- Requires trains to sound horns 15 to 20 seconds before entering a crossing
- A crossing is an at-grade intersection between a roadway and railroad tracks
 - Roadway is owned by a public agency
 - Does not include light rail (excluded from FRA jurisdiction)

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Quiet Zone Definition

- A section of railroad where trains do not follow the Train Horn Rule
- Prohibits use of train horns at crossings
 - Does not include train stations
 - Horns may be sounded in emergencies
- Must be at least 1/2 mile in length
- Must contain at least one crossing



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Quiet Zone – FRA Risk Index

- The FRA uses a Risk Index for every crossing
- Based on vehicle counts, train counts, roadway lanes, railroad tracks, and collision history
- Requires a study to ensure Risk Index is not increased without horns
- Capital Improvements may be required to implement a Quiet Zone



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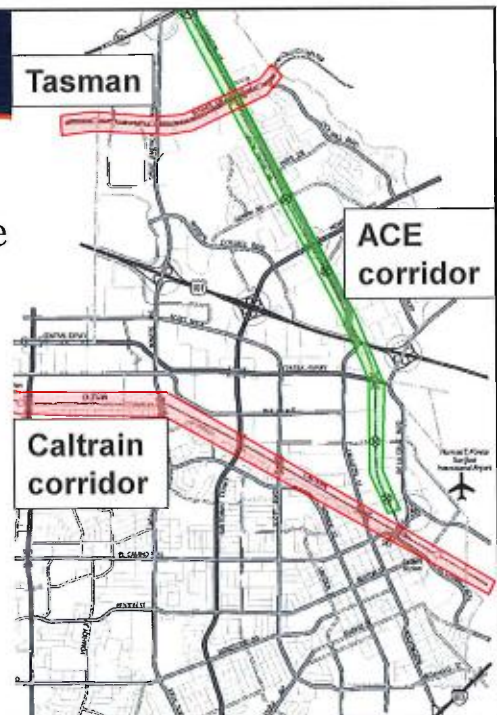
Establishing a Quiet Zone

- Hire Consultant to conduct study
 - Public Outreach
 - Coordinate with Rail Operators/FRA/CPUC
 - Determine crossings within the proposed quiet zone
 - Analyze/propose improvements to address FRA Risk Index criteria
- Council approval of Quiet Zone Study
- Notice of Intent (NOI) to railroad operators
- Design and Construct improvements
- Notice of Establishment (NOE) to railroad operators

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Quiet Zone Eligibility

- Potential crossings within quiet zone
 - Not eligible
 - Light rail tracks (Tasman)
 - Railroad track with grade-separated crossings (Caltrain corridor)
 - Eligible for study
 - Railroad track parallel to Lafayette Street (ACE corridor)
 - 5 Crossings



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Example of Improvements

- Railroad Gates
- Signals
- Curb Medians
- Signage and striping
- Road closure or grade separation



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Quiet Zone Considerations

- Additional costs to construct and maintain new safety measures
 - San Jose study estimated \$19 to \$32 million to construct improvements for 14 crossings
- Review the potential of additional risk mitigation
 - Removal of train horn could increase City risk and liability
 - Additional insurance may be required

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Quiet Zone Cost and Schedule

- Confirm priorities and evaluate workload
- Estimated study cost of \$300,000
 - Consultant/UPRR/Data collection costs
- Approximately 2 years to complete study
 - RFP/Award/Study Completion/Council Approval
- Implementation Schedule and Costs unknown
 - Dependent on required improvements



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QUESTIONS ?

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Vision Zero Plan Agenda

- Background / Concepts/Approach
- Potential Work Plan
- Considerations
- Cost and schedule

VISION ZERO

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Vision Zero Background

- Created in Sweden in 1997
- Goal - reduce and eventually eliminate traffic fatalities and severe injuries
- Bicycle Plan Update 2018 and Pedestrian Master Plan 2019
"Study implementing a Vision Zero policy before 2024"
- "Unfunded Project" in FY 2020/21 and FY 2021/22
Adopted Capital Budget
- No recent grant options available
- Project will be proposed in the upcoming biennial budget

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Vision Zero Concepts

- People make mistakes and error is inevitable
- Policies and roadway designs should be reviewed to minimize consequences of such mistakes
- Data driven analysis
- Active community engagement
- Education and enforcement are essential
- Make safety the highest priority
- Continuous monitoring and active management

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Vision Zero Approach

TRADITIONAL APPROACH

Traffic deaths are **INEVITABLE**
PERFECT human behavior
Prevent **COLLISIONS**
INDIVIDUAL responsibility
Saving lives is **EXPENSIVE**

VS

VISION ZERO

Traffic deaths are **PREVENTABLE**
Integrate **HUMAN FAILING** in approach
Prevent **FATAL AND SEVERE CRASHES**
SYSTEMS approach
Saving lives is **NOT EXPENSIVE**

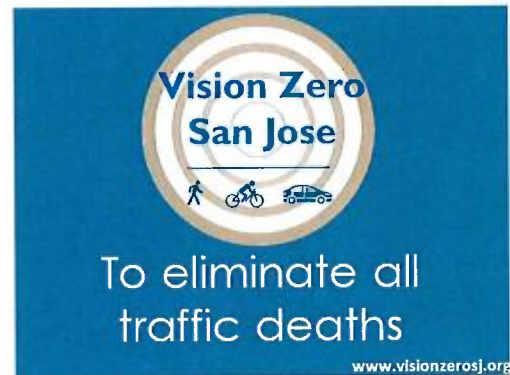
Source: Vision Zero Network

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Vision Zero Locally

- Alameda
- Berkeley
- Daly City
- Fremont
- Menlo Park
- San Jose
- Sunnyvale
- San Francisco



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Potential Work Plan

- Consultant lead initiative
- Community Engagement
- Create a task force and/or advisory group
- Prepare an Action Plan
- Implementation Strategy
- Priority Project Development
- Progress Updates

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Task Force/Advisory Group Members

- City departments
- Councilmembers
- Community groups
- Neighboring agencies
- BPAC



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Action Plan

- Identify vision and goals
- Collect data and analyze roadways
- Complete public outreach
- Conduct media campaigns



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Implementation Options

Identify solutions focusing on engineering, education, and policies

- | | |
|--------------------------------------|----------------------------------|
| • Education Campaign | • Reduced speed limits |
| • 15/20 mph school speed limits | • Protected bikeways |
| • Green bike lanes | • Safe Routes to School Program |
| • Improved crossings | • Striping and signage |
| • Intersection bulbouts and lighting | • Speed feedback signs |
| • Signal operations | • Narrow lanes and road diet |
| | • Targeted/increased enforcement |

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Implementation Options

Identify solutions focusing on engineering, education, and policies



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Implementation Options

Identify solutions focusing on engineering, education, and policies

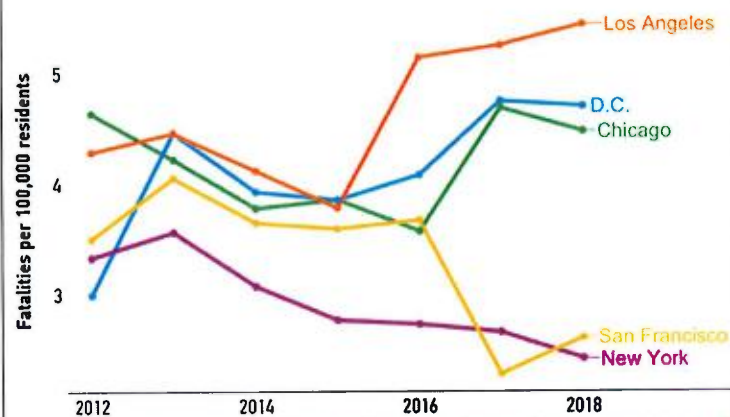


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Vision Zero – U.S.

Traffic fatalities, 2012-2018



Source: New York City Vision Zero View, IDOT, DIXOT, LADOT, San Francisco Vision Zero (David H. Montgomery / CityLab)



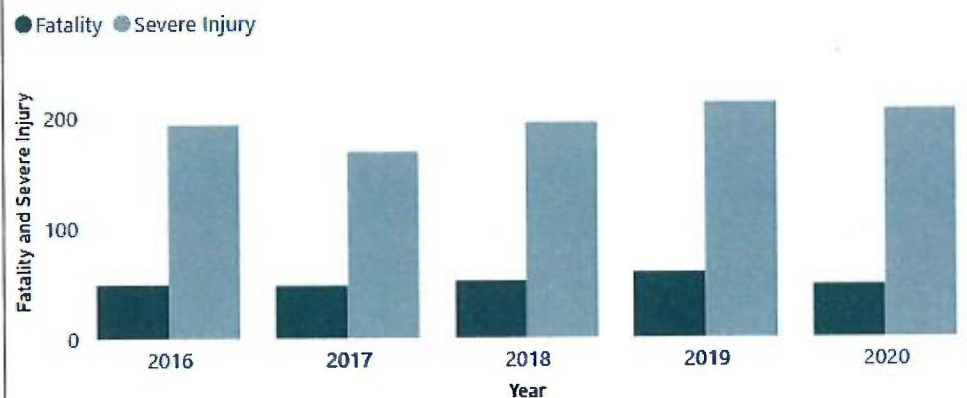
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Vision Zero – Local

- San Jose results

Fatality and Severe Injury by Year



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Vision Zero Funding

- Additional funding required to construct and maintain Vision Zero improvements
 - Fremont constructed 5 protected intersections at a cost of \$6 million
 - San Jose estimated \$20 million to improve for 14 corridors
 - San Francisco's Lombard Street Vision Zero project improved 1.2 miles and 13 intersections at a cost of \$19 million

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Vision Zero Cost and Schedule

- Confirm priorities and evaluate workload
- Estimated cost of \$315,000
- Approximately 2 years to complete
 - RFP/Award/Plan Completion/Council Approval
- Implementation Schedule and Costs unknown

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QUESTIONS ?

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