

### **Quiet Zone Overview**

JeffSchmidt for D3 City Council





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### The growing train noise problem in Menlo Park

- Train noise from extremely loud horns is causing constant noise pollution for Menlo Park
- Noise levels are a minimum of 96 decibels and a maximum of 110 decibels... similar to the worst sources of urban noise pollution
- Approximately 72 passenger and freight trains pass Menlo Park's four crossings every day. They are all within 6/10<sup>th</sup> of a mile and start at 5:15am and end at 1:00am. That's 288 crossings, with 3-4 horn blasts per crossing
- Electrification is expected to more than double the number of trains each week
- Horns impact health across the entire city:
   Physical (racing pulse, high blood pressure, headaches), psychological (attacks of stress, fatigue, depression, and anxiety), sleep (noise above 45db prevents sleep), and memory / concentration (ability to focus, lower performance, hard to study)







Dog 60-80dB

Car horn 90dB

Bus 100dB

Nightlife 100dB

Caltrain 96-110dB

Construction 110dB

Aircraft 130dB





Source: <a href="https://www.iberdrola.com/sustainability/what-is-noise-pollution-causes-effects-solutions">https://www.iberdrola.com/sustainability/what-is-noise-pollution-causes-effects-solutions</a>. Caltrain stats are from public comments to city council from <a href="mailto:resident Steve Walter">resident Steve Walter</a>. Caltrain Menlo Park photo from <a href="mailto:corvidsketcher.com">corvidsketcher.com</a>

### A quiet zone is the solution

- Train engineers have discretion to use the horn for any safety situation
- A quiet zone reduces noise impact <u>and</u> meets federal requirements for safety
- All trains must comply with the quiet zone, including late night freight trains
- A quiet zone makes crossing improvements using a variety of supplementary safety measures – crossing closures, four quadrant gate systems, gates with channelization devices, and gates with medians
- In Menlo Park, quad gates and medians will be constructed
- Atherton's two quiet zones are considered exceptional achievements. Palo Alto is on track to establish a quiet zone at Palo Alto Avenue. The full quiet zone would cover several miles

### **Examples of Supplementary Safety Measures**



**Crossing Closure** 

Four Quadrant Gate System

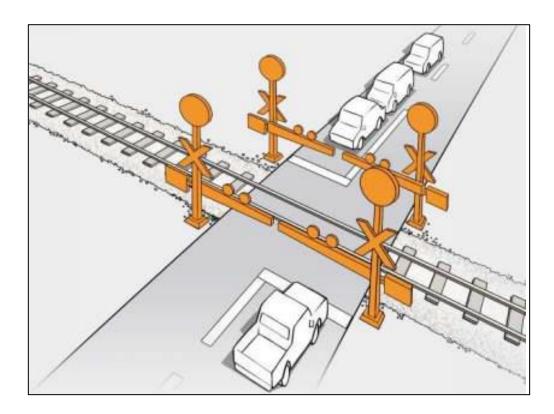


Gates with Channelization Devices

Gates with Medians

# Safety considerations

- Horn noise is generated to protect the public and reduce accidents
- That's why a quiet zone is based on safety measures that are required by the Federal Railroad Administration
- Menlo Park has four crossings, all within the span of 6/10<sup>th</sup> of a mile, so the noise from train horns is concentrated and frequent
- A field study was conducted by Kimley-Horn and Associates, an engineering, planning, and design firm, to assess needed improvements
- They determined that a quiet zone could be established across all four crossings after safety upgrades are made to the two intersections – Oak Grove and Ravenswood – where approximately 75% of all crossings take place
- The city can also choose to upgrade lower-traffic intersections as budget allows



Quad gates eliminate the risk of traffic passing over the tracks, reducing the need for engineers to blow their horns as a warning

# Steps to establish the quiet zone

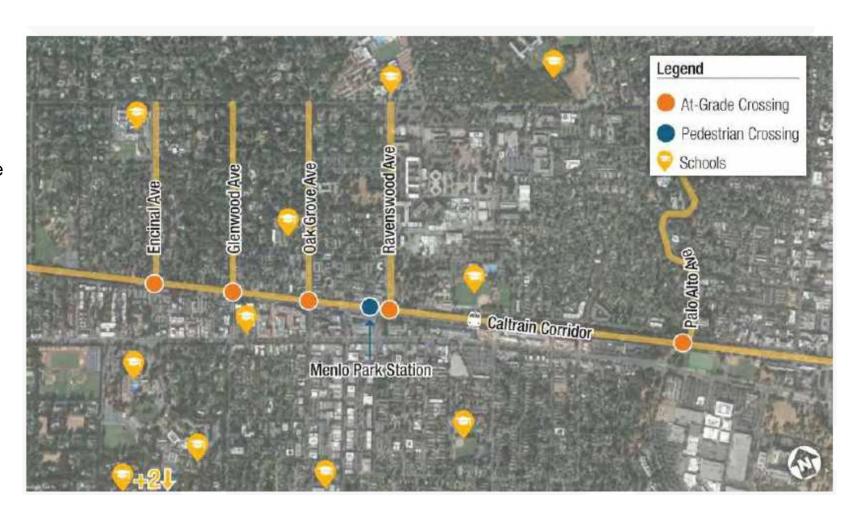
2026 and 2025 2023 2024 beyond This is an estimated timeline **Permits** Field study and data Budget secured for Notice of intent filed It's based on best case collection by Kimley final engineering with agencies scenarios to illustrate the main CPUC General Horn completed and design steps in the process Order 88-B used to inform project Construct quad Encroachment development gates for two Implementation will require a permit crossings - Oak coordinated approach with the Construction & Grove and Federal Railroad Administration. Kimley » Horn Maintenance Ravenswood Caltrans, and the city team CITY OF MENLO PARK AND CITY OF PALO ALTO QUIET ZONE STUD agreements Document Review and Initial Data Collectio Quiet Zone Analysis California Continued outreach SSM at Each Crossing SSM at Some Crossings (QZRI Less Than RIW) **Environmental** to community **Quality Act** Outreach and Coordinatio City of Palo Alto City of Menlo Pari National Inspect and certify Environmental quiet zone with Policy Act necessary agencies Funding sources Ensure budget for decided for maintenance and construction re-certification

# A collaborative approach

This improvement project is a collaboration between various departments and groups in the city, multiple transportation agencies, and an active and dedicated group of resident supporters and local businesses

- Residents and businesses in different neighborhoods are advocating for change and providing feedback
- City Staff are focused on project scoping and implementation – City Manager's Office, Community Development, and Public Works
- City Council is providing guidance and prioritizing the project in the city's budget

   the Capital Improvement Plan / <u>Traffic</u> and <u>Transportation Section</u>
- Budgeted for \$130,000 in 2024-25.
   Identifying avenues to explore funding of \$4,000,000 through various sources in the 2025-26 timeframe



### What's next

- Final engineering designs completed
- Funding sources for construction identified
- Permitting process started
- Ongoing outreach and communication sessions held with residents across impacted districts
- Construction planned, started and finished!











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