Gautho, Julia

From: Kevin Maguire <kmaguire831@gmail.com>
Sent: Friday, February 21, 2025 4:17 PM
To: City Council
Subject: 2.27.2025 City Council Meeting Agenda Item 7b Based on the Bay Avenue Corridor Study, the roundabout option (Alternative 2) presents several negative impacts on side streets and other streets with stop signs: 1. Increased Traffic on Side Streets Traffi...

Follow Up Flag: Follow up
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I live on Monterey Ave, and traffic is backed up from about 445 pm till 5:45-6 pm down to Monterey Park, and NBMS on days with accidents or detours on the freeway.

Park Avenue is also backed up, and a lot of cut through traffic on Columbus, Sir Francis.

Right now we have a natural system that stops and then lets traffic flow. Stops and lets traffic flow.

By opening the flood gates at Bay/Hill, Bay and Capitola, Bay and Monterey. You will be impacting us down stream.

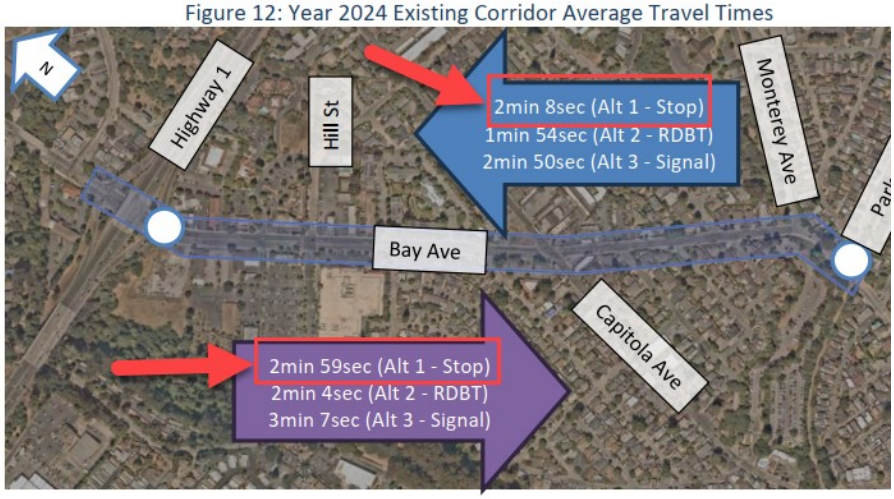
We need that data, and studied in the report. I know you are trying to make it better, but you also are making it worse for others.

It takes me 5-10 mins at times to turn into my driveway because traffic is at a standstill.

I found some flawed data, there might be more

efficiently and the facility is experiencing less traffic congestion.

Figure 12: Year 2024 Existing Corridor Average Travel Times



Existing Conditions

Vehicles traveling northbound on the Alternative 1 Stop layout would have an average peak hour time of 2 minutes 9 seconds, and the estimated annual VHT from Park Avenue to SR1 is 62,501 vel hours. The Alternative 2 Roundabout layout would have an average peak hour travel time of 1 mir 54 seconds and would have an annual VHT of 55,492 vehicle-hours. The Alternative 3 Signal layou would have an average peak hour travel time of 2 minute 50 seconds and would have an annual V 82,726 vehicle-hours.

Similarly, vehicles traveling southbound on the Alternative 1 Stop layout would have an average p hour travel time of 3 minutes 59 seconds, and the estimated annual VHT from SR1 to Park Avenue 98,494 vehicle-hours. The Alternative 2 Roundabout layout would have an average peak hour trav

My assistance ChatGPT 4.0 analyzed the 334 paged, Here are some of the major issues and some proposed resolutions. (i dont think Traffic lights are it, but there was a time at Monterey and Kennedy there was no stop sign, same at Kennedy and Sir Francis.

Remove those, and put a roundabout at Park and Kennedy. You need to address the full flow of traffic at the bottle neck points we already have. .

The Bay Avenue Traffic Study was conducted to analyze the impact of proposed roadway modifications, including the introduction of a roundabout. However, several key flaws were identified in the study's methodology and reported data, potentially affecting the accuracy and reliability of its conclusions. This report consolidates these issues and provides targeted recommendations for improvement.

Key Identified Flaws and Recommendations

1. Data Collection Limitations

- **Flaw:** Data was collected on a **single day (May 16, 2024)**, failing to account for daily, weekly, or seasonal fluctuations.
- **Recommendation:** Conduct multi-day, multi-seasonal data collection, including school days, weekends, and holidays.

2. Inconsistent Peak Hour Selection

- **Flaw:** The PM peak (3:55 – 4:45 PM) does not align with standard peak congestion periods (typically 4:30 – 6:00 PM).
- **Recommendation:** Expand study periods to **two-hour windows** for AM and PM rush hours (**7:00 – 9:00 AM, 4:00 – 6:00 PM**), and include a late evening period (**6:00 – 8:00 PM**).

3. Drone-Based Data Collection Issues

- **Flaw:** Potential inaccuracies due to **obstructions (tree cover, shadows), AI misinterpretation of vehicle stops, and lack of ground-truth validation**.
- **Recommendation:** Cross-validate drone data with **manual counting or ground sensors** and integrate **multiple data collection methods** (loop detectors, radar, video analysis).

4. Lack of Side-Street Impact Analysis

- **Flaw:** The study primarily examines Bay Avenue and **fails to assess congestion at side streets and key intersections** (e.g., Monterey & Park, Monterey & Kennedy, Park & Kennedy).
- **Recommendation:** Conduct a **side-street traffic impact analysis** using **Synchro modeling** to estimate increased wait times at stop signs.

5. Gaps in Pedestrian and Bicycle Safety Assessment

- **Flaw:** No detailed evaluation of **pedestrian wait times, bicycle conflict zones, or traffic rerouting risks**.
- **Recommendation:** Implement a **pedestrian delay study** and **bike lane conflict analysis** to determine potential safety concerns and mitigate risks.

6. Inconsistent Level of Service (LOS) Reporting

- **Flaw:** The study **uses different software models** (Synchro for signals, Sidra for roundabouts, VISSIM for road diets), leading to inconsistency.
- **Recommendation:** Standardize LOS calculations using **one traffic modeling software** (Synchro or Sidra) for uniform comparisons.

Conclusion & Next Steps

While the Bay Avenue Traffic Study provides useful insights, these **methodological flaws** weaken its reliability. Addressing these issues through **expanded data collection, improved modeling consistency, and additional safety analyses** will lead to **better-informed transportation planning decisions**.

Next Steps:

1. Expand data collection across **multiple days and seasons**.

2. Standardize **two-hour peak period analysis**.
3. Validate AI-based traffic detection with **manual/sensor-based cross-checking**.
4. Conduct **side-street congestion modeling** to assess stop sign delays.
5. Enhance **pedestrian and bicycle safety assessments**.
6. Standardize **LOS calculations** across all traffic models.

Implementing these improvements will enhance the study's accuracy and effectiveness in guiding future transportation policies.

- Kevin Maguire

Cliffwood Heights
Capitola, CA
