



COUNCIL REPORT

DATE: May 9, 2023
CATEGORY: Consent
DEPT.: Public Works
TITLE: **North Bayshore Trip Cap Monitoring Reports and Fiscal Year 2023-24 Professional Services Agreement**

RECOMMENDATION

1. Review and accept the fall 2022 and spring 2023 North Bayshore Trip Cap Reports.
2. Authorize the City Manager or designee to enter into a professional services agreement with Fehr and Peers, Inc., to provide transportation consulting services for North Bayshore District Transportation Monitoring for Fiscal Year 2023-24, in an amount not to exceed \$160,400.

BACKGROUND

The City began monitoring the number of vehicle trips at each of the three North Bayshore gateways (San Antonio Road, Rengstorff Avenue, and Shoreline Boulevard) in February 2014 as part of the North Bayshore Precise Plan (NBPP). This monitoring occurs in fall and spring of each year to ensure compliance with the maximum allowed number of trips during the peak period. Annual reports are generally submitted to the City Council in late spring. Past monitoring reports are available on the City's webpage at MountainView.gov/NorthBayshoreTripCap.

North Bayshore Precise Plan

In December 2017, the City Council adopted an updated NBPP, including the following key policies:

- **North Bayshore Gateway Peak-Hour Vehicle Trip Cap.** The district vehicle trip cap was established as the maximum allowed number of trips at the three North Bayshore gateways during the a.m. and p.m. peak-hour periods. The trip cap was set to include both inbound and outbound trips. The trip cap was subsequently modified by the North Bayshore Circulation Study discussed below. The City monitors the number of vehicle trips at the three major entry points into North Bayshore where the trip cap is enforced.

- Vehicle Trip Cap Penalties. Based on the NBPP, if monitoring shows that the trip cap is exceeded at any of the three gateway locations for two consecutive monitoring periods, the City will not grant any new building permits for net new square footage in the NBPP area until the number of peak-hour vehicle trips is reduced below the trip cap, except as described in the next paragraph.

An application for new development may propose strategies, including, but not limited to, physical improvements to the transportation network and additional Transportation Demand Management (TDM) measures, along with traffic analysis demonstrating that the proposed strategies and/or improvements will comply with the district vehicle trip cap prior to project occupancy. The proposed strategies and/or improvements shall be implemented prior to building occupancy, unless deemed otherwise by the City Council. The City Council will consider applications proposing improvements to the transportation network and/or additional TDM measures according to the review process established by Council Policy.

North Bayshore Circulation Feasibility Study

The North Bayshore Circulation Feasibility Study (Circulation Study) developed updated transportation strategies for the full development of the North Bayshore Precise Plan. The City Council initially reviewed the Circulation Study recommendations on [June 8, 2021](#) and approved the final Study and recommendations on [December 7, 2021](#). The Circulation Study recommendations were developed to manage vehicle capacity at the gateways through a combination of demand management, modal shift, and limited infrastructure strategies. The recommendations included an updated list of Priority Transportation Improvement projects and a requirement that future office development achieve a lower single-occupancy vehicle (SOV) rate in the range of 35% to 40% for both existing and future employees, which is lower than the NBPP's 45% SOV target.

The Circulation Study approved by Council included modified gateway trip cap policies to revise the time period and locations for compliance and to update gateway capacity estimates as follows:

- Continue the twice-yearly gateway monitoring program to track post-COVID traffic patterns and compliance trends. The monitoring should measure three-hour peak-period trips in both directions at each gateway and mode-share trends.
- Expand the monitoring program as new growth occurs to better understand characteristics of peak traffic, use of non-SOV modes, and trip characteristics of new residents.

- Measure compliance by comparing actual peak direction trips (a.m. inbound and p.m. outbound) with the gateway capacity for both the a.m. and p.m. three-hour peak periods as opposed to just the peak hour.
- Measure compliance by combining the Shoreline Boulevard and Rengstorff Avenue gateways. The San Antonio Road gateway should continue to be measured separately.
- Adjust the Shoreline Boulevard and Rengstorff Avenue gateway capacities as new infrastructure projects are completed.

On [June 28, 2022](#), Council approved a professional services agreement with Fehr and Peers, Inc, to provide consultant services for the North Bayshore District Transportation Monitoring in the amount of \$160,400.

ANALYSIS

The following focuses on the key findings from the *Fall 2022* and *Spring 2023 North Bayshore District: Transportation Monitoring Report* of gateway peak-hour vehicle trip volumes and SOV mode share. The main reports are included as Attachments 1 and 2, with appendices to the reports located at MountainView.gov/NorthBayshoreTripCap.

Observations During the Continued Pandemic Disruption

The fall 2022 observations, collected during October and November 2022, are not consistent with pre-COVID conditions because many employees continued to work remotely and postpandemic working arrangements for North Bayshore have not yet settled into distinctive commute patterns.

The spring 2023 observations, collected in February 2023, also reflected the ongoing transitional period, which is likely to continue into the next fiscal year as employers implement and adjust to new hybrid work models.

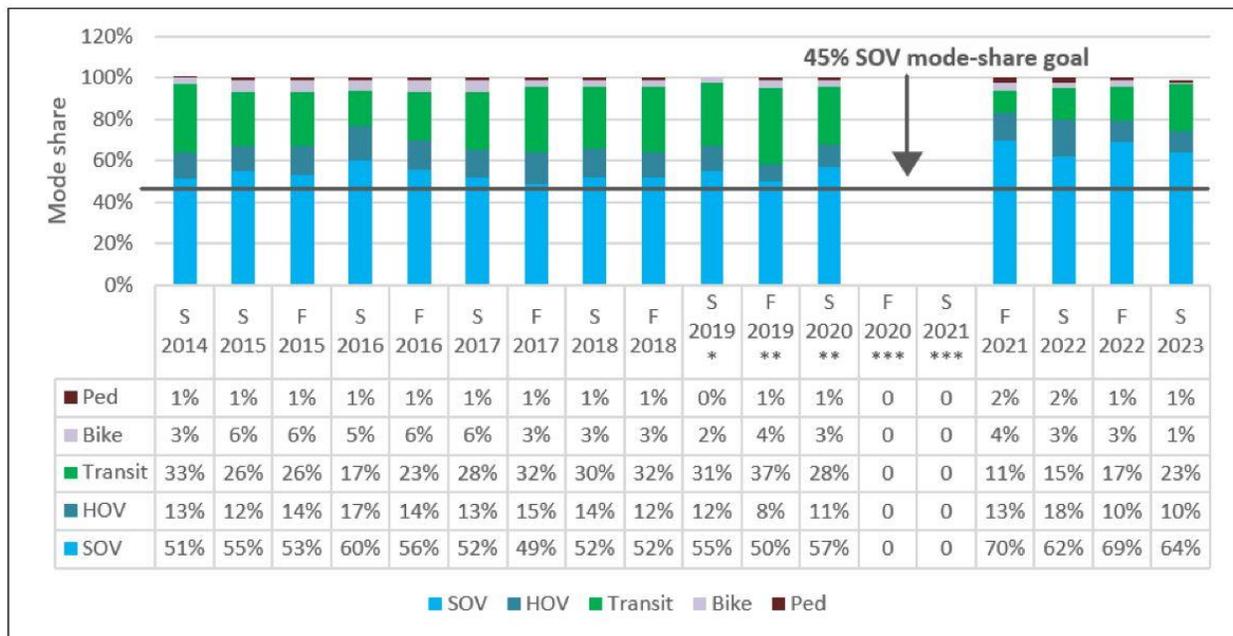
During this transitional period, the observed travel behavior includes a large number of employees not coming on-site to the workplace regularly and a higher SOV rate than pre-COVID for those employees who are commuting to the workplace. While vehicle congestion is returning to Bay Area freeways, each of the three gateways were below their peak-period vehicle trip cap during both the morning and evening periods.

Combined Gateway Mode Share

Table 1 shows the historical trend for all modes of travel, including high-occupancy vehicles (HOV), transit, bicycle, and walking, for the peak hour since monitoring began in 2014. The gateway counts include Stevens Creek Trail and Permanente Creek Trail gateways into North Bayshore to determine mode shares. Key findings include:

- The morning inbound peak-hour SOV mode share has varied since monitoring began in 2014, ranging from as low as 49% in fall 2017 to as high as 70% in fall 2021. The spring 2023 count observations reported an inbound a.m. peak hour SOV mode share of 64%, a 5% decrease from fall 2022 but still significantly more than the prepandemic rates. Since monitoring activities resumed in fall 2021, the morning peak-hour SOV mode share has averaged 66%.

Table 1: Inbound Morning Peak-Hour Mode Split for Combined Gateways, 2014-2023¹



¹ * TNC—Transportation Network Company (i.e., Uber, Lyft). The City started monitoring TNCs in spring 2019. A one-person TNC (driver only) was included in the SOV category, while two-or-more-person TNC (driver plus passenger(s)) vehicles were categorized as HOV.

** Since fall 2019, TNC drivers have been excluded from the mode-share summary. The emergence of TNC vehicles has resulted in an alternative accounting of vehicle occupancy that excludes TNC drivers from the vehicle occupancy observations because they are providing a service and are not part of the traveling public with an origin or destination in North Bayshore.

*** Due to COVID-19 and the dramatic decrease in traffic in Mountain View, and throughout the Bay Area, during this period, the City did not prepare monitoring reports for fall 2020 and spring 2021.

- Although transit ridership declined significantly following the pandemic, transit mode share markedly increased by 12% since monitoring resumed two years ago—from a low of 11% in fall 2021 to 23% transit mode share this spring.
- Bike share remained at the 3% to 4% rate seen before the pandemic for the counts from fall 2021 through fall 2022. The rate dropped to 1% in the spring 2023 count due to the closure of Permanente Creek Trail, which started in January 2023 and will continue through May 2023. During Valley Water’s Floodwall Retrofit Project, Permanente Creek Trail users have been detouring temporarily via Rengstorff Avenue, which likely contributed to a temporary decline in the bike share into and out of the North Bayshore Area.

The 2022-23 monitoring data reflects the return-to-office hybrid models that were implemented by large employers late last spring. The Mountain View Transportation Management Association (TMA), employers, and transit operators all recognize the importance of providing convenient and efficient service to bring commuters back to transit. In addition, in January 2023, the City Council extended the temporary bus lanes on Charleston Road from Landings Drive to Shoreline Boulevard until construction of Phases 2 and 3 of the Charleston Transit Boulevard project. This project will provide permanent transit-only lanes and protected bikeways on Charleston Road to support commute alternatives as congestion returns with the occupancy of the Google Landings project and the development of the Google Master Plan.

Fall 2022 Combined and Individual Gateway Peak-Period Trip Cap Comparison

The fall 2022 total traffic volumes at the three gateways (San Antonio Road, Rengstorff Avenue, and Shoreline Boulevard) combined and individually are lower than the total gateway vehicle trip cap and comply with the North Bayshore Gateway Peak-Period Vehicle Trip Cap Policy (Table 2).

Table 2: Fall 2022 Gateway Trip Cap Performance—A.M. and P.M. Peak Period

| Gateway | Morning Inbound | | | | Evening outbound | | | |
|--------------------------------------------------|-----------------|----------|----------------------------|---------------------------------------|------------------|----------|----------------------------|---------------------------------------|
| | Volume | Trip Cap | Remaining Gateway Capacity | Percent of Gateway Capacity Remaining | Volume | Trip Cap | Remaining Gateway Capacity | Percent of Gateway Capacity Remaining |
| San Antonio Road | 1,210 | 4,140 | 2,930 | 71% | 1,060 | 3,620 | 2,560 | 71% |
| Rengstorff Avenue | 3,740 | 8,880 | 5,140 | 58% | 3,550 | 7,140 | 3,590 | 50% |
| Shoreline Boulevard | 5,040 | 7,470 | 2,430 | 33% | 5,130 | 8,190 | 3,060 | 37% |
| Total | 9,990 | 20,490 | 10,500 | 51% | 9,740 | 18,950 | 9,210 | 49% |
| Combined Gateways | | | | | | | | |
| Shoreline Boulevard & Rengstorff Avenue Combined | 8,780 | 16,350 | 7,570 | 46% | 8,680 | 15,330 | 6,650 | 43% |

Spring 2023 Combined and Individual Gateway Peak-Period Trip Cap Comparison

Much like the fall 2022 monitoring period, the spring 2023 report highlights reduced traffic volumes compared to pre-COVID travel patterns, when in 2018, the Shoreline Gateway had reached 104% of capacity in the a.m. peak hour.

The spring traffic counts show that 58% of the total allowable gateway capacity in the morning was used, mirroring the 59% in the evening peak period for the Shoreline Boulevard and Rengstorff Avenue gateways combined (Table 3). As employees return to the office under hybrid work models, traffic volumes from fall 2022 to spring 2023 increased by 8% for the combined gateways. The Shoreline Boulevard gateway saw the highest increase in traffic volume in both the a.m. (8%) and p.m. (10%) peak periods over the 2022-23 monitoring periods. The Fiscal Year 2023-24 monitoring reports will be important to gauge the evolving travel patterns postpandemic.

Table 3: Spring 2023 Gateway Trip Cap Policy Evaluation—A.M. and P.M. Peak Periods

| Gateway | Morning Inbound | | | | Evening outbound | | | |
|--------------------------------------------------|-----------------|----------|----------------------------|---------------------------------------|------------------|----------|----------------------------|---------------------------------------|
| | Volume | Trip Cap | Remaining Gateway Capacity | Percent of Gateway Capacity Remaining | Volume | Trip Cap | Remaining Gateway Capacity | Percent of Gateway Capacity Remaining |
| San Antonio Road | 1,330 | 4,590 | 3,260 | 71% | 710 | 4,020 | 3,310 | 82% |
| Rengstorff Avenue | 4,030 | 8,880 | 4,850 | 55% | 3,420 | 7,140 | 3,720 | 52% |
| Shoreline Boulevard | 5,480 | 7,470 | 1,990 | 27% | 5,640 | 8,190 | 2,550 | 31% |
| Total | 10,840 | 20,940 | 10,100 | 48% | 9,770 | 19,350 | 9,580 | 50% |
| Combined Gateways | | | | | | | | |
| Shoreline Boulevard & Rengstorff Avenue Combined | 9,510 | 16,350 | 6,840 | 42% | 9,060 | 15,330 | 6,270 | 41% |

2023-2024 Trip Monitoring Contract

In spring 2023, staff released an RFP for consultant services to conduct the 2023-24 semi-annual traffic counts. Fehr and Peers was the only firm to submit a proposal for the project. Fehr and Peers has prepared the North Bayshore monitoring reports since 2017, demonstrating the firm’s extensive understanding of the travel behavior in the district, Council Policy, and established methodology to collect and analyze the gateway traffic count data.

The scope of work for the contract is summarized below:

- Task 1: Project Management—The consultant shall prepare for and facilitate a kickoff meeting with City staff to refine project goals and requirements, expectations, deliverables, work plan, and schedule.
- Task 2: Gateway Count Observations—The consultant will collect daily multi-modal roadway and shared-use path counts at the North Bayshore gateways. The daily count data will be collected over a period of two weeks in both fall 2023 and spring 2024.
- Task 3: Gateway Vehicle Classification Observations—For one day at each of the count locations, the consultant will collect vehicle classification counts for the inbound direction

during the morning peak period and outbound direction during the evening peak period. The vehicle classification will include SOVs, carpool vehicles by vehicle occupancy, transportation network company vehicles (e.g., Uber, Scoop, Lyft) by vehicle occupancy, trucks, transit vehicles, bicyclists, scooters (and other micromobility devices), and pedestrians.

- Task 4: Bus Occupancy Observations—The consultant will collect bus occupancy counts of employer commuter shuttles, TMA shuttles, and VTA buses during the morning and evening peak periods.
- Task 5: Summary of Existing Travel Patterns—The consultant shall analyze vehicle traffic counts and vehicle classification data that are collected during the fall and spring monitoring periods in a memo (fall) and final report (spring) format with tables and figures. The findings shall include the number of vehicle trips and mode share for each North Bayshore gateway during the morning peak period (7:00 a.m. to 11:00 a.m.) and the evening peak period (3:00 p.m. to 7:30 p.m.).
- Optional Task 6: Public Hearings—The consultant will be available to attend two public hearing meetings without a presentation role as part of efforts to communicate the findings of the monitoring reports.
- Optional Task 7: Gateway Operational Analysis—The consultant will include observations of vehicle queues at the combined Shoreline Boulevard and Rengstorff Avenue gateways during the morning and evening peak periods for one day.

FISCAL IMPACT

There is no fiscal impact associated with acceptance of the fall 2022 and spring 2023 Trip Cap Monitoring Reports. 2023-24 North Bayshore Trip Cap Monitoring, Project 24-24, is funded by the Shoreline Regional Park Community Fund. Maximum compensation for the recommended agreement is an amount not to exceed \$160,400. Upon approval of the Fiscal Year 2023-24 Capital Improvement Program by Council in June 2023, there will be sufficient funds for the recommended action.

CONCLUSION

The 2022-23 North Bayshore monitoring reports present the findings that the observed North Bayshore gateway trip volumes complied with the North Bayshore Precise Plan and Circulation Study Trip Cap Policies in Fiscal Year 2022-23. Since late spring 2022, vehicle trip volumes and associated travel patterns continued to see shifts as growing numbers of employees returned to work sites under hybrid work schedules. During this transitional period, the observed travel

behavior indicated a higher-than-typical SOV rate with a reduction between fall 2022 and spring 2023 and an increase in the amount of peak-period commute travel at the Shoreline Boulevard and Rengstorff Avenue gateways from fall 2022 to spring 2023. Authorization for a consultant contract to conduct the Fiscal Year 2023-24 monitoring is requested.

ALTERNATIVES

1. Do not accept the North Bayshore Trip Cap reports.
2. Modify the proposed scope of work for the contract.
3. Provide other direction.

PUBLIC NOTICING

Agenda posting, and email notifications were sent to interested North Bayshore stakeholders.

Prepared by:

Ben Pacho
Transportation Demand Management
Analyst

Reviewed by:

Ria Hutabarat Lo
Transportation Manager

Damian Skinner
Assistant Public Works Director

BP/LL/1/CAM
902-05-09-23CR
202864

Approved by:

Dawn S. Cameron
Public Works Director

Audrey Seymour Ramberg
Assistant City Manager

- Attachments:
1. Fall 2022 NBS Monitoring Report
 2. Spring 2023 NBS Monitoring Report