



COUNCIL REPORT

DATE: June 28, 2022
CATEGORY: Consent
DEPT.: Public Works
TITLE: **North Bayshore Trip Cap Reports and Fiscal Year 2022-23 Professional Services Agreement**

RECOMMENDATION

1. Review and accept the fall 2021 and spring 2022 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 2022-23 in an amount not to exceed \$160,400.

BACKGROUND

The City started monitoring North Bayshore gateways in February 2014 as part of the North Bayshore Precise Plan (NBPP). This monitoring now occurs in fall and spring of each year. Annual reports are generally submitted to the City Council in late spring. These past 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 cap was set to include both inbound and outbound trips. The City monitors the number of vehicle trips at the following three major entry points to North Bayshore where the trip cap is enforced: San Antonio Road, Rengstorff Avenue, and Shoreline Boulevard.
- **Vehicle Trip Cap Penalties.** Based on the NBPP, if monitoring shows that the trip cap is reached at any of the three gateway locations for two consecutive data reporting 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. 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 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-occupant vehicle (SOV) rate in the range of 35% to 40% for both existing and future employees.

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 and compliance trends. The monitoring should measure 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 the three-hour peak period as opposed to just the peak hour.

- Measure compliance by combining the Shoreline and Rengstorff gateways. The San Antonio gateway should continue to be measured separately.
- Adjust the Shoreline and Rengstorff gateway capacities as new infrastructure projects are completed.

Trip Monitoring Service Agreement

On June 8, 2021, Council authorized the City Manager to execute a professional services agreement with Fehr and Peers, Inc. (Fehr and Peers), to provide transportation consulting services for Fiscal Year 2021-22 North Bayshore Trip Cap Monitoring, Project 22-24, in a not-to-exceed amount of \$156,400.

ANALYSIS

The following focuses on the key findings from the *Fall 2021 and Spring 2022 North Bayshore District: Transportation Monitoring Report* of SOV mode-share and gateway peak-hour vehicle trip volumes. The main reports are included as Attachments 1 and 2, with appendices to the report located at MountainView.gov/NorthBayshoreTripCap.

Observations During Continued Pandemic Disruption

The fall 2021 observations, collected during October 2021, do not represent typical conditions because many employees were working remotely and only some essential employees had returned to North Bayshore. During this transitional period, the observed travel behavior includes a high proportion of employees not coming to the workplace regularly and a higher-than-typical drive-alone percentage for those employees who are coming to the workplace. While some congestion is returning to Bay Area freeways, monitoring shows that gateway volumes on local Mountain View streets remain well below capacity.

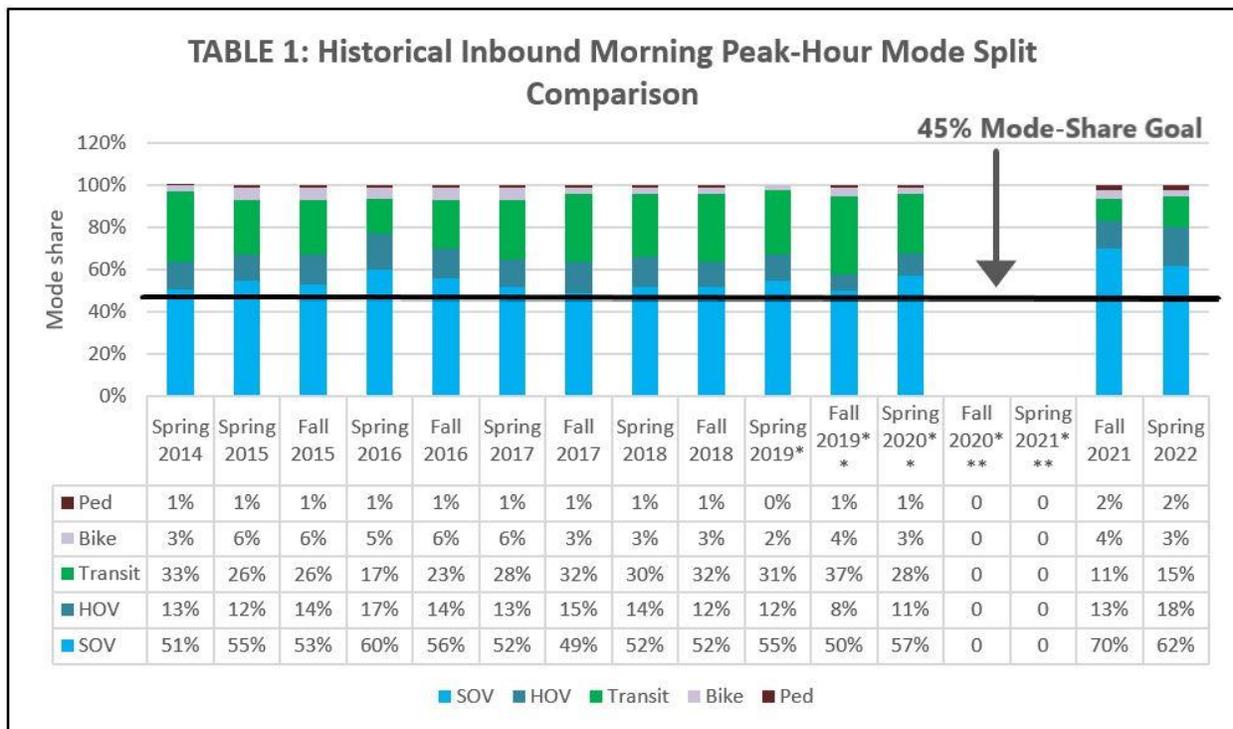
The spring 2022 observations also reflect a continuation of the transitory period, which is likely to extend into the next fiscal year, as employers implement and adjust new hybrid work models. Staff notes that the spring 2022 trip counts were completed in late February, prior to the announcement by large employers in the District, such as Google and Intuit, of return-to-office plans in April and May. Additionally, peak-hour vehicle congestion could return given a higher-than-normal drive-alone rate among employees that do report on-site to the workplace.

Combined Gateway Mode Share

Table 1 shows the historical trend for all modes of travel, including high-occupancy vehicles (HOV), transit, bicycle, and walking, since monitoring studies began in 2014. Key findings include:

- The morning inbound peak-hour SOV mode share has varied since monitoring began, from as low as 49% in fall 2017 to as high as 70% last fall. The spring 2022 monitoring activities reported an inbound a.m. peak-hour SOV mode split at 62%, an 8% reduction from fall 2021 but still significantly more than the pre-pandemic rates.

Table 1: Combined Gateway Peak-Hour Mode Share¹



* 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 or spring 2021.

- Transit mode share declined significantly compared to prepandemic levels, while HOV mode share increased to 18% in spring 2022, its highest level since monitoring began in 2014.

Employers have implemented return-to-office hybrid models since the spring counts were taken. The Mountain View Transportation Management Association (TMA), employers, and transit operators are all working on bringing commuters back to transit. In addition, the temporary bus lanes on Charleston Road have been implemented to help provide a travel time savings to transit as traffic congestion returns. The Fiscal Year 2022-23 monitoring reports will be important to gauge the travel mode trends postpandemic.

Fall 2021 Combined and Individual Gateway Peak-Hour Trip Cap Comparison

The fall 2021 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-Hour Vehicle Trip Cap Policy (Table 2).

Table 2: Fall 2021 Gateway Evaluation—Peak-Hour Volumes

Gateway	Morning Inbound				Evening Outbound			
	Volume	Target	Remaining Gateway Capacity	Percent of Gateway Capacity Remaining	Volume	Target	Remaining Gateway Capacity	Percent of Gateway Capacity Remaining
San Antonio Road	360	1,890	1,530	81%	390	1,830	1,440	79%
Rengstorff Avenue	720	3,290	2,570	78%	870	2,440	1,570	64%
Shoreline Boulevard	1,600	3,110	1,510	49%	1,660	3,760	2,100	56%
TOTAL	2,680	8,290	5,610	68%	2,920	8,030	5,110	64%

Spring 2022 Combined and Individual Gateway Peak-Hour Trip Cap Comparison

Similar to the fall 2021 monitoring period, the spring 2022 report highlights the reduced traffic volumes when compared to pre-COVID travel patterns. In particular, the spring trip counts reflect that only 26% of the total allowable gateway capacity in the morning peak period and only 30% in the evening peak period was used at the Shoreline Boulevard and Rengstorff Avenue gateways, combined (Table 3).

Table 3: Spring 2022 Gateway Evaluation—Directional Peak Period

Gateway	Morning Inbound				Evening Outbound			
	Volume	Target	Remaining Gateway Capacity	Percent of Gateway Capacity Remaining	Volume	Target	Remaining Gateway Capacity	Percent of Gateway Capacity Remaining
San Antonio Road	3,060	4,590	1,530	33%	590	4,020	3,430	85%
Rengstorff Avenue	1,340	8,880	7,540	85%	1,540	7,140	5,600	78%
Shoreline Boulevard	2,950	7,470	4,520	60%	3,110	8,190	5,080	62%
TOTAL	7,350	20,940	13,590	65%	5,240	19,350	14,110	73%
Combined Gateways	Volume	Target	Remaining Gateway Capacity	Percent of Gateway Capacity Remaining	Volume	Target	Remaining Gateway Capacity	Percent of Gateway Capacity Remaining
Shoreline Boulevard and Rengstorff Avenue Combined	4,290	16,350	12,060	74%	4,650	15,330	10,680	70%

Preliminary Hybrid Work Assessment

As noted above, the spring 2022 trip counts were completed in late February 2022, prior to the return-to-office and new hybrid work schedules for the large employers. In an effort to understand the potential impacts on the gateways as employees return to the office, the spring

report also included three scenarios related to the current higher SOV rates, lower transit use, and the hybrid work models.

- **Scenario 1:** Return to office with the spring 2022 mode-shares and no hybrid work schedule—the return of existing employees, whose commute choices mirror the current mode-share, may result in 14% more vehicle trips in the morning and 21% more in the evening than was observed during prepandemic periods.
- **Scenario 2:** Hybrid work with spring 2022 mode-share—presents a future in which the full North Bayshore Precise Plan (NBPP) has been built out and there are hybrid work schedules (i.e., employees working remotely part of the week), but with the spring 2022 mode-share. This may result in over 60% more vehicle trips in both the morning and evening than analyzed for the NBPP. The vehicle trip volume under this scenario would far exceed the available roadway capacity. This scenario illustrates that the hybrid work model alone may not be enough to overcome the impacts of the higher SOV rates currently being seen.
- **Scenario 3:** Hybrid work with spring 2022 mode-share and 50% of employees working from home—estimates the future build-out, as presented Scenario 2, but assumes half of all North Bayshore employees work entirely remote. In this case, total volumes entering and exiting the gateways are projected to increase by 4% to 9% in the morning and evening peak-hour, respectively, over what was analyzed for the NBPP.

Cumulatively, these scenarios offer a view into a number of travel demand scenarios that help contextualize the evolving trends observed in the fall and spring reports. They are hypothetical, but they do illustrate the importance of the NBPP transportation policy framework to lower the SOV rates even with hybrid work strategies. It is premature to assume the current mode split will be a long-term trend and more useful information will likely be obtained next year as we emerge from the pandemic and observe a greater return-to-work condition.

2022-23 Trip Monitoring Contract

Fehr and Peers has prepared the North Bayshore monitoring reports since 2017, demonstrating the firm's thorough understanding of the travel behavior in the District and established processes and methodology to collect and analyze this data. In spring 2022, management of the North Bayshore Semiannual Traffic Counts transitioned from the Community Development Department to the Public Works Department. To maintain consistency of monitoring activities during this change in program management, staff recommends continuing to contract with Fehr and Peers for next fiscal year's monitoring efforts.

The scope of work for the contract is summarized below:

- Task 1: Daily Count Observations—A count vendor will collect daily roadway and shared-use path segment counts in the fall and spring at the North Bayshore gateways during the morning and evening peak periods for two consecutive weeks.
- Task 2: Gateway Vehicle Classification Observations—Vehicle counts will be classified by SOVs, carpool vehicles by vehicle occupancy, transportation network company vehicles (e.g., Uber and Lyft) by vehicle occupancy, trucks, transit vehicles, bicyclists, and pedestrians.
- Task 3: Summary of Existing Travel Patterns—The vehicle traffic counts and vehicle classification data will be summarized to show travel patterns by time of day, mode share, and vehicle usage during the morning and evening peak periods.
- Task 4: Gateway Operations Observations—Monitoring will also capture instances of vehicle queues where the gateway demand exceeds capacity at the Shoreline Boulevard and Rengstorff Avenue gateways.
- Task 5: Fall 2022 and Spring 2023 Technical Report—Historical gateway counts will be used to provide additional context for the reported weekday travel patterns. Additionally, to present the existing gateway volume and mode share monitoring results, the fall 2022 and spring 2023 monitoring activities will be summarized in brief technical memos.
- Task 6: Public Meetings—The consultant, Fehr and Peers, will also be available to attend two public meetings to provide supplementary information to Council and/or the public.

FISCAL IMPACT

2022-23 North Bayshore Trip Cap Monitoring, Project 23-24, 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 2022-23 Capital Improvement Program by Council, there will be sufficient funds for the recommended action.

CONCLUSION

According to the fall 2021 and spring 2022 trip cap reports, the North Bayshore gateways are in compliance with the North Bayshore Precise Plan trip cap. Since the spring 2022 trip counts were conducted, travel patterns have continued to be in a state of transition as employees return to work sites. During this transitional period, the observed travel behavior is expected to continue to include a higher-than-typical drive-alone percentage and uncertainty about the amount of

peak-period commute travel. Authorization for a consultant contract to conduct the Fiscal Year 2022-23 monitoring is requested.

ALTERNATIVES

1. Modify the proposed scope of work for the contract.
2. Provide other direction.

PUBLIC NOTICING

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

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- Attachments:
1. Fall 2021 NBS Monitoring Report
 2. Spring 2022 NBS Monitoring Report