



MEMORANDUM

To: Jim Lightbody, Principal, Lightbody Consulting; City of Mountain View, CA

From: Jessica Roberts, TDM-CP; Cole Peiffer, AICP, Alta Planning + Design

Date: November 29, 2021

Re: North Bayshore TDM Guidelines Peer Review

Introduction

The North Bayshore TDM Guidelines in the City of Mountain View are intended to help reduce the total trips generated by the significant level of planned office, residential, and entertainment uses in the area. Most specifically, the goals of the TDM guidelines are to provide future companies and residential developers with a straight-forward process to develop, track, and maintain a TDM program resulting in Single Occupancy Vehicle (SOV) mode share of 45% or less of the trips made in the district. It is important to note that Google, a major employer in North Bayshore, proposes a 35% SOV mode share goal for their planned developments. Achieving this level of trip generation is intended to reduce local greenhouse gas emissions and the impact on local congestion.

Alta conducted a peer review of the draft residential and non-residential TDM Guidelines for the North Bayshore Area, which support the North Bayshore Precise Plan. This peer review evaluated the TDM guidelines based on the baseline TDM program, financial penalty mechanisms, data tracking and monitoring methodology, and TMA implementation. The following memo represents high-level feedback which the City may consider when finalizing North Bayshore TDM guidelines.

TDM Guideline Considerations

Baseline TDM Program

It is our opinion that the strategies included in the Baseline TDM Program alone will not be sufficient to achieve the 45% SOV goal for all relevant employers in the North Bayshore area. The level of parking allowed by the Precise Plan for office uses and initial level of parking considered for residential units (1.25 spaces / unit) combined with the passive TDM strategies, in our professional opinion, may not be sufficient to ensure that the SOV goal is met. This is evidenced by the existing employers in the area who have already implemented TDM strategies above and beyond the baseline TDM program, and which continue to fall short of their SOV goal. Therefore, the City may consider adding the following highly impactful strategies in the Baseline TDM Program:

- Parking Cash-Out
- Parking Pricing
- Subsidized / Free Transit Passes

Penalties

Currently, the penalty system identifies three strategies that the City may use to help ensure compliance including requiring additional TDM strategies, requiring greater TMA contributions, and implementing a congestion pricing program. However, these strategies lack specificity and clarity on how, when, and to what extent they will be implemented. It is highly recommended that the City develop specific financial and programmatic penalties in order to ensure compliance with the TDM guidelines. We recommend that the City consider two types of mechanisms for tracking and implementing financial penalties: District-Wide and Development Specific (detailed under the Recommendations section of this memo).

District-Wide Penalty Implementation

In order to assess a district-wide policy, there are multiple items which must be addressed. First, the total baseline level of traffic must be established against which subsequent years will be evaluated. Secondly, the City must address whether the baseline traffic volume will increase over time to account for background growth or remain at a constant historical level. Thirdly, the City must create a clear and fair method to count district-wide trips at three entry/exit points and account for retail/restaurant/entertainment trips which are not subject to the SOV goal.

At present, residential, retail, and commercial uses are identified in the Precise Plan and are exempt from the district-wide trip cap; however, their trips will be counted in the data collected at the three North Bayshore area entry points. Land uses in the commercial areas include a 'Regional Shopping Center' and a grocery store which will both generate peak hour traffic, especially during the PM peak hour. Greater clarity on how these land uses will be accounted for in the methodology and how the trip cap will be assessed will be provided in a subsequent Circulation Study.

District Parking

Tracking trip generation from individual businesses is complicated by the presence of district parking. District parking lots and garages may provide shared parking spaces open to any employee or visitor to the district. Due to this, if driveways are the only access point counted during compliance evaluations, counting trips at the project driveways alone may not reflect the complete number of trips generated by that business. In order to prevent trips which end in district parking lots from being omitted from employer mode share assessments, there are a number of strategies which the City may consider including:

1. Survey for parking garage occupants – Survey garage occupants as they enter or leave about their destination.
2. Key Card / Ticketed Entry / License Plate Recognition system – Employees of businesses in the TMA could enter the parking structure / lot by using an ID badge which would track their employer, or by having their pre-registered license plate scanned. Visitors or guests may take a ticket and would be tracked accordingly. Parking for visitors / guests may either be free or paid.
3. Exclusive Parking – The entire parking garage may be reserved for the exclusive use of a single tenant, typically during normal business hours.

It is important that the City consider the potential impact on retail, restaurant, entertainment, and community land uses such as the Shoreline Amphitheatre in North Bayshore if parking is restricted to a single user.

Recommendations

In order to ensure that the North Bayshore TDM Guidelines achieve the SOV mode share goal and provide the City with appropriate enforcement mechanisms and data tracking methodologies to hold companies accountable if they fall short. The following recommendations may be incorporated into the existing TDM guidelines without changing any background analysis or trip rate calculations.

Implement TDM Guideline Compliance Levels

Under the TDM Guidelines, the total trips of each development are to be evaluated each year to determine the compliance with the development trip cap. Following the evaluation of development trips, it is recommended that each development be assigned a compliance level based on the trip cap to be re-evaluated annually. Based on the compliance level, the employer may be required to add progressively more impactful TDM policies. Policies added to a TDM program due to an increase in compliance level will be required to be enforced for a period of two years at which point the compliance level re-evaluated. Annual trip cap monitoring and evaluations will continue at all compliance levels.

- **Level 1** - In full compliance with the development trip cap. No new TDM strategies required above the standard TDM program. Additional strategies may be implemented at the employer's discretion.

- **Level 2** - Exceeding trip cap by 1 - 15%. Must add at least two of the following policies in addition to the standard TDM program (Subsidized or free carpooling/vanpooling, reduced parking supply, expanded ride matching)
- **Level 3** - Exceeding trip cap by more than 15%. In addition to programs added at the yellow level, employer must add at least one of the following programs (Subsidized or free transit, commuter shuttle services, parking pricing, parking cash-out)

Modifications to TDM programs due to a change in compliance level are intended to occur in addition to any penalties assessed through the development-specific penalty structure.

Develop A District-Wide Penalty Structure

Due to the shared nature of parking options for employees within the North Bayshore area, it may be difficult to directly attribute all trips associated with a specific development. For this purpose, the total daily trip cap for the area will be monitored at the three distinct entry points: Shoreline Boulevard, San Antonio Road, and Rengstorff Avenue. It is recommended that the City implement a District-Wide Penalty Structure as detailed below.

1. If the monitored trips for the area show that the AM trip cap has been exceeded by 15%:
 - a. All non-residential TDM programs will automatically be entered into the Level 2 compliance tier for a period of two years and must adjust their TDM programs to satisfy the updated requirements within 6 months. Following the two-year period, the compliance level may be re-evaluated based on monitored trip volumes. Employers are encouraged to collaboratively address updated TDM requirements through the TMA.
 - b. Residential TDM programs will be required to add and implement one additional TDM strategy.
2. If the monitored trips for the area show that the AM trip cap has been exceeded by more than 15%:
 - a. All TDM programs will automatically be entered into the Level 3 compliance tier for a period of two years and must adjust their TDM programs to satisfy the updated requirements within 6 months. Following the two-year period, the compliance level may be re-evaluated based on monitored trip volumes. Employers are encouraged to collaboratively address updated TDM requirements through the TMA.
 - b. Residential TDM programs will be required to add and implement one additional TDM strategy.
3. Businesses will be required to develop TDM programs which address the highest applicable compliance level between the District-Wide and Development-Specific compliance levels. A business with a development specific non-compliance Level 3 would be required to develop a Level 3 compliant TDM plan regardless of district-wide compliance level. Similarly, a business with a development-specific compliance Level 1 would be required to satisfy the Level 3 requirements if the district exceeded the trip cap by more than 15%.

Stipulate Non-Residential Development Financial Penalty Structure

Financial penalties for non-residential developments violating the project trip caps should be based on the total number of employees. The penalties can be addressed through simple financial penalties and/or require them to implement more TDM strategies to their program for each year they are in violation based on a point system.

Recommend adjustments to employer tiers

- Tier 1: 10 - 100 on-site employees + virtual employees
- Tier 2: 101 - 500 on-site employees + virtual employees
- Tier 3: 501 or more on-site employees + virtual employees

Financial Penalties

Financial penalty for exceeding project vehicle trip performance standard by 1%:

- Tier 1: \$25,000
- Tier 2: \$50,000
- Tier 3: \$150,000

Penalty for each additional percent exceeded:

- Tier 1: \$10,000
- Tier 2: \$25,000
- Tier 3: \$75,000

Example penalty for 100% violation (bringing in twice the number of trips allowed under the total trip cap):

- Tier 1: \$1,015,000
- Tier 2: \$2,525,000
- Tier 3: \$7,575,000

Apply A Multi-Year Non-Compliance Multiplier

The financial penalty for non-compliance will be multiplied by the total number of consecutive years of non-compliance. For example, a Tier 2 business that exceeded the trip cap by 20% in the third year of non-compliance would calculate their total penalty in the following way:

- First 1% exceeding trip cap for Tier 2 - \$25,000
- Additional 19% of exceeding trip cap for Tier 2 - (19 x \$50,000) = \$950,000
- Multi-year multiplier = 3
- (\$25,000 + \$950,000) x 3 = \$2,925,000 total financial penalty

Use of Financial Penalty Funds by the TMA

The purpose of penalties for non-compliance, collected by the City and administered by the TMA, is to a) provide a financial motivation for employers to comply with trip cap agreements, and b) provide funding for transportation improvements and programs within the project area that will help reduce single occupancy vehicle trips including but not limited to:

- Projects that increase transit accessibility
- Improvements to transit service
- Traffic calming projects
- Bicycle/Pedestrian connectivity and safety projects
- Ridesharing/carpooling projects or shuttle services

We recommend that the City insist on the right to review and approve programs and improvements paid for by financial penalty funds. That might include a policy similar to the following:

The City, in collaboration with the TMA, shall develop a list of improvements and programs to be delivered with collected penalties within 180 days of receipt of penalties. The City may require the TMA to provide written justification for any and all projects proposed to be included on the improvements list. The list shall include the expected timing of completed improvements and programs. Projects included on the list must have a demonstrable and logical connection to reducing vehicle trips within the project area. Projects which are deemed to lack sufficient justification may be eliminated at the sole discretion of the City.

Consider Congestion Pricing

If identifying the baseline trip level for the North Bayshore area becomes problematic or if the area is determined to have exceeded the area trip cap for three consecutive years, the City Council may consider implementing a district wide congestion pricing scheme as identified in the Precise Plan. Such a scheme would eliminate the need for attributing trips to developments and would disperse the cost of congestion equally to all entering vehicles. Following multiple years of noncompliance, collected fees may be sufficient to fully fund a congestion pricing scheme in the area.

Define Commute / Trip Types

In order to provide clarity for all parties involved, it is important to clearly define how trips are categorized for reporting purposes. We recommend that the TDM guidelines include a list of definitions for all commute/trip types at the beginning of the document. Definitions will be especially important for providing greater clarity on the difference between a ride hailing trip (Uber / Lyft) and a ridesharing trip (carpool, UberPool, etc.). Definitions for different trip types may include the following:

- **Drive-alone** - Any trip which occurs alone in a car, SUV, motorcycle, moped, or truck.
- **TNC** - Any trip involving a Transportation Network Company (Uber, Lyft, etc.) with no other passenger.
- **Carpool** - Any trip in which you drove/rode in a car, SUV, van, truck, motorcycle, or moped with another friend, coworker, or family member who dropped you off at work. Additionally, trips involving multiple passengers traveling in a TNC may also count as a carpool trip.
- **Public Transit** - Any trips made with public transit bus, light rail, or commuter rail (Caltrain, Amtrak). Trips made using an employer subsidized transit pass on a public transit vehicle is still considered a Public Transit trip.
- **Employer Shuttle** - Any trip involving an employer subsidized private bus/shuttle.
- **Walk** - Any trip where the majority of travel occurred by walking.
- **Bike** - Any trip where the majority of travel occurred by bicycling. Includes trips completed by e-bikes, scooters, e-scooters, and skateboards/longboards.
- **Telecommuting** - Any typical commute trip which is avoided entirely by the employee working in a virtual capacity.

Standardize Mode-Share Survey

The North Bayshore TMA and the City may consider managing the implementation of the annual mode share survey if response rates fall below 90% as stipulated in the Precise Plan. The survey for non-residential and residential uses should be standardized across all employers and residential development property managers in order to ensure accurate data.

Recommended Non-Residential Development Mode-Share Survey

The mode share survey is intended to collect information about how employees are commuting to and from work and assess whether employers are meeting their SOV target. The annual survey should include a set of questions to gauge the mode and time of travel for all on-site employees. The annual survey may be modified to gather additional information. Initial survey questions for the annual employee survey are included below:

1. On Wednesday, November __, did you physically travel to work?
 - Yes
 - No, I worked from home. (2 trips logged as telecommute)
 - No, I did not work that day. (Entry omitted from results)

2. How did you arrive to work on that day?
 - I drove alone in a car, SUV, motorcycle, moped, or truck
 - I took an Uber or Lyft with no other passengers
 - I got a ride from a friend, coworker, or family member who dropped me off at work in a car, SUV, van, truck, motorcycle, or moped, or I took an Uber or Lyft with other passengers.
 - I took public transit (public bus, light rail, Caltrain, Amtrak, etc.)
 - I took an employer shuttle
 - I walked
 - I took a bike or scooter (includes e-bikes, e-scooters, and skateboards/longboards)

3. How did you leave work on that day?
 - I drove alone in a car, SUV, motorcycle, moped, or truck
 - I took an Uber or Lyft with no other passengers
 - I got a ride from a friend, coworker, or family member who dropped me off at work in a car, SUV, van, truck, motorcycle, or moped, or I took an Uber or Lyft with other passengers.
 - I took public transit (public bus, light rail, Caltrain, Amtrak, etc.)
 - I took an employer shuttle
 - I walked
 - I took a bike or scooter (includes e-bikes, e-scooters, and skateboards/longboards)

Recommended Residential Development Mode-Share Survey

The City should provide a sample survey for property managers to administer which evaluates the typical mode share for trips to and from work. Sample survey questions may include the following:

1. On Wednesday, November __, did you leave you home for any reason?
 - Yes
 - No, I did not leave and was not working from home (Entry omitted from results)
 - No, I was working from home (2 trips logged as telecommute)
 - No, I was not at home on that day due to travel/other reasons (Entry not included in results)

2. Think about the first time that you left your home that day for any reason: how did you travel?
 - I drove alone in a car, SUV, motorcycle, moped, or truck
 - I took an Uber or Lyft with no other passengers
 - I took public transit (public bus, light rail, Caltrain, Amtrak, etc.)

- I got a ride from a friend, coworker, or family member who dropped me off at work in a car, SUV, van, truck, motorcycle, or moped, or I took an Uber or Lyft with other passengers.
 - I took an employer shuttle
 - I walked
 - I took a bike or scooter (includes e-bikes, e-scooters, and skateboards/longboards)
3. When you returned home that day, how did you travel?
- I drove alone in a car, SUV, motorcycle, moped, or truck
 - I took an Uber or Lyft with no other passengers
 - I took public transit (public bus, light rail, Caltrain, Amtrak, etc.)
 - I got a ride from a friend, coworker, or family member who dropped me off at work in a car, SUV, van, truck, motorcycle, or moped, or I took an Uber or Lyft with other passengers.
 - I took an employer shuttle
 - I walked
 - I took a bike or scooter (includes e-bikes, e-scooters, and skateboards/longboards)