To City of Mountain View Memo

From Steer

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Project City of Mountain View TDM Ordinance Project No. 24363902

## List of TDM Strategies in the TDM Toolkit

The Draft TDM Toolkit includes a standardized list of measures which applicants will use as they develop their TDM Plan. It provides implementation guidance as to which strategies may be suitable for different development types (e.g., residential, non-residential, mixed use).

Table 1 presents the list of TDM strategies according to TDM category and strategy type, including:

- Required TDM Strategies, which provide the supportive structure to implement TDM;
- Core TDM Strategies, which provide an array of flexible, proven trip reduction strategies that applicants may select from to develop the project's TDM Plan; and
- Auxiliary TDM Strategies, which may not have significant trip reduction potential as stand-alone strategies but are essential in supporting the successful implementation of the Core strategies.

The table also provides estimated potential Average Daily Trips (ADT) reduction for each Core strategy based on the Santa Clara Countywide VMT Evaluation Tool. Applicants may submit supplemental trip generation analyses that calculates trip reduction at the site level to verify meeting the ADT target, including approved methodologies reviewed by the City. The estimated ADT reduction potential for Required strategies are not provided because these strategies address administrative arrangements such as agreements with the City and reporting requirements. The estimated ADT reduction potential for auxiliary strategies are also not provided, because research has indicated that these provide minimal trip reduction as standalone strategies. TDM research associated with the California Air Pollution Control Officers Association (CAPCOA) and Santa Clara Countywide VMT Evaluation Tool - Version 2 indicates that trip reductions for auxiliary strategies typically range from 0.1% and 2%. Instead, auxiliary strategies support more effective implementation of the Core strategies.

Following feedback received from the Bicycle/Pedestrian Advisory Committee (<u>January 29, 2025</u>) and Environmental Planning Commission (<u>February 5, 2025</u>) staff will explore how to incorporate additional land use/ project design-related strategies so that applicants could receive credit towards their trip reduction targets for characteristics such as:

- Transit proximity: situating the project within 0.5 miles of transit service
- Affordable housing: inclusion of on-site Affordable Housing, as defined by the City's Affordable
   Housing program
- Active transportation improvements: contributing to pedestrian and bicycle improvements at the site level to increase safety and connectivity for active transportation users



Table 1. Draft TDM Toolkit

		Strategy	Strategy			When to	Relevant Dev	velopment Type	
	TDM Strategy	Category	Туре	Description	Trip Reduction	Implement	Residential	Non- Residential	Mixed-Use
1	Transportation coordinator	Administrative	Required	A designated person or entity responsible for implementing the TDM Plan and liaising with the City regarding monitoring and reporting requirements.		Within 60 days of occupancy	Medium and I	arge projects	
2	Mountain View Transportation Management Association (MTMA) membership	Administrative	Required	Membership of the TMA.  (Applicants required to join the TMA may select strategies related to TMA-provided programming from the below list of Core and Auxiliary strategies.)		Prior to receiving certificate of occupancy	Large	Medium & Large	Non- residential >50 ksf AND residential ≥1,000 ADT
3	TDM Agreement	Administrative	Required	Execution of TDM Agreement between Property Owner and City, memorializing the property's TDM commitments and addressing procedures related to change in tenure.		Prior to receiving certificate of occupancy	х	х	х
4	Annual TDM reporting	Administrative	Required	Submission of annual TDM reporting to the City, per stipulated deadline.		Annually, beginning 1 year after certificate of occupancy and on the first of January thereafter	х	х	х
5	Annual travel survey	Administrative	Required	Completion of a travel survey of regular site users.		Annually, beginning 1 year after certificate of occupancy	Small, Mediu	m and large proje	cts
6	Daily driveway counts	Administrative	Required	Completion of daily driveway counts.  (Sites are permitted to conduct driveway counts with an independent third party to verify the data provided.)		Annually, beginning 1 year after certificate of occupancy	Medium and I	arge projects	

	TDM Strategy	Strategy Category	Strategy Type	Description	Trip Reduction	When to Implement	Relevant Dev	elopment Type Non- Residential	Mixed-Use
7	Property transfer form	Administrative	Required	Submission of Property Transfer form to the City. This form transfers responsibility for implementing the property's TDM plan when ownership or tenure of a property changes, ensuring that the new property owner understands and agrees to the TDM Plan and/or Agreement. It also provides contact details for the new owner or occupant.		Within 30 days of change in ownership	undergoes a c	ibject to the ordin hange in ownersh the initial entitler	nip following
8	Alternative transportation subsidies	Incentives	Core	Provide subsidies to all building occupants from certificate of occupancy until between two and ten years after full occupancy, for at least one of the following: a) Transit b) Vanpool c) Carpool d) Active transportation.	Within ½ mile of a VTA Light Rail Caltrain Station: Low Participation (\$200/occupant) – 3%  Medium Participation (\$270/occupant) – 5%  High Participation (\$325/occupant) – 6%  Not within ½ mile of a VTA Light Rail/ Caltrain Station:  Low Participation (\$200/occupant) – 2%  Medium Participation (\$270/occupant) – 3%  High Participation (\$325/occupant) – 4%	Within 60 days of receiving certificate of occupancy	x	x	x
9	Bikeshare and/or scootershare program	Programming	Core	Implementation of campus bike sharing system that includes capital investment and operations, preferably with interoperability to neighbouring systems and	6%	Initial occupancy	х	x	х

		Strategy	Strategy			When to	Relevant Dev	elopment Type	
	TDM Strategy	Category	Туре	Description	Trip Reduction	Implement	Residential	Non- Residential	Mixed-Use
				high penetration within the region (e.g. Bay Wheels).					
10	Bike facilities	Infrastructure	Core	Provide and maintain facilities for bicycle users at the project site. Examples of end-of-trip facilities include bike parking, bicycle lockers, showers, and personal lockers. The extent of VMT reduction is based on the Project provision of secure bike parking or secure bike parking and additional facilities proportional to the number of commuting bicyclists or as determined by the Mountain View Municipal Code SEC. 36.32.85.	3%	During construction	x	x	x
11	Rideshare program	Programming	Core	Organize a program to match individuals interested in carpooling who have similar commute patterns or leverage existing County and/or regional programs (MTC and VTA).	4%	Initial occupancy	x	х	х
12	Free door-to-door transit	Programming	Core	Provide direct shuttle service to the Project site from areas with high concentrations of employees.  Note: This strategy is mutually exclusive with strategy #14 and therefore both strategies should not be selected together.	10%	Initial occupancy	х	x	x
13	Telecommuting and alternative work schedules	Incentives	Core	Allow and encourage employees to telecommute or allow alternative work schedules that result in fewer in-office days.	5%	Initial occupancy		х	х
14	First/Last Mile transit	Programming	Core	Provide free shuttle service to and from nearby transit hubs/stations.	5%	Initial occupancy	х	х	х

		Strategy	Strategy			When to	Relevant Dev	elopment Type	
	TDM Strategy	Category	Туре	Description	Trip Reduction	Implement	Residential	Non- Residential	Mixed-Use
				Participation in the MVgo shuttle program qualifies applicants to select this strategy via TMA membership.  Note: This strategy is mutually exclusive with strategy #12 and therefore both strategies should not be selected together.				Noordonnat	
15	Unbundled parking costs**	Parking Management	Core	Unbundle the cost of parking space from the rental price of properties.  **Required for multi-family residential properties with 16+ residential units, per AB 1317 Unbundled Parking.  Note: This strategy is mutually exclusive with strategy #16 and therefore both strategies should not be selected together.	10%	Initial occupancy	х	x	х
16	Limit parking supply	Parking Management	Core	Provide parking supply at rates lower than the Institute of Transportation Engineers (ITE) Parking Generation Manual or lower than those documented in the Mountain View City Code. Decreasing parking supply encourages employees to choose an alternative transportation mode for their commutes. This measure is more effective if street parking is not free or unrestricted during typical working hours. Surrounding street parking must be metered, have time limits during typical working hours, and/or be available to residential parking permit (RPP) holders only.	10%	During construction	x	x	x

		Strategy	Strategy			When to	Relevant Dev	elopment Type	
	TDM Strategy	Category	Туре	Description	Trip Reduction	Implement	Residential	Non- Residential	Mixed-Use
				Note: This strategy is mutually exclusive with strategy #15 and therefore both strategies should not be selected together.					
17	Employee Parking Cash- Out	Parking Management	Core	The State's Parking Cash-Out Program, California Health & Safety Code, Section 43845 and AB 2206 requires certain employers who provide subsidized parking for their employees to offer a cash allowance in lieu of a parking space.  Note: This strategy is mutually exclusive with strategy #18 and therefore both strategies should not be selected together.	12%	Initial occupancy		x	x
18	Price workplace parking	Parking Management	Core	Require commuters to pay for parking on-site.  Note: This strategy is mutually exclusive with strategy #17 and therefore both strategies should not be selected together.	12%	Initial occupancy		x	х
19	VTA Equitable VMT Mitigation Program	Programming	Core	Participate in VTA's Equitable VMT Mitigation Program. This could potentially include:  Vanpool subsidies  E-bike subsidies  Bus speed improvements	TBD	Initial occupancy			
20	Transit service expansion	Programming	Core	Subsidize transit service through fees and contributions to the transit provider. This strategy must be negotiated with the transit agency.	10%	During construction	х	x	х

		Strategy	Strategy			When to	Relevant Dev	elopment Type	
	TDM Strategy	Category	Туре	Description	Trip Reduction	Implement	Residential	Non- Residential	Mixed-Use
21	On-site wayfinding	Infrastructure	Auxiliary	Provide clear information for site users guiding them to transit and active transportation infrastructure and resources, consistent with City wayfinding practices.		During construction	х	х	х
22	Support Safe Routes to School Programs	Programming	Auxiliary	In coordination with Mountain View Safe Routes to School Program, support efforts to encourage students to walk or bike to school. Initiatives may include annual efforts to form bike trains and walking school buses and offering bicycle and pedestrian safety training.		Initial occupancy	x		
23	Priority carpool/vanpool parking	Parking Management	Auxiliary	Provide dedicated carpool/vanpool spaces near entrances. Parking may also be discounted.		Prior to initial occupancy		x	х
24	Transportation information hub	Infrastructure	Auxiliary	Provide virtual (webpage) or physical (bulletin board) information on local transportation resources and promote programs selected through site's 'Core' strategies. Information must be kept current and reviewed/updated quarterly.		During construction	x	x	x
25	Transportation events	Programming	Auxiliary	Host virtual or on-site gatherings or workshops at least two times per year focused on transportation information sharing.		Initial occupancy	х	х	х
26	Raffles and giveaways	Programming	Auxiliary	Provide raffle prizes for individuals who participate in Core strategies or indicate they travel to site without driving alone.		Initial occupancy	х	x	х
27	Behavioural intervention	Programming	Auxiliary	Provide personalized travel planning assistance such as information on how to use transit and transit itineraries, carpool matching and		Initial occupancy	х	x	х

		Strategy	Strategy			When to	Relevant Dev	elopment Type	
	TDM Strategy	Category	Туре	Description	Trip Reduction	Implement	Residential	Non- Residential	Mixed-Use
				personal follow-up to tenants/employees.					
28	Carshare program	Programming	Auxiliary	Provide subsidies and promotions, as well as dedicated parking spaces, for car sharing services such as ZipCar, Car2Go, and GetAround.		Initial occupancy	х	x	х
29	Mid-day Mobility	Programming	Auxiliary	Employees who take transit, carpool or bike to work can request reimbursement of up to \$15 for mid-day trips taken between 10am and 3pm via Uber, Lyft or taxi.  (MTMA membership and information qualifies applicants to select this strategy.)		Initial occupancy		x	x
30	Guaranteed Ride Home (GRH) program	Programming	Auxiliary	Provide eligible tenants/employees with a return trip home if they used a sustainable mode of transport to commute to work, when an unforeseen emergency arises and riding transit, cycling or ridesharing isn't possible, for up to at least three trips per year.  (MTMA Membership and information qualifies applicants to select this strategy.)		Initial occupancy	x	x	x
31	Pre-tax benefits	Incentives	Auxiliary	Taking advantage of the Federal Pre-tax Commuter Benefit law, provide opportunity for employees to receive a tax-free allotment to be spent on transit or other allowable travel expenses.		Initial occupation		x	х

		Strategy Strategy Category Type			When to	Relevant Dev	Relevant Development Type		
	TDM Strategy			Description	Trip Reduction	Implement	Residential	Non- Residential	Mixed-Use
32	Developer-defined strategy	Other	Other	Propose a tailored and effective TDM strategy to building occupants with supporting data to demonstrate level of effectiveness, for review and approval by City staff.	TBD	TBD	х	x	х

Table 2 provides the technical justification for the estimated ADT reduction percentages for the Core strategies listed in Table 1.

Table 2. Justification for Estimated Trip Reduction Potential

	TDM Strategy	Formula	Estimated Level of Effectiveness (Percent ADT Reduction)	Notes/Source
8	Transit Subsidies/ Incentives	% VMT Reduction = [(% Vehicle Share) / (1 - % Transit Share)] * (0.43 * % fare subsidy * % Transit Share)  Note: Vehicle share includes all vehicle trips: SOV, carpool and ride hail	Within ½ mile of a VTA Light Rail/ Caltrain Station:  • Low Participation (10% of occupants) – 3%  • Medium Participation (20% of occupants) – 5%  • High Participation (30%+ of occupants) – 6%  Not within ½ mile of a VTA Light Rail/ Caltrain Station:  • Low Participation (10% of occupants) – 2%  • Medium Participation (20% of occupants) – 3%  High Participation (30%+ of occupants) – 3%  (Assuming subsidy of \$135 per month for project within ½ mile of VTA Light Rail/ Caltrain station and \$90 for projects elsewhere)	VTA Tool - TP07 Subsidized Transit Program
9	Bikeshare and/or scootershare program	6% conversion of vehicle to bicycle or scooter trips. (CAPCOA formula)	6% (Assuming 50% of the program cost)	See 'TP02 Bike Share Programs' in the VTA Tool. It is presumed that the Developer will be participating in an existing established program within a dense neighborhood. The 6% reduction appears high for

				Mountain View but no other study or research is available to state otherwise.
10	Bike Facilities (Employment land use only)	% VMT reduction = (Bike mode share) * (level-of-facility-multiplier) then discounted to account for difference between bike trip length and drive trip length	3%  Secure Bicycle Storage - 1%  Showers and personal lockers - 2%	See Appendix A - pages 17-32 of C/CAG Transportation Demand Management Policy Update Approach, 2021
11	Rideshare Program	% VMT Reduction = (54.5% reduction in commute VMT) * (% of total employees that participate)	4%	See 'T-8. Provide Ridesharing Program' in <b>CAPCOA</b> <b>Handbook</b>
12	Free Door-to- Door Transit	% VMT Reduction = 47% * % of total employees that participate	10% (Assuming 20% participation)	See Appendix A - pages 17-32 of C/CAG Transportation Demand Management Policy Update Approach, 2021
13	Telecommuting and Alternative Work Schedules (Employment land use only)	% VMT Reduction = reduction based on type of alternative schedule × % of total employees that participate	5% (Assuming 1.5 days/week and 10% employee participation)	See 'TP08 Telecommuting and Alternative Work Schedules' in the VTA Tool
14	First/Last Mile transit	% Reduction in VMT = - 1*(Total Transit Mile Increased/Transit Miles before the project)*6.69%*0.7*57.8*1	5% (Assuming CAPCOA maximum)	See 'T-25. Extend Transit Network Coverage or Hours' in CAPCOA Handbook.  CAPCOA maximum is 4.6%. However, given the extensive

				coverage of MVGo and Community Shuttle.
15	Unbundle Parking Costs from Property Cost (On Site Parking)	% Reduction in VMT = Change in vehicle cost * elasticity * A  Where: Change in vehicle cost = monthly parking cost / (\$average annual vehicle costs / 12), (taken from CAPCOA)	10% (Based on Testing)  Monthly Parking cost is assumed as \$300.	Using the maximum suggested by CAPCOA and rounding it to the nearest integer. See 'T-16. Unbundle Residential Parking Costs from Property Cost' in CAPCOA Handbook.
16	Limit Parking Supply	% VMT Reduction = % Reduction of parking supply from minimum in City Code × 0.5	10% At least 10% below the minimum required parking based on the Mountain View Municipal Code.	The percent reduction can be adjusted based on the % below minimums. See 'Reduced Parking' in Appendix A - pages 17-32 of C/CAG Transportation Demand Management Policy Update Approach, 2021  C/CAG - 10%
17	Employee Parking Cash- Out (Employment land use only)	% VMT Reduction = % reduction of commute VMT by place type × % of total employees that are eligible	12% Recognizing the variation in parking costs across the city, the cash out allowance should be tailored to the parking expenses specific to the project's vicinity.	Using the maximum suggested by CAPCOA. See 'T-13. Implement Employee Parking Cash-Out' in CAPCOA Handbook.

18	Price Workplace Parking (Employment land use only)	% VMT Reduction = % reduction based on parking fee and place type × % of total employees subject to priced parking	12% (Assuming 10% of employees subject to priced parking at a rate of \$200 per month for projects within ½ mile of VTA Light Rail/ Caltrain station and \$135 for projects elsewhere)	Similar to unbundled parking. See 'T-12. Price Workplace Parking' in <u>CAPCOA</u> <u>Handbook</u> .
19	VTA Equitable VMT Mitigation Program	TBD upon program adoption	TBD	TBD
20	Transit Service Expansion	% VMT Reduction = 0.5 * 0.67 * % change in frequency * Route Contribution Proxy * existing transit mode share Route Contribution Proxy = 50% (when less than 50% of the routes are improved); 85% (when more than or equal to 50% of the routes are improved)	The Applicant in coordination with the transit agency will determine an appropriate amount per employee or resident, to be paid as a one-time contribution.	See 'Fund Transit Service' Parking' in Appendix A - pages 17-32 of C/CAG Transportation Demand Management Policy Update Approach, 2021