Transportation Demand Management Policy Update Approach

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FOR **City/County Association of Governments of San Mateo County**

PREPARED BY **Advanced Mobility Group**

Acknowledgements

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Introduction

As the designated Congestion Management Agency (CMA) for San Mateo County, C/CAG is authorized by California Government Code Section 65088 to prepare a Congestion Management Program (CMP) on a biennial basis. The express goal of the CMP is to manage traffic congestion on the designated CMP Network within San Mateo County, which is a system of State highways and principal arterials that course through the County, including incorporated and unincorporated jurisdictions therein. The CMP itself provides a detailed list and description of the facilities included on the San Mateo County CMP Network.

This document describes Advanced Mobility Group's (AMG) recommendations for the approach to updating a particular section of the San Mateo County CMP, which is the Land Use Impact Analysis Program - otherwise known as the Transportation Demand Management (TDM) Policy; a statutorily required component of the CMP. These recommendations are based on the findings in the prior Best Practices Memo (dated December 1, 2018), multiple meeting discussions with project stakeholders, as well as extensive discussion with C/CAG staff. This document also encapsulates previous policy approach memoranda submitted to C/CAG and its stakeholders with newer, additional feedback and research incorporated.

Purpose Statement

The overarching goal of this TDM Policy Update Approach document is to update the C/CAG TDM Policy to reflect TDM best practices, provide updated performance targets, and standardize monitoring and reporting requirements. To accomplish this, AMG has prepared the following recommendations to update the TDM Policy across four areas:

1. Project Review Thresholds
2. Vehicle Trip Reduction Targets
3. Monitoring & Reporting
4. TDM Measures

These recommendations address issues identified to improve the current TDM Policy and are described in the ensuing sections below.

How This Policy Update Affects Local Jurisdictions in San Mateo County

All C/CAG member jurisdictions will be subject to the updated TDM Policy – unless expressly exempted by C/CAG. (Paths to exemption are explained in greater detail in the companion *Implementation Guide*). The TDM Policy Update includes a new requirement that local jurisdictions notify C/CAG of any new development project under their purview that is estimated to generate at least 100 Average Daily Trips (ADT). Previously, the threshold for local jurisdictions to notify C/CAG of new development projects was 100 net peak hour trips, or those proposed as part of a General Plan Amendment (GPA).

The TDM Policy Update is intended, in part, to help local jurisdictions without a locally-adopted TDM program - or perhaps an outdated one – adequately mitigate vehicular traffic impacts on the CMP Network. It is recognized that local jurisdictions may have already adopted or are in the process of adopting their own TDM program or policies for purposes of mitigating travel demand emanating from new land development. This TDM Policy does not preclude local jurisdictions from applying their

established traffic impact analysis regulations or ordinances during the course of local development review nor does it preclude local jurisdictions from applying lawfully required analysis required by CEQA.

The ensuing sections of this *Policy Approach* document describe the specific sections of the C/CAG TDM Policy to be updated, including foundational rationale for said changes

Update to Project Review Thresholds

Issues with current TDM Policy:

- Net Peak Hour Trip Metric: The 100 or more net peak hour vehicle trips threshold is high and likely excludes many new developments, such as small office buildings, apartment complexes, and condos that could benefit from a TDM Plan.
- Threshold: The threshold only considers the net change in vehicle trips, which risks omitting certain project types, such as infill or redevelopment projects, that would also benefit from applying TDM strategies.

Recommended Metric:

Weekday Average Daily Traffic: Use the projected weekday average daily traffic (ADT) as the threshold for applying TDM requirements. Project thresholds will be stated as ADT and correlated with one of the following three metrics, depending on the predominant site land use:

1) Square footage (Office, Research and Development, Industrial, Institutional, and Medical);
2) Number of rooms/units (Lodging and Multi-Family Residential); or
3) Number of employees (Retail and Restaurant)

Recommended Threshold:

The table below demonstrates the proposed ADT thresholds in correlation to the underlying project characteristic to be applied in the updated TDM Policy. Thresholds vary by land use and project size. It was determined that a tiered approach, with distinct thresholds for “small projects” and “large projects” would be best. The thresholds were determined by evaluating several technical resources, including multiple peer-reviewed trip generation guidance documents, California Office of Planning & Research (OPR) policy advisories, as well as case study TDM policies in California and other regions nationwide.

Table 1. Recommended ADT Thresholds, Correlated with Project Size Characteristic [1] [2] [3]

	Small Projects	Large Projects
Non-Residential: Office, R&D, Industrial, and Institutional	**100 – 499 ADT (10,000 – 49,999 sq. ft.)**	**500+ ADT (50,000+ sq. ft.)**
Non-Residential: Medical &Lodging	**100 – 499 ADT (10,000 – 49,999 sq. ft.)**	**500+ ADT (50,000+ sq. ft.)**
Non-Residential: Retail & Restaurant	**100 – 499 ADT (30-99 employees)**	**500+ ADT (100+ employees)**
Residential: Multi-Family	**100 – 499 ADT (20 - 49 units)**	**500+ ADT (50+ units)**

Small projects and large projects will be subject to different goals and monitoring and reporting requirements, also discussed in detail within the companion *Implementation Guide*. This tiered approach will allow C/CAG to expand the reach of the TDM Policy, improve monitoring and reporting, and minimize financial and administrative burdens to developers, property managers, local agency, and C/CAG staff.

Update to Vehicle Trip Reduction Targets

Issues with current policy:

- Lacking Clarity: Vehicle trip reduction targets are not specified within the current policy and the developer/tenants are not held responsible for the extent to which TDM programs are used. Without quantifiable targets, the ability to monitor and report on the effectiveness of the policy and hold developers/tenants accountable for the ongoing implementation of TDM programs, is limited.

Recommended Metric:

Adopt Vehicle Trip Reduction & Mode Share Targets – Adopt vehicle trip reduction targets as the primary TDM metric. The total vehicle trip reduction target will also encompass a single-occupant vehicle (SOV) mode share reduction ratio that accounts for estimated shift in travel demand behavior, which is documented with research citations in Appendices C and D.

Additional summary bases for recommending vehicle trip reduction ratio as the primary metric, supplemented with SOV mode share reduction, are as follows:

- Vehicle trip reduction ratios are supported by academic research and case study applications in the Bay Area, and beyond. (Bibliography also available in Appendix D). Specific examples include:
    - The City of Mountain View (CA) established a SOV mode share target of 45 percent in the North Bayshore TDM Plan Guidelines.

[1] The quantified square footage, employees, and units in this table demonstrate plausible project size relative to the estimated project ADT. The representative project size values are not exact. They are based on documented linear relationships between project size and respective site travel demand. More detail is available in research references cited in Appendix C & D of this document.

[2] Justification for managing congestion on the CMP Network, particularly by smaller-sized projects, is delegated by State law (CA Govt. Code 65088). In fact, there is no legally identified minimum project size. Therefore, C/CAG can exercise discretion in setting minimum project size thresholds for inclusion in this TDM Policy. However, research of TDM policy advisories and case studies documented in Appendix D (CA Office of Planning & Research, City of Carlsbad, et al) indicate appropriate minimum ADT thresholds and linear correlation between daily trip generation and project size as proposed in Table 1, above.

[3] The TDM Policy only applies to multi-family residential developments only. Single-family home developments are ***exempted*** from this TDM Policy.

    - Fairfax County (VA), near Washington, D.C., has established vehicle trip generation rates based on project site distance from a rail station and accounting for the density of adjacent developments. The closer a site is to a rail station and the greater amount of nearby development, the greater the vehicle trip reduction goal would be. The vehicle trip reduction goal in Fairfax County ranges between 25 to 65 percent of ITE rates.
- Mode share is a viable complementary metric; it was the most common goal metric used in jurisdictions reviewed in the *Best Practices Memo*, dated December 1, 2018.
- Methodology for calculating mode share is relatively easy to understand and synthesize data.
- In the recommended monitoring and reporting approach described later in this document, as well as in the *Implementation Guide*, Commute.org will assist C/CAG by collecting data about TDM implementation status at completed projects. Commute.org will distribute periodic surveys to project tenants and their employees, and then compile and report findings to track TDM Policy implementation progress.
- Mode share targets can be the same countywide or can vary based on land use, location, or distance to transit.

Recommended Targets:
As illustrated in the Table 2 below, the recommended vehicle trip reduction target is 35% below estimated project ADT for all but two land uses categories; a lower vehicle trip reduction target of 25% applies to projects categorized as Small Residential (Multi-Family) or TOD.

Table 2. Vehicle Trip Reduction Targets

	Small Projects	Large Projects	TOD (Small & Large)
Non-Residential: Office, Industrial, and Institutional	**35%**	**35%**	**25%**
Non-Residential: Medical &Lodging	**35%**		
Non-Residential: Retail	**35%**		
Residential: Multi-Family	***25%***		

Vehicle trip reduction and mode share are complementary metrics to address transportation network performance. As part of this TDM Policy Update, reducing SOV trips through implementation of TDM measures supports regional mode share targets shown in Table 3, which are based on countywide averages from the 2019 Congestion Management Program (CMP). Local jurisdictions may set more aggressive targets, as appropriate.

Table 3.
San Mateo County Congestion Management Program (CMP) Mode Share Targets for Single-Occupant Vehicles

	Small Projects	Large Projects
Single Occupant Vehicle	**73%**	**67%**

Update to TDM Measures

Issues with current policy:

- Stakeholder group members indicated that many of the TDM measures listed in the current policy are not used and/or are outmoded (ex. video conference centers). The policy also includes some TDM measures that are typically required as part of building codes or other regional ordinances.
- Developers are required to select measures to offset peak hour vehicle trips over 100, using a vehicle trips credited value for each measure. However, since developers/tenants are not held responsible for the extent to which TDM programs are used, there is little incentive for developers to select measures that are tailored to their specific project.
- The number of vehicle trips credited for each metric may not reflect actual results, since they are countywide estimates and do not consider factors like the project location, distance to transit, or pedestrian and bicycle network, which are critical for the success of many TDM measures.

Recommendation:

Require a set of baseline TDM measures for all projects. Baseline TDM measures will be related to site design and physical improvements, many of which are already required as part of building codes or other local or regional ordinances or programs, in addition to programmatic measures that will require implementation and monitoring post-occupancy. Once required baseline measures are fulfilled, developers can select from additional (recommended) TDM measures that are most appropriate to the site and will help the site achieve its mode share and vehicle trip reduction goals. To facilitate implementation in line with C/CAG TDM Policy, as well as for future TDM monitoring and data collection, it is proposed that development applicants submit a TDM Checklist to the governing jurisdiction Planning Department as part of the development review process. The expectation is that the local jurisdiction will condition any project approval on the implementation of the measures selected from the TDM Checklist by the project applicant. Each measure selected in the Checklist corresponds to a point value and vehicle trip reduction percentage (impact), the values of which are based on literature review of transportation research, best practices, and stakeholder feedback.

The TDM Checklist will also categorize development projects according to their proximity to “high quality” transit, defined as a transit station or stop featuring maximum 15-minute service frequency (headways) during weekday peak hours between 6-10 a.m. and 3-7 p.m. This definition is also consistent with that of the Metropolitan Transportation Commission (MTC). Three project categories are proposed:

1. **Transit-Oriented Development (TOD)** – project located within 0.5 miles of “high quality” transit.
2. **Transit Proximate** – project located between 0.5 – 3 miles of “high quality” transit.
3. **Non-Transit Proximate** – project located more than 3 miles from “high quality” transit.

Some measures will only be required of projects meeting one of the above three geographic criteria.

Detailed background worksheets that showcase the underlying scoring values for the Required and Additional Recommended TDM measures to evaluate Residential (Multi-Family) and Non-Residential land uses, the latter of which includes Office, R&D, Industrial, and Institutional; Medical & Lodging; and Retail & Restaurant categories are contained in Appendix A. A full description of each TDM measure is provided in Appendix B.

Update to Policy Monitoring & Reporting

Issues with current policy:

- Since developer/tenants are not held responsible for the extent to which TDM programs are used post-occupancy, there is no mechanism for monitoring or accountability after a new project is built.
- Lack of consistent reporting of development project applications by local jurisdictions to C/CAG staff (as is required in established policy).
- Lack of mechanism for systematic reporting of TDM mitigation measure status post-occupancy.

Recommendation:

Require periodic reporting post-occupancy. Reporting requirements and duration of requirements will vary depending on project ADT and land use. To implement this, C/CAG will partner with Commute.org to administer the monitoring and reporting process primarily through project tenant and employee surveys. These surveys will be intended to capture the completeness of TDM implementation as well as trip-making behavior. Commute.org will assist with distribution, collection, and synthesis of survey data.

A process will also be developed to follow up with projects that fall short of TDM Policy goals or reporting requirements. This compliance effort will be collaborative, not punitive; no fines to the project owner or tenant are proposed as part of this process due to failure to achieve the targeted trip reduction goals. Rather, it is proposed that C/CAG, in partnership with Commute.org, convene with the non-compliant owner/tenant and the local jurisdiction where the project is located to strategize a path toward adequate TDM implementation and, ultimately, TDM Policy compliance.

Reporting for Small Residential Projects:

- No reporting is required for small residential projects.

Reporting for Large Residential Projects:

- A TDM self-certification status form is required to be completed biennially for the first six (6) years after occupancy.

Reporting for Large & Small Non-Residential Projects:

- Monitoring and reporting for 20 years post-occupancy
- A TDM self-certification status form is required to be completed biennially for 18 years post occupancy.
- A travel survey of employees/occupants is required to be completed biennially -beginning in the third year post-occupancy for a period of six years and then triennially for remaining 12 years.

Table 4. Recommended Monitoring & Reporting Structure

	Multi-Family Residential		Non-Residential	
	Small Projects	**Large Projects**	**Small Projects**	**Large Projects**
TDM Plan Checklist Survey Reporting (1-6 Years Post-Occupancy)	Not Required	Biennial self-certification	Biennial survey	Biennial survey
TDM Plan Checklist Survey Reporting (6+ Years Post-Occupancy)	Not Required	Not Required	Triennial Survey	Triennial Survey
Mode Share Surveys	Not Required	Not Required	Required	Required

For example, the 20-year monitoring and reporting in the form of periodic surveys will commence two years after project completion & occupancy and biennially for six years, and then triennially for 12 years. Example:

Year 2025: Project completion & occupation
2026: TDM Self-Certification Form
2027: TDM Self-Certification Form and 1st biennial (two-year) survey
2029: TDM Self-Certification Form and 2nd biennial survey
2031: TDM Self-Certification Form and 3rd biennial survey. This is the 6-year mark post-occupancy. From this point forward, surveys are to be conducted triennially (three-year periods).
2034: TDM Self-Certification Form and 4th survey
2037: TDM Self-Certification Form and 5th survey
2040: TDM Self-Certification Form and 6th survey
2043: TDM Self-Certification Form and final survey.

Large residential projects are required to conduct biennial self-certification for the first six years of occupancy; after the sixth year of occupancy, no additional reporting is required. No reporting is required for small residential projects.

- Separate project site traffic counts conducted by project tenants are optional, but welcomed by C/CAG, for transportation performance measurement purposes.

Recommended Monitoring & Reporting Standards:

- Projects will be found non-compliant if the following occurs:
    - Failure to implement measures or amenities as indicated in the submitted TDM Plan or TDM Checklist; or
    - Failure to submit subsequent TDM implementation surveys; or

Projects that do not meet vehicle trip reduction and SOV mode share targets would not otherwise be penalized if they demonstrate a good-faith effort to meet the TDM Policy goals.

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Appendix A *C/CAG TDM Scoring Methodology*

Overview of Appendix A

This technical appendix summarizes the methodological background for the C/CAG TDM Checklist that local jurisdictions subject to the C/CAG TDM Policy shall utilize to evaluate TDM mitigation efforts for new development applications.

Included in this section are the following supplemental materials for local jurisdiction staff and/or developers to use as reference when preparing a C/CAG TDM Checklist applicable to the subject project.

Assistance materials included in this particular appendix consist of the following:

- Text summary of scoring rationale for Non-Residential and Residential land uses
- Detailed tables specifying the TDM measures applicable to each land use category and project type

Further reading and research, including numerical citations for vehicle trip reduction ratios – including SOV mode share - are available in the subsequent *Appendix D, Research References*.

Summary of Scoring Rationale

Why There are Points and Trip Reduction Ratios on the TDM Checklist

The corresponding point values for each mitigating measure are weighted (i.e., assigned a value signifying relative importance) and serve as a guide for relative impact of the TDM measure. This point scoring system is not "One-Size-Fits-All". It is incumbent upon the project applicant, in cooperation with Commute.org and the responsible jurisdiction, to select the necessary values in order to meet the required vehicle trip reduction threshold.

Non-Residential Land Use Category

This category Includes *Office, Industrial, Institutional*; *Medical & Lodging*; and *Retail* land use sub-categories.

The scoring system is based upon the effectiveness of each individual mitigating TDM measure, rated in points on an ascending scale of 1-10 with a corresponding vehicle trip reduction ratio (percentage). To meet the C/CAG TDM Policy vehicle trip reduction targets, a project must commit to a minimum vehicle trip reduction ratio. This is accomplished by fulfilling the *Required* measures listed in the top half of the TDM Score Sheet, plus *Additional Recommended* measures in the bottom half, so that the total trip reduction ratio meets or exceeds the stated minimum threshold (typically 35%, unless otherwise stated). The exact number of *Additional Recommended* measures needed to meet the minimum estimated trip reduction threshold is further based on the project type, as described below:

- **For TOD projects** - defined as being within 0.5 miles of a transit station serving "high-quality transit" - the minimum required trip reduction threshold is 25%. Therefore, after fulfilling all the *Required* measures, the applicant must then select a sufficient number of *Additional Recommended* measures to acheive the minimum 25% vehicle trip reduction threshold for this project type. This threshold is lower than other project types for several reasons, including the fact that development near "high quality" transit service typically generates fewer single-occupancy vehicle trips. Therefore, this

threshold provides a 10% bonus for TODs and aims to incentivize their development by streamlining review.

- **For "Transit Proximate" projects** - defined as being within 0.5 to 3 miles of a transit stop or station with "high quality" transit service - the minimum required trip reduction threshold is 35%. Therefore, after fulfilling all the *Required* measures, the applicant must then select a sufficient number of *Additional Recommended* measures to achieve the minimum 35% trip reduction threshold for this project type.

- **For projects that are NOT "Transit Proximate"** - defined as being located more than 3 miles from a transit stop or station with "high quality" transit service - the minimum required vehicle trip reduction threshold is the same as "Transit Proximate" projects: 35%.

In any case, the project must ultimately select a sufficient number of measures from the *Additional Recommended* measures section to obtain the required overall trip reduction ratio.

Comparative Scoring Description: Large vs. Small Non-Residential Projects

To review, Large and Small Non-Residential Projects may be categorized as one of the following three project types:

- TOD
- Transit Proximate
- Non-Transit Proximate

Transit Proximate and Non-Transit Proximate projects in this project category are required to fulfill sufficient cumulative TDM measures in order to achieve 35% vehicle trip reduction impact. TODs are subject to a lower 25% threshold.

Residential Land Use Category

Like for Non-Residential land uses, the point system used for Residential projects is also based upon the effectiveness of each individual mitigating measure, in terms of estimated vehicle trip reduction ratio and corresponding points rated on an asending weighted scale of 1-10.

The same methodology also applies with regards to fulfilling the *Required* measures plus a minimum number of *Additional Recommended* measures to achieve the minimum trip reduction threshold of 35% (or 25%, if TOD or Small Residential).

Finally, with respect to project types, the same definitions and thresholds also apply for TOD, Transit Proximate, and Non-Transit Proximate projects.

To re-emphasize, the corresponding point value for each mitigating measure is weighted (i.e., assigned a value signifying relative importance) and the point scoring system is not One-Size-Fits-All. It remains incumbent upon the responsible jurisdiction, in cooperation with the project applicant, to select the necessary values in order to meet the required vehicle trip reduction threshold.

Comparative Scoring Description: Large vs. Small Residential Projects

As for Large Non-Residential projects, Large Residential projects are categorized as one of the following three project types:

- TOD
- Transit Proximate
- Non-Transit Proximate

However, the Small Residential Project category is unique in that it *makes no such distinction*. This is because all Small Residential projects, irrespective of geography, are subject to a 25% vehicle trip reduction threshold.

For the Large Residential category, Transit Proximate and Non-Transit Proximate projects are required to fulfill cumulative TDM measures in order to achieve 35% trip reduction impact. However, TODs are still subject to a lower 25% threshold.

Brief Explanation of the Background TDM Checklist Worksheets

The following pages feature technical worksheets for each land use category. There are eight (8) in total, each represented in the following order:

1. Large Non-Residential (Office, Industrial, Institutional)
2. Small Non Residential (Office, Industrial, Institutional)
3. Large Residential
4. Small Residential
5. Large Non-Residential (Medical/Lodging)
6. Small Non-Residential (Medical/Lodging)
7. Large Non-Residential (Retail)
8. Small Non-Residential (Retail)

The purpose of featuring these worksheets is to illustrate the underlying quantification of vehicle trip reduction metrics that are paramount to the C/CAG TDM Policy Update. As described in the main body text of this Policy Approach document, the primary metric is the vehicle trip reduction ratio (or percentage). Single-occupant vehicle (SOV) mode share and the weighted point score are supplementary, but nonetheless valuable insofar as these help derive the estimated vehicle trip reduction that could reasonably occur by implementing certain TDM measures.

For further assistance on this topic, interested parties are encouraged to contact C/CAG staff directly. Contact information is available at the agency website: https://ccag.ca.gov/.

Office, Industrial, Institutional - Large Project (500+ ADT; 50,000+ sft)

Commit to all REQUIRED measures and select sufficient ADDITIONAL Measures to satisfy 35% private automobile trip reduction goal. TOD Projects located within 0.5 miles of station with high-quality transit service shall be subject 25% trip reduction goal.

Required Measures

	ID	Measures	Type	Measure Description	Point Value	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Parking Mgmt. for Ridesharing	1	Free/Preferential Parking for Carpools	Programmatic	Provide free or preferential parking, including reserved spaces or spaces near an entrance or other desirable location, to incentivize ridesharing.	1	1.0%	.05-5%	5.0%	3,6	Financial incentives are consistenty cited in research as one of the most effective travel behavior modifiers. (Consider observed carpooling aka "slugging" in major metro areas w/ tolled roadways & bridges).
TDM Mgmt. & Admin	2	TDM Coordinator/Contact Person	Programmatic	Provide a TDM coordinator or contact person. This may be an individual who is an employee of - or at - the development project; or may be contracted through a third-party provider, such as Commute.org.	1	0.5%	1-2%	2.0%	6	A person whose responsibility it is to provide, measure, and track transportation programs ensures continued effort to reducing SOV trips
	3	Actively Participate in Commute.org, or Transportation Management Association (TMA) Equivalent	Programmatic	Obtain certification of registration from Commute.org or equivalent TMA incorporation documents.	13	16.5%	7.8-26%	26.0%	1,3,6	Examples: Emeryville TMA, Mission Bay TMA (SF)
	3A	*Certified participation in Commute.org, or equivalent program such as TMA*		*Obtain certification of registration from Commute.org or equivalent TMA incorporation documents.*	*2*	*4.0%*	*5.0%*	*5.0%*	*3*	
	3B	*Commute assistance and ride-matching*		*Establish a commute assistance program to provide individualized trip planning services.*	*4*	*1.0%*	*1-3%*	*3.0%*	*6*	
	3C	*Shuttle Program/Shuttle Consortium/Fund Transit Service*		*Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees and guests.*	*5*	*10.0%*	*0.3-13%*	*13.0%*	*1*	FOR TRANSIT PROXIMATE PROJECTS ONLY * ^
	3D	*Guaranteed Ride Home*		*Offer employees a Guaranteed Ride Home (GRH) program (or participate in the Commute.org GRH program).*	*1*	*0.5%*	*<1%*	*1.0%*	*1*	
	3E	*Orientation, Education, Promotional Programs and/or Materials*		*Offer new employees an orientation or education program or materials.*	*1*	*1.0%*	*0.8-4%*	*4.0%*	*1*	
Shuttles, Transit & Ridesharing	4	Carpool or Vanpool Program	Programmatic	Establish carpool or vanpool program for tenant-occupants and register program with Commute.org for active users to become eligible for fiscal rewards.	3	2.0%	1-5%	5.0%		
	5	Transit or Ridesharing Passes/Subsidies	Programmatic	Offer public transit passes or subsidies; or carpool/vanpool subsidies to tenants equivalent to 30% of the value of their monthly fare or $50 monthly, to incentivize transit use and ridesharing and comply with regional environmental sustainability goals. NOTE: Funding contributions towards and/or participation in Commute.org shuttle program does not count for this measure. Passes/subsides provided must be valid for public transportation options, including but not limited to BART, Caltrain, SamTrans, and ridesharing platforms and vanpool subscription (or costs).	8	10.0%	0-20%	20.0%		
	6	Pre-Tax Transportation Benefits	Programmatic	Offer option for tenants to participate in a pre-tax transit program to encourage the use of sustainable transportation modes and leverage pre-tax income to pay for commute trip costs.	3	1.0%	0-3%	3.0%	0	
Active Transportation	7	Secure Bicycle Storage	Site Design	Comply with CALGreen minimum bicycle parking requirements: Provide safe and convenient long-term (Class I) bicycle parking equating to 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (for 10+ tenant-occupants). Short-term (Class II) bicycle parking should be within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of 1 two-bike capacity rack. May also be in the public right-of-way.	1	1.0%	0.5%	0.5%	6	Lockers or indoor parking (in addition to racks for short-term parking).
	8	Showers, Lockers, and Changing Rooms for Cyclists	Site Design	These amenities serve as end of trip facilities for employees arriving by bike or other active transportation forms.	2	2.0%	2-5%	3.0%	3	Facilities to store personal hygiene items and change of clothes is an effective measure to encourage active transportation to/from work.
Site Design Initiatives	9	Design Streets to Encourage Bike/Ped Access	Site Design	Design street or roadways that provide multimodal travel choices and give people the option to avoid vehicular traffic congestion, increasing the overall capacity of the transportation network.	1	1.0%	0-2%	2.0%	1,6	Direct pedestrian connection to transit, front setback <20 feet. Given Complete Streets, this is requirement with most jurisdictions.

Maximum Weighted Points from Required Measures, for TOD Projects	25	25.0%
Maximum Weighted Points from Required Measures, for Projects NOT "Transit Proximate"	25	25.0%
Maximum Weighted Points from Required Measures, for "Transit Proximate" Projects	30	35.0%

*** "Transit Proximate" : Project located between 0.5 - 3 miles from a transit station or stop with "high quality" transit service.**
^ "High quality" transit service : Rail station or a transit stop featuring bus service with maximum 15-minute headways during weekday peak hours of 6-10AM and 3-7PM.

Additional Recommended Measures . Select sufficient, additional measures to reach 35% trip reduction threshold (25% for TODs).										
		Additional Measures	Type	Measure Description	Additional Point Values	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Employee Programs	10	Flex Time, Compressed Work Week, Telecommute	Programmatic	Flex time allows employees some flexibility in their daily work schedules. Compressed work week allows employees to work fewer but longer days. Telecommuting functions similarly, allowing employees to work from home rather than the office, reducing vehicle travel on the days they work remotely.	5	5.0%	1-27%	16.0%	2,9	With COVID-19 shelter-in-place laws, telecommute surveys have shown and increase in the propensity for employers to allow telecommuting on a regular basis. Increased percentage from original 4%.
Parking Mgmt.	11	Paid Parking at Market Rate	Programmatic	Motorists pay directly for using parking facilities. Parking rates should be at the market rate and not subsidized by property owners or employers.	10	25.0%	0.5-20%	10.0%	1	
	12	Short Term Daily Parking	Programmatic	Offer daily or hourly parking rates that are proportional to the monthly rate or approximately the cost of a transit fare.	2	2.0%	2.0%	1.0%		
	13	Reduced Parking	Site Design	Provide off-street private parking at least 10% below local zoning code required minimums, on a per unit or square foot basis. Where regulations stipulate parking maximums, full credit may be issued if applicant provides parking below the applicable maximum rate. Consideration may be required of potential spillover parking into surrounding areas.	8	10.0%	5-12%	8.0%	1	Would have project sponsor to reduce parking to 10% below local zoning code required minimums; and where less than 10 spaces are in question - remove at least 1 space (see VTPI research citation in Methodology).
TDM Mgmt. & Admin	14	Developer TDM Fee/TDM Fund	Programmatic	Impact fees can be collected from developers, generally on a per-unit or square footage basis, to fund the implementation of TDM programs. These TDM fees can be put in an escrow account for the developer or subsequent property manager to spend to implement programmatic elements of the TDM plan. NOTE: "Double dipping" with the already required "TMA Participation" measure (above) is not allowed. This measure cannot be given credit for TDM fund payment or developer fees already required by fee nexus ordinance by the governing jurisdiction. Credit here may only be given for voluntary TDM fund payment or developer fee negotiated separately with the governing jurisdiction.	5	4.0%	5.0%	5.0%		
Transit, Shuttles, & Ridesharing	15	Car Share On-Site	Programmatic	Provide on-site car share or vehicle fleets.	3	1.0%	<2%	2.0%	2	
	16	Land Dedication or Capital Improvements for Transit	Site Design	Contribute space on, or adjacent to, the project site for transit improvements. NOTE: Scoring for this measure is tiered, based how many improvements are implemented from the list of sub-types below. Each improvement type is worth 2 points. Achieving 4 improvements equals the full 8 points. Land dedication sufficient to accommodate at least 4 improvements will also score the full amount of points.	8	4.0%	0-4%	3.0%	1	
	16A	*Bus Pullout Space*			*2*					
	16B	*Bus Shelter*			*2*					
	16C	*Visual/Electrical Improvements (i.e., Lighting, Signage)*			*2*					
	16D	*Other (i.e., Micromobility Parking Zone, TNC Loading Zone)*			*2*					
	17	Shuttle Program/Shuttle Consortium/Fund Transit Service	Programmatic	Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees and guests.	5	10.0%	0.3-13%	13.0%	1	
Active Transportation	18	Bike/Scooter Share On-Site	Programmatic	Allocate space for bike or scooter share stations, docks, or parking areas.	2	1.0%	<2%	2.0%	7	
	19	Active Transportation Subsidies	Programmatic	Offer employees or residents who use active transportation subsidies other incentives (gift cards, prizes).	3	2.0%	0.5-3%	3.0%	5	
	20	Gap Closure	Site Design	Establish new, or enhance the quality of, pedestrian and bicycle facilities to facilitate active transportation from a project site to existing trails, bikeways, or adjacent streets. Pedestrian improvements should be within 0.5 miles of project site (approx. 10-15 minute walk); bicycling improvements within 2 miles of site (approx. 15-min ride at 10mph).	5	7.0%	3-21%	15.0%	8	Research identifies maximum 0.5-mile walkshed (radius) from project site and 2-mile biking radius (15 minutes @10mph; leisurely ride).
	21	Bike Repair Station	Site Design	Offer a bicycle repair station or toolkit, within a designated, secure area of the building, such as a bicycle storage room, to encourage bicycling and support employees and residents who cycle.	1	0.5%	0.5%	1.0%		
Site Design Initiatives	22	Pedestrian Oriented Uses & Amenities on Ground Floor	Site Design	Include active, pedestrian-oriented commercial uses on the ground floor to create more walkable and inviting areas. Provide on-site amenities, such as cafés, gym, childcare, retail stores, or banks.	4	3.0%	0.5-2%	3.0%	10	

Maximum Weighted Points from Additional Measures, for TOD Projects	56	64.5%
Maximum Weighted Points from Additional Measures, for Projects NOT "Transit Proximate"	61	74.5%
Maximum Weighted Points from Additional Measures, for "Transit Proximate" Projects	56	64.5%
Cumulative Total for TOD Projects	*81*	
Cumulative Total for Projects NOT "Transit Proximate"	*86*	
Cumulative Total for "Transit Proximate" Projects	*86*	

Office, Industrial, Institutional - Small Project (100-499 ADT; 10,000-49,999 sft)

Commit to all REQUIRED measures and select sufficient ADDITIONAL Measures to satisfy 35% private automobile trip reduction goal. TOD Projects located within 0.5 miles of station with high-quality transit service shall be subject 25% trip reduction goal.

Required Measures

	ID	Measures	Type	Measure Description	Point Value	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Parking Mgmt. for Ridesharing	1	Free/Preferential Parking for Carpools	Programmatic	Provide free or preferential parking, including reserved spaces or spaces near an entrance or other desirable location, to incentivize ridesharing.	1	1.0%	.05-5%	5.0%	3,6	Financial incentives are consistenty cited in research as one of the most effective travel behavior modifiers. (Consider observed carpooling aka "slugging" in major metro areas w/ tolled roadways & bridges).
TDM Mgmt. & Admin	2	TDM Coordinator/Contact Person	Programmatic	Provide a TDM coordinator or contact person. This may be an individual who is an employee of - or at - the development project; or may be contracted through a third-party provider, such as Commute.org.	1	0.5%	1-2%	2.0%	6	A person whose responsibility it is to provide, measure, and track transportation programs ensures continued effort to reducing SOV trips
	3	Actively Participate in Commute.org, or Transportation Management Association (TMA) Equivalent	Programmatic	Sites shall register with Commute.org or else join or create a Transportation Management Association (TMA) with equivalent TDM service, whose role is to coordinate transportation-related programs and services in specific geographic areas.	8	6.5%	7.8-26%	8.0%	1,3,6	Examples: Emeryville TMA, Mission Bay TMA (SF)
	3A	*Certified participation in Commute.org, or equivalent program such as TMA*		*Obtain certification of registration from Commute.org or equivalent TMA incorporation documents.*	*2*	*4.0%*	*5.0%*	*5.0%*	*3*	
	3B	*Commute assistance and ride-matching*		*Establish a commute assistance program to provide individualized trip planning services.*	*4*	*1.0%*	*1-3%*	*3.0%*	*6*	
	3C	*Guaranteed Ride Home*		*Offer employees a Guaranteed Ride Home (GRH) program (or participate in the Commute.org GRH program).*	*1*	*0.5%*	*<1%*	*1.0%*	*1*	
	3D	*Orientation, Education, Promotional Programs and/or Materials*		*Offer new employees an orientation or education program or materials.*	*1*	*1.0%*	*0.8-4%*	*4.0%*	*1*	
Shuttles, Transit & Ridesharing	4	Carpool or Vanpool Program	Programmatic	Carpool and vanpooling are types of ridesharing that seek to allow vehicles to carry additional passengers when making a trip, with minimal additional mileage. Carpooling generally uses participants' own automobiles. Vanpooling generally uses leased vans (often supplied by employers, non-profit organizations or government agencies).	3	2.0%	1-5%	5.0%	0	
	5	Transit or Ridesharing Passes/Subsidies	Programmatic	Offer public transit passes or subsidies; or carpool/vanpool subsidies to tenants equivalent to 30% of the value of their monthly fare or $50 monthly, to incentivize transit use and ridesharing and comply with regional environmental sustainability goals. NOTE: Funding contributions towards and/or participation in Commute.org shuttle program does not count for this measure. Passes/subsides provided must be valid for public transportation options, including but not limited to BART, Caltrain, SamTrans, and ridesharing platforms and vanpool subscription (or costs).	8	10.0%	0-20%	20.0%	1	
	6	Pre-Tax Transportation Benefits	Programmatic	Offer option for tenants to participate in a pre-tax transit program to encourage the use of sustainable transportation modes and leverage pre-tax income to pay for commute trip costs.	3	1.0%	0-3%	3.0%	0	
Active Transportation	7	Secure Bicycle Storage	Site Design	Comply with CALGreen minimum bicycle parking requirements: Provide safe and convenient long-term (Class I) bicycle parking equating to 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (for 10+ tenant-occupants). Short-term (Class II) bicycle parking should be within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of 1 two-bike capacity rack. May also be in the public right-of-way.	1	1.0%	0.5%	0.5%	6	Lockers or indoor parking (in addition to racks for short-term parking).
	8	Showers, Lockers, and Changing Rooms for Cyclists	Site Design	These amenities serve as end of trip facilities for employees arriving by bike or other active transportation forms.	2	2.0%	2-5%	3.0%	3	Facilities to store personal hygiene items and change of clothes is an effective measure to encourage bicycling or running to work.
Site Design Initiatives	9	Design Streets to Encourage Bike/Ped Access	Site Design	Design street or roadways that provide multimodal travel choices and give people the option to avoid vehicular traffic congestion, increasing the overall capacity of the transportation network.	1	1.0%	0-2%	2.0%	1,6	Direct pedestrian connection to transit, front setback <20 feet. Given Complete Streets, this is requirement with most jurisdictions.
				Maximum Weighted Points from Required Measures	28	25.0%				

Additional Recommended Measures . Select sufficient, additional measures to reach 35% trip reduction threshold (25% for TODs).										
		Additional Measures	Type	Measure Description	Additional Point Values	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Employee Programs	10	Flex Time, Compressed Work Week, Telecommute	Programmatic	Flex time allows employees some flexibility in their daily work schedules. Compressed work week allows employees to work fewer but longer days. Telecommuting functions similarly, allowing employees to work from home rather than the office, reducing vehicle travel on the days they work remotely.	5	5%	1-27%	16%	2,9	With COVID-19 shelter-in-place laws, telecommute surveys have shown and increase in the propensity for employers to allow telecommuting on a regular basis. Increased percentage from 4% to 6%
Parking Mgmt.	11	Paid Parking at Market Rate	Programmatic	Motorists pay directly for using parking facilities. Parking rates should be at the market rate and not subsidized by property owners or employers.	10	25%	0.5-20%	10%	1	
	12	Short Term Daily Parking	Programmatic	Offer daily or hourly parking rates that are proportional to the monthly rate or approximately the cost of a transit fare.	2	2%	2%	1%	0	
	13	Reduced Parking	Site Design	Provide off-street private parking at least 10% below local zoning code required minimums, on a per unit or square foot basis. Where regulations stipulate parking maximums, full credit may be issued if applicant provides parking below the applicable maximum rate. Consideration may be required of potential spillover parking into surrounding areas.	8	10%	5-12%	8%	1	Would have project sponsor to reduce parking to 10% below local zoning code required minimums; and where less than 10 spaces are in question - remove at least 1 space (see VTPI research citation in Methodology).
TDM Mgmt. & Admin	14	Developer TDM Fee/TDM Fund	Programmatic	Impact fees can be collected from developers, generally on a per-unit or square footage basis, to fund the implementation of TDM programs. These TDM fees can be put in an escrow account for the developer or subsequent property manager to spend to implement programmatic elements of the TDM plan. NOTE: "Double dipping" with the already required "TMA Participation" measure (above) is not allowed. This measure cannot be given credit for TDM fund payment or developer fees already required by fee nexus ordinance by the governing jurisdiction. Credit here may only be given for voluntary TDM fund payment or developer fee negotiated separately with the governing jurisdiction.	5	4%	5%	5%	0	
Transit, Shuttles, & Ridesharing	15	Car Share On-Site	Programmatic	Provide on-site car share or vehicle fleets.	3	1%	<2%	2%	2	
	16	Land Dedication or Capital Improvements for Transit	Site Design	Contribute space on, or adjacent to, the project site for transit improvements. NOTE: Scoring for this measure is tiered, based how many improvements are implemented from the list of sub-types below. Each improvement type is worth 2 points. Achieving 4 improvements equals the full 8 points. Land dedication sufficient to accommodate at least 4 improvements will also score the full amount of points.	8	4%	0-4%	3%	1	
	16A	Bus Pullout Space			2					
	16B	Bus Shelter			2					
	16C	Visual/Electrical Improvements (i.e., Lighting, Signage)			2					
	16D	Other (i.e., Micromobility Parking Zone, TNC Loading Zone)			2					
	17	Shuttle Program/Shuttle Consortium/Fund Transit Service	Programmatic	Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees and guests	5	10%	0.3-13%	13%	1	NON-TRANSIT PROXIMATE PROJECTS ONLY
Active Transportation	18	Bike/Scooter Share On-Site	Programmatic	Allocate space for bike or scooter share stations, docks, or parking areas.	2	1%	<2%	2%	7	
	19	Active Transportation Subsidies	Programmatic	Offer employees or residents who use active transportation subsidies other incentives (gift cards, prizes).	3	2%	0.5-3%	3%	5	
	20	Gap Closure	Site Design	Establish new, or enhance the quality of, pedestrian and bicycle facilities to facilitate active transportation from a project site to existing trails, bikeways, or adjacent streets. Pedestrian improvements should be within 0.5 miles of project site (approx. 10-15 minute walk); bicycling improvements within 2 miles of site (approx. 15-min ride at 10mph).	5	7%	3-21%	15%	8	Research identifies maximum 0.5-mile walkshed (radius) from project site and 2-mile biking radius (15 minutes @10mph; leisurely ride).
	21	Bike Repair Station	Site Design	Offer a bicycle repair station or toolkit, within a designated, secure area of the building, such as a bicycle storage room, to encourage bicycling and support employees and residents who cycle.	1	1%	1%	1%	0	
Site Design Initiatives	22	Pedestrian Oriented Uses & Amenities on Ground Floor	Site Design	Include active, pedestrian-oriented commercial uses on the ground floor to create more walkable and inviting areas. Provide on-site amenities, such as cafés, gym, childcare, retail stores, or banks.	4	3%	0.5-2%	3%	10	
				Maximum Weighted Points from Additional Measures	61	74.5%				
				Cumulative Total	*89*					

Residential - Large Project (Multi-family; 50+ units)

Commit to all REQUIRED measures and select sufficient ADDITIONAL Measures to satisfy 35% private automobile trip reduction goal. TOD Projects located within 0.5 miles of station with high-quality transit service shall be subject 25% trip reduction goal.

Required Measures

		Measures	Type	Measure Description	Point Value	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Employee & Resident Amenities	1	Orientation, Education, Promotional Programs and/or Materials	Programmatic	Offer residents an orientation or education program or materials.	1	1.0%	0.8-4%	4.0%	1	
TDM Mgmt. & Admin	2	TDM Coordinator/Contact Person	Programmatic	Provide a TDM coordinator or contact person. This may be an individual who is an employee of - or at - the development project; or may be contracted through a third-party provider, such as Commute.org.	1	0.5%	1-2%	2.0%	6	A person whose responsibility it is to provide, measure, and track transportation programs ensures continued effort to reducing SOV trips
	3	Actively Participate in Commute.org, or Transportation Management Association (TMA) Equivalent	Programmatic	Sites shall register with Commute.org or else join or create a Transportation Management Association (TMA) with equivalent TDM service, whose role is to coordinate transportation-related programs and services in specific geographic areas.	11	15.0%	6-26%	21.0%	1,3,6	Examples: Emeryville TMA, Mission Bay TMA (SF)
	3A	*Certified participation in Commute.org, or equivalent program such as TMA*		*Obtain certification of registration from Commute.org or equivalent TMA incorporation documents.*	*2*	*4.0%*	*5.0%*	*5.0%*	*3*	
	3B	*Commute assistance and ride-matching*		*Establish a commute assistance program to provide individualized trip planning services.*	*4*	*1.0%*	*1-3%*	*3.0%*	*6*	A program outlines the workplan for the commute assistance and establishes a point-person for the implementation of SOV trip
	3C	*Shuttle Program/Shuttle Consortium/Fund Transit Service*		*Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees and guests.*	*5*	*10.0%*	*0.3-13%*	*13.0%*	*1*	"TRANSIT PROXIMATE" PROJECTS ONLY * ^
Shuttles, Transit & Ridesharing	4	Transit or Ridesharing Passes/Subsidies	Programmatic	Offer public transit passes or subsidies, or carpool/vanpool subsidies to tenants equivalent to 30% of the value of their monthly fare or $50 monthly, to incentivize transit use and ridesharing and comply with regional environmental sustainability goals. NOTE: Funding contributions towards and/or participation in Commute.org shuttle program does not count for this measure. Passes/subsides provided must be valid for public transportation options, including but not limited to BART, Caltrain, SamTrans, and ridesharing platforms and vanpool subscription (or costs)	8	10.0%	0-20%	1	20.0%	
Active Transportation	5	Secure Bicycle Storage	Site Design	Comply with CALGreen minimum bicycle parking requirements: Provide safe and convenient long-term (Class I) bicycle parking equating to 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (for 10+ tenant-occupants). Short-term (Class II) bicycle parking should be within 200 feet of the building entrance, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of 1 two-bike capacity rack. May also be in the public right-of-way.	1	1.0%	0.5%	0.5%	6	Lockers or indoor parking (in addition to racks for short-term parking)
Site Design Initiatives	6	Design Streets to Encourage Bike/Ped Access	Site Design	Design street or roadways that provide multimodal travel choices and give people the option to avoid vehicular traffic congestion, increasing the overall capacity of the transportation network.	1	1.0%	0-2%	2.0%	1,6	Direct pedestrian connection to transit, front setback <20 feet. Given Complete Streets, this is requirement with most jurisdictions.

Maximum Weighted Points from Required Measures, for TOD Projects	18	18.5%
Maximum Weighted Points from Required Measures, for Projects NOT "Transit Proximate"	18	18.5%
Maximum Weighted Points from Required Measures, for "Transit Proximate" Projects	23	28.5%

*** A "Transit Proximate" project is defined as locating between 0.5 - 3 miles from a transit stop or station with "high-quality" transit service.**

^ "High-quality" transit is defined as any rail station or a transit stop featuring bus service with maximum 15-minute headways during weekday peak hours of 6-10AM and 3-7PM.

Additional Recommended Measures . Select sufficient, additional measures to reach 35% trip reduction threshold (25% for TODs).

		Additional Measures	Type	Measure Description	Additional Point Values	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Employee & Resident Amenities	7	Delivery Amenities	Site Design	Offer delivery-supportive amenities, such as an area for receipt of deliveries, clothes lockers for laundry or dry cleaning, storage for package deliveries or temporary refrigeration for grocery deliveries. Delivery-supportive amenities can help reduce the need for individual vehicle ownership and vehicle trips by consolidating multiple trips at one central location.	1	1.0%	<2%	1.0%	7	
	8	Family-supportive Amenities	Site Design	To address challenges that families face in making trips without a private vehicle, the property owner should provide family-supportive amenities, such as on-site secure storage of personal car seats, strollers, cargo bicycles, or other large bicycles. Property owners can also provide shared building equipment, such as shopping carts or cargo bicycles for check out by residents.	3	3.0%	0.5-3%	3.0%	7	
Parking Mgmt.	9	Paid Parking at Market Rate	Programmatic	Motorists pay directly for using parking facilities. Parking rates should be at the market rate and not subsidized by property owners or employers.	10	25.0%	0.5-20%	10.0%	1	Financial incentives (and disincentives) are consistenty cited in research as one of the most effective travel behavior modifiers. (Consider Shoup, et al).
	10	Reduced Parking	Site Design	Provide off-street private parking at least 10% below local zoning code required minimums, on a per unit or square foot basis. Where regulations stipulate parking maximums, full credit may be issued if applicant provides parking below the applicable maximum rate. Consideration may be required of potential spillover parking into surrounding areas.	8	10.0%	5-12%	8.0%	1	Would have project sponsor to reduce parking to 10% below local zoning code required minimums; and where less than 10 spaces are in question - remove at least 1 space (see VTPI research citation in Methodology).
TDM Mgmt. & Admin	11	Developer TDM Fee/TDM Fund	Programmatic	Impact fees can be collected from developers, generally on a per-unit or square footage basis, to fund the implementation of TDM programs. These TDM fees can be put in an escrow account for the developer or subsequent property manager to spend to implement programmatic elements of the TDM plan. NOTE: "Double dipping" with the already required "TMA Participation" measure (above) is not allowed. This measure cannot be given credit for TDM fund payment or developer fees already required by fee nexus ordinance by the governing jurisdiction. Credit here may only be given for voluntary TDM fund payment or developer fee negotiated separately with the governing jurisdiction.	5	4.0%	5.0%	5.0%		
	12	Carpool or Vanpool Program	Programmatic	Carpool and vanpooling are types of ridesharing that seek to allow vehicles to carry additional passengers when making a trip, with minimal additional mileage. Carpooling generally uses participants' own automobiles. Vanpooling generally uses leased vans (often supplied by employers, non-profit organizations or government agencies).	3	2.0%	1-5%	5.0%		
Transit, Shuttles, & Ridesharing	13	Car Share On-Site	Programmatic	Provide on-site car share or vehicle fleets.	3	1.0%	<2%	2.0%	2	
	14	Land Dedication or Capital Improvements for Transit	Site Design	Contribute space on, or adjacent to, the project site for transit improvements. NOTE: Scoring for this measure is tiered, based how many improvements are implemented from the list of sub-types below. Each improvement type is worth 2 points. Achieving 4 improvements equals the full 8 points. Land dedication sufficient to accommodate at least 4 improvements will also score the full amount of points.	8	4.0%	0-4%	3.0%	1	
	14A	*Bus Pullout Space*			*2*					
	14B	*Bus Shelter*			*2*					
	14C	*Visual/Electrical Improvements (i.e., Lighting, Signage)*			*2*					
	14D	*Other (i.e., Micromobility Parking Zone, TNC Loading Zone)*			*2*					
	15	Shuttle Program/Shuttle Consortium/Fund Transit Service	Programmatic	Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees and guests.	5	10.0%	0.3-13%	13.0%	1	NON-TRANSIT PROXIMATE PROJECTS ONLY
Active Transportation	16	Bike/Scooter Share On-Site	Programmatic	Allocate space for bike or scooter share stations, docks, or parking areas.	2	1.0%	<2%	2.0%	7	
	17	Active Transportation Subsidies	Programmatic	Offer employees or residents who use active transportation subsidies other incentives (gift cards, prizes).	3	2.0%	0.5-3%	3.0%	5	
	18	Gap Closure	Site Design	Establish new, or enhance the quality of, pedestrian and bicycle facilities to facilitate active transportation from a project site to existing trails, bikeways, or adjacent streets. Pedestrian improvements should be within 0.5 miles of project site (approx. 10-15 minute walk); bicycling improvements within 2 miles of site (approx. 15-min ride at 10mph).	5	7.0%	3-21%	15.0%	8	Research identifies maximum 0.5-mile walkshed (radius) from project site and 2-mile biking radius (15 minutes @10mph; leisurely ride).
	19	Bike Repair Station	Site Design	Offer a bicycle repair station or toolkit, within a designated, secure area of the building, such as a bicycle storage room, to encourage bicycling and support employees and residents who cycle.	1	0.5%	0.5%	1.0%		
Site Design Initiatives	20	Pedestrian Oriented Uses & Amenities on Ground Floor	Site Design	Include active, pedestrian-oriented commercial uses on the ground floor to create more walkable and inviting areas. Provide on-site amenities, such as cafés, gym, retail stores, or banks.	4	3.0%	0.5-2%	3.0%	10	

Maximum Weighted Points from Additional Measures, for TOD Projects	56	63.5%
Maximum Weighted Points from Additional Measures, for Projects NOT "Transit Proximate"	61	73.5%
Maximum Weighted Points from Additional Measures, for "Transit Proximate" Projects	56	63.5%
Cumulative Total for TOD Projects	*74*	
Cumulative Total for Projects NOT "Transit Proximate"	*79*	
Cumulative Total for "Transit Proximate" Projects	*79*	

Residential - Small Project (Multi-family; 20-49 units)

Commit to all REQUIRED measures and select sufficient ADDITIONAL Measures to satisfy 25% private automobile trip reduction goal (including TODs).

Required Measures										
		Measures	Type	Measure Description	Point Value	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Employee & Resident Amenities	1	Orientation, Education, Promotional Programs and/or Materials	Programmatic	Offer new residents an orientation or education program or materials.	1	1.0%	0.8-4%	4.0%	1	
TDM Mgmt. & Admin	2	TDM Coordinator/Contact Person	Programmatic	Provide a TDM coordinator or contact person. This individual may either be an employee of the development project or may be contracted through a third-party provider, such as Commute.org.	1	0.5%	1-2%	2.0%	6	
Transit, Shuttles & Ridesharing	3	Transit or Ridesharing Passes/Subsidies	Programmatic	Offer public transit passes or subsidies; or carpool/vanpool subsidies to tenants equivalent to 30% of the value of their monthly fare or $50 monthly, to incentivize transit use and ridesharing and comply with regional environmental sustainability goals. NOTE: Funding contributions towards and/or participation in Commute.org shuttle program does not count for this measure. Passes/subsides provided must be valid for public transportation options, including but not limited to BART, Caltrain, SamTrans, and ridesharing platforms and vanpool subscription (or costs).	8	10.0%	0-20%	20.0%	1	
Active Transportation	4	Secure Bicycle Storage	Site Design	Comply with CALGreen minimum bicycle parking requirements: Provide safe and convenient long-term (Class I) bicycle parking equating to 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (for 10+ tenant-occupants). Short-term (Class II) bicycle parking should be within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of 1 two-bike capacity rack. May also be in the public right-of-way.	1	1.0%	0.5%	0.5%	6	Lockers or indoor parking (in addition to racks for short-term parking)
Site Design Initiatives	5	Design Streets to Encourage Bike/Ped Access	Site Design	Design street or roadways that provide multimodal travel choices and give people the option to avoid vehicular traffic congestion, increasing the overall capacity of the transportation network.	1	1.0%	0-2%	2.0%	1,6	Direct pedestrian connection to transit, front setback <20 feet. Given Complete Streets, this is requirement with most jurisdictions.
				Maximum Weighted Points from Required Measures	12	13.5%				

Additional Recommended Measures . Select sufficient, additional measures to reach 25% trip reduction threshold (including TODs).										
	ID	Additional Measures	Type	Measure Description	Additional Point Values	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Employee & Resident Amenities	6	Delivery Amenities	Site Design	Offer delivery-supportive amenities, such as an area for receipt of deliveries, clothes lockers for laundry or dry cleaning, storage for package deliveries or temporary refrigeration for grocery deliveries. Delivery-supportive amenities can help reduce the need for individual vehicle ownership and vehicle trips by consolidating multiple trips at one central location.	1	1.0%	<2%	1.0%	7	
	7	Family-supportive Amenities	Site Design	To address challenges that families face in making trips without a private vehicle, the property owner should provide family-supportive amenities, such as on-site secure storage of personal car seats, strollers, cargo bicycles, or other large bicycles. Property owners can also provide shared building equipment, such as shopping carts or cargo bicycles for check out by residents.	3	3.0%	0.5-3%	3.0%	7	
Parking Mgmt.	8	Paid Parking at Market Rate	Programmatic	Motorists pay directly for using parking facilities. Parking rates should be at the market rate and not subsidized by property owners or employers.	10	25.0%	0.5-20%	10.0%	1	
	9	Reduced Parking	Site Design	Provide off-street private parking at least 10% below local zoning code required minimums, on a per unit or square foot basis. Where regulations stipulate parking maximums, full credit may be issued if applicant provides parking below the applicable maximum rate. Consideration may be required of potential spillover parking into surrounding areas.	8	10.0%	5-12%	8.0%	1	Would have project sponsor to reduce parking to 10% below local zoning code required minimums; and where less than 10 spaces are in question - remove at least 1 space (see VTPI research citation in Methodology).
TDM Mgmt. & Admin	10	Developer TDM Fee/TDM Fund	Programmatic	Impact fees can be collected from developers, generally on a per-unit or square footage basis, to fund the implementation of TDM programs. These TDM fees can be put in an escrow account for the developer or subsequent property manager to spend to implement programmatic elements of the TDM plan. NOTE: "Double dipping" with the already required "TMA Participation" measure (above) is not allowed. This measure cannot be given credit for TDM fund payment or developer fees already required by fee nexus ordinance by the governing jurisdiction. Credit here may only be given for voluntary TDM fund payment or developer fee negotiated separately with the governing jurisdiction.	5	4.0%	5.0%	5.0%		
	11	Actively Participate in a Transportation Management Association	Programmatic	Sites can establish or join a Transportation Management Association (TMA) whose role is to coordinate transportation related programs and services in specific geographic areas.	2	4.0%	5.0%	5.0%	3	
Transit, Shuttles, & Ridesharing	12	Carpool or Vanpool Program	Programmatic	Carpool and vanpooling are types of ridesharing that seek to allow vehicles to carry additional passengers when making a trip, with minimal additional mileage. Carpooling generally uses participants' own automobiles. Vanpooling generally uses leased vans (often supplied by employers, non-profit organizations or government agencies).	3	2.0%	1-5%	5.0%		
	13	Commute Assistance and Ride-Matching	Programmatic	Establish a commute assistance program to provide individualized trip planning services.	4	1.0%	1-3%	3.0%	6	A program outlines the workplan for the commute assistance and establishes a point-person for the implementation of SOV trip reduction programs
	14	Car Share On-Site	Programmatic	Provide on-site car share or vehicle fleets.	3	1.0%	<2%	2.0%	2	
	15	Land Dedication or Capital Improvements for Transit	Site Design	Contribute space on, or adjacent to, the project site for transit improvements. NOTE: Scoring for this measure is tiered, based how many improvements are implemented from the list of sub-types below. Each improvement type is worth 2 points. Achieving 4 improvements equals the full 8 points. Land dedication sufficient to accommodate at least 4 improvements will also score the full amount of points.	8	4.0%	0-4%	3.0%	1	
	15A	*Bus Pullout Space*			*2*					
	15B	*Bus Shelter*			*2*					
	15C	*Visual/Electrical Improvements (i.e., Lighting, Signage)*			*2*					
	15D	*Other (i.e., Micromobility Parking Zone, TNC Loading Zone)*			*2*					
Active Transportation	16	Bike/Scooter Share On-Site	Programmatic	Allocate space for bike or scooter share stations, docks, or parking areas.	2	1.0%	<2%	2.0%	7	
	17	Active Transportation Subsidies	Programmatic	Offer employees or residents who use active transportation subsidies other incentives (gift cards, prizes).	3	2.0%	0.5-3%	3.0%	5	
	18	Gap Closure	Site Design	Establish new, or enhance the quality of, pedestrian and bicycle facilities to facilitate active transportation from a project site to existing trails, bikeways, or adjacent streets. Pedestrian improvements should be within 0.5 miles of project site (approx. 10-15 minute walk); bicycling improvements within 2 miles of site (approx. 15-min ride at 10mph).	5	7.0%	3-21%	15.0%	8	Research identifies maximum 0.5-mile walkshed (radius) from project site and 2-mile biking radius (15 minutes @10mph; leisurely ride).
	19	Bike Repair Station	Site Design	Offer a bicycle repair station or toolkit, within a designated, secure area of the building, such as a bicycle storage room, to encourage bicycling and support employees and residents who cycle.	1	0.5%	0.5%	1.0%		
Site Design Initiatives	21	Pedestrian Oriented Uses & Amenities on Ground Floor	Site Design	Include active, pedestrian-oriented commercial uses on the ground floor to create more walkable and inviting areas. Provide on-site amenities, such as cafés, gym, retail stores, or banks.	4	3.0%	0.5-2%	3.0%	10	
				Maximum Weighted Points from Additional Measures	70	68.5%				

Medical & Lodging - Large Project (500+ ADT: 50,000+ sft)

Commit to all REQUIRED measures and select sufficient ADDITIONAL Measures to satisfy 35% private automobile trip reduction goal. TOD Projects located within 0.5 miles of station with high-quality transit service shall be subject to 25% trip reduction goal.

Required Measures

ID		Measures	Type	Measure Description	Point Value	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
TDM Mgmt. & Admin	1	TDM Coordinator/Contact Person	Programmatic	Provide a TDM coordinator or contact person. This individual may either be an employee of the development project or may be contracted through a third-party provider.	1	0.5%	1-2%	2.0%	6	A person whose responsibility it is to provide, measure, and track transportation programs ensures continued effort to reducing SOV trips
	2	Actively Participate in Commute.org, or Transportation Management Association (TMA) Equivalent	Programmatic	Sites shall register with Commute.org or else join or create a Transportation Management Association (TMA) with equivalent TDM service, whose role is to coordinate transportation-related programs and services in specific geographic areas.	8	6.5%	7.8-13%	13.0%	1,3,6	8 POINTS REPRESENTS BASELINE CREDIT FOR THIS MEASURE. SHUTTLES FOR NON-TOD PROJECTS ARE AWARDED ADDITIONAL CREDIT, BELOW.
	2A	*Certified participation in Commute.org, or equivalent program such as TMA*		*Obtain certification of registration from Commute.org or equivalent TMA incorporation documents.*	*2*	*4.0%*	*5.0%*	*5.0%*	*3*	
	2B	*Commute assistance and ride-matching*		*Establish a commute assistance program to provide individualized trip planning services.*	*4*	*1.0%*	*1-3%*	*3.0%*	*6*	
	2C	*Guaranteed Ride Home*		*Offer employees a Guaranteed Ride Home (GRH) program (or participate in the Commute.org GRH program)*	*1*	*0.5%*	*<1%*	*1.0%*	*1*	
	2D	*Orientation, Education, Promotional Programs and/or Materials*		*Offer new employees an orientation or education program or materials*	*1*	*1.0%*	*0.8-4%*	*4.0%*	*1*	
		FULFILL THE ABOVE REQUIRED COMPONENTS FROM MEASURE 2 (A-D), AND SELECT ONE OF THE FOLLOWING OPTIONS BASED ON PROJECT GEOGRAPHY (2E - 2G):								
	2E	TOD OPTION				6.5%	7.8-13%	13.0%	1,3,5	NO ADDITIONAL CREDIT AWARDED. 8 POINTS FOR TOD PROJECT ARE SATISFIED BY MEASURE 2 (A-D) COMPONENTS, ABOVE.
				TOD OPTION POINTS	8					
	2F	PRIVATE Shuttle Program/Shuttle Consortium/Fund Transit Service		Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees.	5	8.0%	0.3-13%	13.0%	1	NON-TOD PROJECTS ONLY
				PRIVATE SHUTTLE OPTION POINTS	13					
	2G	COMMUNITY Shuttle Program/Shuttle Consortium/Fund Transit Service		Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees and the general public at points of departure and arrival.	7	10.0%	0.3-13%	13.0%	1	NON-TOD PROJECTS ONLY
				COMMUNITY SHUTTLE OPTION POINTS	15					
Shuttles, Transit & Ridesharing	3	Carpool or Vanpool Program	Programmatic	Carpool and vanpooling are types of ridesharing that seek to allow vehicles to carry additional passengers when making a trip, with minimal additional mileage. Carpooling generally uses participants' own automobiles. Vanpooling generally uses leased vans (often supplied by employers, non-profit organizations or government agencies).	3	2.0%	1-5%	5.0%		
	4	Transit or Ridesharing Passes/Subsidies	Programmatic	Offer public transit passes or subsidies; or carpool/vanpool subsidies to tenants equivalent to 30% of the value of their monthly fare or $50 monthly, to incentivize transit use and ridesharing and comply with regional environmental sustainability goals. NOTE: Funding contributions towards and/or participation in Commute.org shuttle program does not count for this measure. Passes/subsides provided must be valid for public transportation options, including but not limited to BART, Caltrain, SamTrans, and ridesharing platforms and vanpool subscription (or costs).	8	10.0%	0-20%	20.0%	1	
	5	Pre-Tax Transportation Benefits	Programmatic	Offer option for tenants to participate in a pre-tax transit program to encourage the use of sustainable transportation modes and leverage pre-tax income to pay for commute trip costs.	3	1.0%	0-3%	3.0%	0	
Site Design Initiatives	6	Design Streets to Encourage Bike/Ped Access	Site Design	Design street or roadways that provide multimodal travel choices and give people the option to avoid vehicular traffic congestion, increasing the overall capacity of the transportation network.	1	1.0%	0-2%	2.0%	1,6	Lockers or indoor parking (in addition to racks for short-term parking)
	7	Pedestrian Oriented Uses & Amenities on Ground Floor	Site Design	Include active, pedestrian-oriented commercial uses on the ground floor to create more walkable and inviting areas. Provide on-site amenities, such as cafés, gym, childcare, retail stores, or banks.	4	3.0%	0.5-2%	3.0%	10	Direct pedestrian connection to transit, front setback <20 feet. Given Complete Streets, this is requirement with most jurisdictions.

Maximum Weighted Points from Required Measures, for TOD Projects	25	24.0%
Maximum Weighted Points from Required Measures, for Projects w/Private Shuttle	33	32.0%
Maximum Weighted Points from Required Measures, for Projects w/Community Shuttle	35	34.0%

*** A "Transit Proximate" project is defined as locating between 0.5 - 3 miles from a transit stop or station with "high-quality" transit service.**

^ "High-quality" transit is defined as any rail station or a transit stop featuring bus service with maximum 15-minute headways during weekday peak hours of 6-10AM and 3-7PM.

Projects beyond 3 miles from High-quality transit are categorized "Non-Transit Proximate"

Additional Recommended Measures . Select sufficient, additional measures to reach 35% trip reduction threshold (25% for TODs).										
	ID	Additional Measures	Type	Measure Description	Additional Point Values	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Employee Program	8	Telemedicine	Programmatic	This measure implements telecommunications in lieu of in-patient visits. (FOR MEDICAL LAND USE ONLY).	5	5.0%	1-27%	16.0%	2,9	
Parking Mgmt.	9	Paid Parking at Market Rate	Programmatic	Motorists pay directly for using parking facilities. Parking rates should be at the market rate and not subsidized by property owners or employers.	10	25.0%	0.5-20%	10.0%	1	
	10	Short Term Daily Parking	Programmatic	Offer daily or hourly parking rates that are proportional to the monthly rate or approximately the cost of a transit fare.	2	2.0%	2.0%	1.0%		
	11	Reduced Parking	Site Design	Provide off-street private parking at least 10% below local zoning code required minimums, on a per unit or square foot basis. Where regulations stipulate parking maximums, full credit may be issued if applicant provides parking below the applicable maximum rate. Consideration may be required of potential spillover parking into surrounding areas.	8	10.0%	5-12%	8.0%	1	Would have project sponsor to reduce parking to 10% below local zoning code required minimums; and where less than 10 spaces are in question - remove at least 1 space (see VTPI research citation in Methodology).
	12	Free/Preferential Parking for Employee Carpools	Programmatic	Provide free or preferential parking, including reserved spaces or spaces near an entrance or other desirable location, to incentivize ridesharing.	1	1.0%	.05-5%	5.0%	3,6	
TDM Mgmt. & Admin	13	Developer TDM Fee/TDM Fund	Programmatic	Impact fees can be collected from developers, generally on a per-unit or square footage basis, to fund the implementation of TDM programs. These TDM fees can be put in an escrow account for the developer or subsequent property manager to spend to implement programmatic elements of the TDM plan. NOTE: "Double dipping" with the already required "TMA Participation" measure (above) is not allowed. This measure cannot be given credit for TDM fund payment or developer fees already required by fee nexus ordinance by the governing jurisdiction. Credit here may only be given for voluntary TDM fund payment or developer fee negotiated separately with the governing jurisdiction.	5	4.0%	5.0%	5.0%		
Transit, Shuttles, & Ridesharing	14	Car Share On-Site	Programmatic	Provide on-site car share or vehicle fleets.	3	1.0%	<2%	2.0%	2	
	15	Land Dedication or Capital Improvements for Transit	Site Design	Contribute space on, or adjacent to, the project site for transit improvements. NOTE: Scoring for this measure is tiered, based how many improvements are implemented from the list of sub-types below. Each improvement type is worth 2 points. Achieving 4 improvements equals the full 8 points. Land dedication sufficient to accommodate at least 4 improvements will also score the full amount of points.	8	4.0%	0-4%	3.0%	1	
	15A	*Bus Pullout Space*			*2*					
	15B	*Bus Shelter*			*2*					
	15C	*Visual/Electrical Improvements (i.e., Lighting, Signage)*			*2*					
	15D	*Other (i.e., Micromobility Parking Zone, TNC Loading Zone)*			*2*					
Active Transportation	16	Bike/Scooter Share On-Site	Programmatic	Allocate space for bike or scooter share stations, docks, or parking areas.	2	1.0%	<2%	2.0%	7	
	17	Active Transportation Subsidies	Programmatic	Offer employees or residents who use active transportation subsidies other incentives (gift cards, prizes).	3	2.0%	0.5-3%	3.0%	5	This will require ongoing monitoring to determine who and how often someone used an alt mode; or the purchase of a software license to manage such a rewards program.
	18	Gap Closure	Site Design	Establish new, or enhance the quality of, pedestrian and bicycle facilities to facilitate active transportation from a project site to existing trails, bikeways, or adjacent streets. Pedestrian improvements should be within 0.5 miles of project site (approx. 10-15 minute walk); bicycling improvements within 2 miles of site (approx. 15-min ride at 10mph).	5	7.0%	3-21%	15.0%	8	Research identifies maximum 0.5-mile walkshed (radius) from project site and 2-mile biking radius (15 minutes @10mph; leisurely ride).
	19	Bike Repair Station	Site Design	Offer a bicycle repair station or toolkit, within a designated, secure area of the building, such as a bicycle storage room, to encourage bicycling and support employees and residents who cycle.	1	0.5%	0.5%	1.0%		
	20	Showers, Lockers, and Changing Rooms for Cyclists	Site Design	These amenities serve as end of trip facilities for employees arriving by bike or other active transportation forms.	2	2.0%	2-5%	3.0%	3	
	21	Secure Bicycle Storage	Site Design	Comply with CALGreen minimum bicycle parking requirements. Provide safe and convenient long-term (Class I) bicycle parking equating to 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (for 10+ tenant occupants). Short-term	1	1.0%	0.5%	0.5%	6	Points and percentage based on similar education programs such as carpool/vanpool ridematching & promotion. Observations indicate encouragement and biking with a friend greatly increase the

Maximum Weighted Points from Additional Measures, for TOD Projects	56	65.5%
Maximum Weighted Points from Additional Measures, for Projects with Private Shuttle	56	65.5%
Maximum Weighted Points from Additional Measures, for Projects with Community Shuttle	56	65.5%
Cumulative Weighted Points from Required Measures, for TOD Projects	*81*	*89.5%*
Cumulative Weighted Points from Required Measures, for Projects with Private Shuttle	*89*	*97.5%*
Cumulative Weighted Points from Required Measures, for Projects with Community Shuttle	*91*	*99.5%*

Medical & Lodging - Small Project (100-499 ADT; 10,000-49,999 sft)

Commit to all REQUIRED measures and select sufficient ADDITIONAL Measures to satisfy 35% private automobile trip reduction goal. TOD Projects located within 0.5 miles of station with high-quality transit service shall be subject to 25% trip reduction goal.

Required Measures

	ID	Measures	Type	Measure Description	Point Value	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
TDM Mgmt. & Admin	1	TDM Coordinator/Contact Person	Programmatic	Provide a TDM coordinator or contact person. This individual may either be an employee of the development project or may be contracted through a third-party provider.	1	0.5%	1-2%	2.0%	6	A person whose responsibility it is to provide, measure, and track transportation programs ensures continued effort to reducing SOV trips
	2	Actively Participate in Commute.org, or Transportation Management Association (TMA) Equivalent	Programmatic	Sites shall register with Commute.org or else join or create a Transportation Management Association (TMA) with equivalent TDM service, whose role is to coordinate transportation-related programs and services in specific geographic areas. NOTE: This measure applies to developments that implement a community shuttle service.	8	6.5%	7.8-26%	13.0%	1,3,6	
	2A	*Certified participation in Commute.org, or equivalent program such as TMA*		*Obtain certification of registration from Commute.org or equivalent TMA incorporation documents.*	*2*	*4.0%*	*5.0%*	*5.0%*	*3*	
	2B	*Commute assistance and ride-matching*		*Establish a commute assistance program to provide individualized trip planning services.*	*4*	*1.0%*	*1-3%*	*3.0%*	*6*	
	2C	*Guaranteed Ride Home*		*Offer employees a Guaranteed Ride Home (GRH) program (or participate in the Commute.org GRH*	*1*	*0.5%*	*<1%*	*1.0%*	*1*	
	2D	*Orientation, Education, Promotional Programs and/or Materials*		*Offer new employees an orientation or education program or materials*	*1*	*1.0%*	*0.8-4%*	*4.0%*	*1*	
Shuttles, Transit & Ridesharing	3	Carpool or Vanpool Program	Programmatic	Carpool and vanpooling are types of ridesharing that seek to allow vehicles to carry additional passengers when making a trip, with minimal additional mileage. Carpooling generally uses participants' own automobiles. Vanpooling generally uses leased vans (often supplied by employers, non-profit organizations or government agencies).	3	2.0%	1-5%	5.0%	0	
	4	Transit or Ridesharing Passes/Subsidies	Programmatic	Offer public transit passes or subsidies; or carpool/vanpool subsidies to tenants equivalent to 30% of the value of their monthly fare or $50 monthly, to incentivize transit use and ridesharing and comply with regional environmental sustainability goals. NOTE: Funding contributions towards and/or participation in Commute.org shuttle program does not count for this measure. Passes/subsides provided must be valid for public transportation options, including but not limited to BART, Caltrain, SamTrans, and ridesharing platforms and vanpool subscription (or costs).	8	10.0%	0-20%	20.0%	1	
	5	Pre-Tax Transportation Benefits	Programmatic	Offer option for tenants to participate in a pre-tax transit program to encourage the use of sustainable transportation modes and leverage pre-tax income to pay for commute trip costs.	3	1.0%	0-3%	3.0%	0	
Site Design Initiatives	6	Design Streets to Encourage Bike/Ped Access	Site Design	Design street or roadways that provide multimodal travel choices and give people the option to avoid vehicular traffic congestion, increasing the overall capacity of the transportation network.	1	1.0%	0-2%	2.0%	1,6	Lockers or indoor parking (in addition to racks for short-term parking)
	7	Pedestrian Oriented Uses & Amenities on Ground Floor	Site Design	Include active, pedestrian-oriented commercial uses on the ground floor to create more walkable and inviting areas. Provide on-site amenities, such as cafés, gym, childcare, retail stores, or banks.	4	3.0%	0.5-2%	3.0%	10	Direct pedestrian connection to transit, front setback <20 feet. Given Complete Streets, this is requirement with most jurisdictions.

Maximum Weighted Points from Required Measures, for TOD Projects	25	24.0%
Maximum Weighted Points from Required Measures, for Transit Proximate Projects	25	24.0%
Maximum Weighted Points from Required Measures, for Projects NOT "Transit Proximate"	25	24.0%

*** A "Transit Proximate" project is defined as locating between 0.5 - 3 miles from a transit stop or station with "high-quality" transit service.**
^ "High-quality" transit is defined as any rail station or a transit stop featuring bus service with maximum 15-minute headways during weekday peak hours of 6-10AM and 3-7PM.
Projects beyond 3 miles from High-quality transit are categorized "Non-Transit Proximate"

Additional Recommended Measures . Select sufficient, additional measures to reach 35% trip reduction threshold (25% for TODs).										
	ID	Additional Measures	Type	Measure Description	Additional Point Values	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Employee Program	8	Telemedicine	Programmatic	This measure implements telecommunications in lieu of in-patient visits. (FOR MEDICAL LAND USE ONLY).	5	5.0%	1-27%	16.0%		
Parking Mgmt.	9	Paid Parking at Market Rate	Programmatic	Motorists pay directly for using parking facilities. Parking rates should be at the market rate and not subsidized by property owners or employers.	10	25.0%	0.5-20%	10.0%	1	
	10	Short Term Daily Parking	Programmatic	Offer daily or hourly parking rates that are proportional to the monthly rate or approximately the cost of a transit fare.	2	2.0%	2.0%	1.0%		
	11	Reduced Parking	Site Design	Provide off-street private parking at least 10% below local zoning code required minimums, on a per unit or square foot basis. Where regulations stipulate parking maximums, full credit may be issued if applicant provides parking below the applicable maximum rate. Consideration may be required of potential spillover parking into surrounding areas.	8	10.0%	5-12%	8.0%	1	Would have project sponsor to reduce parking to 10% below local zoning code required minimums; and where less than 10 spaces are in question - remove at least 1 space (see VTPI research citation in Methodology).
	12	Free/Preferential Parking for Employee Carpools	Programmatic	Provide free or preferential parking, including reserved spaces or spaces near an entrance or other desirable location, to incentivize ridesharing.	1	1.0%	.05-5%	5.0%	3,6	
TDM Mgmt. & Admin	13	Developer TDM Fee/TDM Fund	Programmatic	Impact fees can be collected from developers, generally on a per-unit or square footage basis, to fund the implementation of TDM programs. These TDM fees can be put in an escrow account for the developer or subsequent property manager to spend to implement programmatic elements of the TDM plan. NOTE: "Double dipping" with the already required "TMA Participation" measure (above) is not allowed. This measure cannot be given credit for TDM fund payment or developer fees already required by fee nexus ordinance by the governing jurisdiction. Credit here may only be given for voluntary TDM fund payment or developer fee negotiated separately with the governing jurisdiction.	5	4.0%	5.0%	5.0%		
Transit, Shuttles, & Ridesharing	14	Car Share On-Site	Programmatic	Provide on-site car share or vehicle fleets.	3	1.0%	<2%	2.0%	2	
	15	Land Dedication or Capital Improvements for Transit	Site Design	Contribute space on, or adjacent to, the project site for transit improvements. NOTE: Scoring for this measure is tiered, based how many improvements are implemented from the list of sub-types below. Each improvement type is worth 2 points. Achieving 4 improvements equals the full 8 points. Land dedication sufficient to accommodate at least 4 improvements will also score the full amount of points.	8	4.0%	0-4%	3.0%	1	
	15A	*Bus Pullout Space*			*2*					
	15B	*Bus Shelter*			*2*					
	15C	*Visual/Electrical Improvements (i.e., Lighting, Signage)*			*2*					
	15D	*Other (i.e., Micromobility Parking Zone, TNC Loading Zone)*			*2*					
	16	Shuttle Program/Shuttle Consortium/Fund Transit Service	Programmatic	Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees and guests.	5	10%	0.3-13%	13%	1	
Active Transportation	17	Bike/Scooter Share On-Site	Programmatic	Allocate space for bike or scooter share stations, docks, or parking areas.	2	1.0%	<2%	2.0%	7	
	18	Active Transportation Subsidies	Programmatic	Offer employees or residents who use active transportation subsidies other incentives (gift cards, prizes).	3	2.0%	0.5-3%	3.0%	5	
	19	Gap Closure	Site Design	Establish new, or enhance the quality of, pedestrian and bicycle facilities to facilitate active transportation from a project site to existing trails, bikeways, or adjacent streets. Pedestrian improvements should be within 0.5 miles of project site (approx. 10-15 minute walk); bicycling improvements within 2 miles of site (approx. 15-min ride at 10mph).	5	7.0%	3-21%	15.0%	8	Research identifies maximum 0.5-mile walkshed (radius) from project site and 2-mile biking radius (15 minutes @10mph; leisurely ride).
	20	Bike Repair Station	Site Design	Offer a bicycle repair station or toolkit, within a designated, secure area of the building, such as a bicycle storage room, to encourage bicycling and support employees and residents who cycle.	1	0.5%	0.5%	1.0%		
	21	Showers, Lockers, and Changing Rooms for Cyclists	Site Design	These amenities serve as end of trip facilities for employees arriving by bike or other active transportation forms.	2	2.0%	2-5%	3.0%	3	
	22	Secure Bicycle Storage	Site Design	Comply with CALGreen minimum bicycle parking requirements: Provide safe and convenient long-term (Class I) bicycle parking equating to 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (for 10+ tenant-occupants). Short-term (Class II) bicycle parking should be within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of 1 two-bike capacity rack. May also be in the public right-of-way.	1	1.0%	0.5%	0.5%	6	Points and percentage based on similar education programs such as carpool/vanpool ridematching & promotion. Observations indicate encouragement and biking with a friend greatly increase the likelihood of cycling.

Maximum Weighted Points from Additional Measures, for TOD Projects	56	64.5%
Maximum Weighted Points from Additional Measures, for Transit Proximate Projects	61	75.5%
Maximum Weighted Points from Additional Measures, for Projects NOT "Transit Proximate"	61	75.5%
Cumulative Weighted Points from Required Measures, for TOD Projects	*81*	89.5%
Cumulative Weighted Points from Required Measures, for Transit Proximate Projects	*86*	99.5%
Cumulative Weighted Points from Required Measures, for Projects NOT "Transit Proximate"	*86*	99.5%

Retail - Large Project (100+ FTE)

Commit to all REQUIRED measures and select sufficient ADDITIONAL Measures to satisfy 35% private automobile trip reduction goal. TOD Projects located within 0.5 miles of station with high-quality transit service shall be subject 25% trip reduction goal.

Required Measures

ID		Measures	Type	Measure Description	Point Value	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Parking Mgmt. for Ridesharing	1	Free/Preferential Parking for Carpools	Programmatic	Provide free or preferential parking, including reserved spaces or spaces near an entrance or other desirable location, to incentivize ridesharing.	1	1.0%	.05-5%	5.0%	3,6	Financial incentives are consistenty cited in research as one of the most effective travel behavior modifiers. (Consider observed carpooling aka "slugging" in major metro areas w/ tolled roadways & bridges).
TDM Mgmt. & Admin	2	TDM Coordinator/Contact Person	Programmatic	Provide a TDM coordinator or contact person. This may be an individual who is an employee of - or at - the development project; or may be contracted through a third-party provider, such as Commute.org.	1	0.5%	1-2%	2.0%	6	A person whose responsibility it is to provide, measure, and track transportation programs ensures continued effort to reducing SOV trips
	3	Actively Participate in Commute.org, or Transportation Management Association (TMA) Equivalent	Programmatic	Obtain certification of registration from Commute.org or equivalent TMA incorporation documents.	13	16.5%	7.8-26%	26.0%	1,3,6	Examples: Emeryville TMA, Mission Bay TMA (SF)
	3A	*Certified participation in Commute.org, or equivalent program such as TMA*		*Obtain certification of registration from Commute.org or equivalent TMA incorporation documents.*	*2*	*4.0%*	*5.0%*	*5.0%*	*3*	
	3B	*Commute assistance and ride-matching*		*Establish a commute assistance program to provide individualized trip planning services.*	*4*	*1.0%*	*1-3%*	*3.0%*	*6*	
	3C	*Shuttle Program/Shuttle Consortium/Fund Transit Service*		*Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees and guests.*	*5*	*10.0%*	*0.3-13%*	*13.0%*	*1*	FOR TRANSIT PROXIMATE PROJECTS ONLY * ^
	3D	*Guaranteed Ride Home*		*Offer employees a Guaranteed Ride Home (GRH) program (or participate in the Commute.org GRH program).*	*1*	*0.5%*	*<1%*	*1.0%*	*1*	
	3E	*Orientation, Education, Promotional Programs and/or Materials*		*Offer new employees an orientation or education program or materials.*	*1*	*1.0%*	*0.8-4%*	*4.0%*	*1*	
Shuttles, Transit & Ridesharing	4	Carpool or Vanpool Program	Programmatic	Establish carpool or vanpool program for tenant-occupants and register program with Commute.org for active users to become eligible for fiscal rewards.	3	2.0%	1-5%	5.0%		
	5	Transit or Ridesharing Passes/Subsidies	Programmatic	Offer public transit passes or subsidies; or carpool/vanpool subsidies to tenants equivalent to 30% of the value of their monthly fare or $50 monthly, to incentivize transit use and ridesharing and comply with regional environmental sustainability goals. NOTE: Funding contributions towards and/or participation in Commute.org shuttle program does not count for this measure. Passes/subsides provided must be valid for public transportation options, including but not limited to BART, Caltrain, SamTrans, and ridesharing platforms and vanpool subscription (or costs).	8	10.0%	0-20%	20.0%		
	6	Pre-Tax Transportation Benefits	Programmatic	Offer option for tenants to participate in a pre-tax transit program to encourage the use of sustainable transportation modes and leverage pre-tax income to pay for commute trip costs.	3	1.0%	0-3%	3.0%	0	
Active Transportation	7	Secure Bicycle Storage	Site Design	Comply with CALGreen minimum bicycle parking requirements: Provide safe and convenient long-term (Class I) bicycle parking equating to 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (for 10+ tenant-occupants). Short-term (Class II) bicycle parking should be within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of 1 two-bike capacity rack. May also be in the public right-of-way.	1	1.0%	0.5%	0.5%	6	Lockers or indoor parking (in addition to racks for short-term parking).
Site Design Initiatives	8	Design Streets to Encourage Bike/Ped Access	Site Design	Design street or roadways that provide multimodal travel choices and give people the option to avoid vehicular traffic congestion, increasing the overall capacity of the transportation network.	1	1.0%	0-2%	2.0%	1,6	Direct pedestrian connection to transit, front setback <20 feet. Given Complete Streets, this is requirement with most jurisdictions.
	9	Pedestrian Oriented Uses & Amenities on Ground Floor	Site Design	Include active, pedestrian-oriented commercial uses on the ground floor to create more walkable and inviting areas. Provide on-site amenities, such as cafés, gym, childcare, retail stores, or banks.	4	3.0%	0.5-2%	3.0%		

Maximum Weighted Points from Required Measures, for TOD Projects	30	26.0%
Maximum Weighted Points from Required Measures, for Projects NOT "Transit Proximate"	30	26.0%
Maximum Weighted Points from Required Measures, for "Transit Proximate" Projects	35	36.0%

*** "Transit Proximate" : Project located between 0.5 - 3 miles from a transit station or stop with "high quality" transit service.**
^ "High quality" transit service : Rail station or a transit stop featuring bus service with maximum 15-minute headways during weekday peak hours of 6-10AM and 3-7PM.

Additional Recommended Measures . Select sufficient, additional measures to reach 35% trip reduction threshold (25% for TODs).

		Additional Measures	Type	Measure Description	Additional Point Values	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Parking Mgmt.	10	Paid Parking at Market Rate	Programmatic	Motorists pay directly for using parking facilities. Parking rates should be at the market rate and not subsidized by property owners or employers.	10	25.0%	0.5-20%	10.0%	1	
	11	Short Term Daily Parking	Programmatic	Offer daily or hourly parking rates that are proportional to the monthly rate or approximately the cost of a transit fare.	2	2.0%	2.0%	1.0%		
	12	Reduced Parking	Site Design	Provide off-street private parking at least 10% below local zoning code required minimums, on a per unit or square foot basis. Where regulations stipulate parking maximums, full credit may be issued if applicant provides parking below the applicable maximum rate. Consideration may be required of potential spillover parking into surrounding areas.	8	10.0%	5-12%	8.0%	1	Would have project sponsor to reduce parking to 10% below local zoning code required minimums; and where less than 10 spaces are in question - remove at least 1 space (see VTPI research citation in Methodology).
TDM Mgmt. & Admin	13	Developer TDM Fee/TDM Fund	Programmatic	Impact fees can be collected from developers, generally on a per-unit or square footage basis, to fund the implementation of TDM programs. These TDM fees can be put in an escrow account for the developer or subsequent property manager to spend to implement programmatic elements of the TDM plan. NOTE: "Double dipping" with the already required "TMA Participation" measure (above) is not allowed. This measure cannot be given credit for TDM fund payment or developer fees already required by fee nexus ordinance by the governing jurisdiction. Credit here may only be given for voluntary TDM fund payment or developer fee negotiated separately with the governing jurisdiction.	5	4.0%	5.0%	5.0%		
Transit, Shuttles, & Ridesharing	15	Car Share On-Site	Programmatic	Provide on-site car share or vehicle fleets.	3	1.0%	<2%	2.0%	2	
	16	Land Dedication or Capital Improvements for Transit	Site Design	Contribute space on, or adjacent to, the project site for transit improvements. NOTE: Scoring for this measure is tiered, based how many improvements are implemented from the list of sub-types below. Each improvement type is worth 2 points. Achieving 4 improvements equals the full 8 points. Land dedication sufficient to accommodate at least 4 improvements will also score the full amount of points.	8	4.0%	0-4%	3.0%	1	
	16A	*Bus Pullout Space*			*2*					
	16B	*Bus Shelter*			*2*					
	16C	*Visual/Electrical Improvements (i.e., Lighting, Signage)*			*2*					
	16D	*Other (i.e., Micromobility Parking Zone, TNC Loading Zone)*			*2*					
	17	Shuttle Program/Shuttle Consortium/Fund Transit Service	Programmatic	Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees and guests.	5	10.0%	0.3-13%	13.0%	1	
Active Transportation	18	Bike/Scooter Share On-Site	Programmatic	Allocate space for bike or scooter share stations, docks, or parking areas.	2	1.0%	<2%	2.0%	7	
	19	Active Transportation Subsidies	Programmatic	Offer employees or residents who use active transportation subsidies other incentives (gift cards, prizes).	3	2.0%	0.5-3%	3.0%	5	
	20	Gap Closure	Site Design	Establish new, or enhance the quality of, pedestrian and bicycle facilities to facilitate active transportation from a project site to existing trails, bikeways, or adjacent streets. Pedestrian improvements should be within 0.5 miles of project site (approx. 10-15 minute walk); bicycling improvements within 2 miles of site (approx. 15-min ride at 10mph).	5	7.0%	3-21%	15.0%	8	Research identifies maximum 0.5-mile walkshed (radius) from project site and 2-mile biking radius (15 minutes @10mph; leisurely ride).
	21	Bike Repair Station	Site Design	Offer a bicycle repair station or toolkit, within a designated, secure area of the building, such as a bicycle storage room, to encourage bicycling and support employees and residents who cycle.	1	0.5%	0.5%	1.0%		
	22	Showers, Lockers, and Changing Rooms for Cyclists	Site Design	These amenities serve as end of trip facilities for employees arriving by bike or other active transportation forms.	2	2.0%	2-5%	3.0%		

Maximum Weighted Points from Additional Measures, for TOD Projects	49	58.5%
Maximum Weighted Points from Additional Measures, for Projects NOT "Transit Proximate"	54	68.5%
Maximum Weighted Points from Additional Measures, for "Transit Proximate" Projects	49	58.5%
Cumulative Total for TOD Projects	*79*	
Cumulative Total for Projects NOT "Transit Proximate"	*84*	
Cumulative Total for "Transit Proximate" Projects	*84*	

Retail - Small Project (30-99 FTE)

Commit to all REQUIRED measures and select sufficient ADDITIONAL Measures to satisfy 35% private automobile trip reduction goal. TOD Projects located within 0.5 miles of station with high-quality transit service shall be subject 25% trip reduction goal.

Required Measures

	ID	Measures	Type	Measure Description	Point Value	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Parking Mgmt. for Ridesharing	**1**	**Free/Preferential Parking for Carpools**	**Programmatic**	**Provide free or preferential parking, including reserved spaces or spaces near an entrance or other desirable location, to incentivize ridesharing.**	**1**	**1.0%**	**.05-5%**	**5.0%**	**3,6**	**Financial incentives are consistenty cited in research as one of the most effective travel behavior modifiers. (Consider observed carpooling aka "slugging" in major metro areas w/ tolled roadways & bridges).**
TDM Mgmt. & Admin	**2**	**TDM Coordinator/Contact Person**	**Programmatic**	**Provide a TDM coordinator or contact person. This may be an individual who is an employee of - or at - the development project; or may be contracted through a third-party provider, such as Commute.org.**	**1**	**0.5%**	**1-2%**	**2.0%**	**6**	**A person whose responsibility it is to provide, measure, and track transportation programs ensures continued effort to reducing SOV trips**
	3	**Actively Participate in Commute.org, or Transportation Management Association (TMA) Equivalent**	**Programmatic**	**Obtain certification of registration from Commute.org or equivalent TMA incorporation documents.**	**13**	**16.5%**	**7.8-26%**	**26.0%**	**1,3,6**	**Examples: Emeryville TMA, Mission Bay TMA (SF)**
	3A	*Certified participation in Commute.org, or equivalent program such as TMA*		*Obtain certification of registration from Commute.org or equivalent TMA incorporation documents.*	*2*	*4.0%*	*5.0%*	*5.0%*	*3*	
	3B	*Commute assistance and ride-matching*		*Establish a commute assistance program to provide individualized trip planning services.*	*4*	*1.0%*	*1-3%*	*3.0%*	*6*	
	3C	*Shuttle Program/Shuttle Consortium/Fund Transit Service*		*Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees and guests.*	*5*	*10.0%*	*0.3-13%*	*13.0%*	*1*	FOR TRANSIT PROXIMATE PROJECTS ONLY * ^
	3D	*Guaranteed Ride Home*		*Offer employees a Guaranteed Ride Home (GRH) program (or participate in the Commute.org GRH program).*	*1*	*0.5%*	*<1%*	*1.0%*	*1*	
	3E	*Orientation, Education, Promotional Programs and/or Materials*		*Offer new employees an orientation or education program or materials.*	*1*	*1.0%*	*0.8-4%*	*4.0%*	*1*	
Shuttles, Transit & Ridesharing	**4**	**Carpool or Vanpool Program**	**Programmatic**	**Establish carpool or vanpool program for tenant-occupants and register program with Commute.org for active users to become eligible for fiscal rewards.**	**3**	**2.0%**	**1-5%**	**5.0%**		
	5	**Transit or Ridesharing Passes/Subsidies**	**Programmatic**	**Offer public transit passes or subsidies; or carpool/vanpool subsidies to tenants equivalent to 30% of the value of their monthly fare or $50 monthly, to incentivize transit use and ridesharing and comply with regional environmental sustainability goals. NOTE: Funding contributions towards and/or participation in Commute.org shuttle program does not count for this measure. Passes/subsides provided must be valid for public transportation options, including but not limited to BART, Caltrain, SamTrans, and ridesharing platforms and vanpool subscription (or costs).**	**8**	**10.0%**	**0-20%**	**20.0%**		
	6	**Pre-Tax Transportation Benefits**	**Programmatic**	**Offer option for tenants to participate in a pre-tax transit program to encourage the use of sustainable transportation modes and leverage pre-tax income to pay for commute trip costs.**	**3**	**1.0%**	**0-3%**	**3.0%**	**0**	
Active Transportation	**7**	**Secure Bicycle Storage**	**Site Design**	**Comply with CALGreen minimum bicycle parking requirements: Provide safe and convenient long-term (Class I) bicycle parking equating to 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (for 10+ tenant-occupants). Short-term (Class II) bicycle parking should be within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of 1 two-bike capacity rack. May also be in the public right-of-way.**	**1**	**1.0%**	**0.5%**	**0.5%**	**6**	**Lockers or indoor parking (in addition to racks for short-term parking).**
Site Design Initiatives	**8**	**Design Streets to Encourage Bike/Ped Access**	**Site Design**	**Design street or roadways that provide multimodal travel choices and give people the option to avoid vehicular traffic congestion, increasing the overall capacity of the transportation network.**	**1**	**1.0%**	**0-2%**	**2.0%**	**1,6**	**Direct pedestrian connection to transit, front setback <20 feet. Given Complete Streets, this is requirement with most jurisdictions.**

Maximum Weighted Points from Required Measures, for TOD Projects	**26**	**23.0%**
Maximum Weighted Points from Required Measures, for Projects NOT "Transit Proximate"	**26**	**23.0%**
Maximum Weighted Points from Required Measures, for "Transit Proximate" Projects	**31**	**33.0%**

*** "Transit Proximate" : Project located between 0.5 - 3 miles from a transit station or stop with "high quality" transit service.**
^ "High quality" transit service : Rail station or a transit stop featuring bus service with maximum 15-minute headways during weekday peak hours of 6-10AM and 3-7PM.

Additional Recommended Measures . Select sufficient, additional measures to reach 35% trip reduction threshold (25% for TODs).

		Additional Measures	Type	Measure Description	Additional Point Values	Vehicle Trip Reduction Impact	% SOV Trip Reduction Estimate Range	% SOV Mitigated Trip Reduction	Citation	Notes
Parking Mgmt.	9	Paid Parking at Market Rate	Programmatic	Motorists pay directly for using parking facilities. Parking rates should be at the market rate and not subsidized by property owners or employers.	10	25.0%	0.5-20%	10.0%	1	
	10	Short Term Daily Parking	Programmatic	Offer daily or hourly parking rates that are proportional to the monthly rate or approximately the cost of a transit fare.	2	2.0%	2.0%	1.0%		
	11	Reduced Parking	Site Design	Provide off-street private parking at least 10% below local zoning code required minimums, on a per unit or square foot basis. Where regulations stipulate parking maximums, full credit may be issued if applicant provides parking below the applicable maximum rate. Consideration may be required of potential spillover parking into surrounding areas.	8	10.0%	5-12%	8.0%	1	Would have project sponsor to reduce parking to 10% below local zoning code required minimums; and where less than 10 spaces are in question - remove at least 1 space (see VTPI research citation in Methodology).
TDM Mgmt. & Admin	12	Developer TDM Fee/TDM Fund	Programmatic	Impact fees can be collected from developers, generally on a per-unit or square footage basis, to fund the implementation of TDM programs. These TDM fees can be put in an escrow account for the developer or subsequent property manager to spend to implement programmatic elements of the TDM plan. NOTE: "Double dipping" with the already required "TMA Participation" measure (above) is not allowed. This measure cannot be given credit for TDM fund payment or developer fees already required by fee nexus ordinance by the governing jurisdiction. Credit here may only be given for voluntary TDM fund payment or developer fee negotiated separately with the governing jurisdiction.	5	4.0%	5.0%	5.0%		
Transit, Shuttles, & Ridesharing	13	Car Share On-Site	Programmatic	Provide on-site car share or vehicle fleets.	3	1.0%	<2%	2.0%	2	
	14	Land Dedication or Capital Improvements for Transit	Site Design	Contribute space on, or adjacent to, the project site for transit improvements. NOTE: Scoring for this measure is tiered, based how many improvements are implemented from the list of sub-types below. Each improvement type is worth 2 points. Achieving 4 improvements equals the full 8 points. Land dedication sufficient to accommodate at least 4 improvements will also score the full amount of points.	8	4.0%	0-4%	3.0%	1	
	14A	*Bus Pullout Space*			*2*					
	14B	*Bus Shelter*			*2*					
	14C	*Visual/Electrical Improvements (i.e., Lighting, Signage)*			*2*					
	14D	*Other (i.e., Micromobility Parking Zone, TNC Loading Zone)*			*2*					
	15	Shuttle Program/Shuttle Consortium/Fund Transit Service	Programmatic	Establish a shuttle service to regional transit hubs or commercial centers. Shuttle service should be provided free of charge to employees and guests.	5	10.0%	0.3-13%	13.0%	1	
Active Transportation	16	Bike/Scooter Share On-Site	Programmatic	Allocate space for bike or scooter share stations, docks, or parking areas.	2	1.0%	<2%	2.0%	7	
	17	Active Transportation Subsidies	Programmatic	Offer employees or residents who use active transportation subsidies other incentives (gift cards, prizes).	3	2.0%	0.5-3%	3.0%	5	
	18	Gap Closure	Site Design	Establish new, or enhance the quality of, pedestrian and bicycle facilities to facilitate active transportation from a project site to existing trails, bikeways, or adjacent streets. Pedestrian improvements should be within 0.5 miles of project site (approx. 10-15 minute walk); bicycling improvements within 2 miles of site (approx. 15-min ride at 10mph).	5	7.0%	3-21%	15.0%	8	Research identifies maximum 0.5-mile walkshed (radius) from project site and 2-mile biking radius (15 minutes @10mph; leisurely ride).
	19	Bike Repair Station	Site Design	Offer a bicycle repair station or toolkit, within a designated, secure area of the building, such as a bicycle storage room, to encourage bicycling and support employees and residents who cycle.	1	0.5%	0.5%	1.0%		
	20	Showers, Lockers, and Changing Rooms for Cyclists	Site Design	These amenities serve as end of trip facilities for employees arriving by bike or other active transportation forms.	2	2.0%	2-5%	3.0%		
Site Design Initiatives	21	Pedestrian Oriented Uses & Amenities on Ground Floor	Site Design	Include active, pedestrian-oriented commercial uses on the ground floor to create more walkable and inviting areas. Provide on-site amenities, such as cafés, gym, childcare, retail stores, or banks.	4	3.0%	0.5-2%	3%	4	

Maximum Weighted Points from Additional Measures, for TOD Projects	49	58.5%
Maximum Weighted Points from Additional Measures, for Projects NOT "Transit Proximate"	54	68.5%
Maximum Weighted Points from Additional Measures, for "Transit Proximate" Projects	49	58.5%
Cumulative Total for TOD Projects	*75*	
Cumulative Total for Projects NOT "Transit Proximate"	*80*	
Cumulative Total for "Transit Proximate" Projects	*80*	

Appendix B *Glossary of TDM Measures*

A. Employee & Resident Amenities & Programs

Delivery amenities - Offer delivery supportive amenities, such as an area for receipt of deliveries, such as clothes lockers for laundry or dry cleaning, storage for package deliveries or temporary refrigeration for grocery deliveries. Delivery supportive amenities can help reduce the need for individual vehicle ownership and individual vehicle trips, buy consolidating trips to and one central location into one trip with multiple stops.

Family supportive amenities – To address challenges that families face in making trips without a private vehicle, the property owner should provide family supportive amenities, such as on-site secure storage of personal car seats, strollers, cargo bicycles, or other large bicycles. Property owners can also provide shared building equipment, such as shopping carts or cargo bicycles for check out by residents.

Orientation, education or promotional programs and/or materials – Offer new employees or residents an orientation or education program or materials. This should explain the importance of trip reduction methods and provide information on alternative transport mode options available at the site, including transit schedules, maps, and trip planning. These orientation or education programs and materials can also highlight transportation-focused benefits or amenities available to employees or residents, such as pre-tax benefits, car share, bike share, or shuttle services.

Flex time, compressed work week, or telecommuting – Flextime allows employees some flexibility in their daily work schedules. Flextime reduces peak period congestion directly by shifting trips to before or after peak periods and can also make ridesharing and transit use more feasible. Compressed work week allows employees to work fewer but longer days, thereby reducing the need to commute on the employee's day off. Telecommuting functions, similarly, allowing employees to work from home rather than the office, reducing vehicle travel on the days they work remotely.

Guaranteed Ride Home – Offer employees a Guaranteed Ride Home (GRH) program to provide an occasional subsidized ride to commuters who use alternative modes, for example, if a bus rider must return home in an emergency, or a car pooler must stay at work later than expected. This addresses a common objection to the use of alternative modes. In San Mateo County, a countywide GRH program is managed by Commute.org. This program is open to all persons with a workplace in San Mateo County or students who commute to a participating college in San Mateo County.

B. Parking Management

Paid parking at market rates – Motorists pay directly for using parking facilities. Parking rates should be at the market rate and not subsidized by property owners or employers. Paid parking can result in more efficient use of parking facilities, address specific parking problems, ensure that parking is available for intended users, and reduce total parking requirements. Paid parking, however, can disproportionally impact low-income persons and must be a consideration when setting rates and policies.

Reduced parking – Provide off-street private parking below local zoning code required minimums for a per-unit or square foot basis. Reduced parking can encourage new development at higher densities and can promote greater use alternative transportation modes, particularly in combination with other TDM measures. This measure, however, is typically only effective when parking is constrained, and ample on-street parking is not available.

Free or preferential parking for carpoolers/vanpoolers – Provide free or preferential parking, including reserved spaces or spaces near an entrance or in another desirable location, to incentivize ridesharing.

Short term daily parking – Offer daily or hourly parking rates that are proportional to the monthly rate or approximately the cost of a two single transit fares. Eliminating unlimited-use passes altogether can also be beneficial as a trip-reduction measure, instead offering daily tickets, so commuters save money every day they avoid driving.

C. TDM Management & Administration

TDM Coordinator/Contact Person – Provide a TDM coordinator or contact person. This individual may either be an employee of the development project or may be a contracted through a third-party provider. The TDM coordinator should provide oversight and management of the project's TDM Plan implementation. In this way, a single representative of the property owner is aware of and responsible for the orderly and timely implementation of all aspects of the TDM Plan and can adequately manage the components of the TDM Plan.

Actively participate in Commute.org, or Transportation Management Association equivalent – Sites shall register with Commute.org or else join or create a Transportation Management Association (TMA) with equivalent TDM service, whose role is to coordinate transportation-related programs and services in specific geographic areas.

Notably, for Large Non-Residential (Office, Industrial, Institutional, as well as Medical & Lodging) projects categorized as Transit Proximate there are five components an applicant must fulfill to satisfactorily implement this measure:

1. Obtain certification of participation with Commute.org, or equivalent program.
2. Provide commute assistance or ride-matching program.
3. Provide (or fund) a dedicated shuttle program/consortium or equivalent transit service.
4. Provide Guaranteed Ride Home
5. Supply orientation, education, and promotional programs and/or materials for tenants

For all other project size and land use classifications, the third component above is not requirement as part of this measure.

Developer TDM fee/TDM fund – Impact fees can be collected from developers, generally on a per-unit or square footage basis, to fund the implementation of TDM programs. These TDM fees can be put in an escrow account for the developer or subsequent property manager to spend to implement programmatic elements of the TDM plan. Importantly, "double dipping" with the already-required "TMA Participation" measure (above) is not allowed. This measure cannot be given credit for TDM fund payment or developer fees already required by fee nexus ordinance by the governing jurisdiction. Credit here may only be given for voluntary TDM fund payment or developer fee negotiated separately with the governing jurisdiction.

D. Transit, Shuttles, & Ridesharing

Carpool or vanpool program – Carpool and vanpooling are types of ridesharing that seek to allow vehicles to carry additional passengers when making a trip, with minimal additional mileage. Carpooling generally uses participants' own automobiles. Vanpooling generally uses leased vans (often supplied by employers, non-profit organizations, or government agencies). Carpool and vanpool programs may receive financial incentives from property managers or employers, as well as ride-matching services to help facilitate these shared trips.

Commute assistance and ride-matching – Establish a commute assistance program to provide individualized trip planning services. These services can help employees and residents understand the range of transportation options available to them based on their commute patterns. Ride-matching services aim to find carpools or vanpools for employees or residents with similar commute patterns. Dynamic ridesharing apps are increasing in popularity and allow for ride-matching on a day-by-day basis.

Shuttle program / Shuttle consortium / Fund transit service – Establish a shuttle service to regional transit hubs, commercial centers, or residential areas. Shuttle service should be provided free of charge to residents, employees, and guests. Alternatively, a project site may buy into a shuttle consortium with neighboring developments to pool resources and run shuttle services to multiple nearby sites. Developers may also fund enhanced transit service to/from their project site in collaboration with SamTrans.

Transit or ridesharing passes/subsidies – Offer public transit passes or subsidies; or carpool/vanpool subsidies to tenants' equivalent to 30% of the value of their monthly fare or $50 monthly, to incentivize transit use and ridesharing and comply with regional environmental sustainability goals. NOTE: Funding contributions towards and/or participation in Commute.org shuttle program does not count for this measure. Passes/subsides provided must be valid for public transportation options, including but not limited to BART, Caltrain, SamTrans, and ridesharing platforms and vanpool subscription (or costs).

Pre-tax transportation benefits for employees – Allow employees to participate in a pre-tax transit and parking benefits program to save money and encourage the use of sustainable transportation modes. In the Bay Area, the Bay Area Air Quality Management District (BAAQMD) requires that employers with 50+ employees within the air district provide commuter benefits.

Car share on-site – Provide on-site car share or vehicle fleets. Availability of car-share vehicles reduces the need for individual vehicle ownership, which, in turn, reduces VMT of individuals. Car share provides vehicles for those trips that are not convenient to make by transit, walking, or bicycling, such as large shopping trips. Subsidizing car share membership creates a higher demand for car share vehicles and may reduce the barrier for individuals to try car share services. Similarly, on-site fleet vehicles at employer sites allow employees who use a commute alternative to run errands during the day or attend off-site meetings.

Land dedication or capital improvements for transit – Contribute space on, or adjacent to, the project site for transit improvements. Scoring for this measure is tiered, based how many improvements are implemented from the list of sub-types: Bus Pullout Space; Bus Shelter; Visual/Electrical Improvements; Other

(micromobility parking zone, TNC loading zone, et al). Each of these improvement sub-types is worth 2 points. Achieving 4 improvements equals the full 8 points. Land dedication sufficient to accommodate at least 4 improvements will also score the full number of points.

E. Active Transportation

Secure bicycle storage (long term and short term) – Provide safe and convenient long-term (Class I) bicycle parking. Long-term bicycle parking should offer protection from weather and convenient access to and from the street, without the need to use stairs and with doorways and corridors that are sufficiently wide to navigate with a bicycle. Short term (Class II) bicycle parking should be near pedestrian entries and may be in the public right-of-way. Short term bicycle parking may be used for visitors, couriers, or customers, typically for less than two hours.

Bike share on-site – Provide on-site bike share or bicycle fleets. Availability of bike-share bikes or bicycle fleets reduces the need for individual vehicle ownership and use, which, reduced the number of VMT by individuals. Bike share systems allow for bikes to be rented at one location and returned to another. Bike share systems can play a role in the first or last mile of a commute. Subsidizing or offering complementary bike share memberships, can encourage greater use of the bike share systems and may reduce the barrier for individuals to try bike share. Similarly, on-site fleet bicycles at employer sites allow employees who either drive or a commute alternative to run errands during the day, using a non-motorized form of transport.

Active transportation subsidies – Offer employees or residents who use active transportation subsidies other incentives (gift cards, prizes). This can promote and encourage use of these modes and reward those who walk or bike to work.

Gap Closure – Establish pedestrian and bicycle connections from a project site to existing trails, bikeways, or adjacent streets. This can promote walking and biking by improving safety and comfort and making local and regional connections easier to access. This measure not only benefits site employees or residents, but also other pedestrians and cyclists in the area, particularly if the new development is able to close gaps in the bicycle or pedestrian network or improves overall access to these facilities.

Bicycle repair station or maintenance services – Offer a bicycle repair station or toolkit, within a designated, secure area of the building, such as a bicycle storage room, to encourage bicycling and support employees and residents who cycle. Tools and supplies can include those necessary for fixing a flat tire, adjusting a chain, and performing other basic bicycle maintenance. Maintenance services can also be offered to each resident or employee at least once annually, covering basic services such as a tune-up and inspection.

Bike buddy program or bicycle education program – Establish a bike buddy program to match up beginning cyclists with experienced cyclists. A bike buddy program can help employees find the safest and fastest commute routes to work, provide education on road cycling safety and gear, and provide the motivation to bicycle rather than drive.

Showers, changing rooms, and lockers – These amenities serve as end of trip facilities for employees arriving by bike or other active transportation forms. Commuters who bicycle or walk often arrive wet, muddy or sweaty. Providing employees with a place to shower, change and store clothes can encourage bicycle commuting. Such facilities also benefit employees who exercise during breaks or may occasionally need to wash and change clothes for other reasons.

F. Site Design Initiatives

Design streets / roads that encourage pedestrian and bicycle access – Design street or roadways that provide travel choices and give people the option to avoid traffic congestion, increasing the overall capacity of the transportation network. Street designs should enable safe access for all users of all ages and abilities. Improving pedestrian and cyclist safety and comfort can increase the use of active transportation for residents or employees of a project site.

Pedestrian-oriented uses on ground floor – Include active, pedestrian-oriented commercial uses on the ground floor to create more walkable and inviting areas. Developments should form common and semi-continuous building "walls" along primary street frontages and have uses that promote a high level of customer use and promote pedestrian interest. Providing on-site amenities such as cafes, gyms, childcare, retail or banking institutions, for example, can encourage walking by making the street visually appealing and engaging to pedestrians and promote safety through active street-level uses.

Appendix C *References Specific to ADT Trip Reduction Methodology*

The references listed below are specified, separate from Appendix D reference materials, for their relevance to the recommended ADT trip reduction methodology set forth in this C/CAG TDM Policy:

- California Office of Planning & Research (OPR). (2018). *Technical Advisory on Evaluating Transportation Impacts on CEQA*. https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

- City of Carlsbad. (2019). *Transportation Demand Management (web page)*. https://carlsbadca.gov/services/building/tdm.asp

- Kimley-Horn and Associates, Inc. (2008). *Trip-Generation Rates for Urban Infill Land Uses in California Phase1: Data Collection Methodology and Pilot Application*. https://nacto.org/wp-content/uploads/2015/04/trip_generation_rates_for_urban_infilll_and_uses_caltrans.pdf

- San Diego Association of Governments (SANDAG). *Trip Generation for Smart Growth*. https://www.sandag.org/uploads/publicationid/publicationid_1500_11604.pdf

- Utah Department of Transportation. (2004). *Traffic Impact Study Requirements*. https://nacto.org/docs/usdg/traffic_impact_study_guidelines%20_utah_dot.pdf

Appendix D *Research References*

Numerical Citations in Background TDM Checklist Worksheets Located in Appendix A)

1. California Air Pollution Control Officers Association (CAPCOA). (2010). *Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures.* http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

2. City of Berkeley. (2009). West Berkeley Circulation Master Plan (Draft): Transportation Demand Management Report (Draft). Prepared by Wilbur Smith Associates. https://www.cityofberkeley.info/uploadedFiles/Planning_(new_site_map_walk-through)/Level_3_-_General/TDM%20Report%20Draft%20030309.pdf

3. City of Sacramento. *City Code 17.700.080: Transportation Demand Management Plan-Evaluation Criteria for Trip Reduction Credits*. https://www.qcode.us/codes/sacramento/view.php?topic=17-vii-17_700-17_700_080

4. Vermont Agency of Transportation, Policy, Planning and Intermodal Development Division. (2016). *Transportation Demand Management (TDM) Guidance*. https://vtrans.vermont.gov/sites/aot/files/planning/documents/trafficresearch/VTrans%20TDM%20Guidance%20Feb%202017.pdf

5. Oregon Department of Environmental Quality (ODEQ). (2006). *Employee Commute Options (ECO) Sample Trip Reduction Plan*. https://www.oregon.gov/deq/FilterDocs/ECOSamplePlan.pdf

6. City of San Francisco. (2016). *TDM Plan 2017-2020*. https://www.sfmta.com/sites/default/files/reports-and-documents/2017/12/11-7-17_item_11_transportation_demand_management_plan_0.pdf

7. City of San Francisco. (2018). *Transportation Demand Management: Technical Justification*. https://default.sfplanning.org/transportation/tdm/TDM_Measures.pdf

8. Victoria Transport Policy Institute (VTPI). (2018). *Online TDM Encyclopedia*. https://www.vtpi.org/tdm/

9. Walls, M. & Safirova, E. (2004). *A Review of Literature on Telecommuting and Its Implications for Vehicle Travel and Emissions*. https://media.rff.org/archive/files/sharepoint/WorkImages/Download/RFF-DP-04-44.pdf

10. Nelson Nygaard. (2005). *Crediting Low-Traffic Developments: Adjusting Site-Level Trip Generation Using URBEMIS*. https://www3.drcog.org/documents/archive/urbemis.pdf

Additional References Informing the C/CAG TDM Policy Update

- Alexander, S. & Kott, J., et al. (2019). *Housing and Mobility Toolkit for San Mateo County*. https://transweb.sjsu.edu/sites/default/files/1898-San-Mateo-County-Housing-Mobility-Toolkit.pdf

- Contra Costa Transportation Authority (CCTA). (2019). *Pittsburg-Bay Point Community-Based Transportation Plan: Existing Conditions Report.* Prepared by Placeworks. https://ccta.net/wp-content/uploads/2019/07/PBP_CBTP_ExistingConditionsAppendix_FINAL.pdf

- Contra Costa Transportation Authority (CCTA). (2019). *Richmond Area Community-Based Transportation Plan: Existing Conditions.* Prepared by Placeworks. https://ccta.net/wp-content/uploads/2019/07/Richmond-Area_CBTP_ExistingConditionsAppendix_FINAL.pdf

- Currans, Kristina. (2017). *Issues in Trip Generation Methods for Transportation Impact Estimation of Land Use Development: Review and Discussion of State-of-the-Art Approaches Paper No. 17-01450*. Presented to Transportation Research Board (TRB). https://ppms.trec.pdx.edu/media/project_files/TRB_2017_CurransPoster_MethodsReview_30x40inch.pdf

- El-Geneidy, A., Grimsrud, M., Wasfi, R., Tétreault, P., & Surprenant-Legault, J. (2014). *New evidence on walking distances to transit stops: Identifying redundancies and gaps using variable service areas.* Transportation, 41(1), 193-210. https://tram.mcgill.ca/Research/Publications/Transit_service_area.pdf

- Handy, S., Tal, G. & Boarnet, M. (2014). *Impacts of Bicycle Strategies on Passenger Vehicle Use and Greenhouse Gas Emission: Policy Brief*. Prepared for California Air Resources Board (CARB). https://ww2.arb.ca.gov/sites/default/files/2020-06/Impacts_of_Bicycling_Strategies_on_Passenger_Vehicle_Use_and_Greenhouse_Gas_Emissions_Policy_Brief.pdf

- Layton, R. Design Concepts. *Walkability Standards: Test of Common Assumptions*. (2017). https://www.dcla.net/blog/walkability-standards

- University of California-Davis, Urban Land Use and Transportation Center. (2014). *Smart Growth Trip Generation*. http://ultrans.its.ucdavis.edu/projects/smart-growth-trip-generation