Recommendations for Application of the Mobility Management Toolbox

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1. Introduction

This report describes recommendations for the application of the Mobility Management Toolbox (MMT). This memo can assist SANDAG with promoting widespread and consistent use of the MMT across all jurisdictions within the San Diego region. The memo includes a description of the legislative background of Senate Bill 743 (Steinberg, 2013) (SB 743) and the changes to evaluating transportation impacts under the California Environmental Quality Act (CEQA) that were initiated with the passage of SB 743 and provides recommendations for applying the MMT during the development review and planning processes.

Mobility management can help meet the mobility needs of the region without the costly investment in large capital projects. Mobility management includes Transportation Demand Management (TDM), which consists of programs and services that help to encourage transportation alternatives, reduce the reliance on the private automobile for travel, and reduce vehicle miles traveled (VMT) and greenhouse gas emissions. Examples of TDM strategies include carshare and vanpool programs, telework, transit system improvements, active transportation improvements, and parking management.

Mobility management also encompasses Transportation System Management (TSM), which refers to strategies that optimize transportation system operations and performance. Traditional TSM strategies include traffic signal synchronization, traveler information systems, freeway ramp metering, and traffic incident management. Recent advancements in technology and active transportation demand management (ATDM) have multimodal benefits and can improve the mobility and safety of non-auto modes through improvements that prioritize and improve responsiveness to bicycles and pedestrians through strategies like transit signal priority and bike signal systems.

SANDAG has developed the Mobility Management Toolbox to assist with identifying, screening, and evaluating the VMT-reduction potential of mobility management strategies. The implementation of SB 743 will place new emphasis on reducing VMT from development projects. SANDAG has developed the MMT to help local governments and developers understand the potential to reduce the VMT generated by a proposed project through the application of mobility management strategies. Mobility management also supports local and regional climate action planning efforts. In addition, SANDAG, member agencies, transit agencies, and other stakeholders can use the MMT as a sketch planning tool to help evaluate mobility management improvements for planning, grant applications, and a variety of other purposes.

The Toolbox consists of a guidebook and an accompanying VMT-reduction calculator tool. The guidebook provides descriptions of a wide variety of Mobility Management strategies, with resources for implementation and key references for additional information. The accompanying calculator tool allows users to estimate the percent reduction in VMT that would be achieved by implementation of one or more TDM strategies. Strategies in the VMT reduction tool are organized around two scales of application: project/site-level and community/city-level.

This report discusses applications of the MMT, organized in the following sections:

- **SB 743 Background –** Describes the legislative and regulatory changes and how those are being implemented as changes in impact analysis under CEQA.
- **Development Review Process –** Describes the process for reviewing and permitting public and private development projects and the applicability of the MMT. Also describes the intergovernmental review (IGR) process.
- **General Plans and Community Plans –** Describes local government general plans and community plans and how the MMT can inform these processes.

- **TDM Ordinances –** Describes local government TDM ordinances as well as trip caps and the relevance of the MMT to these initiatives.
- **Climate Action Plans –** Describes local and regional climate action planning and how the MMT can support the development and implementation of greenhouse gas–reduction efforts.
- **Integration with Existing SANDAG Resources –** Briefly describes related SANDAG resources and their relationship to the MMT.

2. SB 743 Background

Legislative and Regulatory Changes

On September 27, 2013, Governor Jerry Brown signed SB 743, which mandated a change in the way that public agencies evaluate transportation impacts of projects under CEQA, focusing on vehicle miles traveled (VMT) rather than level of service (LOS) and other delay-based metrics. SB 743 states that new methodologies under CEQA are needed for evaluating transportation impacts that are better able to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution, promoting the development of a multimodal transportation system, and providing clean, efficient access to destinations.

On November 27, 2017, the Governor's Office of Planning and Research (OPR) transmitted the final proposed amendments to the CEQA Guidelines to the California Natural Resources Agency, including the proposed updates for analyzing transportation impacts pursuant to SB 743. On January 26, 2018, the Natural Resources Agency published a Notice of Proposed Rulemaking to update the CEQA Guidelines. In addition, in April 2018, OPR released the revised *Technical Advisory on Evaluating Transportation Impacts in CEQA* (*Technical Advisory*), which recommended VMT per capita, VMT per employee, and net VMT as the new metrics for transportation analysis.

On December 28, 2018, following five years of stakeholder and public engagement, the Natural Resources Agency certified and adopted the CEQA Guidelines update package, which included the new CEQA Guidelines section implementing SB 743 and making VMT the metric for determining the significance of transportation impacts under CEQA (CEQA Guidelines Section 15064.3). OPR also released the final revised *Technical Advisory* in December 2018, which contains OPR's technical recommendations for assessing VMT, thresholds of significance, and mitigation measures. Per State CEQA Guidelines Section 15064.3(c), July 1, 2020, is the statewide implementation date for using VMT to determine the significance of impacts in CEQA analysis. It should be noted that lead agencies are not precluded from transitioning from LOS to VMT prior to July 1, 2020, and some local governments are proceeding with the transition ahead of this schedule.

Changes to Impact Analyses Under the California Environmental Quality Act

With the passage of SB 743, the focus of transportation impact analysis in CEQA documents has shifted from automobile delay, which is measured by LOS and other similar metrics, to VMT. Accordingly, automobile delay will no longer be considered a significant impact under CEQA. While lead agencies are still required to analyze potential transportation-related impacts on air quality, noise, safety, or any other secondary impact associated with transportation (PRC §21099[b][1]), SB 743 includes several notable changes to CEQA applicable to transit-oriented developments and certain infill projects. In particular, Public Resources Code Section 21099(d)(1) states as follows:

> *"Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area[1] shall not be considered significant impacts on the environment."*

While lead agencies have the discretion to choose the most appropriate methodology and significance thresholds for evaluating a project's VMT and associated impacts as long as it is supported by substantial evidence, the OPR *Technical Advisory* provides recommended thresholds for various types of land use projects. The OPR *Technical Advisory* provides the following recommended numeric thresholds for residential, office, and retail projects. Note that these are OPR's guidelines; developers and local governments should check with the lead agency to determine if other guidelines are applicable.

Residential – A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the Sustainable Communities Strategy (SCS) for that city and should be consistent with the SCS.

Office – A proposed project exceeding a level of 15 percent below existing regional VMT per employee may indicate a significant transportation impact.

Retail – A net increase in total VMT may indicate a significant transportation impact. Because new retail development typically redistributes shopping trips rather than creating new trips, estimating the total change in VMT (i.e., the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project's transportation impacts.

In addition, the OPR *Technical Advisory* provides the following general guidance and recommendations for other types of land use projects.

Mixed-Use Projects – Lead agencies can evaluate each component of a mixed-use project independently and apply the significance threshold for each project type included (e.g., residential and retail). Alternatively, a lead agency may consider only the project's dominant use. In the analysis of each use, a project should take credit for internal capture. Combining different land uses and applying one threshold to those land uses may result in an inaccurate impact assessment.

Other Land Uses – Among land use projects, residential, office, and retail projects tend to have the greatest influence on VMT. For that reason, OPR recommends the quantified thresholds described above for purposes of analysis and mitigation. Lead agencies, using more location-specific information, may develop their own, more specific thresholds, which may include other land use types. In developing thresholds for other project types, or thresholds different from those recommended here, lead agencies should consider the purposes described in Section 21099 of the Public Resources Code and regulations in the CEQA Guidelines on the development of thresholds of significance (e.g., CEQA Guidelines, § 15064.7).

[1] As defined in Public Resources Code Section 21099, a transit priority area is an area within ½-mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations.

Redevelopment Projects – Where a project replaces existing VMT-generating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact. If the project leads to a net overall increase in VMT, then the thresholds described above should apply.

In addition, a project or plan near transit that replaces affordable residential units with a smaller number of moderate- or high-income residential units may increase overall VMT because displaced residents' VMT may increase. A lead agency should analyze VMT for such a project even if it otherwise would have been presumed less than significant. The assessment should incorporate an estimate of the aggregate VMT increase experienced by displaced residents. That additional VMT should be included in the numerator of the VMT per capita assessed for the project.

If a residential or office project leads to a net increase in VMT, then the project's VMT per capita (residential) or per employee (office) should be compared to thresholds recommended above. Per capita and per employee VMT are efficiency metrics and, as such, apply only to the existing project without regard to the VMT generated by the previously existing land use.

If the project leads to a net increase in provision of locally serving retail, transportation impacts from the retail portion of the development should be presumed to be less than significant. If the project consists of regionally serving retail and increases overall VMT compared to with existing uses, then the project would lead to a significant transportation impact.

Regional Transportation Plan and Sustainable Communities Strategy Consistency (All Land Use Projects) – Section 15125, Subdivision (d) of the State CEQA Guidelines provides that lead agencies should analyze impacts resulting from inconsistencies with regional plans, including regional transportation plans. For this reason, if a project is inconsistent with the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), the lead agency should evaluate whether that inconsistency indicates a significant impact on transportation. For example, a development may be inconsistent with an RTP/SCS if the development is outside the footprint of development or within an area specified as open space as shown in the SCS.

Lastly, the OPR *Technical Advisory* provides the following recommendations for analyzing VMT impacts of land use plans, such as general plans and community plans.

Land Use Plans – Similar to projects, lead agencies should analyze VMT outcomes of land use plans across the full area over which the plan may substantively affect travel patterns, including beyond the boundary of the plan or jurisdiction's geography. Also similar to projects, VMT should be counted in full rather than split between origin and destination (emissions inventories have sometimes split cross-boundary trips in order to sum to a regional total, but CEQA requires accounting for the full impact without truncation or discounting). Analysis of specific plans may employ the same thresholds described above for projects. A general plan, area plan, or community plan may have a significant impact on transportation if proposed new residential, office, or retail land uses would in aggregate exceed the respective thresholds recommended above. Where the lead agency tiers from a general plan EIR pursuant to CEQA Guidelines Sections 15152 and 15166, the lead agency generally focuses on the environmental impacts that are specific to the later project and were not analyzed as significant impacts in the prior EIR (Public Resources Code Section 21068.5; CEQA Guidelines Section 15152[a]). Thus, in analyzing the later project, the lead agency would focus on the VMT impacts that were not adequately addressed in the prior EIR. In the tiered document, the lead agency should continue to apply the land use project thresholds recommended above.

3. Development Review Process

Description

The MMT is intended to complement the existing development review process by serving as a resource during the CEQA and intergovernmental review (IGR) processes. Every agency has a process for reviewing and permitting public and private development projects. For example, the City of San Diego has five decision process levels that fall under either ministerial or discretionary decisions.[2] Projects reviewed and decided by Process 1 are ministerial decisions and are not subject to CEQA review; these decisions are based solely on whether a project complies with regulations of the Municipal Code and, where applicable, any prior approved discretionary decision. Process 2 through 5 decisions are discretionary, with each step up in the process requiring greater oversight and a higher decision-making body. While these projects are also subject to regulations, there is some degree of discretion given to the assigned decision maker to approve or deny these projects. These projects are reviewed for compliance with local and state development policies and regulations (City of San Diego, 2019).

All projects requiring discretionary approval, whether a physical development project or plan, are subject to CEQA. State CEQA Guidelines Section 15357 defines a discretionary project as:

> *"…a project which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, regulations, or other fixed standards. The key question is whether the public agency can use its subjective judgment to decide whether and how to carry out or approve a project."*

In general, the submittal of complete project applications and plans for discretionary projects initiates the environmental review (CEQA) process. Agency staff will then determine the appropriate CEQA document for the project, which could include an environmental impact report (EIR), mitigated negative declaration (MND), negative declaration (ND), or notice of exemption (i.e., an exemption from further CEQA review). The environmental review process will typically occur concurrently with other project review processes (e.g., plan review). Preparation of the CEQA document is typically an iterative process that involves multiple rounds of agency staff reviews prior to distribution of the document for public review. The length of the public review period depends on the type of CEQA document being prepared, as indicated below.

- **EIR –** Not less than 45 calendar days, unless a shorter period, not less than 30 days, is approved by the State Clearinghouse.
- **MND or ND –** Not less than 30 calendar days, unless a shorter period, not less than 20 days, is approved by the State Clearinghouse.
- **Notice of Exemption –** No public review requirement; however, there is a 35-day statute of limitations for filing a court challenge after the filing and posting of the notice.

The public review period allows both regulatory agencies and the public to comment on the adequacy of the CEQA document. These comments are considered in the final CEQA document.

[2] City of San Diego. 2019. *What Are the Steps in the Development Review Approval Process?* Available at sandiego.gov/planning/about/overview/steps.

Once the environmental review process is complete, a public hearing by the appropriate decision-making body (e.g., director-level staff, planning commission, city council, etc.) will be held to determine whether or not to approve the project and certify (EIR) or adopt (MND/ND) the corresponding final CEQA document.

At the regional level, SANDAG, as the Metropolitan Planning Organization (MPO) for the San Diego region, serves as the designated Areawide Clearinghouse for the review of environmental documents and certain grant applications for projects and programs in the region. This designation is set under both federal and state intergovernmental review regulations, CEQA, and the National Environmental Policy Act (NEPA). Per state law, SANDAG has the authority to determine whether a project or plan will need to be reviewed for regional significance through the IGR process. For projects considered to have potential regionally significant impacts, SANDAG staff write comment letters from a regional perspective that emphasize the need for land use and transportation coordination based on the policies contained in the current Regional Comprehensive Plan (RCP) and RTP/SCS.[3] As the regional MPO, SANDAG supports member agency implementation of SB 743 by developing resources, such as the Mobility Management Toolbox, that can be employed by the various jurisdictions in the San Diego region to reduce VMT and greenhouse gas emissions associated with their projects.

Application of the Mobility Management Toolbox for Development Review

SANDAG developed the MMT as a resource for jurisdictions and developers to provide a consistent regional framework for evaluating VMT-reduction strategies as part of the development review and transportation-analysis processes as required under CEQA. The MMT supports the goals of SB 743 by providing jurisdictions with a resource to quantify VMT reductions resulting from TDM implementation. The MMT can be applied during the local development review process in the following ways:

- Used by project applicants (e.g., developers) and public agencies to calculate evidence-based VMT reductions for both project-planning purposes and CEQA compliance.
- Used by project applicants during the preliminary project-planning process to identify mobility management strategies that can be incorporated into the preliminary project design to reduce their project's VMT (along with air quality and greenhouse gas emissions) and proactively avoid transportation impacts that may otherwise be identified during the development review process.
- Used by transportation and environmental planners of public agencies during the development review process for discretionary projects. The strategies from the MMT can be required by agency staff during preparation of the environmental document and incorporated into the project design to mitigate or avoid transportation impacts of the project under CEQA.
- Used by transportation planning agencies such as SANDAG during the IGR process to identify and suggest VMT-reduction measures that could be incorporated into regionally significant projects.

[3] Previously separate planning documents, the RCP and RTP/SCS were integrated into one single planning document, *San Diego Forward: The Regional Plan*, which was adopted by the SANDAG Board of Directors in October 2015.

4. General Plans and Community Plans

Description

California Planning and Zoning Law (Government Code Section 65000 et seq.) provides the legal framework in which California cities and counties exercise local planning and land use functions. Under state planning law, each city and county is required to adopt a general plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning" (Government Code Section 65300 et seq.). General plans identify development goals and policies relative to the distribution of future public and private land uses within a city's or county's jurisdiction. A general plan consists of several mandatory elements, including land use, circulation, housing, conservation, open space, noise, and safety. A general plan also may include other elements at the discretion of the jurisdiction that relate to the physical development of that specific county or city. The general plan must be comprehensive and internally consistent between elements, goals, and policies. All 19 governments in the San Diego region have a general plan that designates appropriate land uses throughout the jurisdiction and identifies the goals and policies as they relate to land use and development.

Many general plans also encompass community plans (sometimes called "area plans"), which focus on a smaller geographic area. A community plan has the same force of law as a general plan.

Application of the Mobility Management Toolbox for General Plans and Community Plans

The MMT could be used by public agencies when developing long-range planning documents such as general plans and community plans to guide planning goals and policies, provide strategies for reducing VMT at the community and/or city level, and provide a framework for future projects to reduce their VMT. The MMT can be used to prioritize VMT-reduction strategies within a given jurisdiction. For example, the City of Chula Vista has incorporated Transportation Demand Management (TDM) strategies into the Land Use and Transportation Element of its General Plan. TDM strategies are programs and services that help to encourage transportation alternatives, reduce the reliance on the private automobile for travel, and reduce VMT and greenhouse gas emissions. The Chula Vista General Plan includes the following objective:

> *Objective – LUT 18: Reduce traffic demand through TDM strategies, increased use of transit, bicycles, walking, and other trip-reduction measures.*

City staff could use the MMT to identify strategies for achieving this objective.

Another example could be a community in unincorporated San Diego County that is updating its community plan. Based on information in the MMT, the agency can work to include VMT-reduction strategies within the community plan update that will achieve VMT reduction. The MMT could help these jurisdictions identify strategies that are appropriate for a small town or rural area, as opposed to strategies that are only appropriate for locations with higher density and land values (e.g., bikeshare, parking cash-out).

5. Transportation Demand Management Ordinances

Description

Some local governments have adopted transportation demand management (TDM) ordinances to advance the transportation goals of their general plans, CAPs, and other community planning efforts. Adoption of a TDM ordinance usually codifies any identified programs, plans, and strategies, making them mandatory requirements for both ministerial and discretionary projects. A TDM ordinance typically requires actions by a developer in order to receive a building permit for a project. Some TDM ordinances include both voluntary and requirements elements. For example, the City of Carlsbad adopted a TDM ordinance on February 26, 2019. The purpose of the ordinance is to "reduce the number of Carlsbad employees driving alone to and from work and increase alternative commuting options like transit, biking, carpool and vanpool, to meet 2035 greenhouse gas reduction targets." [4] The ordinance requires that a TDM Plan be created for any new nonresidential development project that is anticipated to generate 110 or more average daily employee trips.

A related type of TDM ordinance is a trip cap. A trip cap sets limits on the amount of vehicle trips to and from workplaces and enforces these limits via regular traffic counts and penalties for noncomplying workplaces. Local governments have the ability to set trip caps on new development projects through development agreements, but their authority to enact caps on existing development is more limited, so trip caps are likely to focus on new development. Several cities in the San Francisco Bay Area have enacted trip caps, including Mountain View, Sunnyvale, Cupertino, and Menlo Park.[5] Most of these caps focus on individual development projects, but Mountain View's trip cap covers an entire district.

Application of the Mobility Management Toolbox for Transportation Demand Management Ordinances

The MMT could be used to support the implementation of a TDM ordinance by both city staff and developers. For example, if the ordinance requires development of a TDM plan (such as Carlsbad), developers could use the MMT to identify and assess effective strategies for inclusion in their required TDM plan. City staff who review and approve the TDM plan can rely on the MMT to assess the adequacy of plan strategies for reducing vehicle trips.

City staff could also use the MMT for developing new TDM ordinances and related city programs. Programs in some cities require that developments achieve specified levels of vehicle trip of VMT reduction in order to receive approval. For example, the City of San Francisco created a list of 66 TDM options, each with points assigned to them, from which a developer can select measures to include in their required TDM plan. City staff could use the MMT in order to determine the appropriate scoring or points assigned to various TDM measures.

If a city enacts a trip cap, the affected developers and employers could use the MMT to identify and evaluate strategies that effectively reduce vehicle travel. While the MMT VMT reduction calculator tool is focused on VMT, there is a close correlation between a percent reduction in VMT and a reduction in vehicle trips.

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[4] carlsbadca.gov/services/depts/pw/environment/cap/transport.asp

[5] For a summary of South Bay trip cap programs, see Cities21, Palo Alto Comp Plan Transport Element, Extended Comments, September 1, 2015, cities21.org/cms/PA_Transp_Elem_C21.pdf.

6. Climate Action Plans

Description

A climate action plan (CAP) outlines the current and future actions for jurisdictions to reduce communitywide greenhouse gas emissions and is commonly prepared to show how local goals and policies align with statewide targets for greenhouse gas reductions. Adopting a CAP marks the beginning of an iterative process of implementing, monitoring, and updating the CAP. Nearly all of the San Diego region's 19 local governments have adopted a CAP or are in the process of developing one. The transportation sector is the largest source of greenhouse gas emissions in many cities and counties, yet local governments have limited ability to promote strategies involving vehicle fuel efficiency improvements or alternative fuels that are effective at reducing transportation greenhouse gas emissions. Therefore, CAPs typically include strategies to reduce VMT as an approach to curb local greenhouse gas emissions and meet reduction targets.

Application of the Mobility Management Toolbox for Climate Action Plans

The MMT could be used by public agencies when developing CAPs to provide strategies for reducing VMT at the community and/or city level and provide a framework for future projects to reduce their VMT to assist in meeting the greenhouse gas–reduction targets identified in the CAP. Many CAPs reference the reduction strategies outlined in the "Quantifying Greenhouse Gas Mitigation Measures" report from the California Air Pollution Control Officers Association (CAPCOA).[6] However, while the CAPCOA report is a useful reference for guiding practitioners, the VMT and greenhouse gas–reduction estimates in the report are intended to be applied at the project scale and are not specific to the San Diego region. The SANDAG Regional Climate Action Planning Framework (ReCAP) provides examples for VMT reduction measures that can be included in a CAP and methods to calculate their associated greenhouse gas reductions. The MMT provides a complementary tool to ReCAP for identifying and quantifying transportation greenhouse gas–reduction measures for a CAP since it includes community-level strategies and relies on regionally specific data for many reduction calculations. In addition, many jurisdictions with an adopted CAP also have prepared a CAP consistency checklist that offers CEQA streamlining to certain projects that can demonstrate consistency with the CAP. A CAP checklist could reference the MMT as a tool for project applicants to use as they demonstrate CAP consistency.

7. Integration with Existing SANDAG Resources

SANDAG currently has several resources that can be used by project applicants, public agencies, transportation planners, and environmental planners prior to and during the development review process. The MMT will complement many of these existing resources. This section briefly describes these resources and their relationship to the MMT.

[6] California Air Pollution Control Officers Association (CAPCOA). *Quantifying Greenhouse Gas Mitigation Measures*. capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.

Integrating Transportation Demand Management into the Planning and Development Process: A Reference for Cities (2012)

This document is intended to provide SANDAG member agencies with case studies and resources for integrating TDM throughout the various land development stages and provide recommendations for managing, monitoring, and evaluating the effectiveness of TDM strategies. It provides an introduction to TDM and how TDM fits into local government planning and project-development processes. The document discusses a variety of policies and programs for implementing TDM, such as design guidelines, trip-reduction ordinances, development agreements, employer commute trip-reduction programs, and parking policies. The document also identifies many case study examples.

The MMT is a natural complement to this document, since it provides quantitative estimates of the VMT-reduction benefits of TDM strategies. Cities wishing to create or improve their TDM programs can rely on the "Integrating Transportation Demand Management" document for establishing their policies and programs and can use the MMT to help implement a TDM program at the local level.

Regional Transit Oriented Development Strategy (2015)

The SANDAG Regional Transit Oriented Development (TOD) strategy was developed over several years and adopted in 2015 as part of San Diego Forward: The Regional Plan. Regional TOD Strategy recommends strategies and actions to assist the region in creating TOD projects and districts in association with the region's existing and future network of public transit. Six Working Papers and two background reports were developed as part of the strategy effort.

The MMT supports broader SANDAG efforts to promote TOD. In particular, TOD is one of the strategies included in the VMT reduction calculator tool, so local governments and other stakeholders can get a sense of the magnitude of VMT reduction associated with TOD. The MMT also provides valuable information on many of the features that should accompany TOD, such as bike and pedestrian improvements.

Regional Parking Management Toolbox (2016)

The Regional Parking Management Toolbox is an interactive PDF document that is intended to provide the reader with a number of definitions, resources, and tools to implement parking management strategies within their local jurisdiction or service area. The document includes dozens of strategies, including those to support transportation demand management and sustainability. The Regional Parking Management Toolbox does not provide quantitative estimates VMT or trip-reduction impacts of any strategy.

The MMT calculator tool includes two parking management strategies: Parking Pricing and Parking Cash-Out. The MMT can complement the Regional Parking Management Toolbox by providing a simple tool for estimating the VMT-reduction impacts of these two strategies.

Regional Mobility Hub Strategy (2018)

This SANDAG program included development of a Mobility Hub Features Catalog, which describes the kinds of services, amenities, and technologies that make up a mobility hub. It also includes descriptions of eight prototype sites within the San Diego region that were identified to show how mobility hub features should be tailored to different communities. Development of each prototype site includes "Recommended Mobility Hub Features."

The MMT complements the Regional Mobility Hub Strategy by providing a basis for estimating VMT-reduction benefits associated with many mobility hub features. For example, the following elements of the Mobility Hub Features Catalog are included in the MMT VMT-reduction calculator tool:

- Pedestrian amenities
- Bikeways
- Bikeshare
- Carshare
- Transit improvements
- Microtransit

Communities that are seeking to implement a mobility hub can use the MMT to help quantify the benefits and build support for associated planning and investments.

iCommute Program

iCommute is the SANDAG TDM program for the San Diego region. Information on the program is available at icommutesd.com. Program components include the following:

- **Commuter Assistance –** iCommute assists commuters by providing information about carpool services, the subsidized vanpool program, transit solutions, regional support for biking, the Guaranteed Ride Home program, information about teleworking, and bike and pedestrian safety program support for schools.
- **Employer Services –** iCommute provides assistance to local businesses, helping them develop and implement customized employee commuter benefit programs that lower costs, increase productivity, and help the environment.
- **Support for Local Jurisdictions –** iCommute is available to provide support and tools to help local governments and institutions plan, design, and implement a customized TDM program.

The MMT can serve as a resource for employers and local jurisdictions who participate in the iCommute participants. For example, employers could use the Mobility Management Guidebook to identify appropriate strategies and could use the VMT-reduction calculator tool to estimate the potential vehicle trip reduction associated with specific strategies.