



555 West Middlefield Road Transportation Demand Management Plan

Planning
Division



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1 INTRODUCTION

The location and design of 555 West Middlefield Road make it a prime candidate for an effective transportation demand management (TDM) program. This TDM Plan describes strategies that will enable the site to actively manage travel demand for the 323 new residential units and 402 existing residential units through a variety of infrastructure investments and ongoing programs, including pedestrian site enhancements, carshare vehicles, and others.

TDM refers to policies, physical amenities, programs, tools, and services that support the use of sustainable modes to facilitate non-driving access to an area. TDM is intended to work with the existing transportation system to expand and support mobility options that accommodate growth while meeting the City of Mountain View goals to reduce vehicle trips.

PROJECT CONTEXT AND PROFILE

The proposed project is located on the south side of Middlefield Road between Moffett Boulevard and CA-85. The Project Site currently contains 402 multi-family residential units in fifteen buildings along with a clubhouse and six surface parking lots containing a total of 670 spaces. Based on the site plan dated July 31, 2020, AvalonBay proposes replacing most of the surface parking lots with underground parking and 323 new apartment units at 555 West Middlefield Road. The existing clubhouse will be replaced with a new clubhouse and leasing office. The existing 402 residential units will remain, ensuring they continue to be available for housing and no displacement will occur. The final project will have a total of 725 dwelling units, providing much needed housing in the City of Mountain View while remaining in character with the surrounding neighborhood design. The project will be served by three subterranean garages with 918 spaces and 52 additional surface parking spaces for guests. The 970 total parking spaces will serve new and existing residential units. The housing development will include both market rate and below market rate units. The TDM Plan applies to both the existing units and the new construction.

The City of Mountain View encourages a percentage of new housing to be affordable. Key strategies to achieve this include: (1) Incentivizing land donations for affordable housing development, (2) including affordable housing units within market-rate developments; and (3) collecting rental housing impact fees from market-rate housing developments. Under the City's Below-Market-Rate (BMR) Program, *15% of all new housing must be set aside for low and moderate income persons.*¹ 555 West Middlefield will meet this requirement with 48 of its new units set aside for below-market rate residents and paying an in-lieu fee for the fractional 0.45 unit.

555 West Middlefield is located within walking distance (0.5 miles) of downtown Mountain View shops and restaurants and approximately 0.5 miles from the Mountain View Caltrain/VTA light-rail station. Additional nearby transit stops are VTA Lines 32, 185, and the Free Shuttle to Light Rail along West Middlefield Road and VTA Line 81 on Moffett Boulevard. West Middlefield Road has Class II bicycle lanes

¹ City of Mountain View (2018). Below-Market-Rate Housing Ordinance. Retrieved from <https://www.mountainview.gov/civicax/filebank/blobdload.aspx?blobid=10763>

and provides a dedicated bicycle connection to the Stevens Creek Trail, a mixed-use path connecting to North Bay Shore and neighborhoods south of West Middlefield Road.

WHY TRANSPORTATION DEMAND MANAGEMENT

This TDM Plan affirms AvalonBay's commitment to sustainability and accessibility and reinforces the City of Mountain View's policies to reduce vehicle trips and greenhouse gas emissions, and balance the needs of all transportation modes.² A robust TDM Plan enables the development to support these goals while also supporting the type of urban design currently sought by prospective residents. Given the project's proposed TDM program, the increased amount of affordable housing, and surrounding transportation context, the project applicant proposes a parking ratio of 1.36 spaces per unit, 970 spaces for 725 units when all phases of construction are complete. The project's off-street parking meets the City of Mountain View's Model Parking Standard.

The strategies described in this Plan are designed to work together to provide residents and visitors with greater transportation choice. Targeted programs strengthen the benefits of past investments in the surrounding bicycle and pedestrian infrastructure and the site's transit connections by reinforcing awareness of these options, breaking down barriers to incorporating them in travel routines, and incentivizing habitual use. With this larger design context in mind, we estimate that full implementation of the TDM program included in the Strategy will meet the City's goal of a **10% reduction in SOV trips from residents in the new and existing buildings.**

TDM PLAN OVERVIEW

This introduction is followed by two chapters:

- Chapter 2 presents a slate of recommended TDM measures for 555 West Middlefield Road to reduce SOV trips and parking demand for the development.
 - Chapter 3 presents the project applicant's approach to monitoring the TDM Plan's implementation to ensure that it achieves its goals of reducing SOV trips and parking demand.
- Appendix A documents the estimated trip impact methodology.

² City of Mountain View (2012) *General Plan*. Retrieved from <http://www.mountainview.gov/civicax/filebank/blobdload.aspx?blobid=10702>

2 PLANNED TDM STRATEGIES

This TDM Plan consists of a package of measures that will work together to provide greater transportation choice in a way that is both cost effective and highly marketable. Measures include programs and infrastructure improvements, many of which have been successfully implemented in other urban and suburban residential developments. Implementation Practices are cited below each measure when possible.

The TDM measures discussed below are grouped into two categories: infrastructural measures and operational measures. Infrastructural measures typically involve one-time capital expenditures for the construction of a particular facility or amenity, or the allocation of space needed to accommodate the facility/amenity. Operational measures typically consist of ongoing costs to maintain existing facilities/amenities or sustain ongoing policy commitments.

The table below summarizes the TDM measures proposed for 555 West Middlefield.

Figure 1 Summary of TDM Strategies at 555 West Middlefield Road

Measure Type	Mode	TDM Strategy
Land Use	Building	Affordable Housing (48 new units)
	Building	Site Enhancements to encourage walking
Parking	Parking	Parking supply reduction
Other TDM Inducements	Building	Collaborative workspace
	Transit, New Mobility Options	Transit screen with real-time transit information ³
	Building	TDM coordinator
	Motorized Transport	ZipCar car-share service
Bicycle	Bicycle	Bicycle parking
	Bicycle	Bicycle repair rooms
Design Element	Building	Convenient delivery storage area

Affordable Housing

555 West Middlefield is providing 48 new affordable units. A residential development’s housing type affects its ability to reduce vehicle trips. Projects that incorporate affordable housing usually have lower parking demand and vehicle trip generation rates.⁴ This typically occurs because there is a lower auto ownership rate among residents in lower-income/affordable units. Providing 15% of its units at below market rate will help reduce the need for parking. Moreover, there is a high need for housing in general and below market-rate units specifically in the South Bay, with a median house sale price of \$1.6 million in the City of Mountain View.⁵

³ Current examples include TransitScreen and Roadify, amongst others, but this recommendation doesn’t endorse a specific vendor.

⁴ TransForm, GreenTRIP Parking Database <http://database.greentrip.org/> Assembly Bill 744, which was approved on October 9, 2015, recognizes the lower parking demand and VMT associated with affordable housing developments. http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB744.

⁵ “Mountain View, CA Housing Market, Trends, and Schools - Realtor.com®.” 2020. September 10, 2020.: https://www.realtor.com/realestateandhomes-search/Mountain-View_CA/overview

Site Enhancements to Encourage Walking

The project's site plan includes pleasant, direct, and convenient pedestrian paths between residential buildings, amenities, and to offsite destinations. The project design makes the accessibility of onsite amenities and public open space by walking the most feasible mode of travel for internal trips. Additionally, the ease of pedestrian connections to the sidewalk is associated with an increase in the choice of walking and walking to transit for trips compared to site design that is oriented towards parking and away from the sidewalk.

Parking Supply Reduction

A lower total parking supply for both new and existing units than conventional parking provision rate will reduce the number of trips generated by the project. The project proposes 1.34 spaces per unit 14% less parking than conventional parking provision rates (1.5 spaces a unit per ITE rates), resulting in a corresponding reduction in trips generated by the project. ITE rates are used as baseline conditions to measure the effectiveness of this strategy.

This strategy builds upon project context factors such as level of urbanization, walkable destinations nearby, transit service, and bike network. 555 West Middlefield has many attributes discussed in the introduction that support alternatives to driving for many types of trips, enabling a reduction in parking supply and corresponding reduction in vehicle trips.

Collaborative Work Space

A business services room can help encourage and facilitate working from home, which can have a direct impact on reducing trips to and from the site. Such an amenity is a typical part of large rental buildings, though the size and specific services included vary.

At 555 West Middlefield, work spaces could include rentable work rooms that can be reserved in advance, high-speed internet connections, and printing/scanning services. The project applicant will be responsible for developing and maintaining these business services rooms.

Real-Time Transit Information

The applicant will install up to two real-time transit information screens, to be displayed prominently in shared amenity spaces accessible to existing and future residents. Knowing the next bus or train arrives, in real-time, can help reduce some of the uncertainty associated with using alternative transportation modes and reduce the time residents spend waiting at bus stops. Access to real-time transit information, whether in fixed displays or via mobile apps, was found to increase bus ridership,⁶ decrease time spent waiting at bus stops, and increase rider satisfaction.⁷ These displays also typically include information for modes other than transit, such as the availability of nearby carshare vehicles or ride hailing services.

Real-time transit information screens installed in lobbies or common areas show residents all of their available transportation options in a clear, user-friendly display, such as in Figure 2. Leading vendors such as TransitScreen and Roadify provide installation assistance as well as subscriptions to area transit

⁶ Brakewood, Candace, Gregory S. Macfarlane, and Kari Watkins. 2015. "The Impact of Real-Time Information on Bus Ridership in New York City." *Transportation Research Part C: Emerging Technologies* 53 (April): 59–75. <https://doi.org/10.1016/j.trc.2015.01.021>.

⁷ Brakewood, Candace. 2014. "Evaluating the Impacts of Real-Time Transit Information in Tampa and Atlanta." Webcast, August 7. <https://www.cutr.usf.edu/wp-content/uploads/2014/08/CUTR-Webcast-Handout-8.7.14.pdf>.

information. These systems are typically “fit and forget”, with an initial customization fee to tailor information to the project site and then an annual fee for licensing and upkeep.

Implementation Practices

Parkmerced, the largest apartment community in San Francisco, began a partnership in 2014 with TransitScreen, a company that provides real-time transit information displays. TransitScreen is working with the Metropolitan Transportation Commission to modernize transit displays in over 46 locations throughout the San Francisco Bay Area. Another residential development, NEMA, provides real-time transit information on their resident app and website.

TDM Coordinator

The project applicant will appoint an on-site transportation staff person to support the implementation and evaluation of the site’s TDM program. They would act as a centralized transportation resource to all residents, providing up-to-date transportation information.

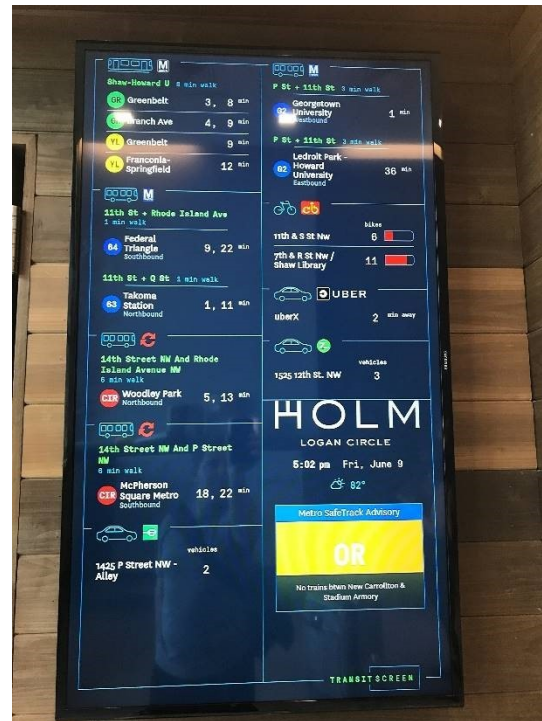
The on-site transportation staff person will also support efforts to collect data to evaluate the effectiveness of the overall TDM program and to understand opportunities to adjust the program to meet changing needs of residents and visitors.

On-Site Carshare Spaces

555 West Middlefield will provide at least two parking spaces at no cost to carshare operators, with the possibility of increasing up to four spaces over time in response to demand. Carshare facilities act as both a transportation solution and an attractive building amenity. Programs allow for 24/7 on-demand access to a shared fleet of vehicles. Providing access to carshare helps offset a smaller parking supply by supplying residents with access to a vehicle without having to purchase one.

While the City of Mountain View does not require carshare spaces in its citywide zoning code that covers 555 West Middlefield, comparable South Bay developments typically provide at least two to three on-site carshare spaces to reduce resident parking demand. In Mountain View’s North Bayshore Precise Plan area, multi-family developments of more than 200 units are required to allocate two carshare spaces, plus one for every additional 200 units.⁸ This same requirement also exists for developments of more than 200 units throughout the city of San Francisco, and this rate of carshare space allocation is equivalent to a 1% trip reduction “credit” that counts towards the project’s mandatory vehicle miles traveled (VMT)

Figure 2 TransitScreen Display in Holm Apartments, Washington, D.C.



⁸ City of Mountain View. 2017. North Bayshore Precise Plan. Table 24: Ridesharing Vehicle Parking Requirements. <https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=15050>

reduction threshold.⁹ To earn a higher number of credits towards the VMT reduction threshold, projects with more than 200 units can provide more substantial carshare incentives, including increasing the number of carshare spaces up to one space per every 40 units, and carshare membership for each household.¹⁰

A UC Berkeley study found that each carsharing vehicle takes between 9 and 13 private cars off the road, including member vehicles sold and postponed vehicle purchases.¹¹ In other words, a typical household with a carshare membership reduces its vehicle ownership, on average, by between 0.24 and 0.47 vehicles. By reducing vehicle ownership, car sharing typically reduces the number of vehicle trips.¹² Spaces will be located in the guest parking surface lots or in high-visibility parking spots within the parking garage, with clear exterior signage to increase visibility and emphasize the convenience of carshare. Figure 3 shows an example of Zipcars in a surface lot.

Figure 3 Reserved Zipcar Parking

Implementation Practices

Madera Apartments (Mountain View) has 203 units with a 1.37 parking ratio and provides two carshare vehicles on site, with two additional Zipcar locations within ¼ mile. The mixed-use development at 400 San Antonio Road is slated to provide two to three Zipcar vehicles on-site.¹³ The Uptown (Oakland) has 665 units with a 0.80 parking ratio and provides one carshare vehicle on site, with an additional four carshare locations within a 1/4 mile.



Secure Bicycle Parking

In line with City requirements, the project applicant will provide approximately 482 secure bicycle parking spaces for residents, in addition to approximately 35 public short-term bicycle parking spaces. Residents are more likely to bike when offered the same level of access and security as motorists. Secure bicycle parking is an important feature for new residential developments that encourages bike trips for every day trips such as shorter errands and first- and last-mile transit connections. The City of Mountain View requires the following bike parking standards:

- One bicycle parking space is required for each unit.
- One space per 10 units must be allocated for guest use.

The secure spaces will be located at easily accessible, well-lit, and attractive locations close to main entrances within buildings. The project applicant will provide a fob, a key, or another secure access

⁹ Each project must achieve a trip reduction target based on its location, off-street parking ratio, access to transit, density, and other factors.

¹⁰ City of San Francisco. 2017. TDM Program Standards: Appendix A. http://default.sfplanning.org/plans-and-programs/emerging_issues/tsp/TDM_Measures_02-17-2017.pdf

¹¹ Martin, Elliot, Susan Shaheen, and Jeffrey Lidicker. 2010. "Impact of Carsharing on Household Vehicle Holdings." *Transportation Research Record* 2143: 150–58. doi:10.3141/2143-19.

¹² TransForm, GreenTRIP Traffic Reduction Strategies – Free Carshare Membership, GreenTrip Connect Carshare Factsheet.

¹³ Hexagon Transportation Consultants. 2016, August 2. Transportation Demand Management Plan, Mixed-Use Development at 400 San Antonio Road in Mountain View, CA.

mechanism to residents. Bike parking will be designed to also accommodate cargo bicycles. Public short-term bike parking will be located in well-lit, designated areas near the entrance to each new building. Given the proximity of all the buildings to one another, existing residents will benefit from and be able to use available bicycle parking.

Bicycle Repair Stations

Bike repair stations provide convenient bike tools to make it easier for bicyclists to keep their bikes operable. A bike repair station also addresses concerns about ongoing bicycle maintenance—by providing tools and parts in an easily accessible and secure area. Bicycle repair stations will be available to all residents.

The project applicant will set aside adequate space for installing two cycle repair stations on site. Each space should be adequate for a bike stand and necessary tools and supplies. Tools and supplies should include, at a minimum, those necessary for fixing a flat tire, adjusting a chain, and performing other basic bicycle maintenance. This may include a bicycle pump, wrenches, a chain tool, lubricants, tire levers, hex keys/Allen wrenches, screwdrivers, and spoke wrenches. Figure 4 shows an example bicycle repair station.

Figure 4 Bicycle Repair Station



Implementation Practices

As an example, at NEMA in San Francisco, residents have access to bike rentals, storage, and a repair/resource center. The Velo Room at Solera (Denver) provides tools, bike stands, work benches, air pumps, tubes, and other supplies, as well as gel packs, energy bars, and bike trail maps. Several university campuses, including Ponce Health Science University in Portland and the University of California-Davis, have bicycle repair stations in key facilities.

Convenient Delivery Storage Space

The project applicant will provide storage space near the elevators to store packages. Building residents typically access deliveries through a locker system with unique pick-up codes that include the locker number and access times for the delivery recipient when building staff are unable to receive the package. An example locker is shown in Figure 5.

Implementation Practices

This strategy has been implemented at Parkmerced Apartments, a residential apartment complex in Parkmerced near San Francisco State University. Residents have access to Amazon Lockers to help facilitate online ordering. Residents can have their packages delivered to the lockers and are then notified through the residential portal when their packages have arrived.¹⁴ Madera Apartments in Mountain View also has a 24/7 package locker system.¹⁵

Figure 5 Amazon Storage Locker



Electric Vehicle Charging

While electric vehicle (EV) charging has no effect at reducing vehicle trips or parking demand, they are helpful in achieving the City's climate action goals established in its Community Climate Protection Roadmap (CPR). 555 West Middlefield will provide 99 parking spaces with power outlets for EV charging. One of the City's primary climate objectives is reducing its greenhouse gas emissions by 80% by 2050, and a key mechanism to achieve this target is the expansion of EV charging in multi-family residential developments.¹⁶ EV charging at 555 West Middlefield will help incentivize EV adoption among the project's residents. Implementing EV charging in multi-family developments is particularly important because residents do not have access to private garage space and therefore have limited opportunities to charge their EVs at 120V outlets, as residents in single-family homes do. The installation of the power outlets for EV charging is well-timed given the anticipated near-term growth of EV infrastructure in California. For example, the Electrify America project – created as part of the settlement of the Volkswagen emissions scandal – is in the middle of the Cycle 2 investment of \$200 million in California from 2019 to 2021 toward the installation EV charging stations in the state's urban areas, a large portion of which are planned for the Bay Area.¹⁷

¹⁴ Maximus Real Estate Partners. 2018. "Resident Services for Better San Francisco Living." Parkmerced. Accessed June 1, 2018. <https://www.parkmerced.com/residents/>.

¹⁵ Prometheus Apartments. 2018. "Madera Apartments Amenities." Mountain View Apartments | Madera. 2018. <https://prometheusapartments.com/san-francisco-bay-area-apartments/san-francisco-south-bay/madera>.

¹⁶ City of Mountain View. 2015. Climate Protection Roadmap. P. 57

¹⁷ California Air Resources Board vote to approve Electrify America's Cycle 2, December, 2018.

3 MONITORING AND REPORTING

The property owner shall prepare an annual TDM report and submit it to the City of Mountain View to document the effectiveness of the TDM program in achieving the goal of 10% peak-hour vehicle trip reduction for the project. The TDM report shall be prepared by an independent consultant and paid for by the property owner or tenant; the consultant team shall work with the property's TDM coordinator. The TDM report will include a determination of historical resident commute methods, which shall be informed by surveying all residents living on the project site and through driveway traffic counts. All nonresponses to the residential commute survey will be counted as a drive-alone trip. The driveway traffic counts shall be prepared and provided by an independent, licensed consultant and paid for by the property owner. The driveway counts and resulting data shall be included in the TDM report provided to the City.

TDM Reporting: The initial TDM report for the project will be submitted one year after the granting of a Certificate of Occupancy for fifty percent (50%) or more of the project. Subsequent reports will be collected annually.

Reporting Requirements: The TDM report shall confirm the TDM measures which have been implemented by the project and either: (1) state that the project has achieved 10 percent (10%) reduction or higher, providing supporting statistics and analysis to establish attainment of the goal; or (2) state that the project has not yet achieved the 10 percent (10%) peak-hour vehicle trip reduction, providing an explanation of how and why the goal has not been reached and a description of additional measures that will be adopted in order to attain the TDM peak-hour vehicle trip reduction goal.

APPENDIX A

Estimated Trip Impact Methodology

ESTIMATED TRIP IMPACT METHODOLOGY

555 West Middlefield is committed to reducing trips generated by its site by 10 percent through the implementation of TDM measures. According to industry research on the effectiveness of the TDM measures included in this Plan, the project should achieve this goal.

Estimation Methodology

The project team estimated the potential impact of the package of TDM measures using a widely used estimation approach published by the California Air Pollution Control Officers Association (CAPCOA). The CAPCOA approach is rooted in an extensive literature review on the effectiveness of TDM and other greenhouse gas-reduction strategies, and an accompanying manual provides clear guidance on the assumptions and limitations of each measure.¹⁸

The research indicates that parking management and pricing is one of the strongest trip reduction mechanisms, even in the absence of a robust set of supporting TDM strategies. This may be due in part to the fact that parking-associated travel behavior is measured more easily than other strategies whose impacts may be more dispersed.

Figure 6 summarizes the estimated impact of key TDM measures included in the Strategy in the context of the broader potential ranges of impact included in the CAPCOA report. The measures included in the table are the ones that are expected to generate notable levels of trip-reduction. Other strategies can be considered supportive of these measures. The table indicates the range of each strategy's expected impact on trips generated by the primary land use types.

Calculating a Site-Wide Trip Reduction Estimate

TDM measures and the trip-reduction effects associated with them are not additive but rather complementary and synergistic. Moreover, when additional measures are implemented, the marginal benefit of each new program diminishes; this means that if a site implements 11 measures, with each estimated to reduce trip-making by 10%, one would not expect a 110% overall reduction in trip-making. To prevent this kind of result, the CAPCOA methodology includes maximum reduction levels associated with each category of strategies, based on existing research. For example, parking policy and pricing strategies can achieve a maximum reduction of 20%. This is separate from the impact of other TDM strategies, which can achieve a combined maximum reduction of 15%.

In general, the calculation is as follows¹⁹:

$$\text{Trip Reduction Estimate} = 1 - (1 - \text{Parking Reduction}) * (1 - \text{Other TDM Reduction})$$

The two trip reduction components are calculated in a similar way. For instance:

$$\text{Parking Reduction Estimate} = 1 - (1 - \text{Strategy \#1 Reduction}) * (1 - \text{Strategy \#2 Reduction}) * \dots$$

Although the difference between this approach and a simple additive method is small, it has larger implications as the scale of the project increases. In addition, implementation of these strategies is often staggered, complicating the estimation of when these trip reduction strategies fully take effect.

¹⁸ California Air Pollution Control Officers Association (CAPCOA). *Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emissions Reductions from Greenhouse Gas Mitigation Measures*. August 2010. Retrieved October 2017 from <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>.

¹⁹ For further explanation of the other variable involved in trip reduction calculations, please refer to Chart 6-2 of the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures Handbook*, August 2010.

Figure 6 Estimated Impact of key TDM Measures

PROPOSED TDM STRATEGIES, 555 MIDDLEFIELD				Estimated Range of Trip Reduction			Estimated Range of Trip Reduction by Unit		
Reduction Factor	Associated 555 West Middlefield Strategies	CAPCOA Policy	Theoretical Range of Reductions and Rationale (CAPCOA)	Most likely	Low	High	New Units (45%)	Existing Units (55%)	Combined Reduction
Land Use	Affordable Housing (48 new units)	LUT-6	Ranges from 0.04 – 1.20% trip reduction, as determined by the percentage of affordable units in the development. 555 West Middlefield will have approximately 15% affordable units, so it should expect to achieve 15% of the maximum reduction for this factor.	1.2%	0.04%	1.2%	0.2%		0.1%
	Site Enhancements	SDT-1	Encourages walking to facilities onsite and nearby	1.0%	0.0%	2.0%	1.0%	1.0%	1.0%
Parking	Parking supply reduction	PDT-1	Reduction of parking compared to ITE	5.0%	5.0%	12.5%	5.0%	5.0%	5.0%
Other TDM Inducements (Categorized as CTR by CAPCOA)	Collaborative work space	TRT-6	Ranges from 0.07-5.5% commuter trip VMT reduction, based on the number of employees participating and the frequency of telecommuting.	1.5%	0.07%	5.5%	1.5%	1.5%	1.5%
	Real-time transit information	TRT-1	Estimated at 0.8-4% of commute VMT reduction, based on the percentage of people utilizing these resources. Given the level of effort invested by 555 West Middlefield in robust marketing, including general and personalized information and transportation guidance, the potential trip reduction is estimated to be high.	3.0%	0.8%	4.0%	3.0%	2.0%	2.5%
	TDM coordinator								
Car share - 2-4 spaces on-site	TRT-9	Ranges from 0.4-0.7% VMT reduction, based on a deployment of one car per 1,000 people. The planned number of car sharing spaces at 555 West Middlefield, at one vehicle per 184 units, is higher than many comparable developments. However, given the suburban setting and lack of membership subsidies for residents, the potential trip reduction of these strategies is estimated to be moderate.	2.0%	2.0%	4.0%	2.0%	3.0%	2.6%	
Other	Secure bike parking	SDT-6, LUT-9	Currently, these strategies have no point of reference in the existing emission and trip reduction literature. However, they fill in key gaps between the other recommended TDM strategies, by supporting bike and transit trips. The potential trip reduction estimate of these strategies is likely to be negligible, as their benefits reinforce other more quantifiable TDM strategies.	n/a					
	Bike repair station	SDT-5, LUT-9							
	Convenient delivery storage space	LUT-9							
Estimated Total									12.0%