



GRANT
O'FARRELL



5
FULTON
Sixth Av.

F MARKET & WHARVES CASTRO



TSP

Transportation Sustainability Program

Photo: Sergio Ruiz



Transportation Sustainability Program

Keeping people moving as our City grows



**ENHANCE TRANSPORTATION
TO SUPPORT GROWTH**



November 2015



**MODERNIZE ENVIRONMENTAL
REVIEW**



March 2016



**ENCOURAGE SUSTAINABLE
TRAVEL**



February 2017

Presentation Overview



Purpose

Explain technical aspects of TDM Program in more detail

Topics

Purpose of TDM Program

Define TDM measure

TDM Menu

- Overview

- Assignment of point values to TDM measures

Process for Amendments

Examples

Ocean Avenue/Capitol Avenue

Geary Blvd/6th Avenue

GRANT
O'FARRELL



SAN FRANCISCO

5
FULTON

shift



F MARKET
& WHARVES

CASTRO

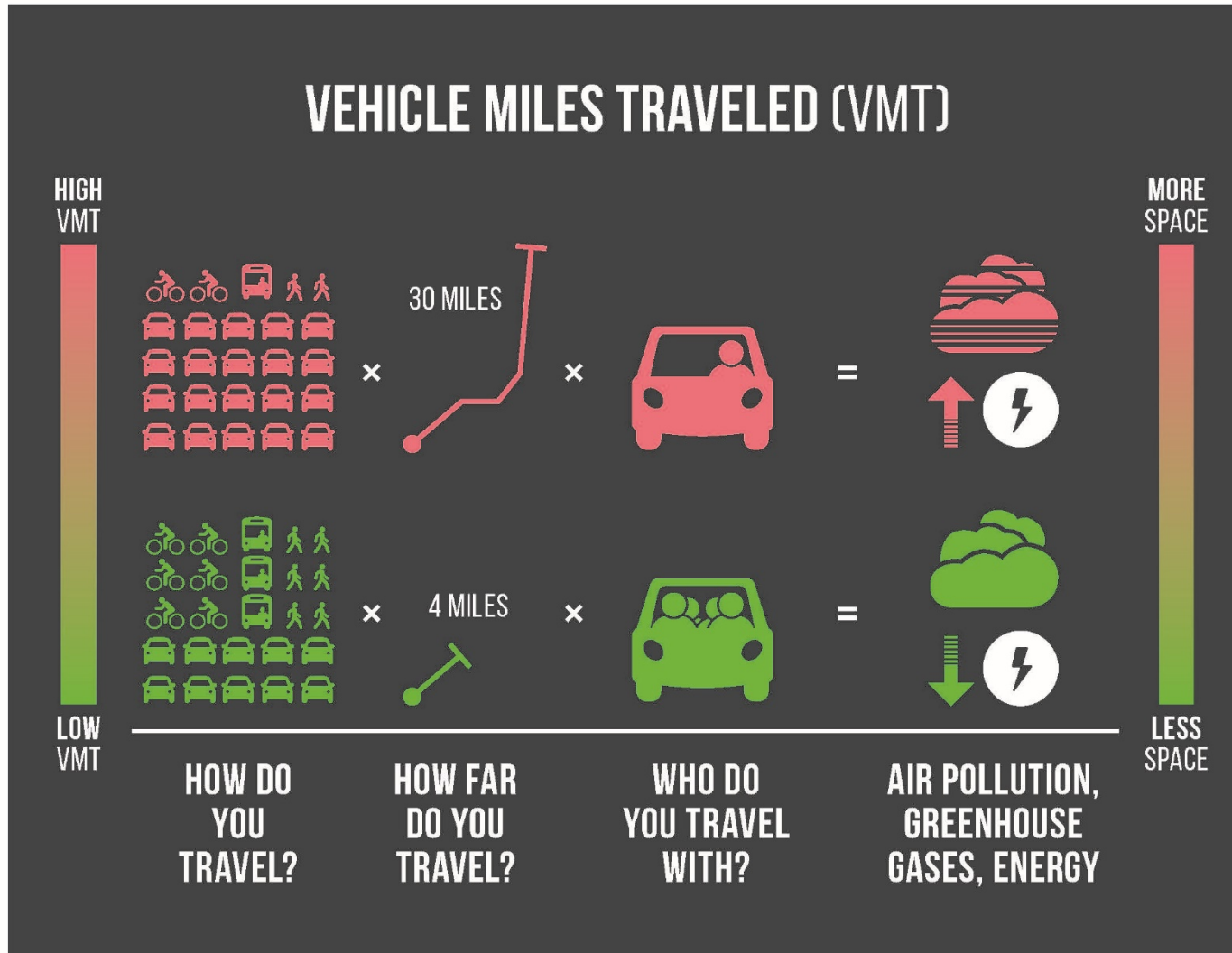
1061

ENCOURAGE SUSTAINABLE TRAVEL

Purpose of TDM Program



Keeping People Moving as Our City Grows by
Reducing **Vehicle Miles Traveled**



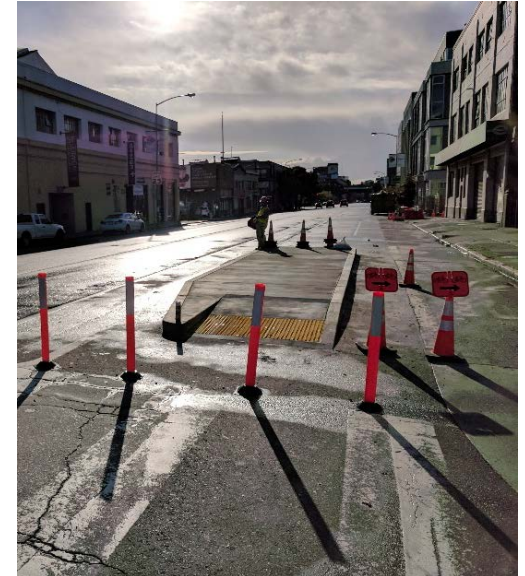
Reducing VMT – Benefits



Less space needed for transportation infrastructure



Less noise, energy, and air pollution, including greenhouse gases



Improved safety – aligns with Vision Zero

Reducing VMT – Benefits



Fundamental relationship between VMT and safety (Yeo et al. 2014)

“Multiple traffic safety studies showed that higher VMT was positively associated with the occurrence of traffic crashes or fatalities (e.g., Ewing et al. 2002, 2003; NHTSA 2011). The causal relationship between the mileage of total vehicle trips and crash occurrences can be explained by probability. With higher VMT, it is more likely that more crashes will occur (Jane et al. 2012).”



TDM Measure



Definition:

All reduce vehicle miles traveled (VMT)

Affects trips of on-site users

Under the control of the developer or tenant

*TDM Program Standards,
Glossary of Terms*

TDM Measure



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All reduce vehicle miles traveled (VMT)
Affects trips of on-site users
Under the control of the developer or tenant

*TDM Program Standards,
Glossary of Terms*

Identification:

Literature Review
Existing Code Provisions
Best Practice Research
Stakeholder Outreach

*TDM Technical Justification,
Table 4-1*

TDM Measure



Definition:

All reduce vehicle miles traveled (VMT)
Affects trips of on-site users
Under the control of the developer or tenant

*TDM Program Standards,
Glossary of Terms*

Identification:

Literature Review
Existing Code Provisions
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*TDM Technical Justification,
Table 4-1*

Rejected:

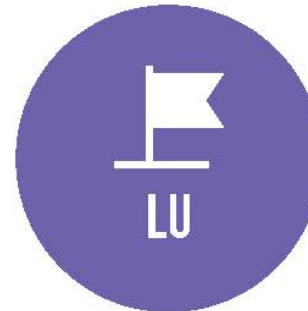
Does not meet definition
Relates to Areawide VMT reduction
Challenges in Monitoring or Implementation

*TDM Technical Justification,
Pages 23-24*

TDM Menu



8 Categories, 26 Measures, 66 Options



*TDM Program Standards,
Table 2-3*

TDM Menu



Assignment of Point Values:

Literature Review

- California Air Pollution Control Officers Association, California Air Resources Board, DC bikeshare research, academic papers, others

Local Data Collection



High Parking

Leads to



Lots of Driving

Best Practice Research

- Santa Monica, Seattle, Cambridge, Arlington County, others

Transportation Expert Opinion

- Family-friendly measures ,delivery measures, signage measures

*TDM Technical
Justification,
Pages 24-32*

TDM Menu



CATEGORY	MEASURE	POINTS
 ACTIVE TRANSPORTATION	ACTIVE-1 Improve Walking Conditions: Options A - B	● 1
	ACTIVE-2 Bicycle Parking: Options A - D	●●●● 1 - 4
	ACTIVE-3 Showers and Lockers	● 1
	ACTIVE-4 Bike Share Membership: Locations A - B	●● 1 - 2
	ACTIVE-5A Bicycle Repair Station	● 1
	ACTIVE-5B Bicycle Maintenance Services	● 1
	ACTIVE-6 Fleet of Bicycles	● 1
ACTIVE-7 Bicycle Valet Parking	● 1	
 CAR-SHARE	CSHARE-1 Car-share Parking & Membership: Options A - E	●●●●● 1 - 5
 DELIVERY	DELIVERY-1 Delivery Supportive Amenities	● 1
	DELIVERY-2 Provide Delivery Services	● 1
 FAMILY	FAMILY-1 Family TDM Amenities: Options A - B	●● 1 - 2
	FAMILY-2 On-site Childcare	●● 2

CATEGORY	MEASURE	POINTS
FAMILY-3	Family TDM Package	●● 2
 HIGH OCCUPANCY VEHICLES	HOV-1 Contributions or Incentives for Sustainable Transportation: Options A - D	●●●●●●●● 2 - 8
	HOV-2 Shuttle Bus Service: Options A - B	●●●●●●●●●●●●●● 7 - 14
	HOV-3 Vanpool Program: Options A - G	●●●●●●● 1 - 7
 INFORMATION & COMMUNICATIONS	INFO-1 Multimodal Wayfinding Signage	● 1
	INFO-2 Real Time Transportation Information Displays	● 1
	INFO-3 Tailored Transportation Marketing Services: Options A - D	●●●● 1 - 4
 LAND USE	LU-1 Healthy Food Retail in Underserved Area	●● 2
	LU-2 On-site Affordable Housing: Options A - D	●●●● 1 - 4
 PARKING MANAGEMENT	PKG-1 Unbundle Parking: Locations A - E	●●●●● 1 - 5
	PKG-2 Parking Pricing	●● 2
	PKG-3 Parking Cash Out: Non-residential Tenants	●● 2
	PKG-4 Parking Supply: Options A - K	●●●●●●●●●●●● 1 - 11

Process for Amendments



Substantive Amendments:

Additional/removal TDM measure

Increase/decrease of five points of TDM measure

Increase/decrease of 10 points of multiple TDM measures

Increase/decrease of three points for target

Substantial changes to fact sheets

*TDM Program Standards,
Pages 19-21*

Process for Amendments



Substantive Amendments:

Additional/removal TDM measure

Increase/decrease of five points of TDM measure

Increase/decrease of 10 points of multiple TDM measures

Increase/decrease of three points for target

Substantial changes to fact sheets

*TDM Program Standards,
Pages 19-21*

Reports:

One-year

Every four years following transportation plan updates

*TDM Program Standards,
Page 21*

Example 1: Ocean and Capitol

Characteristics (hypothetical)

60 Units, 40% two-bedroom, 20% on-site affordable housing, 60 Parking Spaces



Project Characteristics

Street Address of Project

Assessors Block/Lot

Transportation Analysis Zone Number 54

Category C - Residential

Target Point:

17

Project Characteristics - Land Use Category C (Residential Type)

Dwelling Units and Beds in Group Housing

60

Less than 10 dwelling units or beds is not subject to TDM Program.

% of Dwelling Units Two-Bedrooms or larger

40

% On-site Affordable Housing (income >55% ≤80% AMI)

10

100% Affordable Housing projects are not subject to TDM Program.

% On-site Affordable Housing (income ≤55% AMI)

10

100% Affordable Housing projects are not subject to TDM Program.

Accessory Parking Spaces

60

Example 1: Ocean and Capitol

Characteristics (hypothetical)

60 Units, 40% two-bedroom, 20% on-site affordable housing, 60 Parking Spaces



Category C - Residential

Current Point:

17

Target Point:

17

Category C Residential

PARKING

PKG 1 Unbundle Parking

+1 Neighborhood Parking Rate: 1.18

Location A

PKG 4 Parking Supply

+2 Neighborhood Parking Rate: 1.18

Project Parking Rate: 1.00 Option B

ACTIVE TRANSPORTATION

ACTIVE-1 Improve Walking Conditions

No

Option A Option B

ACTIVE-2 Bicycle Parking

+1

Option A Option B Option C Option D

ACTIVE-4 Bike Share Membership

No

>1,000feet <=1,000feet

(Click here for the bay area bike share station map)

ACTIVE-5a Bicycle Repair Station

No

ACTIVE-5b Bicycle Maintenance Services

No

ACTIVE-6 Fleet of Bicycles

No

CAR SHARE

CSHARE-1 Car-Share Parking

+4

Option A Option B Option C Option D Option E

Example 1: Ocean and Capitol

Characteristics (hypothetical)

60 Units, 40% two-bedroom, 20% on-site affordable housing, 60 Parking Spaces



DELIVERY

DELIVERY-1 Delivery Supportive Amenities

 No

FAMILY

FAM-1 Family TDM - Amenities

 Yes No +2 Option A Option B

FAM-2 On-site Childcare

 No

FAM-3 Family TDM Package

 Yes No +2

HIGH OCCUPANCY VEHICLES

HOV-1 Contributions or Incentives

 No

Option A Option B Option C Option D

HOV-2 Shuttle Bus Service

 No

Option A Option B

COMMUNICATIONS AND INFORMATION

INFO-1 Multimodal Wayfinding Signage

 Yes No +1

INFO-2 Real Time Transportation Displays

 Yes No +1

INFO-3 Tailored Transportation Marketing Services

 No

Option A Option B Option C Option D

LAND USE

LU-2a On-site Affordable Housing (income >55% ≤80% AMI)

 Yes No +1

Option A

LU-2b On-site Affordable Housing (income ≤55% AMI)

 Yes No +2

Option B

Category C - Residential

Current Point:

17

Target Point:

17

Example 2: Geary and 6th Ave

Characteristics (hypothetical)

40 Units, 40% two-bedroom, 18% on-site affordable housing, 40 Parking Spaces



Project Characteristics

Street Address of Project

Assessors Block/Lot

Transportation Analysis Zone Number

Project Characteristics - Land Use Category C (Residential Type)

Dwelling Units and Beds in Group Housing	<input type="text" value="40"/>	Less than 10 dwelling units or beds is not subject to TDM Program.
% of Dwelling Units Two-Bedrooms or larger	<input type="text" value="40"/>	
% On-site Affordable Housing (income >55% ≤80% AMI)	<input type="text" value="15"/>	100% Affordable Housing projects are not subject to TDM Program.
% On-site Affordable Housing (income ≤55% AMI)	<input type="text" value="3"/>	100% Affordable Housing projects are not subject to TDM Program.
Accessory Parking Spaces	<input type="text" value="40"/>	

Category C - Residential

Target Point:
15

Example 2: Geary and 6th Ave

Characteristics (hypothetical)

40 Units, 40% two-bedroom, 18% on-site affordable housing, 40 Parking Spaces



Category C Residential

Category C - Residential

PARKING

Current Point:

15

Target Point:

15

PKG 1 Unbundle Parking

 Yes

+3 Neighborhood Parking Rate: 0.67

Location B

PKG 4 Parking Supply

 No

+0 Neighborhood Parking Rate: 0.67

Project Parking Rate: 1.00 Parked > neighborhood rate

ACTIVE TRANSPORTATION

ACTIVE-1 Improve Walking Conditions

 No

Option A Option B

ACTIVE-2 Bicycle Parking

 Yes

+2

Option A Option B Option C Option D

ACTIVE-4 Bike Share Membership

 No

>1,000feet <=1,000feet

(Click here for the bay area bike share station map)

ACTIVE-5a Bicycle Repair Station

 No

ACTIVE-5b Bicycle Maintenance Services

 No

ACTIVE-6 Fleet of Bicycles

 No

CAR SHARE

CSHARE-1 Car-Share Parking

 Yes

+2

Option A Option B Option C Option D Option E

Example 2: Geary and 6th Ave

Characteristics (hypothetical)

40 Units, 40% two-bedroom, 18% on-site affordable housing, 40 Parking Spaces



DELIVERY

DELIVERY-1 Delivery Supportive Amenities Yes +1

FAMILY

FAM-1 Family TDM - Amenities Yes +2 Option A Option B

FAM-2 On-site Childcare No

FAM-3 Family TDM Package No

HIGH OCCUPANCY VEHICLES

HOV-1 Contributions or Incentives Yes +2

Option A Option B Option C Option D

HOV-2 Shuttle Bus Service No Option A Option B

COMMUNICATIONS AND INFORMATION

INFO-1 Multimodal Wayfinding Signage No

INFO-2 Real Time Transportation Displays No

INFO-3 Tailored Transportation Marketing Services No

Option A Option B Option C Option D

LAND USE

LU-2a On-site Affordable Housing (income >55% ≤80% AMI) Yes +2

Option B

LU-2b On-site Affordable Housing (income ≤55% AMI) Yes +1

Option A

Category C - Residential

Current Point:

15

Target Point:

15

TRANSPORTATION SUSTAINABILITY PROGRAM



*Keeping people moving
as our city grows*

Website: sftdmtool.org
sf-planning.org/shift-encourage-sustainable-travel
Email: tsp@sfgov.org

