

ATTACHMENT 1

DESCRIPTIONS OF NEW TRANSPORTATION PERFORMANCE MEASURES

1. VMT PER CAPITA

The Vehicle Miles Traveled (VMT) per Capita measure sums the miles traveled for trips within the City of Pasadena citywide model. The Citywide VMT is calculated by adding: 1) 100% of VMT associated with trips traveling within the City of Pasadena boundaries that are generated or attracted by the City, and 2) 50% of VMT associated with trips with an end or origin outside of the City. The City's VMT is then divided by the City's total service population, defined as the population plus the number of jobs, per Capita.

Although VMT itself will likely increase with the addition of new residents, the City can reduce VMT on a per-capita basis with land use policies that help Pasadena residents meet their daily needs within a short distance of home, reducing trip lengths, and by encouraging development in areas with access to various modes of transportation other than auto.

2. VT PER CAPITA

Vehicle Trips (VT) per Capita is a measure of motor vehicle trips associated with the City. The measure sums the trips with origins and destinations within the City of Pasadena, as generated by the Trip-Based citywide model. The regional VT is calculated by adding the VT associated with trips generated and attracted within the City of Pasadena boundaries, and 50 percent of the VT associated with trips that either begin or end in the City, but have one trip end outside of the City. The City's VT is then divided by the City's total service population, defined as the population plus the number of jobs, to calculate VT per Capita.

As with VMT, VT itself will likely increase with the addition of new residents, but the City can reduce VT on a per-capita basis with land use policies that help Pasadena residents meet their daily needs within a short distance of home, reducing trip lengths, and by encouraging development in areas with access to various modes of transportation other than auto.

3. PROXIMITY AND QUALITY OF BICYCLE NETWORK

The Proximity and Quality of Bicycle Network provides a measure of the percent of the City's dwelling units and work places within a quarter mile of each of three bicycle facility types. The facility types are aggregated into three hierarchy levels, obtained from the City's 2012 (Draft) Bicycle Transportation Plan categories as shown in Table A4.

TABLE A4 – BIKE FACILITIES HIERARCHY		
LEVEL	DESCRIPTION	FACILITIES INCLUDED
1 (A)	Advanced Facilities	Bike Paths (P1) Multipurpose Paths (PP) Cycle Tracks/Protected Bike Lanes
2 (B)	Dedicated Facilities	Buffered Bike Lanes Bike Lanes (2, P2) Bike Boulevards (BB)
3 (C)	Basic Facilities	Bike Routes (3, P3) Enhanced Bike Routes (E3, PE3) Emphasized Bikeways (PEB)

Source: City of Pasadena Bicycle Transportation Plan, 2012.

For each bike facility level, a quarter-mile network distance buffer is calculated and the total dwelling units and work places within the buffer are added.

The City can improve measures of Bike Facility Access by improving and expanding existing bike facilities and by encouraging residential and commercial development in areas with high-quality bike facilities.

4. PROXIMITY AND QUALITY OF TRANSIT NETWORK

The Proximity and Quality of Transit Network provides a measure of the percent of the City's dwelling units and work places within a quarter mile of each of each of three transit facility types, as defined in the *Draft Streets Types Plan* and in Table A5.

TABLE A5 – TRANSIT FACILITIES HIERARCHY	
LEVEL	FACILITIES INCLUDED
1 (A)	Includes all Gold Line stops as well as corridors with transit service, whether it be a single route or multiple routes combined, with headways of five minutes or less during the peak periods.
2 (B)	Includes corridors with transit headways of between six and 15 minutes in peak periods.
3 (C)	Includes corridors with transit headways of 16 minutes or more at peak periods.

Source: *Draft Streets Types Plan*, Pasadena Department of Transportation, March 2013.

For each facility level, a quarter-mile network distance buffer is calculated and the total dwelling units and work places within the buffer are added.

The City can improve the measures of Transit Proximity and Quality by reducing headways on existing transit routes, by expanding transit routes to cover new areas, and by encouraging residential and commercial development to occur in areas with an already high-quality transit service.

5. PEDESTRIAN ACCESIBILITY

The Proximity and Quality of Pedestrian Environment provides a measure of the average walkability in the TAZ surrounding Pasadena residents, based on a Pedestrian Accessibility metric. The Pedestrian proximity metric is a simple count of the number of land use types accessible to a Pasadena resident or employee in a given TAZ within a 5-minute walk. The ten categories of land uses are:

- Retail
- Personal Services
- Restaurant
- Entertainment
- Office (including private sector and government offices)
- Medical (including medical office and hospital uses)
- Culture (including churches, religious and other cultural uses)
- Park and Open Space
- School (including elementary and high schools)
- College

The resulting count of land use types is then assigned a letter grade from A to D based on the following structure:

- **A** – greater than or equal to 8 land use types
- **B** – greater than or equal to 5 land use types and less than 8 land use types
- **C** – greater than or equal to 2 land use types and less than 5 land use types
- **D** – greater than or equal to 0 land use types and less than 2 land use types

The City can improve the Resident and Employment Pedestrian Accessibility Scores by:

- Encouraging residential development in areas with high existing Pedestrian Accessibility Scores;
- Encouraging commercial development in areas with high existing Pedestrian Accessibility Scores; and
- Attracting mixed development and new land use types to increase the Pedestrian Accessibility metric values of other areas.