WORKING DRAFT

List of Transportation Emission Reduction Measures To be included in the PR2301 Guidance Document

It is the intent of these mitigation measures to provide viable options for new development and renovations to reduce NOx, VOC, and PM2.5 emissions through land use and transportation strategies. These strategies are intended to promote a sustainable design that encourages bicycle and pedestrian development, reduces the dependence on the automobile, and increase transit ridership. The purpose of these mitigation measures is to demonstrate what can be achieved to comply with mitigation objectives of Proposed Rule 2301.

Measure #	Title	Description	Point/Percent Reductions Default*
	Land Use Measure	es ·	
1	Mixed-Use	• All residential units are within ½ mile of retail, parks, schools, or other civic uses	1 ^{1,2}
2	Residential Density	Project is oriented towards existing or planned transit, bicycle, or pedestrian corridor, setback distance is reduced to increase density	0.51
3	Brownfield Redevelopment	• Project is located on an infill site less than ½ mile from public transit and more than 500 feet from a diesel corridor (Cannot combine with #4)	12
4	Infill Development	• Projected is located on an infill site less than ½ mile from public transit, and serviced by existing infrastructure (Cannot combine with #3)	1 ¹
5	Mixed Use	Development of projects characterized by having various uses such as commercial, residential, and institutional, are combined in a single building or on a single site in an integrated development project with functional interrelationships and a coherent physical design	3 ^{1,2}
6	Mixed Use	• Project to contain 3 of the following on-site or within ½ mile: residential, retail, park, open space, office building, or other civic uses	3 ^{1,2}
7	Transit Oriented Development (TOD)	Project is designed with an increased scale and density within ½ mile from mass transit stations or bus hubs	1 ¹
8	Smart Growth Design	Project is designed in a pedestrian oriented fashion to maximize neighborhood walkability, connect to the existing street grid, preserves open space, promote transit ridership, and buildings with appropriate street frontages	11
	Transportation/Tr	ansit Measures	
9	Transportation Signage	 Provide a display case or kiosk displaying transportation information in a prominent area accessible to employees, residents, or visitors. Display bicycle route maps, bus schedules, and other transportation information such as carpooling, carsharing, etc. 	0.5^{2}
10	Neighborhood Electric Vehicle (NEV) Access	Project is designed to accommodate NEVs (e.g., routes, infrastructure, and parking). Make physical development consistent with state and local ordinance requirements for NEVs	11
11	Transit Headways	• Transit service provides headways of one hour or less for stops within ½ mile	$0.5^{1,2}$

¹ Sacramento Metropolitan AQMD, Recommended Guidance for Land Use Emission Reductions, Version 2.4, August 2007.

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²URBEMIS 2007, Version 9.2, November 2007.

^{*} Default values are conservative estimates. Using specific data in URBEMIS projects could result in additional points.

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Measure #	Title	Description	Point/Percent Reductions Default*
12	Transit Shelters	 Project provides safe and convenient bicycle/pedestrian access to transit stops and provides essential transit stop improvements (i.e., shelters, route information, benches, and lighting) (Cannot combine with #13) 	0.51
13	Transit Shelters	• Provide transit stops with safe and convenient bicycle/pedestrian access. Provide essential transit stop improvements such as shelters, route, information, benches, and lighting in anticipation of future transit services (Cannot combine with #12)	0.251
14	Neighborhood Shuttles	Shuttle or bus rental program for transport to special event centers or other attractions	12
15	Business Center Shuttles	Office parks, business centers, and other employment centers provide shuttles to and from transit facilities and eating establishments if needed	0.5^{2}
16	Vehicle Fleet	Enhanced measures to reduce emissions, beyond ARB requirements, from medium and heavy duty fleet vehicles; fleet vehicles less than 7 years old	22
17	Provide Ridesharing Incentive or Transit Pass Subsidy	• Provide incentive packages such as a one year subsidy allowance to employees (e.g., \$2 per day per employee or \$520 per year)	$0.5^{1,2}$
18	Transportation Programs	 Develop rideshare program for projects with under 250 employees at worksite that would achieve a 1.5 AVR in accordance with local ordinances or requirements 	12
	Bicycle/Pedestrian		
19	Bicycle Parking	• Provide one covered or indoor bicycle space for every 20 car parking spaces for all users	0.5^{3}
20	Bicycle Parking (multi-unit residential)	 Long-term bicycle parking (bicycle lockers, locked rooms, etc.) is provided at apartment complexes or condominiums without garages 	0.51
21	Bicycle Parking (non-residential)	Non-residential projects provide plentiful short-term and long-term bicycle parking facilities to meet peak season maximum demand	0.51
22	Bicycle Lanes	• A biking network is completed to connect at least 50% of project to diverse uses within 3 miles (Cannot combine with #23)	0.5^2
23	Bicycle Measures	• Designated bicycle routes to all units and connectors to existing Class I or Class II Bicycle lanes within ½ miles and project design includes a comparable network that connects to the project uses to the existing offsite facility (Cannot combine with #22)	0.51
24	End of Trip Facilities	Provide end-of-trip facilities such as showers, lockers, and changing space	0.5 ^{1,2}
25	Walkable Neighborhood	• Project must provide safe and convenient pedestrian and bicycle access to all transit stops within 1/2 mile (Cannot combine with #26)	1 ^{1,2}
26	Walkable Neighborhood	Provide pedestrian access between bus service and major transportation points (Cannot combine with #25)	0.51

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Measure #	Title	Description	Point/Percent Reductions Default*
27	Walkable Neighborhood	 Provide traffic calming modifications to project roads, such as narrower streets, speed platforms, bulb-outs at intersections, raised crosswalks, center islands, and bicycle stoplights. Design roadways to reduce motor vehicle speeds and encourage pedestrian and bicycle trips by implementing traffic calming features 	0.251
28	Walkable Neighborhood	• Multiple and direct street routing (grid network pattern) and eliminate cul-de-sacs	1 ^{1,2}
29	Walkable Neighborhood	 Project minimizes or eliminates pedestrian barriers such as walls, berms, landscaping, and slopes between residential and non-residential uses that impede bicycles or pedestrian circulation 	11
30	Pedestrian Network	 Provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with project site 	11
31	Complete Streets	• Design and construct all street standards to provide equal access and right of ways for pedestrian, bicycle, bus, rail, and automobile.	11
	Parking Measures		
32	Parking Pricing Strategies	• Employee and/or customer paid parking system (parking meters, pay lots, valet, etc)	1 ^{1,2}
33	Parking Pricing Strategies	Parking cash-out system	11
34	Parking Spaces	• Provide at least a 10% reduction of required parking or reductions less than code (Cannot combine with #35)	2 ^{1,2}
35	Parking Spaces	• Provide minimum amount of parking required (Cannot combine with #34)	11
36	Park and Ride Lots	Build or contribute to Park and Ride lots	11
37	Parking Spaces	 Provide preferential parking spaces for carpools, vanpools, EVs, alternative fuel vehicles, motorcycles, mopeds, and bicycles near the entrance of buildings and provide 7'2" minimum vertical clearance in parking facilities for vanpool vehicles 	0.5 ^{1,2}
38	Parking Spaces	Parking facilities are not adjacent to street frontage	0.51
39	Walkable Neighborhood	 Provide a parking lot design that includes clearly market and shaded pedestrian pathways between transit facilities and building entrances 	0.51
40	Shared Parking	 Project has a parking arrangement where many uses share parking spaces as their uses dictate different hours of need (i.e. movie theatre and shopping mall, night and day uses) 	0.51

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