

HGB Draft On-Road SIP Control Strategies

ID	Old ID	Control Strategy	Description	Category	Year Added	EPA PQSE	Comment
1	17	Bicycle and pedestrian action groups	<i>Specified percentage of employees requesting facilities as a group and pledging to commute by bicycle 33% of the time.</i>	Bicycle and Pedestrian	2006	N	
2	51	Clean Cities Technical Coalition	<i>This measure patterned after the H-GAC Clean Cities Program</i>	Clean Vehicle Programs	2006	N	Heavy-duty
3	54	Private sector clean fuel fleets		Clean Vehicle Programs	2006	Y	
4	56	Close loopholes in the Texas Clean Fleet Program making fewer exemptions for fleets		Clean Vehicle Programs	2006	N	
5	58	Fleet review, procurement and operations policies		Clean Vehicle Programs	2006	Y	
6	59	Public agency clean fleet program	<i>Commitment by public agencies to purchase cleanest possible fleet vehicles</i>	Clean Vehicle Programs	2006	Y	See Measure 54
7	71	Electric Vehicles	<i>Fuel cells incentive or mandated</i>	Clean Vehicle Programs	2006	Y	Light-duty only
8	99	Area-wide "Steer It/Clear It" program	<i>Program for immediate removal of vehicles from roadway in event of a stall or non-serious accident.</i>	Freeway Incident / Roadway Construction Management	2006	Y	
9	100	Additional freeway service patrol	<i>Operation of additional lane miles of new roving tow truck patrols to clear incidents and reduce delay on freeways during peak periods.</i>	Freeway Incident / Roadway Construction Management	2006	Y	
10	101	SAFEClear - Mandatory quick removal of disabled vehicles during peak periods		Freeway Incident / Roadway Construction Management	2006	Y	
11	115	Cleaner diesel fuel		Fuel Standards	2006	Y	
12	127	Air quality information with driver training	<i>Include information on vehicle emissions and air pollution with new-driver and defensive-driving education.</i>	General Public Education and Outreach	2006	N	
13	144	Divert trucks from nonattainment areas	<i>Require through-traffic trucks to travel around rather than through nonattainment areas</i>	Goods Movement	2006	Y	
14	146	Peak period truck bans on freeways and major arterials		Goods Movement	2006	Y	
15	147	Permit HOV lane use by qualifying low emission vehicles (LEV)		High Occupancy Vehicle (HOV) Lanes/Managed Lanes	2006	Y	
16	150	Increase occupancy to three or more per vehicle		High Occupancy Vehicle (HOV) Lanes/Managed Lanes	2006	Y	
17	157	Single Occupant Vehicles (SOV) access to HOV and transit stations	<i>Provide direct freeway access to adjoining HOV or transit park-and-ride facilities to encourage use and expedite access.</i>	High Occupancy Vehicle (HOV) Lanes/Managed Lanes	2006	N	
18	161	Managed lanes to accommodate some single occupant vehicles in HOV lanes	<i>In highly congested corridors where speeds are below 20 miles per hour on freeway lanes, permit limited use of HOV lanes by SOV using tolls or other limiting technique.</i>	High Occupancy Vehicle (HOV) Lanes/Managed Lanes	2006	Y	
19	163	Focus on finding and penalizing extreme high emitters		High-Emitting Vehicle Detection and Programs	2006	Y	

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20	165	Rewards for reporting smoking or high emitting vehicles		High-Emitting Vehicle Detection and Programs	2006	Y	See measure 166
21	172	Scrappage/buy-back plan		1	2006	Y	LIRAP Light-duty VMEP
22	181	Dedicated funding for school bus replacement		High-Emitting Vehicle Detection and Programs	2006	N	
23	186	Non-profit organization assistance program		High-Emitting Vehicle Detection and Programs	2006	N	
24	188	Enforce smoking vehicle reports and require repairs	<i>Investigate opportunities to partner with non-profit organizations to ensure high-emitting donation vehicles are not returned to the road and reused in an "as is" condition.</i>	High-Emitting Vehicle Detection and Programs	2006	N	
25	191	Low-interest financing for low income and/or old vehicle trade-ins		High-Emitting Vehicle Detection and Programs	2006	N	
26	193	Ban sale of high-emitting vehicles		High-Emitting Vehicle Detection and Programs	2006	N	
27	194	Ban high-emitting vehicles in CBD		High-Emitting Vehicle Detection and Programs	2006	N	
28	195	Deny registration to vehicles with repeated emission failures		High-Emitting Vehicle Detection and Programs	2006	N	
29	201	Communicate by radio best routes through area to avoid congestion		Intelligent Transportation Systems (ITS)	2006	N	
30	202	Information telephone hotline for traffic conditions		Intelligent Transportation Systems (ITS)	2006	N	
31	207	Provide transportation conditions internet site	<i>Provide hotlink to local transportation conditions website or provide internal webpage with transit, traffic, other conditions, schedules and directions to encourage use of modes other than driving alone.</i>	Intelligent Transportation Systems (ITS)	2006	N	
32	208	Encourage bicycle use by using ITS to increase safety in strategic bicycle/automobile conflict areas		Intelligent Transportation Systems (ITS)	2006	N	
33	209	Dynamic message signs for control of truck movements		Intelligent Transportation Systems (ITS)	2006	N	
34	210	Dynamic message signs for freeway traffic control		Intelligent Transportation Systems (ITS)	2006	N	
35	211	Real-time display of estimated time of arrivals at bus stops	<i>Provide changeable message signing at bus stops noting ETA of the next buses arriving at the stop.</i>	Intelligent Transportation Systems (ITS)	2006	N	
36	212	Increase system surveillance		Intelligent Transportation Systems (ITS)	2006	N	
37	214	Limit left turns on selected thoroughfares during ozone season		Ozone Action Day / Ozone Season	2006	N	

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38	218	Delay high emissions producing activities on ozone action days; delay activities for non-ozone action days		Ozone Action Day / Ozone Season	2006	N	
39	227	Preferential parking for High Occupancy Vehicle (HOV) lane users and ride sharers; Free spaces, reserved spaces		Parking Management	2006	Y	
40	228	Preferential parking for High Occupancy Vehicle (HOV) lane users and ride sharers; Rate reduction		Parking Management	2006	N	
41	229	Preferential parking for High Occupancy Vehicle (HOV) lane users and ride sharers; Metered spaces	Almost exactly the same as 227	Parking Management	2006	Y	
42	231	Free parking at park-and-ride facilities for High Occupancy Vehicle (HOV) lane and transit users	<i>Provide free parking at facilities served by transit; include costs elsewhere or subsidize. Include in weekly or monthly passes.</i>	Parking Management	2006	N	
43	235	Increase parking at transit centers or stops		Parking Management	2006	N	
44	236	Use direct ramps to connect park-and-ride lots with freeway system		Parking Management	2006	N	
45	237	Locate fringe parking and park-and-ride lots on		Parking Management	2006	N	
46	240	Provide parking at all major transit stations		Parking Management	2006	N	
47	241	Commuter parking pricing	<i>No free parking. All parking at actual fully-allocated cost.</i>	Parking Management	2006	Y	
48	243	Parking space tax or surcharge	<i>Institute a parking space tax or surcharge which is used to subsidize transit</i>	Parking Management	2006	N	
49	246	Increase meter fees for on-street parking		Parking Management	2006	N	
50	248	Eliminate employee parking subsidies		Parking Management	2006	Y	
51	249	Employee parking cash-out program		Parking Management	2006	Y	
52	253	Smart Cards pay as you go parking		Parking Management	2006	N	
53	256	Reduce legal on-street parking spaces in high congestion areas		Parking Management	2006	N	
54	262	Limit peak period parking to vehicles with two or more occupants	<i>Use flextime, but permit only vehicles with two or more occupants to enter workplace parking facilities during peak periods.</i>	Parking Management	2006	N	
55	271	Remove fuel subsidies		Pricing Measures	2006	Y	
56	273	Accelerated depreciation allowance for employer provided vanpool and bicycle facilities		Pricing Measures	2006	N	
57	275	Congestion pricing for major activity centers	<i>Charge vehicles to enter high-activity centers (retail/business districts, etc.) in cities, with higher prices charged during high-traffic hours.</i>	Pricing Measures	2006	Y	

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58	277	Pay-As-You-Drive Insurance (per-mile)	<i>Spring 2004-Local officials meet with Department of Insurance representatives, Fall 2004-Research on pay as you drive programs begins, January 2005-"Before" portion of pilot program commences, January 2006-"After" portion of pilot program commences</i>	Pricing Measures	2006	Y	
59	287	Local or regional fuel taxes		Pricing Measures	2006	N	
60	291	Vehicle miles traveled - based taxes	<i>Charge a tax for VMT per year.</i>	Pricing Measures	2006	Y	
61	295	Increase tolls during peak traffic periods		Pricing Measures	2006	Y	
62	298	No tolls for buses and vanpools		Pricing Measures	2006	N	
63	300	Increased speeding fines	<i>Increase amount of fines for exceeding existing speed limit</i>	Speed	2006	Y	
64	302	Aggressive driving enforcement		Speed	2006	N	
65	304	Lower speed limit in urban area to 55 miles per hour		Speed	2006	Y	
66	311	Reduce speed to 55 miles per hour for commercial trucks	<i>A Federal Highway Administration study concludes that "reducing truck speed limits by ten miles per hour can reduce the nitrogen oxide emission factor by approximately 18% or more per truck.</i>	Speed	2006	Y	
67	316	Incentives for infill and redevelopment		Sustainable and Transit-Oriented Development	2006	N	
68	319	Local medical facilities	<i>Increase the number of local "neighborhood" facilities for routine medical procedures</i>	Sustainable and Transit-Oriented Development	2006	N	
69	321	Encourage or require complementary uses in close proximity in all developments or development areas	<i>Apply Planned Use Development (PUD) concept by area, requiring a mix of complementary uses in each square mile or other development area in accordance to a sub-area, locally developed plan.</i>	Sustainable and Transit-Oriented Development	2006	N	
70	323	Comprehensive design guidelines for activity centers	<i>Comprehensive design guidelines for layout of schools, neighborhoods and other activity centers to maximize walkability and minimize the need for short-distance automobile trips.</i>	Sustainable and Transit-Oriented Development	2006	N	
71	324	Locate personal business support centers at park-and-ride facilities (convenience businesses)		Sustainable and Transit-Oriented Development	2006	N	
72	326	Co-locate event centers and major transit centers and stations	<i>Local event centers at sites of major transit centers to ensure high level of service.</i>	Sustainable and Transit-Oriented Development	2006	N	
73	327	Daycare and other services	<i>Daycare, other convenience services at park-and-ride lots and transit stations.</i>	Sustainable and Transit-Oriented Development	2006	N	
74	328	Ban left turns		Traffic Flow Improvements	2006	N	
75	342	Reversible traffic lanes		Traffic Flow Improvements	2006	N	
76	350	Local intersection signal improvements		Traffic Flow Improvements	2006	Y	
77	351	Traffic signal equipment or software updating		Traffic Flow Improvements	2006	Y	

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78	352	Emphasis on major route traffic signalization; through route traffic platooning		Traffic Flow Improvements	2006	Y	
79	354	Real-time traffic flow management	<i>Traffic signals that change timing/cycles to accommodate real-time traffic conditions.</i>	Traffic Flow Improvements	2006	Y	
80	355	Adaptive traffic signals and signal timing		Traffic Flow Improvements	2006	Y	
81	357	Light emitting diode (LED) traffic signal replacement		Traffic Flow Improvements	2006	N	
82	358	Two-phase signals		Traffic Flow Improvements	2006	N	
83	360	Signal timing and coordination to promote traffic progression	<i>Currently signal coordination tends to focus on reducing delay time for individual drivers; alter coordination to promote greatest movement for traffic as a whole.</i>	Traffic Flow Improvements	2006	Y	
84	366	Prohibit drive-thru service during ozone season		Traffic Management	2006	Y	
85	371	Reduce transit fares		Transit	2006	Y	
86	374	Peak/off-peak transit fares		Transit	2006	Y	
87	376	Personalized rapid transit		Transit	2006	Y	
88	377	Transit schedule coordination		Transit	2006	N	
89	393	Guaranteed ride home		Transit	2006	N	
90	403	Subscription bus service		Transit	2006	Y	
91	407	Business First enhanced buses	<i>Provide buses with laptop/Internet links, telephone and other business amenities.</i>	Transit	2006	Y	
92	414	Electrify bus routes		Transit	2006	Y	
93	422	Monthly transit pass programs	<i>Already have</i>	Transit	2006	N	
94	423	Eliminate trips - Free transit from remote sites		Transit	2006	Y	
95	424	Provide an off-peak unlimited-ride daily pass		Transit	2006	Y	
96	426	Uniticket programs		Transit	2006	N	
97	428	Simplified fare collection		Transit	2006	N	
98	430	Public transportation - Special fares		Transit	2006	N	
99	433	Accelerate rail expansion		Transit	2006	N	
100	436	Commuter Rail		Transit	2006	N	
101	437	High-speed rail		Transit	2006	N	
102	438	Free circulator service to major generators	<i>Free shuttle/transit service connecting remote areas with major activity generators.</i>	Transit	2006	N	
103	441	Provide High Occupancy Vehicle (HOV) shuttle between company facilities	<i>Between transit stops and CBD locations</i>	Transit	2006	Y	
104	446	Teleconferencing of meetings		Travel Demand Management: Business Operations	2006	Y	

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105	453	Mandated peak spreading	<i>Require business hours to be staggered to spread peak traffic over a wider time period and reduce congestion.</i>	Travel Demand Management: Business Operations	2006	Y	
106	459	Mandatory or voluntary compressed work week		Travel Demand Management: Business Operations	2006	Y	
107	460	Subscription buses or buspooling		Travel Demand Management: Business Operations	2006	N	
108	461	Internet ridematching services	<i>Real-time ridematching offered via a Website, by an employer, or by a third party (sponsored by city or transportation authority).</i>	Travel Demand Management: Business Operations	2006	Y	
109	462	Purchase vans for vanpools		Travel Demand Management: Business Operations	2006	Y	
110	463	Mandate or encourage vanpooling and carpooling		Travel Demand Management: Business Operations	2006	Y	
111	465	Mandatory or voluntary flextime program (daily start and end time)		Travel Demand Management: Business Operations	2006	N	
112	470	Pay or other financial incentive for not driving	<i>Employer pays employees who do not drive a monthly stipend; employees who drive receive no corresponding benefit.</i>	Travel Demand Management: Business Operations	2006	Y	
113	471	Employer tax credit or deduction	<i>Institute a tax credit or deduction for employees that regularly use a non-single occupancy vehicle mode for commuting and/or for employers, based on number of employees that commute using non-SOV</i>	Travel Demand Management: Business Operations	2006	Y	
114	475	Incentives for Best Workplaces for Commutes Designation	<i>Already implementing in Houston</i>	Travel Demand Management: Business Operations	2006	N	
115	477	Trade equivalent jobs to be closer to work	<i>For employees of the same company but at different worksites, identify opportunities to "trade jobs" or worksites to reduce commute distance.</i>	Travel Demand Management: Business Operations	2006	N	
116	484	Personalized travel planning	<i>Based on rider's origin and destination(s), personalized travel plan of transit routes and connections provided via website or telephone service.</i>	Travel Demand Management: Business Operations	2006	N	
117	487	Telecommuting incentives or mandates		Travel Demand Management: Business Operations	2006	N	
118	496	Regional Vanpool programs	<i>Could add more to current Houston vanpooling program</i>	Travel Demand Management: Regional Applications	2006	Y	
119	499	Share hybrid vehicles	Shared vehicles among a group of owners	Travel Demand Management: Regional Applications	2006	Y	
120	500	Encourage pooled ownership of single occupant vehicles for local midday travel	<i>Encourage pooled ownership of cars, trucks; e.g., one neighborhood collectively owns an SOV for periodic use.</i>	Travel Demand Management: Regional Applications	2006	N	

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121	501	Car Sharing Programs (Flexcar)	<i>Car-sharing programs. We give our members the key to new cars, trucks, and minivans located across a metropolitan region. You pay an hourly rate, and the company pays for the car, insurance, gas and a reserved parking spot!</i>	Travel Demand Management: Regional Applications	2006	Y	
122	503	Rideshare matching, transit marketing and information programs		Travel Demand Management: Regional Applications	2006	N	
123	504	Rewards for reducing total vehicle miles traveled in a city or region		Travel Demand Management: Regional Applications	2006	N	
124	551	If the California Low Emitting Vehicle Program is adopted and only LEV certified, gasoline vehicles are for sale in Texas, then mandated fleets should have to purchase the ULEV alternative fuel version of the same vehicle rather than the gasoline version		Vehicle Emission Standards	2006	Y	
125	553	Adopt California standards for vehicle emission rates	<i>Public and Publicly contracted fleet rules</i>	Vehicle Emission Standards	2006	Y	
126	576	Limitations on idling of heavy-duty vehicles	<i>May require city ordinance. Will require additional power sources for local major events.</i>	Vehicle Idling	2006	Y	
127	587	Heavy-Duty Vehicle Border Inspection Program for AB 1009 (Pavley 2004)	<i>The Air Resources Board, in cooperation with the California Highway Patrol, shall develop regulations establishing inspection protocol for determining whether the engine of a heavy-duty vehicle met the federal emission standard applicable to the engine's model year at the time of manufacture, pursuant to AB 1009 (Pavley 2004)</i>	Vehicle Inspection and Maintenance	2006	N	
128	589	More frequent emissions tests for taxi cabs		Vehicle Inspection and Maintenance	2006	N	
129	592	Augment truck and bus highway inspections with community-based inspections (HDV8)	<i>HD vehicles are inspected to detect mal-maintenance and tampering and to measure smoke emissions in mixed-use communities.</i>	Vehicle Inspection and Maintenance	2006	N	
130	594	Addition of HDGV2B weight class vehicles to		Vehicle Inspection and Maintenance	2006	N	Already included
131	598	More frequent testing for vehicles that repeatedly fail inspection tests		Vehicle Inspection and Maintenance	2006	N	
132	601	Extend or expand light-duty diesel engine inspection and maintenance program		Vehicle Inspection and Maintenance	2006	N	
133	604	If the largest city in a county takes part in a testing program, the entire county must opt-in.		Vehicle Inspection and Maintenance	2006	Y	3 counties not included in I/M
134	623	Mandated no drive days		Vehicle Operations Management	2006	Y	
135	628	Voluntary no drive day programs		Vehicle Operations Management	2006	Y	

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136	629	License plates determine access to vehicle use (odd/even driving days)		Vehicle Operations Management	2006	Y	
137	630	Encourage/Mandate Livable Centers		Sustainable and Transit-Oriented Development	2008		
138	631	DPS-like emissions sensors in HCTRA toll booths - enhanced smoking vehicles program		Vehicle Inspection and Maintenance	2008		
139	632	Enhanced enforcement for Smoking Vehicles Program - vehicle impounding for violators (like Dallas Emissions Enforcement Pilot Program)		High-Emitting Vehicle Detection and Programs	2008		
140	633	Limit left turns on selected thoroughfares at all times		Traffic Flow Improvements	2008		
141	634	Higher registration fees for high emissions vehicles		Pricing Measures	2008		
142	635	Prime parking for vanpools/carpools/hybrids		Parking Management	2008		
143	636	Hybrid cars parking meter fee exemption		Parking Management	2008		
144	637	Use of taller highway barriers to reduce "rubbernecking"		Freeway Incident / Roadway Construction Management	2008		
145	638	Increased use of hybrid buses		Transit	2008		
146	639	Initiate a flexbike service to encourage bicycling		Bicycle and Pedestrian	2008		
147	640	Creation of regional government idling restriction MOU		Vehicle Idling	2008		
148	641	Industry idling restrictions		Vehicle Idling	2008		
149	642	More stringent I/M cut points		Vehicle Inspection and Maintenance	2008		
150	643	Accelerate development and construction of mass transit projects		Transit	2008		