

GreenStep Cities Best Practice # 13 **- final draft for comment through May 2010 -**

❖ *Efficient City Fleets*: Implement a city fleet investment, operations and maintenance plan.

Optional for all cities

Category: Transportation

Summary

Whether a city - or other taxpayer-funded entity such as a park or school district - leases or owns vehicles, or contracts for vehicle services such as road grading, planned actions can cut costs per taxpayer and cut total mobility costs and carbon emissions per employee.

Best Practice Actions

- Category A and B cities must complete at least one Action if they choose to implement this best practice.
 - Category C cities must complete at least two Actions if they choose to implement this best practice.
- (1) Decrease use of city vehicles by means such as trip bundling, video conferencing, carpooling and financial incentives for efficient vehicle use.
 - (2) Right-size the city fleet with the most fuel-efficient vehicles that are of an optimal size/capacity for their intended functions.
 - (3) Document the phase-in of at least three of the following in vehicle contracts, for city or local transit fleets, or for school/park board fleets:
 - a. Monthly monitoring and reporting for staff on fuel usage and costs.
 - b. Training for more efficient driving, including anti-idling behavior/rules.
 - c. Maintenance schedules that optimize vehicle life and fuel efficiency.
 - d. Alternative fuel vehicles.
 - e. Charging stations (solar or wind powered) for plug-in hybrid and full electric vehicles.
 - f. Lower-carbon fuels (such as biodiesel, straight vegetable oil) using a life-cycle calculation.
 - g. More fuel-efficient vehicles.
 - h. Car share vehicles owned by a third party to decrease fleet size.
 - i. Bicycles.
 - (4) Phase in bike, foot or horseback police patrols.
 - (5) Document that the local school bus fleet has optimized routes, start times, boundaries, vehicles, bus fuels, and driver actions to decrease fuel use.
 - (6) Participate in Project GreenFleet to retrofit or replace diesel engines, or to install auxiliary power units that reduce truck and bus idling.

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Implementation Resources

(tied to the relevant Action by number)

- (1) - (3) Best management practice resources for fuel economy, alternative fuels, vehicles: www.wsppn.org/fleet
- (3b) EcoDriving techniques, promotional materials and calculators: <http://ecodrivingusa.com>
- (3d) Alternative fuel vehicles include gas- or diesel-electric hybrid vehicles, electric vehicles, hydrogen fuel cell, E-85 flex-fuel vehicles, compressed natural gas vehicles, and liquid natural gas and propane vehicles: http://www.nextstep.state.mn.us/res_detail.cfm?id=141
- (3d) U.S. Dept. of Energy's Alternative Fuels and Advanced Vehicles Data Center, which has cost calculators and other tools: <http://www.afdc.energy.gov/afdc>

- (5) *Strategies for Saving School Bus Energy* (Minneapolis Public Schools: 2009): <http://www.nextstep.state.mn.us/energyconference/090122hallanger.pdf>
- (6) Project GreenFleet, a collaborative effort, lead by Minnesota Environmental Initiative, with business, government agencies and non-profit organizations, to improve air quality and protect public health by reducing emissions from Minnesota's school buses and other diesel vehicles: <http://www.projectgreenfleet.org>

Benefits

- Calculators to determine a fleet's emissions: <http://www.wsppn.org/fleet/Calculators.cfm> and <http://www.travelmatters.org>
- Fleet Greenhouse Gas Emissions calculator (Environmental Defense Fund): <http://innovation.edf.org/page.cfm?tagid=37020>
- Emissions calculator in *Transportation Emissions Guidebook, Part Two: Vehicle Technology and Fuels* (Center for Clean Air Policy): <http://www.ccap.org/safe/guidebook.php>
- U.S. Dept/ of Energy's GREET Fleet Footprint Calculator for Clean Cities: http://www.transportation.anl.gov/modeling_simulation/GREET/footprint_calculator.html
- If just half of U.S. drivers practiced moderate levels of ecodriving - subtly changing driving habits and adjusting maintenance techniques – CO2 emissions could be reduced annually by about 100 million tons, or the equivalent of heating and powering 8.5 million households.

Connection to State Policy

- 2009 fleet goals for agencies of the State of MN are to:
 - Use vehicles with fuel efficiency ratings that exceed 30 miles per gallon for city usage or 35 miles per gallon for highway usage.
 - Reduce the use of petroleum-based diesel fuel in on-road vehicles owned by state departments by 10% by 2010 and by 25% by 2015, using 2005 as a baseline.
 - Reduce the use of gasoline in on-road vehicles owned by the state departments by 25% by 2010 and by 50% by 2015, using 2005 as a baseline.

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