

Suggested Policy Details - this is a “menu” of options that may be customized to a fleet:

The Garfield Clean Energy has compiled a list of fleet practices based on successful fleet policies in use by Colorado’s State Fleet, City of Denver’s Fleet, Eagle County’s fleet, and others around the nation. These guidelines save fuel, save cost, and can save staff time, all while delivering quality fleet services to municipalities.

TRACK FLEET ENERGY USAGE

Tracking odometer readings and fuel usage provides information needed to better optimize vehicle usage for minimum cost and gives early warning of vehicle problems.

Vehicle energy usage data is critical to complete accounting and regular reporting of progress toward financial, energy-reduction and carbon-emission targets.

Fleet-management software can track fuel and odometer readings, link to existing fuel-card systems, and cut time and expense from fleet management by eliminating paperwork.

DEPT	MODEL	JANUARY	FEBRUARY	M
BOCC	PRUIS	1,008	1,352	
BOCC	PRUIS	1,343	798	
ASSESSOR	DURANGO	461	428	
ASSESSOR	LIBERTY	579	403	
ASSESSOR	PRUIS	0	0	
COMMUNICATIONS	ESCAPE	0	322	
IT	PRUIS	0	844	
P&Z	PRUIS			
FACILITIES	RANGER	1,337	1,017	
FACILITIES	F350	751	513	
FACILITIES	2500			
FACILITIES	3500	652	823	
FACILITIES	CHEROKEE	0	0	
FACILITIES	VAN	0	0	
FACILITIES	F350	874	303	
FACILITIES	2500	716	691	

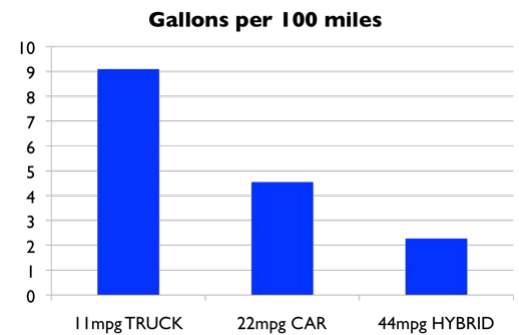
OPTIMIZE VEHICLE USE

The manner in which fleet vehicles are used for travel in your city or county is a key determinant of the fleet’s overall efficiency. Most importantly, schedule travel efficiently so that multiple tasks can be accomplished with one trip. With proper planning, staff should also be able to share vehicles for all or part of a trip. Software especially designed to optimize fleet vehicle routes can also be used to achieve large reductions in fuel use and emissions.

SELECT THE RIGHT VEHICLE FOR EACH DAY’S WORK

A simple but important step that any city or county can take to improve the efficiency of its fleet is to ensure that the correct vehicle is chosen for each day. Whereas permanent vehicle assignments might result in an inefficient pickup being driven on an administrative task, a “motor pool” arrangement allows workers to choose the right vehicle for the job.

Recommendations include: Require employees to select the car or truck that matches that day’s tasks; Use cars or minivans, not SUVs, for moving people; Use 4x4 trucks or SUVs only for off-road jobs or inclement weather; Do not permanently assign large vehicles or 4x4s to individuals, unless that person’s job requires off-road or inclement weather driving for a majority of the time.



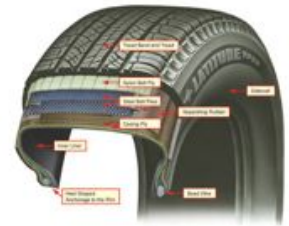
IMPROVE VEHICLE EFFICIENCY

Vehicle efficiency can be improved by a variety of simple practices that any fleet can incorporate into their daily operations

Improve Aerodynamics: Put racks, ladders and tools on vehicle roofs only when needed that day.

Reduce Rolling Resistance: Routinely check tire pressure checks. Note: tires inflated with nitrogen stay fully inflated longer.

Purchase Low Rolling Resistance Tires: Use low rolling resistance (LRR) tires to achieve fuel savings of 2 to 10 percent. Cars: Goodyear FuelMax, Bridgestone Ecopia, Michelin Energy. Heavy Trucks: Goodyear FuelMax (dual), Michelin X-One (wide-base)



Note: Low rolling resistance does NOT mean low traction. LRR tires use improved internal construction to reduce the energy absorbed inside the tire during each rotation. Truckers using wide-base tires actually report improved traction in snowy conditions.

USE EFFICIENT VEHICLES YEAR-ROUND

Purchase modern Studless Snow Tires: With a set of 4 modern studless snow tires, front-wheel-drive vehicles are capable of operating all winter.

Michelin X-Ice Xi2 has better ice traction than a studded tire, but performs like an all season tire on dry pavement. New compounds outlast traditional snow tires many times over. Just in case, put shovels in cars in case vehicle is plowed-in. Eagle County their 20 Prius hybrids year-round.



IMPROVE DRIVER EFFICIENCY

Vehicles need to be operated in the correct manner as well. Employees should receive driver training and be awarded incentives for driving efficiently. Finally, establishing a policy against idling vehicles is a key component of an Efficient Fleets program. Edmonton, Alberta increased average fuel economy by 20% by coaching employees on fuel-efficient driving. Avoid fast acceleration, hard braking and unnecessary idling. Use good planning to combine trips and identify efficient routes. Choose the most efficient vehicle you can for the trip.

EDUCATE AND ENGAGE VEHICLE USERS

Educating users on the savings of efficient fleets is important. Engaging the team in the decision making process builds engagement and helps create a more successful project. A key message is that money saved = jobs saved. Old habits are hard to break, but educate the team that daily vehicle choice is critical, and reward good decisions. Challenge departments to compete for quarterly VMT and fuel reductions. Make it fun, keep it visible over time. Change is never easy. Facilitate a can-do-attitude. Anyone can find reasons that something new may fail, yet it takes courage to persevere.

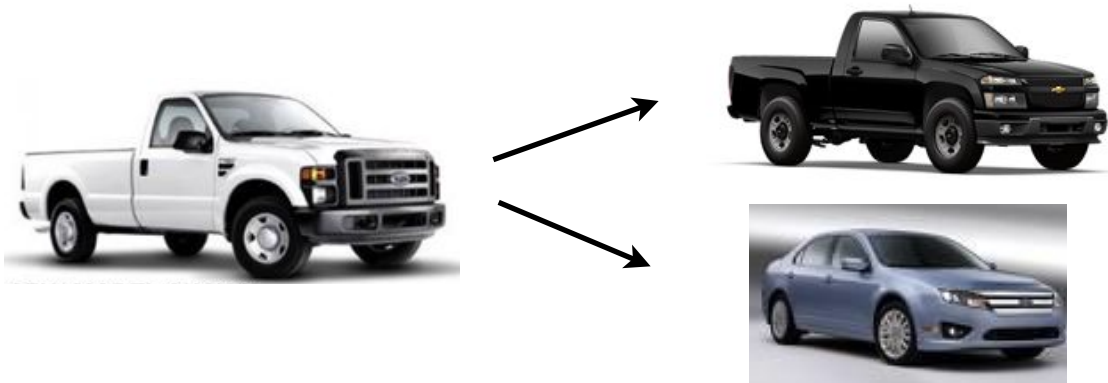
ELIMINATE EXCESS VEHICLES

In many cases cities and counties have more vehicles than they need in their fleets. By analyzing the operational needs of your fleet, and eliminating excess vehicles, non-critical trips will be discouraged and alternative forms of travel encouraged.



DOWNSIZE VEHICLES

Does a building inspector need to drive a full size truck? Probably not, but in many local governments trucks and large sedans are still the vehicles assigned to staff, regardless of how appropriate the vehicle is to the duties that they perform. Matching duty requirements of staff to the smallest possible vehicle for the task is a critical component of an Efficient Fleets program. Smaller vehicles should be substituted for larger vehicles by phasing them in as new vehicles are purchased or by selling larger vehicles.



INCORPORATE EFFICIENCY AND ALTERNATIVE FUELS INTO BID SPECIFICATIONS

Including a minimum fuel efficiency standard for each vehicle class in procurement specifications results in only the most fuel-efficient vehicles being purchased. Also include preferences for procuring vehicles that can run on alternative fuels or be converted at a later time to run on CNG. When planning a vehicle purchase, quantify the total cost of ownership, buy using realistic fuel price forecasts and calculating the net present value of fuel/maint/repair for vehicles. Always purchase vehicles with the lowest overall life cycle cost. This process helps staff quantify the savings from advanced technology vehicles with higher purchase price but lower lifecycle cost due to lower fuel use. Note: Do not use artificially low fuel prices, or unrealistically high maintenance costs of for advanced vehicles.

BUY VEHICLES THAT RUN ON ALTERNATIVE FUELS: CNG, E85, BIODIESEL

Fuel Diversity is a key pillar of a well-run fleet. As fuel price spikes have dented budgets, petroleum availability problems could reduce a municipality's ability to meet citizen needs. By incorporating non-petroleum fuels into your daily operations, you will be able to "play the market" for the cheapest fuel, and choose between a variety of fuels if supplies of one type become restricted. Consider "Second Generation Biofuels" such as Cellulosic Ethanol (Flex Fuel), non-food-based BioDiesel. Also consider Natural Gas Vehicles such as CNG-dedicated or CNG-Bi-Fuel (CNG + Gasoline)



LIMIT USAGE OF 4x4 VEHICLES

A key piece of Colorado's State Fleet Policy is to revisit the ubiquitous deployment of 4x4 vehicles in the fleet. Though necessary in certain cases, 4x4 vehicles cost more to purchase, more to operate, use more fuel, and cost more to repair than other vehicles. Create a motor pool for shared use of low-efficiency vehicles such as SUVs and 4x4s. Pre-arrange agreements with rental companies for times of special need. Do not permanently assign large vehicles or 4x4s to individuals, unless that person's job requires off-road or inclement weather driving for a majority of the time. Require director-level approval for any 4x4 purchases.

REDUCE VMT: USE TRANSIT, BIKE, WALK, OR TELECOMMUTE

Is it necessary to drive to that meeting? Often the answer is no. Fleet vehicle usage can be substantially decreased if employees use other modes of travel. Depending on the distance; transit, a bicycle, or walking normally will suffice. Employees should be provided with transit passes and reimbursed when using transit or bicycles to travel for business reasons. Another option is to avoid travel altogether by using email, phone, or video technology to accomplish tasks by telecommuting. Leverage IT staff to identify and eliminate gaps in or barriers to teleconference, videoconference and webinar tools. Develop a VMT reduction outreach and education program for employees.

PLAN FOR PURCHASE OF ELECTRIC VEHICLES

Vehicles with electric drive trains will likely replace internal combustion engine vehicles in the future. Electric vehicles (EVs) powered by batteries and gasoline-powered generators (hybrids) are already available. Electric vehicles and plug-in-vehicles available in 2011 are highway-capable, are appropriate for many tasks, and significantly reduce fleet petroleum consumption.



- Plan for purchase of plug-in hybrids (PHEVs) in 2011
 - Vehicles will operate on plug electricity and as a gasoline-electric hybrid.
 - Designed to charge overnight from any 110 volt wall plug.
 - Efficiency will range from 50 to 150 mpg, capable of normal highway operation.
 - Passenger cars will be on the market in 2011, cargo vans by 2012.
- Plan for purchase of electric vehicles in 2011
 - Electric vehicles are planned by many manufacturers (domestic & foreign)
 - Electric vehicles will be available in many vehicle types (cars/trucks/vans)
 - Electric vehicles will be all-weather, highway-capable with significant cargo capacity
 - Cargo vans, delivery trucks, and cars will all be available in 2011
- Prepare for new technology
 - When repaving sidewalks or parking lots, bury electrical conduit to allow for future plug-in parking spaces.
 - When designing or remodeling buildings, include 110 volt outdoor outlet plugs near parking spaces and size circuits for future installation of fast-charging 240 volt outlet plugs for electric vehicles.
- Buy Neighborhood Electric Vehicles (NEVs) today:
 - Federal designation: 25mph on 35mph roads.
 - Designed to charge overnight from any 110 volt wall plug.
 - 20-40 miles per charge, perfect for city maintenance
 - Available in the US since 1998 as small cars, pickups, vans, etc.

