



## **FORT CARSON 25-YEAR SUSTAINABILITY GOAL PLAN**

### **GOAL: SUSTAINABLE TRANSPORTATION (ST)**

#### **Goal Statement:**

Reduce automobile dependency and provide balanced land use and transportation systems.

#### **25-Year Vision**

The final wording of the transportation goal established at the 2002 Fort Carson Sustainability Conference is ***Reduce automobile dependency, and provide balanced land use and transportation systems.*** Desired end states related to sustainable transportation and land use from the Sept 2002 conference are as follows:

- Increased use of mass transit with clean fuels.
- Schedules that reduce vehicle emissions.
- Innovative materials and placement that provides sustainable transportation systems.
- Reduction of average daily commute miles.
- Regional partnerships for alternative and multiple occupancy vehicles.
- Reduce the amount of vehicles on the roadway to reduce congestion.
- Control urban expansion and zone to discourage vehicle use.

#### **Ownership and Involvement (Resources, Roles and Authority)**

**Goal Proponent:** DOL Director

#### **Goal Lead & Fort Carson Partners:**

DOL/DPW  
DES (Physical Security, PMO)  
MSE  
AAFES  
DECA  
MEDDAC  
DFMWR

#### **Off-post Partners:**

Pikes Peak Area Council of Governments / Pikes Peak Regional Transit Authority  
City of Colorado Springs / Mountain Metro Transit / Metro Rides  
Southern Colorado Clean Cities Coalition  
Green Cities Coalition  
Pikes Peak Area Bikeways Coalition / Bicycle Colorado  
Silver Key  
Community Intersections  
Pikes Peak Partnership (Amblicab)  
City of Fountain  
El Paso County  
Pueblo County  
Pikes Peak Mobility Coalition

---

Other Federal, state and local transportation-related agencies (GSA, DOT, CDOT, EPA, etc)

### **Fort Carson EMS – Significant Aspects and Impacts**

1. Water quality related to vehicle and equipment maintenance; SW Runoff; water treatment
2. Air emissions related to vehicle maintenance; vehicle emissions; POV commute; and fuel use (JP8, biodiesel, gasoline)
3. Transportation related to tactical and non-tactical vehicle use; transport of equipment; long-haul trucking; and hauling of waste and recycling; non-tactical vehicle use; commuting
4. Land use related to new or existing infrastructure (roads and buildings); and POL use
5. Cost/Budget salary expenditures to public and private entities; fuel cost for vehicles and aircrafts; and total cost
6. Energy related to fuel use; vehicle and equipment maintenance (refueling; fuel for tactical vehicles; fuel spills)

### **Legal and Other Requirements** (including other EMS goal plans)

#### **1. Presidential Executive Orders (EO)**

A. Executive Order 13423, 26 January 2007, adopted into law in the FY2009 budget by Public Law 111-8, April 2009.

- Policy: “it is the policy of the United States that federal agencies conduct their environmental, transportation and energy-related activities...in an environmentally, economically and fiscally sound, integrated, continuously improving, efficient and sustainable manner.”
- Goals:
  - “improve energy efficiency and reduce greenhouse gas emissions of the agency, through reduction of energy intensity by 3 percent annually through the end of fiscal year 2015, or 30% by the end of fiscal year 2015, relative to the baseline of the agency’s energy use in fiscal year 2003.”
  - “ensure that the agency...relative to agency baselines for FY05, reduces the fleet’s total consumption of petroleum products by 2 percent annually through fiscal year 2015; increases the total fuel consumption that is non-petroleum based by 10% annually, and uses plug-in hybrid vehicles when they are commercially available at a cost reasonably comparable, on the basis of life-cycle cost, to non-plug in hybrid vehicles”
- The head of each agency shall:
  - “Implement within the agency sustainable practices for energy efficiency, greenhouse gas emissions avoidance or reduction, and petroleum products use reduction, renewable energy including bio energy, pollution and waste prevention...and vehicle fleet management.”

- “ensure use of environmental management systems (EMS) at all appropriate organizations levels to...address environmental aspects of internal agency operations and activities, including environmental aspects of energy and transportation functions...”

**B. Executive Order 13514, Federal Leadership in Environmental, Energy and Economic Performance, 8 October 2009, Transportation–related goals for agencies:**

- Federal agencies will commit to goals for greenhouse gas reductions to achieve from 2010 to 2020. The Department of Defense committed to reducing greenhouse gas emissions by 34% for non-combat operations; the overall Federal government goal is an averaged 28% (Presidential announcement, 29 January 2010). The Federal government was also committed by President Obama to reduce greenhouse gas pollution from indirect sources, such as commuting, by 13% 2010-2020 (Presidential announcement 20 July 2010).
- Reduce use of fossil fuels by using low greenhouse gas emitting vehicles including alternative fuel vehicles; optimizing the number of vehicles in the agency fleet; reducing the agency fleet's total consumption of petroleum products by a minimum of 2% annually through the end of FY2020, relative to a baseline of FY2005.
- Pursue opportunities with vendors and contractors to address and incorporate incentives to reduce greenhouse gas emissions (such as changes in...transportation used
- Implement strategies and accommodations for transit, travel, training, and conferencing that actively support lower-carbon commuting and travel by agency staff
- Develop and implement innovative policies and practices to address greenhouse gas emissions unique to agency operations
- Implement storm water management guidance promulgated to implement section 438 of the Energy Independence and Security Act of 2007
- Participate in regional transportation planning and recognize existing community transportation infrastructure
- The order also requires GSA to make recommendations associated with the use of public transportation by Federal personnel, Federal shuttle bus and vehicle transportation routes supported by multiple Federal agencies, and use of alternative fuel vehicles in Federal shuttle bus fleets.
- Excludes vehicles and equipment used in combat support, combat service support, tactical or relief operations, or training for such operations; Federal law enforcement; emergency response (fire and rescue) vehicles; and spaceflight vehicles (including associated ground-support equipment).

**2. Public Laws**

A. Energy Policy Act of 2005: Section 701 states that dual-fueled vehicles must be operated on alternative fuels unless the Secretary of Energy determines that the agency qualifies for a waiver. (Source: US DOE Federal Energy Management Program)

B. Energy Independence and Security Act of 2007 (EISA 2007): Subtitle C sections 141, 142 and 246 state: (Source: US DOE Federal Energy Management Program)

- Federal agencies are prohibited from acquiring any light-duty motor vehicle or medium-duty passenger vehicle that is not “a low greenhouse gas emitting vehicle” as defined in

the subtitle. Alternatively, the agency may demonstrate that it has adopted cost-effective policies to reduce its petroleum consumption sufficiently to achieve a comparable reduction in greenhouse gas emissions.

- Federal agencies are required to achieve at least a 20% reduction in annual petroleum consumption and a 10% increase in annual alternative fuel consumption by 2015 from a 2005 baseline.
- Each agency is directed to install at least one renewable fuel pump at each Federal fleet fueling center by 2010.

### **3. Department of Defense and Department of Army Directives / Goals**

A. DoD Telework policy: “maximize the number of employees that do telework “to reduce traffic congestion and energy consumption and pollution emissions”

B. DoD Goal for Renewable Energy Use (relevant to electrification of vehicles): 7.5% of all electricity consumed will be generated from renewable sources by 2013; 25% by 2025.

C. DoD Sustainability Campaign Plan

D. Department of the Army

- Environmental Strategy (2004):
  - “address the lifecycle impacts of our energy use”
  - “focus on sustainable operational efficiency”
- IMCOM Installation Management Campaign Plan 2010-2017 (2010):
  - LW6 – A Culture of Safety, Sustainability and Healthy Work Environment: Build and sustain a culture of safety by practicing good safety habits, addressing safety deficiencies, and articulating how the installation management community is working to improve safety and address safety issues.
  - IR1 – Sustainable Infrastructure that Supports Senior Commander Requirements: Design, construct, update and rehabilitate our infrastructure so that it is sustainable, agile and supports current and future Senior Commander requirements. Develop sustainable infrastructure that is resource and energy efficient, provides a safe and productive working and living environment and is fully incorporated into enterprise and installation level management and decision support tools.
  - IR2 – Sustainable Army Communities of Excellence: Employ an effective integrated management system with an installation readiness focus, cost consciousness, and a sustainable performance-driven culture that shares information and best practices. Commit leadership to the eleven principles of performance excellence: visionary leadership; a focus on the future; managing for innovation; managing by fact; societal responsibility; a focus on results and creating value; and a systems perspective (paraphrased).
  - IR4 – Enhanced Capabilities Through Partnerships: Enable partnerships to access unique capabilities without having to support the capability over the long term. Leverage the private sector to purchase goods and services for cost and performance benefits. IR4-1: Leverage private sector and local community Enhanced Use Lease partnership opportunities to develop cost effective operations, sustainable infrastructure, and high quality services and facilities for our Soldiers and their Families. (paraphrased)
  - IR5 – The Army’s Infrastructure Modernized and Sustainable: Maintain situational awareness of the status of our facilities and infrastructure, the

consumption of natural resources and energy, and the status of the sources of those natural resources and energy. Develop and update plans at the enterprise and installation level to modernize or replace those facilities and infrastructure so as to improve their natural resources and energy efficiency and their overall capability to support the current and future requirements of Senior Commanders.

- IR5-2: Transportation infrastructure that efficiently and effectively meets current and future planned demand – using a metric of the % of required repairs reported that are funded within 2-4 Federal fiscal years.
- IR6 – Environmental Stewardship: Preserve, protect, conserve, sustain and, where appropriate, restore the natural environment on which our installations depend. Integrate program guidance and goals across installation functional areas in order to lead and execute environmental programs. Transform business practices, enhance current management procedures, and develop innovative technologies and approaches, leveraged across the Army enterprise to improve operational capabilities while achieving greater efficiencies and reduced liabilities. Proactively address environmental matters to ensure Soldier, Family and Civilian readiness.
- SF1 – Effective Privately Owned Vehicles (POV – Motorcycle and Auto) Safety Programs in Place: Create and deliver effective safety programs focused on motorcycle and auto safety that enable a safety culture both on- and off-duty.
- Energy Efficiency and Security – Objective: Maintain energy and water efficient installations by holding users accountable, modernizing facilities, installing new technologies, and leveraging partnerships that will provide an increased level of energy security leading to sustainable and resilient infrastructure and mission assurance.
  - We will reduce dependence on fossil fuels.
  - We will capitalize on one of the biggest assets at our disposal – land – in order to advance renewable energy sources.
  - Sustainability projects and initiatives will introduce new models of efficient design and operation.
  - We will recognize energy as a strategic resource and address the priorities of the Army Energy Strategy for Installations, the Army Energy Security Implementation Strategy, the Army Campaign Plan for Sustainability and other Army guidance.
  - EN1 – Reduce Energy and Water Consumption: Eliminate wasteful practices, reduce consumption and change behavior regarding energy and water use. Impart knowledge, training, and operational awareness to achieve long term cost savings and to strengthen the ability of the Army. (paraphrased)
  - EN1-4: Instill an energy-conscious culture in our communities.
  - EN2 – Increase Energy and Water Efficiency and Modernize Infrastructure: Build new facilities and renovate existing facilities to high performance standards. Provide safe, healthy, sustainable and productive living and working environments that reduce

environmental impact while greatly reducing total ownership and life cycle costs.

- EN3-2 – Substitute renewable resources for purchases of energy from fossil fuel sources where life cycle cost effective.
  - Metrics include % of installations meeting legislative standards for renewable energy use, and % of electric and total energy from renewable sources.
- EN-4 – Improve the Development of Renewable and Alternative Energy for Vehicle Fleet Mobility Fuel: Installations achieve a continuous increase in the usage of alternative/renewable fuels based on specific goals established for each installation, including non-tactical vehicle fleet capable of using alternative/renewable fuels and availability of alternative/renewable fuel sources on or within close proximity to the installation.
  - EN4-1: Increase the level of alternative/renewable fuels, using metric that 75% of covered vehicles purchased/leased must be Alternative Fuel Vehicles,
  - EN4-2: Increase alternative fuel consumption, using metric of the % increase in alternative fuels used annually using a 2005 baseline.
  - EN4-3: Decrease petroleum fuel consumption, using a metric of % decrease of petroleum fuel consumption annually using 2005 baseline.

#### **4. Fort Carson Sustainability Goals and Regulations**

- A. Energy & Water Goal
- B. HAPs Goal
- C. Sustainable Development Goal

#### **5. State and Local Goals / Regulations**

- A. State of Colorado:
  - Governor’s Climate Action Plan (2007):
    - Colorado will by 2020 reduce greenhouse gas emissions by 20% from 2005 levels, and will by 2050 reduce greenhouse gas emissions by 80% from 2005
    - Reduce emissions from passenger vehicles by adopting greenhouse gas emissions standards.
- B. Pikes Peak Area Council of Governments and City of Colorado Springs
  - Regional Transportation Plan (2008)
    - Principles include “develop a multi-modal transportation system that provides access to employment, services, military installations, and other destinations
  - 2035 Mountain Metropolitan Transit Plan (2008)
    - Support the integration of the transit mode with other travel modes
    - Provide for safe, well-maintained, and environmentally responsible fleet and facilities.
      - Transition to “clean” vehicles, considering emissions standards as vehicles are replaced;

- Maintain existing transit facilities to maximize life cycle and energy efficiency
  - The 2035 Transit Vision Plan includes four fixed-guideway/rapid transit corridors (Nevada and Academy going N/S; Fountain-Academy and Academy/Airport E/W) and four “call and ride” service areas in the northern suburbs (concept could be extended to Fort Carson)
  - Plan outreach showed that regional residents have developed a strong interest in transit, bicycle and pedestrian modes, and the lack of alternatives to driving was identified as one of the top three issues. “The community values having transit become an integrated, vital part of the overall transportation network.”

## **Background**

Numerous policies at the federal, state, and local government levels, plus DoD and DA policies aim to achieve more sustainable transportation systems in the US. Goals include reducing America’s dependence on foreign oil, reducing environmental impacts of energy sources used in transportation, reducing safety hazards of transportation, reducing transportation system congestion for both people and freight.

Achieving sustainable transportation depends on long-term planning of land uses, transportation technologies and systems, and the local availability of sustainable fuel sources. Primary human aspects are safety, convenience (time and comfort), cost and equitable access of all people that Fort Carson serves to its services.

This goal focuses on the performance of the transportation system, and objectives concerning the sustainability performance of the system including unregulated carbon dioxide emissions. The sustainable transportation plan for 2027 to be developed in FY07 will address the whole-system.

Desired end states related to sustainable transportation and land use from the Sept 2002 conference are as follows:

- Increased use of mass transit with clean fuels.
- Schedules that reduce vehicle emissions.
- Innovative materials and placement that provides sustainable transportation systems.
- Reduction of average daily commute miles.
- Regional partnerships for alternative and multiple occupancy vehicles.
- Reduce the amount of vehicles on the roadway to reduce congestion.
- Control urban expansion and zone to discourage vehicle use.

This goal addresses vehicle use as a detriment to quality of life. More time spent in vehicles due to congestion or long commutes typically equates to less time spent with families or other important personal pursuits. Furthermore, with increased security, the more vehicles coming into the gates, the more congestion is created, and the more time is spent in vehicles. This goal seeks to reduce the negative impacts on quality of life from transportation systems in and around Fort Carson’s operations.

The performance metrics established were:

- 20% per capita reduction in vehicle miles traveled on post by 2015, and 40% by 2027;

- 20% of total trips on post using alternative modes by 2015, and 40% by 2027;
- Alternative mode network in place by 2015.

The vision is to achieve a sustainable Post transportation system integrated with regional and state transportation systems. A sustainable Post transportation system is characterized by:

- Maximized efficiency of energy used for transportation and efficiency of time spent moving people or materials
- Maximized use of sustainable energy sources for transportation, in particular local or US fuel sources
- Maximized integration with regional and state transportation systems that promote sustainability performance and transportation user quality of life
- Maximized transportation convenience for mission needs including rapid deployment and freight mobility
- Maximized integration with land-use planning for Post lands and surrounding communities
- Minimized adverse air emissions from transportation sources
- Maximum compliance with US government, State of Colorado, Pikes Peak region and other relevant transportation goals, policies or regulations recognized by the US Army or Department of Defense

This goal is wholly focused on non-combat (non-mission or non-tactical) transportation operations at Fort Carson. However, the Federal, state and other goals cited above cover mission/combat operations unless they are specifically excluded. An important finding of the Army Environmental Policy Institute, responding to recommendations to reduce vehicle fuel use related to contingency operations, is that a Stryker Brigade Combat Team in a contingency operation has a fully burdened cost of \$13.13 per gallon of fuel. This figure includes monetized costs only; a fully-burdened per gallon cost that includes externalized sustainability impacts of fuels may further help Fort Carson's operations achieve sustainable transportation cost savings and reduced impacts.

### **Challenges & Barriers**

#### A. From the 2002 Conference:

Limited technology  
Regulatory conflicts  
Equipment

#### B. From the 2003 5-Year Plan:

Perception of independence and status of automobile  
City bus system does not currently support Fort Carson's needs  
On-post shuttle service not used (scheduling/awareness)  
Rideshare forms not allowed in The Mountaineer  
Current infrastructure supports single occupancy vehicles (parking, building distances from each other and from services)  
Rapidly changing technologies  
High startup costs for mass transit  
Legal challenges (currently illegal to fund commuting to and from work and for personal trips)  
Many people are afraid to walk, bicycle, or take public transportation  
In many cases it is easier to take a personally-owned vehicle (POV)

### **Training**

- SEMS Awareness
- Competence training related to goal requirements
- Energy Conservation Officer Training

### **Communication**

- External (Coordinated with PAO and aligned with Installation strategic communication strategies)
  - Fort Carson Growth Planning Partnership Groups and implementation of transportation-related initiatives-Collaboration with regional transportation agencies in long-range transportation planning public forums
  - Community Town Hall forums, discussions and meetings
  - News releases relative to transportation infrastructure and operational changes
- Internal
  - Publications, news releases, supply flashers, town halls and other mechanisms to communicate traffic demand management and other transportation related activities.
  - Signs specific to transportation, e.g. car pool only parking signs or alternate route selection eSignage
  - Sustainable transportation system marketing

### **Document Control**

- Bicycle and Pedestrian Plan (DPW)
- Transportation Plan (DPW)
- Sustainable Transportation Plan (ISRO)
- Transit Plan ((ISRO)
- Transportation Motor Pool SOP/Logs (DOL/TMP)
- Air Permit(s) (DPW/DOL)

### **Operational Controls**

- Signs (Post-wide)
- TMP contract (DOL)
- TMP SOP (DOL/TMP)
- TMP Logbook (DOL/TMP)
- GSA credit card (DOL/TMP)/GSA

### **Monitoring & Measurement**

- Transportation Motor Pool Alternate Fuel Vehicle (GSA) Statistics (DOL)
- Fuel Delivery/Usage Data (DOL)
- GSA Vehicle Usage (GSA)DOL
- Fuel Efficiency (GSA/DOL)ISRO
- Gate Counts (DPW)
- Fuel Usage, TMP Vehicles (GSA)DOL
- Air Permit Monitoring (DOL/DPW)

### **Evaluation of Compliance**

- TMP Monthly Dispatch Review (DOL/TMP)

- GSA Monthly Vehicle/Fuel Usage (GSA)
- GSA Vehicle Usage at least annually (DOL)

**Nonconformity**

- IPAN and CPAN locations

**Control of Records**

- TMP dispatch receipts (DOL/TMP)
- GSA reports (GSA/DOL/TMP)
- TMP contract reports (DOL)

**Annual Review**

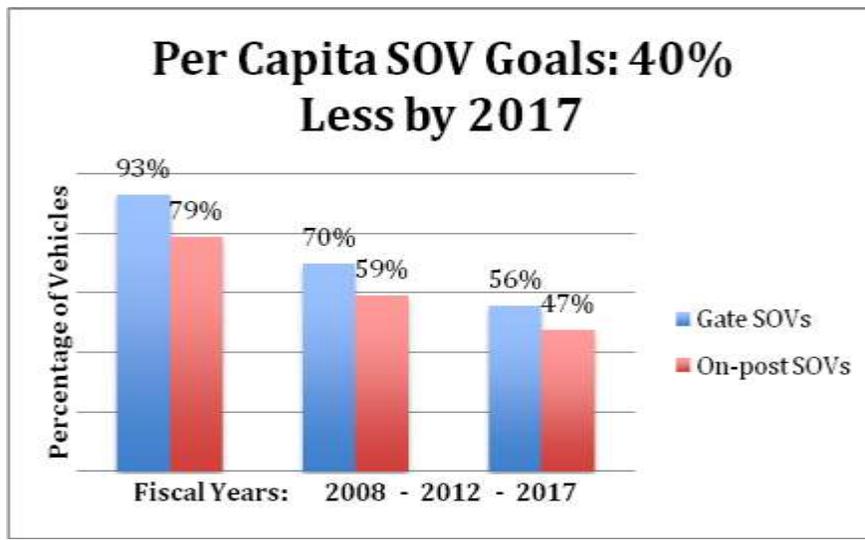
- Non-Tactical Vehicle Review Board (DOL/TMP/GC)
- Air emissions (DPW/DOL)
- PAS report

**Goal Objectives and Targets**

**Objective ST1: Reduce Single Occupant Vehicle (SOV) non-mission trips**

**Target by FY12: SOV (single occupancy vehicle) non-mission vehicle trips reduced 25% per capita from FY08 baseline.**

**Target by FY17: SOV non-mission vehicle trips reduced 40% per capita from FY08 baseline.**



**Details on Objective Target Graph ST1**

**Measure:** # of single occupant vehicles compared to total # of vehicles per capita annual average entering Fort Carson gates and on Fort Carson roadways

**Scope:** The measure includes all non-mission/tactical vehicles entering through Fort Carson gates during annual count events, and measures of SOV frequency on Fort Carson roadways..

**Source:** DPW Transportation Engineer

**Baseline:** FY08

**Limitations:** Vehicles are typically counted one time per year or less at entry gates and on roadways. Vehicles are not counted at all gates at the same times (day/week/time). Determining the per capita rate is difficult because of difficult determination of per capita numbers (reducing deployed units from assigned military).

**Verification & Validation:** DPW Transportation Engineer; compared to local/regional statistics as determined by the Pikes Peak Council of Governments.

**Initiatives in support of Obj. ST.1 FY10/11**

ST1.1 Implement Rideshare marketing plan in FY10 (ISRO)

ST1.2 Participate in regional transit and other transportation planning activities, FY10-FY12 (ISRO, DPW, DOL)

ST1.3 Complete and market the Carless/Carlite Mobility Plan in FY10, including contracts/agreements with private vendors for car- and low-impact vehicle sharing (ISRO/DPW/DOL)

ST1.4 Continue to implement the Bicycle and Pedestrian Plan in FY10-FY12 (DPW)

ST1.5 Complete the project at Gate 3 to reduce congestion and provide better bicycle and pedestrian access in FY10 (DPW)

ST1.6 Implement a project at Gate 4 to reduce congestion and provide better bicycle and pedestrian access in FY10/FY11 subject to availability of funds (DPW)

ST1.7 Implement a project at Gate 1 to reduce congestion and provide better bicycle and pedestrian access in FY10/FY11/FY12 subject to availability of funds (DPW)

ST1.8 Support planned construction of bicycle/pedestrian access from Pikes Peak Community College to Fort Carson Gate 4 by El Paso County in FY10. (DPW)

ST1.9 Coordinate with IMCOM/DA to expand the mass transit voucher opportunity to contractors in FY10. (DOL)

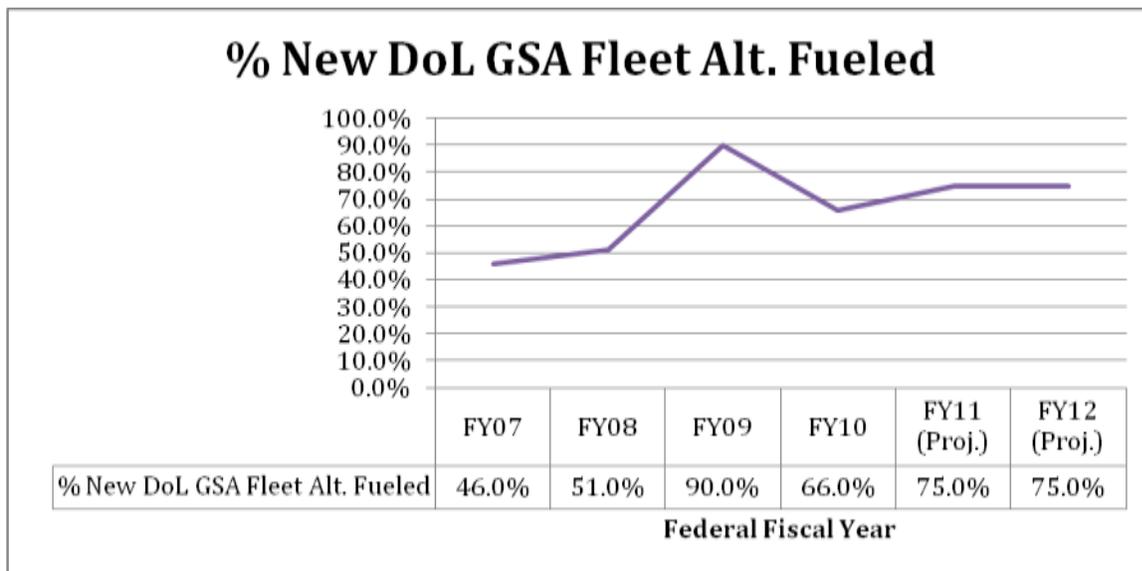
ST1.10 Coordinate with IMCOM/DA to expand the definition of “official use” for government-funded transit/shuttle services to include non-mission trips in FY10. (DOL)

Participants involved: Sustainable Fort Carson, DPW, DOL, DES, El Paso County, IMCOM, PPACG, local/regional planning agencies, Mountain Metro and/or other transit services, Metro Rides, other governmental and non-governmental agencies, contracted service providers.

**Objective ST2: Increase use of sustainable transportation fuels and reduce petroleum usage in vehicles**

**Target by FY12: (1) 100% Access by Fort Carson users to cost-effective sustainable transportation fuels; (2) Increase the alternate fueled vehicle fleet by ensuring that 75% of new fleet vehicles are alternative fueled (E85, hybrid, electric) and that Fort Carson continues the practice of alternative fueled vehicle replacing retiring vehicle whenever one is available.**

**Target by FY17: Continue the 75% alternative fuel capability of new purchases, measured annually and the 100% access to sustainable vehicle fuels.**



NOTE: The previous objective 2.2 metrics (adopted 2007) concerning percentages of fuels distributed that are petroleum or alternatives have been abandoned due to the measurement difficulties, including lack of data on fuel usage using the fleet credit card, and the inability to determine types of vehicles using delivered fuels by other non-tactical fleets and tactical vehicles.

**Initiatives in support of Obj. ST2 FY10/11**

ST2.1 Request and encourage GSA to provide alternative-fueled vehicles when fulfilling Fort Carson requirements in FY10/FY11/FY12 (DOL)

ST2.2 Request GSA work with manufacturers to approve biodiesel for use in government fleet vehicles in FY10/FY11/FY12 (DOL)

ST2.3 Develop electric vehicle charging infrastructure as appropriate and subject to availability of funds (DPW/DOL)

ST2.4 Continue coordination with GSA to pursue access and use of more sustainable diesel fuel (biodiesel, clean diesel) subject to availability. (DOL)

ST2.5 Monitor sustainable biodiesel markets/standards at least annually (DOL/DPW)

ST2.6 Conduct pilot projects such as Smith Electric Trucks subject to availability and/or funds (DOL/DPW)

ST2.7 Market bicycling, walking and other non-motorized forms of transportation continuously in order to decrease the total number of vehicles required from GSA (ISRO, DOL)

ST2.8 Request and encourage GSA provide actual fuel usage reports to customers in FY10/FY11 (DOL)

ST2.9. Complete Life-cycle Sustainability Performance analysis of vehicle fuels and establish plans by end of FY10 to maximize the availability of sustainable fuels to Fort Carson users (ISRO/DOL)

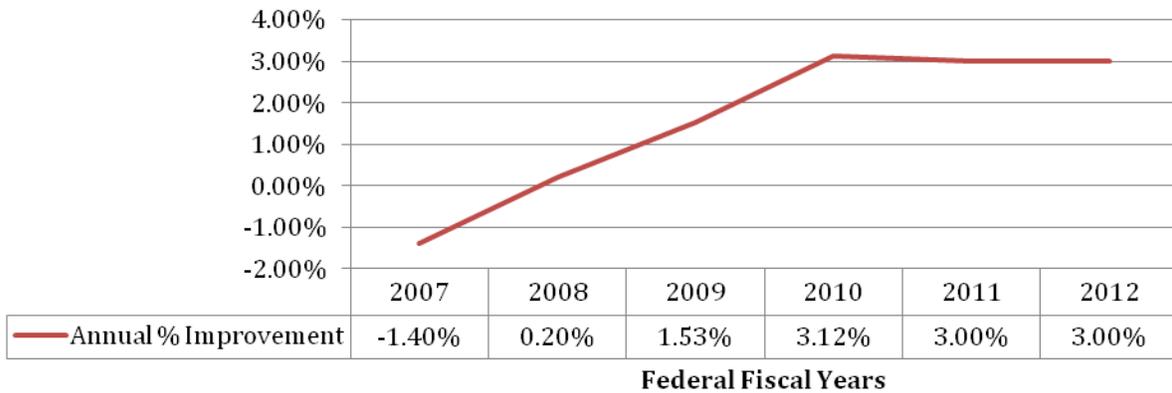
Participants involved: DOL, DPW, Sustainable Fort Carson, GSA, Southern Colorado Clean Cities Coalition

**Objective ST3: Improve transportation fuel efficiency**

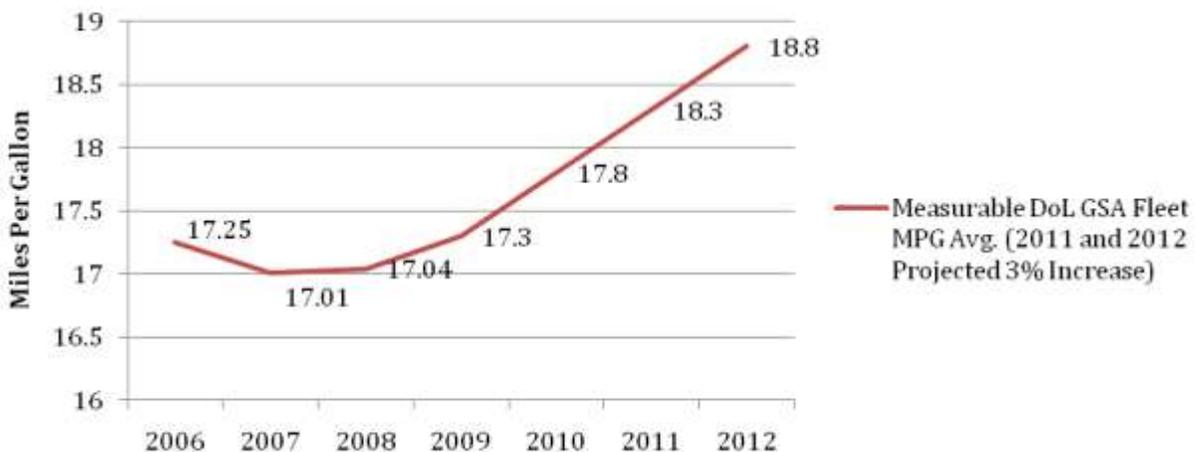
**Target by FY12: (1) Improve non-tactical government fleet average fuel economy annually by at least 3% and (2) Improve non-tactical government actual fuel usage annually by at least 3%. (limited to on-road vehicles)**

**Target by FY17: Continue this level of performance annually**

**Annual % Improvement DoL's GSA Fleet  
(2011 & 2012 Projected)**



**DoL GSA Fleet Avg. by FY**



Details on Objective Target Graphs

**Measure:** % annual improvement in DoL's GSA fleet vehicle fuel economy; *actual fuel usage not yet available.*

**Scope:** The measure includes GSA fleet vehicles only for which manufacturer / EPA fuel economy standards are available, with the exception that NEV vehicles received in FY10 were conservatively estimated at 30 MPG equivalent, reflecting an approximate 75% reduction from actual MPG equivalent due to their limited use capabilities.

**Source:** EPA estimated fuel economy, revised for greater accuracy, 2009 ([www.fueleconomy.gov](http://www.fueleconomy.gov))

**Baseline:** DoL's GSA fleet of FY2006

**Limitations:** The measure excludes heavy vehicles not receiving an EPA rating (heavy vans/trucks/buses): tactical/mission vehicles; construction vehicles; emergency response vehicles (fire); other vehicle fleets on Fort Carson (DFMWR, AAFES).

**Verification & Validation:** Sustainable Fort Carson verifies the information through DoL's GSA roster.

#### **Initiatives in support of Obj. ST3 FY10/11**

ST3.1 Review organizational needs and provide the most fuel efficient vehicle possible to meet mission customer needs in FY10/FY11/FY12 (DOL)

ST3.2 Implement the recommendations of the one-way traffic vehicle study to reduce traffic congestion, reduce vehicle idling, and improve vehicle economy in FY10 (DPW)

ST3.3 Add additional electric vehicles to the fleet in FY10/FY11/FY12 (DOL)

ST3.4 Educate drivers about the negative impacts of unnecessary vehicle idling on air quality, fuel usage, fuel economy and cost in FY10/FY11/FY12 (ISRO/DPW)

ST3.5. Review how Fort Carson can measure transportation energy efficiency considering energy use per passenger mile rather than vehicle efficiency and implement passenger mile efficiency measures and goals when available.

Participants involved: DOL, DPW, ISRO, GSA, IMCOM