

Goal 2: Sustainable Transportation Five-Year Plan

Sustainable Transportation

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

The long term goal for this Five-Year Plan is to reduce automobile dependency and provide balanced land use and transportation systems by 2027 with interim goals. The desired end state is to enhance quality of life and support rapid deployment, increase viable alternatives to urban sprawl and associated single occupancy vehicles, decrease on- and off-post travel-time, and reduce adverse air emissions.

Background

The original goal from the Sep 2002 sustainability conference related to sustainable transportation is:

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

This goal has a cousin in the goal for sustainable water and energy use. However, the objective in that goal is to provide for alternative fuels, whereas this goal is focused on how to use automobiles less, thereby creating less pollution as well as reducing traffic congestion on and off the Installation.

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 typically equates to less time spent with families. 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 magnitude of these quality of life issues.

The Natural Step System Conditions

1. Nature is not subject to systematically increasing concentrations of substances extracted from the earth's crust.
2. Nature is not subject to systematically increasing concentrations of substances produced by society.
3. Nature is not subject to increasing degradation by physical means.
4. Human needs are met worldwide.

The sustainable transportation goal supports all of the System Conditions. As buses and carpools are used in lieu of single occupancy vehicles, fewer fossil fuels will need to be extracted from the earth's crust, working toward System Condition 1. System Condition 2 is supported by the decrease in the number of personal vehicles used and disposed of; and the decrease of wear and tear on vehicle parts, such as tires that eventually go to the landfill. Adding just one extra person per vehicle could reduce the amount of pollution emitted from automobiles by half. In addition, paving over natural landscapes for freeways and water runoff from the freeways severely degrades nature. Prevention of the construction of more freeways by reducing the number of cars using them will support System Condition 3. Carpooling creates friends and allows neighbors to get to know each other. It also reduces individual gasoline bills and automobile repairs, which allow for other human needs to be better met, supporting System Condition 4. Sustainable transportation supports all of the system conditions in many other direct and indirect ways.

Challenges and Barriers

- 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)

Strategies

- Address administrative policies that encourage individual transportation
- Enhance infrastructure that encourages sustainable transportation
- Increase number of pedestrian pathways
- Explore telecommuting possibilities
- Create more opportunities for teleconferencing and video conferencing
- Create flexible work schedules
- Research opportunities for carpooling and shuttle use

Areas of Overlap

- Sustainable Energy
- Master Planning
- Hazardous Air Pollution Reduction
- Partnerships
- Procurement

Objectives, Initiatives, Steps and Resources

Objective 2.1: Reduce the number of automobiles entering the Installation by 25 percent by 2007.

Land use will need to change so that in the future automobiles are less vital than they are today. Co-locating activities is one way to support this effort. Fort Carson activities supported sustainable transportation in the early years through building barracks, dining facilities and training areas all within walking distance of each other. Perhaps some of the practices of the past should be re-examined.

Administrative activities can support alternative modes of transport as much as physical means. Identifying who travels where and when is key in determining how to reduce the number of automobiles on the road at any given time. This will require the support of Fort Carson's command as well as external agencies, such as RideFinders.

Initiative 2.1.1: Baseline data for number of cars that enter the Installation on an average yearly basis.

Lead: DOL

Action Agents: DPW, Provost Marshal's Office (PMO)

Steps	Resources Needed	Time/Cost
Install counters at all gates		40 hours
Develop a normalization protocol		10 hours
Analyze data and organize into a presentable format for yearly analysis and comparison		10 hours

Measure: Complete data set on the number of vehicles entering the Installation beginning with calendar year 2004.

Initiative 2.1.2: Reduce administrative actions that support individual transportation.

Leads: DGC, Chief of Staff

Action Agents: DPTM/G3

Steps	Resources Needed	Time/Cost
Move physical training (PT) to the last hour of the day.		
Reorient troops to change in PT hours		

Measure: 90% of troops are performing PT at the last hour of the day by 2007.

Initiative 2.1.3: Enhance infrastructure that encourages sustainable transportation.

Leads: DPW, DOL

Action Agents: DPW, DOL

Steps	Resources Needed	Time/Cost
Prevent all parking close to buildings by establishing a fee/permit program		
Provide AFVs for on-post travel from building to building		
Work with Master Planning for long term changes that create paths, establish routes for biking, set up bike racks, etc. that encourage biking and walking		
Create an awareness program for Fort Carson personnel to understand how to use alternative modes and that they exist.		

Measure: Yearly increase in the number of people who acquire permits, use AFVs for on –post travel, and use bike and foot paths.

Initiative 2.1.4: Increase carpooling, city bus, and shuttle use.

Leads: DOL, PMO

Action Agents: DOL with DECAM and El Paso County Rideshare Assist

Steps	Resources Needed	Time/Cost
Work with RideFinders to assist with carpooling needs		
Re-establish awareness program and promote Fort Carson rideshare list		
Create incentive program for sharing rides (coupons, gift certificates, etc.)		
Require all soldiers, civilians and contractors to register with ridefinders		
Rearrange work schedules to accommodate carpooling.		
Provide shuttle schedule for off-post trips to lunch alternatives, quick shopping areas, and common quick errand locations		

Measure: 10 percent increase each year in the number of shuttle riders, carpoolers, and city bus riders.

Goal 2 - Sustainable Transportation: Reduce automobile dependency and provide balanced land use and transportation systems

Objective 2.1: Reduce the number of automobiles entering the Installation by 25% by 2007.

Measure:

By 2007, the number of automobiles entering the Installation has been reduced by 25% from a 2004 baseline.

Target: 6-25 Years

40% reduction in POVs entering post
40% increase in alternative modes
Alternative mode network in place

Target 1-5 Years

Carpools and bus riding increased by 25%
POVs entering post reduced by 25%

Baseline FY 2001

Unknown, but very little carpooling and bus riding.
Infrastructure that supports POVs

Initiatives:

Baseline data for the number of cars that enter the Installation on an average yearly basis
Reduce administrative actions that support individual transportation
Enhance infrastructure that encourages sustainable transportation
Research opportunities for carpooling, city bus and shuttle use
Restricted/limited parking
Convenient post shuttle system