

SECTION X.

Sustainability

Growth and operational change at Fort Carson, the region's largest employer, will affect the economy and the quality of life in the Pikes Peak region well beyond the currently planned troop increases. Phase I of the Fort Carson Regional Growth Plan suggested continued monitoring of Pikes Peak area quality of life indicators to ensure long-term regional sustainability and maintain quality of life. In addition, the Plan also suggested ongoing coordination between Fort Carson and local communities in order to ensure that sustainability efforts are shared between the Post and the local communities.

In the early stages of this Phase II effort, the Sustainability Partnership Group, consisting of Fort Carson Sustainability representatives, business, non-profit and civic leaders, concluded that sustainability was too broad a term for the purposes of the Growth Plan. The group further agreed that the Phase II efforts should focus on sustainability as a stimulant to, and outgrowth of, economic development, and that Phase II should identify synergies between sustainability efforts at Fort Carson and the surrounding communities.

Objectives

Fort Carson is recognized as a national and international leader of sustainability among military installations because of its long term sustainability goals and its sustainability accomplishments. However, in order for the installation to meet some of its ambitious sustainability goals, it needs assistance and support from the surrounding communities. The purpose of the Sustainability Section is to identify opportunities where the growth of Fort Carson and the resulting regional economic expansion can also stimulate regional sustainability and create broader economic development opportunities in the Pikes Peak region, while helping the installation reach some of its sustainability objectives. It serves as a first step for the region in becoming more collaborative, focused and strategic in its view of both sustainability and economic development options.

In the development of this section of the Growth Plan, the Study Team noted marked inconsistency in the use and definition of the term "sustainability." The term sustainability means different things to different people across the Pikes Peak region.

It should be noted that for the purposes of this analysis, sustainability is not narrowly defined as addressing only environmental concerns. Sustainability, as used here, represents efforts to balance economic vitality, community health and well-being, and stewardship of the natural resources and environment. Sustainability's focus on the "triple bottom line" (economy, community and environment), broadly addresses long-term socioeconomic needs of the region. This section of the Growth Plan identifies the opportunities that exist or can be created by the integration of regional sustainability, economic development and expansion at Fort Carson.

Methodology

The findings and recommendations of this section were heavily influenced by meetings with combined Sustainability and Economic Development partnership groups, which reviewed and reacted to input derived primarily from a series of individual, small-group and large-group interviews. In addition, planning documents from the region and similar efforts in Colorado and nationwide were analyzed.

In total, more than 40 individuals participated in the various interviews and meetings. The individuals represented a cross-section of community, government, military, sustainability, business and economic development organizations within El Paso, Fremont, Pueblo and Teller counties. Organizations that participated included:

- Action 22
- Catamount Institute
- City of Colorado Springs
- City of Fountain
- City of Pueblo
- Colorado Springs Economic Development Corporation
- El Paso County
- Fort Carson
- Greater Colorado Springs Chamber of Commerce
- Oliver & Co.
- Pikes Peak Sustainable Business Network
- Pikes Peak Workforce Center
- Pueblo County
- Sierra Club
- Smart Growth Advocates of Pueblo

After the Sustainability and Economic Development partnership groups agreed with the refined focus of this effort, targeted research continued with five group interviews in June and July 2009. Individuals participating in these interviews were leaders representing the local government, economic development, business and sustainability communities in the region. While each interview was tailored to the specific geographic and/or professional focus of the interviewees, all interviews focused on four key areas:

1. Regional lessons to be learned from Fort Carson's sustainability efforts;
2. Existing economic development efforts;
3. Perceptions of sustainability by the business and economic development communities; and
4. Opportunities and constraints.

Input gathered in these interviews was presented to a combined meeting of the Economic Development and Sustainability partnership groups. Feedback and reactions from this combined group, along with national best practices research and a review of related regional efforts, helped inform the development of draft recommendations that were reviewed and refined by PPACG staff before being presented to a breakout session at the Southern Colorado Sustainability Conference in November 2009.

As part of the Southern Colorado Sustainability Conference, the project team facilitated a breakout session with about 20 conference attendees. During the breakout session, participants helped refine, remove and offer new recommended opportunities for consideration, which were further reviewed and revised by the partnership group.

Overview of Fort Carson’s Sustainability Goals and Programs

Before discussing how growth at Fort Carson can influence long-term economic development and sustainability in the region, it is important to understand Fort Carson’s current sustainability efforts. This subsection provides an overview of Fort Carson’s existing sustainability program.

The Army recognizes that sustainable practices can improve quality of life and enhance the natural environment, but they also believe that sustainability is crucial to meeting current and future mission requirements. The Army has established a long-range environmental vision to meet its mission today and in the future, and sustainability is a foundation for this strategy.

At Fort Carson, sustainability is defined as “acting today to meet the needs of the present in a manner that allows future generations to meet their needs.” The post believes that sustainability is an integral part of fulfilling basic Soldier obligations, ensuring that they have:

- The land, water and air resources needed to train;
- A healthy environment in which to live; and
- The support of local communities, both today and in the future.

Fort Carson has been practicing environmental stewardship and community involvement for many years. In 2002 the post adopted an ambitious set of 25-year goals specifically aimed at promoting sustainable practices. Fort Carson took input from various community leaders, organizations and resource users in El Paso, Pueblo and Fremont counties in developing their sustainability program, and their overarching goal is to integrate sustainability into its daily operations, procedures and policies.

Fort Carson is a key partner in helping to pursue some of the opportunities in this report, and it is possible that the Growth Plan findings may influence some of Fort Carson’s future initiatives. This is particularly true of the areas where there is significant overlap between the goals of Fort Carson and those of this effort – areas like transportation, renewable energy, recycling/waste and energy-efficient building practices.

Fort Carson’s Sustainability Program is based on twelve goals. The program and its specific goals, as detailed in Fort Carson’s 2009 annual sustainability report, are summarized below.

Goal 1: Sustain all facility and mobility systems from renewable sources, and reduce the total water purchased from outside sources by 75 percent.

Fort Carson is committed to making its facilities and infrastructure more energy and water efficient. In one of its greatest successes toward achieving this goal, Fort Carson constructed a two- megawatt solar array, which produces enough electricity to power almost 550 homes a year. Additionally, Fort Carson has generated substantial energy savings in many of its buildings by replacing less-efficient systems, and a pilot program has been introduced to help identify future energy improvement opportunities.

Goal 2: Reduce automobile dependency and provide balanced land use and transportation systems.

By adopting initiatives that encourage more efficient and alternative modes of transportation, Fort Carson has already made strides towards achieving this goal. The completed 2027 Sustainable Transportation Plan made recommendations for a variety of new programs to maximize existing transportation infrastructure, from carpooling and car-sharing programs to enhanced transit services and the exploration of transit-oriented development opportunities. This was further complemented by a personal rapid transit feasibility study and trail and sidewalk improvements. The post is also in the process of updating its fleet with more fuel efficient vehicles, and Fort Carson plans to eventually adopt a Car-Less Mobility System.

Goal 3: Improve communication to foster understanding and attain a “Community of One.”

This goal is based on a belief that the more organizations there are working toward common sustainability goals, the better the outcome will be for the Pikes Peak region. Since adopting this goal, Fort Carson has intensified the level and frequency of its communication and outreach efforts to help promote sustainability throughout the region.

Beginning in 2010, this goal will no longer be a stand-alone objective. While Fort Carson will continue to encourage communication and cooperation, it was determined that it would be more effective for each individual Fort Carson sustainability goal to have its own strategic communication plan.

Goal 4: Enhance partnering to collaboratively develop, integrate and implement regional sustainability.

Since first adopting this goal, Fort Carson has supported regional sustainability by participating in a wide variety of forums, regional conferences, partnerships and other collaborative efforts to encourage sustainability. Fort Carson’s involvement in these activities has helped increase knowledge and understanding of sustainability while enhancing relationships between regional entities with similar sustainability goals.

Like Goal 3, this goal will no longer be a stand-alone category beginning next year; rather it will also be integrated into the remaining sustainability goals. However, Fort Carson will continue to provide ongoing partnership and support to other regional sustainability efforts.

Goal 5: Reduce the total weight of hazardous air pollutant (HAPs) emissions to zero.

Fort Carson has been working to identify and eradicate its biggest sources of hazardous air pollutants. A big part of this effort is coordinating with the Directorate of Logistics to make product substitutions so that materials like paints and brake cleaners, which contribute to air pollution, can be replaced with more environmentally-friendly products that still meet mission requirements. Fort Carson has also conducted studies to provide enhanced data and transparency on emissions in order to better identify the sources of hazardous air pollutants.

Goal 6: Further integrate sustainability principles into the Fort Carson land use planning, Real Property Master Planning, and Military Construction, Army (MCA) programming processes.

By promoting sustainable housing solutions within the community, Fort Carson has helped support the development of active, quality neighborhoods that align with mission requirements and promote environmental stewardship. As part of this goal, Fort Carson aims to complete redevelopments that maximize the use of available land and infrastructure and cluster complementary services to reduce driving needs. The post has already completed a centrally located, LEED-certified operational campus for the 1st Brigade Heavy Combat Team, as well as a wide variety of on-post, energy-efficient housing in close proximity to schools, shopping, recreation and employment.

Goal 7: All applicable facilities at Fort Carson will be high performance buildings that meet or surpass the Platinum Standard of Sustainable Project Rating Tool (SPiRiT) or Leadership in Energy and Environmental Design (LEED) rating.

Fort Carson has aggressively pursued sustainable design standards while working to educate stakeholders on the importance of implementing green building practices. The post has encouraged its engineers, architects and designers to achieve and utilize LEED-accreditation, while urging contractors to comply with sustainable building-design standards before, during and after construction.

Fort Carson hopes to make all of its facilities high-performance sustainable buildings by 2027. To that end, it has already completed a number of retrofitting projects, utilizing the LEED Existing Building standards. Additionally, Fort Carson continues to complete cost-benefit analysis studies that help measure the performance of high-performance buildings and specific sustainable building materials.

Goal 8: Key stakeholder groups are trained, compliant and motivated toward sustainability principles.

Fort Carson desires to increase the region's commitment to sustainability. The vision for this goal is for stakeholders to have an increased awareness of sustainability principles and their implications, as well as a higher degree of individual responsibility and accountability for environmental stewardship.

Accordingly, Fort Carson has participated in a number of regional events aimed at increasing education and awareness about sustainability. Furthermore, the post is in the process of analyzing a culture survey that will establish the level of knowledge and behavioral changes of key stakeholders in order to make future sustainability programs more effective.

Goal 9: All Department of Defense (DOD) and Fort Carson procurement actions support sustainability.

The Directorate of Family, Morale, Welfare and Recreation – which oversees a wide range of Soldier and family services – has taken a leadership role on this goal by educating decision-makers about the importance of sustainability and how it affects the post. As a result, several sustainable procurement initiatives have been adopted, particularly at Envision Express (a non-profit that serves the needs of Fort Carson's business operations) and Cheyenne Shadows Golf Club. Moving forward, Fort Carson plans to develop a post-wide sustainable procurement plan, as well as additional training programs on the Department of Defense Green Procurement Policy.

Goal 10: The total weight of solid and hazardous waste disposed of is reduced to zero.

By encouraging recycling, reusing equipment and taking other measures to reduce waste, Fort Carson has already made progress toward achieving this goal. With the addition of many new recycling dumpsters, recycling numbers on-post have greatly increased. Fort Carson also began partnering with a military Zero Waste Consortium to identify ways to improve recycling and reduce costs by combining resources with other regional military entities. Additionally, Fort Carson initiated Operation “Clean Sweep,” an effort to reduce waste disposal while at the same time supporting soldier deployments. Moving forward, Fort Carson has ambitious goals to investigate an organics-diversion program including a biomass-cogeneration plant and a waste-to-energy system.

Goal 11: Training Ranges (land and associated air space used for live fire ranges, maneuver, testing and development designated for Military Operations in Urban Terrain training) capable of supporting current and future military training to standard.

There are five programs that are being implemented in conjunction with this goal:

- **Army Compatible Use Buffer Program:** Aims to protect environmental resources, critical training ranges and maneuver space by pursuing a buffer zone around sensitive training areas.
- **Cultural Resources Management:** Helps to protect and expand cultural resources.
- **Prescribed Burn Program:** Uses prescribed fire to help control and limit the spread of wildfires.
- **Training Ranges:** Encourages sustainable practices on training ranges.
- **Wildlife Management:** Helps to protect and manage species at risk at Fort Carson.

Goal 12: Advance a sustainable mission and Fort Carson by adopting a Sustainability and Environmental Management System (SEMS) and by imparting (passing on) a personal commitment and enthusiasm for sustainability.

When Fort Carson first established its 25-year sustainability goals, it recognized the need for a system to ensure that the visions of each goal would be achieved. The SEMS is designed to provide a management framework that ensures adequate resources, accountability and performance in attaining Fort Carson’s sustainability goals. Each year, an internal audit of the SEMS is completed to identify areas for improvement, including education and awareness, communication, performance measurement and tracking.

Related Regional Efforts

The Pikes Peak region has a number of planning efforts related to sustainability, economic development and community planning. This report attempts to highlight the many and varied efforts in the region that promote sustainability and/or economic development. A key to the success of the sustainability/economic development task of the Growth Plan is to coordinate these various efforts in order to concentrate resources and avoid duplication of work. The following section, therefore, summarizes the most relevant related efforts in the Pikes Peak region. Additional information on these efforts (web links, materials on PPACG’s website, etc.) can be found at the end of this section.

City of Colorado Springs – 2008 Strategic Plan and Guiding Principles for a More Sustainable City

In 2008, the City of Colorado Springs City Council adopted a vision for achieving sustainable growth within the community. Their goal is to promote a sustainable and healthy future for the City through environmental excellence, energy efficiency, smart-resource consumption and the attainment of internal sustainability goals. Their vision, along with a vision for promoting economic vitality, was outlined in the City's 2008 strategic plan.

In addition, with direction from city management and input from key stakeholders, the City of Colorado Springs created the Guiding Principles for a More Sustainable City. This document guides all city-specific sustainability efforts by providing a common understanding of sustainability and a vision for the future of city operations. The principles include the following:

- Consider the long-term impacts of policy choices;
- Mitigate the negative environmental impacts of population growth and consumption;
- Implement planning policies that foster environmental quality and economic vitality;
- Make procurement decisions that minimize negative environmental and social impacts;
- Build community for successful sustainability programs and projects; and
- Develop cross-sector and regional partnerships to achieve a healthy and vibrant community.

Dream City: Vision 2020

Facilitated by Leadership Pikes Peak, Dream City is a project that identifies common community visions and values in an effort to create a better future for the region. Through public dialogue and civic engagement, the project aims to “inspire, educate and mobilize” the community.

As part of Dream City, Leadership Pikes Peak facilitated a series of visioning sessions throughout the region in 2008 and 2009. The project team collaborated closely with the Quality of Life Indicators effort to coordinate the community vision with measurable outcomes and actions. More than 100 local organizations and 3,000 citizens were involved in the effort, and in July 2009 the collective visions were presented at a summit with 300 attendees present.

Dream City developed Vision Statements for ten different categories, each of which corresponds to a Quality of Life Indicator area. Each vision statement outlines the collective vision, philosophy, orientation and goal for the corresponding topic. The categories include:

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|-----------------------|-----------------------------|
| ■ Economy | ■ Arts/Culture/Recreation |
| ■ Social Wellbeing | ■ Transportation |
| ■ Natural Environment | ■ Public Safety |
| ■ Health | ■ Community Engagement |
| ■ Education | ■ Built Planned Environment |

Economic Development Corporations

Colorado Springs Regional Economic Development Corporation. The privately-funded Colorado Springs Regional Economic Development Corporation encourages economic growth by promoting the area to new companies and industries. The organization provides potential employers with comprehensive relocation and expansion services, including city comparison data, information regarding facility availabilities, site visit assistance, planning and permit meetings with city officials, and assistance in identifying business incentives.

Fountain Economic Development Commission. The Fountain Economic Development Commission advises City Council on matters that affect the City's economy and job base. Duties include formulating city goals and objectives, adopting and implementing economic development plans, encouraging the diversification of the economy and performing other activities that help to promote economic development. Economic development initiatives are also incorporated into Fountain's Comprehensive Development Plan and Strategic Downtown Plan.

Fremont Economic Development Corporation. The Fremont Economic Development Corporation provides economic development leadership and expertise to businesses and communities in Fremont County. Their mission is to promote a strong economy in Fremont County by providing support and leadership to help grow and maintain primary job opportunities. Among many other duties, the Fremont Economic Development Corporation primarily assists its member communities in projects involving new business locations, existing business retention and expansion, and new business start-ups.

Pueblo Economic Development Corporation. The Pueblo Economic Development Corporation (PEDCO) is a non-profit organization dedicated to promoting the Pueblo area to businesses considering a new location or expansion. With a membership comprised of a wide range of community leaders, the main mission of PEDCO is to attract, retain and expand primary jobs. The organization provides a wealth of information to potential employers through its annual Data Book, which includes information on everything from site selection and construction costs to education and transportation.

Fountain Creek Watershed Plan. The Fountain Creek Watershed is a 927-square mile watershed located along the central front range of Colorado that drains south into the Arkansas River at Pueblo. Since November 1998, PPACG, the Pueblo Area Council of Governments (PACOG) and a variety of other stakeholders have been working collaboratively to address the problems of erosion and flooding in the watershed.

The Fountain Creek Watershed Plan, developed by PPACG, was initiated in 2000 through a grant from the Colorado State Soil Conservation Board. The plan describes growth, development trends and health characteristics of the Fountain Creek Watershed. The completion of the plan and development of the Fountain Creek Watershed District marked a notable success in achieving regional collaboration among a variety of diverse entities.

Operation 60ThirtyFive. Launched by a collaborative group of 17 private and public organizations, Operation 60ThirtyFive is a comprehensive strategic economic development plan for the Pikes Peak region with a particular focus around Colorado Springs. The plan identifies strategies to support a successful, collaborative economy. It emphasizes the importance of regional cooperation, entrepreneurship and a skilled workforce.

One of the report's key recommendations is for the Pikes Peak region to break down longstanding silos and work collaboratively towards a common economic vision. The plan states that collaborative action is a crucial element in strengthening the region's economic competitiveness.

The plan focuses on seven core strategy areas:

- Enhancing community collaboration and integrating leadership;
- Expanding resources to foster entrepreneurship;
- Positioning the Pikes Peak region as a talent magnet;
- Sharpening connections to the economic development agenda at regional universities, colleges and community colleges;
- Raising the Pikes Peak region's international presence;
- Increasing the positive awareness of the Pikes Peak region as a viable business location and elevating the quantity and quality of employment opportunities through expanded attraction and retention/expansion programs; and
- Sector-specific strategies for each targeted industry.

The plan also completed a Target Industry Analysis to identify the industries that represent the greatest economic opportunities for the region. They include:

- Software and Information Technology
- Aerospace, Defense and Homeland Security
- Renewable Energy
- Sports, Health and Wellness
- Emerging Industries and Entrepreneurs

Pikes Peak Sustainability Indicator Project. The Pikes Peak Sustainability Indicator Project (PPSIP) is a partnership between Fort Carson and the region's governments, businesses and citizens. While Fort Carson adopted its own set of sustainability goals in 2002, the post also recognized that its success was highly dependent on community cooperation. The PPSIP was part of an effort to enhance collaboration between Fort Carson and the community.

The project's report, published in 2005, provides local communities with information on how to measure and manage their progress towards sustainability goals. It also discusses how the community can adopt some of the sustainability concepts and environmental strategies that are currently utilized by the Army.

Pikes Peak Sustainable Business Network. As part of the Catamount Institute, a local nonprofit dedicated to promoting ecological stewardship, the Pikes Peak Sustainable Business Network is a membership network of business professionals seeking to support sustainable business practices and to promote the need for these practices in the Pikes Peak region. The organization provides networking opportunities, information, resources and a number of other tools related to sustainable business practices. The network's goals include helping the community to:

- Achieve a competitive business advantage from improved environmental performance, particularly through process efficiency;

- Develop new business opportunities through environmental stewardship;
- Support the development and adoption of sustainable technologies and systems;
- Stimulate consumer awareness and commitment to buying sustainable products and services;
- Adopt triple-bottom-line accounting and reporting to raise awareness of the true costs and benefits of sustainable business practices; and
- Make sustainability a foundation of business strategy.

PPACG Transportation Plan

PPACG recently updated its long range Transportation Plan to provide a strategy for the region’s transportation system through the year 2035. The plan’s vision was recently updated and is defined as creating “a sustainable multi-modal transportation system that meets regional mobility and accessibility expectations as essential elements of the Pikes Peak Area’s quality of life.” The plan’s mission is to “plan multi-modal transportation facilities and services that efficiently move people and goods, support economic vitality, and sustain and improve the quality of life in the Pikes Peak region.” The Plan establishes priorities for all modes of travel in the region and addresses the following issues:

- Safety for all modes of transportation
- Metro Transit/Metro Mobility bus systems
- Freight movement/truck routes
- Corridor preservation
- Mobility and accessibility throughout the region for all of its citizens
- Revenue resources for funding improvements
- Maintenance of the existing system
- Transportation for persons with disabilities and older persons
- Impacts of population and job growth on the transportation system
- Increasing efficiency of the existing transportation system and managing congestion
- Access to the airport

Quality of Life Indicators for the Pikes Peak Region

Led by the Pikes Peak United Way and Leadership Pikes Peak, the Quality of Life Indicators (QLI) project examines the factors that make a community great. Through an annual report, the effort identifies quantitative measures of the quality of life in the Pikes Peak region and endeavors to track these indicators over time.

Now in its third year, the project relies heavily on volunteers who participate in Visioning Councils. These groups help to identify the metrics and indicators that should be measured to gauge the community's success. Nine different Visioning Councils are convened regularly, each relating to a different category that influences the community's quality of life. The categories include:

- Growing a Vibrant Economy
- Promoting Social Wellbeing
- Preserving the Natural Environment
- Sustaining a Healthy Community
- Achieving Educational Excellence
- Enjoying Arts, Culture And Recreation
- Moving Around Efficiently
- Keeping the Community Safe
- Fostering Community Engagement

The report, published annually, makes a conscious effort to present only the facts, although in the most recent edition, the project team also identifies indicators that are perceived to be showing a trend of success and those that reveal areas of concern.

The data in the QLI report have been used to help drive other community initiatives, including Dream City 2020 and Operation 60ThirtyFive.

Sustainability Action Plan for the Pikes Peak Region (SNaPP)

The Sustainability Action Plan for the Pikes Peak Region (SNaPP) is still in the early stages of development. Initiated by several of the region's community leaders, SNaPP was formed out of a desire to encourage collaboration among the myriad sustainability efforts, plans and institutions that oftentimes work independently of one another and end up duplicating efforts.

Although its exact goals and scope are still being developed, the SNaPP effort aims to help create regional sustainability goals that provide a framework for identifying how individuals, businesses, institutions and governments can work in partnership to achieve their mutual sustainability goals. By defining measurable goals and energizing broad stakeholder support, the SNaPP effort plans to tap into the region's natural and human capital to create a more sustainable future for the Pikes Peak region.

Other Related Efforts

In addition to the efforts described above, there are a wide range of other programs, plans and initiatives related to regional economic development and sustainability. As the opportunities in this report are explored, there should be an awareness of, and coordination with (as appropriate), the following efforts.

It's important to note that this list is not necessarily inclusive of all sustainability projects and organizations in the region, but it includes many of the main efforts that should be considered.

- Colorado College Sustainability Plan
- Colorado Springs Conservation Corps
- Colorado Springs Procurement Technical Assistance Center
- Colorado Springs Utilities Climate Action Plan
- Mayor Rivera's Green Economy Community Task Team

- Green Cities Coalition of the Pikes Peak Region
- Manitou Springs Sustainability Plan
- Pikes Peak Workforce Center
- PACOG Transportation Plan
- Recycling Coalition of Colorado Springs
- Sierra Club – Pikes Peak Group
- South Academy Blvd Intermodal and Re-Development Study
- Southeast Colorado Renewable Energy Society
- Southern Colorado Clean Cities Coalition
- University of Colorado at Colorado Springs – Sustainability Strategic Plan
- Veteran’s Green Jobs

State and Federal Influences

Local and regional sustainability and economic development efforts are most effectively addressed in the context of state and federal legislation/regulations/initiatives.

With the Obama Administration’s lead on promoting renewable energy, environmental protection and urban redevelopment, other federal agencies and legislators are following suit by actively promoting sustainable practices and programs.

Opportunities to harness these federal and state opportunities may position the region well. The current Administration and numerous federal initiatives are encouraging and requiring local and regional governments to address sustainability across a range of efforts, including housing, environmental, transportation.

Therefore, local and regional planning efforts will be incentivized and/or required to conduct more regional coordination and collaborative planning in order to avoid potential stringent federal regulations as well as obtain needed resources for transportation, housing, environmental, and other local needs.

Federal and state trends toward energy efficiency, coordination of housing transportation planning and stricter environmental regulations are among the initiatives that will require more coordination at the local and regional level.

As the Pikes Peak region address sustainability and economic development in the context of Fort Carson growth, it would benefit the region to understand current and future trends at the state and national level in order to ensure that the region can move forward in a proactive manner, rather than being forced to react to federal/state mandates.

Federal Livability Partnership

On June 16, 2009, the Environmental Protection Agency (EPA), U.S. Department of Housing and Urban Development (HUD) and U.S. Department of Transportation (DOT) established an interagency partnership to foster sustainability through better coordination of federal housing, transportation, and environmental programs. This interagency partnership has defined core principles of livability and

developed a partnership agreement that will guide the agencies' efforts in order to improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide. This partnership will also identify barriers to coordination, review opportunities to integrate existing planning requirements and focus research and technical assistance programs in support of sustainable communities.

Livable Communities Act

On August 6, 2009, Sen. Christopher Dodd (D-Conn.) introduced and Sen. Michael Bennet (D-CO) co-sponsored the Livable Communities Act (S. 1619). This legislation would provide a multi-year authorization for sustainability planning grants that will help towns and regions cut traffic congestion, reduce greenhouse gas emissions and fuel consumption, protect green spaces, create more affordable housing, and revitalize existing Main Streets and urban centers. Key provisions of S. 1619 include: funds for towns and regions to develop long-term comprehensive plans that integrate transportation, housing, land use, and economic development; funds for implementation of sustainable development projects focused on affordable housing, transit-oriented development, transit, bike-ped projects, and brownfield and infill redevelopment; research and technical assistance for regional livability initiatives; and the creation of an interagency council on sustainable communities.

U.S. Economic Development Administration Efforts

The U.S. Economic Development Administration (EDA) is also working to implement President Obama's policy priorities with efforts to accelerate job growth and lay a foundation for robust economic growth while establishing a framework for sustainability in local economies. The EDA seeks to provide assistance to local economies that embrace collaborative, integrated, regional approaches and that recognize that regional and cross-functional collaboration among government agencies, private and non-profit sector are essential. The EDA also established a new program, the Global Climate Change Mitigation Incentive Fund, which supports projects that foster economic development through advancing the green industry in distressed local economies.

Federal Leadership in Environmental, Energy and Economic Performance Executive Order

Another development in sustainability was the signing of Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," wherein federal agencies will be given 90 days to set 2020 greenhouse reduction goals and are required to "lead by example" in promoting energy security and safeguarding environmental health. The E.O. states:

"Federal agencies shall increase their energy efficiency; measure, report and reduce their greenhouse gas emissions from direct and indirect activities; conserve and protect water resources through efficiency, reuse, and stormwater management; eliminate waste, recycle, and prevent pollution; leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials, products, and services; design, construct, maintain, and operate high performance sustainable buildings in sustainable locations; strengthen the vitality and livability of the communities in which Federal facilities are located; and inform Federal employees about and involve them in the achievement of these goals." Executive Order 13514 of October 5, 2009

By fulfilling this Executive Order, the Federal government will leverage its purchasing power to support environmentally friendly goods and services and efficient building design, support community livability, and build on the momentum of the Recovery Act to spur entrepreneurialism and job creation.

Strengthening Federal Environmental, Energy and Transportation Management Executive Order

As directed by Executive Order 13423, “Strengthening Federal Environmental, Energy, and Transportation Management,” (signed in December 2007 by former president George W. Bush) federal agencies, including the Department of Defense, made efforts and goals to reduce energy, water and petroleum intensity, increase renewable energy usage, and implement an Environmental Management System (EMS) to monitor progress towards these goals. The DoD also issued a “Green Procurement Policy” recommending that life-cycle analysis and environmental and social impacts be assessed in purchase decisions.¹ With direction from the DoD and mandates from the Bush and Obama administrations, all military branches are now assessing sustainability in their installation management and operations. The Department of the Army has defined sustainability as a strategy to address national security and stability and has created goals to foster a sustainability ethic, strengthen operations, minimize impacts and costs, and enhance well-being for the Soldiers, families and communities through leadership in sustainability.

State Trends

The State of Colorado, with the Governor’s Energy Office (GEO) in the forefront, is working to advance Colorado as a leader in the “New Energy Economy.”

In 2007, Colorado Governor Bill Ritter helped create the Colorado Climate Action Plan with ambitious goals such as reducing the state’s green house gas emissions 20 percent by 2020, the state government’s energy consumption 20 percent by 2012 and state’s petroleum use in state vehicle fleets 25 percent by 2012. Many jurisdictions in Colorado have already adopted the state’s Climate Action Plan or have created their own action plan with similar benchmarks and goals.

Recent state legislation has eased some logistical hurdles in achieving some of these goals and provided funding through the GEO, the Department of Local Affairs, and other agencies to assist programs and planning efforts related to alternative fuels, renewable energy projects, energy efficiency, smart growth and efforts to work towards the Climate Action Plan goals.

National Best Practices Analysis

Many communities and regions across the United States have developed or initiated successful sustainability programs. The following section outlines several efforts that may have relevance for the Pikes Peak region. This analysis identifies successful practices and lessons learned in the development of a sustainability program.

These practices will provide helpful guiding principles as the region works to pursue the opportunities identified in this report – as well as in implementing other future efforts in the Pikes Peak region. By considering and leveraging (when appropriate) these best practices, future efforts are likely to be more successful, effective and better supported by the community.

¹ The Green Procurement Strategy was updated in November, 2008, and is available at: http://www.fedcenter.gov/_kd/Items/actions.cfm?action=Show&item_id=12371&destination=ShowItem

Plans Evaluated

Eight programs with similar goals to those of the Growth Plan's sustainability and economic development task were evaluated. The plans were selected based on their successful results and/or their relevance to the Pikes Peak region – either due to their proximity or because of similar military influences. The analysis focused on identifying best practices in the following five areas:

- Process/approach to develop the vision/plan
- Metrics used to measure progress, success and failure
- Focus industries and rationale for selecting them
- Methods of implementation (e.g. policy changes, public outreach, infrastructure projects, etc.)
- Goal/vision statements for similar efforts

More information and links to download the complete plans are available at the end of this section. The following eight plans were evaluated:

Albuquerque, NM. AlbuquerqueGreen is the City of Albuquerque's sustainability program. This comprehensive sustainability plan provides the vision and tools for the city to promote energy conservation, clean energy production and use, and conservation technologies. The city has set long-term goals related to a variety of focus areas that have resulted in many successes. Legislation was passed to set aside 3 percent of city bond revenues for energy conservation and renewable energy, and city leaders signed executive orders prohibiting the purchase of single serving bottles of water and directing that all city motor vehicles be powered by alternative fuel. City agencies have also worked with private industry to recruit green building supply industries, and a major Urban Forest Improvement Initiative was adopted. Progress towards the plan's success is tracked through a highly transparent website. In order to attain widespread buy-in, the city collaborates with many other community and non-profit organizations in pursuing their sustainability goals.

Austin, TX. The Downtown Austin Plan is an effort to develop a strategic vision for the city's downtown and create the best implementation strategy to achieve that vision. Phase One of the plan identifies opportunities and challenges facing downtown Austin. Phase Two focuses on the implementation of the high-priority opportunities. The Downtown Austin Plan is based on input from key stakeholders and public meetings but also relies heavily upon surveys of local residents to generate public buy-in during Phase One. The plan was implemented through various policy changes, such as the establishment of an Office of Economic Growth and Redevelopment Services to manage new development policies and promote sustainable growth. It also initiated short-term pilot programs to create immediate successes.

Denver, CO. Greenprint Denver is intended to provide leadership and practical solutions to ensure a prosperous community where people and nature thrive. The program, led by the city with a variety of community and business partners, was developed to determine objectives that can be tracked, measured, refined and reported while charting the city's course over five years. Denver conducted an intense six-month planning process that inventoried City activities, researched national best practices, and determined priorities and metrics for a five-year span. The plan effectively announces accomplishments for several well-defined areas of focus and has successfully implemented policy changes to help achieve its goals.

Fort Collins, CO. The Fort Collins Action Plan for Sustainability is founded on the principle that sustainability goes beyond environmental planning to include economic and social health. The plan provides recommended policies, goals and targets for advancing sustainability within all city operations for

several years into the future. The plan focuses on setting goals and targets on a realistic schedule and identifying the focus areas within the city's purview to analyze and make recommendations for action. This plan does have a potential drawback: it was developed by an internal city team and had limited input from the public and businesses sectors.

Portland, OR. In 2004 the Portland Office of Sustainable Development (OSD) completed a Strategic Plan that revised its mission and identified high-level goals, core service areas, a unifying vision and key values. Portland's plan was developed with input from focus groups, OSD staff, stakeholders, clients and partners. The plan is wide-reaching, focusing on a broad range of policy areas ranging from climate protection to sustainable food and utilizing an array of implementation programs and resources for neighborhoods and the business community. Portland's plan is constantly updated as various levels of goals, deliverables and deadlines are reached. These successes are then publicized so that stakeholders are regularly made aware of important milestones.

Santa Monica, CA. Santa Monica's Sustainable City Plan was created in 1994 to enhance resources, prevent harm to the natural environment and human health, and to benefit the social and economic well-being of the community for the sake of current and future generations. The Sustainable City Plan was primarily developed by the city's Task Force on the Environment and city staff, with some public input. The plan contains a set of eight goal areas with specific indicators to measure progress. The plan also has eight guiding principles to evaluate long-term sustainability and influence policy decisions that range from the protection of the natural environment to encouraging businesses to adopt sustainable practices.

Seattle, WA. Sustainable Seattle is a non-profit organization dedicated to enhancing the long-term quality of life in Seattle. The organization achieves its mission through three types of recommendation categories: awareness, assessment and action. In celebration of its 15-year anniversary, Sustainable Seattle recently issued its first sustainability report that details the environmental, social and economic performance of Sustainable Seattle. The organization convened local and regional governments, businesses, and the public to create a civic agenda that reflects the partnerships forged with urban centers and neighborhoods. The result is a connected community network. The group established a set of economic, social and environmental indicators to monitor progress and created initiatives based on those indicators that leveraged the synergies between individuals or organizations within the community.

Sustainable Sandhills. Sustainable Sandhills is a non-profit organization comprised of Fort Bragg, the North Carolina Department of Environment and Natural Resources (NC DENR) and other area stakeholders to raise awareness about the environment, economy and quality of life through programs ranging from recycling to eco-tourism. It engages both governmental and non-governmental organizations, the military, and the region's residents and businesses in a grassroots effort for local sustainability. Sustainable Sandhills partnered with six surrounding counties and held a widely-attended conference to introduce the initiative and form steering committees to turn ideas into action. Many of the plan's metrics base success on the number of individuals who take ownership of a project in one of the plan's five focus areas.

Key Best Practices

There are numerous factors (cultural, political, economic, etc.) that influence the approach and success of these efforts. Therefore, no specific effort should set the bar for best practices in the development and implementation of a sustainability program for the Pikes Peak region. All of the efforts have more – and less – successful aspects that can be learned from.

Overall, the greatest successes stemmed from the efforts that provided educational and financial resources to initiate sustainable practices or from those that implemented key policy changes, fueled by broad and strong local buy-in to spur action.

In general, five overarching best practices were identified.

Best Practice #1: Encourage deep collaboration between local governments, community organizations and businesses to conduct an intensive and determined planning process.

The most successful plans recognized early on that time should be taken to conduct necessary research and community outreach. Before taking action, one must determine the structure that works best for the program, the issues on which to focus and the key groups with which to partner. It is important to partner with various local- government and community groups, non-profits and business organizations early in the process to ensure their buy-in.

The Pikes Peak region is full of environmental, business, service-oriented non-profits and military groups that could be included as partners and given areas of ownership or accountability over implementation programs. A core network of many of these organizations already exists and has worked closely together on other efforts. However, it will be important to solidify and expand those participating to ensure that the network is not just “more of the same,” and that it accurately reflects the geographic, socioeconomic and issue-centric diversity that exists in the region.

Best Practice #2: Develop adaptable goals and utilize a broad set of metrics to measure and publicize progress on a regular and timely basis, while engaging the community to ensure accountability.

Developing metrics to measure progress is a crucial part of a successful sustainability effort. Metrics or indicators should consider community or local perception of the effort, as local support can make or break long-term projects. Successful programs were not afraid to show failure in their reporting, but they also identified steps to turn that failure into success.

Rather than locking in overly-directive metrics and targets, successful sustainability efforts typically built flexibility into their goals. This allowed them to adapt to a measured failure or changing dynamics. As the past few years have shown, conditions, especially economic conditions, can change therefore measurements of success should be flexible.

Plans that utilized a regular, transparent reporting system were able to quickly identify and publicize areas of success and areas in need of improvement. This helped to hold the community accountable to its goals. Regular progress reports also helped to promote community ownership of projects and provided a means to tap into local expertise and knowledge. An effective reporting system can provide valuable feedback on the community’s perception of a project and its effectiveness.

In the Pikes Peak region, the Quality of Life Indicators Project and the Dream City efforts will provide a good starting point for determining and tracking metrics.

Best Practice #3: Define and hone the focus industries. Focus on the dynamics of the region, and prioritize industries that are likely to be most directly impacted by sustainability programs.

Aside from the process area (Best Practice #1), this area is probably most influenced by the specific dynamics of the region. The most effective sustainability plans did a good job of evaluating the daily impacts of key local issues and focusing their attention on those areas. Similarly, it is important to identify

the region's largest economic drivers and the industries that contribute the most to the culture and "feel" of the region or those that involve many different levels of the community. The most successful sustainability efforts concentrated on these areas in order to remain relevant to the community and have the greatest possible impact.

Operation 60ThirtyFive provides the region with a strong base from which to leverage this best practice. However, more should be done to ensure that the effort truly reflects the goals and focus of the entire region and not just the City of Colorado Springs.

Best Practice #4: Determine methods of implementation that directly and quickly impact focus industries and attract local involvement.

The most successful approaches to implementing sustainability efforts in other regions included:

- Creating pilot programs that could be developed quickly and, in turn, show rapid success
- Initiating policy changes that influenced sustainable building methods, water consumption and/or power requirements
- Developing community action teams that addressed local needs and helped to educate existing businesses and community organizations on how to become more sustainable
- Creating a job training program for all levels of sustainable jobs from waste collection to solar-panel installation
- Training program staff to consistently communicate about its sustainability efforts
- Educating the public to increase awareness of the effort

Many of these best practices for methods of implementation helped inform the Potential Opportunities chapter of this report.

Best Practice #5: Create a succinct goal or vision statement that articulates the program's overall effort in a way that involves the community and is understandable to the public.

The most successful sustainability efforts considered input from both program leadership and the broader community to develop a goal or vision statement that is easily communicated and comprehended. They were generally brief, only a sentence or two, and clearly communicated what the overall effort intended to accomplish. Clear, concise statements like these went a long way toward helping to increase community understanding, support and buy-in to the effort.

Challenges

Input gathered throughout the development of this report identified a number of challenges that will influence the likely success of any effort to capitalize on regional sustainability or economic development opportunities from the growth at Fort Carson. These challenges should be considered as new opportunities are pursued.

The most prominent challenges identified by stakeholders include the following:

- **Confusion over the term “sustainability” complicates buy-in and support for sustainable principles.**
 - There are broad inconsistencies in the intended meaning of the term. Frequently, people think of “sustainability” as just environmentalism, instead of understanding that sustainability equally focuses on the triple bottom line of society, environment and economy.
 - After years of unsustainable practices resulting in few individual consequences, many people do not feel a sense of urgency to change their daily habits (e.g. using public transportation, energy efficiency and more) into ones that may be more sustainable.
 - There are some negative regional views of sustainability, generally tied to perceptions of environmentalism, liberalism or higher taxes.

- **There is more regional competition than collaboration.**
 - There are numerous economic development and sustainability efforts in the region.
 - Many of these efforts have areas of overlap or duplication in both their focus and the individuals participating in them.
 - The overlap in focus creates confusion about the value and benefit of all efforts.

- **There is no clear leadership entity that is accountable for this kind of effort.**
 - There are a number of organizations involved in the regional sustainability effort. However, none has established a trusted reputation as a regional leader.
 - Economic development is competitive by nature. The current economic climate increases this level of competition. Many in the region do not intuitively take a broad, regional approach in their view of economic development.
 - No organization currently possesses the funding or policy power to stimulate change at the local level and ensure compliance and follow-through.
 - There is concern about the City of Colorado Springs dominating the focus of any regional effort.
 - There exists little consistent local government support for more sustainable actions.

- **The region has a strong focus on immediate costs instead of lifecycle costs. This is exacerbated by the current economic climate.**
 - The broad business community does not take sustainability seriously unless there is a near-term monetary benefit.
 - The short-term need to produce jobs and economic growth often results in entities taking a “me-first” approach that sacrifices the long-term benefits of sustainability.

- The region's economic development efforts focus on high-paid, salaried jobs. There is little support or interest in creating additional lower-paid, skilled labor jobs that can result from some sustainability programs (e.g. low-paying labor, recycling and solid-waste management).

■ **There are barriers to creating broad habit changes in this region.**

- The region, and particularly the military population, has a very automobile-dependent transportation culture. Furthermore, regional transit providers have been forced to reduce service with recent budget cuts. This creates challenges to efforts that encourage more sustainable transportation choices.
- Much of the existing infrastructure does not adequately support transit or car-less mobility options.
- Personal habit changes (e.g. recycling) take time and are often difficult to achieve when they require additional effort (e.g. sorting recyclables) on the part of the individual.
- Electricity and natural gas prices in the region are relatively low compared to the rest of Colorado and the nation. Therefore, the return of investment for renewable energy installations is not realized as immediately as other regions with higher utility costs. This lessens the economic incentive to utilize renewable energy.
- Landfill costs in the region are also low, lessening the economic incentive to recycle.

■ **There are inconsistent visions for the desired future of the region.**

- The Pikes Peak region is divided in its view of growth. At times, sustainability can get inappropriately swept into this debate when a shift to more sustainable practices (e.g. water conservation) is viewed as being caused by growth rather than just the right thing to do.
- Lower taxes and operational costs are some of the region's key selling points in attracting businesses to relocate here. There is concern that efforts to increase sustainability and provide a better quality of life may require changes that increase costs for businesses considering relocating to the region.

■ **Fort Carson's procurement practices can serve as a barrier to many local and/or sustainable businesses.**

- A small minority of the procurement decisions related to Fort Carson are actually controlled locally. Most major procurements are handled through large, federally-controlled contracts.
- Of the procurement controlled locally, there is little to no local-vendor preference included in the decisions.
- While sustainability is an element of Fort Carson's procurement evaluation, lifecycle costs are not given sufficient consideration as an influential part of the decision-making process.

Potential Opportunities

The primary focus of this subsection is to identify the opportunities for the region to leverage the growth at Fort Carson along with related economic growth in order to increase regional sustainability and economic development. After conducting significant outreach with leaders from across the region and analyzing successful efforts nationwide, this process identified a number of potential opportunities to make progress toward achieving this objective.

The opportunities covered a broad spectrum. On one extreme were opportunities with a strong sustainability focus, but little economic development benefit. On the other extreme was the opposite.

This section lays out the potential opportunities in six areas that generally struck a strong balance of providing both economic development and sustainability benefits. Some recommendations may lean more heavily toward one side, but in their entirety, the plan sets the stage for leveraging the two goals and achieving mutual successes. In considering these opportunities, it is important to note that there is a strong focus on planning, organization and coordination. While there may be some that want to rush to immediate action, it will be critical to develop a foundation of regional collaboration and an accepted regional vision/focus if the effort is to be successful. This section identifies many of the critical first steps in achieving long-term success.

The opportunities are organized into six broad categories. The categories were identified and modified through a series of interviews and meetings with key stakeholders throughout the region.

The six categories are:

- Regional Collaboration
- Renewable Energy
- Solid Waste and Recycling
- Construction, Retro-Fitting and Maintenance
- Education and Training
- Transportation

Regional Collaboration

Key challenges:

- The region lacks a clear leader with the power and accountability for ensuring follow through on sustainability planning efforts.
- There is little substantive government support for sustainability initiatives.
- Economic development organizations in the region tend to compete rather than collaborate.

Indicators of success:

- Development of a regional sustainability plan
- Identification of a lead organization responsible for overseeing regional sustainability efforts
- Amount of grant funds allocated

Related Fort Carson goals:

- Goal 3: Improve communication to foster understanding and attain a “Community of One.”
- Goal 4: Enhance partnering to collaboratively develop, integrate and implement regional sustainability.

Likely participants in pursuing these opportunities include:

- Local military installations (including Fort Carson and the Air Force Academy)
- Catamount Institute
- Chambers of Commerce
- Economic Development Corporations
- Local Governments
- PPACG
- Procurement Technical Assistance Center
- SNaPP Signatories
- Local Government

Potential Opportunities — Regional Collaboration

Establish and clarify the role of a regional leader in sustainability efforts.

- Role of the leader should be primarily convener and coordinator.
- Leverage existing organizations and networks (e.g. Southern Colorado Sustainable Communities).

Convene sustainability business and civic leaders to develop a regional sustainability plan.

- Convene all who have been engaged in the various efforts to determine what has worked well, what hasn't worked so well and what changes in approach or focus should be made to best position the region for success.
- Engage the broad community to ensure the vision, goals and recommendations are aligned with community expectations and values.
- Establish local priorities and responsibilities in each area

Partner with regional economic development and governmental leaders to develop consensus around forming an Economic Development District for the region in order to obtain federal assistance for economic development planning.

- Identify responsible party for development of a Comprehensive Economic Development Strategy (likely Operation 60Thirty Five)

Encourage local governments and Fort Carson to establish sustainable purchasing guidelines for government purchases.

- Consider developing a standardized regional rating system for local governments to use in assessing the sustainability of a product/service.
- Work with Fort Carson to determine the percentage and types of product/service purchasing decisions that are locally controlled and partner with chambers to promote this information to local businesses.

Provide support (e.g. through forums, additional publicity, etc.) to Fort Carson to help share its sustainability successes with the greater community.

Work collaboratively to aggressively research and apply for grants that will encourage sustainable practices.

Continue to encourage and help grow/promote the Southern Colorado Sustainability Conference and other sustainability events, including publicizing local sustainability award recipients.

Renewable Energy

Key challenges:

- Electricity and natural gas prices in the region are relatively low compared with renewable energy sources like wind power, lessening the motivation to conserve and the economic incentive to utilize renewable energy.
- Progress requires strong collaboration between the utilities and the region.
- The strong regional focus on economic development within the renewable energy sector creates both opportunities and competition.

Indicators of Success:

- Percentage of electricity generated from renewable sources*
- Overall regional energy consumption
- Job growth within the renewable energy sector
- Number and amount of loans provided for renewable energy projects
- Number of policies adopted to encourage renewable energy development/usage
- Completion of renewable energy study and Regional Energy Plan

**Indicator currently being measured by the Quality of Life Indicators Project.*

Related Fort Carson Goal:

- Goal 1: Sustain all facility and mobility systems from renewable sources, and reduce the total water purchased from outside sources by 75 percent.

Likely Participants in Pursuing these Opportunities Include:

- Colleges/Universities
- Colorado Springs Utilities
- Economic Development Corporations
- Local military installations (including Fort Carson and the Air Force Academy)
- Fountain Utilities
- Local Governments
- PPACG
- Private-Sector Renewable Energy Businesses
- Southeast Colorado Renewable Energy Society
- Others

Potential Opportunities — Renewable Energy

Work with utility providers and regional entities to identify opportunities and challenges with increasing renewable energy in the region:

- Evaluating regulations and policies that are barriers to providing renewable energy.
- Quantifying the economic and environmental benefits of regional collaboration in encouraging renewable energy.
- Identifying the benefits and cost efficiencies of expanding renewable energy generation on Fort Carson (e.g. expanding solar panels) for regional use.

Support efforts to promote regional cooperation, and encourage the creation of a Regional Energy Plan aimed at increasing the creation and utilization of renewable energy throughout the region.

Work to increase education, outreach and collaboration between utilities and local governments.

- Convene local governments and utilities to identify barriers and opportunities related to renewable energy supply.
- Coordinate closely with the Colorado Springs Utilities Electric Integrated Resource Plan (scheduled for completion in 2010) to encourage future investment in renewable sources and enhanced energy efficiency initiatives.

Encourage local governments to adopt policies and ordinances aimed at increasing demand for renewable energy in the region such as:

- Requiring a greater percentage of energy to come from renewable sources.
- Providing increased incentives to encourage installation of individual solar panels.
- Ensuring that land use policy is conducive to renewable energy uses.
- Creating or expanding energy reduction goals.

Leverage the success of the City of Colorado Springs' alternative-fueled fleet, and encourage other local governments to adopt similar alternative fuels standards for their vehicle fleets.

- Evaluate the potential for cost savings and increased purchasing power by having multiple local governments combine their resources and purchase alternative fuels and vehicles.

Evaluate the creation of programs that would better link local colleges/universities with renewable energy businesses and utilities, with a goal of developing a trained renewable-energy workforce and enhancing career-placement services for these graduates.

Work with regional economic development corporations to analyze the creation of a sustainable energy financing district and other programs that provide a low-interest revolving loan fund for sustainable projects.

Encourage local utility providers to offer residential energy audits or partner with a non-profit organization that provides these types of services. Also support them in intensifying efforts to identify and publicize renewable energy incentives (e.g. rebates).

Solid Waste and Recycling

Key challenges:

- With multiple private operators, it is less efficient and more challenging to create broad-based programs to foster greater regional recycling programs.
- The region is not maximizing its opportunities to recycle due to long-term habits and a lack of convenient facilities.
- Solid-waste processing fees are relatively low and the lack of a local recycling processing facility increases recycling costs (for hauling out of the region) lessening the motivation to conserve and the economic incentive to recycle.

Indicators of success:

- Per capita pounds of waste generated*
- Per capita pounds of waste recycled*
- Creation of a regional recycling facility
- Adoption of recycling ordinances

**Indicator currently being measured by the Quality of Life Indicators Project.*

Related Fort Carson goal:

- Goal 10: The total weight of solid and hazardous waste disposed of is reduced to zero.

Likely participants in pursuing these opportunities include:

- Fort Carson
- Local Governments
- PPACG
- Quality of Life Indicators Project
- Regional Recycling Collectors/Processors
- Zero Waste Consortium
- Others

Potential Opportunities — Solid Waste and Recycling

Encourage local governments to implement policies aimed at increasing recycling levels.

- Consider Pueblo's model: Adopt ordinances committing significant municipal resources to recycling efforts, and create mandatory residential curbside recycling and other solid-waste management programs that lessen landfill waste and generate employment opportunities.
- Evaluate policy changes to require a recycling component in all demolition/removal permits.
- Explore public-private partnerships to:
 - Provide affordable recycling programs for low-income families (e.g. offering free recycling in public housing).
 - Provide recycling bins at all government buildings.
- Evaluate public- and private-sector opportunities to expand composting programs (e.g. City and County of Denver's model).
- Encourage collaboration between regional entities to increase demand and efficiency.

Convene local governments, recycling experts and regional leaders to determine how to create the demand for a regional recycling plant.

- Determine the most efficient structure (e.g. public co-ops, combining efforts of various contractors/municipalities/Fort Carson, etc.) for a regional recycling facility.

Convene local governments and regional recycling collectors/processors to identify a consistent system for reporting recycling levels, and include a reporting requirement in all municipal recycling contracts.

Work with relevant entities to conduct research (e.g. focus group or surveys) that determines barriers to recycling, and implement a public outreach campaign to change behaviors/habits.

Evaluate the possibility of combining on-post recycling, composting and biomass programs with off-post entities in order to increase efficiency and prominence of recycling.

Encourage partnerships between local governments and non-traditional recycling programs to encourage recycling of items such as electronics, batteries, paint, etc.

- Expand Fort Carson's paint and battery recycling program, and promote existing off-post programs.

Construction, Retro-Fitting and Maintenance

Key Challenges:

- The benefits of converting to sustainable building practices are often overshadowed by the up-front costs.
- There is minimal demand for green-certified contractors.
- Sustainable maintenance practices can require habit changes and additional training/education.

Indicators of Success:

- Number of contractors that receive sustainability certifications
- Per capita water consumption*
- Per residence electricity/natural gas usage*
- Number of Energy Star qualified residences built*
- Number of buildings that are LEED-certified
- Number of retro-fitting projects completed

**Indicator currently being measured by the Quality of Life Indicators Project.*

Related Fort Carson Goal:

- Goal 7: All applicable facilities at Fort Carson will be high performance buildings that meet or surpass the Platinum Standard of Sustainable Project Rating Tool (SPiRiT) or Leadership in Energy and Environmental Design (LEED) rating.

Likely participants in pursuing these opportunities include:

- Builders
- Chambers of Commerce
- Construction Trade Associations
- Economic Development Corporations
- Fort Carson
- Local Governments
- PPACG
- Pikes Peak Sustainable Business Network
- Realtor/Builder Trade Associations
- Others

Potential Opportunities — Construction, Retro-Fitting and Maintenance

Stimulate demand for LEED-certified/green contractors by encouraging local governments to revise building codes and ordinances to support green-building targets for new and existing residential, commercial and governmental buildings.

- Determine the gaps in existing local/state/federal policies and regulations that disallow or dissuade local contractors, developers and builders to integrate sustainable design principles into their plans.
- Encourage local jurisdictions to evaluate policies to exceed the minimum standard for energy codes and/or adopt more recent editions of the International Energy Conservation Code.
- Assist local governments in creating a long-term vision to reduce energy consumption, and develop a tool kit for creating and implementing long-term sustainability goals.

Explore ways to maximize the incentives (monetary and others) for builders to LEED-certify or Energy Star-qualify new construction projects.

- Encourage local governments to provide incentives, such as expedited permits and lower permit fees, to builders that adhere to green standards.

Identify, expand and promote training opportunities on retro-fitting, energy efficiency, energy auditing and LEED certification.

- Conduct an audit of existing training programs to determine what works well, what needs improvement and where new programs are needed.
- Partner with existing local training programs to create additional LEED certification and sustainable-building education opportunities.
- Evaluate possibilities for developing a scholarship program to help fund green training.
- Maximize training for sub-contractors on the Army's standards for green building practices.
- Encourage local building departments to include sustainability-related questions in all contractor licensure tests.
- Determine whether there is a need/value in developing a website with comprehensive information on all regional training opportunities, conferences and events related to green building and sustainable design.

Create greater value for LEED-certification in the region by facilitating additional incentives for contractors to be certified.

- Identify potential economic motivations for contractors (e.g. greater possibility for more government contracts) as well as the barriers to LEED certification.
- Promote LEED certification success stories.
- Create a regional directory of green contractors (made available in hard copy and online), and promote their services to the public and private sectors.
- Encourage local governments to provide discounted licensure/registration rates.

Convene an annual summit of regional leaders to determine priority retro-fitting projects.

- Identify the region's greatest opportunities (both on and off-post) for retro-fitting.
- Educate the public and private sectors about the cost benefits of retro-fitting existing buildings to be more energy efficient, and promote information about available tax credits and rebates for retrofitting projects.

Potential Opportunities — Construction, Retro-Fitting and Maintenance

Encourage Fort Carson, local governments and commercial building managers to implement green maintenance practices for building operations such as cleaning, landscaping, waste management, etc.

- Expand Fort Carson's green building and cleaning practices off-post.
- Encourage commercial real estate trade associations to create standardized training program for sustainable maintenance practices.
- Proactively educate the commercial real estate sector on the best practices for green building operations.
- Have building managers identify individuals within LEED-certified buildings responsible for maintaining ongoing education and accountability to ensure follow through of green building practices.

Partner with Fort Carson, local chambers and the Chamber's Procurement Technical Assistance Center to identify and promote green-building sub-contracting opportunities at Fort Carson for local businesses (e.g. deconstruction/retro-fitting, new construction, consulting, energy audits, equipment/materials supply, recycling).

Education and Training

Key Challenges:

- There is not currently a high demand in the region for individuals with sustainability/green-sector degrees or green jobs training.
- Because many sustainable degree programs are relatively new and still developing, the private-sector and educational institutions are not maximizing opportunities for collaboration, such as opportunities for internships or job placement programs.
- While there are many green job training programs, including some that target veterans, there is an inconsistent level of awareness for existing opportunities.

Indicators of Success:

- Number of full and part-time post-graduate sustainability programs available in the region
- Number of Fort Carson Soldiers/vets/spouses participating in green jobs training programs

Related Fort Carson Goal:

- Goal 8: Key stakeholder groups are trained, compliant and motivated toward sustainability principles.

Likely participants in pursuing these opportunities include:

- Colleges/Universities
- Chambers of Commerce
- Economic Development Corporations
- El Paso County
- Fort Carson
- Pikes Peak Workforce Center
- PPACG
- Others

Potential Opportunities — Education and Training
Work with key entities to establish a regional collegiate consortium to support and encourage colleges/universities in their efforts to establish or expand their sustainability programs. <ul style="list-style-type: none">■ Identify opportunities for students to intern or get other “real world” sustainability training experience at Fort Carson.
Foster partnerships to connect Fort Carson, local economic development professionals and colleges/universities to establish/grow research and development partnerships in the sustainability arena (e.g. renewable energy).
Explore opportunities to expand the Veterans Green Jobs program within the Pikes Peak Region. <ul style="list-style-type: none">■ Encourage employers in the region to participate in the program.■ Partner with Fort Carson to increase awareness among Veterans of the program.
Encourage and support targeted professional organizations (e.g. transportation, construction, etc.) to develop sustainability education/training programs for their members.
Explore partnerships with non-traditional education centers (workforce training) to create education and training programs in the sustainability field (e.g. cleaning services, labor centers, etc.).
Promote and expand the successes of the Veteran’s Workforce Investment Program.

Transportation

Key Challenges:

- The region, particularly in the military culture, has a strong preference for single-occupancy vehicles over transit or non-motorized transportation modes.
- Regional funding for public transit is lacking, resulting in reduced service.
- Gate security creates unique challenges in encouraging connectivity on- and off-post.

Indicators of Success:

- Vehicle miles traveled*
- Public Transportation Use*
- Travel mode statistics*
- Per capita vehicle registrations
- Miles of bike routes on-/off-post

**Indicator currently being measured by the Quality of Life Indicators Project.*

Related Fort Carson Goal:

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

Likely participants in pursuing these opportunities include:

- Colorado Springs Cycling Club
- Economic Development Corporations
- Fort Carson
- Local Governments
- Mountain Metropolitan Transit
- Multi-Family Housing Providers
- PPACG
- Others

Potential Opportunities — Transportation

Partner with Fort Carson to evaluate options (e.g. expanding on recent decision to allow Brigade Commanders to hold physical training (PT) at the end of the day) for reducing multiple “peak hour trips”.

Partner with multi-family housing complexes near Fort Carson gates and transit providers to offer a shuttle service on-/off-post.

Partner with Fort Carson to evaluate parking policy modifications that will encourage more sustainable behavior such as carpooling or transit.

- Consider permitted parking options to minimize on-post trips.

Strengthen relationships between Fort Carson and local jurisdictions to support Fort Carson’s sustainable transportation planning, including low impact vehicles and car-less mobility options.

Explore funding options to include civilian workers in DoD’s transit subsidy program.

Study options for better accommodation of gear storage on public transit.

Encourage local governments to promote higher-density development throughout the region with a particular emphasis on new and re-developments near Fort Carson’s gates.

- Pursue Transit Oriented Development opportunities linked with improved transit options on South Academy Boulevard or other areas around Fort Carson’s gates.

Develop education/social marketing programs to encourage carpooling, transit and other alternative transportation options on-/off-post.

Evaluate ways to increase and expand the region’s trail network to encourage more bicycle and pedestrian traffic.

Study options for on/off-post transit connectivity.

- Work with Fort Carson to evaluate security options for improved transit/bike/pedestrian access at the gates.

Highlight and promote Fort Carson transportation initiatives that require private-sector support (e.g. conversion to sustainable parking, car-sharing and low-impact vehicle sharing) and explore ways to expand these programs off-post.

Next Steps

It is clear that there is a strong contingent within the region possessing the desire to increase sustainability while capitalizing on opportunities for economic development. However, the Pikes Peak region currently lacks the collaboration, organizational infrastructure and unified plan to fully capitalize on all of the sustainability and economic development opportunities that could be created through the growth of Fort Carson.

Despite these struggles, there is regional momentum toward greater collaboration and regional planning – as evidenced by Operation 60ThirtyFive and other regional efforts. It will be important for the region to establish some early successes and build off those to achieve the grander visions held by some.

This section of the Growth Plan should serve as the first step in identifying opportunities and achieving initial successes. It will be important for PPACG and its partner organizations to continually monitor and adapt the recommendations in this report as social, environmental and economic conditions change.

The opportunities identified in this section include a number of planning and coordination activities. These will be critically important in achieving a broad regional support – from grassroots levels up to policy-makers – for a unified vision.

Among the most important of the opportunities identified will be the efforts surrounding the creation of a regional sustainability plan. The continued formation and growth of the SNaPP effort is a positive sign on this front. PPACG will continue to work closely with other leading organizations in the region to stimulate regional agreement and support. Done right, that kind of effort will engender stronger partnership, clearer leadership and greater clarity about a number of variables that will influence the region's ultimate success in this endeavor.

The unified focus of a regional sustainability plan combined with a more regional approach to economic development (e.g. creating an Economic Development District that develops a Comprehensive Economic Development Strategy for the region) will be two cornerstones in the overall success of this effort. Operation 60ThirtyFive is a good first step, but it will be important that all regional economic development entities are fully bought-in to the recommendations to create a truly regional approach.

From a more long-range perspective, PPACG should convene a semi-annual meeting of the sustainability and economic development partnership group focused solely on the findings and recommendations in this report. As appropriate, recommendations should be updated, added or removed. While the two groups may continue to meet separately on a more frequent schedule to discuss other issues, it will be important that at least twice a year, time be taken to assess and adapt the opportunities that have been identified.

In the end, the hope is that this report sparks continued discourse and planning. It is only through that kind of collaboration that efforts like this grow, mature and succeed.

Additional Information

For more information on the various efforts mentioned in this report, please visit the links below.

Fort Carson and Army Resources

- **The U.S. Army 2007 Sustainability Report**
www.aepi.army.mil/internet/FINALArmySustainabilityReport2007.pdf
- **Fort Carson Sustainability & Environmental Management System**
www.sems.carson.army.mil/

Related Efforts Resources

- **City of Colorado Springs**
 - *2008 Strategic Plan:*
www.springsgov.com/units/budget/StratActionPlan/StrategicPlan2008ADOPTED.pdf
 - *Guiding Principles for a More Sustainable City:*
www.springsgov.com/Files/Guiding%20Principles%20for%20a%20more%20Sustainable%20City.pdf
- **Colorado Springs Regional Economic Development Corporation**
www.coloradosprings.org
- **Dream City: Vision 2020**
www.dreamcity2020.org/
- **Fountain Creek Watershed Plan**
 - *Website:* www.fountain-crk.org
 - *Report:* www.fountain-crk.org/Plan%20Documents/Total%20Plan.pdf
- **Fountain Economic Development Commission**
www.fountaincolorado.org/departments/board.asp?fDD=7-41
- **Fremont Economic Development Corporation**
www.fremontedc.org
- **Operation 60ThirtyFive**
 - *Website:* www.operation6035.com/
 - *Report:* www.operation6035.com/documents/ActionPlan.pdf
- **Pikes Peak Sustainability Indicator Project**
www.ppacg.org/Envir/PPSIPProject.pdf

- **Pikes Peak Sustainable Business Network**
 - *Website:* www.ppsbn.org/
 - *Report:* www.ppsbn.org/attachments/140_PPSBN%20SURVEY-Final%20Draft_DC.pdf

- **PPACG Transportation Plan**
 - *Website:* www.movingforwardplan.org/
 - *Plan:* www.ppacg.org/Trans/2030/2030plan.htm

- **Pueblo Economic Development Corporation**
www.pedco.org/

- **Quality of Life Indicators Project for the Pikes Peak Region**
 - *Website:* www.pikespeakqualityoflife.org/
 - *Report:* www.pikespeakqualityoflife.org/reports/2009_report.pdf

- **Colorado College Sustainability Plan**
 - *Website:* www.sustainability.coloradocollege.edu/plan
 - *Report:* www.coloradocollege.edu/sustainability/pdf/Final%20Brendle/TBG%20SMP%20Recommendations%20for%20Colorado%20College%2009-01-08.pdf

- **Colorado Springs Conservation Corps**
www.conservationhardware.org/

- **Colorado Springs Utilities Evaluation of Options to Meet the Colorado Climate Action Plan**
www.csu.org/residential/environment/climate/item2966.pdf

- **Green Cities Coalition of the Pikes Peak Region**
www.greencoloradosprings.org/

- **Manitou Springs Sustainability Plan**
www.manitousprings-co.gov/PDF/Climate%20Protection.pdf

- **Pikes Peak Workforce Center**
www.ppwfc.org/

- **PACOG Transportation Plan**
 - *Website:* www.pacog.net/
 - *Report:* www.pacog.net/PACOG_LongTermTransportationPlanExec.pdf

- **Sierra Club — Pikes Peak Group**
www.rmc.sierraclub.org/ppg/

- **South Academy Boulevard Intermodal and Re-Development Study**
www.springsgov.com/Page.aspx?NavID=1026

- **Southeast Colorado Renewable Energy Society**
www.cres-energy.org/chapters_secres.html
- **Southern Colorado Clean Cities Coalition**
www.southern.cleancitiescolorado.org/
- **University of Colorado at Colorado Springs – Sustainability Strategic Plan**
 - *Website:* www.uccs.edu/~sustain/strategic.html
 - *Report:* www.uccs.edu/~sustain/docs/Sustainability_Plan_and_Appendices.pdf
- **Veteran’s Green Jobs**
www.veteransgreenjobs.org/

Best Practices Resources

- **Albuquerque – AlbuquerqueGreen**
www.cabq.gov/albuquerquegreen
- **Austin – The Downtown Austin Plan**
www.ci.austin.tx.us/downtown/downtownaustinplan.htm
- **Denver – Greenprint Denver**
 - *Website:* www.greenprintdenver.org/
 - *Report:* www.greenprintdenver.org/docs/greenprint_report.pdf
- **Fort Collins – Fort Collins Action Plan for Sustainability**
 - *Website:* www.fcgov.com/sustainability
 - *Report:* www.fcgov.com/sustainability/pdf/sustainability-plan.pdf
- **Portland – Portland Office of Sustainable Development (OSD)**
www.portlandonline.com/osd
- **Santa Monica – Santa Monica’s Sustainable City Plan**
www.santamonicanevclub.com/sustainable_city.htm
- **Seattle – Sustainable Seattle**
www.sustainableseattle.org
- **Fort Bragg/North Carolina – Sustainable Sandhills**
www.sustainableandhills.org