

Pikes Peak Sustainability Indicator Project (PPSIP)

Project Summary Report

November 9, 2005
(Final Draft)



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Project and Reports Overview

The Pikes Peak Sustainability Indicator Project (PPSIP) is a partnership between Fort Carson Mountain Post garrison of the US Army and the governments, businesses and citizens of the region that hosts Fort Carson's primary operations (El Paso, Fremont and Pueblo counties). Fort Carson (in 2002) and the US Army command (in 2004) have adopted sustainability strategies to improve installation management and ensure enduring positive relationships between Fort Carson and its host communities. Fort Carson's success with its sustainability goals is dependent on community cooperation and collaboration.

The objective of PPSIP's first phase, beginning with initial meetings in December 2003 and concluding with the Fourth Annual Fort Carson Community Sustainability Conference on 9 November 2005, is to provide local governments with sufficient information, developed in a regionally-collaborative manner, to determine whether the governments wish to do the following, together or separately:

- Indicators as a management tool: Adopt community indicators as a governance / community management strategy;
- Indicators supportive of Fort Carson and sustainability: Adopt sustainability indicators and in particular, sustainability indicators that are explicitly supportive of Fort Carson's sustainability goals,
- Indicators that are regionally consistent: Adopt indicators that are regionally consistent (and tracked) to the extent that practical.

The PPSIP is a collaborative effort between Fort Carson, local governments and civic organizations. Participating local governments include:

- El Paso County
- Fremont County
- Pueblo County
- Town of Canon City
- City of Colorado Springs
- City of Fountain
- City of Manitou Springs

The PPSIP Steering Committee includes representatives of these governments plus the following organizations:

- Pikes Peak Area Council of Governments
- Pikes Peak United Way
- Pueblo Area Council of Governments
- The Colorado College

This report has been prepared with the advice and consent of the PPSIP Steering Committee, the participants in the four indicator development task forces (Nature, Economy, Well-being and Society) and Fort Carson's Sustainability Program. Primary

authors are Christopher Juniper and Anne Oatman-Gardner of Natural Capitalism Solutions Inc. (NCS); NCS is a non-profit organization that supports the Fort Carson Sustainability Program through a cooperative agreement with Fort Carson's Directorate of Environmental Compliance and Management (DECAM); project leader is DECAM Deputy Director Mary J. Barber. The reports benefited from the research and knowledge of the Steering Committee and the task force members, and Sandra Iseman, NCS intern.

Fort Carson is grateful to all of the volunteers who have generously given their time and talent to the PPSIP.

Reports Overview

This Project Summary Report of the Pikes Peak Sustainability Indicator Project accompanies the complete Project Report (available from www.carson.army.mil/sustain/PPSIP). The Summary Report includes:

- Executive Summary
- Project Summary
 - Fort Carson and Sustainability
 - What is Sustainability?
 - PPSIP Progress To Date
 - Next Steps
- The PPSIP Indicators

The Project Report includes:

- Project Summary Report
- Background Report: Community Plans and Hot Topics Inventory
- Fort Carson's Sustainability Program
- Appendices:
 - Appendix One: Regional Planning Goals and Hot Topics
 - Appendix Two: Local Plans Text
 - Appendix Three: Recommended Indicators and Existing Data
 - Appendix Four: The Web of Predictive and Performance Indicators
 - Appendix Five: Recommended Indicators and Existing Data
 - Appendix Six: Colorado's Tracked Indicators
 - Appendix Seven: Summary: U.S. and Global Indicators Programs
 - Appendix Eight: Indexes as an Indicators Strategy

Executive Summary

How do we measure and manage progress towards community goals? How can the community and region best coordinate its support for its major economic institutions of both the private and public sector? How can the region best discover and adopt the competitive advantages of sustainability concepts and strategies that are now the U.S. Army's environmental strategy along with many other governments and institutions?

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Cities and regions around the country have been developing indicators of their social, economic and environmental progress for use in public policymaking and management. They are sometimes called "progress" indicators, sometimes "quality of life" or "community" indicators, and sometimes "sustainability" indicators. Just as any business or nonprofit organization develops goals and indicators of its success, communities are coming to understand that the phrase "what gets measured gets managed" applies to community development as well as organizations.

The benefits of sustainability indicators to communities are numerous:

- Factual support for less partisan policies and initiatives to address community challenges;
- Early warnings for declines in the quality of life;
- Support for cost-effective regional collaboration (multi-county or watershed-based);
- Alignment of community economic development approaches that are in synch with the rapidly growing national and global movements towards governmental and corporate sustainability performance

Successful indicators projects combine the objective analysis of the indicators with the power of collaborative public/private solutions-development systems. A leading example is the Jacksonville Community Council that for thirty years has been convening regional solutions and for twenty years tracking over 100 indicators.

The PPSIP has been comprised of the work of a Steering Committee and four working Task Forces: Nature, Economy, Well-being and Society. The Steering Committee is composed of representatives from the participating local governments and Fort Carson,

and organizations that provide technical expertise or support. The Steering Committee includes representatives from the following organizations:

- Cities: Canon City, Colorado Springs, Florence, Fountain, Manitou Springs
- Counties: El Paso, Fremont, Pueblo
- Technical: Colorado College, Pikes Peak United Way, Fort Carson, Pikes Peak Area Council of Governments

Preliminary PPSIP meetings were held in 2004. In 2005, following commitments by participating governments to PPSIP participation, the Task Forces and Steering Committee met several times each to explore the merits of using indicators for public progress management and instances where indicators are already being measured to drive performance; to identify hot topics deserving indicators, and to suggest indicators for the hot topics and the key planning goals of the governments.

Over 100 topics were identified that are deserving of progress tracking through indicators. To the extent possible, indicator topics and potential indicators were selected with respect to the whole-system nature of both socio-economic reality, and of sustainability concepts.

As is typical for community indicators projects that have been conducted around the US, citizens want to measure indicators that are often not being tracked or are difficult to track. For this reason, the PPSIP lists for consideration by regional governments and civic organizations both the full list of potential indicators, or “Universe of Indicators,” and a shortened list of “Recommended Indicators” provided below that were selected to reflect the primary concerns of the topics and data that is collected or reasonably collectable.

This report concludes the first phase of what Fort Carson expects will be a long-term dedication by its host communities to sustainability policies, incentives and indicators of progress that support Fort Carson’s sustainability goals, the sustainability goals of other military, government and private organizations and citizens of the region, and the region’s overall health and prosperity for its citizens. Fort Carson extends its deep appreciation to the governments, non-profit organizations and citizens that have participated in the Project to date, and looks forward to playing a continuing role in sustainability-based sound governance in the region.

Project Summary

Cities and regions around the country have been developing indicators of their social, economic and environmental progress for use in public policymaking and management. They are sometimes called “progress” indicators, sometimes “quality of life” or “community” indicators, and sometimes “sustainability” indicators. Just as any business or nonprofit organization develops goals and indicators of its success, communities are coming to understand that the phrase “what gets measured gets managed” applies to community development as well as organizations.

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Successful indicators projects combine the objective analysis of the indicators with the power of collaborative public/private solutions-development systems. A leading example is the Jacksonville Community Council that for thirty years has been convening regional solutions and for twenty years tracking over 100 indicators. In Colorado, indicators and community-solutions projects have been launched in Yampa Valley and Larimer County. Regionally, the Fountain Valley Watershed project of the Pikes Peak Area Council of Governments, which involves eight cities and three counties, is a leading example of the benefits of regional collaboration.

Fort Carson and Sustainability

The US Army determined that using sustainability concepts to manage its installations’ environmental and social impacts (and make the installations even better neighbors to hosting communities) in 2001. Fort Carson was one of seven major installations selected for the first round of sustainability planning and strategy implementation.

The Army’s experience to date, which parallels that of private companies and other governmental organizations, is that sustainability translates into better management, especially as regards environmental and social costs. Organizations committed to sustainability often dramatically reduce energy and materials costs, reduce the use of toxic materials and therefore toxic waste and regulatory costs; and improve human productivity through attraction of the best talent, reduced turnover, and inspired employees/stakeholders.

The U.S. Army's leadership adopted the "Army Strategy for the Environment: Sustain the Mission, Secure the Future," in October, 2004. It establishes a long-range vision that enables the Army to meet its mission today and into the future. According to the Strategy,

"Sustainability is the foundation for this Strategy and a paradigm that focuses our thinking to address both present and future needs while strengthening community partnerships that improve our ability to organize, equip, train and deploy our soldiers. Sustainability connects our activities today to those of tomorrow with sound business and environmental practices. We must strive to become systems thinkers if we are to benefit from the interrelationships of the *triple bottom line* of sustainability: mission, environment and community."

In short, a sustainability approach to Fort Carson's operations and the community's economic and social development is simply the right thing to do and the Army increasingly sees the value proposition of sustainability management strategies.

Fort Carson's award-winning Directorate of Environmental Compliance and Management, under the leadership of Director Tom Warren and Deputy Director Mary Barber and with support from former sustainability planner Kelly O'Neill, launched Fort Carson's Sustainability Program in 2001. The regional community was invited to join with Fort Carson leadership in September, 2002 to learn about the Army's sustainability strategy and develop long-term (i.e. by year 2027) goals for Fort Carson, which are presently:

1. Sustain all facility and mobility systems from renewable sources, and reduce the total water purchased from outside sources by 75Percent.
2. Reduce automobile dependency and provide balanced land use and transportation systems.
3. Improve communication to foster understanding and attain a "Community of One."
4. Enhance partnering to collaboratively develop, integrate, and implement regional sustainability.
5. The total weight of hazardous air pollutant emissions is reduced to zero.
6. Further integrate sustainability principles into the Fort Carson land use planning, Real Property Master Planning, and Military Construction, Army (MCA) programming processes.
7. All applicable facilities at Fort Carson will be high performance buildings that meet or surpass the Platinum Standard of SPiRiT or LEED.

8. Key stakeholder groups are trained, compliant and motivated toward sustainability principles.
9. All DOD and Fort Carson procurement actions support sustainability.
10. The total weight of solid and hazardous waste disposed of is reduced to zero.
11. Training Ranges (land and associated air space used for live fire ranges, maneuver, testing and urban development designated for Military Operations in Urban Terrain training) capable of supporting current and future military training to standard.
12. Advance a sustainable mission and Fort Carson by adopting a SEMS and by imparting (passing on) a personal commitment and enthusiasm for sustainability.

These goals serve as Fort Carson's sustainability indicators. By pursuing these goals with its host communities, Fort Carson will continue to be a cost-effective installation, and will be more likely to continue its expansion into the future. Though some of the goals/indicators are specific to sustainability performance, such as the energy and water goals, the list included three goals related to enhancing the installation's community relationships. These goals are summarized as:

- Enhance Regional Partnering Towards Regional Sustainability
- Train and Motivate Stakeholders Towards Sustainability
- Foster understanding and attain a "Community of One"

The dangers of not aligning Fort Carson's goals with community policies are illustrated by the encroachment of housing developments onto lands adjacent to Fort Carson, which threatens the core mission of the installation: military training. As modern weapons attain ever longer-ranges, the ability of Fort Carson to use its entire area becomes more critical to its viability and ability to expand. This problem, which could have been averted by better alignment of state and local land-use policies with Fort Carson needs, has been defused through an innovative partnership between Fort Carson's DECAM, The Nature Conservancy and four federal and state organizations known as the ACUB: Fort Carson Army Compatible Use Buffer. The partners have protected over 60,000 acres adjoining Fort Carson's boundaries from development incompatible with the Fort Carson mission. Residential development of these lands or other lands adjacent to Fort Carson will seriously threaten the viability of the installation.

What is Sustainability?

"Sustainability" refers to a systematic approach to long-term environmental, social and economic progress. It stems from concepts articulated in the 1980s that people should meet the needs of the present without compromising the ability people in the future to

meet their own needs. In Colorado, sustainability concepts and strategies are being explored or adopted in both the private and public sectors:

- The Pikes Peak Sustainable Business Network, a program of The Catamount Institute, was initiated in 2002; the Colorado Alliance of Sustainable Business Associations was initiated in 2003 to coordinate statewide efforts of several local sustainable business organizations. The nonprofit CORE (formerly CEBA/P3) works to promote sustainable businesses and practices in collaboration with the Advance Colorado Center of the State's Office of Economic Development and International Trade (see www.state.co.us/oed/acc).
- Private businesses recognized as Colorado sustainability leaders include New Belgium Brewing of Ft. Collins, Holcim in Florence, CH2M Hill in Denver, Intel Corporation, Hewlett-Packard and Agilent Technologies.
- The City of Lakewood incorporated sustainability concepts into its Comprehensive Plan in 2003; specific ordinance development is ongoing.
- The Colorado Springs Economic Development Corporation invited a sustainability task force to contribute to its Springs Into Action '04 economic development strategy (report available upon request).
- Sustainability concepts are guiding the Pueblo Army Depot's redevelopment planning efforts.
- The Colorado Department of Public Health and Environment's Sustainability Program for businesses promotes innovative efforts to develop and implement environmentally sustainable practices in Colorado (see www.cdphe.state.co.us/el/sustainability).

PPSIP Progress To Date

The PPSIP has been comprised of the work of a Steering Committee and four working Task Forces: Nature, Economy, Well-being and Society.

The Steering Committee is composed of representatives from the participating local governments and Fort Carson, and organizations that provide technical expertise or support. The Steering Committee includes representatives from the following organizations:

- Cities: Canon City, Colorado Springs, Florence, Fountain, Manitou Springs
- Counties: El Paso, Fremont, Pueblo
- Technical: Colorado College, Pikes Peak United Way, Fort Carson, Pikes Peak Area Council of Governments

The participating cities and counties were asked to provide a staff or citizen representative to each of the Task Forces. The following regional non-profit civic organizations were represented through participation by its members that were delegated by cities or counties:

- Action 22

- Bee Vradenberg Foundation
- Central Colorado Soil Conservation District
- Clean Cities Coalition
- Colorado City Metro. District Board of Directors
- Colorado Springs Council of Neighbors and Organizations
- Colorado Springs Economic Development Corporation
- Colorado Springs Utilities Citizens Board
- Colorado State Fair
- CSU Extension Office/Pueblo; Pueblo County Cooperative Extension
- Fountain MAPP
- Housing and Building Association of Colorado Springs
- Latino Chamber of Commerce
- Penrose-St. Francis Health Services
- Peterson Air Force Base
- Pikes Peak Sustainable Business Network
- Pioneers Museum
- Posada
- Pueblo 2010 Commission
- Pueblo Chamber of Commerce
- Pueblo City Planning Department
- Pueblo City-County Health Department
- Pueblo Depot Activity Development Authority
- Pueblo Economic Development Corporation (PEDCO)
- Pueblo Smart Growth Advocates
- Pueblo West Metropolitan District
- Recycling Coalition of Colorado Springs
- Sierra Club, Pikes Peak Chapter
- Southeastern Colorado Renewable Energy Society
- Sustainable Pueblo
- The Nature Conservancy
- U.S. Dept. of Energy Denver Regional Office
- University of Colorado at Colorado Springs
- US Fish and Wildlife Service
- Wirth Chair, University of Colorado at Denver

The various Technical resources contributed their respective expertise to the work of the Task Forces and Steering Committee, the project was staffed by Christopher Juniper and Anne Oatman-Gardner of Natural Capitalism Solutions on contract to Fort Carson.

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Next Steps

Governments in the region must now consider the following questions regarding the use of indicators:

- Does the government want to set up an indicators system for measuring and/or managing progress? If so, what should be the role for civic organizations?
- Will a regional approach to indicators be valuable from cost-effectiveness and regional synergy perspective? If so, which organization(s) should be the home for the ongoing project?
- Does the “sustainability” concept and/or techniques add value to the indicators process?

The PPSIP encourages local governments in the three counties hosting Fort Carson plus Teller County and other adjacent counties to answer these questions in coming months; Fort Carson will continue to provide staff support to the PPSIP for this process and whatever other work is required to launch the PPSIP process into an ongoing system for outstanding governance and sustainability performance.

Potential Indicator Project Homes

At this time, several organizations are considering whether the PPSIP should be housed within the organization.

Based on the long-term success of the Jacksonville, Florida indicators management effort housed at the Jacksonville Community Council Inc., an effort that is partly funded by that area’s United Way, Jerry Smith, the CEO of El Paso County United Way, intends to launch an indicators and community solutions effort in 2006. This potential project could serve only El Paso County, or its capabilities might be designed so as to serve the region in a collaborative manner.

Other organizations that could logically house or contribute to the PPSIP effort are (1) Action 22 Inc., a southeast Colorado regional association of 22 counties; (2) the State of the Rockies project of The Colorado College, (3) The Catamount Institute and/or its Pikes Peak Sustainable Business Network, and (4) the Pikes Peak Area Council of Governments, which serves El Paso, Teller and Park counties and conducts individual planning projects such as the Fountain Creek Watershed study in El Paso, Fremont and Pueblo counties (organizations are not listed in any particular order).

The PPSIP Indicators

Below are two lists of potential Pikes Peak region indicators developed by the PPSIP. The “Indicators Universe” list is the full “Universe” of proposed indicators with “Recommended” indicators shown in bold. The “Recommended” indicators solely the “Recommended” indicators that might be the list that the next phase of the PPSIP, or indicators initiatives by governments or civic organizations would choose to begin with.

The Universe list reflect the topics and subtopics that the PPSIP participants recommend the governments and citizens of the region manage, recognizing that obtaining the data to indicate progress may be challenging in some cases (or require data that is more of a surrogate for the exact data required).

The format of the Universe is the following:

Task Force name (example: Nature)

Category names (example: N.1. Land Use)

Topic names (example: N.1.1. Urban Infrastructure and Facilities)

Plan / Hot Topic name – the specific local plan or hot topic being addressed by an indicator, if necessary (example: Urban Infrastructure Access)

Performance indicator: the proposed indicator to track the performance of the community

Predictive Indicator: the proposed indicator to predict a positive performance

The Recommended list is a subset of the Universe. Indicators selected as “Recommended” have the following qualities roughly listed in order of importance: (1) sustainability and/or whole-system data; (2) reflects the primary concerns of the topic, including Fort Carson sustainability goals; (3) reflects a broad regional concern compared to concerns specific to a particular locality of the Pikes Peak region; (4) data is more readily obtainable than other potential indicators, partly because the indicators are already being used by an existing state or local agency or process. Recommended indicators are generally selected for the entire topic rather than for each “Plan / hot topic.”

In some cases a specific indicator is suggested; in other cases, the indicator suggestion is about what the indicator would measure, and the actual indicator needs further development in PPSIP phase two.

Throughout the indicators, particularly in predictive indicators, the concept of “cost-effective policies / incentives” is used to describe public programs. This phrase implies government programs, though it does not exclusively mean programs of governments except when regulations are required. The term “cost-effective” implies that the providers of programs will assess the cost-effectiveness of the program.

The following legend applies to the (parens) after listed indicators, linking the indicator to a specific agency that is already tracking it:

- (COH) = Colorado Department of Public Health and Environment, Healthy People Colorado 2010 Targets
- (SCEF) = Southern Colorado Economic Forum, University of Colorado at Colorado Springs
- (CS) = City of Colorado Springs
- (SchDist)= School districts
- (FtC) = Fort Carson Sustainability Goals

Some terms defined:

- “Adequate pedestrian and bike systems”: A system where an average person considers the provisions for walking or bicycling adequate for safety and cost-effective use as a source of mobility.

A Note on Indexes: Several indexes are proposed in the Indicators Universe, of which most are Recommended Indicators. Indexes have pros and cons as indicators – they can give a more accurate simple picture of the direction of a topic that is not provided by individual indicators, but the direction of an index can be influenced by the actual formulation of the index from its component indicators. The use of indexes is further explored in the Project Report, Appendix. 8.

Indicators Universe

Nature

N1. Land Use

N1.1. Urban Infrastructure and Facilities

Plan / hot topic: Urban infrastructure cost-effectiveness

Predictive indicator:

Density of urban development

Cost-effective policies / incentives promoting high quality infrastructure with lower life-cycle costs compared to initial costs.

Performance indicator:

Annual life-cycle costs of building/maintaining urban infrastructure and facilities per capita

Plan / hot topic: Urban infrastructure access

Predictive indicator:

Cost-effective policies and incentives supporting urban developments adjacent to existing developments or as in-fill developments

Performance indicator:

Percent of urban development within 1/2 mile of basic urban institutions (e.g. schools, commercial districts, professional employment opportunities, urban parks)

Plan / hot topic: Walk-ability and bike-ability of urban development

Predictive indicators:

Cost-effective local policies / incentives for walkable and bikeable urban development

Cost-effective local policies / incentives for natural area access via walking or bicycling

Performance indicators:

Percent walking routes meeting safety standards for walkability

Percent bicycle routes that meet safety standards for bike-ability

Percent urban development with natural area access reasonably available by walking or bicycling

Plan / hot topic: Land use pattern support of urban transit systems

Predictive indicator:

Cost-effective land-use policies that directly support transit systems.

Performance indicator:

Percent of new residential or business development within 1/4 mile of a transit stop.

Plan / hot topic: Sustainable procurement of infrastructure

Predictive indicator:

Cost-effective local government policies for sustainable procurement.

Performance indicator:

Percent of urban infrastructure built with “green” or “sustainable” procurement standards (including “built to last” techniques) that include sustainability practices of businesses, not just products (or are aligned with military/government sustainability procurement systems under development).

N1.2. Planning and Density

Plan / hot topic: Efficient use of developed land

Predictive indicator:

Cost-effective government policies / incentives supporting efficient use of developed land

Performance indicators:

Square footage developed (new square footage – whether on new land or in-fill development) relative to total new urban land developed

People per acre in residential zones (i.e. bedrooms per acre of residential zoning) and jobs per acre in commercial zones
Percent new development built to transit-viable densities
Regional GDP per acre developed land

N1.3. Community Institution Protection

Plan / hot topic: Military installation and local institution encroachment

Predictive indicator:

Cost-effective policies and incentives supporting military installation and local institution freedom from encroachment

Performance indicator:

Percent linear feet of military installation and local institution borders protected from incompatible development (e.g. residential, or non-compatible commercial)

Plan / hot topic: Preservation of community plans for development

Predictive indicator:

Land-use decision-making using whole systems approaches

Quality of elected and executive officials

Performance indicators:

Acres annually developed in accordance with comprehensive plans as percentage of total lands developed.

Percent land-use planning using whole-system decision-making

Plan / hot topic: Preservation of ecological viability of designated open spaces

Predictive indicator:

Cost-effective policies / incentives promoting ecologically-compatible developments near designated open-spaces

Performance indicator:

Percent of designated open space ecosystems maintaining ecological viability

Plan / hot topic: Preservation of agricultural land and economy

Predictive indicator:

Purchases from local farmers or farmers markets

Performance indicators:

Community dependence on food imported more than 100 miles

Acres permanently converted from agricultural use (through selling of water rights, etc.)

N1.4. Urban/wildlands interfaces

Plan / hot topic: Fire safety in foothills

Predictive indicators:

Cost-effective policies and incentives promoting fire safety in foothills

and forest lands
Education of landowners about fire safety
Performance indicator:
Property, health and ecosystem losses from fire in the foothills and forest lands

N2. Biodiversity / Ecosystem Health

N2.1. Ecosystem Health Management

Plan / hot topic: Regional and local ecosystem health

Predictive indicators:

- Authority to ensure whole-system ecological management of land (i.e. appropriate corridors, legal authority, financial resources, etc.)
- Percent of non-urban land subject to appropriate financial incentives for ecological health (e.g. TDRs)
- Percent of “downstream” communities with sufficient influence over “upstream” operations
- Percent of watersheds with appropriate scale ecosystem health management (watershed, or other that fits scale of ecosystem)

Performance indicators:

- Regional Biological Health Index; potentially comprised of measurable indicators in the topics of invasive species, in-stream water quality, endangered species, soil health, etc.**
- Percent identifiable ecosystems with improving health

Plan / hot topic: Invasive species

Predictive indicator:

- Percent of invasive species with effective management plans

Performance indicator:

- Annual decline in severity of invasive species problems

Plan / hot topic: Appropriate preservation of open space relative to loss of open space to urban growth

Predictive indicator:

- Cost-effective policies, resources and incentives for open space preservation

Performance indicator:

- One year average of ratio of preserved open land to land consumed by urban development.

Plan / hot topic: Urban/wildlife interface & educating public about ecological management/interactions

Predictive indicator:

- Percent residents educated about ecological land management

Performance indicator:

Percent residents that are literate about ecological land management

N2.2. Natural Capital

Plan / hot topic: Preservation of natural capital for economic prosperity (resources and services)

Predictive indicators:

Percent natural capital monetized and ready for use in decision-making
Percent of land managed by governments dedicated to natural capital protection

Performance indicator:

Percent of natural capital that is monetized and formally included in major regional land-use and economic development planning/decision-making

N3. Energy

N3.1. Local Impacts from Energy Production / Use

Plan / hot topic: Regional air quality

Predictive indicator:

Cost-effective local policies and incentives reducing air pollution

Performance indicator:

Regional Local Sources Pollution Index; potentially comprised of air emissions from energy use, water pollution from energy use, etc. in ratio to population and/or economic output

Plan / hot topic: Security of continuous cost-effective energy access

Predictive indicators:

Cost-effective government programs / policies supporting investment in continuous distributed generation

Performance indicators:

Percent of military institutions meeting energy security goals (e.g. Fort Carson goals for on-site energy production)
Percentage of energy consumed that is produced from local sustainable sources such as renewables, hydro, etc.
Growth of installations of sustainable distributed electrical generation

Plan / hot topic: Pollution from local energy production / use

Predictive indicator:

Performance indicators:

Percent reduction in identified toxics from local energy production
Percent of energy-efficient vehicles (e.g. >30 MPG)
Percent of local air pollution coming from energy production

Plan / hot topic: Energy affordability

Predictive indicators:

Unemployment rate

Percent of affordable homes rated as energy efficient

Percent of buildings receiving energy audits in past two years

Cost-effective local policies / incentives for energy efficient residential structures

Performance indicators:

Percent households requiring home energy financial assistance

Rebates given for energy efficient investments

Residential energy charges per square foot (real dollars)

residents spending more than 10Percent of total expenditures on home and mobility energy and water (alternative: energy use per square foot by lowest income (bottom fifth) consumers)

(See E1.2. – business vulnerability to energy prices)

of buildings achieving high ratings for energy warming and cooling efficiency and lighting efficiency

N3.2. Local Energy Production and Use

Plan / hot topic: Energy efficiency

Predictive indicators:

Local subsidies for energy use, or improved productivity

Percent of buildings receiving energy audits in past two years

Cost-effective incentives and education regarding motor fuel reduction strategies

Performance indicators:

Energy use per household

Economic output per energy unit (BTU) consumption

Motor fuel consumption per capita

Plan / hot topic: Accurate energy pricing

Predictive indicators:

programs/policies established to include lifecycle costs in local energy costs

people educated about true lifecycle costs of energy sources

Performance indicator:

Percent of lifecycle costs (including indirect costs such as military protection of supplies) included in local energy prices

Plan / hot topic: Local sustainable energy production

Predictive indicators:

Cost-effective incentives and education regarding sustainable energy production strategies

Percent local utilities in compliance with state energy laws directing more

sustainable energy use

Performance indicators:

Percent of local energy production meeting sustainability criteria (e.g. renewable fuels from sustainable sources) (FtC)

Plan / hot topic: Excess energy distribution efficiency

Predictive indicator:

Capability of energy distribution systems to export excess energy

Performance indicator:

Percent of excess local power exported to other areas

N3.3. Non-Local or Global Impacts of Energy Production / Use

Plan / hot topic: Climate change

Predictive indicators:

Cost-effectiveness of public incentives and policies supporting climate change activities by organizations and citizens

people educated about climate change risks and opportunities

Performance indicators:

Reduction in carbon / GHG intensity of local energy use

Reduction in carbon / GHG intensity of local energy production

Percent of motor fuels consumed originating beyond US borders

Plan / hot topic: Nuclear power lifecycle impacts

Predictive indicator:

Percent of documented nuclear power risks included in local decision-making processes

Performance indicators:

Percent of electricity consumed from non-nuclear sources.

Plan / hot topic: Ozone layer impacts

Predictive indicator:

Percent energy sources valuing ozone layer impacts in energy planning.

Performance indicators:

Percent reduction in energy-related releases of ozone-layer damaging substances.

Plan / hot topic: Energy pollutants leaving local area

Predictive indicator:

Energy planning valuation of pollutant damage outside of area.

Performance indicator:

Reduction of “Nox” and “Sox” and mercury etc. pollutants leaving the region.

N4. Water

N4.1. Water Supply

Plan / hot topic: Water efficiency

Predictive indicators:

Education/incentive programs supporting efficient water use.

Performance indicators:

Per capita urban potable water use per year

Economic value generated (1) per potable urban water use; (2) per non-urban water use.

Percent increase in urban water used more than one time.

Plan / hot topic: Cost of urban water

Predictive indicators:

Growth of xeriscaped areas (requires no watering).

Incentives/regulations supporting general water efficiency or peak period Reductions.

Performance indicators:

Annual change in real dollar water costs per account.

Percent annual reduction in peak day (or relevant period for water planning) of urban water use.

Market prices of water costs as percentage of estimated total water costs including non-market externalities.

Municipal water shares relative to water demand.

Plan / hot topic: Regional approach to water planning

Predictive indicators:

Local government policies supporting regional water planning

Lawsuits or other legal actions between water providers/users in region

Performance indicators:

Percent water projects planned with regional cooperation

Meaningful community involvement (i.e. decision-making) in water planning

Plan / hot topic: Groundwater supply

Predictive indicators:

Effective regulations/incentives in place to protect groundwater supply

Wells permitted for more than 900 feet per minute

Performance indicators:

Level of regional groundwater aquifers

Percent of groundwater free from contamination

Plan / hot topic: Tap water quality (real and perceived)

Predictive indicators:

Watershed quality management practices

Per gallon cost of treating urban water supply

Performance indicators:

Urban (tap) water quality
Perceived urban (tap) water quality

Plan / hot topic: Natural capital damage from life-cycle of new water supplies (electricity effects, habitat disturbance, physical materials used, etc.)

Predictive indicator:

Water utilities adopting practice of estimating natural capital damages from new water supply projects.

Performance indicator:

Natural capital damage from new water supply projects.

N4.2. Wastewater and Water Quality

Plan / hot topic: Water quality in water bodies (surface and groundwater)

Predictive indicators:

Percent of water bodies receiving adequate management focus and resources.

Annual reduction in human development within 100' of waterways.

Waterways that are not concrete channels.

Education or incentive programs that reduce wastewater contaminants at the source.

Percent reduction in impervious surfaces.

Percent reduction in wastewater contaminants leaving properties.

Percent wastewater contaminants removed from water prior to release to Biosphere.

Annual progress in reducing difference in temperature between wastewater released to biosphere and natural temperature of receiving waterways.

Agricultural runoff water quality.

Growth of impervious surfaces.

Properties achieving zero stormwater runoff.

Performance indicators:

Percent of assessed water bodies (groundwater and surface water) meeting established quality standards

Alignment of sediment levels in waterways with natural levels (dissolved oxygen, TDS, nutrients, temperature, etc.)

Alignment of streamflows with natural levels (volume)

N5. Waste / Solid Waste

N5.1. Solid Waste

Note: “Zero Waste” refers to achieving zero waste put into the biosphere through either landfilling, air or water emissions. This is achieved by converting waste into a salable product for other economic uses.

Plan / hot topic: Ecological (ecosystem) impacts of solid waste management

Predictive indicators:

Solid waste education programs; or # people receiving solid waste education

organizations with Zero Waste goals

Performance indicators:

Solid waste and hazardous waste disposed per GDP

Acres devoted to landfills

Carbon emissions from solid waste disposal (transport, management)

Plan / hot topic: Recycling

Predictive indicator:

Recycling-supportive policies adopted by local governments

Performance indicator:

Volume of solid waste purchased for re-use by local organizations (businesses or nonprofits)

N5.2. Other Waste

Plan / hot topic: Total waste released to biosphere

Predictive indicators:

organizations with zero waste goals

Zero Waste supportive policies adopted by local governments

Performance indicators:

Amount of total waste (solid, liquid, gaseous) released to the biosphere (FtC)

organizations achieving Zero Waste (FtC)

Plan / hot topic: Hazardous waste generated and/or released to biosphere

Predictive indicators:

organizations with zero waste goals

Zero Waste supportive policies adopted by local governments

Performance indicators:

Amount of hazardous waste (solid, liquid, gaseous) released to the biosphere (FtC)

organizations achieving zero hazardous waste (FtC)

Economy

Note: The term “small business” means businesses less than 20 employees total.

E1. Business: Health of Individual Businesses

E1.1. Local (ownership) business health

Plan / hot topic: Local contracts with government or large private sector customers

Predictive indicator:

Large institutions and “business to business” purchasers with small/local business purchasing programs

Performance indicator:

Annual dollar volume of local business (locally owned) contracts with large purchasers

Annual dollar volume of local small business contracts with large purchasers

Plan / hot topic: Local business competitiveness

Predictive indicator:

Access (cost and convenience) of world-class business management education / assistance

Performance indicator:

Bankruptcy rate of locally owned businesses

E1.2. Overall business health

Plan / hot topic: Business management capabilities

Predictive indicators:

Access (cost and convenience) of world-class business management education / assistance

Performance indicators:

Small business profitability

Growth of sales taxes generated by small businesses

Plan / hot topic: Local business creditworthiness

Predictive indicators:

Small business profitability

Access (cost and convenience) of world-class business management education / assistance

Percent reduction in energy used per revenue earned by energy-price vulnerable industries

Performance indicator:

Average bank loan ratings of local businesses

Plan / hot topic: Decrease business vulnerability to energy price inflation

Predictive indicator:

State and local programs supporting business energy productivity of energy-price vulnerable industries

Performance indicator:

Percent reduction in energy used per revenue earned by energy-price vulnerable industries

E1.3. Business support infrastructure

Plan / hot topic: Business access to cost effective leading edge telecommunications

Predictive indicator:

Cost-effective policies and incentives supporting leading edge telecommunications access

Performance indicator:

Percentage businesses reporting cost-effective telecommunications access

Plan / hot topic: Health of business support organizations, e.g. Chambers and industry associations

Predictive indicator:

Quality of elected and executive leadership of business organizations

Performance indicator:

Membership growth in business support organizations

Plan / hot topic: Cost effective developable real estate for targeted growth industries

Predictive indicator:

Cost-effective policies and incentives for targeted growth industries

Performance indicator:

Vacancy rate of infrastructure-served appropriately-zoned land for targeted growth industries

E2. Economic Vitality: Meeting local economic development goals

Note: Livable compensation calculations would include both housing costs and transportation costs.

E2.1. Business diversity

Plan / hot topic: Recruit new business that enhances existing businesses

Predictive indicator:

Government support for businesses meeting adopted economic development goals (e.g. effective target industry programs; incentives; business climate policies)

Performance indicators:

Growth of new businesses that use the waste of existing businesses

Growth of new businesses in targeted export clusters

Plan / hot topic: Growth of targeted and key established industries

Predictive indicator:

Cost-effective policies and incentives supporting targeted industries
Performance indicator:
**Annual growth of targeted (by economic development agency)
and key established industries measured by employment and
total number of business organizations**

Plan / hot topic: Industry sector diversity

Predictive indicator:

Cost-effective policies and incentives promoting diverse industry
development

Performance indicator:

Alignment of local economic diversity with state and national economy

E2.2. Business location

Plan / hot topic: Location of businesses in central business districts or other targeted
areas

Predictive indicator:

Government support (regulations, incentives) for central business district
locations

Performance indicators:

**Annual growth of employment and total number of business
organizations in areas targeted for business growth**

Cost-effectiveness of central business district locations (considering land
costs, redevelopment challenges)

E2.3. Citizen economic health

Plan / hot topic: Job compensation increases lagging behind cost of living increases

Predictive indicator:

Accessibility (geographic and financial) of workforce education programs
to those who need them

Performance indicators:

Wage growth compared to cost of living growth

**Livability/affordability Index: Percent of people earning below
livable compensation and percent of new regional jobs
providing livable compensation, percent of income of people
earning at and/or below regional median devoted to necessities,
economic output per capita, etc.**

E2.4. Overall economic vitality

Plan / hot topic: Attractiveness of region to new business investment

Predictive indicator:

Economic Vitality Index composed of key measures of reaching

economic development goals and business attractiveness including amenities, workforce skill, business support systems, sustainable economy, etc.

Performance indicator:

Annual levels of new business investment in exporting sectors (i.e. not based on local markets)

E3. Employment: Health of a Citizen's Relationship to Paid Work

Note: Indicator selection assumes that local economic development agencies target industries considering quality of employment offered.

E3.1. Workforce skill alignment with employment opportunities

Plan / hot topic: New jobs that fit the needs of residents, i.e. Aligning work force skill with job needs

Predictive indicators:

Engagement of business community in educational curriculum

development of 9-12 and secondary education institutions

Accessibility (geographic and financial) of workforce education programs to those who need them

Business employment growth in targeted sectors (assumes sectors are targeted partially due to existence of local workforce skills)

Performance indicators:

Percent of new jobs filled by local residents

Professionally trained students landing trained-for jobs within one year

Unemployment rate

Underemployment rate (Percent of people with jobs below their qualifications and/or qualified people not in the workforce)

Workforce by Class compared to Jobs by Class (Classes are Creative Class, Working Class, Service Class, Ag Class)

Adults with bachelor's degree or higher level of education

E3.2. Worker compensation

Plan / hot topic: Economic opportunities providing livable compensation

Predictive indicators:

Annual growth of targeted (by economic development agency) and key established industries measured by employment and total number of business organizations

Performance indicators:

Percent of population in poverty

Livability/affordability Index: Percent of people earning below livable compensation and percent of new regional jobs providing livable compensation, percent of income of people earning at and/or below regional median devoted to necessities, economic output per capita, etc.

Economic output per capita

Promotions of native residents into managerial positions

Community Wealth Leakage Index (increase of local economic multipliers)

Plan / hot topic: Quality of New Jobs (e.g. benefits including training for advancement – personal/professional growth opportunities)

Predictive indicator:

Annual growth of targeted (by economic development agency) and key established industries measured by employment and total number of business organizations

Performance indicators:

For both new jobs created and total overall jobs, percent that start above livable compensation levels for 40 hour workweek

Percent new jobs created with at least two-level title increase locally-available

E3.3. Worker transportation access to employment opportunities

Note: The terms “easily accessible” and “reasonably accessible” are to be defined by local transit agencies and economic development agencies (including employment agencies) and are to consider time commitment to a job commute via transit along with other factors.

Plan / hot topic: Geographic alignment to work opportunities

Predictive indicator:

Cost-effective policies and incentives promoting job growth in developed areas

Performance indicators:

Average commute times

Percent of total jobs and new jobs that are easily accessible to economically challenged neighborhoods (i.e. lower income areas)

Plan / hot topic: Transit access to employment

Predictive indicators:

Annual growth of employment and total number of business organizations in areas targeted for business growth

Quality of transit services to areas targeted for business growth.

Percent businesses participating in partnerships providing reduced-cost

transit access and/or providing reduced-cost transit access through own initiative

Performance indicators:

Percent of existing and newly created employment opportunities reasonably accessible via transit

E4. Sustainable Economy

E4.1. Business / organization sustainability practices

Plan / hot topic: Sustainability Management Literacy

Predictive indicator:

Cost-effective policies / incentives for businesses to implement sustainability management systems

Performance indicators:

Percent of organizations greater than 50 people employing an EMS/SEMS

Percent of organizations greater than 20 employees with adopted sustainability policies or goals

Plan / hot topic: Business Protection of natural capital

Predictive indicators:

Percent of organizations greater than 50 people employing an EMS/SEMS

Percent of organizations greater than 20 employees with adopted sustainability policies or goals

Performance indicators:

Percent of organizations that reduce energy and water intensity (means use of resources per dollar of revenue) more than 3% annually

Annual increase in value of natural capital

Percent of organizations greater than 20 employees that reduce energy and water intensity (means use of resources per dollar of revenue) more than 3% annually

Plan / hot topic: Sustainable procurement practices

Predictive Indicator:

Percent of organizations conducting internal sustainability education

Performance:

Percent of organizations that have adopted sustainable procurement practices or goals

Annual growth in sustainable procurement of organizations tracking it

Plan / hot topic: Pollution reduction by business and organizations

Predictive Indicator:

Cost-effective policies / incentives helping organizations reduce pollution

Performance indicators:

Annual reduction in government regulated pollutants (FtC)
Annual reduction in inventory of toxics (federal definition) per GDP

E4.2. Transition to a sustainable economy

Plan / hot topic: Sustainable or eco labeled product development

Predictive indicator:

Cost-effective policies / incentives for sustainable product development

Performance indicator:

Annual increase in certified sustainable or eco-labeled products produced locally (within 60 miles of region's urban centers)

Plan / hot topic: Global need to reduce greenhouse gas emissions

Predictive indicator:

Cost-effective policies / incentives supporting climate change strategies of local organizations

Performance indicator:

Annual business/organization facility reduction of greenhouse gas emissions

Well-Being

W1. Education: Development of human capital

W1.1. K-12 Education

Plan / hot topic: Education quality

Predictive indicators:

Number of students per classroom and per teacher in grades K-3, 3-8, 9-12

Percent of public education staff that meet the certification and highly qualified designation as reported by the state of Colorado

Percent of pre-K age children in educational programs by family income level

Percent kids in alternatives from general public education classrooms

Percent experienced teachers (>15 yrs. experience) at schools not meeting state performance standards

Performance indicators:

Percent of all public education students meeting the Colorado state proficiency standard for each subject area assessed or federal No Child Left Behind standards

Annual dropout rate and graduation rate (reported by the State of Colorado)

Satisfaction of parents with public educational systems

The ratio of mean percentile of the district student achievement divided by the district cost per student (per pupil cost)

W1.2. Continuing Education (degree-based)

Plan / hot topic: Improvement of adult workforce skills

Predictive indicators:

Accessibility (geographic and financial) of workforce education programs to those who need them

Per capita government support of higher education

Performance indicators:

(See E3.1. Adults (percent) with bachelor's degree or higher education)

Human Capital Development Index: Tuition Cost/ opportunity costs/ cost of living compared to incomes/access to education

Percent of students attending higher education with one degree already achieved

W1.3. Public Education (non-degree based)

Plan / hot topic: Cost-effective access to information

Predictive indicators:

Library funding per capita

Cost-effective policies / incentives for home installation of internet access by economically disadvantaged people

Performance indicators:

Percent of households with internet access (via own computer)

Public library volumes per capita

Plan / hot topic: Adult literacy and literacy with English as second language

Predictive indicator:

Percent of population arriving with no English gaining working use of English within one year

Performance indicators:

Adult literacy rates

Adult literacy rates in English among those with English as second language

W2. Health: Human health performance

W2.1. Access

Plan / hot topic: Public access to health care

Predictive indicators:

Percent of population with health insurance

Public health spending per capita

Performance indicators:

Mental Health Treatment Expansion: 55 percent of adults aged 18 to 54 with a Serious Mental Illness will report receiving treatment (COH)

Childhood Immunizations: 80 percent of children 19 to 35 months will receive all DtaP, polio, MMR, Hib, and HepB vaccines (fully immunized with the 4:3:1:3:3 series) (COH)
Specific Source of Ongoing Primary Care: 96 percent of persons of all ages will have a specific source of ongoing primary care (COH)
Health Insurance Coverage: 100% of persons under 65 years of age will have health care coverage (COH)
Percent health care institutions within 1/4 mile of transit services

W2.2. Prevention

Plan / hot topic: Prevention of health problems

Predictive indicators:

Public health funding compared to population

Public health funding treating risky (voluntary) behaviors

Percent of school districts with mandatory health education

Use of publicly available health screening systems (Percent of eligible population)

Performance indicators:

Adult Smoking: Only 12 percent of adults 18 yrs of age and older will have smoked more than 100 cigarettes in their lifetime or smoked on some or all days in the past month (COH)

Adolescent Physical Activity: 85 percent of adolescents in grades 9-12 will engage in vigorous physical activity that promotes cardiorespiratory fitness three or more days per week for 20 or more minutes per day (COH)

Adult Physical Activity: 50 percent of adults aged 18 years and older will report light or moderate physical activity for at least 30 minutes five or more times per week (COH)

Adult obesity: Only 15 percent of adults 20 years of age and older will be obese (body mass index of 30 or greater) (COH)

Responsible Adolescent Sexual Behavior: 95 percent of adolescents will report abstaining from sexual intercourse or using condoms if currently sexually active (COH)

Unintended Pregnancy: Reduce to no more than 30 percent the proportion of all pregnancies that are unintended (COH)

Illicit Drug Use Among Adults: Only 2 percent of adults 18 yrs or older will report illicit drug use in the past 30 days (COH)

Incidence of sexually-transmitted disease

Percent of children receiving recommended immunizations

Reduction of deaths due to leading preventable conditions (e.g. heart disease)

Self-reported number of adults in poor to fair health

Public access to safe cycling/pedestrian mobility or recreational systems (surveyed)

W2.3. Environmental Quality

Plan / hot topic: Environmental (ambient) quality effect on human health

Predictive indicators:

Transition rate to a sustainable economy

Cost-effective government policies / incentives preventing environmental effects on human health

Local mercury emissions from energy production and inoculations

Percent fish in local lakes meeting mercury standards

Population exposed to air not meeting EPA health standards for ozone, carbon monoxide and particulate matter

Performance indicator:

Growth or decline of human health problems attributed to environmental causes

W3. Housing: A basic need supporting human capital

W3.1. Access to housing (costs)

Plan / Hot Topic:

Predictive indicators:

Cost-effective government policies / incentives for adequate affordable housing

Cost-effective government policies / incentives for high performance sustainable housing (e.g. Built Green)

Performance indicator:

Percent of all existing and new housing affordable to very low, low, and moderate income households (affordability measured by life-cycle ownership costs including utilities and maintenance, not initial cost)

W3.2. Quality of Housing

Plan / Hot Topic:

Predictive Indicator:

Cost-effective policies and incentives supporting green high performance housing development and/or remodeling

Performance Indicator:

Production of “Green” high performance housing expressed as percent of new and substantially-rehabilitated housing that complies with local Green Building measures as a percentage of the total new and rehabilitated housing

W3.3. Land use / Mobility

Plan / Hot Topic: Housing locations supportive of mobility without private vehicles

Predictive indicators:

Square footage developed (new square footage – whether on new land or in-fill development) relative to total new urban land developed

People per acre in residential zones

Performance indicators:

Percent of housing within 1 mile of commercial services

Percent of housing within 1/4 mile of transit services

Geographic distribution of affordability, sq mile

Society

S1. Community Participation: Our Ability and Inspiration to Work Together

S1.1 Volunteerism

Plan / hot topic: Governance

Predictive indicator:

Elected leadership and executives rated as high quality

Performance indicator:

Percent of adults 18+ yrs of age who participate in governance as a volunteer

Plan / hot topic: Creating access to participation

Predictive indicator:

Cost-effective policies and incentives supporting ADA regulations compliance and performance beyond compliance

Performance indicator:

Percent compliance with ADA regulations

Plan / hot topic: Overall volunteerism for governance and civic activities

Predictive indicator:

Elected leadership and executives rated as high quality

Performance indicators:

Percent of population over 18 volunteering in community

Percent of youth 10-18 volunteering (civic, religious, etc)

Percent growth of volunteer hours (by those tracking it) compared to population growth

S1.2 Civic/Religious Organizations

Plan / hot topic: # of participants

Predictive indicator:

Does a person feel like it's worth being involved in the community?

Performance indicators:

Charities and individual and business charitable donations per 1,000 population

Percent of identifiable neighborhoods with registered neighborhood associations

Diversity of participants in civic organizations

Plan / hot topic: Churches

Predictive indicator:

Does a person feel like it's worth being involved in the community?

Performance indicators:

of religious congregations per 1000 people

Religious attendees as percent of county population

S1.3 Sustainability Awareness

Plan / hot topic: Community knowledge of sustainability

Predictive indicators:

Sustainability courses or events offered per year

Percent of organizations greater than 50 people employing an EMS/SEMS

Percent of organizations greater than 20 employees with adopted sustainability policies or goals

Performance indicator:

Community sustainability awareness (surveyed)

Plan / hot topic: Sustainability partnering in the community (FtC)

Predictive indicator:

Percent organizations in the region adopting and using common sustainability indicators

Performance indicators:

Community partnerships for sustainability

Rate of Fort Carson's progress in achieving FC sustainability objectives using partnerships

S2. Crime/Safety

S2.1 Crime Prevention and Law Enforcement Effectiveness

Plan / hot topic: Community policing

Predictive indicator:

Community / law enforcement partnerships for crime prevention

Performance indicators:

Percent of police on foot or bicycle

Number of neighborhood watch groups per urban resident

Residents (surveyed) perception of safety

Residents (surveyed) perception of safety services (police, fire, ambulance) response times; actual response time performance

Plan / hot topic: Crime rates

Predictive indicator:

Percent of population below federal poverty level

Performance indicators:

Violent crime (and separately, felony) convictions, as a percent of population

Nonviolent crime (and separately, felony) convictions, as a percent of population

Population growth compared to growth of number of crime victims

S2.2. Substance abuse

Plan / Hot Topic: Substance abuse education

Predictive indicator:

Cost-effective policies and incentives supporting substance abuse education

Performance indicator:

Estimated # of people receiving substance abuse education compared to population (or if measurable, at-risk populations)

S2.3. Youth Crime

Plan / hot topic: Youth crime problems

Predictive indicators:

High school drop out rate

Youth program slots per capita for all youth, and poverty level youth.

Number of parents without adequate daycare options

Performance indicators:

Violent deaths per 10,000 youth

Convicted crime and separately felony rate per 10,000 youth

Juvenile arrest growth compared to population growth

of youth avoiding prison with community restitution

S3. Culture and Leisure: Supporting social systems and ecosystems for access

S3.1. Government Role

Note: Measuring government support for cultural activities does not imply that more government support is a desired solution – it can also be an indicator that too much

government support is occurring. I.e., a measure of government support is neutral regarding the ideal level of government support.

Plan / hot topic: Government support of cultural / leisure activities

Predictive indicators:

Private support of cultural / leisure activities per capita

Government's obligated spending compared with revenues per capita

Dedicated government funds for cultural / leisure support

Adopted government policies supporting cultural / leisure activities (e.g. natural area preservation, historic preservation, arts, etc.)

Performance indicator:

Tax dollars supporting cultural / leisure activities events per capita

S3.2. Culture and Leisure Access

Plan / hot topic: Alignment of cultural event seating/venues/costs with community demand

Predictive indicators:

Variety of community cultural facilities

of seats in public/private arts facilities per capita

Tax dollars supporting cultural / leisure activities events per capita

Performance indicators:

Cultural / leisure event attendance growth per capita

Financial health of cultural / leisure event organizations

% of cultural events affordable to poverty-level residents

S3.3. Economic Benefit

Plan / hot topic: Economic contribution of cultural / leisure events

Predictive indicators:

Alignment of cultural event seating with community demand

Cultural events marketing to people outside the community

Cultural events quality

% of workers classified as Creative Workforce

of cultural/leisure organizations with professional staff

Performance indicators:

of non-resident participants in community cultural / leisure events

Estimated economic benefit from major cultural / leisure events per capita (including multipliers, etc.)

of tourism-related and culture/leisure-related jobs with benefits that pay living way

Arts Vitality Index (including percent of economic growth from the arts; # organizations with a "percent for the arts" or similar policy; local dollars donate per capita to five largest identified arts organizations, etc.)

S4. Family Health

S4.1. Family self-sufficiency

Plan / hot topic: Family Self-sufficiency

Predictive indicators:

Unemployment rate

Economic Vitality Index

Production of green high performance housing

Cost-effective policies / incentives for home installation of internet access
by economically disadvantaged people

Performance indicator:

Family Self-sufficiency Index (access to health insurance, cost-effective mobility, daycare, etc.)

Plan / hot topic: Health of children of divorce

Predictive indicators:

Divorce rate

Percent of parents not living in the region (within one hour) of children

Performance indicator:

People under 18 from divorced families and not meeting CSAP
requirements

S4.2 Family vitality

Plan / hot topic: Preventable death

Predictive indicators:

Growth or decline of human health problems attributed to environmental
causes

Motor Vehicle Traffic Crashes: Reduce deaths caused by motor vehicle
traffic crashes to 9.2 deaths per 100,000 population (COH)

Performance indicators:

Preventable death rate

S5. Governance: Managing economic and social behavior

S5.1. Accountability

Plan / hot topic: Quality of elected leaders and executives

Predictive indicator:

Percent of elective offices actively contested

Percent local elected positions paying a living wage

Percent of local executive positions compensated in the range of

national norms

Performance indicator:

Percent of local government entities with an adopted strategic plan with reported results
Elected leadership and executives rated as high quality

Plan / hot topic: Government responsiveness to constituents

Predictive indicators:

Elected leadership and executives rated as high quality

Government's obligated spending compared with revenues per capita

Performance indicators:

Access to elected officials or important information (survey gathered)

Balance of government revenues streams compared to state/national norms

Flexibility of local leaders to respond to changes (survey gathered)

Perceived influence (via survey) of campaign donors on local officials

S5.2. Participation Rates and Quality

Plan / Hot Topic: Citizen participation in governance (local govt. and neighborhood associations)

Predictive indicators:

Perceived influence (via survey) of campaign donors on local officials

Flexibility of local leaders to respond to changes (survey gathered)

Elected leadership and executives rated as high quality

Does a person feel like its worth being involved in the community?

Government or non-profit institution support of neighborhood associations

Government or non-profit support of voter education and ease of voting

Performance indicators:

Percent voting in elections and Percent eligible voter registered to vote

Diversity of people who participate in government boards and commissions

Percent of elective offices actively contested

Participation in neighborhood associations.

Percent residential (acres) represented by established neighborhood assns or homeowners associations

S5.3. Fiscal Management

Plan / Hot Topic: Government fiscal fairness (are people and organizations appropriately paying for government services)

Predictive indicator:

citizens educated about government services and revenues

Performance indicators:

Government revenues compared to population and personal income

Percent of new urban development's revenues to local/state governments

covering short- and long-term costs
Percent of government-owned lands providing local government revenues
in lieu of taxes equivalent to private landowners
Local taxes waived through business incentives per dollar collected from
those businesses and livable compensation jobs created by those
businesses

S6. Mobility: Connection of people to goods and services

Note: the following mobility indicators are listed in other topics:

- Land Use: See N1.1. Land use pattern support of urban transit systems
- Housing: See W3.3. Housing locations supportive of mobility without private vehicles
- Work: See 3.3. Geographic alignment to work opportunities and Transit access to employment
- Relationship to Health: see W2.1. Public access to health care and W2.2. Prevention of health problems
- Senior mobility: see S7.3. Senior Necessities Performance
- Youth mobility:

S6.1. Public Mobility Performance

Plan / hot topic: Cost-effectiveness of public mobility systems

Predictive indicator:

Cost-effective policies and incentives supporting low-cost mobility

Performance indicators:

Amount of tax dollars spent on subsidizing single-occupancy vehicle use
versus public transit

Percent of streets with adequate pedestrian and bike facilities

Percent of land devoted to “car habitat”

Total mobility-related carbon dioxide emissions per capita and per
economic performance.

Percent change Vehicle Miles Traveled (VMT) per capita

Percent growth in transit usage

Average life-cycle cost of individual mobility (including costs of time)

S7. Seniors

S7.1. Seniors' Health

Plan / hot topic: Seniors' overall health

Predictive indicators:

Percent of population over 60 accessing county delivered or NGO services

Percent of population over 70 living in own home
Performance indicator:
Senior Vitality Index (age 60+ and linked to number of seniors over 60 in region)

Plan / hot topic: Seniors' financial health

Predictive indicator:
Seniors' per capita income growth compared to cost of living growth
Cost-effective policies and incentives protecting seniors from fraud
Performance indicator:
Seniors' poverty rate
Rate of seniors that are victims of fraud

Plan / hot topic: Seniors' physical/mental health

Predictive indicator:
See Health Indicators of sections 2.1. and 2.2.
Performance indicator:
Senior Vitality Index

S7.2. Diversity of Senior Activities

Plan / hot topic: **Diversity of Senior Needs: (focus on the most fragile if we have to choose)**

Predictive indicator:
Cost-effective policies and incentives supporting private or public senior programs
Performance indicators:
Percent of population over 60 accessing county delivered or NGO services
Percent of population over 70 living in own home
Percent of seniors achieving self-sufficiency: sufficient income considering expenses
Nursing home patient days per person over 65

S7.3. Senior Necessities Performance

Plan / hot topic: Performance of senior housing (access; affordability)

Predictive indicator:
Cost-effective policies / incentives supporting senior housing performance.
Performance indicator:
of units per capita dedicated to 65 and over

Plan / hot topic: Senior Mobility: Maximizing independence for frail and disabled

Predictive indicator:
Cost-effective policies and incentives supporting senior mobility
Performance indicator:

Percent of senior population reporting strong mobility

S8. Youth

Note: The Youth indicators listed immediately below are consolidated from the relevant indicators previously listed in sections W.1. Education, W.2. Health, and S3.2. (Crime) in order to present a coherent picture of youth-related indicators. Other indicators of Youth quality and sustainability begin at section S8.1.

W1. Education: Development of human capital

W1.1. K-12 Education

Plan / hot topic: Education quality

Predictive indicators:

Number of students per classroom and per teacher in grades K-3, 3-8, 9-12.

Percent of public education staff that meet the certification and highly qualified designation as reported by the state of Colorado.

Percent of pre-K age children in programs by family income level

Percent students in alternatives from general public education classrooms

Performance indicators:

Percent of all public education students meeting the Colorado state proficiency standard for each subject area assessed.

Annual dropout rate and graduation rate (reported by the State of Colorado)

Satisfaction of parents with public educational systems

The ratio of mean percentile of the district student achievement divided by the district cost per student (per pupil cost).

W1.3. Public Education (non-degree based)

Plan / hot topic: Cost-effective access to information

Predictive indicator:

Library funding per capita

Cost-effective policies / incentives for home installation of internet access by economically disadvantaged people

Performance indicators:

Percent of households with internet access (via own computer)

Public library volumes per capita

W2. Health: Human health performance

W2.1. Access

Plan / hot topic: Public access to health care

Performance indicators:

Childhood Immunizations: 80 percent of children 19 to 35 months will receive all DtaP, polio, MMR, Hib, and HepB vaccines (fully immunized with the 4:3:1:3:3 series) (COH)

Specific Source of Ongoing Primary Care: 96 percent of persons of all ages will have a specific source of ongoing primary care.

Health Insurance Coverage: 100Percent of persons under 65 years of age will have health care coverage.

Health care institutions within 1/4 mile of transit services.

W2.2. Prevention

Plan / hot topic: Prevention of health problems

Predictive indicators:

Public health funding compared to population

Public health funding treating risky (voluntary) behaviors

Percent of school districts with mandatory health education

Use of publicly available health screening systems (Percent of eligible population)

Performance indicators:

Adolescent Physical Activity: 85 percent of adolescents in grades 9-12

will engage in vigorous physical activity that promotes cardiorespiratory fitness three or more days per week for 20 or more minutes per day. (COH)

Responsible Adolescent Sexual Behavior: 95 percent of adolescents will report abstaining from sexual intercourse or using condoms if currently sexually active. (COH)

Unintended Pregnancy: Reduce to no more than 30 percent the proportion of all pregnancies that are unintended. (COH)

Incidence of sexually-transmitted disease

Percent of children receiving recommended immunizations

Reduction of deaths due to leading preventable conditions (e.g. heart disease)

Public access to safe cycling/pedestrian mobility or recreational systems (surveyed)

S2.3. Youth Crime

Plan / hot topic:

Predictive indicators:

High school drop out rate

Youth program slots per capita for all youth, and poverty level youth

Number of parents without adequate daycare options

Performance indicators:

Violent deaths per 10,000 youth

Convicted crime and separately felony rate per 10,000 youth

Juvenile arrests

of youth avoiding prison with community restitution

S8.1. Youth Vitality

Plan / hot topic: Youth care

Predictive indicators:

Percent of family-assistance resources in community to help families dedicated to children.

Percent families that moved in the past year.

Performance indicators:

Youth Vitality Index, comprised of the individual indicators listed in section S8 (both indicators regarding youth vitality from other sections, and section S8.1).

Number of children on waiting lists at day care providers.

Child abuse cases investigated/prosecuted as percent of population.

Licensed daycare vs. youth population aligned with geographic needs.

Youth abortion rates.

Children's response to military deployment.

Infant mortality rate.

Bullying measured by survey question: Do you feel safe in your school?