



Colorado (CO)

PSIC Federal Award: \$14,336,638

(Awarded September 30, 2007)

Summary

PSIC Investment Justification	Federal Funds
Colorado's Statewide Mobile Communications Suite and Radio Cache Strategic Technology Reserve (STR) for the 9 All Hazards Regions	\$1,110,352
Digital Trunked Radio System (DTRS) Statewide Infrastructure Development/Back-up Power in Areas at High Risk for Natural Disasters	\$816,000
DTRS Statewide Infrastructure Development/Enhancement	\$3,980,890
Statewide System of Systems Non-DTRS Infrastructure/Equipment	\$1,147,854
Colorado All-Hazards Region's End User Communication Devices	\$5,046,485
Interoperability Planning, Training, and Exercises for Colorado Region's Designated at High-Risk for Natural Disasters	\$405,800
DTRS End User Equipment for State Agency Personnel	\$1,018,293
Technical Training, Planning, and Coordination	\$230,865
Management and Administration (M&A)	\$430,099
Statewide Planning	\$150,000
Total PSIC Award	\$14,336,638

Pass Through: The State of Colorado fulfilled the PSIC Grant Program requirement by passing through a minimum of 80 percent of the total award amount to local or tribal government bodies or authorized nongovernmental organizations.

Strategic Technology Reserve (STR): Colorado allocated \$1,110,352 to its STR Investment.

Investments

Colorado's Statewide Mobile Communications Suite and Radio Cache Strategic Technology Reserve (STR) for the 9 All Hazards Regions

Federal Amount:	\$ 1,110,352
Non-Federal Match Amount:	\$ 277,588
Total Project Cost:	\$ 1,387,940



100%* Acquisition & Deployment	0% Training & Exercise	0% Planning & Coordination
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**Percentages include both Federal and non-Federal Match funds.*

Colorado currently has limited capabilities to re-establish interoperable communications during and after major incidents of disaster. This Investment will address that communications gap through the acquisition of two Mobile Interoperable Gateway (MIG) Systems and additional radio equipment. The gateways will be installed on mobile trailers that can be moved to the scene of an incident. Each communications trailer will contain a cache of equipment, including: radio antennae, gateways, and portable radios that have been pre-programmed to operate in every region. This Investment satisfies the PSIC Program requirement to develop and implement a STR that is pre-positioned, deployable, and able to re-establish communications when critical communications equipment is damaged or destroyed.

Digital Trunked Radio System (DTRS) Statewide Infrastructure Development/Back-up Power in Areas at High Risk for Natural Disasters

Federal Amount:	\$ 816,000
Non-Federal Match Amount:	\$ 204,000
Total Project Cost:	\$ 1,020,000



100%* Acquisition & Deployment	0% Training & Exercise	0% Planning & Coordination
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**Percentages include both Federal and non-Federal Match funds.*

Colorado's current Digital Trunked Radio System (DTRS), which serves as the State's seamless statewide wireless system, does not provide communications coverage for all regions. This Investment will situate a five-channel DTRS tower site at the east portal of the Eisenhower Tunnel in the Northwest Region on Interstate 70, and install localized signal amplifiers at key locations to expand and enhance coverage. The Investment will enable the State to provide back-up power to two of the DTRS zone controller's sites which will improve reliability and prevent total system failure in the event that power is lost at critical infrastructure equipment locations. Investing in the expansion of the statewide system and back-up power will improve interoperability among all system users throughout the State.

DTRS Statewide Infrastructure Development/Enhancement



Federal Amount:	\$ 3,980,890
Non-Federal Match Amount:	\$ 3,099,140
Total Project Cost:	\$ 7,080,030

99%* Acquisition & Deployment	0% Training & Exercise	<1% Planning & Coordination
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**Percentages include both Federal and non-Federal Match funds.*

The communication systems across the State were initially maintained at the local level, but through cooperative efforts, many public safety agencies are moving to the Statewide Digital Trunked Radio System (DTRS). Within Colorado, several areas of the State have DTRS coverage that is inadequate to meet local government requirements, and several local government agencies do not have dispatch capabilities on the system. This Investment will add dispatch center connectivity, add new towers to address multi-jurisdictional coverage gaps, enable interstate interoperability through gateways, and add repeaters to allow additional capacity. These projects ultimately impact the 700-plus agencies currently using the DTRS and provide direct benefits to these agencies in six of the nine all-hazards regions. Since the DTRS is connected to other systems via gateways, statewide interoperability will be improved.

Statewide System of Systems Non-DTRS Infrastructure/Equipment



Federal Amount:	\$ 1,147,854
Non-Federal Match Amount:	\$ 286,964
Total Project Cost:	\$ 1,434,818

99%* Acquisition & Deployment	<1% Training & Exercise	<1% Planning & Coordination
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**Percentages include both Federal and non-Federal Match funds.*

Currently, select agencies within Colorado use technologies that are non-DTRS or utilize systems that are at differing levels of migration to the statewide system. This Investment will provide for the procurement of fixed and mobile gateway devices to allow interoperable communications between disparate systems, while migration to the DTRS continues. This Investment also provides funding for a web-based tool that allows for real-time communication among Emergency Operations Centers (EOC) and provides direct links to the field during incidents. This Investment is expected to improve interoperability between disparate systems, to provide connections between and among systems migrating to the statewide DTRS, and to improve command and control during emergency incidents and major disasters.

Colorado All-Hazards Region's End User Communication Devices



Federal Amount:	\$ 5,046,485
Non-Federal Match Amount:	\$ 2,212,350
Total Project Cost:	\$ 7,258,835

99%* Acquisition & Deployment	1% Training & Exercise	0% Planning & Coordination
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**Percentages include both Federal and non-Federal Match funds.*

As agencies migrate to newer technologies and the statewide Digital Trunked Radio System (DTRS), the State has experienced some loss of interoperability with some agencies. This Investment will resolve the interim problem through the purchase of additional radio equipment and mobile gateways to enhance individual agency capabilities, and improve interoperable communication throughout the State. Mobile extenders will improve signal strength and provide for coverage in areas of the South All-Hazards Region to improve DTRS signal strength. The Investment will not only advance spectrum efficiency goals through the migration of users onto the statewide digital system, but will also enable two tribal nations in the Southwest Colorado to migrate onto the statewide system. This Investment will also provide the North Central Region with the means to transmit and receive encrypted communications within the system used in the Denver Metro Area. This Investment will improve interoperability for agencies and tribal governments in Colorado's Southern All-Hazard Region, and enhance communication capabilities for public safety agencies in the North Central Region.

Interoperability Planning, Training, and Exercises for Colorado Region's Designated at High-Risk for Natural Disasters



Federal Amount:	\$ 405,800
Non-Federal Match Amount:	\$ 0
Total Project Cost:	\$ 405,800

0%* Acquisition & Deployment	47% Training & Exercise	53% Planning & Coordination
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**Percentages include both Federal and non-Federal Match funds.*

Colorado does not have an organized statewide training program for interoperable communications. This Investment will assist five of Colorado's nine All-Hazards Regions to engage in planning, training, and exercise programs. The planning component of this Investment will provide support to develop regional interoperable communications plans, assist in the acquisition and deployment of grant-funded equipment, develop training and exercise objectives and outcomes, and participate in the statewide planning processes. These efforts will address both existing and newly acquired equipment.

DTRS End User Equipment for State Agency Personnel

Federal Amount:	\$ 1,018,293
Non-Federal Match Amount:	\$ 254,573
Total Project Cost:	\$ 1,272,866



100%* Acquisition & Deployment	0% Training & Exercise	0% Planning & Coordination
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**Percentages include both Federal and non-Federal Match funds.*

All Colorado State agencies have not fully migrated to its Digital Trunked Radio System (DTRS), which serves as the State's seamless statewide wireless system which has the potential to negatively impact command and control at the scene of a major disaster or large-scale incident. This Investment will be used to procure mobile and portable radios to enhance individual State agency capabilities, to access existing DTRS radio tower sites, and to communicate with responders during major events requiring multiple agency interoperability. This Investment will incorporate the needs of public safety personnel in many State agencies, including the Departments of Public Safety, Transportation, Natural Resources, Corrections, and Higher Education.

Technical Training, Planning, and Coordination

Federal Amount:	\$ 230,865
Non-Federal Match Amount:	\$ 0
Total Project Cost:	\$ 230,865



0%* Acquisition & Deployment	43% Training & Exercise	57% Planning & Coordination
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**Percentages include both Federal and non-Federal Match funds.*

The Digital Trunked Radio System (DTRS) is a complex system. A recent State audit found that the State staff lacks the necessary training to be fully proficient in the operation of the DTRS. This Investment will fund the development of a train-the-trainer program and provide training to key personnel who operate and maintain the State's DTRS. PSIC funds will also be used to hire a new Interoperability Communications Coordinator (ICC). The ICC will lead efforts to implement the Statewide Communications Interoperability Plan (SCIP) and collaborate with State and local agencies to standardize equipment for interoperability. This Investment will strengthen interoperability through planning, coordination and training.

PSIC Administration and Statewide Planning Costs

Management and Administration (M&A)

Federal Amount:	\$ 430,099
Non-Federal Match Amount:	\$ 86,020
Total Project Cost:	\$ 516,119

The State was allowed to retain up to three percent of the total PSIC award for costs associated with the administration of the State's PSIC Investments. The M&A costs could include hiring full-time or part-time staff or contractors for grant management services related to reporting, monitoring and audit compliance, and associated travel and meeting expenses.

Statewide Planning

Federal Amount	\$ 150,000
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The State was allowed to retain up to five percent of the total PSIC award for Statewide Planning costs associated with the incorporation of the PSIC criteria into the Statewide Communication Interoperability Plan (SCIP). The Statewide Planning period of performance was April 1, 2007– December 3, 2007, with the submission of the SCIP.
