

**BUDGET INFORMATION - Construction Programs**

NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case, you will be notified.

COST CLASSIFICATION	a. Total Cost	b. Costs Not Allowable for Participation	c. Total Allowable Costs (Columns a-b)
1. Administrative and legal expenses	\$ 333,000 .00	\$ 0.00	\$ 333,000 .00
2. Land, structures, rights-of-way, appraisals, etc.	\$ 1,582,200 .00	\$ 0.00	\$ 1,582,200 .00
3. Relocation expenses and payments	\$ 0.00	\$ 0.00	\$ 0.00
4. Architectural and engineering fees	\$ 75,000 .00	\$ 0.00	\$ 75,000 .00
5. Other architectural and engineering fees	\$ 2,063,882 .00	\$ 0.00	\$ 2,063,882 .00
6. Project inspection fees	\$ 0.00	\$ 0.00	\$ 0.00
7. Site work	\$ 608,869 .00	\$ 0.00	\$ 608,869 .00
8. Demolition and removal	\$ 0.00	\$ 0.00	\$ 0.00
9. Construction	\$ 3,793,469 .00	\$ 0.00	\$ 3,793,469 .00
10. Equipment	\$ 9,572,649 .00	\$ 0.00	\$ 9,572,649 .00
11. Miscellaneous	\$ 0.00	\$ 0.00	\$ 0.00
12. SUBTOTAL (sum of lines 1-11)	\$ 18,029,069 .00	\$ 0.00	\$ 18,029,069 .00
13. Contingencies	\$ .00	\$ 0.00	\$ 0.00
14. SUBTOTAL	\$ 18,029,069 .00	\$ 0.00	\$ 18,029,069 .00
15. Project (program) income	\$ .00	\$ 0.00	\$ 0.00
16. TOTAL PROJECT COSTS (subtract #15 from #14)	\$ 18,029,069 .00	\$ 0.00	\$ 18,029,069 .00
<b>FEDERAL FUNDING</b>			
17. Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share.) Enter the resulting Federal share.	Enter eligible costs from line 16c Multiply X <u>67.32</u> %		\$ 12,137,422 .00

**ASSURANCES - CONSTRUCTION PROGRAMS**

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0042), Washington, DC 20503.


**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

**NOTE:** Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal interest in the title of real property in accordance with awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.
4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.
6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333) regarding labor standards for federally-assisted construction subagreements.
14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL 		TITLE Deputy Director	
APPLICANT ORGANIZATION Adams County Communications Center, Inc.		DATE SUBMITTED 8/16/10	

Brian Shepherd will be the Authorized Organizational Representative for this project. He has signatory authority for matters relating to the grant.

### CERTIFICATION REGARDING LOBBYING

Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, "New Restrictions on Lobbying." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Commerce determines to award the covered transaction, grant, or cooperative agreement.

#### LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

**As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.**

#### Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

NAME OF APPLICANT

AWARD NUMBER AND/OR PROJECT NAME

Adams County Communication Center BTOP-CCI EGIID: 7823

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

Brian Shepherd Deputy Director

SIGNATURE

DATE



7/26/10

### CERTIFICATIONS REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION-LOWER TIER COVERED TRANSACTIONS AND LOBBYING

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 26, "Governmentwide Debarment and Suspension (Nonprocurement)" and 15 CFR Part 28, "New Restrictions on Lobbying."

#### 1. DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION-LOWER TIER COVERED TRANSACTIONS

As required by Executive Order 12549, Debarment and Suspension, and implemented at 15 CFR Part 26, Section 26.510, Participants responsibilities, for prospective participants in lower tier covered transactions (except subcontracts for goods or services under the \$25,000 small purchase threshold unless the subtier recipient will have a critical influence on or substantive control over the award), as defined at 15 CFR Part 26, Sections 26.105 and 26.110 -

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### 2. LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

#### Statement for loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying,' in accordance with its instructions.

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As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification(s).

NAME OF APPLICANT

AWARD NUMBER AND/OR PROJECT NAME

Adams County Communication Center BTOP-CCI EGID: 7823

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

Brian Shepherd Deputy Director

SIGNATURE

DATE

7/26/10

## DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352  
(See reverse for public burden disclosure.)

Approved by OMB  
0348-0046

<b>1. Type of Federal Action:</b> <input type="checkbox"/> a. contract <input checked="" type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	<b>2. Status of Federal Action:</b> <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	<b>3. Report Type:</b> <input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change <b>For Material Change Only:</b> year _____ quarter _____ date of last report _____
<b>4. Name and Address of Reporting Entity:</b> <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known: <i>Adams County Communication center</i> <i>7321 Birch St.</i> <i>Commerce City, CO 80022</i>  Congressional District, if known: <sup>4c</sup>	<b>5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:</b>   Congressional District, if known:	
<b>6. Federal Department/Agency:</b>  NTIA	<b>7. Federal Program Name/Description:</b>  Broadband Technology Opportunity Program  CFDA Number, if applicable: _____	
<b>8. Federal Action Number, if known:</b>	<b>9. Award Amount, if known:</b> \$ 13,882,091	
<b>10. a. Name and Address of Lobbying Registrant</b> (if individual, last name, first name, MI):  <i>N/A</i>	<b>b. Individuals Performing Services</b> (including address if different from No. 10a) (last name, first name, MI): <i>N/A</i>	
<b>11.</b> Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: <u><i>Brian Shepherd</i></u> Print Name: <u>Brian Shepherd</u> Title: <u>Deputy Director</u> Telephone No.: <u>303-227-7124</u> Date: <u>7/26/10</u>	
<b>Federal Use Only:</b>		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)



# Comprehensive Community Infrastructure Budget Narrative Template

**Applicant Name: Adams County Communications Center (ADCOM 911)**

**EasyGrants Number: 7823**

**Organization Type: Public entity, Non-profit Corporation**

**Proposed Period of Performance: October 2010 – October 2013**

**Total Project Costs: \$ 18,029,069**

**Total Federal Grant Request: \$ 12,137,422**

**Total Matching Funds (Cash): \$ 3,055,000**

**Total Matching Funds (In-Kind): \$ 2,836,647**

**Total Matching Funds (Cash + In-Kind): \$ 5,891,647**

**Total Matching Funds (Cash + In-Kind) as Percentage of Total Project Costs: % 32.67**

## **1. Administrative and legal expenses - \$333,000**

<b>Service/Cost</b>	<b>Total Time</b>	<b>Hourly Rate</b>	<b>Total Cost</b>
<b>Project Mgmt. - ADCOM 911</b>	3,000	\$40	\$120,000 (In-Kind)
<b>Project Mgmt. - DIA</b>	1,000	\$100	\$100,000
<b>Legal Fees</b>	320	\$275	\$88,000
<b>Spectrum Licensing</b>	N/A	N/A	\$25,000





The Administrative and legal expenses for this project are limited to four categories.

**Project Management:** cost is for staff time associated with managing the day-to-day implementation of the project. Both ADCOM 911 and DIA will have a project manager assigned, and the distribution of hours will be weighted heavily towards the front-end of the project with the required project management decreasing toward the third year. ADCOM 911 will perform PM with internal staff while DIA will outsource its PM services. The in-kind valuation is calculated by using the existing Deputy Director's salary (who will be doing the PM), determining an hourly rate and multiplying by the hours.

**Legal Expenses:** The legal expenses of \$88,000 will be for the development of Intergovernmental Agreements and Memorandums of Understanding between the various organizations involved. These agreements are required by the FCC and will be crucial to the ongoing governance and expansion of the system. Additionally, we will seek legal review of all major contracts. The specific breakdown of hours is:

Development of Initial MOU between ADCOM 911 and DIA: 80  
Development of IGA/MOU regarding standards of use for CAI fiber network: 120  
Development of governance and operational/use guidelines for LTE system: 120

**Spectrum Licensing:** One stipulation from the FCC waiver granting public safety agencies access to the 700 MHz spectrum was they would pay nominal fees to support the administration of the Public Safety Spectrum Trust (PSST). The formal budget submitted by the PSST has first year fees at \$15,000 with an expected \$5,000 per year for years two and three.

**Cash Match**

These expenses will not be subject to a cash match

**In-kind Match**

ADCOM 911 will contribute \$120,000 of Project Mangement in-kind contribution for the project.

**2. Land, structure, rights-of-way, appraisals, etc. - \$1,582,200**

All expenses in this category are directly related to radio tower sites including the tower structure and equipment buildings. These towers will be used as primary access sites for the LTE system access. The towers are located throughout the service area and are all existing structures.

The only expense that is not a direct in-kind match is the pre-fabricated equipment building to be installed at the Cherokee Tower site at a cost of \$45,000.

**Cash Match**

There is no cash match for this category.

**In-kind Match**

The total in-kind match for this cateogry is \$1,537,200 and is determined by calculating the current market rate for tower space at the desired AGL. The primary reference used was an existing lease ADCOM 911 currenly has with a major commercial carrier at the 50 AGL level. The current monthly value of this lease is \$2,135. We then multiplied the monthly lease amount by the number of towers (14



for ADCOM 911, 6 for DIA) and multiplied that by the number of months in the lease (36). The calculated values for each partner are listed below.

**ADCOM 911 Sites**

Agency	Monthly Lease Value	Number of Sites	Allowable Months	Total In-kind contribution
ADCOM 911	\$2,135	14	36	1,076,040
DIA	\$2,135	6	36	\$461,160
Total				1,537,200

**3. Relocation expenses and payment - \$0**

There are no relocation expenses for this project.

**4. Architectural and engineering fees - \$75,000**

For this project we have budgeted \$75,000 for engineering studies on all major towers to be used. These studies will be used to identify the requirements to ensure the towers meet all standards and specifications with the additional antenna load estimated for the project.

**Cash Match**

These expenses will not be subject to any cash match.

**In-kind Match**

These expenses will not be subject to any in-kind match.

**5. Other architectural and engineering fees - \$2,063,882**

The breakdown of services within this category is.

Service	Total Staff Hours (Over 3 year project)	Hourly Rate	Total Cost
ADCOM 911 RF Technical Services	5,500	\$35	\$192,500 (In-Kind)
ADCOM 911 IT Staff Services	1,750	\$35	\$61,250 (In-kind)
ADCOM 911 Technical Services FTE	5,200	N/A – 2.5 FTE	270,000



DIA RF Services	650	\$200	\$130,000
DIA IT Services	650	\$200	\$130,000
Vehicle Model Installation	200 Units	\$300 per unit	\$600,000
LTE Design/Implementation	1	\$580,132	\$580,132
IP Network Design/Implementation	500	\$200	\$100,000

The expenses in this category are all directly related to the technical labor required to design and implement the project. The Staff Radio Technician Support time is for internal salary expenses of staff that will be dedicated to the RF segment project. The Staff IT System Support time is for the IP network related staff time required for the project. These figures were determined by taking the average hourly cost of ADCOM 911's existing staff and multiplying by the number of hours.

While internal staff will do a great deal of the work, we anticipate the need for external consulting and vendor expertise to assist ADCOM 911 and DIA. The External IT Consulting time is for experts in fiber-optic network implementation to assist both DIA and ADCOM 911 in designing and implementing the underlying fiber-optic network while the LTE System Design and Implementation is anticipated to be services provided by the LTE vendor during the project and is determined by vendor quote.

The end-use modem installation is based on a quote from one of the potential vendors for installing the modems into field units.

**Cash Match**

These expenses will not be subject to any cash match.

**In-kind Match**

These expenses will have the following In-kind contributions:

**ADCOM 911:** \$253,750

**6. Project inspection fees - \$0**

We do not anticipate any inspection fees



**7. Site work - \$608,869**

The following summarizes the site location/work to be done for the project.

**ADCOM 911 Building/Tower Renovation - \$200,000**

In order to accommodate the additional equipment and staff required to implement and maintain the proposed network, ADCOM 911 must expand its tower capacity, equipment room capacity and office space. This renovation will be to complete currently unfinished segments of the building to meet the requirements for sensitive equipment. In addition to the equipment room expansion, additional office and training space will be developed out of currently unfinished areas of the building. The total space to be renovated will be 842 square feet. The tower work is designed to ensure the existing tower has the capacity for the additional equipment. The specific tower and building expenses are:

Modification	Primary Reason	Cost
ADCOM Equipment Room Renovation	Existing equipment room lacks adequate power, racking capability and wiring.	\$110,000
ADCOM Office Space Renovation	Additional office space required for new staff	\$47,500
Tower Strengthening	Required for additional antennas	\$40,000
Security Fencing	Site will be a key aggregation point, currently tower is open.	\$2,500

**Cherokee and Ladybird Tower Renovations - \$85,000**

As one of the key tower locations within the service area, this existing tower will require strengthening to support additional load, a new equipment building as the current building has no available space and a new generator as the current generator lacks capacity and reliability. Additional security fencing is also required as multiple governmental agencies have access to the property it sits on.

Modification	Primary Reason	Cost
Cherokee Strengthening	Required for additional antennas and equipment	\$50,000
Ladybird Strengthening	Required for additional antennas and equipment	\$30,000
Security Fencing	Site will be a key aggregation point	\$2,500 (each)

**Justice Center Site Preparation - \$38,000**

This proposed site will require significant rooftop preparation including: rooftop mounts, external enclosures, electrical work and battery backup.

**DIA Site Hardening - \$82,500**

While the proposed sites at DIA have the required infrastructure for the access site hosting, some hardening/preparation must take place. The expenses in this category will be for tower/pole hardening, additional enclosures and backup systems.

**Building Antenna Roof Mounts - \$39,000**



For 15 of the buildings identified we will need to install standard roof-mount systems for the antennas.

**Antenna Installation - \$152,000**

Antenna installation – Tower	14	\$6,000	\$84,000
Antenna installation – Building	17	\$4,000	\$68,000

Antenna Installation – Tower: These are expenses to be incurred for mounting the antennas on towers. ADCOM 911 and DIA will not be doing their own tower climbing and will require external services for this. The quote is based on past costs for tower mounting

Antenna Installation - Building: These are electrical costs related to mounting the antennas on existing buildings. This will vary from building to building but we expect the \$4,000 figure to be the highest required value.

**eNodeB Miscellaneous Hardware - \$12,369**

Based on past experience, when installing remote sites a standard configuration of miscellaneous hardware is required. We have included a quote detailing the required hardware for each site.

**Cash Match**

These expenses will not be subject to any cash match.

**In-kind Match**

These expenses will not be subject to any in-kind match.

**8. Demolition and removal - \$0**

There are no demolition and removal expenses for this project

**9. Construction - \$3,793,469**

All of the construction expenses for this project are directly related to fiber-optic cable installation. This fiber-optic infrastructure will be the core backbone of the underlying network that supports the wireless system. Additionally, this fiber will be used to interconnect multiple Public Safety Answering Points, governments, school districts and the Denver Federal Center. The standard valuation of fiber was using \$25.75 per foot or \$135,960 per mile. A letter from a local fiber construction vendor is included to support this.

**Adams County Fiber Existing - \$269,690 (In-kind)**

The Adams County Fiber refers to the fiber infrastructure that is currently being developed by ADCOM 911. This in-kind contribution is the primary network that will connect ADCOM 911 to multiple anchor points including the Adams County Detention Center, City of Brighton, City of Commerce City and the



Adams County government campus. The realized value represents a 20% deduction in the gross value based on non-project uses.

**DIA Fiber Existing - \$656,007 (In-kind)**

DIA has existing fiber to all but one of the their proposed LTE sites which will be used for transport of all LTE data. The recognized values represents a 50% from gross value for non-project related uses.

**6<sup>th</sup> Avenue Fiber - \$790,304 (\$255,000 Cash Match)**

This fiber construction will utilize existing light-rail construction that is occurring on one of the major highways in the Denver metro area. This fiber run will link all of Adams County, DIA, the City and County of Denver, Jefferson County government (and PSAP) and the Denver Federal Center. This link is a key segment as it provides ADCOM 911 and DIA the ability to link their wireless network to an existing node in the Federal Network. The ability to link all regional networks to a centralized national core has been proposed by ERIC. The valuation for this fiber varies from the standard in that it is following the development of light-rail line being developed by the local RTD. RTD has offered to lay the fiber at cost, a quote showing this is has been included.

**Cherokee Tower/120th Fiber - \$1,297,058 (1,236,000 Cash Match)**

This fiber installation will tie one of ADCOM 911's key radio sites, the Cherokee site, into the fiber backbone. As this site will be a primary wireless aggregation point for both the current project and future expansions, it is crucial that it be connected to the primary network via high-speed fiber.

**Thornton Fiber - \$379,328 (\$364,000 Cash Match)**

With several key sites in the northern suburban section of the proposed service area, interconnecting the proposed fiber network to the existing City of Thornton fiber is crucial. This connection will tie ADCOM 911 and the Thornton Communications Center together at their closest points, a water treatment facility that lies within a few miles of the ADCOM 911 facility.

**DIA Fiber Extension - \$401,082 (\$400,000 Cash Match)**

While DIA has an existing fiber-network, the proposed wireless network will require upgrades to existing segments and some additional segments to their network.

**Cash Match**

**These expenses will have the following cash match**

Segment	Cash Match	Source
6 <sup>th</sup> Avenue	\$255,000	Jefferson County Emergency Communications Authority
Cherokee Tower/120 <sup>th</sup>	\$1,236,000	Adams County E911 Authority
Thornton Fiber	\$364,000	Adams County E911 Authority
DIA Fiber Extension	\$400,000	DIA



**In-kind Match**

Segment	In-kind Valuation	Source
Existing Adams County Fiber	\$269,690	ADCOM 911
Existing DIA Fiber	\$656,007	DIA

**In-kind valuation methodology**

To determine the in-kind methodology for fiber we determined a per mile cost for the fiber and multiplied that by the total mileage of existing fiber. We then subtracted a percentage from the total value to take into account non LTE and CAI Interconnection use of the fiber. For Adams County fiber we determined the per mile cost to be \$135,960 and for DIA we used \$46,511. The reason for the large discrepancy is that the Adams County fiber was installed in highly-developed commercial and suburban areas while the DIA fiber was installed in undeveloped land.

**10. Equipment - \$9,572,649**

As shown in the detailed budget, equipment will be the single largest category of expenses. In all cases, this equipment will be directly used for the development of the wireless and backhaul network. The equipment costs were based on specific vendor quotations or estimates from vendor proposals. The following tables break down the major equipment types showing their use and cost.

**LTE Related Equipment - \$7,801,743**

Equipment Type	Description of Use	Unit Cost	Units	Total Cost
eNodeB Site	Radio access point for subscribers	\$70,000	31	\$2,170,000
Enhanced Packet Core	The "brains" of the system. Manages all wireless traffic	\$3,279,500	1	\$3,279,500
User Equipment (UE)	The end user devices used by first responders.	\$1,000	2,000	\$2,000,000  (Cash Match: \$800,000)
700 MHz Antennas	Panel antennas required for each	\$11,865/ \$10,949	31	\$352,243



	remote site			
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**Network Management/Transport Equipment - \$1,610,031**

Equipment Type	Equipment Description	Unit Cost	Units	Total Cost
Fiber-optic aggregation  Points (Cisco 15454-GE)	This equipment is used to aggregate and manage the fiber-optic network traffic at key locations.	\$83,255/  \$79,750	5	\$412,768
Fiber-optic remote site access  (Cisco ASR1000 /3925/2921)	This equipment allows secondary sites and towers to access the fiber-optic network and transport the data to the central core.	\$77,733/  \$8,621/  \$4,495	11	\$293,915
Firewall  (Cisco ASA 5580)	Equipment used to maintain security throughout the wireless and backhaul network.	\$74,800	4	\$299,200
Network Security  (Cisco IPS/IDS)	Security device to detect security breaches within the network	\$65,000	1	\$65,000
Network Monitoring  (Netscout)	Software/Hard ware to monitor and manage network traffic	\$75,000	1	\$75,000





Microwave Backhaul	To backhaul LTE from eNodeB Sites	\$30,500/ \$15,000/ \$40,000/ \$28,000	15	\$447,500
Network Racks and Cables	To Install network equipment in server room	\$4,162	4	\$16,648

**Generators and UPS Equipment - \$160,875**

<b>Equipment Type</b>	<b>Location</b>	<b>Unit cost</b>	<b>Number of Units</b>	<b>Total Cost</b>
Generator	ADCOM 911	\$60,000	1	\$60,000
Generator	Ladybird Tower	\$20,000	1	\$20,000
Generator	Cherokee Tower	\$20,000	1	\$20,000
48 Volt UPS	Various eNodeB Sites	\$2,435	25	\$60,875

**Cash Match**

The total cash match for the equipment will be \$800,00 applied towards the LTE end-user devices. The breakdown of the cash matc is as follows

**Adams County E911 Authority:** \$400,000  
**ADCOM 911:** \$150,000  
**DIA:** \$250,000

**In-kind Match**

These expenses will not be subject to any in-Kind match.



**11. Miscellaneous - \$0**

There will be no miscellaneous expenses for this project

**Cash Match**

These expenses will not be subject to any cash match.

**In-kind Match**

These expenses will not be subject to any in-Kind match.

**13. Contingencies - \$0**

**- Contingencies are an unallowable expenditures under BTOP.**

**15. Project (program) income - \$0**

**- The value for this line-item on the SF-424C is \$0. Please do not provide an estimated Project (program income) on the SF-424C.**

## **BTOP Comprehensive Community Infrastructure Detailed Budget**

Please complete the General Budget Overview and Detailed Project Costs worksheets.

***Please refer to the Comprehensive Community Infrastructure Grant Guidance for detailed instructions on the completing this upload.***

Applicants are required to provide this upload as an Excel file, and not to convert it to a PDF prior to upload. Applicants should not alter the layout of the provided templates, except to insert additional line-items as needed in the Detailed Project Costs worksheet.

***Important Update - 3/19/2010:*** This template has been updated with the addition of a new column in the Detailed Project Costs worksheet. The new column, titled "Cash Match Percentage" allows Applicants to specify the percentage of the line item cost that will be provided by the cash match. This column is only relevant if "Cash Match" is selected in column C (the "Match" column). If "Cash Match" is selected in column C, Applicants should specify a percentage in the Cash Match Percentage field--100% means that the line item will be paid for entirely from the cash match, 0% means that it is paid for entirely from the federal request, any other amount will allocate the costs between the federal request and the cash match.

Note that *it is not required for Applicants to use this updated template.* Applicants that submit their detailed budget using the previously available template will not be penalized. In the previous version of this template, selecting "Cash Match" in column C indicates that 100% of the line item cost will be paid from the cash match.

## General Budget Overview

Budget	Federal Funding Request	Matching Funds (Cash)	Matching Funds (In-Kind)	Budget TOTAL	Last Mile Allocation	Middle Mile Allocation	Allocated TOTAL
Network & Access Equipment (switching, routing, transport, access)	\$8,259,531	\$800,000	\$0	<b>\$9,059,531</b>	\$4,210,000.00	\$4,849,531.00	<b>\$9,059,531</b>
Outside Plant (cables, conduits, ducts, poles, towers, repeaters, etc.)	\$1,004,015	\$2,255,000	\$2,462,897	<b>\$5,721,912</b>	\$1,928,443.00	\$3,793,469.00	<b>\$5,721,912</b>
Buildings and Land – (new construction, improvements, renovations, lease)	\$611,375	\$0	\$0	<b>\$611,375</b>	\$381,375.00	\$230,000.00	<b>\$611,375</b>
Customer Premise Equipment (modems, set-top boxes, inside wiring, etc.)	\$0	\$0	\$0	<b>\$0</b>	\$0.00	\$0.00	<b>\$0</b>
Billing and Operational Support Systems (IT systems, software, etc.)	\$0	\$0	\$0	<b>\$0</b>	\$0.00	\$0.00	<b>\$0</b>
Operating Equipment (vehicles, office equipment, other)	\$0	\$0	\$0	<b>\$0</b>	\$0.00	\$0.00	<b>\$0</b>
Engineering/Professional Services (engineering design, project management, consulting, etc.)	\$2,225,132	\$0	\$373,750	<b>\$2,598,882</b>	\$1,944,882.00	\$654,000.00	<b>\$2,598,882</b>
Testing (network elements, IT system elements, user devices, test generators, lab furnishings, servers/computers, etc.)	\$0	\$0	\$0	<b>\$0</b>	\$0.00	\$0.00	<b>\$0</b>
Site Preparation	\$12,369	\$0	\$0	<b>\$12,369</b>	\$12,369.00	\$0.00	<b>\$12,369</b>
Other	\$25,000	\$0	\$0	<b>\$25,000</b>	\$25,000.00	\$0.00	<b>\$25,000</b>
<b>TOTAL BROADBAND SYSTEM:</b>	<b>\$12,137,422</b>	<b>\$3,055,000</b>	<b>\$2,836,647</b>	<b>\$18,029,069</b>	<b>\$8,502,069</b>	<b>\$9,527,000</b>	<b>\$18,029,069</b>
<b>Cost Share Percentage:</b>	<b>67.32%</b>	<b>16.94%</b>	<b>15.73%</b>				

## DETAIL OF PROJECT COSTS

PLEASE COMPLETE THE TABLE BELOW FOR THE DIFFERENT CATEGORIES OF EQUIPMENT THAT WILL BE REQUIRED FOR COMPLETING THE PROJECT. EACH CATEGORY SHOULD BE BROKEN DOWN TO THE APPROPRIATE LEVEL FOR IDENTIFYING UNIT COST

		Match (Cash/In-kind)	Cash Match Percentage	Unit Cost	No. of Units	Total Cost	Last Mile Allocation	Middle Mile Allocation	Allocated Total	SF-424C Budget Category	Support of Reasonableness
<b>NETWORK &amp; ACCESS EQUIPMENT</b>						<b>\$9,059,531</b>	<b>\$4,210,000</b>	<b>\$4,849,531</b>	<b>\$9,059,531</b>		
<b>Switching</b>	Cisco ASR1000-ESP10	No Match		\$77,733.00	3	\$233,199		\$233,199.00	\$233,199	10. Equipment	See MSN Quote
	Cisco 3925/K9	No Match		\$8,621.00	6	\$51,726		\$51,726.00	\$51,726	10. Equipment	See MSN Quote
	Cisco 2921/K9	No Match		\$4,495.00	2	\$8,990		\$8,990.00	\$8,990	10. Equipment	See MSN Quote
<b>Routing</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>Transport</b>	45 MBS 11 GHz Microwave			\$30,500.00	7	\$213,500		\$213,500.00	\$213,500	10. Equipment	
	225 MBS 6 GHZ Microwave			\$15,000.00	2	\$30,000		\$30,000.00	\$30,000	10. Equipment	Upgrades to existing Microwaves
	45 MBS 4.9 GHz Microwave			\$40,000.00	3	\$120,000		\$120,000.00	\$120,000	10. Equipment	
	90 MBS 23 GHz Microwave			\$28,000.00	3	\$84,000		\$84,000.00	\$84,000	10. Equipment	
<b>Access</b>	Cisco 15454-10GE-XPE	No Match		\$79,748.00	1	\$79,748		\$79,748.00	\$79,748	10. Equipment	See MSN Quote
	Cisco 15454-GE-XPE	No Match		\$83,255.00	4	\$333,020		\$333,020.00	\$333,020	10. Equipment	See MSN Quote
	LTE eNodeB Sites	No Match		\$70,000.00	31	\$2,170,000	\$2,170,000.00		\$2,170,000	10. Equipment	See LTE Quotes
	LTE Enhanced Packet Core	No Match		\$3,279,500.00	1	\$3,279,500		\$3,279,500.00	\$3,279,500	10. Equipment	See LTE Quotes
<b>Other</b>	Cisco ASA 5580-40-8GE	No Match		\$74,800.00	4	\$299,200		\$299,200.00	\$299,200	10. Equipment	See MSN Quote
	Netscout	No Match		\$75,000.00	1	\$75,000		\$75,000.00	\$75,000	10. Equipment	
	Customer Premise Equipment (L	Cash Match	100.00%	\$1,000.00	800	\$800,000	\$800,000.00		\$800,000	10. Equipment	
	Customer Premise Equipment (L	No Match		\$1,000.00	1200	\$1,200,000	\$1,200,000.00		\$1,200,000	10. Equipment	
	Networking Racks and Cables	No Match		\$4,162.00	4	\$16,648		\$16,648.00	\$16,648	10. Equipment	See CDW Quote
	Cisco IPS/IDS	No Match		\$65,000.00	1	\$65,000	\$40,000.00	\$25,000.00	\$65,000	10. Equipment	
<b>OUTSIDE PLANT</b>						<b>\$5,721,912</b>	<b>\$1,928,443</b>	<b>\$3,793,469</b>	<b>\$5,721,912</b>		
<b>Cables</b>	Cherokee/120th Fiber Run	Cash Match	100.00%	1236000	1	\$1,236,000		1236000	\$1,236,000	9. Construction	Based on 25.75 per foot.
	Cherokee/120th Fiber Run	No Match		61058	1	\$61,058		61058	\$61,058	9. Construction	Based on 25.75 per foot.
	6th Avenue Fiber Run	Cash Match	100.00%	255000	1	\$255,000		255000	\$255,000	9. Construction	See Quote 'West Tracks'
	6th Avenue Fiber Run	No Match		535304	1	\$535,304		535304	\$535,304	9. Construction	See Quote 'West Tracks'
	Thornton Fiber Run	No Match		15328	1	\$15,328		15328	\$15,328	9. Construction	Based on 25.75 per foot.
	Thornton Fiber Run	Cash Match	100.00%	364000	1	\$364,000		364000	\$364,000	9. Construction	Based on 25.75 per foot.
	DIA Fiber/Network Extension	Cash Match	100.00%	400000	1	\$400,000		400000	\$400,000	9. Construction	
	DIA Fiber/Network Extension	No Match		1082	1	\$1,082		1082	\$1,082	9. Construction	
	Adams County Fiber (Existing)	In-kind Match		269690	1	\$269,690		269690	\$269,690	9. Construction	Construction Cost with 20% subtracte for nor
DIA Fiber (Existing)	In-kind Match		656007	1	\$656,007		656007	\$656,007	9. Construction		
<b>Conduits</b>					\$0			\$0			
<b>Poles</b>	Building Rooftop Antenna Mounts			3000	13	\$39,000	39000		\$39,000	7. Site work	
						\$0			\$0		
						\$0			\$0		
<b>Towers</b>	DIA Tower/Rooftop Sites	In-kind Match		76860	6	\$461,160	461160		\$461,160	2. Land, structures	See detailed budget for description
	ADCOM Tower Sites	In-kind Match		76860	14	\$1,076,040	1076040		\$1,076,040	2. Land, structures	See detailed budget for description
								\$0			
<b>Other</b>	700MHz Antennas + Cable (Tower Mounts)	No Match		11865	14	\$166,110	166110		\$166,110	10. Equipment	See Tesco LTE Worksheet
	(Bldg. Mounts, includes enclosure)	No Match		10949	17	\$186,133	186133		\$186,133	10. Equipment	See Tesco LTE Worksheet

		Match (Cash/In-kind)	Cash Match Percentage	Unit Cost	No. of Units	Total Cost	Last Mile Allocation	Middle Mile Allocation	Allocated Total	SF-424C Budget Category	Support of Reasonableness
<b>BUILDINGS</b>						<b>\$611,375</b>	<b>\$381,375</b>	<b>\$230,000</b>	<b>\$611,375</b>		
<b>New Construction</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>Pre-Fab Huts</b>	Cherokee Tower Building	No Match		45000	1	\$45,000	45000		\$45,000	2. Land, structures	
<b>Improvements &amp;</b>	ADCOM Renovations	No Match		200000	1	\$200,000		200000	\$200,000	7. Site work	
	Cherokee Renovations	No Match		52500	1	\$52,500	52500		\$52,500	7. Site work	
	Justice Bldg. Improvements	No Match		38000	1	\$38,000	38000		\$38,000	7. Site work	
	DIA Site Hardening	No Match		82500	1	\$82,500	82500		\$82,500	7. Site work	
	Ladybird Tower Strengthening	No Match		32500	1	\$32,500	32500		\$32,500	7. Site work	
	Generator for ADCOM 911	No Match		60000	1	\$60,000	30000	30000	\$60,000	10. Equipment	Based on existing equipment
	48 Volt UPS	No Match		2435	25	\$60,875	60875		\$60,875	10. Equipment	See CDW Quote
<b>Other</b>	Generator for Ladybird site	No Match		20000	1	\$20,000	20000		\$20,000	10. Equipment	Based on existing equipment
	Generator for Cherokee Site	No Match		20000	1	\$20,000	20000		\$20,000	10. Equipment	Based on existing equipment
<b>CUSTOMER PREMISE EQUIPMENT</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
<b>Modems</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>Set Top Boxes</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>Inside Writing</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>Other</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>BILLING SUPPORT AND OPERATIONS SUPPORT SYSTEMS</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
<b>Billing Support</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>Customer Care</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>Other Support</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		

		Match (Cash/In-kind)	Cash Match Percentage	Unit Cost	No. of Units	Total Cost	Last Mile Allocation	Middle Mile Allocation	Allocated Total	SF-424C Budget Category	Support of Reasonableness
<b>OPERATING EQUIPMENT</b>											
<b>Vehicles</b>						\$0	\$0	\$0	\$0		
						\$0			\$0		
						\$0			\$0		
<b>Office Equipment /</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>Other</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>PROFESSIONAL SERVICES</b>						<b>\$2,598,882</b>	<b>\$1,944,882</b>	<b>\$654,000</b>	<b>\$2,598,882</b>		
<b>Engineering Design</b>	LTE Design/Implementation	No Match		665132	1	\$580,132	580132		\$580,132	5. Other archit. and engr.	
	IP Network Design/Implementatio	No Match		200	500	\$100,000		100000	\$100,000	5. Other archit. and engr.	
	Tower Engineering	No Match		15000	5	\$75,000	75000		\$75,000	4. Architectural and engr.	
<b>Project Management</b>	ADCOM Project Mgmt	In-kind Match		40	3000	\$120,000	60000	60000	\$120,000	1. Admin and Legal	
	DIA Project Mgmt	No Match		100	1000	\$100,000	50000	50000	\$100,000	1. Admin and Legal	
						\$0			\$0		
<b>Consulting</b>	Legal Services	No Match		275	320	\$88,000	44000	44000	\$88,000	1. Admin and Legal	
						\$0			\$0		
						\$0			\$0		
<b>Other</b>	ADCOM 911 RF Technical Serv	In-kind Match		35	5500	\$192,500	192500		\$192,500	5. Other archit. and engr.	
	ADCOM 911 IT Staff Services	In-kind Match		35	1750	\$61,250	61250		\$61,250	5. Other archit. and engr.	
	ADCOM 911 Technical Services	No Match		108000	2.5	\$270,000		270000	\$270,000	5. Other archit. and engr.	
	DIA RF Services	No Match		200	650	\$130,000	130000		\$130,000	5. Other archit. and engr.	
	DIA Network Services	No Match		200	650	\$130,000		130000	\$130,000	5. Other archit. and engr.	
	Vehicle Modem Installation	No Match		300	2000	\$600,000	600000		\$600,000	5. Other archit. and engr.	See Motorola Quote
	Antenna Installation - Building	No Match		4000	17	\$68,000	68000		\$68,000	7. Site work	
	Antenna Instalation - Tower	No Match		6000	14	\$84,000	84000		\$84,000	7. Site work	
<b>TESTING</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
<b>Network</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>IT System</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>User Devices</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>Test Generators</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>Lab</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		
<b>Servers/Computer</b>						\$0			\$0		
						\$0			\$0		
						\$0			\$0		

		Match (Cash/In-kind)	Cash Match Percentage	Unit Cost	No. of Units	Total Cost	Last Mile Allocation	Middle Mile Allocation	Allocated Total	SF-424C Budget Category	Support of Reasonableness
<b>OTHER UPFRONT COSTS</b>						<b>\$37,369</b>	<b>\$37,369</b>	<b>\$0</b>	<b>\$37,369</b>		
Site Preparation	eNodeB Misc. Hardware	No Match		399	31	\$12,369	12369		\$12,369	7. Site work	
Other	700Mhz licensing to PSST	No Match		25000	1	\$25,000	25000		\$25,000	1. Admin and Legal	
						\$0			\$0		
<b>PROJECT TOTAL:</b>						<b>\$18,029,069</b>	<b>\$8,502,069</b>	<b>\$9,527,000</b>	<b>\$18,029,069</b>		

SF-424C Cross-check Totals	
1. Admin and Legal	\$333,000
2. Land, structures	\$1,582,200
3. Relocation expenses	\$0
4. Architectural and engr.	\$75,000
5. Other archit. and engr.	\$2,063,882
6. Inspection fees	\$0
7. Site work	\$608,869
8. Demolition/removal	\$0
9. Construction	\$3,793,469
10. Equipment	\$9,572,649
11. Misc.	\$0

Matching Contribution Cross-check Totals	
Federal Funding Request	\$12,137,422
Cash Match Contribution	\$3,055,000
In-kind Match Contribution	\$2,836,647

**Approach to allocating Last Mile and Middle Mile costs:**

All equipment directly related to the LTE wireless system is allocated to last mile. Any expense related to developing required network infrastructure is allocated to middle mile.