



# Comprehensive Community Infrastructure Budget Narrative Template

Applicant Name: LA-RICS

EasyGrants Number: 7835

Organization Type: Other (Joint Powers Authority)

Proposed Period of Performance: 5 years

Total Project Costs:

Total Federal Grant Request: \$66,943,425

Total Matching Funds (Cash):

Total Matching Funds (In-Kind):

Total Matching Funds (Cash + In-Kind):

Total Matching Funds (Cash + In-Kind) as Percentage of Total Project Costs: 15.05%

Budget Narrative Categories	BTOP
1. Administrative and legal expenses	\$1,572,497
2. Land, structure, rights-of-way, appraisals	\$7,420,797
4. Architectural and engineering fees	\$16,397,532
9. Construction	\$22,374,774
10. Equipment	\$17,866,044
11. Miscellaneous	\$1,311,781
<b>Total</b>	<b>\$66,943,425</b>

## 1. Administrative and legal expenses - \$1,572,497

- Provide a breakout of position(s), time commitment(s) such as hours or level-of-effort, and salary information/rates with a detailed explanation, and additional information as needed.

Costs in this category include estimated expenditures for project management, site acquisition and construction management services, administration, legal, procurement, travel, permits and fees, publications, site visits, office space lease and other related expenditures necessary to support the project.

BTOP Grant: \$1,572,497



- b. \$1,505,463. This is the contract amount for the professional project management services that Jacobs Engineering Group will provide until the grant closeout period.
- c. \$67,034. This is the estimated cost of miscellaneous expenditures related with administrative, legal, site visits (LA County Sheriffs deputies), travel, permits and fees, publications, office space lease (suite 100) and others.

Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

2. Land, structure, rights-of-way, appraisals, etc. -\$7,420,797

- Provide description of estimated costs, proposed activities, and additional information as needed.

2. Land, structure, rights-of-way, appraisals	BTOP
Purchase of poles and steelwork	\$0
Purchase of self support communication towers	\$7,420,797
Purchase of new shelters	\$0
Construction of new roads	\$0
Member land and tower contribution	
Existing Data Centers	
Existing Data Center - Fire Command Control Facility	
Existing Data Center - Sheriff Communication Center	
<b>Total</b>	<b>\$7,420,797</b>

BTOP Grant: \$7,420,797

\$7,420,797. This is the estimated cost for Motorola to install new Antenna Support Structures. This includes 63 self-supporting communication towers and poles on four rooftops. The tower height ranges from 44 ft to 70 ft and the detailed costs are provided below:

Antenna Support Structure	Site Cost	Units	Total
44 ft Undisguised Monopole	\$25,049.00	1	\$25,049.00
70 ft Undisguised Monopole	\$36,856.28	62	\$2,285,089.36
Antenna Support Structure Site Installation and Development	\$22,044.36	63	\$1,388,794.68
Cells on Wheels (COWs)	\$243,792.67	15	\$3,656,890.05
Rooftop Installations	\$16,243.50	4	\$64,974.00
<b>TOTAL</b>			<b>\$7,420,797.09</b>

Installation cost is the same for each of the new monopoles.

15 Cell on Wheels (COWs) will be installed to supplement the system at a unit cost of \$243,792.67 for a total cost of \$3,656,890.05. This price includes purchase and delivery, equipment assembly and layout, antenna mast, array, and mounting hardware provision and installation, H-frame assembly, RF installation, Telco installation, supply and install fabricated skid for equipment platform, electric service installation, generator installation, complete grounding, chain-link fencing and screening, microwave equipment provision and installation

Rooftop installation costs do not include the cost of erecting new towers and are quoted separately. Rooftop cost includes small poles that will be installed on the roof to support the antennas.

- Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.



3. Relocation expenses and payment - \$0

- Provide explanation for the relocation, description of the person involved in the relocation, method used to calculate costs, and additional information as needed.

There are no relocation expenses and payments.

4. Architectural and engineering fees - \$16,397,532

- Provide description of estimated fees, rates, explanation of proposed services, and additional information as needed.

The estimated architectural and engineering fees outlined below includes costs associated with network design, microwave engineering, radio frequency design,

4. Architectural and engineering fees	BTOP
A&E, Licensing, Zoning and Permitting	\$9,873,922
Broadband Consultant	\$1,263,258
Site Commissioning Microwave	\$99,848
Staging And Acceptance Testing	\$1,818,251
Radio and System Design	\$2,754,998
Site Commissioning LTE	\$587,255
Coverage Modeling Tool and Inventory Management System	
LARICS Engineering Staff (Radio and MW engineering support) - Cash	
LARICS Engineering Staff (Radio and MW engineering support) - In Kind	
Environmental Services Consultant	
Miscellaneous	
<b>Total</b>	<b>\$16,397,532</b>

BTOP Grant: \$16,397,532

a. \$15,881,538. This is the estimated cost Motorola will provide in architectural and engineering-related services described in the table above.

b. \$1,263,258. This is the estimated cost of broadband engineering services contractor Televate, LLC will provide.

- Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

5. Other architectural and engineering fees - \$0

- Provide description of estimated fees, rates, explanation of proposed services, and additional information as needed. (N/A)

6. Project inspection fees - \$0

- Provide description of estimated fees, rates, explanation of proposed services, and additional information as needed. (N/A)



7. Site work – \$0

- Provide description of estimated fees, rates, explanation of proposed services, and additional information as needed. (N/A)

8. Demolition and removal – \$0

- Provide description of estimated fees, rates explanation of proposed services, and additional information as needed.

There are no demolition and removal expenses.

9. Construction - \$22,374,774

- Provide description of estimated fees, rates, explanation of proposed services, state whether the work is being completed by the applicant or an outside contractor, and additional information as needed.

BTOP Grant: \$22,374,774.

The contract amount for construction activities Motorola will provide are described in detail below.

Activity	Unit Cost	Units	Total
Primary Core Installation	\$ 1,148,281	1	\$ 1,148,281
HSS Installation	\$ 325,361	1	\$ 325,361
Redundant Core Installation	\$ 1,382,860	1	\$ 1,382,860
<b>TOTAL</b>			<b>\$ 2,856,502</b>
Activity	Unit Cost	Units	Total
eNodeB Shipping and Installation	\$ 3,486.60	67	\$ 233,602.20
LTE Antenna Installation	\$ 17,919.37	67	\$ 1,200,597.79
Microwave Radio Shipping and Installation	\$ 6,249.75	23	\$ 143,744.25
Microwave Antennas and Cables Installatio	\$ 16,352.72	23	\$ 376,112.56
Site Preparation	\$ 22,825.12	67	\$ 1,529,283.04
Site Stealthing (Additional Costs)	\$ 121,363.00	17	\$ 2,063,171.00
<b>TOTAL</b>			<b>\$ 5,546,510.84</b>
Activity	Fixed Cost		
Remediation Work at Sites Halted	\$ 2,378,664.00		
Ballistic Protection for COWs			
Construction Change Orders	\$ 11,292,204.59		
Interior Space Improvements	\$ 300,892.00		
<b>TOTAL</b>	<b>\$ 13,971,760.59</b>		
Combined Cost			\$ 22,374,773.43

Remediation/Restoration Work. \$2,378,664 is the estimated cost of remediation work at 29 Los Angeles County Fire and one (1) City of Los Angeles Fire sites where construction had to be stopped due to opposition from firefighter labor unions. Restoring sites to original condition includes mobilization, removal of tower, transporting tower, grout tower base, remove generators from site, restore concrete pavements, environmental specialist reports, landscape and irrigation replacement, any related permit fees, final site cleanup, others.



10. Equipment - \$17,866,044

- Provide a list of equipment in the form of a table with description, number of units, unit cost, state whether it is being purchased or leased, and additional information as needed.

10. Equipment	BTOP
LTE infrastructure equipment (eNodeBs)	
LTE infrastructure equipment (eNodeBs)	
LTE infrastructure equipment (EPC)	\$1,364,743
LARICS Backhaul transport equipment	
New transport equipment	\$181,500
Fiber Lease Agreement	\$2,288,399
Generators, HVAC, UPS	\$4,454,402
LTE Vehicular Router Modems	\$9,500,000
LTE Smartphones	\$0
Computers, furniture, printers	
LTE Network Analyzers	\$0
LTE Drive Test Equipment	\$0
Lab Equipment	\$77,000
Mobile Data Terminals	
<b>Total</b>	<b>\$17,866,044</b>

BTOP Grant: \$17,866,044. The estimated amount of equipment and components purchased for the Public Safety Broadband Network for the funds drawn in requests 34, 35, 36 and 37 are classified in the table of equipment above.

11. Miscellaneous - \$1,311,781

- Provide additional information as needed.

BTOP Grant: \$1,311,781.

- a. \$890,761. This is the estimated cost in project management and broadband engineering contractors will provide.
- b. \$421,020 is the estimated cost allocated for training trainers and users on the PSBN system.

11. Miscellaneous	BTOP
Program Management Contractor	\$438,025
Broadband Engineering Contractor	\$452,736
Other (Training and Documentation)	\$421,020
<b>Total</b>	<b>\$1,311,781</b>

- Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.



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.

Addendum

- Very few indirect costs are allowable through BTOP. If any allowable indirect costs and/or fringe benefits are included in the budget, please provide a copy of your existing Negotiated Indirect Cost Recovery Agreement (NICRA), if available. If the NICRA is applied accordingly in the budget, there is no need to justify the costs. If a NICRA is not available or is not consistent with the rates/calculations in the budget, please provide an explanation of how the amounts were calculated. Please clearly list the manner in which indirect costs are calculated in the budget.

Note: Verify that indirects are calculated correctly and are eligible BTOP costs. To clarify, reasonable indirect costs under BTOP are only allowable for Full Time Employees (FTEs) associated with the construction, deployment, or installation of facilities or equipment used to provide broadband service.