



Comprehensive Community Infrastructure Budget Narrative Template

Applicant Name: JKM Consulting, Inc. dba - M² Connections

EasyGrants Number: 6757

Organization Type: For profit entity

Proposed Period of Performance: 3 years

Total Project Costs: \$8,199,737

Total Federal Grant Request: \$ 6,269,197

Total Matching Funds (Cash): \$ 51,000

Total Matching Funds (In-Kind): \$ 1,879,540

Total Matching Funds (Cash + In-Kind): \$ 1,930,540

Total Matching Funds (Cash + In-Kind) as Percentage of Total Project Costs: 23.5 % (*Rounded from 23.54392586%)

1. Administrative and legal expenses - \$ 510,200

Grant Administration will be performed by East Alabama Regional Planning Commission. An experienced grant contractor will devote the time required to fulfill the grant contract requirements from grant award through grant closure. This position will be retained by the grantee through a contract basis for a fee of \$100,000 total for the three year project.

M² Connections, a division of JKM Consulting will provide Administration and Network Design, as well as, serve as Program Management at the contracted rate of \$392,400 for the total three year project. See attached Organizational Chart for additional detail.

This area also includes \$17,800 for grant preparation expenses, outside counsel attorney fee's for contract review and CPA fee's associated with due diligence.

There are no In-Kind or Cash Match funds for this category.

The total cost for Project BEAR Administration and legal expenses will be \$510,200.



2. Land, structure, rights-of-way, appraisals, etc. - \$ 486,000

Costs outlined in this category include the value of the initial three years of a capital lease for six (6) tower structures. Five (5) sites are reflected as in-kind donations from Clay County Commission; one (1) is a three year lease from Calhoun County EMA. Market rates were utilized for calculating the In-Kind matching funds. Six leased collocation spaces with 5 in-kind and one leased from Southern Company Services at the value of the first three years of a capital lease.

The Capital Lease of \$30,000 is for one (1) Tower at Chimney Peak with utilities and unescorted access from Calhoun County EMA.

The In-Kind Match is \$405,000 comprised of the following components:

- \$225,000 for five (5) towers (with utilities), accessible sites valued at \$45,000 each, utilizing market rate for three year lease.
- Facility for network interconnection of dark fiber and services provided by Jacksonville State University, James Cable, Southern Union Community College and Clay County Hospital: five (5) 23" data center racks at market rate for data center/POP collocation space at \$12,000/year per 23" rack for a three year lease value of \$180,000.

The Cash Match is \$51,000 comprised of the following components:

- Pre-approval expenses- \$15,000
- One data center rack at the value of a 3 year capital lease - \$36,000.
- Cash match will come from a combination of capital contribution from JKM Consulting and program income.

3. Relocation expenses and payment - \$ 0

No relocation expenses are required for Project Bear.

4. Architectural and engineering fees - \$514,204

Detailed engineering costs are included in the system cost for each wireless system, totaling for this project at \$100,000. The detailed cost for fiber deployment is based upon a rate of \$0.18 per foot for a total of \$ 88,704.

Additional Engineering, permits, Project Management and field inspectors \$325,500.

There are no In-Kind or Cash Match for this category.



5. Other architectural and engineering fees - \$ 75,000

Other engineering fees to cover optronics engineering, IP network design and documentation of the completed project are included in this amount.

There are no In-Kind or Cash Match for this category.

6. Project inspection fees - \$ 0

Project does not include activities that warrant government or other project inspection fees.

7. Site work - \$ 0

Project will utilize existing tower structures and the space within on-site buildings. Other equipment will utilize Anchor Institution provided space.

8. Demolition and removal - \$ 0

Not required for this proejct. A number of the sites are underutilized, therefore minimal preparation is required.

9. Construction - \$4,470,516

This section covers the cost of constructing the new fiber, acquiring an IRU for fibers and In-Kind contributions of dark fiber.

New fiber to be constructed is 96 fiber SMF type predominately direct buried with directional boring as needed and some aerial for laterals and to avoid areas of rock. Rate is based on contractor estimate from previous jobs.

New Fiber Construction Cost	463,570ft	\$6.48/ft	\$3,004,976
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IRU fiber is for two dark fibers, with access to two maintenance fibers as needed. The IRU term is ten years, the expected remaining economic life of the fiber. The IRU is to be paid upfront with a monthly recurring maintenance fee. These fibers are part of a Southern Company electrical grid control communications network. The fibers traverse a National Forrest and Wilderness area where no new construction is permitted and will form the protection side of a ring serving Clay and Talladega Counties. Initially, WDM technology will be deployed on these fibers to allow for significant broadbandband capacity.

IRU Fiber	168,960ft	\$0.91/ft	\$ 153,000
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The third component is the In-Kind contribution from Anniston Fiber Optic and James Cable LLC.

Anniston Fiber Optics contribution is 26 sheath miles of 96 fiber count fiber cable. This system was originally designed to be the core baseline for an expansion such as this. Every sheath mile will be utilized in this project. Accordingly, since the cable has been in service for less than a year and only 10% of the network is in use, we have valued this at 80% of original construction cost.

AFO	137,280ft	\$6.32/ft	\$868,000
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The James Cable contribution is 31 sheath miles of 6 count fiber. Because of the terrain, rock and National Forrest constraints, this fiber would be very expensive to overbuild. Accordingly we have valued this contribution at the market rate established by Southern Company as the only dark fiber provider in the region.

Wadley Cable	137,280ft	\$2.72/ft	\$372,840
Lineville Fiber	26,400ft	\$2.72/ft	\$71,700

Total In Kind	300,960ft	\$4.36/ft	\$1,312,540
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10. Equipment - \$ 2,078,817

NETWORK & ACCESS EQUIPMENT			\$1,443,482
Routing	0	0	\$0
12 port layer 3 switch	6	\$2,000	\$12,000
Juniper Core Router	1	\$150,000	\$150,000
Juniper J2320 router W/1GB	1	\$4,714	\$4,714
Transport			
Fiber Media Converters	80	\$1,500	\$120,000
OC48 Nodes	4	\$45,000	\$180,000
Existing OC48 Nodes	4	\$40,500	\$162,000
5GHz multi band wireless backhaul	8	\$4,278.57	\$34,229
Radio link 108Mbps	2	\$11,285.71	\$22,571
Access			
AP Base Station System with Ant	6	\$126,327.96	\$757,968
CUSTOMER PREMISE EQUIPMENT			\$562,500
Customer Prem Modems	2,500	\$225	\$562,500
NETWORK Management System			\$72,835



Anniston Fiber Optic is contributing four on hand OC48 nodes to the project. The These nodes are one year old and are on a five year depreciation schedule. After one year of depreciation the value of these four OC-48 nodes is \$ 162,000.00.

There is In-Kind Match of \$162,000.00 for this category.

11. Miscellaneous - \$ 65,000

This is for un-categorized items such as signage required by NTIA and other agencies, supplies that may be used across various budget items, generic T&E, storage yard rental, conference room rental for pre-bid and bid meetings, etc.

Cash match of \$15,000 for pre-award application expenses.

No 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.