



Comprehensive Community Infrastructure **Budget Narrative Template**

Applicant Name: University of New Hampshire

EasyGrants Number: 4248

Organization Type: Non-Profit Institution

Proposed Period of Performance: July 1, 2010 – June 30, 2013

Total Project Costs: \$65,847,892

Total Federal Grant Request: \$44,480,992 (67.5511% of total project costs)

Total Matching Funds (Cash): \$5,146,900

Total Matching Funds (In-Kind): \$16,220,000

Total Matching Funds (Cash + In-Kind): \$21,366,900

Total Matching Funds (Cash + In-Kind) as Percentage of Total Project Costs: 32.45%

1.Administrative and legal expenses - \$4,855,407-

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.

Positions and FTE % are listed below. Fringe rate is 42.9% on UNH personnel. New positions are noted in 2nd column. Existing positions are allocated by estimated time to be spent working on project. Senior Management participation includes 4 positions: UNH CIO, USNH IT Architect, UNH IT Finance Director and UNH Telecom Director.

Travel/Meetings is estimated at approximately \$25,000 per year due to the large number of individuals involved in the project state wide.

Consultants will be critical with state wide communications. Estimated use: 500 hours per year at \$70/hour.



UNH Facilities & Administrative Recovery (IDC) is calculated at 26%.

Position Title	New	Annual	With Fringe	FTE	3 yrs
UNH Principal Investigator		98,200	140,327	0.5	210,491
UNH Telecom Project Manager	New	97,878	139,868	1	\$419,606
UNH Network Engineer Architect		103,030	147,230	0.83	\$366,603
UNH Network Engineer	New	81,600	116,606	1	\$349,819
UNH Project Lead	New	61,200	87,455	1	\$262,364
UNH Project Coordinator	New	44,228	63,202	1	\$189,606
UNH Communications Coordinator	New	61,818	88,338	1	\$265,014
UNH Contract/Budget/Financial Manager	New	86,770	123,995	1	\$371,986
UNH Financial/Business Support	New	47,783	68,282	1	\$204,848
UNH Grant Management Specialist		66,970	95,700	0.25	\$71,775
UNH Senior Management Participation		595,513	850,989	0.10	\$255,297
UNH Supplemental Pay for Additional Duties		29,681	42,415		\$127,244
NH State Telecom Management (Contractor)	New	57,999	74,928	1	\$224,785
Personnel Subtotal					\$3,319,438
Travel/Meetings			24,973		\$74,918
Consultant -Telecom Industry Analyst (Contractor)			35,000		\$105,000
Consultant -Community Interest Liaison (Contractor)			35,000		\$105,000
	Cash Match	\$15,000			\$50,000
Legal- Establishment of New Self-Sustaining Entity (Contractor)			\$295	250hrs	\$73,750
Legal & Consulting-Contract Reviews UNH			\$ 295	450 hrs	\$132,750
UNH Facilities & Administrative Recovery (IDC)	No Match		\$994,551	1	\$994,551
Other Total					\$1,535,969
Grand Total					\$4,855,407

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

Cash Source 1... The one cash match is \$15,000 pledged by FastRoads representing 30% of its legal consulting expense. Source of FastRoads total \$2,276,900 cash match: Loan from Business Finance Authority (BFA).



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

None.

2. Land, structure, rights-of-way, appraisals, etc. - \$96,000

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

Item Description	Unit Cost	Units	Total	Cash Match	Match Amount
Medium Equipment Shelter (inc. delivery)	\$28,000	2	\$56,000	30.00%	\$16,800
Small Equipment Shelter (inc. delivery)	\$20,000	2	\$40,000	30.00%	\$12,000
Total			\$96,000		\$28,800

All costs associated with this category are subcontracted costs.



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



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

None

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.

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



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

4. Architectural and engineering fees - \$4,922,273

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

Item Description	Unit Cost	Units	Total	Match	Match Amount
Underground Engineering	\$4.00	46,147 ft	\$184,589		
Ariel Engineering	\$0.80	2,261,213 ft	\$1,808,970		
Drop Engineering- FastRoads	\$500.00	220 ft	\$110,000	30.00%	\$33,000
Permitting- FastRoads	\$45,000.00	1 ea	\$45,000	30.00%	\$13,500
Design Engineering- FastRoads	\$461,817.00	1 ea	\$461,817	30.00%	\$138,545
Project Management- Middle Mile	\$.50	2,307,360 ft	1,153,680		
Wireless- Project Management & Project Engineering, Including Site Surveys	\$475,000.00	1 ea	\$475,000	72.63%	\$345,000
Wireless- Application Engineering, Drafting & Documentation	\$18,200.00	1 ea	\$18,200		
Design PM, QA –FastRoads	\$492,605.00	1 ea	\$492,605	30.00%	\$147,782
Network Testing-FastRoads	\$92,363.00	1 ea	\$92,363	30.00%	\$27,709
IT System Testing-FastRoads	\$18,473.00	1 ea	\$18,473	30.00%	\$5,542
Technical Consulting-FastRoads	\$61,576.00	1 ea	\$61,576	30.00%	\$18,473
Total			\$4,922,273		\$729,551

All costs associated with this category are subcontracted costs.



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



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





5. Other architectural and engineering fees - \$78,425

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

Item Description	Unit Cost	Unit	Total
Wireless-Factory Services	\$23,100.00	1 ea	\$23,100
Wireless-FCC Licensing and Path Analysis	\$55,325.00	1 ea	\$55,325
Total			\$78,425

All costs associated with this category are subcontracted costs.

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

No Cash Match.

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

No In-Kind Match.

6. Project inspection fees - \$153,939

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

Item Description	Unit Price	Units	Total	Cash Match	Match Amount
Engineering Inspection-FastRoads	\$153,939.00	1 ea	\$153,939	30.00%	\$46,182

All costs associated with this category are subcontracted costs.

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



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

No In-Kind Match.



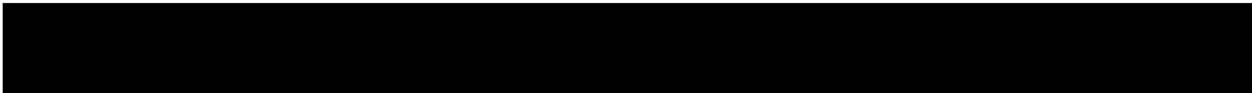
7. Site work - \$7,359,864

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

Item Description	Unit Price	Units	Total	Cash Match	Match Amount
Make Ready cost (heavy- 47% of Network miles x pole per mile)	\$500.00	8,454 poles	\$4,226,926		
Make Ready cost (medium-12% of network miles x pole per mile)	\$200.00	2,158poles	\$431,676		
Make Ready cost (light- 41% of network miles x pole per mile)	\$100.00	5,092 poles	\$509,201		
Vault Placement-FastRoads (FR)	\$800.00	4 sites	\$3,200	30.00%	\$960
Handhole Placement (FR)	\$700.00	20 sites	\$14,000	30.00%	\$4,200
Generator Site Prep (FR)	\$1,500.00	24 sites	\$36,000	30.00%	\$10,301
Cabinet Site Prep (FR)	\$2,000.00	20 sites	\$40,000		
Shelter Site Prep (FR)	\$4,500.00	4 sites	\$18,000	30.00%	\$5,400
Trenching(FR)	\$18.00	14,222 ft	\$255,996	30.00%	\$76,799
Boring (Road Crossings) (FR)	\$30.00	21,333 ft	\$639,990	30.00%	\$191,997
Direct Bury (FR)	\$10.00	105,241 ft	\$1,052,410	30.00%	\$315,723
Aerial Construction (FR)	\$7.50	1,422 ft	\$10,665	30.00%	\$3,200
Handhole Placement (FR)	\$600.00	203 ft	\$121,800	30.00%	\$36,540
Total			\$7,359,864		\$645,120

All costs associated with this category are subcontracted costs.

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



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

No In-Kind Match.

8. Demolition and removal - \$0

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

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

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



9. Construction - \$23,333,015

- 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.

Item Description	Match	%	Unit Cost	Units	Total	Match Amount
Strand & pole line materials	No Match		0.30	2,261,213 ft	\$678,364	\$0
Strand Construction Labor	No Match		0.75	2,261,213 ft	\$1,695,910	\$0
288 Loose tube fiber OSP cable	Cash Match		1.80	2,723,348 ft	\$4,902,026	\$800,000
Lashing materials	No Match		0.15	2,723,348 ft	\$408,502	\$0
Cable placement / Lashing Labor	No Match		1.25	2,723,348 ft	\$3,404,185	\$0
Splicing materials	No Match		0.10	2,723,348 ft	\$272,335	\$0
Splicing Labor	No Match		0.42	2,723,348 ft	\$1,143,806	\$0
Materials New Trench splicing	No Match		0.10	55,598 ft	\$5,560	\$0
New Trench Splicing Labor	No Match		0.42	55,598 ft	\$23,351	\$0
Materials New Trench Fiber	No Match		1.80	55,598 ft	\$100,077	\$0
Materials In Soil (trench)	No Match		5.00	23,073.6 ft	\$115,368	\$0
Labor In Soil (trench)	No Match		20.00	23,073.6 ft	\$461,472	\$0
Materials Pavement (trench)	No Match		25.00	23,073.6 ft	\$576,840	\$0
Labor Pavement (trench)	No Match		40.00	23,073.6 ft	\$922,944	\$0
Flaggers	No Match		0.25	2,307,360 ft	\$576,840	\$0
Drop Splicing- FR	Cash Match	30.00%	35.00	1374 ft	\$48,090	\$14,427
Drop Labor-FR	Cash Match	30.00%	2,000.00	220 ft	\$440,000	\$132,000
Bulk Splicing-FR	Cash Match	30.00%	35.00	1152 ft	\$40,320	\$12,096
Last Mile Drop Labor-FR	Cash Match	30.00%	600.00	791 ft	\$474,600	\$142,380
Last Mile Drop Splicing-FR	Cash Match	30.00%	45.00	648 ft	\$29,160	\$8,747
Highway Xing	No Match		29.30	437 hr	\$12,804	\$0
RR Xing	No Match		205.00	437 hr	\$89,585	\$0
DOT Fiberoptic Cost Estimate (Details by Line Item Available)- NH DOT	Cash Match	20.26%	6,910,875	1 ea	\$6,910,875	\$1,400,000
Total					\$23,333,015	\$2,509,650

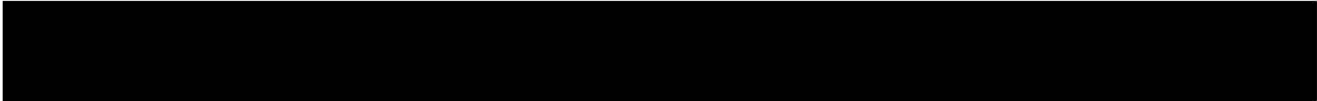
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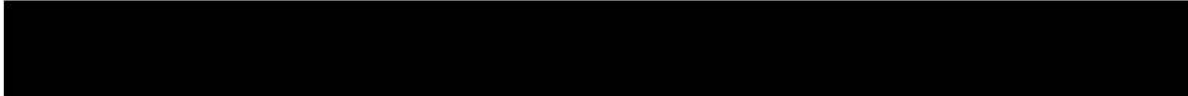
The NH Department of Transportation has provided a scanned copy of its detailed project budget.

The DOT project will be a sub-award of this grant in the dollar amount of \$6,910,875 .

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



The NH Department of Transportation will provide a \$1,400,000. NH State Highway funds will be used for the cash match.



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

No In-Kind Match.

10. Equipment - \$24,022,352 (\$15,200,000 + \$8,822,352)

- 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.

Item Description	Match Type	% Match	Unit Cost	Units	Total
Existing Fiber [REDACTED]	In-kind Match	100.00%	\$1,000	7600 fiber mi	\$7,600,000
Existing Fiber [REDACTED]	In-kind Match	100.00%	\$1,000	7600 fiber mi	\$7,600,000
Total					\$15,200,000



Item Description	Match Type	Match %	Unit Cost	Units	Total	Match Amount
PoP L2 Switch Port	No Match		\$1,000.00	5 ea	\$5,000	
In- Building Switching Labor	No Match		\$1,000.00	5 ea	\$5,000	
Cisco 3560G Switch	Cash Match FR	30.00%	\$5,400.00	22 ea	\$118,800	\$35,640
Wireless -Aggregation Service Routers with Crypto, Loop Protection & VLAN		0.00%	\$85,822.26	8 ea	\$686,578	



Cisco 3750G Router	Cash Match FR	30.00%	\$7,600.00	6 ea	\$45,600	\$13,680
Cisco 7600 Series 10G Core Router	Cash Match FR	30.00%	\$125,000.00	2 ea	\$250,000	\$75,000
DWDM 1x10gE Network Side VMUX-UNH	Cash Match	100.00%	\$47,143.00	5 ea	\$235,715	\$235,715
DWDM Stub VMUX-UNH	Cash Match	100.00%	\$81,920.00	2 ea	\$163,840	\$163,840
Cisco Optics (SFP, XFP, XENPAC)	Cash Match FR	30.00%	\$875.00	60 ea	\$52,500	\$15,750
PacketFront Uplink Optics	Cash Match FR	30.00%	\$375.00	160 ea	\$60,000	\$18,000
Wireless -350 Mbps Packet Node Radios		0.00%	\$49,369.14	42 ea	\$2,073,504	
Wireless- Short Haul Radio Systems for Fiber Connectivity	No Match		\$16,400.00	6 ea	\$98,400	
Wireless- DC Power System	No Match		\$5,419.38	40 ea	\$216,775	
Wireless -Interface Codecs from IP to legacy	No Match		\$6,000.00	32 ea	\$192,000	
	Cash Match	100.00%	\$120,230.00	1 ea	\$120,230	\$120,230
	Cash Match	10.00%	\$34,700.00	10 ea	\$347,000	\$34,700
Wireless -Commissioning and FCC Proof of Performance	Cash Match	16.74%	\$15,000.00	6 ea	\$90,000	\$15,070
Wireless- Antennae & Waveguide Systems	No Match		\$7,447.31	42 ea	\$312,787	
Wireless-Radio and Antennae System Installation	In-Kind	75.00%	\$900,000	1 ea	\$900,000	\$675,000
Wireless -Microwave Network Technician Postions- NHSP 3 years Term	No Match		\$231,418.20	2 ea	\$462,836	
Core Carrier Ethernet node 4x10G Net + 24x1G cust	No Match		\$26,920.00	5 ea	\$134,600	
PoP Carrier Eth Switch - end point	No Match		\$1,000.00	31 ea	\$31,000	
PoP Router- UNH	Cash Match	92.57%	\$3,500.00	31 ea	\$108,500	\$100,445
Prem router	No Match		\$3,500.00	31 ea	\$108,500	
Install Routers	No Match		\$1,920.00	31 ea	\$59,520	
PacketFront Fiber ASR	Cash Match FR	30.00%	\$5,400.00	80 ea	\$432,000	\$129,600
Uninterruptable Power Supply	Cash Match FR	30.00%	\$3,000.00	24 ea	\$72,000	\$21,600
IP Addressable Power Strip	Cash Match FR	30.00%	\$200.00	22 ea	\$4,400	\$1,320
Fiber Patch Panel	Cash Match FR	30.00%	\$3,600.00	22 ea	\$79,200	\$23,760
Fiber Jumpers	Cash Match FR	30.00%	\$14.00	857 ea	\$11,998	\$3,599



BROADBAND TECHNOLOGY OPPORTUNITIES PROGRAM (BTOP)

Drop Fiber	Cash Match FR	30.00%	\$ 0.12	439500 lin ft	\$52,740	\$15,822
Locate Wire	Cash Match FR	30.00%	\$0.04	439500lin ft	\$17,580	\$5,274
72 Count Fiber Optic Cable	Cash Match FR	30.00%	\$.80	158458 lin ft	\$126,766	\$38,030
1.25" HDPE Conduit	Cash Match FR	30.00%	\$.60	284,436 lin ft	\$170,662	\$51,198
Drop Duct	Cash Match FR	30.00%	\$.30	439,500 lin ft	\$131,850	\$39,555
Active Cabinet	Cash Match FR	30.00%	\$3,500.00	20 ea	\$70,000	\$21,000
Cabinet Access Handhole	Cash Match FR	30.00%	\$450.00	20 ea	\$9,000	\$2,700
Fixed Generator w/ LP tank	Cash Match FR	30.00%	\$5,500.00	24 ea	\$132,000	\$39,600
Automated Transfer Switch	Cash Match FR	30.00%	\$500.00	24 ea	\$12,000	\$3,600
NEMA Boxes	Cash Match FR	30.00%	\$40.00	1,011 ea	\$40,440	\$12,132
Misc. Drop Hardware	Cash Match FR	30.00%	\$20.00	1,011 ea	\$20,220	\$6,066
Vault	Cash Match FR	30.00%	\$1,500.00	4 ea	\$6,000	\$1,800
Buried Fiber Marker Posts	Cash Match FR	30.00%	\$15.00	711 ea	\$10,665	\$3,200
Handholes	Cash Match FR	30.00%	\$350.00	203 ea	\$71,050	\$21,315
Corning Splice Enclosures	Cash Match FR	30.00%	\$305.00	203 ea	\$61,915	\$18,575
PacketFront DRG (Fiber CPE)	Cash Match FR	30.00%	\$325.00	1011 ea	\$328,575	\$98,573
Splice Tray & Pigtails	Cash Match FR	30.00%	\$55.00	1011 ea	\$55,605	\$16,682
PacketFront Server Package	Cash Match FR	30.00%		1 ea	\$20,000	\$6,000
Ticketing & Network Support Server	Cash Match FR	30.00%		1 ea	\$3,500	\$1,050
Network Monitoring Server	Cash Match FR	30.00%		1 ea	\$3,500	\$1,050
Total					\$8,822,352	\$2,086,169



All costs associated with this category are subcontracted costs.

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

Tables below show line items with cash match amounts.

UNH is providing \$500,000 Cash Match below from internal funds.

Item Description	Match Type	Match %	Unit Cost	Units	Total	Match Amount
DWDM 1x10gE Network Side VMUX-UNH	Cash Match	100.00%	\$47,143.00	5 ea	\$235,715	\$235,715
DWDM Stub VMUX-UNH	Cash Match	100.00%	\$81,920.00	2 ea	\$163,840	\$163,840
Pop Router- UNH	Cash Match	92.57%	\$3,500.00	31 ea	\$108,500	\$100,445
Total					\$508,055	\$500,000



Item Description	Match Type	Match %	Unit Cost	Units	Total	Match Amount
	Cash Match	100.00%	\$120,230.00	1 ea	\$120,230	\$120,230
	Cash Match	10.00%	\$34,700.00	10 ea	\$347,000	\$34,700
Wireless -Commissioning and FCC Proof of Performance	Cash Match	16.74%	\$15,000.00	6 ea	\$90,000	\$15,070
Total					\$557,230	\$170,000

All costs associated with this category are subcontracted costs.



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

rd party vendor, is providing \$675,000 In-Kind Match below. will provide inst ces.

Item Description	Match Type	Match %	Unit Cost	Units	Total	Match Amount
Wireless-Radio and Antennae System Installation	In-Kind	75.00%	\$900,000	1 ea	\$900,000	\$675,000



All costs associated with this category are subcontracted costs.

11. Miscellaneous - \$1,026,617

- Provide additional information as needed.

Item Description	Unit Cost	Units	Total	Cash Match %	Match Amount
Packetfront BECS/SMT/HMT Server License (Contractor)	\$200,000	1 ea	\$200,000	30.00 %	\$60,000
PacketFront Per Port Software License (Contractor)	\$52	80 ea	\$4,160	30.00 %	\$1,248
PacketFront Support/Maintenance (Contractor)	\$23,550	1 ea	\$23,550	30.00 %	\$7,065
Network Equipment Maintenance Plans (Contractor)	\$4,050.00	1 ea	\$4,050	30.00 %	\$1,215
Cisco 7600 Maintenance (Contractor)	\$12,500	2 ea	\$25,000	30.00 %	\$7,500
Pole Owner Fees	\$31.62	15,704 poles	\$496,560		
Pre-Application Expenses -UNH	\$175,297	1 ea	\$175,297		
	\$98,000	1 ea	\$98,000	30.00 %	\$29,400
Total			\$1,026,617		\$106,428



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



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

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.