**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.

# NTIA BTOP Round Two - CCI #5116
# DC Community Access Network ("DC-CAN")
# General Budget Overview

FINAL
March 23, 2010
6:00 PM Eastern

| 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) | $4,474,433 | $7,498,090 | $0 | **$11,972,523** | $0.00 | $11,972,523.00 | **$11,972,523** |
| Outside Plant (cables, conduits, ducts, poles, towers, repeaters, etc.) | $8,732,184 | $0 | $0 | **$8,732,184** | $0.00 | $8,732,184.00 | **$8,732,184** |
| Buildings and Land – (new construction, improvements, renovations, lease) | $0 | $0 | $0 | **$0** | $0.00 | $0.00 | **$0** |
| Customer Premise Equipment (modems, set-top boxes, inside wiring, etc.) | $0 | $0 | $0 | **$0** | $0.00 | $0.00 | **$0** |
| Billing and Operational Support Systems (IT systems, software, etc.) | $0 | $0 | $0 | **$0** | $0.00 | $0.00 | **$0** |
| Operating Equipment (vehicles, office equipment, other) | $0 | $0 | $0 | **$0** | $0.00 | $0.00 | **$0** |
| Engineering/Professional Services (engineering design, project management, consulting, etc.) | $4,191,025 | $15,000 | $61,968 | **$4,267,993** | $0.00 | $4,267,993.00 | **$4,267,993** |
| Testing (network elements, IT system elements, user devices, test generators, lab furnishings, servers/computers, etc.) | $60,300 | $0 | $0 | **$60,300** | $0.00 | $60,300.00 | **$60,300** |
| Site Preparation | $0 | $0 | $0 | **$0** | $0.00 | $0.00 | **$0** |
| Other | | | | **$0** | | | **$0** |
| **TOTAL BROADBAND SYSTEM:** | **$17,457,942** | **$7,513,090** | **$61,968** | **$25,033,000** | **$0** | **$25,033,000** | **$25,033,000** |
| **Cost Share Percentage:** | **69.74%** | **30.01%** | **0.25%** | | | | |

**FINAL VERSION**

J Carella

# NTIA BTOP Round Two - CCI #5116
# OCTO DC-Community Access Network

FINAL
March 22, 2010
6:00 PM Eastern

## 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

| NTIA BTOP Round Two CCI (Winter 2010) - EasyGrant#: | | 5116 | Applicant: | OCTO DC-Net | | Project Name: | DC-Community Access Network (DC-CAN) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SERVICE AREA or COMMON NETWORK FACILITIES: | | Match (Cash/In-kind) | Unit Cost | No. of Units | Total Cost | Last Mile Allocation | Middle Mile Allocation | Allocated Total | SF-424C Budget Category | Support of Reasonableness |
| **NETWORK & ACCESS EQUIPMENT** | | | | | **$11,972,523** | **$0** | **$11,972,523** | **$11,972,523** | | |
| **Switching** | Cisco 3560 24 10/100 PoE + 2 SF | Cash Match | $5,790 | 291 | $1,684,890 | $0 | $1,684,890 | $1,684,890 | 10. Equipment | 223 new sites; 68 upgrade sites. |
| | GE SFP LC connector LX/LH transceiver (four) | | $565 | 1164 | $657,660 | $0 | $657,660 | $657,660 | 10. Equipment | Unit configurations used to construct |
| | Cisco 1520 Outdoor Series (w/ hardware) | | $3,500 | 291 | $1,018,500 | $0 | $1,018,500 | $1,018,500 | 10. Equipment | equipment bill of materials |
| | Chassis 4507R-E | | $5,497 | 3 | $16,491 | $0 | $16,491 | $16,491 | 10. Equipment | Commercial prices, based on procurement |
| | Supervisor (WS-X45-SUP6-E) | | $10,997 | 6 | $65,982 | $0 | $65,982 | $65,982 | 10. Equipment | schedules. |
| | IOS (S45EESK9-12250SG) | | $6,000 | 3 | $18,000 | $0 | $18,000 | $18,000 | 10. Equipment | Same |
| | 48 Port PoE Blades (WS-X4648-RJ45V+E) | | $4,122 | 6 | $24,732 | $0 | $24,732 | $24,732 | 10. Equipment | Same |
| | SFP (GLC-LH-SM) | | $565 | 12 | $6,780 | $0 | $6,780 | $6,780 | 10. Equipment | Same |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Routing** | Cisco 7606 redundant system 2RSP720-3CXL, 2PS | | $51,750 | 18 | $931,500 | $0 | $931,500 | $931,500 | 10. Equipment | Commercial prices, based on procurement |
| | 48-port SFP Gigabit (two) | | $18,750 | 36 | $675,000 | $0 | $675,000 | $675,000 | 10. Equipment | 223 new sites; 68 upgrade sites. |
| | 48-port SFP FastEthernet (two) | | $6,750 | 36 | $243,000 | $0 | $243,000 | $243,000 | 10. Equipment | Unit configurations used to construct |
| | 10GBASE-LR X2 Module (four) | | $3,000 | 72 | $216,000 | $0 | $216,000 | $216,000 | 10. Equipment | equipment bill of materials |
| | MPLS VPN: ASR 9010 (Super Co | Cash Match | $303,400 | 2 | $606,800 | $0 | $606,800 | $606,800 | 10. Equipment | Same |
| | MPLS VPN: ASR-9006 (Core Site | Cash Match | $249,550 | 8 | $1,996,400 | $0 | $1,996,400 | $1,996,400 | 10. Equipment | Same |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Transport** | DWDM: 10 sites 40-channel Cien | Cash Match | $321,000 | 10 | $3,210,000 | $0 | $3,210,000 | $3,210,000 | 10. Equipment | Commercial prices, based on procurement |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Access** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Other** | Hubbell RE-BOX wall enclosure | | $357 | 223 | $79,611 | $0 | $79,611 | $79,611 | 10. Equipment | Commercial prices, based on procurement |
| | Patch Panel mounting bracket | | $40 | 223 | $8,920 | $0 | $8,920 | $8,920 | 10. Equipment | 223 new sites; 68 upgrade sites. |
| | Equipment mounting bracket | | $46 | 223 | $10,258 | $0 | $10,258 | $10,258 | 10. Equipment | Unit configurations used to construct |
| | APC SMART UPS 1000 Rack Mount | | $507 | 223 | $113,061 | $0 | $113,061 | $113,061 | 10. Equipment | equipment bill of materials |
| | Network Management Card | | $224 | 223 | $49,952 | $0 | $49,952 | $49,952 | 10. Equipment | Same |
| | Mounting hardware/patch cord(s)/etc. | | $100 | 223 | $22,300 | $0 | $22,300 | $22,300 | 10. Equipment | Same |
| | Power (PWR-C45-1400DC-P) | | $960 | 6 | $5,760 | $0 | $5,760 | $5,760 | 10. Equipment | Same |
| | 48-volt 155-aH battery string (two) | | $1,825 | 36 | $65,700 | $0 | $65,700 | $65,700 | 10. Equipment | Same |
| | Battery tray (two) | | $196 | 36 | $7,056 | $0 | $7,056 | $7,056 | 10. Equipment | Same |
| | Circuit Breaker 100-amp (5) | | $32 | 90 | $2,880 | $0 | $2,880 | $2,880 | 10. Equipment | Same |
| | 48v 50amp rectifier module (two) | | $995 | 36 | $35,820 | $0 | $35,820 | $35,820 | 10. Equipment | Same |
| | Cisco 5500 Series Wireless Controller Redundant P | | $897 | 5 | $4,485 | $0 | $4,485 | $4,485 | 10. Equipment | Same |
| | Cisco 5508 Series Wireless Controller for up to 250 | | $38,997 | 5 | $194,985 | $0 | $194,985 | $194,985 | 10. Equipment | Same |
| | | | $0 | | $0 | $0 | $0 | $0 | | |

# NTIA BTOP Round Two - CCI #5116
# OCTO DC-Community Access Network

FINAL
March 22, 2010
6:00 PM Eastern

| NTIA BTOP Round Two CCI (Winter 2010) - EasyGrant#: | | 5116 | Applicant: | OCTO DC-Net | | Project Name: | DC-Community Access Network (DC-CAN) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **OUTSIDE PLANT** | | | | | **$8,732,184** | **$0** | **$8,732,184** | **$8,732,184** | | |
| **Cables** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Conduits** | CAN Backbone Fiber Materials | | $2.10 | 303,250 | $636,825 | $0 | $636,825 | $636,825 | 10. Equipment | 288-count fiber, per foot; vendor quote |
| | Access Loops | | $1.30 | 585,100 | $760,630 | $0 | $760,630 | $760,630 | 10. Equipment | 96-count fiber, per foot; vendor quote |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Ducts** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Poles** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Towers** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Repeaters** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Other** | Underground Fiber Install | | $8.24 | 503200 | $4,146,368 | $0 | $4,146,368 | $4,146,368 | 7. Site work | Unit cost per foot; vendor quote |
| | Aerial Fiber Install | | $3.86 | 318250 | $1,228,445 | $0 | $1,228,445 | $1,228,445 | 7. Site work | Unit cost per foot; vendor quote |
| | ISP Costs | | $2.14 | 66900 | $143,166 | $0 | $143,166 | $143,166 | 7. Site work | Unit cost per foot; vendor quote |
| | Verizon Inspectors | | $65 | 27950 | $1,816,750 | $0 | $1,816,750 | $1,816,750 | 6. Inspection fees | Unit cost per hour; vendor quote |
| | | | $0 | | $0 | $0 | $0 | $0 | | |

# NTIA BTOP Round Two - CCI #5116
# OCTO DC-Community Access Network

FINAL
March 22, 2010
6:00 PM Eastern

| NTIA BTOP Round Two CCI (Winter 2010) - EasyGrant#: | | 5116 | Applicant: | OCTO DC-Net | | Project Name: | DC-Community Access Network (DC-CAN) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SERVICE AREA or COMMON NETWORK FACILITIES: | | Match (Cash/In-kind) | Unit Cost | No. of Units | Total Cost | Last Mile Allocation | Middle Mile Allocation | Allocated Total | SF-424C Budget Category | Support of Reasonableness |
| **BUILDINGS** | | | | | **$0** | **$0** | **$0** | **$0** | | |
| **New Construction** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Pre-Fab Huts** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Improvements & Renovs** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Other** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **CUSTOMER PREMISE EQUIPMENT** | | | | | **$0** | **$0** | **$0** | **$0** | | |
| **Modems** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Set Top Boxes** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Inside Writing** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Other** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **BILLING SUPPORT AND OPERATIONS SUPPORT SYSTEMS** | | | | | **$0** | **$0** | **$0** | **$0** | | |
| **Billing Support Systems** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Customer Care Systems** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Other Support** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |

# NTIA BTOP Round Two - CCI #5116
# OCTO DC-Community Access Network

FINAL
March 22, 2010
6:00 PM Eastern

| NTIA BTOP Round Two CCI (Winter 2010) - EasyGrant#: | | 5116 | Applicant: | OCTO DC-Net | | Project Name: | DC-Community Access Network (DC-CAN) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SERVICE AREA or COMMON NETWORK FACILITIES:** | | **Match (Cash/In-kind)** | **Unit Cost** | **No. of Units** | **Total Cost** | **Last Mile Allocation** | **Middle Mile Allocation** | **Allocated Total** | **SF-424C Budget Category** | **Support of Reasonableness** |
| **OPERATING EQUIPMENT** | | | | | **$0** | **$0** | **$0** | **$0** | | |
| **Vehicles** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Office Equipment / Furniture** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Other** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **PROFESSIONAL SERVICES** | | | | | **$4,267,993** | **$0** | **$4,267,993** | **$4,267,993** | | |
| **Engineering Design** | DC-Net Engineering, Inspection | | $65 | 21,040 | $1,367,600 | $0 | $1,367,600 | $1,367,600 | 4. Architectural and engr. | Estimates; procurement list costs |
| | Fiber Splicing and Testing | | $65 | 581 | $37,765 | | $37,765 | $37,765 | 7. Site work | Estimates; procurement list costs |
| | Network Configuration | | $90 | 450 | $40,500 | $0 | $40,500 | $40,500 | 4. Architectural and engr. | Estmates; internal labor |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Project Management** | Program Manager | | $90 | 1,920 | $172,800 | $0 | $172,800 | $172,800 | 1. Admin and Legal | Estimates; procurement list costs |
| | Project Manager | | $90 | 3,840 | $345,600 | $0 | $345,600 | $345,600 | 1. Admin and Legal | Estimates; procurement list costs |
| | Financial Analyst / Program Compliance | | $90 | 5,760 | $518,400 | $0 | $518,400 | $518,400 | 1. Admin and Legal | Estimates; procurement list costs |
| **Consulting** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Other** | Install New DC-Net Sites | | $3,780 | 223 | $842,940 | $0 | $842,940 | $842,940 | 7. Site work | Labor for installation; estimates |
| | Upgrade Existing DC-Net Site (underserved area) | | $1,280 | 68 | $87,040 | $0 | $87,040 | $87,040 | 7. Site work | Labor for installation; estimates |
| | Upgrade Public Safety M-3,4 Sites | | $780 | 71 | $55,380 | $0 | $55,380 | $55,380 | 7. Site work | Labor for installation; estimates |
| | Upgrade Existing DC-Net Model1 Hub Site | | $4,560 | 18 | $82,080 | $0 | $82,080 | $82,080 | 7. Site work | Labor for installation; estimates |
| | Install DC-CAN DWDM | | $15,000 | 10 | $150,000 | $0 | $150,000 | $150,000 | 4. Architectural and engr. | Labor for installation; estimates |
| | Install DC-CAN MPLS Routers | | $780 | 10 | $7,800 | $0 | $7,800 | $7,800 | 4. Architectural and engr. | Labor for installation; estimates |
| | Install Wireless Core | | $624 | 5 | $3,120 | $0 | $3,120 | $3,120 | 4. Architectural and engr. | Labor for installation; estimates |
| | Install Handholes | | $8,000 | 60 | $480,000 | $0 | $480,000 | $480,000 | 7. Site work | Labor for fiber installation; estimates |
| | | | | | $0 | | | $0 | | |
| | BTOP Application Submission | In-kind Match | $115 | 536 | $61,640 | $0 | $61,640 | $61,640 | 11. Misc. | Costs of BTOP application preparation |
| | Plug entry | In-kind Match | $1 | 328 | $328 | $0 | $328 | $328 | 11. Misc. | Plug, round up to nearest 000 |
| | ARRA/BTOP Compliance, Repor | Cash Match | $75 | 200 | $15,000 | $0 | $15,000 | $15,000 | 11. Misc. | New procedures for ARRA compliance |
| **TESTING** | | | | | **$60,300** | **$0** | **$60,300** | **$60,300** | | |
| **Network Elements** | Network Testing | | $90 | 220 | $19,800 | $0 | $19,800 | $19,800 | 4. Architectural and engr. | Estimates, based on experience |
| | Network Turnup / Testing | | $90 | 450 | $40,500 | $0 | $40,500 | $40,500 | 4. Architectural and engr. | Estimates, based on experience |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **IT System Elements** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **User Devices** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Test Generators** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Lab Furnishings** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| **Servers/Computers** | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |

**FINAL VERSION**

J Carella

# NTIA BTOP Round Two - CCI #5116
# OCTO DC-Community Access Network

FINAL
March 22, 2010
6:00 PM Eastern

| NTIA BTOP Round Two CCI (Winter 2010) - EasyGrant#: | | 5116 | Applicant: | OCTO DC-Net | | Project Name: | DC-Community Access Network (DC-CAN) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SERVICE AREA or COMMON NETWORK FACILITIES: | | Match (Cash/In-kind) | Unit Cost | No. of Units | Total Cost | Last Mile Allocation | Middle Mile Allocation | Allocated Total | SF-424C Budget Category | Support of Reasonableness |
| OTHER UPFRONT COSTS | | | | | $0 | $0 | $0 | $0 | | |
| Site Preparation | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| Other | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | $0 | | $0 | $0 | $0 | $0 | | |
| | | | | PROJECT TOTAL: | $25,033,000 | $0 | $25,033,000 | $25,033,000 | | |

| SF-424C Cross-check Totals | |
|---|---|
| 1. Admin and Legal | $1,036,800 |
| 2. Land, structures | $0 |
| 3. Relocation expenses | $0 |
| 4. Architectural and engr. | $1,629,320 |
| 5. Other archit. and engr. | $0 |
| 6. Inspection fees | $1,816,750 |
| 7. Site work | $7,103,184 |
| 8. Demolition/removal | $0 |
| 9. Construction | $0 |
| 10. Equipment | $13,369,978 |
| 11. Misc. | $76,968 |
| TOTAL SF-424C | $25,033,000 |

| Matching Contribution Cross-check Totals | | |
|---|---|---|
| Federal Funding Request | $17,457,942 | |
| Cash Match Contribution | $7,513,090 | 30.01% |
| In-kind Match Contribution | $61,968 | 0.25% |
| Total Match Pctg | 30.26% | |
| TOTAL SOURCES OF FUNDS | $25,033,000 | |

| | |
|---|---|
| SF-424C Difference: | $0 |
| Sources of Funds Difference: | $0 |

**Approach to allocating Last Mile and Middle Mile costs:**
As this is exclusively a middle-mile project, with last-mile enablement, there are no last-mile costs. All project costs are therefore accounted as allocated to Middlle Mile, exclusively.

**FINAL VERSION**

J Carella

# BTOP Comprehensive Community Infrastructure
# Service Offerings and Competitor Data Template

Please complete the complete the following worksheets--either of the Last Mile or Middle M
Service Offerings worksheets may be omitted if the applicant is not proposing to provide se
that type.

For both the Last Mile and Middle Mile Service Offerings worksheets, the service offerings s
include all relevant tiers and markets (*e.g.* residential, business, wholesale). Applicants sho
sure to include details on any services that would be offered at discounted rates to particul
classes of customers (*e.g.* community anchor institutions or third party service providers).

In the Last Mile Service Offerings worksheet, applicants are required to provide estimated a
end user speeds. Average speeds should be the average sustained actual, non-burst speed
end user would receive during a peak hour. For purposes of calculating these speeds, appli
should utilize their subscriber projections for year eight of the project, and develop subscril
utilization projections that are consistent with any additional services the applicant plans to
For wireless broadband services, this speed should be an average of the speeds available ac
entire cell. Beyond these general guidelines, due to the multiplicity of technical solutions t
be proposed, the applicants may use discretion to determine the most reasonable manner
to estimate actual speeds on their network. Applicants should explain the underlying assur
used to calculate the average speeds in the space provided.

In the Competitor Data worksheet, applicants are required to provide data on both last mil
middle mile service providers, regardless of whether the applicant proposes to offer both la
and middle mile services. In the column titled Service Areas Where Service Offered, applica
should list all of the Last Mile and Middle Mile Service Areas within their Proposed Funded
area in which the listed services area available. Please ensure that the Service Area names
consistent with those provided within the application and the Service Areas attachment. If
actual availability of the listed services is limited (*e.g.* the service is only available within pa
Last Mile or Middle Mile Service Area), note this in the Other Comments column.

In contrast to several other attachment templates in this application, the data provided via
template will NOT be subject to automated processing. These templates worksheets are pr
to demonstrate the level of data required and to provide a suggested format. Applicants ar
modify the template layouts in order to provide the most effective presentation of the data
their specific project. Applicants should, however, ensure that they provide at least as muc
as these templates require. To the extent that you modify these templates please ensure t
print layouts are adjusted so that rows do not break across pages in a manner that will be d
to understand. It is recommended that you provide these documents in PDF format when
submitting a copy of your application on an appropriate electronic medium, such as a DVD,
ROM, or flash drive.

Mile
ervices of

should
ould be
lar

average
ls that an
icants
ber
o offer.
cross an
that may
in which
mptions

e and
ast mile
ants
Service
are
the
rt of the

this
rovided
re free to
a for
ch detail
that the
difficult

, CD-

# Proposed Middle Mile Service Offerings

| Name of Service Offering | Distance Band or Point to Point | Minimum Peak Load Network Bandwidth Capacity (Mbps) | Monthly Pricing ($) | Other Comments/Description/Features or Limitations |
|---|---|---|---|---|
| **Layer 1** | | | | |
| Dark Fiber Service | Distance Band | N/A | Avg $175 per strand per mile | Price varies based on construction costs in each ward. Pricing in underserved areas of ward 5,7 and 8 are lower than other wards. |
| Wavelength | Point-to-Point | 1 Gbps | $4,500 per access node | Wavelengths can be shared or dedicated and configured in a point to point or point to multipoint fashion as desired. Wavelengths are provisioned over a ring between desired locations as protected or unprotected. Peering can be done using Ethernet, FC/FICON, SONET or direct wave (OTN) interfaces. Bandwidth at 2.5 Gbps. Features: Physical path redundancy, dedicated 24 by 7 monitoring. 99.999% availabiilty. Direct connectivity to District government data centers for District government services and resources; direct connectivity to core exchanges, available public and private peering points for interconnection and offsite data storage/recovery; private connection to other District government and community anchors on network; Edu-Net access for educational institutions - ability to peer with Internet(2), Mid-Atlantic Exchange (MAX GigaPOP), National Public LightPath, National LambdaRail. |
| | | 2.5 Gbps | $5,200 per access node | Same as 1 Gbps wavelength service. Bandwidth at 2.5 Gbps |
| | | 10 Gbps | $6,000 per access node | Same as 2.5 Gbps wavelength service. Bandwidth at 10 Gbps |
| **Layer 2** | | | | |
| Layer 2 Service | Point-to-Point or Point-to-Multipoint | 100 Mbps | $2,200 per access site | Layer 2 services offered over the MPLS platform built over a protected DWDM ring. Can be configured as point to point or point to multipoint. Features: Physical path redundancy, dedicated 24 by 7 monitoring. 99.999% availabiilty. Direct connectivity to District government data centers for District government services and resources; direct connectivity to core exchanges, available public and private peering points for interconnection and offsite data storage/recovery; private connection to other District government and community anchors on network; Edu-Net access for educational institutions - ability to peer with Internet(2), Mid-Atlantic Exchange (MAX GigaPOP), National Public LightPath, National LambdaRail. |
| | | 1 Gbps | $3,200 per access site | Same as 100 Mbps EoMPLS. Bandwidth at 1 Gbps |
| | | 10 Gbps | ICB | Same as 100 Mbps EoMPLS. Bandwidth at 10 Gbps |
| **Layer 3** | | | | |

| | | | | |
|---|---|---|---|---|
| VPN | Point-to-Point or Point-to-Multipoint | 2 Mbps | $400 | Physical path redundancy; 24x7 network monitoring and customer support; guaranteed quality of service and packet delivery suitable for all traffic (including VoIP); demonstrated 99.995% network uptime past performance; Internet connectivity; Direct connectivity to District government data centers for District government services and resources; direct connectivity to core exchanges, available public and private peering points for interconnection and offsite data storage/recovery; private connection to other District government and community anchors on network; Edu-Net access for educational institutions - ability to peer with Internet(2), Mid-Atlantic Exchange (MAX GigaPOP), National Public LightPath, National LambdaRail; HIPAA-Net access for health customers; Public Safety-Net access for public safety entities; can be accessed at neutral collocation facility in underserved area, if desired. |
| | | 10 Mbps | $600 | Same as 2 Mbps VPN Access service |
| | | 100 Mbps | $1,995 | Same as 2 Mbps VPN Access service |
| | | 1 Gbps | $4,995 | Same as 2 Mbps VPN Access service |
| | | 10 Gbps | ICB | Same as 2 Mbps VPN Access service |

# Competitor Data

**Competitor Data - Last Mile Service Providers**

| Service Provider | Service Areas Where Service Available | Technology Platform | Service Tiers | Downstream Speed | Monthly Pricing | Other Comments/Description/Features or Limitations |
|---|---|---|---|---|---|---|
| RCN | All four quadrants of Washington DC: NW, NE, SE, and SW | Hybrid Fiber Coax | Basic | 1.5 Mbps | $17.50 | |
| | | | Mid | 10 Mbps | $32.45 | |
| | | | High | 20 Mbps | $65.50 | |
| RCN | All four quadrants of Washington DC: NW, NE, SE, and SW | Hybrid Fiber Coax | Low | 1.5 Mbps | $22.99 | 12 mo contract pricing; retail rates after 1 year |
| | | | Mid | 10 Mbps | $32.99 | |
| | | | High | 20 Mbps | $52.99 | |
| Verizon | All four quadrants of Washington DC: NW, NE, SE, and SW | DSL | Basic | 1 Mbps | $29.99 | |
| | | | Mid | 3 Mbps | $39.99 | |
| | | | High | 7.1 Mbps | $49.99 | |
| Comcast | All four quadrants of Washington DC: NW, NE, SE, and SW | Hybrid Fiber Coax | Basic | 1 Mbps | $24.95 | |
| | | | Mid | 12 Mbps | $42.95 | |
| | | | High | 16 Mbps | $52.95 | |
| Earthlink | All four quadrants of Washington DC: NW, NE, SE, and SW | | Basic | 56 Kbps | $21.95 | Dial-up |
| | | | Mid | 1.5 Mbps | $39.95 | DSL |
| | | | High | 5 Mbps | $59.99 | Satellite |

**Competitor Data - Middle Mile Service Providers**

| Service Provider | Service Areas Where Service Available | Technology Platform | Service Tiers | Distance Band or Point-to-Point | Minimum Peak Load Network Bandwidth Capacity | Pricing | Other Comments/Description/Features or Limitations |
|---|---|---|---|---|---|---|---|
| AT&T | Northwest Washington DC | MPLS | | Point to Point | 1.5 Mbps | $665 | This is a generic service pricing provided by AT&T. AT&T did not confirm if it will provide the services in the Southeast/Northeast areas of DC and/or any portions of their service that will be provisioned over Verizon network. |
| FiberLight | Northwest Washington DC | | | | | | No fiber availability in underserved area and is either unable to provide service or would provide service over Verizon's network. |
| Global Crossing | All four quadrants of Washington DC: NW, NE, SE, and SW | MPLS | Entry Level | 100 Mbps | 100 Mbps | $9,475.00 | Global crossing indicated that they do have fiber in the areas of Southeast/ Northeast DC over which middle-mile services can be provided. The pricing provided here is based on their MPLS service. |
| Level3 | All four quadrants of Washington DC: NW, NE, SE, and SW | Long Haul Fiber Network | Entry Level | 100 Mbps | 100 Mbps | Not available | Fiber infrastructure not present in underserved area. To obtain service customer would have to pay for fiber to be built into customer premises as a Non recurring charge. Speeds as advertised by provider. |
| | | | Highest Speed Plan | 10,000 Mbps | 10,000 Mbps | Not available | |
| | | | Other Plans (eg. Middle | 2,500 Mbps | 2,500 Mbps | Not available | |
| RCN | All four quadrants of Washington DC: NW, NE, SE, and SW | Hybrid Fiber Coax | Entry Level | 100 Mbps | 100 Mbps | $2,580 | Fiber infrastructure not widely present in underserved area. To obtain service customer would have to pay for fiber to be built into customer premises as a Non recurring charge. Speeds as advertised by provider. Pricing based on GSA schedule. |
| | | | Highest Speed Plan | 10,000 Mbps | 10,000 Mbps | $23,154 | |
| | | | Other Plans (eg. Middle Tier) | 2,500 Mbps | 2,500 Mbps | $7,800 | |
| TW Telecom | Northwest Washington DC | MPLS | | | | | No fiber availability in underserved area and is either unable to provide service or would provide service over Verizon's network. Indicated that it has no future expansion plans for fiber in SE or NE Washington DC |
| Verizon | All four quadrants of Washington DC: NW, NE, SE, and SW | TLS | Entry Level | 10 Mbps | 10 Mbps | $1,000 | Verizon provided no response for request for MPLS services. While Verizon is the ILEC in SE and NE Washington DC, it did not confirm the extent of fiber avaialbility in these areas and/or where it will provide services in these areas. Also previous research has revealed that fiber infrastructure is not widely present in underserved area. The pricing povided here is for a Transparent LAN service (TLS). To obtain LAN service customer would have to pay for fiber to be built into customer premises as a Non recurring charge. Speeds as advertised by provider. Pricing is based on GSA schedule. |
| | | | Highest Speed Plan | 1,000 Mbps | 1,000 Mbps | $4,200 | |
| | | | Other Plans (eg. Middle | 100 Mbps | 100 Mbps | $2,250 | |
| Zayo Bandwidth | Northwest Washington DC | MPLS | | | | | No fiber availability in underserved area and is either unable to provide service or would provide service over Verizon's network. Provider also mentioned that it does not have any plans to expand into further areas in Washington DC. |

# Comprehensive Community Infrastructure Budget Narrative

Applicant Name: District of Columbia Government
Office of Chief Technology Officer (DC OCTO)

EasyGrants Number: 5116
DC Community Access Network

Organization Type: District of Columbia

Proposed Period of Performance: 30 Months
(FY 2011-Q1 – FY 2013-Q2)

Total Project Costs: $25,033,000

Total Federal Grant Request: $ 17,457,942

Total Matching Funds (Cash): $ 7,513,090

Total Matching Funds (In-Kind): $ 61,968

Total Matching Funds (Cash + In-Kind): $ 7,575,058

Total Matching Funds (Cash + In-Kind) as Percentage of Total Project Costs: 30.26 %

---

## 1. Administrative and legal expenses - $1,036,800

- 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.

Administrative expenses are budgeted at $1,036,800, for three labor categories. Program Manager will be roughly half-time over the two-and-a-half year project schedule (30 months); unit costs are based on procurement schedules. Project manager will be full-time for duration of project; again, unit costs are list prices. Financial analyst and compliance analyst will be responsible for financial controls, and satisfying compliance, reporting and other obligations imposed by acceptance of the BTOP grant.

| **Admin & Legal: Staff** | Hours | Years | Rate | Total Cost |
|---|---|---|---|---|
| Program Manager | 1,920 | 2.25 | $90 / hour | $ 172,800 |
| Project Manager | 3,840 | 2.25 | $90 / hour | $ 345,600 |

| | | | | |
|---|---|---|---|---|
| Financial Analyst / Compliance Analyst | 5,760 | 2.25 | $90 / hour | $518,400 |
| **TOTAL:** | | | | **$ 1, 036,800** |

Services to support legal, contract review and other administrative matters will be supported by existing District of Columbia staff.

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

No cash matching funds are committed for this expense category. It is entirely funded by BTOP grant money.

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

No in-kind matching funds are committed for this expense category. It is entirely funded by BTOP grant money.

## 2. Land, structure, rights-of-way, appraisals, etc. - $ 0

In this CCI Application for DC-CAN, there are no project expenses assigned to “Land, Structure, Rights-of-Way, Appraisals, etc.”.

## 3. Relocation expenses and payment - $ 0

In this CCI Application for DC-CAN, there are no project expenses assigned to “Relocation Expenses and Payments”.

## 4. Architectural and engineering fees - $ 1,629,320

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

| **Architectural and Engineering Fees** | Hours | Years | Rate | Total Cost |
|---|---|---|---|---|
| Engineering Services – services for fiber bundle installations, allocations | 21,040 | 9.0 | $65 / hour | $ 1,367,600 |
| Network Configuration – configuration and implementation of base network infrastructure | 450 | 0.25 | $90 / hour | $ 40,500 |
| Install DC-CAN DWDM Multiplexing Systems | 10 instances | Not Applicable | $15,000 / installation | $ 150,000 |

| | | | | |
|---|---|---|---|---|
| – enable efficient fiber management and capacity management | | | | |
| Install DC-CAN MLPS Routers – support communications infrastructure | 10 instances | Not Applicable | $ 780 / installation | $ 7,800 |
| Install Wireless Core | 5 instances | Not Applicable | $624 / installation | $ 3,120 |
| Network Turn-up and Assurance | 450 | 0.25 | $ 90 / hour | $ 40,500 |
| Network Testing | 220 | 0.12 | $ 90 / hour | $ 19,800 |
| **TOTAL:** | | | | **$ 1,629,320** |

Unit costs are based on contract rate schedules; work efforts are based on experience within DC-Net.

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

No cash matching funds are committed for this expense category. It is entirely funded by BTOP grant money.

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

No in-kind matching funds are committed for this expense category. It is entirely funded by BTOP grant money.

## 5. Other architectural and engineering fees - $ 0

In this CCI Application for DC-CAN, there are no project expenses assigned “Other Architectural and Engineering Fees”.

## 6. Project inspection fees - $ 1,816,750

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

| **Project Inspection Fees** | Hours | Years | Rate | Total Cost |
|---|---|---|---|---|
| Verizon Inspectors | 27950 | 13.0 | $ 65 / hour | $ 1,816,750 |
| **TOTAL:** | | | | **$ 1,816,750** |

A core strategy of the DC-CAN proposal is the intent to run new fiber bundles only through existing Verizon conduit. This eliminates the need for new construction, minimizes service interruptions, and

eliminates disruption to environment. As DC-Net personnel (primarily contractors) will be installing new fiber, DC-CAN will arrange for Verizon inspectors to be on-site during fiber pulls, splices, etc., and to sign off that new infrastructure was successfully completed, and did not impact Verizon, or other, service. This expense funds those Verizon inspection efforts.

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

No cash matching funds are committed for this expense category. It is entirely funded by BTOP grant money.

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

No in-kind matching funds are committed for this expense category. It is entirely funded by BTOP grant money.

## 7. Site work - $ 7,103,184

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

| **Site Work** | Units | Years | Rate | Total Cost |
|---|---|---|---|---|
| Underground Fiber Installation | 503,200 | c. 14 | $ 8.24 / foot | $ 4,146,368 |
| Aerial Fiber Installation | 318,250 | c. 5 | $3.86 / foot | $ 1,228,445 |
| ISP Costs | 66,900 | c. 1.5 | $ 2.14 / foot | $ 143,166 |
| Fiber Splicing and Testing | 581 | c. 0.3 | $ 65 / hour | $ 37,765 |
| Install New DC-Net Sites | 223 | c. 0.5 | $ 3,780 / site | $ 842,940 |
| Upgrade Existing DC-Net Sites (underserved) | 68 | c. 0.2 | $ 1,280 / site | $ 87,040 |
| Upgrade Public Safety M-3,-4 Sites | 71 | c. 0.2 | $ 780 / site | $ 55,380 |
| Upgrade Existing DC-Net Model1 Hub Site | 18 | c. 0.4 | $ 4,560 / site | $ 82,080 |
| Install Hand-holes | 60 | c. 2.8 | $ 8,000 / unit | $ 480,000 |
| **TOTAL:** | | | | **$ 7,103,184** |

Unit costs are based on contract rate schedules; work efforts are based on experience within DC-Net.

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

No cash matching funds are committed for this expense category. It is entirely funded by BTOP grant money.

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

No in-kind matching funds are committed for this expense category. It is entirely funded by BTOP grant money.

## 8. Demolition and Removal - $ 0

In this CCI Application for DC-CAN, there are no project expenses assigned "Demolition and Removal Fees".

## 9. Construction - $ 0

In this CCI Application for DC-CAN, there are no project expenses assigned to "Construction". All new fiber will be pulled through existing telecommunications conduits. All fiber equipment and installation costs are recorded under #7 – Site Work.

## 10. Equipment - $ 13,369,978

- 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.

The following table lists all equipment for purchase for the DC-CAN project. All equipment will be purchased (none leased). All unit costs have either been sourced from Procurement Office, or obtained via quotation from supplying vendor.

Quantities were derived based on planned configuration for each site, multiplied by the number of sites (newly added; upgraded; etc). These site counts are based upon the planned set of Community Anchor Institutions, Points of Inter-Connections, and core DC-Net processing centers.

Total equipment cost is $13,369,978.

Requested BTOP grants will fund $ 5,871,888, and the remaining balance of $ 7,498,090 will be funded by OCTO's cash match contribution. In the right hand column, the four sets of equipment which will be purchased using the District's Cash Match have "YES" in their cells, which are also colored yellow.

| Equipment Type, Model | Unit Price | Quantity | Extended | Pricing Source | Cash Match |
|---|---|---|---|---|---|
| Cisco 3560 24 10/100 PoE + 2 SFP + IPS Image | $5,790 | 291 | $1,684,890 | DC cost per unit | Yes |
| GE SFP LC connector LX/LH transceiver (four) | $565 | 1164 | $657,660 | DC cost per unit | |
| Cisco 1520 Outdoor Series (w/ hardware) | $3,500 | 291 | $1,018,500 | DC cost per unit | |
| Chassis 4507R-E | $5,497 | 3 | $16,491 | DC cost per unit | |
| Supervisor (WS-X45-SUP6-E) | $10,997 | 6 | $65,982 | DC cost per unit | |
| IOS (S45EESK9-12250SG) | $6,000 | 3 | $18,000 | DC cost per unit | |
| 48 Port PoE Blades (WS-X4648-RJ45V+E) | $4,122 | 6 | $24,732 | DC cost per unit | |
| SFP (GLC-LH-SM) | $565 | 12 | $6,780 | DC cost per unit | |
| Cisco 7606 redundant system 2RSP720-3CXL, 2PS | $51,750 | 18 | $931,500 | DC cost per unit | |
| 48-port SFP Gigabit (two) | $18,750 | 36 | $675,000 | DC cost per unit | |
| 48-port SFP FastEthernet (two) | $6,750 | 36 | $243,000 | DC cost per unit | |
| 10GBASE-LR X2 Module (four) | $3,000 | 72 | $216,000 | DC cost per unit | |
| MPLS VPN: ASR 9010 (Super Core sites) | $303,400 | 2 | $606,800 | DC cost per unit | Yes |
| MPLS VPN: ASR-9006 (Core Sites) | $249,550 | 8 | $1,996,400 | DC cost per unit | Yes |
| DWDM: 10 sites 40-channel Ciena 4200 RS | $321,000 | 10 | $3,210,000 | DC cost per unit | Yes |
| Hubbell RE-BOX wall enclosure | $357 | 223 | $79,611 | DC cost per unit | |
| Patch Panel mounting bracket | $40 | 223 | $8,920 | DC cost per unit | |
| Equipment mounting bracket | $46 | 223 | $10,258 | DC cost per unit | |
| APC SMART UPS 1000 Rack Mount | $507 | 223 | $113,061 | DC cost per unit | |
| Network Management Card | $224 | 223 | $49,952 | DC cost per unit | |
| Mounting hardware/patch cord(s)/etc. | $100 | 223 | $22,300 | DC cost per unit | |
| Power (PWR-C45-1400DC-P) | $960 | 6 | $5,760 | DC cost per unit | |
| 48-volt 155-aH battery string (two) | $1,825 | 36 | $65,700 | DC cost per unit | |
| Battery tray (two) | $196 | 36 | $7,056 | DC cost per unit | |
| Circuit Breaker 100-amp (5) | $32 | 90 | $2,880 | DC cost per unit | |
| 48v 50amp rectifier module (two) | $995 | 36 | $35,820 | DC cost per unit | |
| Cisco 5500 Series Wireless Controller Redundant Power Supply | $897 | 5 | $4,485 | DC cost per unit | |
| Cisco 5508 Series Wireless Controller for up to 250 APs | $38,997 | 5 | $194,985 | DC cost per unit | |
| CAN Backbone Fiber Materials | $2.10 | 303,250 | $636,825 | Fiber bundles | |
| Access Loops | $1.30 | 585,100 | $760,630 | Fiber bundles | |
| **TOTALS** | | | **$13,369,978** | | |
| **TOTAL BTOP Federal Grant** | | | | **$ 5,871,888** | |
| **TOTAL DC Cash Match** | | | | **$ 7,498,090** | |

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

$ 7,498,090 in District of Columbia cash will be used as a matching contribution toward the DC-CAN project. The source of the funds will be District of Columbia Government.

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

No in-kind matching funds are committed for this expense category. It is entirely funded by BTOP grant money, and by District of Columbia cash match, as indicated above.

## 11. Miscellaneous - $ 76,968

- Provide additional information as needed.

DC-CAN has accounted for three project cost items in its budget, as listed in the following table.

| **Miscellaneous** | Hours | Years | Rate | Total Cost |
|---|---|---|---|---|
| BTOP Application and Proposal Preparation | 536 | 0.25 | $ 115 / hour | $ 61,640 |
| Plug entry, to round proposal to nearest 000. | | | | $ 328 |
| Policy and Procedure Changes to support ARRA / BTOP Compliance and Transparency obligations | 200 | 0.10 | $ 75 / hour | $ 15,000 |
| **TOTAL:** | | | | **$ 76,968** |

Re BTOP Application and Proposal Preparation, three contractors worked approximately four-and-a-half weeks to construct the proposal and application. Estimated at 536 person hours, at a blended average cost of $115 / hour, BTOP proposal development costs are estimated at $61,640. This item is being classified as an in-kind match, and no BTOP funds will be used for this.

$328 was added to the budget as a plug entry, to bring the project cost to an even thousand dollars. This, too, is being classified as an in-kind match, and no BTOP funds will be used for this.

Re Policy and Procedure Changes, in the event of a BTOP grant award, it is expected that changes will be required to support new financial controls, additional financial reports, quarterly submissions to Recovery.gov, and other compliance obligations associated with acceptance of a grant. District of Columbia estimates 200 hours at $75 per hour, or $15,000, to implement these changes. This item is being classified as a cash match, and no BTOP funds will be used for this.

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

The $15,000 for Policy and Procedure Changes, to support implementation of ARRA and BTOP compliance and transparency efforts, are being classified as Cash Match. Source of these funds is the budget of the District of Columbia Office of the Chief Technology Officer (OCTO).

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

The $61,640 for the legitimate costs of the BTOP Application Preparation (from late January NOFA to submission) are being classified as in-kind matching funds. In addition, the $328 plug entry is classified as in-kind matching, as well, for a total of $61,968. Source of these funds is the budget of the District of Columbia Office of the Chief Technology Officer (OCTO).

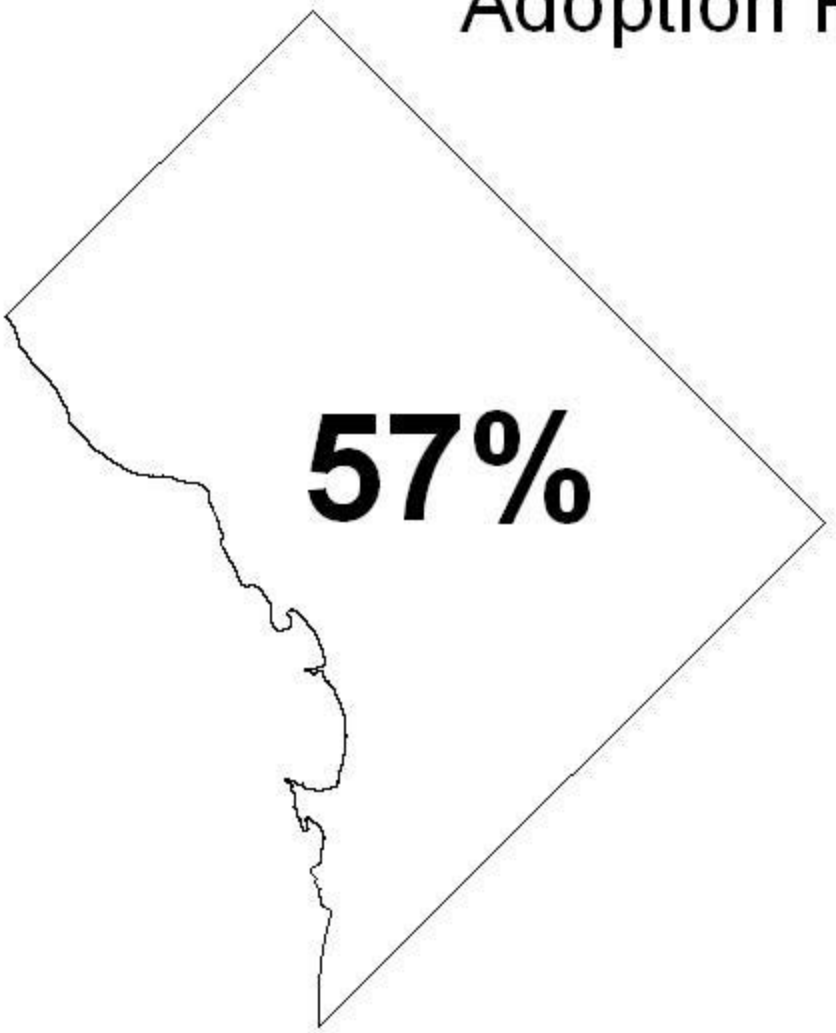
## 13. Contingencies - $ 0

In this CCI Application for DC-CAN, there are no project expenses assigned to “Contingencies”.

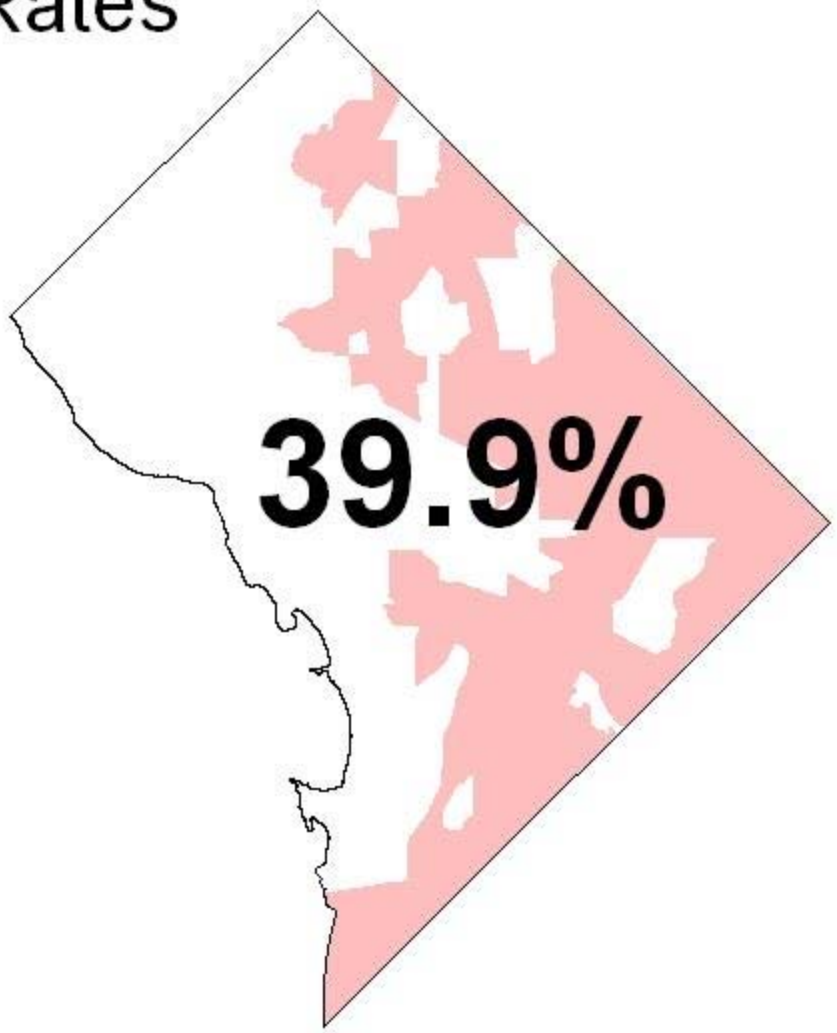
## 15. Project (program) income - $0

In this CCI Application for DC-CAN, there is no program income expected, or recorded in this category.

# Adoption Rates



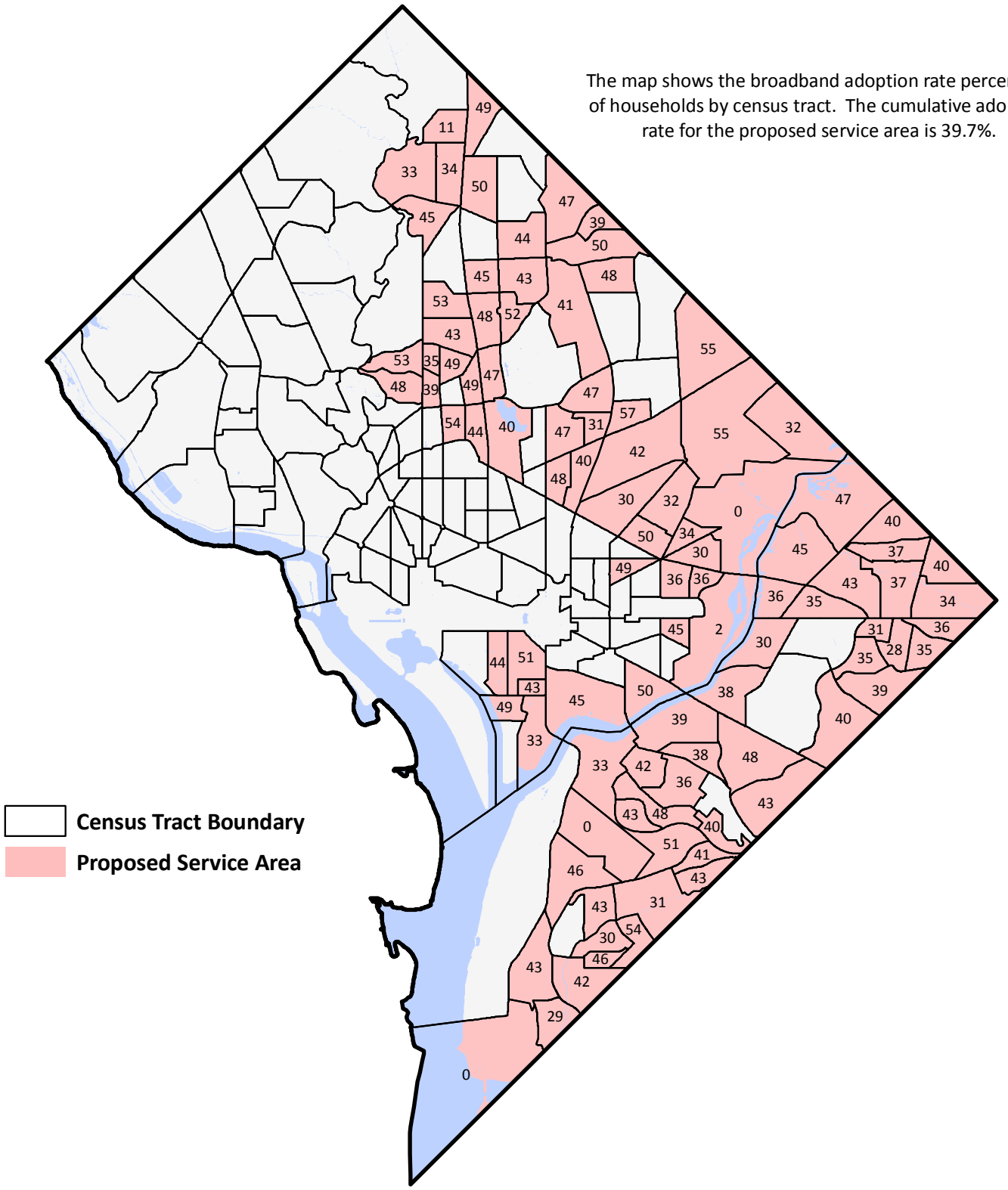

Entire District




Underserved Service Area

# District of Columbia
# Broadband Adoption Rate by Census Tract

The map shows the broadband adoption rate percentage of households by census tract. The cumulative adoption rate for the proposed service area is 39.7%.




*Source: 2000 Census; FCC Form 477 12/31/2008 from major providers to the District of Columbia Public Service Commission*

N
W E
S

1 inch = 1.7 miles

Scale: 1:110,000

0 0.5 1 2 3 Miles

Source:
Office of the Chief Technology Officer (OCTO)

Prepared by: DC GIS

Date: March 24, 2010

Coordinate System:
NAD 1983 StatePlane Maryland FIPS 1900

# BTOP Comprehensive Community Infrastructure
# Service Area Template

Please complete the complete the CCI Service Area worksheet. In each line you will provide name of a service area and one of the contiguous Census tracts or block groups that make u service area. Please provide full 11-digit Census tract numbers, includes the 2-digit State FIP the 3-digit county code, followed by a unique 6-digit tract number. For Census block groups please provide the full tract number, plus the 1-digit block group number (12 digits total). If more than one Census tract or block group in a service area, there will be multiple lines in th for that service area. It is critical that the service area names provided in this table match w service area names provided in the Service Area Details page of the application. Please revie document and Service Area Details page for consistency before submitting your application.

Important Note: Excel truncates leading zeros from numbers. Consequently, the tract/block column on the worksheet has been formatted as text. This formatting should not be altered validity of your data may be compromised.

The data provided via this attachment will be subject to automated processing. Applicants a therefore required to provide this attachment as an Excel file, and not to convert it to a PDF submitting a copy of your application on an appropriate electronic medium, such as a DVD, C ROM, or flash drive. Additionally, Applicants should not modify the format of this file (*e.g.,* I adding or removing worksheets). Do not leave blank lines in the table between service area

**EXAMPLE**

| Service Area Name | Tract or Block Group # |
|---|---|
| Big BB Project South | 01001020100 |
| Big BB Project South | 01001020100 |
| Big BB Project South | 010010202001 |
| Big BB Project West | 01001020400 |
| Big BB Project North | 01001020800 |
| Big BB Project North | 010010209002 |
| | |
| | |
| | |
| | |

the
p that
PS code,
s,
there is
ne table
ith the
ew this

group
l, or the

are
when
CD-
by
s.

**BTOP CCI Service Area Template**

Title: **DC-Community Access Network**
Easy Grants ID: **5116**

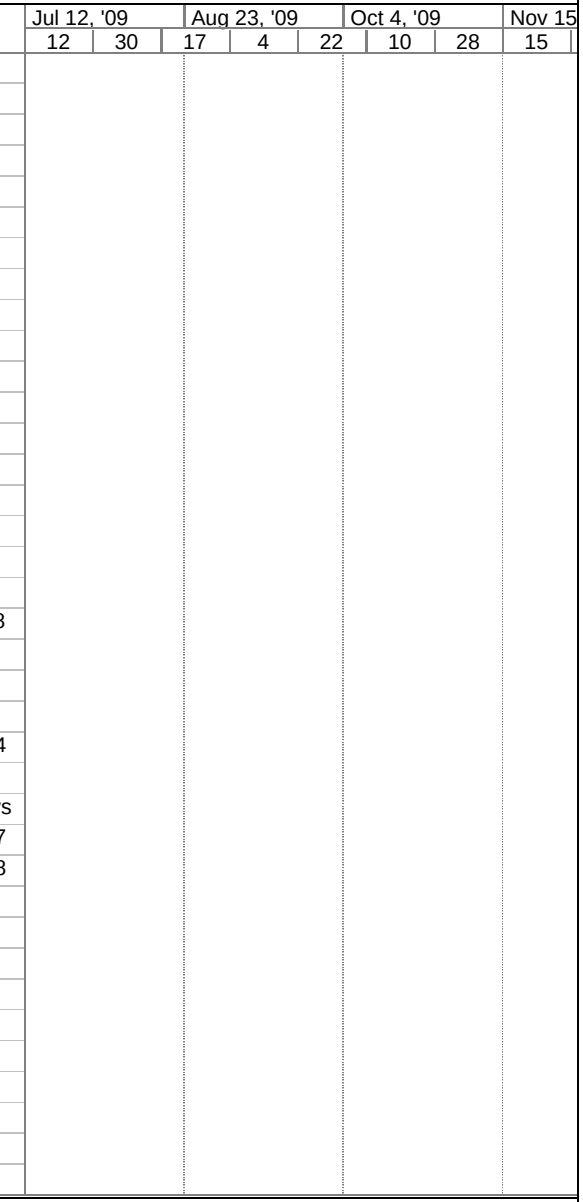
| Service Area Name | Tract or Block Group # |
|---|---|
| Disadvantaged Wards | 11001001701 |
| Disadvantaged Wards | 11001001801 |
| Disadvantaged Wards | 11001001803 |
| Disadvantaged Wards | 11001001804 |
| Disadvantaged Wards | 11001001901 |
| Disadvantaged Wards | 11001002001 |
| Disadvantaged Wards | 11001002102 |
| Disadvantaged Wards | 11001002201 |
| Disadvantaged Wards | 11001002202 |
| Disadvantaged Wards | 11001002301 |
| Disadvantaged Wards | 11001002400 |
| Disadvantaged Wards | 11001002501 |
| Disadvantaged Wards | 11001002502 |
| Disadvantaged Wards | 11001002701 |
| Disadvantaged Wards | 11001002702 |
| Disadvantaged Wards | 11001002801 |
| Disadvantaged Wards | 11001002802 |
| Disadvantaged Wards | 11001002900 |
| Disadvantaged Wards | 11001003100 |
| Disadvantaged Wards | 11001003200 |
| Disadvantaged Wards | 11001003400 |
| Disadvantaged Wards | 11001003500 |
| Disadvantaged Wards | 11001003600 |
| Disadvantaged Wards | 11001006001 |
| Disadvantaged Wards | 11001006002 |
| Disadvantaged Wards | 11001006100 |
| Disadvantaged Wards | 11001006301 |
| Disadvantaged Wards | 11001006400 |
| Disadvantaged Wards | 11001006801 |
| Disadvantaged Wards | 11001006804 |
| Disadvantaged Wards | 11001007100 |
| Disadvantaged Wards | 11001007200 |
| Disadvantaged Wards | 11001007302 |
| Disadvantaged Wards | 11001007304 |
| Disadvantaged Wards | 11001007308 |
| Disadvantaged Wards | 11001007401 |
| Disadvantaged Wards | 11001007403 |
| Disadvantaged Wards | 11001007404 |
| Disadvantaged Wards | 11001007406 |
| Disadvantaged Wards | 11001007407 |
| Disadvantaged Wards | 11001007408 |
| Disadvantaged Wards | 11001007409 |
| Disadvantaged Wards | 11001007503 |
| Disadvantaged Wards | 11001007504 |
| Disadvantaged Wards | 11001007601 |
| Disadvantaged Wards | 11001007603 |
| Disadvantaged Wards | 11001007604 |
| Disadvantaged Wards | 11001007605 |
| Disadvantaged Wards | 11001007707 |
| Disadvantaged Wards | 11001007708 |
| Disadvantaged Wards | 11001007709 |
| Disadvantaged Wards | 11001007803 |
| Disadvantaged Wards | 11001007804 |
| Disadvantaged Wards | 11001007806 |
| Disadvantaged Wards | 11001007807 |
| Disadvantaged Wards | 11001007808 |
| Disadvantaged Wards | 11001007809 |
| Disadvantaged Wards | 11001007901 |
| Disadvantaged Wards | 11001007903 |
| Disadvantaged Wards | 11001008402 |
| Disadvantaged Wards | 11001008701 |
| Disadvantaged Wards | 11001008702 |
| Disadvantaged Wards | 11001008802 |
| Disadvantaged Wards | 11001008803 |
| Disadvantaged Wards | 11001008804 |
| Disadvantaged Wards | 11001008903 |
| Disadvantaged Wards | 11001008904 |
| Disadvantaged Wards | 11001008905 |
| Disadvantaged Wards | 11001009000 |
| Disadvantaged Wards | 11001009101 |
| Disadvantaged Wards | 11001009102 |
| Disadvantaged Wards | 11001009201 |
| Disadvantaged Wards | 11001009203 |
| Disadvantaged Wards | 11001009204 |
| Disadvantaged Wards | 11001009302 |
| Disadvantaged Wards | 11001009400 |
| Disadvantaged Wards | 11001009501 |
| Disadvantaged Wards | 11001009505 |
| Disadvantaged Wards | 11001009507 |
| Disadvantaged Wards | 11001009508 |

| Service Area Name | Tract or Block Group # |
|---|---|
| Disadvantaged Wards | 11001009509 |
| Disadvantaged Wards | 11001009601 |
| Disadvantaged Wards | 11001009602 |
| Disadvantaged Wards | 11001009603 |
| Disadvantaged Wards | 11001009604 |
| Disadvantaged Wards | 11001009700 |
| Disadvantaged Wards | 11001009801 |
| Disadvantaged Wards | 11001009802 |
| Disadvantaged Wards | 11001009804 |
| Disadvantaged Wards | 11001009806 |
| Disadvantaged Wards | 11001009807 |
| Disadvantaged Wards | 11001009808 |
| Disadvantaged Wards | 11001009809 |
| Disadvantaged Wards | 11001009902 |
| Disadvantaged Wards | 11001009903 |
| Disadvantaged Wards | 11001009904 |
| Disadvantaged Wards | 11001009905 |
| Disadvantaged Wards | 11001009906 |
| Disadvantaged Wards | 11001009907 |

# 5116-CCI DC-CAN
# DC Community Access Network

March 24, 2010

| ID | Task Name | Duration | Start | Finish | Predecessors |
|---|---|---|---|---|---|
| 1 | **5116-CCI DC-CAN COMPOSITE PROJECT PLAN** | **621 days** | **Mon 10/4/10** | **Mon 3/18/13** | |
| 2 | **DC-CAN Core Ring** | **621 days** | **Mon 10/4/10** | **Mon 3/18/13** | |
| 3 | **006-014** | **361 days** | **Mon 10/4/10** | **Tue 3/13/12** | |
| 4 | 006-014 Network Design | 10 days | Mon 10/4/10 | Fri 10/15/10 | |
| 5 | 006-014 Site Preparation | 5 days | Mon 10/4/10 | Fri 10/8/10 | 4SS |
| 6 | 006-014 Equipment Procurement | 60 days | Mon 10/4/10 | Thu 12/30/10 | |
| 7 | 006-014 ISP/Equipment Deployment | 10 days | Mon 1/3/11 | Fri 1/14/11 | 6 |
| 8 | 006-014 OSP Deployment (Underground Survey | 85 days | Mon 10/11/10 | Mon 2/14/11 | |
| 9 | 006-014 OSP Deployment (Underground Buildou | 340 days | Tue 10/19/10 | Mon 2/27/12 | 8SS+5 days |
| 10 | 006-014 Network Testing and Turnup | 10 days | Tue 2/28/12 | Mon 3/12/12 | 7FS+2 days,9 |
| 11 | 006-014 Network Complete | 1 day | Tue 3/13/12 | Tue 3/13/12 | 10 |
| 12 | **014-253** | **173 days** | **Mon 10/4/10** | **Mon 6/13/11** | |
| 13 | 014-253 Network Design | 10 days | Tue 10/19/10 | Mon 11/1/10 | 4 |
| 14 | 014-253 Site Preparation | 5 days | Tue 10/19/10 | Mon 10/25/10 | 13SS,5 |
| 15 | 014-253 Equipment Procurement | 60 days | Mon 10/4/10 | Thu 12/30/10 | |
| 16 | 014-253 ISP/Equipment Deployment | 15 days | Tue 1/18/11 | Mon 2/7/11 | 7,15 |
| 17 | 014-253 OSP Deployment (Underground Survey | 36 days | Fri 10/22/10 | Tue 12/14/10 | 13SS+3 days |
| 18 | 014-253 OSP Deployment (Underground Placem | 144 days | Fri 10/29/10 | Thu 5/26/11 | 17SS+5 days |
| 19 | 014-253 Network Testing and Turnup | 10 days | Fri 5/27/11 | Fri 6/10/11 | 16FS+2 days,18 |
| 20 | 014-253 Network Complete | 1 day | Mon 6/13/11 | Mon 6/13/11 | 19 |
| 21 | **253-248** | **343 days** | **Mon 10/4/10** | **Thu 2/16/12** | |
| 22 | 253-248 Network Design | 10 days | Tue 11/2/10 | Mon 11/15/10 | 13 |
| 23 | 253-248 Site Preparation | 5 days | Tue 11/9/10 | Mon 11/15/10 | 22SS+5 days,14 |
| 24 | 253-248 Equipment Procurement | 60 days | Mon 10/4/10 | Thu 12/30/10 | |
| 25 | 253-248 ISP/Equipment Deployment | 15 days | Mon 1/9/12 | Mon 1/30/12 | 16,27FS-15 days |
| 26 | 253-248 OSP Deployment (Underground Survey | 42 days | Wed 12/15/10 | Tue 2/15/11 | 22SS+3 days,17 |
| 27 | 253-248 OSP Deployment (Underground Placem | 168 days | Fri 5/27/11 | Mon 1/30/12 | 26SS+5 days,18 |
| 28 | 253-248 Network Testing & Turnup | 10 days | Thu 2/2/12 | Wed 2/15/12 | 25FS+2 days |
| 29 | 253-248 Network Complete | 1 day | Thu 2/16/12 | Thu 2/16/12 | 28 |
| 30 | **248-003** | **411 days** | **Tue 11/16/10** | **Fri 7/6/12** | |
| 39 | **003-405** | **396 days** | **Thu 12/2/10** | **Thu 6/28/12** | |
| 48 | **405-304** | **503 days** | **Thu 12/16/10** | **Wed 12/12/12** | |
| 57 | **304-415** | **413 days** | **Mon 1/3/11** | **Tue 8/21/12** | |
| 66 | **415-001** | **452 days** | **Tue 1/18/11** | **Tue 10/30/12** | |
| 75 | **001-028** | **509 days** | **Tue 2/1/11** | **Thu 1/31/13** | |
| 84 | **028-006** | **532 days** | **Mon 2/14/11** | **Mon 3/18/13** | |
| 93 | | | | | |




Project: Community_Access_Network_
Date: Wed 3/24/10

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline



FINAL

# 5116-CCI DC-CAN
# DC Community Access Network

March 24, 2010

| ID | Task Name | Duration | Start | Finish | Predecessors |
|---|---|---|---|---|---|
| 94 | **DC-CAN Access Loops** | **542 days** | **Mon 10/4/10** | **Tue 11/27/12** | |
| 95 | **Loop 250-234** | **111 days** | **Mon 10/4/10** | **Tue 3/15/11** | |
| 96 | 250-234Network Design | 24 days | Mon 10/4/10 | Fri 11/5/10 | |
| 97 | 250-234 Site Preparation | 24 days | Wed 10/6/10 | Tue 11/9/10 | 96SS+2 days |
| 98 | 250-234 Equipment Procurement | 60 days | Mon 10/4/10 | Thu 12/30/10 | |
| 99 | 250-234 ISP/Equipment Deployment | 12 days | Mon 1/3/11 | Wed 1/19/11 | 98 |
| 100 | 250-234 OSP Deployment (Aerial) | 39 days | Mon 10/11/10 | Tue 12/7/10 | |
| 101 | 250-234 Network Testing & Turnup | 48 days | Wed 1/5/11 | Mon 3/14/11 | 99SS+2 days |
| 102 | 250-234 Network Complete | 1 day | Tue 3/15/11 | Tue 3/15/11 | 101 |
| 103 | **Loop 006-006** | **101 days** | **Mon 10/4/10** | **Tue 3/1/11** | |
| 104 | 006-006 Network Design | 13 days | Mon 11/8/10 | Wed 11/24/10 | 96 |
| 105 | 006-006 Site Preparation | 13 days | Wed 11/10/10 | Tue 11/30/10 | 104SS+2 days |
| 106 | 006-006 Equipment Procurement | 60 days | Mon 10/4/10 | Thu 12/30/10 | |
| 107 | 006-006 ISP/Equipment Deployment | 7 days | Thu 1/20/11 | Fri 1/28/11 | 99,105FS-3 days,1 |
| 108 | 006-006 OSP Deployment (Aerial) | 15 days | Wed 12/8/10 | Wed 12/29/10 | 100,104SS+3 days |
| 109 | 006-006 OSP Deployment (Underground Survey | 11 days | Fri 11/12/10 | Tue 11/30/10 | 104SS+4 days |
| 110 | 006-006 OSP Deployment (Underground Placem | 44 days | Tue 11/23/10 | Fri 1/28/11 | 109SS+7 days |
| 111 | 006-006 Network Test & Turnup | 26 days | Mon 1/24/11 | Mon 2/28/11 | 107SS+2 days |
| 112 | 006-006 Network Complete | 1 day | Tue 3/1/11 | Tue 3/1/11 | 111 |
| 113 | **Loop 006-252** | **87 days** | **Mon 10/4/10** | **Wed 2/9/11** | |
| 123 | **Loop 355-256** | **121 days** | **Mon 10/4/10** | **Tue 3/29/11** | |
| 133 | **Loop 006-251** | **95 days** | **Mon 1/3/11** | **Tue 5/17/11** | |
| 143 | **Loop 006-007** | **125 days** | **Mon 1/3/11** | **Wed 6/29/11** | |
| 152 | **Loop 222-354** | **113 days** | **Mon 1/3/11** | **Mon 6/13/11** | |
| 162 | **Loop 248-225** | **302 days** | **Mon 1/3/11** | **Wed 3/14/12** | |
| 172 | **Loop 248-248** | **101 days** | **Fri 3/4/11** | **Wed 7/27/11** | |
| 181 | **Loop 003-003** | **230 days** | **Fri 3/4/11** | **Thu 2/2/12** | |
| 190 | **Point to Point** | **439 days** | **Fri 3/4/11** | **Tue 11/27/12** | |
| 191 | PtP Network Design | 42 days | Thu 7/7/11 | Fri 9/2/11 | 182 |
| 192 | PtP Site Preparation | 42 days | Thu 7/7/11 | Fri 9/2/11 | 191SS |
| 193 | PtP Equipment Procurement | 60 days | Fri 3/4/11 | Fri 5/27/11 | |
| 194 | PtP ISP/Equipment Deployment | 21 days | Fri 7/27/12 | Fri 8/24/12 | 192FS-3 days,193 |
| 195 | PtP OSP Deployment (Aerial) | 5 days | Wed 6/15/11 | Tue 6/21/11 | 177 |
| 196 | PtP OSP Deployment (Underground Survey) | 66 days | Tue 7/26/11 | Thu 10/27/11 | 186,191SS+4 days |
| 197 | PtP OSP Deployment (Underground Placement) | 264 days | Thu 8/4/11 | Tue 8/21/12 | 196SS+7 days |
| 198 | PtP Network Test & Turnup | 84 days | Tue 7/31/12 | Mon 11/26/12 | 194SS+2 days,19 |
| 199 | PtP Network Complete | 1 day | Tue 11/27/12 | Tue 11/27/12 | 198 |


Project: Community_Access_Network
Date: Wed 3/24/10

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

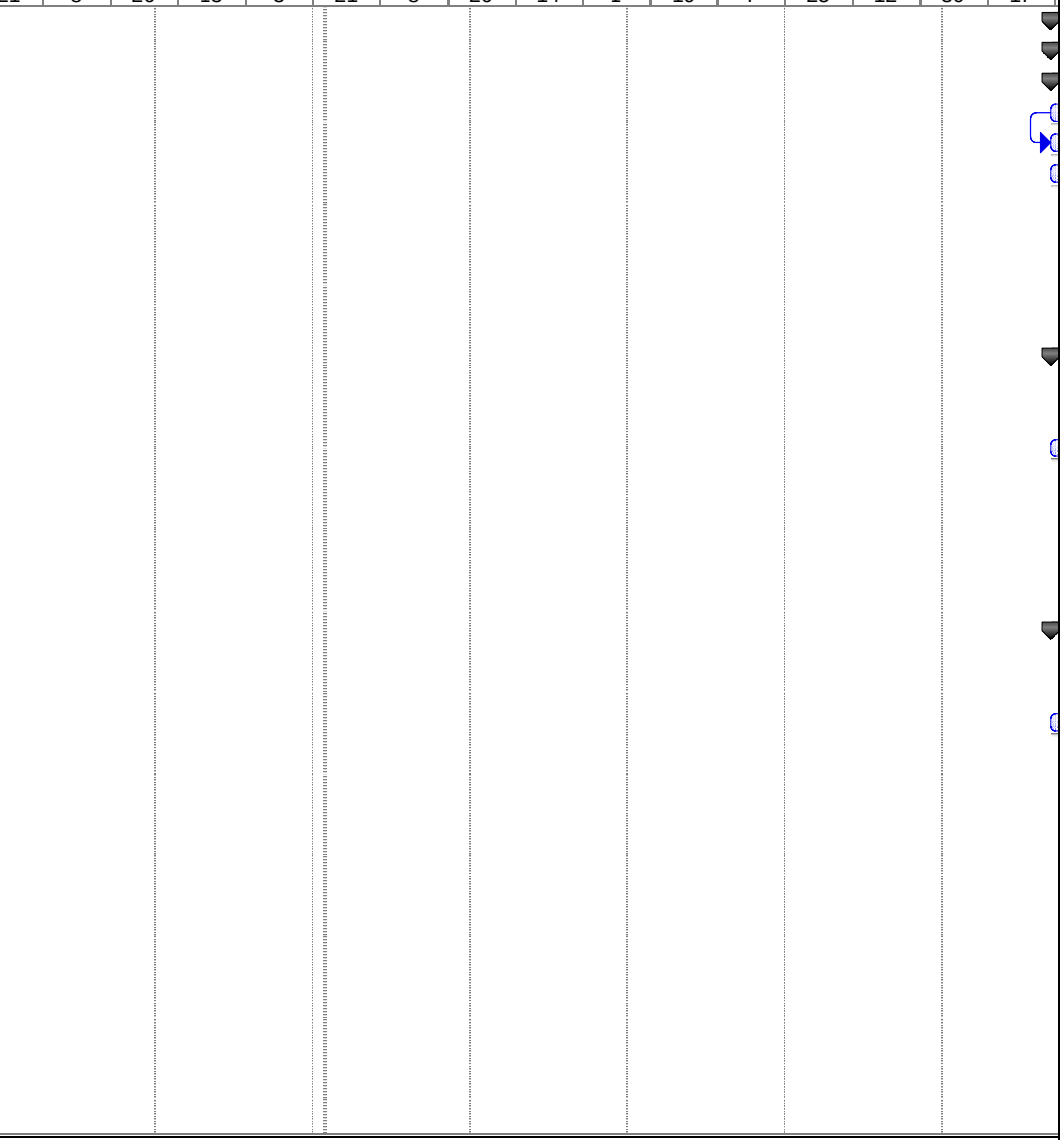


FINAL

# 5116-CCI DC-CAN
# DC Community Access Network

March 24, 2010

| ID | Task Name |
|---|---|
| 1 | **5116-CCI DC-CAN COMPOSITE PROJECT PLAN** |
| 2 | **DC-CAN Core Ring** |
| 3 | **006-014** |
| 4 | 006-014 Network Design |
| 5 | 006-014 Site Preparation |
| 6 | 006-014 Equipment Procurement |
| 7 | 006-014 ISP/Equipment Deployment |
| 8 | 006-014 OSP Deployment (Underground Survey |
| 9 | 006-014 OSP Deployment (Underground Buildou |
| 10 | 006-014 Network Testing and Turnup |
| 11 | 006-014 Network Complete |
| 12 | **014-253** |
| 13 | 014-253 Network Design |
| 14 | 014-253 Site Preparation |
| 15 | 014-253 Equipment Procurement |
| 16 | 014-253 ISP/Equipment Deployment |
| 17 | 014-253 OSP Deployment (Underground Survey |
| 18 | 014-253 OSP Deployment (Underground Placem |
| 19 | 014-253 Network Testing and Turnup |
| 20 | 014-253 Network Complete |
| 21 | **253-248** |
| 22 | 253-248 Network Design |
| 23 | 253-248 Site Preparation |
| 24 | 253-248 Equipment Procurement |
| 25 | 253-248 ISP/Equipment Deployment |
| 26 | 253-248 OSP Deployment (Underground Survey |
| 27 | 253-248 OSP Deployment (Underground Placem |
| 28 | 253-248 Network Testing & Turnup |
| 29 | 253-248 Network Complete |
| 30 | **248-003** |
| 39 | **003-405** |
| 48 | **405-304** |
| 57 | **304-415** |
| 66 | **415-001** |
| 75 | **001-028** |
| 84 | **028-006** |
| 93 | |




Project: Community_Access_Network
Date: Wed 3/24/10

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

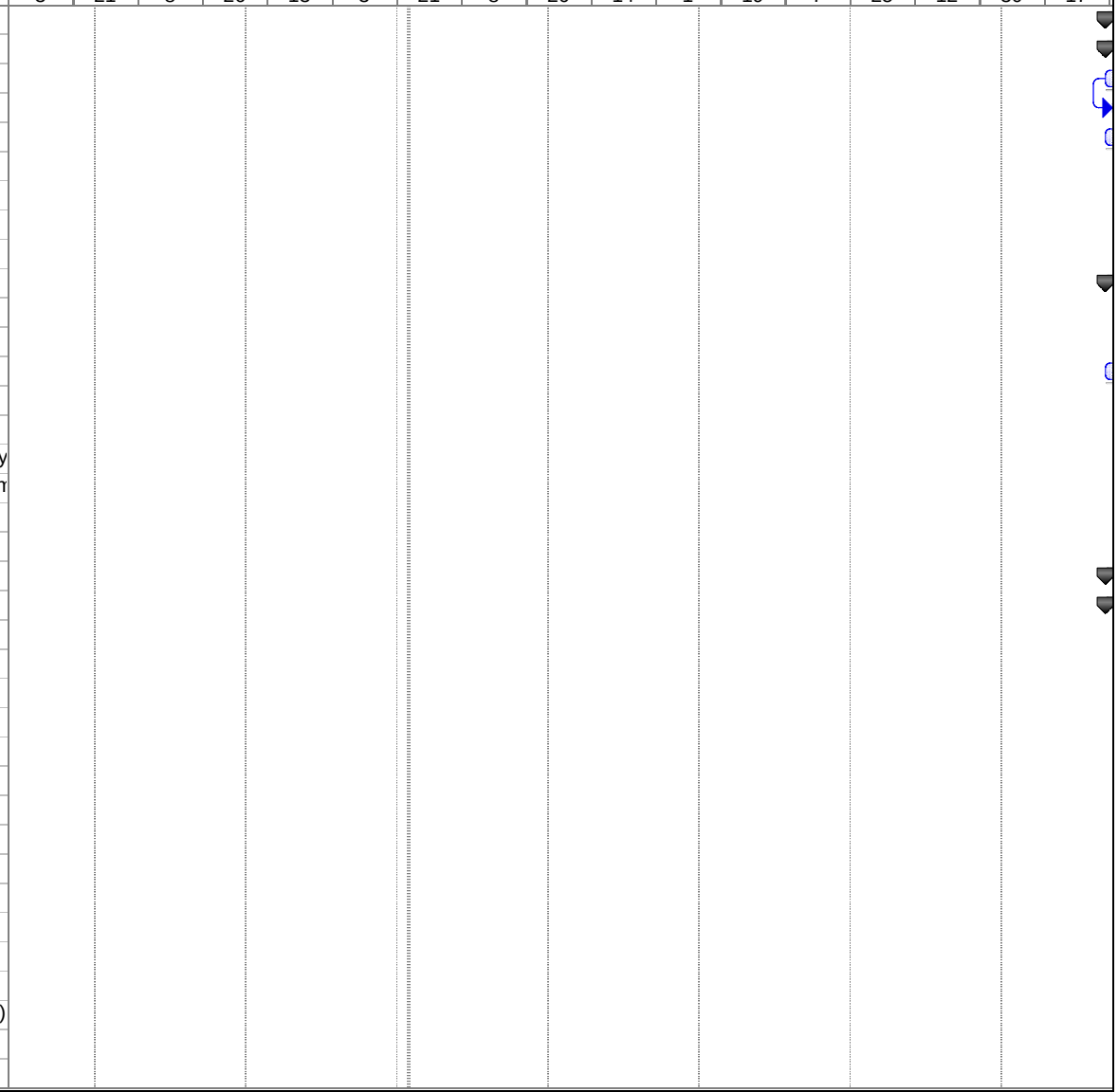


FINAL

# 5116-CCI DC-CAN
# DC Community Access Network

March 24, 2010

| ID | Task Name |
|---|---|
| 94 | **DC-CAN Access Loops** |
| 95 | **Loop 250-234** |
| 96 | 250-234Network Design |
| 97 | 250-234 Site Preparation |
| 98 | 250-234 Equipment Procurement |
| 99 | 250-234 ISP/Equipment Deployment |
| 100 | 250-234 OSP Deployment (Aerial) |
| 101 | 250-234 Network Testing & Turnup |
| 102 | 250-234 Network Complete |
| 103 | **Loop 006-006** |
| 104 | 006-006 Network Design |
| 105 | 006-006 Site Preparation |
| 106 | 006-006 Equipment Procurement |
| 107 | 006-006 ISP/Equipment Deployment |
| 108 | 006-006 OSP Deployment (Aerial) |
| 109 | 006-006 OSP Deployment (Underground Survey |
| 110 | 006-006 OSP Deployment (Underground Placem |
| 111 | 006-006 Network Test & Turnup |
| 112 | 006-006 Network Complete |
| 113 | **Loop 006-252** |
| 123 | **Loop 355-256** |
| 133 | **Loop 006-251** |
| 143 | **Loop 006-007** |
| 152 | **Loop 222-354** |
| 162 | **Loop 248-225** |
| 172 | **Loop 248-248** |
| 181 | **Loop 003-003** |
| 190 | **Point to Point** |
| 191 | PtP Network Design |
| 192 | PtP Site Preparation |
| 193 | PtP Equipment Procurement |
| 194 | PtP ISP/Equipment Deployment |
| 195 | PtP OSP Deployment (Aerial) |
| 196 | PtP OSP Deployment (Underground Survey) |
| 197 | PtP OSP Deployment (Underground Placement) |
| 198 | PtP Network Test & Turnup |
| 199 | PtP Network Complete |




Project: Community_Access_Network_
Date: Wed 3/24/10

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

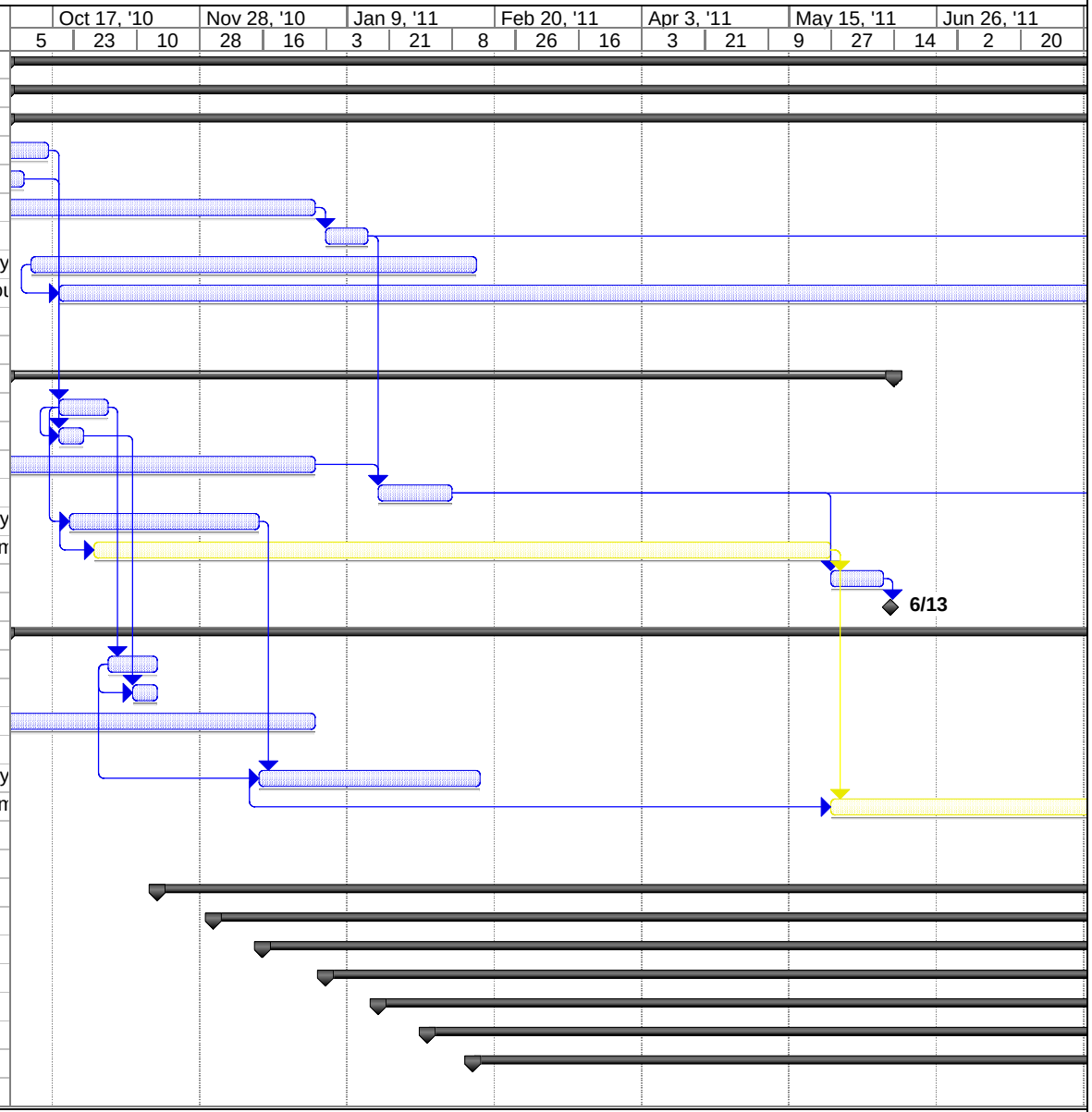


FINAL

# 5116-CCI DC-CAN
# DC Community Access Network

March 24, 2010

| ID | Task Name |
|---|---|
| 1 | **5116-CCI DC-CAN COMPOSITE PROJECT PLAN** |
| 2 | **DC-CAN Core Ring** |
| 3 | **006-014** |
| 4 | 006-014 Network Design |
| 5 | 006-014 Site Preparation |
| 6 | 006-014 Equipment Procurement |
| 7 | 006-014 ISP/Equipment Deployment |
| 8 | 006-014 OSP Deployment (Underground Survey |
| 9 | 006-014 OSP Deployment (Underground Buildou |
| 10 | 006-014 Network Testing and Turnup |
| 11 | 006-014 Network Complete |
| 12 | **014-253** |
| 13 | 014-253 Network Design |
| 14 | 014-253 Site Preparation |
| 15 | 014-253 Equipment Procurement |
| 16 | 014-253 ISP/Equipment Deployment |
| 17 | 014-253 OSP Deployment (Underground Survey |
| 18 | 014-253 OSP Deployment (Underground Placem |
| 19 | 014-253 Network Testing and Turnup |
| 20 | 014-253 Network Complete |
| 21 | **253-248** |
| 22 | 253-248 Network Design |
| 23 | 253-248 Site Preparation |
| 24 | 253-248 Equipment Procurement |
| 25 | 253-248 ISP/Equipment Deployment |
| 26 | 253-248 OSP Deployment (Underground Survey |
| 27 | 253-248 OSP Deployment (Underground Placem |
| 28 | 253-248 Network Testing & Turnup |
| 29 | 253-248 Network Complete |
| 30 | **248-003** |
| 39 | **003-405** |
| 48 | **405-304** |
| 57 | **304-415** |
| 66 | **415-001** |
| 75 | **001-028** |
| 84 | **028-006** |
| 93 | |




Project: Community_Access_Network
Date: Wed 3/24/10

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

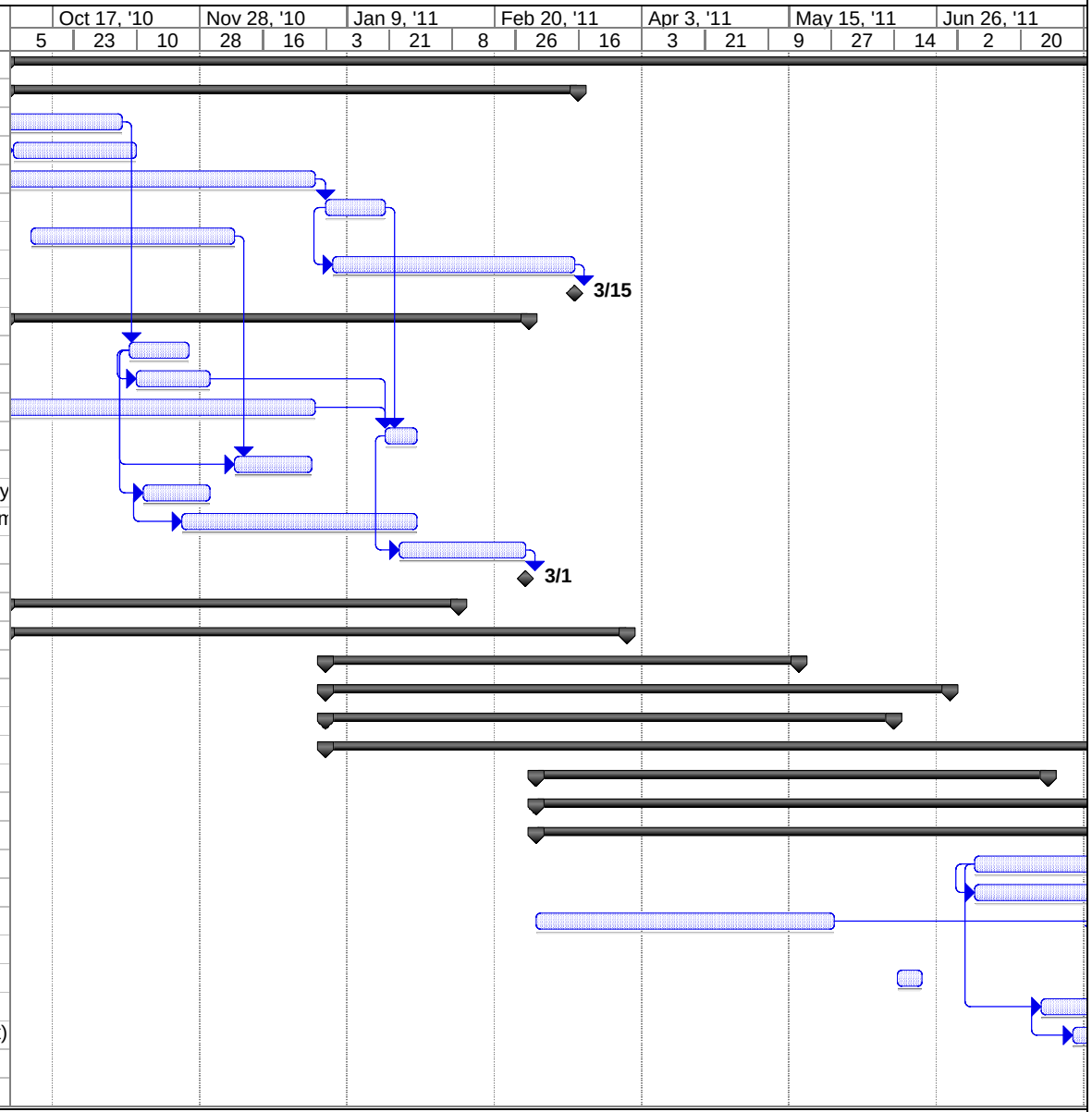


FINAL

# 5116-CCI DC-CAN
# DC Community Access Network

March 24, 2010

| ID | Task Name |
|---|---|
| 94 | **DC-CAN Access Loops** |
| 95 | **Loop 250-234** |
| 96 | 250-234Network Design |
| 97 | 250-234 Site Preparation |
| 98 | 250-234 Equipment Procurement |
| 99 | 250-234 ISP/Equipment Deployment |
| 100 | 250-234 OSP Deployment (Aerial) |
| 101 | 250-234 Network Testing & Turnup |
| 102 | 250-234 Network Complete |
| 103 | **Loop 006-006** |
| 104 | 006-006 Network Design |
| 105 | 006-006 Site Preparation |
| 106 | 006-006 Equipment Procurement |
| 107 | 006-006 ISP/Equipment Deployment |
| 108 | 006-006 OSP Deployment (Aerial) |
| 109 | 006-006 OSP Deployment (Underground Survey |
| 110 | 006-006 OSP Deployment (Underground Placem |
| 111 | 006-006 Network Test & Turnup |
| 112 | 006-006 Network Complete |
| 113 | **Loop 006-252** |
| 123 | **Loop 355-256** |
| 133 | **Loop 006-251** |
| 143 | **Loop 006-007** |
| 152 | **Loop 222-354** |
| 162 | **Loop 248-225** |
| 172 | **Loop 248-248** |
| 181 | **Loop 003-003** |
| 190 | **Point to Point** |
| 191 | PtP Network Design |
| 192 | PtP Site Preparation |
| 193 | PtP Equipment Procurement |
| 194 | PtP ISP/Equipment Deployment |
| 195 | PtP OSP Deployment (Aerial) |
| 196 | PtP OSP Deployment (Underground Survey) |
| 197 | PtP OSP Deployment (Underground Placement) |
| 198 | PtP Network Test & Turnup |
| 199 | PtP Network Complete |




Project: Community_Access_Network_
Date: Wed 3/24/10

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

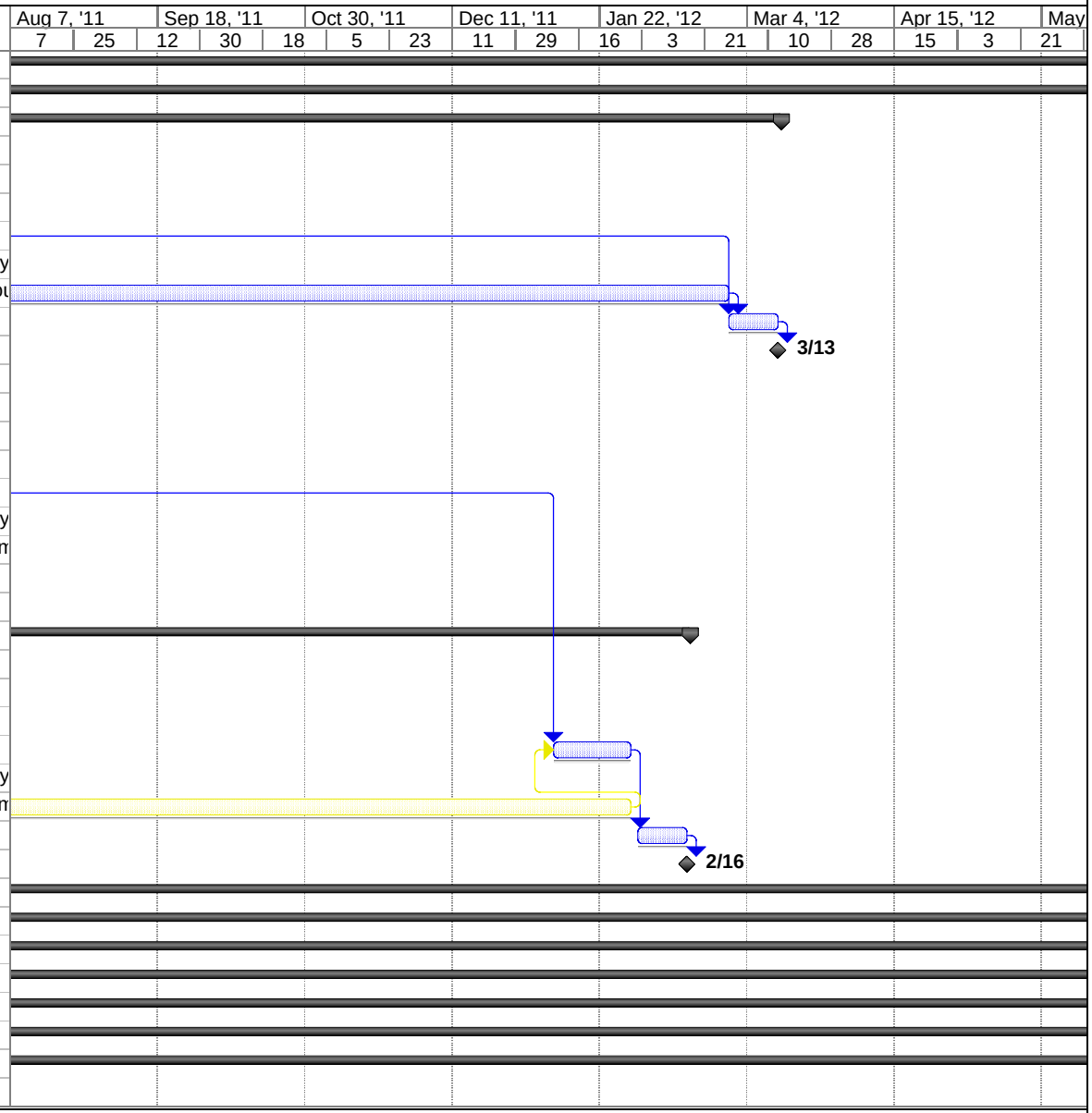


FINAL

# 5116-CCI DC-CAN
# DC Community Access Network

March 24, 2010

| ID | Task Name |
|---|---|
| 1 | **5116-CCI DC-CAN COMPOSITE PROJECT PLAN** |
| 2 | **DC-CAN Core Ring** |
| 3 | **006-014** |
| 4 | 006-014 Network Design |
| 5 | 006-014 Site Preparation |
| 6 | 006-014 Equipment Procurement |
| 7 | 006-014 ISP/Equipment Deployment |
| 8 | 006-014 OSP Deployment (Underground Survey |
| 9 | 006-014 OSP Deployment (Underground Buildou |
| 10 | 006-014 Network Testing and Turnup |
| 11 | 006-014 Network Complete |
| 12 | **014-253** |
| 13 | 014-253 Network Design |
| 14 | 014-253 Site Preparation |
| 15 | 014-253 Equipment Procurement |
| 16 | 014-253 ISP/Equipment Deployment |
| 17 | 014-253 OSP Deployment (Underground Survey |
| 18 | 014-253 OSP Deployment (Underground Placem |
| 19 | 014-253 Network Testing and Turnup |
| 20 | 014-253 Network Complete |
| 21 | **253-248** |
| 22 | 253-248 Network Design |
| 23 | 253-248 Site Preparation |
| 24 | 253-248 Equipment Procurement |
| 25 | 253-248 ISP/Equipment Deployment |
| 26 | 253-248 OSP Deployment (Underground Survey |
| 27 | 253-248 OSP Deployment (Underground Placem |
| 28 | 253-248 Network Testing & Turnup |
| 29 | 253-248 Network Complete |
| 30 | **248-003** |
| 39 | **003-405** |
| 48 | **405-304** |
| 57 | **304-415** |
| 66 | **415-001** |
| 75 | **001-028** |
| 84 | **028-006** |
| 93 | |




Project: Community_Access_Network
Date: Wed 3/24/10

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

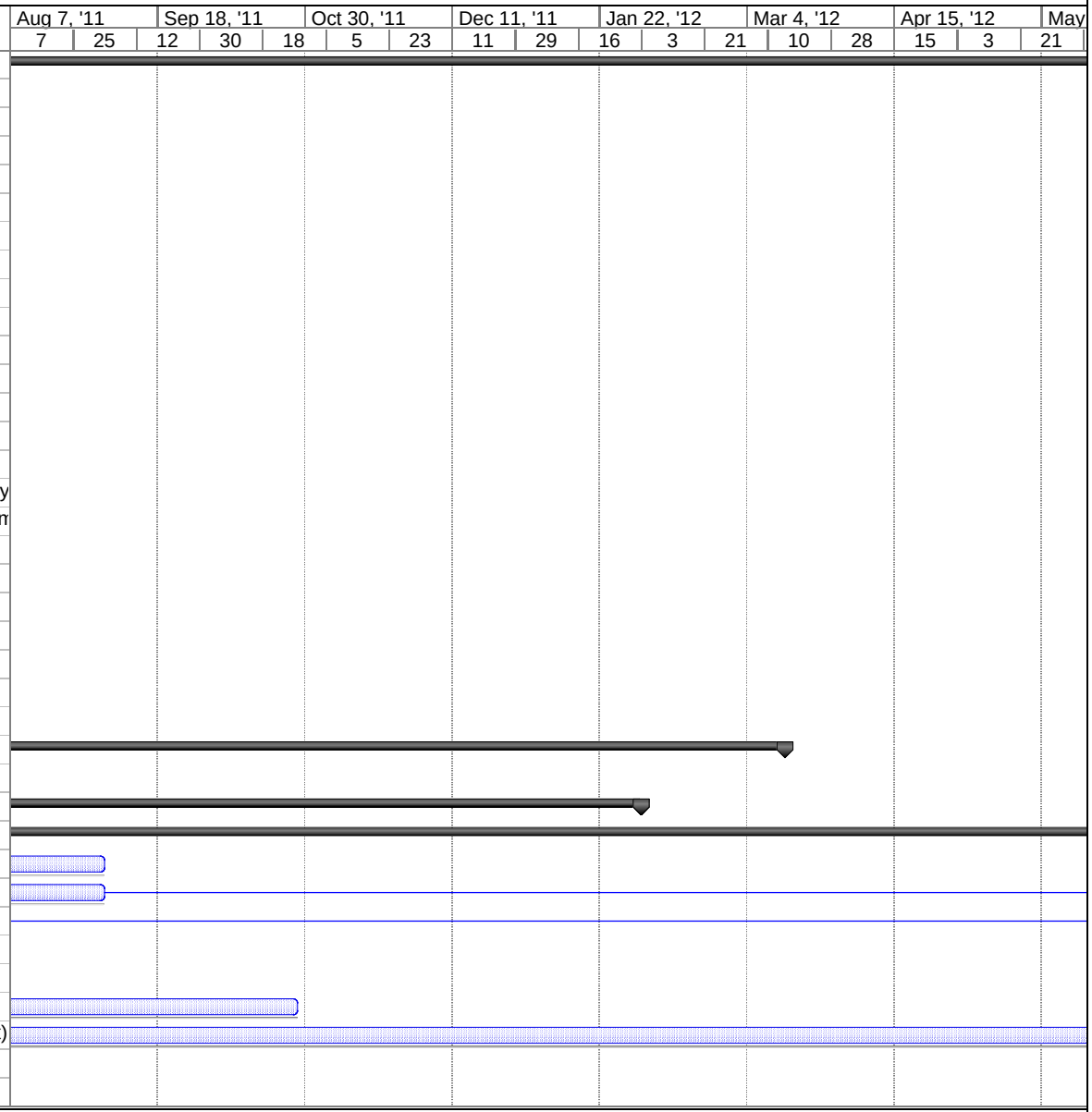


FINAL

# 5116-CCI DC-CAN
# DC Community Access Network

March 24, 2010

| ID | Task Name |
|---|---|
| 94 | **DC-CAN Access Loops** |
| 95 | **Loop 250-234** |
| 96 | 250-234Network Design |
| 97 | 250-234 Site Preparation |
| 98 | 250-234 Equipment Procurement |
| 99 | 250-234 ISP/Equipment Deployment |
| 100 | 250-234 OSP Deployment (Aerial) |
| 101 | 250-234 Network Testing & Turnup |
| 102 | 250-234 Network Complete |
| 103 | **Loop 006-006** |
| 104 | 006-006 Network Design |
| 105 | 006-006 Site Preparation |
| 106 | 006-006 Equipment Procurement |
| 107 | 006-006 ISP/Equipment Deployment |
| 108 | 006-006 OSP Deployment (Aerial) |
| 109 | 006-006 OSP Deployment (Underground Survey |
| 110 | 006-006 OSP Deployment (Underground Placem |
| 111 | 006-006 Network Test & Turnup |
| 112 | 006-006 Network Complete |
| 113 | **Loop 006-252** |
| 123 | **Loop 355-256** |
| 133 | **Loop 006-251** |
| 143 | **Loop 006-007** |
| 152 | **Loop 222-354** |
| 162 | **Loop 248-225** |
| 172 | **Loop 248-248** |
| 181 | **Loop 003-003** |
| 190 | **Point to Point** |
| 191 | PtP Network Design |
| 192 | PtP Site Preparation |
| 193 | PtP Equipment Procurement |
| 194 | PtP ISP/Equipment Deployment |
| 195 | PtP OSP Deployment (Aerial) |
| 196 | PtP OSP Deployment (Underground Survey) |
| 197 | PtP OSP Deployment (Underground Placement) |
| 198 | PtP Network Test & Turnup |
| 199 | PtP Network Complete |




Project: Community_Access_Network_
Date: Wed 3/24/10

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

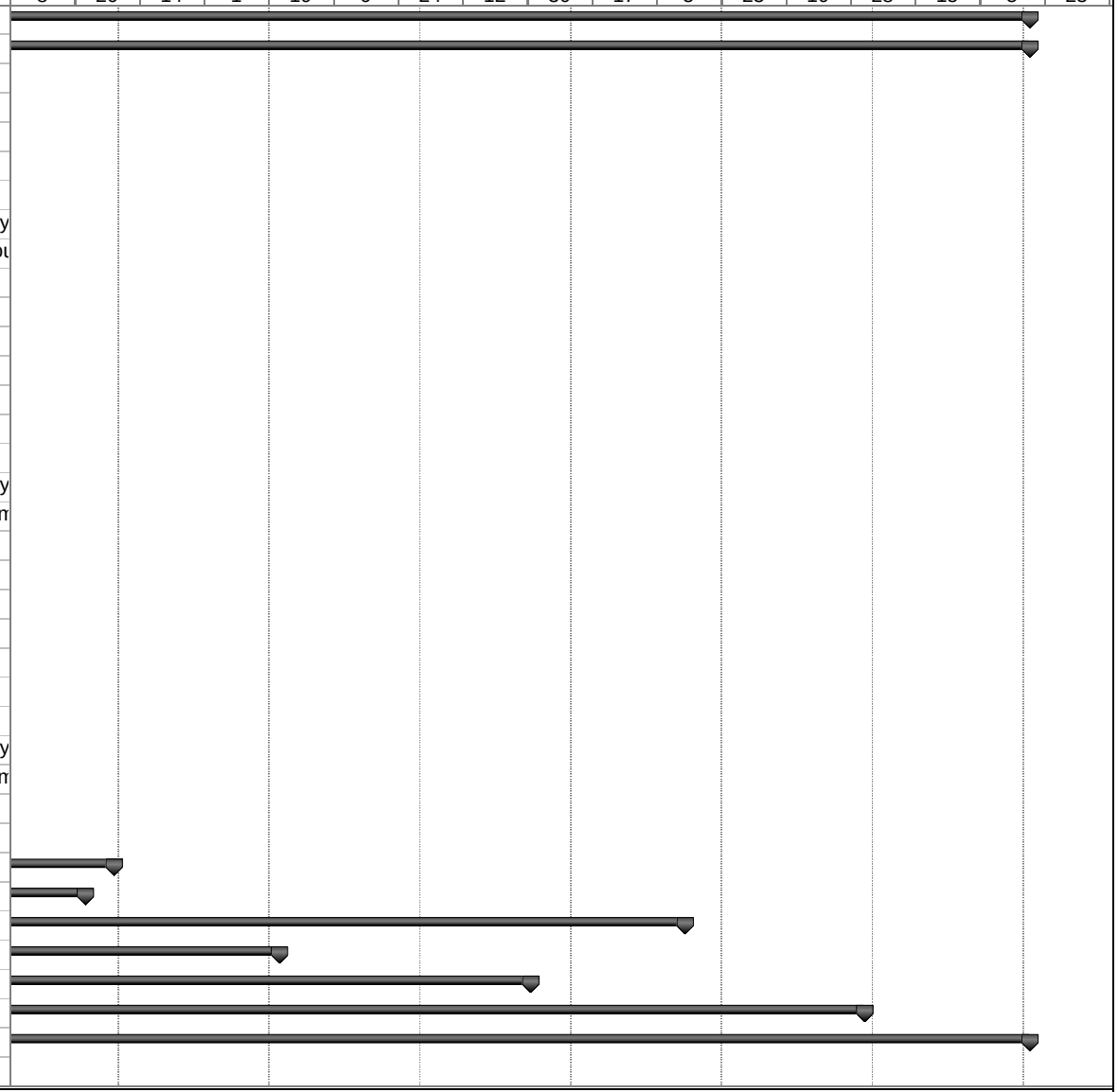


FINAL

# 5116-CCI DC-CAN
# DC Community Access Network

March 24, 2010

| ID | Task Name |
|---|---|
| 1 | **5116-CCI DC-CAN COMPOSITE PROJECT PLAN** |
| 2 | **DC-CAN Core Ring** |
| 3 | **006-014** |
| 4 | 006-014 Network Design |
| 5 | 006-014 Site Preparation |
| 6 | 006-014 Equipment Procurement |
| 7 | 006-014 ISP/Equipment Deployment |
| 8 | 006-014 OSP Deployment (Underground Survey |
| 9 | 006-014 OSP Deployment (Underground Buildou |
| 10 | 006-014 Network Testing and Turnup |
| 11 | 006-014 Network Complete |
| 12 | **014-253** |
| 13 | 014-253 Network Design |
| 14 | 014-253 Site Preparation |
| 15 | 014-253 Equipment Procurement |
| 16 | 014-253 ISP/Equipment Deployment |
| 17 | 014-253 OSP Deployment (Underground Survey |
| 18 | 014-253 OSP Deployment (Underground Placem |
| 19 | 014-253 Network Testing and Turnup |
| 20 | 014-253 Network Complete |
| 21 | **253-248** |
| 22 | 253-248 Network Design |
| 23 | 253-248 Site Preparation |
| 24 | 253-248 Equipment Procurement |
| 25 | 253-248 ISP/Equipment Deployment |
| 26 | 253-248 OSP Deployment (Underground Survey |
| 27 | 253-248 OSP Deployment (Underground Placem |
| 28 | 253-248 Network Testing & Turnup |
| 29 | 253-248 Network Complete |
| 30 | **248-003** |
| 39 | **003-405** |
| 48 | **405-304** |
| 57 | **304-415** |
| 66 | **415-001** |
| 75 | **001-028** |
| 84 | **028-006** |
| 93 | |




Project: Community_Access_Network
Date: Wed 3/24/10

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

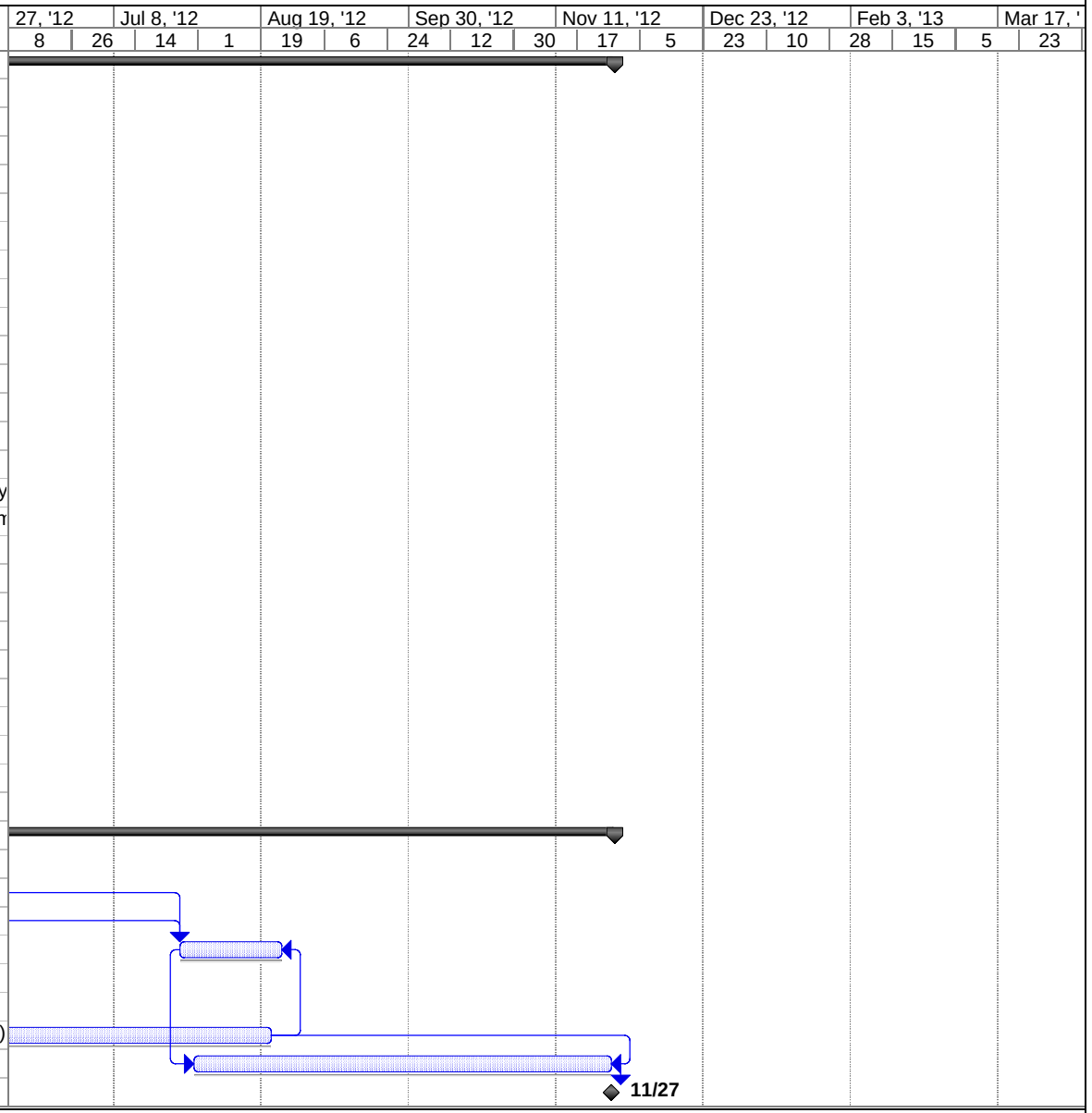


FINAL

# 5116-CCI DC-CAN
# DC Community Access Network

March 24, 2010

| ID | Task Name |
|---|---|
| 94 | **DC-CAN Access Loops** |
| 95 | **Loop 250-234** |
| 96 | 250-234Network Design |
| 97 | 250-234 Site Preparation |
| 98 | 250-234 Equipment Procurement |
| 99 | 250-234 ISP/Equipment Deployment |
| 100 | 250-234 OSP Deployment (Aerial) |
| 101 | 250-234 Network Testing & Turnup |
| 102 | 250-234 Network Complete |
| 103 | **Loop 006-006** |
| 104 | 006-006 Network Design |
| 105 | 006-006 Site Preparation |
| 106 | 006-006 Equipment Procurement |
| 107 | 006-006 ISP/Equipment Deployment |
| 108 | 006-006 OSP Deployment (Aerial) |
| 109 | 006-006 OSP Deployment (Underground Survey |
| 110 | 006-006 OSP Deployment (Underground Placem |
| 111 | 006-006 Network Test & Turnup |
| 112 | 006-006 Network Complete |
| 113 | **Loop 006-252** |
| 123 | **Loop 355-256** |
| 133 | **Loop 006-251** |
| 143 | **Loop 006-007** |
| 152 | **Loop 222-354** |
| 162 | **Loop 248-225** |
| 172 | **Loop 248-248** |
| 181 | **Loop 003-003** |
| 190 | **Point to Point** |
| 191 | PtP Network Design |
| 192 | PtP Site Preparation |
| 193 | PtP Equipment Procurement |
| 194 | PtP ISP/Equipment Deployment |
| 195 | PtP OSP Deployment (Aerial) |
| 196 | PtP OSP Deployment (Underground Survey) |
| 197 | PtP OSP Deployment (Underground Placement) |
| 198 | PtP Network Test & Turnup |
| 199 | PtP Network Complete |




Project: Community_Access_Network_
Date: Wed 3/24/10

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline



FINAL

## BUDGET INFORMATION - Construction Programs

OMB *Approval No. 4040-0008*
*Expiration Date 07/30/2010*

*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.*

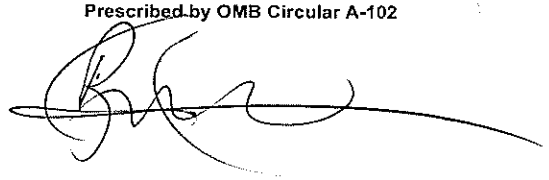
| COST CLASSIFICATION | a. Total Cost | b. Costs Not Allowable for Participation | c. Total Allowable Costs (Columns a-b) |
|---|---|---|---|
| 1. Administrative and legal expenses | $ 1,036,800.00 | $ 0.00 | $ 1,036,800.00 |
| 2. Land, structures, rights-of-way, appraisals, etc. | $ 0.00 | $ 0.00 | $ 0.00 |
| 3. Relocation expenses and payments | $ 0.00 | $ 0.00 | $ 0.00 |
| 4. Architectural and engineering fees | $ 1,629,320.00 | $ 0.00 | $ 1,629,320.00 |
| 5. Other architectural and engineering fees | $ 0.00 | $ 0.00 | $ 0.00 |
| 6. Project inspection fees | $ 1,816,750.00 | $ 0.00 | $ 1,816,750.00 |
| 7. Site work | $ 7,103,184.00 | $ 0.00 | $ 7,103,184.00 |
| 8. Demolition and removal | $ 0.00 | $ 0.00 | $ 0.00 |
| 9. Construction | $ 0.00 | $ 0.00 | $ 0.00 |
| 10. Equipment | $ 13,369,978.00 | $ 0.00 | $ 13,369,978.00 |
| 11. Miscellaneous | $ 76,968.00 | $ 0.00 | $ 76,968.00 |
| 12. SUBTOTAL *(sum of lines 1- 11)* | $ 25,033,000.00 | $ 0.00 | $ 25,033,000.00 |
| 13. Contingencies | $ 0.00 | $ 0.00 | $ 0.00 |
| 14. SUBTOTAL | $ 25,033,000.00 | $ 0.00 | $ 25,033,000.00 |
| 15. Project (program) income | $ 0.00 | $ 0.00 | $ 0.00 |
| 16. TOTAL PROJECT COSTS (subtract #15 from #14) | $ 25,033,000.00 | $ 0.00 | $ 25,033,000.00 |

FEDERAL FUNDING

| | | |
|---|---|---|
| 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 69.74 % | $ 17,457,942.00 |

**Previous Edition Usable** **Authorized for Local Reproduction**

**Standard Form 424C (Rev. 7-97)**
**Prescribed by OMB Circular A-102**



OMB Approval No. 4040-0009
Expiration Date 07/30/2010

# ASSURANCES - CONSTRUCTION PROGRAMS



**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, 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 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) underwhich 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-1 33, "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 |
|---|---|
| | CTO |
| *APPLICANT ORGANIZATION | *DATE SUBMITTED |
| OCTO | 03/24/00 0.00 |