



City of Dayton
117 Cook St.
Dayton, Tx 77535
936.258.2642

Request for Proposal

RFQ# 2023-DayNet -FIBER BROADBAND INTERNET UTILITY

CITY OF DAYTON, TEXAS

DAYNET FIBER BROADBAND INTERNET UTILITY

Dayton City Hall
117 Cook Street
Dayton, Texas 77535
% Office of City Secretary

RESPONSES DUE:

July 13th 2023
3:00 P.M. CDT

ISSUED:

June 15th, 2023

Table of Contents

Introduction.....	2
Objective.....	2
Project Description.....	3
Circuit Information.....	4
Summary Statistics.....	5
RFP Timelines.....	5
The Request for Proposal timeline is as follows:.....	5
Submission Guidelines & Requirements.....	6
Evaluation Factors.....	6
Exhibit A - Data Center Equipment.....	8
Exhibit B - Phase 1 network map.....	11
List of Associated Documents and Files.....	12

Introduction

The City of Dayton, Texas (the City) is seeking proposals from qualified organizations through this Request for Proposal (RFP) to purchase its Fiber Broadband Internet Utility infrastructure and services, known as DayNet. DayNet is a 64-mile gigabit fiber network with an estimated 2,849 residential and 295 commercial and community anchor passings within the corporate limits of the City. DayNet provides data services to businesses, homes, and community institutions within the City("Service Area").

Potential bidders should take note that the City is currently experiencing significant growth, boasting convenient access to Houston via Grand Parkway 99, US 90, and FM 1960. The City's network has been intentionally designed and constructed to accommodate this growth. Currently, there are approximately 6,000 residential lots in various development phases. The City has implemented regulations that require new residential developers to construct conduits and handholds for network expansion, based on a City-approved design. This infrastructure installation occurs alongside water and sewer line installation and is inspected and approved by the City. The successful bidder stands to benefit from this arrangement, with reduced capital costs and quicker entry to the market. Additionally, the City will collaborate with the winning bidder to explore potential Federal or State grants for funding high-speed, reliable internet delivery to Dayton, Liberty County, and surrounding areas.

Please take note that the City will receive from the winning bidder synchronous internet services at the 1Gig speed (including static IP addresses suitable for operations) for every current and future city-owned facility for 20 years, without any cost to the City, upon the handover of operations.

Objective

The City of Dayton aims to find a suitable bidder for this opportunity. Our primary objective with DayNet is:

1. **The sale of the DayNet Fiber Broadband Internet Utility Infrastructure, assets, and serviced accounts**
2. **Alternatively, enter into a strategic partnership or managed services agreement**

Our aim with this RFP is to find the most suitable source to purchase DayNet and one that can offer the City the best value overall. The City seeks highly capable and qualified organizations that have the technical expertise, resources, and capacity to operate and maintain broadband infrastructure and provide end-user broadband services that will ensure long-term capacity and network performance standards.

As an alternative to a full purchase of DayNet, the City is willing to discuss a strategic partnership agreement.

All interested organizations must provide a comprehensive proposal detailing their qualifications and a proposed approach to reach these objectives, meeting all required elements listed in this RFP to be evaluated by CoDT. Refer to the Qualifications Statement Guidelines section for specific information.

Project Description

The DayNet architecture is a high-speed FTTP GPON communications network within the city limits purposed to deliver wholesale and retail FTTP services. The network of OLTs at the Data Center and two network ODC cabinets function as PoP sites and house active electronics and splitters in support of the FTTP deployment. Centralized and comprehensive greenfield fiber routing was laid out with consideration in economically connecting each service area back to one of fourteen local cabinets located at the data center “headend” or alternate node sites along the backbone ring.

The underground fiber is single-mode, single jacket, and single armor cable, and the footage without drops is listed below. The 288 ct fiber is all backbone with 2,451 ft being aerial and the remainder underground. All other cable footages are for feeder and distribution fibers with 1,159 ft being aerial.

Item	Distance (ft)
12 CT FIBER CABLE	26,558
24 CT FIBER CABLE	64,707
48 CT FIBER CABLE	64,707
96 CT FIBER CABLE	78,283
144 CT FIBER CABLE	69,610
288 CT FIBER CABLE	27,088
TOTAL	337,697

The equipment includes:

- Calix OLTs
- Clearfield Splitter cabinets
- Buried conduit is High-Density Polyethylene SDR 11, FOOSC (B & D) splice closures, and trays

Detailed data center equipment can be found in Exhibit A.

This RFP contains a network map and a DayNet production .kmz file which includes detailed information regarding conduit placement, vault/handhole locations, fiber cable installation, and splice closure positions.

Circuit Information

DayNet has two IP Transit circuits one to Dallas for the service provided by GTT and the other to Mont Belvieu for the service provided by MB Link. The GTT service is provided by an AT&T fiber that terminates in the data center and the MB Link circuit has a meet point in a MB Link vault south on the canal at the boundary between Dayton and Mont Belvieu on Texas Hwy 146.

Summary Statistics

DayNet offers the following internet tiers:

Market Segment	Tier/Package	Monthly Recurring
Residential	1000Mbps	\$80
Commercial	1000Mbps	\$400

- System Service Area: the system has the potential to pass 2,849 residential premises. The initial project was broken down into two distinct phases. Only phase 1 has been completed.
- Plant Miles: 64 miles
- Existing Internet subscribers: 106
 - A change in management prevented any new signups from taking place over one year ago.

RFP Timelines

The Request for Proposal timeline is as follows:

RFP Issue Date	06/15/2023
RFP submission deadline	07/13/2023
Selection of Top Bidders / Notification to Unsuccessful Bidders	07/20/2023
Contract Award / Notification to Unsuccessful Bidders	TBD

The dates listed are only estimated dates.

Submission Guidelines & Requirements

Respondents shall provide detailed information to allow proper evaluation of the submission. The statement of qualifications should include, at a minimum:

Section 1—Company Profile & Experience

Provide an overview of your company, discussing its structure, longevity, and primary business. Discuss key personnel, your experience working with governmental entities if any, and ownership or management of similar fiber-to-the-premise networks.

Section 2 – Proposed business model to continue operating and maintain the network privately

Provide an overview of the business and marketing plan to include pricing and subscriber growth estimates for a 20-year period. Additional services the respondent is available to offer such as VOIP, Television Services, etc. Discuss how you utilize customer service representatives and field technicians.

Section 3—Personnel Qualifications and Experience

Provide resumes and backgrounds for key personnel and information about their roles in your firm.

Section 4 – Financial Capacity

Confirmation of the financial capability of your firm to successfully complete this transaction.

Section 5—References

Provide references from past work most relevant in demonstrating your ability to perform the scope of work for the City of Dayton. Include information about the project approach and methodology utilized for each project, as well as resulting reports demonstrating your ability to successfully own, operate and maintain a fiber-to-the-premise network.

Evaluation Factors

Evaluation will be conducted considering the relative importance of the following criteria and weights and any other facts considered relevant by the County. The City reserves the right to request presentations or demonstrations from some or all respondents in order to further develop evaluation scores.

- **Purchase and/or Strategic Partner Offer (50%)** - The City will evaluate offers to purchase the network and/or proposals for the greatest monetary benefit to the City.
- **Personnel experience, qualifications, and financial capacity of the Respondent (25%)** - The qualifications of the respondent in terms of experience, service capability, and financial capacity of the respondent to own, operate and maintain the network will be reviewed in order to assess the ability of the respondent to successfully deliver high-speed reliable internet to the residents and businesses of the City of Dayton.
 - Special consideration will be given to respondents who have experience in the following:
 - Owning/operating optical networks utilizing Calix systems.
 - Experience directly or through employee base owning/operating municipal fiber networks.
 - Existing operations and proximity to the City of Dayton
 - Total current subscriber base on existing networks
 - **Past Performance and Future Growth (25%)**- Successful experience in owning, operating, and maintaining existing fiber-to-the-premise networks and planned growth of your firm.

Exhibit A - Data Center Equipment

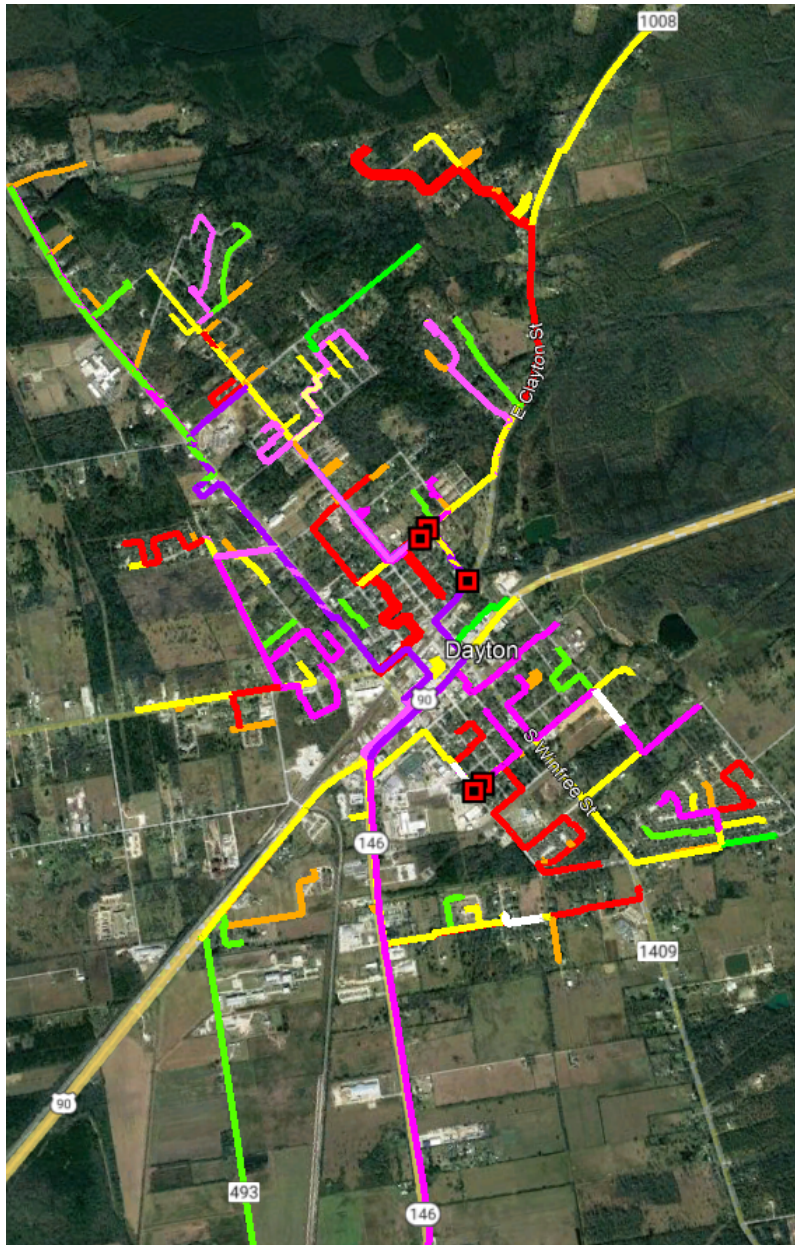
Exhibit A – Data Center Equipment

Product	Manufacturer	Model	Description	Qty
Core/Aggregation	Cisco	ASR-9901-256G	ASR 9901 Chassis PayG 256G Base HW PID	2
Core/Aggregation	Cisco	A9K-SW-MANAGER-CD	ASR 9000 Software Manager CD	2
Core/Aggregation	Cisco	XR-A9K-X64K9-07.1	Cisco ASR 9000 64-BIT IOS XR Software 3DES	2
Core/Aggregation	Cisco	A9K-OTHER	ASR9000; Other Network Applications; For Tracking Only	2
Core/Aggregation	Cisco	ASR-9901-FAN	ASR 9901 Fan Tray	6
Core/Aggregation	Cisco	ASR-9901-2P-KIT	ASR 9901 2 Post Mounting Kit for 19 & 23 in Rack	2
Core/Aggregation	Cisco	A9K-1600W-DC	ASR 9900 Series 1600W DC Power Supply for ASR-9901	4
Core/Aggregation	Cisco	PWR-2KW-DC-CBL	Power Cord - 2KW DC	4
Core/Aggregation	Prolab	SFP-10G-SR-C	Cisco SFP-10G-SR Compatible TAA Compliant 10GBaseSR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)	31
Core/Aggregation	Arbor	SP-FXP-CORE-1	SP Flex Purchase - Core Router License Perpetual SP software license for monitoring 1 Core router and 10,000 FPS. Customers must purchase M&S separately	2
Core/Aggregation	Arbor	AIF-SP-FXP-CORE-1-STD-1YR	Sightline FXP - Subscription to ATLAS Intelligence Feed (3YR)	2
Core/Aggregation	Arbor	S-SEN-FXP-F10K	Sightline Sentinel Purchase - 10K FPS Perpetual Sightline Software License adding Sentinel functionality to Sightline. Enables 10,000 FPS. Requires Sightline deployment. The licensed Sentinel FPS must equal the licensed Sightline deployment FPS. M&S sold separately	2
Core/Aggregation	Prolab	QSFP-100GAOC3M-C	Cisco QSFP-100G-AOC3M Compatible TAA Compliant 100GBase-AOC QSFP28 to QSFP28 Direct Attach Cable (850nm, MMF, 3m)	2
Core/Aggregation	Prolab	SFP-10G-ER-C	Cisco SFP-10G-ER Compatible TAA Compliant 10GBaseER SFP+ Transceiver (SMF, 1550nm, 40km, LC, DOM)	2
Core/Aggregation	Fortinet	14290108	FORTINET FORTIGATE 200F - SECURITY APPLIANCE - WITH 3 YEARS FORTICARE 24X7 COMPREHENSIVE SUPPORT + 3 YEARS FORTIGUARD - GIGE - 1U - RACK-MOUNTABLE	2
Core/Aggregation	Prolab	SFP-10G-LR-C	Cisco SFP-10G-LR Compatible TAA Compliant 10GBaseLR SFP+ Transceiver (SMF, 1310nm, 10km, LC, DOM)	10
Core/Aggregation	Prolab	GLC-SX-MMD		5
IP Service Edge	A10	TH1040-010-2PS-CGN	Thunder 1040 CGN, 1U, 1xCPU, 5xGoC, 4x10GF, 8 GB, SSD, no LOM, No SSL, Dual PS	2
IP Service Edge	A10	AXSK-SFP+ SR	10 Gig SFP+ Fiber transceiver - Short Range (mfg pn FTLX8574D3BCL)	8
IP Service Edge	A10	PS-IMPLEMENTATION-3DAY-REMOTE	Pre-paid. Three day implementation. Remote delivery.	1
Access Network	Calix	000-00372	E7-2 Field Install Package (CO & ODC/RT): Shelf with Blank Card, FTA, and Field installation Kit	2
Access Network	Calix	100-04665	E7-2 GPON-8 r2 card	2

Product	Manufacturer	Model	Description	Qty
Access Network	Calix	100-01508	10GE XFP, Single Mode dual fiber transceiver, 10Km, 1310nm, LC, I-Temp	4
Access Network	Calix	100-01424	Direct Attach SFP/SFP+ copper cable, 0.5 m, 30AWG, I-TempCLEI: BVPQAE5UAA	2
Access Network	Calix	100-05121	GPON SFP OIM, Class B+, 20Km, 1490/1310nm Single Fiber Transceiver, C-Temp, AXOS	8
Access Network	Calix	100-05071	GPON SFP OIM, Class C+, 60Km, 1490/1310nm Single Fiber Transceiver, I-Temp, AXOS	2
Access Network	Calix	000-00372	E7-2 Field Install Package (CO & ODC/RT): Shelf with Blank Card, FTA, and Field installation Ki	2
Access Network	Calix	100-04665	E7-2 GPON-8 r2 card	2
Access Network	Calix	100-01508	10GE XFP, Single Mode dual fiber transceiver, 10Km, 1310nm, LC, I-Temp	4
Access Network	Calix	100-01424	Direct Attach SFP/SFP+ copper cable, 0.5 m, 30AWG, I-Temp	2
Access Network	Calix	100-05121	GPON SFP OIM, Class B+, 20Km, 1490/1310nm Single Fiber Transceiver, C-Temp, AXOS	8
Access Network	Calix	100-05071	GPON SFP OIM, Class C+, 60Km, 1490/1310nm Single Fiber Transceiver, I-Temp, AXOS	1
Access Network	Calix	000-00372	E7-2 Field Install Package (CO & ODC/RT): Shelf with Blank Card, FTA, and Field installation Kit	2
Access Network	Calix	100-04665	E7-2 GPON-8 r2 card	4
Access Network	Calix	100-01508	10GE XFP, Single Mode dual fiber transceiver, 10Km, 1310nm, LC, I-Temp	4
Access Network	Calix	100-05121	GPON SFP OIM, Class B+, 20Km, 1490/1310nm Single Fiber Transceiver, C-Temp, AXOS	8
Access Network	Calix	100-05071	GPON SFP OIM, Class C+, 60Km, 1490/1310nm Single Fiber Transceiver, I-Temp, AXOS	1
Access Network	Calix	110-01337	Implementing E7-2 AXOS AnyPON Data Services (1/2 day) (public, virtual)	4
Access Network	Calix	110-01430	Essential Support Entitlement	1
Access Network	Calix	130-00491	AXOS Framework per Subscriber Annual Term License	500
Business Network	Vmware	VS7-ESSL-KIT-C	VSPH 7 ESS KIT 3 HOSTS MAX 2 PROC HOST	1
Business Network	Vmware	VS7-ESSL-SUB-C	SUB ONLY VSPH 7 ESS KIT 1YR	1
Business Network	efficient IP	SDS-270-DDI-SA	SOLIDserver 270 software appliance DNS-DHCP-IPAM Services	2
Business Network	efficient IP	PSD-CLT	Professional Services - Time & Material Engagement (Use or Lose) for Expertise/Consulting (Daily cost) - Statement of Work Required	5
Business Network	Observium	Observprof	Observium Professional - 1 year	1
Business Network	APC	SRT5KRMXLT-5KTF	APC Smart-UPS SRT 5000VA RM 208V to 120V 2U Step-Down Transformer	1
Business Network	Cisco	HX-E-M5S-HXDP	Cisco HyperFlex M5 Edge Hybrid & All Flash (w/o FI)	1
Business Network	Cisco	HX-E-220M5SX	Cisco HyperFlex Hybrid Edge 220 M5 system	2
Business Network	Cisco	HX-MR-X32G2RT-H	32GB DDR4-2933-MHz RDIMM/2Rx4/1.2v	8
Business Network	Cisco	HX-SAS-M5	Cisco 12G Modular SAS HBA (max 16 drives)	2
Business Network	Cisco	HX-HD12TB10K12N	1.2 TB 12G SAS 10K RPM SFF HDD	8
Business Network	Cisco	HX-SD480G63X-EP	480GB 2.5in Enterprise Performance 6GSATA SSD(3X endurance)	2

Product	Manufacturer	Model	Description	Qty
Business Network	Cisco	HX-SD240GM1X-EV	240GB 2.5 inch Enterprise Value 6G SATA SSD	2
Business Network	Cisco	HX-M2-240GB	240GB SATA M.2	2
Business Network	Cisco	HX-PSU1-1050W	Cisco UCS 1050W AC Power Supply for Rack Server	2
Business Network	Cisco	CAB-N5K6A-NA	Power Cord, 200/240V 6A North America	2
Business Network	Cisco	HX-MSD-32G	32GB Micro SD Card for UCS M5 servers	2
Business Network	Cisco	HX-RAILB-M4	Ball Bearing Rail Kit for C220 M4 and C240 M4 rack servers	2
Business Network	Cisco	HX-E-220C-BZL-M5	HX220C M5 EdgeSecurity Bezel	2
Business Network	Cisco	UCSC-PSU-M5BLK	Power Supply Blanking Panel for M5 servers	2
Business Network	Cisco	UCS-MSTOR-M2	Mini Storage carrier for M.2 SATA/NVME (holds up to 2)	2
Business Network	Cisco	UCSC-BBLKD-S2	UCS C-Series M5 SFF drive blanking panel	8
Business Network	Cisco	UCSC-HS-C220M5	Heat sink for UCS C220 M5 rack servers 150W CPUs & below	4
Business Network	Cisco	HX-CPU-I4208	Intel 4208 2.1GHz/85W 8C/11MB DDR4 2400MHz	4
Business Network	Cisco	HX-E-TOP01	10GbE Single or Dual Switch (2, 3, or 4 node)	2
Business Network	Cisco	HX-MLOM-C25Q-04	Cisco UCS VIC 1457 Quad Port 10/25G SFP28 CNA MLOM	2
Business Network	Cisco	HX-VSP-6-7-FNDR2-D	Factory Installed vSphere 6.7 2-CPU Enduser provides License	2
Business Network	Cisco	HX-VSP-6-7-FNDR-DL	Factory Installed - VMware vSphere 6.7 Fnd SW Download	2
Business Network	Cisco	HXDP-E001-3YR=	HyperFlex Data Platform Edge Advantage 3 Yr	2
Business Network	Cisco	HXDPE001-3YR		2
Business Network	Cisco	DC-MGT-SAAS	Cisco Intersight SaaS	1
Business Network	Cisco	SVS-DCM-SUPT-BAS	Basic Support for DCM	2
Business Network	Cisco	DC-MGT-IMCS-1S	IMC Supervisor - Advanced - 1 Server License	2
Business Network	Cisco	DC-MGT-UCSC-1S	UCS Central Per Server - 1 Server License	2
Business Network	Cisco	DC-MGT-SAAS-EST-C	Cisco Intersight SaaS - Essentials	2
Business Network	Cisco	C9300-24T-E	Catalyst 9300 24-port data only, Network Essentials	2
Business Network	Cisco	C9300-NW-E-24	C9300 Network Essentials, 24-port license	2
Business Network	Cisco	SC9300UK9-173	UNIVERSAL	2
Business Network	Cisco	PWR-C1-350WAC-P	350W AC 80+ platinum Config 1 Power Supply	2
Business Network	Cisco	PWR-C1-350WAC-P/2	350W AC 80+ platinum Config 1 Secondary Power Supply	2
Business Network	Cisco	CAB-TA-NA	North America AC Type A Power Cable	4
Business Network	Cisco	C9300-SSD-NONE	No SSD Card Selected	2
Business Network	Cisco	STACK-T1-3M	3M Type 1 Stacking Cable	2
Business Network	Cisco	C9300-SPWR-NONE	No Stack Power Cable Selected	2
Business Network	Cisco	C9300-DNA-E-24	C9300 DNA Essentials, 24-Port Term Licenses	2
Business Network	Cisco	C9300-DNA-E-24-3Y	C9300 DNA Essentials, 24-Port, 3 Year Term License	2
Business Network	Cisco	C9300-NM-8X	Catalyst 9300 8 x 10GE Network Module	2
Business Network	Cisco	NETWORK-PNP-LIC	Network Plug-n-Play Connect for zero-touch device deployment	2
Business Network	Uplogix	83X-16S-100-NAA	Uplogix LM83X Local Manager, 16 serial ports, 3 ethernet ports, LMS	1
Business Network	Uplogix	61-9600-10	Uplogix Control Center Software, 10 local managers	1

Exhibit B - Phase 1 network map



List of Associated Documents and Files

1. Daynet As-Builts KMZ.Zip
2. Fordham Estates Feeder.pdf
3. Fordham Estates.pdf
4. Phase 1 288 ring.pdf
5. Phase 1 Feeder LCP001.pdf
6. Phase 1 Feeder LCP003.pdf
7. Phase 1 Feeder LCP004.pdf
8. Phase 1 Feeder LCP005.pdf
9. Phase 1 Feeder LCP006.pdf
10. Phase 1 Feeder LCP008.pdf
11. Phase 1 Feeder LCP009.pdf
12. Phase 1 Feeder LCP010.pdf
13. Phase 1 Feeder LCP012.pdf
14. Phase 1 Feeder LCP013.pdf
15. Phase 1 Feeder LCP015.pdf
16. Phase 1 LCP015
17. Phase 2d HWY 146 S1.pdf
18. Phase 2d HWY 146 Phase 2.pdf
19. Splice Results LCP03.pdf
20. Splice Results LCP03_N01.pdf
21. Splice Results LCP03_N09.pdf
22. Splice Results LCP03DF.pdf
23. Splice Results ODC1_2.pdf
24. Splice Results POP site to Mont Belvieu.pdf