ORIGINAL

SELF PROVISIONED NETWORK SOLUTION

developed for

Consolidated High School District 230

Successful Schools
Successful Students

1/6/2017

Consolidated High School District 230

15100 South 94th Avenue

Orland Park, IL 60462

Attention: John Connelly

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Mark Sissel
Senior Director of Sales
7200 NW 86th Street, Ste., M
Kansas City, MO 64153
Direct: 563-349-7436

E-mail: mark.sissel@upnfiber.com

John Connelly
Chief Technology Director
Consolidated High School District 230
15100 South 94th Avenue
Orland Park, IL 60462

Dear John,

Unite Private Networks, LLC (UPN/Unite) is very pleased to provide Consolidated High School District 230 and Village of Orland Park with this comprehensive Fiber-Optic Wide Area Network proposal in response to your Request For Proposal.

UPN understands the challenges that School Districts and Municipalities are facing. The increasing dependence on the network for almost all functions, we believe bandwidth has now become the third utility behind power and water! Imagine being able to secure a virtually unlimited supply of something vital to your operations for a fixed cost. Our solution gives you the ability to have as much bandwidth as technology can provide and the District and City can consume, for a fixed cost with a simple equipment upgrade.

UPN is offering Consolidated High School District 230 and the City of Orland Park a fiber-optic network that exceeds common industry throughput practices and is consistent with the requirements of your e-rate application.

Our Executive Summary section outlines many other benefits we provide. We welcome the opportunity to meet with the evaluation committee to present our solution in more detail. We believe that once the School District and the City of Orland Park understands our RFP response in full, you will agree that Unite Private Networks is the best vendor partner for your fiber WAN project! Please feel free to contact me at mark.sissel@upnfiber.com or at 563-349-7436 if I can answer any questions or be of further assistance.

Best regards,

Mark Sissel

Director of Education Sales

Executive Summary

Unite Private Network's (UPN) has thoroughly read and understood your requirements. Specifically, Consolidated High School District 230 and The City of Orland Park want to:

- Procure scalable and reliable Wide Area Network Services
- Provide an infrastructure that can handle the growth in applications over the long term
- Have control of the network

Our proposal addresses your goals by providing a clean, simple, yet reliable long-term solution. UPN's proposal offers CHS230 and the City of Orland Park a Self Provisioned Network to all facilities. Our infrastructure provides you a scalable network with maximum control and flexibility.

UPN will also work with the City per the request of the District to ensure proper utilization of the current conduit in place for pull throughs and project management updates.

UPN's unique value proposition provides districts with many advantages relating to the control of your network, but without the hassles. These advantages include visibility and control of your network, long term price stability, and virtually unlimited bandwidth upgrades with minimal cost increases. Best of all, UPN owns and maintains the network, manages the fiber infrastructure (locates, restoration and relocates) and manages the service, all of which are included in this Category 1 E-rate eligible solution.

We offer a full turn-key solution consisting of engineering, permitting, construction, maintenance, electronics, and labor included in our project.

Selecting UPN as your provider will give the District the following advantages:

- **PRIVACY AND SECURITY -** UPN delivers its service over fiber pairs that have been specifically deployed for use by the CHS230 and the City of Orland Park. This assures CHS230 and VOP of constantly available bandwidth and unprecedented flexibility in network management. Many incumbent vendors will often offer smaller bandwidth increments as a result of legacy equipment and facilities. These public systems can be less secure since they include routing through a central office or cable head end facility. Our approach at UPN is to always recommend and implement full duplex bandwidth when deploying pure fiber WANs for school districts. This simplifies management for us, and provides your District a clean, reliable solution as well.

- **NETWORK VISIBILITY AND CONTROL –** You control Routing and Quality of Service (QoS). Our solution allows you to see into your private network; whereas, the switches and the throughput all unencumbered by legacy infrastructure, such as central offices and head end facilities, could limit the visibility you would have to your network.

- **RELIABILITY -** A simpler network design increases the reliability of the WAN by eliminating potential points of failure and simplifying the management of the network. With no backhaul to a central office or head-end, fewer switches are required, and your data moves directly from point-to-point on fiber between your facilities.

- **DEDICATED EDUCATION TEAM -** UPN assigns you a team that is focused on education solutions and is very familiar with E-Rate processes and procedures.

- **FULLY E-RATE CATEGORY 1 COMPLIANT -** This lit managed service is fully E-Rate Category 1 compliant, so you can be confident in your ability to secure your E-Rate funding. UPN's SPIN # is 143032551. Our Tax ID # is 273483570.

- **A PROVEN TRACK RECORD -** UPN has a proven demonstrable track record of turn-key WAN's serving over 230 districts in 20 states. Several of our past projects have been similar in scope and have been offered as examples under the "Projects of Similar Scope and Size" included in proposal binder tab section five.

- **FINANCIAL FLEXIBILITY -** UPN can work with your District to accommodate your financial requirements, whether that includes an upfront payment with lower monthly charges or strictly monthly recurring charges. Either way, the District will know their fixed costs over a long-term contract.

- **LOWEST TOTAL COST OF OWNERSHIP (TCO) -** UPN's proposal provides the lowest Total Cost of Ownership (TCO) per Gbps over the life of the term. Simply put, you get more bandwidth for your money with UPN! In addition, the simplicity of the layer two switched network means there are lower ongoing costs. Your technology team does not need to be trained on routing protocols and no ongoing upgrades are required.

- **PROJECT MANAGEMENT -** Finally, our team includes many utility veterans who are knowledgeable of local laws, rights of way and have existing relationships with parties crucial to this project. With our experience and knowledge, we can ensure a smooth implementation and successful project.

COMPANY OVERVIEW

Unite Private Networks (UPN) provides high-bandwidth, fiber-based communications networks and related services to schools, governments, carriers, data centers, hospitals, and enterprise business customers throughout the United States. Service offerings include dark and lit fiber, private line, optical Ethernet, Internet access, data center services, and other customized solutions.

UPN currently serves over 300 communities across 20 states, with over 6,200 metro fiber route miles, and 3,750 on-net buildings.

UPN has a proven history of successful completion of large and complex fiber-optic construction projects, on time and on budget. Customer relationships typically include long-term agreements (10-20 years) for fiber-optic connectivity between multiple facility locations. UPN manages all phases of the customer relationship, including RFP response, construction management, network reliability, technical assistance, and customer service, to facilitate a long-term partnership with the customer. UPN also has significant experience working with federal E-Rate program guidelines for K-12 school districts.

UPN is regulated by Public Service Commissions of each state in which UPN operates and also by the Federal Communication Commission, with periodic reporting requirements and service standards. UPN is a certified E-Rate service provider. Headquartered in the Kansas City, MO metro area, UPN has been providing customer-focused communications solutions since 1998.

UPN is owned by Cox Communications, Ridgemont Equity Partners and the company's management team. The relationship with Cox and Ridgemont provides UPN with access to capital and an ability to leverage strategic insights and capabilities in order to accelerate growth over the long-term. UPN continues to be led by its existing management team and operates as a stand-alone business within the Cox family of companies. More information about UPN is available at www.uniteprivatenetworks.com

About Cox Communications

Cox Communications is a broadband communications and entertainment company, providing advanced digital video, Internet, telephone and home security and automation services over its own nationwide IP network. The third-largest U.S. cable company, Cox serves approximately 6 million residences and businesses. Cox Business is a facilities-based provider of voice, video and data solutions for commercial customers, and Cox Media is a full-service provider of national and local cable spot and digital media advertising. Cox is known for its pioneering efforts in broadband, voice and commercial services, industry-leading customer care and its outstanding workplaces. For nine years, Cox has been recognized as the top operator for women by Women in Cable Telecommunications; Cox has ranked among DiversityInc's Top 50 Companies for Diversity 11 times. More information about Cox Communications, a wholly owned subsidiary of Cox Enterprises, is available at www.cox.com

About Ridgemont Equity Partners

Ridgemont Equity Partners is a Charlotte-based middle market buyout and growth equity investor. Since 1993, the principals of Ridgemont have invested more than $3.5 billion in 129 companies. The firm focuses on investments of $25 million to $100 million in industries in which it has deep expertise, including basic industries and services, energy, healthcare, and telecommunications/media/technology. More information about Ridgemont Equity Partners is available at www.ridgemontep.com

Scope of Work

Electronics

UPN's proposal provides a custom Self Provisioned Fiber Network. We will provide 20 (twenty) 10.0 Gbps SFP's to connect any of the locations listed in the Request For Proposal. This configuration will allow for bandwidth without concern for oversubscription, unlike what is often experienced on a WAN normally provided by a local cable provider or traditional telecommunications provider. This flat network enables your technology team to work with switches they are comfortable with and will not require the background and experience necessary for managing sophisticated routing protocols.

We can work with your technology department to order the correct GBIC's or SFP's for the type of equipment you provide. .

When the need arises for additional bandwidth, UPN's design makes it simple to handle upgrades. If the switches you own are capable of supporting up to 10 Gigabit GBIC's or SFP's, then UPN will simply replace the SFP's and upgrade your service to a higher bandwidth profile. Our electronics allow for scalability and expandability. If we provide the switches, we purposely utilize equipment that can easily be upgraded to higher bandwidth in the future, with only the need to upgrade the SFP's or GBIC devices. Additional bandwidth may require a future E-rate filing if this was not requested in your original RFP or 470. UPN will work with the school district to meet your E-rate guidelines.

Fiber

UPN will provide single mode fiber-optic cable. Preliminary routes have already been driven out and initial engineering completed. Routes are subject to change with no impact in cost to the District based on operational needs after final route engineering is completed.

UPN has also performed due diligence on the fiber routes for pole attachment and pole loading requirements. UPN has extensive experience working with utilities to place fiber both in rights-of-way and on existing poles. UPN's senior management has experience in the power utility business and has both authored and implemented pole attachment agreements with communications companies. UPN has contacted the local utility and is familiar with local pole attachments and loading specifications. UPN also owns and operates fiber-optic cable WAN's in 20 states and has numerous pole attachment agreements with various pole owners throughout Illinois.

Building Entries

Construction of building entries will be physically located with other utilities and communications entries to the extent possible. UPN building entries are made with plenum rated cable or with standard fiber in EMT conduit to comply with National Electric Code guidelines. While most work can be conducted during normal business hours, UPN will coordinate with the district to perform work after hours as needed inside the buildings to avoid disruption of classroom instruction. UPN will use existing available conduit for building entries (where available) and will construct new conduit into the building (where required). Aerial building entry will occur where other utilities have also entered buildings in an aerial fashion.

Project Timing

Project timing will be contingent on final contract language with respect to E-rate funding if desired. UPN is willing to provide an E-rate Funding Commitment Decision Letter (FCDL) contingency if desired. If no E-rate contingency is placed in the agreement for services, a tentative project schedule will be provided upon coordination with the District. Subsequent to contract award, UPN's Project Coordinator will meet with District representatives to determine where the greatest needs for the District exist. Please see the Project Management section for additional information.

Pricing Summary

10 GIG E-WAN/Self-Provisioned

Consolidated High School 230

- Self Provisioned Fiber-Optic WAN connecting 10 locations

School/Building Name	Strand Count	Mileage	Labor	Materials	As-Builts	Total One Time Cost	Estimated Completion Date	Annual Maintenance Cost (20 year contract)
Lagrange Road 131st to 179th	96 strands (48 pair)	Per RFP Specifications	Included	Included	Included	$ -		
D230 Administrative Building to Lagrange	96 strands (48 pair)	Per RFP Specifications	Included	Included	Included	$ -		
Carl Sandburg High School to Lagrange	96 strands (48 pair)	Per RFP Specifications	Included	Included	Included	$ -		
Victor J. Andrew High School to Lagrange	96 strands (48 pair)	Per RFP Specifications	Included	Included	Included	$ -		
Amos Alonzo Stagg High School to Lagrange	96 strands (48 pair)	Per RFP Specifications	Included	Included	Included	$ -		
Willow Grove Facilities Building to Century School	96 strands (48 pair)	Per RFP Specifications	Included	Included	Included	$ -		
Village of OP: Lagrange and 131st to Water Tower Connection (Sandburg campus)	96 strands (48 pair)	Per RFP Specifications	Included	Included	Included	$ -		
Village of OP: 151st and Ravinia to Lift station then to MPS	96 strands (48 pair)	Per RFP Specifications	Included	Included	Included	$ -		
Village of OP: 159th and Ravinia to Public Works	96 strands (48 pair)	Per RFP Specifications	Included	Included	Included	$ -		
Village of OP: 144th and Lagrange to Ravinia South to Village Hall	96 strands (48 pair)	Per RFP Specifications	Included	Included	Included	$ -		
Totals						$ 600,000	*See Below	$ 47,400
*** 180 Days from successful acquisition of USAC FCDL approval or waiver by CHS230, acquisition of necessary permits, easements and ROW.**								

The following taxes may or may not be applicable given the tax status of the School District and/or City of Orland Park

1) IL USF (Universal Service Fund) Fee - 1.2865%
2) Telecom Excise Tax (for Orland Park, IL) - 8.0%
3) Telecom Infrastructure Maintenance Fee – 0.5%

The addition or subtraction of sites is negotiable. Most of our customers have preferred a stipulation that additional sites are added at the same MRC, and with a coterminous term as all other sites on the Agreement. The School District pays our actual cost of construction to bring fiber into the new facility plus 21%. Due to the considerable cost incurred to build fiber into a site we must have a stipulation that our costs can be recovered, if a site no longer requires connectivity. Fiber moves are typically handled in the same manner—UPN cost plus 21%.

Pricing Notes:

1. This price quote expires ninety (90) days from the due date of the associated response.
2. This is a turn-key quote with all construction, electronics, and maintenance included.
3. All rates quoted are monthly recurring charges (MRC).
4. E-Rate discount is assumed based upon previous year's USAC Form 471 filed and is subject to change based on USAC guidelines and approval.
5. Please note that UPN can also provide an upfront payment option (Non-Recurring Charge or NRC) which would further reduce the monthly recurring charges (MRC) while maintaining the overall cost.
6. All applicable taxes and fees including, but not limited to, federal, state, local use, excise, gross receipts, sales or privilege taxes, occupation taxes, duties, regulatory fees or similar liabilities shall be paid by the School District in addition to the regular charges under this Agreement. The School District shall be required to provide documentation evidencing its exemption from any such taxes or fees.

Project Management

Unite has extensive resources to ensure the successful implementation of your Wide area network. With a dedicated Project Coordinator working with an experienced team, your project will be managed for a thorough and timely completion. Once the contract is awarded, Unite will assign a Project Coordinator (PC) to oversee the implementation of the project. The PC has the following responsibilities:

- Act as the main point of contact for Unite and customer project teams
- Identify both Unite and customer members of the project team, including roles/responsibilities
- Coordinate the development of the implementation plan
- Hold planning sessions
- Confirm the scope of work
- Guide the execution of the project plan to ensure all tasks are completed in timely manner
- Provide regular communication on project status via agreed upon methods
- Obtain proactive escalations of issues that impact service delivery
- Conduct project closing reviews

Phase 1: Planning

Early identification of team members is critical to the successful implementation of the project. The Unite PC will lead and coordinate the internal project team that will be responsible for the project implementation. This Unite project team will include members from Sales, Sales Engineering, Customer Operations, Network Planning, Network Engineering, and Billing.

Prior to contract, your scope of work was clearly discussed and documented. Now in the planning phase, documented requirements, including services and equipment, are reviewed; In addition, significant milestones are identified; a detailed timeline is prepared; and a tracking spreadsheet of all locations is developed to monitor progress. Upon completion of the timeline, the UPN PC will arrange a kick-off meeting to begin the project implementation.

The UPN Project Coordinator will obtain the list of the District's team members, add the Unite team members, and create a complete project team list. Roles and responsibilities will be identified and the list will be distributed to the entire team. Project team members may include employees as well as sources contracted to assist with the implementation.

Phase 2: Implementation

The UPN team will work closely with your project team to implement the services and successfully complete the project. In this phase, the PC will host the project kick-off meeting. An agenda will be prepared and distributed prior to the meeting. Members of the project teams will be invited to join a call to discuss the project. During the call, the services and the type of equipment UPN is providing will be confirmed and/or clarified. Activation request dates will be confirmed. We will also review the milestones. Additional information that is required, such as access to facilities and specific internal demarc locations will be discussed. The customer communication plan will be established, including the frequency of updates, and the method of communication.

Throughout the project, the implementation plan will be monitored for plan compliance. The PC will schedule regular updates to discuss project status, exceptions, issues, and progress. Progress will be monitored against the established milestones using a project tracking spreadsheet. Identification of exceptions will be

escalated as required and corrective action implemented. Early action will help the team ensure timely completion of the project.

The Unite outside plant team will work with the appropriate members of your project team during the construction process to coordinate site visits and discuss the specifics of building entry work and demarcation points. Engineered building entry documentation will be provided to the District for approval prior to construction beginning.

The PC will confirm the timing for final installation of the services. The Network Engineering team will work directly with the District to discuss any special instructions and arrangements with regard to access to the facilities. Installation of equipment will be coordinated with the District. The Network Engineering team will test and confirm the quality of the network.

Phase 3: Follow-Up

Upon the successful testing and confirmation of your Wide Area Network, Unite will send a service commencement letter stating the contract number and the date service started. Instructions on repair reporting through UPN's Network Operations Center (NOC), along with an escalation list, will be provided as well.

Billing will commence as stated in the contract. A billing letter will be sent for the District to select one of two billing methods, billing at a discounted monthly rate or full billing, assuming the District will file a BEAR form. Once the District receives its FCDL letter and files the Form 486, Unite can then bill the discounted amount if the District selects that option.

Following completion of the project, Unite will deliver documentation as described in the As-Built Documentation section. The PC will have a follow-up call with the District to ensure all services have been completed successfully. Any open issues will be discussed and logged for review. There will be a post-implementation review of the project action items.

Unite has a proven track record in the implementation of school district Wide Area Networks. The Unite project team will work to ensure the project scope is clear and comprehensive at the project start, that the project plan is defined and communicated to all team members, and that the implementation is completed efficiently with minimal disruption. We look forward to working with you on your project.

Large School District
Sample Schedule and Implementation Plan
Unite
PRIVATE NETWORKS
ID
Task Name
Duration
Start
Finish
1st Quarter
2nd Quarter
3rd Quarter
4th Quarter
1st Quarter
2nd Quarter
3rd Quarter
4th Quarter
1st Quarter
1 Contract Negotiations 45 days Fri 1/16/17 Fri 3/17/17
2 Communication Plan/Mobilization 30 days Mon 3/20/17 Fri 4/28/17
3 Engineering 90 days Mon 5/1/17 Fri 9/1/17
5 Pole Applications 120 days Mon 6/19/17 Fri 12/1/17
7 City/State/RR/UG/ROW Permits 150 days Mon 6/19/17 Fri 1/12/18
4 Engineering Revisions 30 days Mon 11/6/17 Fri 12/15/17
8 School Site Construction 90 days Mon 7/3/17 Fri 11/3/17
9 Underground Construction 180 days Mon 7/24/17 Fri 3/30/18
6 Make-Ready 120 days Mon 9/4/17 Fri 2/16/18
10 Aerial Construction 120 days Mon 12/4/17 Fri 5/18/18
11 Splicing and Testing 160 days Mon 10/16/17 Fri 5/25/18
12 Electronics and turn-up 30 days Mon 5/14/18 Fri 6/22/18
13 Final as-builts and clean-up 60 days Tue 7/3/18 Mon 9/24/18
Contract Negotiation
Administration
Engineering
Pole Permitting
City/State/RR Permits
Revisions
School Site Const
UG Const
Make-Ready
Aerial Const
Splice/Test
Service Delivery Package/OTDR Results
Final as-builts/clean-up
Sample schedule
50-100 Schools
Business Days

Network Operations

Network Operations is integral to your service implementation and maintenance activities with UPN. A team of highly skilled Field Engineers are available to ensure your service levels are met and maintained to your expectations. A few of our processes that directly affect your service will be discussed in the next sections to provide you with procedures to assist us in delivering service to you.

Network Monitoring

UPN NOC provides 24x7 network monitoring with state-of-the-art software and technology. A broad variety of monitoring, from network, switch, port, to IP addressing and bandwidth can be established. Using system alerts, we can identify and resolve issues faster. System alerts also provide us opportunities to analyze and identify areas of potential future issues that can proactively be addressed to prevent downtime. Any issues identified from network monitoring systems are managed through the service issue process, starting with service ticket creation. The service ticket will allow us to organize and document all activities of issue resolution for customers. Customers will be notified after service ticket creation to ensure issue resolution is achieved to service expectations.

Performance Metrics & Reporting

UPN will work with you to identify key performance metrics that supports your school district's needs. We can tailor reports to suit your needs and your timeframes. Reports, such as Mean-Time-to-Repair (MTTR), Service Tickets Totals, Reason for Outages, Network Availability, Alarms Total/Date/Type, and Bandwidth Utilization are just a few of the reports that can be developed. Today, UPN will provide these reports to you based upon defined criteria and timeframes. Our future plans will allow you to access and view your reports using web access.

Service Level Agreements

UPN strives to adhere to industry standard service level targets. Network availability is calculated using network outage times and total hours of possible availability in a year, producing a percentage of overall availability. MTTR (Mean-Time-To-Repair) targets have been established with priority service level impacts to service.

UPN Service Ticket Severity Levels

Network Availability Target is: 99.99%

Priority	Name	Description	Resolution Target
P1	**Critical**	Interruption making a critical functionality inaccessible or a complete network interruption causing a severe impact on services availability. The following conditions exist: • One or more sites impacted or large number of customers impacted. • Disaster in progress with major impacts. • No possible alternative for service available. • Significant impact on business operations.	4 hours
P2	**Important**	Critical functionality or network access interrupted, degraded or unusable, having a severe impact on services availability. No acceptable alternative is possible. The following conditions may exist: • Single Client service impact. • Unstable facilities or equipment interfering with service availability. • Service level indicators are significantly outside acceptable thresholds. • System/Service operates in a restricted mode. • Failure or degradation occurs in critical timeframe (ie, public event)	24 hours
P3	**Normal**	Non critical function or procedure, unusable or hard to use having an operational impact, but with no direct impact on services availability. An event that causes minimal loss of service. The following conditions may exist: • Breakage, performance problem, or hardware issue with minimal service impairment or loss of service. • A permanent solution or workaround is available. • Service level indicators are reduced below normal levels. • Service restoral occurred before trouble referral process completed.	3 days
P4	**Low**	An event with little or no impact to service levels. The following conditions may exist: • No outage or service interruption occurred. • Alarm/alert indicators present without service impact. • Administrative, Configuration, Software modifications required for service improvements.	5 days
P5	**Very Low**	Non service impacting required or requested actions. The following conditions may exist: • Billing Issues/Inquiries • Premise or Facilities Issues/Inquiries • Company Informational Inquiries	10 days

Service Issue Management

Customers should call the UPN NOC (866-963-4237) with all service issues.

UPN NOC will create a service ticket from all information provided by the customer at the time of the call. Service tickets allow UPN to track your issues and the resolution of those issues. This information also allows for the calculation of performance metrics discussed later in this document.

Customers have the option to escalate issues using two methods, depending upon your choice: asking the UPN NOC to escalate an issue or utilize an escalation list provided to you.

To assist UPN in tracking and coordinating all necessary activities for resolving issues expeditiously, use the following information as your first phone call for trouble resolution. All dispatches , if deemed necessary, will be generated through this contact.

Reporting service issues to UPN
1-866-963-4237
Twenty-four hours/seven days a week

The escalation process provides another method for obtaining information and resolutions, once an issue has been reported to Unite Private Networks.

Service Escalation Contact List

Level	Name	Email	Cell#
1st	Jerome Simoneau Sr. Engineer, Network Operations	jerome.simoneau@upnfiber.com	816-365-9435
2nd	Beth Kimmel Director, Network Operations	beth.kimmel@upnfiber.com	402-326-9980
3rd	Dee Franken Vice President, Customer Operations	dee.franken@upnfiber.com	816-654-4287
4th	Chad Senglaub Chief Operations & Technology Officer	chad.senglaub@upnfiber.com	816-500-9935

If for some reason you are not getting the appropriate response from our operations team or you just want to make your sales team aware of a situation or need sales assistance, below is a sales escalation list as well.

Sales Escalation List

Level	Name	Email	Cell#
1st	**Mark Sissel** **Director of Education Sales**	**mark.sissel@upnfiber.com**	**817-805-7776**
2nd	**Jason Adkins** **Senior Vice President Sales**	**jason.adkins@upnfiber.com**	**980-229-6306**

Network Maintenance

Network Maintenance is broken into two categories: scheduled maintenance and emergency maintenance. Scheduled maintenance relates to planned activities required to improve, maintain, and enhance network services. These events are typically used for upgrades or routine maintenance activities. Emergency maintenance relates to unplanned activities, resulting from some type of network failure or vulnerability that could lead to a network outage or impact services.

Emergency Maintenance

- Customers are notified at the earliest possible opportunity through our email notification system with event ticket number, description of the event, timeframes associated with the event, and actions being taken to resolve the event.
- Customers are able to call the UPN Network Operations Center (NOC) at 866-963-4237 for updates on the event as needed.
- Customers will be notified through our email notification system when an event is resolved.

Scheduled Maintenance

- Customers are notified at a minimum of seven (7) business days in advance of scheduled maintenance activities through our email system with event ticket number, description of the activity, timeframes associated with the activities, and impact to service.
- UPN scheduled maintenance activities are planned during time frames that are recognized by the industry as windows for performing necessary work on networks. These time frames are established typically during the week from 10:00 p.m. local time to 6:00 a.m. local time.
- Customers are able to call the UPN NOC at 866-963-4237 for updates on the event as needed.
- Customers will be notified through our email notification system when an event is completed and closed.
- Scheduled maintenance will apply mostly to school districts where UPN maintains the switches for the District. If UPN is only providing SFP's or GBIC's, it is unlikely we would have scheduled maintenance.

Notification Lists

All customers should provide their list of company contacts and email addresses that require notifications of Emergency and Scheduled Maintenance activities. Contact information should be sent to support@upnfiber.com.

Example of Scheduled Maintenance Notification

Unite Private Networks will be performing maintenance on our existing 10G ring in the Lincoln, NE area to perform a circuit move.

Ticket #: 3396

Start Time: Friday, 12:00 AM August 2nd, Central Standard Time
End Time: Friday, 4:00 AM August 2nd, Central Standard Time

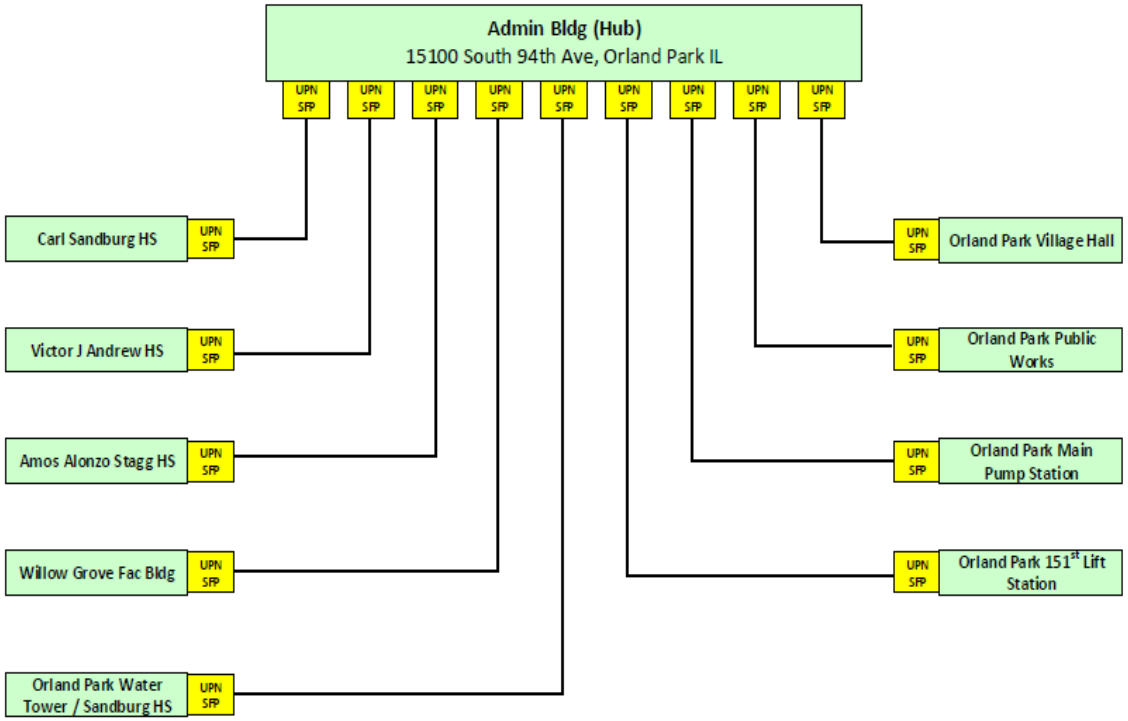
Expected Duration of Outage: Up to 15 minutes.
Please contact UPN at 1-866-963-4237 (email: support@upnfiber.com) with any questions or concerns regarding this maintenance.

SUMMARY OF BENEFITS

By selecting Unite Private Networks as your Wide Area Network vendor of choice, your District will receive the following benefits:

- Wide Area Network that is designed and engineered to ensure it meets the needs of the District
- Map that lays out the fiber design for your District, assuring you of exactly what your network looks like and how it functions
- Services that are Category One E-Rate eligible
- Each connection to your schools is matched by at least a 10 Gbps connection at the District office, eliminating any oversubscription issues
- Network that upgrades easily to 20 Gbps with simple electronics changes
- Fiber that comes direct to the District, does not pass through a central office or cable head end facility
- Increased reliability and security based on the physical and logical network design
- Cost effective, long-term contracts and flexible payment options help to meet your financial requirements
- As-built documentation provided once your network is completed
- A team including your Director of Education Sales, and support people that are well-versed in all facets of E-rate funding, as well as special state-by-state funding options
- Knowledge that as dark fiber rules change in the future, UPN is prepared to provide these types of solutions
- Confidence in UPN, as we service over 230 districts, with 165 of them having bandwidth of 1 Gigabit or more
- Finally, comfort in UPN's proven history, with customers located in 20 states, over 4,000 metro fiber route miles, and 2,000 on-net buildings

UPN K12 EWAN Service
Orland Park SD 230 – 10 Gbps Interfaces

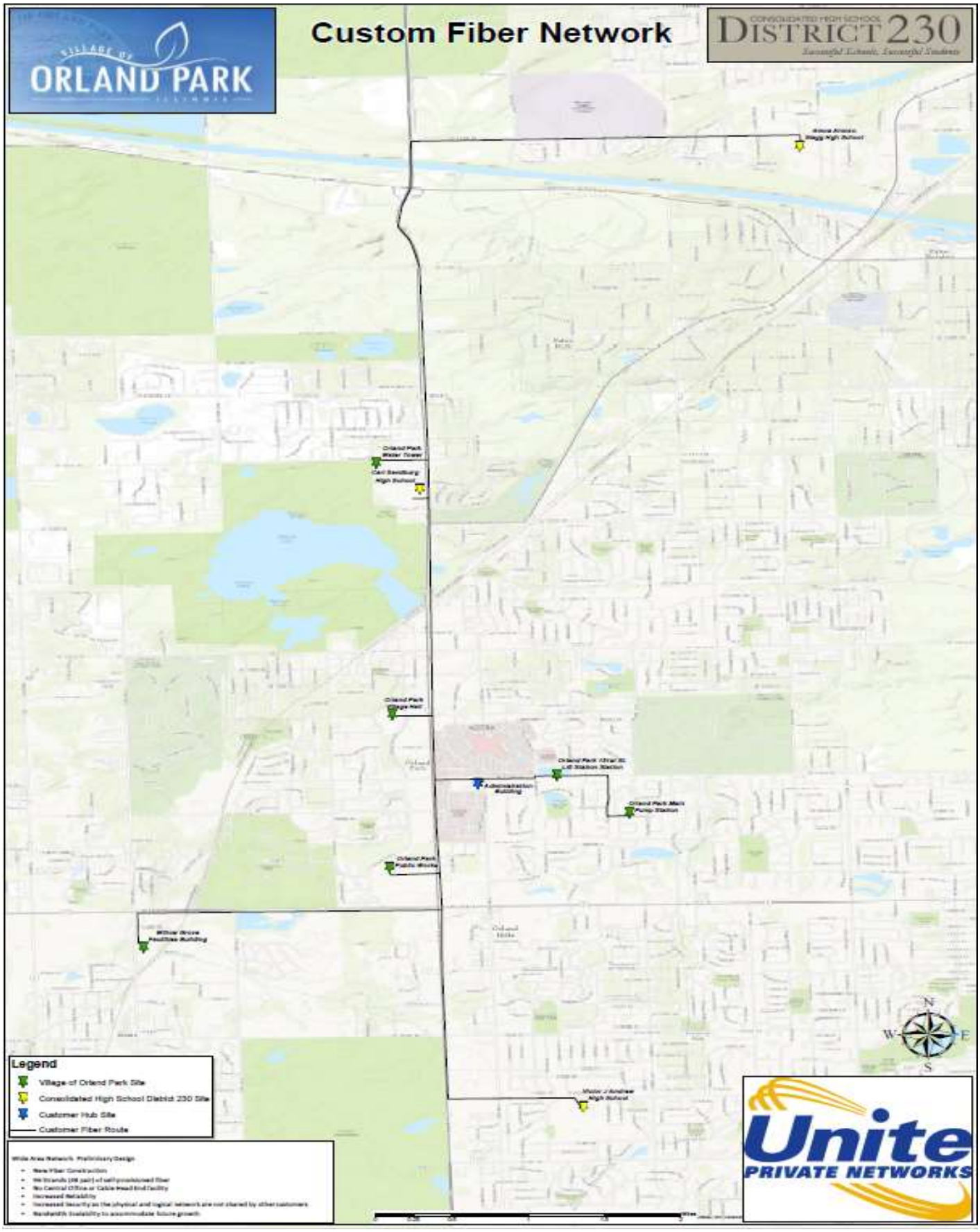


Typical Configuration

Providing: SFP's for EWAN Service to K12 Schools

- CPE: SFP's only compatible with School District switches
- CPE Location: Within school switch
- When UPN provides the switches the service will be either EPL to each school or E-Hub
- Total 10 sites including the Hub

K12 EWAN – Logical Template
15031-1 & -3 GLP
12.13.16


Custom Fiber Network
VILLAGE OF ORLAND PARK
CONSOLIDATED HIGH SCHOOL DISTRICT 230
Legend
Village of Orland Park Site
Consolidated High School District 230 Site
Customer Hub Site
Customer Fiber Route
Unite PRIVATE NETWORKS

Projects of Similar Size/Scope (10)

Dallas Public Schools WAN project – Dallas, TX

Contact: George Mallick, Chief Technology Officer, 972-925-5705, gmallick@dallasisd.org
Contract length: 10 Year signed in 2011
Contract value: **$35,880,000**

The Dallas School District WAN consists of 281 locations, two data centers, and over 300 miles of new fiber construction requiring a 20 month build. UPN has dedicated a five person team to provide project management for the WAN construction. DISD was previously utilizing AT&T services for the previous WAN.

Allen Independent Schools WAN Project—Allen, TX

Contact Patrick Tanner, Technology Director, 972-727-0468,patrick_tanner@allenisd.org

Contract length: 10 year signed in 2012

Contract value: **$3,000,000**

This project provided 1Gigabit services to most sites and 10 Gigabit for the remaining 2 sites, with over 25 miles of outside plant construction. The District desired to move to a secure network which provided scalability and greater control over the WAN by District personnel. The project was completed early and accepted by the District so they would not have to renew their contract with the incumbent provider, which allowed for a smooth transition in their E-rate submissions.

Galesburg SD 205 WAN Project – Galesburg, IL

Contact: Rick Lawsha, IT Director, 309-343-2717, rlawsha@galesburg205.org
Contract length: 15 year signed in 2011.
Contract value: **$1,817,718**

The Galesburg WAN network consists of approximately 12 miles of fiber connecting 12 facilities together. This project presented unique complexities because every school is physically situated on the ring design. The school district now enjoys speeds they could not get with the previously oversubscribed public network.

Lincoln Public Schools WAN project - Lincoln, NE

Contact: Kurt Langer, Director of Technology, 402-458-3131, klanger@lps.org
Contract length: 10 Year Original Contract with 12 year renewal in 2010.
Contract value: **$11,083,082**

This project consisted of a new build of over 100 miles of fiber (155 miles in DCSD proposal) throughout Lincoln, Nebraska. Lincoln is not only a college town but the State Capital. The LPS WAN project connected 64 school facilities with assigned fiber to each site. Since this project was completed, UPN has won dozens of additional contracts serving customers such as; State of Nebraska, City of Lincoln, University of Nebraska, and many large Enterprise clients like Bryan Hospital.

Richmond County School District, GA

Contact: Rob Jankus, IT Director 706-826-1103 robert@boe.richmond.k12.ga.us
Contract length: 10 years signed in 2009
Contract value: **$10,777,000**

Richmond County School WAN consists of over 92 miles of new fiber construction connecting 65 sites. RCSD chose UPN because the network is a truly private WAN with assigned fibers per school and no sharing of bandwidth like most cable companies.

Puyallup School District, Puyallup, WA

Contact: Randy Averill, IT Director 253-841-1301 AverilRE@puyallup.k12.wa.us
Contract length: 10 years signed in 2008
Contract value: **$9,771,118**

The Puyallup School build was one of our most complex projects to date, due to the unique geographic area and geologic conditions presented around a volcano in and around Puyallup, WA. Special engineering and permitting were required. The network consists of over 41 miles of new fiber build completed in less than a year to connect all of their school sites.

St. Vrain School District – Denver, CO

Contact: Bill Brayshaw, IT Project Manager, 303-772-7701, brayshaw_william@stvrain.k12.co.us
Contract length: 10 years
Contract value: **$8,398,000**

This fiber WAN consisted of 44 miles of new fiber construction connecting 21 sites. UPN also worked with the District to include all Qwest termination penalties into the contract to eliminate any double paying of circuits during the transition. The school has had a few additions to the network and enjoys speeds never before attained with the previous oversubscribed public network.

Aurora School District – Denver, CO

Contact: Steve Clagg, CIO 303-326-1985, sdclagg@aps.k12.co.us
Contract length: 10 years
Contract value: **$8,121,000**

Aurora's WAN consists of 44 miles of new plant build connecting 48 total sites. This project presented several permitting and logistical challenges due to the schools being geographically situated around an active US Air Force Base. UPN came in on time and under budget, even with the additional challenges.

Pueblo Public Schools WAN project – Pueblo, CO

Contact: Danny Combs, IT Director, 719-549-7290, dcombs@pueblo60.k12.co.us
Contract length: 15 years
Contract value: **$6,754,988**

The Pueblo D60 WAN network consists of approximately 43 miles of fiber connecting 39 facilities together. This project presented unique complexities because every school is physically situated on the ring design.

Additionally, there are two replicating data sites within the district WAN continuously backing up servers. Pueblo is also the site of our national disaster recovery center complete with all environmental backups necessary to offer data center and disaster recovery services to our national Enterprise and school customers.

Westminster Schools – Denver, CO

Contact: Brady Mills, Director of Technology 303-657-3830 bmills@adams50.org
Contract length: 16 years
Contract value: **$3,488,000**

The WAN consists of 18 miles of new plant connecting 27 locations. Westminster schools were looking for a robust WAN ring that wasn't part of an existing public WAN system. The ring design connects the data center to all the high schools. The middle and elementary locations come back to the closest high school hub via a direct assigned pair of fibers. The ring is a multi-10Gig ring.

School Reference List

STATE	SCHOOL NAME	CONTACT NAME	CONTACT NUMBER
*IL	**CHSD 218, IL Schools**	***John Byrne***	**708-514-0571**
*IL	**Midlothian, IL Schools**	***Angela Crotty***	**708-388-6444**
*IL	**Village of Palatine**	***Larry Schroth***	**847-963-6270**
IL	River Forest, IL Schools	*Kevin Martin*	708-366-9230
IL	Bourbonnais ESD 53	*Roger Hale*	815-929-5287
IL	Darien, IL Schools	*Keith Roberts*	630-968-7505
IL	Antioch, IL Schools	*Dave Downing*	847-838-8480
IL	Canton Union, IL Schools	*Don Howell*	309-647-3400
IL	Galesburg, IL Schools	*Rick Lawsha*	309-343-1151
IL	Sunnybrook School District 171	*Mark Crotty*	708-895-0750
KS	Manhattan-Ogden USD #383	*Mike Ribble*	785-587-2066
KS	Hoisington School District	*Bill Lowry*	620-653-4134
KS	Geary County USD #475	*Karl DeArmond*	785-717-4070
CO	Craig-Moffatt County School Dist.	*Marlene Knez*	970-824-3268
CO	Pueblo School District 60	*Danny Combs*	719-549-7290
CO	Englewood Schools	*Mike Porter*	303-806-2025
CO	Aurora School District	*Steve Clagg*	303-326-1985
MO	Excelsior Springs SD 40	*Wayne Ball*	816-630-1280
MO	Lindbergh School District	*Karl Guyer*	314-729-2400
MO	Moberly School District 81	*Alan West*	660-269-2665
MO	Liberty Public School District	*Trey Katzer*	816-736-6726
MO	Raytown Schools	*Melissa Tebbenkamp*	816-268-7122
MO	Harrisonville School District R-IX	*Mike Diggs*	816-380-2727
MO	Lone Jack C-6 School District	*Cary Wesemann*	816-697-2215
MO	Sedalia School District 200	*Brad Pollitt*	660-829-6456
MO	Lawson R-XIV School District	*Roger Schmitz*	816-580-7277
MO	Warrensburg R-VI School District	*Scott Patrick*	660-747-7823
MO	Warren County R-III Schools	*Ron Greer*	636-456-4311
MO	Knob Noster R VIII School District	*Jeff Davis*	660-563-5644
OK	Enid ISD 57	*Jeff Herbel*	918-337-6231
OK	Pauls Valley School District	*Travis Thompson*	405-238-1239
OK	Perkins Tryon Public Schools	*James Ramsey*	405-547-5703
OK	Shawnee Public Schools	*Steve Maple*	405-878-1054
OK	Tuttle Public Schools	*Lee Coker*	405-381-2373
OK	Yukon Public Schools	*Jason McDaniel*	405-354-2587
TX	Allen ISD	*Patrick Tanner*	972-727-0484
TX	Dallas ISD	*Gary Schuman*	972-925-5670

*UPN also has fiber rings in Arlington Heights, Hickory Hills, Bridgeview, Downers Grove, Naperville, and Palatine.

Unite Private Networks Signs WAN Agreement with Dallas Independent School District

Construction of 300 mile fiber-optic network to serve 281 District sites

Kansas City, MO (October, 2011) – Unite Private Networks (UPN) today announced a long-term agreement to provide fiber-optic WAN services to the Dallas Independent School District (DISD). The nearly 300 mile fiber-optic network will connect to 281 District facilities and provide up to 10 Gigabits of communication capacity to each site. UPN plans to begin construction immediately and expects completion of the initial phase within 20 months.

According to Gray Salada, Executive Director of Information & Technology Services, the network is a key component of the Districts' technology modernization program creating a state of the art digital environment in the classroom. "The new network will provide students and teachers the flexibility and capacity to access digital resources across the globe facilitating research, communications, and collaboration as well as supporting on-line curriculum and assessments."

UPN provides high-bandwidth, fiber-based communications networks and related services to schools, governments, carriers, data centers, hospitals, and enterprise business customers located in 19 states.

"The ubiquitous nature of the school sites will create an easily accessible fiber-optic network throughout the greater Dallas area," said Kevin Anderson, UPN CEO. "The nearly unlimited bandwidth provided by fiber-optic facilities allows our services to easily and quickly expand as the needs of customers grow over time. Most of our customers enter into long-term, fixed-priced contracts that allow them to lock-in their future communications costs while providing them with flexible solutions to meet their ever-growing bandwidth requirements. It's definitely a win-win for our customers."

About Unite Private Networks *Unite Private Networks (UPN) provides high-bandwidth, fiber-based communications networks and related services to schools, governments, carriers, data centers, hospitals, and enterprise business customers throughout the United States. Service offerings include dark and lit fiber, private line, metro-optical Ethernet, Internet access, data center services, and other customized solutions. Headquartered in the Kansas City, MO metro area, UPN has been providing customer-focused communications solutions since 1999. UPN currently has customers located in 19 states. For more information on UPN, please visit www.uniteprivatenetworks.com.*

Unite Private Networks Announces the Second Oklahoma Land Rush

8 School Districts Make Long Term Commitments for Fiber-Optic Wide Area Networks

Kansas City, MO (April 12, 2011) Unite Private Networks (UPN) announced today its participation in the second Oklahoma Land Rush, one hundred years after the original. Eight school districts are moving forward with fiber-optic Wide Area Networks to link their facilities together with high-speed connections.

"The Administrative and Technology leadership at these districts should be commended as pioneers just like their ancestors over a century ago. Learning is more effective, through the use of technology, for the students of today's generation. They have grown up with it, utilize it in the personal lives, and have come to expect it at school," noted UPN Vice President of Business Development, Martin Mueller.

Atoka, Bartlesville, Drumright, Geronimo, Meeker, Pauls Valley, Tuttle, and Woodward Public Schools join the fast growing number of school districts across the country providing their students, staff and administration with the speed and reliability of a fiber-optic network from UPN.

UPN provides high-bandwidth, fiber-based communications networks to schools, government, carriers, data centers, hospitals, and enterprise business customers. UPN currently has customers located in 19 states throughout the U.S.

About Unite Private Networks:

Unite Private Networks specializes in providing high-bandwidth, fiber-based communications networks and related services to schools, government, carriers, data centers, hospitals, and enterprise business customers throughout the United States. Service offerings include dark and lit fiber, private line, metro-optical Ethernet, Internet access, and other customized solutions. Headquartered in the Kansas City MO metro area, Unite Private Networks has been providing customer-focused communications solutions since 1999. For more information on UPN, please visit http://www.uniteprivatenetworks.com/ .

Case Studies

Adams50

Colorado District Bids Farewell to Network Bottlenecks & Spiraling Costs

A Colorado school district's quest for a long-term bandwidth solution ends with a state-of-the art fiber optic network implemented by Unite Private Networks, LLC. The new solution provides virtually unlimited throughput, making network bottlenecks a distant memory.

About Adams County School District #50

The Adams County School District #50 in Westminster, Colorado, also known as Adams50, serves more than 10,000 students in 19 schools. With 1300 staff members and an annual budget exceeding $110 million, Adams50 faces the same challenges of most districts across the nation – how to meet current student, staff, administrative, and instructional needs, while adequately planning for the future, in the face of severely limited budgetary resources.

Bandwidth Requirements and Network Costs Spiral Up

When Brady Mills, Director of Technology for Adams50, started with the district thirteen years ago, an IT environment free of network bottlenecks was just a dream. Many of the buildings in the Adams50 district are old, some built over 60 years ago. It was challenging to maintain an adequate networking environment spanning buildings with outdated infrastructure – a common struggle for many school districts. Until 2009, Adams50 leveraged a T1 copper network from a large telecommunications provider, running T1 circuits to each of 24 buildings.

"It was getting more and more expensive, and our bandwidth requirements were greatly increasing," Mills explains. "It simply was not cost effective to keep doing with T1 networks." Network bottlenecks restricted the ability to incorporate new technologies and instructional applications, and wireless support was minimal at best. Knowing the district would eventually reach the breaking point with the current network infrastructure, Mills resolved to get ahead of the ever-increasing bandwidth needs. In 2005 and 2006, Mills began researching his options for a better, more cost-effective, long-term solution to meet the district's bandwidth needs.

E-Rate Program Makes Fiber Optic WAN Affordable

Mills had the good fortune to discover Unite Private Networks (UPN) early in his research process. He developed a strong working relationship with the company, one of the largest turn-key providers of fiber optic Wide Area Networks (WANs) in the nation. UPN provides specialized expertise in helping school districts leverage the E-Rate government program for U.S. schools and libraries to obtain affordable telecommunications and Internet services.

By early 2007, Mills' research and foresight paid off. With the benefit of UPN's knowledge and experience, Adams50 successfully navigated the complex and cumbersome E-Rate application process, securing an 84% lease rate discount on a new, state-of-the-art, UPN fiber optic network.

Long-term, Fixed Cost Contract an Easy Sell to School Board

"We selected UPN because it was clear that they were the only group out there with really good school district fiber networking experience," Mills says. "They have great experience and references across the nation, for good reason."

In 2007, Adams50 entered into a fixed-cost, 15-year contract with UPN to provide a private fiber optic WAN for the district – 84% of which is paid for by E-Rate. Network data is transmitted at 1 Gigabit per second (or GigE). Mills describes this long-term lease as an easy sell to school board. "This network answers all of our bandwidth needs for the next 15 years, and the cost is locked in." Mills says. "It was obvious to the Board that the benefits were just huge."

UPN Delivers, Six Months Ahead of Schedule

Leasing a private fiber optic WAN from UPN provides all the benefits of owning the network infrastructure – including complete control over configuration and throughput, and exclusive claims to the bandwidth – without any of the headaches involved in building or

maintaining that infrastructure. Working closely with Mills, UPN designed a custom fiber network to best meet the district's implementation goals. Adams50 opted for a unique hybrid design, combining ring as well as hub-and-spoke network architecture.

UPN began building the district's new fiber network in November 2008, managing the construction process for 23 route-miles of fiber optic cabling, handling all the complexities involved with permit, right-of-way, etc. issues. Construction proceeded smoothly and the district's new network went live at the end of 2009, six months earlier than expected.

"It was a very smooth process," Mills says. "UPN is extremely reliable. They know E-Rate, they know how to work with cities to get permits and resolve implementation issues, and they work with quality subcontractors."

Network Throughput Increased 1000 Times

The decision to lease a fiber WAN from UPN has paid off for the Adams50 district in a myriad of ways. With network throughput now roughly one thousand times greater, Adams50 has been able to expand programs & services that were constrained by the previous networking environment. In addition, Mills and his team are implementing new systems that were never in the realm of possibility before.

Students are benefiting directly from the new capabilities. The district has enough network speed to extensively leverage Internet applications for instruction, utilizing a wide range of rich content for learning – including network-intensive streaming video. In addition, the district can now utilize Internet applications for tasks such as student assessment, planning, business processes, and data storage.

Limitless Bandwidth Facilitates New Possibilities, New Efficiencies

The district is also using the UPN fiber network to support new, centralized systems for HVAC monitoring and control, Voice over IP (VoIP), and security. Adams50 has installed security systems and cameras in each of the district's buildings, all of which are networked and centrally managed.

Another back-office benefit of the new network involves elimination of site-based servers. Previously, the Adams50 Technology Department supported as many as 50 distributed servers across all district buildings. With the UPN WAN, Mills' has been able to consolidate all site-based servers into one centrally-located virtual server farm, resulting in huge savings of time, labor, and capital. "There is less hardware to support," says Mills "and the reduction in complexity and overhead to maintain is huge. This would not have been possible on the old network."

Learning Enhanced with 21st-Century Content, Devices

The surge of available bandwidth through the UPN WAN enabled the placement of numerous wireless access points throughout all school facilities. This major upgrade provides comprehensive Wi-Fi access, capable of supporting thousands of access devices. Adams50 recently added nearly 500 tablet computers and 900 handheld devices for student use.

"We had very limited wireless before," Mills says. "Now, with full Wi-Fi in all buildings, we deliver 21st-century content on all kinds of devices. Our wireless traffic has increased ten-fold." The use of these new devices is having a major impact on student learning across regular education, special education, and gifted-and-talented programs.

UPN Provides 100% Reliability & Exceptional Service

Mills happily reports that the UPN fiber network has been 100% reliable since going live at the end of 2009. "We've had zero downtime of UPN services," he says.

UPN provides networks for school districts of all sizes and is known for providing exceptional customer service. That service begins with the company's knowledge of and proficiency in the E-Rate application process, simplifying it and helping districts maximize the potential benefits of the program. High quality service continues through design and construction of the network, and persists after the network goes live, as Mills is quick to mention. "We have a great partnership with UPN, with full disclosure and full trust," he says. "You want to be working with the best, and UPN really is."

As every IT director knows, implementing new technology on a large scale involves uncertainty. Unforeseen issues and side effects occur, vendor decisions may be questioned with the benefit of hindsight, and success can be elusive. Fortunately for Mills, this is not his reality.

“UPN is the best vendor I’ve worked with in 26 years of working in IT,” Mills says. “They do whatever is necessary to make your project successful.”

About Unite Private Networks

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For more information on E-Rate funding, visit the Universal Services Administration website at http://www.usac.org/sl/.

Lincoln Public Schools Case Study

Fiber Network Enables Operational Efficiency to Support Dramatic Growth

A large Nebraska school district relies on its fiber optic network to gracefully support increased operational and instructional demands brought on by dramatic growth. The longstanding partnership with Unite Private Networks, LLC assists the district in recovering from a devastating catastrophe that destroyed the primary data center.

About Lincoln Public Schools

As the second-largest district in the state of Nebraska, currently enrolling over 36,000 students, Lincoln Public Schools (LPS) is in a period of rapid growth. With an annual budget of approximately $320 million, LPS includes over 60 schools and employs 7,000 staff.

District Manages Dramatic Growth Period

Adding the equivalent of two average-sized elementary schools to the student population presents a range of operational and administrative challenges for a school district. At LPS, this scenario has repeated for three consecutive years, with 800 - 1,000 new students enrolling annually. The growth trend shows no sign of reversing.

“The challenges of growth are significant because you have to have more of just about everything,” says Kirk Langer, Director of Technology for Lincoln Public Schools. Technology is clearly no exception to this requirement. Fortunately for LPS, one critical category unaffected by the increased demand is network services. The LPS network easily handles all traffic and actually enables greater operational efficiency – an absolute necessity in this high-growth context.

Fiber Network Easily Keeps Pace with Ever-Increasing Demands

LPS utilizes a fiber optic wide area network (WAN) which provides the district network speeds of 1 Gigabit per second (also known as GigE). This network was custom designed and built for LPS by Unite Private Networks (UPN) in 2001. The network installation includes over 90 route-miles of fiber optic cable, combining both aerial and subterranean elements.

As a result of the robust network and the virtually unlimited bandwidth it provides, Langer happily reports that network constraints are never an issue. “There is no application that we want but are unable to run,” he says. “Voice over IP, video streaming, video conferencing -- we can do any and all of them. We can do all of them simultaneously.”

Limitless Bandwidth Enables Critical Operational Efficiencies

The impact on instruction is huge for teachers and students, while the many back-office efficiencies enabled by the fiber network are what keep the district afloat. “As we grow as a district, we need to deliver more services,” Langer says. “This type of technology allows us to do that without a proportional need for additional budgetary resources.”

The district’s centralized data facility is a prime example of an operational efficiency directly enabled by the network. Previous to adopting the fiber network, one or more servers were located in each of the schools, and bandwidth constraints prohibited a centralized approach. With more than 60 buildings spread throughout the district, the time required to maintain, troubleshoot, and upgrade the hardware alone was considerable. “Today, it’s all central,” Langer says. “It’s an enormous operational efficiency. I don’t know how we would cover it any other way.”

Extensive Use of Cloud-Based Services Provides Many Options

In the classroom, as well as administratively, the district is leveraging the limitless bandwidth of the fiber network to take advantage of cloud computing. Various vendors offer instructionally-based cloud services and material that enhance the educational experience for LPS students. The district utilizes cloud-based providers for its student assessment and student information systems. Staff and students make heavy use of Google Apps™, removing the need for Langer’s department to install and maintain these fundamental productivity applications on the district’s machines.

The ability to leverage cloud-based applications as well as Software as a Service (SAAS) solutions saves the district time and money, while increasing productivity and enhancing instruction. “With fiber, we can provide many, many options to our students & staff, at an extraordinarily low cost,” Langer says. “Without it, there would be no other way.”

Fixed Cost Contract a Key Advantage

The entirely predictable, fixed-cost nature of the fiber lease agreement is a key reason that, in 2010, LPS renewed its UPN contract for another twelve years. Prior to renewal, an extensive due diligence process underscored the key advantages of using UPN as the network service provider.

Bids from other providers approached the network as a managed service, increasing in cost with district growth. Langer and the school board found UPN's fixed-cost model much more compelling. "With UPN, if we add a school and need to extend our network, we have a modest capital cost associated with the construction and that's it," says Langer. "If only our schools or buses could expand their capacity in the same way that we're doing our fiber," he adds, "life would be a lot easier!"

Exceptional Service is Foundation for an Enduring Partnership

The district's decision to renew the UPN lease for another twelve years was also based on the company's track record of providing exceptional customer service. "This is not just a commodity we are buying," Langer emphasizes. "We are banking our operational & instructional services on this network. We need a responsive, accommodating, knowledgeable partner -- and that's what we have in UPN."

LPS can rely on UPN's responsiveness in the face of both planned and unplanned changes. As in any growing metropolitan area, infrastructure changes to roadways and intersections can have an impact on the fiber routing. The growth of the district implies regular extensions to the network as new schools are built. "UPN is dependable and responsive," Langer reports. "They exceed expectations."

UPN Responsiveness Aids Disaster Recovery

That dependability and responsiveness was never more critical than in May 2011, when a major fire destroyed the LPS district office building where the primary data center was housed. Within 48 hours of the catastrophe, Langer and UPN had resolved short-term and long-term recovery plans, including provisions for establishing a new data center and for routing fiber into new, temporary buildings.

"It was a critical situation, and UPN mobilized with us, putting us in a position to recover in a very quick and agile fashion," Langer says. As LPS continues its dramatic growth, the UPN fiber network facilitates an ongoing agility, leaving Langer's department well-equipped to face the challenges – both expected as well as unexpected – inherent in that growth.

About Unite Private Networks

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For more information on E-Rate funding, visit the Universal Services Administration website at http://www.usac.org/sl/.

Sample Building Entry Documentation

SF/ST #	ST4409
Project Name	Center School District
Site # of Total Sites	2 0f 7
Site Name	Boone Elementary
Address	8817 Wornall Rd
City /State	Kansas City MO
Zip Code	64132
Customer Name	John Doe
Customer Contact Number	816.555.5555
Bldg. Contact Name	Jim Doe
Bldg. Contact Number	816.555.5555
AE	
Conducted By:	Kevin Steele
DATE:	2/12/2013

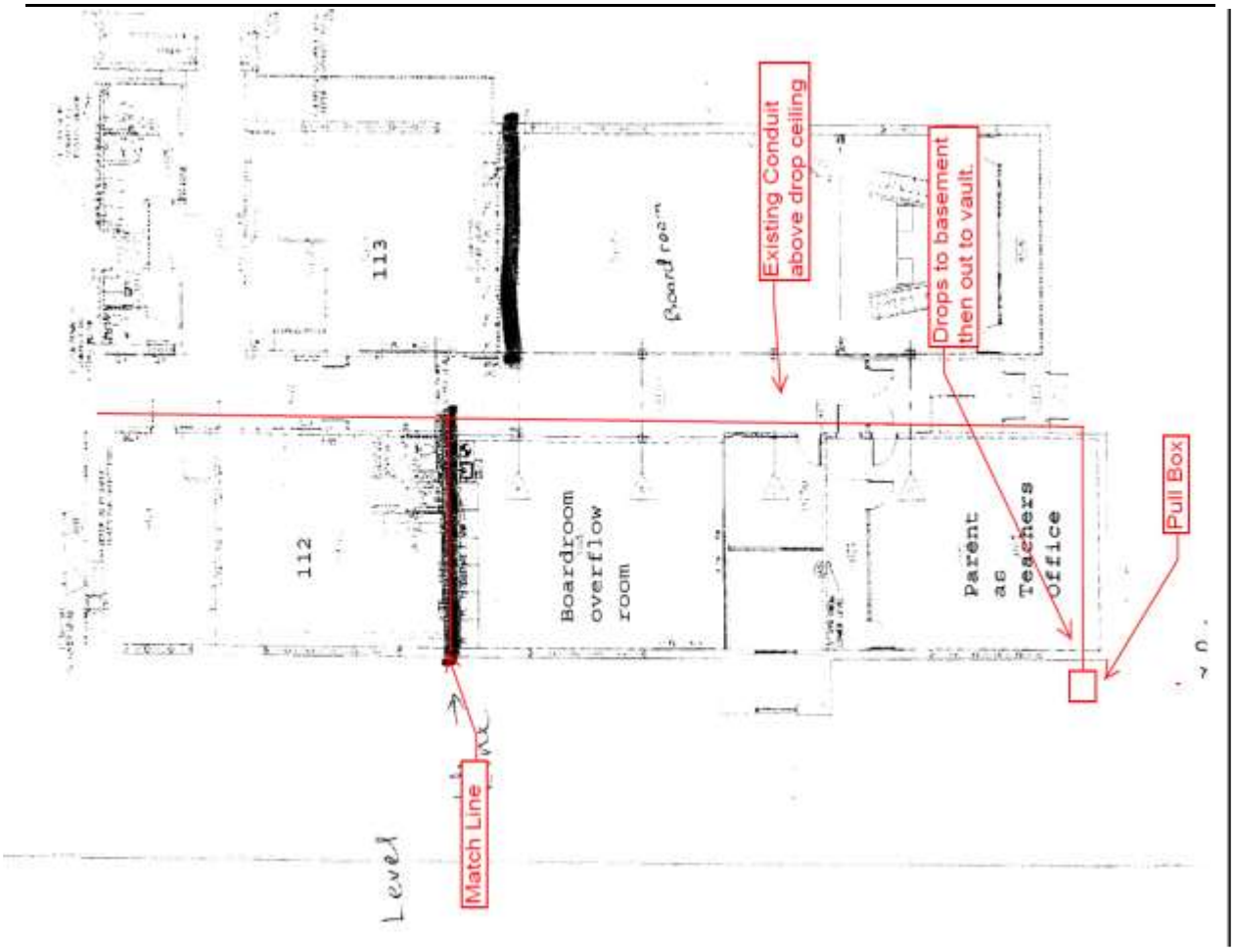
From Riser Pole on 89th Street bore south to existing pull box; enter in existing conduit to phone room in basement. Pull through existing 2" conduit up though office space then into hallway north down hallway to IT room located back of the stage.

Proposed Scope of Work

Actual Equipment Requirements and Construction Detail Determined by Final Design

SF/ST #	ST4409	DATE:	2/12/2013
Project Name	Center School District	Address	8817 Wornall Rd
Site # of Sites	2 0f 7	City / State	Kansas City MO
Site Name	Boone Elementary	Zip Code	64132

PROPOSED ROUTE FROM ROW INTO BUILDING EQUIPMENT LOCATION



SF/ST #	ST4409	**DATE:**	2/12/2013
Project Name	Center School District	**Address**	8817 Wornall Rd
Site # of Sites	2 0f 7	**City / State**	Kansas City MO
Site Name	Boone Elementary	**Zip Code**	64132

NOTES AND ADDITIONAL DETAIL

SF/ST #	ST4409	DATE:	2/12/2013
Project Name	Center School District	Address	8817 Wornall Rd
Site # of Sites	2 0f 7	City / State	Kansas City MO
Site Name	Boone Elementary	Zip Code	64132

NOTES AND ADDITIONAL DETAIL

As-Built Documentation

Within 30 days of completion of the project, the Project Coordinator will follow up with the Construction Manager and make sure the District receives the as-built documentation as discussed in the Project Management section. This will include the following information, provided to you in a binder format:

- Map of your network illustrating the routes between the buildings and your designated District hub
- OTDR results from your network tests
- The final engineered drawings of the building entry documentation similar to what is shown in the previous section taking into account any last minute changes
- Electronics specifications

Sample Invoice

Remit to:
Unite Private Networks
120 S Stewart Rd
Liberty, MO 64068
816-518-8322
customercare@upnllc.com

Bill to: Any School District
1234 S North St
Liberty, MO 64068

Customer # ANY100
Invoice # 9999
Invoice Date: 09/01/13
Due Date: 09/30/13
PO/BAN# 99999

Service Period 09/01/13-09/30/13

Charge Description	Location	Bandwith	Circuit ID #	Amount
WAN Lease	01234567890123456789012345678 9	1000 Mbps	0123456789	10,000.00
WAN Lease USAC Reimbursement				(5,400.00)
			Total Charges	**4,600.00**

Taxes/Fees

MO USF	17.00

Total Invoice **4,617.00**

MASTER SERVICE AGREEMENT

UPN's standard Master Service Agreement (MSA) is attached hereto. This document contains information relating to various aspects of our provision of services including without limitation: construction and delivery timeframes; the service commencement date and service delivery; the initial term of the agreement and extensions; early termination; invoicing; taxes; force majeure; service levels and interruption credits; assignments; limitation of liability and warranties; governing law; dispute resolution; and, access, space, power and entry rights requirements. Notwithstanding any provision of the RFP or its attachments, UPN does not intend the RFP (or any attachment thereto) or its response to the RFP to be a binding contract between the parties. UPN expects the final MSA to be negotiated and signed by the parties to reflect the entire agreement between the parties and to supersede any other verbal or written understandings and discussions, including the RFP (and all attachments thereto) and UPN's response.