

Request for Information No. I
RFP No. 22/23-01 IT Wide Area Network Project
September 7, 2022

Response to Proposers' Questions

1.1 Question: is it still bidding on 10/20/2022 at 12:00 PM PT?

Answer: All dates for the RFP can be viewed on the webpage at <https://iusd.org/wide-area-network-project> . The webpage will be updated if dates change. It is the Provider's responsibility to monitor the Purchasing website for changes, updates, revisions and/or uploaded documents.

1.2 Question: Is the pre-bid meeting scheduled took place?

Answer: The Pre-Proposal Conference & Site Walk took place as scheduled.

1.3 Question: Is there an addendum issued?

Answer: There are not currently any addendums issued. Any addendums will be posted to <https://iusd.org/wide-area-network-project> . It is the Provider's responsibility to monitor the Purchasing website for changes, updates, revisions and/or uploaded documents.

1.4 Question: Can I request a copy of the sign in sheet?

Answer: IUSD cannot publish the sign-in sheet, due to policies regarding protecting Provider information, however a list of attendees has been posted to <https://iusd.org/wide-area-network-project> .

1.5 Question: I do not see a 470 in Funds for Learning. Should we be expecting to see that soon?

Answer: The 470 was certified and posted on August 25, 2022, the day of the RFP posting and can be found at <https://data.usac.org/publicreports/Forms/Form470Rfp/Index>.

1.6 Question: Please let me know if a Zoom conversation is allowable under your rules.

Answer: Unfortunately our team cannot speak with individual vendors regarding the RFP for legal reasons. If you have specific questions please email them to MichelleBennett@iusd.org and your questions will be answered along with all other questions received and posted to <https://iusd.org/wide-area-network-project> on or before the scheduled date for Responses for Questions to be posted. We plan to post answers regularly so Providers can proceed with completing Proposals without undue delay. In an effort to ensure that all Providers are provided

with the same information and the RFP process is fair and impartial all answers to questions will be included as part of the RFI process.

1.7 Question: What is the estimated cost of this project?

Answer: IUSD will not know the estimated cost until after reviewing proposals.

1.8 Question: The RFP states that IUSD is looking for E-Rate funding. Is there a specific dollar amount that cannot be surpassed?

Answer: The District has not set a limit on the dollar amount for the project. All proposals will be evaluated based on the requirements stated in the RFP and the total cost of ownership of the proposed solution(s). The District will set aside adequate funds to cover the cost of the selected Proposal, including any costs not funded through E-Rate.

1.9 Question: Is the district open to alternative payment models including paying capital expenditures up-front or folding capital expenditures into the recurring monthly costs?

Answer: IUSD is open to various payment models, including paying capital expenditures up-front (upon completion of appropriate project milestones) and/or rolling expenditures into the monthly recurring costs of the project. The District will evaluate payment structures based on the total cost of ownership to the District (including any anticipated E-Rate discounts) and availability of District Funds aligned to the payment structure (i.e., available one-time vs. ongoing funds). Vendors may include one or more proposed payment structure(s) with their Proposal. To submit alternative options, Providers may duplicate the Pricing Form and complete one form for each pricing structure alternative. **Please be sure to submit separate Pricing Forms for all proposed Solutions/payment options** and provide a narrative description to clarify the different Solutions/payment options when responding to criteria. This will be helpful when the District project team reviews proposal costs and payment structures with our Fiscal Services team.

1.10 Question: The Form 470 doesn't state the option to pay a capital expense over time (such as over four years as opposed to one lump sum). Does IUSD prefer to pay the invoice up front?

Form 470 Programs
[Installation Payment Plan](#)
Range of Years: 4 - 4 Years
Payment Type: Monthly

Answer: Please see page 2 of the Form 470:

1.11 Question: The Form 470 states that IUSD is using multiple 10 Gbps cards to obtain desired service. If we propose a Solution that is cost-attractive would the District be interested in going straight 100 Gbps?

Answer: Yes. When completing pricing forms, please enter prices for all Gbps sections. The pricing for 100 Gbps can be the same cost as other Gbps on the Pricing Form if the Provider desires. The District will weigh all options when scoring.

1.12 Question: Can one Provider propose multiple Solutions (such as lit fiber, dark fiber, fixed wireless, and/or an alternative solution)?

Answer: Yes, a single Provider can propose a lit Solution, a dark fiber Solution, fixed wireless, and/or another Solution. A single Proposal with multiple options is acceptable. If proposing multiple Solutions **please be specific about each proposed Solution when responding to criteria (ie: Be clear about the resiliency, redundancy, and equipment for each proposed Solution).**

1.13 Question: Is there a date RFIs will be published and available to Providers?

Answer: All RFI responses will be posted by October 13th. However, the District responds to questions as they come in and will post answers to the website as soon as possible.

1.14 Question: Can we ask more questions during the site walk?

Answer: Yes. Additional questions were permitted throughout the site walk. The District's staff has transcribed questions and answers from the site walk and included them in this RFI, along with additional information or clarifications.

1.15 Question: Are site walks mandatory to submit a proposal?

Answer: No. Site walks are designed to allow Providers to view current District set-ups, and are not mandatory to submit a proposal.

1.16 Question: Is IUSD currently working with a managed service provider or consultant on this RFP?

Answer: IUSD worked with a consultant to develop the technical requirements of the RFP, including the proposed network topology. The consultants will also assist with the evaluation of the proposals. The consultant is providing professional services to support IUSD staff and is not anticipated to provide ongoing services related to this RFP. IUSD is not working with a managed service provider at this time.

1.17 Question: Who is the networking consultant working with IUSD?

Answer: Development Group, Inc. (DGI).

1.18 Question: Are there specific pain points IUSD is looking to resolve with this Solution?

Answer: IUSD is primarily seeking to increase bandwidth/throughput and the resiliency of the District network through this RFP.

1.19 Question: Does the District currently experience bandwidth constraints?

Answer: The District does not currently have issues related to bandwidth constraints, however we foresee that it would be an issue in the future if the District did not increase bandwidth. Increased bandwidth has been planned for the past ten years to support IUSD's continuous growth.

1.20 Question: Is the desire to move software to cloud providers (thus requiring more bandwidth) in the short term or long term?

Answer: IUSD utilizes many cloud-hosted solutions, including productivity tools (Office 365, G-Suite), educational software (learning management system, various curriculum and intervention platforms) and operational tools (data warehouse and analytics, HR and business solutions). The District anticipates moving additional services to cloud-service providers over the next 12-18 months. These projects include backup solutions and additional user document storage.

1.21 Question: Is there a specific cloud provider you prefer, such as AWS?

Answer: IUSD does not have a preferred cloud services provider at this time. Many of IUSD's current cloud partnerships are determined by the third-party software partner (e.g., Canvas Learning Management Solution leverages AWS). Our team has primarily used Microsoft Azure in moving traditionally on-premise services to the cloud. All cloud service providers used by the District must adhere to strict privacy requirements consistent with Federal and State regulations.

1.22 Question: How does traffic run in the District's current environment (ex 1: between the school and the district ex 2: between schools: School to School)?

Answer: Most of the current traffic on the District's network flows from the school site, to the NOC/Data Center, to OCDE and out to the Internet (as most educational and productivity platforms are hosted). Substantially less traffic moves from school site to school site.

1.23 Question: Would IUSD be interested in having a Provider include a direct connect or express route to Microsoft Azure or Google as part of the solution?

Answer: IUSD is not currently interested in a direct connect or express route to Microsoft Azure or Google. The District does not have a single cloud provider and is not (at this time) interested in introducing additional complexity as part of this project.

1.24 Question: Beyond the private network IUSD is looking to build, is there also interest in building direct internet access?

Answer: IUSD is not interested in direct internet access at this time. OCDE is the District's current internet service provider (ISP) and does not charge for these services. OCDE provides

significant additional services to IUSD, including DDOS scrubbing and other network monitoring. Changing the District's ISP would require a substantial network redesign and is not a priority for IUSD at this time.

Topology

1.25 Question: The RFP states that a logical ring topology is desired, what does logical ring mean? Is a logical ring different than a physical ring?

Answer: The District desires a ring based network topology. The logical ring topology provided by the bidder should conform to the specifications outlined in the RFP. The logical ring topology may differ from the underlying physical topology used to provide the service. As such the RFP requests that the Provider provide information regarding the physical routing of network facilities that will be used to deliver the logical ring topology.

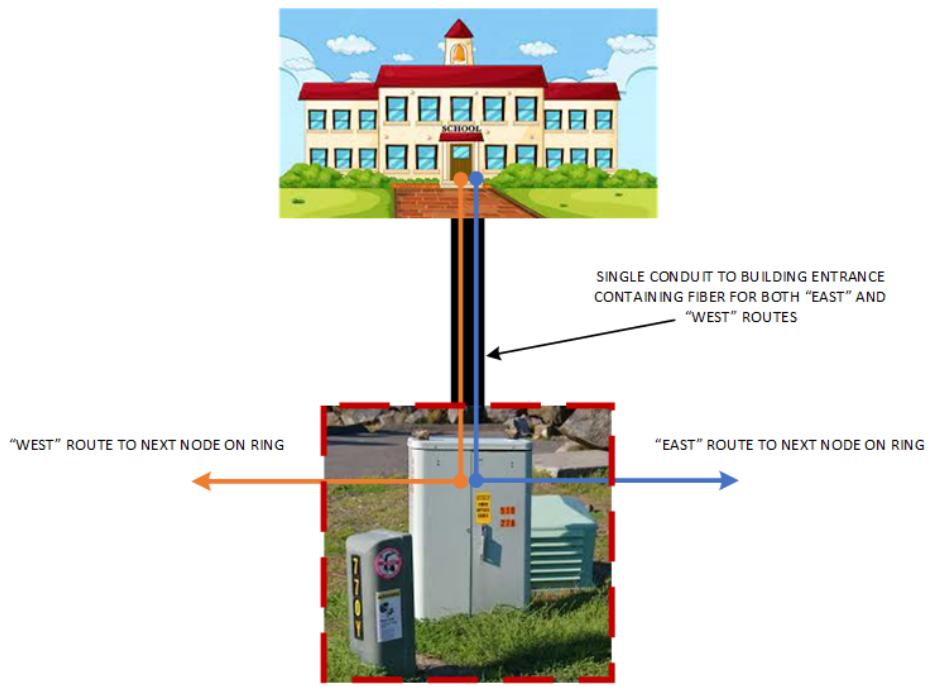
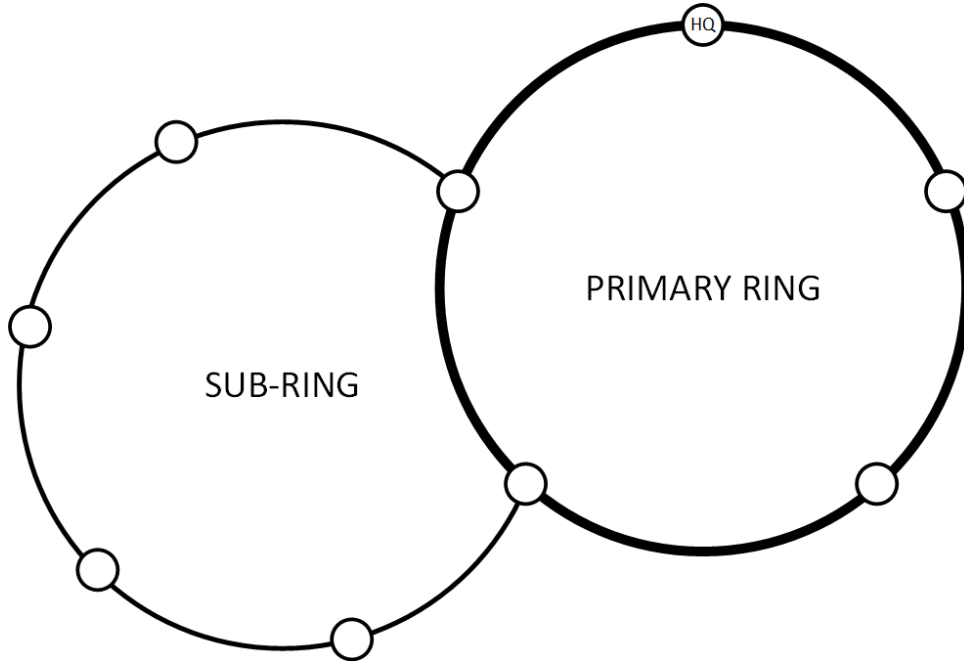
1.26 Questions: To what extent is a diverse physical path required to meet IUSD's requirement of 99.99% uptime? What are the District's expectations related to resiliency and (a) rerouting occurring at equipment locations; (b) diverse path once the fiber leaves the building?

Answer: (a) The District does not require "east/west" fiber to use diverse building entrances. Fiber entering a building may use the same conduit and/or fiber cable as needed.

(b) The District prefers geographic diversity in fiber routes between nodes on the ring where feasible. Preferably, geographic diversity should be available on the ring beginning at the first splice point after leaving a facility. Ideally the physical fiber routes should be organized in such a way that a single fiber cable cut will not interrupt service to more than a single node on the ring, and depending on the location of the cut and the fiber route, a cut in the fiber may not result in service interruption to any nodes on the ring. With appreciation for the many variables that come into play when deploying fiber, the District will evaluate recommendations made by each Provider that balance the design goals outlined in the RFP, available fiber facilities, construction/permitting realities and installation costs.

(c) In the event of a failure of the underlying Provider network (whether lit service or dark fiber) District equipment will automatically reroute traffic around the failure.

Following are conceptual drawing(s) of the desired network topology.



1.27 Question: Is the District open to a direct wireless alternative for the secondary connection at sites should the cost of construction/fiber be prohibitive?

Answer: Yes, the District would consider a direct wireless alternative for the secondary connection. The District recommends Providers include alternative cost proposals (multiple Pricing Forms) when offering cost-saving alternative topologies.

1.28 Question: Is the District flexible regarding substitutions of different locations for the primary ring if it lowers the cost?

Answer: Section 2.15 in the RFP states

“...Providers may submit alternative topologies and/or substitute equipment or services in response to this RFP (Substitute Solution). Providers proposing a Substitute Solution must clearly describe how the proposed Services differ from the requested topology and/or other specifications within the RFP. Providers must include descriptive technical literature fully describing the Substitute Solution and address how the alternative solution meets the District’s needs related to service reliability, scalability, and resiliency.

Determination of equivalency and suitability of a proposed Substitute Solution rests in the sole discretion of the District. The District is not responsible for locating or securing any information which is not included in such substantiating data. The burden of proof as to the quality or suitability of proposed Substitute Solution shall be borne by the Provider. The District shall be the sole judge as to the quality and suitability of proposed Substitute Solution, and decisions of the District shall be final and conclusive.

It is understood and agreed to by the Providers that the District reserves the right to reject any such proposed Substitute Solution. If the Substitute Solution offered by the Provider is not acceptable, in the sole opinion of the District, then the Provider expressly understands and agrees that the Provider’s proposal may be rejected as not conforming to the requirements of the RFP.”

The main District consideration regarding topology is the pathway to the internet. No District location/address is more valuable than others. The high schools and administrative buildings selected for the Core Ring in the RFP were selected because the District currently has 10Gbps at those locations and they are geographically diverse. If another pathway is desirable for Providers IUSD is open to reviewing the proposed topology, including alternative Core Ring sites.

Equipment

1.29 Question: Does the District need racks and other equipment as part of this RFP, or does this include only the Wide Area Network?

Answer: All MDF rooms will have at least 2U of available rackspace on a 19” rack for Provider’s equipment. Provider’s should specify any additional conditions or assumptions related to room-ready conditions in response to requirement 3.11 in the RFP:

“3.11 Describe any assumptions made impacting the cost proposal, and any limitations (e.g., professional service hours, room-ready conditions, acceptable SLAs) that apply to the listed costs.”

1.30 Question: Does the District already have necessary equipment ready to install?

Answer: IUSD already has necessary equipment, or has ordered it and will have it by the time the WAN is implemented.

1.31 Question: Is there a preferred handoff from the Provider to IUSD (ie: fiber or LC connections)?

Answer: Criteria No. 2.1.6 in the RFP asks Providers to “Confirm that all fiber terminations are “LC” terminations at the patch panel, District handoff or DEMARC.”.

1.32 Question: Could the District clarify what equipment is required of the provider for the Lit and Dark Fiber Options?

Answer: Providers should include all equipment necessary to deliver the Solution as defined by the RFP. In summary:

- Lit Fiber: rack-mounted equipment required to deliver services for the site. Equipment may include router(s), switch(es), ADMs, etc. The Provider will designate the specific port(s) for handoff to the District.
- Dark Fiber: a rack-mounted LIU with fiber terminations appropriate for the site or other equipment as may be required.

1.33 Question: Who is the District’s current Wide Area Network Services provider?

Answer: AT&T is the District’s current WAN provider. Please see section 1.4 of the RFP for additional information related to IUSD’s current Wide Area Network.

1.34 Question: Is the District interested in any additional local area network/Category 6 cabling at this time?

Answer: IUSD completed a comprehensive Local Area Network Upgrade Project approximately five years ago. At this time, the District does not have additional needs for interior/LAN cabling as part of this project.

Dark Fiber

1.35 Question: Dark Fiber Solutions are very different from Lit Fiber Solutions. Dark fiber is just the infrastructure, not equipment, so a Provider would make sure the distance is suitable to

shoot the light for locations in the network. Dark Fiber does not include switches or routers or anything, but does include maintenance if there is an event (ie: fiber is cut), would need to be managed by IUSD and if there is an event (downtime) would need to be reported to Providers. Does the District plan to manage the actual network, with the Provider only providing dark fiber? To what extent is the Provider expected to service a dark fiber Solution?

Answer: The District would plan to manage the Dark Fiber network, including any equipment needed at the Data Center and District locations. For the Dark Fiber solutions, the District would expect the Provider to include a maintenance plan for repairs/replacement of fiber related to physical damage.

1.36 Question: Would the District be interested in a managed private network/managed dark fiber?

Answer: The District is open to considering a Managed Private Network solution as well as the lit fiber and dark fiber options specified in the RFP. Providers may submit multiple Pricing Forms and/or alternative Proposals to represent different levels of service offerings (e.g., dark fiber v Managed Private Network).

Construction/Physical Sites

1.37 Question: Can the District provide additional information related to current path of fiber to the schools, including the points of connection at the street?

Answer: Please view maps for each site in this [GOOGLE FOLDER](#).

1.38 Question: Where the MPOE and MDF are in different locations, is the Provider responsible for extending the services/connection to the MDF?

Answer: Yes, Providers are responsible for extending the services to the MDF room where the MDF and MPOE are in different locations. Criteria no. 2.1.7 in the RFP states: "District circuit handoff location will be at MDF room designated by IUSD." Providers are responsible for bringing fiber to the handoff, which must be in the MDF/server room.

1.39 Question: Please provide the number of sites (and which sites) where the MPoE and MDF are in different rooms.

Answer: The MPoE and MDF are in different rooms in twenty one older sites.

Sites with separate MPoE and MDF:

Creskide Education Center, Northwood High, University High, College Park Elementary, Culverdale Elementary, Eastshore Elementary, Greentree Elementary, Irvine Virtual Academy Elementary, Meadow Park Elementary, Northwood Elementary, Santiago Hills Elementary, Stone

Creek Elementary, Turtle Rock Elementary, University Park Elementary, Lakeside Middle, Rancho San Joaquin Middle, Sierra Vista Middle, South Lake Middle, Venado Middle, Early Childhood Learning Center, and Legacy Creekside & Irvine Adult Transition Program. All other sites have a combined MPoE and MDF, similar to the set up at the Oak Creek Elementary site. Please see the table in the response to Question 1.42 for a full list of sites including this information.

1.40 Question: Does the District require the Provider to trench to bring in new conduit/pathway into the school for this project?

Answer: Provider's may use the existing pathway at sites where the existing pathway has sufficient space to accommodate the new fiber. If there is not sufficient space in the existing pathway, Providers are expected to install new pathway to provide the Services.

1.41 Question: Does IUSD want a single point of entry into buildings, or are diverse second entries desired?

Answer: The District is not requiring a diverse path at each site for the two connections called for in the proposed ring topology. Providers may use a single point of entry at each site, with the exception of the connection to OCDE (the District's ISP). Providers are expected to construct/utilize a diverse path for the connection to OCDE. The District prefers geographic diversity in fiber routes between nodes on the ring where feasible. Preferably, geographic diversity should be available on the ring beginning at the first splice point after leaving a facility. Ideally the physical fiber routes should be organized in such a way that a single fiber cable cut will not interrupt service to more than a single node on the ring, and depending on the location of the cut and the fiber route, a cut in the fiber may not result in service interruption to any nodes on the ring. With appreciation for the many variables that come into play when deploying fiber, the District will evaluate recommendations made by each Provider that balance the design goals outlined in the RFP, available fiber facilities, construction/permitting realities and installation costs.

1.42 Question: Please provide locations where conduit may be full (ie: Provider can't use and needs to bring in new conduit where existing conduit is). Providers would prefer to avoid trenching and avoid extra expenditures.

Answer: Providers will be expected to bring additional conduit when existing conduit cannot accommodate four (4) additional strands of fiber as called for in the project. Generally, Providers may assume that the sites listed below as Conduit Status "Available" have sufficient space available to pull additional strands of fiber. For all other sites, pictures have been made available in this [Google Folder](#) to help Providers assess any necessary construction. Below is a list of District sites with relevant information:

Site Name	Address	Year Built	MDF/MPoE in Same Location	Conduit Status*
Creekside Education Center	3387 Barranca Parkway, Irvine, CA 92606	2007	No	Available
Irvine High	4321 Walnut Avenue, Irvine, CA 92604	1976	Yes	See picture
Northwood High	4515 Portola Parkway, Irvine, CA 92620	1999	No	Available
Portola High	1001 Cadence, Irvine, CA 92618	2016	Yes	Available
University High	4771 Campus Drive, Irvine, CA 92612	1971	No	See picture
Woodbridge High	2 Meadowbrook, Irvine, CA 92604	1981	Yes	See picture
District Office	5050 Barranca Parkway, Irvine, CA 92604	1984	Yes	See picture
Network Operations Center (NOC)/Maintenance & Operations	100 Nightmist, Irvine, CA 92618	2014	Yes	Available
Alderwood Elementary (K-6)	2005 Knollcrest, Irvine, CA 92603	2005	Yes	Available
Bonita Canyon Elementary (K-6)	1 Sundance Drive, Irvine, CA 92603	1977	Yes	See picture
Brywood Elementary (K-6)	1 Westwood, Irvine, CA 92620	1988	Yes	See picture
Canyon View Elementary (K-6)	12025 Yale Court, Irvine, CA 92620	2000	Yes	Available
College Park Elementary (K-6)	3700 Chaparral Avenue, Irvine, CA 92606	1974	No	See picture
Culverdale Elementary	2 Paseo Westpark, Irvine,	1976	No	See picture

(K-6)	CA 92614			
Cypress Village Elementary (K-6)	355 Rush Lily, Irvine, CA 92618	2014	Yes	Available
Deerfield Elementary (K-6)	2 Deerfield Avenue, Irvine, CA 92604	1977	Yes	See picture
Eastshore Elementary (K-6)	155 Eastshore, Irvine, CA 92604	1980	No	See picture
Eastwood Elementary (K-6)	99 Meander, Irvine, CA 92620	2017	Yes	Available
Greentree Elementary (K-6)	4200 Manzanita Street, Irvine, CA 92604	1976	No	See picture
Irvine Virtual Academy Elementary (K-6)	1 Liberty, Irvine, CA 92620	2021	No	See picture
Loma Ridge Elementary (K-6)	500 Tomato Springs, Irvine, CA 92618	2019	Yes	Available
Meadow Park Elementary (K-6)	50 Blue Lake South, Irvine, CA 92614	1988	No	See picture
Northwood Elementary (K-6)	28 Carson, Irvine, CA 92620	1981	No	See picture
Oak Creek Elementary (K-6)	1 Dovecreek, Irvine, CA 92618	2002	Yes	Available
Portola Springs Elementary (K-6)	12100 Portola Springs, Irvine, CA 92618	2015	Yes	Available
Santiago Hills Elementary (K-6)	29 Christamon West, Irvine, CA 92620	1979	No	See picture
Springbrook Elementary (K-6)	655 Springbrook North, Irvine, CA 92614	1989	Yes	See picture
Stone Creek Elementary (K-6)	2 Stone Creek South, Irvine, CA 92604	1987	No	See picture
Stonegate Elementary (K-6)	100 Honors, Irvine, CA 92620	2009	Yes	Available
Turtle Rock	5151 Amalfi Drive, Irvine,	1970	No	See picture

Elementary (K-6)	CA 92603			
University Park Elementary (K-6)	4572 Sandburg Way, Irvine. CA 92612	1967	No	See picture
Westpark Elementary (K-6)	25 San Carlo, Irvine, CA 92614	1989	Yes	See picture
Woodbury Elementary (K-6)	125 Great Lawn, Irvine, CA 92620	2007	Yes	Available
Beacon Park School (K-8)	200 Cultivate, Irvine, CA 92618	2016	Yes	Available
Cadence Park School (K-8)	750 Benchmark, Irvine, CA 92618	2018	Yes	Available
Plaza Vista School (K-8)	670 Paseo Westpark, Irvine, CA 92606	1999	Yes	Available
Solis Park (K-8)	101 Abacus, Irvine, CA 92618	2022	Yes	Available
Vista Verde School (K-8)	6 Federation Way, CA 92603	2006	Yes	Available
Jeffrey Trail Middle	155 Visions, Irvine, CA 92620	2013	Yes	Available
Lakeside Middle	3 Lemongrass, Irvine, CA 92604	1979	No	See picture
Rancho San Joaquin Middle	4861 Michelson Drive, Irvine, CA 92612	1972	No	See picture
Sierra Vista Middle	2 Liberty, Irvine, CA 92620	1984	Yes	See picture
South Lake Middle	655 West Yale Loop, Irvine, CA 92614	1994	No	See picture
Venado Middle	4 Deerfield Avenue, Irvine, CA 92604	1976	No	See picture
Early Childhood Learning Center	1 Smoketree, Irvine, CA 92604	1975	No	See picture

Legacy Creekside & Irvine Adult Transition Program	311 West Yale Loop, Irvine, CA 92604	1981	No	See picture
El Camino Real (Administrative Facility)	4782 Karen Ann Lane, Irvine, CA 92604	1973	Yes	See picture

*Conduit Status represents the best estimate of the space available in the existing pathway to accommodate four (4) additional strands of fiber as called for in the project. This information is provided so that Providers' may make reasonable estimates of construction costs related to the project. Providers are responsible for verifying conditions at sites and the information provided should not be construed as a guarantee of site conditions or required construction.

1.43 Question: For locations that are challenging due to high construction cost, would IUSD accept a fixed wireless backup with up to 20Gbps, pointing at the next site (assuming the primary ring would be cable, and the secondary ring would be wireless)?

Answer: If fixed wireless could provide the needed bandwidth Providers may propose those Solutions. Providers offering alternative Solutions must be sure to include details in all responses in Proposal, including but not limited to required equipment (including if Provider provides it or if District would need to supply it and any associated cost). Proposing both options would be desirable and the District will score all options to determine the best fit.

1.44 Question: A fixed wireless solution would require that gear is allowed on the roof of the location. Is this allowed?

Answer: Yes, generally speaking that is fine. Providers will need to Include all costs, including any cost necessary for penetration of roof and back to the room that they would need.

SITE WALK PHOTOS

Network Operations Center (NOC)



Culverdale - Older site with separate MDF and MPOE



Oak Creek: newer location with combined MDF and MPoE



Rancho San Joaquin



University High School

