Information Technology
Network Redesign and Hardware Upgrade

REQUEST FOR INFORMATION (RFI)
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I. INTRODUCTION AND BACKGROUND

First 5 LA — Giving Kids the Best Start

In 1998, California voters passed Proposition 10, which levied a 50-cent per pack tax on all tobacco products. The resulting tax revenues were earmarked for the creation of a comprehensive system of information and services to advance early childhood development and school readiness within each county in California. In Los Angeles County, the First 5 LA Commission was formed as a public entity to develop and oversee various early childhood initiatives and to manage the funding from Proposition 10.

The First 5 LA FY 2020-2028 Strategic Plan

In November 2019, First 5 LA’s Board of Commissioners approved the 2020-28 Strategic Plan that boldly articulates the goal of the organization’s “North Star” – that by 2028, all children in Los Angeles County will enter kindergarten ready to succeed in school and life. The new plan will help guide and accelerate all First 5 LA does to make a tangible difference in the lives of children today and tomorrow.

II. INFORMATION REQUESTED

First 5 LA Information Technology Department is requesting information from manufacturers and vendors to provide a new network design. The new design will replace the existing network switching along with the vertical cables between the switches on each floor.

Please refer to Appendix A. The first page in Appendix A is the current network with switch locations and cable connections across the three data centers. Page 2 and Page 3 of Appendix A are samples of possible physical network architecture solutions. These samples are examples of the type of architecture that may work for First 5 LA. Manufacturers and vendors may expand on these samples or recommend other solutions entirely.

Please provide the following information:

1. A new network design and a list of products that best meet your suggested design based on all the information in Appendix A and Appendix B.
2. Specifications and feature information for each design and models listed in step 1.
3. One-time “ballpark” or MSRP (Manufacturer Suggested Retail Price) budget information.
4. Any relevant features that require recurring or subscription costs.
5. A list of installers or any sub-contractors you prefer to implement the design or equipment proposed.
6. Include a recommendation on the upgrade/replacement of the CISCO UCS hardware so that it is scalable to include future telephony upgrades. Please include a list of recommended hardware products, specifications, features, and estimated recurring or subscription costs (for budget planning purposes). Please include this information as a separate heading / section from the rest of the RFI.
Network Architecture Information

We are requesting a design proposal for the network architecture which includes the following:

- Contain redundant connections that provide 10G or better between all switching.
- Provide continuous operations in the event of multiple failures. Please include information on fail-safes, load sharing, and power consumption.
- Include the capability to upgrade from 10G to 40G or higher with no redesign and reasonable purchasing and labor requirements.
- Provide Gigabit ethernet to the desktop. The current “horizontal” cables on each floor from the patch panel to device is Cat 6.
- Provide a combination of non-POE, POE, or better to support VoIP and Wi-Fi as well as allow the addition of smart lighting, integrated access controls, video over IP with automation controllers such as Crestron, Extron, Savant, Lenel, etc.
- Maximize efficiencies while reducing the amount of hardware, power, and knowledge required to operate, modify, and maintain the network overall.
- Fit within the current racks.
- Provide a robust, reliable network for First 5 LA for the next 7-10 years.

Interoperability with Current Systems

- The current wireless network is Cisco Meraki access points connected to Cisco Meraki switches. Please provide information regarding any known issues with your products and their interoperability with Cisco Meraki products.
- First 5 LA’s current VoIP system is Cisco Call Manager. Please provide information regarding any known issues with your products and their interoperability with Cisco VOIP systems and phones.

Budget/Pricing:

Please provide an estimate or MSRP (for project budget approximation) pricing for the network redesign and hardware upgrade, as indicated in the table below. Please provide estimated pricing broken down by materials and labor costs.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Platform / Part Name</th>
<th>Description</th>
<th>Unit Price</th>
<th>Total Cost</th>
<th>Recurring or Subsequent Costs</th>
</tr>
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III. TIMELINE FOR RFI

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>DATE</th>
</tr>
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<tbody>
<tr>
<td>RFI Released</td>
<td>November 9, 2020</td>
</tr>
<tr>
<td>Site Visit (Non-Mandatory; by request)</td>
<td>November 17, 2020</td>
</tr>
<tr>
<td>Deadline for Submission of Questions and Requests for Clarification by</td>
<td>November 30, 2020</td>
</tr>
<tr>
<td>Responses to Questions and Requests for Clarification published (if required)</td>
<td>December 2, 2020</td>
</tr>
<tr>
<td>Deadline for Submission of Responses by</td>
<td>December 7, 2020</td>
</tr>
</tbody>
</table>

Non-Mandatory Site Visits
Site visit requests are available on **November 17, 2020**, for the following time slots on a first-come, first serve basis:

- 9:00 – 10:00 AM
- 10:00 – 11:00 AM
- 11:00 – 12:00 AM
- 1:00 – 2:00 PM
- 2:00 – 3:00 PM

To request a time-slot, please e-mail Terrie Johnson at tjohnson@Firsts5LA.org no later than noon (12 PM) on November 13, 2020.

Deadline
The deadline for submitting information for the Network Redesign and Hardware Upgrade RFI is **December 7, 2020 by 4:00 PM (PST)**.

Submission Information
Responses should be delivered as PDF files via e-mail to Terrie Johnson, tjohnson@Firsts5LA.org. E-mail submissions should not exceed 20MB. First 5 LA will accept Network designs/diagrams in Visio and Omnigraffle formats. First 5 LA prefers network diagrams that can be easily legible on 11”x17” Ledger/Tabloid paper. Please indicate in your proposals if diagrams require a larger print format.

Questions and requests for additional information must be submitted in writing to:

Terrie Johnson, Contract Operations and Compliance Officer
E-mail: tjohnson@First 5 LA.org

¹ Note: Dates are subject to change at First 5 LA’s sole discretion.
All questions and requests for additional information regarding this RFI must be received in writing by First 5 LA via e-mail before **5 p.m. PT on November 30, 2020**. First 5 LA reserves the sole right to determine the timing and content of the responses to all questions and requests for additional information. First 5 LA may respond to individual inquiries and then post replies to all questions by the posting date on our website.

**IV. NOTICES**

Participation in this Request for Information (RFI) is optional and not required in order to respond to any subsequent procurement First 5 LA may issue. The RFI is not a competitive solicitation, nor does it imply any obligation on First 5 LA’s part to enter into any contract or to make any purchase. Except as otherwise set forth herein, neither First 5 LA nor the interested party responding has any obligation under the RFI. First 5 LA, through its project Design-Builder, anticipates issuing Requests For Proposal (RFP) using information gathered from responses to this RFI. Interested parties are encouraged to submit responses to all or part of the RFI, even if they may not intend or be able to respond to any future requests. Respondents are specifically requested not to submit any type of price proposal other than high-level (ballpark) pricing so that First 5 LA may develop a budget to cover the cost of one or more proposals.

Upon review of documents submitted, First 5 LA may contact respondent for additional information.

There is no expressed or implied responsibility or obligation on the part of First 5 LA to reimburse respondents for any expenses incurred in preparing or submitting their responses.

All documents submitted in response to the RFI will become a matter of public record and shall be thereupon considered public records. If a respondent believes that any portion of its response is exempt from public disclosure, such portion shall be clearly marked “Trade Secret,” “Confidential,” or “Proprietary.” By submitting information with portions marked in this manner, the respondent represents that it has a good faith belief that such material is exempt from disclosure under the California Public Records Act, California Government Code §§ 6250, et. seq.

**V. APPENDIX**

- Appendix A – Network Diagrams (Information Only)
- Appendix B – Additional Project Information (Information Only)
APPENDIX A

First 5 LA
Current Network Diagram

Replace all 2900, 3700, and 5500 series equipment
Keep and redeploy all Meraki equipment

2020 Network Hierarchy by David Birdsall
First 5 LA
Proposed Network Design

Option 1
Spine and Leaf
First 5 LA
Proposed Network Design

Option 2
Layered Aggregation Stacks

Layered Aggregation Stacks

First Floor
Top of Rack 48p
Stack 48p
Stack 48p
MS220 48p

Second Floor
Aggregate
Top of Rack 48p
Stack 48p
Stack 48p
MS220 48p

Third Floor
Aggregate
Top of Rack 48p
Stack 48p
Stack 48p
MS220 48p

Network Hierarchy by David Birdsall
APPENDIX B – ADDITIONAL PROJECT INFORMATION

Current Environment

The agency has one primary location at 750 N. Alameda Street, Los Angeles, CA 90012. The building has three stories.

First 5 LA has approximately 130-150 staff. Most of First 5 LA’s staff are concentrated on the second and third floors of the building. All floors have the network capacity to house all staff on the floor at any given time through a combination of wired and wireless connections. The first floor consists of multiple conference and meeting rooms and one large Multi-purpose Room (MPR), which also serves as our Board and Commission Meeting room. The MPR also houses all staff members at least 12 times a year. The second and third floors consist of a combination of offices and cubicles, with approximately 75 employees per floor.

Due to the current COVID-19 pandemic all First 5 LA staff are teleworking at this time. A small number of essential staff come in only when necessary.

Data Network

In August 2020, First 5 LA upgraded their fiber-optic internet service for data from 150 MBPS to 1 GBPS. The VOIP phone system has a separate 150Mbps fiber optic circuit. This upgrade supports the organization’s move towards the “Mobile-First” and “Cloud-First” initiative. 80% of all our applications are cloud-based, and all staff have been issued mobile devices that enable them to work from home during this pandemic.

First 5 LA recently implemented a new Wi-Fi network, with 12 Meraki wireless access points on 4 Meraki 48 port POE switches. There are no plans at this time to replace this system as they have been recently purchased. The Meraki system should be used as part of the proposed solution.

First 5 LA is in the process of remodeling the building at the above location. The current plan is to remodel in two phases. The IT Hardware Network Upgrade project will be incorporated into Phase 1 of the building remodel plan, along with other construction initiatives such as an upgrade to our HVAC, Solar panels installation, and low voltage upgrades.

First 5 LA’s current network environment is oversized in ratio to our staffing needs. The current design has twenty-five (25) Cisco switches with 48 ports each for a total of 1,200 ports. First 5 LA currently depends on less than 500 ports spread over four networks:

1. Data Management (switching for computers & printers)
2. Data Storage (Servers and SAN/NAS for VMWare & Veeam)
3. Voice Over Internet Protocol (VOIP) phone switches
4. Meraki Wi-Fi and Meraki switches

Each network runs on its own switches in their own node. Each node communicates through the central core switch. At the core switch, the Data, Data Storage, and the Wi-Fi nodes converge their communication, but the Phone network remains separate. This design leaves a lot of ports unused. This also wastes power and cooling for those unused ports.

Information Technology – Network Redesign and Hardware Upgrade
First 5 LA uses standard 19 inch wide by 42u-44u tall racks in the second and third-floor datacenters. The first floor has a standard 19 inch wide by 24u tall rack. All of the racks are less than 75% full. Replacing racks is not part of this RFI.

First 5 LA’s IT Department is requesting information from various manufacturers/vendors on their recommendations on network designs and equipment, which make this setup efficient in management, power, and knowledge required by replacing aging or obsolete hardware, eliminating the power wasted to provide unused ports, eliminating the cooling of unnecessary power supplies, and eliminating unnecessary software and support migration.

**Telephony**

The following is information regarding First 5 LA telephony environment. First 5 LA’s current VoIP system provider is Cisco. The phone system uses Call Manager and Unity to handle calls and voicemail. The agency has over 170 phones. The phones are primarily used to provide voice calls and voicemail. The UCS hardware is nearing EOL (End of Life) and EOS (End of support). Please see the table below. First 5 LA wants to ensure that the proposed new redesign can accommodate the replacement/upgrade of these CISCO UCS hardware in future implementation. At this time, we do not anticipate replacing the UCS hardware along with the network hardware but are looking at options. Please include any information provided as a separate heading/section.

**Relevant device inventory**

The table below lists the network devices subject for replacement:

*Not subject to replacement, however, they will need to be integrated into the new network hardware design.*

<table>
<thead>
<tr>
<th>Device Name</th>
<th>Type</th>
<th>Location</th>
<th>Platform / Part Name</th>
<th>Warranty/EOL (End of Life)/EOS (End of Support)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Meraki</td>
<td>Switch</td>
<td>3rd Floor</td>
<td>MS225-48FP</td>
<td>Under warranty 2022. EOL 2024</td>
</tr>
<tr>
<td>*Meraki</td>
<td>Switch</td>
<td>3rd Floor</td>
<td>MS225-48FP</td>
<td>Under warranty 2022. EOL 2024</td>
</tr>
<tr>
<td>*Meraki</td>
<td>Switch</td>
<td>2nd Floor</td>
<td>MS225-48FP</td>
<td>Under warranty 2022. EOL 2024</td>
</tr>
<tr>
<td>*Meraki</td>
<td>Switch</td>
<td>1st Floor</td>
<td>MS225-48FP</td>
<td>Under warranty 2022. EOL 2024</td>
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<table>
<thead>
<tr>
<th>*Meraki Switch</th>
<th>3rd Floor IT area</th>
<th>MS220-8P</th>
<th>Under warranty 2022. EOL 2024</th>
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<tbody>
<tr>
<td>CISCO Switch</td>
<td>3rd Floor</td>
<td>WS-C2960S-48TS-S</td>
<td>EOL 11/30/2020</td>
</tr>
<tr>
<td>CISCO Switch</td>
<td>2nd Floor</td>
<td>WS-C2960S-48TS-S</td>
<td>EOL 11/30/2020</td>
</tr>
<tr>
<td>CISCO Core Switch</td>
<td>3rd Floor</td>
<td>WS-C3750X-48P</td>
<td>EOL 10/31/2021</td>
</tr>
<tr>
<td>CISCO Core Switch</td>
<td>3rd Floor</td>
<td>WS-C3750G-48TS-S</td>
<td>EOS 01/31/2018</td>
</tr>
<tr>
<td>CISCO Firewall (2 count)</td>
<td>3rd Floor</td>
<td>ASA5525X</td>
<td>EOS 09/04/2020</td>
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**CISCO Phone System VOIP**

<table>
<thead>
<tr>
<th>CISCO Switch</th>
<th>3FL - POE phone switch Stack 1 of 2</th>
<th>WS-C2960S-48FPS-L</th>
<th>11/30/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISCO Switch</td>
<td>2FL - POE phone switch Stack 1 of 2</td>
<td>WS-C2960S-48FPS-L</td>
<td>11/30/2020</td>
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<tr>
<td>CISCO Switch</td>
<td>1FL – Access VOIP switch</td>
<td>WS-C2960S-48FPS-L</td>
<td>11/30/2020</td>
</tr>
<tr>
<td>CISCO Switch</td>
<td>3FL - POE Phone Switch</td>
<td>2960X switch POE 740W</td>
<td>EOS 09/30/2024</td>
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<tr>
<td>CISCO Switch</td>
<td>2FL - POE Phone Switch</td>
<td>2960X switch POE 740W</td>
<td>EOS 09/30/2024</td>
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<tr>
<td>CISCO Switch</td>
<td>1FL - POE Phone Switch</td>
<td>2960X switch POE 740W</td>
<td>EOS 09/30/2024</td>
</tr>
<tr>
<td>CISCO UCS</td>
<td>3FL Cisco UCS Phone System</td>
<td>UCSC-C220-M3SBE</td>
<td>EOS December 2021</td>
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<tr>
<td>CISCO Switch</td>
<td>3FL Cisco UCS S</td>
<td>Cisco 2951/K9 (Network Switch)</td>
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