RFP# 109-24 Executive Summary

Overview

In this two-part RFP, KPBSD seeks proposals for network routing, switching, and voice gateway equipment to support a partial refresh of our wired network infrastructure at select schools.

KPBSD's current district-wide wired network infrastructure is comprised primarily of Cisco Layer 2 and Layer 3 switches with reliance on select Cisco protocols for certain network functions: Cisco VLAN Trunking Protocol (VTP) is utilized at Layer 2 to propagate VLANs and Cisco EIGRP is utilized at Layer 3 for dynamic route distribution throughout our internal network. Some schools with local POTS or PRI voice lines use Cisco routers in lieu of Layer 3 switches for edge routing with added voice gateway capability to integrate with our district-wide Cisco VOIP PBX.

This partial infrastructure refresh would replace end-of-life equipment, add port capacity, add new telephony capabilities, and make other functional improvements to our local area network.

Compatibility with existing infrastructure is one of the primary selection criteria vendor proposals will be scored against during bid review. See Section Q of the RFP Instructions to Bidders for the complete rubric.

This RFP only seeks wired network equipment as well as any additional required licensing/entitlements to support it and does not seek installation or similar services. KPBSD intends to perform all necessary installation to make functional the purchased network equipment included in this RFP.

KPBSD may elect to execute a purchase after award of this RFP at risk (e.g. before we receive our E-Rate funding commitment for eligible Category 2 equipment included in this RFP). In such a circumstance, KPBSD will require that arrival of equipment included in this RFP and invoicing for such items occurs AFTER April 1, 2024 but prior to June 30, 2024.

KPBSD intends to use the E-Rate FCC Form 472 (BEAR) invoicing process.

KPBSD is aware that voice/telephony features and voice/telephony equipment is not eligible for E-Rate subsidy and does not intend to invoice E-Rate for ineligible equipment, or any pro-rated ineligible costs for any portion of ineligible functions served by equipment also used for eligible internal connection purposes.

Part 1: Category 2 LAN Switching

In Part 1 of this RFP, KPBSD seeks proposals for Layer 2 and Layer 3 LAN switching equipment. This equipment serves internal connection needs for both end-users, as well as infrastructure components such as the wireless network or backbone distribution between cabling facilities within a building.

Part 2: Category 2 Routing and Voice Gateways

In Part 2 of this RFP, KPBSD seeks proposals for routers with voice added voice gateway functionality as well as dedicated analog voice gateways that can be integrated with our existing Cisco Unified Communications Manager VOIP PBX infrastructure.

This Specification Sheet must be returned with RFP# 109-24

RFP - Part 1: E-Rate Category 2 Eligible Ethernet Switches

Any vendor may bid on any or all services. Enter cost for each unit (Quantity 1) in Cost per Unit column.

This is the basis for our E-Rate application. Please include all costs KPBSD will be asked to pay. If you don't include it, I won't know to ask for it, and if I don't ask for it, we won't get it subsidized!

Company Name	

Special Note on Product or Service Descriptions

KPBSD provides specific part numbers for products or services listed in RFP specification rows below as best able to aid vendors in any responses made to this RFP; however, we recognize that manufactures may periodically revise their part numbers or otherwise alter standard configurations used for submitting orders.

In the event part numbers or quantities listed for items do not align with current manufacturer configurations, please contact the KPBSD purchasing office <u>as soon as possible</u> to seek clarification. Timing is essential to allow for potential bid addendum(s) to be issued if needed and still meet our filing deadlines for E-Rate subsidy!

See **RFP Instructions to Bidders - Section K.5** for information on how to contact KPBSD Purchasing with any questions.

Row A	N A Project Scope (See Instructions Below)		
	Qty	Product or Service Description	Cost per Unit (Quantity 1)
Row B		Cisco (or equivalent) 48-Port Layer 3 Switches	
B1	1	Cisco #C9300L-48P-4X-A Catalyst 9300L 48 Port Switch, 802.3at PoE+, Network Advantage, 4x10Gb SFP+ Uplinks, VLAN Trunking Protocol, EIGRP Dynamic Routing, or equivalent	
B2	1	Cisco #S9300LUK9-179 Cisco Catalyst 9300L XE 17.9 UNIVERSAL, or equivalent	
В3	1	Cisco #C9300L-NW-A-48 C9300L Network Advantage, 48-port license, or equivalent	
B4	1	Cisco #PWR-C1-BLANK Config 1 Power Supply Blank, or equivalent	
B5	2	Cisco #C9300L-STACK-BLANK Catalyst 9300L Blank Stack Module, or equivalent	
В6	1	Cisco #TE-C9K-SW TE agent for IOSXE on C9K, or equivalent	
В7	3	Cisco #FAN-T2 Cisco Type 2 Fan Module, or equivalent	
B8	1	Cisco #PWR-C1-715WAC-P 715W AC 80+ platinum Config 1 Power Supply, or equivalent	
В9	1	Cisco #C9300L-SPS-NONE No Secondary Power Supply Selected, or equivalent	
B10	1	Cisco #CAB-TA-NA North America AC Type A Power Cable, or equivalent	
B11	1	Cisco #C9300L-SSD-NONE No SSD Card Selected, or equivalent	
B12	1	Cisco #C9300L-DNA-A-48 C9300L Cisco DNA Advantage, 48-port license, or equivalent	

B13	1	Cisco #C9300L-DNA-A-48-3Y C9300L Cisco DNA Advantage, 48-port, 3 Year Term license, or	
B14	1	equivalent Cisco #TE-EMBEDDED-T Cisco ThousandEyes	
B15	1	Enterprise Agent IBN Embedded, or equivalent Cisco #TE-EMBEDDED-T-3Y ThousandEyes -	
B16	1	Enterprise Agents, or equivalent Cisco #D-DNAS-EXT-S-T Cisco DNA Spaces Extend Term License for Catalyst Switches, or equivalent	
B17	1	Cisco #D-DNAS-EXT-S-3Y Cisco DNA Spaces Extend for Catalyst Switching - 3Year, or equivalent	
B18	1	Cisco #PI-LFAS-T Prime Infrastructure Lifecycle & Assurance Term - Smart Lic, or equivalent	
B19	1	Cisco #PI-LFAS-AP-T-3Y PI Dev Lic for Lifecycle & Assurance Term 3Y, or equivalent	
B20	1	Cisco #NETWORK-PNP-LIC Network Plug-n-Play Connect for zero-touch device deployment, or equivalent	
Row C		Cisco (or equivalent) 48-Port Layer 2 Switches	
C1	12	Cisco #C9200L-48P-4X-E Catalyst 9200L 48 Port Switch, 802.3at PoE+, Network Essentials, 4x10Gb SFP+ Uplinks, VLAN Trunking Protocol, or equivalent	
C2	12	Cisco #C9200L-NW-E-48 C9200L Network Essentials, 48-port license, or equivalent	
C3	12	Cisco #CAB-TA-NA North America AC Type A Power Cable, or equivalent	
C4	12	Cisco #PWR-C5-BLANK Config 5 Power Supply Blank, or equivalent	
C5	24	Cisco #C9200-STACK-BLANK Catalyst 9200 Blank Stack Module, or equivalent	
C6	12	Cisco #C9200L-DNA-E-48 C9200L Cisco DNA Essentials, 48-port Term license, or equivalent	
C7	12	Cisco #C9200L-DNA-E-48-3Y C9200L Cisco DNA Essentials, 48-port, 3 Year Term license, or equivalent	
C8	12	Cisco #NETWORK-PNP-LIC Network Plug-n-Play Connect for zero-touch device deployment, or equivalent	
		equivalent	
Row D		Cisco (or equivalent) 24-Port Layer 2 Switches	
D1	3	Cisco #C9200L-24P-4X-E Catalyst 9200L 24 Port Switch, 802.3at PoE+, Network Essentials, 4x10Gb SFP+ Uplinks, VLAN Trunking Protocol, or equivalent	
D2	3	Cisco #C9200L-NW-E-24 C9200L Network Essentials, 24-port license, or equivalent	
D3	3	Cisco #CAB-TA-NA North America AC Type A Power Cable, or equivalent	
D4	3	Cisco #PWR-C5-BLANK Config 5 Power Supply Blank, or equivalent	
D5	6	Cisco #C9200-STACK-BLANK Catalyst 9200 Blank Stack Module, or equivalent	
D6	3	Cisco #C9200L-DNA-E-24 C9200L Cisco DNA Essentials, 24-port Term license, or equivalent	
D7	3	Cisco #C9200L-DNA-E-24-3Y C9200L Cisco DNA Essentials, 24-port, 3 Year Term license, or equivalent	

D8	3	Cisco #NETWORK-PNP-LIC Network Plug-n-Play	
		Connect for zero-touch device deployment, or	
		equivalent	

Instructi	Instructions		
Row A	Project Scope		
A1	KPBSD seeks to improve wired network switching infrastructure by replacing multiple end-of-life switches, expanding switch port capacity where needed, and making other functional improvements to our local area network.		
	This RFP represents the Layer 2 and Layer 3 switches as well as licensing to support these upgrades.		
	Purchase contract term would be from April 1, 2024 to June 30, 2025. Note that E-Rate permits Category 2 purchases to occur beginning April 1, 2024 for E-Rate funding year 2024-2025.		
	In the perfect situation, E-Rate would notify us of our funding decision prior to the start of the funding year (July 2024), we would buy the equipment and install it during summer 2024. In the less-than-perfect situation, a funding decision could easily languish until after summer 2024 and well into the 2024-2025 school year.		
	We will enter into a contract with the successful bidder contingent upon us receiving the E-Rate subsidy. We will both then wait patiently for notification of our funding award. If we do not receive the subsidy we seek, the contract is void and KPBSD may attempt to file again next year for E-Rate subsidy. E-Rate has certain requirements vendors and service providers must meet. You will need to be registered with a SPIN number or be able to get one. KPBSD reserves the right to execute the purchase at-risk following bid award (prior to E-Rate funding approval) if desired.		
	Quantities noted are the minimum quantities. It is possible we could need more.		
	Write your company name above the description block in the provided space.		
	Responses to this specification sheet will be evaluated as described in section Q, subparts 3a-3g in the RFP Instructions to Bidders.		

Row B	Cisco (or equivalent) 48-Port Layer 3 Switches
B1	The listed Cisco switch, or its equivalent, is the switch we desire. The equipment must be new and be eligible
	for manufacturer maintenance coverage.

Row C	Cisco (or equivalent) 48-Port Layer 2 Switches
C1	The listed Cisco switch, or its equivalent, is the switch we desire. The equipment must be new and be eligible
	for manufacturer maintenance coverage.

Row D	Cisco (or equivalent) 24-Port Layer 2 Switches
D1	The listed Cisco switch, or its equivalent, is the switch we desire. The equipment must be new and be eligible
	for manufacturer maintenance coverage.

RFP - Part 2: E-Rate Category 2 Eligible Routers & Non-E-Rate Voice Equipment

Any vendor may bid on any or all services. Enter cost for each unit (Quantity 1) in Cost per Unit column.

This is the basis for our E-Rate application. Please include all costs KPBSD will be asked to pay. If you don't include it, I won't know to ask for it, and if I don't ask for it, we won't get it subsidized!

Company Name	

Special Note on Product or Service Descriptions

KPBSD provides specific part numbers for products or services listed in RFP specification rows below as best able to aid vendors in any responses made to this RFP; however, we recognize that manufactures may periodically revise their part numbers or otherwise alter standard configurations used for submitting orders.

In the event part numbers or quantities listed for items do not align with current manufacturer configurations, please contact the KPBSD purchasing office <u>as soon as possible</u> to seek clarification. Timing is essential to allow for potential bid addendum(s) to be issued if needed and still meet our filing deadlines for E-Rate subsidy!

See **RFP Instructions to Bidders - Section K.5** for information on how to contact KPBSD Purchasing with any questions.

Row A	A Project Scope (See Instructions Below)		
	Qty	Product or Service Description	Cost per Unit (Quantity 1)
Row B		Cisco (or equivalent) PRI Gateway Routers	
B1	2	Cisco #C8200L-1N-4T Cisco Catalyst 8200L with 1-NIM slot and 4x1G WAN ports, or equivalent	
B2	2	Cisco #MEM-C8200-4GB Cisco Catalyst 8200 Edge 4GB memory, or equivalent	
В3	2	Cisco #CAB-AC AC Power Cord (North America), C13, NEMA 5-15P, 2.1m, or equivalent	
B4	2	Cisco #C-RFID-1R Cisco Catalyst 8000 Edge RFID - 1RU, or equivalent	
B5	2	Cisco #C8200-RM-19-1R Cisco Catalyst 8200 Rack mount kit - 19" 1R, or equivalent	
В6	2	Cisco #NETWORK-PNP-LIC Network Plug-n-Play Connect for zero-touch device deployment, or equivalent	
В7	2	Cisco #C8200-PIM-BLANK Cisco Catalyst 8200 Edge PIM Blank, or equivalent	
B8	2	Cisco #C-M2-BLANK Cisco Catalyst 8000 Edge M.2 Blank Cover, or equivalent	
В9	2	Cisco #IOSXE-CTRL-MODE IOS XE SD-WAN boot up mode for Unified image, or equivalent	
B10	2	Cisco #NIM-2MFT-T1/E1 2 port Multiflex Trunk Voice/Clear-channel Data T1/E1 Module, or equivalent	
B11	2	Cisco #PVDM4-64 64-channel DSP module, or equivalent	
B12	2	Cisco #SC8KBEUK9-176 UNIVERSAL, or equivalent	
B13	2	Cisco #DNA-C-T0-A-3Y Cisco DNA Advantage Cloud Lic 3Y – up to 25M (Aggr, 50M), or equivalent	

B14	2	Cisco #DSTACK-T0-A Cisco DNA Advantage Stack	
		– up to 25M (Aggr, 50M) , or equivalent	
B15	2	Cisco #NWSTACK-T0-A Cisco Network Advantage	
		Stack – up to 25M (Aggr, 50M) , or equivalent	
B16	2	Cisco #TE-EMBED-WANI Cisco ThousandEyes	
		WAN Insights Embedded, or equivalent	
B17	2	Cisco #SDWAN-UMB-ADV Cisco Umbrella for DNA	
		Advantage, or equivalent	
B18	2	Cisco #SDWAN-CLOUD-PF Cisco SDWAN Cloud	
		Deployment Option, or equivalent	
B19	2	Cisco #C82L-1N-4T-PF C8200L-1N-4T Platform	
	-	Selection for DNA Subscription, or equivalent	
B20	2	Cisco #IOSXE-CTRL-MODE-PF IOS XE SD-WAN	
520	_	boot up mode for Unified image -Deployment Opt, or	
		equivalent	
B21	2	Cisco #C8000-HSEC U.S. Export Restriction	
D21	~	Compliance license for C8000 series, or equivalent	
B22	2	Cisco #CON-SNT-C8200TL1 SNTC-8X5XNBD Cisco	
DZZ	4		
DOO		Catalyst 8200L with 1-NIM slot and, or equivalent	
B23	2	Cisco #SVS-CDNA-ADV Embedded Support for SW	
		- Tiered DNA Advantage Cloud, or equivalent	
Row C		Cisco (or equivalent) FXO Gateway Routers	
C1	7	Cisco #C8200L-1N-4T Cisco Catalyst 8200L with 1-	
		NIM slot and 4x1G WAN ports, or equivalent	
C2	7	Cisco #MEM-C8200-4GB Cisco Catalyst 8200 Edge	
		4GB memory, or equivalent	
C3	7	Cisco #CAB-AC AC Power Cord (North America),	
		C13, NEMA 5-15P, 2.1m, or equivalent	
C4	7	Cisco #C-RFID-1R Cisco Catalyst 8000 Edge RFID -	
		1RU, or equivalent	
C5	7	Cisco #C8200-RM-19-1R Cisco Catalyst 8200 Rack	
		mount kit - 19" 1R, or equivalent	
C6	7	Cisco #NETWORK-PNP-LIC Network Plug-n-Play	
		Connect for zero-touch device deployment, or	
		equivalent	
C7	7	Cisco #C8200-PIM-BLANK Cisco Catalyst 8200	
0,	<i>'</i>	Edge PIM Blank, or equivalent	
C8	7	Cisco #C-M2-BLANK Cisco Catalyst 8000 Edge M.2	
	'	Blank Cover, or equivalent	
C9	7	Cisco #IOSXE-CTRL-MODE IOS XE SD-WAN boot	
Ca	'		
C10	7	up mode for Unified image, or equivalent Cisco #NIM-2FXO 2-port Network Interface Module -	
L 10	'	FXO (Universal) , or equivalent	
C11	7	Cisco #SC8KBEUK9-176 UNIVERSAL, or equivalent	
C12	7	Cisco #DNA-C-T0-A-3Y Cisco DNA Advantage Cloud	
		Lic 3Y - upto 25M (Aggr, 50M) , or equivalent	
C13	7	Cisco #DSTACK-T0-A Cisco DNA Advantage Stack -	
		upto 25M (Aggr, 50M) , or equivalent	
C14	7	Cisco #NWSTACK-T0-A Cisco Network Advantage	
		Stack - upto 25M (Aggr, 50M), or equivalent	
C15	7	Cisco #TE-EMBED-WANI Cisco ThousandEyes	
	1	WAN Insights Embedded, or equivalent	
		WANTING Embedded, or equivalent	
C16	7	Cisco #SDWAN-UMB-ADV Cisco Umbrella for DNA	
C16	7	Cisco #SDWAN-UMB-ADV Cisco Umbrella for DNA	
	7		
C16		Cisco #SDWAN-UMB-ADV Cisco Umbrella for DNA Advantage, or equivalent	

C18	7	Cisco #C82L-1N-4T-PF C8200L-1N-4T Platform	
		Selection for DNA Subscription, or equivalent	
C19	7	Cisco #IOSXE-CTRL-MODE-PF IOS XE SD-WAN	
		boot up mode for Unified image -Deployment Opt, or	
		equivalent	
C20	7	Cisco #C8000-HSEC U.S. Export Restriction	
C24	7	Compliance license for C8000 series, or equivalent Cisco #CON-SNT-C8200TL1 SNTC-8X5XNBD Cisco	
C21	7	Catalyst 8200L with 1-NIM slot and, or equivalent	
C22	7	Cisco #SVS-CDNA-ADV Embedded Support for SW	
022	′	- Tiered DNA Advantage Cloud, or equivalent	
		Tiered Bit (7 tavaillage cloud, or equivalent	
Row D		Cisco (or equivalent) PRI/FXO Gateway Routers	
	4		
D1	1	Cisco #C8200L-1N-4T Cisco Catalyst 8200L with 1-NIM slot and 4x1G WAN ports	
D2	1	Cisco #MEM-C8200-4GB Cisco Catalyst 8200 Edge 4GB memory	
D3	1	Cisco #CAB-AC AC Power Cord (North America), C13, NEMA 5-15P, 2.1m	
D4	1	Cisco #C-RFID-1R Cisco Catalyst 8000 Edge RFID -	
		1RU	
D5	1	Cisco #C8200-RM-19-1R Cisco Catalyst 8200 Rack	
		mount kit - 19" 1R	
D6	1	Cisco #NETWORK-PNP-LIC Network Plug-n-Play	
		Connect for zero-touch device deployment	
D7	1	Cisco #C8200-PIM-BLANK Cisco Catalyst 8200	
		Edge PIM Blank	
D8	1	Cisco #C-M2-BLANK Cisco Catalyst 8000 Edge M.2	
	4	Blank Cover	
D9	1	Cisco #IOSXE-CTRL-MODE IOS XE SD-WAN boot up mode for Unified image	
D10	1	Cisco #NIM-2MFT-T1/E1 2 port Multiflex Trunk	
D10	'	Voice/Clear-channel Data T1/E1 Module	
D11	1	Cisco #PVDM4-64 64-channel DSP module	
D12	1	Cisco #SC8KBEUK9-176 UNIVERSAL	
	· ·		
D13	1	Cisco #DNA-C-T0-A-3Y Cisco DNA Advantage Cloud Lic 3Y - upto 25M (Aggr, 50M)	
D14	1	Cisco #DSTACK-T0-A Cisco DNA Advantage Stack -	
		upto 25M (Aggr, 50M)	
D15	1	Cisco #NWSTACK-T0-A Cisco Network Advantage	
D16	4	Stack - upto 25M (Aggr, 50M) Cisco #TE-EMBED-WANI Cisco ThousandEyes	
D16	1	WAN Insights Embedded	
D17	1	Cisco #SDWAN-UMB-ADV Cisco Umbrella for DNA	
017	'	Advantage	
D18	1	Cisco #SDWAN-CLOUD-PF Cisco SDWAN Cloud	
		Deployment Option	
D19	1	Cisco #C82L-1N-4T-PF C8200L-1N-4T Platform	
		Selection for DNA Subscription	
D20	1	Cisco #IOSXE-CTRL-MODE-PF IOS XE SD-WAN	
		boot up mode for Unified image -Deployment Opt	
D21	1	Cisco #C8000-HSEC U.S. Export Restriction	
D00	1	Compliance license for C8000 series	
D22	1	Cisco #NIM-2FXO 2-port Network Interface Module -	
D23	1	FXO (Universal) Cisco #CON-SNT-C8200TL1 SNTC-8X5XNBD Cisco	
DZS	'	Catalyst 8200L with 1-NIM slot and	
L	I	Cataly St 0200L WITH 1-INIVI SIDE AND	

D24	1	Cisco #SVS-CDNA-ADV Embedded Support for SW - Tiered DNA Advantage Cloud		
Row E		Cisco (or equivalent) Analog Voice Gateways		
E1	4	Cisco #VG400-8FXS Cisco VG400 Analog Voice Gateway, or equivalent		
E2	4	Cisco #SL-VG400-UC-K9 Unified Communication License for VG400 Series, or equivalent		
E3	4	Cisco #CAB-AC AC Power Cord (North America), C13, NEMA 5-15P, 2.1m, or equivalent		
E4	4	Cisco #PWR-VG400-AC AC Power Supply for Cisco VG400, or equivalent		
E5	4	Cisco #ACS-4220-RM-19 19 inch rack mount kit for Cisco ISR 4220 & VG400, or equivalent		
E6	4	Cisco #SVG400UK9-1610 Cisco VG400 Series IOS XE Universal Image, or equivalent		
E7	4	Cisco #CON-SSSNT-VG4008X SOLN SUPP 8X5XNBD Cisco VG400 Analog Voice Gateway, or equivalent		

Instructions			
Row A	Project Scope		
A1	KPBSD seeks to improve our wired network routing and telephony infrastructure by replacing multiple end-of life routers and voice gateways that serve a mix of routing and voice gateway roles on our local area network at select schools.		
	This RFP represents the routers and voice gateway components, as well as licensing to support these upgrades.		
	KPBSD recognizes that equipment providing voice services is not E-Rate eligible and intends to cost allocate portions of this project out as needed so that only equipment/licensing supporting the flow of data to support our client network is submitted for an E-Rate funding request.		
	Purchase contract term would be from April 1, 2024 to June 30, 2025. Note that E-Rate permits Category 2 purchases to occur beginning April 1, 2024 for E-Rate funding year 2024-2025.		
	In the perfect situation, E-Rate would notify us of our funding decision prior to the start of the funding year (July 2024), we would buy the equipment and install it during summer 2024. In the less-than-perfect situation, a funding decision could easily languish until after summer 2024 and well into the 2024-2025 school year.		
	We will enter into a contract with the successful bidder contingent upon us receiving the E-Rate subsidy. We will both then wait patiently for notification of our funding award. If we do not receive the subsidy we seek, the contract is void and KPBSD may attempt to file again next year for E-Rate subsidy. E-Rate has certain requirements vendors and service providers must meet. You will need to be registered with a SPIN number or be able to get one. KPBSD reserves the right to execute the purchase at-risk following bid award (prior to E-Rate funding approval) if desired.		
	Quantities noted are the minimum quantities. It is possible we could need more.		
	Write your company name above the description block in the provided space.		
	Responses to this specification sheet will be evaluated as described in section Q, subparts 3a-3g in the RFP Instructions to Bidders.		

Row B | Cisco (or equivalent) PRI Gateway Routers

B1 The listed Cisco router, or its equivalent, is the router we desire. The equipment must be new and be eligible for manufacturer maintenance coverage.

Row C | Cisco (or equivalent) FXO Gateway Routers

The listed Cisco router, or its equivalent, is the router we desire. The equipment must be new and be eligible for manufacturer maintenance coverage.

Row D Cisco (or equivalent) PRI/FXO Gateway Routers

D1 The listed Cisco router, or its equivalent, is the router we desire. The equipment must be new and be eligible for manufacturer maintenance coverage.

The intent of this router is not to act as a PRI gateway and FXO gateway simultaneously, it is a shelf spare to immediately replace any failed PRI or FXO gateway router should need arise. We recognize that the 8200L ISR may not support simultaneous installation of all components listed for row D (e.g. FXO and PRI cards together). In this case, components such as the FXO or PRI card (Rows D10 & D22) can be shipped separately with the intent that KPBSD will swap these modular parts as needed when the router is deployed into our production network.

Row E | Cisco (or equivalent) Analog Voice Gateways

E1 The listed Cisco switch, or its equivalent, is the switch we desire. The equipment must be new and be eligible for manufacturer maintenance coverage.