HILLSBORO SCHOOL DISTRICT

**Invitation to Submit Information for
VOIP Phone System Installation and Support**

Issue Date: 3/4/2020

RFI Due Date: 4/1/2020, 2:00 p.m.

Question Submission: Questions should be sent via email to Jordan Beveridge (beveridj@hsd.k12.or.us) by 3/17/2020, 2:00 p.m.. An addendum with answers to questions will be posted.

Proposal Posting and Updates Site: https://www.hsd.k12.or.us/domain/1260
Check this site often for updates or addendums.

Project Name: VOIP Phone System Installation and Support

Description of Need:

The Hillsboro School District (HSD) is currently reviewing the options for replacement of the current VOIP phone system that is in place at 39 sites. The district is also building additional schools and acquiring additional Direct Inward Dial (DID) numbers. This will require reviewing and restructuring the currently assigned DID and internal extension assignments for the district to allow for expansion well into the future. HSD will also be seeking information about available ongoing support options. After reviewing potential options available to the district, Hillsboro School District will be looking to procure a new VOIP system through an RFP or allowable State/Consortium Contract.

District Information:
HSD is the fourth-largest public school district in the state of Oregon with 35 schools serving more than 20,000 students from preschool through twelfth grade.

The District passed a bond measure by its patrons on November 8, 2017. The District is currently in the midst of building and planning to build additional sites that includes two new Elementary Schools and one new Transportation and Maintenance Support site.

District Sites
- Current
  - 4 High Schools

- - - 4 Middle Schools
    - 24 Elementary Schools
    - 2 Multi-Level Schools
    - 2 Alternative Education School Sites
    - 3 Administrative & Support Sites
      - Data center is located in the Administrative Center
    - See Appendix A for site names and addresses
  - Future
    - June 2020
      - 1 Transportation / Maintenance Support Site
    - July 2021
      - 1 New Elementary School
    - July 2022
      - 1 New Elementary School

Current phone system:

Hillsboro School District currently has a Cisco Unified IP telecommunications system serving roughly 2,500 stations across 39 District locations. The District has determined that major components of the existing system are end-of-life, obsolete, and no longer supported. This obsolescence requires the District to either upgrade the existing systems or replace them with new products.

See Appendix B for additional relevant phone system information by site. This includes phone counts by current model and other information.

Current network infrastructure:

The data network uses Cisco, Juniper, and HPE / Aruba routers and switches. The District has centralized voicemail and all of the telecom systems are networked together to allow 4 digit dialing between all phones on the system. PSTN connections for the facilities are primarily provided through PRI service. The District currently has a total of three PRIs installed centrally at the District Office.

The District currently has 39 locations connected with a private fiber Wide Area Network (WAN). All District buildings are connected with a wide area network that provides the needed data network connections. It is the District's intent to obtain a new telecommunications system that will continue to allow direct connectivity and enhanced communications. The District network can provide Power over Ethernet (POE) and Quality of Service (QOS) features and capabilities. The District has also prepared the network to provide the needed IP addressing and subnet approach. Vendors should assume the District's data network will provide the needed POE and QOS capabilities for VoIP Deployment. The data network is a municipal dark fiber deployment

and network connections to schools are a minimum of 10Gbps. There are no bandwidth or latency issues within the data network at this time.

The District has standardized on the following network devices at each school:

Device	Model
Router / L3 Switch	Juniper EX3400 / QFX5110
L2 PoE Switch	HPE / Aruba 2530 / 2540 / 2930F
Indoor AP	Cisco 2702i / 2802i

Current email system: Microsoft Office365/Outlook

Submission of information:
1. All proposals should be submitted in two formats
   a. 1 digital submission should be bundled into a single PDF document and emailed to: beveridj@hsd.k12.or.us
   b. 4 paper copies of the submission should also be delivered to:

      Jordan Beveridge
      Hillsboro School District
      3083 Northeast 49th Place
      Hillsboro, OR 97124

2. All proposals should be formatted with the below sections in the provided order:
   a. Section 1: Table of Contents
   b. Section 2: Company Background & Information
      i. General company background
      ii. Contacts for this RFI
      iii. Background of installing VOIP systems of the same or larger size and complexity
      iv. Background of providing ongoing support to VOIP systems of the same or larger size and complexity
   c. Section 3: Responses to Areas of Interest section
   d. Section 4: Proposed System Information
      i. Highlight other features and functions of additional information concerning the proposed system
   e. Section 5: Network Infrastructure
      i. Provide optimal network configuration and architecture
   f. Section 6: Support Options Available

g. Section 7: Budgetary Pricing Information
   i. Not a quote, for budgeting information
   ii. Include budgetary total cost for all needed phones and equipment
   iii. Include budgetary total cost for installation and programming of all phones and equipment
   iv. Include budgetary cost for multiyear support
   v. Provide any options for purchasing through a state contract, reciprocal government agency contract or consortium purchase

Areas of Interest:
Provide information about the options available for each of the areas of interest.
1. Explain phone system application integrations
   a. Smartphone Application and Integration
      i. Smartphone App Availability
         1. Receive calls
         2. Make calls
         3. Check Voicemail
      ii. Authentication on App
         1. Azure authentication option
         2. Other authentications options
      iii. How are users provisioned
      iv. User adjustable dial plan settings
         1. Example - ring at desk first then to smartphone app if turned on
   b. Desktop/Laptop Integration
      i. Soft phone on computer
      ii. Computer software, application or web app
         1. Click to Dial
         2. Drag/Drop Transfer
         3. Check Voicemail
         4. Directory Lookup
         5. Customize Groups
         6. Line Status Indicators
      iii. Compatibility with Windows, MAC, and / or Chrome OS
      iv. Authentication for software, application or web app
         1. Azure authentication option
         2. Other authentication options
      v. How are users provisioned

2. Describe phone model options including features and options for the below areas and needs.
   a. Basic Phone - Waiting Area
      i. Speakerphone capable
   b. Classroom Phone

    i. Speakerphone capable
  c. Office / Administrative
    i. Speakerphone capable
    ii. Expandable for additional lines
  d. Conference Room Speakerphone
    i. 360 microphone
  e. Hearing-aid compatible options
    i. Coil in handset earpiece
    ii. Port for neckloop
    iii. Bluetooth capable
  f. Wall mounting options for each phone model
  g. Headset options

3. Safety Features
  a. E911
    i. Send email/text when 911 calls are made
  b. Phone capability to interact with Access Control System
    i. Answer door intercom and unlock
  c. Ability for the system to initiate separate Lockout or Lockdown
    i. Connect to school or building paging system to deliver or trigger automatic page
    ii. Connect to access control system to trigger door lock or unlock
  d. Panic Line button or other feature that connects caller directly to identified building or security staff
  e. Button or feature that triggers call recording
    i. On demand initiation
    ii. Specific lines always recorded
    iii. Access to recordings
  f. Malicious Call Identification
    i. Easy access to reports that provide information on identified calls
    ii. Button or feature to tag identified calls
  g. Paging to Speakerphone
    i. Override volume setting

4. Call Center / Call Queuing functions
  a. Ability to interface one or more phones to be part of a call center
    i. Queue calls
    ii. Sign additional phones/users in as needed to take calls based on volume
    iii. Deliver message to users that call the call center number
    iv. Deliver message to users in queue/on hold
      1. Automated wait time estimate for those on hold
  b. Describe options and availability

5. Voicemail
    a. Available outside
        i. Call in
        ii. App
        iii. Online
    b. Voicemail forwarded to email
        i. Integrated / unified
            1. Message waiting indicator light synchronized with email
    c. Voicemail to text via email

6. Conferencing / Conference Bridge options

7. Connection to Paging Systems
    a. FXO port options
    b. SIP options
    c. See Appendix C for current paging system by site

8. Hide specific users from directory
    a. Select different number for directory
    b. Customizable groupings

9. Fax
    a. Digital / eFax options
    b. Analog fax machine support (ATA / gateway)

Appendix A- District Sites and Addresses- (https://www.hsd.k12.or.us/Page/5297)

HILLSBORO SCHOOL DISTRICT

ELEMENTARY SCHOOLS

1. Brookwood
3960 SE Cedar St.
Hillsboro, OR 97123
503.844.1715

2. Butternut Creek
20395 SW Florence St.
Aloha, OR 97078
503.844.1390

3. Eastwood
2100 NE Lincoln St.
Hillsboro, OR 97124
503.844.1725

4. Farmington View
8300 SW Hillsboro Hwy.
Hillsboro, OR 97123
503.844.1735

5. Free Orchards
2499 S Beech St.
Cornelius, OR 97113
503.844.1140

6. Groner K-8
23405 SW Scholls Ferry Rd.
Hillsboro, OR 97123
503.844.1600

7. W.L. Henry
1060 SE 24th Ave.
Hillsboro, OR 97123
503.844.1690

8. Imlay
5900 SE Lois St.
Hillsboro, OR 97123
503.844.1090

9. Indian Hills
21260 SW Rock Rd.
Aloha, OR 97003
503.844.1350

10. Jackson
675 NE Estate Dr.
Hillsboro, OR 97124
503.844.1670

11. Ladd Acres
2425 SE Cornelius Pass Rd.
Hillsboro, OR 97123
503.844.1300

12. Lenox
21200 NW Rock Creek Blvd.
Portland, OR 97229
503.844.1360

13. Lincoln Street
801 NE Lincoln St.
Hillsboro, OR 97124
503.844.1160

14. W. Verne McKinney
535 NW Darnielle St.
Hillsboro, OR 97124
503.844.1660

15. Minter Bridge
1750 SE Jacquelin Dr.
Hillsboro, OR 97123
503.844.1650

16. Mooberry
1230 NE 10th Ave.
Hillsboro, OR 97124
503.844.1640

17. North Plains
32030 NW North Ave.
North Plains, OR 97133
503.844.1630

18. Orenco
7050 NE Birch St.
Hillsboro, OR 97124
503.844.1370

19. Paul L. Patterson
251 NE Lenox St.
Hillsboro, OR 97124
503.844.1380

20. Quatama
6605 NE Campus Way
Hillsboro, OR 97124
503.844.1180

21. Reedville
2695 SW 209th Ave.
Aloha, OR 97003
503.844.1570

22. Rosedale
3901 SE 67th Ave.
Beaverton, OR 97078
503.844.1200

23. L.C. Tobias
1065 SW 206th Ave.
Aloha, OR 97003
503.844.1310

24. West Union
23870 NW West Union Rd.
Hillsboro, OR 97124
503.844.1620

25. Witch Hazel
4950 SE Davis Rd.
Hillsboro, OR 97123
503.844.1610

MIDDLE SCHOOLS

26. Brown
1505 SE Cornelius Pass Rd.
Hillsboro, OR 97123
503.844.1070

27. Evergreen
456 NE Evergreen Rd.
Hillsboro, OR 97124
503.844.1400

6. Groner K-8
23405 SW Scholls Ferry Rd.
Hillsboro, OR 97123
503.844.1600

28. J.W. Poynter
1535 NE Grant St.
Hillsboro, OR 97124
503.844.1580

29. South Meadows
4690 SE Davis Rd.
Hillsboro, OR 97123
503.844.1220

HIGH SCHOOLS

30. Century
2000 SE Century Blvd.
Hillsboro, OR 97123
503.844.1800

31. Glencoe
2700 NW Glencoe Rd.
Hillsboro, OR 97124
503.844.1900

32. Hilhi
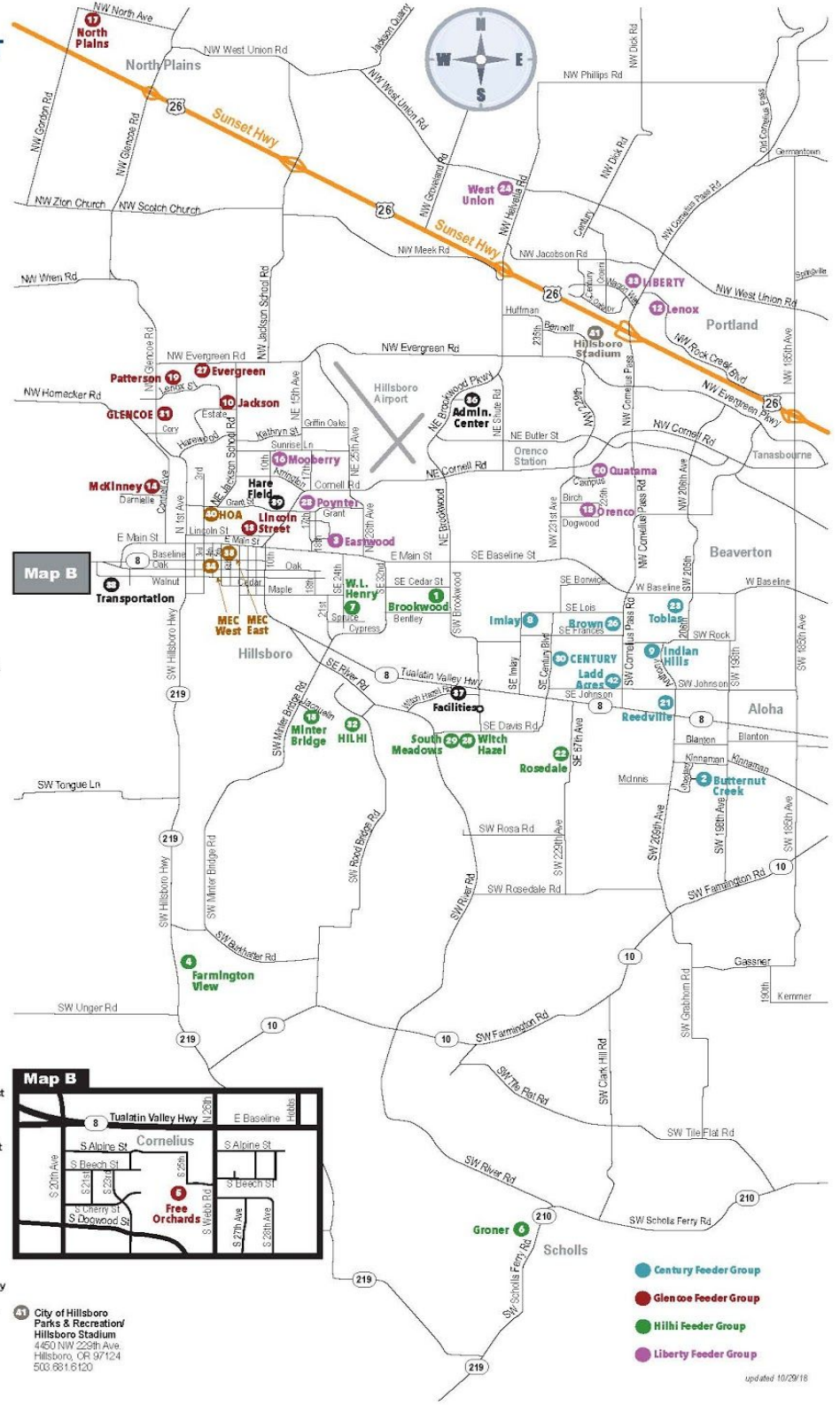3285 SE Rood Bridge Rd.
Hillsboro, OR 97123
503.844.1980

33. Liberty
7445 NE Wagon Dr.
Hillsboro, OR 97124
503.844.1250

34. Miller Education Ctr. West
440 SE Oak St.
Hillsboro, OR 97123
503.844.1680

35. Miller Education Ctr. East
215 SE 6th Ave.
Hillsboro, OR 97123
503.844.1000

OTHER DISTRICT BUILDINGS

36. Administration Center
3083 NE 49th Place
Hillsboro, OR 97124
503.844.1500

37. Facilities & Support Services
4901 SE Witch Hazel Rd.
Hillsboro, OR 97123
503.844.1320

38. Transportation Services
1220 SW Walnut St.
Hillsboro, OR 97123
503.844.1123

39. Hare Field
1151 NE Grant St.
Hillsboro, OR 97124
503.844.1320

40. Hillsboro Online Academy
(HOA, grades 3-12) and
Peter Boscow Conf. Ctr.
452 NE 3rd Ave.
Hillsboro, OR 97124
503.844.1050

41. City of Hillsboro
Parks & Recreation/
Hillsboro Stadium
4450 NW 229th Ave.
Hillsboro, OR 97124
503.681.6120

Century Feeder Group
Glencoe Feeder Group
Hilhi Feeder Group
Liberty Feeder Group

updated 10/29/18

Map B

Tualatin Valley Hwy
E Baseline
Cornelius
S Alpine St
S Beech St
S Cherry St
S Dogwood St
Free Orchards

Appendix B- Current Phone System Information

Phone Models by Site

Site	7911 (Basic)	7942 (Class)	7962 (Office)	7936 (Conf)	Total Phones
Administrative Center	5	172	26	3	206
Butternut Creek ES	2	34	2	0	38
Brookwood ES	2	37	2	0	41
Brown MS	3	64	4	0	71
Century HS	6	156	4	0	166
Evergreen MS	5	78	3	0	86
Eastwood ES	3	37	2	0	42
Facilities	5	34	3	1	43
Free Orchards ES	6	48	2	0	56
Farmington View ES	1	29	2	0	32
Glencoe HS	5	147	3	0	155
Groner ES	2	28	2	0	32
WL Henry ES	2	41	2	0	45
Hillsboro HS	8	158	2	0	168
Indian Hills ES	3	33	2	0	38
Imlay ES	6	48	2	0	56
Jackson ES	2	35	2	0	39
Ladd Acres ES	9	38	3	0	50
Liberty HS	5	163	2	0	170
Lincoln Street ES	4	48	2	0	54
Lenox ES	4	33	2	0	39

Site	7911 (Basic)	7942 (Class)	7962 (Office)	7936 (Conf)	Total Phones
Minter Bridge ES	2	38	3	0	43
Miller Education Center East	1	26	1	0	28
Miller Education Center West	3	30	2	0	35
McKinney ES	3	37	3	0	43
Mooberry ES	2	38	2	0	42
North Plains ES	4	33	3	0	40
Orenco ES	6	47	2	0	55
Patterson ES	5	48	2	0	55
Peter Bosco CC	1	13	1	0	15
Poynter MS	3	77	3	0	83
Quatama ES	6	47	2	0	55
Rosedale ES	5	39	2	0	46
Reedville ES	2	28	2	0	32
South Meadows MS	11	89	3	0	103
Tobias ES	4	43	2	0	49
Transportation	3	17	7	0	27
Witch Hazel ES	6	51	2	0	59
West Union ES	2	31	2	0	35
Totals:	157	2193	118	4	2472

Phone System Information by Site

Site	ATA 186	VG Model	FXO	FXS	PRI
Administrative Center	0	2921 (x2)	4	20	3
Butternut Creek ES	0	2821	4	4	
Brookwood ES	0	2821	4	4	
Brown MS	0	2851	4	4	
Century HS	0	3825	4	8	
Evergreen MS	0	2851	4	4	
Eastwood ES	0	2851	4	4	
Facilities	0	2821	4	8	
Free Orchards ES	0	2851	4	4	
Farmington View ES	0	2821	4	4	
Glencoe HS	0	3825	4	8	
Groner ES	0	2821	4	4	
WL Henry ES	0	2821	4	4	
Hillsboro HS	0	3825	4	8	
Indian Hills ES	0	2821	4	4	
Imlay ES	0	2851	4	4	
Jackson ES	0	2821	4	4	
Ladd Acres ES	0	2851	4	4	
Liberty HS	4	3825	4	12	
Lincoln Street ES	0	2851	4	4	
Lenox ES	0	2821	4	4	
Minter Bridge ES	0	2821	4	4	
Miller Education Center East	0	2821	4	4	

Site	ATA 186	VG Model	FXO	FXS	PRI
Miller Education Center West	0	2821	4	4	
McKinney ES	0	2821	4	4	
Mooberry ES	0	2821	4	4	
North Plains ES	0	2821	4	4	
Orenco ES	0	2851	4	4	
Patterson ES	0	2851	4	4	
Peter Bosco CC	0	2821	4	4	
Poynter MS	0	2851	4	4	
Quatama ES	0	2851	4	4	
Rosedale ES	0	2851	4	4	
Reedville ES	0	2821	4	4	
South Meadows MS	0	3825	4	4	
Tobias ES	0	2851	4	4	
Transportation	0	2821	4	12	
Witch Hazel ES	0	2851	4	4	
West Union ES	0	2821	4	4	

Appendix C: Paging Systems

All paging systems currently connect via an FXO port to the current phone system.

Site	System	Version
Administrative Center	NA	
Butternut Creek ES	Rauland Telecenter ICS (rack-mount)	0590
Brookwood ES	Rauland Telecenter ICS (rack-mount)	0590
Brown MS	Rauland Telecenter ICS (rack-mount)	0642
Century HS	Simplex 5100	
Evergreen MS	Rauland TCU	0590
Eastwood ES	Rauland TCU	
Facilities	NA	
Free Orchards ES	Simplex 5100	
Farmington View ES	Rauland Telecenter ICS (desk-mount)	0642
Glencoe HS	Rauland TCU	
Groner ES	Rauland Telecenter ICS (rack-mount)	0642
WL Henry ES	Rauland Telecenter ICS (desk-mount)	0642
Hillsboro HS	Valcom	
Indian Hills ES	Rauland Telecenter ICS (rack-mount)	0553
Imlay ES	Simplex 5100	
Jackson ES	Rauland Telecenter ICS (rack-mount)	0642
Ladd Acres ES	Rauland Telecenter ICS (desk-mount)	0553
Liberty HS	Simplex 5100	
Lincoln Street ES	Simplex 5100	
Lenox ES	Rauland Telecenter ICS (desk-mount)	0642

Site	System	Version
Minter Bridge ES	Rauland Telecenter ICS (desk-mount)	0642
Miller Education Center East	NA	
Miller Education Center West	Bogen PCM2000	
McKinney ES	Rauland Telecenter ICS (rack-mount)	0553
Mooberry ES	Rauland Telecenter ICS (desk-mount)	0642
North Plains ES	Rauland Telecenter ICS (rack-mount)	0642
Orenco ES	Simplex 5100	
Patterson ES	Simplex 5100	
Peter Bosco CC	NA	
Poynter MS	Rauland Telecenter ICS (rack-mount)	0642
Quatama ES	Simplex 5100	
Rosedale ES	Simplex 5100	
Reedville ES	Rauland Telecenter ICS (desk-mount)	0642
South Meadows MS	Simplex 5100	
Tobias ES	Rauland Telecenter ICS (rack-mount)	0642
Transportation	NA	
Witch Hazel ES	Bogen PCM2000	
West Union ES	Rauland Telecenter ICS (rack-mount)	0642