

ITS Strategic Roadmap – FY16

Unified Communications

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Background

The Metropolitan Government of Nashville and Davidson County (Metro) has historically operated independent Telephone (voice) and Data transmission networks. With the introduction of Voice over IP (VOIP) these diverse networks have merged. This new technology gives Metro the ability to deploy enhanced services to Metro departments that can increase efficiency and control operational costs.

Currently a diverse set of communication products are used Metro wide with little to no integration capability. These include analog, digital and Voice over IP telephones for voice communications; standalone fax machines and email for the written communications; a limited use deployment of Video Conferencing; various automated attendant services such as Contact Center and Integrated Voice Response (IVR) Systems.

Utilizing the Voice over IP foundation Metro will move to integrate these communication services for potential access from phone, computer and mobile devices. Additional services will include fax to email, voice messaging to email, Instant Messaging (pending approval), enhanced Video Conferencing offerings and self service offerings for conference scheduling and user configurable telephone features.

Primary stakeholders of these services are Metro general government agencies, Davidson County Sheriff's Office, and the judicial community. The Emergency Communications Center (ECC), Metro Water Services and the Metro Nashville Public Schools currently maintain their own services, however, discussions have taken place with the Emergency Communications Center and Metro Water Services as to how Metro ITS could assist them on the upgrade and maintenance of their communications systems in the near future.

Current Strategic Drivers

1. **Implementation of Cisco VOIP Telephone system** (High) – Cisco has been selected to replace the End of Life Nortel/Avaya platform. This new platform allows Metro to merge the separate voice and data network into one yielding higher returns on spend for network services. Additionally, Cisco Voice over IP is the foundation for offering new communications tools such as video conferencing and messaging. Metro will engage trusted technology partners to work alongside Metro staff to roll out new phones.
2. **End of life: Legacy telephone system (Nortel/Avaya)** (High) – The Nortel/Avaya Telephone systems, used to deliver voice telephone service within Metro, will reach End of Life in 2015 and will limit Metro's ability to support and secure these systems. Additionally, these systems utilize the Microsoft Server operating system that is scheduled to go End of Life in the next year which will create a security risk in the Metro network.



3. **End of life: Contact Center System (Nortel/Avaya) (High)** – The Nortel/Avaya Contact Center, used to deliver service and information via self-service or agent interaction to Metro and the Public will, reach End of Life in 2015 and will limit Metro’s ability to support and secure these systems. Additionally, these systems utilize the Microsoft Server operating system that is scheduled to go End of Life in the next year which will create a security risk in the Metro network.
4. **Customer Demand: Instant Messaging (High)** – Metro ITS has received multiple departmental request to provide Instant Messaging to be integrated into their work process.
5. **Demand for Secure Government Systems (High)** - With massive data breaches in the news on seemingly a daily basis, we must strive at all times to protect the security, availability and integrity of all facilities and systems entrusted to our management.
6. **Customer Demand: Video Conferencing Services (Medium)** – Requests for the ability to conduct Video Conferencing continues to grow. Video Conferencing can reduce project cost, by reducing the need for travel and enhance communications over traditional telephone conferencing.

On the Horizon Strategic Drivers

1. **Technology end of life: Obsolete telephone tech (Game changing)** - Service Providers (AT&T, Comcast, others) strategic plans to migrate to IP delivery of all services and phase out legacy services to include analog telephones, Centrex and Primary rate interfaces (PRI).

Short Term Goals (0-6 months) 7/1/15 – 12/31/15

1	Replace Nortel End of Life CS1K telephone system servicing Metro Office Building, Howard Office Building, Lindsley Hall, Fire Headquarters, Juvenile Justice Center, Public Works and Human Resources with Cisco Voice Over IP. Project includes phones, multiple contact centers and fax services. Metro will engage trusted technology partners to work alongside Metro staff to roll out new phones. Project will begin in FY15 and transition over into FY16. Capital funding was secured in FY2015.	6/2015	4 months
2	Re-engage Metro Legal for guidance and approval for the use of Instant Messaging.	6/2015	3 months
3	Replace Nortel End of Life Conference Call platform with Cisco WebEx on premise solution, or similar, for voice and video conferencing. Capital funding will be requested in FY16 budget.	6/2015	2months
4	Replace Nortel End of Life CS1K telephone system servicing J. A. Burch, Historic Courthouse and Davidson County Sheriff’s Office with Cisco Voice over IP. Metro will engage trusted technology partners to work alongside Metro staff to roll out new phones. Project includes phones, multiple contact centers and fax services. Capital funding will be requested in FY16 budget. Audit of the PBX has been completed, working on obtaining hardware and services quotes.	11/2015	4 months



Medium Term Goals (6-18 months) 1/1/16 - 12/31/16

#	Goal/Objective	Est. Start	Est. Duration
1	Replace Nortel End of Life BCM and Norstar telephone systems at Parks Headquarters – Capital funding will be requested in FY16 budget.	1/2016	1 month
2	Implement Cisco Jabber for Instant Messaging and conferencing services Pending approval). Capital funding will be requested in FY16 budget.	2/2016	4 months
2	Implement Meraki Point-to-Point Virtual Private Networks at select Parks locations via Comcast Internet. Capital funding will be requested in FY16 budget.	2/2016	3 months
3	Implement Session Initiation Protocol Trunking to replace Primary Rate Interface voice services. Capital funding will be requested in FY16 budget. Budget estimates are complete.	3/2016	4 Months
4	Convert Traffic School End of Life Integrated Voice Response (IVR) to Cisco Integrated Voice Response (IVR). Capital funding will be requested in FY16 budget.	5/2016	4 Months

Long Term Goals (18-36 months) 1/1/17 - 6/30/18

#	Goal/Objective	Est. Start	Est. Duration
1	Replace Nortel End of Life CS1K telephone system servicing Criminal Justice Center with Cisco Voice Over IP pending decisions on future planning. Metro will engage trusted technology partners to work alongside Metro staff to roll out new phones. Capital will be required.	TBD	TBD
2	Replace remaining Norstar End of Life telephone systems, approx. 45 locations. Metro will engage trusted technology partners to work alongside Metro staff to roll out new phones. Capital will be required.	1/2017	10 Months

Related Roadmaps:

- Email and Calendaring
- Network Infrastructure

