ITS Strategic Roadmap – FY20 Planning

Cellular Devices and Service

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Background
Metro Government’s workforce is dependent upon mobile devices and constant connectivity to perform their job duties. Departments like Police, Fire, Codes, Water Services and Public Works have built new service models around mobile access to data and services, with more departments working in similar directions.

Due to these new models and the ubiquity of employee and citizen cellphones, there is increased need for cellphone signals to reach inside all large Metro facilities effectively. Enablement of the connectivity has become a standard component of new construction and refurbishment of Metro facilities.

ITS is responsible for maintaining the competitively-bid contracts for cellular services for Metro general government departments and agencies. The ITS Employee and Account Care (EAC) team provides the following services for departmental cellular devices:

- Device ordering support
- Cellular service ordering support
- Device replacement support
- Secure device disposal support
- Device billing chargeback to department
- Invoice monitoring
- Provider interface support including cellular coverage requests

Cellular hardware supported includes smartphones, pagers, mobile hotspots/air cards, and service for Metro PCs or tablets with a cellular card.

Billing for cellular services are directly billed at cost to customer departments with no markup or fee.
Metro has cellular contracts signed with Verizon Wireless and AT&T Wireless. Standard terms, as of writing in Fall 2018, are:

**AT&T Rates:**
- Flip-Phones: Per minute service rate is a flat 5 cents per minute used
- Smartphones: Monthly service rate is $44.99 for unlimited data/400 anytime shared minutes
- MiFis and PC related devices: Monthly service rate is $34 for unlimited data

**Verizon Rates:**
- Flip-Phones: Per minute service rate is a flat 5 cents per minute used
- Smartphones: Monthly service rate is $39.99 for unlimited voice and data
- MiFis and PC related devices: Monthly service rate is $34 for unlimited data

**Pager Rates:**
- Numeric Pagers: Monthly service rate is $1.45
- Alpha Pagers: Monthly service rate is $3.45

**Current Strategic Drivers**
1. **Customer Demand: Demand for Mobile Access** (High) – To allow employees to be more productive and mobile, departments are allowing more employees to have smartphones.
2. **Customer Demand: Improved Building Interior Wireless Coverage** (High) – Most Metro Government buildings were built prior to ubiquitous cellphone use, thus signals do not always reach inside all parts of Metro Government facilities.
3. **Technology Change: Smartphone Hardware** (High) – In the past the majority of Metro’s Smartphones were Blackberrys. iPhones are now Metro’s most common smartphone, followed by Android based phones.
4. **Technology Change: Connected Laptops and Tablets** (Medium) – As Metro employees become more mobile, there is push toward tablets and away from desktop PCs. The trend is to have these tablets equipped with wireless air cards, which allow use anywhere there is a signal.

**On the Horizon Strategic Drivers**
1. **Continual Change in Technology** (Medium) – The speed and bandwidth of cellular connectivity continues to increase. Verizon will be discontinuing its 3G network at the end of 2019, which will require the replacement of all 3G cellular devices. Network providers will be testing 5G networks throughout 2019. The first 5G-ready smartphones are expected to be released in 2019.
### Short Term Goals (0-6 months) 7/1/19 – 12/31/19

<table>
<thead>
<tr>
<th>#</th>
<th>Goal/Objective</th>
<th>Est. Start</th>
<th>Est. Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Building Coverage</strong>: Assist in coordination and implementation of Verizon solution for the increase of signal in necessary Metro Buildings.</td>
<td>7/2019</td>
<td>ongoing</td>
</tr>
<tr>
<td>2</td>
<td><strong>Devices</strong>: Replace any remaining 3G wireless devices with 4G devices due to Verizon discontinuing their 3G network service 12/31/2019. Continue to analyze, plan and implement new mobile device selection for best products and services Metro departments.</td>
<td>7/2019</td>
<td>ongoing</td>
</tr>
<tr>
<td>3</td>
<td><strong>Tablets/Laptops</strong>: Analyze, plan, revise and implement internal air card purchases for approved tablets and laptops transitioning to Gobi cards to work with multiple vendors as contracts awards change.</td>
<td>7/2019</td>
<td>ongoing</td>
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<td>4</td>
<td><strong>Wireless Contract</strong>: New wireless contract should have gone into effect at the end of calendar year 2018. Ensure service to all wireless devices has been moved to the awarded vendor.</td>
<td>7/2019</td>
<td>1-3 months</td>
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### Medium Term Goals (6-18 months) 1/1/2020 – 12/31/2021

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<th>Est. Duration</th>
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<tbody>
<tr>
<td>1</td>
<td><strong>Building Coverage</strong>: Analyze, plan, and coordinate with construction teams to implement the cellular repeater devices installation to service all Metro buildings and enhance their reception. Report completion information and results.</td>
<td>1/2020</td>
<td>ongoing</td>
</tr>
<tr>
<td>2</td>
<td><strong>Devices</strong>: Replacement of Metro Nashville’s 4G wireless devices with 5G devices to take advantage of the network’s most advanced wireless service available.</td>
<td>1/2020</td>
<td>6 months</td>
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### Long Term Goals (18-36 months) 1/1/2021 – 06/30/2022

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<th>Est. Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Contract</strong> – Begin the process of developing the solicitation document for the new wireless contract by identifying needs and services that will need to be included as part of the procurement.</td>
<td>1/2021</td>
<td>18 months</td>
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**Related Roadmaps:**

- Structured Cabling