



Board Report

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AD-HOC CUSTOMER EXPERIENCE COMMITTEE JANUARY 18, 2018

**SUBJECT: METRO RAIL SYSTEM WI-FI AND CELLULAR PROJECT
UPDATE**

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE status report on Metro's rail system Wi-Fi and cellular system project.

ISSUE

The addition of cellular Wi-Fi to the Red and Purple lines allows customers to maintain cellular voice and data connectivity while travelling on rail underground. This is a status report on the project.

DISCUSSION

In February 2013, the Metro Board authorized the CEO to enter into a 20-year contract with InSite Wireless to provide cellular coverage in the Metro underground rail system tunnels and stations, and an option for Wi-Fi in the underground rail stations. The contract was structured to be a revenue generator for Metro. InSite Wireless is responsible for all capital costs associated with the project.

There are two independent components of the project which have an impact on service activation dates for the public - cellular infrastructure and carrier contractual agreements.

1. Cellular infrastructure consists of a Distributed Antenna System (DAS) comprised of cabling installed throughout the tunnels and three communications base station hotels with associated network switching and routing equipment for each of the four carriers.

Note: All future rail projects will include a DAS as part of initial construction.

The cellular portion of the project was divided into three phases:

- Phase 1 - Union Station to 7th/Metro Station (Red and Purple Lines)
- Phase 2 - To Wilshire/Western (Purple Line 2A), Vermont/Sunset (Red Line 2B)
- Phase 3 - Hollywood/Western to North Hollywood (Red Line)

Current Cellular Infrastructure Status

The DAS has been completed for all three segments. Two of the three communications base station hotels are complete which allow cellular access from Union Station west to Wilshire/Westwood (Purple Line) and north to Vermont/Sunset (Red Line). The final base station to support the Phase 3 segment to North Hollywood is targeted for completion during Q1-Q2 2018.

- Cellular contractual agreements between the cellular carriers (AT&T, Verizon, T-Mobile, and Sprint) and InSite Wireless are required to enable project cost recovery and allow Metro customers to access their respective cellular networks on the subway.

Under the contractual agreement between Metro and InSite Wireless, Metro will receive 53% of generated revenue from this project; however, there are no direct contractual agreements between any of the carriers and Metro. Consequently, Metro’s influence over the timeline for signing carriers for the project is somewhat limited.

Current Contractual Status

Verizon, Sprint, T-Mobile and AT&T have all signed contracts for Phases 1 and 2A.

T-Mobile has contracted for Phase 2B. Verizon and Sprint are scheduled for Phase 2B contract completion January 31st and AT&T is targeted for Q1 of 2018.

Verizon and Sprint are scheduled for Phase 3 contract completion during Q1-Q2 2018. Phase 3 contracts for T-Mobile and AT&T are pending.

Activation Phases for Customer Use

Phase	Line	Segment	Active Carriers
1	Red Purple	Union Station to 7 th /Metro Union Station to 7 th /Metro	All carriers - Live All carriers - Live
2A	Red Purple	To Wilshire/Vermont To Wilshire/Western	All carriers - Live All carriers - Live
2B	Red	To Vermont/Sunset	T-Mobile - Live Verizon (Jan 31, 2018) Sprint (Jan 31, 2018) AT&T (Q1-2018)
3	Red	To North Hollywood Station	Verizon (Q1-Q2 2018) Sprint (Q1-Q2 2018) T-Mobile (No contract) AT&T (No contract)

Wi-Fi Status at Underground Metro Stations

Negotiations stalled some time ago between InSite Wireless and an Internet Service Provider (ISP) for providing Wi-Fi in the subway stations. To date, InSite Wireless has been unable to develop a monetization plan to finance the infrastructure and associated service costs for free Wi-Fi in the stations. InSite Wireless continues to search the market for opportunities but so far, passenger dwell times at stations don’t appear long enough for ISP’s to recover their costs. In the meantime, Metro IT is exploring the potential for expanding its connected facilities project, which provides Wi-Fi at Metro bus divisions and maintenance facilities, to include subway stations with public Wi-Fi as an added

benefit.

DETERMINATION OF SAFETY IMPACT

This status update report on rail system Wi-Fi and cellular system project will not have any impacts on the safety of our customers and/or employees.

NEXT STEPS

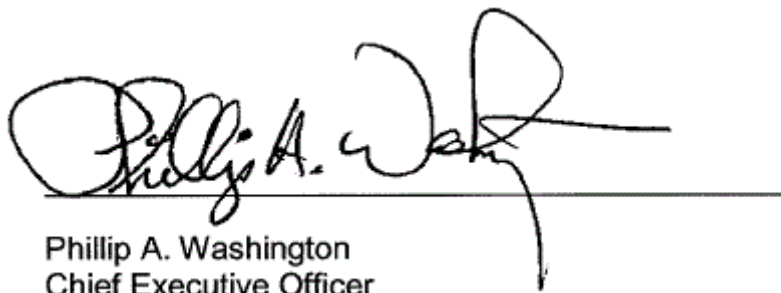
Operations and IT will continue to work together to activate live wireless cellular service on the Red Line for the Phase 3 segment. Also, staff will return to the board as necessary to provide updates regarding initiatives to improve the customer experience and the technology on our system, inclusive of the rail system Wi-Fi and cellular system project.

ATTACHMENTS

Attachment A - SUBWAY CELLULAR PROJECT MAP

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Subway Cellular Project

