Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

Metro

Board Report

File #: 2024-0807, **File Type:** Motion / Motion Response **Agenda Number:** 32.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE
JANUARY 16, 2025

SUBJECT: OPEN ACCESS LEASABLE FIBER

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE the report back on the feasibility of providing open access leasable fiber along the A Line South public right-of-way that could be accessed by City and County agencies.

ISSUE

At its July 2024 meeting, the Board directed staff to report back on the feasibility of open access leasable fiber. The findings are that open access leasable fiber is not feasible.

BACKGROUND

In the July 2024 Board Report, staff submitted a request to establish a Life of Project budget of $65,350,000 to implement the Communication Transmission System (CTS) upgrade, including installing a new fiber backbone on the Metro A, B, and D lines. The Board approved the request, as amended by Directors Dupont-Walker, Mitchell, and Butts, to report back on the feasibility of identifying areas along the public right-of-way where open access leasable fiber could be accessed by City and County agencies.

DISCUSSION

Staff conducted a feasibility study on installing an additional fiber optic cable with 432 strands available along the 22-mile, A Line South alignment for lease and usage by the City, as well as County agencies, which could be accessed near the Communications Equipment Rooms at the A Line South stations. This cable would be installed in existing underground conduits and manholes, which are also used for Metro's internal fiber optic cables. After reviewing the as-built drawings and conducting field surveys, the team found significant issues with providing leasable fiber as outlined below:

Financial and Resource Implications

Metro staff would be required to take on additional responsibilities and costs to maintain and repair the leasable fibers, conduits, inner ducts, as well as cable termination points. Given the

department's current and projected workload, staff does not have the capacity to absorb additional responsibilities. The potential maintenance responsibilities would require additional staff and vehicles to perform the necessary routine maintenance and to respond to any failures based on the agreed service level. These additional demands could disrupt Metro's ability to focus on its core priorities.

Cybersecurity Risks
Introducing leasable fiber cables into the same infrastructure as Metro's internal fibers (shared conduits and manholes) could create cybersecurity risks. Fiber optic tapping through the splices is possible due to utilizing the same splice trays, which creates a vulnerability, making Metro's internal communication systems susceptible to breaches.

In order to protect Metro systems against cybersecurity risks, the leasable fiber would need to be completely separate from Metro's fiber cables and conduits. This design and construction would allow use of Metro's right of way, but would not allow leasable fiber cable into the same infrastructure as Metro's fiber as the leasable fiber cable would be in a separate physical infrastructure, including conduits, manholes, and splice trays. In addition, any monitoring system to report on the condition of the leasable fiber would need to be a separate system, monitored by a dedicated maintenance team.

The addition of this work would likely delay the main CTS upgrade project schedule, which could also affect the timelines of major rail projects that need connectivity to the Rail Operations Control (ROC) Center, such as East San Fernando Valley (ESFV), Purple Line Extension (PLE)-1, PLE-2, PLE-3, Foothill 2B, and Metro Center Project (MCP).

Due to the concerns outlined above, open access leasable fiber is determined to be not feasible and not recommended.

EQUITY PLATFORM

The A Line South serves areas with a high Equity Focus Communities (EFC) concentration, including Watts, Willowbrook, Compton, Long Beach, Florance-Graham, and Downtown LA.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The Metro A, B, D Lines Communication Transmission System Upgrade Project supports the following Metro Strategic Plan Goals:

Goal # 1 Provide high-quality mobility options that enable people to spend less time traveling.

Goal # 3 Enhance communities and lives through mobility and access to opportunity.

NEXT STEPS
Staff will continue moving forward with the contract solicitation process for the main CTS fiber optic

cable upgrade project. Metro recommends municipalities to partner with fiber infrastructure firms to collaborate with other government entities to provide fiber optic cable access.

ATTACHMENTS

Attachment A - Motion #36

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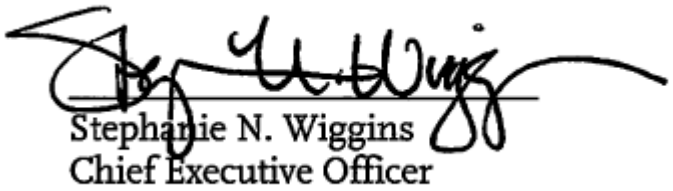
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