



# BART Digital Railway

Mobilitie Update, June 24, 2021

**mobilitie**<sup>®</sup>  
intelligent infrastructure



# BART Digital Railway

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- For more than a decade, BART has leveraged commercial telecommunication partnerships, with companies like Verizon, AT&T, T-Mobile and Sprint.
- The commercial industry has provided substantial revenue to the District and helped provide the basic cellular services that our patrons and employees rely on in our 30 miles of underground.
- The BART Digital Railway is designed to widen these commercial opportunities and expand advanced wireless connectivity to our stations and new trains.

# What Can We Expect?

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- Our riders can expect faster speeds from their cell phones, making it easier to make calls, send messages and surf the web.
- Our riders can also expect access to high-quality WiFi in our stations and new trains.
- These networks will ease cellular congestion in and around District property providing greater connectivity for our riders and the communities surrounding BART.

# Regional Coordination

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- The BART Digital Railway project is also a regional coordination effort.
- The San Francisco Municipal Transportation Agency (SFMTA) is already leveraging the BART agreement to provide their very first underground cellular system.
- This new system will provide cellular service in the SFMTA underground, that has previously been without service.
- We have also reached out to other Bay Area transit agencies to create more resilient overall networks, and more revenue opportunities.



# BART Digital Railway

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Jan 9, 2020: Board approved contract

Sep 14, 2020: Negotiations completed / contract signed



## Included Assets

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- WiFi in Stations
- Wireless Network for the Fleet of the Future
- Additional Capacity for Future Equipment
- 72 Strands of new Fiber Optic Cable

# Projects 1 & 2

## Project 1: SFMTA Underground Cellular

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### Key Accomplishments

- ✓ Data center location approved
- ✓ Final design complete, approved by carriers
- ✓ Project Work Plan approved
- ✓ Phase 1 & 2 permits approved

### Schedule & Next Steps

- Phase 1 Q3 2021
- Phase 2 Q4 2021
- Phase 3 Q1 2022
- Phase 4 Q2 2022
- All phases on-air 2022**



## Project 2: BART Station Wireless Services

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### Key Accomplishments

- ✓ Project Work Plan approved
- ✓ All station site walks complete


### Schedule & Next Steps

- Finalize network design
- Initiate pre-construction
- First 4 stations to go on-air: Powell St., Montgomery St., Embarcadero, Civic Center
- All station Wi-Fi on-air 2024**






# Low-Profile Deployment

**WAYSIDE WIRELESS JOINT-USE POLE**




**AUX. EQUIPMENT**





**JOINT-USE POLE COMPONENTS:**

- A. MULTI-CARRIER 4G CELLULAR OMNIDIRECTIONAL ANTENNA
- B. CARRIER 1 5G EQUIPMENT
- C. CARRIER 2 5G EQUIPMENT
- D. WAYSIDE WIRELESS NETWORK EQUIPMENT
- E. AUX. EQUIPMENT SPACE
- F. MULTI-CARRIER 4G RADIO CABINET
- G. POWER METER, DISCONNECT, BREAKER PANEL
- H. FIBER AND SWITCH BAY

NOTE: Pole Height is 39' above grade. Pole will be limited to 25' above track Infrastructure when next to elevated rail.



**POLE COLOR OPTIONS**

			
Nat. Park Brown	Dark Grn./Hunter Grn	Slate Gray	Military Blue



# Projects 3 & 4

## Project 3: Wayside Wireless Services

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### Key Accomplishments

- ✓ Project Work Plan approved
- ✓ Site walks complete
- ✓ Train-to-ground prelim. design complete
- ✓ Pilot sites permits submitted

### Schedule & Next Steps

- Pilot sites complete Q1 '22
- W. Oakland - Daly City '21 - '25
- W. Oakland - S. Fremont '22 - '24
- Coliseum - Oakland Airport '22 - '24
- W. Oakland - Bay Point '22 - '25
- Daly City - Millbrae '22 - '25
- MacArthur - Richmond '22 - '24
- Bay Fair - Dublin/Pleasanton '23 - '24
- All wayside wi-fi on-air 2025**

## Project 4: Commercial Fiber Optic Cable

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### Key Accomplishments

- ✓ Project Work Plan approved
- ✓ Transbay Tube (TBT) segment prioritized for initial deployment and monetization
- ✓ TBT fiber ordered, material in market

### Schedule & Next Steps

- Initiate TBT marketing and sales effort
- TBT deployment complete Q1 2022
- Initiate deployment in M-Line and W-Line
- All fiber complete 2023**



# External Affairs Outreach & Engagement Strategy

## Four Pole Pilot Outreach

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### July - September 2021

OEA will begin to inform neighbors, stakeholders and elected officials of BART's plans to install approximately 160 low-profile poles along the BART right-of-way.

### November 2021

Installation of the four-pole pilot between Balboa Park and Daly City stations begins.



## Messaging Strategy

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Before installing the poles, our goal is to give the public sufficient notice of BART and Mobilite's plans and to provide an explanation of the poles' benefits.

### Key Messages

- Safety
- Visual impact
- Stronger signals, faster speeds
- High-tech future proof
- Emergency services

### Title VI

Outreach materials will be produced in multiple languages in accordance with the Office of Civil Rights.

# External Affairs Outreach & Engagement Strategy

## Activities by Department

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### Government & Community Relations

- Arranging Board Member & Local Elected Briefings
- Neighborhood/Community Stakeholder Outreach
- Corridor Mailers
- Distribution of Neighborhood Specific Factsheets
- Eblast to Community Based Organizations, Local Orgs, Neighborhoods
- Town Halls/Virtual Town Halls

### Marketing

- Design & Production of PowerPoints and Neighborhood Specific Factsheets
- Project Stories on BARTable website and Newsletter

### Communications

- Project Specific Page on BART Website
- Social Media
- Potential Media Relations Campaign for Hyper-local & Ethnic News Outlets
- Talking Points/FAQ

### Customer Services

- Intake and Tracking of Neighborhood Comments via Phone, BART website, and Email

