

GOOD MORNING

Please mute your microphone for better sound quality for everyone.

Please submit questions by clicking the Q&A icon.

All Metrolink staff presenting today will display a Metrolink train as their background image.

Thank you!



METROLINK®

WI-FI REVERSE PITCH





CUSTOMER-FOCUSED CEO VISION

Safety and Security

Modernized Business Practices

Integrated System



IMAGINE

Image by @_titographer_

A scenic landscape featuring a train, a bridge, and mountains. In the foreground, a double-decker train with a white and teal livery is moving along a track. To the right, a concrete bridge spans across the scene, with a yellow truck driving on it. The background is dominated by rolling mountains under a clear blue sky with light clouds. The word "IMAGINE" is overlaid in large white letters across the center of the image.

IMAGINE

Image by @ssax859

A high-speed train, likely a Shinkansen, is shown traveling through a scenic valley. The train is white with blue and grey accents and is moving from the bottom left towards the center. To the left of the train is a steep, rocky cliff face with some sparse vegetation. To the right is a lush, green forested hillside. In the background, there are rolling hills and a small town or village under a blue sky with scattered clouds. The word "IMAGINE" is overlaid in large, white, bold letters across the center of the image.

IMAGINE

Image by @scax859

REVERSE PITCH PURPOSE

To tap into the creativity and innovation of the private sector to deliver Wi-Fi to our riders quickly, efficiently and cost effectively.

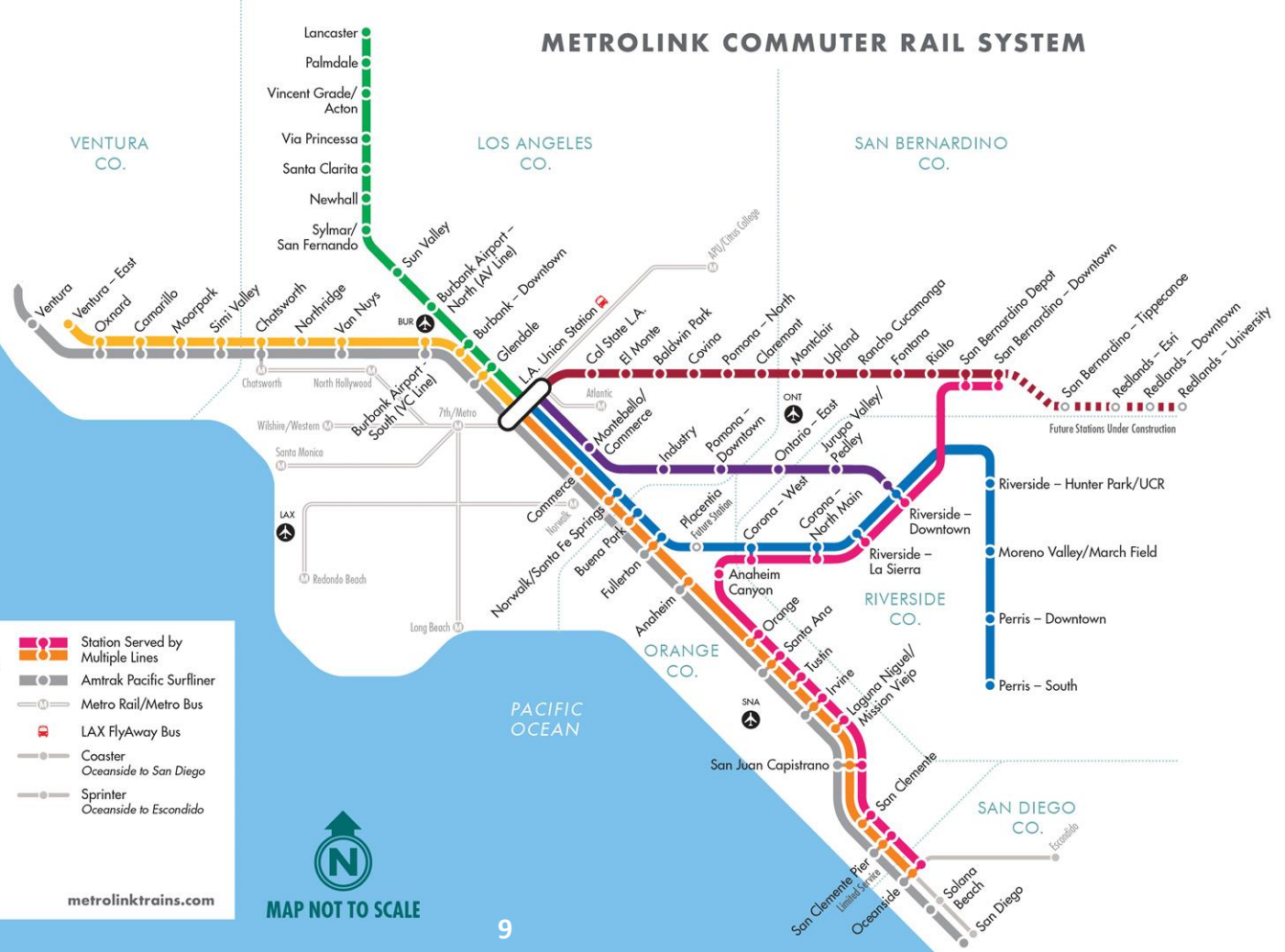


TODAY'S AGENDA

How do we deliver Wi-Fi to Metrolink customers?

- ABOUT METROLINK
- OPPORTUNITY STATEMENT
- PORTRAIT OF A METROLINK RIDER
- WI-FI PILOT PROGRAM PANEL
- HOW TO SUBMIT YOUR IDEAS

METROLINK COMMUTER RAIL SYSTEM



- Antelope Valley Line
- Inland Empire-Orange County Line
- Orange County Line
- Riverside Line
- San Bernardino Line
- Ventura County Line
- 91/Perris Valley Line
- Future Station
- Under Construction
- Station Served by Multiple Lines
- Amtrak Pacific Surfliner
- Metro Rail/Metro Bus
- 🚗 LAX FlyAway Bus
- Coaster
- Sprinter



metrolinktrains.com



MAP NOT TO SCALE

METROLINK CONNECTS SOUTHERN CALIFORNIA

28th Year of Operations

52
Locomotives



538 Miles
of Network

8th Largest by rider
(by the system)

3rd
Largest by
Route Mileage

258
Passenger Cars

7 Train
Lines



Operates in
Counties

6

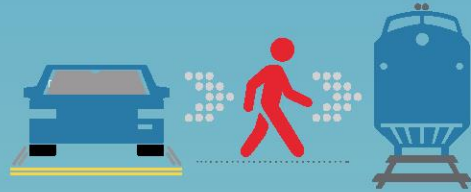
62
Stations

*Sources: National Transit Database (2018)
Metrolink Equipment Department (2019)

METROLINK REMOVES EMISSIONS AND CONGESTION

85%

OF WEEKDAY METROLINK RIDERS HAVE AN AUTOMOBILE BUT CHOOSE TO TAKE THE TRAIN



METROLINK HELPS RELIEVE FREEWAY CONGESTION

ALONG THE **5***, **10***, 14, 15, 57, **60***, **91***, **101***, **134***, 210, 215, 405, 605 AND 710 FREEWAYS



Metrolink reduces 9.3 million car trips off Southern California roads, eliminating over 130,000 metric tons of GHG emissions in our air basin – the equivalent carbon captured by 153,000 acres of forest.

Sources: Metrolink (2018) Origin Destination Study.

Metrolink (2019) Large capacity equivalent calculated using Metrolink conductor counts and Caltrans AADT traffic counts.

Metrolink (2019) Ticket-Based Ridership FY19 Business Intelligence Report

California Air Resources Board (2019) TIRCP Benefits Calculator Tool. <https://ww2.arb.ca.gov/resources/documents/cci-quantification-benefits-and-reporting-materials?corr>

Environmental Protection Agency (2019) EPA's Greenhouse Gas Equivalencies Calculator, <http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

11.9 MILLION BOARDINGS



In FY19, Metrolink achieved an agency ridership record of 11.9 million boardings. FY19 also marked five years of continuous growth.



WI-FI OPPORTUNITY STATEMENT

IDEAL

Riders have onboard Wi-Fi access during their commute.

REALITY

Riders do not have the ideal customer experience on board Metrolink trains.

CONSEQUENCES

It is more difficult to retain current riders and attract new riders.

PROPOSAL

Invite solutions for Metrolink to develop and implement Wi-Fi for riders ASAP.



METROLINK®

OpEx  Now

Wi-Fi

PORTRAIT OF A METROLINK RIDER

WEEKDAY RIDER



65% use Metrolink at least **five days** a week



82% are **work** trips



26% ride **more** now than last year



92% know of the **Metrolink Mobile Ticketing App**; **49%** use it

WEEKEND RIDER



12% use Metrolink at least **2 days** a week



69% are **leisure** trips



36% ride **more** now than last year



70% know of the **Metrolink Mobile Ticketing App**; **38%** use it

*Source: 2018 Metrolink OD Study

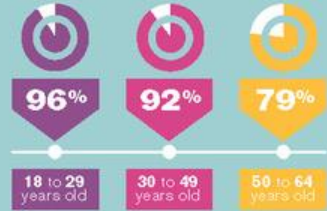
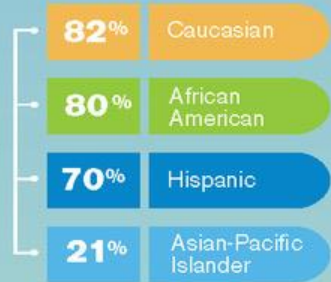
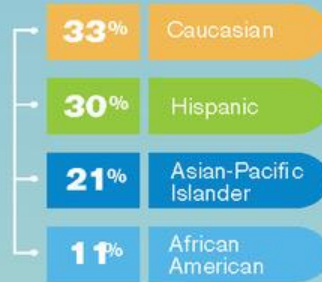
METROLINK RIDER / SMARTPHONE USER

METROLINK RIDER

SMARTPHONE USER

\$ 92,833 Median household income 

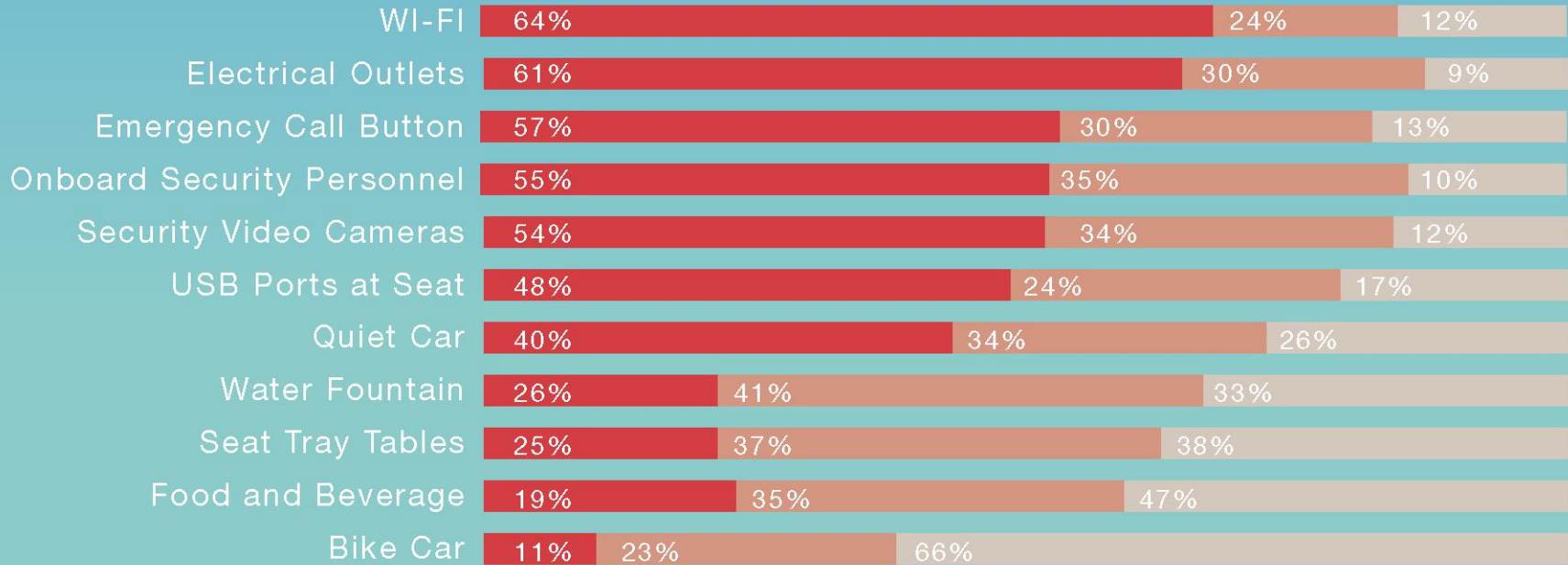
95% Income > **\$ 75K**



Source: *2019 Pew Research (smartphone ownership in the US)
*Experian (length of time spent on smartphones)

WE WANT WI-FI

What amenities are important to you?



*Source: 2018 Metrolink OD Study

■ Very Important ■ Somewhat Important ■ Not Important

WE WANT WI-FI...EVEN MORE!

How important is onboard Wi-Fi to you?

RESPONSE	2010	2018	DIFFERENCE
EXTREMELY/VERY IMPORTANT	37%	63%	▲ 26%
SOMEWHAT IMPORTANT	29%	25%	▼ 4%
NOT IMPORTANT	33%	12%	▼ 21%
DON'T KNOW	2%	N/A	N/A

*Source: 2018 Metrolink OD Study



WI-FI PROGRAM PANEL

METROLINK WI-FI PILOT PROGRAM PANEL



MODERATOR

Sherita Coffelt
Director,
Communications



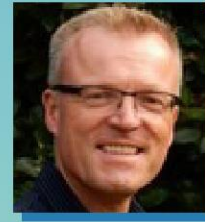
PANELIST

Luis Carrasquero
Sr. Mgr. Train Control
On-board Systems



PANELIST

Arun Chakladar
Senior Director, IT



PANELIST

Henning Eichler
Market Insights
and Analytics Manager

WI-FI PILOT PROGRAM OVERVIEW



SINGLE TRAIN CAR ANTENNA CONFIGURATION



PILOT PHASE 1: NOV 2019 - JAN 2020 TWO CARS PILOTED

- Two cars with external antennas
- One car with aluminum external body
- One car with stainless steel external body

PILOT PHASE 2: JAN 2020 - MAR 2020 FOUR CARS PILOTED

- Two cars with external antennas
- Two cars with internal antennas
- Two cars with aluminum external body
- Two cars with stainless steel external body

INSTALLATION OF WI-FI HARDWARE ON CARS TOOK PLACE AT OUR CENTRAL MAINTENANCE FACILITY



METROLINK.

Wi-Fi Pilot Installation





PILOT PROGRAM OPERATIONS AND EQUIPMENT FINDINGS

LESSONS LEARNED

- First two pilot cars required installation of roof mounted antennas. This process added extended hours of work, requiring the car to be out of service or unavailable for a few days.
- Second pilot had internal antennas, which resulted in no drilling of the equipment, but lower performance. Hardware installation involved less than an hour of time.
- With both pilots, equipment was out of sight and required little to no maintenance.

DOING THINGS DIFFERENTLY

- Explore repeaters or using trainline to extend coverage.

ADVICE OR WORDS OF WISDOM

- Ability to throttle bandwidth
- Remote analytics
- Provide a customer service phone/text number, chat function or email address for Wi-Fi related inquiries.

WI-FI PILOT DATA USAGE

PILOT 1 (2 CARS)

Average Daily Usage
6.1 GB

Max. Daily Usage
14GB

Avg. Unique Devices Per Day
113

PILOT 2 (4 CARS)

Average Daily Usage
7.6 GB

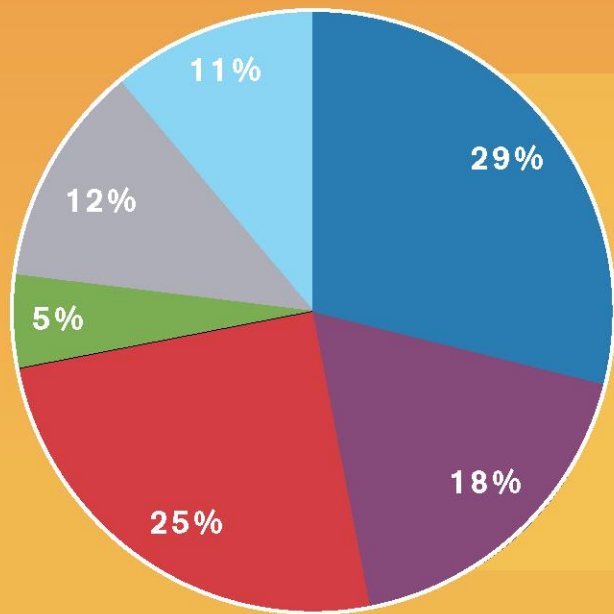
Max. Daily Usage
14 GB

Avg. Unique Devices Per Day
224

WI-FI SIGNAL STRENGTH



TOP WI-FI APPLICATIONS BASED ON DATA USAGE DURING PILOT



- EMAIL AND WEB BROWSING - 29%
- SOCIAL MEDIA - 25%
- STREAMING (VIDEO AND MUSIC) - 18%
- NOT AVAILABLE - 12%
- OTHER - 11%
- APP STORES - 5%

WI-FI PILOT CUSTOMER SURVEY

“This is a great step in making our ride more enjoyable. Thank you so much!”

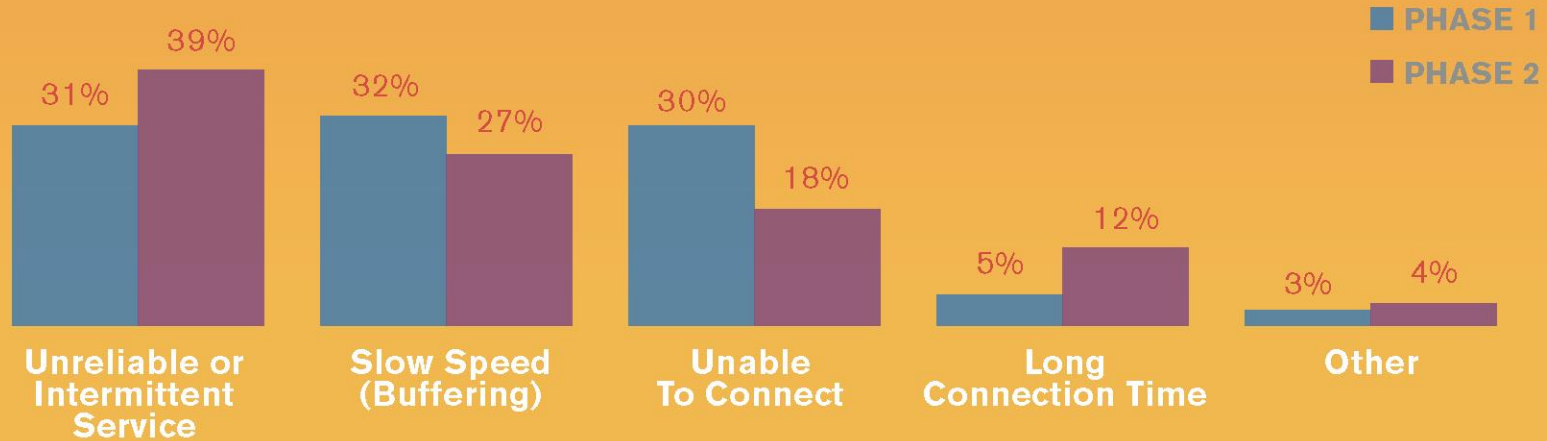
“Adding Wi-Fi is a game changer, Metrolink. Thank you!”

“It worked great. Now that I enjoyed it once, I want more!!! Thank you.”

WI-FI PILOT CUSTOMER SURVEY

57% of respondents indicated no problems

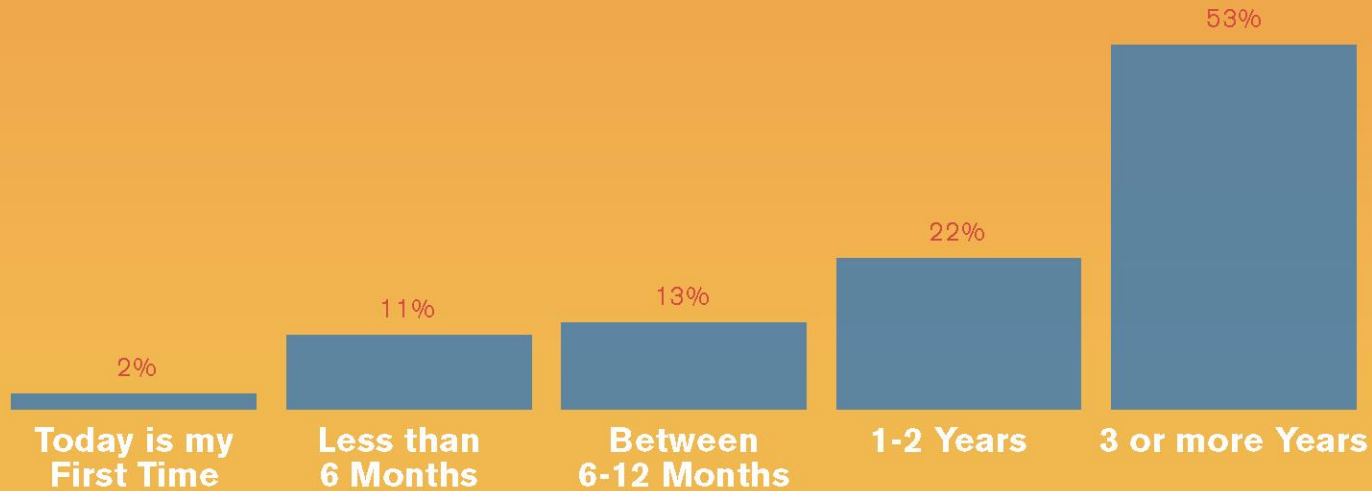
PLEASE DESCRIBE THE PROBLEM YOU WERE EXPERIENCING



Percent of respondents reporting problem. Multiple responses possible.

WI-FI PILOT CUSTOMER SURVEY

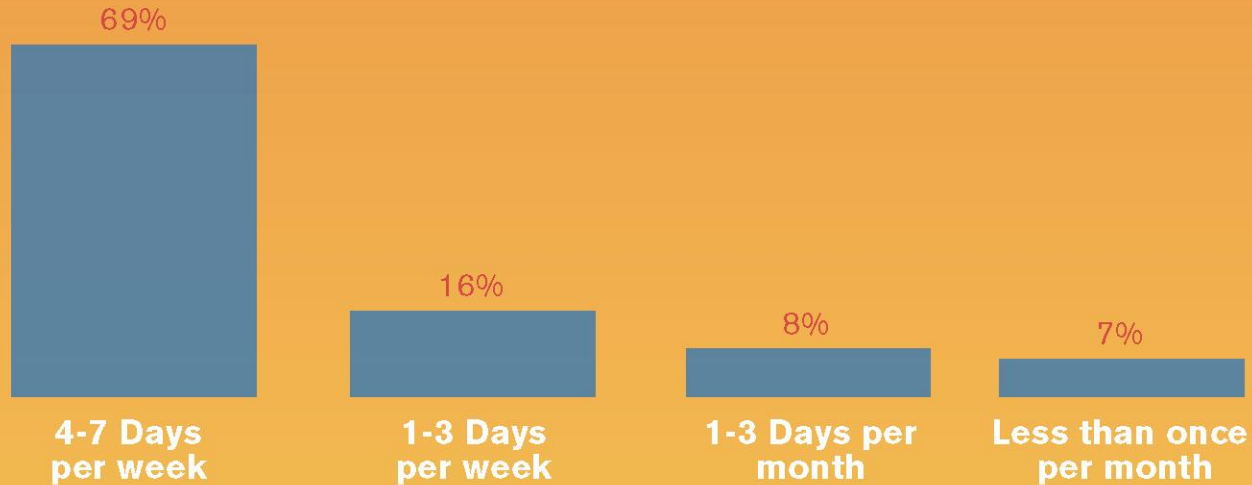
HOW LONG HAVE YOU BEEN RIDING METROLINK?



Percent of respondents

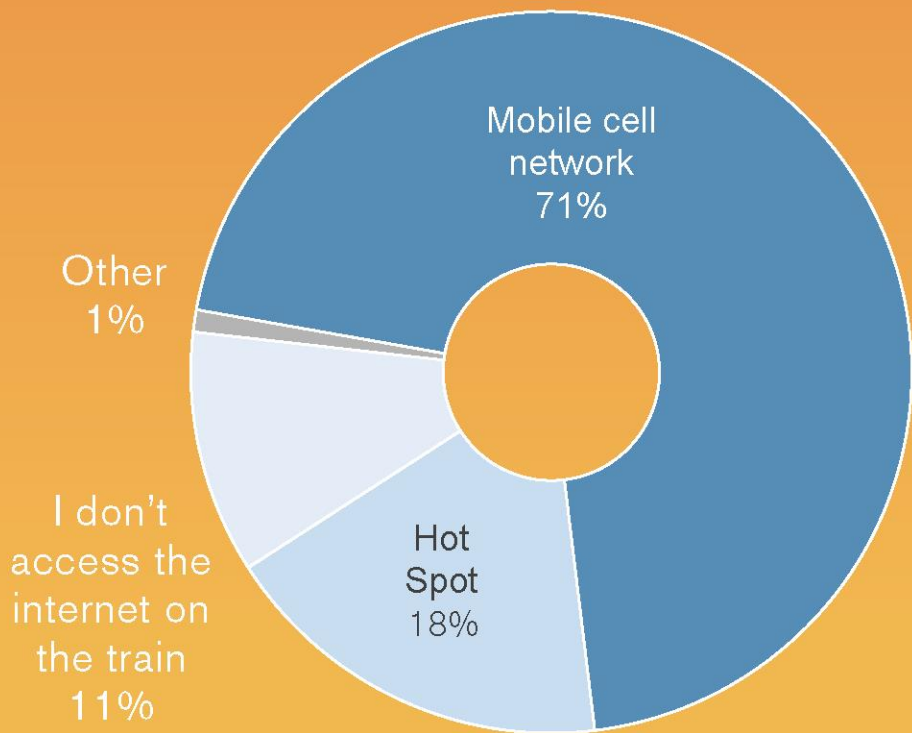
WI-FI PILOT CUSTOMER SURVEY

HOW OFTEN DO YOU RIDE METROLINK?



- 57% are Monthly or 7-Day Pass riders.

Percent of respondents



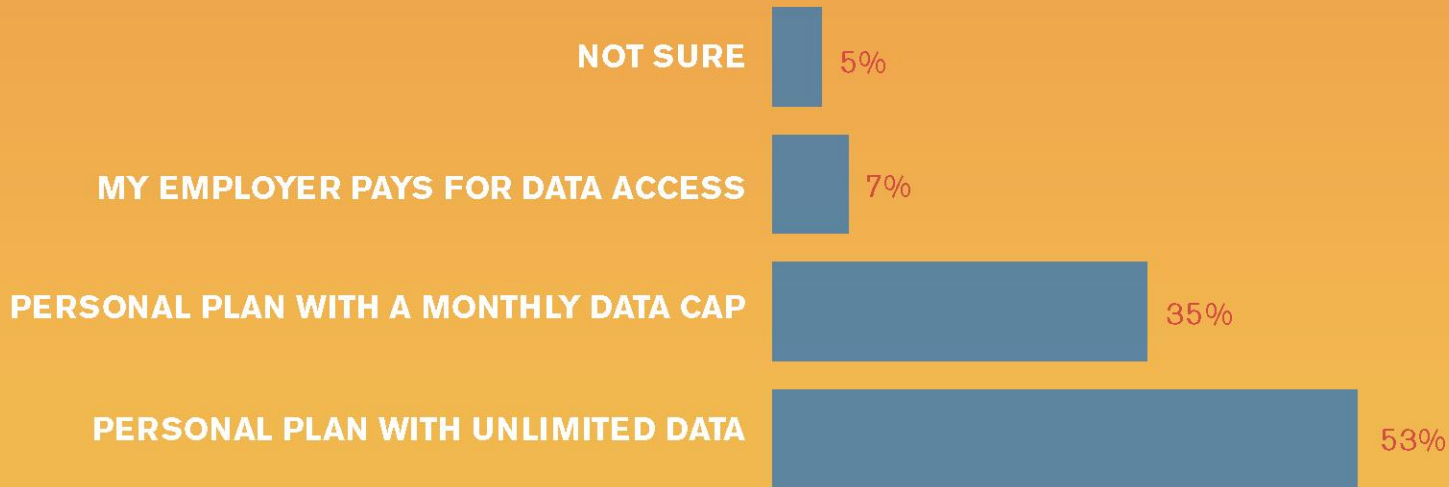
WI-FI PILOT CUSTOMER SURVEY

HOW DO YOU ACCESS THE INTERNET
WHEN YOU ARE RIDING ON A
METROLINK TRAIN WITHOUT WI-FI?

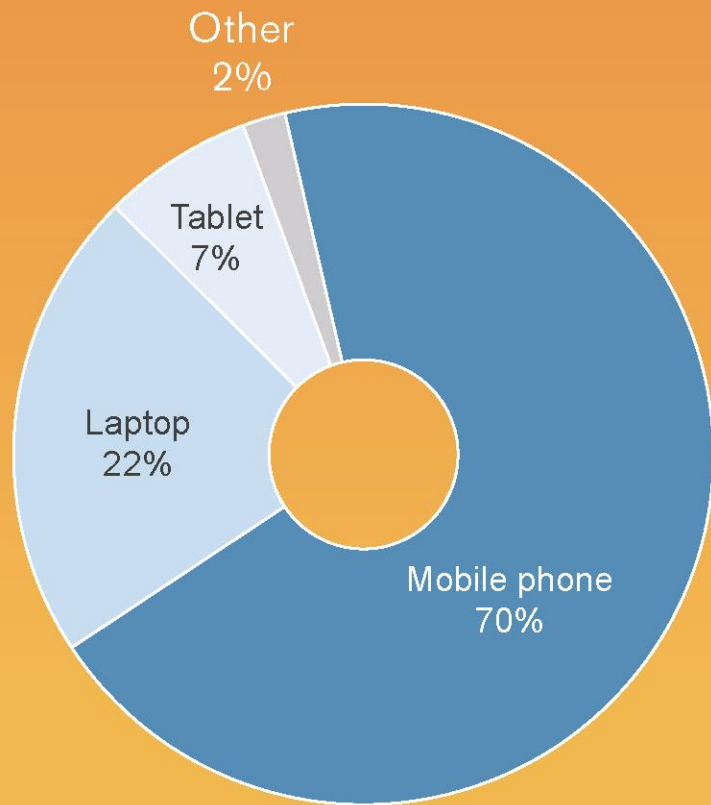
Percent of respondents

WI-FI PILOT CUSTOMER SURVEY

WHAT TYPE OF MOBILE DATA PLAN DO YOU HAVE FOR YOUR MOBILE DEVICE?



Percent of respondents



WI-FI PILOT CUSTOMER SURVEY

PLEASE THINK ABOUT THE LAST TIME
YOU USED METROLINK'S ONBOARD WI-FI.
WHAT DEVICE WERE YOU USING?

Percent of respondents

KEY FINDINGS FROM CUSTOMER SURVEY

- Riders depend on Internet access during their commute
 - Most have unlimited data plans
- Primary Wi-Fi problems include reliability and speed

A group of diverse people are sitting on a train, smiling and taking a selfie together. The scene is set inside a train car with large windows and patterned seats. The text "HOW TO SUBMIT YOUR IDEAS" is overlaid in white capital letters across the center of the image.

HOW TO SUBMIT YOUR IDEAS

UNSOLICITED PROPOSALS

Per Section 7 of Metrolink Procurement Policies

An Unsolicited Proposal is a written proposal that is submitted to the Authority on the initiative of the submitter for the purpose of developing a partnership that is not in response to a formal or informal request issued by the Authority such as Request for Proposal (RFP) or an Invitation for Bid (IFB).

- **Innovative and unique**
- **Independently originated and developed by the proposer**
- **Sufficiently detailed to demonstrate benefit to the Authority**

Available online at: [metrolinktrains.com/wifi](https://www.metrolinktrains.com/wifi)

HOW TO SUBMIT YOUR IDEAS

Unsolicited Proposals generated from this Reverse Pitch Forum are due to SCRRA on or before Friday, 05/29/2020 at 2:00 PM PDT

- Email questions and submittals with subject line Proposer Name - Wi-Fi Reverse Pitch to ideas@scrra.net
- Limit Unsolicited Proposals to 20 pages maximum.
- Unsolicited Proposals will be reviewed for Technical & Financial Merit.
- After review, the Authority will determine the most appropriate next steps, which could proceed to a sole source agreement, or issuance of a formal competitive procurement.
- The Authority does not commit to any particular outcome (including that Authority engagement with the proposer will lead to a procurement or a contract with the proposer).

Additional information provided in the accompanying Technical Supplement.

Q & A

THANK YOU



ideas@scrra.net
metrolinktrains.com/wifi