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## Topics

- Recent Performance Information
- Comparison to Benchmarks
- Systemic Influencers (COVID and others)
- Service Ideas
- Customer Service-Oriented Example
- Addressing ridership groups (women, for example)

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# Existing Transit Service

## Mountain Line Fixed Route

### Strengths

- High passenger capacity
- Serves many destinations along major corridors
- Regional access

### Weaknesses

- Less flexibility for new service throughout the city
- Existing network not sufficient for quick/short trips across town

## Mountain Lift Paratransit

### Strengths

- Provides ADA accessible transportation option
- Flexible Origin-Destination

### Weaknesses

- Multi-rider trips
- Hours limited to Mountain Line service
- Must book at least 24 hours in advance for most service

## Mountain Link NAU-focus

### Strengths

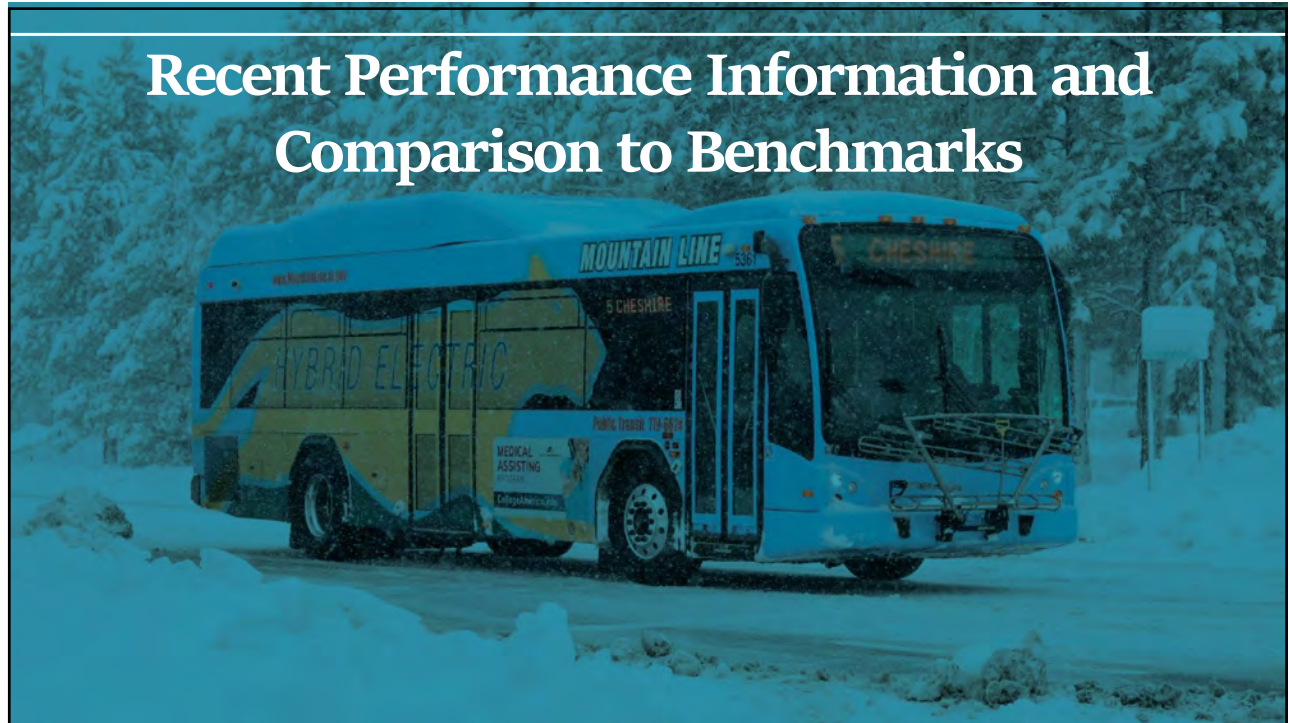
- Services focused, high-demand area
- Free to students

### Weaknesses

- Difficult to replicate elsewhere due to demographics

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# Recent Performance Information and Comparison to Benchmarks



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# Mountain Lion Services – Strategic Measures

	2019 Actual	2020 Actual	2021 Actual	2022 Goals	2022 Projected
<b>Fixed Route - Bus</b>					
Annual Boardings	2,541,353	2,097,814	924,728	1,252,561	1,398,742
Cost per Passenger	\$ 2.91	\$ 3.64	\$ 8.63	\$ 6.92	\$ 6.58
Cost per Service Hour	\$ 98.14	\$ 109.52	\$ 109.66	\$ 112.62	\$ 121.71
Passengers per Hour	33.77	30.09	12.71	16.27	18.51
<b>Demand Response - Paratransit</b>					
Trips Per Hour	3.02	3.40	2.61	3.05	1.86
Cost per Trip	\$ 46.05	\$ 54.60	\$ 55.69	\$ 44.11	\$ 68.12
Cost per Hour	\$ 139.10	\$ 185.50	\$ 189.21	\$ 134.63	\$ 126.81
<b>Taxi Program - City</b>					
Cost per Trip	\$ 14.50	\$ 16.42	\$ 21.99	\$ 17.52	\$ 20.28
Total Trips/Vouchers	7,116	6,875	4,732	5,118	5,408
<b>Taxi Program - County</b>					
Cost per Trip	\$ 26.94	\$ 26.47	\$ 31.80	\$ 40.22	\$ 26.66
Total Trips/Vouchers	954	929	661	996	756
<b>Vanpool Program - County</b>					
Cost per Trip	\$ 4.23	\$ 3.86	\$ 6.50	\$ 6.61	\$ 5.16
Trips	9,442	8,922	8,646	8,438	8,565

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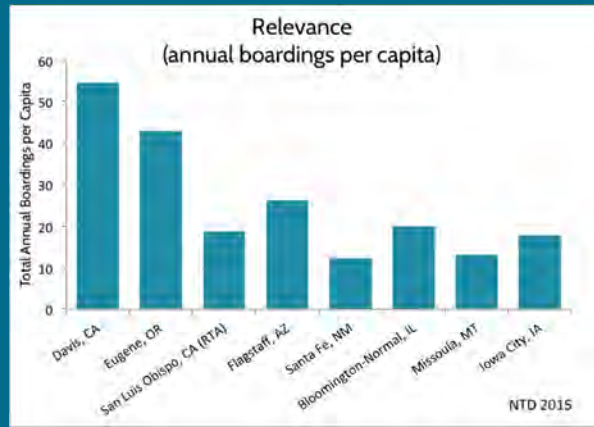
# Benchmark Comparison with Other Agencies

	Flagstaff, AZ	Madera, CA	Victoria, TX	Camarillo, CA	Cheyenne, WY	Pittsburg, MD
<b>Primary UZA</b>						
Population	71,957	78,413	63,683	71,772	73,588	72,714
Agency VOMS	29	24	40	19	18	30
<b>Fixed Route - Bus</b>						
Annual Boardings	2,097,814	241,800	168,541	56,136	108,045	19,158
Cost per Passenger	\$3.45	\$16.04	\$6.66	\$10.34	\$9.25	\$25.43
Cost per Service Hour	\$103.93	\$74.66	\$47.16	\$128.93	\$61.51	\$39.45
Passengers per Hour	30.1	4.7	7.1	12.5	6.6	1.6
<b>Demand Response - Paratransit</b>						
Trips per Hour	3.4	1.6	2.2	3.4	1.5	2.3
Cost per Trip	\$53.32	\$86.64	\$37.04	\$19.01	\$35.86	\$21.87
Cost per Hour	\$181.17	\$137.32	\$82.23	\$63.94	\$52.38	\$49.85

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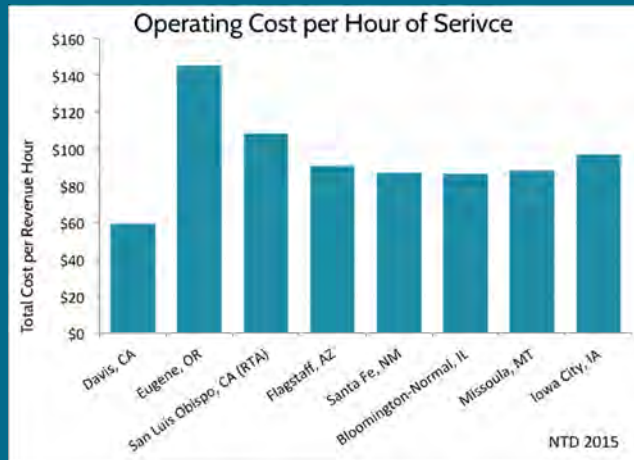
# Mountain Line Peer Comparison



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# Mountain Line Peer Comparison



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# Perceptions of Mountain Line, Non-Rider Survey, May 2019

Statement	Agree	Disagree	No Opinion
It reduces traffic congestion.	82.1%	12.7%	2.6%
It is a valuable service for our community.	93.1%	4.3%	2.6%
It is a good resource for people who can't drive or don't have access to a vehicle.	94.6%	3.0%	2.4%
It is reliable and cost-effective transportation.	81.7%	9.5%	8.8%

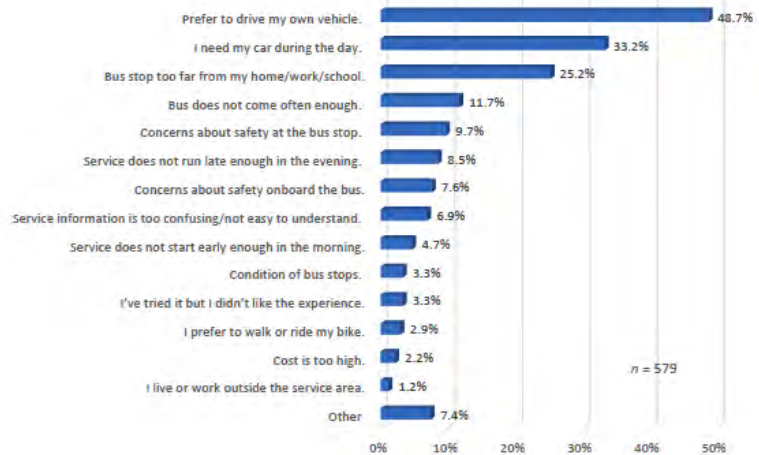
Statement	Disagree	Agree	No Opinion
It is not a service our community needs.	78.5%	14.0%	7.4%

Statement	Agree	Disagree	No Opinion
It is something I would only consider if I didn't have an alternative method of transportation.	69.7%	25.7%	4.6%
It is something I would like to use more, but don't know enough about.	35.2%	51.1%	13.7%
I would be willing to pay more in taxes in order to increase public transportation.	44.9%	41.8%	13.3%
It is too inconvenient to be a viable alternative to a car.	40.6%	46.9%	12.5%

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## Why not use Mountain Line per Non-Rider Survey, May 2019



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## Mountain Line On-board Customer Survey (2018)

### The “typical” Mountain Line customer:

- Is generally satisfied with the Mountain Line service
- Uses Mountain Line to travel to work (46.7 percent) or school (20.2 percent)
- Uses non-cash fare media (78.2 percent)
- Has been riding Mountain Line regularly for two years or longer (56.8 percent)
- Rides Mountain Line because it is their only transportation (68.6 percent)
- Rides five or more times per week (60.3 percent)
- Walks (or uses a wheelchair) to and from the bus stop
- Would ride more if there was later (65.9 percent) or more frequent (64.4 percent) service on weekends
- Is employed either full- or part-time (56.1 percent)
- Is a working age adult (age 25-64 years) (58.3 percent)
- Has an annual household income of less than \$20,000 (59.3 percent)
- Lives in a one- or two-person household (52.3 percent)
- Does not have regular access to a working vehicle (68.3 percent)
- Does not have a disability (90.8 percent)

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## Systemic Influences



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## How Big of an Impact to Transit?

- Working remotely – at least a few days/week
- Relocation to less-friendly transit location due to above
- Ridership apprehension due to proximity to others
- On-line purchases (goods and services)
- Remote learning environments

Countermeasures?

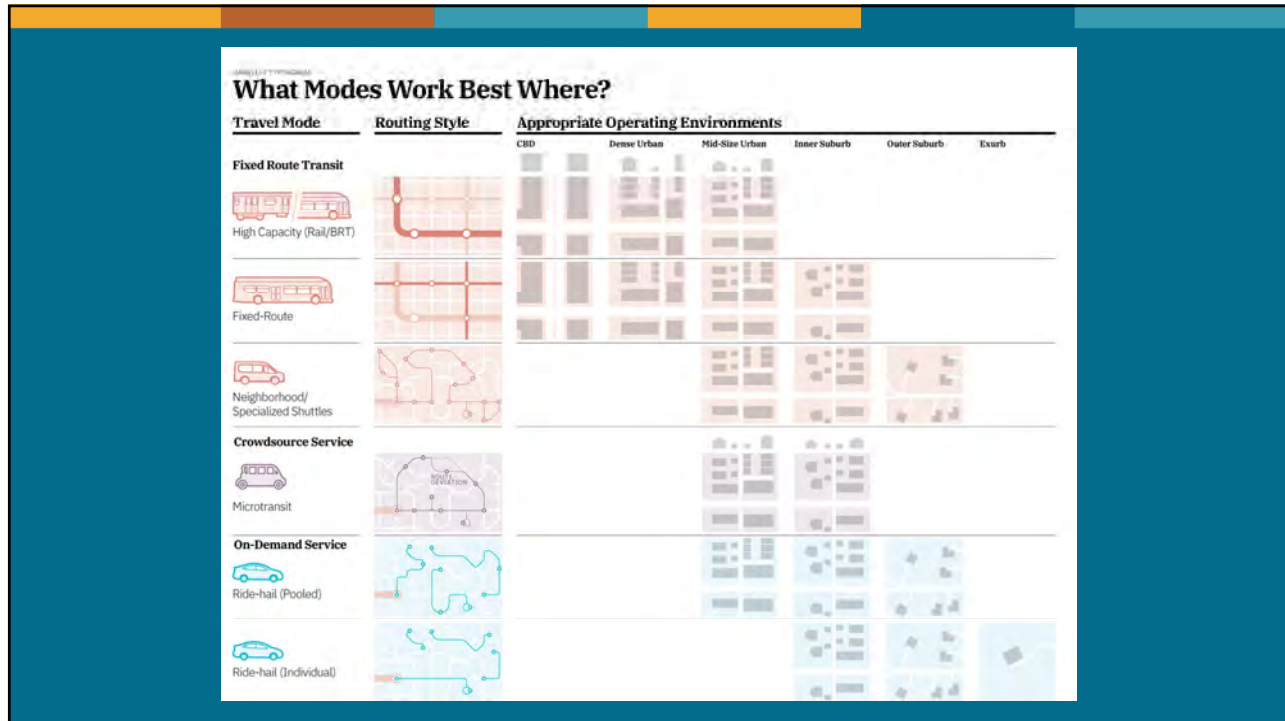
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## Potential Future Service Ideas



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## Neighborhood Shuttle Service

### What is it?

- Neighborhood transit shuttle service
- Provides connection from neighborhoods to key activity locations

#### Strengths

- Opportunity to expand new shuttle service for non-commuters
- Medium capacity vehicles

#### Weaknesses

- Fixed-routes offer less flexibility
- Larger vehicles need specific bus stops
- Difficult balance between accessing enough key destinations with quick on-vehicle time and frequent service

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## Specialized Shuttle Service

### Limited Applicability

- Special events
- Seasonal
- Need available rolling stock and drivers



Source: Visit Laguna Beach

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## On-Demand Microtransit

### What is it?

- Shared-ride, on-demand service
- Could be hailed using smartphone app

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Flexible routing</li> <li>• More direct service</li> </ul>	<ul style="list-style-type: none"> <li>• Limited capacity compared to fixed-route transit and shuttles</li> </ul>

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# On-Demand Microtransit

## ➤ FRAN (City of Anaheim)

- Partnership between the city and the Anaheim Transportation Network
- Service is free and serves downtown area



Source: Center City Anaheim

## ➤ Huntington Beach Downtown Shuttle

- Partnership between the city and Circuit
- Service is free and serves downtown area
- Can be hailed on-demand on site or through a phone application



Source: LA Times

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# Ridehail / Transportation Network Company Partnerships (TNC's)

## What is it?

- Potential to partner with Uber, Lyft, and/or local taxi operator to provide trips
- Point-to-point service, some limited opportunity for shared rides
- Can cover a large area with dispersed (low-density) origins
- Range of partnership options

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Low-cost to rider (but may be increasing)</li> <li>• Residents may already be familiar with service</li> </ul>	<ul style="list-style-type: none"> <li>• Potential challenges with ADA compliance</li> <li>• Limited integration with other transit services &amp; apps</li> <li>• Cannot accommodate demand surge / large groups</li> </ul>

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# Transportation Network Company Partnerships (TNC's)

## ➤ GoDublin! (Dublin, CA)

- Livermore Amador Valley Transit (LAVTA) pays for 50% of rider fare, up to \$5 within city limits
- Partnership between LAVTA & Uber and Lyft



Source: Livermore Amador Valley Transit (LAVTA)

## ➤ GoMonrovia (Monrovia, CA)

- Fixed reduced rate of \$3 for those traveling within the service area
- Partnership between the City of Monrovia and Lyft



Source: City of Monrovia

## ➤ Cincinnati Strategic Transit Study

- Recommended potential on-demand pilots
- Partnership between Uber and the city

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# Customer Service-Oriented Example



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# Ridership Growth Action Plan



**Priority Regional Strategies**

**Information**  
*Make it easy to pay, reward frequent use, and market dynamically to people based on their individual usage data*

- Seamless Fare Payment Options
- TAP Distribution & Direct Marketing
- Unified Transit Marketing

# Ridership Growth Action Plan

**Priority Regional Strategies**

**Quality of Life**  
*Enhance perceptions of safety through engagement with customer-minded staff and technology*

- Enhanced Customer Facing Operator Role
- Supportive Fare Enforcement
- Data-Driven Security
- Integrated Incident Reporting App

**Priority Regional Strategies**

**Service Quality**  
*Develop a unified customer-focused system*

- Optimize Fixed-Route Network
- Frequent, Reliable Service
- Expand Express Service



# Ridership Growth Action Plan

Measuring RGAP Success

## Collective Customer Focus

Ridership and Trip-Making

Customer Understanding

Market Capture

Customer Perception

Non-Customer Perception

### TAP Distribution and Direct Marketing

Customer Information
Fares & Payment Methods
Marketing & Promotions
Systems

Focus direct mailing and on-site promotional outreach at specific neighborhoods, schools, large employers, special events, and other institutions to get pre-loaded TAP cards into potential customers' hands and encourage more trip-making through targeted marketing.

### Unified Transit Marketing

Marketing & Promotions
Processes & Agency Coordination

Coordinate at the agency, regional, and subregional levels to methodically market transit. Focus on reaching non-riders with messaging that positions transit as an essential part of a new LA lifestyle.

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# Ridership Growth Action Plan

### Regional Uniform Data Standard

Processes & Agency Coordination
Systems

Implement a regional standard for data management and reporting, especially for foundational data on ridership and service levels.

### Cooperative Skills Development

Employee
Processes & Agency Coordination

Develop a shared learning or internship program to build uniform planning and operations management skills among agencies.

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# Ridership Growth Action Plan

## Ridership Growth Action Plan

### Develop a Customer Experience Program

Employee Processes & Agency Coordination

Thread the importance of the customer experience throughout each agency department, and cooperatively between Metro and LACMOA agencies, at a policy and programmatic level.

### Enhanced Customer Facing Operator Role

Employee Processes & Agency Coordination Quality of Life

Develop a common policy that sets high expectations for customer service. Empower operators to provide excellent customer service through new training.

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# Ridership Growth Action Plan

## Ridership Growth Action Plan

### Integrated Incident Reporting App

Customer Information Processes & Agency Coordination Systems Quality of Life

Report an Issue

Bus Late

Driver Issue

Payment Problem

Other Issue

Create or adapt smartphone app(s) that allows customers to report security incidents and other concerns quickly and easily, regardless of the transit service they're riding.

### Data-Driven Security

Processes & Agency Coordination Systems Quality of Life

Use incident reporting and security data to anticipate problem areas and strategically deploy security resources.


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# Ridership Growth Action Plan

## Expand Express Service

Service Delivery



Use new data sources to identify good markets for additional express transit.

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# Understanding How Women Travel

## Why look at women's travel?

- Ridership segmentation offers insights into how to best serve the diversity of customer needs
- Challenges assumption that "gender neutral" approach to planning does not have disparate impacts
- Deep academic research shows differences in experience using transit based on gender, particularly around safety



Photo Source: Taylor & Perrin

## Metro Project Background

- Ridership segmentation offers insights into how to best serve the diversity of customer needs
- Challenges assumption that "gender neutral" approach to planning does not have disparate impacts
- Deep academic research shows differences in experience using transit based on gender, particularly around safety



# Understanding How Women Travel

## Metro Data

- Metro On-Board Survey (2010-2018)
- Metro Customer Complaint and Tracking System (CCATS) (2013-2018)
- Metro Crime Reports (2017-2018)
- Metro Fare Evasion and Citation Records (FY 2018)
- Metro Bike/Bus Interface Study Survey (2017)
- Metro Customer Satisfaction Survey (2017)
- Metro General Public Survey (2013)
- LACMOA Ridership Growth Action Plan Survey (2018)



Photo Source: Taylor & Perrin

## Summary of Metro Findings

### Key themes:

- Overall Travel Behavior
- Transit Travel Behavior
- Safety
- Access
- Reliability
- Comfort & Convenience



Photo Source: Metro



# Understanding How Women Travel

- 1 **OVERALL TRAVEL BEHAVIOR** → Women's travel is constrained by household obligations and the needs and schedules of others.
- 2 **OVERALL TRAVEL BEHAVIOR** → Women tend to, although to a lesser extent than men, have to make do (surrender) and often make do.
- 3 **SAFETY** → Women cite safety as a top concern, which is exacerbated by access, reliability, and service issues.
- 4 **ACCESS** → Women, especially those who are low-income, have an elevated need and time burden to obtain access.
- 5 **RELIABILITY** → Women cite services that does not match their needs and available information as key reliability concerns.
- 6 **CONVENIENCE & COMFORT** → Women highlighted several customer service and physical design as key areas of dissatisfaction.

**Women cite safety as a top concern and barrier to riding transit.**

## Women feel substantially less safe riding transit and waiting for transit after dark.

Current Month Riders' Perception of Safety During the Day and Night

Category	Female (%)	Male (%)
I FEEL SAFE RIDING TRANSIT DURING THE DAY	67%	57%
I FEEL SAFE WAITING FOR TRANSIT DURING THE DAY	53%	47%
I FEEL SAFE TRAVELING TO THE TRANSIT STATION DURING THE DAY	67%	63%
I FEEL SAFE RIDING TRANSIT AFTER DARK	27%	39%
I FEEL SAFE WAITING FOR TRANSIT AFTER DARK	11%	17%
I FEEL SAFE TRAVELING TO THE TRANSIT STATION AFTER DARK	35%	41%

**Women find it difficult to travel with children on transit.**

More than 80% of women who travel with children:

Category	Female (%)	Male (%)
DRIVING THE BUS WITH CHILDREN IF AVAILABLE	81%	79%
STANDING AND HOLDING WITH CHILDREN IF AVAILABLE	75%	52%
STANDING ON THE PLATFORM OR STATION AREA	74%	47%
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**Key observations:**  
 Children travel almost exclusively with women. If men were observed traveling with children, they were typically also traveling with an adult woman.  
 Women (and men) traveling with children almost always had other items they were carrying, strollers, bags, and/or multiple children.  
 Families generally sit in reserved seating at the front of the bus. If those seats were not available, they sat in a pair of seats with the child in the window seat or, alternatively, sat on an adult's lap. Occasionally, adults sat separate from their children, or seated a child in a side-facing bench seat or aisle seat and stood next to them.

## Preliminary BART Findings

Based on BART's 2015 Station Profile Study:  
Female BART riders.

- Are more likely to be low-income
  - (21% of female riders vs. 17% male riders)
- Are less likely to have a driver's license
  - (65% of female riders vs. 67% male riders)
- Make more trips to colleges/universities
- Make more stopping trips
- Make less traditional work and work-related trips

Based on BART's 2015 Station Profile Study:  
Female BART riders.

- Are more likely to be dropped off or picked up from a station, particularly at night
- Are more likely to connect to a station via other public transit
- Are less likely to bicycle to a station

# Understanding How Women Travel

### Potential Policy & Design Solutions

- Transit ambassador staffing
- Lighting at stops/stations
- Interior station design
- "Request-a-stop" program
- Integrated crime reporting
- Discount program outreach
- Simplified, family-friendly fares
- "Pass-back" TAP
- Easier TAP reloading
- Seating layouts
- Pull cords/push buttons
- Space for strollers
- Stop/station amenities
- Mid-day service
- Real-time arrival info
- Tech-enabled Access routing
- Off-peak on-demand micro-transit



## Understanding How Women Travel

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## Potential Discussion Points

- What is most lacking about Flagstaff transit?
- What type of service is most in need?
- What unserved areas deserve consideration?
- What would constitute a "win"?



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