samTrans

How Good Was Your COA?

Determining the Effectiveness of Your Comprehensive Operational Analysis

Jonathan Steketee
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Agenda

- Defining COA & *Reimagine SamTrans*
- Evaluating Success
- Findings from SamTrans' Analysis
- Next Steps

Defining COA & *Reimagine SamTrans*

Jonathan Steketee

Comprehensive Operational Analysis (COA)

An ***in-depth, data-driven evaluation*** of the existing transit operations to ***identify opportunities to improve the efficiency, effectiveness, and equity*** of transit options in the short-term.

Example COA from Houston Metro

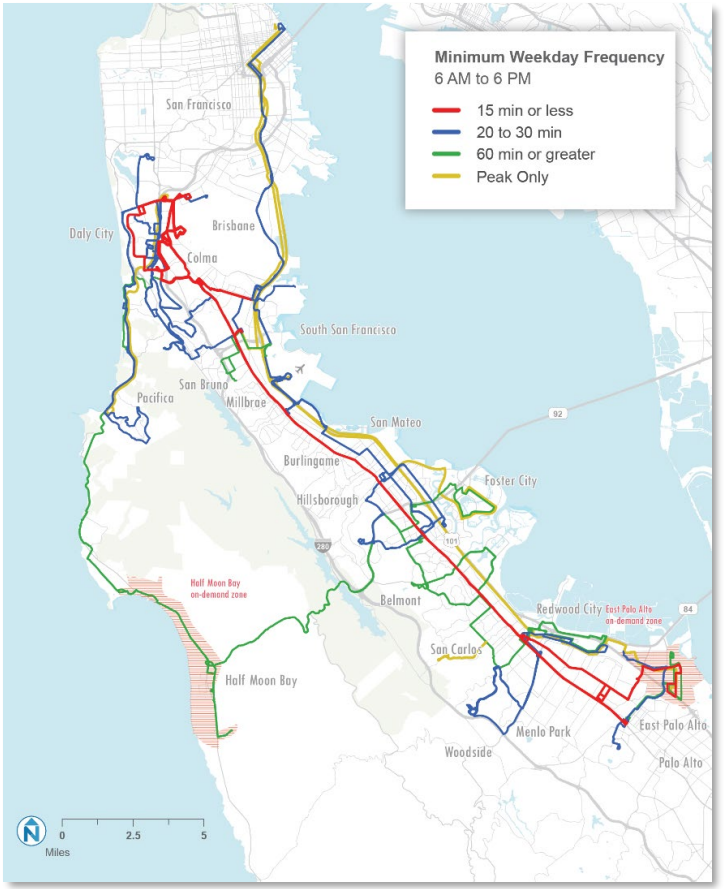
San Mateo County Transit District (SamTrans)

Operational Facts

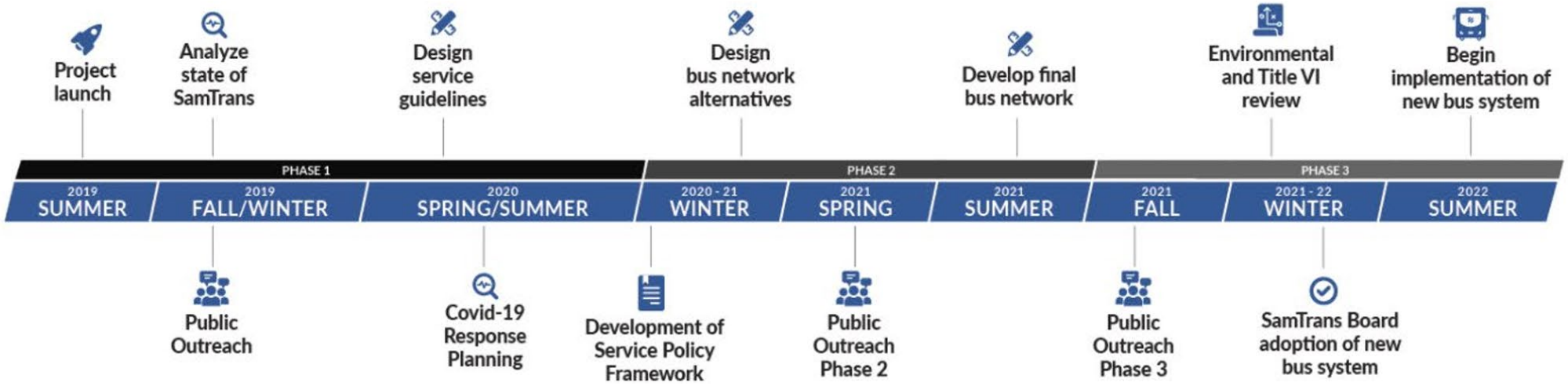
- Service Area: San Mateo County, parts of San Francisco and Palo Alto
- Over 300 buses serving 71 fixed routes
- 2 on-demand service areas
- Redi-Wheels providing ADA paratransit service

Rider Profile

- Ridership is 89% recovered to pre-pandemic levels
- 90% of riders are low income (64% extremely low income) based on county's affordable housing metrics
    - Lowest income ridership of any major Bay Area transit agency
- Nearly 75% of riders don't have access to a private vehicle



History of *Reimagine SamTrans*



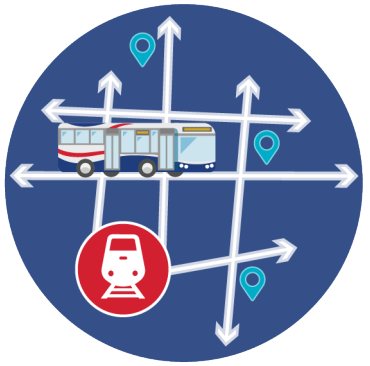
Reimagine SamTrans Guiding Principles

Customer Focus

Employ customer-focused decision-making

Workforce Delivery

Design service that can be reasonably delivered by our workforce



Effective Mobility

Be an effective mobility provider

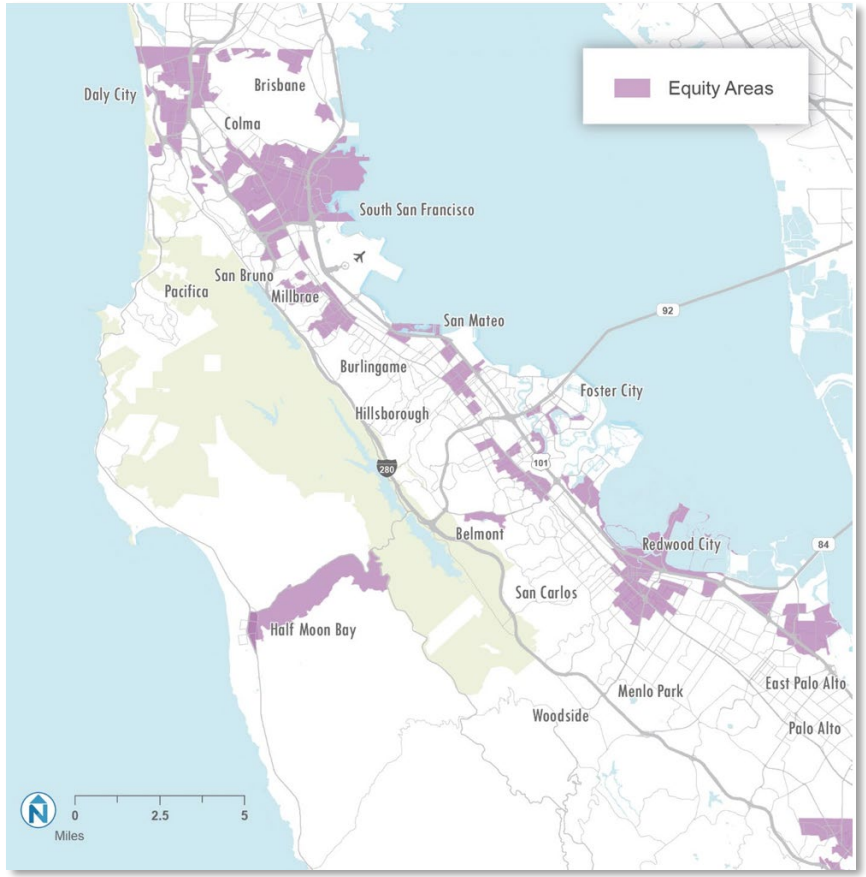
Social Equity

Support social equity and direct resources into *equity priority areas*

Equity Priority Areas

To identify areas with significant transportation and access disparities, SamTrans used a Neighborhood Equity Index that geographically identifies neighborhoods with:

- **Low-income households**
  - Earning less than $75,000 annually
- **Racial and ethnic minorities**
  - Populations that identify other than white
- **Zero-car households**
  - Households with no access to a personal vehicle



Three Proposed Networks

Alt 1: Efficient & Frequent

- Emphasize direct, high frequency access to places within the county
  - Removed service into SF, reinvested resources into improved frequency within San Mateo County

Alt 2: Regional Connections

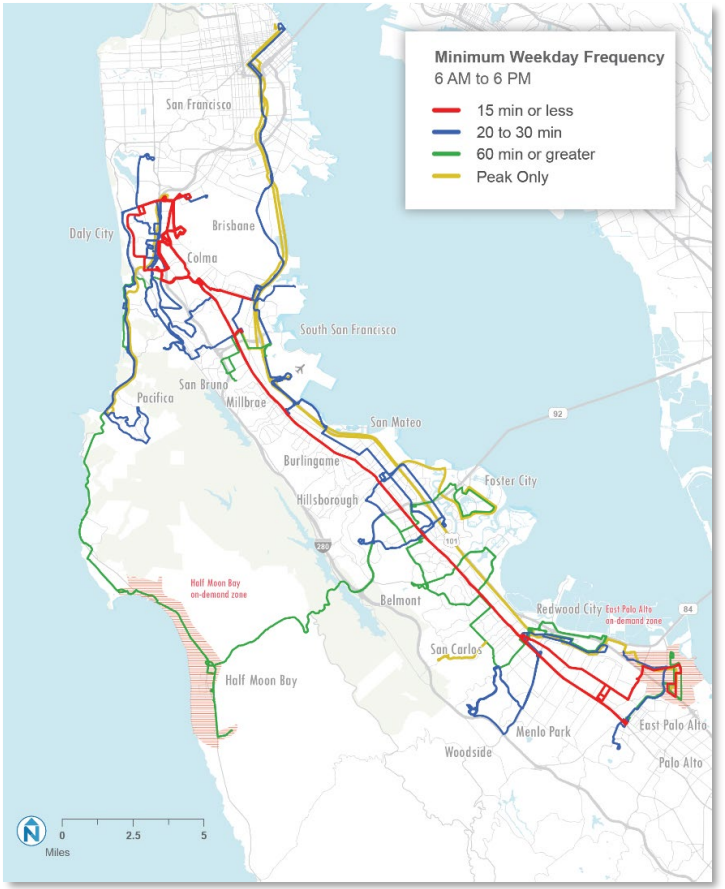
- Improve connections to rail and the region
  - Additional express bus service

Alt 3: Coverage & Frequency

- Retain coverage of service within the county
  - On-demand zones to provide coverage
  - Expanded midday and weekend service

Implementing *Reimagine SamTrans*

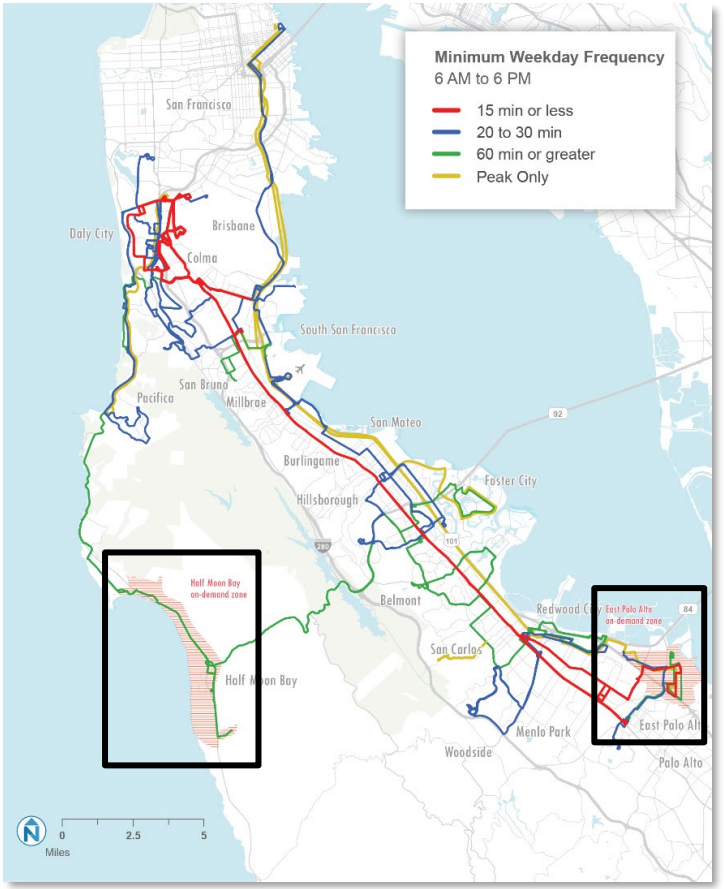
- The *Reimagine SamTrans* network includes consolidated routes and streamlined services to improve efficiency and attract more ridership.
  - More direct and frequent routes
  - Some reduction in coverage
- Phased Implementation
  - Phase 1: August 2022
  - Phase 2: June 2023
  - Phase 3: February 2024
  - Final phase: August 2024



More information is available on our website: https://www.samtrans.com/planning/reimaginesamtrans

Microtransit in *Reimagine SamTrans*

- Final recommended network included **two microtransit service** areas to complement fixed routes.
  - East Palo Alto and Half Moon Bay
- SamTrans' microtransit service, **Ride Plus, launched on June 18, 2023.**



More information is available on our website: www.samtrans.com/rideplus

Reimagine SamTrans Implementation

Phase	Routing	Rebranded	Restored	New	Improved Freq.	Span	Discontinued/ Reduced
1	14 routes	13 routes	-	Weekday: 1 route Sunday: 1 route Daily: 1 route	Weekday: 1 route Weekend: 3 routes	-	Discontinued: 12 routes Reduced: 3 routes
2	3 routes	-	Weekday: 1 route	Launch Ride Plus (microtransit)	Weekend: 2 routes	2 routes	Reduced: 1 route
3	-	-	-	Weekday: 1 route	Weekday: 1 route Weekend: 1 route	-	Discontinued: 1 route
4 (summer 2024)	*1 route*	*-*	*Weekday peaks: 3 routes* *Sat: 1 route*	*Weekday: 1 route* *Sat: 1 route* *Sun: 4 routes* *Daily: 1 route*	*Weekday: 6 routes* *Weekend: 3 routes*	*-*	*-*

Service Policy Framework

- Service Planning Guiding Principles
- Service Categories Definitions
- Route Development Guidelines
- Route Communication
- Service Evaluation
- Service Planning Process

Why Adopt a Service Policy Framework?

- Sets the values and principles from which we make decisions
- Supports staff in making day-to-day decisions and in emergency or crisis response
- Consistency and Board-approved rationale for how decisions are applied to each route or community
- Rooted in best practices
- Reflective of community input

Evaluating Success

Kate Christopherson

Evaluation Process Step by Step

1. Establish goals
2. Conduct COA
3. Wait / Let changes mature
4. Determine variables & methodology
5. Collect & analyze data
6. Share results

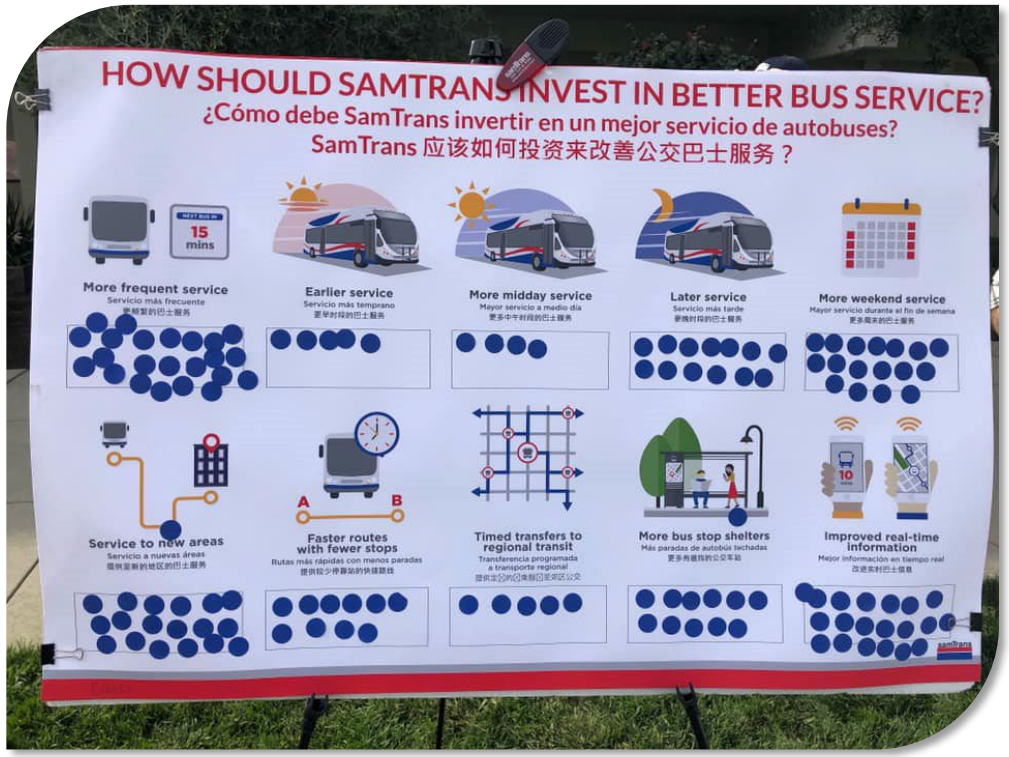
1. Establish Goals

The goals of *Reimagine SamTrans* were to …

- **Improve the experience for existing SamTrans customers**
- **Grow new and more frequent ridership on SamTrans**
- **Build SamTrans efficiency and effectiveness as a mobility provider**

2. Conduct Your COA / Bake!

2. Conduct Your COA



3. Wait / Let Changes Mature

4a. Determine Variables

The goals of *Reimagine SamTrans* were to …

Improve the experience for existing SamTrans customers

Grow new and more frequent ridership on SamTrans

Build SamTrans efficiency and effectiveness as a mobility provider

Evaluating our success

- Service levels
- Ridership
- On-time performance
- Customer feedback

- Ridership
  - *Particularly in Equity Priority Areas*)

- Productivity
  - Boardings/ Revenue Hour
  - Boardings/ Revenue Mile
  - Boardings/Trip

4a. Variables Continued

Systemwide

- Generalized results for the entire network

Service Category

- Frequent
- Local
- Community
- School-oriented
- Express/Limited Stop
- Owl

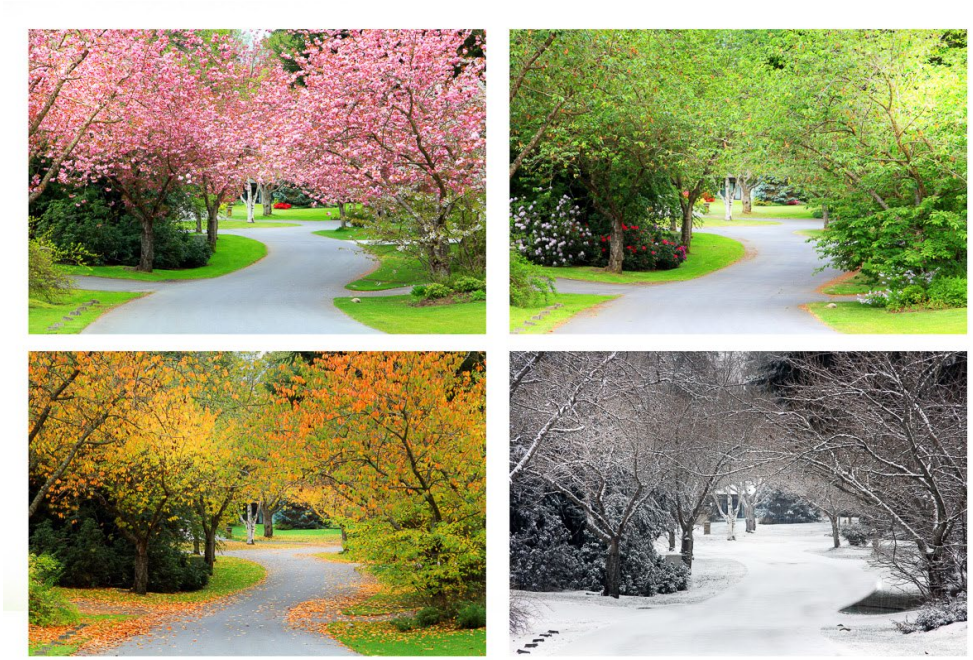
Geography

- North
- Mid
- South
- Coastal
- Multicity

4b. Determine Methodology

- Once variables were determined, staff looked at three time periods:
  - **Pre-pandemic/Pre-Reimagine:** January 2020
  - **Post-Pandemic/Pre-Reimagine:** May 2022
  - **Post-Pandemic/Reimagine Phases 1 & 2:** August/September 2023

When possible, compare the same seasons/months. Avoid months with holidays and school breaks.



Side Note: How are we evaluating Ride Plus's success?

Expand mobility

- Trips made from locations within the service area that are not served by fixed route
- Trips made that connect to fixed route
- Increased transit trips in the zone with Ride Plus, compared to prior trips on fixed route alone

Ensure high quality service

- Average wait time (<25 min)
- Completed requests (90%+)
- Star rating for trip (high)
- Star rating for app (high)
- Complaints (low)

Provide efficient and sustainable service

- Pooled trips percentage
- Reduced solo vehicle trips

Advance equity

- Demographics of riders & alignment with equity priority communities
- Reduced transportation costs of riders (compared to other modes they were using e.g., TNCs)

5. Collect and Analyze Data / Taste

Variable	Source
Service Levels	Scheduling Program
Ridership	Farebox
On-Time Performance	Automatic Vehicle Location (AVL)

Tools
• Tableau • Microsoft Excel • Microsoft Word

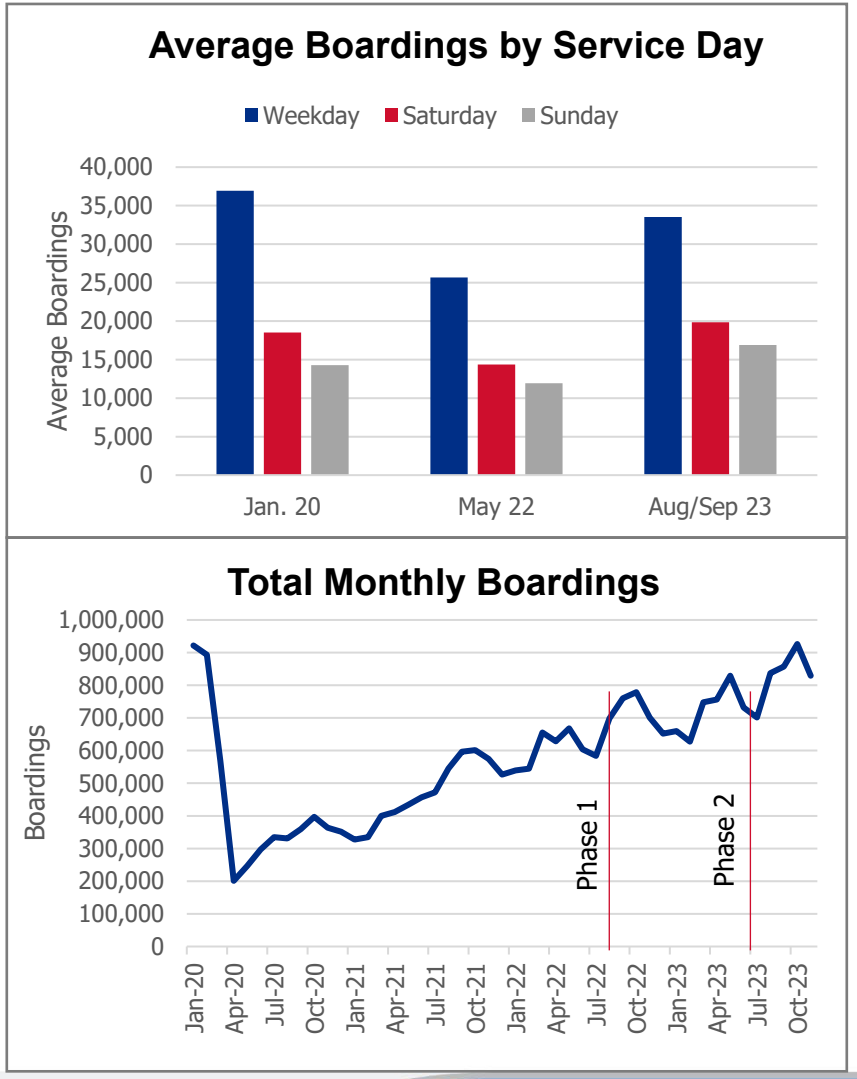
6. Share Results / Findings

Findings from *Reimagine SamTrans*

Chris Duddy

Systemwide Findings

- **Weekends** (and especially **Sundays!**) have seen significant ridership growth
- Systemwide, our service is now **more productive.**
  - Boardings per Trip and Revenue Mile exceed pre-pandemic levels for all service day types
  - Boardings per Revenue Hour exceed pre-pandemic levels on weekends and nearly match on weekdays
- Increased service to **Equity Priority Areas** resulted in higher ridership in those areas



Systemwide Findings Continued

- On-Time Performance (OTP)
  - SamTrans continues to experience OTP under 85% goal.
  - Staff continue to seek ways to improve OTP.

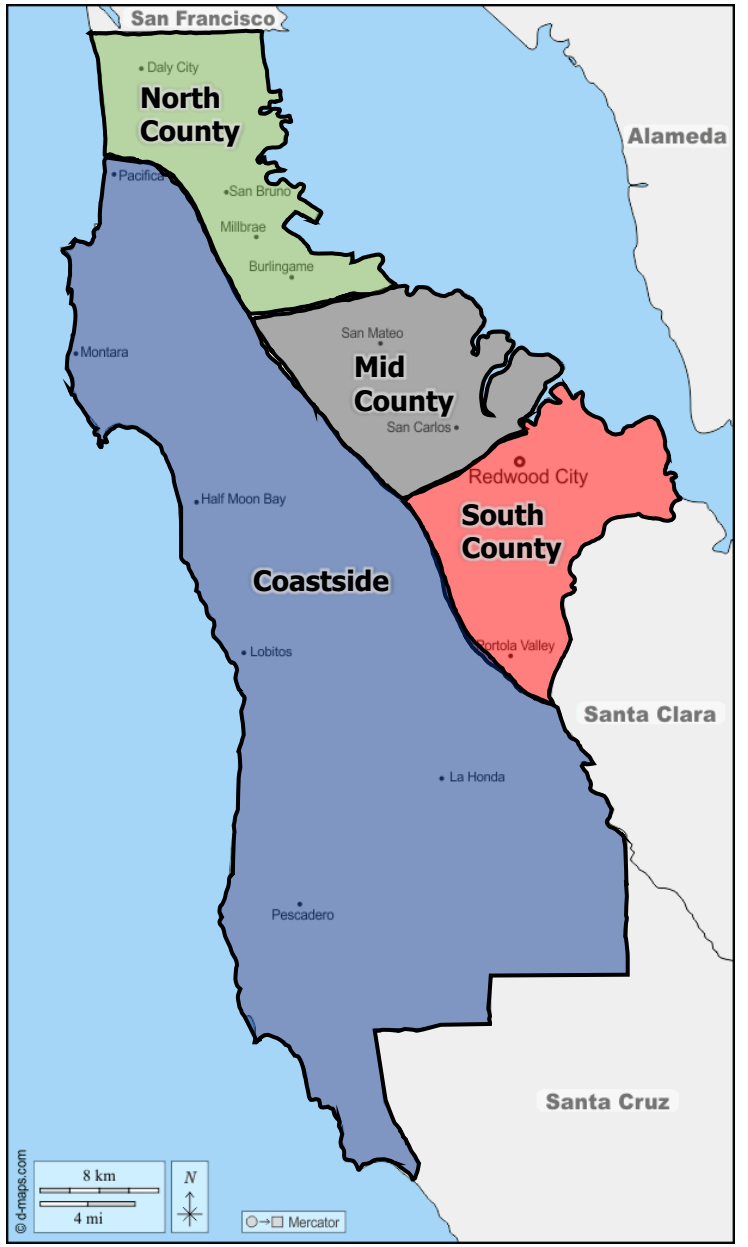
Service Category Findings

- ★ Ridership on **frequent routes** is higher than pre-pandemic levels.
- Community routes struggle with OTP and ridership recovery.
- School-oriented route ridership remains below January 2020 ridership, though productivity is strong.

Frequent routes run about every 15 minutes and includes 120, 130, 296, and ECR

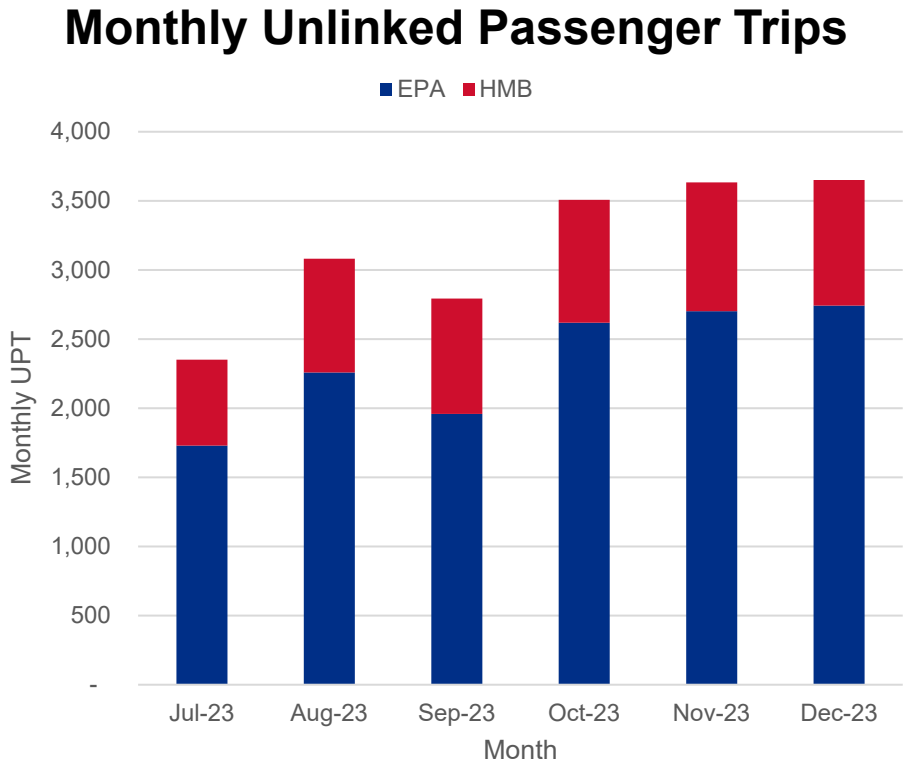
Geography Findings

- ★ North, Mid, and South County + Coastside routes
  - Similar ridership and productivity compared to pre-pandemic.
- ★ Multi-City routes
  - Increased ridership and productivity compared to pre-pandemic.
- All geographic levels struggle with OTP.



Ride Plus Key Metrics (First 6 Months of Service)

Ridership Metric	Stat
Unlinked Passenger Trips	19,017
East Palo Alto	*14,010 (73.7%)*
Half Moon Bay	*5,007 (26.3%)*
Passenger Miles	32,227
East Palo Alto	*18,414*
Half Moon Bay	*13,813*



*Miles inside the service area to pick-up, drop-off, or carry a passenger
^Time van is available for riders

Next Steps

- Complete implementation of full network in summer 2024.
- Staff will do full *Reimagine SamTrans* review, with new key performance indicators, 12 months after complete implementation.

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Thank You!