375 Beale Street, Suite 800 San Francisco, CA 94105

### **Meeting Agenda**

### **Fare Integration Task Force**

Members: Michael Hursh, Chair Denis Mulligan, Vice Chair

Michelle	Bouchard, Carolyn M. Gonot, Da	ryl Halls,			
Beth Kranda, Carter Mau, Therese W. McMillan, Kate Miller,					
Robert Powers,	Rick Ramacier, Michael Tree, and	d Jeffrey Tumlin			
Monday, September 20, 2021	12:30 PM	Board Room – 1st Floor (REMOTE)			

In light of Governor Newsom's State of Emergency declaration regarding the COVID-19 outbreak and in accordance with Executive Order N-29-20 issued by Governor Newsom on March 17, 2020 and the Guidance for Gatherings issued by the California Department of Public Health, the meeting will be conducted via webcast, teleconference, and Zoom for Task Force members who will participate in the meeting from individual remote locations.

A Zoom panelist link for meeting participants will be sent separately to Task Force members.

The meeting webcast will be available at http://mtc.ca.gov/whats-happening/meetings Members of the public are encouraged to participate remotely via Zoom at the following link or phone number. Task Force Members and members of the public participating by Zoom wishing to speak should use the "raise hand" feature or dial \*9. When called upon, unmute yourself or dial \*6. In order to get the full Zoom experience, please make sure your application is up to date.

Attendee Link: https://bayareametro.zoom.us/j/84631334581 Join by Telephone Dial (for higher quality, dial a number based on your current location) US: +1 408 638 0968 or +1 669 900 6833 or +1 253 215 8782 or +1 346 248 7799 or +1 312 626 6799 or +1 646 876 9923 or +1 301 715 8592 or 877 853 5247 (Toll Free) or 888 788 0099 (Toll Free) Webinar ID: 846 3133 4581

International numbers available: https://bayareametro.zoom.us/u/kdZZsAdAw4 Detailed instructions on participating via Zoom are available at: https://bayareametro.zoom.us/u/keF6DXG0Ji https://mtc.ca.gov/how-provide-public-comment-board-meeting-zoom

Members of the public may participate by phone or Zoom or may submit comments by email at info@bayareametro.gov by 5:00 p.m. the day before the scheduled meeting date. Please include the committee or board meeting name and agenda item number in the subject line. Due to the current circumstances there may be limited opportunity to address comments during the meeting. All comments received will be submitted into the record.

#### 1. Roll Call / Confirm Quorum

*Quorum:* A quorum of this committee shall be a majority of its regular voting members (7).

#### 2. Chair's Introduction / Remarks - Hursh

#### 3. Consent Calendar

 3a.
 21-0994
 Minutes from the May 17, 2021 Meeting

 Action:
 Task Force Approval

 Attachments:
 03a FITF Minutes 07-19-2021.pdf

#### 4. Subcommittee Reports

4a.	<u>21-0833</u>	Policy Advisory Council Fare Coordination and Integration Subcommittee Report			
		Summary of materials presented and discussions from the Policy Advisory Council Fare Coordination and Integration Subcommittee on August 2, 2021.			
Action: Information					
Presenter: Adina Levin, Policy Advisory Council Fare Coordination and Integr Subcommittee Chair					
	<u>Attachments:</u>	4a_Policy_Advisory_Council_Meeting_Summary.pdf			
5. Inf	formation				
5a.	<u>21-0995</u>	Fare Coordination/Integration Study - Draft Findings and Recommendations			
		Presentation on draft findings, recommendations, and proposed near-term fare policy actions resulting from the work of the Fare Coordination/Integration Study.			
	<u>Action:</u>	Information			
	<u>Presenter:</u>	William Bacon, MTC Co-Project Manager			
		Michael Eiseman, BART Co-Project Manager			
	Attachments:	05_FITF_Presentation.pdf			
		05 Appendix.pdf			
		05_Handout_Correspondence Received.pdf			

#### 6. Public Comment / Other Business

Task Force Members and members of the public participating by Zoom wishing to speak should use the "raise hand" feature or dial \*9. When called upon, unmute yourself or dial \*6.

#### 7. Adjournment / Next Meeting

The next meeting of the Fare Integration Task Force will be held on Monday, October 18, 2021 at 12:30 p.m. remotely and by webcast as appropriate depending on the status of any shelter in place orders. Any changes to the schedule will be duly noticed to the public.

**Public Comment:** The public is encouraged to comment on agenda items at Committee meetings by completing a request-to-speak card (available from staff) and passing it to the Committee secretary. Public comment may be limited by any of the procedures set forth in Section 3.09 of MTC's Procedures Manual (Resolution No. 1058, Revised) if, in the chair's judgment, it is necessary to maintain the orderly flow of business.

**Meeting Conduct:** If this meeting is willfully interrupted or disrupted by one or more persons rendering orderly conduct of the meeting unfeasible, the Chair may order the removal of individuals who are willfully disrupting the meeting. Such individuals may be arrested. If order cannot be restored by such removal, the members of the Committee may direct that the meeting room be cleared (except for representatives of the press or other news media not participating in the disturbance), and the session may continue.

**Record of Meeting:** Committee meetings are recorded. Copies of recordings are available at a nominal charge, or recordings may be listened to at MTC offices by appointment. Audiocasts are maintained on MTC's Web site (mtc.ca.gov) for public review for at least one year.

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Attachments are sent to Committee members, key staff and others as appropriate. Copies will be available at the meeting.

All items on the agenda are subject to action and/or change by the Committee. Actions recommended by staff are subject to change by the Committee.

375 Beale Street, Suite 800 San Francisco, CA 94105

### **Meeting Minutes - Draft**

### **Fare Integration Task Force**

Members:

Michael Hursh, Chair Denis Mulligan, Vice Chair

Carolyn M. Gonot, Daryl Halls, Beth Kranda, Carter Mau, Therese W. McMillan, Kate Miller, Robert Powers, Rick Ramacier, Michael Tree, and Jeffrey Tumlin

Monday, July 19, 2021 1:30 PM	Board Room – 1st Floor (REMOTE)
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#### 1. Roll Call / Confirm Quorum

Present: 12 - Chair Hursh, Task Force Member Halls, Task Force Member McMillan, Task Force Member Miller, Vice Chair Mulligan, Task Force Member Powers, Task Force Member Ramacier, Task Force Member Tree, Task Force Member Tumlin, Task Force Member Kranda, Task Force Member Mau, and Task Force Member Gonot

#### 2. Chair's Introduction / Remarks - Hursh

#### 3. Consent Calendar

Upon the motion by Task Force Member Tumlin and second by Task Force Member Tree, the Consent Calendar was unanimously approved. The motion carried by the following vote:

- Aye: 12 Chair Hursh, Task Force Member Halls, Task Force Member McMillan, Vice Chair Mulligan, Task Force Member Powers, Task Force Member Ramacier, Task Force Member Tree, Task Force Member Tumlin, Task Force Member Kranda, Task Force Member Mau, Task Force Member Gonot and Bouchard
- Absent: 1 Task Force Member Miller
- **3a.** <u>21-0832</u> Minutes from the May 17, 2021 Meeting

#### Action: Task Force Approval

Attachments: 03a\_FITF Minutes\_05-17-2021.pdf

Member Miller arrived after the approval of the Consent Calendar.

#### 4. Information

**4a.** <u>21-0834</u> Project Update and Pathway to Policy Recommendations

Discuss of ongoing work tasks and presentation on a pathway to the development of draft project recommendations which will be presented at the September Task Force meeting.

- Action: Information
- Presenter: William Bacon, MTC Co-Project Manager Michael Eiseman, BART Co-Project Manager
- Attachments: 04a FCIS July Project Update.pdf

Ian Griffiths of Seamless Bay Area spoke on this item. Rich Hedges spoke on this item.

- 5. Public Comment / Other Business
- 6. Adjournment / Next Meeting

The next meeting of the Fare Integration Task Force will be held on Monday, August 16, 2021 at 1:05 pm remotely and by webcast as appropriate depending on the status of any shelter in place orders. Any changes to the schedule will be duly noticed to the public.

### **Clipper<sup>®</sup> Executive Board Fare Integration Task Force**

**September 20, 2021** 

Agenda Item 4a

### Policy Advisory Council Fare Coordination and Integration Subcommittee Report Subject:

Summary of materials presented and discussions from the Policy Advisory Council Fare Coordination and Integration Subcommittee on August 2, 2021.

#### **Background:**

At the Policy Advisory Council Fare Coordination and Integration Subcommittee meeting, the project team presented status updates, a schedule outlook, a first look at recommendations, and initial findings of an implementation assessment.

Emerging recommendations were presented through the framework of "tiers of integration." The first tier would include overlays such as passes and caps which would not require governance or fare structure changes; Tier 2 would reduce price barriers by offering broad transfer discounts between operators; Tier 3 would align fare structures between regional services; and Tier 4 would integrate fare structures and policies across regional and local operators. The project team also presented an emerging recommendation to pilot a bulk institutional/employer pass in the near-term to evaluate travel behavior changes with a barrier-free product.

#### Discussion

Subcommittee members were largely supportive of the emerging recommendations, particularly the pass products and pilot under consideration. Several participants noted the appeal of the simplicity associated with an all-agency institutional pass over the complexities of a tiered pass. Others stressed that equity should continue to be a focus in designing and pricing new pass products.

In addition to the discussion over pass products and pilots, several subcommittee members also voiced support for the higher tiers of integration. Despite a larger implementation need relative to the status quo, greater integration is worth striving for and there would be benefits inherent to a more centralized management structure.

Fare Integration Task Force September 20, 2021 Page 2 of 2

Lastly, Subcommittee members recommended the development of more user-friendly materials for future meetings and stakeholder presentations.

#### **Issues:**

None identified.

#### **Recommendations:**

Information Item for Task Force discussion and feedback

#### Attachments:

None

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Michael Eiseman, Director of Financial Planning, BART

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William Bacon, Principal, Transit Programs & Financial Analysis, MTC



### **Fare Integration Task Force Meeting** September 20, 2021







Appendix – Business Case





# 1 — Fare Coordination & Integration Study Recap

## **Project Problem Statement**

Fare policy is one among several factors that have constrained the growth of transit ridership in recent years. Current fare policies are informed by funding and governance models that **incentivize locally-focused fares** without providing a coherent set of policies to set fares that support ridership growth.

As a result, Fare Coordination and Integration has a role to play in restoring transit ridership, supporting recovery from the COVID-19 pandemic, and **delivering the transportation system the Bay Area needs** for its coming decades of growth.

The following key issues define how fares impact ridership and contribute to the key challenges which detract from rider experience:

## **Customer Value**



Current fare policies can lead to a disconnect between the fare charged and the value a customer places on their trip.



## Payment Experience

Current fare products, passes, payment technologies, and payment experiences may not be legible.

Key Issues

Current fares may not consistently meet the needs of Equity Priority Communities.

Equity

Current fares may not optimize the ridership and benefits of proposed transportation investments.



### **Future Transit**



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## **Fare Integration Tiers**

The fare integration business case assesses the benefits, costs, and requirements associated with increasing tiers of fare policy integration in the Bay Area.













## What is considered in a business case?

 Used for understanding how each tier or option could impact ridership and revenue and potential wider benefits of structure change

Forecasting and Modelling

 Used to inform how different tiers or options should be assessed and solicit wider perspectives on fare structure change

Stakeholder Engagement



•Used to inform how different tiers or options should be assessed and solicit wider perspectives on fare structure change

Agency Engagement

•Used to inform how different tiers or options should be assessed and confirm key strategic, financial, and implementation considerations











## **How Were Options Evaluated?**

A business case framework is being used to make recommendations based on:



The overall benefits of integration



The comparative benefits of each tier



For tiers with multiple options, the specific benefits of each option and best option within a tier

### Evaluation to determine the value and benefit of a fare structure



## Strategic Dimension

Why pursue fare integration?

- Advance key regional policies and goals
- Higher ridership, equity, financial sustainability, customer experience, and change in VMT

### **Socio-Economic Benefit** Cost Dimension



What is the value of fare integration?

Monetizing the strategic benefits to estimate their overall value to the Bay Area

Reviewing financial impacts and risks and potential funding strategies

What are the financial requirements for successful integration?



Fare Structure Organization

Reviewing financial impacts, risks and funding strategies

How can fare integration be implemented and managed?

Delivery and Operation Dimension



Evaluation to determine the risks and requirements required to deliver a structure













## **Fare Integration Analysis: Structural Change and Revenue Impacts**

The FCIS reviewed a range of changes for fares in the Bay Area these can be divided into structural changes and revenue impacts

### Structural Changes

Structural changes include changes to:

- Local services the amount charged for fares on local bus and LRT services
- Regional services the amount charged for trips on rail, ferry, and express bus
- Transfers removing or discounting additional fares paid when using multiple operators

### Revenue Impacts ("Subsidy")

Each structural change can either increase or decrease revenue generated. Without fare increases and/or ridership increases, fare integration will require additional investment. Each Tier was modeled based on the following "subsidy" changes to illustrate the impacts of structural change and subsidy change:

Low Investment – approx. cost of free/reduced cost transfers or 1% to 2.5% of pre-COVID revenue

High Investment – approx. Tier 3 integration or 5% to 7.5% of pre-COVID revenue. Tiers 3-4, which may increase fares for some customers, were tested with additional investment to minimize any fare increases and to understand how the policy impacts scale with level of investment

3 — 4







## **Overview of Key Findings**

## Are there fare integration options that offer a cost effective, equitable way to promote transit? **Yes**, especially in coordination with a broader user-focused regional strategy.

	Potential to drive ridership	Modeling suggests t increase in transit ri level)		
<ul><li>● (\$) •</li></ul>	<b>Cost-effective</b>	Ridership benefits c efficient (~\$2-3 per discounts (\$3/trip) c		
	Positive social ROI	Analysis suggests in on investment throu		
	<b>Balanced equity impacts</b>	Fare integration stra indicates equity prio benefits of most str		
	High uncertainty	There is uncertainty modeling as well as		

that fare structure changes could drive a small but significant idership (2-6%, depending on the strategy & revenue recovery

of targeted integration strategies appear reasonably cost new trip) as compared to alternatives such as global fare or service enhancement and system optimization (~\$3-15/trip)

ivestment in fare integration would have a positive social return ugh benefits such as lower VMT and travel time savings

ategies appear compatible with regional equity goals. Analysis ority communities would receive a proportional share of the rategies

-2 -3 -4

y in the findings due to both the inherent uncertainty of post-pandemic uncertainty





## **Overview of Key Findings**

Would regional standardization drive ridership through improved learnability/legibility? Inconclusive.

- of fares across all operators alone would promote ridership.
  - **Benefits for some.** Our user research suggest that standardizing fares across operators could improve learnability & legibility for some users & potential users (especially those unfamiliar with current fare system)
  - *Perceived costs for others.* However, many existing riders we spoke to were anchored in the existing system and did not express a preference for standardization.
- use factors appear to be the largest drivers of variability between regions.
- due to COVID-19.
- standardization across all operators may increase if implemented in conjunction with the mapping, wayfinding, and branding changes discussed with the Blue-Ribbon Transit Recovery Task Force.

• User research findings were not conclusive. FCIS user research was not able to establish that standardization

• Global best practices not conclusive. While many regions with high-performing transit do have standardized region-wide fares, other high-performing regions have more complex fare structures. Service quality and land

• High uncertainty. There are limitations to the insight gained from the user research, especially as modified

• Standardization case may be stronger if linked to mapping, wayfinding, and branding. The benefits of fare







### Phase B – Clipper 2 Launch (2023)

- Free/reduced cost transfers region-wide
- Continue to explore options for individual pass products and/or a Clipper START cap

## 

### Phase C – Post Clipper 2 (2024+)

- Continue to assess benefits and costs of a single distance- or zonebased fare structure for <u>regional</u> services
  - Continued study of this option *in the context of broader* evaluation of post-COVID ridership, role in the region, and funding strategy for regional services



## Implement no-cost and reduced cost transfers beginning in 2023

Free and reduced-cost inter-agency transfers region-wide

### Definition

- Local/Local or Local/Regional connections: pay for only the most expensive segment
- Regional/Regional connections: Transfer discount about equal to minimum fare or local bus fare

### Rationale

- Eliminate price barriers between agencies
- Treat inter-agency connections like single-agency connections
- Allow regional services to function better as part of the local network

### **Business case summary**

- Ridership: +1.9%
- Revenue Impact: \$22.5M/year, \$2.25/new trip (most cost-efficient fare structure option tested)
- Equity: Benefits balanced across income levels
- Readily implementable in next generation Clipper within existing governance structures







## Pilot an all-agency employer/institutional pass beginning in 2022



## Definition

- All agency / all-you-can-ride passes that institutions or employers buy for all constituents (comparable to Caltrain Go Pass, AC Transit Easy Pass, Puget Sound Orca Business Passport)
- Pricing likely based on business location for a long-term program, but simplified or subsidized for Pilot

### Rationale

- Evaluate a barrier-free all agency transit pass to build toward broader fare integration in 2023 Engage Bay Area institutions and business community in transit's success
- Promote commute market recovery

### **Business case summary**

- Priced to achieve subsidy parity with other fares (~\$0/new trip)
- Equity: Requires careful design/mitigation to achieve equity balance
- Modeled on successful programs in the Bay Area and in peer regions
- Can be piloted in existing Clipper system





## Consider implementing an individual pass in 2023 or later (pending pilot outcomes and funding)

Individual Pass ("Puget Pass" model)

## Definition

- trip would require \$1 of payment from e-cash)

### Rationale

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- Reduces user friction for multi-agency trips
- volume rail/ferry riders not over-subsidized relative to local bus riders)

### **Business case summary**

- Ridership +1.5%, revenue impact \$34M/year, \$4.35/new trip
- structure

Multi-agency pass offered to individuals; price is based on user-selected fare multiplied by standard factor For example, a \$3.00 pass costs \$3 x 18 round trips per month (\$108). All trips up to \$3 are covered. (A \$4

Comparable to multi-agency pass offering in Seattle region ("Puget Pass") and the Washington, D.C. region

Allows multi-agency users the same high-volume discounts now available to single-agency riders

Multi-tiered structure aims to minimize revenue loss and improve equity performance (ensures highest-

Equity: Up-front payment may exclude low-income riders (consider pairing with Clipper START fare capping)

Can be implemented in Clipper 2 but will require system changes; need multi-agency revenue sharing



## Continue to Evaluate Costs and Benefits of Standardizing Regional Fares Post Clipper 2 (2024+)

Single Fare Structure for Regional Service Definition Shared distance- or zone-based structure for all regional services (rail, ferry, regional express bus) Evaluate this option in the context of broader evaluation of post-COVID ridership, role in the region, and funding strategy for regional services Rationale A more learnable/legible system for regional travelers, infrequent users, and visitors Potential to be part of a broader customer facing strategy for long-term regional recovery **Business case** Ridership & Fiscal Impact: 

- Equity: Benefits balanced across income levels
- change management for some regional customers

High investment option: Ridership: +4.7%; revenue impact: \$70M/year; \$2.84/new trip Lower investment option: Ridership: +2.1%, revenue impact: \$26M/year, \$2.39/new trip

Requires new agreements or governance structure for regional service, some new Clipper equipment,



## Tier 4 - No recommendation at this time

e Fare Structure for Local & Regional Service
າ
<ul> <li>ier 4 options examined included:</li> <li>Local common flat fare + regional distance-b fare; Zone-based for all transit service;</li> </ul>
ier 4 options have higher deliverability challenge ser research was not conclusive on customer ex
case summary
<ul> <li>idership &amp; Fiscal Impact:</li> <li>High investment options: Ridership: 3%-4%;</li> <li>Lower investment option: Ridership: 0% to 1</li> <li>Equity: Mixed equity outcomes; some option members in certain communities to achieve equires new agreements or governance structure nost customers</li> </ul>

based fare; Local common flat fare + regional Zone-based

ges & higher modeled cost per trip than targeted strategies experience benefits of standardization

; revenue impact: \$67-\$73m; \$3.28 - \$4.26/trip

1.5%; revenue impact: \$13M-\$30M; \$4.02-\$4.34/trip

ons include fare increases on equity priority population e standardization

are for all service, new technology, change management for





# **Summary of Key Business Case Metrics**

Tier	Fare Integration Scenario	Ridership change (%)	Revenue Impact / Subsidy required (%)	Revenue Impact / Subsidy required (\$M)	Cost per new rider	
	Transfer Discounts 🛞 + 🇭					
2	No-cost transfers (local/local, local/regional)	0.8%	1.2%	\$12	\$2.86	
Z	No-cost transfers (local/local, local/regional, regional-regional)	1.9%	2.3%	\$23	\$2.25	Recommended
	Regional Standardization (higher investment) 🛛 🖳 🛱 🖽 🗁 or 🛛 😫					
3	Unified Fare by Distance for Regional Services only	4.7%	7.2%	\$70	\$2.84	🗲 Continue to evaluate
	Unified Fare by Distance for Regional Services + Local Flat Fare	4.2%	7.5%	\$74	\$3.28	
4	Small zones for all service	3.0%	6.9%	\$67	\$4.26	
	Large zones + local flat fare	3.8%	7.5%	\$73	\$3.69	
	Regional Standardization (lower investment) 🛛 🖳 🛱 📼 🗁 or 🛛 😫					
3	Unified Fare by Distance for Regional Services only	2.1%	2.6%	\$26	\$2.39	
	Unified Fare by Distance for Regional Services + Local Flat Fare	1.1%	2.4%	\$23	\$4.02	
4	Small zones for all service	-0.2%	1.3%	\$13	No new riders	
	Large zones + local flat fare	1.5%	3.1%	\$30	\$4.34	
	Passes & Caps 📶 🚍					
	Fare-based cap (\$162 Dollars)	0.5%	6%	\$58	\$22.36	
	Trip-based cap (40 trips)	0.7%	5%	\$49	\$13.31	
1	Individual Pass ("Puget Pass" model)	1.5%	3.5%	\$34	\$4.35	Continue to evaluate
	Employer/Institutional Pass	Impacts of program based on scale of participation, intended to have no financial "subsidy" need.				두 Pilot
	Global Discounts (for comparison)					
	2.5% Global Discount	0.9%	1.4%	\$14	\$3.24	
	5% Global Discount	1.75%	2.9%	\$29	\$3.06	







# Summary of Key Business Case Metrics

Tier	Fare Integration Scenario	Overall Equity Assessment	Socio-Economic Benefit	Deliverability
	Transfer Discounts (\$)+			
2	No-cost transfers (local/local, local/regional)	Generally Positive	\$50	Low Impact
۷	No-cost transfers (local/local, local/regional, regional-regional)	Generally Positive	\$120	Low Impact
	Regional Standardization (higher investment) 📮 🚊 🛲 😑 or 🛛 😫			
3	Unified Fare by Distance for Regional Services only	Mixed Performance	\$340	Mid/High Impact
	Unified Fare by Distance for Regional Services + Local Flat Fare	Mixed Performance	\$310	High Impact
4	Small zones for all service	Mixed Performance	\$70	High Impact
	Large zones + local flat fare	Mixed Performance	\$280	High Impact
	Regional Standardization (lower investment) 🛛 📮 🚍 👄 or 🖉			
3	Unified Fare by Distance for Regional Services only	Mixed Performance	\$110	Mid/High Impact
	Unified Fare by Distance for Regional Services + Local Flat Fare	Mixed Performance	\$50	High Impact
4	Small zones for all service	Mixed Performance	-\$170	High Impact
	Large zones + local flat fare	Mixed Performance	\$50	High Impact
	Passes & Caps 📶 🚍			
1	Trip-based cap	Mixed Performance	NA	Low Impact
	Fare-based cap	Requires Mitigation	NA	Low Impact
	Individual Pass ("Puget Pass" model)	Requires Mitigation	NA	Low Impact
	Employer/Institutional Pass	Requires Mitigation	NA	Low Impact

Note – Tier 3 and 4 options were assigned a mixed performance score for equity as each option can decrease fares for some equity priority groups but raise fares for others. Further analysis, including full Title VI, is required to identify if mitigation is required.

**Recommended** 

Continue to evaluate

Continue to evaluatePilot





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## **Next Steps: Advance Regional Institutional/Employer Pass Pilot**

### **Pilot Objectives**

- Evaluate a barrier-free all agency transit pass to build toward broader fare integration in 2023
- Collect data that could be used as the basis for revenue model for permanent program

### Phase 1 (2022)

- Focus on colleges and universities
- Demonstration project with affordable housing residents
- Leverage existing agency relationships to establish program quickly

### Phase 2

- To be designed and implemented based on learnings from Phase 1, and tentatively to include:
  - Expansion to include private employers and more affordable housing residents
  - Partner with business organizations and property managers

## Challenges

- Similar offerings tend to serve either students or white-collar workers program will need a strong equity focus to achieve balance
- Significant administrative cost / staffing requirements
- Clipper 1 implementation requires 100% of agencies to sign-on
- Revenue risk pilot will require funding to backstop agency revenue









## **Next Steps**



Delivery of FCIS Pilots, Demonstration Projects, and Longer Term Actions

## **Onwards** $\rightarrow$

## **Key Actions to Consider**

- Decision on whether to proceed with a pilot
- Management structure for pilot
- Funding to support implementation
- Decisions on whether to proceed with Tier 2 (free/reduced cost transfers) in Clipper 2
- Forum for continued discussions of FCIS recommendations





# — Appendix – Business Case Findings



# **Fare Coordination/Integration Study and Business** Case

# **Appendix – Business Case Findings**

# Draft September 2021







## **Appendix – Business Case Contents**









## **Business Case Introduction**

## **Network Model Overview**



### Network models consider all modes available to each traveler for a given trip

The model estimates the number of travellers who will choose each mode based on travel time (including reliability, wait times, access times, and time spent in vehicle) and <u>financial costs</u> (including fares, tolls, fees) for a given trip





The fare modeling approach holds all travel times constant but changes fares to determine how a new fare structure could lead to behavior change






# What policy tools can be used to implement fare integration?

Price barriers, learnability/legibility, equity, and affordability can all be influenced through two types of fare integration policy changes.

### Change how much customers pay for each trip

Fare policies can reprice trips to:

- Incentivize ridership in specific market segments
- Re-balance revenue across different user types- for example – today, customers paying double fares contribute a disproportionate amount of revenue compared to trips paying single fares

Throughout this presentation, comparator options of -1 to -2.5% and -5% to -7.5% fare revenue across the region are used to illustrate how direct investment in the existing fare structure compares to investment in the options.







### Analysis Approach: Modelling Subsidy Scenarios (Tiers 2, 3, and 4)

### A four step analysis process was developed to test each fare option:



Test Tier 2 Options using the RTM to estimate level of subsidy required to remove all pricebased fare barriers



Run global discount comparator scenarios (2.5% and 5% discounts) to be used to contextualize option performance





Test Tiers 3 and 4 based on assumed pricing (example: pricing proposals from stakeholders) to determine level of subsidy required 4

Modify Tiers 3 and 4 to reach a similar level of required subsidy as Tier 2







Tier 1 (Passes and Caps) Analysis

### **Tier 1 - Overview**

#### Tier 1 Overlays is focused on caps and passes.

A range of passes and caps were modelled using a custom built elasticity model - this included:

- A range of price levels
- A range of trip levels (number of trips before a cap sets in)
- A single regional cap or product
- Tiered caps or products

This model uses pre-COVID Clipper data to explore the number of trips each 'card' made on each operator – either as part of a single trip or over the course of the month.

Elasticities were used to assess how different caps and pass products could impact ridership and revenue using the R programing language.

Because caps and passes were assessed with a different model than Tiers 2-4, they are discussed separately in this section.

h cartion	Includes
	IIILIUUES.

- **Overall findings**
- Model outputs for:
  - Daily caps
  - Weekly caps •
  - Monthly caps •
  - Tiered monthly caps •
  - An example 'Puget Pass' Style Product •
- Recommendations for further analysis





### **Options Overview**

Caps and passes can be defined based on the following:

- **Caps** a product offer where customers receive a discount, or free travel, once a trip based or value based 'cap' has been reached
- Value the dollar value applied to a cap or pass (example: \$50)
- **Trips** the number of trips a customer could take before they receive a discount or free travel (example: 35 trips)





# **Tier 1 – Initial Findings**



Trip-based products or caps tend to achieve as much ridership as a fare-based cap but with much lower revenue impacts.

**Tiered caps** (local service and all inclusive) generate similar levels of ridership but result in substantially more revenue loss. These are not recommended for further study.

A monthly product based on the Puget Pass was modelled using Clipper data and included in the Business Case. In this scenario, a transit rider selects the value of their own monthly pass based on their most common/preferred trip. When using transit services that exceed this value, the transit rider only pays the difference in fare.





### **Daily Trip-based and Fare-base Caps**

Trip-Based Cap

#### **Change in Daily Clipper Revenue by Cap Type**



# 2%

#### **Change in Daily Clipper Trips by Cap Type**



### Weekly Trip-based and Fare-base Caps

Trip-Based Cap

#### Change in Weekly Clipper Revenue by Cap Type



80<sup>th</sup> percentile fare paid

#### Fare-Based Cap



Change in Weekly Clipper Trips by Cap Type

80<sup>th</sup> percentile fare paid



Number of Trips



### **Monthly Trip-based and Fare-base Caps**

**Trip-Based Cap** 



Trip-based caps generate similar levels of ridership with less revenue loss, most visible in the monthly comparison.

**Fare-Based Cap** 





# **Puget Pass Styled Monthly Product**

3

The Puget pass system allows the user to specify their most common trip, which is then capped at 36 trips. Transit riders only pay the additional fare for trips valued more than the most common trip.

Monthly Clipper data was used to model an approximation this product using two factors to determine the most common trip for each Clipper card:

- 1) most used transit agency
- 2) most common transfer pair

Additional fare is charged for trips that exceed this common trip amount. The transit rider pays the difference between the additional fare and the common trip value.

Based on comparative performance to value and trip based caps, the Puget Pass style product was included in the business case analysis.

#### **Puget Sound Scenario**









### **Business Case Analysis**

# Strategic Dimension – how do the options support policy objectives?

**The Strategic Dimension** evaluates each option based on the stated policy goals for Fare Coordination and Integration.

Four focused metrics, derived from the problem statement and broader local/regional/State policies, have been used to assess strategic performance.

Combined these metrics answer the questions:

- Can Fare Integration address the problem statement?
- What are the trade offs between options for addressing the problem statement?

Legend

Analyzed with model

Analyzed with Customer Research



### Strategic Metric 1 – Ridership Development – Bay Area Wide Perspective

The figures to the right illustrate overall ridership impact in the Bay Area at different levels of subsidy and notes the following findings:

- Options in Tiers 1 and 2 only impact customers who face an integration price barrier and can generate between 0.75% to 2% more ridership with a low level of investment
- Options in Tiers 3/4 have greater ridership generation potential with higher subsidy with a unified fare by distance for regional services only offering the greatest ridership potential at high levels of investment and comparable ridership to no-cost transfers at low level of investment









### Strategic Metric 1 – Ridership Development – Inter and Intra County Trips

#### **Key Findings**

- No-cost transfer options promote intercounty ridership (~11,000 to 25,500 passengers per day) with limited intracounty gains
- At a high level of investment, Tier 3 generates nearly 69,000 new riders per day of which 55,000 are inter-county trips, with low investment it can generate 30,000 trips a day of which 22,000 are inter-county
  - At \$70m per year of new subsidy, small zones for all services generates intracounty/single operator ridership (~50,000 trips per day). This option loses ridership at lower levels of subsidy, and with high subsidy gains intra-county but loses inter county ridership







## **COVID Recovery and Integration Ridership**

A set of COVID Recovery scenarios were developed to explore how different extents of recovery by **2025 could impact option ridership gains.** 

#### The figure to the right illustrates ridership gains for five scenarios:

- Baseline ridership forecasts (see previous slides)
- Ridership gains if the option was delivered with existing extent of recovery
- Ridership gains if recovery continued on a similar trajectory as today until 2025
- Ridership gains with a slower recovery (recovery rates are 50% what has been observed)
- Ridership gains with a partial recovery (no area in the Bay Area is 100% at 2019 levels by 2021)

This assessment illustrates that lower levels of recovery has more severe impacts to performance for options with higher intercounty travel (Unified fare by distance, large zones)

Gain

Ridership



## **Strategic Metric 2 – VMT Reduction**



Reducing **vehicle miles** travelled (VMT) is a key policy theme at the local, regional, and State level.



VMT reductions vary between options based on the types of trips that are generated by fare policy changes.

Note - Tier 1 - Individual Pass ("Puget Pass" model) was not included in this analysis as it was not modelled in the regional travel model













### **Strategic Metric 3 – Equity**

The Strategic Business case focuses on the quantitative data provided by the TM 1.5 model outputs, specifically how travel behavior varies by household income groups:

- How would **new subsidy** be distributed between household income groups?
- How are fare increases distributed between household income groups?
- How are fare decreases distributed between household income groups?
- Do the fare structures change the modes used by travellers based on household income?

Equity implications of fare policy change are multidimensional. This study incorporated both quantitative and qualitative analyses to better understand impacts of fare policies on low-income and priority populations in the Bay Area.

These include:

- Impacts on costs/affordability and access to modes based on 1. income data in the TM 1.5 Outputs.
- Alignment or conflict with existing policies concerning equity 2. in the region through stakeholder engagement and policy review.
- Barriers to travel experienced by transit riders in the region 3. expressed through User Research.







# Strategic Metric 3 – Equity Impact (Share of subsidy: share of ridership)

Model outputs were analyzed to understand how dollars invested in lower fares were distributed among income groups.

#### The following general conclusions were identified:

- Level of subsidy invested in each income band only varies slightly between options
- Generally level of subsidy aligns with proportion of riders in each income category, with the exception of \$60k-\$100k, where investment is lower than the proportion of riders in this category







### **Equity Assessment: Fare increases across income groups**

This assessment focused on the number of customers paying more under each option and their average fare increases.

This assessment notes that:

- Tier 4 options tend to have more customers paying more, however unified fare by distance with a local flat fare and large zones with a local flat fare have lower average fare increases than lower tiers and small zones
- Tier 4 options tend to have more customers paying more in the lower income bands than the higher income bands
- Tier 3 results in fewer customers than Tier 4 paying more, with impacts that are generally consistent across the income groups



#### **Percent of Riders Experiencing Increase in Fares**









### Equity Assessment: Fare decreases across income groups

This assessment focused on the number of customers paying less under each option and their average fare decreases.

This assessment notes that:

- Tier 4 options tend to have more customers paying less, with the number of customers paying less equally distributed between income levels
- Tier 2 and Tier 3 have fewer customers paying less but offer greater fare reductions than Tier 4



#### **Percent of Riders Experiencing Decrease in Fares**

Less than 30K 30k-60k 60k-100k More than 100k -5.00% -10.00% -25.00% -35.00% -35.00% -40.00%



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## Mode shift across income groups

Additional analysis was conducted to understand how mode choice changed as a result of fare policies, specifically whether changes made rail services more accessible to lower income riders.

#### **Key Findings**

- For Tier 2, more people switched from using bus to rail than from rail to bus across all income groups.
- This pattern continues for Tiers 3-4, with the exception of the lowest income group.
- For options Tiers 3-4, the "Less than \$30k" were slightly more likely to switch from rail to bus (.01% to .40% more switching to bus).





#### Percent of Transit Riders Switching Modes (Bus to Rail)

#### Percent of Transit Riders Switching Modes (Rail to Bus)



### **Strategic Metric 4 – Customer Experience**

The problem statement for the FCIS identified **customer experience** as a key integration barrier.

The FCIS team worked extensively with travelers to identify how this barrier impacts their use of multiple operators (either for one trip or for different trips over the course of a week/month) and how they perceived each option.

Customers were asked to review each option under a range of scenarios and provide rankings and qualitative feedback on its value, fairness, and legibility.

#### This metric synthesizes this customer research to define:

- The likely impacts that each option will have to traveler experience and traveler willingness to use multiple operators
- Key customer identified pros and cons of each option





# **Customer Experience - Overlays**

### **Overall Lessons**

#### For new or infrequent riders, this option may be easier to understand compared to other options as one rule applies to all services.

- Riders perceive caps as greater value than a pass, especially amongst Deemed as most fair most often, including low-income participants. those whose transit trips were random while passes were preferred when the travel routine was predictable and involved frequent trips.
  - Cap: Flexible, feel good about taking extra trips (over the cap) knowing they're "free".
  - Pass: Convenient, peace of mind, assume or expect a significant discount for paying upfront
- Riders' preferred cap/pass duration depend on how they plan and budget (e.g. weekly, monthly)
- Rolling duration for cap/pass maximizes its value, but can be challenging for riders to
- remember the start and end of the duration.



### Value

Good value as it always guarantees a discount of some sort

#### Fairness

### Legibility

- **Cap**: participants had issues understanding or had a different understanding of how caps work
- **Pass**: while not as challenging as caps, some participants did misunderstand or have a different understanding of what passes offered









#### **Overall Lessons**

- Riders perceive value in getting part of their trip for free but may fee that the discount is small in comparison to the total trip cost (e.g. p for a long trip on a regional service).
- While it can be easy to understand conceptually, it may not be easy rider to know what to pay unless they know which service is the mo expensive.



	Value
	Cap: value comes in free trips after cap and its perceived flexibility
aying	Pass: provides peace of mind, but deep discounts expected
for a	
ost	Fairness
	Users did not provide specific input on fairness of transfer discounts
	Legibility
	Conceptually easy to understand but may be impacted if in the future

it isn't "only paying for the most expensive part of the trip"







#### **Overall Lessons**

- While riders may find it fair to pay by mileage, they also feel fares may be expensive for long trips, even when there is a distance-based cap in place.
- With the cap, riders know their fare will not exceed a certain price, but fares for trips that don't reach the cap may fluctuate more based on distance changes.
- Framing transfers to local services as "free" gives riders a sense of value.



#### Value

□ May feel expensive but cap and free transfers to local services are good value

#### Fairness

Deemed as most fair after no-cost transfers, but this view is not shared by low-income participants

### Legibility

Conceptually easy to understand, but will need tools to determine distance/price









#### **Customer Experience - Regional + Local Change Zones on All** Modes

#### **Overall Lessons**

- It is easy to understand and remember the price of fares for local services.
- There are concerns that the single flat fare is higher than current local service prices, making it unfair to some riders in the Bay Area.
- Framing transfers to local services as "free" gives riders a sense of valu
- While riders claim this option is easy to understand, they often don't ٠ consider what happens for regional services or misunderstand that regional services are also a flat fare.



	Value
	Good value for local-service-only trips, free transfers are good value
	Fairness
	Concerns about local service fares increasing in certain areas
le.	Legibility
	Conceptually easy to understand for trips only pertaining to local services, but erroneously apply the same rule to regional services







### **Customer Impacts: Summary**

Tier	Option	Value	Legibility	Fairness
1	Caps and Passes	Generally positive	Mixed feedback – some passes may be more complicated to understand than others	Generally Positive
2	Unified Fare by Distance for Regional Services only	Generally positive	Generally positive, some concern about learning multiple fares and figuring out which one is discounted	Generally Positive
3	Unified Fare by Distance for Regional Services + Local Flat Fare	Generally Positive	Mixed feedback – stated need for tools to interpret structure (similar to BART today)	Generally Positive
4	Small zones for all service	Mixed feedback, trending negative – concerns on how zones may raise fares for local services and for travellers who do not use multiple agencies	Mixed feedback – some recognition of improved understandability, however general concerns about the number of zones and ability to determine fare	Mixed feedback, trending negative – concer zones will impact fares that are flat today o fare by distance (BART)
4	Unified Fare by Distance for Regional Services + Local Flat Fare and Large zones + local flat fare	Generally positive	Generally positive	Mixed feedback– some concerns about fa increases







### **Strategic Dimension – Summary**

		Daily Ridership Growth				
Tier	Option	High Investment	Low Investment	Equity Impacts	Customer Experience	
1	Individual Pass ("Puget Pass" model)		25,500	Requires mitigation	<b>Generally Positive</b>	
2	No-cost transfers (local/local, local/regional)		11,500	Investment is balanced across income levels, with least low income travellers paying more	Generally Positive	
2	No-cost transfers (local/local, local/regional, regional- regional)		27,610	Investment is balanced across income levels, with least 10% of low income travellers paying more and 20% paying less	<b>Generally Positive</b>	
3	Unified Fare by Distance for Regional Services only	68,800	30,200	Investment is balanced across income levels, with least 10% of low income travellers paying more and 25% paying less	Generally positive with some issues to resolve	
4	Unified Fare by Distance for Regional Services + Local Flat Fare	62,500	16,100	Investment is balanced across income levels, with 20% of low income travellers paying more but 65% pay less	Generally positive with some issues to resolve	
4	Small zones for all service	44,000	-2,100	Investment is balanced across income levels, with 25% of low income travellers paying more but 73% pay less	Mixed feedback	
4	Large zones + local flat fare	55,000	22,000	Investment is balanced across income levels, with 35% of low income travellers paying more but 65% pay less	Generally positive with some issues to resolve	

#### Legend

32	Weaker performance	Moderate performance	Stronger Performance	Not <i>i</i>
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Applicable





### **Economic Dimension – what is the social value of each option?**

The Economic Dimension evaluates each option based on the social value they can realize for local communities and the broader region.

These benefits include:

- **Traveler benefits** including reduced travel time
- **Externalities** including reduction in pollution, congestion, and collisions and improved health

Combined these metrics answer the questions:

- What are the social benefits of Fare Integration over the next five years in discounted 2021 USD?
- Is the level of social value of the option appropriate for the risk and change management required to deliver it?





### **Economic Evaluation Summary**

Overall, fare integration is likely to generate significant economic benefits to the region

#### **Key Findings**

- Of the low investment options, Tier 2 has the highest benefits over the first five years of integration – this is because it does not raise the price for any traveller (while Tier 3 and 4 options may require some increase at this level of subsidy) which results in higher VMT reduction
- Small zones has net negative economic performance B at low levels of investment because it has a net increase in VMT due to a decrease in long distance inter county trips
- Increasing investment leads to higher benefits as it allows for generally lower fares and higher ridership compared to lower investment options





# Financial Dimension – what is the financial impact of each option?

**The Financial Dimension** evaluates each option based on its impact to funding for transit.

It is focused on the following impacts:



Required subsidy (total) – strategic estimates of the total lost revenue from each fare option



**Cost per new rider –** the level of subsidy required for each new trip

Combined these metrics answer the questions:

- What level of financial commitment is required to deliver integration?
- How cost effective is each option?
- How does the subsidy required for fare integration compare to other investments?



### **Financial Metric 1 – Required Subsidy**



	Com	parators
_		-
arge zones + local Global 2.5% Global 5% Discou flat fare Discount to all to all Fares Fares		Global 5% Discount to all Fares

#### Findings

The cost of transfer discounts between all services ranges between \$11-\$25 million per year based on initial estimates

Broader standardization regional B standardization of fares requires either significant new subsidy or raising fares for many customers to offset lost revenue – lower investment variants of Tiers 3 and 4 will have some fare increases to offset these losses, while high investment variants of fare by distance with flat local fares, zonal, and zonal with flat local fares options also have fare increases







### **Financial Metric 2 - Cost Per New Rider**



#### Findings

- Tier 2 has the lowest cost per new rider, while Tier 3 has a similar cost per new rider at low levels of investment
- Widespread changes proposed under В Tier 4 are more expensive as they lose ridership in some markets and also generate growth in others – as level of subsidy applied to small zones decreases the cost per rider increases as there are more ridership losses in key regional markets
- Comparator tests illustrate that at a regional scale, direct discounts to the existing structure are likely to have greater value for money than Tier 4 as they do not raise/lower fares in a structured – but arbitrary – manner











# **Relationship Between Ridership and Subsidy for Each Option**

The graph to the right illustrates the relationship between revenue change (or required subsidy) and ridership impacts for each option.

This graph can be used to explore comparative option performance for a set level of subsidy:

- Low Investment (1-2.5%) Tier 2 and Tier 3 generate the most ridership, Tier 4 (small zones) loses ridership
- **High Investment (5% to 7%)** Tier 3 has the highest ridership gain and exceeds Tier 4 options and 5 (small zones)
- Ridership gains increase with level of investment as do cost per new, suggesting there is a diminishing return on investment but higher overall gains to be realized with more subsidy





### **Financial Evaluation Summary**

	Revenue Impacts	(million USD/year)	Cost Per New Rider	
Options	High Investment (5 to 7.5%)	Low Investment (1 to 2.5%)	High Investment (5 to 7.5%)	Low Investment 2.5%)
Individual Pass ("Puget Pass" model)	-\$34		\$4.35	
No-cost transfers (local/local, local/regional)	-\$12		\$2.86	
No-cost transfers (local/local, local/regional, regional-regional)	-\$23		\$2.25	
Unified Fare by Distance for Regional Services only	-\$70	-\$26	\$2.84	\$2.39
Unified Fare by Distance for Regional Services + Local Flat Fare	-\$74	-\$23	\$4.02	\$3.28
Small zones for all service	-\$67	-\$13	\$4.26	
Large zones + local flat fare	-\$73	-\$30	\$4.34	\$3.69





### Fare Integration Cost Efficiency vs Other Investment Options



Required subsidy for FCIS Tier 2 – Transfer Discounts - local/local, local/regional and regional/regional) has an estimated cost of

This revenue impact is less than the estimated cost-per-trip of most proposed Bay Area transit projects (as modelled in Plan Bay Area 2050 using RTM 1.5)

The revenue impact is also less than the average cost-per-trip of the existing Bay Area transit system as of 2019.

Other transit projects include 18 transit projects in Plan Bay Area selected for this analysis because they are likely or possible uses of regional funds. Only projects proposed by transit agencies and actively under development are included. Estimated fare revenue is subtracted from operating expense calculate operating

Operating subsidy of the existing system is based on operating expense minus fare revenue as reported to NTD in 2019. Capital cost is based on the average of capital expenditures as reported to NTD between 2010 and 2019 expressed in




# Delivery and Operation Dimension – what is required to successfully deliver each option?

**Delivery and Operation Dimension** assesses each option based on the key changes required across the following dimensions:





Management – how will issues, risks, challenges, and changes will be managed over time?

**Technology** – how is it implemented and procured?





**Customers – what level** of change management is required for customers?

**Operations and** Infrastructure-how it will 'run' on a day to day basis and what infrastructure is required?











#### Management – low impact

Can be delivered with agency to agency agreements 

or

Can be delivered and managed centrally across the region  $\rightarrow$  increased revenue allocation and pricing complexity

#### **Technology – low impact**

Can be delivered with existing technology or with C2 



#### **Agency Infrastructure and Operations – low impact**

- Minimal changes can be rolled out with operator training on the passes with some investment in marketing and communications
- Could also be marketed and communicated centrally

#### Customers / change management – low impact

If a pass, it is opt in and will require marketing advertising

#### Or

If a cap, the cap should be advertised broadly but will automatically apply to customers and will not require additional action to access







#### Management – low impact / medium impact

Can be delivered with agency to agency agreements 

or

- Can be delivered and managed centrally across the region
- Will require a formula for revenue allocation – either centrally or on agency pair basis

#### **Technology – low impact**

Can be delivered with existing technology on a limited basis or completely with C2 under the initial roll out



#### **Agency Infrastructure and Operations – low impact**

- Minimal changes can be rolled out with operator training (to message the discounts) and supporting advertising material
- Could also be marketed and communicated centrally

#### Customers / change management – low impact

- Only customers using multiple agencies are impacted – change management would focus on explaining the discount, although it is applied automatically
- If a general region-wide discount rule is applied (example: only pay highest fare, only pay regional fare) change management is simpler to roll out







#### Management – low impact / medium impact

Can be partially delivered with agency to agency agreements – for example, two regional operators making a single fare structure

or

Can be delivered centrally across the region  $\rightarrow$  one manager is responsible for setting fares and developing a formula for revenue allocation

#### **Technology – medium impact**

Requires C2 and new fare setting approaches for one or more agencies



#### **Agency Infrastructure and Operations – medium impact**

- Requires new fare collection infrastructure, marketing materials, and staff training for all agencies that are integrated
- This could be done on an agency by agency basis or centrally

#### **Customers / change management – medium impact**

End fare structure will either be fare by distance or zones across all regional operators – all operators already use a form of fare by distance or zones, so the change management process would focus on helping a select set of customers understand the new structure and make best use of it







#### Management – high impact

- Fare setting authority would need to be transitioned from local agencies and regional agencies to a central manager to ensure sustainable change (agreements are unlikely to sustain a regional fare structure over the long term)
- Requires an overhaul of revenue allocation and/or subsidy/funding allocation

#### Technology – medium impact / high impact

- Requires C2 and new fare setting approaches for all agencies
- Region wide zones would require tap off or a 'check out' function on buses

# **Regional + Local Change Zones on All Modes – Delivery Requirements**



#### **Agency Infrastructure and Operations – high impact**

- Requires a range of new fare collection infrastructure, marketing materials, and staff training for all agencies across the region – likely requires a centralized approach
- Check out function on buses could have boarding / alighting impacts and operational impacts over the short to medium
- As fares change, some operators will require additional funding to cover shortfalls in fare revenue while maintaining level of service

#### Customers / change management – medium impact / high impact

- Customers will have to learn fare by distance/zones for regional (see previous slide)
- Customers will either learn a flat fare for local (limited impact) or a zone structure which is more complex and will have wide-ranging changes for trips that used to be under an operator flat fare





# **Delivery and Operation Dimension Evaluation Summary**

Tier	Options	Management	Technology	Agency Infrastructure and Operations	Customer change management
1	Individual Pass ("Puget Pass" model)	Low	Low	Low	Low
2	No-cost transfers (local/local, local/regional) No-cost transfers (local/local, local/regional, regional-regional)	Low/Medium	Low	Low	Low
3	Unified Fare by Distance for Regional Services only	Low/Medium	Medium	Medium	Low/Medium
4	Unified Fare by Distance for Regional Services + Local Flat Fare Small zones for all service Large zones + local flat fare	High	Medium/High	High	Medium/High

## Legend **Greater Impact** Moderate Impact Less Impact





# **Delivery Evaluation Findings - Overall**



Requires institutional change

Changes beyond price barriers -> more customer change management required











# Summary of Business Case by Tier and Dimension

## **1** Overlays to Fare Structure (Incremental Performance when Layered on Tier2)

#### What was tested?

- Trip-based caps (daily, weekly and monthly) at different trip thresholds (assuming local to regional free transfers)
- Value-based caps (daily, weekly and monthly) at various price points (assuming local to regional free transfers)
- Tiered pass product: local service only, all inclusive
- Puget Pass-styled product where transit rider's monthly pass value is based on most common trip value (multiplied by 36)

- Tiered passes and caps are required to minimize revenue loss for regio operators while generating new ridership but may be more complex for customers to understand
- Customers are interested in a pass or product that applied to multiple operators
- A single trip cap or monthly pass with a set price for all travelers will either not generate ridership (if priced too high) or lose significant revenue (if priced too low)
- Further work needs to be completed to explore caps vs. passes this work should explore balancing with ridership potential and available subsidy



	Strategic	Economic
	Daily Trip Change: Fare Cap (\$162): +7,300 Trip Cap (35): +10,200 Individual Pass ("Puget Pass" model): +21,900 Equity Impact: Passes require up-front payment, which may exclude lower income riders from benefits. Fare capping offers more equitable benefits.	<b>Present Value of Economic Benefits:</b> not completed due to different modelling platform (Clipper data does not include VMT) – anticipated to perform with a similar level as Options 3b high investment.
onal or	Financial	Delivery
	Total required subsidy: Fare Cap (\$162): \$59m/year Trip Cap (35): \$49m/year Tiered Pass: \$34m/year Cost per new rider: Fare Cap (\$162): \$22.36 Trip Cap (35): \$13.31 Individual Pass ("Puget Pass" model): \$4.35	Overall Assessment: low impact – readil deliverable with some technology changes and new organizational agreements.







#### What was tested?

- **No-cost transfers (local/local, local/regional):** 100% discount for all local to local transfers (trips using multiple providers pay only one fare)
- **No-cost transfers (local/local, local/regional, regional-regional):** 100% discount for all local to regional transfers (trips using regional and local only pay the total regional fare)

- The local to regional transfer market is the largest integration market in the Bay Area, local to local transfers are a smaller opportunity, but can support equity goals and overall fairness
- Combined, discounted transfers could generate up to 13,000 new transit trips a day with the lowest cost per new rider of Tiers 2-4
- These options are the least complex to implement and performed well in customer research, where customers valued their simplicity and reflection of fairness and value (reducing penalties to use multiple operators when required)



Strategic	Economic
Daily Trip Change: No-cost transfers (local/local, local/regional): 11,500 trips per day No-cost transfers (local/local, local/regional, regional-regional): 25,500 Equity Impact: Net savings for equity priority populations; some additional subsidy to higher income riders	Five Year Present Value of Economic Benefits: No-cost transfers (local/local, local/regional): \$50m (2021 USD) No-cost transfers (local/local, local/regional, regional-regional): \$120 (2021 USD)
Financial	Delivery
Total required subsidy: No-cost transfers (local/local, local/regional): - \$12m/year No-cost transfers (local/local, local/regional, regional-regional):\$23m/year Cost per new rider: No-cost transfers (local/local, local/regional): \$2.84 No-cost transfers (local/local, local/regional,	<ul> <li>Overall Assessment: low impact</li> <li>Readily deliverable within planed Clipper 2</li> <li>Requires multi-agency MOU</li> </ul>









# **3** Changes to Regional Service Fares and Local Discounts

#### **Unified Fare by Distance for Regional Services only**

## What was tested?

- 100% discount for all local to local transfers (trips using multiple provide pay only one fare)
- 100% discount for all local to regional transfers (trips using regional ar local only pay the total regional fare)
- All regional services use a single distance or zonal structure (no transferred fees) → test used a BART structure for all services
- Subsidy of \$70 million, future tests underway to better compare to T2

- Has ability to increase ridership beyond Tier 2 to up to 68,000 new trip per day (at \$70 million in subsidy) but cost per rider increases, however cost per rider is significantly lower than Tier 4 options
- Additional riders are long distance travellers making use of the combin regional network or use of re-priced regional services
- Customers identified this option is generally perceived as fair and reflective the value of a trip taken, however they noted additional tools would be required to fully understand it
- This option has moderate delivery requirements and could be delivere in stages (example: combining fares for two operators to start) or all at once

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	Strategic	Economic
iders nd <sup>f</sup> er	<ul> <li>Daily Trip Change: High Investment: 68,000 Low Investment: 30,200</li> <li>Equity Impact: With significant new subsidy, some riders with lower incomes would see fares rise to achieve regional standardization</li> </ul>	Five Year Present Value of Economic Benefits: High Investment: \$340m (2021 USD) Low Investment: \$110m (2021 USD)
ps er	Financial	Delivery
ned ects be ed t	Total required subsidy: High investment: \$70 m/year Low Investment: \$26 m/year Cost per new rider: High investment: \$2.84 Low Investment: \$2.39	<ul> <li>Overall Assessment: low impact/medium impact</li> <li>Requires new agreements or governance structure for regional service</li> <li>Requires new technology</li> <li>Requires some regional customers learn a new structure</li> </ul>





## **Changes to Regional and Local Fares** 4

#### **Unified Fare by Distance for Regional Services + Local Flat Fare**

### What was tested?

- FBD curve for all regional operators
- Single flat fare for all local operators no transfer fees (100%) discount to local fare) when using regional
- Subsidy of \$75m/year, , future tests underway to better compare to T2

- Ridership impacts similar to Tier 3 although slightly lower as the FBD fare curve for this option must be higher to offset lost revenue from the local flat fare and maintain a comparable subsidy as T3 for comparison
- This option has higher cost per new rider than T3 but lower cost per new rider than small zones, this means it is generally more financially efficient than zones for all modes but less financially efficient than retaining individual local fares with free inter-operator transfers
- Customers noted that a local flat fare would be easier to understand than a free transfer but also noted it may lead to unfair changes in fares
- This option is more complex to deliver than Tiers 2 or 3 due to governance requirements but easier to implement than small zones because it does not require extra readers on each bus



Strategic	Economic
Daily Trip Change:	Five Year Present Value of
High Investment: 62,500	Economic Benefits:
Low Investment: 16,100	High Investment: \$310m (2021 USD)
Equity Impact: Without significant	
new subsidy, some riders with	Low Investment: \$50m (2021 USE
lower incomes would see fares rise	
to achieve regional standardization	
Financial	Delivery
Total required subsidy:	<b>Overall Assessment:</b> high impact
High Investment: \$74m /year	<ul> <li>Requires significant management ar</li> </ul>
Low Investment: \$23m /year	governance change for a sustainable structure
	Poquiros significant changes to ager
Cost nor now rider:	• Requires significant changes to agei
Cost per new rider:	operations
Cost per new rider: High Investment: \$4.02	<ul> <li>Requires significant changes to agen operations</li> <li>Requires new technology on most</li> </ul>











#### What was tested?

- 81 zones
- Fares increase based on number of zones travelled
- Zonal ad-fares are the same for all modes
- Three levels of subsidy \$100m/year, \$70m/year, \$12.5m/year

- Ridership impacts are complex and vary from operator to operator due to the 'region-wide changes' (where some trips increase and other decrease in fare) included in this proposal
  - **High investment:** this option has a net loss of inter-county trips and gains 44,000 net new trips (of these 50,000 gross are in San Francisco using bus and LRT)
  - Low investment: this option has a region wide net loss in ridership (-2,000 trips) but it retains a net gain of 23,000 intercounty trips offset a loss of 25,000 inter-county trips
- This option has the highest cost per new rider and most challenging delivery requirements
- Customers noted that the number of zones included may be hard to understand and that the option does not inherently reflect value and fairness



Strategic	Economic
Daily Trip Change: High Investment: +44,000 Low Investment: -2,000 (loss) Equity Impact: Without significant new subsidy, some riders with lower incomes would see fares rise to achieve regional standardization	Five Year Present Value of Economic Benefits: High Investment: \$70m (2021 USD) Low Investment: -\$170 (2021 USD)
Financial	Delivery
Total required subsidy: High Investment: \$67m/year Low Investment: \$13m/year Cost per new rider: High Investment: \$4.26	<ul> <li>Overall Assessment: high impact</li> <li>Requires significant management and governance change for a sustainable structure</li> <li>Requires significant changes to agency operations</li> <li>Requires new technology on all local and most regional operators (tap in,</li> </ul>











### What was tested?

- 81 zones
- Fares increase based on number of zones travelled
- Zonal ad-fares are the same for all modes
- Two levels of subsidy \$100m/year and \$70m/year, , future tests underway to better compare to T2

- Ridership impacts are complex and vary from operator to operator due to the 'region-wide changes' (where some trips increase and other decrease in fare) included in this proposal
  - At \$70m per year, this option has a net loss of inter-county trips and gains 44,000 net new trips (of these 50,000 gross are in San Francisco using bus and LRT)
  - At \$10-15M per year, this option has a region wide net loss in ridership (-2,000 trips) but it retains a net gain of 23,000 intercounty trips offset a loss of 25,000 inter-county trips
- This option has the highest cost per new rider and most challenging delivery requirements
- Customers noted that the number of zones included may be hard to understand and that the option does not inherently reflect value and fairness



Strategic	Economic
Daily Trip Change: High Investment: 55,000	Five Year Present Value of Economic Benefits:
Low Investment: 22,000	<b>High Investment</b> : \$280m (2021 USD)
new subsidy, some riders with lower incomes would see fares rise to achieve regional standardization	Low Investment: \$90m (2021 USD)
Financial	Delivery
Total required subsidy: High Investment: \$73m/year Low Investment: \$30m/year Cost per new rider: High Investment: \$4.34 Low Investment: \$3.69	<ul> <li>Overall Assessment: High impact</li> <li>Requires significant management and governance change for a sustainable structure</li> <li>Requires significant changes to agency operations</li> <li>Requires new technology on all local and most regional operators (tap in, tap out)</li> <li>Requires extensive change management for customers</li> </ul>

# Performance Summary – Relative Performance (Tiers 2-4)

		Tier 1	Tie	er 2	Tie	er 3	r 3 Tier 4			er 4		
Dimension	Metric	Individual Pass ("Puget Pass" model)	No-cost transfers (local/local, local/regional)	No-cost transfers (local/local, local/regional, regional-regional)	Unified Fare by Di Servic	stance for Regional es only	Unified Fare by Di Services + Lo	stance for Regional ocal Flat Fare	Small zones	for all service	Large zones +	local flat far
Investment			Low	Low	High	Low	High	Low	High	Low	High	Low
Strategic	Change in Trips per Day	25,500	11,500	25,500	68,000	30,200	62,500	16,100	+44,000 (includes 50,000 new intra-county trips but - 6,000 inter county trips)	-2,000	+55,000	+22,00
	VMT Change per Day	N/A	-120,000	-290,000	-850,000	-265,000	-775,000	-131,000	0	+412,000	-700,000	-230,00
	Equity	Requires mitigation	Generally positive	Positive/ Mixed	Mixed performance	Mixed performance	Mixed performance	Mixed performance	Mixed performance	Mixed performance	Mixed performance	Mixed performa
	Experience	Generally positive feedback	Generally positive feedback	Generally positive feedback	Generally p some issue	oositive with es to resolve	Generally p some issue	ositive with s to resolve	Mixed f	eedback	Generally p some issue	ositive wit s to resolve
Economic	Value of Benefits (million 2021 USD)	N/A	\$50	\$120	\$340	\$110	\$310	\$50	\$70	-\$170	\$280	\$90
Financial	Subsidy	\$34m	\$12m	\$22.5 m	\$70m	\$26 m	\$74m	\$23 m	\$67m	\$13m	\$73m	\$30m
	Cost per New Rider	\$4.35	\$2.86	\$2.25	\$2.84	\$2.39	\$4.02	\$3.28	\$4.26	No new riders	\$4.34	\$3.69
Implementation	Overall Risk and Impact Assessment	Low impact	Low impact	Low Impact	Mediur	n impact	High i	mpact	High i	mpact	High i	mpact

### Legend

55

Weaker performance

Moderate performance

Stronger Performance



Not Applicable





# **Overall Summary: Tier Performance**



## **Overlays**

- Strengths Readily deliverable
- Potential Issues and Weaknesses – Potentially high subsidy, frequency or opt-in based, does not support ridership growth outside of those who purchase the pas or hit the cap

2



### **Transfer Discounts**

- Strengths resolves integration price barriers, simple rules, complete coverage, deliverable under C2
- Potential Issues and Weaknesses – customers still interact with multiple structures, does not fully solve experiential barriers



## **Regional Change**

- Strengths same as Tier 2, however all regional trips use one structure which may augment customer experience and lead to additional ridership
- Potential Issues and Weaknesses – more challenging to implement and manage without governance changes

4



#### **Regional + Local Change**

- Strengths one structure for region may improve customer experience
- Potential Issues and Weaknesses – Many riders experience fare changes (either higher prices or new subsidy) not directly related to promoting multiagency travel
- Requires significant governance changes, expanded infrastructure, and change management at the customer and agency level



From:MTC-ABAG InfoTo:William Bacon; Martha SilverSubject:Fwd: Fare Integration Task ForceDate:Sunday, September 19, 2021 2:47:54 PM

#### Get Outlook for Android

From: Graham

Sent: Sunday, September 19, 2021 12:56:54 PM To: MTC-ABAG Info <info@bayareametro.gov> Subject: Fare Integration Task Force

\*External Email\*

Hello,

I'm very excited that MTC is investigating regional fare integration - I think it's an incredibly important step to increase the usefulness and accessibility of our transit system. Multi-agency transit passes and free transfers are great first steps, and I would encourage the MTC to adopt those recommendations from the study.

I live in San Francisco and work on the Peninsula, and had a Caltrain monthly pass from my employer. BART + Caltrain would have been the most convenient option for me to commute to work, but I didn't take it because my transit benefit wouldn't have covered the full cost. Instead, I just took Caltrain, and spent more time commuting. I hope the MTC will approve the initial Tier 1/Tier 2 recommendations and continue to pursue regional fare and network integration, including a standardized regional fare structure. Making transit more appealing is crucial to reduce emissions and combat climate change, and to ensure that people come back to transit post-COVID.

Thank you, Graham

From: Sara

Sent: Sunday, September 19, 2021 11:01:04 AMTo: MTC-ABAG Info <info@bayareametro.gov>Subject: I support the recommendations of the Integrated Fare Study

\*External Email\*

Hi,

I live in San Francisco, and I strongly support the recommendations of the integrated fare study. I regularly take BART and Muni and have definitely avoid Muni service in the past because of the transfer penalty of taking both services in one day.

Furthermore Low-income riders currently primarily use transit for local trips. And also-lowincome riders have unmet needs for mobility, as we hear from the San Francisco Youth Commission, student organizations, Bayview Hunters Point community advocates, and other groups. Integrated fares helps people get to family, educational opportunities, jobs, and medical care.

For the major changes suggested by the study, I would support a ballot measure to support funding for SFMTA and the region so we could have integrated fares.

Lastly I strongly support SFMTA's commitment to equity, and I would want to make sure that any regional solution supports and does not undermine San Francisco's equity policies and service levels appropriate for a dense urban area.

Thank Sara	you,	
 Sara		

From: Rachel H

Sent: Sunday, September 19, 2021 3:15:58 PM To: MTC-ABAG Info <info@bayareametro.gov> Subject: Fare Integration Task Force

\*External Email\*

Members of the MTC Fare Integration Task Force,

Thank you for your study of fare integration for Bay Area transit systems. Fare integration holds great promise for increasing transit ridership and increasing equity for bay area populations, with downstream effects of reducing vehicle collisions and greenhouse gases emissions via reduced driving.

As a mother, I want my daughter and her future children to have as livable a world as we can provide for them. Our actions now can make a crucial difference for the Bay Area.

I commuted from **to to the set of** for work for three years. My employer (**the set of** was able to provide a CalTrain pass, which covered a large segment of my daily journey. However there were no comprehensive pass options for my employer to offer, meaning that I still had to pay significant amounts each month for the Bart and Muni segments. This reduced the money I was able to provide for my family. A comprehensive pass for the Bay Area would have been most welcome.

I have seen the benefits of fare integration in other cities including Zurich and Milan. My sense is that it enables people to afford a longer commute, thereby widening the "commute shed" for both workers and employers.

While the pandemic has had many effects on local businesses, when I see shops with reduced hours due to worker shortage, I can't help but think that increasing access via fare integration for lower-income workers would be a big help. Commuting by car is a terrible, costly option.

I also remember helping a family at SFO that had just arrived from Europe, trying to get to San Francisco. While they instinctively understood the benefits of rail (Bart) and a transit pass, they were dismayed by the prospect of having to buy additional tickets or passes for Muni. They did not understand the lack of a comprehensive transit pass. They felt almost unwelcome in our famously diverse region.

I fully support the Task Force's initial recommendations, including a multi-agency transit pass pilot (start in 2022), and free local and regional transfers (start in 2023).

I encourage you to go further. Greater benefits would come from full fare integration. I see that increasing transit ridership is the best way to increase transit usage and reducing greenhouse gases.

In particular, as an information designer I see great benefit from the improvements that integration could have on signage and wayfinding. Visitors and residents alike would benefit from this kind of simplicity.

Finally, it would be a shame if all of this good effort came undone in a few years. I encourage you to set structures in place to ensure fare integration and stability for all current and future transit users.

Thank you for your strong efforts on fare integration.

Sincerel	y,
Rachel	

From: Martin

Sent: Sunday, September 19, 2021 3:54:26 PM To: MTC-ABAG Info <info@bayareametro.gov> Subject: Fare Integration Task Force

\*External Email\*

One of the biggest impediments to transit use is the number of transfers, which increase the time and uncertainty of any given trip. If those transfers are between agencies, that increases the cost, further disincentivizing the use of transit for the trip.

We need better timing of connections between modes of transit, but we also need to make those connections as painless as possible with regard to fares.

Thank you, Martin

From:	MTC-ABAG Info
То:	William Bacon; Martha Silver
Subject:	Fwd: Fare Integration Task Force Meeting 9/20/21 Emailed Comment
Date:	Sunday, September 19, 2021 4:20:20 PM

From: Davis

Sent: Sunday, September 19, 2021 4:19:35 PMTo: MTC-ABAG Info <info@bayareametro.gov>Subject: Fare Integration Task Force Meeting 9/20/21 Emailed Comment

\*External Email\*

Dear Fare Integration Task Force,

I'm writing today to express my support of the recently announced study recommendations regarding future fare integration. The recommended pilot "go-anywhere" pass has the unique ability to incentivize multi-agency transit use as it will help riders who use more than one agency save money as they ride more. When commuting to school I use SamTrans and Caltrain. My school provides a Caltrain GoPass but no SamTrans fare support; the go-anywhere pass solves this problem really well since it could incorporate all 27 Bay Area agencies. However, the pass won't lead to equitable outcomes if only offered to wealthier companies and universities. I would love to see the pilot incorporate affordable housing complexes, high schools, and other organizations in the future in addition to universities and companies.

Likewise, free local and regional transfers are a good start, a start that I am in support of, but they won't lead to the ideal "Seamless" Bay Area. Free transfers certainly benefit many riders and make it easier financially to string trips together from different agencies, but the base fare structure isn't altered at each agency to reflect other agency fare structures. To create a fullyintegrated transit network, the MTC must commit to standardizing all regional fares—not just recommend a further study—and actively seek funding to do so. Without fiscal support, these changes are bound to fail. These reforms must be done with agency stability in mind; a reform that leads to unraveling is not in the best interest of riders.

With both free transfers and go-anywhere passes, it is expected that more transit trips will be taken per day and new riders will be added, thus taking cars off the road and reducing emissions. These two options have the ability to set the stage for further positive overhauls of Bay Area transit fares, and I look forward to seeing the results in the near future.

Thanks for your time and consideration.

Davis Volunteer with Seamless Bay Area

From: Joe A.

Sent: Sunday, September 19, 2021 4:31:54 PMTo: MTC-ABAG Info <info@bayareametro.gov>Subject: Fare Integration Task Force Public Comments

\*External Email\*

Dear Fare Integration Task Force,

As someone who flies into the Bay Area and then takes transit, my head spins that there are 27 different transit agencies to have to plan trips on. Does not help with trip planning and as the inconveniences pile up, those who land and can choose to rent a car normally do.

Furthermore, the fact there is no day pass for most is a big problem for me. I have to plan my trips on Excel about a week or two out and calculate fare for each agency I intend to ride. I remember in 2019 I had to calculate both fares and schedules for riding four agencies. This October 2021 trip I intend to take no less than six or seven agencies just to see San Francisco + Oakland from the land and sea.

I've been monitoring this process thru Seamless Bay Area's advocacy. For now, I would sincerely support free transfers and fare capping. The go-anywhere pass for employers also sounds good, I understand the Sound Transit-led ORCA Pod has such passes. Not just do these measures make it easier for folks who fly in to choose transit first, but also reduce vehicle miles traveled (VMT) for residents and commuters. All good for the environment.

Also all good steps towards an integrated fare system that the Bay Area desperately needs. 27 different agencies with their own fares, schedules and maintenance needs is *not* the way to manage a transit ecosystem.

Thanks,

Joe

From: Jeffrey

Sent: Sunday, September 19, 2021 4:34:45 PM To: MTC-ABAG Info <info@bayareametro.gov> Subject: Fare Integration Task Force

\*External Email\*

Thank you for spearheading and publishing the recent fare integration study, which shows major benefits for fare integration in increasing transit ridership and providing a more convenient passenger experience.

Given the multiple transit networks existing in the Bay Area and the wide spread of destinations, employment opportunities, and recreation throughout the region, I strongly support greater transit fare integration. I use Caltrain, BART, Muni, and Capitol Corridor, and often cross multiple transit systems during the same trip. Integrated fares would make transit easier and more affordable for me, and more attractive to new users.

I support the study's initial recommendations: a pilot for multi-agency transit passes starting in 2022, and free local and regional transfers starting in 2023. Further, I urge you to pursue the deeper levels of fare integration that the study shows to have the largest ridership benefits and driving reductions.

Thank you,

Jeffrey



September 19, 2021

Dear Fare Integration Task Force members, Transit Agency Board Members, and MTC Commissioners,

Thank you very much for advancing the Regional Fare Coordination and Integration study.

#### We strongly support the <u>initial recommendations</u> of the study, including:

- Piloting multi-agency transit passes that can be distributed to riders by employers, transportation management associations, colleges/universities, and housing developments. ("Tier 1")
- Free transfers across the region ("Tier 2"), which is estimated to bring at least 25,000 new daily riders to transit as much as some of our region's flagship bus lines

Within Tier 1, we encourage moving up affordable housing developments in priority for the pilot, since this has the potential for substantial equity benefits, and will provide valuable pilot feedback from a diverse set of low-income transit riders.

In addition, given the tremendous benefits of standardizing fare structures for regional services ("Tier 3") - which, based on the study, could bring 68,000 new daily transit riders and reduce over 800,000 daily vehicle miles traveled (VMT) from our roads - we strongly support progress toward Tier 3, including setting up the appropriate decision-making structures and identifying the new funding sources that can support that level of integration.

For comparison, the ridership increase associated with Tier 3 is similar to Caltrain's ridership before Covid, and the reduction in driving miles and pollution is four times that projected of Caltrain electrification, one of our region's flagship capital projects.

As the region works together to bring riders back to transit following the impacts of Covid, the study indicates that providing integrated fares is among the most cost-effective strategies available to increase transit ridership.

The study shows that the outcomes would be valuable to provide mobility for low-income residents; to support our economy as the region recovers from Covid; to support needed housing; and to reduce the region's largest source of greenhouse gas emissions.

Lastly, we would like to encourage the Task Force and MTC to continue to keep open the possibility for eventual movement to "Tier 4" integration, a fully integrated fare system as is currently in place across many high-ridership regions. The business case indicates that some versions of Tier 4 may have the potential to offer even greater ridership and VMT benefits than Tier 3.

In addition, MTC's <u>current wayfinding business case</u> study shows an additional \$150-\$300 million in economic and environmental benefits delivered by the deepest level of wayfinding and branding integration, but which is dependent upon fully integrated fares consistent with "Tier 4" of the fare integration study. And MTC's polling shows about a 90% approval rating for wayfinding and fare integration improvements.

The deeper levels of fare integration will require additional funding to achieve the substantial benefits. And it will be essential for these strategies to be implemented in a manner that supports equity for vulnerable residents and the financial viability of transit agencies. These decisions should be brought into the region's consideration of a potential regional transportation funding measure, as part of a broad conversation about the goals and values for transit funding.

Thank you for your consideration,

Ian Griffiths Policy Director, Seamless Bay Area

Tiffany Rodriguez, Manager, Transportation Solutions, Associated Students, San Jose State University

Michael Gliksohn, Treasurer Richmond Progressive Alliance Helena Chang Advocacy Program Manager, The Center for Independent Living (TheCIL)

Greg Magofña Co-Executive, East Bay for Everyone

Debbie Toth President & CEO, Choice in Aging

Lauren Weston Executive Director, Acterra: Action for a Healthy Planet

Kathryn Hagerman Medina Director, Customer Success, RideAmigos

Sheri Bruns Executive Director, Silicon Valley Independent Living Center

Jonathon Kass Transportation Policy Manager, SPUR

Vanessa Bohm Urban Environmentalists

Jordon Wing Streets for People Bay Area

Adina Levin Friends of Caltrain

Riya Master External Affairs Vice President, Associated Students of the UC

Kristina Pappas President, San Francisco League of Conservation Voters

Angie Evans Palo Alto Forward