



Fare Coordination/Integration Study + Business Case
San Francisco Municipal Transportation Agency – Board of Directors
October 5, 2021



Agenda

1 Fare Coordination & Integration Study Overview + Recap

2 Key Findings & Recommendations

3 Recommended Near-Term Actions

4 Summary of Key Business Case Metrics

Appendix – Business Case: Available for download [here](#).



1 — Fare Coordination & Integration Study Recap

Transit Operators & MTC Working Together

Fare Integration Task Force – Project Ownership

Co-Project Managers – BART & MTC staff

Transit Operator Staff Working Group

Consultant team led by the firm Steer

Policymaker and Stakeholder Engagement

Policymaker Webinar

MTC Policy Advisory Council Subcommittee on Fare Coordination/Integration

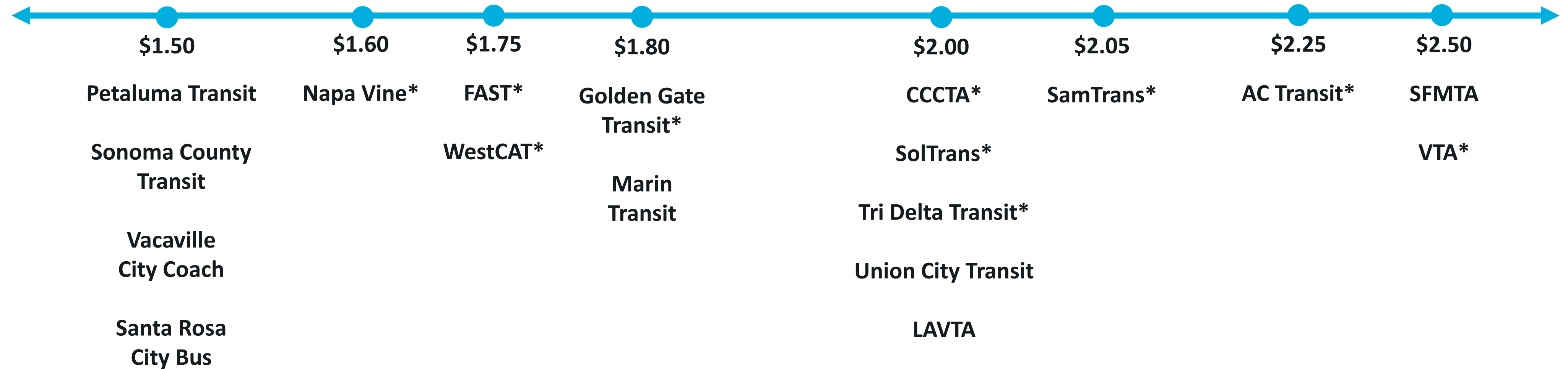
Blue Ribbon Transit Recovery Task Force

Fare Integration Task Force



Overview of Current Transit Fares and Products

Local Bus/LRT Fare
(Adult Clipper Fare)



Zone Based Fares

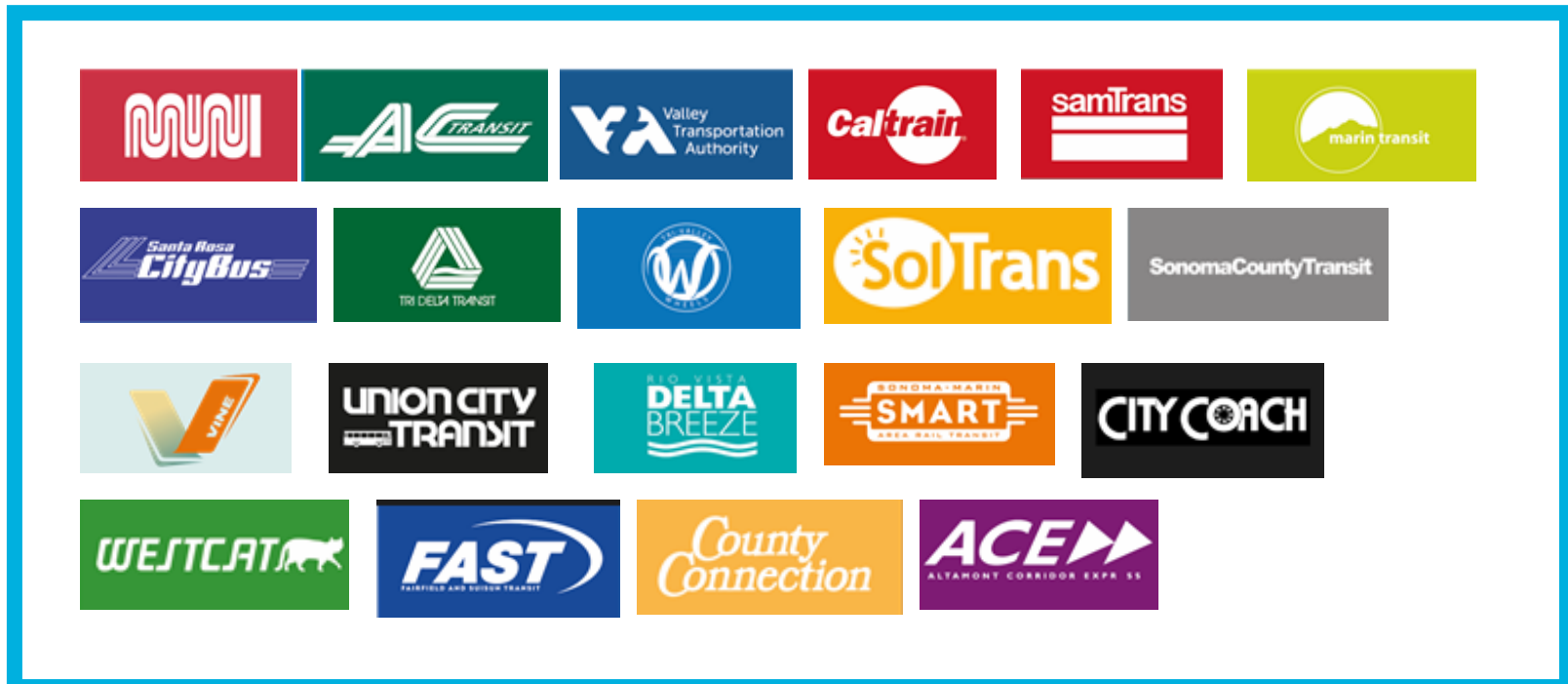
Caltrain
Golden Gate Transit
SMART
Sonoma County Transit

Distance/Route Based Fares

10 miles

ACE
BART
Golden Gate Ferry
WETA

Offers a Pass Product



Does Not Offer a Pass Product

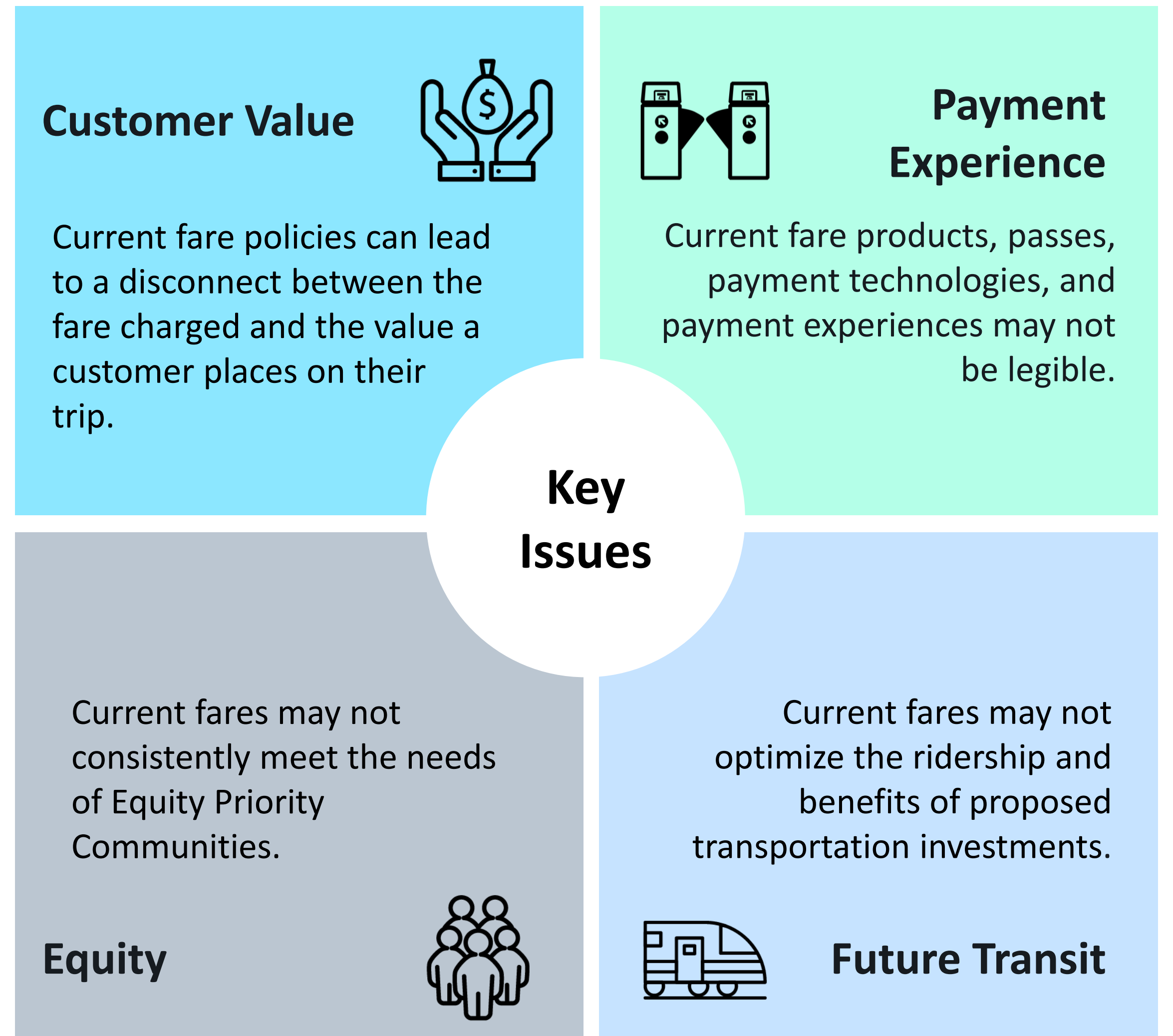


Project Problem Statement

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.

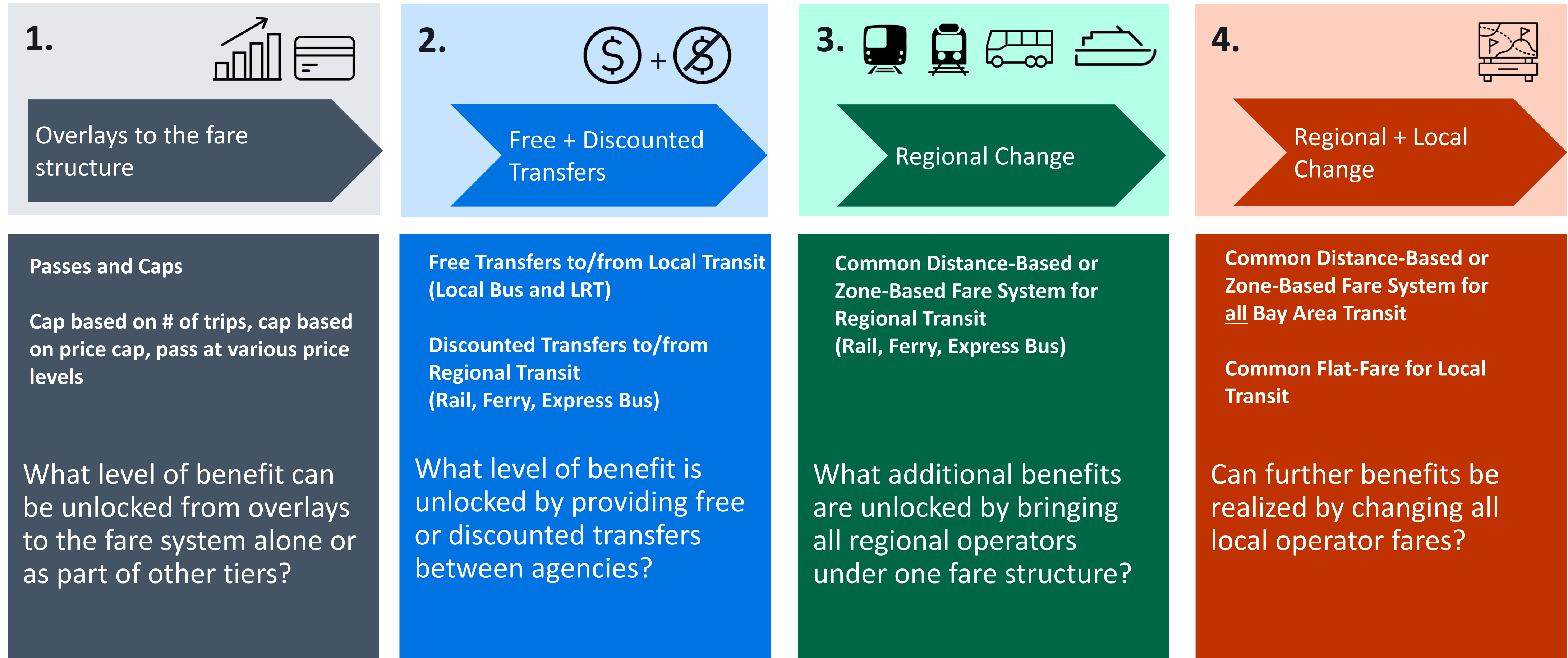
As a result, Fare Coordination and Integration has a role to play in restoring transit ridership, supporting recovery from the COVID-19 pandemic, and **delivering the transportation system the Bay Area needs** for its coming decades of growth.

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



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?



How Were Options Evaluated?

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



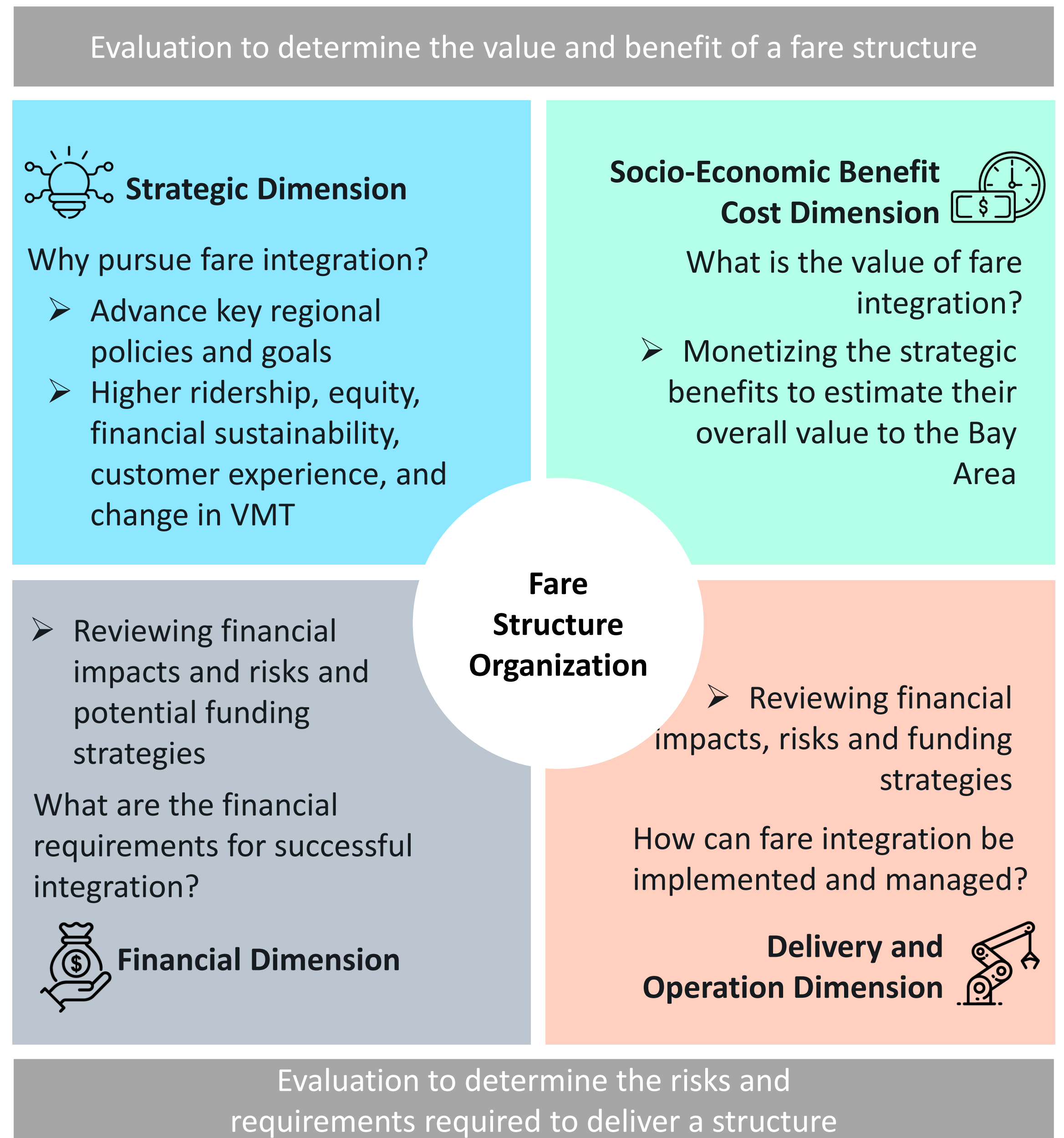
The overall benefits of integration



The comparative benefits of each tier



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



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

2 — Key Findings & Recommendations

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.



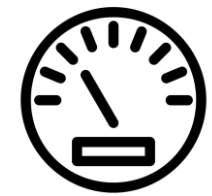
Potential to drive ridership

Modeling suggests that fare structure changes could drive a small but significant increase in transit ridership (2-6%, depending on the strategy & revenue recovery level)



Cost-effective

Ridership benefits of targeted integration strategies appear reasonably cost efficient (~\$2-3 per new trip) as compared to alternatives such as global fare discounts (\$3/trip) or service enhancement and system optimization (~\$3-15/trip)



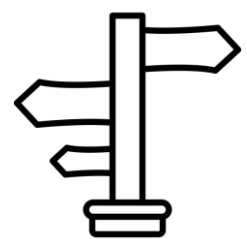
Positive social ROI

Analysis suggests investment in fare integration would have a positive social return on investment through benefits such as lower VMT and travel time savings



Balanced equity impacts

Fare integration strategies appear compatible with regional equity goals. Analysis indicates equity priority communities would receive a proportional share of the benefits of most strategies



High uncertainty

There is uncertainty in the findings due to both the inherent uncertainty of modeling as well as post-pandemic uncertainty

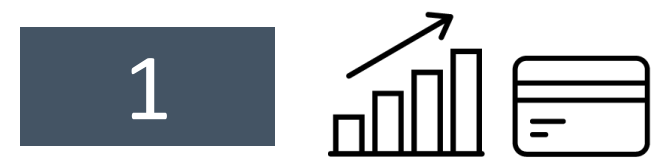
Overview of Key Findings

Would regional standardization drive ridership through improved learnability/legibility?

Inconclusive.

- **User research findings were not conclusive.** FCIS user research was not able to establish that standardization 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.
- **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 use factors appear to be the largest drivers of variability between regions.
- **High uncertainty.** There are limitations to the insight gained from the user research, especially as modified due to COVID-19.
- **Standardization case may be stronger if linked to mapping, wayfinding, and branding.** The benefits of fare 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.

Summary of Recommendations



1

Phase A – Pilot (2022)

- All-agency institutional/employer pass pilot



2

Phase B – Clipper 2 Launch (2023)

- Free/reduced cost transfers region-wide
- All-agency institutional/employer pass (final design pending pilot findings)
- Continue to explore options for individual pass products and/or a Clipper START cap (final design pending pilot findings)



3

Phase C – Post Clipper 2 (2024+)

- Continue to assess benefits and costs of a single distance- or zone-based fare structure for regional 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*

Summary of Recommendations

Phase A (2022)

Phase B (C2 Launch - 2023)

Phase C (Post C2)

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

Summary of Recommendations

Phase A (2022)

Phase B (C2 Launch - 2023)

Phase C (Post C2)

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



Employer/Institutional Pass

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

Summary of Recommendations

Phase A (2022)

Phase B (C2 Launch - 2023)

Phase C (Post C2)

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



Individual Pass (“Puget Pass” model)

Definition

- 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 trip would require \$1 of payment from e-cash)
- Comparable to multi-agency pass offering in Seattle region (“Puget Pass”) and the Washington, D.C. region

Rationale

- Allows multi-agency users the same high-volume discounts now available to single-agency riders
- Reduces user friction for multi-agency trips
- Multi-tiered structure aims to minimize revenue loss and improve equity performance (ensures highest-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
- 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 structure

17

1

2

3

4



Summary of Recommendations

Phase A (2022)

Phase B (C2 Launch - 2023)

Phase C (Post C2)

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:
 - 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
- Equity: Benefits balanced across income levels
- Requires new agreements or governance structure for regional service, some new Clipper equipment, change management for some regional customers

Summary of Recommendations

Tier 4 - No recommendation at this time



Single Fare Structure for Local & Regional Service

Definition

- Tier 4 options examined included:
 - Local common flat fare + regional distance-based fare; Local common flat fare + regional Zone-based fare; Zone-based for all transit service;

Rationale

- Tier 4 options have higher deliverability challenges & higher modeled cost per trip than targeted strategies
- User research was not conclusive on customer experience benefits of standardization

Business case summary

- Ridership & Fiscal Impact:
 - High investment options: Ridership: 3%-4%; revenue impact: \$67-\$73m; \$3.28 - \$4.26/trip
 - Lower investment option: Ridership: 0% to 1.5%; revenue impact: \$13M-\$30M; \$4.02-\$4.34/trip
 - Equity: Mixed equity outcomes; some options include fare increases on equity priority population members in certain communities to achieve standardization
- Requires new agreements or governance structure for all service, new technology, change management for most customers

3 — Summary of Key Business Case Metrics

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
	No-cost transfers (local/local, local/regional, regional-regional)	1.9%	2.3%	\$23	\$2.25
Regional Standardization (higher investment) 🚊🚗🚝 or 🚋					
3	Unified Fare by Distance for Regional Services only	4.7%	7.2%	\$70	\$2.84
4	Unified Fare by Distance for Regional Services + Local Flat Fare	4.2%	7.5%	\$74	\$3.28
	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
4	Unified Fare by Distance for Regional Services + Local Flat Fare	1.1%	2.4%	\$23	\$4.02
	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 📊📄					
1	Fare-based cap (\$162 Dollars)	0.5%	6%	\$58	\$22.36
	Trip-based cap (40 trips)	0.7%	5%	\$49	\$13.31
	Individual Pass (“Puget Pass” model)	1.5%	3.5%	\$34	\$4.35
	Employer/Institutional Pass	Impacts of program based on scale of participation, intended to have no financial “subsidy” need.			
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

← Recommended

← Continue to evaluate

← Continue to evaluate

← Pilot

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
	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
4	Unified Fare by Distance for Regional Services + Local Flat Fare	Mixed Performance	\$310	High Impact
	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
4	Unified Fare by Distance for Regional Services + Local Flat Fare	Mixed Performance	\$50	High Impact
	Small zones for all service	Mixed Performance	-\$170	High Impact
	Large zones + local flat fare	Mixed Performance	\$90	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

← Recommended

← Continue to evaluate

← Continue to evaluate

← Pilot

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.



4 — Recommended Near Term Actions

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

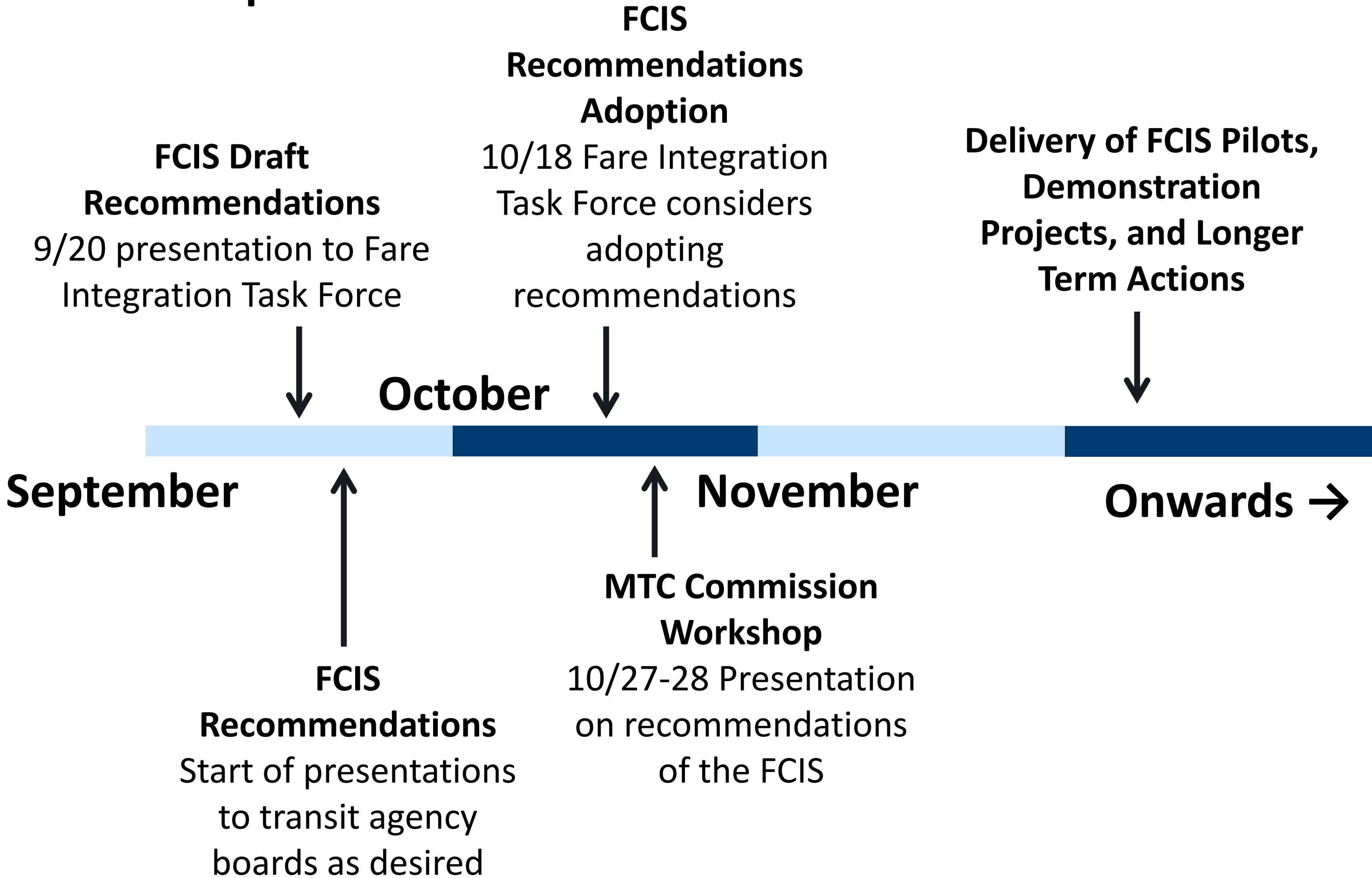
- To be designed and implemented based on learnings from Phase 1, and tentatively to include:
 - Expansion to include private employers and more affordable housing residents
 - Partner with business organizations and property managers

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



- Key Actions for Fare Integration Task Force 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