

Next Generation Fare Gates Update

What we hear...

“Fare inspectors alone are not effective in deterring fare evasion. To reduce fare evasion, BART should consider identifying funds to modify or replace fare gates and establish a timeline for implementation.”

~Contra Costa Grand Jury 2019-20

“Many riders comment they want everyone to pay their fair share and that those committing crime on BART are likely not paying to enter BART.” ~General Manager Listening Tour, rider feedback

“It appears that investment in station hardening and improved fare gates is a better permanent solution to the problem.”

~Alameda County Grand Jury 2018-19

“89% of riders surveyed said it’s important to reduce fare evasion. 70% said very or extremely important”

~2019 BART Rider Survey

“Largest service rating decline was in fare evasion enforcement, 19.8% drop. “

~2018 Customer Satisfaction Survey:

Board of Directors last update September 26, 2019

- Pilot study outcome at Richmond and Fruitvale Stations
- Fare evasion and modified fare gate public survey result
- Board adopted the Swing Style Gate as the preferred design for systemwide upgrade
- Board directed staff to replace the accessible fare gate at Richmond with a prototype swing style gate

Return on Investment:

~\$1M Investment



\$60M Savings



Sep '19 = \$150M, Today = \$90M

- Engineering Innovation
- Software / Hardware Development
- Purchased Materials
- Built in Service Prototype

Prototype Dev/Testing	\$ 2,500,000
Design	\$ 11,000,000
Procurement/Legal	\$ 2,000,000
Materials/Hardware	\$ 24,000,000
Installation/Construction	\$ 31,500,000
Software Integration	\$ 9,000,000
Project Management	\$ 8,000,000
Total:	\$ 90,000,000

Long Term Plan

- Replace existing fare gates with state of the art technology currently available in the market
 - As presented in May 2019, staff recommended procurement of the swing style gate
 - Estimated project cost \$150M.

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SEP 19

The Prototype – ADA Gate - Richmond

- Installed on May 30, 2020
- Staff on Call for Support



This is the industry first pneumatic swing style gate.

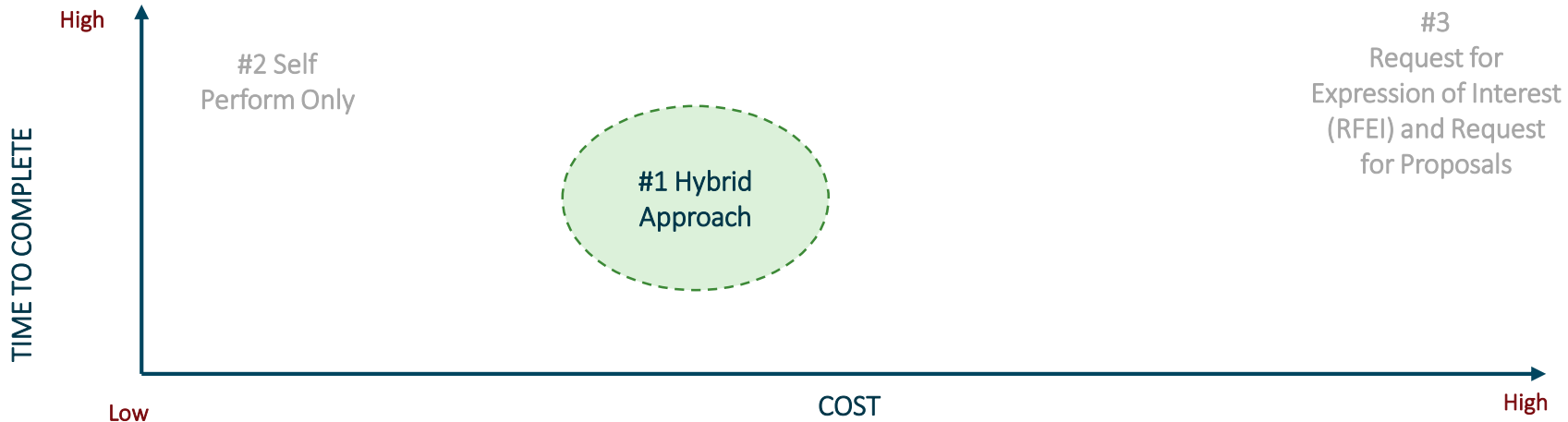
BART's Next Generation Fare Gates

- Why Pneumatic
 - Reliable/Robust
 - Superb Maintainability
 - Minimum throughput 30-PPM
 - Effective against fare evasion
- Why Swing Style
 - Modern
 - Scored Highest on Fare Evasion Deterrence



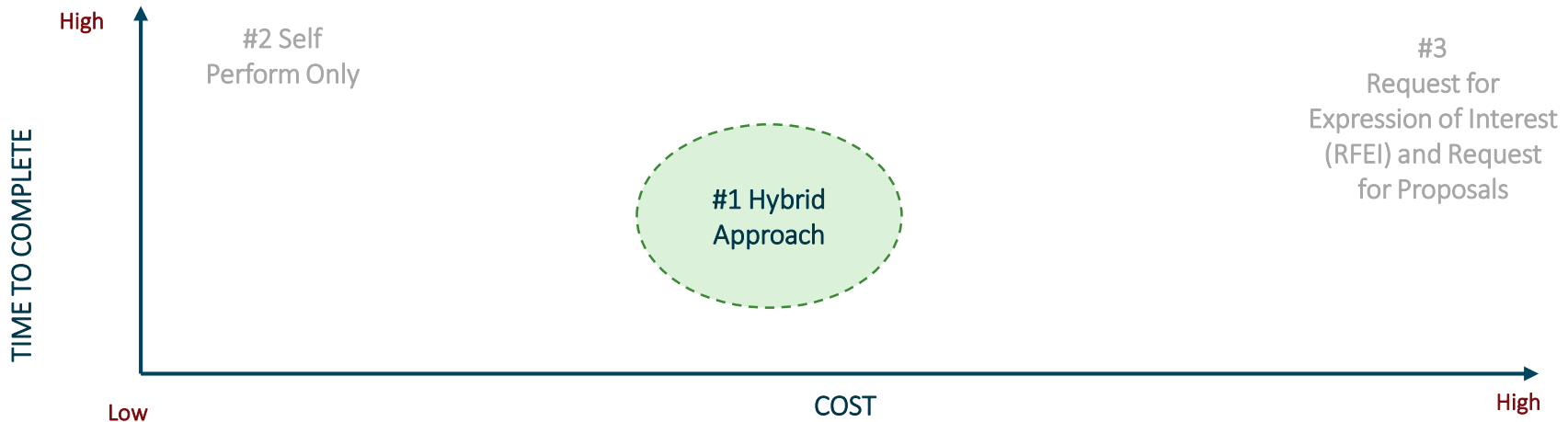
Richmond Station

Implementing New Fare Gates: Approach



	#2 Self Perform Only	#1 Hybrid Approach	#3 RFEI and RFP
Major Benefit	<ul style="list-style-type: none"> • Superior maintainability • Utilizes workforce 	<ul style="list-style-type: none"> • Increased flexibility • Gain value from RFEI 	<ul style="list-style-type: none"> • Engages vendors in the global marketplace
Cost	LEAST	MIDDLE	MOST
Schedule	MIDDLE	SHORTEST	LONGEST
Level of Innovation	MEDIUM	MEDIUM-HIGH	HIGH

Implementing New Fare Gates: Approach

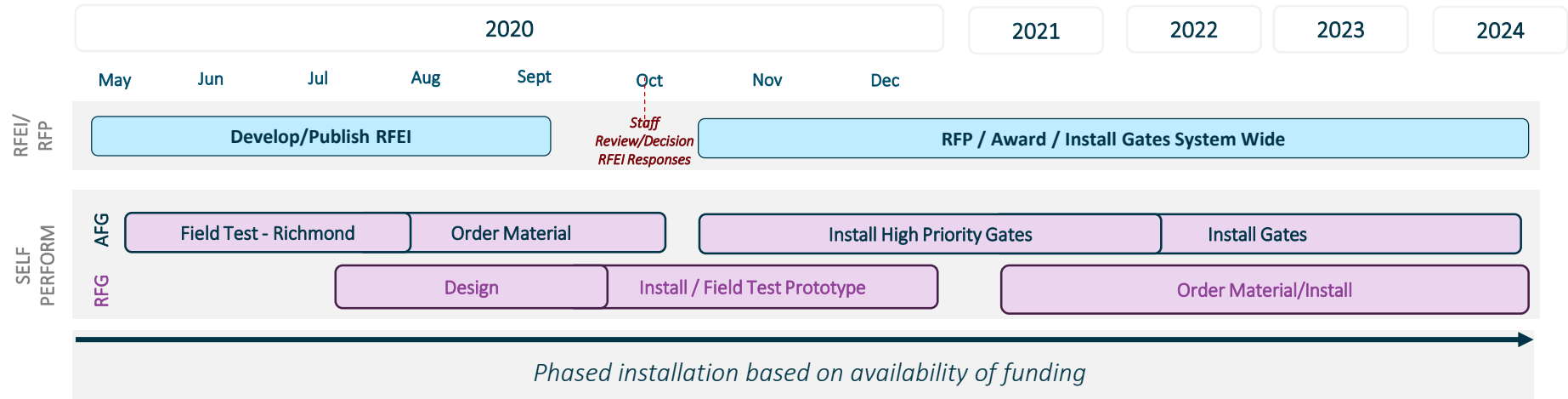


	#2 Self Perform Only	#1 Hybrid Approach	#3 RFEI and RFP
Major Benefit	<ul style="list-style-type: none"> Superior maintainability Utilizes workforce 	<ul style="list-style-type: none"> Increased flexibility Gain value from RFEI 	<ul style="list-style-type: none"> Engages vendors in the global marketplace
Cost	\$80M*	\$90M	\$100M
Schedule	6 Years*	4 Years	5 years
Level of Innovation	MEDIUM	MEDIUM-HIGH	HIGH

* Would be impacted by District Priorities

Project and Funding Needs Timeline

PROJECT TIMELINE



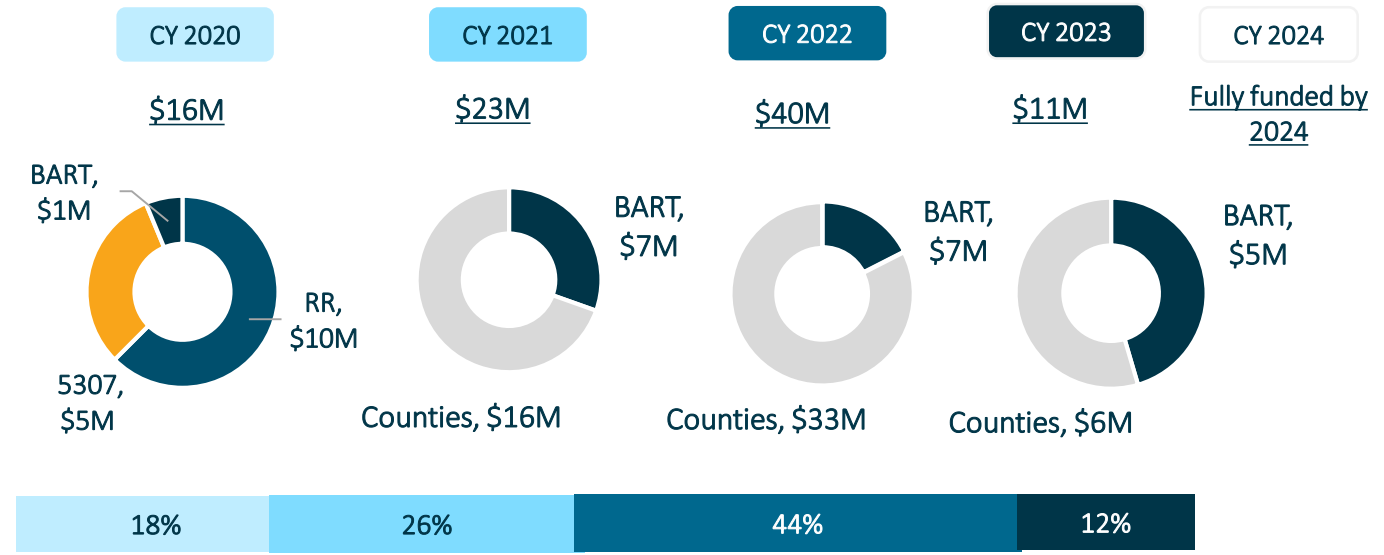
FUNDING TIMELINE



total amount of funding in \$

% and \$ breakdown by funding source

% of \$90m, by year



Funding Framework

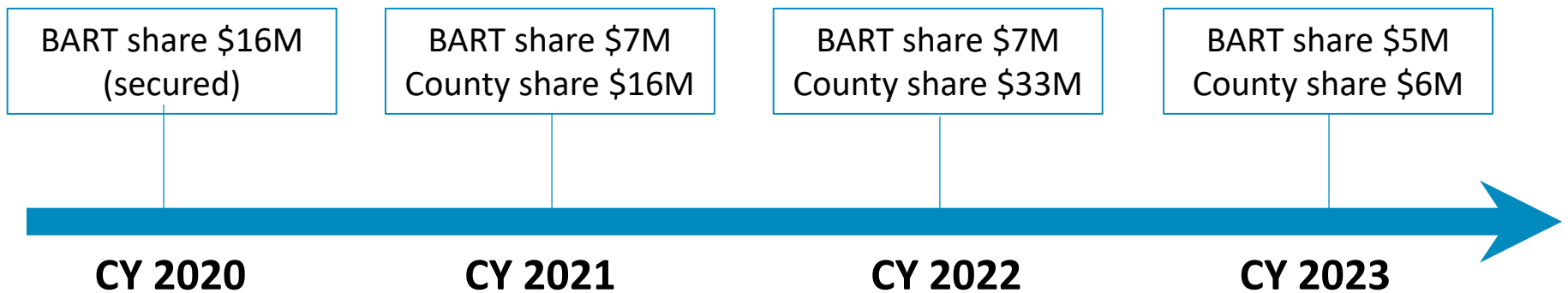
- Next Generation Fare Gate project cost = \$90M
- Funding strategy
 - BART District: ~50%/50% share County/BART
 - Non-BART District Counties share = 100%
- Work with county Congestion Management Agencies and SFO to identify funds
- Advance manufacturing and installation of fare gates in phases tied to county funding availability/timing

Targeted Funding Plan

Next Generation Fare Gates Systemwide = \$90M

County/Segment	Total # of Fare Gates	% of Total	Total Cost (\$M)	Estimated County/SFO Contribution (\$M)	Estimated BART Contribution (\$M)
Alameda (ex. 580 Corr.)	243	34%	30.59	15.29	15.29
580 Corridor	34	5%	4.28	4.28	0.00
Contra Costa	117	16%	14.73	7.36	7.36
San Francisco	199	28%	25.05	12.52	12.52
San Mateo (ex. SFO)	57	8%	7.17	7.17	0.00
SFO	25	3%	3.15	3.15	0.00
Santa Clara	40	6%	5.03	5.03	0.00
Total	715		90.00	54.82	35.18

Estimated Funding Timeline



- Roll out fare gates in phases tied to county funding availability
- Initiated discussions with ACTC, CCTA and SFCTA
- Pursuing discussions with C/CAG and SFO

Fund Sources – BART \$35.2M

Planned

- \$10M Measure RR Access Program funds
- \$7M FTA 5307 funds
- \$7M BART operating allocations
- \$11M deferral of some M&E projects, as part of overall M&E project re-prioritization process
- Continuing systematic review of capital projects and project closeouts to identify funding opportunities
- May be some future opportunities with parking revenue program in later years

Potential Fund Sources – Alameda County \$19.6M

Pursuing

- Measure BB, BART to Livermore - **\$4.3M**
 - Request to move to 580 Corridor fare gates subject to ACTC approval
- RM2, WSX - **\$1.3M**
 - Request to move to fare gates subject to MTC approval
- Measure B, WSX - **\$2.5M**
 - ACTC policy dictates unused funds must be returned to ACTC; BART may request for fare gates
- Measure BB, Station Modernization - **remainder \$11.5M (est.)**
 - Request to move to Alameda County station fare gates subject to ACTC approval
 - Reduces funds available for Station Modernization program

Considered but not advancing

- Measure BB, Community Development Investments - \$5M
 - FY22 call for projects: discretionary, highly competitive, fare gates likely to not compete well
- Alameda County Vehicle Registration Fee - \$5M-\$7M for transit
 - FY22 call for projects : discretionary, highly competitive, fare gates likely to not compete well
- Measure BB, Direct Local Distribution - \$0.7M annual
 - Programmed to BART operating budget

Potential Fund Sources – Contra Costa County \$7.4M

Pursuing

- Measure J, BART Station Modernization - **\$650K**
 - \$200K for Hercules Transit Center and \$450K for Central County bike access improvements
 - Request move to fare gates
 - CCTA reassessing revenue projections based upon current economic conditions, could result in deprogramming/deferral of projects
- State Transportation Improvement Program (STIP), Concord Station Modernization (2nd elevator) - **up to \$9.5M**
 - Request move to fare gates, subject to support by RTPCs, CCTA, MTC and CTC
 - Impacts Station Modernization funds for Concord and Walnut Creek stations

Potential Fund Sources – San Francisco County \$12.5M

Pursuing

- Proposition AA - ~**\$3.7M** total within the county
 - Submit grant application for fare gates summer 2020; unlikely to secure total available
 - SFCTA prioritizing Transit Reliability and Mobility Improvements category; fare gates good fit
- Proposition K - ~**\$10M** BART categories
 - **\$2M** allocated to Embarcadero Platform Elevator and Powell Street Station Modernization
 - **\$3M** additional programmed for BART projects – Traction Power Substation Rep, Elevator Renovation, Market Street New Elevator, Wayfinding and Balboa Park Station Area Improvements
 - Request move some programmed funds to fare gates; SFCTA likely to support
 - Request remaining **\$5M** be programmed to fare gates; SFCTA likely to support

Considered but not advancing

- RM2 - \$1.5M
 - Reallocating to fare gates would reduce funding for Embarcadero Platform Elevator project
- Transit Center District, BART Station Capacity - \$9M Transportation Fees & \$1M Mello Roos CFD
 - Covid-19 impacts delaying funding opportunity to ~2023

Future opportunities

- SF congestion pricing, future sales tax measure and potential GO Bond
 - Core Capacity Program is SFCTA priority
 - Advocate for faregates through SF Transportation Task Force 2045 and SF BOS

Potential Fund Sources - San Mateo & Santa Clara Counties

San Mateo County (\$8.7M)

- Measure W: 10% of measure available annually for “Regional Transit Connection”
 - First Call for Projects delayed to 2021, funds likely available starting FY22
 - Priority for project with public/private partnerships
 - Will submit funding request; likely to be extremely competitive

SFO (\$1.6M)

- Potential to leverage SFO funds

Santa Clara County (\$5M)

- VTA: Full funding for SVRT Phase 1 fare gates included in annual capital cost contribution
- VTA will contribute additional funding for core system fare gates on a proportional use cost basis, per the O&M Agreement

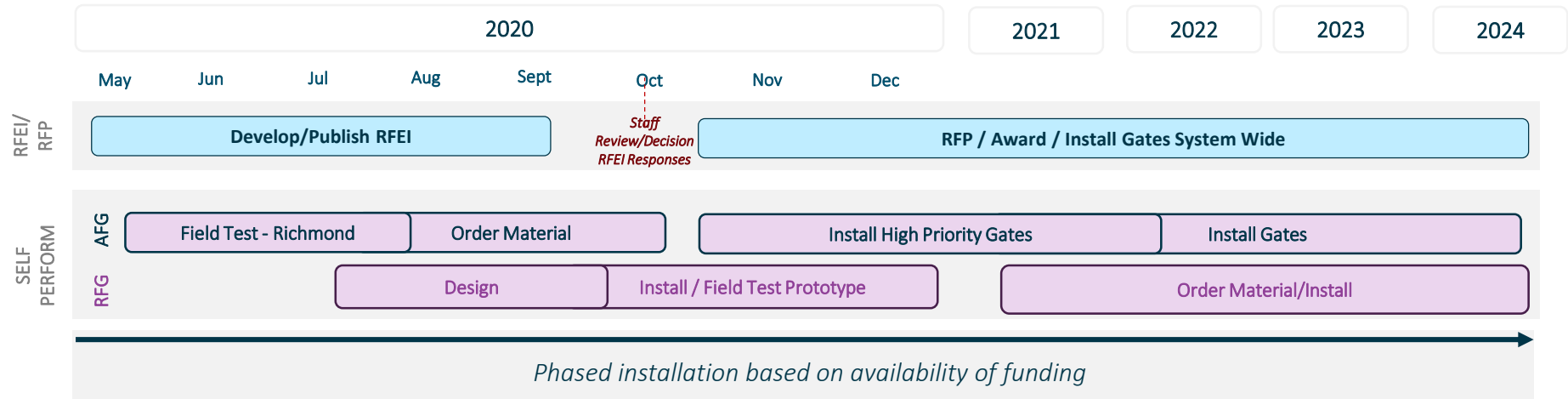
Potential Fund Sources – Federal

Federal

- Homeland Security’s Transit Security Grant Program (TSGP)
 - TSGP’s purpose is to protect transportation infrastructure and the travelling public from terrorism
 - While controlling physical access such as fencing, gates, and barriers are under TSGP’s purview, fare gates alone are not meant to deter terrorist activity and thus would not compete well
- Urban Area Security Initiative (UASI) - \$615M annually
 - UASI assists high-threat, high-density Urban Areas efforts to build, sustain, and deliver the capabilities necessary to prevent, prepare for, protect against and respond to acts of terrorism
 - Not directly for transit operations

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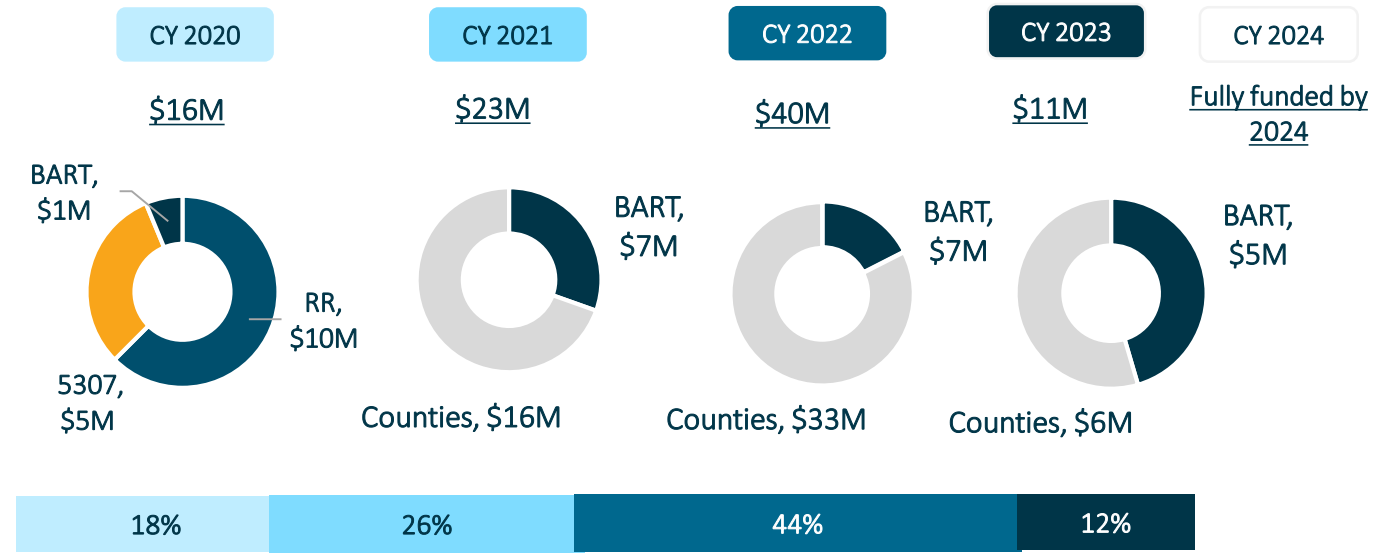
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Next Steps

- Continue with the RFEI effort
- Monitor Richmond prototype in the field
- Build and install AFGs at the high priority stations
- Initiate the design for the regular fare gates

Thank you

