

# 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
<b>Total:</b>	<b>\$ 90,000,000</b>

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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# The Prototype – ADA Gate - Richmond

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



***This is the industry first  
pneumatic swing style gate.***

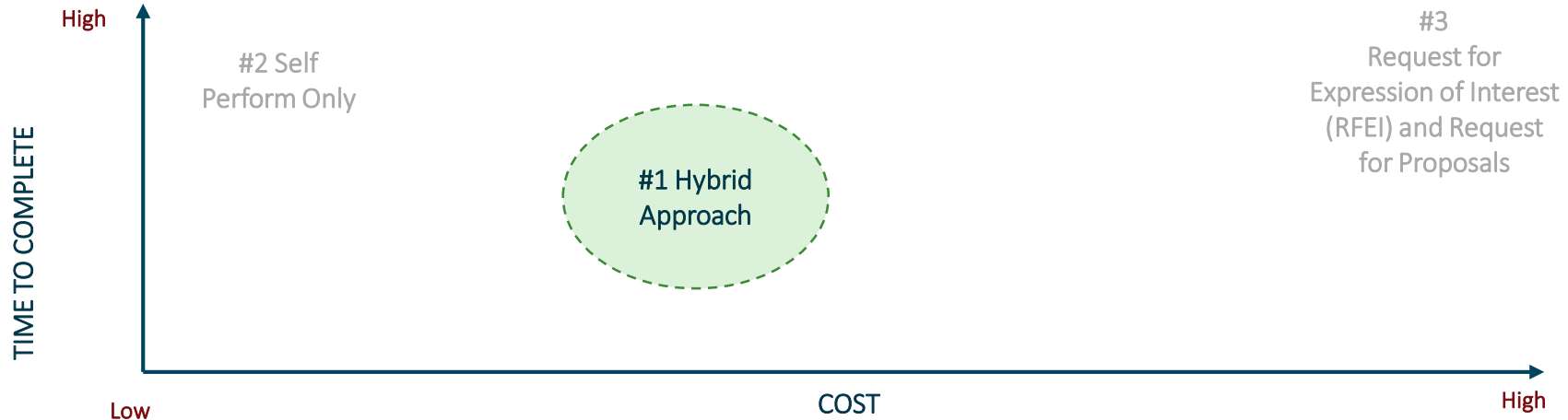
# BART's Next Generation Fare Gates

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



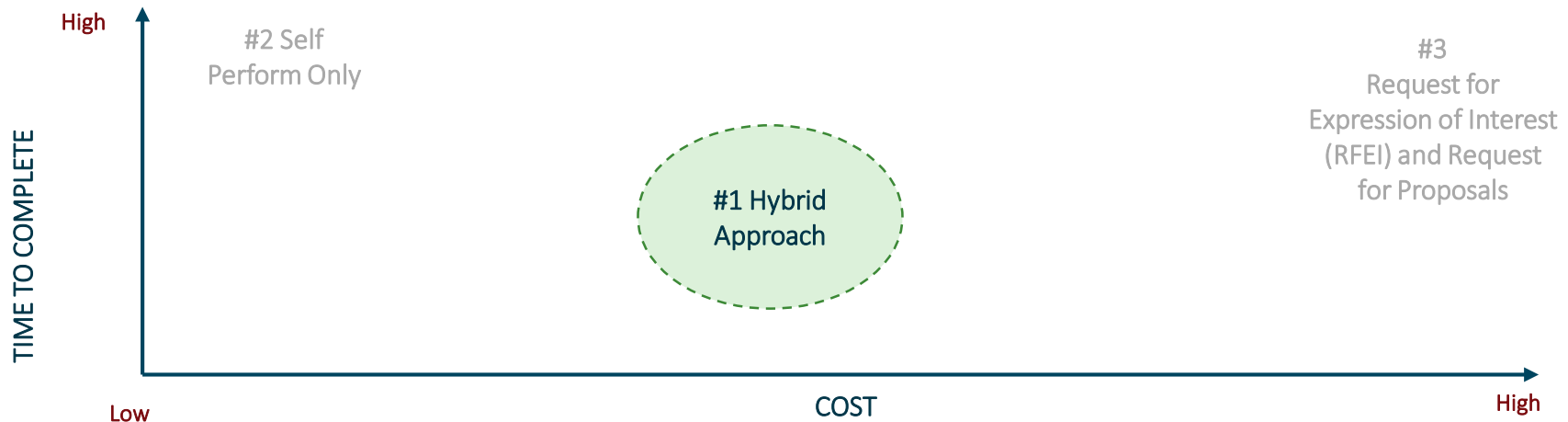
*Richmond Station*

# Implementing New Fare Gates: Approach



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

# Implementing New Fare Gates: Approach



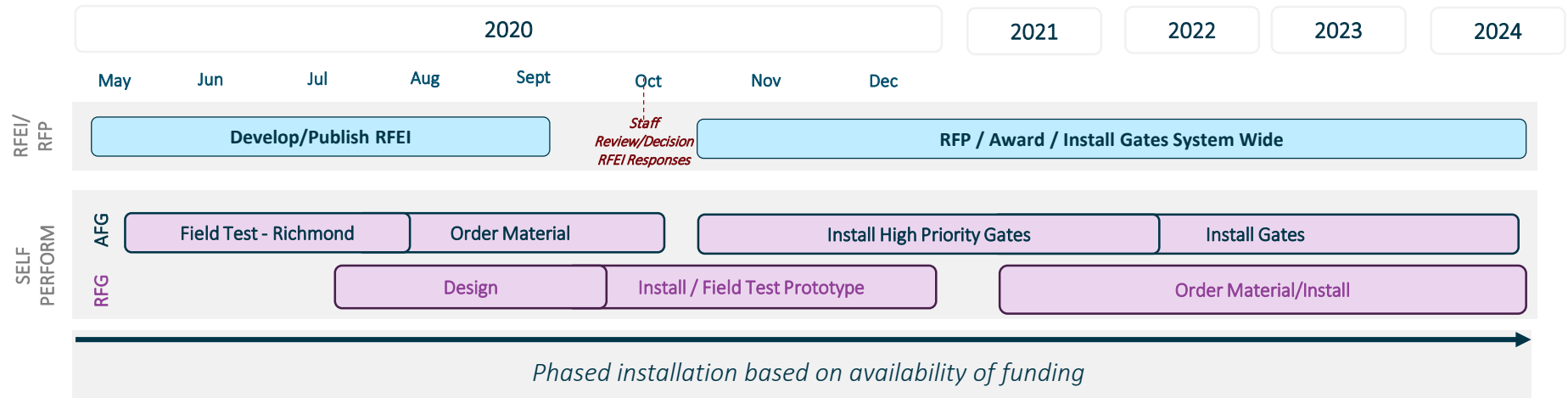
	#2 Self Perform Only	#1 Hybrid Approach	#3 RFEI and RFP
Major Benefit	<ul style="list-style-type: none"> <li>Superior maintainability</li> <li>Utilizes workforce</li> </ul>	<ul style="list-style-type: none"> <li>Increased flexibility</li> <li>Gain value from RFEI</li> </ul>	<ul style="list-style-type: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

\* Would be impacted by District Priorities

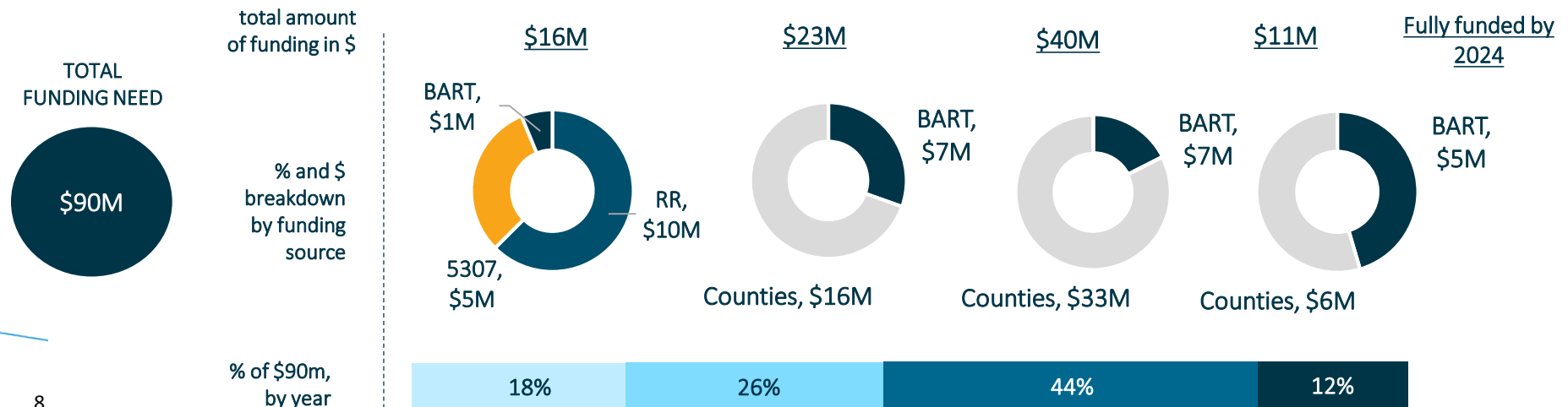


# Project and Funding Needs Timeline

## PROJECT TIMELINE



## FUNDING TIMELINE



# Funding Framework

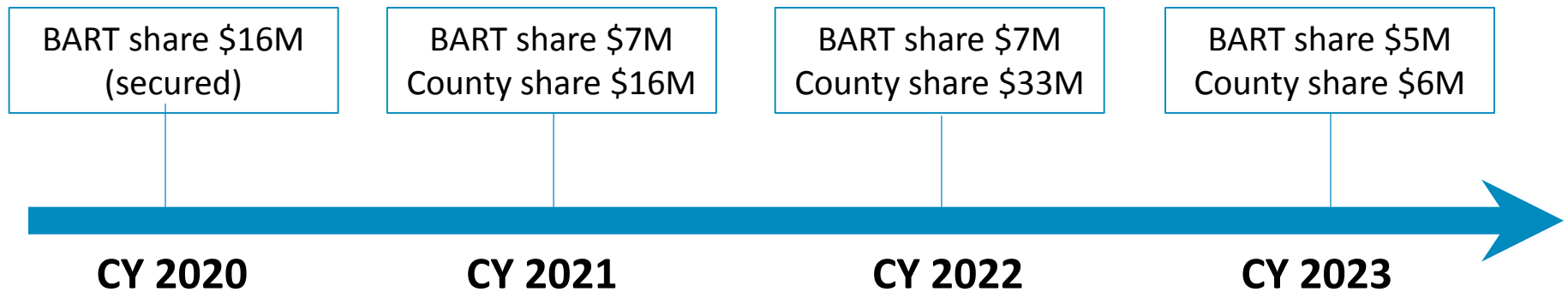
- Next Generation Fare Gate project cost = \$90M
- Funding strategy
  - BART District: ~50%/50% share County/BART
  - Non-BART District Counties share = 100%
- Work with county Congestion Management Agencies and SFO to identify funds
- Advance manufacturing and installation of fare gates in phases tied 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
<b>Total</b>	<b>715</b>		<b>90.00</b>	<b>54.82</b>	<b>35.18</b>

# 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 (2<sup>nd</sup> 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

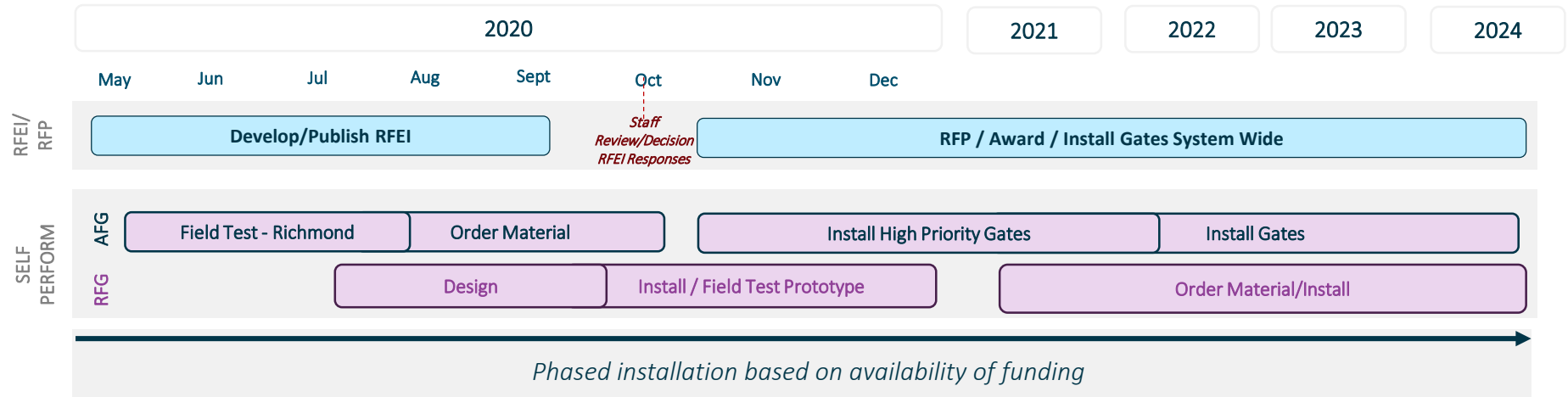
# Potential Fund Sources – Federal

## Federal

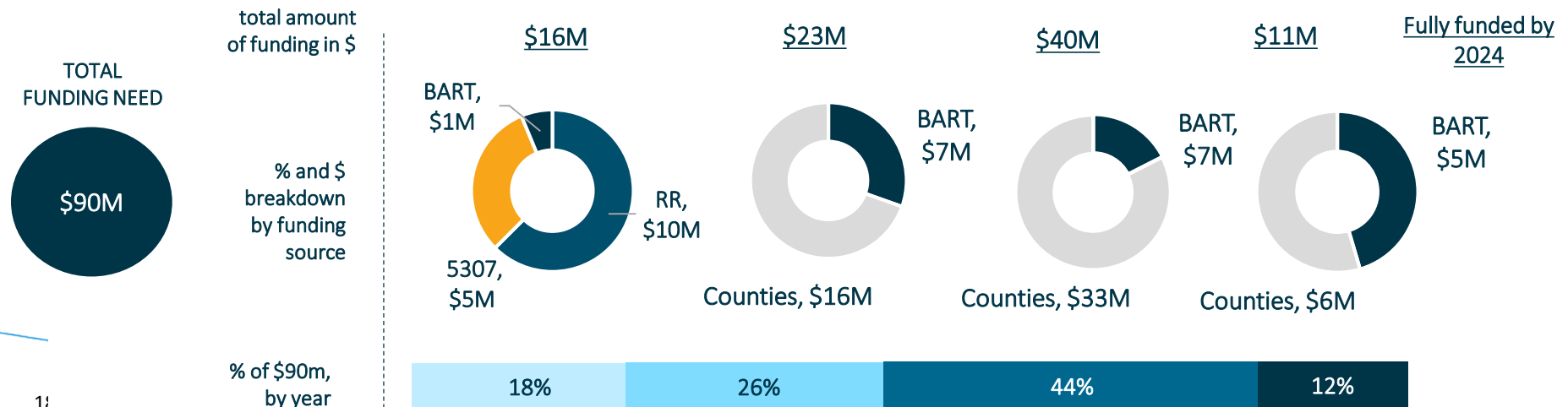
- Homeland Security's Transit Security Grant Program (TSGP)
  - TSGP's purpose is to protect transportation infrastructure and the travelling public from terrorism
  - While controlling physical access such as fencing, gates, and barriers are under TSGP's purview, fare gates alone are not meant to deter 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

# Project and Funding Needs Timeline

## PROJECT TIMELINE



## FUNDING TIMELINE



## 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

