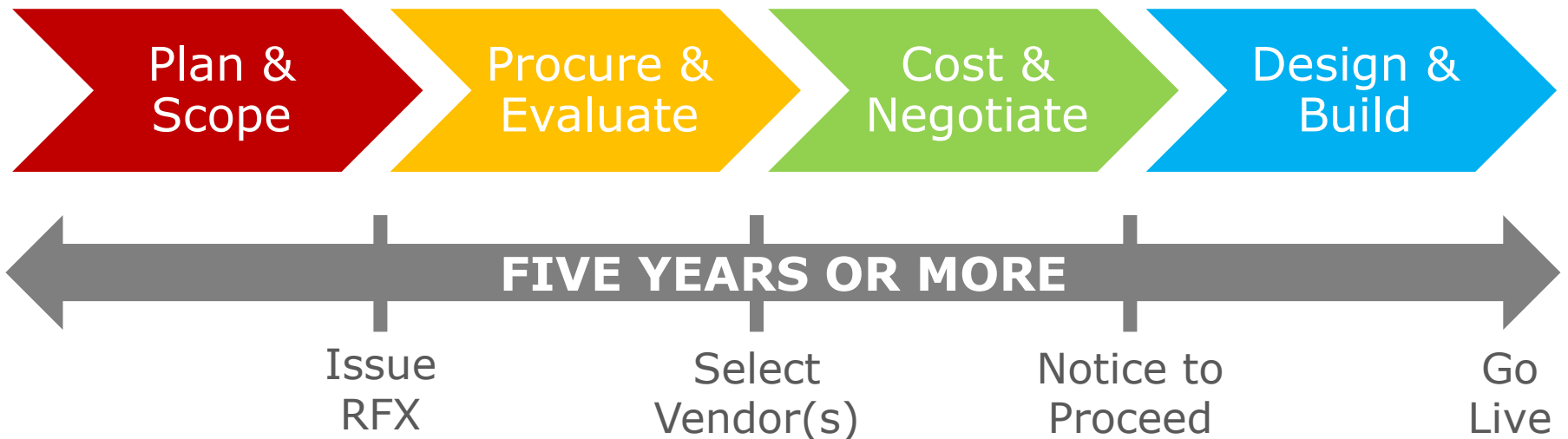# Getting the Most Value
(in the Least Amount of Time)
from Your Fare System Procurement

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2017 Fare Collection/Revenue Management
& TransITech Conferences

APTA

The Expanding Fare System Development Cycle

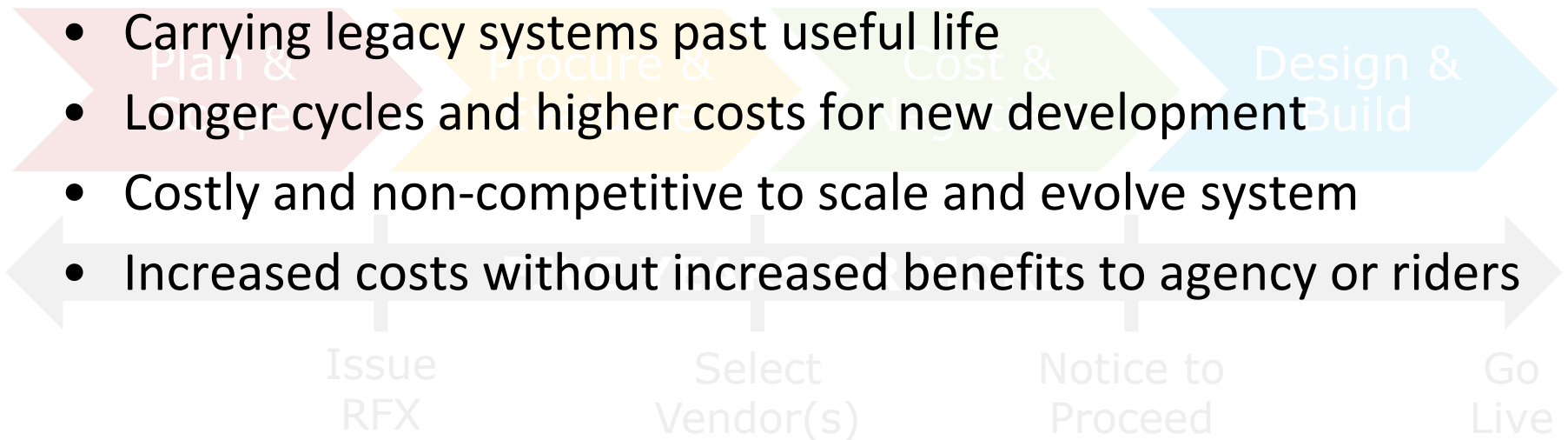The time to procure and implement modern fare systems remains lengthy, without providing additional value to agencies

Plan & Scope	Procure & Evaluate	Cost & Negotiate	Design & Build

FIVE YEARS OR MORE

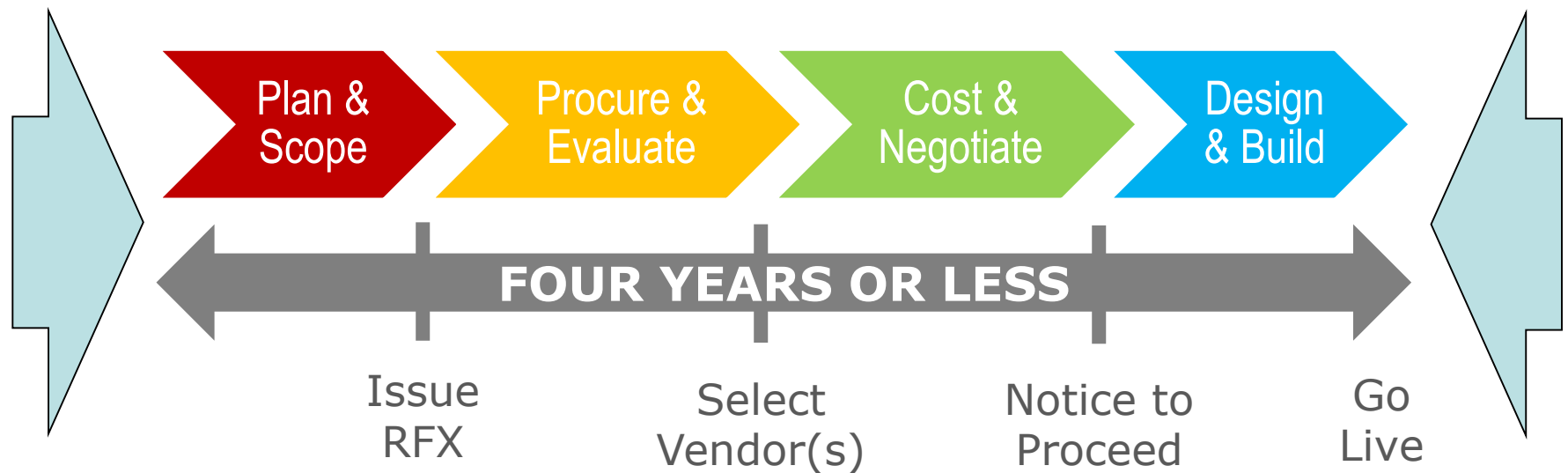| Issue RFX	Select Vendor(s)	Notice to Proceed	Go Live

The Expanding Fare System Development Cycle

The time to procure and implement modern fare systems remains lengthy, without providing additional value to agencies

- Increasing technical requirements and complexity
- Carrying legacy systems past useful life
- Longer cycles and higher costs for new development
- Costly and non-competitive to scale and evolve system
- Increased costs without increased benefits to agency or riders

Plan & ~~Scope~~

Procure & ~~Negotiate~~

Cost & ~~Negotiate~~

Design & Build

Issue RFX

Select Vendor(s)

Notice to Proceed

Go Live

The Expanding Fare System Development Cycle

What strategies can help us to reduce the time and increase the value received from a new fare system?

Plan & Scope → Procure & Evaluate → Cost & Negotiate → Design & Build

FOUR YEARS OR LESS

Issue RFX | Select Vendor(s) | Notice to Proceed | Go Live

Plan & Scope

Scope for functional requirements rather than technical specifications

- Begin with agency goals and business objectives

- Vision from the customer experience

- Utilize a stakeholder process

- Develop a Concept of Operations

"the agency must first clearly define a project vision, definition, scope, and mission in non-technical terms, to insure that all stakeholders understand the intent of the project."

Planning for New Fare Payment and Collection Systems: Cost Considerations and Procurement Guidelines, Smart Card Alliance

Plan & Scope

Structure to maximize competition and preserve flexibility

- Specify open architecture and non-proprietary systems to expand choice in device vendors

- Consider decoupling software, hardware, and customer support services

- Allows adaptation to new technologies faster

- Level playing field for transition activities

Procure & Evaluate

Engage the vendor community directly and incrementally

- Use RFIs to solicit new ideas, best practices, and gauge vendor interest

- Use RFQs to shortlist qualified vendors and refine final scope
  - Solutions proven in operations and available for demo
  - Efforts in parallel can shorten overall timeline and improve bids

Procure & Evaluate

Ask for what is important, and evaluate based on what you asked

- Don't specify what you can't test

- Focus responses on key aspects that will drive long-term value
  - Innovative solutions to meet objectives or reduce time/cost
  - Require COTS inventories, APIs, product roadmaps, etc

- Form criteria to differentiate vendors along your priorities

- Provide for real-world demos and testing scripts

Cost & Negotiate

Evaluate cost criteria based on total cost of ownership (TCO)

- Next generation fare systems are a 10 plus year investment
- Factor long-term benefits of modular COTS systems
- Weigh strength of security, recovery, and PCI protections
- Understand ramifications of upgrades or change orders
- Consider alternative pricing models
  - Cost plus incentives
  - As-a-Service models
  - Revenue sharing models

Cost & Negotiate

Utilize terms and conditions consistent with best practice for technology procurements

- Standard contracts are structured for buying physical assets or engineering & construction services

- Utilizing technology contracts balance risks, increases competition, reduce costs, and speed negotiations

"By making contract terms match the nature of this unique type of project instead of using generic commodity or construction terms for IT projects, state and local government entities will find that they will enjoy increased competition and therefore be able to reduce costs."

Transforming Procurement for the 21st Century, TechAmerica

Design & Build

Design systems incrementally to reduce risk and cost

- Consider Agile, Conference Room Pilots (CRPs) and other stepwise design approaches

- Run pilot projects with a limited system segment or user group

- Understand business and technical issues early

- Generates support with tangible evidence of new technology
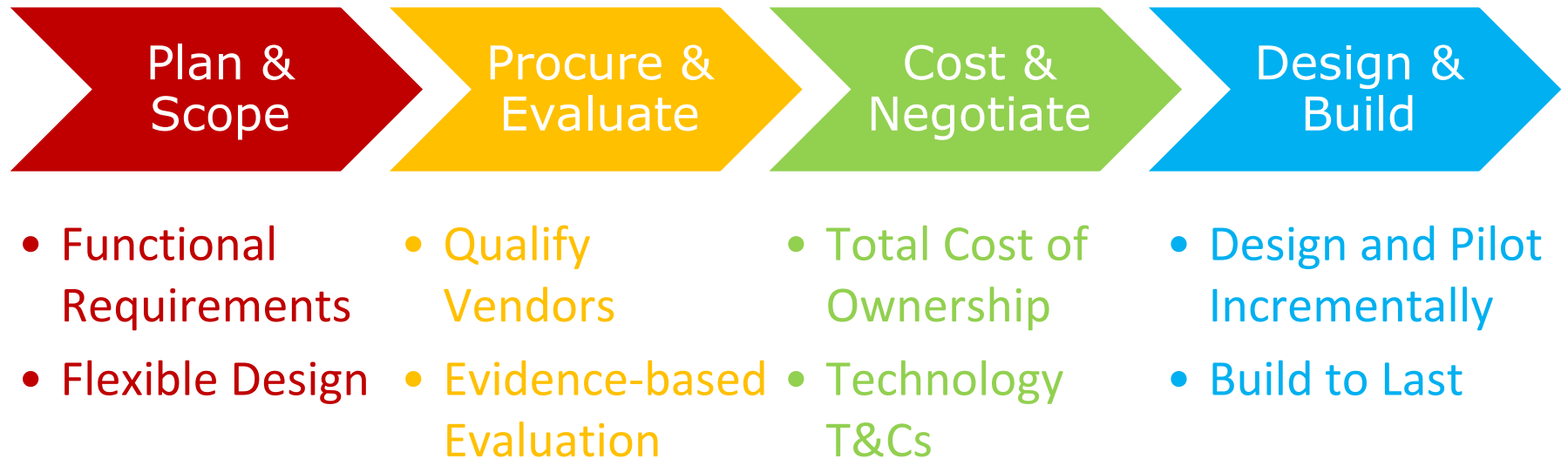
- Allows refinement to requirements

Design & Build

Build the system to scale and grow over 10-20 years

- Utilize COTS software
  - Regular upgrades, minimal security and downtime risks
- Require non-proprietary systems and open architecture to retain control
- Separate hardware from software procurement
  - Maintain back office investment as device components become obsolete
  - Capability to integrate new components from different suppliers over the life of the system

A Value-Driven Fare System Procurement

Plan & Scope	Procure & Evaluate	Cost & Negotiate	Design & Build

- Functional Requirements
- Flexible Design

- Qualify Vendors
- Evidence-based Evaluation

- Total Cost of Ownership
- Technology T&Cs

- Design and Pilot Incrementally
- Build to Last

A value-driven approach reduces time and cost, provides greater choice, and prepares for rapidly evolving technology.

APTA

Thank You!

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For further information:

- *Accelerating the Payback from Fare Collection Investment*, Accenture

- *Planning for New Fare Payment and Collection Systems: Cost Considerations and Procurement Guidelines*, Smart Card Alliance

- *Transforming Procurement for the 21st Century*, TechAmerica

- APTA Procurement Technology Standards Workgroup, APTA

- *Best Practices Procurement & Lessons Learned Manual*, FTA