Frequently Asked Questions (FAQ)

OPEN PAYMENT/ACCOUNT-BASED

Q 1. Are there opportunities for interoperability with other vendors and products, including third party QR codes?

- Yes. TAP Plus can offer integration of third-party QR codes such as AMTRAK, Metrolink, LOSSAN, and LA28 for seamless travel and special events. TAP Plus can offer connections with social services (DPSS, EBT, SNAP, Cal-Fresh) and third-party mobility services (scooters, ride-hailing, parking, EV charging).

- Further, the legacy back office system (Cubic) is currently connected to various third-party devices and services contracted by Metro, including Salesforce, PAX (Point of Sale devices), Masabi QR readers (Metrolink rail gates), Genfare (Farebox), Getac (DCC), Xerox (CAD/AVL system), Qikcell (4G Router), Palo Alto (Routers), IBM servers, Verizon and T-Mobile, Axiom (fare enforcement app, citation and validation for parking), APIs for Metro Parking and Bikeshare, InComm (Retail TAP cards), and Oracle (database).

- Integrated event ticketing has been launched, connecting Masabi, Metro, and Cubic. Currently, QR code readers are only at rail stations, while buses use flash passes. Plans are underway to expand QR code readers across the entire system under the TAP Plus proposal, allowing for QR code fare validation across Metro and 26 transit agencies. Each agency can utilize unique QR codes for city events.

Q 2. Will the vendor use open-source software for this development?

Open-source software is computer software that allows anyone to use, study, change and distribute it for any purpose. The vendor will use open-source software where possible and has a similar agreement with NY MTA. Open-source software is required in this proposed amendment.

Specifically, under the TAP Plus proposal, the fare collection system combines commercial off-the-shelf (COTS) solutions, open-source software, and proprietary elements.

Q 3. How will Metro ensure customers are involved throughout the process?

There are two ways customers will be involved in the Tap Plus development and rollout: market research through surveys and focus groups and user experience testing. Customers include riders from Metro and 26 Muni agencies, LIFE and GoPass participants, Seniors and Persons with Disabilities, and community members. In the Summer of 2024, TAP will create and disseminate a customer survey to assist staff in the customer interface of open payment and the account-based system. This survey would be followed by focus groups comprised of members of the public to gather supplemental feedback to aid in TAP Plus development. These efforts will ensure customers have input and that the development of TAP Plus is aligned with their needs and expectations.

Additionally, a core group of customers will perform thorough testing and feedback to assess the customer experience and usability of each new feature. In Spring 2025, TAP will begin with outreach efforts to organize and recruit core group testers. Testing will begin on open payment in the Summer of 2025 and will continue through

implementation in the Spring of 2026. In Fall 2026, account-based testing will begin and continue through implementation in Winter 2026/2027.

Q 4. What are Metro's plans for the mobile app consolidation, and how does that integrate with this upgrade?

TAP Plus is flexible and designed to integrate with third-party vendors. Metro's mobile app vision is to provide a consistent, accurate, and intuitive experience for customers to pay, plan, report and communicate across services. The Mobile App Working Group is preparing an RFP, with a final recommendation expected in late 2024.

PROCUREMENT/VENDOR

Q 5. Why is Metro issuing a change notice to the current contractor and not an RFP?

There are four primary reasons for continuing with the current vendor:

1. Complexity of the system: TAP serves 27 transit agencies, manages over 700 fare product variations, the TAP mobile app, website, and 1,500 TAP retail vendors. This requires a vendor that has experience with large agencies like New York, Chicago, San Francisco, and Boston.
2. Timeline: To meet the expectations of customers who will descend on Los Angeles with the World Cup, Super Bowl, and Olympic Games, Metro needs to get started immediately. Open payment will be delivered before the 2026 World Cup and by early 2027 the account-based system will be completed. This timeline would not be possible if Metro undertook a new procurement.
3. Leveraging Metro's current investment: Metro has millions of dollars invested in the current system. This includes 550 TAP Vending Machines, 4,000 fareboxes across 26 operators, 931 rail gates and station validators, etc. This equipment is proprietary, and although Metro might be able to find a vendor that would be willing to work with the current vendor to switch over, it would be far more expensive, would require the replacement of all readers at a minimum, and may not be ready in time to support the World Cup, Super Bowl, Olympic Games.
4. Cost: Metro estimates that the cost of going with another vendor ranges from $750 million to integrate current equipment to $2 billion to purchase all new equipment. Estimates are based on what San Francisco, Chicago, Boston, and New York are paying to upgrade or replace their systems.

Q 6. Why does Metro want to meet the deadline for the 2026 World Cup rather than the 2028 Olympics?

This timing will allow Metro to stress test systems during significant sporting events to ensure they are ready to support the expected millions of customers during the Olympic and Paralympic Games.

Q 7. What remedies does Metro have if the vendor is late with the project schedule or does not perform?

Metro may withhold 10% retention from each invoice until a total of 50% of the contract modification value has been billed. The retention withheld will not be released until Metro is satisfied with the delivery of the project. This amount could be as much as $33.5 million.

Metro can also assess liquidated damages for missing milestones and completion dates subject to an 8% maximum monetary penalty. This could amount to as much as $5.36 million in fines.

The vendor will face penalties of $10,000 per day for each milestone, with a maximum of $700,000. This is an enhancement to the current agreement.

Additionally, Metro can Termination for Convenience without cause at any time, in whole or in part, as determined by the MTA in its sole discretion or Terminate for Default if the vendor fails to perform any material work or provide any system component within the schedule specified in the contract.

Q 8. Where has Cubic successfully launched open payment systems?

The vendor successfully launched open payment in the following other cities:

- London - 2012
- Chicago - 2013
- Miami - 2019
- Vancouver - 2018; added Amex in 2019 and Interac Debit in 2023
- Sydney - 2020-2021
- Brisbane - 2022
- New York - 2021-2022

Q 9. If Metro is experiencing delays in development or rollout, what is our drop-dead date for changing course?

Below are preliminary deadlines and milestones. Metro has engineers and testers on staff and its own TAP test lab. Metro could receive preliminary open payment software as early as June/July of 2025.

Deliverables/ Milestones	Event	Acceptance Criteria	Delivery Date
1	Approval of Schedule	Cubic deadline and responsibilities formally documented within a Project Schedule per SOW requirements. Metro shall have (20) business days following receipt of formal Cubic schedule to provide comment and approval	Jul-24
2	Hardware Procurement	Cubic submission of an ERA report exhibiting material order	Aug-24
3	Approval of Final Design Document	Once Cubic submits FDR document, Metro shall have (20) business days following receipt of formal Cubic FDR to provide comment and approval	Nov-24
4	Approval of Test Plan	Once Cubic submits Test Plan document, Metro shall have	Feb-25

		(20) business days following receipt of formal Cubic Test Plan to provide comment and approval	
5	Phase 1 (Open Payment) SIT	Cubic completion of Open Payment SIT with a pass rate in Cubic QA environment	Aug-25
6	IAT Completion	Successful passage of hardware Installation/Acceptance Testing (IAT)	Feb-26
7	Rollout of Open Payment	Metro deployment of Open Payment to the field	Apr-26
8	Phase 2 Account-Based SIT	Cubic completion of Account-Based SIT with a pass rate in Cubic QA environment	Oct-26
9	Rollout of Account-Based system	Metro deployment of account-based to the field	Dec-26
10	Full system acceptance	Successful completion of migration to account-based	Aug-27

Q 10. Can Metro provide more detail about the factors that went into the price analysis and technical evaluation that were used to arrive at the independent cost estimate?

- For equipment and installation, staff used previous change notices to determine fair and reasonable hardware and labor costs.
- For software development, staff determined the level of effort required in terms of hours multiplied by the hourly rates per labor category and determined that the rates were fair and reasonable based on industry standards.
- For cloud hosting, staff consulted with the IT department and determined the costs were fair and reasonable.
- For PCI, staff consulted with the IT department to determine the annual costs and used the costs to compare them against Cubic's annual costs and determined that they were fair and reasonable.
- For Support Services, staff used the current agreement's cost elements and extrapolated forward for four years using the same annual increase, year to year, and adjusting for current in-service quantities of equipment.

Q 11. If Metro does move forward with the contract extension and scope change, and decides 4 years down the line that it wants to part ways with Cubic or decouple the open payment component, what does that process look like, does Metro own the new hardware, software, and data, and would this system allow for a seamless transfer or integration?

Yes, Metro owns all the equipment and data. Metro is purchasing a subscription for the software. Uncoupling elements is not recommended as it would require multiple readers on the system and at least two back offices. To achieve a fully integrated system like Metro has now, both systems operated by different vendors would have to communicate in real time. This could be extremely complex and costly and is not recommended.

If Metro decides to part ways due to performance issues, staff would issue an RFP to collect proposals for two options:

1. Require a vendor to integrate their software with the current equipment. This would require the replacement of the readers (proprietary), new software to run the equipment, and a new service agreement. This new system would be expected to run in parallel with the current system for up to two years as Metro transitions customers and 26 TAP partner transit agencies.
2. If the equipment cannot be operated by a new vendor or it is deemed that the current equipment needs to be replaced to ensure compatibility, then staff would solicit proposals calling for a total replacement of all fare collection equipment, including TAP vending machines, gates, station validators, bus validators fare boxes TAP mobile app and website. This would require a much longer transition (3 to 5 years) as replacement equipment must be designed to fit Metro's requirements and produced as ordered.

ALTERNATIVES CONSIDERED and WHAT ARE OTHER CITIES DOING?

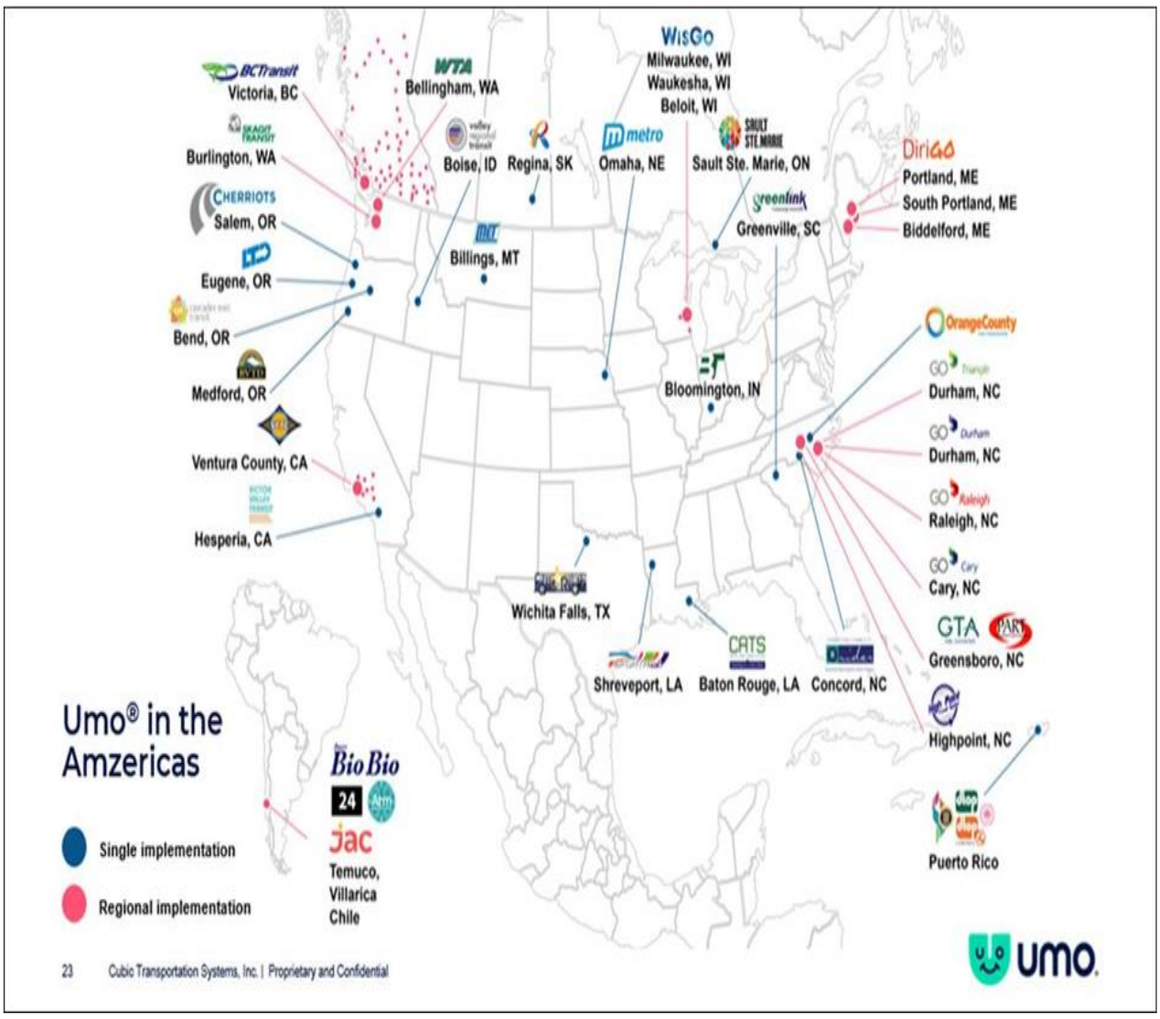
Q 12. Why didn't Metro consider going with Cal-ITP?

Cal-ITP does not support our current system, and they will not be able to convert the current card system to an open payment system. Cal-ITP does not have a solution to upgrade Metro's fare gates or bus validators for integrated event ticketing. Cal-ITP does not have a proven track record with large complex transit agencies.

Q 13. What other cities are currently supported by Cubic?

Larger Transit Agencies

Smaller Transit Agencies



Q 14. Are there any other vendors supporting large transit agencies?

There are no vendors that support a large transit agency with as many partner agencies (26) as LA does.

Q 15. Have other cities served by Cubic experienced delays or budget overruns?

Several agencies have experienced delays and cost overruns. Metro staff identified four reasons for delays and budget overruns in cities served by Cubic.

1. Core issues include upgrading from magstripe or non-legacy systems to open payment and account-based systems, which are more complex.
2. Delays are due to development challenges and agency internal organizational issues.
3. In some cases, the complex, privately financed project faces administrative and technical challenges during migration.
4. Integration with third-party devices introduces new technical complications and extends timelines.

Q 16. What will Metro do to avoid problems that other cities have experienced?

By considering the following factors, Metro can avoid the issues that others are facing.

1. Metro is leveraging existing infrastructure and hardware with Cubic, while other systems are being built from the ground up, replacing their existing systems. Metro saves time since its legacy system is Cubic.

2. Metro has a clearly defined scope of work and KPIs and will strictly adhere to them.
3. Metro is leveraging its existing customer relationship management system, unlike other cities migrating to new CRMs.
4. Cubic has deployed open payment in other cities, providing Metro an advantage to deploy faster and free of bugs.
5. Metro also has an internal team of testers and engineers who are well-versed in the fare collection system. This team provides additional expertise to keep cubic on track, closely monitors the project against the plan and budget, and conducts robust internal testing.

Q 17. Is Cubic a defense contractor too?

Yes. Cubic has two separate business units, Cubic Transportation Systems (CTS) and Cubic Defense. CTS has separate management and Profit and Loss Statements. Metro's contract is with the CTS.

GLOSSARY OF TERMS

Term	Definition
Closed Loop	A closed loop card is a payment card that the cardholder can use only at a particular retailer or other company. Our TAP card is a closed loop card. All information is kept on the card.
Commercial Off-the-Shelf (COTS)	Commercial-off-the-shelf or commercially available off-the-shelf products are packaged or canned hardware or software, that is ready-made and available for sale to the general public or organizations, rather than commissioning custom-made, or bespoke, solutions. The vendor will use COTS software, where applicable, to support the fare collection system.
Contactless Payment	Contactless payment systems are credit cards and debit cards, key fobs, smart cards, or other devices, including smartphones and other mobile devices, that use radio-frequency identification or near-field communication for making secure payments.
Open API (Application Programming Interface)	An open API is a publicly available application programming interface that provides developers with access to a software application or web service. Open APIs are APIs that are published on the internet and are free to access by consumers.
Open Loop	Open-loop payment technology is built upon international EMV standards meaning any rider can use their everyday bank issued contactless EMV credit or debit card or their smart device to pay for their travel.
Open Payment	Open payments allow commuters to use their existing Visa cards or mobile payment apps to pay for their transit fares. There's no need to queue up for a ticket or top-up a

Term	Definition
	transit-specific card. Just tap your Visa card or mobile device on the reader and go.
Open Source	Open-source infrastructure is technology specifications that are not proprietary. Open-source architecture means that a given software can be integrated with other software sources, whereas a closed source or proprietary architecture can only use the services or integrate with technology from a single origin.