


**CITY AND COUNTY OF SAN FRANCISCO**

**BOARD OF SUPERVISORS**

**BUDGET AND LEGISLATIVE ANALYST**

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November 10, 2022

**TO:** Government Audit and Oversight Committee  
**FROM:** Budget and Legislative Analyst   
**SUBJECT:** November 17, 2022 Government Audit and Oversight Committee Meeting

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**EXECUTIVE SUMMARY**

**Legislative Objectives**

- The proposed resolution would authorize the Municipal Transportation Agency (MTA) to execute an amended and restated memorandum of understanding with the Metropolitan Transportation Commission (MTC) and the other 23 participating transit operators for the Next Generation Clipper System. The term of the MOU is 10 years from its effective date.

**Key Points**

- The Clipper system is the regional electronic transit fare payment system that operates throughout the Bay Area, including on Muni, and has operated since 2002. The system has been governed by several Memoranda of Understanding (MOUs) between the Metropolitan Transportation Commission (MTC), which holds the contract with Cubic Transportation Systems, Inc. to operate the Clipper system, and the transit operators that use Clipper.
- The MTC and all 24 operators, including the MTA, seek to replace the current MOU with an updated MOU to reflect the new contract with Cubic, Inc. to establish the Next Generation Clipper System. The Next Generation System will improve user experience and access, including enabling changes to Clipper accounts to be made in real-time, enabling additional fare products to be used on Clipper cards, and expanding the number of locations for purchasing Clipper cards.
- The MOU would require the MTA to implement the Next Generation system, promote Clipper as its primary fare payment system (including for mobile payments), and provide Clipper training to staff.

**Fiscal Impact**

- Under the proposed MOU, the MTC will pay 50 percent of operating and maintenance costs and the operators will pay the remaining 50 percent based on their share of Clipper ridership among the agencies. The MTA is currently 35 percent of all Clipper ridership throughout the Clipper system. Additionally, operators are expected to pay 100 percent of credit card fees based on the percentage of revenue processed through each agency.
- The MTA estimates that its annual financial obligation under this MOU would range from \$6.5 million in year one of the MOU to \$8.5 million in year 10 with an average financial obligation of \$7.6 million annually and a total financial obligation of \$76 million over the total 10-year period.

**Recommendation**

- Approve the proposed resolution.

## MANDATE STATEMENT

City Charter Section 9.118(b) states that any contract entered into by a department, board or commission that (1) has a term of more than ten years, (2) requires expenditures of \$10 million or more, or (3) requires a modification of more than \$500,000 is subject to Board of Supervisors approval.

## BACKGROUND

### Clipper history

The Clipper system is the regional electronic transit fare payment system that operates on 24 transit systems throughout the Bay Area. It was implemented in 2002 by the Metropolitan Transportation Commission (MTC) and initially governed by an Interagency Participation Agreement between MTC and six of the transit operators. In 2011, the Interagency Participation Agreement was replaced by a Memorandum of Understanding (MOU) signed by seven initial operators, including the MTA. The MOU was subsequently updated and reinstated in 2016 and then amended in 2017 and 2019 to reflect changes in Clipper operations, including to create a Clipper Executive Board consisting of representatives from the operating agencies (including MTA) and clarify the roles of the MTC and the operators. Any transit operator that has started using the Clipper system after 2011 has been required to join the MOU as a condition of using the system, so now all 24 operators that use the system are part of the MOU.

### Next Generation Clipper

The MTC holds the contract with Cubic Transportation Systems, Inc. (Cubic) which operates the Clipper Card payment system. Their most recent contract with Cubic was signed in 2018 and includes the implementation of the Next Generation Clipper System. The Cubic contract to build and operate the Clipper system was awarded following a competitive solicitation and the costs of the contract were evaluated by a third-party engineering firm. MTC is paying for the \$165 million capital costs of the Cubic contract (such as installing Clipper card readers on transit and building a new account system) and the operating costs will be shared by MTC and the transit operators, such as MTA. Cubic has been operating the legacy Clipper system while it builds the Next Generation Clipper System.

According to the MTA, the Next Generation Clipper System will make improvements to the Clipper system that will improve user experience and access. The Next Generation system will be account based, which means that customers will see changes to their Clipper accounts (such as adding fare values) on their cards in real-time, as opposed to the current system which requires customers to wait up to five days before changes they make are added to their cards. The Next Generation system will also allow the MTA to add products to the Clipper system that are not currently available, such as Muni Day Passes and Muni Lifeline Passes (passes for people with low incomes). These changes are expected to be implemented by Fall 2024.

Some changes that are part of the Next Generation system have already been implemented, such as the ability to use your Clipper card virtually through your smartphone. Additionally, the MTA plans to expand the number of locations for purchasing Clipper cards (and adding fare values to existing cards) under the Next Generation system, including focusing on access in low-income communities and communities of color.

The MTC and all 24 operators, including the MTA, are replacing the 2016 MOU with a new MOU to reflect the Next Generation Clipper System changes and to leverage a new cost sharing structure, outlined below.

## DETAILS OF PROPOSED LEGISLATION

The proposed resolution would authorize the MTA to execute an amended and restated memorandum of understanding with the MTC and the other 23 participating transit operators. The term of the MOU is 10 years from its effective date.

Under the MOU, the MTA's obligations as a participating transit agency are outlined below. Obligations that are new to the proposed MOU are in **bold**.

- Implement the Clipper fare payment system according to the rules outlined in the MOU, including:
  - Make its facilities and staff available for the implementation of the Clipper system
  - Determine where to place the Clipper system onboard transit vehicles and prepare vehicles for site placement
  - Attend trainings and train staff on Clipper
- Pay its share of Clipper costs as outlined in the MOU (see Exhibit 1) and participate in as-needed reviews of the cost-sharing allocations
- Support the MTC in its administration of the Regional Transit Connection Discount Card Program (RTC Program)
- **Operate and promote Clipper as its primary fare payment system, including mobile fare payments, and not create or promote a competitive product except in limited circumstances (e.g., for tourists)**
- **Provide Clipper training to operators, station agents, customer service representatives, and other relevant employees**
- **Perform first-line maintenance on Clipper equipment**
- **Take financial responsibility for cost of replacing Clipper equipment that was damaged in-service or any other cause for which the risk of loss is not with the Clipper Contractor pursuant to the Clipper Contract**
- **Provide specifications for the development and operation of the Clipper mobile app**

The MTA will still be allowed to operate its Muni Mobile program despite the MOU's requirement that operators promote Clipper as its primary fare payment system because currently the products available on Muni Mobile are not available on the Clipper system (e.g., the Lifeline Pass and the Muni Day Pass). According to Diana Hammons, Senior Manager for Revenue Collection

and Sales at the MTA, Muni Mobile currently fills a mobile payment gap in Clipper's services but once the Next Generation system allows it, the MTA is excited to transition most of its mobile payment options to Clipper.

## **FISCAL IMPACT**

The proposed MOU includes a new cost-sharing structure between MTC and the 24 participating agencies that differs from the 2016 MOU. Under the proposed MOU, MTC will pay 50 percent of the operating and maintenance costs of the Next Generation contract with Cubic and 100 percent of the mobile card fee costs (the costs associated with converting Clipper cards to virtual cards and maintaining the virtual Clipper product). The remaining 50 percent of the operating and maintenance costs will be split between the operators based on their proportion of total trips taken on the entire Clipper system. The operating and maintenance costs include the following costs:

- General operations and maintenance services across the new Clipper system;
- Compliance management and reporting services (such as Payment Card Industry Data Security Standards);
- Transaction processing, financial and account management services;
- Customer service system administration;
- Management of the new system's fare media (e.g., the physical and virtual cards);
- Management of the Clipper card retail sales and distribution network;
- Monitoring and control of the new system;
- Second-line preventative and corrective maintenance on Clipper equipment; and
- Information and security management

Furthermore, 100 percent of credit card fees will be allocated to the operators based on the percentage of revenue processed by each agency. Unlike the old Clipper contract, under the Next Generation contract with Cubic, operating and maintenance costs are a flat fee and will not fluctuate throughout the life of the contract. According to Senior Manager Hammons, who co- led the process of negotiating this new MOU among the participating operators, this new cost-sharing structure was created out of a collaborative process with all the participating operators, represents the fairest way to share the costs of the Clipper system, and is an improvement over the old cost-sharing structure.

### **Transition to New System**

The new cost-sharing structure will be implemented when the Next Generation Clipper system reaches a milestone called "revenue-ready," which is anticipated in Q1 2023. This milestone will occur based on the Cubic contractual requirements, including the installation, testing and training associated with pilot installations of the new equipment, and the full operation of all back-office functions, services, and networks. At this point, Cubic will be operating both systems in parallel, allowing a transition of customers from the old system to the new system, utilizing their existing cards and accounts. Based on this model, transit operators will incur costs for both the existing and Next Generation system through FY 2023-24 at which time the transition will be

complete, and Cubic will no longer be required to support both systems. As the transition progresses and customers are migrated to the new system, less support is required to operate the existing system, costs will transition to a “time and materials” structure whereby charges will be based on the actual costs and changes to the transit agencies will ramp down during this time. MTA’s Clipper costs are budgeted at \$7.1 in FY 2022-23 and \$9.7 million FY 2023-24, which includes the transition period.

The breakdown of annual costs under the proposed MOU is shown in Exhibit 1 below.

**Exhibit 1: MTA’s Annual Costs Under Next Generation Clipper MOU**

<b>Year</b>	<b>Annual Clipper Program Contract Fees (for all Transit Operators)</b>	<b>Annual Estimated Credit Card Fees (for all Transit Operators)</b>	<b>Total Annual Program Costs (for all Transit Operators)</b>	<b>MTA Share (35 percent)</b>
1	\$11,491,652	\$7,200,000	\$18,691,652	\$6,542,078
2	12,714,966	7,380,000	20,094,966	7,033,238
3	13,093,982	7,564,500	20,658,482	7,230,469
4	13,365,164	7,753,613	21,118,776	7,391,572
5	13,498,485	7,947,453	21,445,938	7,506,078
6	13,822,481	8,146,139	21,968,621	7,689,017
7	14,154,510	8,349,793	22,504,303	7,876,506
8	14,494,772	8,558,537	23,053,309	8,068,658
9	14,843,472	8,772,501	23,615,973	8,265,591
10	15,200,822	8,991,813	24,192,635	8,467,422
<b>Total</b>	<b>\$136,680,306</b>	<b>\$80,664,349</b>	<b>\$217,344,654</b>	<b>\$76,070,629</b>

Source: MTA

Notes: Annual program fees and annual estimated credit card fees assume 5 percent annual escalation. “For Operators” refers to all 24 transit operators that use the Clipper payment system.

Exhibit 1 shows that currently, the MTA represents 35 percent of all trips taken on the Clipper system (BART is 45 percent and the other 22 agencies combined represent the remaining 20 percent). Based on this number, the MTA estimates that its annual financial obligation under this MOU would range from \$6.5 million in year one of the MOU to \$8.5 million in year 10 with an average financial obligation of \$7.6 million annually.

Exhibit 2 below shows the MTA’s annual costs and fare revenue under the current MOU for FY 2019-20 through FY 2023-24.

**Exhibit 2: MTA’s Actual Annual Costs and Fare Revenue Under Current Clipper MOU, FY 2018-19 through FY 2023-24**

<b>Fiscal Year</b>	<b>MTA Clipper Costs</b>
FY 2018-19	8,400,000
FY 2019-20	7,458,239
FY 2020-21	1,942,807
FY 2021-22	3,004,297
FY 2022-23	7,100,000
FY 2023-24	9,700,000

Source: MTA

As shown above, the FY 2018-19 Clipper costs for MTA were \$8.4 million, which is more than the projected annual cost of the first nine years of the proposed agreement.

The old MOU stipulated a variable fee and transaction-based payment structure, meaning that operators’ costs would increase or decrease depending on monthly Clipper use/ridership (MTC invoices operators monthly). Annual costs for FY 2020-21 and FY 2021-22 were \$1.9 million and \$3 million, respectively, due to the Covid-related reduction in Muni ridership. Over FY 2022-23 and FY 2023-24, MTA Clipper costs will increase due to increased ridership and transition to the new Clipper system.

According to Senior Manager Hammons, Muni Clipper use had remained steady pre-pandemic, therefore the MTA does not expect Clipper usage to change dramatically in the future but anticipates that it will return to pre-pandemic levels. Additionally, MTA staff do not expect the MTA’s share of total trips on the Clipper system, and therefore its share of costs, to change significantly throughout the life of the MOU. According to Senior Manager Hammons, if Muni ridership changes, then it is likely changing for other transit systems as well, keeping the proportion of rides across all transit agencies the same even if the total number of trips increases or decreases.

The costs associated with the past MOU have been paid from the MTA’s operating budget.

**RECOMMENDATION**

Approve the proposed resolution.