



**Board Report**

**File #:** 2023-0382, **File Type:** Program

**Agenda Number:**

**REGULAR BOARD MEETING  
JUNE 22, 2023**

**SUBJECT: EXPRESSLANES PAY-AS-YOU-GO PILOT EVALUATION**

**ACTION: APPROVE RECOMMENDATIONS**

**RECOMMENDATION**

**CONSIDER:**

- A. RECEIVING AND FILING the ExpressLanes Pay-As-You-Go Pilot evaluation methodology and findings;
- B. AUTHORIZING the Pay-As-You-Go Program permanent, eliminate the \$25 penalty for notice of toll evasion, and adjust the Program’s “processing fee” (which replaces the former penalty amount) from \$4 to \$8 to align processing costs and fees;
- C. AUTHORIZING the Chief Executive Officer or their designee to conduct an annual audit to confirm the fee amount and make downward or upward adjustments to the fee as appropriate to keep costs and fees aligned, consistent with the Fee Adjustment Policy (Attachment D); and
- D. AUTHORIZING the Chief Executive Officer or their designee to make the necessary changes to the ExpressLanes Toll Ordinance, as required.

**ISSUE**

The Pay-As-You-Go (PAYG) Pilot was approved by the Board in January 2019 as a time-limited pilot to evaluate the effects of reducing the penalties associated with using the ExpressLanes for drivers without FasTrak transponders. At the time of approval, Metro staff committed to conducting an evaluation of the Pilot’s impacts and to report back to the Board at the conclusion of the Pilot period with findings. This Board Report addresses the impacts of the Pilot, and its associated recommendation regarding the future of the PAYG Program.

**BACKGROUND**

The Metro ExpressLanes are High-Occupancy Toll (HOT) lanes on I-110 and I-10 in Los Angeles County. They allow toll-free access to High Occupancy Vehicles (HOVs) while also offering non-HOV

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drivers the opportunity to use them by paying a toll that varies depending on the level of demand. Fundamentally, the ExpressLanes use pricing to optimize both lane utilization and performance by targeting usage levels that are just below the carrying capacity of the lanes. As demand for the ExpressLanes increases, toll prices will rise for all non-HOV users to manage the increase in demand to maintain lane performance. If at any given time demand for the ExpressLanes becomes so great that the maximum toll rate is insufficient to keep demand below capacity, the lanes temporarily revert into conventional HOV lanes until demand subsides (a transient operational condition referred to as “HOV Only” mode).

Before the HOT lanes opened on I-110 and I-10 in 2012 and 2013, they were HOV lanes. Prior to the conversion, non-HOVs had no legal way to access the lanes-but now as HOT lanes, drivers can pay a toll to save time when they need it the most. Formerly, non-HOVs illegally accessing the HOV lanes were subject to a minimum fine, which is currently \$490. However, drivers that access the HOT lanes now without FasTrak pay only the toll plus a smaller processing fee, representing a 98% reduction in cost compared to the current HOV violation fee. Moreover, the processing fee can be avoided by opening an ExpressLanes account. The conversion from HOV lanes to HOT lanes was made possible by a \$210.6 million grant from USDOT, of which 63.7% was used to fund transit improvement projects and investments along the ExpressLanes corridors, including Silver Line and municipal operator service, a new El Monte Station, and improvements to Harbor Gateway Transit Center, Manchester and Slauson Stations, to free up capacity on the already congested HOV lanes for single occupant toll lane use. In addition, equity benefits were provided to the communities affected during the lane conversion, including provision of additional incremental transit services, active transportation programs and system connectivity improvements through grant funding.

The PAYG pilot reduced the cost of using the ExpressLanes without a FasTrak transponder by temporarily removing the \$25 violation penalty and replacing it with a significantly lower \$4 processing fee for non-FasTrak trips. This \$4 fee was designed and intended to match the costs of processing each PAYG notice, thereby keeping the PAYG pilot cost-neutral. For PAYG trips, the Roadside Toll Collection System captures photos of the vehicles as they traverse toll points, and the registered vehicle owners receive notices by mail to pay the tolls and fees due. These PAYG notices can be paid through the ExpressLanes website, over the phone, at neighborhood Pay-Near-Me locations (participating 7-Eleven locations), or in person at an ExpressLanes service center (Torrance and El Monte).

California Streets and Highways Code 149.9 and the Ordinance for Enforcement of Toll Violations (“Toll Ordinance”) jointly establish the requirement that all vehicles in the Metro ExpressLanes carry FasTrak transponders. As part of the PAYG Pilot, CHP stopped issuing citations for those driving the ExpressLanes without a transponder as of January 2020; if the Board elects to make this Pilot permanent, CHP would continue to follow this course of action with respect to transponders moving forward. Consistent with ExpressLanes regulatory requirements, under the new PAYG Pilot anyone using the ExpressLanes without a FasTrak transponder still receives a PAYG Notice of Toll Evasion Violation that includes the toll amount for the trip and a \$4 processing fee as opposed to the original \$25 penalty. If the balance due on a PAYG notice is not paid by the date indicated on the notice, it incurs penalties for delinquency, as shown in Attachment A.

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The Board approved the PAYG Pilot in January 2019 and subsequently approved the necessary changes to the Toll Ordinance to enact the Pilot in January 2020. Public outreach and education about the PAYG Pilot was conducted primarily through the website and roadside signage along the I-10 and I-110 ExpressLanes corridors, due to the targeted nature of those communications and the constraints imposed by the COVID-19 pandemic at the time. The Pilot was initially intended to have a duration of one year, effective as of January 5, 2020. However, in 2021 the Pilot period was extended to allow sufficient time for the disruptive and unprecedented effects of the COVID-19 pandemic on ExpressLanes traveler behaviors, traffic patterns, and revenue trends to subside before conducting the Pilot evaluation.

The evaluation specifically seeks to address the following questions regarding the PAYG Pilot's impact:

1. How effective was the Pilot at making the ExpressLanes available to more drivers?
2. How effective was the Pilot at reducing the fees/penalties paid by non-FasTrak users to offer more opportunities for access to the ExpressLanes?
3. How effective was the Pilot at reducing revenue losses associated with non-payment of notices for non-FasTrak trips?
4. How effective was the Pilot at opening up the ExpressLanes to occasional users?
5. What effect did the pilot have on congestion/mobility in the ExpressLanes?

These questions are consistent with the stated objective of seeking "ways that the ExpressLanes can be made available to more drivers" with consideration for occasional and last minute users as provided in the Board approved Motion #42 (Attachment B).

## **DISCUSSION**

To assess the pilot's effectiveness at making the ExpressLanes available to more drivers, the evaluation considered the changes that occurred to ExpressLanes trip volumes by non-FasTrak transponder users (i.e., PAYG users) after the Pilot was implemented. In the "Before PAYG" period, 3.70% of all ExpressLanes trips were made by drivers without a FasTrak transponder. In the "With PAYG" period, this percentage increased to 5.98%. This difference was statistically significant at a 95% confidence level. Over the same period, FasTrak transponder trip volumes declined by 16.1% while non-FasTrak transponder trip volumes increased by 38.9%. This translates into an estimated 899,954 additional ExpressLanes trips as a result of the PAYG Pilot in the one-year "With PAYG" period. The data support the conclusion that the PAYG Pilot resulted in more ExpressLanes trips by drivers that did not have a FasTrak transponder, and suggest that the PAYG Pilot resulted in a 2.4% increase in ExpressLanes trip volumes.

To assess the Pilot's effectiveness at reducing the penalties paid by non-FasTrak users, the evaluation considered the changes that occurred to ExpressLanes trip revenue collected from non-FasTrak users after the Pilot was implemented. In the "Before PAYG" period, an estimated \$11.7

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million in revenue was collected from non-FasTrak users of the Metro ExpressLanes across all Notice escalation stages prior to DMV hold, representing 18.6% of all revenues collected over that time period. In the “With PAYG” period, this percentage fell to 17.1%. Over the same period, FasTrak account revenue grew by 18.9%. Based on these data, the expected revenue in the “With PAYG” period would have been an estimated \$2.6 million higher in the absence of the PAYG Pilot, representing an approximate reduction in revenue of 3.8% as a result of the Pilot. Therefore, the data provides no evidence that the PAYG Pilot had any significant effect on the total revenue obtained from non-FasTrak trips in the ExpressLanes.

To assess how effective the Pilot was at reducing revenue losses associated with non-payment of notices for non-FasTrak trips, the evaluation considered the changes in on-time payment rates for non-FasTrak trips that occurred after the Pilot was implemented. In the “Before PAYG” period, non-FasTrak Notice payments that were submitted on time constituted 78.4% of all payments made at any Notice escalation stage prior to DMV hold. In the “With PAYG” period, this percentage decreased to 77.6%. Based on these data, the expected number of on-time payments in the “With PAYG” period would have been an estimated 6,620 higher in the absence of the PAYG Pilot. This difference was not statistically significant at a 95% confidence level (paired Student’s t-Test, p-value 0.104). Therefore, the data provides no evidence that the PAYG Pilot had any meaningful effect on the relative frequency of on-time payments for non-FasTrak trips in the ExpressLanes.

To assess the pilot’s effectiveness at opening up the ExpressLanes to occasional users, the evaluation considered changes in the number of non-FasTrak trips made by infrequent or occasional users of the ExpressLanes after the PAYG Pilot was implemented. In the “Before PAYG” period, 73% of non-FasTrak drivers made just one trip in the ExpressLanes, while in the “With PAYG” period this percentage declined to 63%. However, the number of non-FasTrak drivers in every other trip count bin increased in the “With PAYG” period. The average number of trips made per non-FasTrak driver increased from 2.5/year in the “Before PAYG” period to 3.7/year in the “With PAYG” period, with over 90% of non-FasTrak drivers using the ExpressLanes six times a year or fewer. The difference in the two distributions was statistically significant at a 95% confidence level. These findings indicate that the vast majority of non-FasTrak drivers typically use the lanes on an infrequent/occasional basis only, and that such users felt more comfortable continuing to use the ExpressLanes without FasTrak following implementation of the PAYG Pilot.

To assess the effect of the Pilot on congestion and mobility in the ExpressLanes, the evaluation considered the changes in end-to-end travel times. The analysis revealed that the travel times decreased by an average of 2.6 minutes in the AM Peak and increased by an average of 4.2 minutes in the PM Peak, after controlling for pandemic-related effects. Note, however, that these results reflect the cumulative effect of all changes to the ExpressLanes between the “Before PAYG” and “With PAYG” periods, including transit service changes or roadway configuration changes that occurred over the same period. The data available for this analysis could not support isolating the specific impact of the PAYG Pilot alone.

The evaluation also considered the distribution of PAYG trips throughout the day and found that the greatest proportions of PAYG travelers use the ExpressLanes during off-peak periods, with 25.6% of all trips during the off-peak periods being PAYG trips, compared to 22.5% during the peak periods. These findings suggest that non-FasTrak drivers are having a proportionally greater influence on

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overall trip volumes during non-peak periods.

The full evaluation results and detailed findings, including charts and data tables, are provided in Attachment C. Unless otherwise noted in the analysis details, the “Before” period is September 2018 - August 2019, and the “After” period is September 2021 - August 2022.

### *Fee Adjustment Policy*

The PAYG processing fee is designed to make the PAYG Program cost-neutral, such that it does not constitute a potential financial liability on the rest of the ExpressLanes program. Among other things, this helps protect the availability of funds for such things as net toll revenue grant reinvestments, which are used to fund transportation programs that promote more equitable outcomes on the corridors, such as investments in transit station improvements, bicycle infrastructure, Complete Streets programs, and first/last mile connections. When first calculated in 2018, the estimated processing cost per PAYG trip was \$4. This was calculated to cover the costs associated with processing PAYG notices, including: license plate image processing, notice printing, notice mailing, payment processing, customer service/support engagements, and back-end system management.

After collecting additional data over the course of the PAYG Pilot on revenue associated with non-pursuable PAYG notices (e.g., vehicles with no license plates), PAYG non-payment rates, and processing costs (including the effects of inflation since 2018), an updated PAYG processing fee of \$8 is recommended to sufficiently cover PAYG Program costs. This accounts for the joint effects of inflation, PAYG trip non-payment rates, and non-pursuable PAYG trip rates, which collectively reflect a fee increase of 92% (calculation details are provided in Attachment D). A breakdown of costs is provided below, with additional detail available in Attachment E.

- \$1.20 for equipment, software, and communications for license plate capture
- \$0.58 for manual verification and QA/QC of license plate images as required
- \$3.69 for customer service (phone support, in-person support, mail handling)
- \$2.50 for printing, postage, envelopes, DMV lookup, and credit card fees
- Total: \$7.97, rounded to \$8 in accordance with Attachment D.

Furthermore, to allow for ongoing coverage of PAYG Program costs moving forward, this fee would be subject to an annual audit to determine any downward or upward adjustments to the fee as appropriate to keep costs and fee aligned, consistent with the Fee Adjustment Policy (Attachment D).

For added interpretive support with respect to this fee increase through an equity lens, the equity analysis found that ZIP codes with lower EFC concentrations had relatively higher PAYG utilization rates whereas ZIP codes with higher EFC concentrations had relatively lower PAYG utilization rates. Additional detail is provided in the Equity Platform section.

Prior to PAYG, a \$25 penalty of notice of toll evasion was assessed. During the pilot, this penalty was suspended. If PAYG is made permanent, the \$25 penalty for toll evasion is eliminated. Per the Toll Ordinance, if a PAYG Notice is not paid within 30 days, it escalates to a “Past Due Notice” and incurs an additional “Past Due Penalty” on top of the previous balance due. The current Past Due Penalty is \$21, meaning that the total amount due at the Past Due Notice escalation stage is the toll

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plus \$25 in fees and penalties (i.e., the sum of the \$4 processing fee and the \$21 Past-Due Penalty). As part of the Fee Adjustment Policy as described in Attachment D, any changes to the processing fee will be accompanied by corresponding adjustments to the Past-Due Penalty to keep their sum fixed at \$25. For example, if the PAYG processing fee were increased from \$4 to \$8, the Past Due Penalty would be adjusted from \$21 to \$17 such that the total amount due at the Past Due Notice stage remains the toll plus \$25 in fees and penalties.

For added context, an \$8 fee is still the lowest out of all such fees among other Express Lanes operators in the state, which range from \$10 to \$40 and are \$25 on average (see Attachment A for a complete comparison table). Metro continues to be a national leader in this regard as more facilities across the country start to evaluate their own programs to make it easier for occasional, infrequent, or inadvertent users to access their lanes.

Any such changes to the PAYG fee would require corresponding updates to the Toll Ordinance, which was last updated on January 5, 2020, to include the current \$4 PAYG fee. When updates to the Toll Ordinance are limited to routine PAYG fee amount adjustments only, as defined in Attachment D, they will be communicated to the Metro Board by official Board Correspondence at least 30 days in advance and will subsequently be publicly announced through the website and/or other communications channels consistent with the existing customer notification practice.

### *Interpretive Support for Revenue Findings*

Although the PAYG processing fee is specifically designed such that the added costs of supporting the PAYG Program are recovered by the fee, there are nevertheless additional revenue impacts to the ExpressLanes program associated with PAYG given that it reduced the former \$25 violation fee for non-FasTrak trips to a lower \$4 processing fee instead. This translated into reduced revenue for the ExpressLanes program as compared to the pre-PAYG period by an estimated 3.8%, which lowers the amount of funding available.

No portion of a PAYG notice is designed to function as a revenue generator for ExpressLanes. The toll portion of the PAYG notice that is posted on the lanes is set according to the price needed to keep the lanes moving and is a function of road capacity and demand at any given time. The fee portion of the PAYG notice is a function of processing/handling costs, and is designed specifically to cover those program expenses; it is not designed to be punitive. While any non-zero fee amount would also act as a financial disincentive to some extent, this is not the intent of the fee portion of the PAYG notice; rather, the purpose of PAYG is to minimize this disincentivizing effect by lowering the PAYG fee to the minimum level necessary to cover processing costs. Finally, the penalty portion of the PAYG notice is triggered only if the user does not pay the balance owed by the due date and is designed to be a deterrent to encourage timely payment of the amount due.

The PAYG Pilot does not threaten Metro's ability to manage demand in the I-10 and I-110 ExpressLanes, as the non-FasTrak travelers in the ExpressLanes are still subject to the tolls and the demand-influencing effects thereof. The inclusion of a processing fee on PAYG trips does increase the total price paid by the traveler for a given trip, which translates into lower demand for the ExpressLanes among this cohort of users. However, the intention of the PAYG policy is to reduce the

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costs of accessing the ExpressLanes by non-FasTrak users-not to establish price parity with FasTrak users whose transactions are an order-of-magnitude more cost efficient to process-which this program accomplishes. While the PAYG processing fee may represent a disincentive to ExpressLanes use by non-FasTrak users, this is a necessary outcome of the nature of plate-based trip processing and is a cost that customers can easily avoid if desired by preparing in advance by opening an account. The convenience offered by the PAYG program comes at added cost to Metro, and the PAYG processing fee ensures that that added cost is paid for by the users making those choices, rather than being subsidized by other ExpressLanes accountholders that prepared in advance by signing up for accounts. As demand for the ExpressLanes goes up because the population of potential users expands (i.e., the addition of more non-FasTrak users into that population as provided by the PAYG Pilot), the prices will rise for all non-exempt users as well to compensate for this increase in demand. To be clear, the primary mechanism for controlling demand is the application of the dynamically calculated toll; the additional effect that the processing fee has on suppressing demand among PAYG users is incidental.

It should be noted that while non-FasTrak user revenues declined between the pre-implementation and post-implementation data used for this analysis, these reductions in violation revenue were more than offset by broader revenue increases program-wide that resulted from growing demand for the ExpressLanes - particularly in the PM Peak period-and a corresponding rise in toll rates necessary to effectively manage that increasing demand during those peak times. More precisely, program-wide revenue increased overall by 4.8% between the "Before PAYG" and "With PAYG" periods, though the analysis suggests that revenue growth would have been 3.8% higher over the same period in the absence of the PAYG Pilot.

### *Signage Considerations*

During the Pilot period of the program, modifications to the static roadside signage were not incorporated. As PAYG now transitions into a permanent program, staff will adjust ExpressLanes signage to reflect the new policy as allowed by existing law, CA-MUTCD, Caltrans, California Traffic Control Devices Committee (CTCDC), and other applicable authorities.

## **DETERMINATION OF SAFETY IMPACT**

This recommended action is not anticipated to have an impact on the safety of Metro's patrons or employees.

## **FINANCIAL IMPACT**

The toll revenue and fees collected are recognized as ExpressLanes revenues. The toll revenue will fund the existing and future ExpressLanes operations. The PAYG fees will cover the program expenses such as processing/handling costs.

### *Impact to Budget*

No impact to the FY23 Budget. If approved, the change in fees/fares will be factored into future year

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budgets. The Toll revenues are eligible only for activities (operation/capital) within the toll regions.

## **EQUITY PLATFORM**

The ongoing PAYG Pilot would continue to reduce the costs of using the ExpressLanes without FasTrak by as much as 68% by lowering the fee portion of such trips from \$25 (i.e., the original pre-Pilot fee amount that would be reinstated if the PAYG Program were discontinued) to \$8. This benefit therefore necessarily extends to drivers that may have inadvertently entered the lanes without intention of doing so as well. Other ExpressLanes programs already exist to target other equity-related issues, such as emissions reductions (i.e., the Carpool Loyalty Program and Transit Rewards Program), and improved transit access (i.e., the incremental transit service funding program).

When considering the utilization rates of the PAYG Pilot, ZIP codes with the lowest EFC concentrations had the highest relative PAYG utilization rates (4.87% of all trips made), whereas ZIP codes with the highest EFC concentrations had the lowest relative PAYG utilization rates (2.62% of all trips made). PAYG utilization is defined as a ZIP code's total count of PAYG trips paid before escalation, normalized by the total trip count for that ZIP code. The focus on trips paid before escalation is necessary to account for the fact that the PAYG Pilot only modified that fee level of the escalation process (i.e., reducing it from \$25 to \$4). Additional detail is available in Attachment E: Pay-As-You-Go Equity Analysis.

It is also notable that for frequent ExpressLanes travelers with low incomes that want to avoid the PAYG processing fees entirely, there is the option of opening Low Income Assistance Plan (LIAP) accounts with Metro ExpressLanes instead. Eligible households that meet the income requirements for LIAP accounts receive initial credits of \$25 each upon account activation and have the monthly \$1 account maintenance fees waived on an ongoing basis. As of August 2022, there were 17,060 active LIAP accounts with an estimated 8,018 (47%) living in EFCs (see Attachment E). Recent data analysis by staff has offered strong evidence that having access to LIAP accounts effectively addresses the cost-related barriers to use of the ExpressLanes among low-income households.

## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The ongoing PAYG Pilot supports Strategic Goal 1, providing high-quality mobility options that enable people to spend less time traveling, by reducing the costs of accessing the ExpressLanes for non-FasTrak users. Over the past 12 months, the ExpressLanes have offered travelers an average time savings of 32% and an average travel time reliability improvement of 54% when compared to the adjacent general purpose lanes on I-10 and I-110 in the weekday peak periods and directions. Since the ExpressLanes first opened in 2012, they have cumulatively saved users an estimated 26.6 million hours of time.

The ongoing PAYG Pilot supports Strategic Goal 2, delivering outstanding trip experiences for all users of the transportation system, by reducing the costs of accessing the ExpressLanes for non-FasTrak users. When traffic shifts from the general-purpose lanes to the ExpressLanes, that can help free up additional capacity in the general-purpose lanes and achieve performance improvements for those travelers as well.



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**ALTERNATIVES CONSIDERED**

As an alternative to this recommended action, the Board may instead elect not to continue the PAYG Program. This is not recommended, as the PAYG Pilot has generated significant tangible benefits for the traveling public by making the lanes more accessible to infrequent and occasional users, and by increasing on-time payment rates among non-FasTrak users of the ExpressLanes.

**NEXT STEPS**

Upon Board approval of this recommended action, staff will update customer materials and messaging to indicate that the PAYG Program and its associated benefits are now a permanent feature of the Metro ExpressLanes, will make updates to the Toll Ordinance and PAYG Notice fee as described in the Fee Adjustment Policy, and will take additional action as needed on the backend systems to make the PAYG Program permanent. To further promote awareness about the PAYG Program among non-FasTrak users of the I-10 and I-110 corridors, staff will also implement a billboard strategy to educate freeway users about the new policy. Staff will also investigate what options are available for ExpressLanes signage updates to reflect the new policy as allowed by CA-MUTCD, Caltrans, and other applicable regulations and authorities.

**ATTACHMENTS**


- Attachment A - Violation Fees and Timeframes Among FasTrak Operators
- Attachment B - Board Motion 42
- Attachment C - Analysis Findings
- Attachment D - Fee Adjustment Policy
- Attachment E - Processing Fee Breakdown
- Attachment F - Pay-As-You-Go Equity Analysis

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