



# CASHLESS TOLLING RISK ANALYSIS

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**CENTRAL  
FLORIDA  
EXPRESSWAY  
AUTHORITY**

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# EXECUTIVE SUMMARY

## Overview

### Background

On March 19<sup>th</sup>, 2020, the Central Florida Expressway Authority temporarily closed its manned lane terminals (MLTs) in response to safety concerns related to the COVID-19 pandemic. While CFX resumed cash collection for tolls on June 1<sup>st</sup>, 2020, other similar agencies opted to eliminate cash payments entirely for toll collections as part of an accelerating national trend. Approximately 50% of US tolling agencies are currently operating cashless.

As of the time of fieldwork for this review, cash collections represent approximately 4%, or \$24m of CFX annual toll revenue; the annual cost to CFX associated with collection is \$18m. By comparison, E-PASS and Pay By Plate account for approximately 76% and 20% of revenue, respectively, the majority of which is collected via electronic payments. In accordance with the national trend toward cashless tolling, CFX has planned for any future roadway construction projects to be cashless. Currently, one roadway within the CFX system, the Wekiva Parkway, is already fully cashless. While all-electronic tolling capability exists throughout the system, CFX continues to provide means for customers to pay for tolls using cash.

In accordance with the 2022 Internal Audit Plan, Internal Audit participated in workshop discussions held by CFX management and the Board of Directors to identify risks, opportunities, and stakeholder concerns relevant to a prospective conversion to All Electronic Tolling (AET).

### Objectives

The objectives of this review were to support CFX with the identification of key risks and pitfalls inherent in the conversion to all electronic tolling (“AET”), document the plans in place to mitigate key risks, and provide perspective and a point of view on risks and lessons learned by other tolling agencies that have converted to AET.

**Scope and Approach** The scope and approach for the review were as follows:

- 1) Gained an understanding of developing AET conversion plans through interviews with CFX management and participated in a board workshop held to facilitate discussions on a potential conversion.
- 2) Performed benchmarking of similar tolling agencies that have undergone a conversion to AET to capture information regarding lessons learned, common pitfalls, and strategies employed to reduce the negative impacts of their conversions.
  - 1) Internal Audit gathered benchmarking information from the following tolling agencies and organizations: MTA Bridges and Tunnels, Pennsylvania Turnpike Commission, Illinois State Highway Toll Authority, United Bridge Partners, LLC, and Harris County Toll Road Authority (Protiviti Team). Information was gathered through interviews with staff and/or Protiviti personnel working with other agencies and reviews of related documents.

# EXECUTIVE SUMMARY



## Summary of Benchmarking Results

Topic Area	Potential Solutions / # Ideas for Consideration
Unbanked Customers and Visitors	3
Labor Impact	3
Safety Impact	1
Financial Impact	2

# BENCHMARKING RESULTS

# BENCHMARKING RESULTS

## Opportunity 1 – Unbanked Customers and Visitors

Unbanked Customers  
and Visitors

Labor

Safety

Financials

### Opportunity

Currently, customers can pay for tolls using cash within the lanes at manned lane terminals (MLT), automated coin machines (ACM), and re-load lanes. Customers can also load their E-PASS accounts using cash at a walk-in customer service center. A CFX transition to All Electronic Tolling would entail the closure of the cash collection toll booths and automated coin machines which serve as the primary channels through which customers pay for tolls using cash. While several re-load lanes and a customer service center would continue to accept cash as a means of payment, customers would largely be required to pay for tolls through their E-PASS account via credit or debit card or through a Pay By Plate invoice received by mail, with payment via credit or debit card or by check.

A reduction in the availability of cash payment options could present challenges to customers without E-PASS accounts (i.e., the unbanked and visitors) in paying for tolls. Additionally, those formerly cash-paying customers who do not adopt an E-PASS transponder will be charged the higher Pay by Plate rate, representing an increased economic burden.

CFX is considering ways to mitigate the economic impacts of an AET transition on unbanked customers and temporary visitors by reducing barriers to adoption of E-PASS transponders and through expanding the avenues for accepting cash payments after a conversion to AET. Together, these strategies should minimize the impact of increased tolling rates associated with the Pay by Plate payment method.

### Potential Solutions

Internal Audit identified the following potential solutions implemented by similar organizations to address this challenge, some of which are being employed at CFX:

- Enhance the level of community outreach to educate the public regarding the transition and cashless payment options.
  - Utilize address information from invoiced PBP customers to inform them via mail of E-PASS as a payment option.
  - Create an AET-transition specific website, with informational resources for customers.
- Encourage increased adoption of E-PASS among cash-paying customers through the following:
  - Offer cash incentives (e.g., Visa gift cards) to new account holders to increase E-Pass account creation.
  - Extend the grace period during which no penalty is applied for insufficient funds on account.
- Offer alternate means of payment
  - Offer pre-paid cards for sale at brick-and-mortar retail locations which may be used to fund E-Pass accounts by customers using cash.
  - Allow tolling statements to be paid using cash through third-party vendors at brick-and-mortar retail locations (i.e., registers and kiosks).
- Invest in means to help temporary visitors take advantage of discounts and benefits available to E-PASS customers.
  - Expand the existing Visitor Toll Pass program at the Orlando International Airport to encourage transponder use by temporary visitors.

# BENCHMARKING RESULTS

## Opportunity 2 – Labor



### Opportunity

CFX currently utilizes a third-party contractor to collect tolls within manned lane terminals and to operate automatic coin machines, representing a staff totaling approximately 260 contractors. A transition to All Electronic Tolling would eliminate the need for virtually all in-person toll collection roles within the lanes and support staff within the toll plaza back offices. Interviews with other tolling agencies having undergone AET conversion indicate the following potential impacts:

- Impacted contractors may seek employment elsewhere before the transition is complete, which could result in staffing shortages.
- Pay By Plate transaction volume will likely increase as cash payment options decline, resulting in an increased workload for image review and customer service roles.

CFX should coordinate with the third-party contractor to mitigate these potential impacts and ensure adequate labor resources during and after the AET transition. CFX should also consider offering resources to assist impacted contractors with finding new employment opportunities.

### Potential Solutions

Internal Audit identified the following ideas and solutions implemented by similar organizations to address this challenge, some of which are being employed at CFX:

- CFX should coordinate with the third-party contractor to ensure service level agreements are met throughout the transition
  - Other tolling agencies and vendors have offered early retirement and benefits to eligible employees, contingent upon their employment through the transition date. For employees ineligible for early retirement, cash incentives were paid to encourage retention as the transition date approached.
- Coordinate with the third-party contractor to hire, train, and redeploy eligible toll collections contractors to other roles within the agency, such as image review and customer service.
- Host workshops for impacted contractors to assist with resume writing, interviewing skills, networking. Provide other job search assistance, as needed, for terminated roles.

# BENCHMARKING RESULTS

## Opportunity 3 – Safety

Unbanked Customers  
and Visitors

Labor

Safety

Financials

### Opportunity

A transition to All Electronic Tolling (AET) would involve the immediate decommissioning and eventual removal or repurposing of physical structures such as toll plazas, booths, and gantries which exist on most CFX roads. Changes in the use of these structures and/or their removal could impact traffic patterns. Most agencies interviewed during the Internal Audit benchmarking exercise stated that accident rates have increased following their transition to AET; however, the root causes are not yet known, and current available data is inconclusive as to the contributing factors.

CFX should consider taking preemptive action to reduce driver confusion and address roadway safety concerns stemming from changes to the flow of traffic resulting from an AET transition.

### Potential Solutions

Internal Audit identified the following ideas and solutions implemented by similar organizations to address this challenge:

- Preemptively add additional signage to impacted roadways, plazas, and exits before, during and immediately after the transition to AET.
  - Signage notifying drivers that the cash payment option is no longer available and that stopping is not necessary.
  - Signage encouraging drivers to slow down on exits which formerly had cash payment options.

# BENCHMARKING RESULTS

## Opportunity 4 - Financials



### Opportunity

The total financial impact of an AET transition is a function of the cost savings associated with eliminating cash collections and the net impacts of shifting cash customers to different collection channels after considering additional processing costs, leakage, and potential lower collectability rates. Each toll collection channel (i.e., Cash, E-PASS, and Pay By Plate) has a unique toll rate and cost structure. While the cost savings associated with the elimination of cash collections in the lanes is known, the total transition impact depends on the new breakdown of transactions flowing through the remaining channels, E-PASS and Pay By Plate. Higher processing costs, leakage, and lower collectability rates associated with Pay By Plate transactions result in nearly double the rates of E-PASS to cover the additional costs associated with this collection channel.

Interviews with agencies which have undergone AET conversion indicate that a significant portion of cash transactions may shift to the Pay By Plate channel, increasing the portion of overall collections subject to higher costs and lower collectability rates. Additionally, for the agencies interviewed which have undergone AET conversion, the cost savings generated through the elimination of cash collections did not offset the increased Pay By Plate costs.

CFX should consider methods and opportunities to encourage the adoption of E-PASS transponders among cash-paying customers in order to minimize the financial impact of increased Pay By Plate volume and should assess the sufficiency of current rate structures to withstand such a shift.

### Potential Solutions

Internal Audit identified the following ideas and solutions implemented by similar organizations to address this challenge, some of which are being employed at CFX:

- Offer discounts for PBP customer transponder purchases to increase adoption rate.
- Other tolling agencies have increased tolling rates associated with PBP transactions to offset additional costs incurred.
  - CFX should consider monitoring and periodically analyzing PBP transaction metrics, adjusting tolling rates as necessary to counteract increased costs and leakage and lower collection rates.

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