

All Electronic Tolling: First Year Results

November 13, 2017

MassDOT Highway Division

Overview: Update to the Board on AET Go-Live Just After the One Year Anniversary

- Customer Service, Safety, and Satisfaction
- Roadway Reconstruction
- Efficient Revenue Collection and Operational Savings
- Environmental and Other Benefits

Miss these?



Neither do our customers.

A Reminder: Where we were

- Just over one year ago, drivers all along the Massachusetts Turnpike (I-90) had to change lanes, slow down, or stop at toll booths, constantly re-positioning in order to merge back into travel lanes every time they encountered a toll booth
- Toll booths
 - Inconvenienced drivers
 - Added to congestion (as well as greenhouse gas emissions from all those idling engines)
 - Increased risks of crashes into toll booths, toll takers, and other stopped vehicles

AET 365 Days Later: We have come a long way

Major Milestones:

- System go-live: October 28, 2016
- 86% of toll transactions statewide are EZ-Pass
- As of November 10, 2017 all interchanges on which construction began on Go-Live weekend have reached Full Beneficial Use*

** Sumner Tunnel plaza construction began later in order to accommodate additional design requested by City of Boston*

Program Objectives

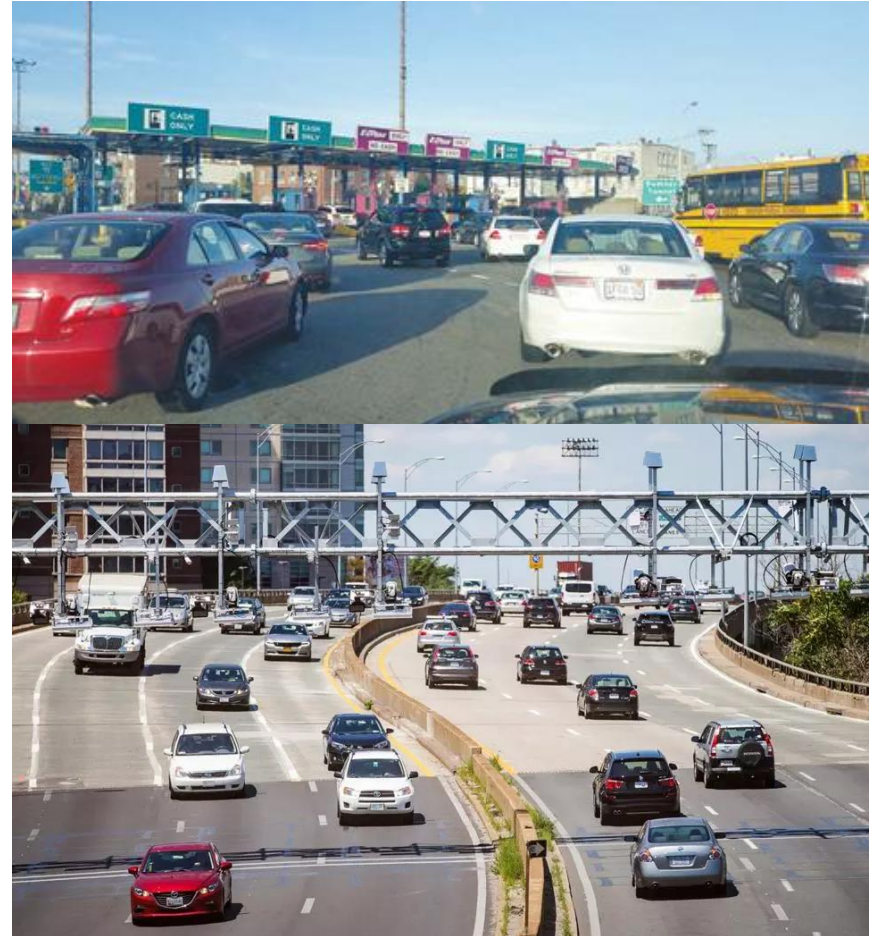
MassDOT promised our customers, taxpayers and the Board that this program would:

- Improve customer service and satisfaction by
 - Reducing travel times for drivers
 - Producing safer roadways by reducing speed variability
- Be revenue neutral to customers and produce approximately the same amount of revenue for MassDOT
 - Be a more efficient revenue collection model
 - Realize operational savings
- Maximize environmental benefits by reducing idling time
- Deliver on time/on budget construction projects with a goal of completing roadway reconstruction in 2017

A photograph of a multi-lane highway with several cars in motion, blurred to indicate speed. Above the road, a complex metal structure supports multiple surveillance cameras and sensors, likely for traffic monitoring. The background shows green trees and a clear sky.

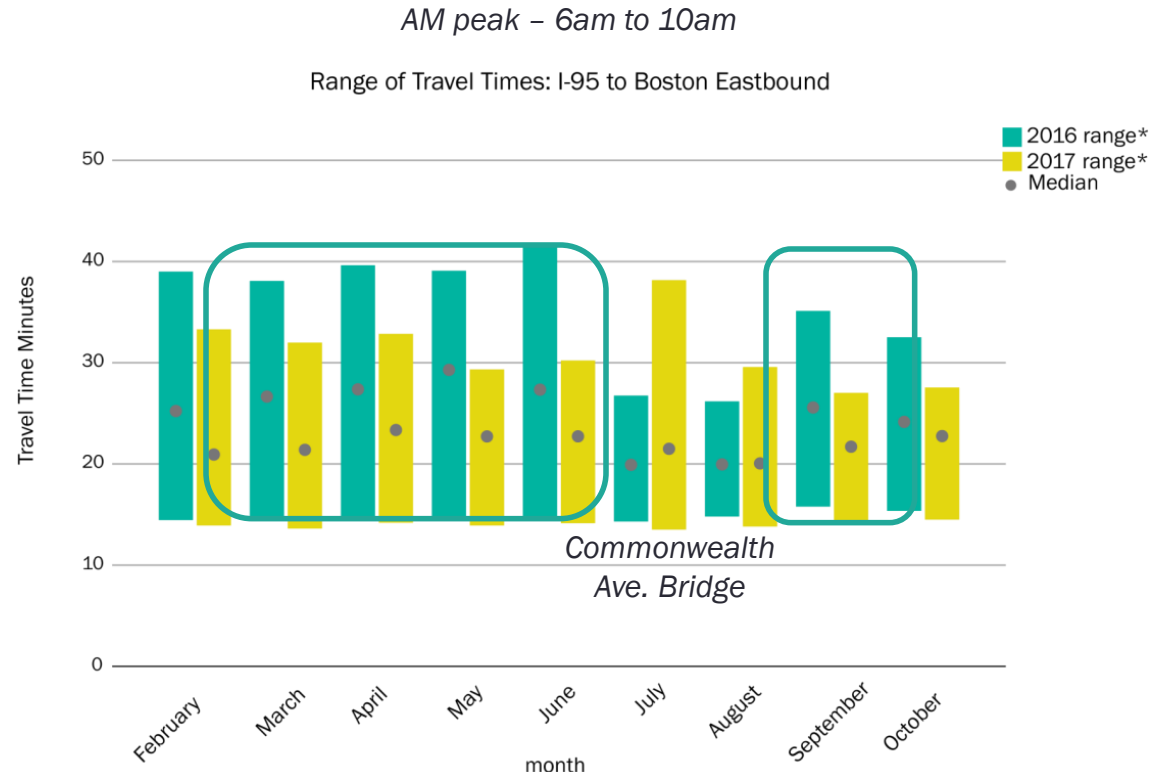
DELIVERING ON CUSTOMER SERVICE

Customers from Lee to Logan are no longer waiting line at toll booths



Reliability and travel times improved even as volumes on I-90 increased

Drivers are seeing time savings; commutes on I-90 east into Boston from I-95 during the morning rush hour were about 10 minute faster in September 2017 compared to the same route and daily time period in September 2016



*Lower value represents the 10th percentile, higher value represents the 90th percentile; this range is shown to represent the majority of trips and to adjust for any outliers in the data

Major E-ZPass campaign successful:

E-ZPass usage already exceeds its target for 2017.

Prior to
October 2016

79.7%

*Of toll transactions
statewide are E-ZPass*



Now

86%

*Of toll transactions
statewide are E-ZPass*

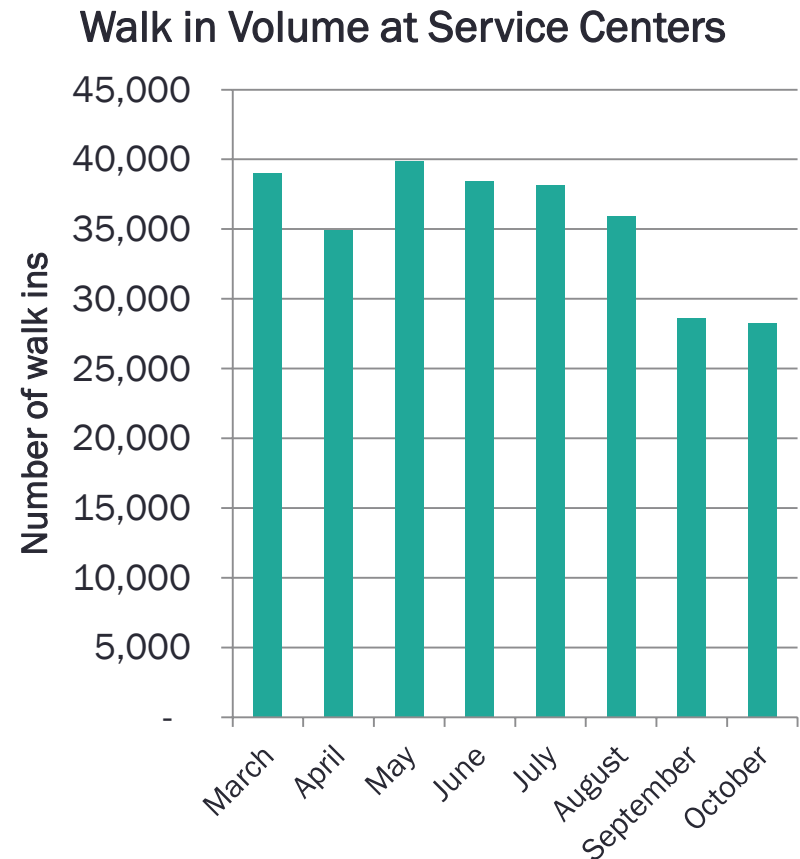
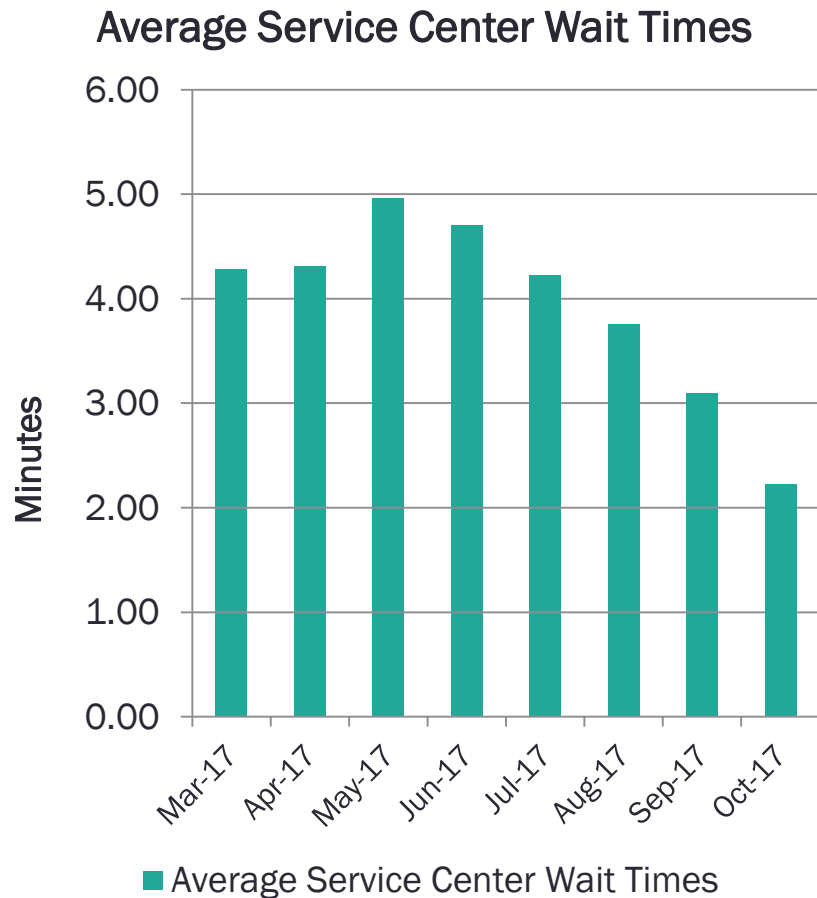
**+ 601,000
transponders**

*Issued since Oct. 2016, contributing to
a total of 3.4 million transponders in
Oct. 2017*

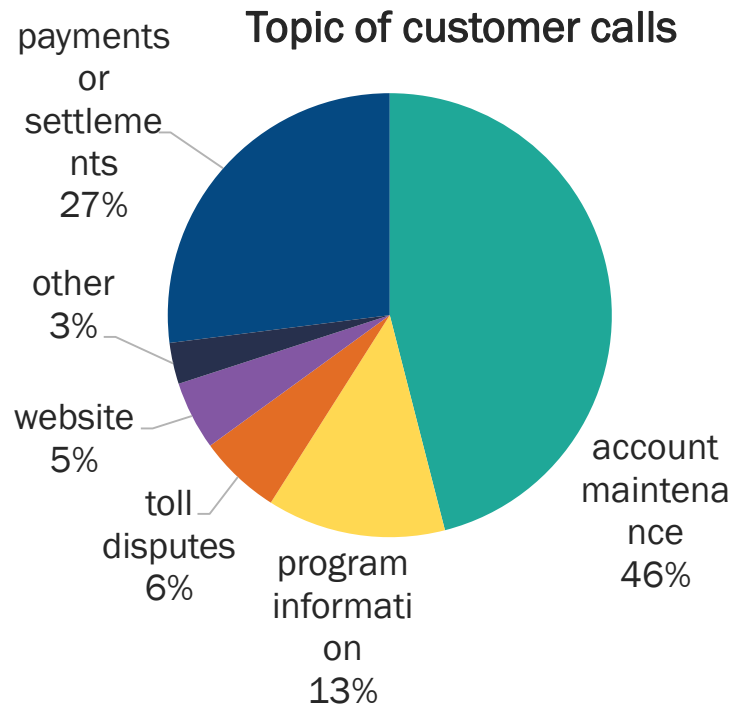
**+ 276,000
accounts**

*Opened since Oct. 2016 to create
a total of over 2 million E-ZPass
accounts in Oct. 2017*

Service Center wait times improved



Call wait times remain low despite volume increases



- The majority of customer calls were related to account maintenance
- Despite a 725k increase* in call volumes, call wait times remain low – 45 seconds on average.**

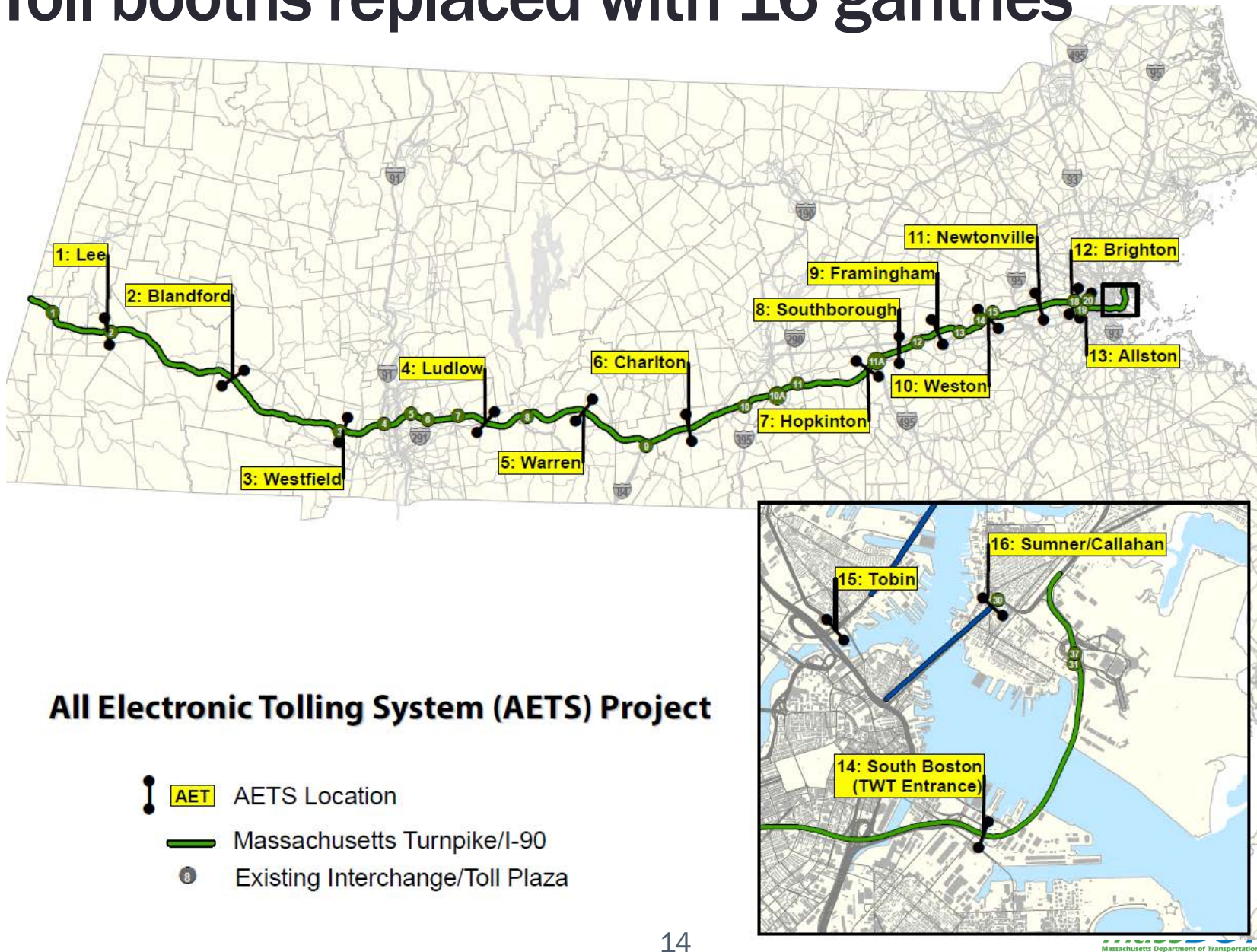
* compared to last year

** over the past 8 weeks



TOLL DEMOLITION AND ROADWAY RECONSTRUCTION

Toll booths replaced with 16 gantries



Reconstruction status: Western MA



West Stockbridge and Lee interchanges are 100% complete, with all landscaping, site restoration, and cleanup finished

Interchange	Full beneficial use
1: W. Stockbridge	✓
2: Lee	✓
3: Westfield	✓
4: W. Springfield	✓
5: Chicopee	✓

Reconstruction status: Central MA



Former Chicopee interchange,
shown near final reconstruction

Interchange	Full beneficial use
6: Chicopee	✓
7: Ludlow	✓
8: Palmer	✓
9: Sturbridge	✓
10: Auburn	✓

Reconstruction status: Metro West



Former Framingham interchange,
shown mid-reconstruction

Interchange	Full beneficial use
11: Millbury/Worcester	✓
11A: Hopkinton	✓
12: Framingham	✓
13: Natick	✓
14: Weston	✓

Reconstruction status: Boston area



* *Sumner Tunnel reconstruction began later than other interchanges in order to finalize design with the City of Boston.*

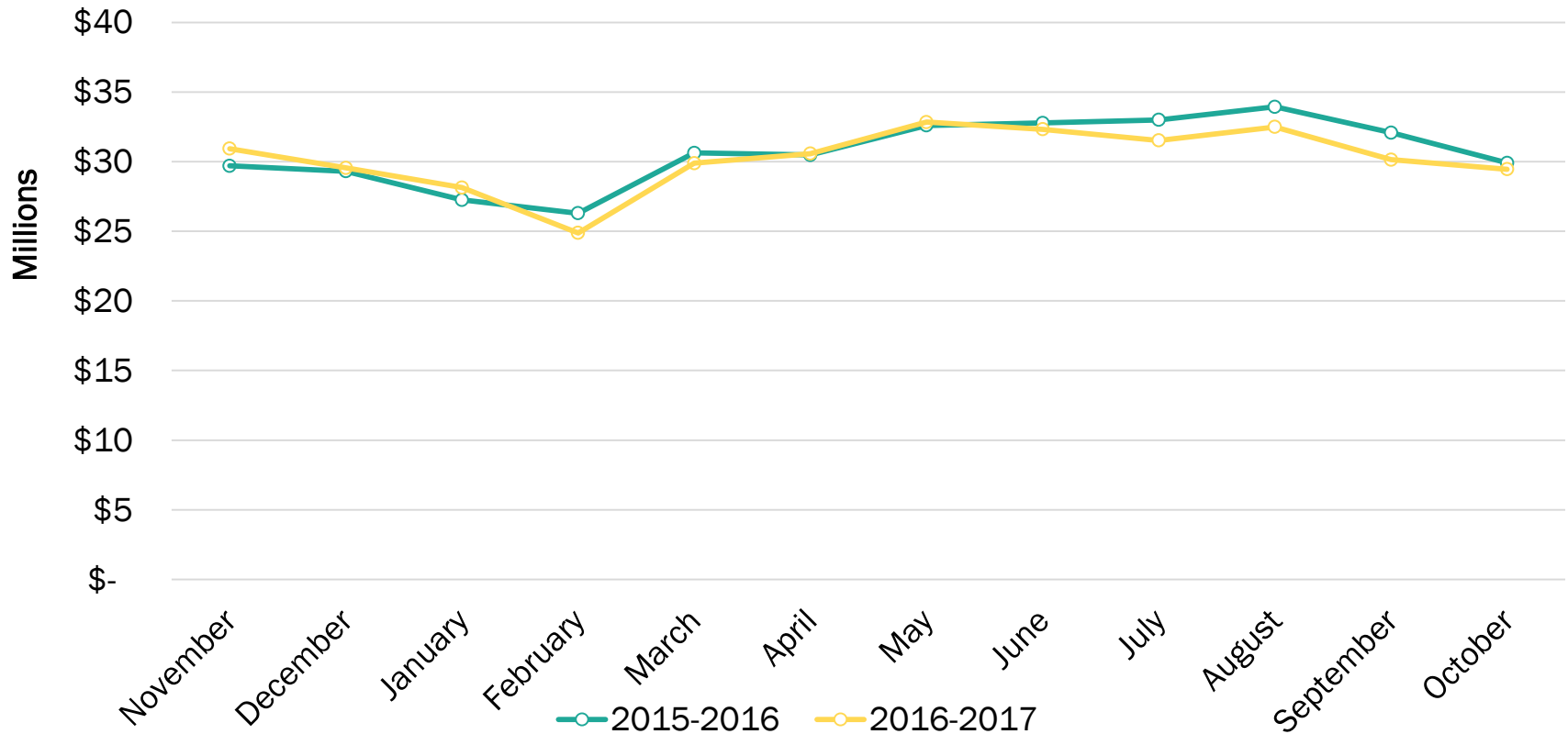
Interchange	Full beneficial use
15: Weston	✓
18: Allston/Brighton	✓
31/37: Ted Williams Tunnel	✓
30: Sumner Tunnel	*



EFFICIENT COLLECTION, REVENUE NEUTRALITY

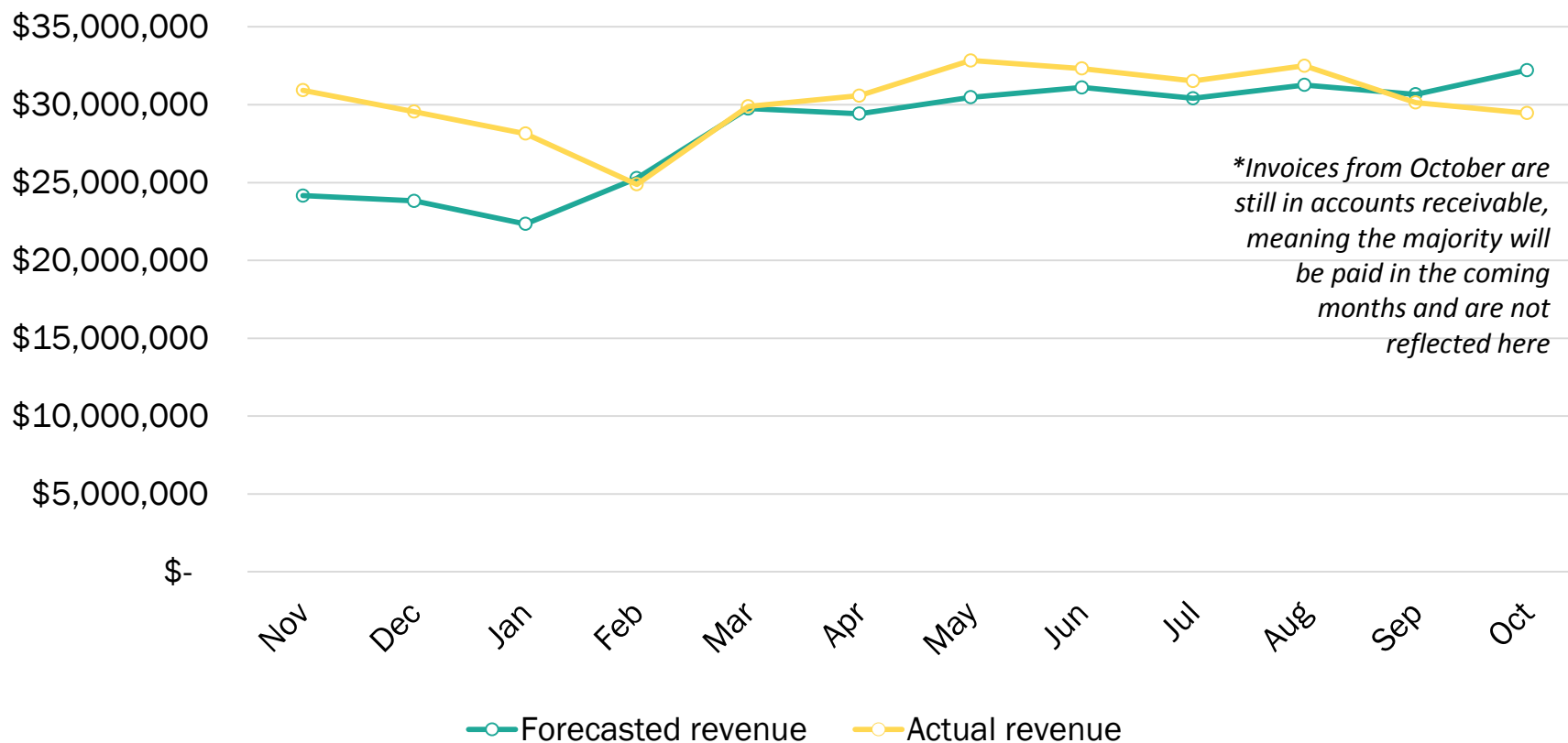
Revenue collection is almost identical to “legacy revenue” under tolls

Legacy revenue vs. AET revenue













Revenue is also tracking well with that forecast by the revenue model

Revenue - all facilities



AET system is less prone to leakage (uncollected or uncollectable revenue); fare collection is more efficient

Agency	% of Total E ZPass Trips	% of Total E ZPass Revenue
Massachusetts Department of Transportation	87.9%	82.2%
New York State Thruway Authority	3.5%	6.9%
MTA Bridges and Tunnels	2.4%	2.9%
New Jersey CSC	1.6%	1.9%
New Hampshire DOT	1.5%	1.6%
Port Authority of New York and New Jersey	1.1%	1.5%

Jurisdiction	% of Pay By Plate customers	Reciprocity status
Massachusetts	66%	
Connecticut	9%	
New York	6%	
New Hampshire	2%	
Rhode Island	2%	
Florida	2%	
Pennsylvania	2%	
New Jersey	1%	
Maine	1%	
Ontario, Canada	1%	



YEAR TWO FOCUS

Areas of focus for Year 2

- Continued focus on minimizing leakage
 - Improve address hits through skip tracing and resubmission to the DMVs
 - Increase number of states with which MA has violation reciprocity agreements
 - Act against plate alterations or coverings
 - Improve overall system performance
- Take a deeper look into safety data
- Close out remaining construction contracts