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May 22, 2015

Mr. David Chapin  
Coordinator for InterCounty Connector & Special Projects  
Maryland Transportation Authority  
2310 Broening Highway  
Baltimore, MD 21224

Subject: Maryland Transportation Authority 2015 Traffic and Toll Revenue Forecast Update

Dear Mr. Chapin:

CDM Smith Inc. (CDMS) was retained by the Maryland Transportation Authority (MDTA) to prepare an investment-grade level traffic and revenue study providing estimates of future traffic and toll revenue through Fiscal Year (FY) 2024 for the seven MDTA "Legacy" facilities listed below. These traffic and toll revenue forecasts were provided to MDTA in our March 2015 study titled, 2014 Traffic and Toll Revenue Forecast (Legacy Facilities).

Following submission of the study, and as part of the effort by the MDTA to understand the traffic and revenue impacts associated with various toll reduction scenarios, CDMS was requested by the MDTA to perform a series of "high-level" analyses to estimate the potential toll transaction, toll revenue, and other revenue impacts associated with these scenarios. This update letter summarizes the estimated transaction and revenue impacts of the toll reduction scenarios ultimately being implemented by the MDTA on July 1, 2015 (FY 2016) and updates the traffic and revenue forecasts submitted in the March 2015 study based on those impacts.

## Study History

The objective of the March 2015 traffic and toll revenue study was to develop updated 10-year forecasts for each of the seven legacy facilities, from FY 2015, beginning July 1, 2014, through FY 2024, ending June 30, 2024. The seven legacy toll facilities currently owned and operated by the MDTA across the State of Maryland include:

- Thomas J. Hatem Memorial Bridge (Hatem Bridge)
- John F. Kennedy Memorial Highway, excluding the Express Toll Lanes (Kennedy Highway)
- Baltimore Harbor Tunnel (Harbor Tunnel)
- Fort McHenry Tunnel (McHenry Tunnel)



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- Francis Scott Key Bridge (Key Bridge)
- William Preston Lane Jr. Memorial Bridge (Bay Bridge)
- Harry W. Nice Memorial Bridge (Nice Bridge)

The InterCounty Connector (ICC/MD 200), the State's first all-electronic, congestion-managed toll road connecting the I-370 and I-95 corridors and the all-electronic congestion-managed I-95 Express Toll Lanes<sup>SM</sup> project were not addressed in the March 2015 report, and similarly, are not addressed in this update letter. Separate traffic and revenue studies have been performed for these facilities.

The March 2015 forecasts made maximum use of all available data, including historical trend information by vehicle category and toll payment category for each facility. The analysis also included a general overview of economic trends, both nationally and within the service areas of each facility. A summary of estimated transactions and in-lane toll revenue from FY 2014 through FY 2024 for each of the seven MDTA legacy facilities was developed by passenger car and commercial vehicle classes. For purposes of budgeting and the tracking of actual versus forecasted transactions and revenue by MDTA, monthly forecasts of transactions and in-lane toll revenue were also developed for FY 2015 and FY 2016.

As discussed briefly above, following the development of the March 2015 forecasts, CDMS was requested by MDTA staff to perform a series of "high-level" analyses to estimate the potential toll transaction, toll revenue and other revenue impacts of various toll reduction scenarios. These toll reduction scenarios were developed by MDTA staff, seven of which were adopted by the MDTA on May 7, 2015. CDMS was then asked to summarize the estimated impacts from these scenarios by toll facility and update the March 2015 forecasts by incorporating these impacts. The recommended scenarios, along with their impacts, are discussed below.

### Recommended Toll Reduction Scenarios

The estimated impacts and updated forecasts developed as part of this update were based on the following toll reduction scenarios.

**Recommendation 1:** Increase the E-ZPass Maryland discount from 10% to 25% for the Baltimore Harbor (I-895) and Fort McHenry (I-95) tunnels, the Francis Scott Key Bridge (I-695), the Thomas J. Hatem Memorial Bridge (US 40) and the John F. Kennedy Memorial Highway (I-95) - toll drops from \$7.20 to \$6.00 round trip - and for the Governor Harry W. Nice Memorial Bridge (US 301) - toll drops from \$5.40 to \$4.50 round trip.

This strategy increases the Maryland E-ZPass<sup>®</sup> discount from 10 percent to 25 percent at the existing Legacy facilities, with the exception of the Bay Bridge. The toll reduction will take effect on July 1, 2015. Benefits of this recommendation include promoting the least expensive method of toll collection,

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keeping the intended benefactors within the state of Maryland and providing substantial savings to those targeted customers.

**Recommendation 2:** Eliminate the Maryland E-ZPass \$1.50 monthly account fee for Maryland residents.

This fee reduction will take effect on July 1, 2015. This strategy benefits all Maryland E-ZPass account holders. In addition, this elimination responds to negative public pressure and shows MDTA in a positive light, while also providing substantial savings to cash paying customers who may switch over and purchase an E-ZPass transponder.

**Recommendation 3:** Reduce all cash, video, commuter and shoppers' toll rates at the Bay Bridge (US 50/301), including reducing the two-axle cash rate from \$6.00 to \$4.00 round trip and the Commuter rate from \$2.10 to \$1.40. In addition, the Maryland E-ZPass toll rate will be set to \$2.50, down from the existing \$5.40.

This toll reduction will take effect on July 1, 2015. Rate changes on this facility not only affect two-axle vehicles, but all larger vehicles, including 5+ axle vehicles, as well. Benefits include improved traffic flow from increased E-ZPass toll collection, the larger number of benefitted users based on the 2-axle rate change, and the fact that most destinations served by the bridge are within Maryland which provides the most benefit to Maryland residents.

**Recommendation 4:** Reduce two-axle toll rates on the ICC/MD200 and I-95 ETL for all pricing periods by \$.03 per mile. This change reduces a two-axle, peak period trip from I-270/I-370 to US 1 on the ICC from \$4.40 to \$3.86 (E-ZPass), and a two-axle, peak period trip on the I-95 ETL from \$1.75 to \$1.54 (E-ZPass). Other ICC and I-95 ETL toll rates also will be reduced based on standard multipliers per axle.

The per-mile toll reduction on both of these facilities will be effective on July 1, 2015. While this recommendation will benefit many users, this was not part of the CDMS forecast provided in this toll transaction and toll revenue update letter. A forecast for the ICC under the existing and reduced tolling structure is being conducted under a separate investment-grade study. Benefits of this strategy include video customers transitioning to E-ZPass, increased usage due to decreased rates, and keeping pricing consistent across both facilities.

**Recommendation 5:** Establish a 30% discount at the Hatem Bridge for three- and four-axle vehicles with Maryland E-ZPass - three-axle toll drops from \$16.00 to \$11.20, while four-axle toll drops from \$24.00 to \$16.80.

The discount for three- and four-axle vehicles would take effect on July 1, 2015. This recommendation re-establishes a discount program for three- and four-axle vehicles that was discontinued in conjunction with the FY 2012 toll increases. Other benefits include savings to small businesses with delivery services and customers that use trailers to tow boats or similar equipment. The implementation of this plan may

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result in diversion of vehicles from I-95 to US 40 to get the discount, may encourage non-Maryland residents to switch to a Maryland E-ZPass to get a discount, thus increasing costs to MDTA.

**Recommendation 6:** Increase Maryland E-ZPass supplemental rebate program for vehicles with five-or-more axles by 5 percentage points per trip.

The rebate program levels will each increase by 5 percentage points per trip level effective July 1, 2015. The current discounts are 5% for 60-79 trips, 10% for 80-99 trips, and 15% for 100 or more trips per transponder in a calendar month. These will change to 10% for 60-79 trips, 15% for 80-99 trips, and 20% for 100 or more trips. Benefits of this plan include additional savings to very frequent users, most of which will be doing frequent business in Maryland. It also creates consistency between the two 5+ axle rebate plans by having the same discount amounts, and the impact is very small as opposed to changing the axle multiplier, currently set at 6 times the 2-axle rate for 5+ axle trucks.

**Recommendation 7:** For vehicles using the Childs Street and I-695 turnaround exits at the Baltimore Harbor Tunnel and Key Bridge respectively, toll rates will decrease to \$2.00 per axle for three-to-six-plus-axle vehicles. For example, three-axle vehicles will see a toll reduction from \$8.00 to \$6.00 and four-axle vehicles from \$12.00 to \$8.00.

This strategy will go into effect on January 1, 2016. The transaction and revenue impacts resulting from this toll reduction scenario were not analyzed by CDMS. The revenue impacts were provided by the MDTA. Benefits of this recommendation include promoting Port and freight activity. This promotion could provide a positive benefit for the Maryland economy overall due to the impact on the trucking community using the Port of Baltimore.

### Traffic and Revenue Impacts

Impacts of over 30 toll reduction scenarios were initially studied by CDMS. These included both individual scenarios and multiple scenarios combined into “bundles”. These impacts were studied at the FY 2016 level only, and then applied to the original March 2015 forecasts. The first year that a change is shown is FY 2016, as the toll rate reductions take effect on July 1, 2015. Using the same annual traffic growth rates as those developed for the March 2015 study, the FY 2016 numbers were then grown to produce estimates through FY 2024.

Table 1 below presents the new forecasts for both toll transactions and toll revenue. Estimated transactions in FY 2015 were 112.4 million and forecasted to grow to 119.7 million in FY 2024, or about 6.5 percent during the nine-year forecast period. This equates to an average annual growth rate of 0.7 percent per annum. Estimated toll revenue in FY 2015 was \$575.1 million and is forecasted at \$570.1 million in FY 2024, a decrease of 0.9 percent. This decrease equates to an average annual change of -0.1 percent per year. However, if calculated from the updated FY 2016 revenue forecast of \$539.3 million, revenue by FY 2024 is forecasted to grow by 5.7 percent, or 0.7 percent per annum.

**Table 1**  
**Historical and Forecasted Transactions and In-Lane Toll Revenue**

Fiscal Year	Transactions (millions)								Percent Change
	JFK	Hatem	BHT	FMT	FSK	Bay	Nice	Total	
2009	14.64	5.04	25.53	43.45	11.69	12.75	3.35	116.45	
2010	<sup>(1)</sup> 14.75	4.99	25.23	44.06	10.96	12.99	3.35	116.33	(0.1)
2011	15.38	5.07	26.12	46.29	11.65	13.56	3.40	121.46	4.4
2012	<sup>(1)</sup> 14.82	5.03	25.75	44.52	11.05	13.67	3.29	118.13	(2.7)
2013	<sup>(1)</sup> 14.58	4.56	23.97	43.58	10.92	12.74	3.26	113.61	(3.8)
2014	<sup>(1)</sup> 14.38	4.95	24.90	41.88	10.42	12.76	3.24	112.52	(1.0)
2015	14.26	4.96	26.03	39.98	10.94	12.86	3.33	112.36	(0.1)
2016	14.32	5.05	25.05	41.12	11.21	13.36	3.38	113.49	1.0
2017	14.49	5.08	24.55	41.73	11.34	13.52	3.39	114.11	0.5
2018	14.61	5.11	24.55	42.08	11.41	13.62	3.39	114.79	0.6
2019	14.72	5.15	24.59	42.38	11.48	13.70	3.40	115.43	0.6
2020	14.83	5.18	24.63	42.68	11.54	13.79	3.40	116.06	0.5
2021	14.94	5.21	25.76	42.50	11.60	13.89	3.41	117.30	1.1
2022	15.07	5.24	25.94	42.85	11.65	14.00	3.41	118.18	0.7
2023	15.21	5.27	26.01	43.23	11.71	14.11	3.42	118.95	0.7
2024	15.34	5.30	26.06	43.57	11.77	14.22	3.42	119.69	0.6
<b>Average Annual Percent Change:</b>									
2009-2014	(0.4)	(0.4)	(0.5)	(0.7)	(2.3)	0.0	(0.6)	(0.7)	
2014-2024	0.7	0.7	0.5	0.4	1.2	1.1	0.5	0.6	

Fiscal Year	Toll Revenue (\$ millions)								Percent Change
	JFK	Hatem	BHT	FMT	FSK	Bay	Nice	Total	
2009	95.14	2.07	35.61	82.97	18.56	32.51	9.77	276.63	
2010	<sup>(1)</sup> 107.35	2.61	37.01	94.02	20.54	36.79	10.15	308.47	11.5
2011	107.39	2.82	37.85	95.32	20.78	37.62	10.15	311.92	1.1
2012	<sup>(1)</sup> 116.01	5.25	48.74	118.82	25.82	46.74	11.60	372.98	19.6
2013	<sup>(1)</sup> 121.86	7.80	52.05	135.61	28.94	52.40	12.97	411.62	10.4
2014	<sup>(1)</sup> 162.80	10.17	77.56	183.13	40.26	79.76	20.40	574.08	39.5
2015	161.37	10.44	81.23	177.46	42.48	80.93	21.19	575.10	0.2
2016	160.00	10.69	74.83	176.24	42.38	53.69	21.43	539.25	(6.2)
2017	161.99	10.83	73.33	178.35	42.83	54.24	21.68	543.25	0.7
2018	163.36	10.94	73.33	179.56	43.08	54.62	21.83	546.72	0.6
2019	164.37	11.04	73.45	180.60	43.33	54.92	21.89	549.61	0.5
2020	165.44	11.13	73.56	181.63	43.55	55.24	21.97	552.52	0.5
2021	166.56	11.22	77.04	182.67	43.77	55.59	22.06	558.91	1.2
2022	167.96	11.31	77.58	183.90	43.99	55.98	22.17	562.88	0.7
2023	169.41	11.40	77.77	185.17	44.21	56.38	22.27	566.62	0.7
2024	170.73	11.49	77.93	186.36	44.43	56.78	22.36	570.07	0.6
<b>Average Annual Percent Change:</b>									
2009-2014	11.3	37.6	16.8	17.2	16.7	19.7	15.9	15.7	
2014-2024	0.5	1.2	0.0	0.2	1.0	(3.3)	0.9	(0.1)	

<sup>(1)</sup> Year of toll increase.

- Represents actual data.

Table 2 below presents a breakdown of the updated forecast by month for FY 2015 and FY 2016. The FY 2015 forecast remains relatively unchanged, as the toll reduction impacts all begin with the implementation of toll reductions effective July 1, 2015. The highest monthly revenue in FY 2016 is forecasted to occur in August with a total of \$54.6 million. The lowest revenue is forecasted in February with a total of \$38.5 million.

**Table 2**  
**Monthly Forecasted In-Lane and Other Toll Revenue**

		Toll Revenue (\$ millions)		
	Month	In-Lane	Other <sup>(1)</sup>	Total
<b>Fiscal Year 2015</b>	Jul-14	\$ 53.6	\$ 3.3	\$ 56.9
	Aug-14	\$ 54.4	\$ 3.3	\$ 57.7
	Sep-14	\$ 46.3	\$ 2.8	\$ 49.1
	Oct-14	\$ 48.4	\$ 3.0	\$ 51.3
	Nov-14	\$ 46.4	\$ 2.9	\$ 49.3
	Dec-14	\$ 46.2	\$ 2.8	\$ 49.0
	Jan-15	\$ 40.3	\$ 2.5	\$ 42.8
	Feb-15	\$ 37.2	\$ 2.3	\$ 39.5
	Mar-15	\$ 45.5	\$ 2.8	\$ 48.3
	Apr-15	\$ 50.6	\$ 3.1	\$ 53.7
	May-15	\$ 53.6	\$ 3.3	\$ 56.9
	Jun-15	\$ 52.6	\$ 3.2	\$ 55.9
<b>Fiscal Year 2016</b>	Jul-15	\$ 50.1	\$ 2.7	\$ 52.8
	Aug-15	\$ 51.8	\$ 2.8	\$ 54.6
	Sep-15	\$ 44.0	\$ 2.4	\$ 46.3
	Oct-15	\$ 45.0	\$ 2.4	\$ 47.4
	Nov-15	\$ 43.2	\$ 2.3	\$ 45.5
	Dec-15	\$ 42.9	\$ 2.3	\$ 45.3
	Jan-16	\$ 37.5	\$ 2.0	\$ 39.6
	Feb-16	\$ 36.5	\$ 2.0	\$ 38.5
	Mar-16	\$ 42.3	\$ 2.3	\$ 44.6
	Apr-16	\$ 47.0	\$ 2.5	\$ 49.6
	May-16	\$ 49.9	\$ 2.7	\$ 52.5
	Jun-16	\$ 49.0	\$ 2.6	\$ 51.6

<sup>(1)</sup> Includes "Other Revenue" from the ICC and I-95 ETL

## Other Revenue Impacts

In addition to the In-Lane toll revenue forecast, a forecast of various Other Revenue streams was also produced. This Other Revenue forecast is shown in Table 3 and includes such items as unused prepaid toll revenue from commuter programs, transponder sales, civil penalties, and the commercial vehicle discount programs. In FY 2016, total Other Revenue is forecasted at \$29.1 million. In FY 2024 the forecast is \$32.0 million. This represents a 10.0 percent change over the FY 2016 to FY 2024 forecast period.

## Comparison of Forecasts

In-Lane toll revenue and Other Revenue when combined produce the total revenue forecast. These forecasted values were compared to those from the March 2015 report and are presented in Table 4. The values shown for FY 2014 are actuals. The forecasts of In-Lane revenue shown for FY 2015 are unchanged since the toll reductions are effective July 1, 2015 (FY 2016). A slight adjustment to Other revenue was made which accounts for the difference between the March and May 2015 forecasts. In FY 2016, the first year of the updated forecasts, the total revenue is forecasted at \$568.3 million, compared with \$615.0 million in the March 2015 forecast. This equates to a \$46.7 million reduction in toll revenue, \$39.1 million in In-Lane reductions and \$7.6 million in Other reductions. Expressed as a percent reduction, total revenue is forecasted to be 7.6 percent lower. The updated forecasted revenue for FY 2024 is \$602.0 million versus \$651.8 million in the March 2015 forecast, or \$49.7 million lower of which \$41.4 million is in In-Lane revenue reductions and \$8.3 million is in Other revenue reductions. The updated FY 2024 forecast of \$602.0 million equates to a 5.9 percent growth over the updated FY 2016 forecast of \$568.3 million. It is important to note that these differences in revenue only account for impacts in In-Lane revenue associated with the seven "Legacy" facilities. These In-Lane revenue impacts exclude those from Recommendation 4 discussed previously, related to the ICC and I-95 ETL. Forecasts of Other revenue provided in this update do include those for the "Legacy" facilities and for the ICC and I-95 ETL.

## Disclaimer

Current accepted professional practices and procedures were used in the development of these traffic and revenue estimates. However, as with any forecast of the future, it should be understood that there may be differences between forecasted and actual results caused by events and circumstances beyond the control of the forecasters. In formulating its estimates, CDM Smith has reasonably relied upon the accuracy and completeness of information provided (both written and oral) by the MDTA. CDM Smith also has relied upon the reasonable assurances of some independent parties and is not aware of any facts that would make such information misleading.

CDM Smith has made qualitative judgments related to several key variables in the development and analysis of the traffic and revenue estimates that must be considered as a whole; therefore selecting portions of any individual result without consideration of the intent of the whole may create a



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**Table 3  
 Historical and Forecasted In-Lane and Other Revenue**

Fiscal Year	Legacy Facilities Other Revenue (\$ millions)															New Facilities Other Revenue (\$ millions)										Total Other Revenue	Percent Change
	Service Fees and Sales					Violation Recovery					Commercial Vehicles					InterCounty/Connector											
	Legacy Facilities In-Lane Toll Revenue	Unused Pre-Paid Trip Revenue	Transponder Sales	Monthly Account Fees	Notice of Toll Due Fees	Civil Penalties	Violation Fees	Commercial Vehicle Post-Usage Discount	Commercial Vehicle High Frequency Discount	Over-site Permit Fee	Concession Revenue	Hatem E-ZPass Program	ICC Transponder Sales	ICC Monthly Fees	ICC Violation Fees	ICC Civil Penalties	ICC NOTD Fees	I-95 ETL Violation Fees									
2004	\$ 251.30	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ 0.80	\$ (2.30)	\$ -	\$ -	\$ 8.10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8.60	\$ 259.90	-						
2005	(1) 278.50	2.80	-	-	-	1.50	(3.30)	-	-	8.00	-	-	-	-	-	-	-	-	8.40	286.90	10.39						
2006	278.80	3.50	-	-	-	2.80	(4.50)	-	-	7.80	-	-	-	-	-	-	-	-	9.60	288.40	0.52						
2007	282.30	4.00	-	-	-	3.00	(4.80)	-	-	8.10	-	-	-	-	-	-	-	-	10.30	292.60	1.46						
2008	279.30	4.30	-	-	-	3.00	(5.00)	-	-	8.00	-	-	-	-	-	-	-	-	10.30	289.60	(1.03)						
2009	276.60	4.50	-	-	-	1.90	(4.80)	-	-	8.00	-	-	-	-	-	-	-	-	9.60	286.20	(1.17)						
2010	308.50	6.60	1.40	9.60	1.10	2.30	(6.60)	(0.20)	1.00	8.20	-	-	-	-	-	-	-	23.40	331.90	15.97							
2011	(1) 312.00	6.50	1.50	9.90	1.30	1.30	(6.70)	(0.30)	1.20	7.90	-	-	-	-	-	-	-	23.00	335.00	0.93							
2012	(1) 373.00	9.10	1.70	4.70	0.80	2.80	(5.90)	(0.20)	1.30	7.60	0.30	-	-	-	-	-	-	22.20	385.20	17.97							
2013	(1) 411.60	11.50	1.30	5.30	0.10	4.00	(4.60)	(0.70)	1.30	4.10	0.80	-	-	-	-	-	-	23.10	434.70	9.99							
2014	(1) 574.08	18.69	1.22	5.75	-	4.55	(5.89)	(0.64)	1.04	3.23	1.49	0.16	0.76	0.10	2.35	-	-	32.85	606.93	39.62							
2015	575.10	18.79	1.23	5.81	-	4.59	(5.92)	(0.64)	1.05	5.48	1.50	0.16	0.77	0.10	2.36	-	0.10	35.38	610.48	0.59							
2016	581.25	19.07	1.24	-	-	4.73	(5.95)	(1.00)	1.06	5.91	1.50	0.16	-	-	2.37	-	-	29.09	568.34	(6.90)							
2017	583.25	19.17	1.25	-	-	4.83	(5.98)	(1.01)	1.07	5.99	1.51	0.16	-	-	2.38	-	-	29.38	572.63	0.75							
2018	586.72	19.26	1.26	-	-	4.92	(6.01)	(1.01)	1.08	6.08	1.52	0.16	-	-	2.40	-	-	29.66	576.38	0.65							
2019	589.61	19.36	1.26	-	-	5.02	(6.04)	(1.01)	1.09	6.16	1.53	0.17	-	-	2.41	-	-	29.95	579.56	0.55							
2020	592.32	19.45	1.27	-	-	5.12	(6.07)	(1.03)	1.10	6.24	1.53	0.17	-	-	2.42	-	-	30.21	582.73	0.55							
2021	595.11	19.54	1.28	-	-	5.22	(6.10)	(1.03)	1.11	6.32	1.54	0.17	-	-	2.43	-	-	30.50	585.91	0.55							
2022	598.00	19.63	1.28	-	-	5.32	(6.13)	(1.03)	1.12	6.40	1.55	0.17	-	-	2.45	-	-	30.77	589.11	0.55							
2023	598.63	19.75	1.29	-	-	5.32	(6.16)	(1.04)	1.14	7.38	1.56	0.17	-	-	2.46	-	-	31.17	593.39	0.80							
2024	570.07	19.85	1.30	-	-	5.22	(6.20)	(1.04)	1.15	7.48	1.57	0.17	-	-	2.47	-	-	31.97	602.03	0.61							

Source: Historical data from MPTA.  
 (1) Year of full license.  
 (2) Concession Revenue Forecast is 90% of the estimated concession revenue as prepared by Arise Inc., other projections by CDM Smith.  
 (3) Represents actual data.



misleading or incomplete view of the results and the underlying methodologies used to obtain the results. CDM Smith gives no opinion as to the value or merit to partial information extracted from this report.

**Table 4**  
**Comparison of March 2015 Forecast versus May 2015 Forecast**

Fiscal Year	Total Revenue					
	Mar-15		May-15		Difference	
	Forecast	Forecast	Numeric	Percent		
2014	\$ 606.9	\$ 606.9	\$ (0.0)	(0.0)		
2015	611.1	610.5	(0.6)	(0.1)		
2016	615.0	568.3	(46.7)	(7.6)		
2017	619.7	572.6	(47.1)	(7.6)		
2018	623.8	576.4	(47.4)	(7.6)		
2019	627.3	579.6	(47.7)	(7.6)		
2020	630.8	582.7	(48.0)	(7.6)		
2021	637.9	589.4	(48.5)	(7.6)		
2022	642.5	593.6	(48.9)	(7.6)		
2023	647.8	598.4	(49.4)	(7.6)		
2024	651.8	602.0	(49.7)	(7.6)		
<b>Total</b>	<b>\$ 6,914.6</b>	<b>\$ 6,480.5</b>	<b>\$ (434.1)</b>	<b>(6.3)</b>		

All estimates and projections reported herein are based on CDM Smith’s experience and judgment and on a review of information obtained from multiple agencies, including the Maryland Transportation Authority. These estimates and projections may not be indicative of actual or future values, and are therefore subject to substantial uncertainty. Future developments cannot be predicted with certainty, and may affect the estimates or projections expressed in this report, such that CDM Smith does not specifically guarantee or warrant any estimate or projection contained within this report.

While CDM Smith believes that some of the projections or other forward-looking statements contained within the report are based on reasonable assumptions as of the date the input data were collected, such forward looking statements involve risks and uncertainties that may cause actual results to differ materially from the results predicted. Therefore, following such dates, CDM Smith will take no responsibility or assume any obligation to advise of changes that may affect its assumptions contained



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within the report, as they pertain to socioeconomic and demographic forecasts, proposed residential or commercial land use development projects and/or potential improvements to the regional transportation network.

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We appreciate the important nature of this assignment and the opportunity to work with the Authority. Please do not hesitate to call if you have any comments and/or questions.

Very truly yours,

A handwritten signature in black ink that reads "Paul M. Marcella". The signature is written in a cursive, flowing style.

Paul M. Marcella  
Associate/Project Manager  
CDM Smith Inc.