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July 22, 2016

Mr. Peter Mills
Executive Director
Maine Turnpike Authority
2360 Congress Street
Portland, ME 04102

Subject: **Comments on Final eTrans Report "Shortfalls in MTA's Response to the Army Corp of Engineers (March 30, 2016)"**

Dear Peter:

As requested, CDM Smith has reviewed the final eTrans Report "Shortfalls in MTA's Response to the Army Corp of Engineers (March 30, 2016)". This report summarizes our findings in light of the specific work we did regarding the York Mainline conversion to either AET or ORT and in light of our experience on other similar work throughout the United States.

Introduction

CDM Smith was (and still is in most cases) the traffic engineering consultant to a number of the agencies mentioned in the eTrans report where AET has been implemented, including for the Pennsylvania Turnpike Commission, the Central Florida Expressway Authority, and for Highway 407 in Toronto (the first AET facility in North America). In addition, the Florida Turnpike, the Maryland Transportation Authority, the E-470 Public Highway Authority (Colorado), the Harris County Toll Road Authority (Texas), and many more have deployed AET based on CDM Smith traffic and revenue studies. The same approach and considerations for those studies were taken into account as part of our analysis of AET and ORT impacts at the York Toll Plaza.

The CDM Smith Study for the Maine Turnpike Authority (MTA) was conducted without bias for either AET or ORT, but rather on the mix of variables specific to the York (and Gardiner) toll plaza. These variables are unique for each and every toll facility. The mix of in-state versus out-of-state cash customers, overall cash market share, license plate successful read rate, valid department of motor vehicle address records, toll diversion, and more, are all location specific. They determine the potential levels of revenue leakage under AET and ORT, as well as the level of video or cash surcharges required to make up any toll revenue shortfalls.

In the end, we did not recommend either AET or ORT, but rather only the measures required to ensure net revenue neutrality for both. Based upon the impacts of these measures, previous professional tolling recommendations, and an MTA staff recommendation, the MTA Board of

Directors selected ORT. Based on our national experience and a number of technical project-specific risk factors including the percentage of MTA income at risk at York, the mix of out-of-state and Canadian traffic, the cash market share, the toll surcharge, and traffic diversion, it is our professional opinion that the MTA decision was prudent and consistent with good tolling practice nationally.

Following are responses to each section of the eTrans report, as they apply to the work conducted by CDM Smith and summarized in our "Maine Turnpike ORT/AET Impact Analysis (March 18, 2014)".

Response to eTrans Report: Cover Page

The cover page of the eTrans report provides a table which contrasts ORT versus AET on several key elements. All ORT characteristics are labeled as "marginal" or "poor", while those for AET are all labeled as "best". It is odd that a "toll cost to customer" category has not been included since this is the aspect of any toll road that most directly affects all users. If "toll cost to customer" were to be considered, ORT would be labeled as "best" since no changes would be required for cash or E-ZPass customers (compared to existing rates). AET would likely merit a "worst" label since a substantial $3.00 surcharge would be required for video (current cash) customers in order to maintain net toll revenue neutrality.

It is also misleading for the author to show the "Life-cycle Costs/Retained Revenue" to be "best" under AET and "poor" for ORT. The only reason for the net positive result under AET is due to the $3.00 video surcharge needed to recover lost revenue. Later in the eTrans report (see Section 3.3.d, page 17) the author says the $3.00 video surcharge is "significantly greater than those likely to occur". Without that level of video surcharge, net toll revenue losses would be significant under AET (based on our analysis).

While the CDM Smith study did not analyze the other components this table ranks, I would take exception to the "poor" ranking under ORT for "Safety" and "Customer Service". Numerous studies (including experience at MTA's converted ORT facilities, as well as those in neighboring New Hampshire) have shown that ORT dramatically reduces accidents compared to traditional mixed use (cash and E-ZPass) toll plazas. Regarding "Customer Service", some of the top focus group responses we have had for those opposing AET is the loss of customer service via the toll attendants. Those motorists indicated that they liked the option to pay cash and ask toll attendants for directions or for help in case of emergencies. These are certainly not reasons to maintain toll collectors, but it does provide ORT with a heightened customer service option not available with AET.

Response to eTrans Report: Section 1.0 (Executive Summary)

In Section 1.0, the author takes issue with the level of traffic diversion CDM Smith estimated under AET. He makes two arguments. First, the CDM Smith estimates of 3,400 to 5,500 daily trips diverting to alternative routes is far too high. And, second, that these levels of diversion are "assumed to be realized over the long term."

The 3,400 daily diversion value is CDM Smith's base case estimate for diversion assuming AET was implemented in 2015. The 5,500 daily diversion level is based on CDM Smith's financial risk analysis assuming a 90 percent confidence level. Risk analyses are often performed in order to provide the financial community (rating agencies, bond insurers, and investors) with some level of assurance that a toll authority's financial obligations can be met. A detailed description of CDM Smith's risk analysis is provided in our Study Report.

The eTrans author seems to imply that there is no alternative road way capacity to absorb this level of diversion. Travel in the southern coastline area of Maine is highly seasonal. As shown in the table below, July and August traffic levels greatly exceed those in other months. Traffic volumes and congestion can be severe during these two peak summer months. Relatively little diversion would occur during these two months (though not necessarily during off peak night time periods). However, for half the year, traffic volumes are about half those during the two peak summer months. During these periods the alternative routes would have ample capacity to absorb significant levels of diversion to avoid a doubling of the video toll at York.

York Toll Plaza 2015
Monthly Traffic Variations

Month	Monthly Variation
January	64.3 %
February	63.9
March	75.1
April	85.1
May	102.2
June	114.2
July	147.9
August	152.3
September	116.8
October	103.7
November	88.9
December	82.3
Average	100.0

The eTrans author's second comment regarding diversion, that these levels of diversion are "assumed to be realized over the long term," is simply untrue. Table 5 (page 21) of the CDM Smith report provides the information summarized in the table below. As shown, CDM Smith base case diversion levels decrease from 3,449 per day in 2015 to less than half that level by 2025 (at 1,627 per day). These decreases in diversion are largely the result of the assumed continued shift from video transactions to E-ZPass (which has no AET toll surcharge) over time.

CDM Smith Estimated Annual Diversion at York Toll Plaza Assuming Conversion to AET

Year	Estimated Annual Diversion	Estimated Daily Diversion
2015	1,259,000	3,449
2016	1,164,000	3,189
2017	1,076,000	2,948
2018	994,000	2,723
2019	918,000	2,515
2020	847,000	2,321
2021	782,000	2,142
2022	721,000	1,975
2023	664,000	1,819
2024	611,000	1,674
2025	594,000	1,627

In an attempt to support his statements regarding CDM Smith's high diversion levels, the author then uses experience on the Tobin Bridge (formally known as the Mystic River Bridge), which recently converted to AET.

In an attempt to demonstrate that the diversion rates we estimated at the York Toll Plaza are too high when AET is assumed, the eTrans report cites the fact that traffic volumes on the Tobin Bridge actually increased for the five month period including August through December 2015 compared to the same five month period in 2014. Over this period, traffic increased by 7.4 percent. His conclusion, therefore, is that AET does not result in toll diversion.

This example does not make any sense for three reasons. First, conversion to AET at the Tobin Bridge took place in July 2014. Thus, AET was operational during both of the time periods they analyzed. So, the growth rate they show really only reflects normal background growth or growth

from other non-AET related sources. For this comparison to be meaningful, they would need to have compared August through December 2013, when there was no AET, versus August through December 2014, when there was AET.

Secondly, the toll diversion rates developed in the CDM Smith report are based on the $3.00 (passenger car) toll increase that would be incurred by video customers under AET. This would be double the current cash toll rates. Toll rates on the Tobin Bridge were $3.00 for cash and $2.50 for E-ZPass (car rates) prior to conversion to AET. Upon conversion to AET, the rates remained unchanged at $3.00 for video (also referred to as toll-by-plate) and $2.50 for E-ZPass. So, even if the author had chosen the correct time periods to compare, we would not have expected any toll diversion to occur at the Tobin Bridge because there was no additional video toll surcharge.

Thirdly, even if the author had selected the correct time periods to compare and a similar toll increase had occurred at the Tobin Bridge, it is impossible to know, without careful analysis, what level of toll diversion would be expected at this highly urban location. Simply using this as an example because it converted to AET is not sufficient to say that diversion rates should also be similar those in the York corridor.

What is most important regarding the AET conversion at the Tobin Bridge is the actual impact it has had on toll revenue collection. The eTrans report does not mention the fact that video payment violations rates have been very high at this location. An April 1, 2015 article in the New Salem News (http://www.salemnews.com/news/local_news/motorists-racking-up-hefty-fines-for-unpaid-cashless-tolls/article_23bb90f3-ed93-5940-ae1b-7ff8aea11ed1.html) wrote the following:

> "Figures from the state Department of Transportation reveal that from mid-July to Dec. 31 the state collected less than half of the $2.7 million in pay-by-plate tolls billed to motorists crossing the Tobin during that time.
>
> [M]otorists who didn't pay up after getting bills in the mail have been hit with more than $3.2 million in late fees and other charges, with MassDOT collecting only $600,000 of that by the end of the year."

As a result of such high violation rates, MassDOT felt it necessary to forgive tolls through an amnesty program. Specifically, MassDOT issued the following notice on this subject: (https://www.paybyplatema.com/pbp/Desktop/Default.aspx):

> "Important Notice: Effective June 1st, 2015 all current delinquent customers will be offered an amnesty settlement. All Pay By Plate fees will be waived and all Registry of Motor Vehicles (RMV) holds will be removed. Only outstanding tolls will need to be paid in full. This amnesty program is for Tobin Bridge outstanding fees only."

Violation fees are meant to both deter motorists from not paying the toll and to help make up for lost toll revenue from those who do violate and never pay. So, while this amnesty program may help in collecting some lost toll revenue, the loss of fee revenue will result in continued net revenue losses.

For comparative purposes, the total video uncollectible rate assumed by CDM Smith for the York Toll Plaza is 42.2 percent (Table 1, page 14). This includes losses from both unbillable transactions and uncollectible transactions. In spite of the slightly lower video collection assumptions CDM Smith developed for the York Toll Plaza, the revenue risk is much higher compared to that for the Tobin Bridge.

In the case of the Tobin Bridge, video transactions account for only about 15 percent of total transactions. This means that a 50 percent video loss rate results in revenue leakage of only about 7.5 percent. In addition, the Tobin Bridge only accounts for about 7.7 percent of total MassDOT Turnpike System toll revenue. The situation at York, however, is quite different. At York, about 30 percent of current transactions are cash (versus 15 percent at Tobin Bridge), thus putting twice the revenue at this location at risk. In addition, the York Toll Plaza is the single highest revenue generating location on the Maine Turnpike accounting for just over 40 percent of total system revenue in 2015 (versus 7.7 percent for Tobin Bridge).

It is also almost comical that the eTrans report uses an example 60 miles south of the York Toll Plaza (on an entirely different road and in a different type of area) when the closest example of a successful toll conversion can be found just a 15 minute drive south of the York Toll Plaza on I-95 in Hampton, New Hampshire. The New Hampshire DOT converted the traditional mixed use (cash and E-ZPass) barrier toll plaza in Hampton to ORT in 2010. Following its success, they converted the Hooksett Mainline Toll Plaza in 2013. Current plans are for the conversion of the Dover and Rochester plazas by the 2021-2022 time period.

In 2011 Hampton Toll Plaza on Interstate 95 was selected as one of the top ten transportation projects in the country in that year's competition based upon judging in three categories: "on time", "under budget", and "innovative management". The competition was sponsored by the American Association of State Highway and Transportation Officials (AASHTO), AAA, and the U.S. Chamber of Commerce (https://www.nh.gov/dot/media/nr2011/nr09011195.htm).

And upon conversion of the Hooksett Toll Plaza, NHDOT Turnpikes Administrator Chris Waszczuk noted that the benefits of implementing ORT at the Hooksett Tolls include (https://www.nh.gov/dot/media/nr2013/20130522-open-road-tolling.htm):

- Improved customer convenience
- Reduced travel time – 270,000 hours annually
- No lines or stopping to pay tolls
- Reduced fuel consumption – 465,000 gallons annually
- Improved air quality – less vehicle idling and delays
- Safer – no lane changing or slowing down
- 30% discount for E-ZPass "passenger type" vehicles

The author of the eTrans report seems to be so focused on promoting AET at all costs, that he neglects to see (or look for) any benefits afforded by ORT. The New Hampshire example is but one of many successful ORT conversions throughout the country. Other examples include the New Jersey Turnpike and Garden State Parkway (NJ), Pennsylvania Turnpike, Central Florida Expressway, and many more.

Response to eTrans Report: Section 2.0 (U.S. Army Corps of Engineers Observations/Requests and MTA's Response)

In Section 2.2 of the eTrans report the author states that toll revenue leakage under ORT has been underestimated, thus making it look more favorable versus AET. It is true, that intentional toll cheats would be able to use the E-ZPass lanes under ORT. But, the same is true with conventional toll plazas with dedicated E-ZPass lanes (which there are at the York Toll Plaza). Thus, conversion to ORT would not result in any (or only minimally more for those who mistakenly get in the express E-ZPass ORT lanes) additional revenue leakage compared to conventional toll plazas. Under AET, revenue leakage occurs when cameras do not take a clear image of the plate, when the department of motor vehicles has incorrect address information, or when motorists do not pay invoices.

Regardless of what the author says on this point, actual experience of ORT revenue collection on the Maine Turnpike at the converted New Gloucester Toll Plaza has shown that there is negligible revenue loss. CDM Smith is the traffic engineering consultant to the Pennsylvania Turnpike, the New Jersey Turnpike, and the Garden State Parkway (NJ). Toll revenue leakage at locations where ORT has been implemented has not been an issue. The same can be said for experience at the Hampton and Hooksett Toll Plazas in New Hampshire.

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For some reason, the eTrans report notes the following, which is totally irrelevant to their argument regarding increased ORT revenue leakage (page 5):

> "In addition, E-ZPass lane violations are not limited to just open road lanes in ORT operations. For example, the E-ZPass lanes on the Pennsylvania Turnpike (gate-free lanes in the toll plazas) have been subject to such fraud and abuse that:
>
> > *"When the Pennsylvania Turnpike's fiscal year ended in May (2015), there were $33.3 million still outstanding in unpaid tolls."*[xxi]
>
> Therefore, for this study to assume only modest violations in ORT lanes at the York Toll Plaza is overly optimistic and biases the results against AET."

Citing this experience in Pennsylvania is irrelevant and misleading for several reasons. First, if, as the author asserts, this $33.3 million in revenue loss is not attributable to ORT, but rather to gate free E-ZPass only lanes (referred to as "slip ramps" by the Pennsylvania Turnpike Commission), then it is plainly clear this has nothing to do with ORT. Secondly, had the author correctly understood what the $33.3 million outstanding tolls referred to, he would not have made this argument at all. In fact, the $33.3 million referred to represents unpaid tolls for the entire system, including ORT plazas, slip ramps, and conventional toll plazas (which form the vast majority of the Pennsylvania Turnpike toll system). They also represent the cumulative two-year total in unpaid tolls. It should also be noted that while $33.3 million sounds like a substantial amount, given the total two-year revenue collection on the Pennsylvania Turnpike, this amounts to only a little more than 1.5 percent of systemwide toll revenue. But, again, the bigger point here is that the $33.3 million dollar unpaid tolls referenced has nothing to do with ORT revenue loss (either on the Pennsylvania Turnpike or on the Maine Turnpike).

Further, if eTrans had read down a little farther in the Pennsylvania Turnpike article from which it quoted, it would have seen that Turnpike Commission Chair Sean Logan said his *"concern is the level of unpaid and uncollected tolls will increase dramatically if the turnpike continues down the road to all electronic tolling without the authority to go after violators with an enforcement mechanism that gets drivers attention".*

In Section 2.4 the eTrans report again uses incomplete and misleading information from another real world example of AET conversion to argue that AET is good and ORT is bad. Unfortunately, this fails as well. They cite the Central Florida Expressway (CFX) Authority as having "recently

studied AET deployment throughout the U.S. and Canada and elected to move forward with AET deployment..." CDM Smith is the traffic engineering consultant to the CFX Authority and conducted the traffic and revenue studies leading to their recent decision to implement AET.

Based on the eTrans report, one would be forgiven for interpreting this statement to mean that the CFX Authority decided to convert its entire system to AET. In fact, that is not the case. AET, in this case, will be implemented on a new expansion project as part of a western beltway around Orlando, FL. Total toll revenue on the new AET segment is estimated to amount to $1.2 million after one year of operation. Total CFX toll revenue in that same year is estimated to amount to $451.5 million; thus, AET revenue will account for 0.3 percent of total system toll revenue (revenue forecasts for the AET segment and total system are from the Central Florida Expressway Authority FY 2015 General Traffic and Earnings Consultant's Annual Report, CDM Smith, February 2016).

This proposed toll segment is, in many ways, a good candidate for AET. It will serve a highly commuter oriented market and is expected to have more than 80 percent SunPass (Florida's equivalent to E-ZPass) participation. In addition, it will serve as an ideal pilot program for any further expansion projects since any losses at this location would not present a revenue risk to the CFX Authority. None of these conditions are true of the York Toll Plaza. Finally, the eTrans author does not mention that all of the current CFX Authority toll system was converted from traditional toll collection to ORT several years ago; they have no plans to convert any of the existing ORT plazas to AET.

Response to eTrans Report: Section 3.0 (Environmental, Safety and Financial Issues Not Properly Addressed in MTA's Analysis)

Section 3.3 specifically deals with "Shortfalls in the MTA's Financial Analyses". The eTrans assertions here fall into the following categories:

1. The CDM Smith report should have considered a life-cycle cost analysis instead of a net revenue analysis.
2. The CDM Smith report limited its analysis to a 10-year time frame.
3. The CDM Smith report focused on a worst case scenario instead of a most likely scenario.
4. The AET video surcharge amounts are higher than those for other AET facilities and inconsistent with "Good Industry Practices".
5. CDM Smith estimates of toll diversion are too high.
6. CDM Smith underestimated cash revenue leakage rates under ORT.
7. CDM Smith assumed different business rules for AET than they did for ORT.

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Items #1 and #2 – These two are related. We provided net AET and ORT traffic and revenue impacts over a 16-year period from 2015 through 2030 (see CDM Smith report Tables 5 and 6). We also conducted a net present value analysis of the revenue impacts along with estimated capital costs for both AET and ORT over a ten-year period. CDM Smith did not recommend either AET or ORT based on this analysis, but rather provided technical analysis and a professional measurement of impacts, and left that decision up to the MTA.

The structure of the analysis, however, is consistent with studies CDM Smith has conducted for numerous other toll authorities. Furthermore, this is the type of information that is requested by the financial industry (rating agencies, bond insurers, and investors). Maximum focus, from their point of view, is on the risk to toll revenue and the ability of a toll agency to maintain minimum debt service coverage ratios. In this case, AET introduces more revenue risk than does ORT, thus the need for the $3.00 video surcharge. Capital costs related to construction of a new toll plaza (be it AET or ORT) is substantially less risky. Cost incurred in construction are well established and represent a one-time expenditure. Revenue losses, on the other hand, can occur on an annual basis. Consistent with other tolling agency practices nationally, I would think that the MTA would be much more concerned with preservation of its long term revenue stream, when compared to the one time capital cost to construct a new toll facility.

Item #3 – This is simply not the case. CDM Smith's base case (see Tables 5 and 6 of the CDM Smith report) reflects "a most likely scenario". We incorporated actual experience at MTA regarding nearly every variable considered in the analysis. Table 1 of CDM Smith's report highlights several of the key assumptions in the model that MTA staff provided based on actual experience. The same is true on the cost side of the equation (image review costs, mailing costs, etc.). The author of the eTrans report may think these variables are too high or that they will change in the future. In order to maintain a strong bond rating, we must base our analysis on current operations. Rating agencies are not interested in "up-side" forecasts and do not rate toll agencies on what might happen in the future. If anything, they are much more interested in the "down-side". Thus, the CDM Smith report also conducted a risk analysis at both a 90 percent and 95 percent confidence level in order to provide the MTA (as well as rating agencies and others, if needed) some measure of confidence that debt service coverage levels could be maintained with either 90 percent or 95 percent confidence.

Item #4 – This is an odd statement. No toll rates (whether cash, E-ZPass, or video) are set based on "Industry Standards". Rates are set to meet operating, capital, and debt service needs. The video surcharges estimated for the York Toll Plaza are based on factors unique to this location, including a majority of out-of-state travelers (including a significant number of Canadian

customers), high cash paying market share (which would be video under AET), a high number of invalid department of motor vehicle addresses, current violation payment experience, etc.

Item #5 – Diversion levels developed in the CDM Smith study were discussed above in detail.

Item #6 – The eTrans author again questions CDM Smith leakage rates for ORT, arguing they should be much higher. This, too, was discussed above in detail.

Item #7 – The CDM Smith analysis assumed the same business rules for both AET and ORT. The eTrans report does not give any examples of where different business rules were used, so it is difficult to respond beyond this. Perhaps they are conflating assumed cash leakage rate assumptions under ORT versus those assumed under AET as being based on business rules. Those types of assumptions are not business rules, but rather actual operating characteristics based on MTA's own experience and on the experience of other ORT facilities such as those in New Hampshire, New Jersey, Pennsylvania, and elsewhere.

Response to eTrans Report: Section 4.0 (Summary)

CDM Smith has no comments on this section.

To repeat what was said in the Introduction, CDM Smith entered into this assignment without a bias toward AET or ORT. We have conducted many studies where the preferred outcome was for conversion to, or the introduction of, AET. As clearly stated in our report, AET is not infeasible, but rather must be accompanied by a substantial video surcharge in order to maintain net toll revenue neutrality. ORT at York, on the other hand, would not require any additional toll surcharges to maintain revenue neutrality on MTA's system. The MTA selected ORT. Based on our national experience and a number of technical project-specific risk factors including the toll surcharge, the percentage of MTA income at risk at York, the mix of out-of-state and Canadian traffic, the cash market share, and traffic diversion, it is our professional opinion that the MTA decision was and remains prudent.

If you have any questions or comments, please do not hesitate to contact me at your convenience.

Very truly yours,

Gary T. Quinlin
Project Manager
CDM Smith, Inc.

Peter Mills

Education/Background:

Born in Farmington, ME 1943
Gorham High School, Gorham, ME Graduated 1961
Harvard College BA. Graduated cum laude in English 1965 with courses qualifying to become a naval officer.
U.S. Navy 1965-70
Univ of Maine School of Law; Law Review. Graduated 1973.
Attorney in Portland 1973-82; owner of the law firm Mills, Shay, Lexier and Talbot in Skowhegan since 1982.
Married to Nancy Mills, Superior Court Justice. Three adult daughters. 6 Grandchildren.
State Senate 1994-2002; Maine House of Representatives 2002-04; State Senate 2004-10.
Executive Director, Maine Turnpike Authority since March 17, 2011.

Military Experience (1965-70): Five years as a destroyer line officer with sea duty billets in communications, operations and intelligence. Deployed to Vietnam, the Central Pacific and the Mediterranean. Was awarded the Navy Commendation Medal for gun line duty in Vietnam and the Navy Achievement Medal for intelligence work on Soviet missile testing.

Maine Turnpike Experience: During my tenure as Executive Director, I have overseen:

Submission of six Turnpike budgets for approval by the Turnpike Board and the Maine Legislature
Capital construction of between $40 and $60 million per year
Labor force reductions and efficiencies to reflect greater reliance on technology
Drafting and passage of a number of changes to state law to improve Turnpike operations
The public process by which tolls were increased by 20% in 2012
Two bond issues to substantially reduce interest on outstanding debt
An increase in the S&P rating for Turnpike bonds
Two long range (3 year) labor contracts each containing material reforms
Significant improvements to the administration of E-ZPass
Resolution of conflicts making use of prior experience in construction and design litigation

Public Service:

In the 117th Legislature (1995-96), chaired Judiciary and served on Labor Committee. In 1995, chaired the Property Rights Task Force.
In the summer of 1996, chaired the Critical Review Committee to rewrite Learning Results for the Dept of Education.
In 1996 and 1997, served on the Assessment Design Team to implement Learning Results.
In 1997, served on the Children's Health Task Force (to implement S-Chip coverage for children) and on a committee to reform pensions for teachers and public employees.
In the 118th and 119th Legislatures (1997-2000), served on Labor and Taxation Committees
In 1998 served on:
The Learning Results Steering Committee to implement education standards and
The Task Force to Increase Primary and Secondary Forest Product Manufacturing.
In 1999 served on a Committee on Sawmill Biomass and an Economic Development Incentives Commission.
In the 120th Legislature (2001-02), served as the Senate Republican lead on Appropriations.
In 2001, served on the Education Funding Reform Task Force.
In 2002-04, was Senate chair and then a House member of the Community Preservation Advisory Commission.
In the 121st Legislature (2003-04), was a House member on Appropriations; also served on the Task Force on Retirement Benefits for Law Enforcement Officers & Firefighters. Became a member of the Health Insurance Public Purchasers' Steering Group.
In the 122nd Legislature (2005-06), served on the Select Committee on Tax Reform and the Insurance & Financial Services Committee.
In the spring of 2005, initiated and led the "Don't Mortgage ME" petition drive that stopped the Legislature from borrowing $447 million dollars without voter approval.

From August 2005 to June of 2006, conducted an unsuccessful campaign for governor in the GOP primary; spoke to over 200 gatherings about the state's current challenges.
In the 123rd Legislature (2007-08), served as Republican Senate lead on the Education Committee.
In 2007, served on the Alternative Education Task Force.
In the 124th Legislature (2009-10), served on the Health & Human Services Committee, the Labor Committee, the Maine Children's Growth Council, LURC's Comprehensive Land Use Plan Working Group Forum, the Advisory Council on Health Systems Development, and the Energy Corridor Commission.
From August 2009 to June of 2010, campaigned a second time unsuccessfully for governor in the GOP primary.
From November 2010 to January 2010, served on Governor LePage's transition committee.
From 2011 to 2013, Governor's Advisory Committee on Development of Broadband Infrastructure

Civic engagements:

President of the Maine Trial Lawyers Association (1992-94).
Inducted into the American College of Trial Lawyers in 1991.
On the Board of Pine Tree Legal Assistance Corporation 1994-1999
On the Board of HealthReach Community Health Centers 1997-2003
On the Board of HealthReach Network, a provider of health services, 2000-2006
On the board of the Maine Math & Science Alliance 1998-2005
Organized transportation summits for Somerset County in 2000 and 2004
On the Advisory Committee on Health Systems Development (2009-10)
On the Steering Committee of the Reforming States Group (1996-2010) (An international group of policymakers sponsored by the Milbank Foundation to develop state & provincial health policy. I was co-chair 2009-10.)
The Maine Coalition for Excellence in Education (2000-09)
The Somerset County Economic Development Corporation (Clerk & founding member 2000-2011)
The Maine Children's Growth Council (2008-10)

Currently serving on the following:

Chair of the Advisory Board of the Margaret Chase Smith Policy Center (since 2009).
The Muskie School Board of Visitors (since 2002)
The Kennebec Regional Development Corp. -- FirstPark (Secretary & founding member. Since 1998)
The Maine Children's Trust (since 2009)
The Board of Health InfoNet (since 2009)
Board of Maine Community Foundation (since 2012)
Founding member & Secretary of the Maine Virtual Academy, an online school (since 2012)

Publications: Numerous Op-Eds and longer writings on education, health, tax and public policy. Many are available at petermills.info. They include:

"A Critical Exegesis of Maine's Creaky Tax Code" in the MCS Maine Policy Review in 1997
"Maine's Dubious Odyssey into the Funding of Local Government" in the MCS Maine Policy Review in 1998
"Maine Tax Policy: Lessons from the Domesday Book" in Changing Maine edited by R. Barringer in 2004
"Megawatts from Mountain Tops: What's in it for Maine?" Vol IX, Numbers 8 & 9 concerning wind power development in the series "Choices" published by the Maine Center for Economic Policy in October 2008.
"Bite Size Democracy -- The Virtues of Incremental Change," in the MCS Maine Policy Review in 2011
"Maine as a Bulwark of Democracy" an essay for the MCS Maine Policy Review in 2014
"Climate Policy 2015: Reports from the Congressional Trenches" published in MCS Policy Review in 2016

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FAMILY: Children – Michael, Karen, Daniel and Steven

EDUCATION:

Waterville High School, Class of 1950
University of Maine – Bachelor of Science in Civil Engineering
University of Mississippi – Certificate in Management
Various courses in City and Regional Planning – Urban Transportation Planning – Real Estate Appraisal – Management, etc.

WORK EXPERIENCE:

Military – U.S. Army – Georgia, Germany 1954-1956
Various – Maine Department of Transportation, June 1956 to December 1973. Engineering, planning, managing and public liaison responsibilities.
Commissioner – Maine Department of Transportation, December 1973 to December 1979. Responsible for the overall administration of a Department of approximately 3,000 employees and a budget of nearly $150,000,000 annually.
Vice President – Operations, the Dunlap Agency, July 1983 to August 1987. Management responsibility for several Northern New England branch office goals, operations and profitability, corporate strategic planning and organizational development.
President – Mallar Associates, August 1987 to December 1999 and Mallar Development Services, January 1980 to July 1983. Specializing in management services, transportation, economic development, governmental relations, governmental operations and public policy.
Retiree – Volunteer work 2000 to present.

FORMER AFFILIATED POSITIONS:

Chairman, Maine-New Hampshire Interstate Bridge Authority
Member, Maine Turnpike Authority
President, American Association of State Highway and Transportation Officials.
Member – Maine Historic Preservation Commission
Chairman, Maine Reapportionment Commission
Co-Chairman, Select Committee on Workers' Compensation
Vice President, Maine Development Foundation
Chairman, Governor's Economic Development Strategy Task Force
Chairman, Board of Directors, Maine Chamber of Commerce and Industry
Chairman, Northern New England Rail Passenger Authority
Board Member and Treasurer, Friends of Scarborough Marsh
Co-Coordinator, Southern Maine Community College Pier Project

OTHER RELATED AFFILATIONS:

Registered Professional Engineer, Retired
Registered Land Surveyor, Retired
Long-term Member, Maine State Employees Association (MSEA)
Member, Maine Better Transportation Association

TOWN ACTIVITIES:

Former President, Hallowell-Farmingdale Little League
Former Treasurer, Hallowell-Farmingdale Cub Scouts
Member, Former Chairman, Farmingdale Highway Advisory Committee
Member, Former Chairman, Farmingdale Capital Needs Committee
Former Member, Chairman, Farmingdale Board of Selectmen
Former Farmingdale Road Commissioner

GARY T. QUINLIN

TOLL STUDIES AND FINANCE

Experience

Mr. Quinlin is a senior project manager at CDM Smith with more than 27 years of experience in transportation, finance, and toll technology projects. He has vast experience in virtually all types of traffic, revenue, and toll studies includes traffic and toll revenue forecasting, investment grade studies, toll sensitivity, managed lane/high occupancy toll (HOT) lane studies, and all electronic toll (AET) studies. He has been a senior project manager for more than 20 years and has been involved in work for many toll agencies such as Florida's Turnpike Enterprise, the New Jersey Turnpike, the Pennsylvania Turnpike, the Maine Turnpike, the Miami-Dade Expressway Authority, and many more.

Much of Mr. Quinlin's recent efforts have revolved around conducting investment grade traffic and revenue studies for use in bond issues, such as those for the New Jersey Turnpike Authority (NJTA) and the Pennsylvania Turnpike Commission (PTC) as well as AET conversion studies for the Miami-Dade Expressway Authority, the PTC, NJTA, and the Maine Turnpike Authority.

Education

M.S. - Urban and Regional Planning, University of Iowa, 1989
B.S. - Sociology, University of Iowa, 1987

CDM Smith

Project Director, Miami-Dade Expressway Authority (MDX) Systemwide Traffic and Revenue (T&R) Update Study, Miami-Dade County, FL. - Mr. Quinlin acted as the project director for this investment grade T&R study. He coordinated all aspects of this work, including the review of economic data collected by an independent subconsultant. Mr. Quinlin developed all final traffic and revenue estimates and developed the study report.

Project Director, Miami-Dade Expressway Open Road Tolling (ORT) Master Plan, Miami-Dade County, FL. - As the project director, Mr. Quinlin worked closely with MDX staff in developing the traffic and revenue forecasts for the master plan. Estimates of converting the existing system to ORT were developed for traffic and revenue, as well as capital and operations and maintenance (O&M) costs. A key element of the study was to "close" the system so that current toll-free movements were eliminated from the system.

Project Manager, General Traffic Engineering Consultant Services, New Jersey - Mr. Quinlin is the nominated project manager for CDM Smith's current general traffic engineering consultant services contract for the New Jersey Turnpike. He is the point person for all work conducted by the firm over the period of this three-year contract. Major elements of this contract include the development of periodic investment grade traffic and revenue studies and participation in financing team/rating agency meetings. Additional tasks include the creation of monthly traffic and revenue reports and annual business interruption insurance certificates.

Project Manager, Maine Turnpike Authority: Independent Financial Risk Analysis for Toll Collection Alternatives at the York Toll Plaza, Maine - Mr. Quinlin is currently managing a study to determine the financial feasibility of relocating the York toll plaza and converting its toll collection system to either ORT or to AET. A specialized model was developed specifically for the York Plaza to test the impact of alternative business rule assumptions and operating characteristics under both ORT and AET operations. Forecasts of annual gross and net (excluding O&M costs) toll revenue are being developed and compared to the existing condition.

Project Director, Pennsylvania Turnpike Commission I-95 Interchange T&R Study, Pennsylvania - The Pennsylvania Turnpike Commission retained CDM Smith to update the prior study from 2006 that estimated traffic and toll revenue impacts associated with a new interchange between I-276 (PA Turnpike) and I-95. Mr. Quinlin acted as project director for this study. He was responsible for overseeing all aspects of work, including client contact, data collection and review, and the development of estimated traffic and revenue impacts.

Project Director, Alabama US 280 Elevate Test Level (TL) Feasibility Traffic and Revenue, Birmingham, AL - Mr. Quinlin served as project director on this study. He coordinated an extensive travel pattern survey and traffic count program, supervised all traffic modeling efforts, developed estimated traffic and toll revenue forecasts, and developed the report document.

Project Director, Pennsylvania Turnpike and I-80 Traffic and Revenue Study, Pennsylvania - CDM Smith conducted a study for the Turnpike Commission to support its proposal to the Federal Highway Authority (FHWA) to take over maintenance of the I-80 corridor in Pennsylvania and make annual payments to PennDOT for improving

other transportation infrastructure in the state. As the project director of this study, Mr. Quinlin was responsible for all aspects of work, including data collection, origin-destination (OD) surveys, and traffic counts, as well as the development of traffic and toll revenue forecasts.

Project Director, Eastbound I-580 High Occupancy Vehicle (HOV) to HOT Conversion, Alameda County, CA - The client proposed converting the existing HOV lane on I-580, the second most congested freeway in the Bay Area, to a high occupancy toll lane to reduce traffic congestion and delay, encourage the use of high occupancy vehicles and transit, support air quality attainment goals, and improve motorist safety. Mr. Quinlin served as the project director for the HOT study. He coordinated all work efforts, including data collection (traffic counts and travel time studies); supervised and reviewed all modeling efforts; developed final traffic and revenue findings; led weekly progress meetings; and developed the final study document.

Project Manager, Pennsylvania Turnpike 2011, 2012, 2013, 2014, 2015, 2016 and 2017 T&R Studies, Pennsylvania - Mr. Quinlin served as the project director for these traffic and revenue studies for the Pennsylvania Turnpike Commission (PTC). The 2011, 2013, 2014, 2016, and 2017 studies were Bring Down Letters and keyed off of prior investment grade studies. The 2012 and 2015 studies were comprehensive investment grade studies. Each of these T&R studies incorporated annual rate adjustments into the forecasts. Part of CDM Smith's role is to identify the impacts of alternative rate increases, as well as the differential application of the rate increases to cash and E-ZPass customers. These studies are used in support of the issuance of all toll revenue bonds by the PTC.

Project Director, 2012 New Jersey Turnpike Investment Grade T&R Study, New Jersey - As project director for this work, Mr. Quinlin oversaw the development of formal updated investment grade traffic and revenue forecasts for both the New Jersey Turnpike and the Garden State Parkway. A detailed socioeconomic review was conducted as part of this study, including meetings with planners and economists in both project corridors, in order to develop updated estimates of growth throughout the ten-year forecast period. Mr. Quinlin participated in rating agency meetings and investor "road shows" as part of his duties for this work.

Project Manager, Pennsylvania Turnpike Barrier Conversion AET Studies, Pennsylvania - CDM Smith was asked to estimate the traffic, gross revenue, and net revenue impacts of converting individual segments of the Pennsylvania Turnpike System to AET. The first portion studied was the easternmost tolling location at the Delaware River Bridge. This location was successfully converted to AET operations, the first for the Turnpike, in January 2016. Operations at this location have been under study to apply to current potential AET conversion locations on the Beaver Valley Expressway, the Findlay Connector, and the northern portion of the Northeastern Extension.

Project Manager, Pennsylvania Turnpike Preliminary Systemwide AET Study, Pennsylvania - CDM Smith was a subconsultant on this project and was responsible for the development of all traffic, toll, and fee revenue impacts of converting the entire Pennsylvania Turnpike to AET. CDM Smith was also responsible for all efforts related to the development of toll system capital and O&M costs. Public outreach and survey efforts were used to collect user characteristics and attitudes toward AET. CDM Smith developed a specialized AET model to estimate the traffic, revenue, and O&M cost impacts of converting to AET. A key element of the model is the ability to test numerous business rules assumptions and their impact on traffic, revenue, and O&M costs. CDM Smith also worked with the prime consultant in reviewing legislative/legal issues related to AET and ways to minimize AET revenue leakage.

Project Manager, Pennsylvania Turnpike Final Systemwide AET Study, Pennsylvania - CDM Smith is responsible for all final traffic and revenue studies to be completed in advance of AET implementation on the Pennsylvania Turnpike. In addition to refining the work conducted in the preliminary phase of work, this study will include the development of pilot programs to test the impact of AET. In addition, CDM Smith is tasked with reviewing capital and O&M costs developed by others for this work. The AET model developed as part of the preliminary study will be used to test and refine the final operational assumptions that will be used in the pilot programs, as well as for full system implementation.

Project Director, Delaware River and Bay Authority (DRBA) Investment Grade Traffic and Toll Revenue Study, Delaware - Mr. Quinlin is overseeing the development of a formal investment grade traffic and toll revenue study for the DRBA, with includes forecasts for both the Delaware Memorial Bridge and the Cape May-Lewes Ferry. A detailed socioeconomic review of the region is being undertaken in the development of five-year updated forecasts. The study report will be included in an upcoming Official Statement, and CDM Smith will attend rating agency meetings in support of the issuance of additional revenue bonds.