Financial Consulting Services for CITT

Risk Analysis Update

MIAMI-DADE

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The CITT Risk Assessment Model is a tool designed to evaluate the financial feasibility of the People's Transportation Plan ("PTP").

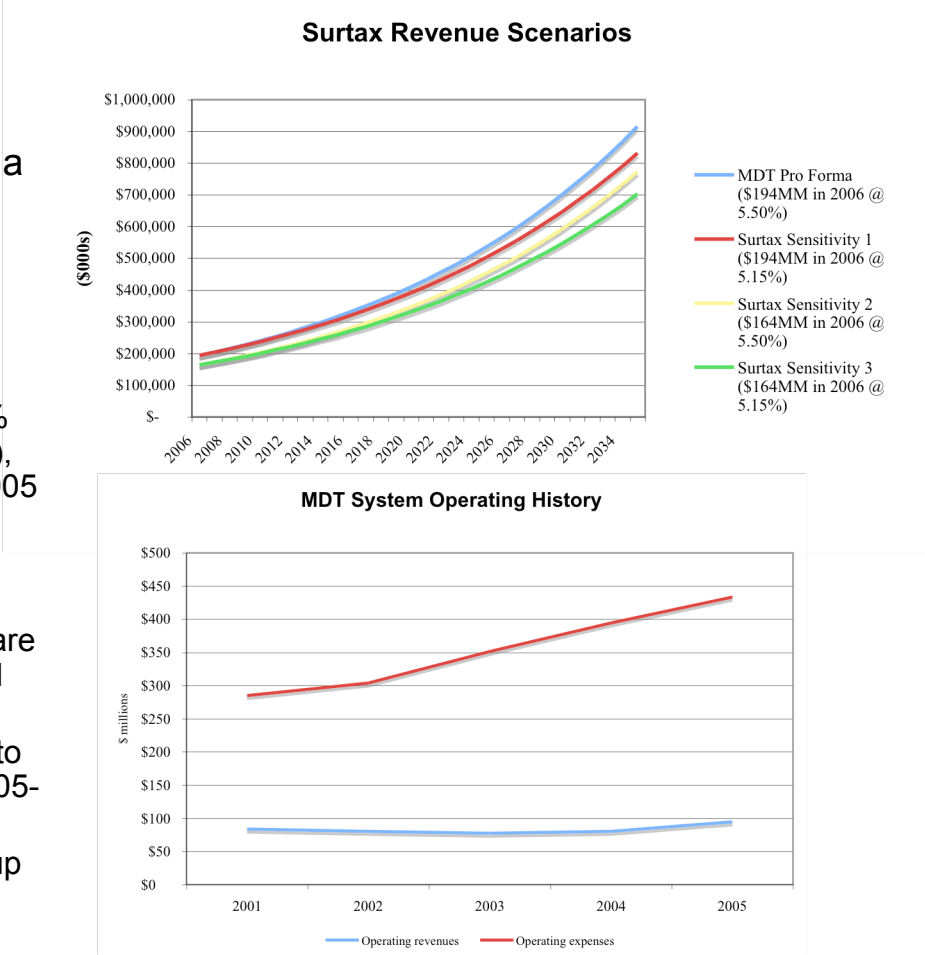
- The Risk Assessment Model (the "Model") is designed to provide a comprehensive 30-year financial analysis of the PTP.
  - The Model is designed primarily to views projects from CITT's perspective
  - Recognizing that the PTP represents only a portion of Miami-Dade Transit ("MDT") operations, a comprehensive financial outlook for MDT is also included in the Model.
- The Model is designed to be user-friendly, flexible to changing assumptions, and able to provide concise, easy-to-understand summaries and reports.
- The latest MDT Pro Forma base assumptions were analyzed for this report:
  - The CITT Validation Case is a validation case created to match the MDT Pro Forma dated November 15, 2006.
  - While the two cases are not identical, their assumptions match very closely.
  - Any differences in cash flow are not material when sensitivity analysis is performed.
- Sensitivity analysis was performed to assess individual risk factors using the CITT Validation Case as a baseline scenario:
  - Since these sensitivities are individually compared to the baseline, they are a good assessment of the risks facing the PTP based on MDT Pro Forma assumptions.
- The IMG Team is currently formulating a Base Case for the CITT as a more conservative alternative to the Validation Case.

The IMG Team analysis indicates that the the financial feasibility of the PTP is very tight using MDT assumptions, and may require additional funds and/or reductions in expenditures.

- The CITT Validation Case shows a $138 million deficit in present-value terms over the 30-year period.
- Senior and junior lien debt service coverage requirements ("DSCR") are violated in four and two years respectively out of the thirty years in the forecast.
  - Since MDT is required to both pay debt service and operate the transit system, the Model includes an alternate DSCR calculation that includes operating costs and grant funding. Using this calculation, the junior lien coverage is violated in four out of the thirty years.
- Sensitivity analysis found that the primary risk factors for the PTP include the following scenarios:
  - Operating revenues 10% less than forecast in every year
  - Operating expenses 10% higher than expected over the forecast.
- Other factors that had a relatively smaller, but still significant, impact.
  - PTP rail capital costs 10% higher than expected
  - Federal grant revenues for the North Corridor and FIU to MIC reduced to a 50% contribution level.
  - Interest rates rise by 1%
  - Surtax revenue growing at 5.15% (Public Health Trust 10-year historic average) annually rather than the MDT-projected 5.50%.
- A quarter-penny increase in the surtax would dramatically improve the financial outlook of the PTP and sufficiently mitigate all of the downside cases that were analyzed.

The IMG Team identified a number of key assumptions in the MDT Pro Forma that may be aggressive.

- 2006 was an exceptionally strong year for surtax revenue (up 14%). Growing from an average of the past 5 years would produce a different revenue forecast.
- Other assumptions that may be optimistic:
  - Federal share of 61% of project costs for the North Corridor
  - Federal share of 60.3% for the FIU-MIC
  - Operating cost growth of approximately 4.2% per year (more in years when rail lines open), compared with 11.1% average from 2001-2005
    - Total operating cost increase is 32% between 2005 and 2010
  - While proposed fare increases, increased ridership, and new fare collections systems are likely to increase revenue, the total expected growth is very high.
    - Total operating revenues are forecast to rise 104% (more than double) from 2005-2010
    - Existing bus service farebox revenue up 136%



The CITT Risk Assessment Model was developed to analyze PTP risk

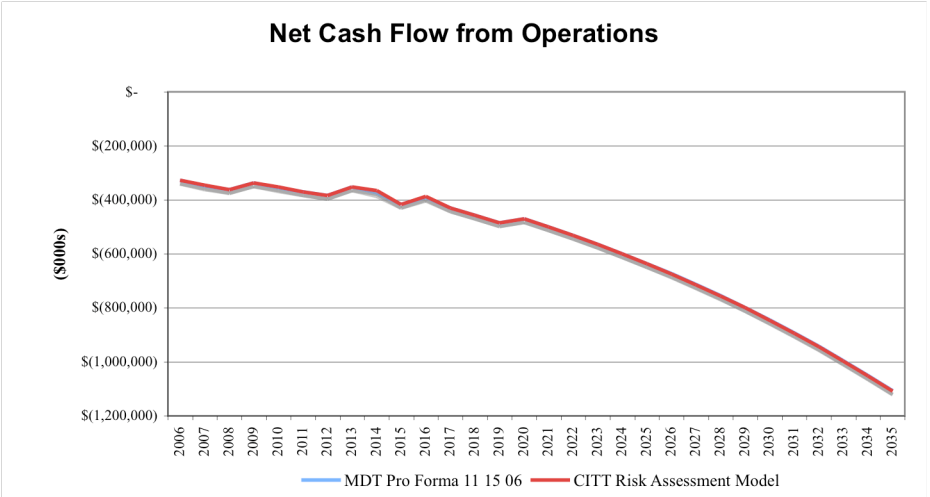
- The "Validation Case" in the Risk Assessment Model (the "Model") seeks to match the Pro Forma as closely as possible.
  - All Pro Forma assumptions are input into the Model, except for a limited number of exceptions that are not material to the analysis.
  - Use of Pro Forma assumptions represents neither acceptance or rejection of those assumptions by the IMG Team
- The key difference is debt is structured differently in the Model.
- Overall, the Validation Case and Risk Assessment Model differ by an amount equal to 1.36% of the $46.8 billion in MDT expenses over the 30-year forecast period.
  - The difference in debt service cost accounts for 97% of the difference between the two forecasts.

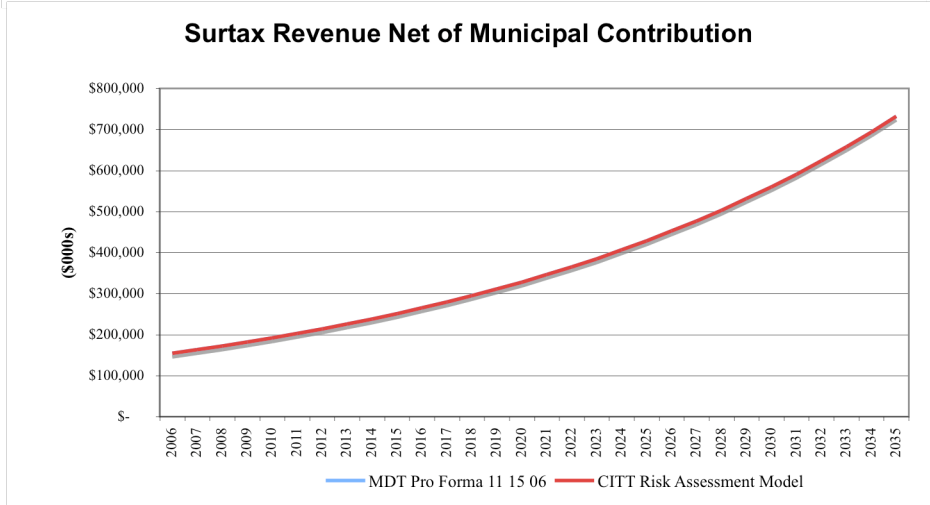
Financial Analysis: Pro Forma vs. CITT Validation Case - Net Operating Cash Flow and Surtax Revenues

The following pages compare the results of the MDT Pro Forma and the CITT Validation Case.

- The net operating cash flow for the two cases match almost exactly. This includes both PTP and non-PTP operations.

- The surtax revenue forecasts are identical since both models assume a growth rate of 5.50%.





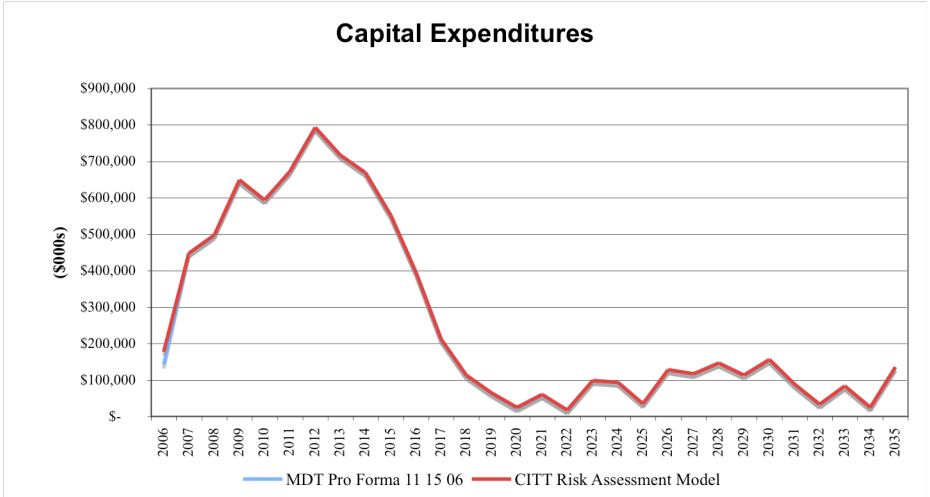
Note: Since Pro Forma matches CITT Validation Case very closely, it is difficult to distinguish them on some of these graphs.

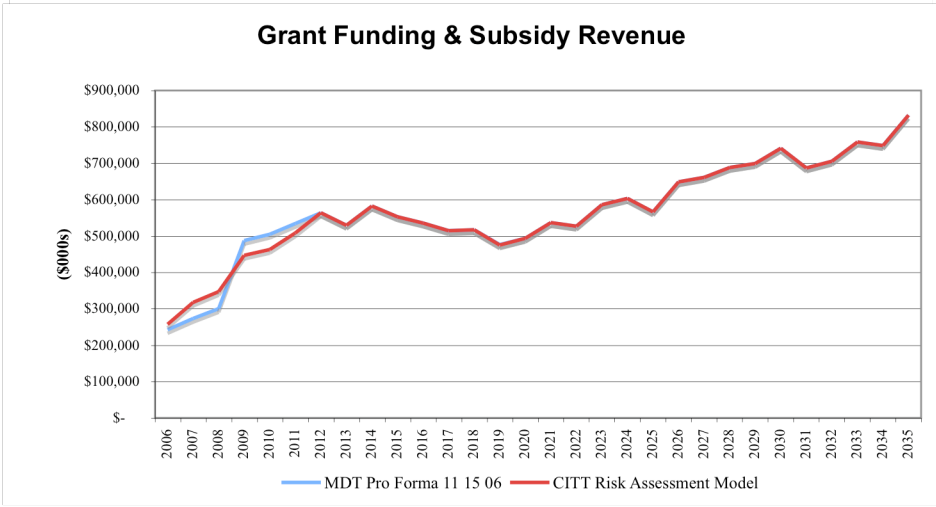
Financial Analysis: Pro Forma vs. CITT Validation Case - Capital Expenditures and Grant Funding Revenue

The capital expenditure and grant funding revenue forecasts are very similar for the MDT Pro Forma and the CITT Validation Case.

- The capital expenditures shown include both PTP capital for rail, bus, and public works as well as any non-PTP capital.

- The grant funding revenue schedules are very similar though not identical due to slight differences in modeling structure; the 30-year totals are nearly identical.





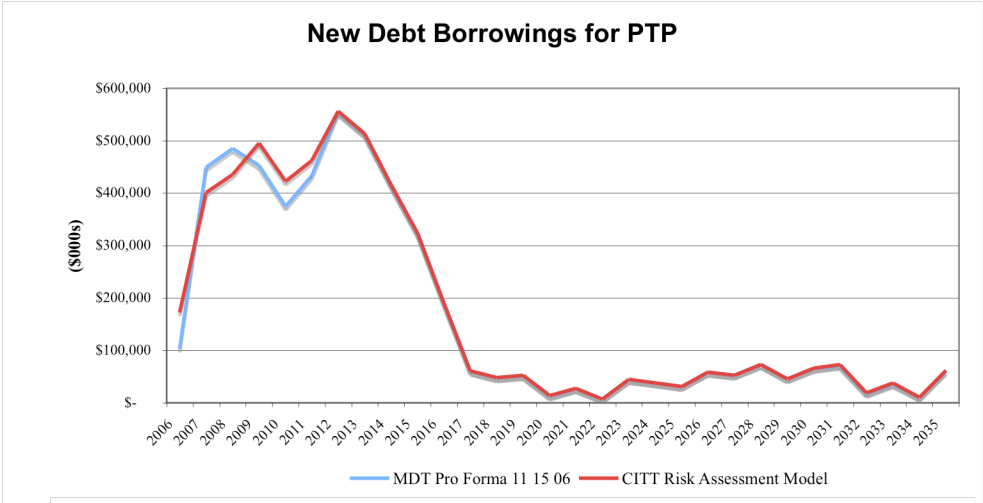
Note: Since Pro Forma matches CITT Validation Case very closely, it is difficult to distinguish them on some of these graphs.

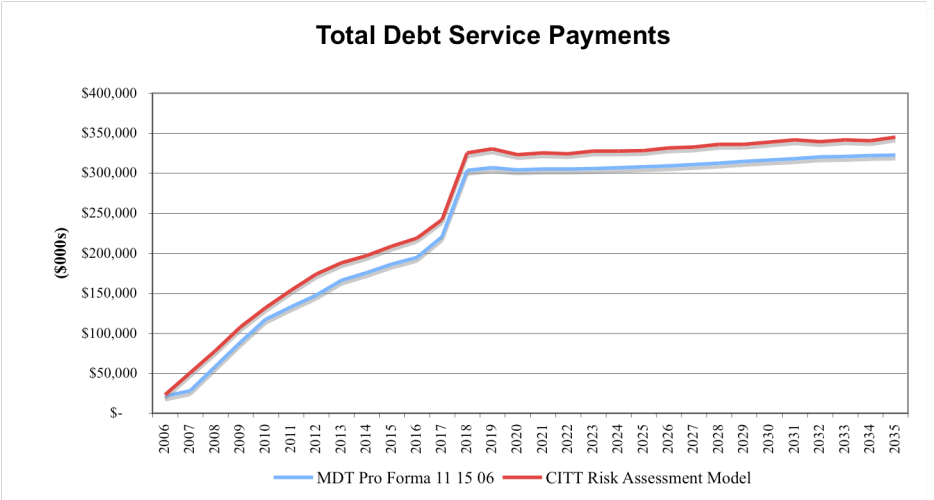
Financial Analysis: Pro Forma vs. CITT Validation Case - New Debt Borrowings and Debt Service Payments

While new debt borrowing amounts for the two models are very similar, debt service payments are structured differently in the CITT Validation Case.

- The Pro Forma structures debt service ("d/s") to keep the aggregate payments level.

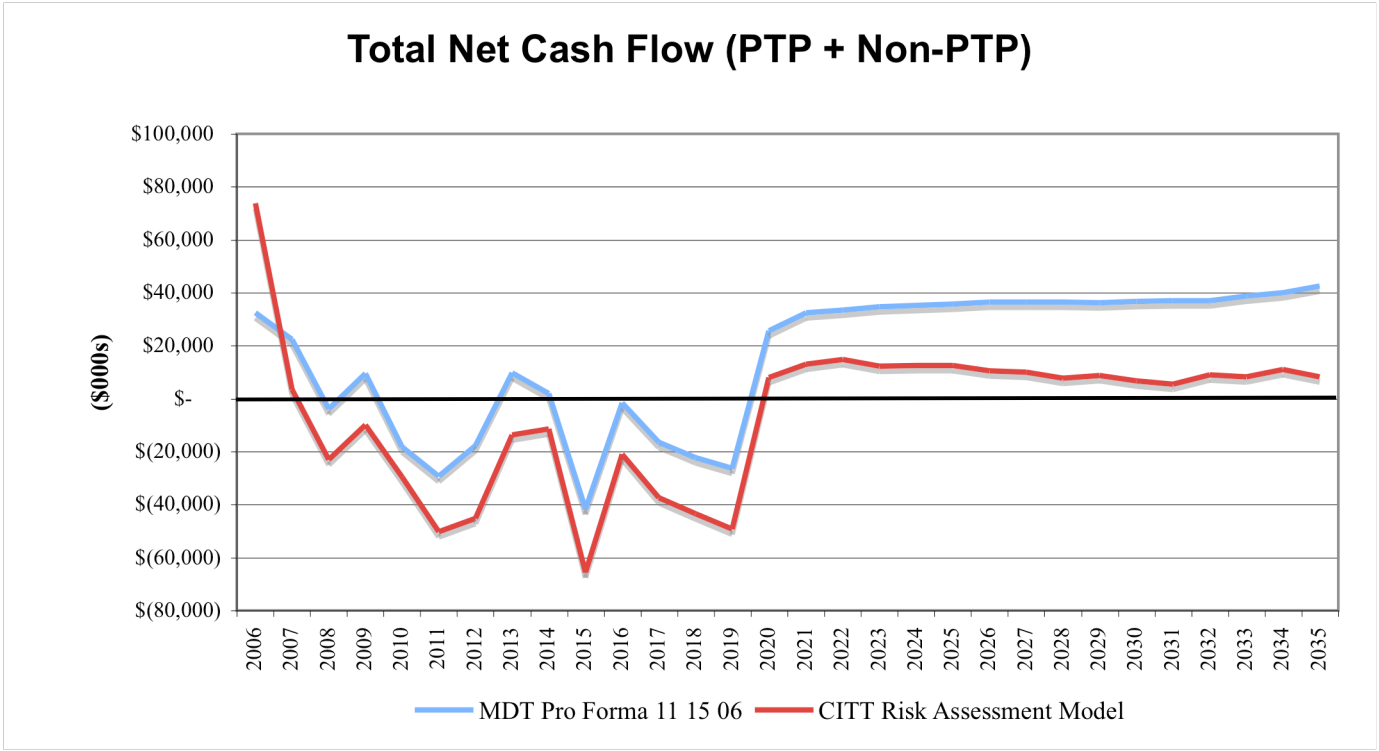
- The CITT Validation case structures level d/s payments for each year's individual issue resulting in higher total payments in short-term.



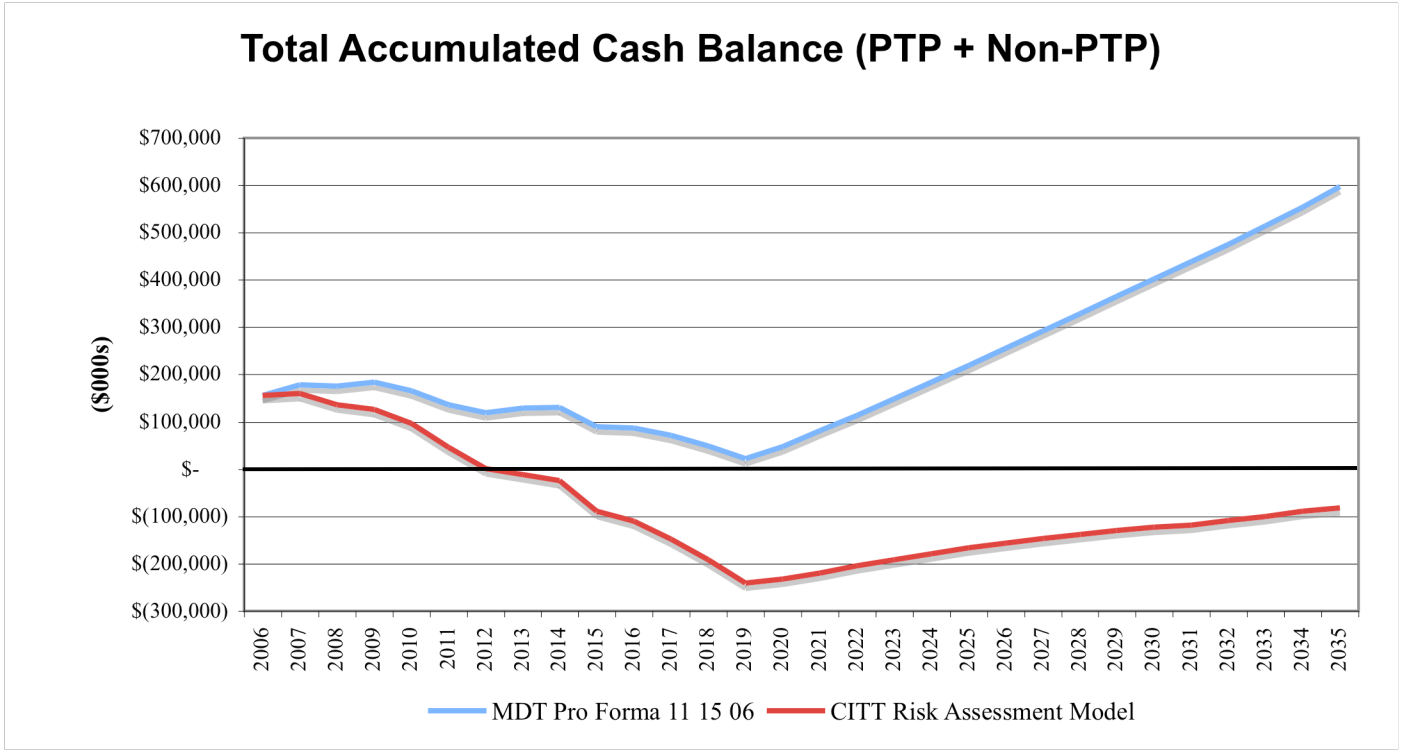


Note: Since Pro Forma matches CITT Validation Case very closely, it is difficult to distinguish them on some of these graphs.

The total net cash flow for the combined system in the Pro Forma and CITT Validation Case show similar trends though there are slight differences mainly due to debt service payment structuring.

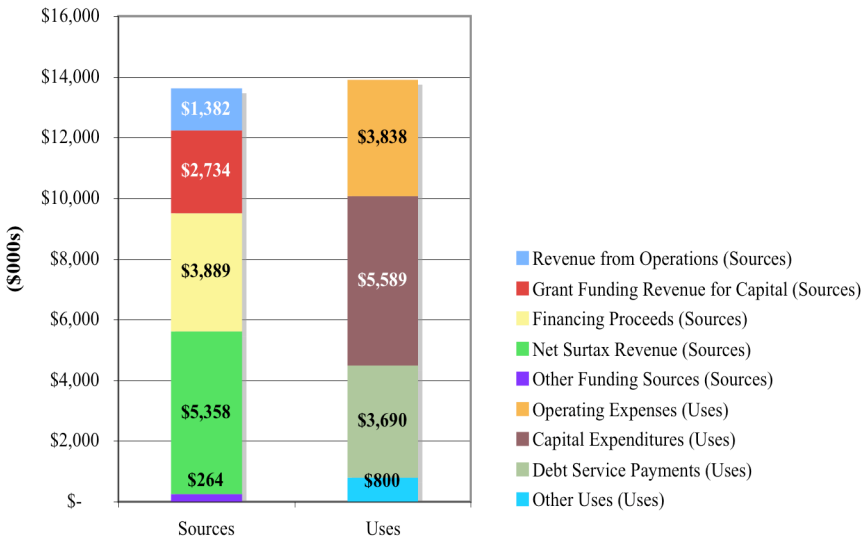


The accumulated cash balance forecast shows that even based on the MDT Pro Forma assumptions, the financing will be tight considering the accumulated cash balance approaches zero in 2019.

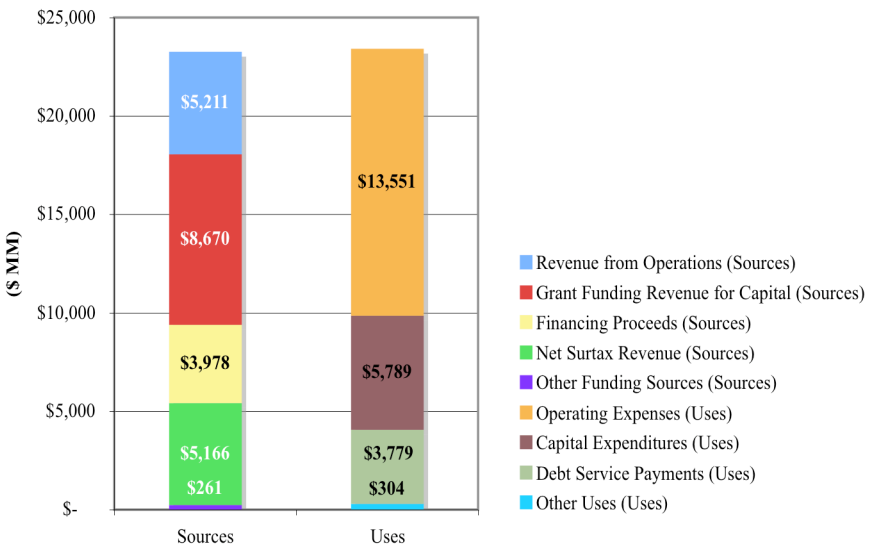


The CITT Validation Case 30-year net present value comparison of funding sources versus uses shows that sources virtually match uses, although uses are slightly higher.

Total 30-Year PTP Sources & Uses in Current Dollars



Total 30-Year (PTP+Non-PTP) Sources & Uses in Current Dollars



Sensitivity analysis was conducted using the CITT Risk Assessment model to compare alternatives with the CITT Validation Case.

- In addition to the cash flow deficit projected by the CITT Validation Case, the IMG Team used the CITT Model to identify and quantify the key risk factors facing the PTP program.
- Except for sensitivity #3, each sensitivity case presented in the table on the following slide shows the effect of changing only one assumption from the baseline scenario of the CITT Validation Case (i.e., the changes in assumptions are not cumulative).
  - For example, what if surtax revenues grow at 5.15% (Public Health Trust historic average) instead of 5.50% per year?
- The net present value ("NPV") of the net cash flows (both PTP plus non-PTP) from each case is used as the basis for comparing sensitivities.
  - If the NPV figure is negative, it indicates that MDT will be in deficit under a given scenario.
- The incremental effect (from baseline) on total nominal (not discounted) dollar figures are also presented alongside the effect on NPV figures.
- The NPV comparison method does not include the fact that the overall amount of outstanding debt at the end of the 30-year forecast may differ for a given scenario.
- Most of PTP capital expenditures occur in the first 10-12 years of the forecast and there are no major capital expenditures in later years in the Model, although in reality, these additional future year costs will likely exist.

Sensitivity Analysis: Summary of Key Sensitivity Results

Sensitivity		30-Yr Total Net Cash Flow (YOE $MM) [1]			30-Yr NPV of Net Cash Flow ($MM) [2]		
		PTP Net Cash Flow	Non-PTP Net Cash Flow	Total PTP + Non-PTP Cash Flow	PTP Net Cash Flow	Non-PTP Net Cash Flow	Total PTP + Non-PTP Cash Flow
Baseline Scenario (CITT Validation Case)		**$ (359)**	**$ 195**	**$ (164)**	**$ (325)**	**$ 187**	**$ (138)**
Incremental Cash Flow Difference from Baseline							
Sensitivity 1:	Operating revenues are 10% lower in all years [3]	$ (554)	$ (808)	$ (1,362)	$ (246)	$ (380)	$ (626)
Sensitivity 2:	Operating & maintenance (O&M) expenses are 10% higher in all years [3]	$ (716)	$ (2,024)	$ (2,740)	$ (320)	$ (951)	$ (1,271)
Sensitivity 3:	Operating & maintenance (O&M) expenses are 10% higher in all years; 3 major rail corridor capital expenditures are delayed by 10 years [3]	$ 987	$ (2,235)	$ (1,249)	$ 630	$ (1,039)	$ (409)
Sensitivity 4:	Remove North Corridor rail project	$ 1,423	$ 170	$ 1,593	$ 599	$ 60	$ 658
Sensitivity 5:	Remove FIU to MIC rail project	$ 1,363	$ 155	$ 1,518	$ 562	$ 53	$ 615
Sensitivity 6:	PTP rail capital expenditures are 10% higher in all years; incremental costs borne by state and local levels [3]	$ (455)	$ 1	$ (454)	$ (218)	$ 1	$ (217)
Sensitivity 7:	Federal grant contribution level for North Corridor and FIU to MIC projects lowered to 50% of project cost; correspondingly, state at 25% and local at 25%	$ (300)	$ 1	$ (299)	$ (138)	$ 0	$ (137)
Sensitivity 8:	Surtax revenue bond interest rates increased by 1.00%; earning rates and discount rate also change	$ (514)	$ 2	$ (513)	$ (193)	$ (12)	$ (205)
Sensitivity 9:	Surtax revenue annual growth rate changed from 5.50% to 5.15% in every year (PHT Historical)	$ (661)	$ 1	$ (661)	$ (251)	$ 1	$ (250)
Sensitivity 10:	Adding another quarter-penny to the sales tax; surtax revenues are 50% higher in all years [3]	$ 6,805	$ 193	$ 6,998	$ 2,993	$ 70	$ 3,063

1. *Year of Expenditure dollars (not discounted).*
2. *Here each case is discounted at a discount rate of 4.75%, based on the long-term interest rates used in the Pro Forma.*
3. *Sensitivity increases are the change compared to the baseline scenarios in each year--rate of growth for the given variables is unchanged.*

Sensitivity Analysis: Summary of Key Sensitivity Results (continued)

Sensitivity	10-Year Total Net Cash Flow (YOE $MM)[1]			Approximate Total Amount of Debt Outstanding in Year 10 ($ MM)	Surtax Revenue % Increase Required to Reach $0 NPV over 10 Years[2]	O&M Expense % Decrease Required to Reach $0 NPV over 10 Years[2]
	PTP Net Cash Flow	Non-PTP Net Cash Flow	Total PTP + Non-PTP Cash Flow			
Baseline Scenario (CITT Validation Case)	**$ (287.6)**	**$ 21.1**	**$ (266.5)**	**$ 3,940.6**	**11.5%**	**-4.4%**
Incremental Cash Flow Difference from Baseline						
Sensitivity: Operating revenues are 10% lower in all years[3]	$ (79.6)	$ (167.8)	$ (247.4)	$ 3,940.6	22.5%	-8.6%
Sensitivity: Operating & maintenance (O&M) expenses are 10% higher in all years[3]	$ (115.9)	$ (445.6)	$ (561.5)	$ 3,940.6	37.7%	N/A
Sensitivity: Operating & maintenance (O&M) expenses are 10% higher in all years; 3 major rail corridor capital expenditures are delayed by 10 years[3]	$ 395.0	$ (465.5)	$ (70.5)	$ 1,482.5	16.9%	N/A
Sensitivity: PTP rail capital expenditures are 10% higher in all years; incremental costs borne by state and local levels[3]	$ (99.0)	$ 1.2	$ (97.8)	$ 4,197.9	15.7%	-6.0%
Sensitivity: Surtax revenue annual growth rate changed from 5.50% to 5.15% in every year (PHT Historical)	$ (42.3)	$ 0.7	$ (41.6)	$ 3,940.6	13.5%	-5.0%

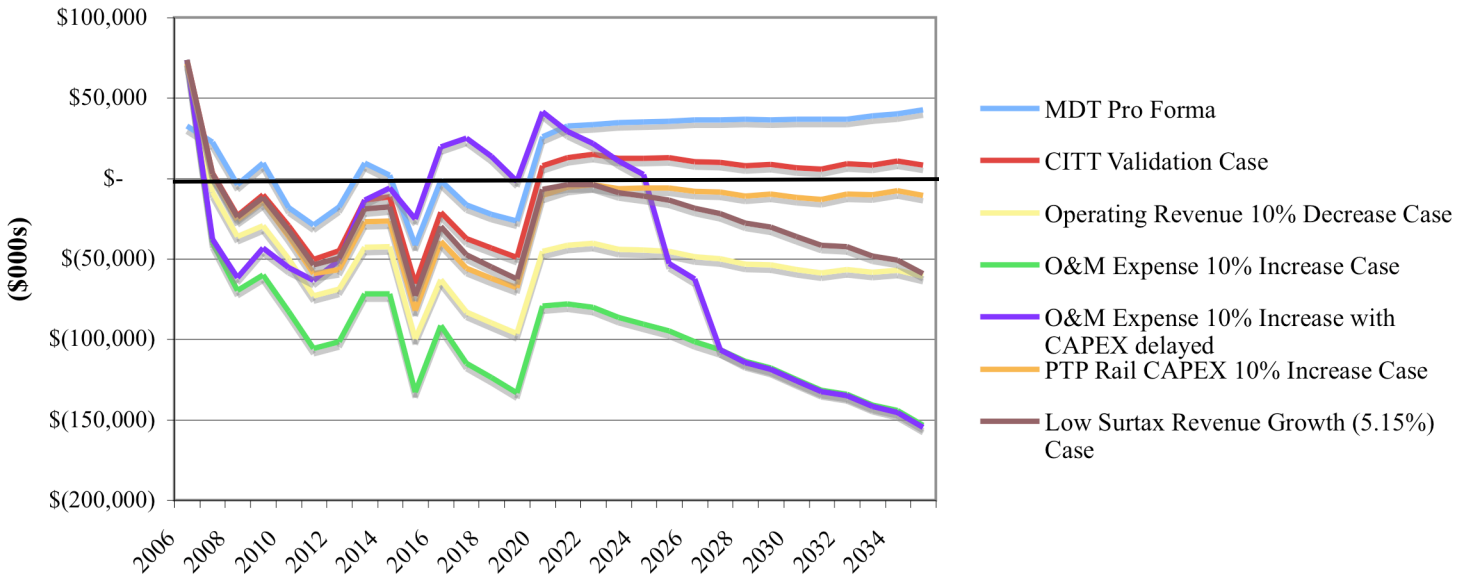
1. *Year of Expenditure dollars (not discounted).*
2. *Here each case is discounted at a discount rate of 4.75%, based on the long-term interest rates used in the Pro Forma.*
3. *Sensitivity increases are the change compared to the baseline scenarios in each year--rate of growth for the given variables is unchanged.*

The sensitivity analysis shows that the PTP faces various downside risks that could further constrain the net cash flows.

- Operational risks can significantly impact the bottom line:
  - Lower than expected operating revenue (potentially due to low ridership growth or expected increases not being realized) has a substantial negative impact.
  - Greater than expected increases in operating and maintenance expenses are a primary risk factor.
- While the increased capital expenditure sensitivity does not indicate a major adverse impact in NPV terms, the total outstanding debt balance is higher at the end of the forecast than in the baseline scenario.
- Other risks that are important but less significant in impact are:
  - Lower than expected grant funding and subsidy revenues
  - Higher surtax revenue bond debt financing interest rates
  - Lower than expected growth in surtax revenues.
- Most of these downside risks can be mitigated by adding a quarter-penny to the surtax.

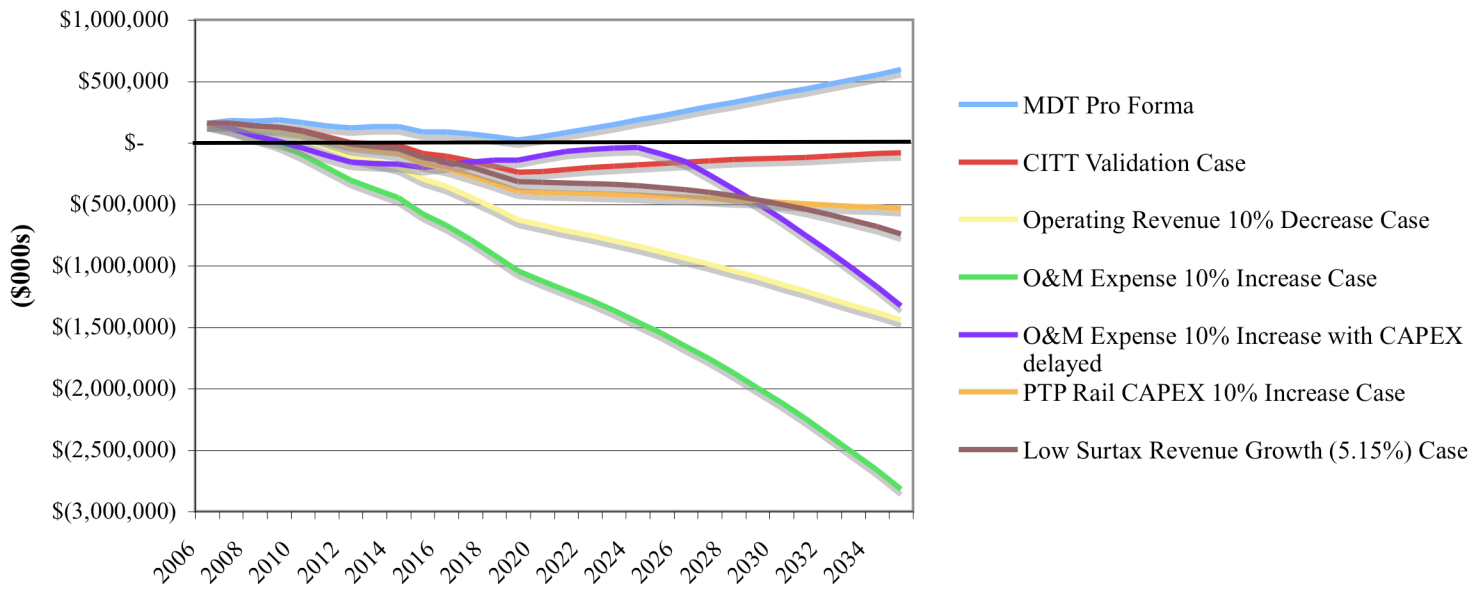
The sensitivity analysis shows that operating costs higher than expected or low revenues have the greatest effect on cash flows.

Total Net Cash Flow (PTP + Non-PTP)



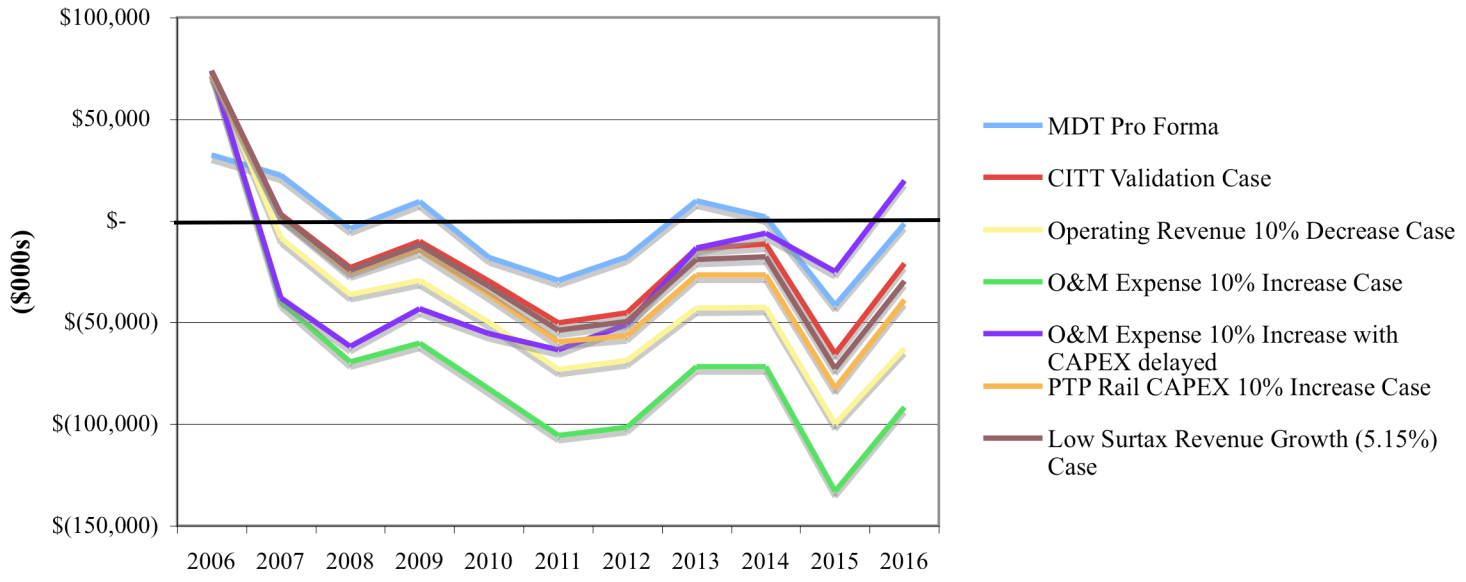
The sensitivity analysis shows that operating costs higher than expected or low revenues have the greatest effect on cash flows.

Total Accumulated Cash Balance (PTP + Non-PTP)



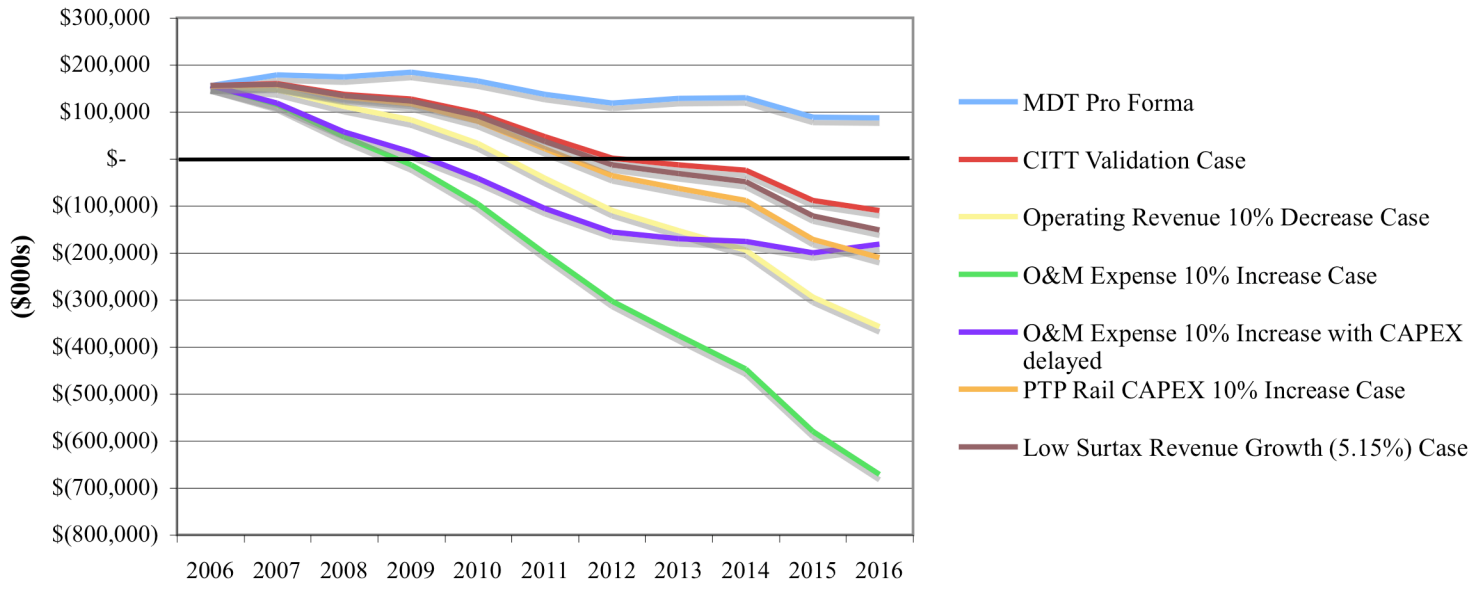
Net cash flows are forecast to be negative in seven of the next ten years in the Pro Forma.

Total Net Cash Flow (PTP + Non-PTP) 2007-2016



Negative annual cash flows will reduce the surtax balance in the next ten years.

Total Accumulated Cash Balance (PTP + Non-PTP) 2006-2016



There is a high likelihood that the half-penny surtax alone will not be adequate to fund all PTP projects.

- The Pro Forma shows very tight margins until 2019, when the last of the three rail corridors is completed.
  - Much of the balance in the 30-year forecast accrues in the final few years of the Pro Forma.
- Sensitivity analysis using the CITT Risk Assessment Model shows that even minor increases in operating costs or reductions in revenue will result in the surtax balance being exhausted.
- Realizing strong federal grant participation is critical for the PTP projects.
  - The assumed share of federal funds has grown significantly compared to the February 2006 Pro Forma.
- New revenue sources are needed to complete the planned projects.
  - Without additional revenue, portions of the capital program will need to be delayed.
  - A surtax increase of 25 cents would make the current plan feasible in most scenarios.

In the coming weeks, the IMG Team will conduct further risk assessment analysis.

- Continue working with OCITT to refine the Risk Assessment Model and ensure the latest MDT assumptions are incorporated.
- Monte Carlo probability risk simulation
- High-level review of the capital program
- Analysis of likelihood of achieving federal funding
- Benchmarking analysis
- Development of CITT Base Case
- Other analyses as requested.