

# State Notes

## TOPICS OF LEGISLATIVE INTEREST

Spring 2010



### Searching for Savings: Prevailing Cost Drivers for the Michigan Department of Corrections By Matthew Grabowski, Fiscal Analyst

---

Upon initial inspection, recent expenditures on behalf of the Michigan Department of Corrections (MDOC) may seem inconsistent with declines in the prison population that have occurred in the past three calendar years. Accordingly, several variants of the following question have been posed:

*Given the recent reductions in the prison population and associated facility closures, why has the MDOC been unable to achieve significant reductions in spending?*

Under closer inquiry, however, it becomes apparent that the MDOC budget is subject to a range of cost drivers that are not invariably linked to the overall level of incarceration. While there is undoubtedly a correlation between the prison population and State expenditures on corrections, the convergence of other variables has largely negated the savings associated with reductions in the population of Michigan's correctional facilities. Among these variables are employee economic costs, prisoner health care costs, prisoner reintegration, and community supervision programming. This analysis attempts to draw attention to these underlying cost drivers within the MDOC budget; in doing so, this report endeavors to provide a satisfactory response to inquiries on the savings (or apparent lack thereof) associated with reductions in the prison population and the closure of numerous correctional facilities.

#### Population and Expenditure Trends

Tables 1 and 2 provide a 10-year history of MDOC appropriations and year-end prison population, respectively. As shown in Table 1, gross appropriations to the MDOC increased steadily between fiscal year (FY) 2002-03 and FY 2007-08. Both FY 2008-09 appropriations and FY 2009-10 appropriations (to date) represent reductions from preceding years.

Table 1

Department of Corrections Funding History			
Fiscal Year	Full-Time Equated Positions (FTEs)	Gross	% Change in Gross Appropriations
2000-01	19,768.8	\$1,706,276,900	NA
2001-02	19,390.5	1,688,016,300	(1.1)%
2002-03	18,827.9	1,687,056,831	(0.1)
2003-04	18,296.7	1,705,829,881	1.1
2004-05	17,753.8	1,768,907,800	3.7
2005-06	17,509.2	1,885,554,200	6.6
2006-07	17,782.0	1,953,623,000	3.6
2007-08	17,637.4	2,079,681,100	6.5
2008-09	17,285.0	2,038,478,100	(2.0)
2009-10	15,746.1	1,956,122,800	(4.0)

Source: Annual Appropriations Acts



Table 2 shows a prison population that increased significantly from calendar year (CY) 2000 to the end of CY 2002. Overall incarceration then declined in both CY 2004 and CY 2005 before reaching a record high by the end of CY 2006.<sup>1</sup> Between January 1, 2007, and January 1, 2010, Michigan's prison population declined by nearly 6,000 inmates. This precipitous decline has been the primary impetus for additional scrutiny of the MDOC budget.

**Table 2**  
**Year-End Prison Population (Institutions and Camps)**

Calendar Year	Year-End Population	Numerical Change	Percent Change
2000	45,821	NA	NA
2001	47,317	1,496	3.3%
2002	49,459	2,142	4.5
2003	48,887	(572)	(1.2)
2004	48,557	(330)	(0.7)
2005	49,377	820	1.7
2006	51,454	2,077	4.2
2007	50,203	(1,251)	(2.4)
2008	48,686	(1,517)	(3.0)
2009	45,478	(3,208)	(6.6)

**Source:** MDOC Client Census Report

While MDOC appropriations and the prison population have generally trended along parallel paths, FY 2008-09 and FY 2009-10 are exceptions in a sense. Given that the prison population has declined by nearly 9.1% since October 1, 2008, one might expect a corresponding reduction in MDOC appropriations. In fact, the reduction in gross appropriations to the MDOC since that date has been \$123.6 million -- only a 5.9% reduction. Furthermore, reductions in the State's prison population have permitted the MDOC to close 19 individual correctional facilities in the past six fiscal years.<sup>2</sup> This total includes 10 prison camps and nine State prisons.<sup>3</sup>

In light of these facility closures, it may be appropriate to question whether current appropriations are necessary for the supervision of approximately 45,000 prisoners and 82,000 parolees and probationers by the MDOC. Although it can be unambiguous to claim that MDOC should have realized savings equivalent to the costs of operating the closed facilities, such an approach does not account for any reallocation or reinvestment of those savings within the MDOC budget. A more detailed inspection of recent appropriations to the MDOC reveals that personnel, prisoner health care, and community supervision have become the primary cost drivers in the MDOC budget.

<sup>1</sup> The Michigan prison population actually reached its peak in April 2007 before declining in the second half of that calendar year.

<sup>2</sup> For additional information, please see "Prison and Camp Closures" on the SFA website at <http://www.senate.michigan.gov/sfa/Publications/Notes/2009Notes/NotesMayJun09lh.pdf>.

<sup>3</sup> Muskegon Correctional Facility has remained open and is now financed through the housing of prisoners from the State of Pennsylvania.



## Employee Economics

For FY 2009-10, the MDOC is authorized to employ 15,746.1 full-time equated positions. The size of the Department's workforce dictates that even small wage or retirement adjustments can have a considerable impact on the overall budget. As shown in Table 3, employee economics costs have outpaced the total MDOC appropriations increases since FY 2004-05. These costs reflect contracted wage and salary increases, as well as increases in the employer-borne costs of health insurance and retirement. When these economic increases are not explicitly funded, as was the case in FY 2003-04, the MDOC must finance the costs through reductions in existing programming.

**Table 3**

<b>History of Funded Employee-Related Economic Increases</b>							
Fiscal Year	Salary	Insurance	Retirement	Workers' Compensation	Other	Total Employee Economics	Total Approp. Increase
2002-03	\$17,876,300	\$0	\$2,331,800	\$1,365,600	(\$7,217,100) <sup>a)</sup>	\$14,356,600	\$17,854,300
2003-04 <sup>b)</sup>	0	0	0	2,823,000	28,595,600 <sup>c)</sup>	112,628,900	37,450,369
2004-05	61,617,600	21,209,900	68,827,200	(2,549,000)	(46,342,500) <sup>d)</sup>	102,763,200	80,352,719
2005-06	10,590,700	22,831,700	18,362,900	(1,378,000)	46,342,500 <sup>d)</sup>	96,749,800	91,198,600
2006-07	36,328,100	13,633,100	32,057,900	(1,105,000)	0	80,914,100	54,867,300
2007-08	41,987,300	16,612,500	24,272,600	(932,000)	0	81,940,400	124,646,100
2008-09	10,004,600	(12,298,700)	7,320,000	(533,000)	0	4,492,900	(39,032,900)
2009-10	9,411,900	6,807,300	15,206,400	473,000	0	31,898,600	(54,869,300)

a) This eliminated a lump sum salary payment that had been part of the contract during FY 2000-01 & FY 2001-02.  
 b) Salary, insurances, and retirement increases were unfunded this year, but totaled \$81.2 million. PA 154 of 2008 required the MDOC to finance economic increases through reductions in programming.  
 c) Restored FY 2002-03 shortfall in retirement.  
 d) This reduction and subsequent increase of the same amount marks the start and end of employee concessions such as furlough days and banked leave time.

**Source:** State Budget Office

In addition to the increases listed above, unionized MDOC employees are scheduled to receive 3.0% pay raises at the onset of FY 2010-11. The cumulative impact of these salary adjustments will result in a further increase of approximately \$29.5 million in MDOC employee costs. It should be noted that the MDOC cannot manipulate employee compensation rates at will. Also, as confirmed by recent Senate floor debate, it is extremely difficult for the Legislature to rescind pay increases that are negotiated between labor unions and the Office of the State Employer.

Salary and wage economics aside, additional employee-related costs are an added strain on the MDOC budget. Absent any changes to the current structure of the State Employees Retirement System, one anticipates the continued growth of employer contributions to fund pension benefits. Across the various departmental budgets, Michigan faces a dilemma in addressing both increasing costs and unfunded liabilities in the State retirement programs. A recent report by the Pew Center on the States summarized this challenge as follows:



*The almost unavoidable upcoming increases in employer contributions could not come at a worse time. These actuarial demands have hit just as states' revenues have been squeezed by the recession. Employer contributions come out of the same pot of money that funds education, Medicaid, public safety, and other critical needs.<sup>4</sup>*

### Prisoner Health Care Costs

It should come as no surprise that prisoner health care costs have become a primary cost driver within the MDOC budget. Above and beyond the well documented increases in general health care costs over the past two decades, Michigan's truth-in-sentencing law has produced longer prison terms and an aging prison population. Although age is not necessarily a reliable proxy for health care needs, there can be little doubt that an aging prison population is driving health care costs upward.

Table 4 underscores the changing age dynamics of the Michigan prison population. In December 2009, the MDOC was responsible for twice as many prisoners over the age of 55 as had been incarcerated in December 2000. As elderly and near-elderly prisoners comprise an increasing share of the total prison population, the Department faces the daunting task of providing adequate care for individuals prone to chronic and degenerative health problems.

**Table 4**  
**Prison Population Over the Age of 55**

Calendar Year	Total Population	Prisoners Average Age	Prisoners Age > 55	% of Prisoners Age > 55
2000	47,718	35.1	2,107	4.4%
2001	48,849	35.4	2,365	4.8
2002	50,591	35.6	2,674	5.3
2003	49,357	35.9	2,865	5.8
2004	48,831	36.3	3,096	6.3
2005	49,139	36.6	3,370	6.9
2006	51,515	36.9	3,760	7.3
2007	50,233	37.2	4,021	8.0
2008	48,713	38.0 <sup>a)</sup>	4,662	9.6
2009	45,478	38.0 <sup>a)</sup>	4,217	9.3

<sup>a)</sup> Beginning in 2008, MDOC age stats were rounded to the nearest year.

**Source:** MDOC Annual Stat Report. Numbers reported collected in December of each year.

From a broader perspective, aggregate appropriations for prisoner health care have increased by a factor of five in the past two decades. As shown in Table 5 increases in health care costs borne by the MDOC have generally outpaced increases in the gross appropriations to the Department. In FY 1990-91, prisoner health care costs accounted for just 6.0% of the gross appropriations to

<sup>4</sup> "The Trillion Dollar Gap: Underfunded State Retirement Systems and the Roads to Reform", Pew Center on the States, February 2010.  
[http://downloads.pewcenteronthestates.org/The\\_Trillion\\_Dollar\\_Gap\\_final.pdf](http://downloads.pewcenteronthestates.org/The_Trillion_Dollar_Gap_final.pdf)



the MDOC; in contrast, prisoner health care accounts for 13.3% of the FY 2009-10 year-to-date appropriations.

**Table 5**

<b>Health Care Appropriation History</b>			
<b>Fiscal Year</b>	<b>Gross Appropriation</b>	<b>Health Care <sup>1)</sup></b>	<b>Health Care as of % of Gross Appropriation</b>
1990-91	\$844,834,100	\$50,813,500	6.0%
1991-92	961,815,700	52,378,700	5.2
1992-93	1,034,639,100	74,056,000	7.2
1993-94	1,151,482,100	76,413,000	6.6
1994-95	1,222,204,800	84,639,900	6.9
1995-96	1,315,090,800	89,495,400	6.8
1996-97	1,350,709,533	95,882,100	7.1
1997-98	1,389,827,700	107,563,400	7.7
1998-99	1,450,202,500	108,582,700	7.5
1999-2000	1,564,700,800	120,151,100	7.7
2000-01	1,706,276,900	140,086,100	8.2
2001-02	1,688,016,300	148,907,800	8.8
2002-03	1,687,056,831	156,308,800	9.3
2003-04	1,705,829,881	162,015,700	9.5
2004-05	1,768,907,800	170,036,500	9.6
2005-06	1,885,554,200	191,892,800	10.2
2006-07	1,953,623,000	231,010,300	11.8
2007-08	2,079,681,100	236,407,300	11.4
2008-09	2,038,723,100	270,124,900	13.2
2009-10 <sup>2)</sup>	1,956,122,800	259,647,300	13.3

<sup>1)</sup> Includes health care administration, clinical complexes, prisoner health care services (formerly hospital and specialty care), and vaccinations.  
<sup>2)</sup> Year-to-date appropriations.

**Source:** Annual Appropriations Acts

On April 1, 2009, the Michigan Department of Corrections entered into a new, three-year contract for prison health care services with Prison Health Services, Inc.. Because this new agreement establishes a limited-risk capitation payment schedule for prisoner health services, the MDOC is hopeful that the upward trend in prison health care costs will be restrained.

### **Community Supervision and Prisoner Reintegration**

In the past decade, the MDOC has begun to make the transition from a primarily incarceration-oriented organization to one that invests heavily in alternative sanctions and community-based supervision. Furthermore, the MDOC has implemented and subsequently expanded the Michigan Prisoner Re-Entry Initiative (MPRI), which provides services and programming intended to reduce recidivism rates and ease the transition from prison to community. While it is significantly less expensive to supervise an offender in the community than in a State corrections facility, these transitions have required the MDOC to redirect resources and incur additional costs. It is



essential to recognize that a prisoner who has been paroled is still under MDOC supervision for a period of time. Thus, savings that may result from reductions in the prison population are offset to some degree by community supervision costs.

Table 6 includes a recent history of appropriations to three key budget areas: field operations, the MDOC electronic monitoring center, and prisoner reintegration (MPRI). The field operations budget line includes funding for parole and probation agents, and reflects overall community supervision to an extent. Funding appropriated for the electronic monitoring center is spent for the remote observation of select individuals using technologies such as GPS tethers and blood-alcohol monitors. The prisoner reintegration line is used to fund MPRI programming including, but not limited to, workforce development, health-related services, and residential stability.<sup>5</sup>

**Table 6**

<b>Funding History for Select Lines FY 2004-05 to FY 2009-10</b>					
<b>Fiscal Year</b>	<b>Field Operations</b>	<b>Electronic Monitoring Center</b>	<b>Prisoner Reintegration (MPRI)</b>	<b>Total</b>	<b>Total % Change</b>
2004-05	\$135,735,600	\$3,533,200	\$0	\$139,268,800	NA
2005-06	138,960,600	4,637,500	0	143,598,100	3.1%
2006-07	146,501,000	5,649,500	0	152,150,500	6.0
2007-08	153,833,000	7,086,900	30,904,700	191,824,600	26.1
2008-09	159,619,400	9,583,500	46,632,400	215,835,300	12.5
2009-10	171,935,100	11,306,300	57,895,700	241,137,100	11.7

**Source:** Annual Appropriations Acts

As shown here, appropriations for field services have increased 26.7% since FY 2004-05, while appropriations for electronic monitoring have increased more than threefold in the same span. These additional appropriations are driven primarily by increases in the number of parolees under MDOC supervision. Recent census reports released by the MDOC seemingly confirm this assertion. While the number of parolees under MDOC supervision fluctuates daily, periodic snapshots of that population strongly suggest an upward trend. As of April 1, 2010, the MDOC was responsible for 20,120 parolees; just two years earlier, on April 1, 2008, the total number of parolees was 16,796.<sup>6</sup> In sum, the increase in the parole population has forced the MDOC to hire additional parole agents and invest in additional electronic monitoring resources.

## Conclusion

The FY 2009-10 MDOC budget, as enacted, assumed \$118.0 million in savings resulting from reductions in the prison population and the closure of three State prison facilities and five prison camps during calendar year 2009.<sup>7</sup> Accounting for the additional closures completed by the MDOC between FY 2004-05 and the present, one might expect a reduction to the Department's

<sup>5</sup> Further information on the Michigan Prisoner Re-Entry Initiative is available at [www.michpri.com](http://www.michpri.com) and [http://www.michigan.gov/corrections/0,1607,7-119-9741\\_33218---,00.html](http://www.michigan.gov/corrections/0,1607,7-119-9741_33218---,00.html).

<sup>6</sup> Michigan Department of Corrections, monthly client census summary reports.

<sup>7</sup> PA 114 of 2009. Muskegon Correctional Facility is now being used to house prisoners from the State of Pennsylvania.

**State Notes**  
TOPICS OF LEGISLATIVE INTEREST  
Spring 2010



baseline budget in excess of \$200.0 million. In practice, however, the MDOC has been obliged to account for increasing employee-related costs and prison health care costs. Moreover, MDOC efforts to assist parolees with the transition from prison to the community have necessitated the reinvestment of savings that resulted from population reductions and prison closures.

If nothing else comes of this analysis, it should be evident that legislators face an arduous task in evaluating expenditures by the MDOC. While prison population reductions and facility closures reduce aggregate incarceration costs, many of these unspent dollars then are redirected to finance community supervision and prisoner re-entry services. Absent additional reductions in the prison population, it is difficult to ascertain methods by which the MDOC can further reduce spending. Ultimately, it seems that successful cost-containment strategies must address the cost drivers outlined here.

# State Notes

## TOPICS OF LEGISLATIVE INTEREST

Spring 2010



### **Race to the Top School Reforms: Current Status and Prospects** **By Curtis Walker, Legislative Analyst, and Kathryn Summers, Chief Analyst**

---

#### **Introduction**

The American Reinvestment and Recovery Act of 2008 (ARRA) appropriated \$4.35 billion to the new Race to the Top (RTTT) Fund, to be used for grants to states that develop and implement comprehensive education reform plans that meet certain requirements. The deadline to apply for the first round of grants was January 19, 2010. Michigan, along with 39 other states and the District of Columbia, submitted an application for a grant in the first round.

Of the 41 applicants, 16 states were selected as finalists; Michigan was not among them. On April 2, 2010, the U.S. Department of Education announced that Delaware and Tennessee had been selected to receive RTTT grants in the first round. Delaware received about \$100.0 million, and Tennessee was granted \$500.0 million. States that were not awarded a grant may apply for a second round of grants.

This article describes Michigan's recently enacted RTTT legislation and related activities, as well as the fiscal impact of the legislation. It also summarizes the winning applications from Tennessee and Delaware, and describes the reviewers' response to Michigan's application.

#### **RTTT in Michigan**

Michigan's application was organized around the Michigan Integrated Education Reform Plan (MIERP). That plan incorporates a number of legislative reforms included in Public Acts 201 through 205 of 2009.<sup>1</sup> Among other things, those Acts do the following:

- Permit the creation of a limited number of "Schools of Excellence", which must be modeled after high-performing schools or programs.
- Require the creation of a teacher identification system that can match an individual teacher with individual pupils he or she has taught.
- Require each school board to adopt an evaluation system that measures student growth and uses the evaluations in compensation, promotion, and retention decisions.
- Require the lowest-performing 5% of public schools in the State to be placed into a State School Reform/Redesign (SSRR) District.
- Require each school in the SSRR District to submit a redesign plan, and require the amendment of any collective bargaining agreements as necessary to implement the plan.
- Require the establishment of an alternative process under which a person may earn an interim teaching certificate, and after three years of satisfactory performance teaching in public schools, receive a full teaching certificate.
- Require a school administrator hired after January 4, 2010 to have a school administrator's certificate.
- Require a pupil to attend public school until the age of 18 (rather than 16), unless he or she is at least 16 and has the written permission of his or her parent or guardian to stop attending school.

---

<sup>1</sup> For a complete description of the legislation, please see the Summary as Enacted of Senate Bills 926 and 981 and House Bills 4787, 4788, and 5596, which is available through the Senate Fiscal Agency website: <http://www.senate.michigan.gov/sfa/>.



Those legislative reforms, while significant, comprised only a portion of the total RTTT grant application.

Among other initiatives, Michigan joined a consortium of other states to develop and adopt common academic standards, and committed to working with a number of consortia to develop high-quality assessments. By providing support to the local education agencies (LEAs) with the greatest achievement gaps and developing and distributing instructional materials based on the new standards, the application proposed that Michigan could reduce the disparities in educational achievement and improve academic performance across the State. The Teaching for Learning Framework is a web-based tool to help teachers in that effort, and will be in operation before the start of the 2010-2011 school year.

In addition, Michigan is developing a State Longitudinal Database System to track student performance over time and has created the Data for Student Success portal to allow easier access to the data in a usable form. Data will be disbursed to eight regional data initiatives to drive academic research and policy decisions.

About 89.0% of LEAs and 8.0% of teacher union representatives signed a memorandum of understanding (MOU) in support of the reform agenda.

### **Fiscal Impact on the State**

Michigan's RTTT legislation imposes numerous fiscal responsibilities on the State that will require State funding (or a repeal or change in State law) if Michigan is not successful in receiving Federal funds from the second round of grant applications. Specifically, the State Budget Office and Michigan Department of Education (MDE) have estimated that a total of 27.0 full-time equated staff (FTEs) at the MDE and \$41.4 million are necessary to begin implementing all components of the legislation in fiscal year (FY) 2009-10, and \$23.1 million is necessary in FY 2010-11. Of these totals, State funding of nearly \$500,000 General Fund/General Purpose (GF/GP) was appropriated in an FY 2009-10 supplemental, and \$1.7 million GF/GP is requested for next year, to cover costs in the legislation that are not allowed to be paid for by Federal funds. The remainder of the costs could be paid for with Federal funds, but only if Michigan is successful in being awarded an RTTT grant in the second round.

Specifically, the costs are broken down as follows

- 14.0 FTEs and \$25.0 million in FY 2009-10, and \$17.0 million in FY 2010-11, for the development of student growth measures based on assessments and other objective criteria that are to be used by districts for purposes of teacher and school administrator evaluations and compensation systems, and in public school academy (charter school) contracts. If Michigan is successful in its second RTTT application, then funds awarded under that grant could be used to pay for these activities. However, until Federal funds are received or State replacement funds are identified, the Michigan Department of Education has stated it will not be able to implement these requirements. Also, local districts will incur costs for implementing the student growth measures in teacher and school administrator evaluations and compensation systems; if Federal RTTT funds are received, they can be used by districts to pay for these costs, but if not, then districts still have to implement the changes, and pay for them out of operating funds.



- \$15.9 million in FY 2009-10, and \$4.4 million in FY 2010-11, for the completion of Federally required components of the statewide longitudinal data system, the primary component of which is to link individual teacher and student achievement data. The State has asked to use a portion of any RTTT funding received for this purpose, and the Center for Educational Performance and Information has applied for a separate Federal competitive grant in case Michigan does not receive an RTTT grant. However, if Michigan is not successful in either of these Federal grants, the changes still must be made to the data system since Michigan made assurances to the Federal government when applying for ARRA State Fiscal Stabilization Funding (SFSF) that this work would be done. Michigan received \$1.6 billion in SFSF, of which \$1.3 billion has been used to support the K-12 budget in FY 2008-09 and FY 2009-10, with the remaining funding proposed to be used in FY 2010-11.
- \$492,800 State GF/GP and 13.0 FTEs in FY 2009-10, and nearly \$1.7 million State GF/GP in FY 2010-11, for State-level activities required under the package of State legislation, but not directly part of the Federal RTTT application. These activities include the School Reform/Redesign Officer, responsible for overseeing the turnaround and redesign of the bottom 5% of lowest-achieving schools, creation of Schools of Excellence and Cyber schools, an alternative process for teacher certification, a required certification of school administrators, and a process to ensure that teachers and principals have adequate access to basic instructional supplies.
- By the 2016-2017 school year, between \$150.0 million and \$250.0 million yearly to pay for the increase in the dropout age from 16 to 18 years. The current age at which students are legally allowed to drop out of school is 16; data indicate there are somewhere between 25,000 and 35,000 dropouts each year, of varying ages. If all these students instead remained in school, and did not receive a waiver or ignore the law, then the full State cost could range between \$150.0 million and \$250.0 million per year. However, to the extent students either received waivers to drop out at an earlier age, or simply ignored the requirement, the additional yearly cost would be less.

The first three items discussed above are likely to have longer fiscal impacts than are stated here, since the reforms are permanent. Some of the initial up-front costs will decline over time, but the expanded data, assessment, and personnel infrastructure likely will remain, thereby generating long-term costs.

### **Race to the Top Criteria**

As part of the evaluation process, each application was reviewed based on criteria specified by the U.S. Department of Education. The criteria gave "absolute priority" to a comprehensive approach to education reform, and second priority to an emphasis on science, technology, engineering, and math (STEM). The criteria were broken down into the following six main categories, with separate criteria listed under each:

- A. State Success Factors
- B. Standards and Assessments
- C. Data Systems to Support Instruction
- D. Great Teachers and Leaders
- E. Turning Around the Lowest-Achieving Schools
- F. General



(The separate criteria in each category are described below in the discussion of "Response to Michigan's Application".)

Points were assigned for each category and subcategory, totaling a maximum possible score of 500. Each application was evaluated by five reviewers, and the 16 highest-scoring applications were re-evaluated to determine the final scores. The two top rankings were 443.4 for Tennessee and 438.4 for Delaware. Michigan ranked 21<sup>st</sup> out of the 41 applicants, with a score of 366.2.

### **RTTT in Tennessee**

Tennessee's application is centered on the state's data collection system, which Tennessee says is the oldest and most comprehensive in the country. Recent changes to Tennessee law permit the use of student performance data in determining teacher and administrator compensation.

The state proposes developing more rigorous assessments to address the gap in performance between the state assessments and Tennessee students' National Assessment of Educational Progress (NAEP) scores. The application also includes aggressive goals for eliminating the achievement gap on the state assessment test and reducing the achievement gap on NAEP, including specific target dates.

The state has established an "Achievement School District" that will consist of underperforming schools, and the State Education Commissioner will have the authority to intervene in those schools to enact reforms.

Tennessee also passed legislation to increase the cap on charter schools in the state.

Officials and union representatives in every school district signed an MOU indicating support for the RTTT initiative.

### **RTTT in Delaware**

Delaware's application also stresses the importance of data collection. The state will augment its existing longitudinal data system to include extensive testing data for each student, and will use the data to evaluate teacher performance. The state has developed a teacher evaluation system based on Charlotte Danielson's *A Framework for Teaching*, and has adopted standards developed by the Interstate School Leaders Licensure Consortium.

Student growth is a key factor in determining teacher effectiveness, and the results of the teacher evaluations will inform professional development decisions and the promotion, retention, and removal of teachers.

The state also will track teacher performance to identify the most effective teacher preparation programs.

The state proposes that teacher tenure be conditional on student performance, although implementing that proposal will require legislative action.

The lowest-performing schools in the state may be placed into a "Partnership Zone". Schools in the Zone must adopt one of four intervention models (closure, turnaround, restart, or transformation), and are subject to state oversight to ensure improved performance.



The proposed reforms received support from each LEA and all affected teacher union representatives.

**Response to Michigan's Application**

Michigan's application received a score of 366 out of 500, compared with the winning scores of about 440. Each reviewer wrote extensive comments on each section of the application, indicating its strengths and opportunities for improvement. Table 1 shows the scores given by each reviewer and the average score. It is followed by a summary of the comments in the areas that cost Michigan the most points.

**Table 1**

<b>Michigan Race to the Top Scores</b>									
<b>Criterion</b>		<b>Available Points</b>	<b>Reviewer 1</b>	<b>Reviewer 2</b>	<b>Reviewer 3</b>	<b>Reviewer 4</b>	<b>Reviewer 5</b>	<b>Average Score</b>	<b>Lost Points</b>
State Success Factors	A(1)	65	35	47	42	43	22	37.8	<b>27.2</b>
	A(2)	30	27	20	19	24	22	22.4	7.6
	A(3)	30	11	17	21	17	12	15.6	<b>14.4</b>
Standards and Assessments	B(1)	40	38	36	40	40	40	38.8	1.2
	B(2)	10	10	8	10	10	10	9.6	0.4
	B(3)	20	20	16	20	18	17	18.2	1.8
Data Systems to Support Instruction	C(1)	24	10	10	10	10	10	10	14
	C(2)	5	5	5	4	5	4	4.6	0.4
	C(3)	18	18	15	14	16	14	15.4	2.6
Great Teachers and Leaders	D(1)	21	13	15	13	9	12	12.4	8.6
	D(2)	58	41	39	39	37	37	38.6	<b>19.4</b>
	D(3)	25	15	16	17	12	7	13.4	<b>11.6</b>
	D(4)	14	11	10	7	8	9	9	5
	D(5)	20	10	12	20	14	8	12.8	7.2
Low-Achieving Schools	E(1)	10	10	10	10	10	10	10	0
	E(2)	40	38	30	26	33	34	32.2	7.8
General	F(1)	10	10	10	10	10	10	10	0
	F(2)	40	36	33	34	30	40	34.6	5.4
	F(3)	5	5	4	5	5	5	4.8	0.2
Emphasis on STEM	Priority 2	15	15	15	15	15	15	15	0

A(1): Articulating Reform Agenda and LEA Participation

The reviewers generally praised the overall reforms in the application, calling it "coherent and comprehensive", although one reviewer disagreed, saying that the goals did not represent a unified whole, and that the application did not provide enough details about how the goals would be achieved.

All reviewers expressed concern about the low level of union support for the reform agenda, and worried that the State would be unable to meet its reform objectives without extensive cooperation from teacher unions. (As mentioned above, only 8.0% of local union leaders signed the MOU.)



One reviewer also emphasized that support from school districts was not unanimous, either. Although over 89.0% of districts signed onto the MOU, 88 districts did not, indicating that there might be localized resistance to the reform agenda.

A(2): Building strong statewide capacity to implement, scale up, and sustain reforms

Again, the most common concern was the limited support from the teacher unions. Without that support, reviewers worried that the burden of reform would fall largely on the LEAs, which would be unable to implement some measures without union cooperation. Some reviewers noted that the State might have trouble funding the reforms going forward, given Michigan's economic troubles. One reviewer mentioned that the application did not take full advantage of Michigan's system of universities, one of the State's greatest strengths.

A(3): Demonstrating significant progress in raising achievement and closing gaps

Several reviewers complained that the application did not include sufficient detail on achievement and student performance. One noted that while student performance on the State assessments showed improvement, there was no similar increase in NAEP scores, and that performance gaps persisted.

Another common complaint was that the application did not include graduation rate data, although the application explained that the methodology for calculating the rate had recently changed, making comparisons with data from previous years impossible.

C(1): Fully implementing a statewide longitudinal data system

The application was marked down in this area because Michigan has not yet fully implemented its longitudinal data system, although the application does describe the current data collection efforts and projects full implementation by December 2010. There is little that can be done to address that criticism except to move ahead with current implementation efforts.

D(2): Improving teacher and principal effectiveness based on performance

The RTTT legislation requires the Center for Educational Performance and Information within the State Budget Office to develop a system to identify teacher performance based on the individual performance of his or her students. While the reviewers praised that initiative, several objected that the evaluations would include only students who were present for the entire evaluation period. Excluding some students could allow teachers or administrators to "game" the system, the reviewers said. Also, that policy could fail to adequately measure student performance in areas of high mobility. Since students who move a lot may be at high risk of falling behind academically, the reviewers argued that those students should be included in any evaluation system.

In addition, there was skepticism about the short timeline for developing and implementing performance evaluation systems for each school district, and several reviewers emphasized that union support would be essential to the success of any system that uses teacher evaluations to determine compensation. One suggested that there needs to be a mechanism to deal with a failure to reach a collective bargaining agreement.



D(1): Providing high-quality pathways for aspiring teachers and principals

The reviewers noted that Michigan recently enacted legislation providing for alternative certification of teachers and for certification of administrators, but several reviewers requested more information about those initiatives, such as copies of the legislation or current data on identified teacher shortages. In addition, some reviewers wondered whether the strategies listed in the application would be sufficient to meet the demand for teachers, particularly in math and science.

D(3): Ensuring equitable distribution of effective teachers and principals

According to the comments, the application should include additional strategies to improve teacher effectiveness and improve the distribution of teachers and principals, including incentives, higher pay, and improving the work environment to make it more attractive to teachers. Reviewers generally approved of the mentoring aspects of the application, but suggested that the efforts listed would not be sufficient to overcome the current disparities. One evaluator suggested that Michigan should implement policies at the State level to improve the equitable distribution of teachers and administrators in low-performing schools.

D(5): Providing effective support to teachers and principals

The application lists efforts to create a central online resource to direct teachers and administrators to existing professional development programs. Several reviewers asked for more information about that proposal and requested more specific details about how the MDE would support teachers and principals.

E(2): Turning around the lowest-achieving schools

The reviewers uniformly praised Michigan's newly enacted plans to identify and reform consistently low-performing schools, which require the lowest-performing 5% of schools to submit turnaround plans based on one of the four RTTT models. One reviewer was concerned that the plan relied too heavily on outside vendors to turn around schools, and emphasized that the State needed to maintain strict oversight, particularly if the entity implementing the reforms had a past relationship with the school that could make it difficult for the vendor to make the difficult choices necessary to improve conditions.

The reviewers generally approved of the School Reform/Redesign District, which allows for intervention in schools where the turnaround plan is insufficient. The concept is similar to Tennessee's Achievement School District and Delaware's Partnership Zone, which also received high marks.

The application also emphasized ongoing efforts to reform Detroit Public Schools and the Pontiac School District, but some reviewers raised concerns about whether those interventions were sufficient, and asked for more detailed plans to improve low-performing schools in those districts.

F(2): Ensuring successful conditions for high-performing charter schools and other innovative schools

Reviewers praised Michigan's existing charter school system and welcomed the addition of the new Schools of Excellence, which will be modeled after high-performing schools. Several reviewers spoke highly of Michigan's system for holding charter schools accountable, mentioning that Michigan had closed 26 charter schools since 1998. One reviewer asked for more information on factors that inhibit the approval of new charter schools in the State.



Reviewers also praised other innovative education models in the application, including the cyber schools permitted under the RTTT legislation, technical high schools, and other efforts to provide services and support to students at risk of dropping out of school.

### **Conclusion**

In general, Michigan's MIERP reform plan shares many characteristics with the proposals submitted by Delaware and Tennessee. One of the key differences is the degree of support among LEAs and other stakeholders, which reviewers cited as necessary to ensure successful implementation. Some also were concerned that the application did not cite specific funding sources for reform efforts, and worried that Michigan would have difficulty fully funding various aspects of the plan, given the State's economic situation.

In other areas, the application was criticized for past actions. The reviewers cited mixed data on student achievement and closing the achievement gap, and the application was criticized because the longitudinal data system was still in the process of being fully implemented.

Reviewers also asked for more details in several areas, including graduation data, a copy of the MOU signed by LEAs and other stakeholders, and further information on how Michigan plans to meet teacher shortages.

Many of the legislative initiatives were widely praised, and the section of the application dealing with turnaround schools received high scores overall. In addition, the proposal to evaluate teacher performance based on individual student achievement was welcomed, although some reviewers raised concerns about the implementation.

The comments on Michigan's application and the details of the winning applications provide a framework for further refining Michigan's reform efforts, if the State chooses to reapply for an RTTT grant in round two. The deadline for applications is June 1, 2010. Only about one eighth of the available money was awarded in the first round, and Secretary of Education Arne Duncan has said that the second round will likely include 10 to 15 recipients (*Education Week*, "\$3.4 Billion Remains in Race to Top Fund", 4-7-10).

In addition, the President has indicated that he will request an additional \$1.35 billion in the FY 2011 budget to continue the program (*Education Week*, "Obama to Seek \$1.35 Billion Race to Top Expansion", 4-15-10).

Regardless of whether the State receives an RTTT grant, the enacted legislation represents a substantial reform of Michigan's education system, aimed at addressing long-standing disparities in quality and improving accountability for educational outcomes. That effort is well aligned with the stated goal of the Race to the Top program, which is to drive innovation at the state level to ensure that all children have access to high-quality public education.

# State Notes

## TOPICS OF LEGISLATIVE INTEREST

Spring 2010



### History of the Underground Storage Tank Programs in Michigan

By Josh Sefton, Fiscal Analyst

---

#### Introduction

Since 1986, over 21,800 releases from underground storage tanks (USTs) have been reported or discovered in tanks storing petroleum products. These releases have the potential to affect groundwater quality near and around the release site, and as a result, USTs are regulated on the State and Federal levels. Underground storage tank regulations essentially have three goals:

- To ensure proper installation, maintenance, and removal of USTs so as to help prevent releases.
- To ensure that releases are reported promptly, and that parties liable for releases are held accountable for costs associated with ensuing mitigation and cleanup actions.
- To ensure that releases from tanks that have no legally responsible owner, so-called "orphan" tanks, are dealt with.

It is estimated that since the UST programs were created almost 25 years ago, approximately 12,750 releases have been cleaned up, leaving about 9,100 releases unaddressed. The Department of Natural Resources and Environment (DNRE) estimates that approximately half of these 9,100 remaining sites are orphan sites, meaning that the State is the only entity likely to take any remedial action on them. At a cost of \$400,000 per site, on average, the DNRE estimates that this backlog of orphan sites needing action could cost upward of \$1.8 billion. The bulk of these documented releases are not newly discovered; 60.0% of them are more than 10 years old, and 88.0% are over five years old. These older release sites represent a "catch-22" situation for the DNRE, as older sites tend to require more extensive cleanups, since released products have had more time to seep further into the ground and spread. This makes these cleanups more expensive, and consequently the Department is unable to perform as many cleanups, which in turn allows existing releases to age and become more extensive.

This article gives a brief history of the three major UST-related programs administered by the State of Michigan, and shows how funds have been appropriated to these programs historically.

#### Underground Storage Tank Program

Efforts to regulate USTs began in 1984, when the United States Congress enacted Subtitle I of the Resource Conservation and Recovery Act. Subtitle I required the U.S. Environmental Protection Agency (EPA) to promulgate a regulatory structure for USTs that held petroleum or other hazardous materials. Subtitle I allowed states to establish their own regulations as long as they were no less stringent than those of the EPA. Additionally, funding was offered to help states implement UST regulatory programs. In response to Subtitle I, Michigan enacted Public Act (PA) 423 of 1984, known as the Underground Storage Tank Regulatory Act (UST Act). The UST Act, which is now Part 211 of the Natural Resources and Environmental Protection Act (NREPA), required all owners of USTs (with certain exceptions) to register them with the Fire Marshal Division of the State Police, and to comply with regulations regarding installation and removal of USTs. (Currently, the Bureau of Fire Services and the State Fire Marshal are within the Department of Energy, Labor, and Economic Growth.) Underground storage tanks exempted from regulation under the UST Act include:

- farm and residential tanks of 1,100 gallons or less holding fuel used for noncommercial purposes,

# State Notes

## TOPICS OF LEGISLATIVE INTEREST

### Spring 2010



- tanks storing heating oil to be used on the premises where it is stored,
- tanks mounted on or above the floor of below-grade areas such as basements,
- septic tanks and systems for collecting storm water and wastewater,
- flow-through process tanks,
- tanks of 110 gallons or less, and
- emergency spill and overflow tanks.

The UST Act also charged the Fire Marshal Division with investigating reported leaks from tanks, periodically inspecting existing tanks, and inspecting tanks before they are decommissioned. The program was initially funded by a \$100 annual fee paid by owners of USTs and EPA grant funds. Today, the program, which is now housed within the DNRE, uses both of those funding sources, as well as revenue from the Refined Petroleum Fund for its operations, as revenue from the annual registration fee is no longer sufficient to sustain the program. The \$100 annual fee has not been increased since it was first collected in 1988. Table 1 shows a history of appropriations to the UST program.

**Table 1**  
**Appropriations for Underground Storage Tank Program**  
**(dollars in thousands)**

Fiscal Year	Department Housing UST Program	FTEs Appropriated	Total Appropriation	UST Fees Appropriated	Federal Funds Appropriated	Refined Petroleum Fund Appropriated	Other Funds Appropriated
1988-89	State Police	3.0	326.5	0.0	244.9	0.0	81.6 IDG from DNR
1989-90	State Police	20.0	6,262.5	6,000.0	262.5	0.0	0.0
1990-91	State Police	24.0	10,209.5	10,047.0	162.5	0.0	0.0
1991-92	State Police	48.0	8,835.2	8,582.6	252.6	0.0	0.0
1992-93	State Police	48.0	8,963.7	8,707.5	256.2	0.0	0.0
1993-94	State Police	48.0	8,930.3	8,674.1	256.2	0.0	0.0
1994-95	DNR	48.0	9,230.0	8,973.8	256.2	0.0	0.0
1995-96	DNR	45.0	6,375.5	6,114.4	261.1	0.0	0.0
1996-97	DEQ	45.0	6,359.1	6,098.7	260.4	0.0	0.0
1897-98	DEQ	45.0	6,305.6	6,047.2	258.4	0.0	0.0
1998-99	DEQ	45.0	6,413.1	6,148.5	262.2	0.0	2.0 GF/GP
1999-2000	DEQ	45.0	6,534.1	6,264.5	267.6	0.0	2.0 GF/GP
2000-01	DEQ	45.0	6,668.7	6,201.1	267.6	0.0	200.0 CMI - Administration
2001-02	DEQ	39.0	5,480.3	5,009.7	267.6	0.0	203.0 CMI - Administration
2002-03	DEQ	37.0	4,102.9	3,864.9	238.0	0.0	0.0
2003-04	DEQ	37.0	4,102.9	3,864.9	238.0	0.0	0.0
2004-05	DEQ	35.0	4,263.1	4,007.7	255.4	0.0	0.0
2005-06	DEQ	35.0	4,292.2	4,039.2	253.0	0.0	0.0
2006-07	DEQ	35.0	3,186.3	2,925.6	260.7	0.0	0.0
2007-08	DEQ	35.0	3,394.6	3,125.5	269.1	0.0	0.0
2008-09	DEQ	33.0	3,068.7	1,977.0	269.8	821.9	0.0
2009-10	DEQ	33.0	3,558.1	2,170.2	416.8	1,001.1	0.0
2010-11 <sup>a)</sup>	DNRE	33.0	3,663.1	2,017.9	627.0	1,018.2	0.0

<sup>a)</sup> FY 2010-11 figures based on Senate-passed version of Senate Bill 1161 and the Executive Recommendation for the FY 2010-11 budget.



### **Leaking Underground Storage Tank Program**

Several years after enacting the UST Act, Michigan enacted PA 478 of 1988, the Leaking Underground Storage Tank Act (LUST Act). The objectives of the LUST Act, now Part 213 of NREPA, are to regulate and provide for corrective action when releases are discovered or reported. Originally, the program operated under the rules and guidelines set by the EPA, but now has its own set of rules, which comply with the mandate from Congress that state programs be "no less strict" than the EPA guidelines. Historically, the program was funded predominantly with grants from the EPA; however, in recent years, Federal support for the LUST program has been reduced significantly and State resources have been used instead. The department responsible for administration of the LUST Act was initially the Department of Natural Resources (although the Act requires release reporting to the State Fire Marshal). Program implementation responsibilities under the LUST Act were delegated to the Department of Environmental Quality (DEQ) when it was created in 1995, and have since been assigned to the DNRE. The major responsibilities of the Department under the LUST Act include:

- Overseeing remediation efforts by liable parties and conducting State-funded cleanups of orphan sites;
- Initiating compliance and enforcement actions against UST/LUST owners who fail to comply with UST/LUST regulations; and
- Administering Federal grant funds.

Under State law, UST owners are normally held liable in the event of a release from one of their tanks. If there is a party that can legally be held responsible, the Department will oversee remediation actions taken by the responsible party to ensure that cleanups meet the standards set forth by law. If there are no liable parties, the Department may use State funds to perform cleanup actions that normally would be required of the owner, depending on the severity of the release. An example of an orphan site is a release discovered at a gas station that has been abandoned and whose owner is a corporation that has gone bankrupt or no longer exists.

### **Michigan Underground Storage Tank Financial Assurance Program**

In 1986, before the EPA had completed its Subtitle I rules in 1988, Congress amended Subtitle I to include a provision for rules concerning the financial liability of owners when leaks in USTs were discovered. When the EPA completed its Subtitle I rules in 1988, it concluded that UST owners who owned between one and 100 USTs had to be able to show their ability to pay up to \$1.0 million, and those owning 101 or more USTs had to demonstrate ability to pay up to \$2.0 million for the remediation of UST leaks if any were discovered. Owners of USTs could demonstrate their ability to meet this requirement in a number of ways, including purchasing private environmental insurance against UST leaks. In many cases, however, owners were not able to satisfy the financial assurance requirement, as many owners found private environmental insurance to be too expensive or unavailable. To assist Michigan UST owners, Michigan enacted PA 518 of 1980, the Michigan Underground Storage Tank Financial Assurance Act (MUSTFA Act), now Part 215 of NREPA. Under the program, owners of USTs who complied with the registration and reporting requirements of the UST Act would be eligible to receive money from the MUSTFA Fund for corrective actions in the event a leak was detected in their respective USTs. Additionally, PA 518 called for the Department of Treasury to establish an interest subsidy program designed to help UST owners seeking to upgrade or install new, and presumably safer, USTs. Because future demand for the program was largely unknown, the law also included a clause allowing the State Treasurer to stop all MUSTFA payments in the event the program was found insolvent.



To fund the MUSTFA program, a 7/8<sup>th</sup>-cent-per-gallon regulatory fee was levied on each gallon of refined petroleum products (gasoline, on- and off-road diesel, jet fuel, aviation fuel, kerosene, etc.) sold. The statute originally allowed the following uses of the MUSTFA Fund:

- Administrative costs up to 7.0% of projected revenue in a given year. The Departments of Attorney General, Natural Resources, Management and Budget, State Police, and Treasury could draw on the Fund for this purpose.
- Up to 10.0% of projected annual revenue for the interest subsidy program.
- Indemnification payments to parties affected by petroleum product releases on behalf of UST owners found responsible for those releases.
- Payments for corrective action in cases where UST owners complied with registration and inspection requirements and a leak was discovered and promptly disclosed.

The demand for the MUSTFA program was initially underestimated, as was the case in several other states that implemented similar programs. A 1993 audit revealed that in the first two years of the program, the fee generated about \$110.0 million in revenue, but approximately \$250.0 million in claims had been filed. In response, Michigan enacted Public Acts 132 and 212 of 1993 to alter how the MUSTFA program operated. These changes included delaying a sunset on the regulatory fee to January 1, 2005; creating the MUSTFA Authority, which was allowed to issue revenue bonds; reducing the amount that the program would pay out for eligible claims; implementing a competitive bid process; and making various other changes aimed at combating fraudulent practices by UST owners and contractors doing remediation work.

Perhaps the most significant of these changes was language that eventually would phase-out the MUSTFA program altogether. Public Act 212 created a timeline that limited the amount an individual claim would be eligible to receive in financial support from the MUSTFA program. Under PA 212, no new claims for remediation and indemnification from the MUSTFA program were to be accepted after December 22, 1998. To address the shortfalls in fee revenue relative to the large number of claims, the MUSTFA Authority authorized the sale of approximately \$215.0 million in revenue bonds. Public Act 132 also increased the allowable uses of the MUSTFA Fund to permit it to be used to service these bonds.

The proceeds from the bonds were spent or encumbered within the first two fiscal years they were issued, as a significant backlog of claims had accumulated in the five years the program operated without the bonds. This quick expenditure and the subsequent returning deficit in the program led the State Treasurer, on March 31, 1995, to determine that MUSTFA Fund revenue was no longer sufficient to cover claims. This declaration gave UST owners and the affected public 90 days, by law, to file a claim for remediation or indemnification payments. Public Act 269 of 1995 then codified June 29, 1995, as the last day a MUSTFA claim could be filed. From June 29, 1995, onward, no new claims were accepted, and revenue to the MUSTFA Fund was used solely to pay eligible claims filed before that date, and to pay principal and interest on the bonds.

Public Act 390 of 2004 earmarked all funds deposited into the MUSTFA Fund during fiscal year (FY) 2002-03 and FY 2003-04 to be used for paying off the bonds. Public Act 390 also transferred the remaining balance of the MUSTFA Fund into the new Refined Petroleum Fund created by the Act.

### **Transition from MUSTFA to the Refined Petroleum Fund**

Under PA 390 of 2004, the purposes for which the Refined Petroleum Fund (RPF) could be used were broader than the purposes for the MUSTFA Fund. Public Act 390 also delayed the sunset date

**State Notes**  
TOPICS OF LEGISLATIVE INTEREST  
 Spring 2010



on the regulatory fee to December 31, 2010, the date it remains today. The expansions contained in PA 390 allowed the Department of Agriculture to draw on the RPF to fund the motor fuel quality program as well as the weights and measures program, and changed the nature of how the RPF would be used in the future. The allowable uses of the RPF under PA 309 were:

- Funding the Weights and Measures Act and the Motor Fuels Quality Act in the Department of Agriculture;
- Cleanups of LUSTs as provided by law (Part 213 of NREPA); and
- Administrative costs of the Departments of Agriculture, Attorney General, Environmental Quality, and Treasury associated with programs receiving RPF dollars, and for administering the RPF.

Additionally, PA 318 of 2006 added two allowable uses of the RPF. These two uses were:

- Up to \$15.0 million for the (then) DEQ to establish a cleanup program for orphan sites; and
- Up to \$45.0 million to establish a temporary reimbursement program.

The temporary reimbursement program allowed a limited pool of applicants to receive reimbursements for remediation actions taken on LUSTs. This program was similar to MUSTFA, but had a much more limited scope. The last reimbursements were made from this program in September 2009.

**Table 2**

<b>MUSTFA/RPF Appropriations by Department (Dollars in Thousands)</b>						
<b>Fiscal Year</b>	<b>DNR/DEQ/ DNRE</b>	<b>Treasury</b>	<b>Agriculture</b>	<b>Attorney General</b>	<b>DMB</b>	<b>Other/Notes</b>
1989-90	835.0	165.0	0.0	0.0	0.0	First yr. 7/8 <sup>th</sup> cent tax is collected.
1990-91	1,092.2	220.1	0.0	0.0	47,004.8	First yr. program has funds to operate.
1991-92	2,893.5	225.6	0.0	229.3	47,017.3	
1992-93	2,090.4	180.6	0.0	141.3	55,000.0	
1993-94	2,178.0	180.7	0.0	145.8	51,599.0	
1994-95	153,784.1	186.6	0.0	140.0	0.0	
1995-96	212,426.0	191.4	0.0	144.0	0.0	
1996-97	92,072.8	191.4	0.0	140.4	0.0	
1997-98	62,084.5	191.4	0.0	141.0	0.0	
1998-99	62,087.1	192.4	0.0	141.9	0.0	
1999-00	62,194.9	199.0	0.0	147.9	0.0	
2000-01	62,321.6	206.2	0.0	154.2	0.0	
2001-02	62,411.2	219.3	0.0	159.3	0.0	
2002-03	62,455.7	224.4	0.0	161.3	0.0	
2003-04	0.0	30,000.0	0.0	0.0	0.0	Refined Petroleum Fund created
2004-05	11,921.0	23,914.5	3,000.0	0.0	0.0	
2005-06	114,327.8	23,914.5	3,191.1	0.0	0.0	
2006-07	30,272.1	23,914.5	3,317.7	0.0	0.0	\$70.0 million transferred to EPF for debt service.
2007-08	30,684.5	23,914.5	3,520.4	0.0	0.0	
2008-09	17,600.7	15,514.5	3,339.0	0.0	0.0	
2009-10	36,208.0	15,514.5	3,454.9	0.0	0.0	
2010-11 <sup>a)</sup>	37,437.1	15,514.5	3,870.9	0.0	0.0	

<sup>a)</sup> FY 2010-11 figures based on Senate-passed version of Senate Bill 1161 and the Executive Recommendation for the FY 2010-11 budget.



### **Future of the Refined Petroleum Fund**

Table 2 shows how money from the MUSTFA Fund and the RPF has been appropriated historically. The figures in Table 2 reflect departmentwide appropriations from the Funds; it is important to note that not all of the funding is used for cleanup and remediation actions. In the FY 2009-10 DNRE appropriation, for instance, while approximately \$36.2 million was appropriated from the RPF, \$20.0 million will go toward cleanup and remediation, while the remainder supports various other lines in the budget. Additionally, starting in FY 2003-04, appropriations to the Department of Treasury have been servicing Quality of Life bonds. This appropriation was made initially as a fund shift in order to save General Fund/General Purpose revenue, and has occurred every year since, although to a lesser extent in years following FY 2003-04. It should be noted that while the enabling statute for the MUSTFA Fund (MCL 324.21506) contained language allowing its funds to be used to "defease principal and interest due and owing on bonds issued by the authority pursuant to this part", the enabling statute for the RPF (MCL 324.21506[a]) does not specifically mention the use of RPF dollars to service debt as an allowable use of the RPF. The "authority" mentioned in the MUSTFA statute refers to the MUSTFA Authority, the entity which, as previously mentioned, approved the issuance on bonds in the 1990s to help pay for the large number of claims the MUSTFA program was experiencing at that time. A similar fund shift was used as part of the FY 2006-07 budget, when \$70.0 million from the RPF was appropriated to the Environmental Protection Fund (EPF). The EPF, which has many more statutorily allowable uses than the RPF, then was used to pay debt service on general obligation bonds, freeing up State General Fund/General Purpose dollars.

Currently, the 7/8<sup>th</sup>-cent per-gallon regulatory fee, which is the sole revenue source for the RPF, is set to expire on December 31, 2010. The Senate-passed version of Senate Bill 1161, the FY 2010-11 DNRE budget, contains approximately \$37.4 million in appropriations from the RPF. If legislation does not address the RPF fee sunset, much of the revenue necessary to support these appropriations will not be collected. Similarly, a total of approximately \$19.4 million in appropriations is contained in Governor Granholm's recommended budgets for the Departments of Treasury and Agriculture. Revenue to support these potential appropriations also will be jeopardized if the fee is allowed to sunset.

### **Conclusion**

While Michigan's UST programs have been successful in facilitating the removal or cleanup of over 12,800 UST releases in the last 20 years, over 9,100 releases still remain. Many of these releases are old and have the potential to develop extensive release "plumes" underground, potentially affecting the quality of groundwater. While the DNRE will be able to locate liable parties for many releases, it is estimated that roughly half of them are orphan sites, and will at some point require cleanup action by the DNRE, an estimated \$1.8 billion liability.

# State Notes

## TOPICS OF LEGISLATIVE INTEREST

Spring 2010



### **Fuel Taxes and Michigan Transportation Funding**

**By David Zin, Economist**

---

Governor Granholm's fiscal year (FY) 2010-11 budget recommendation for the Michigan Department of Transportation (MDOT) includes \$1.5 billion for road and bridge programs. These programs provide for the construction, reconstruction, and renovation of Michigan's streets, highways, and bridges and are funded by a combination of Federal, State, and local revenue. The FY 2010-11 recommendation includes \$486.8 million of Federal funding, \$894.8 million of Michigan Transportation Fund (MTF) revenue, and \$23.5 million of State Trunkline Fund (STF) revenue. Federal funding is available under several provisions in Federal law and generally is based on specified match rates, until the maximum amount of revenue the Federal government makes available is exhausted. Under the recommendation, due to insufficient State funds, the FY 2010-11 budget would fail to match all of the available Federal funds, leaving approximately \$475.0 million of Federal revenue unused.

Most revenue for Michigan's transportation programs (which include more than road and bridge programs) comes from two sources: 1) fuel taxes, particularly the taxes on gasoline and diesel motor fuel, and 2) vehicle registration fees. In FY 2008-09, taxes on gasoline and diesel fuel generated \$964.3 million, while vehicle registration taxes totaled \$842.4 million, supporting \$1,806.7 million (87.5%) of the \$2,065.2 million of State transportation spending in FY 2008-09. A portion of sales taxes on motor vehicle-related sales is also directed to the Comprehensive Transportation Fund (CTF) and accounted for \$82.9 million (4.0%) of FY 2008-09 transportation revenue, while other licenses and permits represented an overwhelming majority of the remaining revenue.

### **Revenue History**

The gasoline tax was initially adopted in 1925 at a rate of 2 cents per gallon. The rate was soon increased to 3 cents per gallon, in 1927. By 1984 the tax rate on gasoline had increased to 15 cents per gallon. The last increase in the tax rate occurred in 1997, when the rate was raised from 15 cents to 19 cents per gallon.

Despite the stability in the tax rate between 1984 and 1997, fuel taxes generated consistently rising revenue. With the exception of the 1979-1982 recessions, fuel taxes have exhibited stable growth since the end of World War II. Between FY 1984-85 and FY 1994-95, fuel tax revenue grew by an average of 2.8% per year. (See [Table 1](#) and [Figure 1](#).) Much of the growth in fuel tax revenue reflects overall economic growth in the economy, as well as increases in population and changing demographics regarding travel and the transportation of goods -- all factors that increase consumption over time. The growth in consumption has a tendency to be offset by higher fuel prices, which create an incentive to reduce consumption, and by rising fuel efficiency standards. Despite the challenges to Michigan's economy over the last 10 years, fuel tax revenue grew 0.6% per year between FY 1998-99 and FY 2002-03.

Since gas prices began to consistently break \$2.00 per gallon in 2004, eventually peaking at \$4.21 per gallon in July 2008, the pressures to reduce consumption have dominated fuel purchases. As a result, between FY 2002-03 and FY 2008-09, Michigan fuel tax revenue declined an average of 2.1% per year. Fiscal year 2008-09 fuel tax revenue totaled \$964.3 million, down \$58.6 million (5.7%) from FY 1997-98, the first full fiscal year of the current tax rates. Compared with FY 2002-03, the peak year for fuel tax revenue, FY 2008-09 revenue was down 11.8%, reflecting a decline in consumption from approximately 5.8 billion gallons per year to less than 5.1 billion gallons.

Table 1

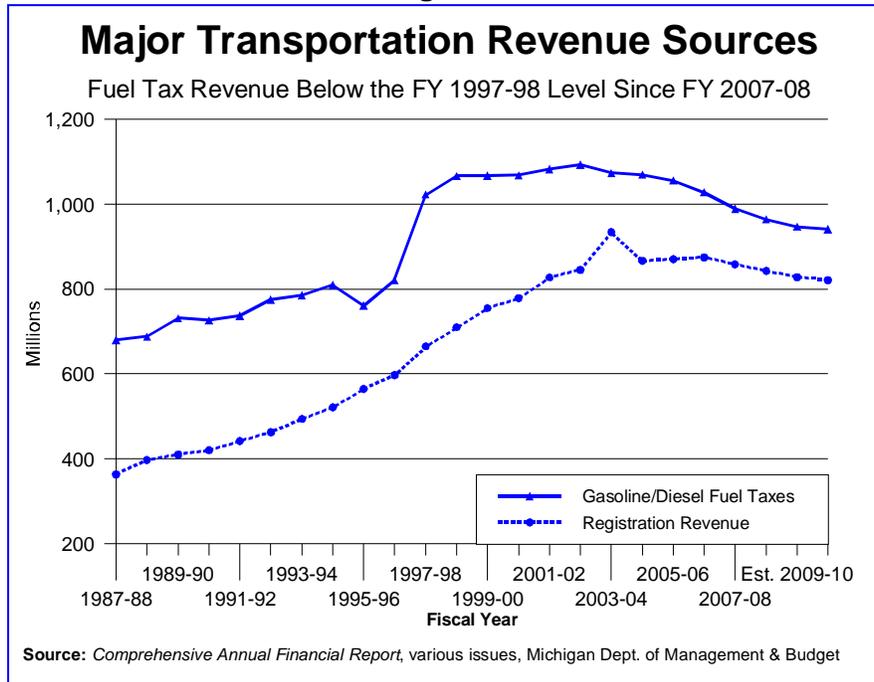
**Revenue History for Select Michigan Transportation Taxes  
(dollar amounts in millions)**

<b>Fiscal Year</b>	<b>Gasoline Tax</b>	<b>Diesel Fuel Tax</b>	<b>Total</b>	<b>Percent Change</b>	<b>Vehicle Registration Taxes</b>	<b>Percent Change</b>	<b>Transportation Revenue</b>	<b>Percent Change</b>	<b>Total Sales Tax</b>	<b>Percent Change</b>
1985	\$569.7	\$45.4	\$615	---	\$286.7	---	\$901.8	---	\$2,142.6	---
1986	595.8	47.9	644	4.6%	300.0	4.6%	943.7	4.6%	2,283.3	6.6%
1987	604.5	50.7	655	1.8%	315.9	5.3%	971.1	2.9%	2,348.4	2.9%
1988	628.5	52.2	681	3.9%	363.2	15.0%	1,043.9	7.5%	2,475.0	5.4%
1989	634.0	54.1	688	1.1%	397.0	9.3%	1,085.1	3.9%	2,615.2	5.7%
1990	678.4	53.3	732	6.3%	409.8	3.2%	1,141.5	5.2%	2,671.3	2.1%
1991	673.2	53.1	726	-0.7%	420.2	2.5%	1,146.4	0.4%	2,671.9	0.0%
1992	682.8	54.6	737	1.5%	441.8	5.1%	1,179.2	2.9%	2,745.1	2.7%
1993	708.3	66.7	775	5.1%	462.5	4.7%	1,237.5	4.9%	2,905.7	5.9%
1994	716.7	69.0	786	1.4%	494.3	6.9%	1,280.0	3.4%	3,776.0	30.0%
1995	736.1	73.6	810	3.1%	521.2	5.4%	1,330.9	4.0%	4,884.2	29.3%
1996	681.6	80.3	762	-5.9%	564.4	8.3%	1,326.3	-0.3%	5,171.6	5.9%
1997	737.3	83.9	821	7.8%	597.0	5.8%	1,418.3	6.9%	5,389.8	4.2%
1998	904.5	118.4	1,023	24.6%	665.3	11.4%	1,688.2	19.0%	5,617.3	4.2%
1999	931.7	134.7	1,066	4.3%	710.2	6.7%	1,776.6	5.2%	5,901.7	5.1%
2000	923.0	144.1	1,067	0.1%	755.2	6.3%	1,822.2	2.6%	6,277.5	6.4%
2001	934.4	133.7	1,068	0.1%	778.2	3.1%	1,846.3	1.3%	6,352.3	1.2%
2002	939.7	143.4	1,083	1.4%	827.7	6.4%	1,910.8	3.5%	6,441.2	1.4%
2003	936.2	157.3	1,094	1.0%	845.3	2.1%	1,938.8	1.5%	6,422.6	-0.3%
2004	932.7	140.8	1,074	-1.8%	934.3	10.5%	2,007.8	3.6%	6,473.5	0.8%
2005	922.8	146.7	1,069	-0.4%	866.3	-7.3%	1,935.7	-3.6%	6,599.1	1.9%
2006	906.7	149.0	1,056	-1.3%	870.4	0.5%	1,926.1	-0.5%	6,638.1	0.6%
2007	884.0	144.1	1,028	-2.6%	874.7	0.5%	1,902.8	-1.2%	6,552.2	-1.3%
2008	849.2	140.4	990	-3.7%	857.9	-1.9%	1,847.5	-2.9%	6,773.3	3.4%
2009	846.3	117.9	964	-2.6%	842.4	-1.8%	1,806.7	-2.2%	6,089.1	-10.1%
<b>Jan. 2010 Consensus Revenue Forecast</b>										
2010	\$832.0	\$115.0	\$947.0	-1.8%	\$828.0	-1.7%	\$1,775.0	-1.8%	\$5,894.5	-3.2%
2011	826.0	115.0	941.0	-0.6%	821.0	-0.8%	1,762.0	-0.7%	5,947.6	0.9%
<b>Change Since FY 2002-03</b>										
2009	-9.6%	-25.1%	-11.8%		-0.3%		-6.8%		-5.2%	
2011	-11.8%	-26.9%	-13.9%		-2.9%		-9.1%		-7.4%	
<b>Average Growth</b>										
1989-1997	1.9%	5.6%	2.2%		5.2%		3.4%		---	
1998-2003	0.7%	5.9%	1.3%		4.9%		2.8%		2.7%	
2003-2009	-1.7%	-4.7%	-2.1%		-0.1%		-1.2%		-0.9%	

**Source:** Comprehensive Annual Finance Report of the State of Michigan, various years



**Figure 1**



Revenue from vehicle registration taxes has been more stable than the revenue from motor fuel taxes. Between FY 1984-85 and FY 1994-95, revenue from vehicle registration increased by an average of 6.2% per year. As with motor fuel taxes, registration rates increased in 1997. Largely assisted by hefty purchase incentives offered by manufacturers, even Michigan's descent into recession in 2000 failed to slow registration revenue significantly. Between FY 1997-98 and FY 2003-04, revenue from vehicle registration grew by an average of 5.8% per year. However, as Michigan employment continued to decline, consumers came to expect (or were even fatigued by) large incentives, and fuel prices remained about \$2 per gallon, while vehicle consumption patterns shifted to fewer purchases, less expensive vehicles, and/or vehicles that were more fuel efficient. As a result, between FY 2003-04 and FY 2008-09, vehicle registration revenue has declined an average of 2.0% per year. In FY 2008-09, registration revenue of \$842.4 million was down \$91.9 million (9.8%) from FY 2003-04.

Combined, fuel taxes and registration fees peaked in FY 2003-04 at just over \$2.0 billion, after rising an average of 2.9% per year since FY 1997-98. Since FY 2003-04, revenue fell an average of 2.1% per year, to just over \$1.8 billion in FY 2008-09 -- a total decline of \$201.2 million (10.0%).

### Sales Tax on Motor Fuels

An issue related to rising fuel prices concerns sales taxes on motor fuels, especially because Michigan earmarks a portion of the sales tax on motor fuels to the CTF. Michigan levies the sales tax on gasoline and diesel fuel sales, and includes the fuel tax as part of the sales tax base. Including the fuel tax in the sales tax base increases the price of motor fuel by approximately 1.1 cents per gallon. While the additional sales tax revenue generated by including fuel taxes in the sales tax base has fallen as gasoline consumption has declined, it has been more than offset by the increase in fuel prices. When the price of gas was \$1.56 per gallon (the average price during 2003,



even though by the end of the year it was consistently above \$2 per gallon), the sales tax represented about \$0.25 of the price of gas. When gasoline prices peaked in 2008 at \$4.21 per gallon, the sales tax represented \$0.67 cents of the price. At a retail price of \$2.50 per gallon, the price reflects 14.15 cents per gallon of Michigan sales tax.

When compared with other states' gasoline tax rates, Michigan's gasoline tax ranks 34<sup>th</sup>. Five of the states with lower rates also assess sales tax on gasoline purchases, while seven of the other 11 states levy various other fees or taxes on top of the gasoline tax (such as a license tax, inspection fee, environmental fee, or petroleum fee) and several charge additional taxes or higher rates to commercial or carrier vehicles or large trucks. At a price of roughly \$2.50 per gallon, when Michigan fuel taxes and sales taxes are combined, Michigan exhibits one of the five highest state tax rates in the country.

However, two important aspects of Michigan's sales tax on gasoline should be highlighted. First, the majority of sales tax revenue collected is not directed to transportation-related funds. Constitutionally, approximately 73.3% of sales tax revenue is dedicated to the School Aid Fund (60.0% of the collections at a 4.0% rate, plus 100% of collections at a 2.0% rate) while another 10.0% of collections (15.0% of collections at a 4.0% rate) is constitutionally dedicated to revenue sharing payments to local units of government. As a result, more than 83.3% of sales tax revenue from gasoline is constitutionally designated to funds that have nothing to do with transportation.

A portion of sales tax revenue is statutorily earmarked to the Comprehensive Transportation Fund by M.C.L. 205.75, which allocates to the CTF 27.9% of one-fourth of the sales tax collections at a 4.0% rate remaining on sales of "fuels sold to propel motor vehicles upon highways, on the sale of motor vehicles, and on the sale of the parts and accessories of motor vehicles by new and used car businesses, used car businesses, accessory dealer businesses, and gasoline station businesses" after the distributions to the School Aid Fund (SAF) and constitutional revenue sharing are subtracted. In FY 2008-09, this transfer to the CTF totaled \$82.9 million, down 4.9% from FY 2007-08.

Assuming an average gas price of \$2.50 for 2009, sales taxes on motor fuels totaled approximately \$718.2 million in FY 2008-09. Constitutional earmarks on sales tax revenue directed \$526.7 million of that revenue to the SAF (and another \$71.8 million to constitutional revenue sharing), approximately \$210.7 million more than if gas had been \$1.50 per gallon. However, this "windfall" to the SAF represented only 1.6% of FY 2008-09 SAF revenue, and less than one-third of what the Lottery contributed to the SAF. More relevant to the topic of this paper, very little of the increase saw its way into transportation funding.

### **The Role of Inflation**

The discussion so far has focused on the actual dollars received, rather than taking into account their buying power. In the case of transportation funding, this distinction is important because there has been significant inflation in the prices of materials and supplies used in road and highway construction. The actual declines in transportation revenue since FY 2003-04 are significant and unprecedented, without accounting for the effects of inflation. When adjusted for price changes, the drop in transportation revenue is staggering -- rivaling or exceeding the changes experienced by the General Fund depending on which years are examined.



While a road construction-related producer price index is not available back that far, if the 1927 tax rate were adjusted by the Detroit consumer price index (CPI), the rate would have been approximately 34.1 cents per gallon in 2009, rather than the actual rate of 19 cents per gallon. However, the best measure for inflation relevant to transportation funding is the producer price index for material and supply inputs to highway and street construction, published by the U.S. Bureau of Labor Statistics. The modern version of this index is available back through June 1986.

When adjusted for inflation, FY 2008-09 fuel tax revenue was 42.0% below the FY 2002-03 level, while registration taxes were down 34.4%. (See Table 2 and Figure 2.) Combined, inflation-adjusted transportation revenue fell 38.7% between FY 2002-03 and FY 2008-09. When the forecasted values for FY 2010-11 are taken into account, FY 2010-11 fuel tax revenue is expected to be 48.8% below the FY 2002-03 level, and registration fee revenue is predicted to be 42.2% lower. Combined, inflation-adjusted transportation revenue in FY 2010-11 is forecasted to be 45.9% below the level in FY 2002-03.

The inflation-adjusted transportation revenue estimates for FY 2010-11 mean that while the stock of roadway the State must maintain has increased, the buying power of State funds to maintain that infrastructure (in terms of plowing and mowing, as well as in resurfacing, reconstruction and rehabilitation) and/or expand it is half what the buying power was in FY 2002-03. The situation is expected to continue to worsen: Inflation for highway construction has averaged 3.4% per year over the life of the index and 5.2% per year over the last decade, while higher fuel economy standards are expected to lower gasoline consumption by approximately 15.0% over the next 20 years. Over the same period, the average price of oil is expected to increase to approximately \$130 per barrel, in 2008 dollars -- more than double the average price of oil during 2009 and roughly on par with the price of oil during its record peaks of 2008. Higher oil prices, and the corresponding increase in fuel prices, also will further reduce consumption.

**Figure 2**

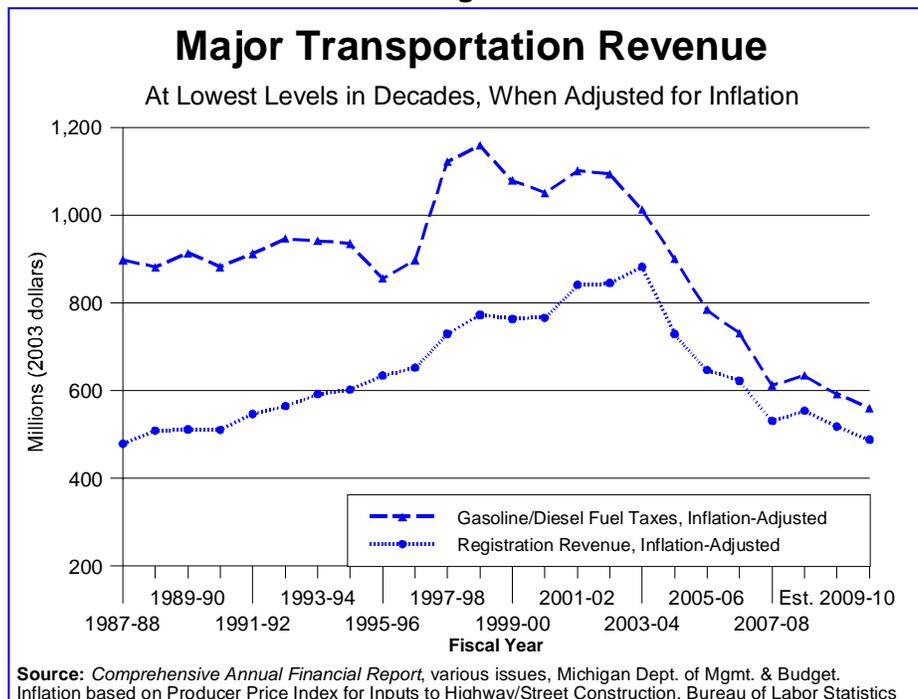


Table 2

**Revenue History for Select Michigan Transportation Taxes, Adjusted for Inflation  
(dollar amounts in millions)**

Fiscal Year	Gasoline Tax	Diesel Fuel Tax	Total	Percent Change	Vehicle Registration Taxes		Transportation Revenue	Percent Change	Hwy/Road Materials PPI	
					Index (FY 2003=100)	Percent Change				
1988	\$829.1	\$68.8	\$897.9	0.5%	\$479.1	11.2%	\$1,376.9	3.9%	75.8	3.4%
1989	812.3	69.4	881.6	-1.8%	508.7	6.2%	1,390.4	1.0%	78.0	2.9%
1990	847.2	66.6	913.8	3.6%	511.8	0.6%	1,425.6	2.5%	80.1	2.6%
1991	817.5	64.5	882.0	-3.5%	510.3	-0.3%	1,392.2	-2.3%	82.3	2.8%
1992	844.8	67.6	912.3	3.4%	546.6	7.1%	1,458.9	4.8%	80.8	-1.8%
1993	865.3	81.4	946.7	3.8%	564.9	3.4%	1,511.6	3.6%	81.9	1.3%
1994	858.6	82.7	941.2	-0.6%	592.1	4.8%	1,533.3	1.4%	83.5	2.0%
1995	850.6	85.1	935.7	-0.6%	602.2	1.7%	1,537.9	0.3%	86.5	3.7%
1996	766.2	90.3	856.4	-8.5%	634.4	5.3%	1,490.8	-3.1%	89.0	2.8%
1997	805.8	91.7	897.5	4.8%	652.4	2.8%	1,549.9	4.0%	91.5	2.9%
1998	992.0	129.8	1,121.8	25.0%	729.7	11.8%	1,851.5	19.5%	91.2	-0.4%
1999	1,013.4	146.5	1,159.9	3.4%	772.4	5.9%	1,932.3	4.4%	91.9	0.8%
2000	933.2	145.7	1,078.9	-7.0%	763.5	-1.1%	1,842.5	-4.6%	98.9	7.6%
2001	919.6	131.5	1,051.2	-2.6%	765.9	0.3%	1,817.1	-1.4%	101.6	2.7%
2002	955.5	145.8	1,101.4	4.8%	841.6	9.9%	1,943.0	6.9%	98.3	-3.2%
2003	936.2	157.3	1,093.5	-0.7%	845.3	0.4%	1,938.8	-0.2%	100.0	1.7%
2004	880.7	133.0	1,013.7	-7.3%	882.3	4.4%	1,896.0	-2.2%	105.9	5.9%
2005	776.9	123.5	900.4	-11.2%	729.3	-17.3%	1,629.7	-14.0%	118.8	12.2%
2006	673.8	110.7	784.4	-12.9%	646.8	-11.3%	1,431.2	-12.2%	134.6	13.3%
2007	629.2	102.6	731.8	-6.7%	622.6	-3.7%	1,354.4	-5.4%	140.5	4.4%
2008	525.8	86.9	612.7	-16.3%	531.2	-14.7%	1,143.9	-15.5%	161.5	15.0%
2009	557.0	77.6	634.6	3.6%	554.4	4.4%	1,189.1	3.9%	151.9	-5.9%
<b>Jan. 2010 Consensus Revenue Forecast</b>										
2010	\$520.7	\$72.0	\$592.7	-6.6%	\$518.2	-6.5%	\$1,111.0	-6.6%	159.8	5.2%
2011	491.7	68.5	560.1	-5.5%	488.7	-5.7%	1,048.8	-5.6%	168.0	5.2%
<b>Change Since FY 2002-03</b>										
2009	-40.5%	-50.7%	-42.0%		-34.4%		-38.7%		51.9%	
2011	-47.5%	-56.5%	-48.8%		-42.2%		-45.9%		68.0%	
<b>Average Growth</b>										
1989-1997	-0.1%	3.6%	0.2%		3.2%		1.4%		2.0%	
1998-2003	-1.2%	3.9%	-0.5%		3.0%		0.9%		1.9%	
2003-2009	-8.3%	-11.1%	-8.7%		-6.8%		-7.8%		7.2%	

Source: Senate Fiscal Agency



## **Conclusion**

Michigan transportation-related revenue collections, primarily from motor fuel taxes and vehicle registration fees, have fallen significantly in the last six years and are expected to continue falling. Declining fuel taxes have been driven by a combination of high fuel prices, rising fuel efficiency standards, and a weak economy, all of which have worked to reduce fuel consumption. Falling registration revenue has primarily reflected Michigan's weak economy, as well as higher fuel prices and weak population growth. Transportation-related revenue from these two sources is expected to be 9.1% less in FY 2010-11 than in FY 2002-03, despite increasing demands from Michigan's transportation infrastructure.

When adjusted for inflation, Michigan's primary transportation revenue is predicted to be 45.9% less in FY 2010-11 than in FY 2002-03. The trend of declining revenue and above-average inflation for transportation expenses is expected to continue for many years, as oil and gas prices rise and fuel economy standards increase. To the extent that Michigan's economy remains weak for several more years, a condition consistent with most major State and national forecasts, the problem of declining revenue and rising costs will only worsen.

For Michigan's road and bridge programs, declining revenue and rising costs will be exacerbated by the State's failure to fully use available Federal matching funds. The FY 2010-11 budget recommendation falls \$84.0 million short of maximizing Federal matching revenue, leaving unused \$475.0 million of Federal funds that could be directed to Michigan's roads and bridges. Under the current system, as revenue continues its forecasted decline, Michigan is likely to leave ever-increasing amounts of Federal revenue unused. If the State continues to direct insufficient State revenue to road and bridge programs and leave available Federal funds unmatched, Michigan's transportation infrastructure will bear the brunt of not only declining State revenue, but also reduced Federal revenue.