

A New Model for Louisiana's Transportation System

A white paper

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Objective:¹

Louisiana's transportation infrastructure is in a deplorable state. Our roads are in poor condition, our bridges are structurally deficient, and traffic congestion is eating into our productivity. The rate of fatality due to auto crashes in Louisiana is above the national average. Our citizens, driving on poor roads, pay a hidden cost for additional repairs and higher auto insurance. Similarly, other modes of transportation in the state do not receive sufficient financial support. While the backlog of infrastructure needs grows, we continue to avoid having a meaningful conversation about how to address the state's transportation issues. It is time to reject the notion that "all is well" and start that conversation.

The objective of this paper is to outline Louisiana's critical highway transportation issues and to offer strategies that address these issues. Louisiana faces a great opportunity for economic prosperity. Major petrochemical industries are making tens of billions of dollars of investments in the state. Among other things, they require an effective and efficient highway network for their inter- and intrastate operations. Our newly found opportunities to become economically prosperous cannot be lost due to an inadequate transportation infrastructure.

Background:

Louisiana's highway network is in poor condition. Not only do we experience these conditions through the daily use of the system, but it is also confirmed through available technical data. The following statistics is a sample in support of that assertion:

- 62% of Louisiana's 61,635 miles of roads are either in poor or mediocre condition.² DOTD has jurisdiction over 16,655 miles of these roads.
- 29% of Louisiana's 13,050 bridges are either Structurally Deficient or Functionally Obsolete².
- Average age of bridges in Louisiana is 34.9 years.² Bridges are normally designed for a life-span of 50 years.
- Louisiana ranks 13th highest in the nation on the number of structurally deficient bridges.³

¹ Observations, opinions and conclusions presented in this paper are those of the author and not of his employer or any organization that he is affiliated with.

² The White House - <http://www.whitehouse.gov/rebuild-america>

³ Bridge Inspection Program, Department of Transportation and Development; Louisiana Legislative Auditor; Performance Audit Issued April 2, 2014.

- Louisiana needs \$2.7 billion to address its structurally deficient bridges.
- Louisiana’s backlog of unmet needs exceeds \$12 billion.
- Louisiana ranks 44th in its highway fatality rate; 41st in the condition of rural interstate pavements⁴.

Due to the lack of sufficient and sustained financial resources, Louisiana cannot begin to implement its major highway infrastructure development as recommended in its latest Long Range Plan, and that paralysis will affect our future economic growth. Meanwhile, the current condition of our highways continues to impose additional hidden costs on our citizens:

- Driving on Louisiana roads costs motorists \$1.2 billion a year in extra vehicle repairs and operating costs – \$408 per motorist.⁵
- Annual auto insurance cost in Louisiana is the highest in the nation: \$1,277 versus the lowest in the country, Iowa, at \$630.⁶

The current condition did not come about overnight; it is the result of inattention for the last 30 years. Our last major transportation development program was the Transportation Infrastructure Model for Economic Development (TIMED), initiated in 1990 by Governor Roemer as a 15 year program. It was reprogrammed for a 10-year completion by Governor Foster in 2002 which led to a construction program during the remainder of his term and those of Governors Blanco and Jindal (2003-13). The 16 major infrastructure development projects resulted in building 500 miles of new highways, two major bridges, funding for Louis Armstrong Airport, Port of New Orleans, and several projects within the City of New Orleans. Critics point to one project or another in the program as unnecessary; the fact remains that TIMED was the only major infrastructure development initiative in our recent history and its impact on improving access and economic development is indisputable.

Today, our needs have grown drastically. The system, akin to a sick patient, needs a major transplant operation. Over the last decade we failed to administer the needed medicine; rather, we only provided “Band-Aids.” Recent projects such as the widening of I-10 in Baton Rouge, built with surplus and federal stimulus dollars, the bonding of auto registration fees to pay for the overlay of some of the rural roads, or the use of a few million dollars in unclaimed properties from the Louisiana Treasury to build I-49 North, although significant, have done little to address the existing statewide needs. It is not the intent of the writer to minimize these programs; however, when the scope of overall needs is considered, these programs have had minimal effect.

DOTD sets our current needs backlog at \$12 billion. When Governor Jindal took office, the number was over \$14 billion. DOTD’s \$2 billion investment supported by state surplus and federal stimulus funds has had a major positive impact on Baton Rouge traffic; however, that investment addressed only 14% of the identified needs when the

⁴ From <http://theadvocate.com/news/10298243-123/louisiana-sinks-to-40th-in>

⁵ American Society of Civil Engineers - <http://www.infrastructurereportcard.org/louisiana/louisiana-overview>

⁶ Appendix A: BANKRATE Report

entire backlog is considered. DOTD is required to publish annually an estimate of the needs backlog. This number is calculated based on the age and condition of the existing infrastructure in addition to newly identified needs. The current estimate has not changed in value over the last few years.

Issues:

Louisiana's current transportation problems stem from two major shortcomings: structural and financial. Structural issues deal with governance and management of the system; that is, how things get done and the level of effectiveness and efficiency. Meanwhile, the financial issues deal with the available resources, their adequacy, sustainability and the distribution and utilization of those resources both at the state and local levels.

The remainder of this paper provides a critical review of the existing management and financial structures and offers recommendations for the revamp or modification of these areas. There are three areas of concern:

- DOTD's Management Structure

- DOTD's Financial Structure

- Communities' Role

What follows is a detailed discussion of each of the three areas and a set of recommendations on how to improve the existing process.

DOTD's Management Structure:

The Issue:

The management structure of DOTD is greatly centralized and at times is ineffective in the timely implementation of long-range programs. Most decisions are made in Baton Rouge and, due to the size of its bureaucracy, the locals, who ultimately get affected by the decisions, are left out.

Many appointed secretaries do not have the longevity or at times enjoy the needed support of their bosses to successfully implement needed programs. Secretaries are required to operate at the discretion of their governor, who by the nature of his or her office, has been known to make political decisions. Furthermore, in an environment of competing priorities such as health care and education, DOTD priorities do not rank high when it comes to budget allocation.

Transportation planning and implementation require more than four years and usually, DOTD secretaries do not stay on the job long enough to carry out their plans. Consider the recent history of appointments at DOTD: Governor Roemer was elected as a reform governor in 1988. He appointed Neil Wagner as DOTD secretary who spent most of his time on the design and promotion of an economic development agenda called the TIMED program. Governor Edwards followed in 1992. He appointed General Patin, a

former Army Corps of Engineers leader, who went to the department with a plan to re-organize it. The TIMED program received little attention during his tenure as he concentrated on providing more structure to the department. In 1996 Governor Foster was elected and appointed General Denton who resigned after two years to be followed by the author. With a background in transportation and engineering management, he pushed for major reform of processes and procedures at DOTD. A plan was devised to expedite the TIMED program with its completion targeted for 2012. He served for six years. In 2004 Governor Blanco appointed Johnny Bradberry who came to the department with a background in oil and gas production. His first agenda item was a promise to the legislature to make the department more efficient. During Governor Jindal's administration, first Dr. Ankner promoted efficiency in traffic operation and now the current secretary, Sherri LeBas, promotes effective project management as a way to achieve more efficiency.

Since 1988, DOTD has been going through various re-organizational efforts and none of the secretaries has had the opportunity to stay on and carry out the full implementation of his or her plan. It goes without saying that major changes in a large public institution such as DOTD require more than four years. DOTD is a big ship and doesn't turn around easily. None of the secretaries has been credited with the results of their initiative. All ribbon cuttings of one secretary are usually due to the hard work of the previous ones.

Proposals:

- 1. Replace DOTD's Cabinet Structure with a Commission:** Remove DOTD from the governor's cabinet and assign its governance to an independent commission.

The Commission will consist of seven members appointed by the Governor, one from each of the Highway Regions (see item 2 below). The commission will appoint an Executive Director who would lead DOTD and report to the Commission. The Commission will be independent; however, it will report both to the Governor and the Joint Legislative Committee on Transportation. The commissioners will serve an eight-year term with staggered terms for the first appointees. Examples cited in Louisiana are the Board of Elementary and Secondary Education and the Board of Regents.

The proposed form of governance is common in many states. DOTs of our three neighboring states (Texas, Arkansas and Mississippi) have this form of governance. In Arkansas, commissioners are appointed for a ten-year term; in Mississippi, three commissioners are elected from three parts of the state and are primarily responsible to the legislature. In Texas, the commission and governor work in tandem; however, the commission appoints the executive director. The same exists in Georgia.

- 2. Consolidate DOTD's Districts into 7 Regions:** Allow additional autonomy to the regional offices in the areas of transportation planning and management and operation. The regional offices will represent both urban and rural areas within their regions and will collaborate effectively with the local metropolitan planning organizations (MPOs) (Florida Model).

The current 9 districts⁷, with their areas of representation, do not have commonality amongst them. Some districts are mostly rural and some mostly urban. It is envisioned that under the new structure, each DOTD Regions will include an MPO and will work closely with that MPO to further enhance the region's transportation network. One possible scenario for the makeup of the seven regions is: Shreveport, Monroe, Alexandria, Lake Charles, Lafayette, Baton Rouge, and New Orleans.

3. Limit DOTD's responsibilities to Highways of National and Statewide Significance.

The 16,655 miles of highway under DOTD's jurisdictional authority include roads of national, state, regional and local significance. To better define the role and responsibilities of DOTD and its regional offices, Louisiana's highway network should be classified into the following categories:

- a. Highways of National Significance (the National Highway System- NHS)
- b. Highways of Statewide Significance, e.g., LA-1.
- c. Highways of Regional Significance – highways serving several parishes or communities.
- d. Highways of Local Significance – parish or community roads.

Once the new classification process is accomplished, the next step is to place the responsibility for operation and maintenance of all highways of regional significance under the jurisdiction of newly created DOTD regions.

All highways of local significance should be transfer to the appropriate local jurisdictional authorities such as cities and parishes.

Financial Structure:

The Issue:

Transportation funding system in Louisiana is not progressive and does not provide sufficient revenues to address Louisiana's expanding needs from both economic development and from a public demand prospective.

Local governments have limited revenue streams and thus are greatly dependent on Baton Rouge for both funding and implementation of their local projects.

DOTD's annual budget is derived from the following revenue sources⁸:

- a. Annual federal allocation based on the prevailing congressional legislation such as TEA 21, MAP 21, etc. The source of revenue for the federal allocation is the Federal Highway Trust Fund supported by 18.4 cents federal gasoline tax and other taxes such as the one on automobile tires.

⁷ Appendix B: Current DOTD Districts

⁸ Appendix C: DOTD Budget

- b. Annual Revenue from Louisiana Transportation Trust Fund (TTF) which is funded through a state-levied 20 cents tax on gasoline and diesel fuels. In addition, the state also generates revenues from auto and truck registration fees.
- c. Revenues allocated to specific projects through HB-2, the state's Capital Outlay program.
- d. Allocation of surplus revenue by the legislature during the annual state budget appropriation process, which is not very common.
- e. Federal stimulus or earmarked revenues, but happens only on rare occasions.

Given the current condition of our roads and bridges, the obvious conclusion is that our revenues are not sufficient to address the needs. A good indicator of DOTD's level of investment is the annual expenditure in construction and maintenance⁹. The figure in the referenced appendix depicts the level of investment over the years. The spikes during the 2004-2011 fiscal years were due to the TIMED program acceleration.

To support Louisiana's transportation infrastructure needs, the current revenue stream must be revised. The 20 cents excise tax consists of two parts: 16 cents was implemented in 1984 and, the remaining 4 cents was approved by the public in 1990 to support the TIMED program¹⁰. For the next 30 years, all revenue from the 4 cents is dedicated to retire the bonds issued to fund the TIMED program. In addition, to cover the bond covenants, currently, another penny from the 16 cents is also dedicated to the TIMED program. However, at this time, it is unclear how long this requirement will last. For all practical purposes, today, DOTD is operating on the revenue derived from the 15 cents.

Over the last three decades, the purchasing value of the 16 cents has greatly eroded due to two factors: First, the excise tax is fixed in value and is applied to the volume of the purchased fuel. Therefore the tax is not affected by the increase in the value of the purchase. Meanwhile, the cumulated inflation over these years has diminished the purchasing power of the collected revenue. Today, the purchasing power of the 16 cents is equivalent to 8 cents¹¹. The second factor is that fuel consumption is not increasing. Although VMT (Vehicle Miles Travelled) is increasing and, correspondingly, the fuel consumption should also be increasing, that increase is being offset by fuel efficiency of newer vehicles. Furthermore, the current fuel excise tax does not apply to newer fuels such as LNG (Liquidized Natural Gas), CNG (Compressed Natural Gas) or electrical vehicles.

Proposals:

- 1. Replace the Current 16 Cents Fuel Excise Tax with 8% Sales Tax on All Fuels:** The proposed sales tax will apply to all fuels including Ethanol, Methanol, LNG, CNG and any other fuel that is currently excluded from the existing excise tax.

⁹ See Appendix D: Construction Letting

¹⁰ Appendix E: Gas Tax History

¹¹ Appendix F: Erosion of 16 Cents

As mentioned before, Louisiana's gasoline tax consists of two parts: a 16 cents portion that was enacted in 1984 and an additional 4 cents was voted by the public, in 1990, to support the TIMED program. The value of the current excise tax cannot increase. On the other hand, its buying power is diminishing over time due to price inflation.

The proposed sales tax is progressive and will keep up with inflation. This will provide a sustainable source of revenue for our future transportation needs. Based on an assumption of \$3.25 per gallon average purchasing price for gasoline, the proposed 8% sales tax structure will generate an additional \$210 million per year which is equivalent to 7 cents additional excise tax per gallon¹².

The additional cost burden on an average driver in the state will be \$4.4 per month.

With improvements to the overall condition of our highway network, this minimal increase on the cost of fuel will be easily offset by the reduction in the hidden cost that the drivers are bearing today.

2. Allocate 25% of the revenues from the proposed 8% sales tax to local governments for development and maintenance of the local and regional networks:

Through legislation, one quarter of the revenues derived from the sales tax should be distributed state-wide to MPO's, and in the case of rural areas, to DOTD Regional Offices that will work with local parish authorities. These funds can be restricted for expenditure on roads with local and regional significance with the concurrence from DOTD's regional offices. Affected MPOs, local governments and regional DOTD offices will establish their own expenditure priorities. This process is a common practice among more evolved and advanced MPO's in other states. It simply makes sense that the decision-making process be placed at the level closest to the public.

3. Provide tax incentives for private investment in development of major transportation projects:

Louisiana has a \$12B backlog of badly needed highway projects. With the decreased inability of the federal and state agencies to meet the accumulated needs, more states are turning to various means of attracting private funds for transportation. Today in Louisiana, we offer great financial incentives to industry to relocate here. Our tax-incentive package to the film and music industry has been a great success. Our industrial bond program in conjunction with cash and other incentives has been attracting billions of investment in many parts of our state.

Investment in transportation creates both temporary and permanent jobs, as much or perhaps more than the equivalent investment in an industrial plant. Further, an effective transportation system opens the door to further economic development.

¹² Appendix G: Gas Sales Tax Analysis

Today, the address of choice for an industry considering relocation is that of an interstate highway.

Providing such incentives for new corridor development will attract investments in new transportation projects in Louisiana. The program should include investments in highways, rail, waterways, ports and airports. This innovative program will set Louisiana on the path for rapid economic growth.

4. Provide an opportunity for local governments to raise revenue for their local transportation projects:

The state's constitution prohibits local governments from imposing gasoline taxes. With limits on property tax and general sales tax, local entities are limited on generating revenues for their local transportation needs. A general sales tax is viewed as an unfair taxation for those who do not use the system. However, fuel taxes, also labeled as "user fees," are considered as a fair assessment for users of the system.

5. The use of revenues derived from fuel tax must be restricted to transportation improvement use only:

Current state laws allow a 20% allocation from DOTD's annual budget on areas outside of DOTD. This provision siphons badly needed resources out of DOTD. When fuel taxes are used for purposes other than to support a viable transportation system, the public views that as a breach of contract. That erodes public trust in government.

Communities' Role:

The Issue:

Progressive communities in the state should have the authority and the means to take on the leadership role to determine and address local and regional needs and priorities. Furthermore, they must have the needed resources to address those needs.

The United States Congress passed the Federal-Aid Highway Act of 1962, which required the formation of an MPO for any urbanized area (UZA) with a population greater than 50,000¹³. In 1990, the federal transportation legislation, ISTEA (Intermodal Surface Transportation Efficiency Act), strengthened the role of MPOs by allowing them to work hand-in-hand with state and federal transportation agencies in the planning and development of needed infrastructure with particular focus on the priorities of the community. This legislation opened the door to decentralizing departments of transportations and to transferring some of the decision-making authorities to local communities.

Although, in Louisiana, we have several MPOs that function reasonably well, none has an independent authority to completely plan, develop and fund their projects. Most of

¹³ http://en.wikipedia.org/wiki/Metropolitan_planning_organization

the decision making is in Baton Rouge and funding allocation is based on the state priority process. Needless to say, the current structure often produces a great deal of dissatisfaction on the part of the locals and at times leads to conflict between DOTD and local leadership.

Proposals:

1. Within urbanized areas, require MPOs to take on additional responsibilities and become more autonomous:

An MPO is a federally mandated and federally funded transportation policy-making organization that is made up of representatives from local government and governmental transportation authorities.

The current federal requirements define five core functions of an MPO:

1. Establish and manage a fair and impartial setting for effective regional decision-making in the metropolitan area (UZA)
2. Evaluate transportation alternatives, scaled to the size and complexity of the region, to the nature of its transportation issues, and to the realistically available options
3. Develop and update a fiscally constrained long-range transportation plan (LRTP) for the UZA covering a planning horizon of at least twenty years that fosters mobility and access for people and goods, efficient system performance and preservation, and quality of life
4. Develop a fiscally constrained program based on the long-range transportation plan (TIP) designed to serve the UZA's goals while using spending, regulating, operating, management, and financial tools
5. Involve the general public and all the significantly affected sub-groups in the four essential functions listed above.

Presently, most MPOs have no authority to raise revenues such as to levy taxes on their own, rather, they are designed to allow local officials to decide collaboratively how to spend available federal and other governmental transportation funds in their urbanized areas. The funding for the operations of an MPO comes from a combination of federal transportation funds and required matching funds from state and local governments.

Support of additional authority for MPO combined with local governments' ability to generate needed revenues will greatly reduce the current burden on DOTD and would allow the agency to concentrate its efforts on issues of statewide importance.

2. Require Regional DOTD offices to work with rural communities, outside of MPOs, to establish processes for developing projects and allocation of resources:

Regional DOTD offices will have three levels of responsibilities:

- The national and statewide network

- The regional network and collaboration with the appropriate MPO
- The custodial agent to ensure that allocated revenues from the statewide gas sales tax are properly dispensed.

DOTD headquarters will have the main responsibility for the planning, design, funding and implementation of the national and statewide network.

Conclusions:

An abundance of natural resources has placed Louisiana on a path to prosperity for the coming decades. If this great opportunity is to be realized, we must quickly develop a transportation infrastructure that will effectively meet the anticipated needs of the public as well as the industries that are rapidly being attracted to our state.

Appendix A

BANKRATE Data

Car Ownership Costs by State									
http://www.bankrate.com/finance/auto/car-ownership-costs-by-state.aspx#ixzz3AmPp92S									
	Lowest Repair Cost		Lowest Insurance Cost		Lowest Gasoline Cost		Lowest Total Cost		
1	Vermont	\$ 270.00	Iowa	\$ 630.00	Washington, D.C.	\$ 618.00	Iowa	\$ 1,943.00	
2	West Virginia	\$ 310.00	South Dakota	\$ 654.00	New York	\$ 713.00	Ohio	\$ 1,973.00	
3	South Dakota	\$ 312.00	Wisconsin	\$ 658.00	Alaska	\$ 730.00	Illinois	\$ 2,000.00	
4	Delaware	\$ 314.00	North Dakota	\$ 662.00	Nevada	\$ 771.00	Idaho	\$ 2,001.00	
5	Iowa	\$ 315.00	Idaho	\$ 664.00	Pennsylvania	\$ 781.00	Wisconsin	\$ 2,018.00	
26	Louisiana	\$ 354.00			18	Louisiana	\$ 924.00		
	Highest Repair Cost		Highest Insurance Cost		Highest Gasoline Cost		Highest Total Cost		
47	Maryland	\$ 388.00	Rhode Island	\$ 1,142.00	Vermont	\$ 1,178.00	New Jersey	\$ 2,420.00	
48	North Carolina	\$ 390.00	New York	\$ 1,196.00	North Dakota	\$ 1,207.00	Mississippi	\$ 2,488.00	
49	California	\$ 390.00	New Jersey	\$ 1,244.00	Mississippi	\$ 1,231.00	Florida	\$ 2,516.00	
50	Washington, D.C.	\$ 392.00	Washington, D.C.	\$ 1,273.00	Alabama	\$ 1,237.00	Louisiana	\$ 2,555.00	
51	New Jersey	\$ 393.00	Louisiana	\$ 1,277.00	Wyoming	\$ 1,588.00	Wyoming	\$ 2,704.00	
	US Average	\$ 353.80	US Average	\$ 886.33	US Average	\$ 985.08	US Average	\$ 2,225.22	

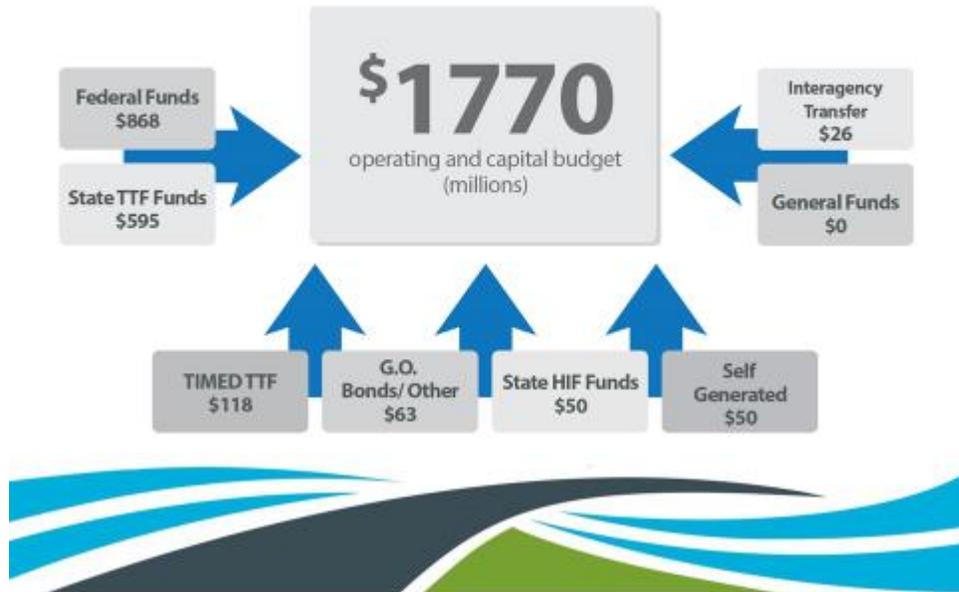
Appendix B



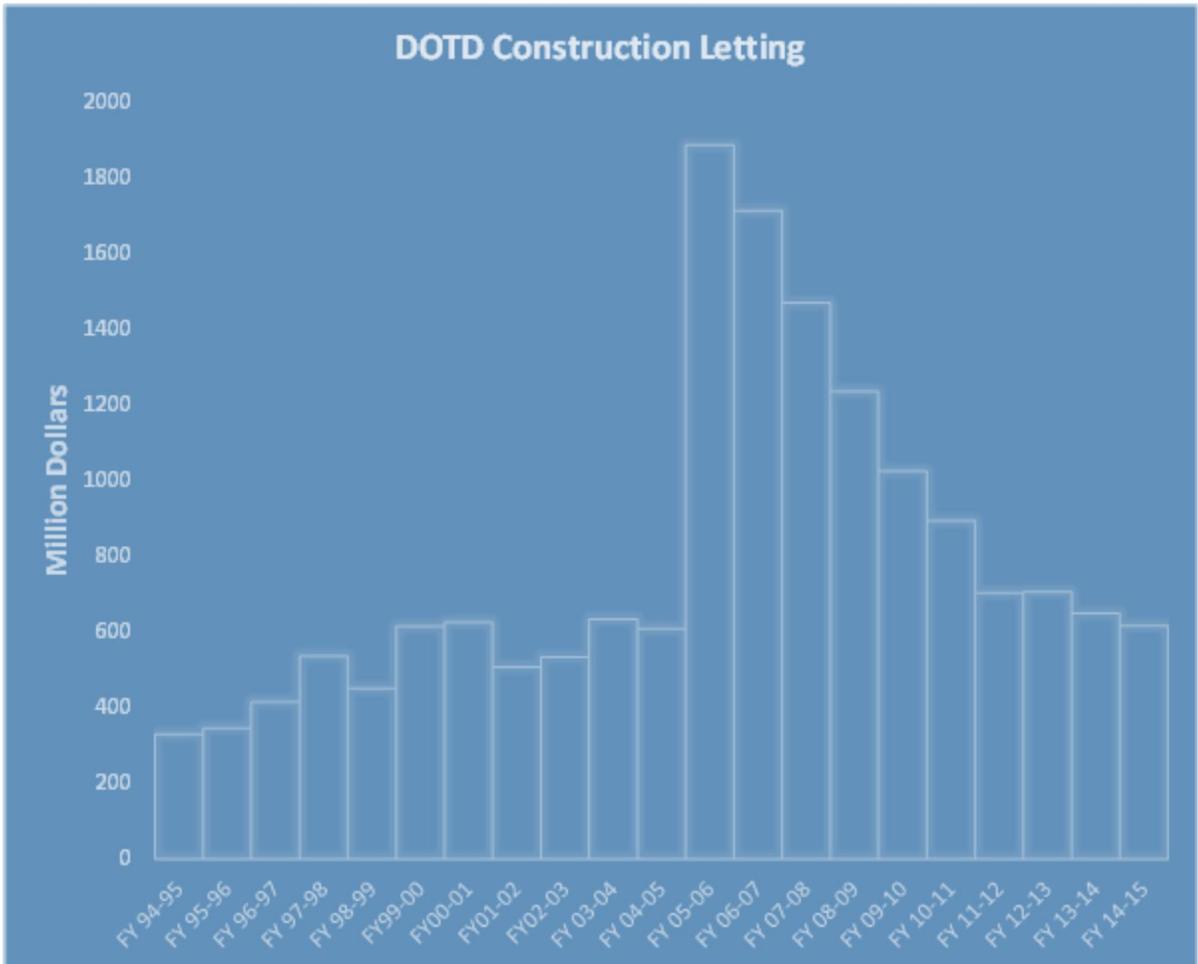
Appendix C

Presentation by Secretary LeBas
Legislative Task Force Meeting
9/10/14

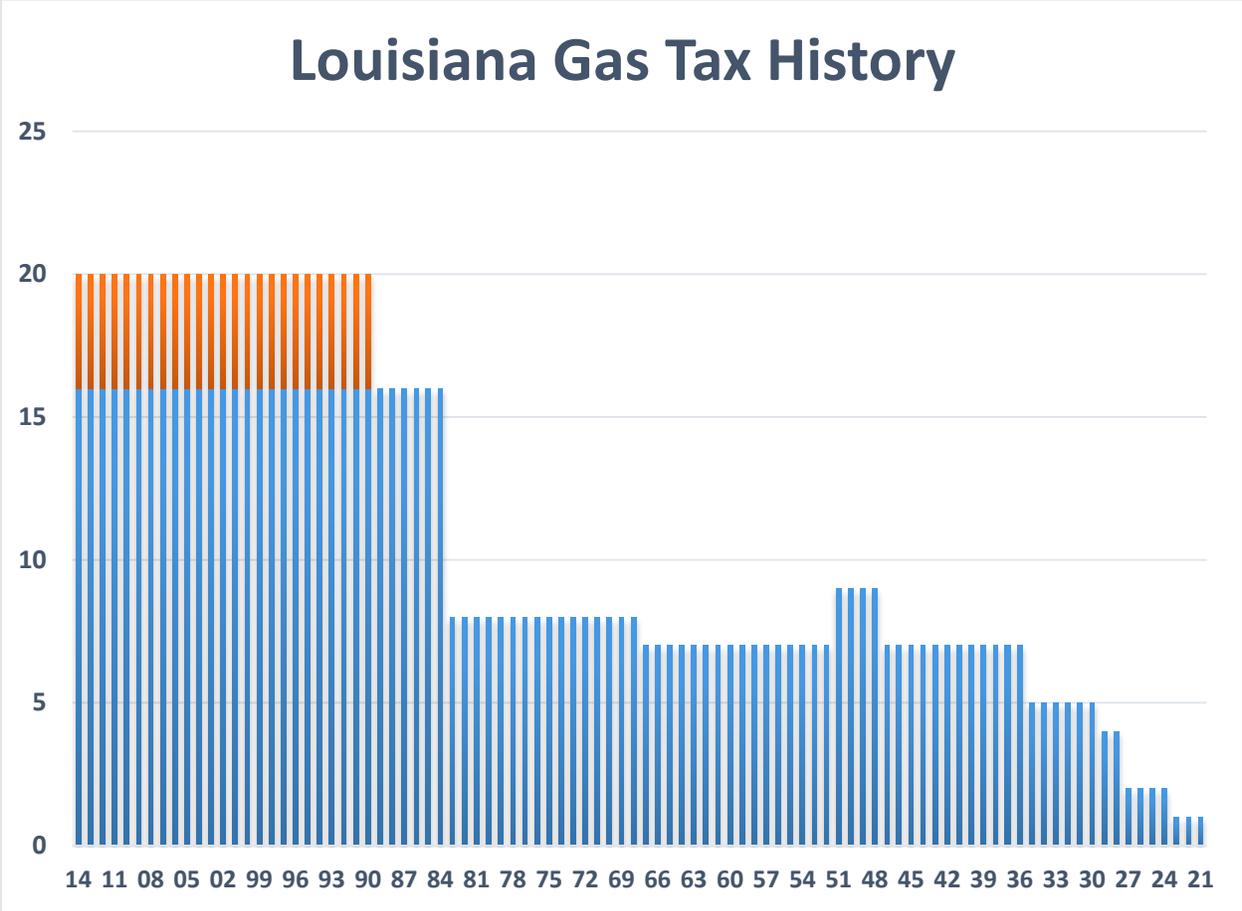
FY 14-15 REVENUE



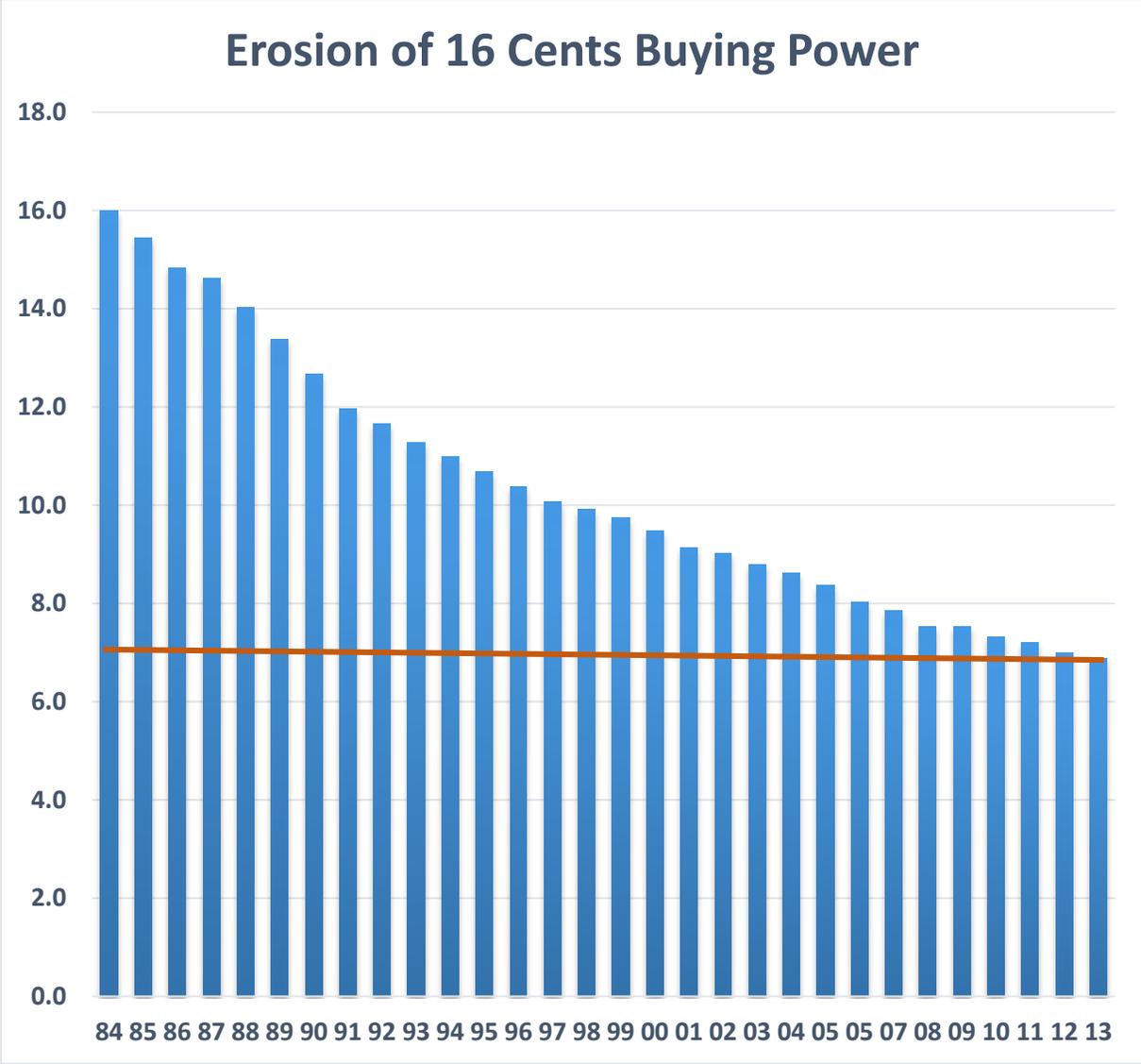
Appendix D



Appendix E



Appendix F



Appendix G

Gasoline Sales Tax Analysis

Assume a per gallon price of	\$3.25
Deduct Federal Excise Tax	\$0.184
Deduct State excise tax	\$0.20

Base price per gallon	\$2.866
Assume 8% sales tax on Base Price	\$0.2293
Add 4Cents TIMED Program dedication	\$0.04
Add Federal Excise Tax	\$0.184

Adjusted Price per Gallon of Gas	\$3.32 \$0.07 more
Additional Tax Revenue from \$0.07	\$210 Million

Additional Cost to Public

Assume a 10000 miles per year average driving
Assume a 16 miles per gallon fuel consumption

Additional cost per year = $(\$0.07) * 10,000 / 16 =$ \$43.74 per year
Average motorist will have an additional tax Burdon of \$3.65 per month

Additional Revenues Generated

One penny tax is currently generating	\$30 million per year
TIMED Dedicated 4 cents produces	\$120 million
The 16 cents gas tax generates approximately	\$480 million
The new additional 7 cents will generate	\$210 million
Sales tax revenue (\$480 + \$210)	\$690.00 million

Overall New Annual Revenue:	\$810 million
1% Sales Tax will generate (\$690/8)	\$86.25 million

Revenue Sharing with Locals:

Assume DOTD 6% Sales Tax	Locals 2% Sales Tax
DOTD's Revenue from 6% sales tax	\$517.00 million
DOTD's Revenue from 4 cent excise tax	\$120.00 million
DOTD's Savings of Parish Transportation Fund	\$ 45.00 million
Total DOTD Revenue	\$682.00 million vs \$600 million (Today)
Locals Revenue from 2% sales tax	\$172.5 million

Note: The above analyses do not account for new revenues due to the application of sales tax on fuels currently not taxed.