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October 14, 2015

Texas House Committee on Transportation
Subcommittee on Long-Term Infrastructure Planning
Texas House of Representatives
P.O. Box 2910
Austin, Texas 78768-2910

TO: The Honorable Ron Simmons
Chairman, Texas House Subcommittee on Long-Term Infrastructure Planning

CC: Members, House Subcommittee on Long-Term Infrastructure Planning

FROM: Ginger Goodin, Director
Policy Research Center, Texas A&M Transportation Institute (TTI)

DATE: October 14, 2015

RE: Requested information

During the subcommittee hearing on September 10, 2015, TTI was asked several follow-up questions regarding our testimony on future funding needs and funding strategies used by other states. The attachment provides our responses to those questions.

Please do not hesitate to contact me if I can provide you with any further information. I can be reached at (512) 407-1114.

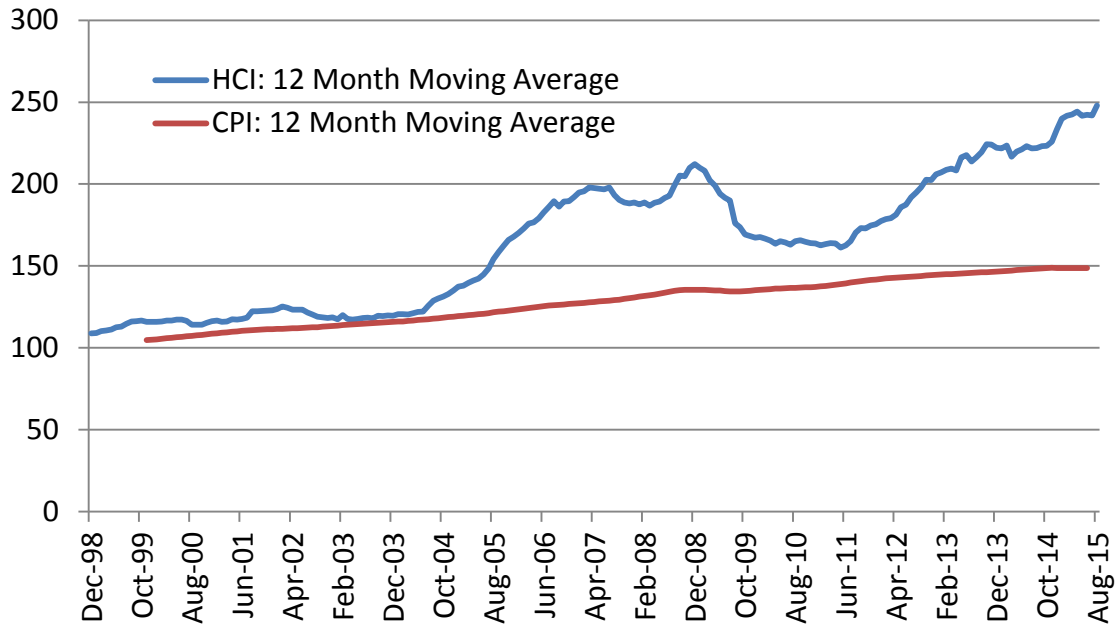
Texas House Transportation Committee, Subcommittee on Long-Term Infrastructure Planning
September 10, 2015
Follow up Data and Discussion

Future Funding Needs:

- **Highway Cost Index: Why is there an increase in rate and volatility since 2004**?

The question is in reference to the following chart:

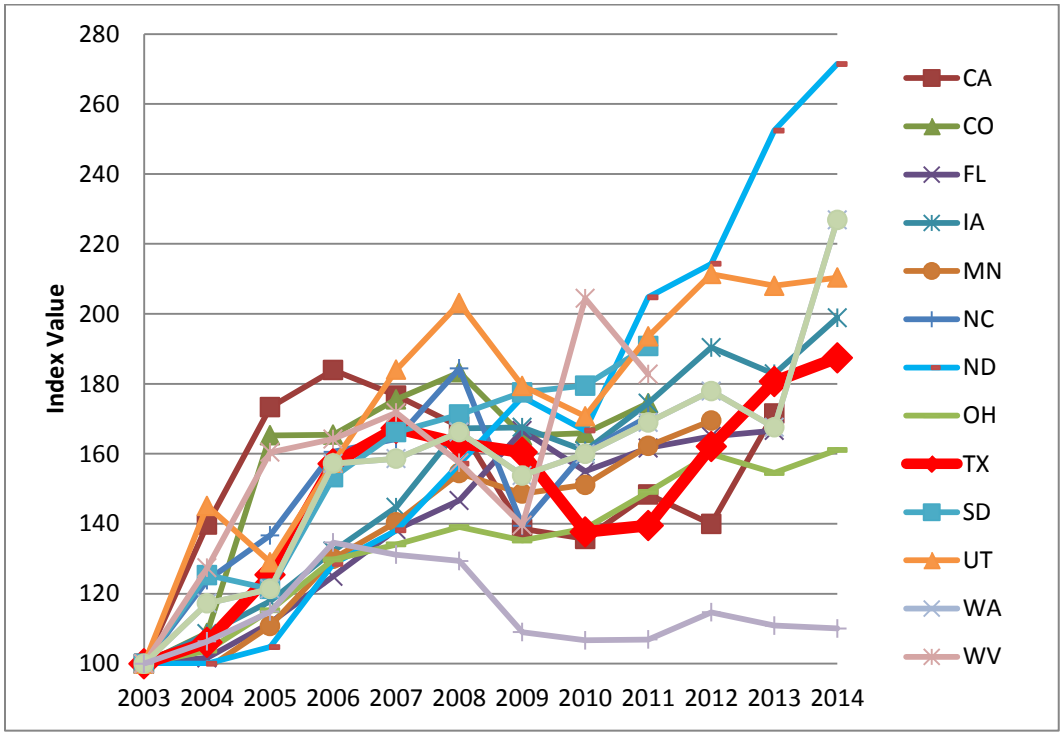
Exhibit 1: 12-Month Moving Average of Texas HCI and National CPI



The Highway Cost Index reflects the effect of inflation on highway construction costs. It includes construction commodities such as steel, cement, and fuel. Alternatively, the Consumer Price Index accounts for a number of household consumer goods and services. Some of the volatility in the Highway Cost index appears to be seasonal. For example, when the monthly values of the 12-month moving average of the HCI are ranked, 10 of the 20 months with the largest month-over-month increase occur in July or August. In addition, as noted in Exhibit 2 below, Texas is not unique in terms of the volatility of the HCI relative to the CPI.

- **How does the HCI in Texas compare to other major states?**
  Exhibit 2 below was developed by TTI in February 2015. The HCIs for the states shown below represent those from whom we could obtain data. Some states do not collect the necessary data, others were not willing to share the data they do collect, and still others use the HCI of other states as a surrogate for their own.

  Exhibit 2: Comparison of Various State HCI's



- **How does the cost of inflation for a $500 million dollar 2010 project compare to a bonding scenario?**

  A $500 million dollar road construction project built in 2010 would cost an estimated $750 million if built today, and more than $920 million if built in 2019, assuming a 5 percent inflation rate from 2015 to 2019.

  A $500 million dollar project, built today and bonded over 30 years at 4 percent would cost an estimated $885 million including principal and interest (assuming 2 percent issuance cost).

- **How is the total transportation need referred to in TTI testimony split between state and local responsibility?**
  The 2030 Report estimated the TOTAL transportation need in the state to be $270 billion (in 2010 dollars). This estimate includes ALL roads – state, local and other. Based on an analysis done at that time it was estimated that approximately 64 percent of the State's total transportation need was being met by TxDOT with the remainder being met by cities, counties, toll authorities, etc. At the time, the trend had been toward non-State entities assuming a larger portion of the total transportation responsibility. As a result, it was assumed that the split would trend toward approximately 60 percent state, 40 percent local. To the extent the state share is assumed to be larger, the total estimated state share of the need would increase in terms of dollars.

- **What is the basis for the 10 percent toll road and P3 assumption used in the needs calculator?**
  The model makes several assumptions as to the future level of needs. These assumptions can be changed to encompass a multitude of situations. The scenarios presented in TTI testimony assumed that approximately 10 percent of construction will be met through state-constructed toll roads (exclusive of what is done at the non-state level) and an additional 10 percent through public private partnerships over the next 20 years. It was also assumed that 10 percent of congestion could be relieved as a result of demand management and other congestion mitigation strategies, such as rapid incident clearance, telecommuting, active traffic management and ridesharing programs.

- **What is 2010 Mobility Performance?**
  The 2030 Report[1] defines 2010 Mobility Performance goals as:
  - Maintain bridge and pavement conditions in the same quality as 2010.
  - Keep traffic congestion from growing.
  - Maintain the same amount of heavily traveled major rural roads.

  <u>Pavement Quality Maintained at 2010 Quality Level</u>
  - Pavement conditions will be maintained at 13 percent of fair, poor and very poor throughout the analysis period of 2011 to 2035.

  <u>Bridge Quality</u>
  - Bridge conditions will be maintained at values similar to 2010 conditions, with bridge deficiencies remaining at 2.3 percent of the statewide bridge surface area.

  <u>Urban Traffic Congestion</u>
  The solutions required to maintain this level of mobility would be a range of highway and transit projects, advanced technologies to improve the efficiency of systems, and incentives to get commuters to think about when and how they make their trips.
  - Average congestion delay is held steady in each urban region at 2010 levels. The total annual delay per peak auto commuter has risen from 40 hours in 2010 to 42 hours in 2014.[2]

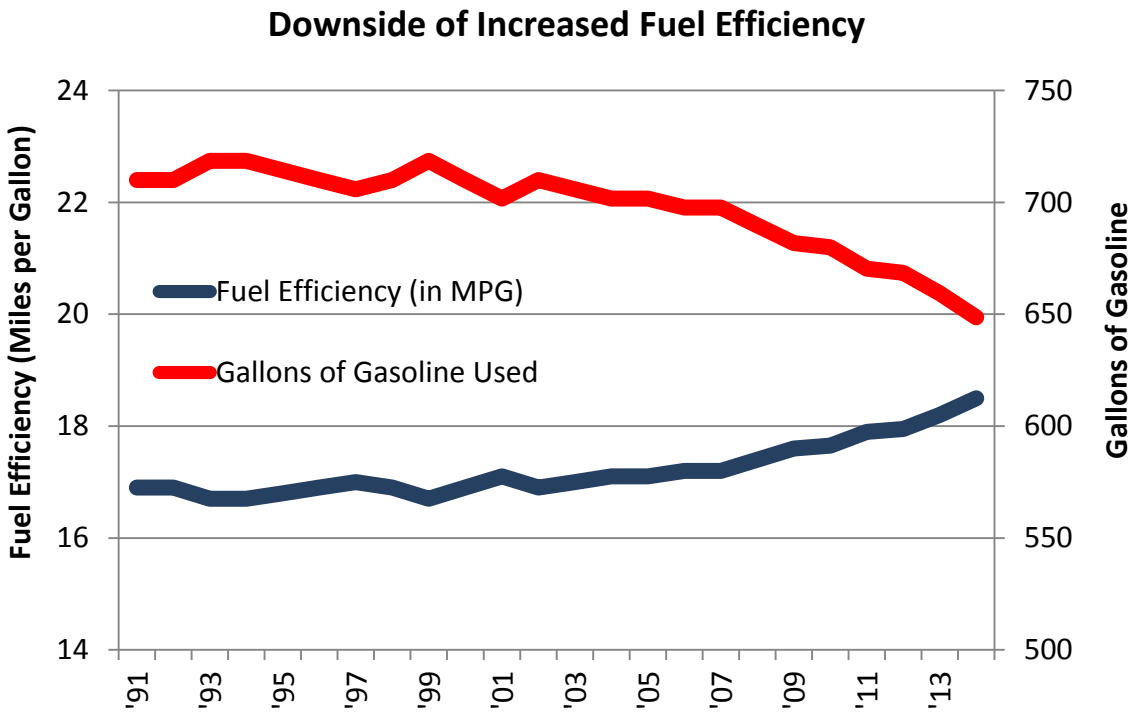
[1] http://texas2030committee.tamu.edu/documents/final_03-2011_report.pdf

Rural Connectivity

Widening the high traffic volume sections of rural corridors will offer significant benefits to travelers, truckers, manufacturers and communities. The scenario maintains the amount of heavily traveled major rural roads at 7 percent.

- **How do the two variables in the fuel efficiency vs gallons chart compare to each other? Why they do not mirror each other exactly?**

  The scale is different for each variable on the chart (shown below). The two are mirror images if the scales were adjusted. A small change in MPG makes a larger impact on gallons consumed assuming the same number of miles is driven each year.



Transportation Funding in Other States:

- **Would you provide a side-by-side comparison of funding strategies for peer states, looking at total budgets and comparing strategies that are similar and those that are unique**?

  We are still in the process of conducting this analysis. A simple comparison from expenditure categories is problematic in that states have different responsibilities with respect to roadways (e.g., local streets), expenditures are reported/accounted for differently, classification of expenditures from state to state are different, etc. It is our desire to provide accurate information and to do so will require more time.

[2] 2015 Annual Urban Mobility Scorecard. http://mobility.tamu.edu/ums/

- **How many states index the fuel tax (not just those that have enacted recent legislation)?** The states that index their fuel tax are shown on the table provided as Exhibit 3. The table also shows states that use some form of variable pricing to determine their motor fuels sales tax.

  Florida, Rhode Island, Georgia, Maryland, and Utah currently use or will use the Consumer Price Index (CPI) in some way to adjust their motor fuel taxes. Florida and Rhode Island use the CPI exclusively. Georgia and Maryland use an excise tax which is updated on the CPI annually in addition to a percent tax. Utah will begin to use the CPI in 2019, but does not currently use it to adjust their motor fuels tax. New Hampshire made a one-time adjustment based off the CPI effective July 1, 2014 but does not have legislation to continue using the CPI to adjust their taxing structure. There are 15 other states that use some form of variable pricing. Nevada is shown in the table, but only allows indexing/ variable pricing for large counties (over 700,000 residents) who enact their own ordinances.

Exhibit 3: Other State Fuel Tax Policies

(A) – Indexed to the Consumer Price Index (CPI)
(B) – Motor fuel tax calculated by percentage of gas price in addition to flat excise tax
(C) – Motor fuel tax calculated by percentage of gas price
(D) – General sales tax applies to motor fuel

State	Type	Statute	Legislation	Key Facts
California	(B)	Cal. Revenue & Taxation Code §7360	Assembly Bill x8-6 (Chapter 11, Statutes of 2010), Senate Bill 70 (Chapter 9, Statutes of 2010), and Assembly Bill 105 (Chapter 6, Statutes of 2011)	• Product of the 2010 "Fuel Tax Swap" • Excise tax and 2.25 percent sales tax on motor fuel • Excise tax adjusted annually to ensure any change in variable rate percentage is revenue neutral.
Connecticut	(B)	Conn. Title 12, Chapter 227 Sale of Petroleum Products Gross Earnings Tax, §12-587 (2011)		• 25 cent per gallon excise tax • Additional tax of 8.1 percent on wholesale level of motor fuel. • Updated annually. • Tax is capped at $3 per gallon.
District of Columbia	(C)	DC § 47–2301	District of Columbia Bill 20-199 §7291 (2013)	• 8 percent on wholesale price of gasoline • Updated every 6 months. • The average wholesale price of motor fuel cannot be less than $2.94. It also cannot fluctuate by more than 10 percent from the average wholesale price of motor fuel from the previous six months.
Florida	(A)	Fla. Stat. Ann. §206.41		• Sales tax on motor fuels adjusted to the percentage change of the CPI. • Updated annually • Floor of 6.9 cents-per-gallon
Georgia	(A),(B)	O.C.G.A. § 48-9-3	HB 170 (2015)	• 26 cents per gallon of gasoline and 29 cents per gallon for diesel excise tax updated every year based on CPI. (Ending in 2018) • 4 percent gas sales tax of the statewide average retail price.
Hawaii	(D)	Hawaii Rev. Stat. §243, Hawaii Rev. Stat. §248-8 & Hawaii Rev. Stat. §249	SB 251 (2015)	• 4 percent excise tax which is deposited in to the state's general fund.
Illinois	(D)	Ill. Stat. ch. 30, §740, Ill. Stat. ch. 35, §105, Ill. Stat. ch. 70, §3615		• 6.25 percent statewide general sales tax • 80 percent (5 percent of the tax) is diverted to the state, then directed to various transportation funds.

Indiana	(B)	Ind. Code Ann. §6-2.5-7, §6-6-1.1, Ind. Code 6-2.5-3.5 & Ind. Code 6-2.5-10-1	SB 479 (2013)	• Seven percent of the statewide average retail price per gallon • Additional 18 cent per gallon excise tax • Updated monthly
Kentucky	(C)	Ky. Revised Statutes, 1980: KRS 138.220	HB 299 (2015)	• Variable excise tax updated quarterly on weighted average whole gasoline price.
Maryland	(A), (B)	Article - Tax - General (2-1103, 2-1302.2, 2-1303, 9-305, 9-306) Article - Transportation (13-954, 3-202, 3-215, 3-216, 3-217, 7-208, 7-506, 8-613.3)	HB 1515 (2013)	• Excise tax indexed by the consumer price index • Additional 3 percent sales tax applied to the wholesale cost of gasoline. • Updated monthly
Nebraska	(B)	Neb. Rev. Stat. §66-489.02 & Neb. Rev. Stat. §66-4,144		• 10.3 cents per gallon excise tax • 5 percent tax on the average wholesale price of fuel • Additional variable rate set by the legislature as needed. • Updated every 6 months
Nevada	(B)		AB 413 (2013)	• Counties with a population **over 700,000** may enact ordinances to tax motor fuels at a percentage adjusted by the average highway and street construction inflation index. • These taxes are **not** statewide and may vary by county
New Hampshire[i]	(A)		SB 367 (2014)	• One time increase • Increase based on change in CPI.
New York	(B)	N.Y. TAX. LAW § 523 : NY Code - Section 523: Fuel use tax and N.Y. TAX. LAW § 301-j: NY Code - Section 301-J: Supplemental petroleum business tax and supplemental tax on aviation gasoline component of aviation fuel business tax (1996)		• 8 cents per gallon flat excise tax • 7.2 percent wholesale tax of gross receipts on petroleum businesses in addition to flat excise tax
North Carolina	(B)	N.C. §105-449.80. Tax rate & §105-449.81	SB 20 (2015)	• 17.5 cents per gallon excise tax • An additional variable wholesale component is either 3.5 cents-per-gallon or 7 percent of the average wholesale price of motor fuel, whichever is greater. • Capped at 37.5 cents-per-gallon.

Pennsylvania[ii]	(C)	Pa. Consolidated Statute Title 75 (Vehicle Code), Chapter 95	HB 1060 (2013)	• 2013 law eliminated the state retail gas tax paid at the pump and replaced with an increased tax rate on the oil company franchise tax. • This increased rate is achieved by raising and removing the cap on the average wholesale price of fuels subject to the tax. • The bill also raises various fees to the rate of inflation and indexes them to inflation
Rhode Island	(A)	R.I. § 31-36-7	HB 7133 (2014)	• 32 cents per gallon excise tax • Excise tax indexed to the CPI every 2 years for urban consumers
Utah	(A),(C)	Utah § 59-13-201	HB 362 (2015)	• Replaces current 24.5 cent per gallon tax with a 12 percent tax on the average rack price of a gallon of gasoline • Will be tied to the CPI after 2019.
Vermont	(B)	Vt. Statute Title 23, Chapter 028, Subchapter 001: § 3106 Imposition, rate, and payment of tax	HB 510 (Act 12) (2013)	• Flat excise tax • A motor fuel tax of 2 percent of the average quarterly retail gas price, and • And an assessment of 13.4 cents or 4 percent of the tax-adjusted gas price (whichever is highest). • Updated quarterly
Virginia	(C)	Va. § 58.1-2217	HB 2313 (2013)	• Rate of 5.1 percent of the average wholesale price of gasoline
West Virginia	(B)	W.V. §11-14C-5. Taxes levied; rate.		• Flat tax gas tax of 20.5 cents-per-gallon plus 5 percent of the average wholesale gasoline price.

Table adapted from information included in the Transportation Investment Advocacy Center's 2015 report, *Variable-Rate State Gas Taxes* and the National Conference of State Legislatures.

[i] One time change based off change in Consumer Price Index (CPI) from 2003 to 2013.
[ii] Starting January 2017