Approved: 6/23/09
Date

MINUTES OF THE SENATE TRANSPORTATION COMMITTEE

The meeting was called to order by Chairman Dwayne Umbarger at 8:30 a.m. on March 6, 2009, in Room 136-N of the Capitol.

All members were present except:
Senator Les Donovan- excused

Committee staff present:
Mike Corrigan, Office of the Revisor of Statutes
Hank Avila, Kansas Legislative Research Department
Jill Shelley, Kansas Legislative Research Department
Cindy Shepard, Committee Assistant

Conferees appearing before the Committee:
Mark Chinery, President, Concrete Pipe Resources, Inc
Mike Johnston, President & CEO , Kansas Turnpike Authority

Others attending:
See attached list.

Presentation on Kansas Reinforced Concrete Pipe Manufacturing Industry

Mark Chinery, President of Concrete Pipe Resources, Inc. provided the committee with an industry overview (Attachment 1) and a report, *Economic Impact of the Concrete Pipe Industry on the State of Kansas, 2006,* prepared for the Missouri Kansas Concrete Pipe Association by the Center for Economic and Business Research, Southeast Missouri State University (Attachment 2).

Following Mr. Chinery's presentation, concerns were discussed about the economic impact of alternate pipe materials manufactured out of state, that are being used in Kansas Department of Transportation (KDOT) road projects. The Chairman requested that KDOT re-evaluate pipe policy specifications and consider life cycle cost analysis, service life, and economic impact in the selection of materials for future projects.

Information on the Kansas Turnpike Authority

Mike Johnston, President & CEO of the Kansas Turnpike Authority, appeared at the committee's request with an overview about the Kansas Turnpike and the future of tolling (Attachment 3).

Discussion and questions followed Mr. Johnston's informational overview.

The meeting was adjourned at 9:20 a.m. The next meeting is scheduled for March 10, 2009.

SENATE TRANSPORTATION COMMITTEE
GUEST LIST

DATE: 3/6/09

NAME	REPRESENTING
Bill Brady	Capitol Strategies
Erika Johnston	KTA
Sean Miller	Capitol Strategies
Terry Heidner	KDOT
Mark Chaney	MO Vs Concrete Pipe Assoc.
Ed Sexe	Cretex Concrete Midwest
Brad Werth	Wichita Concrete Pipe
William Bandstra	Pretech Corp.
Jerry Linn	McPherson Concrete Products
JP Connolly	Oldcastle Precast
Ron Seeber	KARA
Lisa Callahan	KTA
Mary E. Turkington	KTA
Jeff Glasmann	Stein Law
J D Simone	D. Schmidt
Josh Smith	Intern, Sen. Pyle
Sara Belfry	Kansas Chamber
Jason Duncan	Cretex Concrete Products Midwest
KEVIN GREGG	KMCA

SENATE TRANSPORTATION COMMITTEE
GUEST LIST

DATE: 3/6/09

NAME	REPRESENTING
Tom Whitaker	KMCA
Bob Totten	Ks Contractors Assoc
Dan Coches	KSPE
Wendy Williams	KAPA - KRMCA
Woody Moses	KAPA - KRMCA

Kansas Reinforced Concrete Pipe Manufacture Industry Overview

LONG TERM DURABILITY

Only concrete pipe has a proven service life of over 100 years. Throughout the country, there are concrete pipe sanitary and combined sewers that were installed in 1860's and are still in use today. No other pipe material can come close to that kind of performance.

ECONOMICS

Reinforced concrete pipe utilizes conventional materials. Course aggregates, sand, cement, and reinforcing steel, all of which are purchased from **Kansas** companies are the raw materials used in all concrete pipes. Reinforced concrete pipe is made in Kansas, with **Kansas** materials that are hauled by the **Kansas** trucking industry. Concrete pipe not only outperforms all of its competitors, but it is better for the **Kansas** economy.

Economic Impact:

• Manufacturing Companies:	4
• Kansans Directly Employed:	231
• Total Industry KS Job Impact	446
• Labor income	$ 18.76 million
• Industry's employees personal income taxes	$ 321,000
• Total Impact on personal income taxes	$ 625,000
• Annual sales tax revenue	$ 1.745 million
• Manufacturer property taxes	$ 485,200
• The output multiplier	1.50
• The employment multiplier	1.93
• Direct Impact on States Economy	$ 52.7 million
• Total Impact on States Economy	$ 79.1 million

Senate Transportation
3-6-09
Attachment 1

RIGID STRUCTURE MEANS REDUCED RISK AND LOWER MAINTENANCE COSTS

With Reinforced Concrete Pipe you can be sure that your installation will be a solid structure since that structure is delivered on our trucks directly to your jobsite. You do not have to rely on the low bid contractor to build your structure on the jobsite thus reducing the risk of a failed installation. Also, this solid structure means you will not have to worry about the pipe deflecting and causing dips in your roadways that will require patching and increase your maintenance budget

Some think that concrete pipe is too heavy, but this weight is actually a benefit. The weight and strength of concrete pipe eliminates both the line and grade problems and the deflections that occur during installation of lighter products. Regardless of the type of pipe being installed the heavy equipment is already on the job site to dig the trench.

JOINTS AND CONNECTIONS

Your Kansas Manufacturers produce pipe with joints that comply with national standards for soil tight, silt tight, leak resistant, and water tight joints to meet all of your needs. These national standards are among the most stringent in the pipe industry and require the pipe to meet extreme conditions seldom experienced in the field. These standards help to insure we are installing a solid infrastructure which will last for generations.

The joints and connections are often considered the weak link in a pipe system especially when connecting to a rigid manhole. Concrete pipe can be grouted into a rigid manhole and will actually strengthen a manhole that has a large opening. Also, concrete pipe is not sensitive to temperature changes which helps eliminate the pipe contracting and opening joints and pulling away from a rigid manhole.

FLOTATION

Because of the weight of reinforced concrete pipe, flotation is seldom an issue.

FIRE

Concrete pipe will not burn. This is a critical property for pipe culverts in Kansas since we frequently experience Kansans burning fields, leaves, and dead grass. This property is also important in the event a transport truck carrying flammable liquids has an accident and the cargo catches on fire. The traveling public will not have to fear damage to the pipe culverts involved in containing the spill.

TESTING & INSPECTION

Standard testing procedures used to evaluate concrete materials and finished pipe products have been in place for decades. AASHTO and ASTM standards cover all tests required for the evaluation of concrete pipe and its component materials. These tests are easily and routinely conducted in pipe plants and labs across the country. This is a strategic benefit for a mature product which has been proven to stand the test of time.

Missouri Kansas

Concrete Pipe Association

Industry Overview

www.concrete-pipe.org

American Concrete Pipe Association

Missouri Kansas

Concrete Pipe Association

- Mission is to increase educational and technical awareness of concrete products in the engineering community in Missouri and Kansas.
- We conduct seminars, develop software and other technical materials that assist engineers in the design of pipe installations.
- Serve as the unified voice of the concrete pipe industry.

www.concrete-pipe.org

American Concrete Pipe Association

3

Kansas Jobs & Economy

www.concrete-pipe.org

American Concrete Pipe Association

4

Goals for Today…

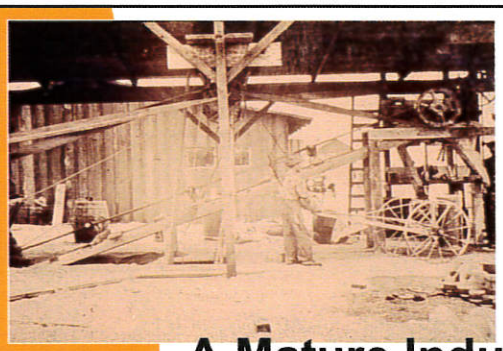
- Industry History
- Industry Competition
- Industry Impact on Kansas Economy
- Industry Challenges & Concerns

www.concrete-pipe.org

American Concrete Pipe Association

Proven Service Life

5



6

A Mature Industry Using Today's Technology

American Water Works Association

ASCE American Society of Civil Engineers

U.S. Department of the Interior Bureau of Reclamation

Specifications

AREMA

US Army Corps of Engineers®

ASTM INTERNATIONAL Standards Worldwide

Federal Aviation Administration

American Association of State Highway and Transportation Officials AASHTO 1914

crete-pipe.org

Investing In Modern Manufacturing Equipment

9

Investing In Quality

www.concrete-pipe.

American Concrete Pipe Association

10

Industry Competition

Topeka:
Oldcastle Precast - Vanguard

Kansas City:
Cretex Midwest Pretech Precast

McPherson:
McPherson Concrete Products

Wichita:
Wichita Concrete Pipe
(A division of McPherson Concrete Products)

www.concrete-pipe.org

American Concrete Pipe Association

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Industry Challenges & Concerns

- State and Local Economy
- Federal Highway Trust Fund
- The State's Long Range Transportation Plan
- Stimulus Package

www.concrete-pipe.org

American Concrete Pipe Association

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Industry Challenges & Concerns

- **Impact of SAFETEA-LU**
  (Safe Accountable Flexible Efficient Transportation Equity Act—A Legacy for Users – 2005)

- Reduce Cost Through Competitive Bids
- If materials are equally acceptable on the basis of engineering and economic analysis

- Goal = To Save Money


stall It.....
Inspect It

Top 10 Reasons to Specify Precast Concrete Pipe

Not all pipes are created equal. When it comes to durability, versatility, and long term value, other pipes don't measure up to precast concrete pipe. There are many reasons to specify rigid concrete pipe instead of flexible pipe. Before you consider choosing a pipe other than precast concrete, take a look at the facts. If you're looking for the best over all solution, concrete pipe is the most solid choice you can make. When you spec concrete pipe, the projects you build today are more likely to be compatible with any future expansions or alterations. Of all the products on the market, only one is certain to be around for generations to come - Precast Concrete Pipe. …….. Pipe for Life!

Reason 1: Superior Strength

Precast concrete pipe is the strongest pipe available. It can be designed and plant tested to resist any load required. Unlike flexible pipe, it has minimal reliance on installation to support loads; it relies primarily on its inherent brute strength manufactured into the pipe. That adds up to a tremendous difference in the design, the installation and the long-term success of your project.

Reason 2: Durability

Durable is defined in Webster's dictionary as "able to exist for a long time without significant deterioration." One of the most critical but overlooked factors in project design is material durability, or service life. The Army Corp of Engineers recommends a design life of 70-100 years for precast concrete pipe, and there are countless examples of installations that surpass those numbers. This means the expectation for precast concrete's functional life is at least twice as long as lesser materials.

There are a variety of products that can meet your specs today, but how many will continue to do the job in the long run? The reasons for this go far beyond concrete's innate strength. Concrete also won't burn, rust, tear, buckle or deflect, and it's immune to the attack of most elements, whether the pipe is buried or exposed.

Reason 3: Hydraulic Efficiency

The key to long-term performance and efficiency lies in a material's ability to retain its original shape and alignment.. Precast concrete pipe's rigidity and mass allow it to greatly out-perform flexible pipe systems in this critical area, which in turn helps to improve hydraulic efficiency by minimizing the resistance to water flow that often occurs when the shape or integrity of a flexible pipe is compromised.

Reason 4: Design and Construction Flexibility

Some projects have design elements that are a little more complex or intricate than others. Precast concrete pipe provides solutions for these projects, whether they are open-cut, deep burials, tunnels, trenchless, shallow burials, or with vertical structures or complex alignment changes. Concrete pipe design is simple to do and the math is sound and easily definable.

Precast concrete pipe gives you strength and flexibility to ensure the success of your most demanding applications. Pipes are manufactured with a variety of sizes, shapes, joints and seal options. There is also an array of linings and coatings that can handle the most aggressive environment.

Reason 5: Dependability

Technology is now in place for making concrete pipe more reliable than ever before. Decades of research and development of many aspects of concrete pipe has enabled concrete pipe producers to change mixes, pipe design, and improve manufacturing processes to provide products that can withstand a wide range of underground environments and effluent profiles.

American
Concrete Pipe
Association
nfo@concrete-pipe.org
www.concrete-pipe.org

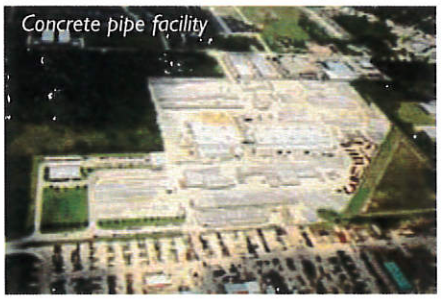
Dep[illegible]ility is not just a matter of how a product performs on its own. It also has a lot to do with how well it is understoo[illegible] the people who plan, design, construct and install a project. How well does the engineer know its properties? How adept is the project team at spotting and correcting potential problems before they happen? How experienced are the crews when it comes to flawless installation and execution? In this vital area, no material is better understood and more commonly used in the field than concrete pipe. That adds up to fewer mistakes, a greater level of comfort and confidence and increased dependability.

Reason 6: Ease of Installation

Concrete pipe is a rigid system that is over 85% dependent on the pipe strength and only 15% dependent on the strength derived from the soil envelope, so installation is made easy. Concrete's rigidity and mass allow for easy and secure placement in the ditch, without disrupting line or grade. Plus, precast concrete pipe joints are easily assembled, which helps minimize the time needs for installation. When installation time matters or when the soil poses challenges to installation, this is a critical area in which concrete pipe far out performs plastic or metal.

That's because the structural and hydraulic integrity of flexible pipes relies heavily on how well you prep the surrounding soil at installation, rather than on their own inherent brute strength. Making sure all conditions are right and installing per national specifications can be a costly and time-consuming proposition.

Reason 7: Local Availability


Concrete pipe facility

Concrete is one of the most widely used construction materials in existence. In virtually every major market, there is a local manufacturer that produces concrete pipe from local suppliers.

Local availability gives you better convenience, and also helps minimize shipping time and costs related to trucking. But that's only the beginning. Having a local manufacturing resource also means that the materials are designed and produced to meet local/state standards. If any issues or changes arise, you also have access to local engineering and support personnel who can respond quickly. In addition, local producers support the local economy by hiring local people (voters) and paying local taxes, which is an extremely important consideration in many private and public projects.

Reason 8: Value

Comparing the initial hard cost of materials is only the first step in seeing where your greatest value lies. There is an array of costs that arise after the initial purchase that can profoundly affect your project's bottom line.

Concrete pipe costs less than plastic or metal pipe to install, inspect and test. It also provides lower ongoing maintenance costs, and minimizes your risk of failure or early replacement.. The cost for crews to repair and replace failed pipelines is enormous in addition to the costs to the motoring public for detours or run-arounds.

Concrete pipe has lower installed costs, less ongoing maintenance and reduced likelihood of future problems. This adds up to a lower total cost over the life cycle of your project. That's the definition of real value.

Reason 9: Environmentally Friendly

Today, being recognized as a green material or product is importance. Concrete pipe is suitable to LEED projects and fits sustainable development. Unlike plastic pipe, concrete is produced with benign, natural materials. But what you might not realize is that manufacturing of concrete consumes less energy than plastic fabrication. It is also recyclable and has little if any environmental impact. And, when you use local resources, concrete can also provide lower fuel cost for delivery.

Reason 10: Supports Sustainable Design

Historically, concrete is the most durable and sustainable material for infrastructure and major construction. It continues to function long after a projects life is reached, by maintaining structural integrity, which reduces the social costs associated with repair and replacement.

Economic Impact of the Concrete Pipe Industry on the State of Kansas, 2006

A Report Prepared for the Missouri Kansas Concrete Pipe Association

Center for Economic & Business Research
Southeast Missouri State University

December 2007

Southeast Missouri State University

Center for Economic & Business Research

Harrison College of Business, Dempster Hall Room 239A

Cape Girardeau, MO 63701

phone: 573-651-2013, email: cebr@semo.edu, fax: 573-651-2947

Executive Summary

- Direct Impact of the concrete pipe industry of $52.7 million in output with 231 employees (The direct impact is due to the economic activity of the sector.)
- Indirect Impact on industry suppliers of $14.7 million and an additional 103 employees (The indirect impact constitutes purchases from the industry's input suppliers.)
- Induced Impact due to employee spending adds an additional $11.7 million to output and another 112 employees to the state's economy (The induced impact is due to the employees' spending.)
- The total impact of the concrete pipe industry is to add $79.1 million to the state's economy and 446 jobs
- The output multiplier is 1.50 such that every $1.00 of additional output in the concrete pipe industry increases output in the state's economy by $0.50
- The employment multiplier is 1.93; every job in the concrete pipe industry creates 0.93 additional jobs in the rest of the economy
- Labor income in the state increases by $18.76 million (direct, indirect and induced impacts)
- The total annual increase in sales tax revenue in the state due to the concrete pipe industry is $1.745 million
- The four firms included in the study paid $485,200 in property taxes in 2006
- It is estimated that the industry's employees paid $321,000 in personal income taxes
- Increased income in the state due to the activities of the concrete pipe sector led to an additional $625,000 in personal income taxes paid
- The output and employment multipliers (1.5-2.0) are in the range that have been found in other studies

I. Methodology

The **concrete pipe industry** is a significant economic sector in the state of Kansas in terms of output, employment, income, and taxes paid. This study measures the extent of the economic impact of the industry on the state's economy.

The measurement of economic impacts is not an exact science. Economic models, with a dose of judgment on the part of the analyst, can give a reasonably accurate indication of the total impact. The methods used in this study employ the IMPLAN model developed by the Minnesota IMPLAN Group. The IMPLAN model is an input-output model of the local economy that approximates the economic structure of the region. The approach is to feed data into the model and then solve the model with the new data. Comparison of the new data with existing data allows an estimate of the economic impact of some entity. This approach to estimating economic impacts, using the IMPLAN model, is the most common one employed by regional economists.

The use of the IMPLAN model allows the researcher to estimate the **direct**, **indirect**, and **induced** impacts on the economy of the economic activity of a particular sector. The direct impact is due to the final demand for the industry's product. As the final demand for the product changes, the output, employment level, and labor income for the industry will change in response to the new level of final demand. The indirect impact results from the purchases by the industry from other local industries that are caused by changes in final demand. For example, as the concrete pipe industry expands, it will purchase additional cement from the cement industry, additional steel from the steel-making industry, more sand and gravel from those sectors, etc. The induced impact is felt by all local industries as higher household income that is generated by increased economic activity by the direct and indirect impacts is spent. The total impact of an expansion of final demand in a given industry (here, the concrete pipe industry) is just the sum of the three impacts, direct, indirect and induced.

Data for the study were collected from the four Kansas members of the Missouri-Kansas Concrete Pipe Association (hereafter, Association) for estimating the above economics impacts. There is one concrete pipe producer in Kansas that is not a member of the Association; therefore, the impacts represented here do not measure the economic impact of the entire industry. However, even with the exclusion of the data from the nonmember firm, the economic impacts of the concrete pipe are shown to be quite extensive and are indicative of the importance of the industry to the state of Kansas.

I. Economic Impacts

Figure 1 shows the economic impact of the industry on output in the state. The four firms report total output of $52.70 million in 2006. This constitutes the direct impact on the state. The activities of the concrete pipe sector result in an additional $14.74 million of output due to the industry's purchases from suppliers from the state of Kansas. This is the indirect impact. The induced impact adds another $11.68 million to the output of the state, which gives a total impact of $79.12 million. This implies an output multiplier of 1.50 ($79.12 million/$52.70 million). An output multiplier of 1.50 indicates that for every $1.00 of additional output produced by the concrete pipe sector in Kansas, an additional $0.50 of output is generated in the state. Given the size and openness of the Kansas economy, this appears to be a very reasonable result.

Figure 2 illustrates the economic impact of the industry on employment within the state. The four firms report total employment of 231 employees (direct impact). The firms' purchases from local suppliers give rise to an additional 103 workers in the state (indirect impact). The purchases due to higher incomes create an additional 112 jobs (induced impact). The total employment impact of the concrete pipe industry is, therefore, 446 jobs. This implies an employment multiplier of 1.93 (446/231); this means that each job in the concrete pipe industry results in the creation of almost one additional job in the rest of the Kansas economy. One reason why the employment multiplier is higher than the output multiplier is that the jobs in the concrete pipe industry pay an above-average wage rate compared to the average industry in the state. This results in a higher multiplier effect.

Figure 3 illustrates the economic impact of the concrete pipe industry on labor income in Kansas. The direct impact reported by the four firms is $10.71 million. The indirect impact on labor income amounts to $4.56 million, while the induced impact is $3.49 million. The sum of these figures, $18.76 million, constitutes the total impact on labor income of the activities of the concrete pipe industry. This implies a labor income multiplier of 1.75 ($18.76 million/$10.71 million).

The final figure (Figure 4) shows the impact on indirect business taxes in Kansas. Indirect business taxes (IBT) are basically sales taxes. The direct impact on IBT in Kansas is $436 thousand. The indirect impact is $604 thousand, while the induced impact is $705 thousand. The total impact on indirect business taxes in the state amounted to $1,745,000 in 2006.

In addition to indirect business taxes, data supplied by the four participating firms also allows an estimate of the direct taxes paid by the industry and its workers. The state corporate income taxes were reported to be $75,500 in 2006. Note that one firm had state tax credits

and so did not pay any taxes and another was unable to separate out the amount it paid to Kansas. The property taxes paid by the four firms in 2006 amounted to $485,200. In addition to these amounts, the employees in the concrete pipe industry and in other affected industries paid state income taxes on their incomes. Given the Kansas individual income tax code, it was estimated that workers would pay equal to approximately three percent of their income. Using this figure gives an estimate of $321,200 in individual income taxes for the employees of the concrete pipe sector. If we use the 3% figure for other employees in other sectors, we get an additional $241,700 in income tax revenues to the state due to the higher incomes that result from the activities of the concrete pipe sector. The total increase in individual income taxes is $562,900. In addition to labor income, property income also increases by a total of $12.79 million in the state. If we use the 3% figure once again (which may be conservative since property owners typically have higher incomes and, therefore, fall into higher tax brackets), we get additional income tax collections of $383,700. Added to the additional taxes due to an increase in labor income, the total individual income tax impact is at least $946,600. The total tax impact of the economic activities of the Kansas concrete pipe sector is the sum of the indirect business taxes, the property taxes, the corporate income taxes, and the individual income taxes. This sum was at least $3,252,300 in 2006.

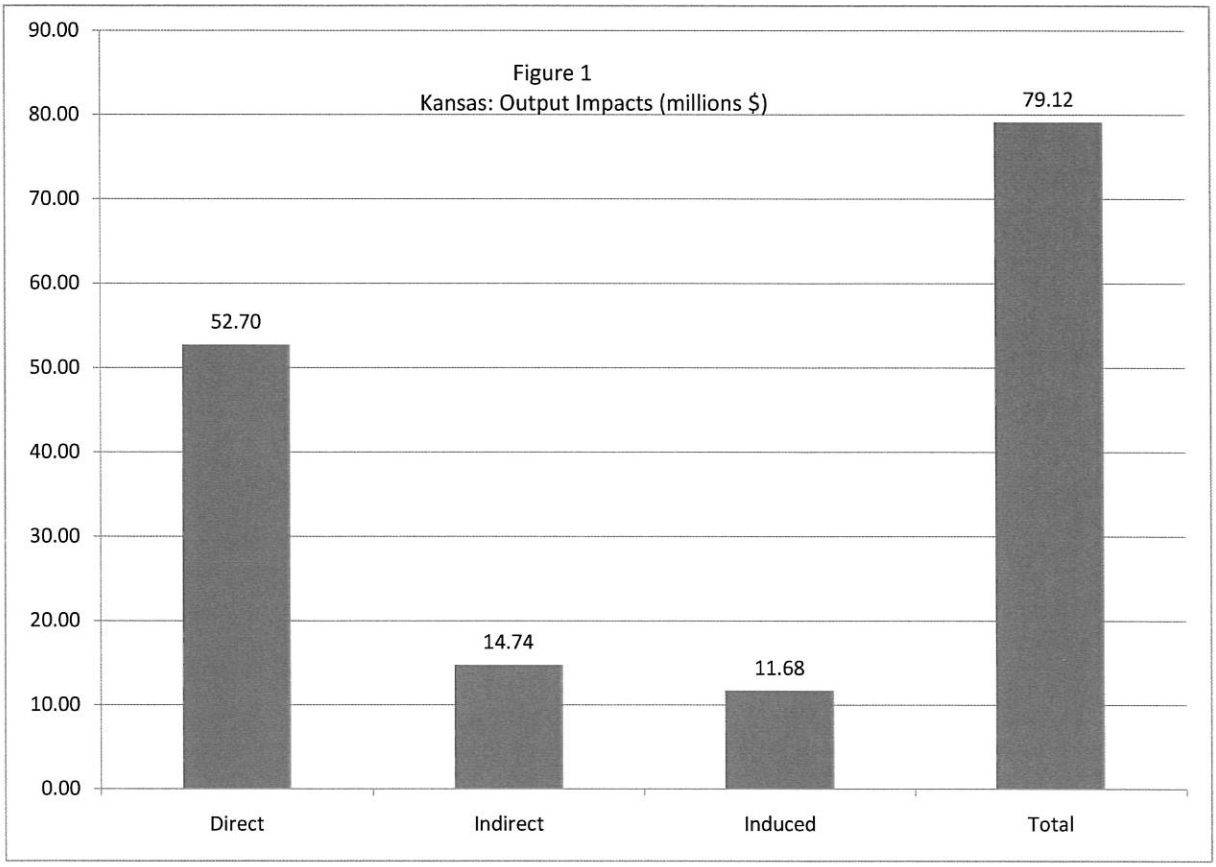


Figure 1
Kansas: Output Impacts (millions $)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
52.70
14.74
11.68
79.12
Direct
Indirect
Induced
Total

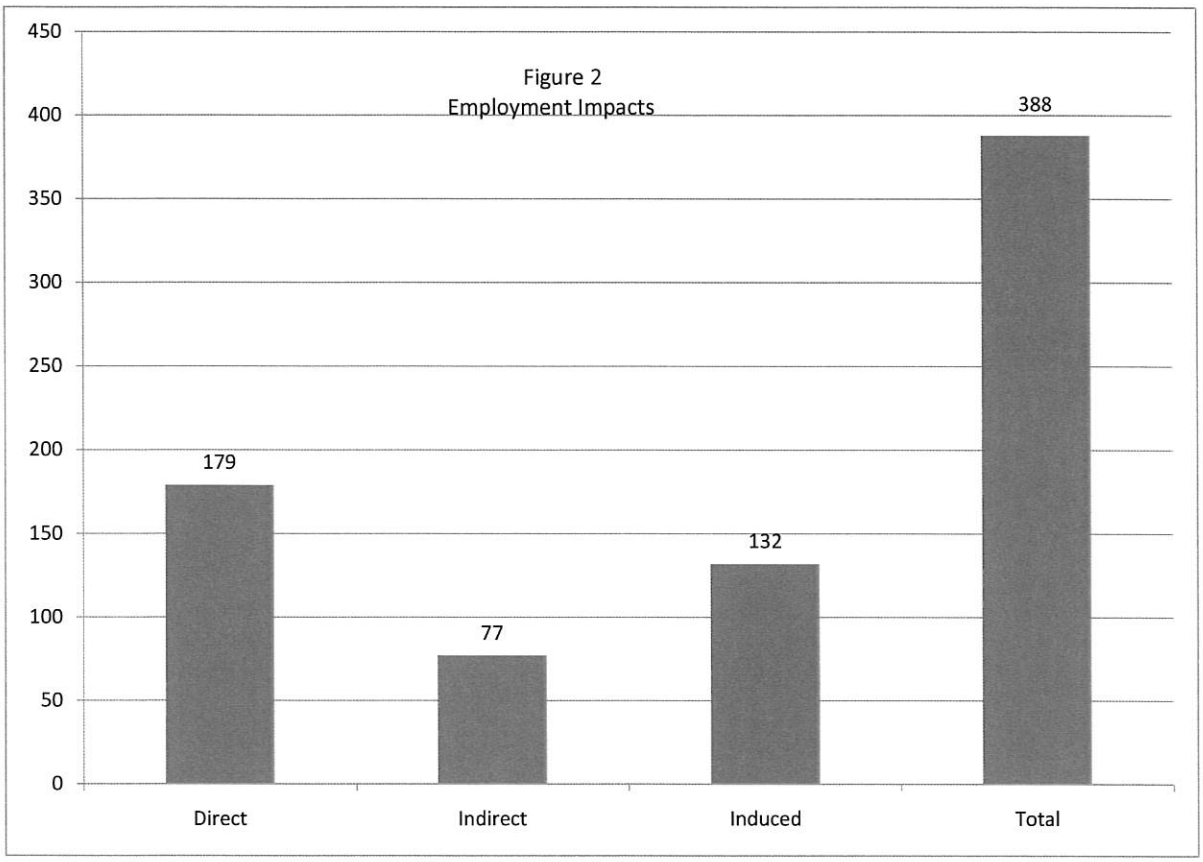


Figure 2
Employment Impacts
450
400
350
300
250
200
150
100
50
0
179
77
132
388
Direct
Indirect
Induced
Total

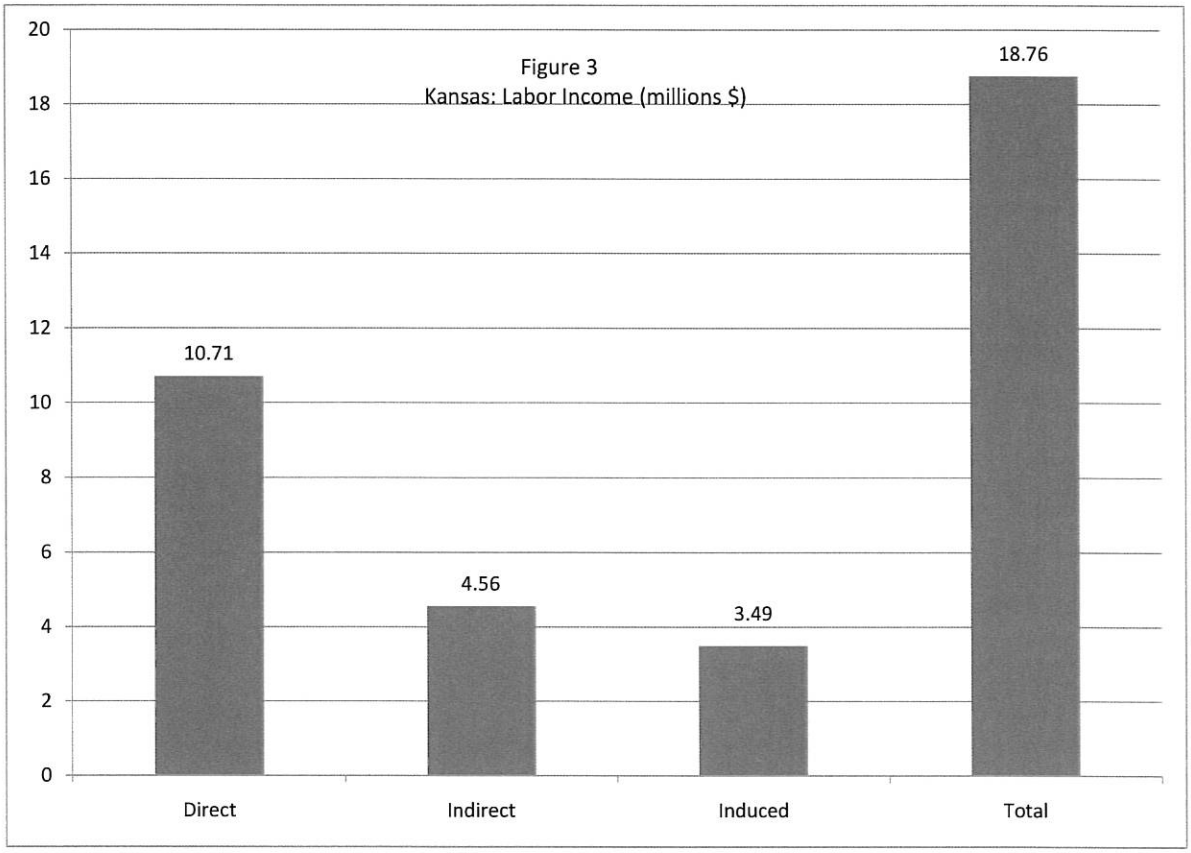


Figure 3
Kansas: Labor Income (millions $)
20
18
16
14
12
10
8
6
4
2
0
10.71
4.56
3.49
18.76
Direct
Indirect
Induced
Total

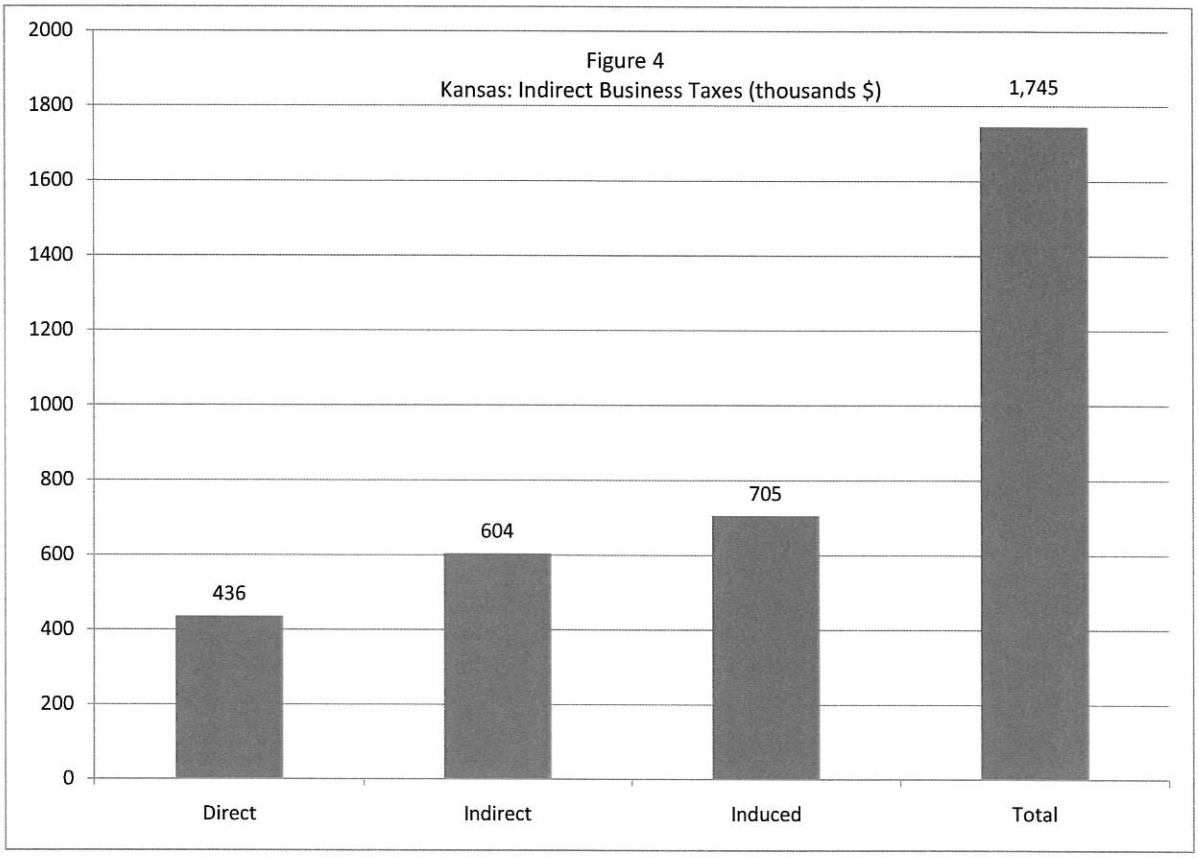


Figure 4
Kansas: Indirect Business Taxes (thousands $)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
436
604
705
1,745
Direct
Indirect
Induced
Total

Kansas Turnpike Authority

Remarks of Michael Johnston, President/CEO of the Kansas Turnpike Authority
Before the Senate Committee on Transportation
Regarding Background Information on the Kansas Turnpike Authority
March 6, 2009

Senator Dwayne Umbarger, Chairman
Senator Bob Marshall – Vice Chair
Senator Kelly Kultala, Ranking Minority Member

Thank you Mr. Chairman and members of the committee, I am pleased to have been invited by you to speak about the Kansas Turnpike.

My name is Michael Johnston and I am the President/CEO for the Kansas Turnpike. I am in my fifteenth year in this role, and before that was Secretary of the Kansas Department of Transportation. For fourteen years before becoming a cabinet officer in 1991, I served in the Kansas Senate representing the district now represented by Senator Umbarger. I am pleased to be with you today to talk about the Kansas Turnpike and attempt to answer any questions you may have.

The Kansas Turnpike Authority was created by law in 1953 and given the assignment to build and operate what we now call the Kansas Turnpike. The Authority, or board as some may call it, consists of five members: The Secretary of the Kansas Department of Transportation (KDOT), the chairman of the Senate Transportation Committee, a member of the House Transportation Committee, and two members from the public appointed by the Governor. That unique governing structure has remained unchanged for over 50 years.

In the early 1950's, and before the federal interstate system was launched, there was a movement in our state that wanted a major roadway constructed to connect our relatively urban centers of Wichita, Topeka, and Kansas City. Since the rural members of the legislators were not about to raise general taxes or fees on their constituents to build this "urban" road, the only possible solution for the legislature was to authorize a toll supported roadway to be constructed. The roadway was financed entirely by revenue bonds and no tax dollars, federal or state, have ever been used to support the turnpike or its operations. In fact, more than $9M in motor fuel and sales taxes generated from sales at turnpike service areas was remitted to the state in 2008. In addition, since KDOT is able to count turnpike miles as part of the interstate system, they receive additional federal interstate funding each year, all of which is dedicated to interstate work on the non turnpike state highway system. In 2008 they received $11M.

Moreover, when the legislature considered the legislation that created the Turnpike Authority in 1953, it made it expressly clear in the enabling act that anyone who purchased revenue bonds from the authority could not look to the state or any political subdivision of the state for support in the event the turnpike was not financially successful.

Together with these remarks, I am providing several exhibits that give the committee additional information about the turnpike and its operations.

Thank you for your interest and I welcome your questions.

Senate Transportation
3-6-09
Attachment 3

Kansas Turnpike Authority Fact Sheet
www.ksturnpike.com

Construction statistics:
- The Turnpike was built in 22 months in 1955 and 1956.
- Cost was $147 million, plus $9 million in Capitalized Interest.
- Original cost translated to $660,000 per mile.
- Over 20 engineering and construction firms were successful bidders for the projects.

Interchanges: The Turnpike has 21 interchanges for entry and exit located at strategic points along the route.

Service Areas: There are a total of six service areas located near Lawrence, Topeka, Emporia, Matfield Green, Towanda, and Belle Plaine.

Bridges: 345

Traffic:
- Grown from 3.6 million vehicles in 1957 to over 32 million vehicles in 2008.
- 28.2 million passenger cars used the Turnpike last year.
- 4.3 million commercial vehicles used the Turnpike last year, but commercial vehicles account for over 40 percent of revenue.

Taxes Collected at Service Areas:
- $8,033,000 in motor fuel, and $1,128,000 in sales taxes collected from the Turnpike's six service areas is paid to the state of Kansas for use unrelated to the Turnpike.

Roadway Widening Project:
- Milepost 184.4 to 197.8—13.4 miles
- Preliminary work began in 2003 and was completed in May 2007
- Construction cost: $53,895,398
- Includes 51-inch median barrier

Median Barrier:
- 32-inch concrete median barrier was installed the entire length of the roadway, all but eliminating head-on collisions. The project was completed in 1992 at a total cost of $32 million, or $143,000 per mile.
- Estimated to save ten lives per year and countless serious injuries.
- During the roadway widening project, completed in May 2007, from milepost 184.4 to milepost 197.8, a cast-in-place 51" concrete median barrier was installed.

Toll Revenue:
- Grown from $3.9 million in 1957 to $78 million in 2008.
- Out-of-state travelers generate approximately 50 percent of the toll revenue and account for approximately 50 percent of the miles traveled because they average longer trips, although they represent slightly less than 30 percent of all vehicles.

Patrol:
The Kansas Turnpike employs 47 highway patrol personnel who provide 24-hour roadway coverage.

Electronic Toll Collection K-TAG program:
The K-TAG program was dedicated October 25, 1995. Currently, there are more than **98,000 accounts** with over **210,000** transponders in use. There are three different payment plans available.

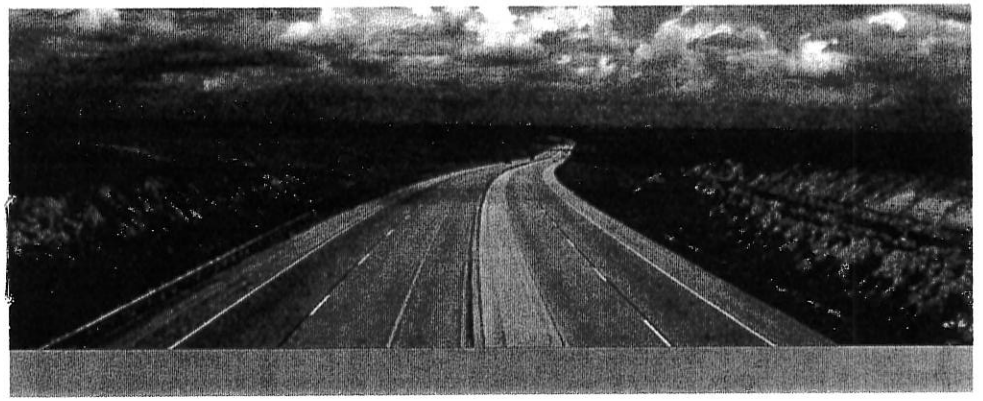
Contact Information:
Kansas Turnpike Authority
9401 E. Kellogg
Wichita, KS 67207-1804
Tele: (316) 682-4537 Fax: (316) 682-1201

Future of Tolling

Today our state and nation face tremendous challenges in preserving and updating our transportation infrastructure. Failure to do so will impede our mobility and stifle our economy. An increased use of tolling is one of the methods that can be considered in order to meet transportation challenges in Kansas. If decision makers determine that tolls should be part of the solution, further analysis of specific locations will be needed, and a public discussion will be needed before a decision to move ahead with any new toll project can be made.

Photo courtesy of Colorado Department of Transportation

Additional information about tolling in Kansas and toll projects across the United States is available at www.ksturnpike.com or www.ksdot.org.



Bridging the Transportation Funding Gap

A quick reference for Kansas policymakers and stakeholders

Information presented by
Spock Solutions and Jacobs Engineering
for the Kansas Department of Transportation
and the Kansas Turnpike Authority

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Imagine having a $200 shopping list and less than $100 in your wallet. Kansas faces a similar plight when comparing a list of identified transportation needs to its inventory of revenues over the next couple of decades. As the state looks for ways to narrow the gap in transportation funding, the Kansas Department of Transportation (KDOT) and the Kansas Turnpike Authority (KTA) have compiled this information about the potential for toll revenues to fund much-needed transportation projects. The information contained not only in this booklet, but also in an accompanying white paper and study report, will help inform discussions about how tolls may complement existing revenue sources.

Kansas is not alone in considering expanded use of tolls. Such discussions are taking place around the country, as many states struggle to pay for their transportation needs.

Transportation Funding Gap

The funding gap in Kansas, for all types of transportation at all levels of government, is $1.5 billion a year through 2030. That's how much it would take to bridge the difference between $2.9 billion in projected annual needs and $1.4 billion in projected yearly revenues. Kansas could close the gap by:

- increasing traditional funding sources such as fuel taxes, sales taxes, and vehicle registration fees;
- deferring maintenance and/or new projects;
- implementing new funding sources such as new tolls;
- a combination of the above actions. All possible solutions - uding additional tolling — must be looked at before Kansas de..ues what course to take.

Tolls 101

Tolls are the oldest means of funding roads. In the United States, turnpike toll roads date back to the late 1700s. In the automobile era, the popularity of financing projects by charging tolls has ebbed and flowed through different political and economic climates, but the fact remains that tolls have the unique ability to draw revenue directly from the users of the facility.

This means that the drivers who benefit from the road or bridge support it financially, in proportion to how much they travel on it.

Tolls can:

- provide backing for revenue bonds, including up-front bond revenue needed to build a road or bridge;
- provide money for ongoing operations, maintenance and improvements;
- influence driver behavior in ways that may reduce traffic con-

Growth of Tolling

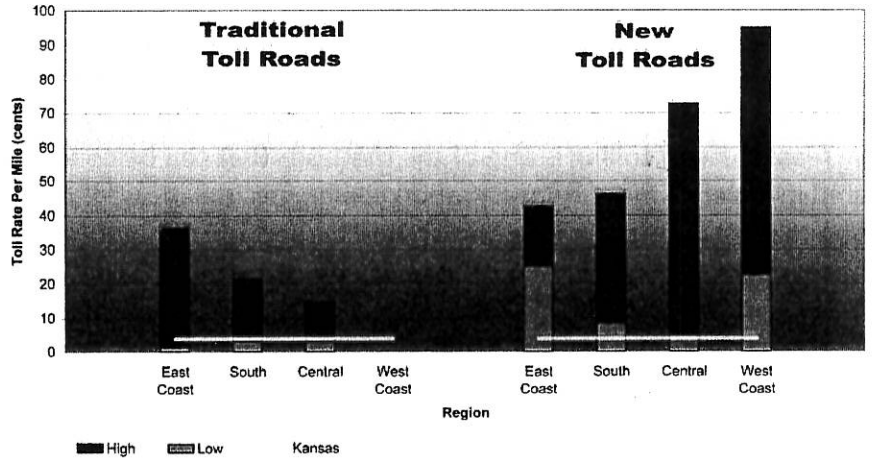
From 1999-2004, tolls represented five percent (5%) of overall highway funding in the United States, and just over four percent (4%) of Kansas highway funding. A number of states rely more heavily on tolls for their roadway funding needs than does Kansas.

Tolls as % of Highway Funding	States
More than 15%	DE, NY
10 to 15%	NH, FL, NJ, OK, ME
5 to 10%	PA, IL, MD, MA, OH, WA

Recent growth in tolling has been encouraged by a combination of factors:

- Constraints in traditional funding sources like the motor fuel taxes. These funding mechanisms have not kept pace with growing needs for maintaining, improving, and expanding roadway capacity;
- A steady increase in traffic and congestion;
- More flexible Federal policies toward tolls since the completion of the Interstate Highway System; and
- More user- and environmentally-friendly technology, allowing users' vehicles to be charged without the stops that increase vehicle emissions.

National Range of Toll Rates (Passenger Cars)



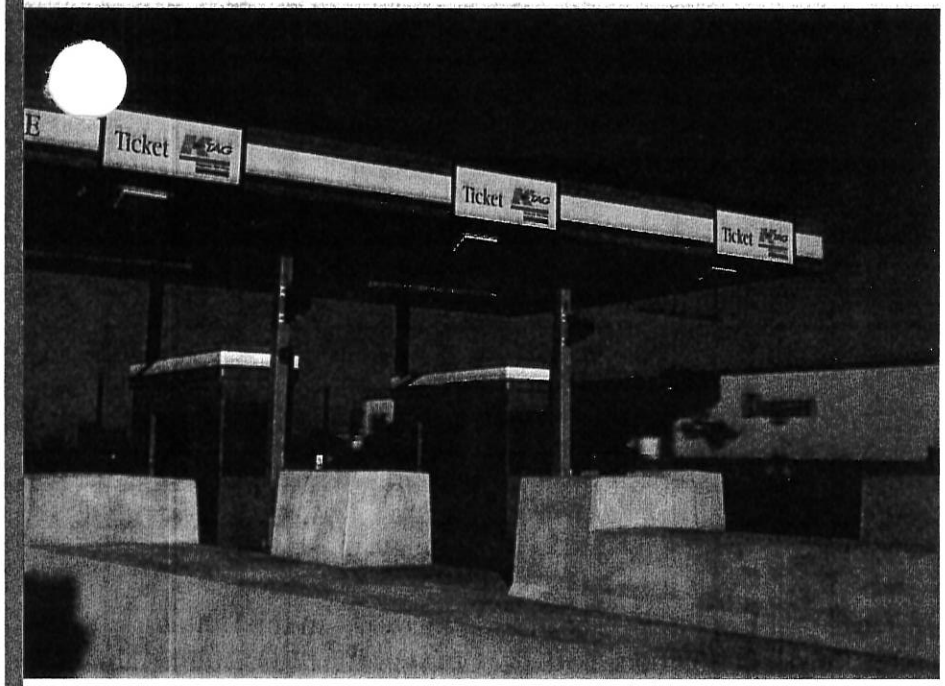
Pricing of Tolls

The chart above shows that tolls, measured in rates per mile, vary widely. The differences largely reflect when roads were built and/or the different objectives of newer tolling projects. Newer toll facilities charge higher rates. The highest per-mile rates are charged by Southern California toll roads that vary the toll hourly as a way to manage and maintain the flow of traffic. Kansas Turnpike per-mile toll rates are at the low end, in line with toll facilities constructed in the Midwest before the Interstate era.

Variety of Tolls

Today a growing variety of tolls are used in combination with other transportation funding methods. For example, a significant number of recent tolling projects have implemented High Occupancy/Toll (or HOT) lanes.

These lanes – separated from the general roadway – give drivers of single-occupant vehicles the choice of driving in the tax-supported lanes or paying a toll in the HOT lanes. They have worked successfully in highly-congested urban areas across the United States. The decision of whether to add a lane or to convert an existing lane to a HOT lane is only made after analyzing the road's ability to handle future traffic.



The Traffic/Tolls/Funding Connection

The Kansas Turnpike demonstrates one of the big advantages of toll-financed roads – accelerated up-front funding. The 236-mile turnpike was built in the pre-Interstate era in just 22 months, far more quickly than the 14 years it took to build the tax-supported segments of I-70 in Kansas.

While toll financing continues to provide this benefit, it costs a lot more to build new roads now than it did in the 1950s. A detailed analysis of a project's costs and revenue-generating traffic is necessary to determine if a project is financially feasible. The chart on page 4 shows, as an illustration, the range of traffic volumes that may be necessary to support a hypothetical toll facility in Kansas.

Estimated Range of Toll-paying Vehicles Necessary

In order to (help) fund a hypothetical toll facility,
assuming practical and reasonable financing expenditures,
construction costs, and operating and maintenance expenses

Percent of Toll Facility Costs Funded by Toll Revenues	Estimated Range of Toll-paying Vehicles Necessary per day, given	
	Toll Rate similar to KTA (4¢/mi)	**Toll Rate similar to newer facilities (15¢/mi)**
100%	150,000 - 250,000	45,000 - 75,000
50%	80,000 - 125,000	25,000 - 35,000
25%	45,000 - 60,000	10,000 - 20,000

To put these traffic levels in perspective, the busiest segment of the Kansas Turnpike today (between Topeka and Lecompton) is 35,000 vehicles a day.

Factors other than financial feasibility have become important for states to consider and tolling has evolved as a technique for reducing congestion by managing traffic. Some of these factors relate to engineering and operational considerations, such as:

- potential to improve speeds above congested levels;
- ability to optimize system performance; and
- constructability of a facility or viability of toll operations.

Additional factors may relate to broader objectives for toll projects, including:

- consistency with statewide/regional goals; and
- impact on economic development and growth.