

2015 REPORT ON TOLLING IN THE UNITED STATES



TOLLING IS AN IMPORTANT FEATURE OF THE US TRANSPORTATION LANDSCAPE.

FAST FACTS

35

Number of US states and territories with at least one tolled highway, bridge or tunnel (Source: IBTTA, 2014)

\$13 billion

Toll revenues collected by US toll agencies in 2013. (Source: IBTTA, based on publicly available data, 2015)

5.7 billion

Number of trips per year on tolled roads and crossings in the United States (Source: IBTTA, 2015)

5,932

Miles of US toll roads (Source: Federal Highway Administration, 2013)

\$14 billion

Capital investment over three years by the top 40 US toll facilities operators (Source: IBTTA Toll Industry Survey, 2011)

3x higher

Fatality rate on all US roads (1.47 per 100 million vehicle miles traveled) versus all toll facilities (0.50) (Source: IBTTA study, 2008)

37 million

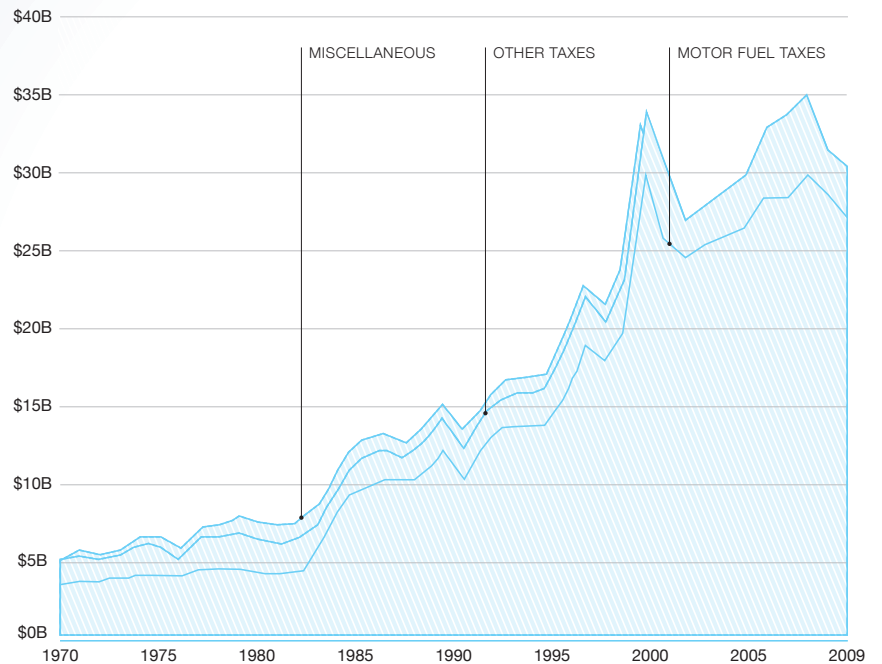
Number of transponders being used for electronic tolling in the US (Source: IBTTA, 2014)

84

Percentage of Americans who feel tolls should be considered as a primary source of transportation revenue or on a project-by-project basis. (Source: HNTB Corporation survey, 2010)

Revenues from the federal fuel tax are declining.

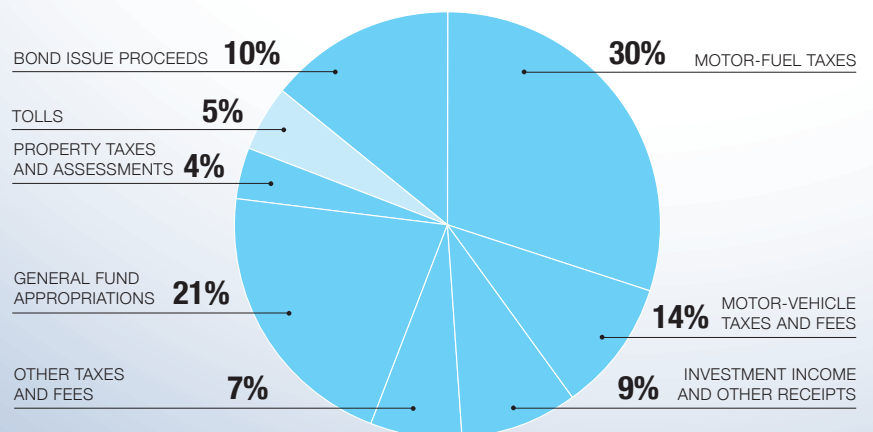
HIGHWAY TRUST FUND RECEIPTS: 1970 - 2009



SOURCE: FEDERAL HIGHWAY ADMINISTRATION

Tolls represent 5% of highway revenues and growing.

HIGHWAY REVENUE BREAKDOWN



SOURCE: FEDERAL HIGHWAY ADMINISTRATION, 2011

TOP 10 TOLL AGENCIES

BY MILEAGE

1	OKLAHOMA TURNPIKE AUTHORITY	605
2	FLORIDA'S TURNPIKE ENTERPRISE	594
3	NEW YORK STATE THRUWAY AUTHORITY	570
4	PENNSYLVANIA TURNPIKE COMMISSION	554
5	NEW JERSEY TURNPIKE AUTHORITY	321
6	ILLINOIS TOLLWAY	286
7	OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION	241
8	KANSAS TURNPIKE AUTHORITY	236
9	ITR CONCESSION COMPANY LLC: INDIANA TOLL ROAD CONCESSIONAIRE	157
10	MARYLAND TRANSPORTATION AUTHORITY	146

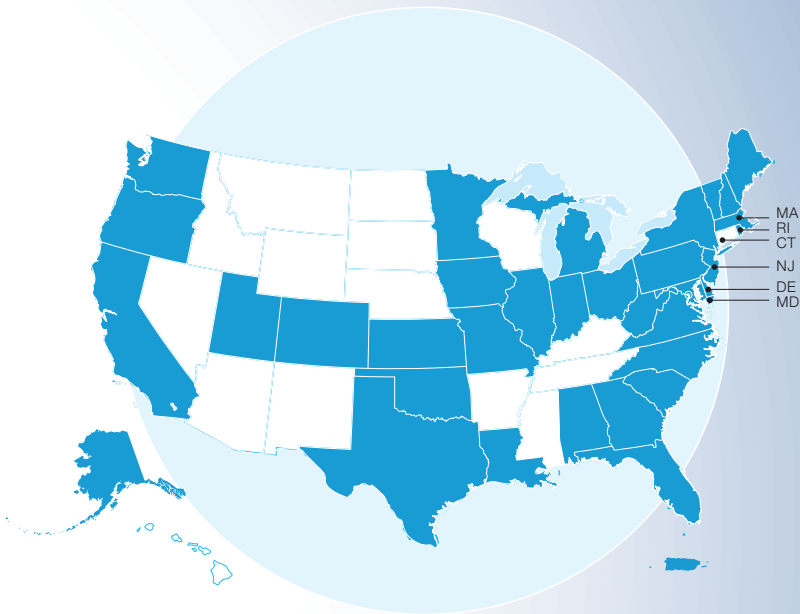
BY REVENUE IN MILLIONS - US\$

1	NEW JERSEY TURNPIKE AUTHORITY	1,413
2	THE PORT AUTHORITY OF NEW YORK & NEW JERSEY	1,330
3	MTA BRIDGES AND TUNNELS	1,227
4	ILLINOIS TOLLWAY	943
5	PENNSYLVANIA TURNPIKE COMMISSION	812
6	FLORIDA'S TURNPIKE ENTERPRISE	756
7	BAY AREA TOLL AUTHORITY, METROPOLITAN TRANSPORTATION COMMISSION	670
8	NEW YORK STATE THRUWAY AUTHORITY	649
9	NORTH TEXAS TOLLWAY AUTHORITY	572
10	HARRIS COUNTY TOLL ROAD AUTHORITY	560

SOURCE: IBTTA, 2013

STATES WITH TOLL ROADS

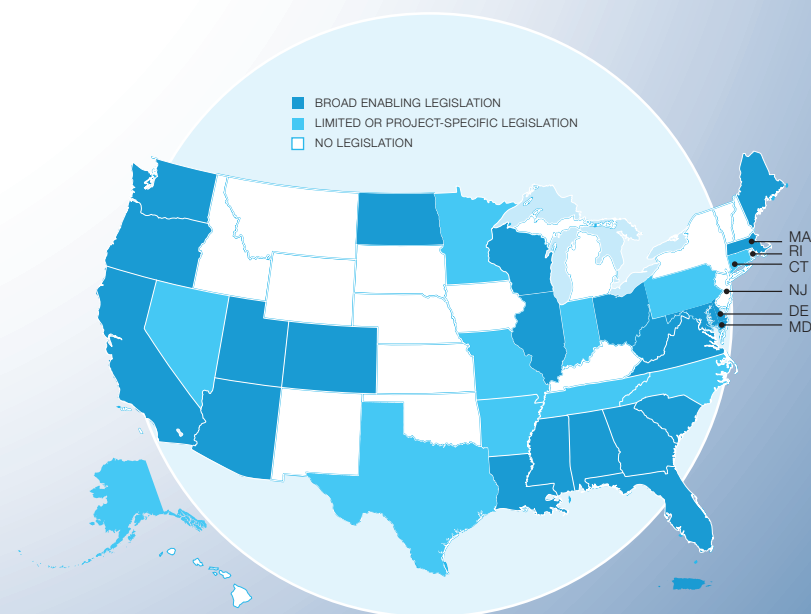
Thirty-four states and Puerto Rico have toll roads and crossings...



SOURCE: IBTTA

STATES WITH PUBLIC-PRIVATE PARTNERSHIPS

...And 33 states and Puerto Rico support public-private partnerships in highway finance.



SOURCE: NATIONAL CONFERENCE OF STATE LEGISLATURES

TOLLING PROVIDES ANSWERS TO AMERICA'S TRANSPORTATION NEEDS.

Q: WHY DO WE NEED TOLLS TO PAY FOR ROADS AND CROSSINGS?

A: No matter how you slice it, federal and state fuel taxes are insufficient to support America's highway infrastructure. Tolls provide a valuable source of revenue both to build new roads and maintain existing roads.

Q: HOW DO TOLLS BENEFIT THE AVERAGE AMERICAN?

A: The primary benefits are better, safer roads; less congestion; more predictable trip times and reduced need for taxes to pay for roads. Tolls provide money today for projects that can be built in the near future and meet demand for decades to come. If it were not for tolls, many of the best roads and bridges in the US might never have been built.

Q: ISN'T A TOLL JUST ANOTHER TAX?

A: No, tolls are voluntary user fees. Drivers can choose to pay tolls or take alternate routes, whereas taxes are mandatory and charged to everyone. Yes, customers of toll facilities also pay taxes, but the taxes are used to fund non-toll roads. Since toll roads are primarily self-financed and do not rely on taxes, the customer is not paying twice for the facility. In fact, without tolls, taxes would be higher.

Q: WHAT ABOUT PUBLIC OPPOSITION TO THE IDEA OF NEW TOLLS?

A: Revenue-raising measures are never popular, especially in a time of economic stress. The federal fuel tax has not been raised since 1993. However, numerous toll facilities have been approved in the anti-tax environment of recent decades, and opinion polls consistently show that motorists prefer tolls over taxes and

support the expansion of toll roads to improve driver options and travel times.¹ In one poll, 84 percent of Americans said tolls should be considered as a primary source of transportation revenue or on a project-by-project basis.²

Q: DOES TOLLING SLOW THE FLOW OF TRAFFIC?

A: Toll roads tend to be less congested than tax-funded roads, where unrestricted access often leads to congestion. Toll roads also lead to time savings and congestion relief on nearby roadways by increasing the total road capacity available. Moreover, with today's technology, most toll operators are eliminating toll plazas and expanding their high-speed, automated tolling options. Most new facilities are being built as cashless systems, with no stopping or slowing down to pay a toll.

MILESTONES IN OPEN ROAD TOLLING AND INTEROPERABILITY



Alesund, Norway

The world's first electronic toll system.



Portugal ETC System "Via Verde" Implemented



The E-ZPass Interagency Group (IAG) forms with three states (New York, New Jersey & Pennsylvania) and seven agencies.



The E-470 Public Highway Authority opens as one of the first non-stop, high-speed ETC lanes in the United States.

1984

Multi-lane, free flow Urban Road Pricing demonstrated in Hong Kong (predecessor to Singapore and started concept of road user charging).



1987

1989

Early ETC Adopters – First U.S. installations of ETC seen by Crescent City Connection (formerly the Greater New Orleans Bridge), Oklahoma Turnpike Authority and Dallas North Tollway.



1990

1991

First Open Road Tolling demonstrated as feasible — **Newcastle University, UK** by Professor Peter Hills using Saab Combitech (now Kapsch) DSRC tags.





Q: HOW DO TOLL ROADS COMPARE TO NON-TOLLED ROADS IN TERMS OF SAFETY?

A: Toll roads are generally safer than non-tolled roads due to better maintenance, pavement, and technology. Toll operators employ state-of-the-art technology to monitor road conditions and have a financial incentive to keep their roads running as safely and smoothly as possible. The facts bear this out, as toll facilities in the United States have a much lower fatality rate than US roads overall.³

Q: IS TOLLING FAIR TO LOW-INCOME MOTORISTS?

A: Many surveys have shown that drivers of all income levels use tolled facilities and support having the option to use high-quality toll roads. A well-designed pricing plan can be less burdensome to low-income citizens than systems that are based on regressive taxes, such as car registration fees, sales taxes and the gasoline tax.

Q: WON'T TOLLS INCREASE CONSUMER PRICES BY DRIVING UP THE COST OF TRUCKING?

A: The poor state of our roads and bridges is already raising consumer prices through congestion, lost time and higher operating costs for trucking companies. The most recent Urban Mobility Report by the Texas Transportation Institute found that highway congestion cost the United States \$101 billion in 2010 and will rise to \$133 billion by 2015.⁴ By increasing the quality of infrastructure and easing congestion, tolls can produce cost savings for truckers and all consumers.



First EZ-Pass Interoperability between NYSTA and NJTA

Portugal becomes first country to apply a single, universal system to all tolls in the country, the **Via Verde**, which can also be used in parking lots and gas stations.



Toronto, Canada's 407 ETR The world's first all-electronic, barrier-free toll highway opens.



Singapore opens the world's first urban-area electronic road pricing system using smart cards.



CityLink a 22-kilometer automated tollway in **Melbourne, Australia** opens.

1993

Georgia 400 and Oklahoma Turnpike Sites of the first express high-speed electronic toll collection systems in the United States.



1995

First E-ZPass Interoperability between NYSTA and MTA Bridges & Tunnels.
State Route 91 in Orange County, California Opened first All-Electronic Toll Collection and High Occupancy Toll (HOT) lanes in the country in 1995.



1997

1998

Express Lanes at Toll Plazas Many agencies across the US begin converting existing toll plazas to incorporate high-speed express lanes.



1999

First SmartCard based ETC System



2000

2001

Switzerland Nationwide LSVA/ORT truck tolling system launches operation.





will be much higher than the original cost. Federal and state fuel taxes are already insufficient to maintain the interstates in good repair, much less rebuild them. Tolling is a proven, convenient, fair way to raise revenues to rebuild these highways.

Q: WHAT ABOUT THE AIR POLLUTION CAUSED BY VEHICLES IDLING AT TOLL PLAZAS?

A: Stop-and-start traffic stemming from extreme congestion is an even greater contributor to air pollution, and it can be partially addressed through increased use of toll-based congestion pricing. Meanwhile, most toll agencies are moving toward “open road tolling,” which eliminates toll plazas.

In one study by the Central Texas Regional Mobility Authority, which compared vehicle emissions on a toll road with those on a parallel tax-

funded road, emissions of various air pollutants were 28 percent to 56 percent lower on the toll road, in part because of a 75 percent improvement in travel times and 26 percent reduction in fuel consumption.⁵

Q: SOME STATES WANT TO PUT TOLLS ON INTERSTATE HIGHWAYS. WHY SHOULD WE ALLOW TOLLS ON ROADS THAT ARE ALREADY PAID FOR?

A: “Already paid for” misses the point. America’s interstate highway system is aging and will deteriorate over time without substantial new investment. The future cost to rebuild these roads

Q: WOULD INCREASED USE OF TOLLING CREATE POLITICAL DIVISIONS BETWEEN STATES THAT DO AND DON’T HAVE TOLL ROADS?

A: No. Neither tolls nor taxes are the solution for every transportation finance and funding issue. Each state will meet its transportation needs with its own mix of financing techniques, including tolls, taxes and borrowing. With other sources of revenue in decline and transportation needs increasing, many states and localities are looking to tolls as an efficient option with many benefits.

Q: WHAT ARE “CONCESSIONS,” AND WHAT ROLE DO PRIVATE BUSINESSES PLAY IN TOLLING?

A: A concession is a contract between a government entity and a private enterprise (frequently a consortium) to build or rebuild a tolled road, bridge



North Texas Tollway Authority
Nation’s first system wide conversion of toll plazas to include express electronic toll collection lanes in 2002.



Austrian DSRC National Truck Tolling
New Jersey Turnpike Authority First to offer five side-by-side express lanes for highway speed Electronic Toll Collection in 2004.
Trans Israel Highway opens with open road electronic toll system.



Distance based charge for trucks on motorways in Germany. Nation-wide open road tolling system; the world’s first example of a toll system based on use of GPS satellites and GSM communications.



Launch of NORTIS
Multi-country interoperability of toll systems in Scandinavian countries (EasyGo service).

2002

2003

2004

2005

2006

London Congestion Charging Program begins based on Video License Plate Reading.



ASFINAG introduces national heavy vehicle electronic tolling system in Austria.
Autopista Central in Santiago, Chile opens the first urban all electronic and interoperable open road tolling facilities in the city.
Westpark Tollway opens as All-Electronic Toll Road in **Houston (Harris County Toll Road Authority)**.



Tampa Hillsborough Selmon Expressway opens the first All-Electronic reversible roadway (Cross-town elevated express lanes).



or tunnel and assume its day-to-day operations for a stated period of time. This is frequently referred to as a “public-private partnership” or P3. The private entity may provide the funds for the infrastructure improvement, or make payments to the government in return for what amounts to a long-term lease on the tolled facility. Ownership of the facility always remains public. The private company takes on the challenge of building and operating a facility that provides enough benefits to drivers that they will willingly choose to use the facility and pay the tolls needed to repay the construction and operational costs.

P3s are regulated by state law and require enabling legislation. Currently, 33 states and Puerto Rico (see page 3) allow P3s, which are viewed as an attractive option for bringing private investment into the transportation system to help offset shortfalls in governmental resources. Concessions are very common in Europe and are being used with increasing frequency in the United States.

DEFINITIONS

TOLL: A fee charged by the operator of a highway, bridge or tunnel for the use of that facility.

VEHICLE MILES TRAVELED (VMT):

1) The total number of miles driven by all vehicles within a given time period and geographic area; 2) the number of miles driven per person per day.

ELECTRONIC TOLL COLLECTION (ETC):

The collection of tolls based on automatic identification of vehicles using electronic systems. An ETC lane collects tolls with no stops required, and an Express Lane allows vehicles to pass at highway speeds.

HOT LANES: High Occupancy Toll lanes are High Occupancy Vehicle (HOV) lanes that also allow access to low occupancy vehicles if drivers pay a toll, allowing more vehicles to use HOV lanes while raising revenue and keeping an incentive for shifting travel times and modes.

OPEN ROAD TOLLING: An electronic toll collection system without toll plazas, in which drivers are charged without having to stop, slow down or stay in a given lane.

CONGESTION PRICING: Harnessing market forces to reduce traffic congestion by charging higher tolls at peak travel times. Removing even a small fraction of vehicles on a congested road allows the system to flow much more efficiently.

TRANSPONDER: In-vehicle equipment permitting a toll facility operator to identify and conduct an electronic toll transaction with a driver.

For more definitions, visit IBTTA's glossary at www.IBTTA.org/glossary



Alliance for Toll Interoperability forms with initial member agencies.



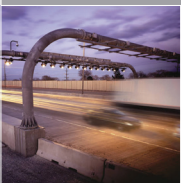
E-470 Public Highway Authority ends cash toll collection on July 4, 2009. All customers use the 70 mph express lanes.



Florida's Turnpike Enterprise converts 47 miles of the Turnpike in Miami-Dade County to all-electronic tolling.

2007

All-Electronic Toll Conversion Projects Initial Wave of converting existing toll roads to AETC starts in earnest.



Miami-Dade Expressway Authority (MDX) opens the Dolphin Extension in June 2007 becoming the first all-electronic stretch of roadway in South Florida.



2009

2010

Miami-Dade Expressway Authority (MDX) fully converts the Gratiigny, Don Shula and Snapper Creek expressways to Open Road Tolling. The three roadways became the first toll roads in South Florida to go cashless and all-electronic.



2011

THE NATION'S ECONOMY DEPENDS ON A STRONG TRANSPORTATION SYSTEM. BUT THAT SYSTEM IS IN CRISIS BECAUSE OF A LACK OF FUNDING, DETERIORATING INFRASTRUCTURE AND GROWING CONGESTION.

- Tolling is a fair, sustainable and smart way to fund, develop and operate roads.
- Because they have a dedicated funding source, toll roads typically are safer, better maintained and have more predictable travel times than non-tolled roads.
- The growth of all-electronic tolling means it is easier to establish toll roads now than ever before.

IBTTA members are leaders in providing safe, economical and customer-friendly roads, bridges and tunnels.

LEARN MORE...

WEB: www.IBTTA.org
TWITTER: @IBTTA or #TollRoads
BLOG: www.IBTTA.org/blog
FACEBOOK: International, Bridge, Tunnel & Turnpike

TOLLING. MOVING SMARTER.

ABOUT IBTTA

The International Bridge, Tunnel and Turnpike Association (IBTTA) is the worldwide association for the owners and operators of toll facilities and the businesses that serve them. Founded in 1932, IBTTA has members in more than 20 countries on six continents. Through advocacy, thought leadership and education, members are implementing state-of-the-art, innovative user-based transportation financing solutions to address the critical infrastructure challenges of the 21st century.

CONTACT IBTTA

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ENDNOTES

- 1 Transportation Research Board, 2008
- 2 Survey sponsored by HNTB Corporation, 2010
- 3 Tollways, 2008
- 4 Texas Transportation Institute study, 2011
- 5 Central Texas Regional Mobility Authority, 2009

OTHER RESOURCES

- IBTTA: www.IBTTA.org/maf
- OmniAir Consortium: www.omniair.org
- Alliance for Toll Interoperability (ATI): www.tollinterop.org
- Federal Highway Administration: www.fhwa.dot.gov

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