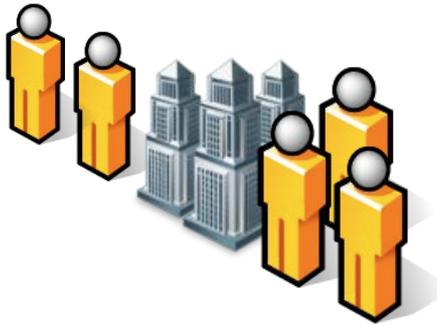


Digital Transportation Exchange

Connecting People and Technology for
Transportation Innovation



So What's the Problem?



Citizens and consumers want efficient and effective transportation but are waiting for new technology integration in traditional transportation solutions...

Entrepreneurs, businesses and startups want to create quality technology solutions to major problems and create large profitable companies but have historically had a limited focus on transportation...

Experts and academics understand the complex problems and potential solutions in transportation but often lack access to the resources that can create solutions...

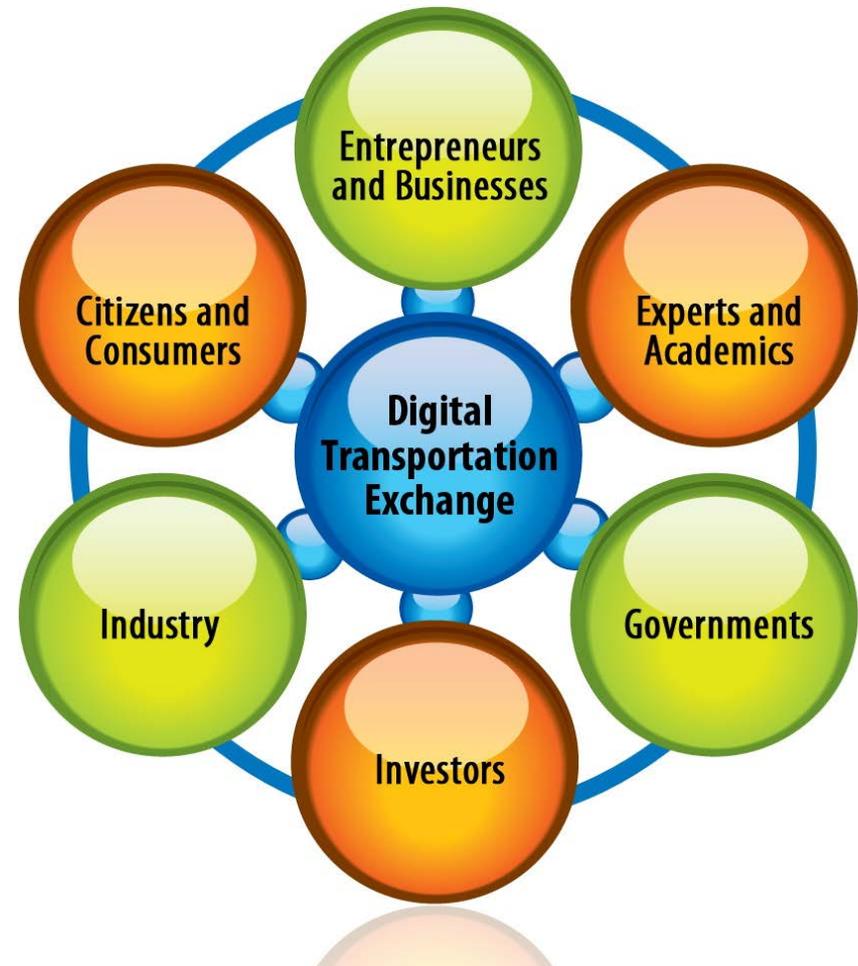
Federal, state and local governments want to create quality transportation solutions while creating jobs in a tight economy but face challenges in doing so...

Venture capitalists and strategic investors are keen on funding digital technology transportation solutions but see limited entrepreneur interests and business plans...

Industry manages and operates transportation services and systems every day, but are not often exposed to the most innovative new tools and technologies to help them do their job...

The DTE is the Solution!

The Digital Transportation Exchange (DTE) will **connect** citizens and businesses, state and local governments, entrepreneurs, researchers, and investors **through a public private partnership** like never before—creating a **thriving marketplace** for **transportation solutions**.



The following use cases are hypothetical. These use cases are intended to illustrate the potential use and impact of the Digital Transportation Exchange, if launched and operational, to a wide variety of stakeholder communities. Potential uses are not limited to these use cases and the DOT does not endorse these ideas in particular. These examples are purely illustrative.



Use Case: The Retiree

Connecting People and Technology
for Transportation Innovation

The Retiree



The Retiree

Megan O'Hara

Age: 64
Children: 4
Resides: Tucson
Job: Retired
Loves: Grandchildren
Hates: Cold Weather

“I can never figure out who to call to get a ride to the hospital for my appointments.”

The Retiree



“My son James found me a simple application for my computer through the DTE that aggregates all the ride information from multiple agencies. I just enter my zip code, what time I need picked up, and a destination and my ride shows up!”

“I don’t even have to worry about identifying the right agency, the application does all that work for me. This tool has saved me so much time and many headaches. I like it so much I’ve told all my friends about it and they’re using it now too!”





Use Case: The Entrepreneur

Connecting People and Technology
for Transportation Innovation

The Entrepreneur



The Entrepreneur

James Hawkins

Age: 28

Children: 1

Resides: Baltimore

Job: IT Specialist

Loves: Anything Apple

Hates: Networking events

“I have an incredible tool that visualizes aircraft noise data but I’m getting no traffic online.”

The Entrepreneur



“Using FAA and private sector data sources, I created a tool that puts flight paths and noise contours of aircraft on a map, helping home buyers and real estate agents to identify which neighborhoods are quiet and which ones have air traffic flying over their heads. While it received some initial buzz in the area, people quickly forgot about it.”



The Entrepreneur



“I submitted my tool easily to DTE and an investor now quickly bought the underlying code! The solution is being licensed for use by nearly 15 real estate companies, 4 city websites and an app version has been downloaded 10,000 times!”



@applove

James Hawkins

Just shared new aircraft noise app on DOT's DTE system. Let us know what you think: <http://dot.ecosystem.org/noiseapp> #dte



Use Case: The Professor

Connecting People and Technology
for Transportation Innovation

The Professor



The Professor

Todd VanFleet

Age: **47**

Resides: **Boston**

Job: **Assistant Professor**

Loves: **Indian Food**

Hates: **Snow**

“I need help getting my algorithms that provide alternative routing using traffic management, arterial and historical data to Personal Traveler Devices to market.”

The Professor



“We’ve been trying to start up a company to sell our solution to car and mobile device manufacturers, but these markets were totally new to us and we didn’t know how to get started. “

“On the DTE we found a venture capitalist that provided industry expertise and seed capital to get our business off the ground. Eight months later, our solution is being deployed!”





Use Case: The Local Government Employee

Connecting People and Technology
for Transportation Innovation

The Local Government Employee



The Local Government Employee

Mark Hill

Age: 40
Resides: Tallahassee, FL
Job: Transportation Innovator
Loves: Football
Hates: Networking events

“I want to apply some of the cool real-time traffic signaling work other towns have done to my town.”

The Local Government Employee



“As a transportation innovator my job is to think about how all modes of transportation get people where they need to go—whether by bus, car, rail or airplane. Congestion is a notorious problem in downtown Tallahassee and it’s worsened by a lack of real time traffic signaling technology. I heard about DTE from another local planner in Florida who found it helpful.”



The Local Government Employee



“On the DTE I found some systems used for real time traffic signaling, open source code, points of contact in other towns, ratings from operators about how the program could be improved, and a list of vendors. Everything I needed to implement it in my town!”





Use Case: The Investor

Connecting People and Technology
for Transportation Innovation

The Investor



The Investor

Oliver Charles

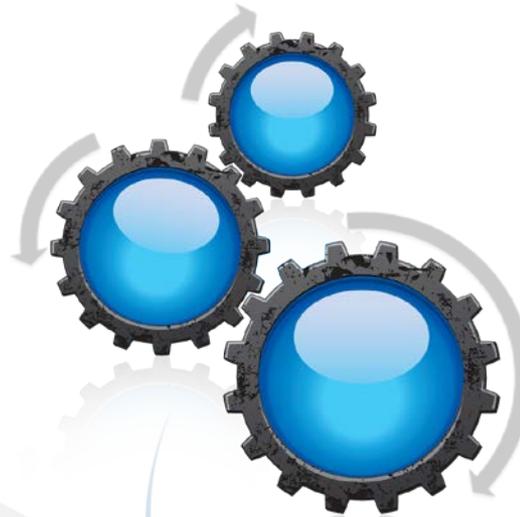
Age: 52
Resides: New York
Job: Venture Capitalist
Loves: Cigars
Hates: Broccoli

“I hear buzz around new technology opportunities in the transportation sector, but where do I find projects I might be interested in funding?”

The Investor



“The Digital Transportation Exchange allows us to see projects at various stages of development and allows us to match our focus with like-minded experts, developers and entrepreneurs.”





Use Case: The Shipper

Connecting People and Technology
for Transportation Innovation

The Shipper



The Shipper

Jean Jacobs

Age: 45

Children: 2

Resides: Michigan

Job: Scheduler at a freight shipping operator

Loves: Post-it notes

Hates: Inefficiency

“We have a bunch of empty cargo space in our weekly shipments, but we’re having a hard time finding local businesses to use it.”

The Shipper



“My company had tried traditional advertising channels but hasn’t been successful finding local business to fill our empty cargo shipments. I’d wished for years that someone would develop an easily searchable ways for businesses wanting to find other shippers to connect with shippers that have extra capacity. On the DTE, I submitted my idea for that tool, and within a few months a developer in California had created it!”

“I immediately subscribed and added my company’s name to the inventory so we could identify new clients.”

The Shipper



“Through this tool I connected with Bob, the owner of a local yogurt producer, whose inventory had been spoiling in transit. After making initial contact and then setting up a sales meeting, Bob switched to Jean’s company for shipping. His yogurt is no longer spoiling in transit as it’s leaving earlier on Jean’s former empty cargo slots. I got new business and Bob’s saving his inventory—a win-win for everyone! Thanks for making my idea a reality DTE!”





So How Will DTE Work?

Connecting People and Technology
for Transportation Innovation

The Basics...



What: The DTE is a catalyst for collaboration and innovation across the public, private and non-profit sectors to develop and share solutions for the biggest problems facing transportation's digital infrastructure.

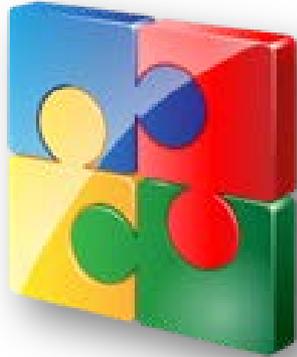
How: Through a public-private partnership, DOT will leverage private sector resources and catalyze this innovative exchange at a low-cost to the Government.

Who: The DOT Office of the Chief Information Officer, in partnership other DOT offices and Operating Administrations, and strategic external partners will work with external private and nonprofit institutions to stand-up and support DTE. Entrepreneurs, experts, investors, partners and citizens will bring the exchange to life and sustain the platform.

When: The partnership will launch in fall 2011 with a prototype deployed months after the external private or nonprofit institution as managing partner has been identified.

Where: The exchange will reside online with occasional physical events (i.e. mashathons) to highlight excellence and stimulate interactions and products across the nation as required.

DTE will provide several functions...



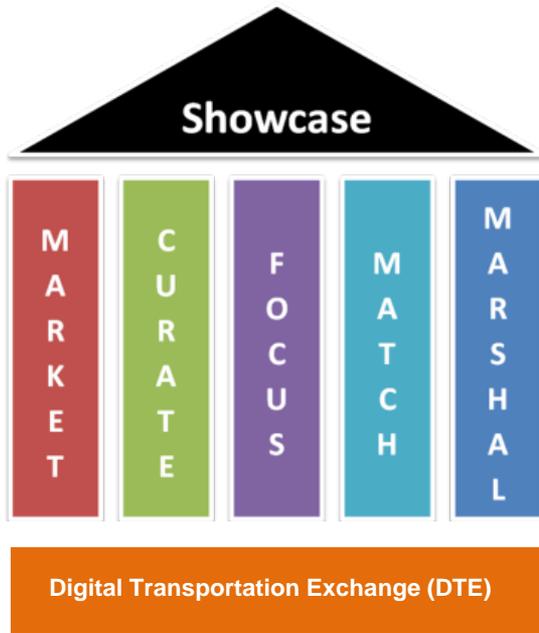
Prioritizing Problems: Help identify and prioritize major transportation problems by size and intensity through ideation and crowd sourcing from citizens, businesses, experts and academics.

Solutions Teaming: Encourage teaming of entrepreneurs, developers, experts and government entities to create innovative digital transportation strategies and plans for funding.

Funding and Financing: Attract attention of the investment community including angels, venture capitalists and strategic investors to digital transportation business plans for funding. Stimulate solution development through innovative funding mechanisms like prizes and competitions.

Market Development: Create a transportation-focused service provider exchange consisting of legal, marketing, communications, accounting and other expertise. Increase the supply of solutions by involving non-traditional actors as well as the demand by drawing the attention of users and investors.

DTE will showcase transportation!



Focusing and Curating: Imagine what would happen if non-traditional technology entrepreneurs, startups, venture capitalists and the private industry were focused on creating quality digital transportation solutions together! By connecting these communities, problems and solutions could be identified and discussed in one place—and teams with the right expertise could form around them.

Marshalling: Imagine what innovative solutions could be created in congestion management, multimedia, 911, traffic signal system controls, freight management, and connected vehicle systems by encouraging and leveraging private sector investment and expertise!

Matching and Marketing: Imagine an online showcase gallery that allows local transportation providers and consumers to search, locate, understand, learn, collaborate, use, improve and reuse solutions efficiently and effectively!

DOT is looking for YOUR feedback



The Department is interested in (1) engaging a wide variety of stakeholders to refine this concept and (2) identifying partners to launch and manage this platform.

There are several ways for you to provide your feedback to the DOT. A few are highlighted below.

- **Join the Conversation Online via [IdeaScale](#).**
 - Submit ideas, thoughts, and comment about our concept and partnerships
 - Comment on ideas and thoughts presented by others
 - Find out what people are talking about
- **Attend the Stakeholder Meeting at DOT Headquarters**

For more detailed information, please see the Federal Register Notice published about the DTE and the DTE website at www.dot.gov/open/DTE.