THE U.S. DEPARTMENT OF TRANSPORTATION'S (DOT) DIGITIAL TRANSPORTATION EXCHANGE (DTE) CONCEPT

Stakeholder Meeting Notes

Friday September 16, 2011



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WELCOME AND INTRODUCTIONS (9:00AM-9:15AM)

Bryna Helfer, DOT's Director of Public Engagement

Welcome to the DTE public meeting, we are ecstatic to have you all here today. We hope this is going to be an interactive exchange between all of you here in person and virtually. Today is about being and getting creative. Some of us come to it from a transit perspective. How many of you are from IT community? Who's from a venture capital firm?

One of the things we want to do today is roll up our sleeves and talk about how DTE could work. Nitin Pradhan (DOT's Chief Information Officer (CIO)) is going to give an overview of what DTE is. Today is about us figuring out the challenges, opportunities and solutions with this concept.

OVERVIEW OF DTE (9:15AM-9:35AM)

Nitin Pradhan, DOT's CIO

Thank you. Thank you for coming here. We think this is going to be an exciting discussion for us. We're going to talk today about DTE. To give you another view of what this really is. Think of it as a social network, an incubator, and a marketplace where technologies can be marketed.

Nitin discussed a presentation on DTE that can be found at www.dot.gov/open/DTE.

Questions for Nitin from the Attendees

Question: What happens after Sept. 23m when the Ideascale site is brought down?

Answer: We will continue the conversation even without the ideascale site. The 23rd is a date to help us look at the feedback.

Question: How are the state DOT's reacting?

Answer: We've spoken to some that have reacted very positively so far.

Question: Does the DOT have any plans to require some level of openness in solutions on the DTE, so that others can leverage platforms that others have created?

Answer: We expect that to happen in some instances. One purpose of the DTE is to promote solution sharing. That will be a main component

GROUP DISCUSSION: OPPORTUNITIES AND CHALLENGES FOR DTE (9:35AM-10:00AM)

Discussion Question from Bryna: What excites you about DTE?

Attendee: As we drive every day, there are many problems we encounter. Before you all came up with this platform concept, there were few ways for us to come together to solve safety problems. It is great that you are looking at solution for that.

Attendee: This morning I was driving with a cab driver, and we were stuck for an hour. Other places I've been have timed lights so congestion isn't as much of a problem, it seems. I'm working on a FHWA project to manage lanes right now. It would be great to share information because there are so many people working on this. I see that as a benefit of DTE.

Attendee: One of the things that excites me the most is the public-private partnership aspect of this. I do have a question on the development side though: who owns intellectual property afterwards?

Attendee: I agree. One of the things about partnerships is that can it can be unclear sometimes who gets intellectual property. I've heard some people mention an "open portal" construct for DTE where an exchange of information would become an engine of growth leveraging the internet. Developing open standards would be very important in this.

Attendee: I really like the idea of connecting the consumer with federal and local/state agencies. We deal with people with disabilities and older adults. Connecting those people with the public sector to determine real problems and create solutions will be important.

Attendee: What excites me? One source connecting people to specific needs.

Attendee: This is an opportunity for us at the program level in the federal government to not be so limited in the efforts we can support--to see our challenges addresses through outside people.

Attendee: ITS America puts technology and transportation together to address transportation challenges. Next month there is an ITS Congress in Orlando. ITS America has uniquely brought the investment community together, enabling investment matching. On the order of 40-50 companies are looking for funding. We think this is beginning of trying to bring together new folks in transportation space; there are many more places to go.

Attendee: I work in Intelligent Transportation Systems program at DOT. We'll be participating in the ITS world congress. A lot of the topics we've heard today deal with issues at the intersection of government, industry and citizens. The importance of open standards have been mentioned many times. That's something we try to promote in our office. You can build it, but will they come? This is a broader issue that takes citizen engagement. Partnerships with local government are important to make sure that citizens are aware of efforts; their involvement makes a difference.

Attendee: I want to make sure there are opportunities in DTE to facilitate training.

Attendee: I direct the FTSA center and I believe there are opportunities here. DTE could create consumer oriented opportunities. DTE could match challenges/needs with possible solution funders. For example, paratransit and other human services are paid for by local government, that can't afford to pay for all services. There is an opportunity to introduce new funding sources here.

Discussion Question from Bryna: What else is on your mind?

Attendee: I am interested to see how cabs and shuttle services will use such a technology? Usually people on shuttle busses are signed up already. How would someone looking to use services like tourists connect with the services on the DTE?

Attendee: Look how Google has gotten involved in Google trip planning. The greatest opportunity is in intermodalism. Most people know you can use Google in inner city trip planning. The next wave should be intermodal connections. Google's giving us an opportunity to think about how consumer provided and government provided information working together can improve the trip planning experience.

Attendee: I'm excited about unmanned vehicle robotics technology. Member companies of my organization have had success, saved many lives, and prevented many accidents. We see DTE as a way to help with public acceptance.

Attendee: DTE levels playing field and can make small business more competitive

Attendee: I am interested to have discussions about any time, any place platforms – Ways to keep people home.

Attendee: I am interested in talking about apps that address Distracted Driving.

Attendee: I think we have to keep in mind that not everyone has a smart phone or way to get to apps – DTE should figure out ways to provide access/technology to people who don't have mobile technologies.

Attendee: How do smart grids apply here?

BREAKOUT SESSIONS (10:00AM-11:30AM)

The large group broke off into breakout groups on the following topics for one hour. The notes from those sessions are provided on the following pages.

- Defining Success (one in person small group discussion, one phone small group discussion)
- Identify the Need for DTE (one in person small group discussion, one phone small group discussion)
- Incentivizing Individual Participation (two in person small group discussions, one phone small group discussion)
- Building the Solutions (two in person small group discussions, one phone small group discussion)
- Launching and Implementing DTE (two in person small group discussions, one phone small group discussion)

DEFINING SUCCESS

These small groups focused on what "success" would mean for DTE and what they thought near term and long term goals should be for the initiative.

Defining Success Group 1

Discussion Participant: It's important for us to understand when we think DTE will have achieved success-what would that look like? The place to start--and the obvious place--is the customer, the citizen. What does it mean for you and me for how we get around? At least on the surface, it would mean that anyone that wants to get

from point A to B can do so easily, and can get there in the shortest amount of time with the least amount of transfers.

Discussion Participant: Thinking back to Nitin's comments, one measure for success is the customer element. The other is what's in it for the investor and how are they realizing an opportunity to innovative or exchange an idea.

Facilitator: So if I can boil that down, the world would be different in that you can find the right information to get from A to B or from idea to idea (ideas to dollars) around this general theme.

Discussion Participant: For me, success would be if every mode of transportation would be seen as equally important and that public transportation would be seem as equally important as the transportation of commodities. There's an attitude about taking a bus, for example. But down the road, there needs to be an attitude change about the different ways in which things are moved.

Discussion Participant: I think looking at it from a safety perspective, there would be fewer injuries and lives lost. From an entrepreneurial perspective, it would provide a channel for investment groups to get their ideas off the ground to speed up innovation and solutions.

Discussion Participant: DTE would be an accelerator of ideas to solutions so that they get out to the marketplace faster.

Discussion Participant: It's hard to get social networks off the ground, and there have been a lot of search engines and social networks because there are a lot of different needs out there. We have to make DTE functional and useful. To go beyond the FaceBook of transportation for techie nerds, DTE it needs to produce results to be successful and allow people to get from place A to B. We need to have implementation of technology that has major messaging.

Discussion Participant: As I'm thinking about success, DTE should be a known source for transportation. It should be the focal point for transportation and investment.

Discussion Participant: DTE should provide a platform for buyers and entrepreneurs to connect. But how does this scale up for others, like universities, to use so that we don't have to come up with these solutions/tools/apps on our own?

Discussion Participant: Why could this system not be something that connects to Google so that it's not separate? So that it's an instant connection for people.

Discussion Participant: There could be a search bar within Google for DTE so that it's not buried, is visible to lots of people.

Discussion Participant: We need to have a connection with search engines like Google. It seems that if we're talking collaboration, etc. you should connect to the largest search engines in the world.

Discussion Participant: One of the critical success factors will be to define who is in the "circle of trust" that we want to draw upon, like search engines but they are not the only ones. But there are others that should be involved. Who are the stakeholders? What are the critical pieces of functionality that you want?

Facilitator: So then based on that comment who should be determining the functionality and the key stakeholders?

Discussion Participant: The Managing Partners since DOT is not going to put any money into this, it should be up to the partners to define the operational partners that DTE should work and the scope. But I'm not sure that is what DOT wants? DOT must better articulate:

- Roles/responsibilities for DOT and managing partners
- Selection process for managing partners
- Goals for DTE
- Scope of DTE

There should be more rewards for those companies that are contributing more (money, time, resources, etc) that are involved.

Discussion Participant: It would be great to have some guidelines for the areas of roles, responsibilities and goals. I would like to see some collaboration to define the social, community, and business benefits so that it comes from a global perspective so it's not just about the needs of large companies.

Discussion Participant: DOT should look at other stakeholders that might want to/should be involved who might be able to help fund this.

Facilitator: How long do you think these activities that you're describing should take?

Discussion Participant: We have to have some kind of success/results within the first two years because people aren't going to wait. Let's try to accelerate the selection of partners with a goal of 6-9 months from now. If we take too long, the meal is going to get stale.

Discussion Participant: Connection points are really important to entrepreneurs so that they can see how they can use this or see the immediate value and usability.

Facilitator: Based on that comment, should entrepreneurs or any other stakeholder groups be involved first?

Discussion Participant: I think developers because users don't even know what they're getting.

Discussion Participant: Do we look at moving people first or commodities first?

Discussion Participant: I think it's both.

Discussion Participant: It might call for two different, parallel sets of information.

Discussion Participant: It sounds like it should be some kind of global system that can be pared down to the local level.

Discussion Participant: We should look at rolling out different levels, layers and get the public involved to help speed solutions (e.g. Wikipedia model).

Discussion Participant: In year one we also need to identify who is NOT in the room.

Facilitator: What else needs to happen in year one?

Discussion Participant: We need to define the functionalities at the end of the day that say "success" when DTE is fully up and running. For me, it's a portal, a place you can go for all transportation, communication and related needs.

Discussion Participant: Is that DOT's goal (to have a portal) or is it to ENABLE this type of collaboration?

Discussion Participant: The goal shouldn't be the tool or a framework. The goal should be that things are happening and are better for the end-user.

Discussion Participant: Who is the end-user? Is it the cargo manufacturer? Is it the state of Virginia? Is it the person who is trying to find a way to get their parents to the store?

Discussion Participant Would DTE rather do outreach to different users or to some kind of trip-planning software companies to enable awareness of those kinds of tools? Or promote usage of those tools and link them to the site so that we're not recreating those tools but cataloging them, and other resources, for people to find them easier? Another piece that you could do is provide feedback on services/products to those providers so that they can anticipate and ramp-up services to better serve the community (e.g. there's a race coming up this weekend and the roads are going to be shut down. Metro should be aware so that they can have more cars on the train.)

Discussion Participant: DTE would help entrepreneurs identify and create customized regional/local solutions.

Discussion Participant: It is incredibly important that the information that is available on DTE is current. Users should be required to keep their information up-to-date. To be successful, the information has to be current.

Discussion Participant: Want to get away from just trip-planning but I'm thinking like things for parents to know that their kids are out past their driving curfew. I don't know where that fits in but ...

Discussion Participant: Ultimately, I think the end user is the barometer of success

Discussion Participant: We haven't talked about getting the academics access to funding ...

Discussion Participant: End-users of the DTE really are two groups in my mind: (1) users (using transportation to get from A to B easier, better solutions for getting themselves around) and (2) makers (using the system (DTE) to come up with transportation solutions/systems better and more accessible to users).

Discussion Participant: I think the one-year goal should be the initial release of the DTE.

Discussion Participant: But what does initial release mean? First need to define who are the managing partners, who are the end users, what is the scope.

Discussion Participant: You should at least open the portal to the general public by then. On second thought, maybe that's year two (public release of the tool and public involvement) and year one should be the ground work: defining who are the partners, roles/responsibilities, functionality, how the tool will be used, etc.)

Discussion Participant: Year two could include creating holograms of what we want the site to look like, defining parameters and goals, defining metrics for both users and makers (profitability, number of users, how many users were connected to investments, how many solutions/innovations were developed, etc.)

Discussion Participant: Parameters should be developed for users and a separate one for makers.

Discussion Participant: We should also think longer term in terms of goals as well. For five years, for example, DTE should be extending the reach of solutions to underserved communities and people should feel very comfortable using it.

Discussion Participant: Is the goal to make the things that are working BETTER or is it to find those areas that don't have resources/tools/ aren't working and come up with solutions there?

Discussion Participant: The elephant in the room is privacy. Who gets in? That's a whole other conversation.

Discussion Participant: Another measure of success is trust—if people feel comfortable using DTE.

Defining Success Group 2

Discussion Participant: I have a background in school districts and local public education. I want to find a way to connect the gap between transportation providers and users, especially disabled students and how to transition the users from school provided transportation to other available transportation to commute to work or college. An increased focus on transportation is needed to support the mission of the school systems. A clear transportation method should be used for college students to get from and to school without any problems. I believe that people should share resources and tools to create a package available to end users. Schools should be engaged within the first three months to collaborate on school related transportation issues, especially for disabled students. Also, there is definitely a need to better describe transportation acronyms for all stakeholder groups.

IDENTIFYING THE NEED

These small groups focused on what the user needs for DTE might be for a variety of stakeholder groups to make the initiative useful.

Identifying the Need Group 1

Facilitator: Thank you for your participation! Through the break-out groups, we want to build on this morning's discussion and identify the primary needs of a variety of stakeholder groups who might use the DTE.

Discussion Participant: There are a myriad of issues in the technology field. They struggle to manage the fleet which includes equipment, drivers and maintainers. Airlines know where all planes are at all times, but ground transportation is not the same. Managing from a safety perspective is a challenge – both for drivers and the processes – it might be a good idea if we had a national database that tracks drivers throughout the system. Usually, Bus lines would partner with private industry and see if there is a solution that would work, but there is no one looking at this problem from an overall industry perspective, and there is a continuing need for a solution on a global scale.

Facilitator: How do you think that would happen? Has there been any research done on these topics?

Discussion Participant: Pew did a report last year on reducing greenhouse gasses across transportation sector. I am here because IT is a great opportunity to make the transportation system more efficient. Right now, there is not a lot of good research on how to use IT to make transportation efficient. With regard to intermodal transportation and traffic, there is not good research that comes up with an accurate summary of how much of the bubble that Nitin highlighted you can get from the DTE space.

Also, it is important to identify behavioral economics; it can be hard to change consumers and how they travel. Existing preferences are hard to change. Some are more ready to embrace change than others, but we need to examine the following question: How can we allow folks to take advantage of new tech without requiring huge behavioral change?

Facilitator: If you're saying that people in general don't like change, then how do we make solutions that bridge those gaps?

Discussion Participant: With commuting, I think people would be open to a change. For example, I travel 55 miles each way so I don't have a lot of options. How could we not want to change when we are spending hours in traffic, etc?

Discussion Participant: Baby boomers will not be able to drive soon, so they will be forced to change. If there was transit or other options, they could be teachable, but right now it's not an option in many places. Mobility will be more of an issue as time goes on. We need more commuter buses and more locations that they service.

Facilitator: If the need for transportation for the aging population will need to cross more groups, what other groups will have needs in the future?

Discussion Participant: People in my industry maintain devices in the field. A lot of systems have failed and don't do what they are designed to do. Some of this may be because actors are not figuring in the expense of maintaining infrastructure in initial cost estimations. There is also concern with new technologies — maintenance, reliability, sustainability and training need to be a part of the planning. The average age of my users is 50-60 and it is often difficult to get information out there to do the training for the technicians.

Facilitator: Does this also mean there is a need to keep continuity of knowledge and feed the right groups into both old and new knowledge?

Discussion Participant: In terms of education, my organization overcame training difficulties and adopted a method for utilizing video type training. When there are many trainers, the messages are often not consistent. We created video training to make sure the messages are consistent. It was a simple app that they used to do this, and people really bought into the videos.

Discussion Participant: Technology can help engage trainees. Watching slides is boring. It is more interesting to learn about the latest tech using new methods instead of 50 year old methods.

Discussion Participant: I agree. There are many different types of learners.

Discussion Participant: Trainings are becoming more interactive and allowing trainers to see if people understand the material.

Discussion Participant: I want to circle back to the issue of commuting; our fathers' generation built up the suburbs and now we are paying the price – we have to drive. If we get too caught up in the design of the systems, we will forget the ways that we can use the data sharing to help us. For example, during the summer in Cape Cod, the population expands 3X. Their infrastructure can't handle that congestion. If people could use an intra-city bus, there would be fewer cars. This goes along with the question in surrounding transit – what can we do to make this work? How do we plan the trips? One idea would be to track buses into Cape Cod and potential users can see the route. The other issue is how we pay. Could we ever have interoperable transit cards between cities? Now we are locked in to 2-3 companies' radio signals. The other issue is: Why don't private companies give GPS technology to city buses so we can track all buses? What about the ferry industry? We need more data exchange. Data should be interchangeable, and Intermodal DOT leadership can help. Problem: A lot of people that grew up with cars don't believe that the bus is going to come, and we need a way to give them confidence in the bus system.

Discussion Participant: Using technology to see when the bus is going to come inspires confidence. How can we leverage the online side of DTE – what do we need for it to work?

Discussion Participant: There are great results in other countries, but their systems are very different. When the government says that something is the standard, it is – a universal top-down approach. Our biggest challenge here is the 3 layers of government and the real work is done at the local level, which results in the biggest chance of differentiation between different designs, standards, etc. Federal DOT works hard to see what the nation needs and then something gets out there and doesn't work or people are complaining. I think it would be great to have a sandbox where people could throw these ideas out and let a community (academics, local governments, community) mark it up and make the changes to find the best and most adoptable solution. It would be valuable at the federal level to allow leaders to see where the gaps are and make sure they are focusing in the right direction.

Discussion Participant: Keep in mind that some people don't use computers.

Facilitator: Someone mentioned that often a technology does not reach all the corners that need to be reached. As far as DTE, the end product may leverage online tools a lot. What would be an obstacle to people using DTE? What would it look like for people to use? What else to we need to do to make it a success?

Discussion Participant: We need advocate groups to be involved in the process. I found out about DTE from someone outside of DOT even though I work at DOT. The challenge is getting ideas out to communities. For example, I did not see anyone from AARP at this meeting

Discussion Participant: 90% of people have phones – is the phone an alternative for those who do not have internet or computer access? Phones are still familiar to the older generation and could be a way to keep the lines of communication open.

Discussion Participant: It may be a good idea for advocacy organizations to have access to DTE and help others get access. Like Onstar – you push a button and someone else helps you. Businesses could form to help people access DTE information.

Discussion Participant: Phones are relatively cheap but have high refresh rates. Younger generations will drive app development and make it easy for older people to use. Economics are changing in demographics – young people will own the systems and developer forums. Dozens of apps are being spawned because of government.

If all vehicles have location technology, immobile people can see where the vehicles are and find the ways to meet their need and make the connection. DTE can help see where the dynamics are. Massachusetts has started convening these people.

Discussion Participant: People need confidence that new things are not a fad that will go away with the next administration. We need to create things that are viable on their own and then they will become a fixture. Some apps people invest in and then they go out of service. To make DTE a universal hub, it needs to be seen as something that will stay around.

Facilitator: Based on that comment what are other things that DTE will need to consider to be successful?

Discussion Participant: The real issue is staying in touch with the issues that need to be solved. Some people think para-transit is available everywhere but it isn't. New issues need to be brought forward, especially if there is a platform for the issues to be raised. Then, we can figure out how to solve them.

Facilitator: Based on that comment, what else has frustrated you about online forums in the past?

Discussion Participant: There are too many pages full of links and topics—it's all about what you see when you first go there. Can you get what you need to know? Can you type in a search and find it? The forum needs to be FLEXIBLE. One potential problem could be having to filter through too much information. It would need to have some management, control, and cleanup.

Discussion Participant: The first problem will be establishing and sustaining interest, especially with the possibility of new administration. Even the current administration could decide this is not worth supporting. Start VERY simple. People aren't going to share entrepreneurial ideas but they would probably like to have access to information and data that is generally publicly available. Trying to have a ton of solutions might be hard to imagine coming true. Also, if the answer to a solution is a potential way to make money, people may not want to share their ideas.

Facilitator: Based on that comment do you think people in business and industry are looking more to listen and benefit than give out ideas? Does there need to be a balance between listeners and people who are going to spark and share in conversation to make this work?

Discussion Participant: I'm thinking that someone in Nitin's position articulates the issue and asks what others can do to help solve the issue. People have selfish reasons to solve their own interests.

Discussion Participant: If it is set up where you can gain membership, you would have an opportunity to contact people directly and then take it offline?

Facilitator: You've all mentioned today a lot of functions this could play as a discussion forum. What else could it be besides a discussion platform?

Discussion Participant: The GPS system was set up as a worldwide system by the Navy but is sustainable now. Communications is driving this now. It doesn't matter who is in the White House if people know enough information and can get carriers to communicate and share information.

Discussion Participant: Is DTE an exchange, platform or system? Does it cross hardware, platform and network? Is it a convergent site? Is there benchmark?

Discussion Participant: As a non-user, being in Google is not helpful if you do not know how to properly word the search

Discussion Participant: Since there are such a wide range of topics – how do you present the various possibilities without having to drill down until you realize you were in the wrong place? There needs to be a high level way to understand options.

Facilitator: Is a need for something more visually oriented.

Discussion Participant: There will be people that aren't comfortable. Why not have a simple training video? Is there a way to create a learning environment to help them be more comfortable with the tool?

Discussion Participant: The Help button never helps.

Discussion Participant: Who is the audience? Generally sophisticated people who work in the space and try to take advantage of technology?

Facilitator: For the sophisticated user – what would prevent them from using it or dismiss the tool?

Discussion Participant: It needs to be simple. Find a resolution that is user friendly to everyone.

Discussion Participant: Isn't this really a social network with a central place that everyone can come together? Some groups will be more savvy than others. A place where they can go to be with people who speak the same language and have similar concerns, issues, likes, etc. I don't think this is a linear thing – it can be different to everyone.

Facilitator: If a discussion forum does not connect people in the right ways and is not what we need, what are other ways that you might want to connect with someone in another community but have not been able to?

Discussion Participant: Maybe people don't know that they need to connect and/or don't know the benefits of connecting.

Facilitator: Any other final thoughts?

Discussion Participant: The opportunity is to create a means for real time intermodal information on vehicle location on a nationwide scale.

Discussion Participant: Another opportunity is the interchange between technology users and technology providers.

Discussion Participant: You should expand the technology to information as well.

Discussion Participant: It is important to but will be tough to engage advocacy organizations. They may hijack the direction of the group and drown out other voices. There are people engaged from many different perspectives with very strong opinions.

Discussion Participant: We need to balance conversation between advocacy groups, research and planning, modal agencies and operators, etc. The key is balance.

Discussion Participant: There are some stakeholders with specific needs that need to be noted: Paratransit, elderly, disabled.

Discussion Participant: There are several functions for an online portion of DTE: conversation forum, connecting business problems with entrepreneurs, sharing data (archived and real time), platform to get access to data, and building solutions from the data.

Discussion Participant: There are several things DTE should be aware of that could impact its success including: security (how much info gets put out there, stealing ideas, not everyone has good intentions), inertia (not getting it off the ground), benefit not outweighing security costs for the managing partners, making sure that it won't be a fad, continuity, encouraging participation, and avoiding having one group dominate the conversation.

Identifying the Need Group 2

Discussion Participant: I am trying to build a county-wide transportation plan. I have found it hard and time consuming to find needs of community. Having a resource like DTE would save me time and would help me to find partners. I have been unable to apply for a grant recently because I couldn't find a partner. I need a match. Lots of companies need partners for all types of solutions. But who would be the lead? Who would gather the information? How would one get into the system to search the site?

Discussion Participant: I think that it would be great to know who does what and how it can better serve the people of Florida. The biggest problem is how to get from county to county without getting on many different kinds of transportation systems. If the site can look up what kind of transportation system can get people from point A to point B that would be very helpful. If the application does not provide exactly what the person needs, it can connect users to partners that could help. This is one of the problems that we all face - there is too much information but there is no one-stop shop. It can be a full-time job to find the information that people are looking for.

Discussion Participant: I think that a big use of DTE could be providing a way to have a level of connectivity between passenger agencies and human service agencies. In my county, people have trouble moving between counties to take advantage of the services available in other counties.

Discussion Participant: If you go into a different county – you can only go there for a 14-day period. If I have a meeting in another county, I have to send a co-worker because I am not registered in other counties and so they do not recognize my disability. Getting from one point to the next is constrained.

Discussion Participant: State representatives and state DOTs do not recognize that the regulations and restrictions they put on them make service delivery impaired.

Facilitator: DTE could allow obstacles to be vetted and publicized. By getting visibility into situations like this, solutions could then be addressed and discussed in a comprehensive way. What would you see as the challenges of implementing DTE? What would encourage peers to use it?

Discussion Participant: It would have to be easy to use. It would have to meet be versatile to meet the needs of all the people using public transportation.

Discussion Participant: It ALWAYS needs a feedback mechanism.

Discussion Participant: Should there also be some type of face-to-face interaction? Some other kind of component?

Discussion Participant: A regional workshop where participants may want to come out and meet each other may be helpful. Maybe they could go to different conferences to showcase DTE. Maybe they should partner with a state.

Discussion Participant: People complain about switching modes of transportation when crossing county lines. DTE could provide many solutions to cross-county residents. Solutions that people are currently unaware of. There are currently cross county lines but it costs a lot of money. A forum that can help me with this question would be helpful.

Discussion Participant: DTE could help lower the cost of resources.

Discussion Participant: Maybe DTE could offer information about where to get transportation help or where to buy a vehicle?

Discussion Participant: DTE will not be successful if it doesn't meet the needs of people that are using it. When the government gets involved, they do not always look at the needs of the consumer. I want something that is created for us by us, not something driven by policy. How can this be made affordable for consumers? There also needs to be a level of flexibility for growth and change.

INCENTIVIZING INDIVIDUAL PARTICIPATION

These small groups focused on who the relevant stakeholders for DTE are and how they would best be motivated to participate in the community.

Incentivizing Individual Participation Group 1

Discussion Participant: There are some stakeholders that are not included in the current discussion including students outside of Transportation. Also family members, caregivers, private business, customers of business products are frustrated because they can't get that line of service to them.

Facilitator: Sounds like a lot of people. What do you think are important drivers to get people involved, the mass, into the conversation?

Discussion Participant: It starts with the brand. If there's no real content, no volume than there's no trust. What do you want DTE to be? Figure out what you want it to be. The reputation needs to be there. Add value, make it easy and simple.

Discussion Participant: Developers, vendors and consumers, need easy access. Real content, a lot of sites don't have this.

Discussion Participant: How do you organize and build the broad range of stakeholders that you want to include? Evolving market place solutions are becoming commoditized. How do you make it worthwhile? What

is the right business plan? Healthcare has this issue, no way to get great ideas implemented. I want to be excited about the implementation. I want it to best beneficial to my business, especially the small disadvantaged. Who's going to be responsible?

Discussion Participant: It takes money and management to get it built. The DTE should maybe have tiered levels of access. The venture capital brand needs to be secured, needs to be tiered, for the security to benefit the stakeholder.

Discussion Participant: It's critical that reputable ideas must be implemented to build trust.

Discussion Participant: The community should help escalating topics. Look at the rich history of online behavior to get this started. Where do you build trust? How do you design that to build your platform? How do you ensure that a stakeholder's intellectual capital is going to remain theirs and nobody is going to steal it?

Facilitator: So you're saying what it would take to get people to stay—what would get them there in the first place?

Discussion Participant: There's a ton of data on the state side and local government side, it does seem to be easily well presented. If you go to Federal government sites there's no real mapping of information verses state sites. How do you make it useful? The states should layer the information, so there are areas of how to improve identified.

Discussion Participant: There needs to be a way that we can use the platform at no extra costs without having to google your entire process.

Discussion Participant: There needs to be ways to show success, demonstrate solutions that are at low and no cost.

Discussion Participant: Different incentives apply to different stakeholders.

Discussion Participant: PhD students can use information for research, they may want to participate in projects. They may want to be attached to something that's good. DTE project may want to attach itself to the best and brightest in order to give them something that they want and can use. A lot of money that goes out ties to research and energy if those dollars could be used that would be good.

Discussion Participant: The user must provide links and tags to DTE. Speak to the value, identify the points in which you need to build, if they trust and it's valued its sustainable. Self policing is okay but it needs to take care of itself. What are the best ways for suites to build trust? Do I know the organization not just electronic but its entire presence? Is it a dot.com? Does if offer trust at a lower cost?

Discussion Participant: A domain opening up, more configuration than one single point of entry. If there are different types of stakeholders and networks, what are the consumer needs? There needs to be crossover, tailored navigation and search, to the DTE site, so that people can come in and have that level of trust.

Discussion Participant: If I'm doing research and I don't want Joe Doe looking into my domain, there needs to be a certain protocol.

Discussion Participant: Would DOT be willing to be the clearinghouse for managing the DTE? Is DOT the certifier? You don't want everyone to have access to the development space. Are they envisioning turning this over to another certifier at some point? What is DOT's involvement and who is the developer? Is DOT staying away from the venture capital? The standards are what people would probably agree to.

Discussion Participant: Google has something like this out there. There are already large gorillas in the room. Does DOT want to duplicate something that's already out there? What's in it for the private sector? What money is to be made? Name recognition? Why is a private company going to spend all this money to build something so complex? What is DOT going to give businesses as incentive? DOT needs more success stories. Trade associations may want to be involved, in case it does turn into something good. How do you connect schools and trade associations?

Discussion Participant: There's a lot of social media, how do you connect with people offline? How do you engage people that don't have a high level of connectivity? For example, my mother is limited, she uses the computer for what she knows but that's it. Word-of-mouth is important.

Discussion Participant: Needs small App device to get the word out. For example, you have libraries where people that don't have computers can stay connected and get information.

Discussion Participant: How do we connect to the grass roots campaign? Thinking about different segments, promote as a research for small business and to entrepreneurs. If your focus is the shipper community, you need to speak in their language.

Discussion Participant: Use paper, not all technology to promote.

Discussion Participant: Google took 411 and put it into a phone number. Convert text and technology into more convertible data. Think robot calls, very detailed.

Facilitator: So we should think of other ways to make things more accessible? How do you provide to people that don't have a smart phone or computer?

Discussion Participant: Who supports an international component? Developers in India could build out my idea, what if it's not U.S. but international is it still feasible for DOT to sponsor? DOT may outsource more jobs, if successful. Could be a perception or image problem for DOT. Meaning the terms of thinking to facilitate participation through an online community? Is there going to be a DTE Twitter account? What methodologies will be used in identifying problems to the exchange? You have to be in everyone's face.

Discussion Participant: Essentially all of these components should be factored: a valuable platform, reference, immediate impact, easy to access, trustworthiness and easy to find.

Discussion Participant: What if you want to make it your homepage? Will it have a toolbar or can DTE run a search across your site? Look at a partnership with a news organization to drive traffic to the site, especially for the local site. It could have a DTE icon, needs to recognizable.

Discussion Participant: DOT needs to be the behavior setting site, this is what we're setting up and expects the forum in which industry sets standards. Find ways common for data recognition or tools to find data.

Incorporate definitional sources to help eliminate the fatigue of finding information. DOT and DTE should be a center pool to relate to the API, to pull and identify.

Discussion Participant: DTE should set achievable goals. There should be a short-term "digital table" process; those types of discussions need a facilitator. The facilitator should frame the conversation and weed what's not needed. Or else, information would just be a laundry list of ideas that are continuous.

Discussion Participant: We need champions, people that have bought in to the concept.

Discussion Participant: Basically, at any conference you will see there's a resource directory. Like the ideas of individuals, reaching out to get people on board and soon the word starts spreading. Regardless of public or private, you need champions. Some of the prime objectives are thinking of ways to stimulate offline customers, creating a tangible product, effective outreach and online icon engagement.

Discussion Participant: For a DTE logo you might want to utilize in-house talent, have a contest, or add in the artist community. If you can find creative ways to promote and fund with a small dollar amount as an incentive, it's amazing what you can find.

Incentivizing Individual Participation Group 2

Facilitator: Who are the stake-holders of DTE based on what you heard this morning?

Discussion Participant: Academia and business community are key.

Discussion Participant: Users have different incentives from the builders. Advocacy and customer groups also have different needs. Transportation providers are another important and different group.

Discussion Participant: State, local, government providers.

Facilitator: Often there is a transportation bias, what do you think about freight movement? What else fits in?

Discussion Participant: Technology developers for supporting DTE. Communication and traffic.

Discussion Participant: If you develop a DTE, you will get more riders on public transportation. And the riders will be more knowledgeable and use it more. The more knowledge people are the more revenue, jobs.

Discussion Participant: If DTE is easy to get to, you're more likely to attract the best people to it.

Discussion Participant: There will be different things that people have an incentive to act on. Within the same service there will be different groups with different incentives. For example, schools and other academic institutions would have one reason to collaborate.

Discussion Participant: DTE could be a one stop shop for transportation resources and products.

Discussion Participant: DTE information might give you more options than just "taking a cab." It's the most annoying to find out if there is a transportation system in a particular city.

Discussion Participant: Also useful for hospitals, because they can look and research what to do if a patient is getting discharged. The information could be part of your check-out procedure.

Discussion Participant: Another important feature of DTE would be to generate awareness of needs and thus encourage solutions-based design.

Discussion Participant: Also includes: Safety, compliance, and efficiency—would like to see who the violators are.

Discussion Participant: You should be able to identify a transportation solution that includes smart-path travel. You should be able to have a city-selected best path from beginning to end, in real time. I need to know if a city has the capability. You should also be able to put in a request to the transit official that includes ETA and special needs.

Facilitator: What you're describing is a product that can be enabled by DTE. Some of it is already happening, it's called Multi Modal Trip Planning (walking, riding, driving is available on Google).

Discussion Participant: What needs to be enhanced is a more efficient communication system to advise if there are delays with real-time information.

Facilitator: So then how does the individual fit in with the DTE?

Discussion Participant: It will need to be organized in the way that a consumer thinks, not the way the government thinks it needs to be described. Government websites are not organized well for the public. Comparing it to Amazon or Google, it is very confusing because of the acronyms. Make it so easy, my mother can understand.

Discussion Participant: We need problems that are searchable and a forum to discuss them.

Discussion Participant: We need relevant content. Consumer input and good content drives businesses to participate.

Discussion Participant: That's what crowd sourcing is about. A cloud database and forum help connect to the developers and share ideas.

Discussion Participant: It's not that it doesn't work, the question is, "Why would the public go to this site, instead of google?" if I'm an industry, why would I take the time to use this medium? What is the incentive for the enterprise to be involved?

Discussion Participant: Competitive edge and proprietary knowledge. It could be accreditation and acknowledgement for the enterprise.

Discussion Participant: Right, why would I share my solution if there is a financial incentive for me to keep it to myself? If I can market it, why would I share my idea? Does the incentive to share outweigh the incentive to market?

Discussion Participant: There has got to be some sort of protection.

Discussion Participant: Most likely the enterprise would never bring their idea until they have branded it and researched it internally.

Discussion Participant: The marketplace will house products and services, but the social networking facilitates collaboration. Apps.gov already exists.

Discussion Participant: Who would be responsible for gathering info and posting?

Discussion Participant: It's a choice, people choose to be involved.

Discussion Participant: When governments provide a tool it seems more official. We need to go to same place for information. Government built could give it a more official nature

Discussion Participant: I was thinking how can we facilitate the jump from online to offline communication?

Discussion Participant: Rural communities will be a challenge.

Discussion Participant: Include Tribal Communities as well. How do you incentivize those communities to have the system in place to even participate? Do they have broadband access?

Discussion Participant: Right, we're making an assumption that all people have access. We're not solving the problem if people can't use it.

Discussion Participant: USDA involvement perhaps? Schools and social services have better access to these people. The problem is larger than urban involvement.

Discussion Participant: Companies will always take the path of least resistance, where they have the most options to display their platform. Increased participation & volume will be an incentive in itself.

Discussion Participant: DTE should reach stakeholders through marketing, comm, and other tactics including distributing outcomes specific to audience (Every audience will have different incentives) and creating a mobile app for DTE.

Discussion Participant: To best connect people and technology to stimulate transportation innovlation online the site should have searchable content, be in Plain English, provide a forum that matches solutions and problems, and be cost-efficient.

Incentivizing Individual Participation Group 3

Facilitator: Generally, what will get people to DTE, what will have them stay there, and what will make them pass on that the DTE exists? And I think that starting with the question of the relevant stakeholder groups would be pretty critical. So, can you possibly brainstorm on some of the thoughts and ideas of what relevant stakeholder groups would be interested in the digital transportation exchange? Any thoughts?

Discussion Participant: Well, most of them, I think, are obvious, aren't they? Anybody that is using transportation services and anybody who is served by transportation services, basically merchants and employers whose people have to get to work.

Discussion Participant: Obviously, traffic management companies, and these days a lot of mobility companies will also want to be involved in this. The technology company list is going to be quite long, which is exciting to me. Not only do I envision the traditional companies that you would think of whether they be the big boys or

the smaller start-ups in transportation, but also traffic management, information technology systems, comptroller companies, and so many hardware companies, as well, are going to want to be involved in this. But you're also going to have the search engines and big companies, you're going to have those communications connection innovators and companies that are going to want to be included in this conversation and in the DTE. Everything that the DTE is going to be doing will affect connecting people.

Facilitator: Correct. The concept document picture shows government, academia, experts in academia and I think what you were talking about would possibly fall under industry, but there are probably different aspects of the industry like connecting people in the technical industries. For instance, I'm with transit, so connecting people there would be connecting all the people in the transportation mode with technical expertise and its users.

Discussion Participant: As was said in the opening session with regard to academia, that's really exciting because it was mentioned that they have a lot of the solutions plotted out, but not the resources or the connections to make it happen. But the other side of academia as we pull on their expertise will be the fact that we'll be able to create training modules of some sort for those students coming up into the industry.

Facilitator: So, how would participation in DTE be incentivized for each of the stakeholder groups?

Discussion Participant: There's always that ownership—which works for all of us, let's be real—that when we feel an ownership to something, we want to participate. And that could be broken down into a lot of areas having to do with proper promotion of the actual DTE of all participating parties. And, what can we do for an individual stakeholder with regards to their participating in the DTE? Giving them access to connections to grow their business is always workable.

Facilitator: So, do you think that for all the stakeholders the possibility of connecting to assets, people, technology, thoughts and discussion would be an incentive?

Discussion Participant: I think that would be the biggest incentive, especially if it's known that because of their participation it's an exclusive connection. It's something especially for start-ups and small businesses. I have a small business, and I can't always jump on a plane and fly to India, but digitally I can.

Discussion Participant: There are two classes of stakeholders—consumers and providers. There are consumers of the services and providers of the services. Both of them are going to participate when they see the benefits to them—the providers because they've got consumers for their service or their product or whatever it is; and on the consumer side, it's because it's saving them time or money or increasing their security, something along those lines.

Facilitator: Time, money and security—the basics.

Discussion Participant: Absolutely. There's a cost to doing it regardless of how inexpensive it is, and that cost has to be either that it's cheaper or provides more reward, that's the alternative.

Discussion Participant: Also, engaging the citizens and the consumers might be one of the biggest challenges. And also actively soliciting their needs in their own individual communities will give them a sense of ownership of DTE.

Facilitator: So, I think that's really driving into another discussion topic. So, we talked about consumers who saw a positive benefit of saving time, money; providers being compelled because they're connected to consumers. But what kinds of activities are those stakeholders involved in that best connect people and technology both online and offline to stimulate transportation innovation? What would get the people to the technology?

Discussion Participant: When you say 'the people' are you talking about all the stakeholders we discussed?

Facilitator: Yes. Exactly.

Discussion Participant: The answer is different depending on the category.

Facilitator: Yes, that's true.

Discussion Participant: I don't know if there is a blanket statement or a blanket solution that can be made for every category. There may be some overlay, but each category wants something different. Their agenda would be completely different.

Discussion Participant: I agree. But the scope of what we're talking about is so broad, it's hard to come up with a generalization without narrowing down the scope. For example, I was born and raised in the heart of NYC, but for the last 18 years of my life I've lived in Texas. Transportation solutions in NYC are vastly different from transportation solutions in Texas because the needs are different. Where you have opportunity to introduce DTE is where you have the greatest problem. It's going to be in congested areas in older cities where the infrastructure cannot keep up with the transportation needs. When you identify what those bottlenecks are, those bottlenecks become the opportunity for the DTE solution.

Facilitator: Okay. I'm wondering about what you said about differences with the solutions in NYC and Texas. Is there a place for these two different, separate, and distinct needs where one can learn solutions through the DTE with what the other has provided? Is there that type of connection for the DTE as well?

Discussion Participant: It's possible. As the same problems arise, they can be resolved in other areas. For example, I live in Austin, and we have a light rail system. I used to live in San Jose, and was there when they introduced light rail there as well. NYC is a population density where you can support a mass transit system. You can have subways, buses, because almost nobody drives. You can't support that in cities like San Jose and Austin even though those are great solutions. They don't have the same problems in Austin and San Jose. Now, we've got the light rail system. It's tremendously expensive and a tremendous expense on the taxpayer. We could have better solutions if we were applying our ingenuity to the situations that we are encountering.

Facilitator: So, basically, the light rail is solving a nonexistent problem in San Jose.

Discussion Participant: Well, it's not the right solution for the problem in San Jose or in Austin. Light rail commits you to a route, and the population density changes and the commuting needs change frequently in cities that are going through rapid expansion. When you get into some place like NYC where it's already packed to the gills, those patterns are not going to change.

Facilitator: Right. You're already overflowing in all the areas. Okay, so it sounds like one of the things that would drive people there to the DTE would be to solve a real problem and other stakeholders could be driven there knowing they could address a problem, even though their problems would be different.

Discussion Participant: Exactly. The DTE would be a great resource for solutions that haven't worked.

Facilitator: There's an interesting dynamic to that statement. I'm wondering how many people who are taking funding from the government or wherever would be very comfortable saying what hasn't worked. That possibly could drive innovation through acknowledging it didn't work but could help someone else out. That's an interesting dynamic for the DTE.

Discussion Participant: It would be wonderful if you could figure it out. Will put it back on you. But, that's a valuable piece of information.

Discussion Participant: I'm coming back around full circle now. The first step for this is to find a way to catalog or categorize the transportation problems and then to say what solutions are there for those problems and how successful were they. It's nothing more frustrating than to drive upon the plains of Texas on a little two-lane road and all of a sudden you come across a four-lane road out in the middle of nowhere and obviously it's not solving a problem in that little rural area there, but it's a solution they applied there. It would be useful to have a knowledge data base of solutions around the country and even around the world and see what solutions have been attempted, and what the cost has been as a way of getting people engaged.

Discussion Participant: Are you suggesting having challenged solutions where there is an aspect of anonymity in that particular database so that people are more free to discuss if we only identified the size of the city?

Discussion Participant: It would have to be something that is non-threatening. I don't know that it would have to be completely anonymous. We'd say that we're considering doing Plan B on this same problem. This attempt was not successful but maybe I can talk to other people who were involved in it. I also like that one of the categories would be by demographics. So, there's something else for people using the DTE to know they're going to find something useful for them.

Discussion Participant: We're now getting into how the searches will look. Boy, there are so many directions.

Facilitator: That's kind of the fun part of starting something like this. There are so many directions as we're talking about incentivizing individual participation. Another technology aspect to this is that you can get in there [the knowledge data base] and find it; whatever it is.

Discussion Participant: When someone is going to search out something, they're looking for a specific category, as far as people groups, but they could also look for a town size from millions to a couple of hundred thousand in this demographic. It can be broken down in this way.

Facilitator: So how do you think this plays into DTE facilitating the development of new transportation solutions?

Discussion Participant: All progress is the result of trial and error—if you can capture the knowledge base of what has actually been attempted, what kinds of success did it have, and ask what were the positive and

negative aspects. If you treat failure as a step forward rather than a step backwards, you can make progress. Nobody gets it right the first time.

Facilitator: And it would help eliminate everyone having to start anew every time because you've already used the knowledge of what was recorded and knew what to stay clear of. Even though that may have been a solution you would have considered, having found this information you realized that's probably not a good way to go. What would make the DTE a priority then for different people to use it?

Discussion Participant: If they can avoid making errors that have been made in the past, it's going to save them time and money. I don't see how anybody would go forward at all without consulting with it if there is a good, strong knowledge base.

Discussion Participant: I agree. It's the attracting of the knowledge base that would make it somewhere you want to go to use, along with the ease of using it.

Discussion Participant: Absolutely. It has got to be accessible as well.

Facilitator: How are we stimulating transportation technology offline? Basically, some people are going to be technology –adverse. What about this technology solution (the DTE) would make that person realize, well, this isn't really that different from what I'm doing so I'm more driven to go there? What should marketing look like?

Discussion Participant: That is my background, marketing, but at the same time I'm a semi-techie. I would not say that I'm a techie. What we appreciate is for our tech friends to always have that conversation that we can kind of translate. It's an invaluable thing to be able to do. That is not to say that the marketing people won't be in the DTE. But there has to be some sort of English language transition. Remember, academia will be there too. Citizens will be there too. We're not going to speak to citizens in the tech language.

Discussion Participant: We have to draw stakeholders in with a combination of social media; you're going to be ongoing identifying your group participation, but it's going to be a heavy social media participation—if budget allows—traditional media, some direct contact with some universities is going to be crucial, whether that is identifying an ambassador—I'll throw that term out—at the community level and the academic level.

Facilitator: What do you mean by traditional media?

Discussion Participant: Traditional marketing avenues—trades, publications.

Discussion Participant: I think the DTE has a way of expanding and sharing knowledge and bringing people together so that they can solve problems. I don't think the DTE solves the problem by itself; it's kind of a dating service. I can match up with other people in other areas who are addressing the same problems or who have already addressed those problems. The DTE is not going to solve the problem but it's going to help me make the connection; it's going to help me find the information I need to solve the problem.

Discussion Participant: I love that. It brings us full circle back to the importance of the profile.

Discussion Participant: Part of that challenge is to popularize a knowledge base to help people crystallize the thoughts of what their problem actually is and associate with the proper types of solutions. But you never know what the solution is. Something in the rural area might be the answer to something that happens elsewhere.

Facilitator: Having a knowledge base that helps to direct those pointed questions is a benefit that helps you to focus or channel your thoughts to be solution-oriented.

Discussion Participant: I've been working in technology for 45 years. One of the things that we're hampered by is the use of a common language. I worked across all different industries and everybody uses the same terms with different meanings. Communication can be particularly difficult when you're talking to someone who owns a trucking company compared to somebody who owns a networking company or commuters on their way back and forth to work.

Discussion Participant: That's true. When talking to my traffic engineers—I have to learn what they mean when they're talking about multi-modals—I've been doing this for 20 years, but still have to learn because technology is constantly changing. I have to be confident and put it in language that I can communicate in whether it's their peers or my peers.

Facilitator: But the consumer may not be interested in learning the transportation jargon. They just want to improve their commute or are interested in the neighborhood having better services.

Discussion Participant: I think we have to get away from using predefined terms that may or may not be universally understood, or we have to do some type of Wiki link where the knowledge has links to clarify what's being said. A common language is ideal, but it is very hard to get to.

Facilitator: Any other thoughts? I didn't ask at the outset what brought you guys to this discussion.

Pete: I'm a fundamentalist, I guess, and I'm interested in making sure it's not just partners of transportation and construction, light rail companies, but also the public. I have a feeling that they can make a difference, and if they feel like their voice is heard and they're respected in what they're saying, everybody will benefit from it.

Jacqueline: My interest—I'm a small business person, and I specifically search out innovation from small companies. There are a lot of brilliant ideas and brilliant products from smaller companies and they have a hard time being heard because they're not a big boy. They have a hard time being heard by the government, whether it's state or local or Federal. The products that they have do answer the questions that are being asked out there, whether it's the president on television, or other entities. I know there are small companies that already have the solutions, but it's hard for them to get a seat at the table. I wanted to participate because it sounds like something that's going to level the playing field, and, I hope, where the product or the innovation is going to come first, before the company name. Some of the answers are somewhere else and not where you'd expect them to be.

Facilitator: What would get the public into the DTE?

Discussion Participant: If their perspective of what the problem is, is paid attention to, recognized, and respected maybe they have a solution as well. The whole idea is to bring people together to solve the problem and you don't solve the problem without thoroughly understanding it. It's the consumer of the solution who is going to say whether it will be successful or not, so they have to be engaged.

Facilitator: Okay. Good point. We talked about having a safe place where you don't get slapped for having something that didn't go as well, but that someone else can use. That seems positive, but do you think that

some type of recognition within the DTE, peer or stakeholder recognition would be any kind of incentive for people to go there, perhaps in academia or small business? Do you think that would be an incentive at all?

Discussion Participant: Absolutely. Just the fact that they shared their experience or their knowledge. Whether what they're sharing is a success or a failure, they should still get recognition. If it doesn't work, it's one fewer thing that we need to do again.

Facilitator: This approach can have a far reaching result not only for transportation, but for everything in a community.

Discussion Participant: Absolutely.

Facilitator: So when thinking about the ways that DTE can incentivize stakeholder groups, heard 'what the incentives are for the stakeholders depends on the stakeholders.' That is one of the things that you said. The other one was that a knowledge base helps to develop solutions. Is that right?

Discussion Participant: Right. And there are two classes of stakeholders—consumers and providers.

Discussion Participant: The knowledge base is key. If you categorize the problem, then you can find other people who identify with the problem and contact those people and deal directly with them. It's a vehicle for connecting people—like a dating service. Whether you make a connection or not, you're advancing the knowledge base by recognizing contributions to the knowledge, either successes or failures, and sharing what went wrong and how to avoid problems in the future.

Discussion Participant: DTE is a critical technology tool, but it's [about] people. People will go there when they realize it's not just a system. Expand the knowledge base and have the DTE serve as a connecting tool, a dating service, if you will, for solutions to clearly identify transportation problems.

LAUNCHING & IMPLEMENTING THE DTE

These small groups focused on how the DTE could be launched, managed and sustained over time with the involvement of a diverse group of partners and stakeholders.

Launching and Implementing the DTE Group 1

Facilitator: You heard this morning about the DTE concept. Based on that discussion, what do you think are some possible strategies to successfully implement DTE?

Discussion Participant: It would be best to start small and make sure the first few apps are successfully implemented. The first apps should be chosen very carefully – you don't want the DTE name associated with first apps that don't work well. It is also necessary to make sure that the applications appeal to many customers – don't want to start with niche applications.

Discussion Participant: I wonder if DOT has looked at what NSA is doing. He knows that NSA is trying to build an open environment to protect against cyber attacks. DOT may be able to take lessons learned from them. He is curious about the business model of the DTE site – will it be an open/free site? Will everyone have access?

Discussion Participant: You have to have a business model that makes sense – starting a partnership where you get money up-front would be ideal. It is an interesting challenge to figure out the best partnership opportunities. There are several possible business models to choose from: Google makes money by advertising while others make money by having a participation fee. DOT needs to decide on the right model for DTE.

Discussion Participant: I noticed a slide from the introduction presentation – it was a chart that had DOT as the strategic lead for DTE; he thought it was interesting that DOT didn't want any part after the strategy was in place. He suggested bringing in a non-profit or a university as a partner – some organization with no product to sell. He warns that people could get annoyed if the site has too much propaganda or advertising for the managing partner.

Discussion Participant: But then where do you get the money to build the system? DOT wants to separate themselves because of rules and regulations. DOT wants to help with things when they can.

Discussion Participant: How about a collaborative community? Fear of neutral non-profit organizations stems from the fact that many are not completely neutral even if claim to be. Associations wants to look out for their members (and those associations to keep members happy).

Discussion Participant: Is there a way that money can be solicited at the state level? How about some kind of grant? This way money is not coming directly from DOT, but it would be from the Federal Government.

Discussion Participant: There are a couple of places where funding is done through a foundation but that is tough unless someone already has a very good relationship with the foundation. Also, foundations aren't neutral either. One business model is collaboration between a managing partner, an implementer (Oracle/IBM/etc), and a funding source. This might not scare people away. Anyone who builds it will want their name associated somehow with the site and the DTE name though.

Discussion Participant: What for-profits have built other stuff? Google, for example? What lessons have been learned along the way? Is there a way to emulate the successful instances? Anyone involved will want to make a profit – but won't the marketplace decide the best way? I don't know which one will be the winner. How do we pick the winner? There are examples all over: take newspapers online – some make you sign up/pay to read while others let you read without paying. There must be a way to choose the best option.

Discussion Participant: The good news is that there is a possibility that DOT will be able to pick a model and try it. They might get it wrong the first time, but that's ok. A partnership that might work is maybe a university instead of an IT company. It might be lower cost – the university may be willing to use the students for cheaper labor.

Discussion Participant: That's a good idea. DOT might get further with a university because of the good will. Georgia Tech has done this in the past. You have to think about the implications of choosing specific partners. For example, if the managing partner is Verizon, would that scare AT&T away because their competitor is associated with it? Or would it make them want to be a part of it? Would a university deter a big business? Would a small business be deterred if a large business was the managing partner? You need to play all these cases out and decide what you are looking for from a managing partner.

Discussion Participant: We've got a lot of problems that need solving. Another one is how to deal with intellectual property. There needs to be a conversation laying out all the IP scenarios. People might not be very willing to share ideas until they know the ideas will be protected.

Discussion Participant: The VC world sorts that out quickly – we can probably learn from them and their model. ITSA is currently doing an investor matching service – ITSA cannot protect the IP that the applicants give to them. There are models in the investment community that these decisions can be based on.

Discussion Participant: My concern with that idea is that the community is too closed; there may be several individual solutions in this model, but they may not build together then.

Discussion Participant: There needs to be a coordinator to identify stakeholders as well as the business needs of all stakeholders. The solution will depend on the marketplace. Older generations don't necessarily care about applications so how do you take this and make it useful to those not already using the technology?

Discussion Participant: There almost needs to be that referee - is DOT going to play that role? There needs to be someone to say that these two separate groups each have a piece of a solution – they should communicate. Someone needs to be the matchmaker.

Discussion Participant: As an aside, all of many universities' IP is owned by the government. This means that the university can't take the intellectual property and go on street with it.

Facilitator: So how would DTE impact the industry?

Discussion Participant: The industry should be able to innovate faster. It would allow applications to come to life faster. For example, if a university has come up with some technology that they have no need for, they can "throw" it to someone who does have a need for it. This would result in less duplicative discovery of technology.

Discussion Participant: What impact do these high-tech systems have on the entire chain? Many systems will have low-tech people managing/fixing systems? For instance, if high-tech solar panels get knocked down/damaged in a hurricane, it is going to be some guy with just a high school education who goes to fix it. Instances like this have to be taken into consideration.

Discussion Participant: There would be a reduction in redundancy of effort. Groups working on the same things/solutions would be able to talk and work together.

Discussion Participant: People who haven't previously been in the transportation space may see an opportunity to enter the market. This would make the space more competitive.

Facilitator: So what would incentivize partners to build and implement the DTE?

Discussion Participant: Money and the ability to draw a profit.

Discussion Participant: Small businesses would have the opportunity to get connected with larger businesses.

Discussion Participant: Goodwill and branding are incentives.

Discussion Participant: Becoming a monopoly is one.

Discussion Participant: It would open a new marketplace for some companies. (This is similar to the impact on the industry above.)

Discussion Participant: It would help some organizations achieve their missions better.

Discussion Participant: An optimization of systems.

Discussion Participant: Suppliers will be interested if it helps them get their job get done better or faster.

Discussion Participant: Achieving social goals is an incentive.

Discussion Participant: I would love to see a broader board of directors-type body made up of people not just from the Federal Government to oversee the whole project.

Discussion Participant: The government can create an open platform with common standards so that people aren't developing solutions in proprietary ways.

Discussion Participant: There is already a consortium which allows people to enter robotics space – this could be a good model.

Discussion Participant: In regards to the DTE logo, I normally cringe at logos like that because I think it will be overly academic conversation. My industry is low-tech and will not be a leader. Some companies might feel uncomfortable and not know where they fit in. DOT should help the small businesses by having a successful information flow.

Discussion Participant: DOT should make sure to keep a level playing field because everyone from high-tech to low-tech may get involved. We should promote success stories – both the high-tech solutions as well as the worker on the highway figuring out faster way to do his job so that everyone sees the value.

Discussion Participant: How do you create better awareness and keep communication going? So much information is flowing so quickly so there needs to be a good way to keep the pace of communication. Also, different people want the information in different ways – DOT can be in charge of keeping the lines of communication open.

Facilitator: Any more strategies for implementation of DTE? The main theme seems to be getting a successful partnership together.

Discussion Participant: In creating something new, we don't want to forget something old. In other words, we want to build upon what is already there.

Discussion Participant: How is this going to be implemented? Just to leaders in the industry? To the public as a whole? How do you get all these ideas in one space? That is a key to the success of DTE.

Discussion Participant: That may be part of the whole marketing/selection of managing partner issue. If AT&T gets involved, who does that interest? If DOT runs it, who does that interest?

Discussion Participant: I see two purposes – to provide services to citizens and to spur innovation of technology.

Discussion Participant: Anything that involves a high cost to implement will not work as well. If a company has to pay a high price to enter, there may not be lots of participation.

Launching and Implementing the DTE Group 3

Facilitator: You heard the concept and reasons to have each stakeholder involved. How do you think the DTE should move from concept to implementation?

Discussion Participant: Have you identified the key stakeholders? You have generalizations. Have you identified individuals and corporations in terms of being involved? Who are the key stakeholders? I'm coming from the industry entrepreneurship side. Are we looking at fortune 50 companies who are going to define the path, or entrepreneurs?

Discussion Participant: How do you define the pathway for defining DTE? It seems easy to get lost in the broadness. This is a huge stakeholder area. How are you creating the pathway? How do you create a focus to allow movement to go forward without going into discussion for two years? Is there a delivery timeline?

Discussion Participant: I think there are other agencies and stakeholders who should be identified. One would deal with the alternative mode community – carpoolers, ride matching, the government groups who deal with telework & transport management, and agencies who deal with riders every day. I think they all need to be part of this. One of the trade organizations we work with is the Association for Commuter Transportation. They need to be part of this as well. They bring a perspective from the alternative mode that we don't have. They work with DOTs and local governments in areas other than buses and freight. They work with pedestrians; they're on the people-focused front line. We need to bring them in. This is a very broad goal, and it might get hung up.

Discussion Participant: It's huge

Discussion Participant: I think that just bringing everyone together is a good start. We've had fragmented discussions on all levels, but nothing cohesive.

Discussion Participant: It's an inverted pyramid concept. At some point the decision needs to happen on feasible deliverables.

Discussion Participant: As far as this opportunity today, it's an opportunity to give comments for the RFP timeline. Let's say the next step is for people to submit a plan to provide a timeline and a strategic method for the phase one RFP. Should the people here today form the RFP criteria? Should we try to spit out a timeline for the first RFP for phase one? One thing we may be able to accomplish would be to leave this session with a clear directive for the next step. One of things we deal with is who puts the plan together. The stakeholders are on an open playing field. Phase one might be to get stakeholders committed & invested. How do we get started on funding? Off the top of my head, it's a simultaneous process. We have to identify financing, people who would begin to put proposals on the table with finances, these kinds of things.

Discussion Participant: From my view, right now we don't think about money. We should think about defining the goal of the project, and how to get to the goal without bringing dollars into the picture. Dollars scare people, and scared people might start setting up roadblocks. I'm not sure what's being articulated here. I'm using Roberta's comments. At what point do we start saying "this is where we start?"

Discussion Participant: It's important to have the framework. We've got commuting, transport, and freight issues that are important. To actually get off the ground, we have to have a box to start in. As people bring in their ideas the program will morph. This starts with the cloud perspective in my mind. This needs a broad, open foundation, but you're still going to have the silo effect to a certain degree.

Facilitator: Little sub-clouds.

Discussion Participant: That's not a bad idea.

Discussion Participant: They have to be able to work with each other. If commuting comes up with an idea that works for freight, we have to have open communication channels so they can talk to each other.

Facilitator: So that it doesn't expand to be unmanageable, what I'm hearing is that it makes sense to segment the stakeholder population into categories so that each group can discuss specifics with their colleagues in their particular industry.

Discussion Participant: So in essence you create a platform grown initially by the user base, but the platform has to allow for this capability. Maybe you don't start by saying we want to give people areas to start discussions within industry.

Discussion Participant: Yes, it's important to interconnect circles.

Discussion Participant: Yes, and it doesn't necessarily mean the platform is just for one group. Maybe the DOT focuses on one area or another first, realizing that it's just a focus point, not an endpoint.

Discussion Participant: Keep it simple. Keep the framework simple. See what's already out there. There have already been a lot of splintered, fragmented conversations. Find best practices; there are already some out there. They may not have a transportation focus; for example, the State of Maryland is doing a one-stop shop broadband tech network for all the state agencies; Howard County in the lead on that. We could bring something that simple into the transportation arena. Keep it simple so everyone can use it. The consumer who wants to get to the information, as well as the VC looking to invest in a company, both need to be able to use the DTE system.

Discussion Participant: Would AASHTO be an example? Intellectual property being put in there already. Looking at tech that already exists may be a simple thing. Someone mentioned Google maps earlier. By default, they just define functions and it's become integral in business because it was simple, and it was available. What do Google, Facebook, and existing technologies already have in play? What's out there that will allow growth expansion? There are existing entrepreneur sites that allow for growth. Can we partner up with those?

Discussion Participant: If you go to the industry and say, here's the issue, but everything's outside the box, and they bring out a solution, then the dollars come from private side, and I've accepted that. But if I have a solution and I want to throw it open to the government and everyone else, and I'm going to throw it out there online, how do I protect my idea?

Discussion Participant: And some people don't want their programming shared.

Discussion Participant: That's true, and those folks wouldn't respond to the RFP.

Discussion Participant: Will the DOT remain in control, if this becomes a privately funded project? When there's no taxpayer money, do you have to follow government rules?

Discussion Participant: What's the definition of the PPP? That might be good to put out. I feel like if you bring something to the table it's yours.

Discussion Participant: Private industry needs to know that if you jump into the pool, you have a set of parameters to follow. What does private get out of it? What am I contributing? There will be some who decide to come in and some who don't. We talked about incentives; maybe some of these need to be changed?

Facilitator: What kind of incentives are on the table?

Discussion Participant: I want to be able to know that I can at least talk to Government! Maybe you don't give me anything, but you know that I exist, and another bid might come my way. If you're industry, and you're playing in this whole thing, you need to know about all the available opportunities. At least I know why it's there, why it was developed. That gives me a different leg up, but my investment is that I'm out there too.

Discussion Participant: Why would I want to put my product out there? That's the investment. The essence of PPP is that there is an investment by both sides, right?

Discussion Participant: Right.

Discussion Participant: Is this just a way for DOT to bring people together? Should DOT provide template rules and contracts that people may or may not use?

Facilitator: What does industry want out of this? How important is intellectual property, how important is access to government? What else is important?

Discussion Participant: About government rules: I know that, as a person concerned with disabilities, whatever is created must comply with the regulations on disabled persons. We know that's a given. If I'm a private contractor and I've never worked with government before, and I've never done this before, it's an additional cost to me to figure out the regulations. The situation would be, in order to get into the pool I have to spend a lot of my own money to comply with regulations. As an advocate I don't want DOT to waive that rule, but as an industry it might not be affordable. Can we use government resources to make my stuff accessible?

Discussion Participant: But you also provide a resource for experts in the field.

Discussion Participant: So that's an example: I'm in here, I want to get into the pool, you're an expert, and you can help me get into the pool. This is an example of bringing people together. I can contribute, and it won't be a burden to me.

Discussion Participant: Let's imagine one scenario. "I wish someone could figure out how to make sure people on a bus over here can get to this place over there." There is no RFP, this is just a thought she's throwing out. And I'm on the other side, with a solution or something I've developed, and I engage with the person posing the question, and I'm asking questions, then not only is she identifying private industry opportunities, I'm also starting to adapt. Maybe the conversation occurs for a year, and at the end of the year, I come back and say, "Guess what, I have it!" Would she be able to say "I can buy it," or does she have to then put out an RFP?

Discussion Participant: In the commuter world, there is a listserve that's out now which brings people from all different agencies together and gives them a resource on any question dealing with transportation. It's sponsored by the Center for Urban Transportation out of the University of South Florida. Something along that line, not a listserve necessarily, but some type of resource clearing house/gateway, I would see this evolving toward. Everybody could exchange and talk to each other, there would be a portal, that sort of thing. We should look at what's out there now.

Discussion Participant: For us, that's part of the process; we do public engagement & market analysis. We contract to do that kind of work. At St. Elizabeth's for example, you've got GSA, Coast Guard, and other government agencies coming in. The community also wants to do all kinds of things with the property. One of the things government has to do is engage the public and get their opinion. I can't remember the policy, but you have to document engagement, and somehow implement community opinions into the plan. My firm actually does that. We develop web sites where people can go online in an interactive way. For example, on the St. Elizabeth's project, we talk about people in the neighborhood, environmental hazards, cultural concerns, and that's actually a piece of the RFP and the whole project itself. For a private firm, that's something they're going to have to do to perfect their product, and it creates a relationship between them, the marketing company, and the community. We look at that as a phase that should go into the strategic plan – public engagement has to be something in its own right. Now, when there's a PPP that changes the policy. The government is not the end-all-be-all. The private company or organization has to follow the same government rules. So, do the private companies come in with their own research, or do you have an independent company come in to do a study? This whole thing should be based on user needs.

Discussion Participant: Who is the user?

Discussion Participant: Going back to your incentives conversation; my response is that, first, government funded organizations have the opportunity to sole-source when you have skills no one else does. The other possibility is that, although the conversation is between two people, other people get to see it. There might be other people out there who are interested. So maybe you give them something but not everything. The incentive for people would be that they're getting at least some info. And if I'm watching, I'm not going to be able to steal your idea.

Discussion Participant: There's also incentive for companies. Developing software is not hard. Ownership is on the table for negotiations; I'm going to develop this, you use it, and as you use it you put in demo info that software owners can take and sell to third parties.

Discussion Participant: Maybe this is a way to go at it when there aren't dollars involved. There's so much technology involved. What our government does with technology is pathetic; we get ideas and then shelve them to protect them. This happens in private industry all the time; people shelve tech all the time. It makes no difference if you're a corporation, a county, or a state. Maybe a cool thing to start this off is to realize that all this stuff already exists. Maybe we invite people to provide existing technology, and make the interaction of existing ideas the issue.

Discussion Participant: Well, I think that in terms of the conversation and in terms of implementation, the vision is so broad and overarching it's difficult to pin down. In terms of implementation, what about stakeholders, those who are here or otherwise? What can we do to get them to the program at the local level?

Pilot it, see how it works, identify the kinks, and get the investors who share the vision to make it meaningful until we get buy-in and support

Facilitator: Stepping back, what does this look like to you in general?

Discussion Participant: A one-stop-shop for consumers at the community transportation level, and a place where you can go and get info. On another level, we have real transportation problems around the country; this is a way to spark ideas and work through some of those so that people can work through these problems. I sit through an hour of traffic every day; why should I have to sit through that much traffic to get to work? So I would be looking at ways to use the system to reduce commute time, which may or may not be a profitable thing for the industry. How could DTE support me by getting me off the road, or making transportation more efficient? We have to make it useful so that people actually want to go and use it. We should get companies involved via the benefit to pull people into their vision of transport. Right now it's so broad that I can't even define one vision.

Discussion Participant: I don't see it as individual. I see it as developing technology that other people can take and then individuals can use.

Discussion Participant: Yes, this is a store where you can browse, buy, and bring home technology for other people to use.

Discussion Participant: People could then go to a city or local community website. Wholesale.

Discussion Participant: This is an incubator for people and ideas to get together, and for ideas to prosper.

Discussion Participant: And to create jobs; maybe we could partner with universities to create majors and academics to train people to come into transportation.

Facilitator: So your model is that individuals are the second layer of stakeholders.

Discussion Participant: Yes. My mom's not going to the feds to find out when a bus comes.

Discussion Participant: DOT needs to be involved, or people aren't going to be interested. You provide the warehouse for the ideas, you throw out the challenges. That's what gets entrepreneurs involved.

Facilitator: How is this different from us posting on a website and giving out prizes or recognition for good ideas?

Discussion Participant: Part of your role in this thing is to be a moderator. You set up the warehouse as much as you can, then take your hands off and you watch. If nothing's going on in a group, you get involved. You are moderators and facilitators.

Discussion Participant: But it could also be a cross-platform opportunity. AASHTO could also utilize resources in this, for example. People come to projects with rules. If you want to play, you have to play by the rules.

Discussion Participant: I don't want to rule out the individual user. While I agree that most of the thought leaders are going to be organizations or industries, there are a lot of really savvy users. Even organizations boil down to one user. I think there's a balance. There's going to be a lot of jargon. If I'm in one pod and I want to go

somewhere else and understand it, I might need help. Maybe DOT could provide a glossary to enhance communication. That could be a role for the DOT, to help people talk to each other.

Discussion Participant: Aren't there universities that could set this up? The University of Iowa has an incubator lab. The concept is out there, you don't have to reinvent it. They're a state-funded source. Maybe the federal government has an earmark fund we could use to start this.

Discussion Participant: One of the things I do is to go around and talk to entrepreneur groups. The most successful companies came from crisis. So we're in the birthing ground of a new group. They also come out of bootstrapping. There are more failures in venture capital than in bootstrappers. Most of the tech companies bootstrapped their way to funding. If you go over to the education side, and I work with University of Texas in Austin, I advise the University not to give the student endless resources. This trains them for the real world. DOT should provide tools & knowledge, but not physical assets. If you say there's no money, it's a question of scale. Even \$5,000 would buy a company if you can advertise them.

Discussion Participant: The government can provide connections, like Manuel said. We're not asking for favoritism. There are zillions of firms you don't know; I think that's a piece to pick up on. Maybe the question is, if I'm going to jump in what do I get other than my name on a list? I need something more that I'm participating in... whether it's more access, whatever. It's more than recognition.

Discussion Participant: Everybody in the pool comes from different backgrounds and different interests. Just the interaction and ability to travel between the silos gives you other benefits, purely from making connections.

Discussion Participant: That could be a government role: cross-pollination. They have to understand me, I have to understand them.

Discussion Participant: That's the benefit; you spread the understanding.

Discussion Participant: We need to talk about where new ideas come from. If I was at a table talking about disability issues, and I found out there was new funding, I would walk away wanting to build a disability product.

Launching and Implementing the DTE Group 3

Facilitator: Based on what you learned during the earlier session what strategies do you think might work to successfully implement the DTE across the industry?

Discussion Participant: For success, the DTE will need a good cross-section of state, local, and federal involvement. The portal should be treated as a true forum and community, and advertised as such. Engagement should be encouraged, especially in terms of getting the right people at the table. Advertising is of utmost importance, as using only the current community may prove to be limiting in the long run. Conferences, symposiums, websites, and co-communication efforts are all ways gain wider outreach to relevant stakeholders.

Discussion Participant: What type of outreach will we be extending to end-users? Certain aspects of the transportation industry can have customer-unfriendly attitudes. For instance, in my work with a transit agency we encountered ticket vending machine producers that would not make the machines easier to use. They

expected the customers to help each other figure the machines out. The development of our transportation solutions must be more inclusive, and take into account the final end user. For instance, we speak of transportation web apps, but what of lower income people who have no computer, or the visually impaired?

Discussion Participant: One of the things that has us thinking is how does this get implemented? DTE must be seen in the context of various stakeholders. Everything starts locally, and people are largely interested in their own communities. People care about and live in their own communities; what interests them is what happens in these communities, not outside of them. DTE will be disruptive for a lot of people. How do we work with them at a level that supports the organization and sharing of information in all its different forms? States manage information about where people live, while counties maintain information about infrastructure and support services. Both will need to share information with each other about communities. DOT should recognize all the information crowdsourcing can provide. People don't want to take chances with public safety and mission critical services, so may be uncomfortable with changes that affect these. My organization has worked to create destinations for stakeholders to get information. The organizations implementing these destinations must share internally, but also externally, with organizations both above and below them. The responsibility for authoritative content lies with them. With the work we're seeing now, states and the federal government are developing destinations that use open standards and platforms that share information publicly and privately.

Facilitator: So based on those thoughts, how do you think DTE might impact the industry?

Discussion Participant: My organization has done white label services, a mixture of custom and off the shelf services, especially at local levels. Transportation is unique enough at the local level that things must be developed with that in mind. DC and New York both have public transportation systems, but have developed different transaction methods for them. Not everyone has a smart phone, so local utilities could come up with a way to reach these people with transportation information, whether it be public terminals or snail mail. You need to connect and be a part of that local community. But when you are there, you become a local. A traveler in a city is, for the duration of their stay, a local there with local transportation needs. When the traveler returns home, his home community becomes his local again. If the DTE forum is active, the granularity of what people need at a local level is important.

Discussion Participant: The DTE has the potential to be transformational to the industry, as we see movement locally through shared services. My state has counties thinking of shared services due to budgets being cut. Public-private partnerships, cost-sharing, or getting together with organizations can all be part of the transformation. We need to have a conversation about changing the business model. In the transportation industry, business as usual will not continue. If the DOT helps with the transformation, consultants will mingle with entry levels and start-ups. This will help force needed transformation.

Facilitator: Speaking of public private partnerships, that what DOT has proposed for the method to launch and implement the DTE. Why would someone want to step up to partner with DOT on that? What are the incentives for stakeholders to be involved to launch and maintain the DTE?

Discussion Participant: Public-private partnerships are all about give and take. Investments need to be made on both sides. DOT can make minimal, non-monetary investments such as innovation and modification of current business practices. The government can promote these services, as long as they are not breaking laws and following procurement guidelines and acting ethically. The government should be the champion in driving

these innovations, the cheerleader and promoter, and act as a broker when needed. Partners should work with other partners, which is not traditionally done. Generally, there is more competitiveness with the opposition, but this can be put aside. The partners and the government need to figure out what roles to play. The DOT can step in and play the broker role to facilitate partnerships and define what they see in the partnership opportunity.

Discussion Participant: We need not just vendor commitment, but the DTE to deal with and support customer needs. At the end of the day, who is the provider and who is the customer? Who is coming back to the vendor to streamline and improve them? The business model has a changed paradigm, brought on by customer feedback. The DOT needs to submit a solution set to be solved, and different requirements and rules about what to solve. The DOT is the ultimate decision maker and decider.

Discussion Participant: Programs have federal money funneled to state and local governments. We should have incentives built in these programs at state and federal levels. We've argued for years about why we can't collect information. There is no incentive, no one directing the local government. Money is passed down, and there is an opportunity to share and back up data, but it never materializes. It is not sanctioned by the federal DOT, and instead exists at a grassroots level. Programmatically, we should think about the information we want to share. What is it, where from, what programs serve it? Otherwise, we have lots of organizations and information, but no guarantee it can be shared.

Discussion Participant: There are three areas the DOT can be of support in. First, there is too much regulation from the DOT. Are we here to serve the public, or to see how much money private industry can wring out of the government? Private industry has too much accessibility. Our local transit company can't do charter service because some other company might want to. We can't provide transit on weekends because of how DOT limits operations. Are they doing it for the public good, or for other reasons? Second, we need to embrace the lowest common denominator of information technology. Most large transit providers come to DOT for funding for projects. We need guidelines, certain common standards, to apply to these major providers that will then trickle down to smaller providers. Small providers can also connect and share with larger providers. Developers would want to work with this because what they create could be used in a broader platform, and would result in greater interconnectivity between providers. Base information could be exchanged easily. In the UK there is a common language for transport options, and perhaps eventually a universal fare card. The US could do this on a regional basis, say New York, Boston, and DC on a regional sharing basis. Third, if something is easier in one location it is better across the board. The more platforms the information is on, the less the cost to smaller providers. We need \$3000 for a database system to collect transport information, but we know we probably won't get it. The more we can share costs and cut down on overall costs the better for everyone.

Discussion Participant: What DOT support would be helpful? The DTE is disruptive and requires people to transform; the DOT should provide clear examples of how this takes place--examples of how transportation organizations are organizing and sharing content. It could discuss how one transport organization has developed a solution with a partner for no cost. The same solution could be shared through other communication and levels of government. While a solution for one government might not meet the needs of another government, it is a place to start. The DOT could lay out a half dozen solutions and challenges, for example. Define what the solution is, have case studies showing partners and consulting agencies how it could be done. Provide stakeholders with clear example of how it works, and how it can transform. You can't have a switch flipped overnight for great investments in transportation enterprises. Build one solution at a time. Show

people how to move one solution at a time. Drive and incentivize. Build it in as part of the program. Bring on more partners; once DOT is on board more will come.

Discussion Participant: The DOT must be the judge, jury, and executioner; decide what is the yardstick or endgame. The DTE can provide the framework for herding cats. Does the DTE have solutions for vendors, agencies, etc.? What is the success point? It is a good launch point for defining success. What success is for the DTE must be determined on a holistic basis – this is the ultimate measurement.

BUILDING THE SOLUTION

These small groups focused on what the technical specifications for an online system might need to be in order to support the discussed functions of the DTE.

Building the Solution Group 1

Facilitator: What do you all think about DTE?

Discussion Participant: I think it's a novel idea, in that it's a Facebook for this industry. We normally don't come into the same circles.

Discussion Participant: I find it interesting; today there's a USA today articles that describes what Department of Education (ED) is trying to do. It's parallel to what we want to do here.

Discussion Participant: What was different today was bringing in the venture capital aspect.

Facilitator: Are there any existing platforms out there that do what was described this morning?

Discussion Participant: Code for America. They encourage the development of apps for municipal use. They can solve any kind of problem: water supply, accounting, traffic, etc

Discussion Participant: I think there might be some stuff going on in the health insurance system--shared code for insurance companies.

Discussion Participant: DTE has to have a method for discovery and satisfy demand load. AltaVista and others have popped up but Google has taken market share because of the ease and its search engine. DTE must be useful.

Discussion Participant: I think DTE will become a good resource to connect people.

Facilitator: So you're saying DTE providing resources is important? Having a library on there would be helpful?

Discussion Participant: DTE could become more of a tool for people to post questions and find answers.

Discussion Participant: This leads me to think that you can build these things, but if people don't know they exist, it won't matter. How do we get the word out?

Facilitator: Ease of use seems important. What about openness?

Discussion Participant: Not a concern, but definitely needed. The framework Nitin described included a services oriented architecture construct.

Discussion Participant: Open sources is different from standards. Private entities will be in for different reasons. There needs to be some entity to oversee that has apps are updated, information isn't changed, and other apps stay valid.

Discussion Participant: When you look at patterns like mobile, desktop, iPad – we all use and consume open standards based systems. When you go to download app on the iPad, there's no open code- but there IS an open standard.

Discussion Participant: What is DOT's role in making sure there is a workable interface with all this? A huge number of people would plug into this if they could plug in business partnerships. Are you going to take us to the dance, and there's no band?

Discussion Participant: It's important for DOT to set direction/expectation. A lot of data is open and many entities will make use of data for public good. If you want private participation, they want some sort of ROI. At that level DOT needs to put policy in place.

Discussion Participant: If someone updates an idea, and it provides benefit, what if big company comes in, sees the idea, and acts on it—"stealing the idea" from the little guy. What's in place to prevent that?

Discussion Participant: This has to do with intellectual property. The managing partner has to be devoted to this.

Facilitator: Great point. So would you say platforms need to be self-policed so that users can watch over them? That DTE sets the rules of behavior and the community polices? The community is on alert to "stealing" of ideas?

Discussion Participant: Are there any nonprofits around the table? Many people want their idea to be shared, but also want to make money from ideas.

Facilitator: Sometimes its ability to be seen and recognized that motivates sharing.

Discussion Participant: So what prevents "Joe" from going straight to IBM with their idea?

Discussion Participant: A lot of people want to share....want ideas to go somewhere.

Discussion Participant: There's already a precedent at the department of education where private companies are investing. Maybe there are also philanthropic motivations in the transportation industry at the community level.

Discussion Participant: The partnership agreement with US DOT and the managing partners should state that the partner could not use DTE to promote their sales.

Facilitator: So then what would this site need to do and how would that be accomplished from a technical perspective?

Discussion Participant: One common place to go and share code.

Discussion Participant: it's Facebook for vendors.

Discussion Participant: But it's also for the general public

Discussion Participant: Prior to eBay, it was hard to connect people who wanted to buy special items and products. DTE enables same thing; connecting niche providers with niche customers

Facilitator: So I've heard you suggest the following features today: purchase app, share code, test code, post idea, comment, social aspect, tips, FAQ, information on how to promote ideas to venture capitalists, etc. Is there anything else?

Discussion Participant: The ability to set up private discussions, share docs, etc.

Discussion Participant: DTE is NOT a place for citizen to get federal government services.

Discussion Participant: DTE will also need a way to identify and certify that you are using supported/authoritative data. Someone mentioned data.gov – which is a repository of federal data sources. If apps are listed on DTE where is their data coming from? Apps should not simply just be posted they should contain information about who the developer was, when was it last updated, data sources, etc. Also there needs to be some analytics. If you're the average consumer, how do you find apps? How important do you think it is to having information tagged?

Discussion Participant: We've all been thinking about apps – whole other groups of partners have different systems and hardware that's relevant to industry that doesn't have anything to do with apps on a phone.

Building the Solution Group 2

Facilitator: Where we'd like to start, coming off of Bryna's talk this morning, is: What are the kinds things DTE needs to perform? Less of the "it needs to be a marketplace" ...But what are the functions that the DTE should have to work for the intended audience?

Discussion Participant: I'm a transportation provider. How do I play in the solution? I see a lot of people who are from the tech side of the equation. As a provider, I guess we can go bottom up in the communication information link. But how do we connect? We provide paratransit—non-emergency, medical transit.

Discussion Participant: DTE is a solution to bring it all together: drivers, buses, etc, and connecting it to IT.

Facilitator: I hear there is a need for matching. What would that look like? How do we link their (paratransit) diversity needs?

Discussion Participant: How do you bring all of these elements together in a user friendly package where it can be used across the country? There are a lot of things coming in. It could be regionalized—even though the big map looks the same, the elements are defined by the regions. Overall, it has to pull together.

Discussion Participant: As CIO of a state DOT, I don't know one place to go to find solutions. Match-making, sure, but finding a place to connect these is important.

Discussion Participant: Maybe the DTE is layered. Even from a provider standpoint, we're all using the internet. First it goes to MTA, the largest bus service and then to Mobility—but that is more curb to curb. We do a bit more to personalize door-to-door whether the customer is ambulatory or in a wheelchair. Then I look at it from the perspective of a user and well, "I might as well stay home".

Facilitator: So DTE is a place to list services?

Discussion Participant: Or just link to the website. Many service providers have a pretty good website.

Facilitator: DTE needs to tease out a diverse marketplace?

Discussion Participant: It should consider procurement laws – If they can streamline for folks who want to do business with the private sector that would help.

Facilitator: What would that look like? Is DTE some kind of streamlining tool? Does it require procurement?

Discussion Participant: It requires making it accepted in its recognizable form—that state officers recognize it; If it's sanctioned, it could go a long way.

Discussion Participant: Just to add to that, my company does a lot of work for state government. State laws are extremely archaic, to say the least. There was a procurement forum in the mid-90's to commodity vs. specialized and there are various ways to get it. State and local governments are governed by each state first of all and are each extremely unique. Coming up with single procurement would be...an act of God. Let's keep tech out of the problem for the meantime and focus on the business problem of connecting people. Tech will in my opinion figure it out. We need to know the business rules of how that's going to be done.

Discussion Participant: What do you want this to do? It can't be a completely open scope. Just like the Constitution, it needs to be building over time. Technology will adapt or adopt. Those days are gone where you have to build something specific in an environment where you couldn't do things.

Discussion Participant: Child welfare, Medicare, Medicaid – providers have to go into multiple areas to get to where they want to be, however the impediments are laws that govern those particular jurisdictions.

Discussion Participant: In a lot of hospitals, there's a patient manager. We do a lot of transport for the Red Devils, a private foundation for breast cancer patients. We also deal with someone from the hospital in Hopkins, MD, etc; that person is either a social worker or RN when you come in that person introduces you to the doctor and sets your schedule, transport, Medicare, Medicaid.

Discussion Participant: As a user, you hit privacy laws, HIPPA, etc; Your identifier, name tag, SSN, whatever it is, is going to ID who you are and they will authenticate whether they are eligible for these services.

Discussion Participant: We've done it in our company where we've tried to filter/match 5-6 solution providers that you need. I love the platform. The devil is in the details—who manages it, who owns it. The content becomes stale, say when people move. The other theory is that, okay, we put everything in there. Human nature starts coming in saying "I'm not getting anything out of it." When we don't get a benefit out of it, why are you going to go through it? If we find out 2-3 good partners we have.

Discussion Participant: Maybe it's the nature of the beast? Relate it to a Wiki – it's self-regulated by the public. I don't know how the details work out, but I want to see consumers saying "I have this need" and industry stepping in "I know how to solve that." What I don't get is if there's no money, why is this a DOT initiative?

Discussion Participant: What's going to make it worth it?

Discussion Participant: DOT is going to give it to certain stakeholders to support it; and there are going to have to be dollars behind it that turn that contribution or application for that particular company(ies). As the CIO spoke this morning there are ways of getting people in this and all kinds of applications that could drive this. It's a service they can provide.

Discussion Participant: That website freelance.com you need something done and people bid on it.

Facilitator: Due diligence becomes an issue – do people who make solutions on freelance.com get reviews?

Discussion Participant: Yeah you do something bad, your score plummets. Unfortunately, you're dealing with IP here; but if there's an accreditation...

Discussion Participant: I think IP is a huge issue that hasn't been addressed. You have a great idea but how much are you going to want to share that? That could cut into your profit potential.

Discussion Participant: We're a network provider, but I would look at this platform and say is there one place I can go to and identify all the applications. Maybe DOT adds highlights or forces me to contribute or forces me to go there to get knowledge somehow. It's a planter but also an enabler. This worked for Baltimore. Well I'm in Portland, Oregon and then maybe you break it down looking for paratransit—here are the solutions they use, etc.

Discussion Participant: The paratransit watch blog has info on private companies and governments providing resources or services. A lot of it is management of dispatching, GPS systems for tracking approvals and things like that. That might be one venue to look at to see who's interested in what you do on the tech side.

Discussion Participant: I might not know about that, but DTE would maybe then direct me to that. If we want to learn about somebody, we go to Wikipedia; If we want info on transportation, we go to DTE.

Discussion Participant: If you're in a senior position in one of these orgs, you have people constantly calling you and can't do it, but they could have a space to refer people.

Discussion Participant: DTE is going to be a portal--

Facilitator: Say you have a problem with a similar kind of management mobility issue, but the market is not paratransit. It's a mobility issue. There are lots of small communities dealing with silo issues. Many state and local DOT traffic management programs are looking for big things for traffic management and it's hard to find information on what other states/locals are already doing. How can DTE bring transparency to those kinds of market places?

Discussion Participant: A state, local, or federal managing board?

Facilitator: What would that board look like?

Discussion Participant: Several international associations hold annual conferences where they bring in the vendors. You don't have to do all that, but they are made up of all different people bringing in and managing with ownership over these issues.

Discussion Participant: The board would have more marketing expertise as well. You have the board, which would oversee and provide expertise to the whole issue, so you need a range of skills that would help get the information out.

Discussion Participant: There is also a need for human intervention to help do some of the marriages in terms of needs and ideas

Discussion Participant: Maybe the platform could kick that up to super users? An escalation process linking to experts?

Discussion Participant: Where are the resources? That's a key component – if you can insert that somewhere in a large way, it will be necessary for success of DTE.

Facilitator: What would attract people to it? There were no resources for Wikipedia—and it happened. What is the thing that DTE needs to do to attract people?

Discussion Participant: When you compare it to Wikipedia, it's like comparing apples to oranges. If I want to find out info about anything, I go to Wikipedia, whereas you're talking about a much smaller scope. What is it that's going to drive these people to transportation solutions? The problems need to be big enough and the payback for providing solutions needs to be big enough. We know there are problems out there, but how will we help the providers? How do you benefit from issuing those solutions? There has to be substantial benefits for doing that. Having them know that and bring benefits into the equation is needed. The problems are easy to find, the solution providers are going to be tough.

Discussion Participant: Start with existing ones.

Discussion Participant: But how many are out there?

Discussion Participant: What's the vehicle? Who's going to govern it? What's it look like?

Facilitator: Who governs the marketplace now?

Discussion Participant: If you put your comparison to Amazon or Apple they own it, because they sift through it. It's one-stop. It's very easy for me and--

Discussion Participant: People know that what they get from it is legitimate.

Discussion Participant: If you put something out there, it's not that different from putting something on Fed Biz Ops. Publishing the solution and what they used from the solution providers could add value. It's hard to get a published case study. If they are going to use it, maybe they have to share information about problem and results—and that could deter them.

Facilitator: Let's take an app store analogy: There are a lot of junk apps. You might have to download 5 apps to figure out which one works best and if you don't contribute back to that app no one else knows what you know. The crowd feedback mechanism makes it a marketing platform.

Discussion Participant: Here's the other thing, too- it's anonymous. If he or she is going to put their name and title and it gets tricky. If some agencies don't want to do that and show favoritism or put name or title out there for all to see, are they going to do that? I agree with you on the iPad, I downloaded 5 note-taking apps and would love to have a platform to show me an unnamed bias or if I know individuals that are like me. If I'm a state DOT, maybe I want to see what other states are doing instead of the Fed.

Discussion Participant: There needs to be some regularity. The marketplace is very diverse. We need to be able to sort ratings. Building on that, there's a notion of creating a taxonomy or letting the crowd create its own taxonomy. Which one would work in the near term vs. the long term? If you said paratransit and I didn't know anything about it, I would be out of luck. So are there any issues we need to consider?

Discussion Participant: True, you create the name—what do I call it? What does the industry call it?

Discussion Participant: Just to add all the different views, I think the business can happen when the incentives are there. If I'm a citizen/resident/etc and want to find out more, so you create a secure or unsecure environment where I can find a way to get from point A to point B. I don't want to go through multipronged approach to get where I want to be. A Wiki is purely anonymous and unsecure. The other world is an Https world. Are you going to use your social security number to authenticate? Are you ready to throw in your number into this environment? Then the investor is going to say, we need a max of 5 years and want to see investment to determine business value. A great idea was the traffic camera, which was revenue sharing and instantaneous. I would like something to point out where those things are so I can slow down and avoid them.

Discussion Participant: Yeah, you save on gas, congestion, and pollution by throwing on a red light/speeding camera.

Discussion Participant: The government's not behind that, that's why it went up fast.

Discussion Participant: Anything of this magnitude has to have a funding stream and a sustainable business model. The government non-essential and non-necessary things will start getting chopped off. This has got to have that "recession-free" sustainable business models where the revenue is both public and private that and then you will realize what you just said —it will just grow.

Discussion Participant: What is really the process they are going to present to get people to put these up? Who is going to take that one on the chin?

Facilitator: Let's explore that for a little bit from a couple angles: Public private partnerships, whatever the case may be. I'll give you an example of challenge.gov. Challenge.gov was solicited by the government and donated free to government. The government put out a no cost RFP, got bids, and it was gifted to the government. These things happen, though I'm not saying that's what this is. What's good for the winning vendor when they do that? They can sell their product to other places or say the fed government is using it.

Discussion Participant: There is an incentive – inner satisfaction. When you put your business hat on, it's money; when you wear that hat on about only caring about the community, it's different. A foundation has the potential for seed money.

Discussion Participant: The first step for DTE would be federal partners pick 5 or 6 prioritized problems. If it's paratransit or congestion, etc. And then going and reaching out to people who have very innovative solutions, other DOT state and local. This is what they did locally, regionally, nationally, internationally. They should get the case studies in there so anyone who is looking would have a pull effect.

Discussion Participant: I used to work with company that did this, but how to you get IT involved in sharing information?

Discussion Participant: It's one of those things – the Field of Dreams – if you build it, they will come. Private sector will see a marketplace and they will come and exploit it as much as they can. IT will come. Connected car, connected bike, SmartGrid, there is definitely a marketplace there. DTE might just start off as a Wiki. Your app store may not be there in phase one. It's so unique to get the industry and different players in there to look in and see "wow, this is unique" and bring people in.

Facilitator: What about time constraints? Is there a challenge in how quickly the ecosystem changes? Is transportation more of a lumbering giant? Is there going to be something new every day?

Discussion Participant: Depends...a new solution? No. New content/ideas? Possibly, yeah. Having people post experience and solutions where they've applied them would be a good place to advertise capabilities. Will that happen often? Maybe. Problems and solutions—that will probably be more updatable.

Facilitator: We have an evolutionary thought to this in terms of architecture?

Discussion Participant: Service-Oriented Architecture

Discussion Participant: There are already things out there like Kickstarter, Simple, Top Coder and Freelance.com; people nerding out over open source; the associations of industry executives—but there's not a lot of transparency in the marketplace. What solutions already exist? We're doing the same thing over and over.

Discussion Participant: The problem is data management. Who owns the data?

Discussion Participant: Somebody's got to own it.

Discussion Participant: Yes, for example, the State department has 3 Terabytes of data. Is DOT going to talk to DOS and get this information transferred? You have a way to sustain an environment through ownership. Someone's got to own it and the governance is key.

Discussion Participant: How do we get universities involved?

Discussion Participant: A licensing fee is where the industry is going to jump in. Once the highway is there, we'll put the cars.

Facilitator: What will make DTE adaptable and relevant?

Discussion Participant: Industry-given, not government-driven.

Discussion Participant: When we talk about industry-driven, is it true that technologists don't understand our problems well enough?

Discussion Participant: I don't agree that they don't understand. There's more of a disconnect on knowing how to apply their solutions to these problems.

Discussion Participant: I think it's a conundrum we deal with—business users and technologists could create whatever they want, but need to understand the language and what the real thought process is.

Discussion Participant: The ability to mine the problem and solution sets is probably the best thing—the data created through this thing.

Discussion Participant: And the ability to make money doing that, to make a profit.

Facilitator: So you're suggesting an open and available database for mining you could get it through an API with all the problem sets/solutions, and underlying management data inside the tool?

Discussion Participant: Yeah

Discussion Participant: It's a doable issue. We can answer those questions.

Discussion Participant: But to break down the silo, we have to give the opportunity to mine the data. It takes away the ROI for the managing partner, but they could license it. Facebook's value is in its data. It gives solutions for private sector to solve.

Discussion Participant: You find that someone has to own the data; otherwise the content gets stale. You can do research on some of that stuff out there, but who is going to reel in and put stuff out there? After awhile it may work itself, but you need it there at the onset.

Discussion Participant: Your audience is very diverse and you're grappling with what the audience wants. There's a need for efficiency.

Discussion Participant: In general, transportation needs to find a way to foster innovation. I don't see a lot of new ideas.

Discussion Participant: I think there are new ideas, but they're not being marketed very well. Where do you go to find that out?

Discussion Participant: The biggest thing for DTE is to be 1 place with 1 database open for mining that's easy to navigate.

Building the Solution Group 3

Facilitator: Our group's topic is building the solution. We'd like to drive the conversation based on stuff from the general session. It sounds like we have a lot of people that work with people with disabilities in this group, so non-technical solutions might be necessary, what would those look like?

Discussion Participant: Our main concern in helping people with disabilities in a rural setting is that there need to be low-tech solutions such as a phone-bank based system of PTB sort of solution – a lot of lower-income people don't have access to technology and this is our main target demographics

Discussion Participant: It's good to get a non-DC perspective. From a virtual standpoint, how do you think the online platform can be best used? What sort of features would need to be built in?

Discussion Participant: I think one of the keys in my area is confusion among consumers on whom to call – integrating everything together is a good idea. An important factor is getting buy-in from the people/organizations who actually provide the transportation – the more communication options possible the better, and there's a need to bring along the transportation providers (many of whom aren't interested in sharing information because there currently is excess demand they are incapable of meeting)

Discussion Participant: We have a deeper transportation network – I'm interested in learning, though, how other folks deal with transportation. [To other participant] In your town there's no public transit and only paratransit?

Discussion Participant: We operate a transportation voucher program for people with disabilities – due to insurance restraints we encourage them to fund their own driver and we reimburse them. Our commission on aging provides a couple of different busing programs, including a bus for seniors getting to medical appointments and another service that picks up seniors first, then people with disabilities, and then anyone else there's room for. There's also a few spotty medical-needs based transportation systems each of which is very hard to deal with – the system is very confusing for people to navigate.

Discussion Participant: Do you think there are places out there that may be willing to work with the government if they had the knowledge that the DTE could provide?

Discussion Participant: The county just did a transportation needs study – despite being a rural area the government employees have cars and don't see the need for public options – we've been trying to get peoples' voices heard but it's hard to get the county to admit the need – people beg rides from neighbors and do whatever they can – we had a guy call up and say "you guys saved my life – I had trouble getting to my doctor's appointments for my heart condition"

Discussion Participant: Do you think some sort of carpooling system would be possible in your area? I know this works in DC but is it applicable to your county?

Discussion Participant: I think it could be an excellent system – most of our customers have some sort of cell phone but almost none of them use the internet or have a smart phone.

Facilitator: What is the estimated size of the population online versus phone, how do you think the percentages would break down?

Discussion Participant: It all depends on whom you serving – people with disabilities tend to be quite poor so they will tend not to have access to technology – you'd be surprised how many areas really don't have technology access.

Discussion Participant: Although sometimes the people who need transportation don't have internet-maybe the companies that are willing to transport them probably will have internet access – these companies could run a web-based app *after* people call them and request services (and a text or an automated phone call).

Discussion Participant: A lot of our folks don't have the capability for texting – as Lisa was saying a lot of these people don't even have cell phones (or don't have minutes) in some truly remote areas there isn't even any cell reception or coverage – this is getting better but it's a real problem out here.

Facilitator: Any thoughts on how we could reach this audience?

Discussion Participant: I don't – I know we're trying to get a transportation hub going in our agency but everyone's going a different direction – we're trying to do a digital solution to get everyone moving in the right direction but this is a real challenge – we do have a bus system that runs but it ends at 6pm and doesn't do a lot on weekends – people interested in going to church on Sunday, for example, are left on their own or have to pay for a taxi. We've gotten together with the public transit people in a nearby city and decided to join a webcast to get new ideas and hear what other people are doing.

Facilitator: Do you have some thoughts about how to ensure that the platform is adaptable for diverse groups of users?

Discussion Participant: There are various ways to interface telephones and computers – a phone bank connected to an online dispatch system could be practicable – the initial customer contact is low tech but it interfaces with a high-tech backend.

Discussion Participant: This is more from the opposite side of the spectrum, coming from DC – need to make sure there are mobile apps for all these services.

Discussion Participant: My approach to technology is based on the fact that the end-user is usually incapable of leveraging technology – we look to share resources across non-profits and for-profits – one of our problems was identifying what people already have – what I've seen is that non-profits have vehicles are underutilized and inefficient and tend to be very protective of their vehicles and their funding – working out long-term financing is tricky – there's existing capacity out there that needs to be better coordinated – my focus would be on this existing capacity and how to get better utilization.

Discussion Participant: Many transportation providers are very protective of their 53-10 funding – there are also severe restrictions/regulation on how they can use their vehicles. We need to get the providers on board and get them to share their information – the more people that come the more people they have to say 'no' to – this doesn't have a direct impact on technology, but it's a reminder that there are serious problems in policy/legislation.

Discussion Participant: It does impact technology, there's capacity out there for non-profits that have dedicated funding – the data management of how these non-profits operate is crucial.

Discussion Participant: There may be a way to digitally track need – as people call in they can better estimate and track demand.

Discussion Participant: Funding is based on reporting back and justifying past expenditures – this could be a way to get better use out of existing funding but there needs to be some change in culture.

Discussion Participant: There's an initiative to combine a lot of the different grant funding streams—the biggest issue will be different agencies protecting their funding—serious incentive problems hindering cooperation—it will be a bumpy road.

Facilitator: You mentioned existing platforms that people have used – are you familiar of something similar to the DTE that works well?

Discussion Participant: I've heard in Wisconsin they do a pretty good job of coordinating their systems and they are frequently cited as an example of effective management – I'm not aware of how this works on the physical level but certainly for paratransit and public transit they seem like a good organizational model.

Facilitator: Do you know what sort of online system, if any, they use?

Discussion Participant: That I don't know, but I would check the Wisconsin DOT

Discussion Participant: If there was some kind of a national database of transportation options that would be good – also, one of the great things for people would be a search engine for people that would allow some sort of drop-down measure with options like "are you confined to a wheelchair?" – say I was traveling to Washington DC where would I be able to go in a wheelchair – not simply transportation options but different options for those with special needs

Discussion Participant: I don't know if there's already been some thought about how the DTE would partner with google maps and other similar entities – real time information on the go about traffic, parking conditions, etc.

Discussion Participant: Real time information is an important component

Discussion Participant: I do think ride-sharing is a good idea – out here it would be nice to have a way of finding out if someone else is going roughly the same place you're going – there's something like this on Craigslist but most people don't know about it.

Facilitator: If a system was built that was more about collaboration than coming up with ideas would that be valuable?

Discussion Participant: That's great as long as you have a plan to get the end results out – "where the rubber meets the road" – it's important to share ideas but there needs to be a real focus on implementation and *funding*.

Discussion Participant: One challenge that we're struggling with is that there is an idea of getting private industry to add information – and who owns the data? How are we going to be able to release the data to consumers? For me these are big concerns – it's great in theory but people will often say 'I don't want to share my data – I'm trying to build a business and you just want to give it out for free'. The dynamic mobility applications program involves similar things for mobility's sake. The DTE is much more broad but we're also going through many of the same questions you are asking. The program started back in 2009 and it will be out

shortly and we will be able to learn a number of lessons once it's functional. We had a call for applications and we got over 100 proposals and there are a lot of similarities.

Facilitator: This is an open source portal correct?

Discussion Participant: Correct – it's two programs that are very intertwined – the data capture program gather real-time data – the open source portal is intended as a way for people to develop open source applications – that should be deployed sometime during the 2011 calendar year – and I'm very much looking forward to hearing more about DTE because we will be able to help each other out a lot.

REPORT OUT AND NEXT STEPS (11:30AM-12:30PM)

After the small group sessions, the entire group gathered together again to share high level summaries about what they talked about with their group. Bryna Helfer facilitated.

Bryna reminded everyone to continue the discussion on www.DTE.ideascale.com and check www.dot.gov/open/DTE for updates.

Nitin and Bryna thanked everyone for coming and participating, both in-person and on the web cast.