Bus Toll Lanes

Imagine...

a transit solution that reduces traffic congestion and pays for itself!

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY 50th Anniversary

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

U.S. Department of Transportation Federal Highway Administration

HART Hillsborough Area Regional Transit Authority

Bus Toll Lanes: A Public Partnership

Bus Toll Lanes (BTLs) are an innovative approach to managed lanes that create a financially feasible, self-sustaining public transportation solution by combining public transit capital funding with long-range toll revenue. BTLs use real-world business practices to provide the accountability needed to ensure premium service today and in the future. How do they accomplish this...

- BTLs offer premium transit service operating on dedicated lanes added to local highways.
- BTLs provide the fastest lowest-cost option to get people where they want to go.
- Construction of a BTL could be funded with a combination of public transportation sources (such as local, state and federal grants) as well as tolls collected from users.
- Although dedicated to transit, a BTL would allow other vehicles in the lane; all those vehicles would pay a toll.
- This public partnership will fund not only the construction, but also operations and maintenance of this transit solution.
- Toll revenue collected from private vehicles is reinvested into transit to cover the operational and maintenance expenses.
- With tolls collected electronically, (no toll booths, no toll booth congestion) all vehicles in the BTL lane will maintain free-flow operating speeds.

By combining the individual strengths of transit and tolling, Bus Toll Lanes give travelers a real choice by providing sustainable, competitive options.

Moving People; Reducing Congestion

Bus Toll Lanes use bus rapid transit services on newly constructed Bus Toll Lane guideways dedicated to transit – **this makes transit competitive with cars!**

Compared to other managed or general purpose lanes, Bus Toll Lanes move people!

BTL – *MOVE PEOPLE!*			
Condition (Vehicle Occupancy Rate = 1.1)	**Buses Per Hour**	**Person Throughput Per Hour**	**Comparison to General Purpose Lane**
General Purpose Lane With Severe Congested	0	1100	100%
Price-Managed Express Lane No Transit	0	1815	165%
BTL 15 Minute Headway	4	1977	180%
BTL 10 Minute Headway	**6**	**2058**	**187%**
BTL 5 Minute Headway	12	2302	209%
BTL 2 Minute Headway	30	3032	276%
BTL 1 Minute Headway	60	4248	386%

Table 1: BTLs Move People
Hypothetical Person Throughput on Bus Toll Lanes in a Limited-Access Free-Flow Environment (Source: Parsons Brinckerhoff)

BTL networks encourage more compact mixed-use land development which results in the reduction of trips and more efficient use of the existing transportation system – **this reduces congestion!**

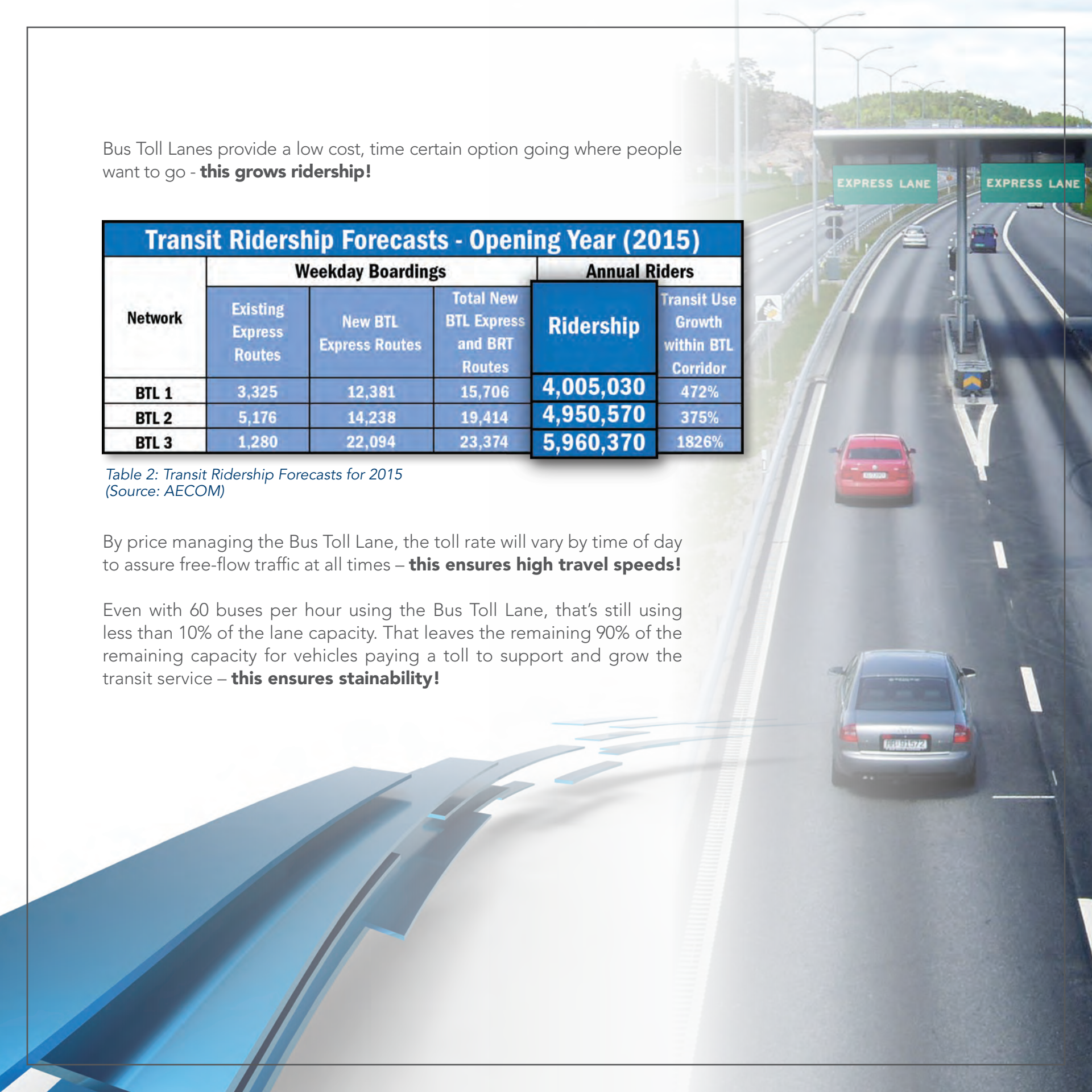
Bus Toll Lanes provide a low cost, time certain option going where people want to go - **this grows ridership!**

Transit Ridership Forecasts - Opening Year (2015)					
Network	Weekday Boardings			Annual Riders	
	Existing Express Routes	New BTL Express Routes	Total New BTL Express and BRT Routes	Ridership	Transit Use Growth within BTL Corridor
BTL 1	3,325	12,381	15,706	4,005,030	472%
BTL 2	5,176	14,238	19,414	4,950,570	375%
BTL 3	1,280	22,094	23,374	5,960,370	1826%

Table 2: Transit Ridership Forecasts for 2015 (Source: AECOM)

By price managing the Bus Toll Lane, the toll rate will vary by time of day to assure free-flow traffic at all times – **this ensures high travel speeds!**

Even with 60 buses per hour using the Bus Toll Lane, that's still using less than 10% of the lane capacity. That leaves the remaining 90% of the remaining capacity for vehicles paying a toll to support and grow the transit service – **this ensures stainability!**



Financial

Public Transit typically funds major capital projects through Federal grants with local matching funds, usually coming from the transportation fuel tax or general tax sources.

The greatest financial challenge for transit is finding sustainable revenue sources to cover ongoing operations and maintenance costs.

Toll project financing is very much the opposite of transit. Toll projects typically face a financial challenge in raising the up-front capital for construction, and projects often need capital to supplement the revenue bonds issued for construction.

By working together, transit capital funds can bridge the financing gap needed to build the roadway, with tolls providing the return on that investment by covering transit operating costs.

Bus Toll Lanes can fully cover the transit operating costs while producing significant amounts of additional revenue for the transit agency to grow future service.

30-Year BTL Revenue and Cost Results
Using Medium Revenue Scenario for Each BTL Network ($Millions)

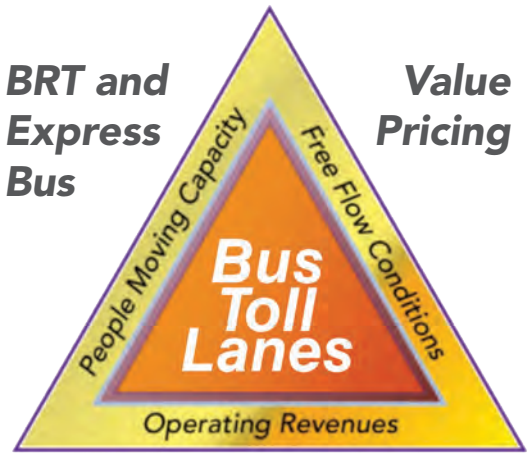
	New Fare Box	BTL O&M[1]		Net Revenue	
Network	Gross Revenue Tolls & Bus Fare	Guideway O&M	New Transit O&M	New Fare Box minus BTL O&M	Present Value @ 5%
BTL #1	3,464	545	535	2,384	807
BTL #2	1,940	371	585	984	316
BTL #3	2,274	361	567	1,346	445

1 = Annual operations, maintenance and major maintenance

Table 3: 30-Year BTL Revenues and Costs
(Source: Parsons Brinckerhoff, Tindale Oliver, American Engineering & AECOM)

To Summarize

- The BTL transit-tolls partnership is a financially feasible, sustainable public transportation solution to fund the construction and operation of a competitive public transit system.
- Varying the toll rate for automobiles to control demand on the BTL ensures significant and sustainable new capacity to existing travel routes and substantially reduces urban traffic congestion.
- The BTL substantially increases the "people-moving" capacity where it is needed most - within high-demand urban corridors.
- Proven toll business practices on the BTL will create a sustainable revenue source to support expansion of public transportation systems and reduce requirements for local transit tax subsidies.
- "Transit First" practices address the needs of the transportation disadvantaged by funding more frequent transit service and reducing public transit fares.
- BTL networks support transit-oriented development to create a more compact, efficient urban land-use.

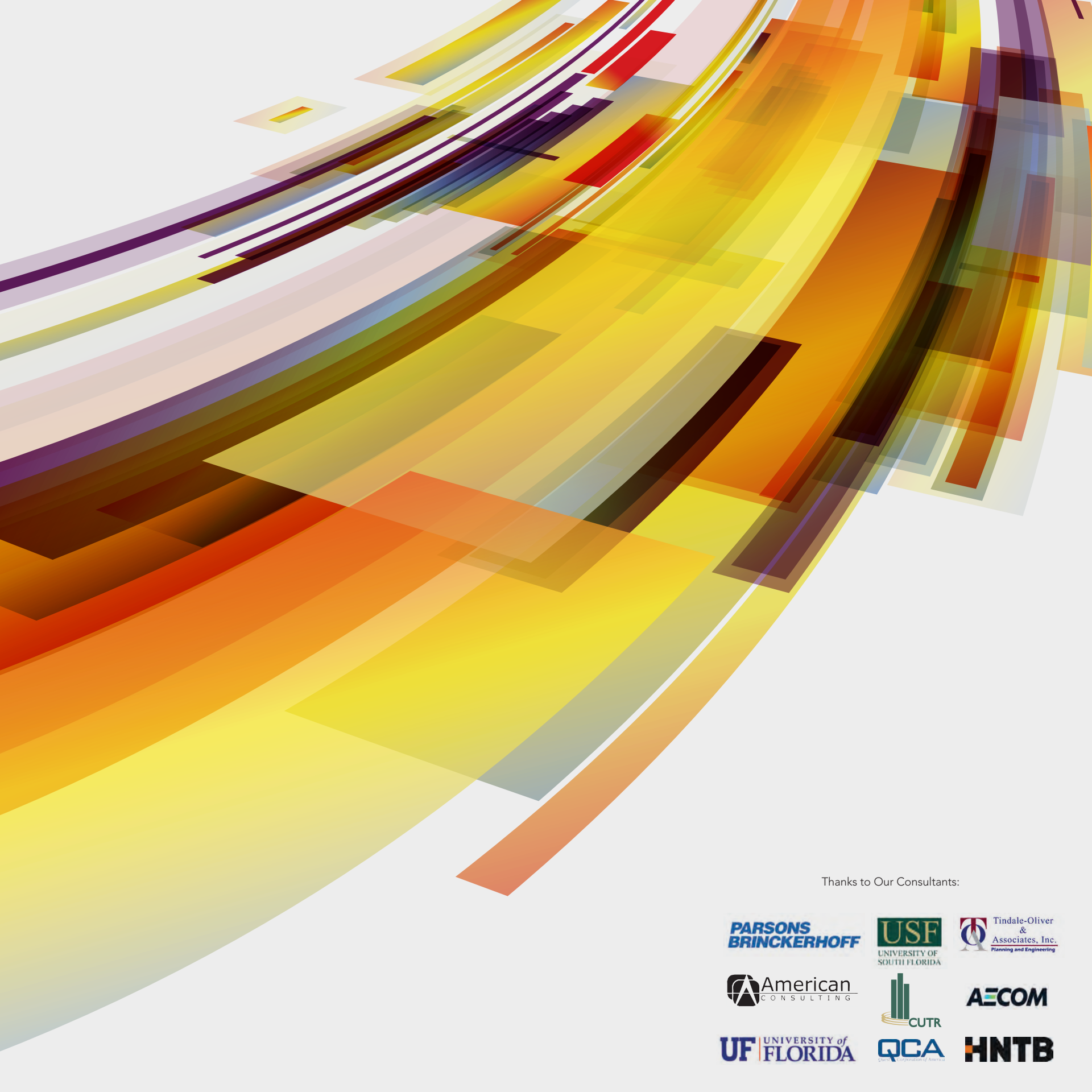


Toll Paying Drivers and Fare Paying Passengers

Moving Forward...

To ensure that BTL projects are eligible for FTA capital, we suggest that the next surface transportation authorization should specifically clarify that the definition of "fixed guideway" allows Federal funding for transit agencies who wish to be equity partners in the construction and operation of BTL projects and networks.

For more information, go online to www.tampa-xway.com or call us at (813) 272-6740.



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