



**Massachusetts Bay  
Transportation Authority**

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## **Innovation Proposals – Late Night**

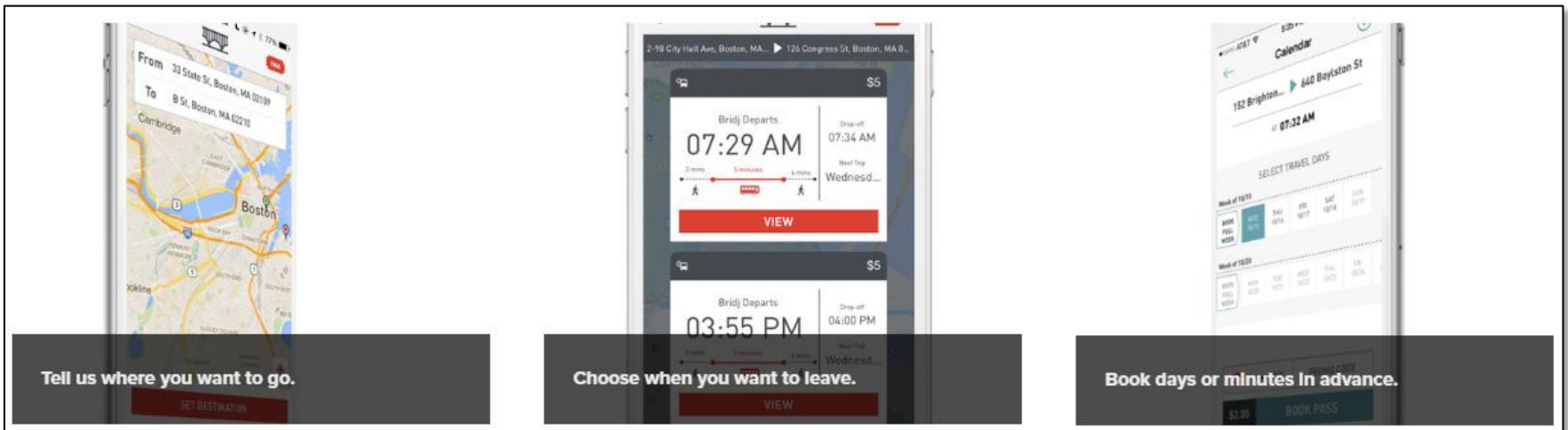
**FMCB**

**October 2016**



## BRIDJ Late-Night Service Proposal: On-Demand service model

- BRIDJ optimizes pickups and drop-offs based on customer demand
- When users submit requests, they are matched to a computer generated pickup point, where they'll meet up with 8-10 other passengers going to a similar destination (stops guaranteed less than 8 min. from end destination)
- Flexible pickup and drop-off points result in a **40-60% more efficient trip (on average)** than traditional transit, at a \$2 to \$6 price point





## BRIDJ Late-Night Service Proposal: Accessibility approach (Kansas City)

- BRIDJ is the first and only transportation technology service to be **fully accessible for non-ambulatory passengers in all markets that they serve**
- Accommodates passengers with special needs (e.g., service dogs, travel companions) and fully accessible for passengers with mobility devices

### Kansas City Area Transit Authority (KCATA):

- BRIDJ's **RideKC** service deploys a mix of vehicles, including wheelchair accessible vehicles, that provide accessibility options for passengers who need them
- Drivers meet same regulatory standards as most traditional bus drivers – CTAA Passenger Service and Safety online training program, proprietary safe driver training, etc.



***RideKC's Accessibility Program***



## BRIDJ Late-Night Service Proposal: Business model for proposed pilot

### Estimated Cost

#### **Estimated Annual Cost of Proposal:**

<b>Cost per Hour:</b>	\$85
<b>Hours per Night:</b>	5
<b>Days per Year:</b>	365
<b># of Buses:</b>	10

<b>Estimated Annual Cost:</b>	<b>\$1.55M</b>
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Fare Recovery:	<b>TBD</b>
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<b>Total Net Subsidy:</b>	<b>TBD</b>
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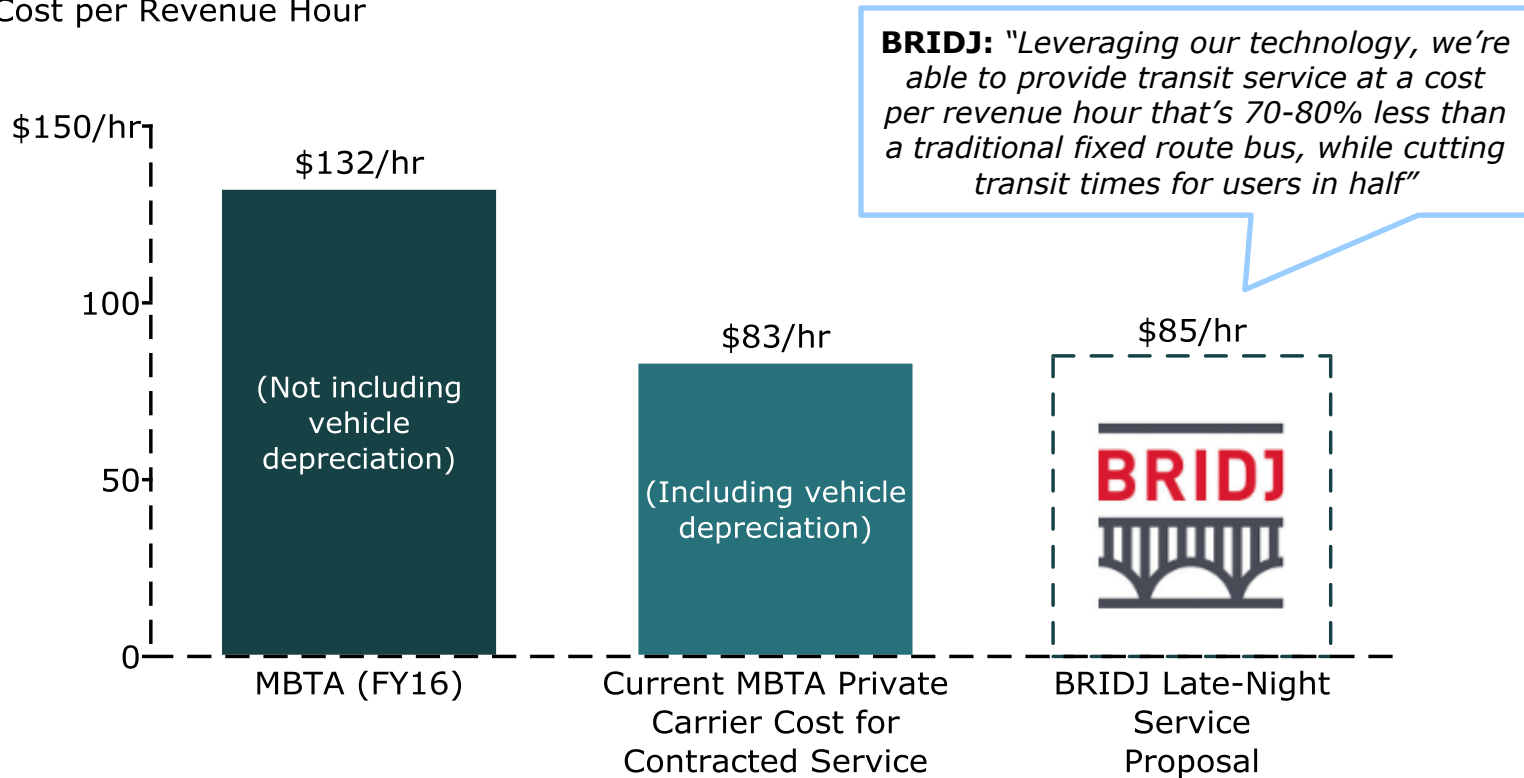
### Overview

- BRIDJ has expressed interest in **“public utility” model**
  - > MBTA sets fares for service
  - > Customers register with BRIDJ app
  - > MBTA pays BRIDJ on a per vehicle hour basis (\$85/hr.)
  - > BRIDJ passes through fare revenue to MBTA, less credit card processing fees
- BRIDJ expects to reduce cost per trip by 40% compared to traditional models and to decrease average trip times by ~55% (when compared with traditional “night owl” service)
- BRIDJ anticipates 3-year contract length



## BRIDJ proposal is comparable to current contract bus costs and 35% below MBTA internal costs

Total Cost per Revenue Hour

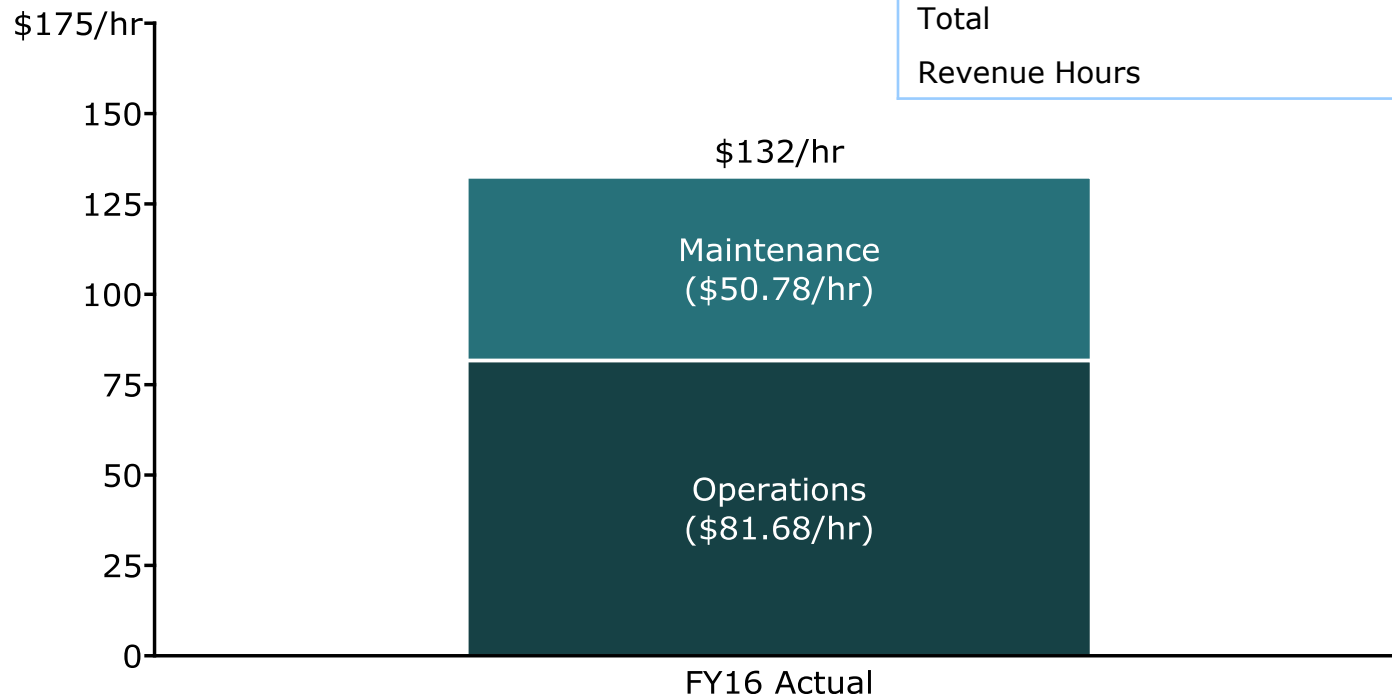


Note: MBTA internal cost per hour reflects pure cost only, and includes the cost of Everett heavy repair facility (\$19M per year) and excludes the cost of non-revenue shops (\$6M per year); cost per hour for private bus carrier includes vendor profit margin and depreciation  
Source: MBTA Internal Data; Transit Profiles: Top 50 Agencies; National Transit Database; U.S. DOT; Office of Budget and Policy, Oct. 2014



## MBTA bus operations cost (internally provisioned) in FY16 was \$132 per revenue hour and does not include vehicle depreciation

Total Cost per Revenue Hour

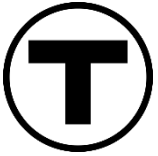


### **FY16 Actual MBTA Bus Costs:**

Operations	\$200M
Maintenance, incl. Fuel and Everett	\$125M
Total	\$325M
Revenue Hours	2.45M

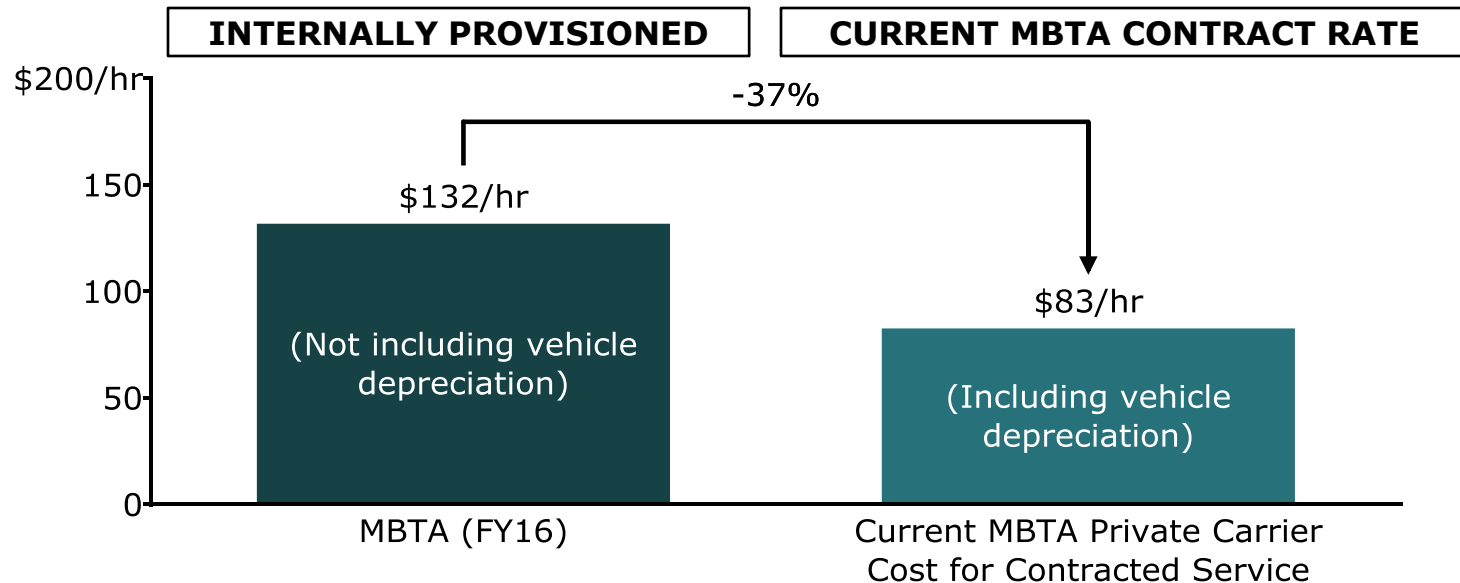
Note: MBTA internal cost per hour reflects pure cost only, and includes the cost of Everett heavy repair facility (\$19M per year) and excludes the cost of non-revenue shops (\$6M per year)

Source: MBTA Internal Data



## Current MBTA contract bus services, which also employ union drivers, are 35% less expensive the internally-provisioned bus service

Total Cost per Revenue Hour



<b>Operator Affiliation</b>	Carmen's Union L589	Teamsters Local 25
<b>Unscheduled Absence Rate</b>	11.7% (Calendar YTD 2016, as of 9/30)	

Note: MBTA internal cost per hour reflects pure cost only, and includes the cost of Everett heavy repair facility (\$19M per year) and excludes the cost of non-revenue shops (\$6M per year); cost per hour for private bus carrier includes vendor profit margin and vehicle costs  
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## BRIDJ Late-Night Service Proposal: Key Considerations

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### Are people using it?

- Ridership
- Rider demographics

### Is it financially sustainable?

- Fare strategy (new, premium service – charge current fare through credit card – no interoperability with current Charlie Cards/tickets)
- Subsidy partnerships (cities, MRA, labor unions, etc.)
- Cost per passenger and net subsidy per trip

### Pilot Program

- 12 month pilot with 6 month check-in
- Possibility of pilot extension in partnership with FTA

### Other considerations

- Parallel paratransit







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## Next Steps

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- 1. Discuss with FMCB**
- 2. Decide whether to request a Detailed Proposal**
- 3. Engage with Stakeholders, Potential Customers and Municipal Partners**



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## Back Up

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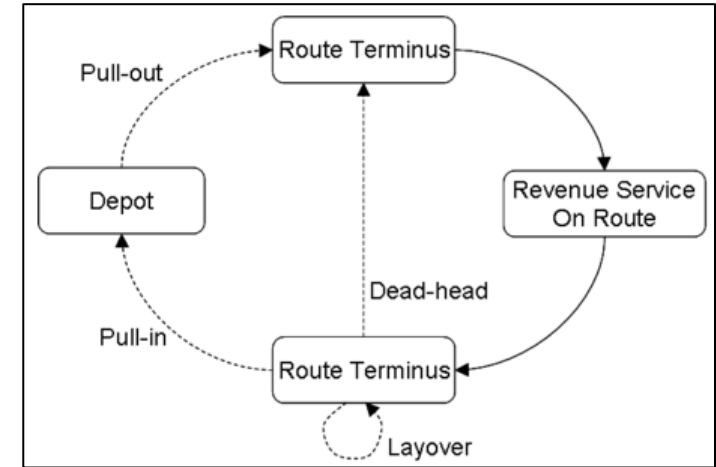


## Vehicle Hours Summary – MBTA Bus Maintenance and Operations

### FY16 MBTA System-Wide Bus Statistics

Vehicle Hours Statistic	Definition	Total Hours	Cost / Hour
<b>Total Vehicle Hours*</b>	Includes revenue hours, plus deadhead and pull-in / pull-out hours	<b>2.70M</b>	<b>\$121</b>
<b>Total Vehicle Revenue Hours</b>	All hours that a bus is in revenue service (excludes deadhead and pull-in / pull-out hours but includes layovers and recovery time built into routes)	<b>2.45M</b>	<b>\$132</b>
<b>Total Vehicle In-Service Hours</b>	Hours that a bus is travelling in service (excludes layovers and recovery time)	<b>1.92M</b>	<b>\$169</b>

### Explanation of Terms



### FY16 Actual MBTA Bus Costs:

Operations	\$200M
Maintenance, incl. Fuel + Everett	\$125M
<b>Total Cost</b>	<b>\$325M</b>
Revenue Hours	2.45M
<b>Cost per Revenue Hour</b>	<b>\$132</b>

\*Does not include time spent training operators or performing other functions not related to direct operation of service  
 Note: MBTA internal cost per hour reflects pure cost only, and includes the cost of Everett heavy repair facility (\$19M per year) and excludes the cost of non-revenue shops (\$6M per year)  
 Source: MBTA Internal Data