



**Massachusetts Bay  
Transportation Authority**

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## **Service Delivery Policy**

**April 25, 2016**



## Background

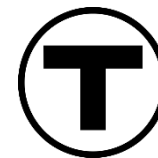
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### **Key uses of the Service Delivery Policy**

1. Performance assessment and tracking
2. Service planning
3. Input to long-term planning

### **Key components**

1. Service Standards (standards of service quality)
2. System Measures (measures of access to the system)
3. Other Service Planning Inputs (inputs to evaluation and allocation of service)



## Policy framework

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### Outcome

To be determined in strategic planning process

### Outputs

**System Measures**  
(network design, capacity, coverage, frequency, span of service)

**Service Standards**  
(safe & secure, reliable, comfortable, accessible, communication)

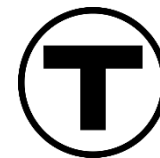
### Inputs

**Other Service Planning Inputs**  
(cost-effectiveness, equity analysis)

**Operational Performance Management**  
(operating measures to achieve service standards)

Public Input

*(Blue boxes indicate components of the SDP)*



## Policy interactions

Service Delivery Policy	External factors
<b>Service Standards</b>	
safety and security	Set by federal and state regulators
reliability	Collaboration with cities and towns
comfort	Some set by federal and state regulators
accessibility	ADA
communication	Title VI Limited English Proficiency
<b>System Measures</b>	
coverage	MBTA service area
frequency	Operating and capital budget
span of service	Operating budget, maintenance time
network design and capacity	Existing infrastructure
<b>Other Service Planning Inputs</b>	
cost-effectiveness	Operating budget
equity analysis	Title VI, MBTA Disparate Impact & Disproportionate Burden policy
public input	Title VI, MBTA Public Participation Plan



## Types of Service Planning

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**Quarterly Service Changes:** *Minor changes to improve performance*

Changes that have limited impact on system measures

**Biennial Service Plan:** *Route optimization*

Allows changes to service availability measures: significant restructuring, new services, elimination of service, large changes to frequency or span of service

Requires public input process and equity analysis

**Service Redesign Plan:** *Network optimization*

Evaluation of network design against regional travel demand and capacity needs

Requires public input process and equity analysis

**Long Range Planning:** *Determine future service needs*

Input to the long range capital plan (Focus40)



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# Service Standards

**What are our standards for service performance?**



## Types of Service Standards

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**Network level standards:** Standards that are measured systemwide

- Safety and Security
- Communication

**Route level standards:** Standards used to evaluate each existing route/line

- Reliability
- Comfort
- Accessibility (vehicle/station)



## Service standards: Safety and Security, and The RIDE

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- Safety and security standards are set by federal and state regulations and implemented, monitored and reported by the MBTA Safety, Security and Police Departments
- Service standards for The RIDE are set by the Federal ADA regulations and in our contracts with the service providers





## Service standards: Communication

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- Accuracy of real-time predictions for vehicle arrivals based on time from stop/station
- Elevator availability announcements within 10 minutes of identified status change
- All in-vehicle stop/station announcements made
- All in-station announcements made
- All relevant announcements and information available as detailed in the Language Assistance Plan in the MBTA Title VI program



## Service standards: Reliability

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### Bus service

- **Scheduled bus:** percent of timepoints within time window of scheduled
- **Frequent bus (<15 mins) & Mattapan:** percent of timepoints within 3 minutes of scheduled headway

### Subway/Green Line

- **Passenger wait time:** percent of passengers waiting less than scheduled headway
- **Passenger travel time:** percent of passengers experiencing travel time less than 3 minutes greater than scheduled travel time

### Commuter rail/ferry

- Percent of passengers departing and arriving no earlier than 0 minutes early and no more than 5 minutes after the time published in the schedule

**Service operated:** Percent of scheduled trips operated



## Service standards: Comfort

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### Bus service

- Percent of passenger travel time spent below the load threshold (140% of seats)

### Subway/light rail

- Percent of passenger travel time on vehicles below the load threshold based on floor area available per passenger by time period

### Commuter Rail

- Percent of trips below load threshold (100% of seats off-peak, 110% at peak)

**Ferry:** Load set by federal law with no additional boardings allowed



## Service standards: Accessibility

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### Subway, commuter rail, light rail

- **Platform accessibility:** percent of platform hours accessible (accessibility of stations and elevator up-time)

### Commuter rail, light rail, bus

- **Vehicle accessibility:** percent of vehicle trips with accessible vehicle



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## Service Standards Questions

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### Network level

safety and security  
communication

### Route level

reliability  
comfort  
accessibility

- Are these the right customer-facing standards?
- Are there other customer-facing standards we should consider?



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# System Measures

**What are the components of our system design?**



## System measures

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### Minimum Service Levels

**-Frequency** (depends on mode): What is the minimum level of frequency that should be provided?

**-Span of Service** (depends on mode): What is the minimum span of service that should be provided?

Coverage: How much of the area or population do our services cover, and at what level of service?

**-Base:** percent of service area population living within ½ mile to service

**-Frequent:** percent of people in dense areas (>7000 ppsm) within ½ mile of high frequent service (<15 minutes)

**-Low income:** Percent of population in low-income households within ½ mile of service



## System measures

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Network Design: How well does our network match the region's needs? Are our services competitive with other modes?

- Travel times
- Measures of regional access

System Capacity (throughput): How well is our capacity matched to the region's demands?

- Existing infrastructure with perfect operations
- Existing infrastructure with normal operations
- Current demand
- (Future demand as part of long-range plan)





## System measures Questions

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frequency  
span of service  
coverage  
network design  
capacity

- Are these the right measures of the system design?
- Is anything missing?



## Next Steps

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- FMCB feedback on Service Delivery Policy framework
- On 5/2/2016, details of service planning process and scope of next service plan
- Draft Service Delivery Policy incorporating feedback released for public comment



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# Appendix



## Putting the Service Delivery Policy in action

