

# AGENDA

### INTRODUCTIONS

**USCG – Overview of Maritime Operations** 

BRIEF SUMMARY OF PHASE I: Policy Regulatory Review

**OPTIMIZED BRIDGE PERFORMANCE – D6** 

PURPOSE & GOALS OF PHASE II: Implement Volunteer Notification Program

**GOALS & EXPECTED OUTCOMES OF TRIAL PROGRAM** 

**APPROACH TO ESTABLISH EXISTING CONDITIONS** 

• Data, MOEs, Sample Metrics & Communications

APPROACH TO IMPLEMENT NOTIFICATION PROGRAM

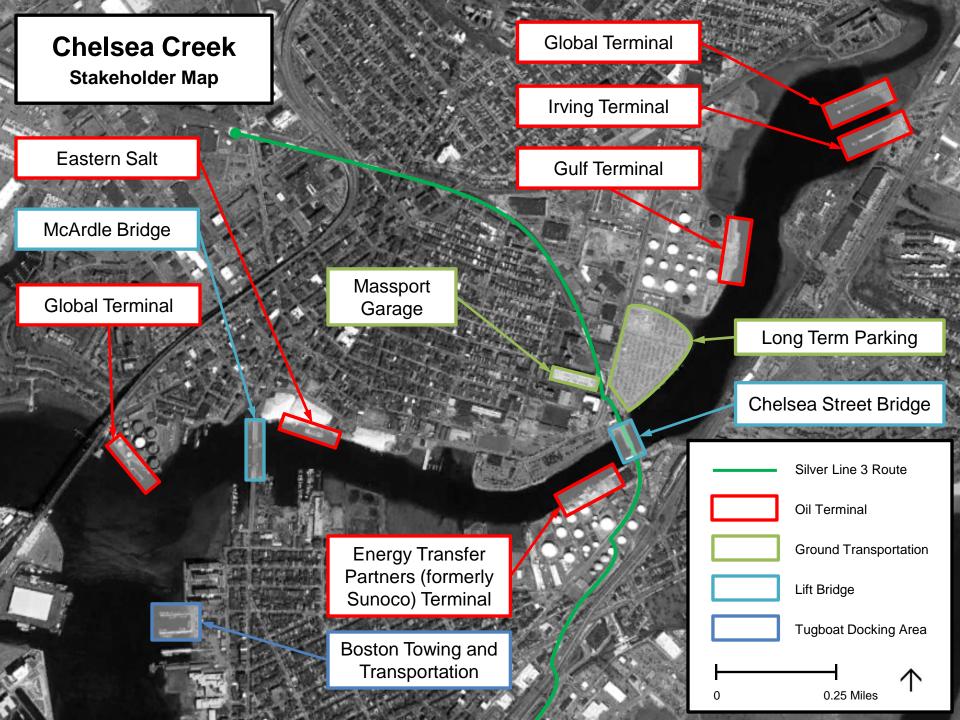
Notification Intervals, SOPs, Communication methods, tracking

**NEXT MEETING & PROPOSED SCHEDULE** 





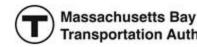




### **BRIEF SUMMARY OF PHASE I**

- Better understand Port, **Chelsea Bridge and land** side operations
- Review of federal regulations and operational procedures on bridge lifts







### **BRIEF SUMMARY OF PHASE I: Consensus Reached On -**

- MassDOT to advance a notification program
- No restrictions on bridge operations at this time, pending the outcomes of the pilot notification project
- No further consideration of capital improvements such as lighting, fendering, or Chelsea Creek widening/dredging during the notification trial with the exception of agencies continual efforts to advocate for dredging funding.
- Consider land side improvements

Implement a Trial Notification Program – develop scope, base data and standard operating procedures (SOPs) with stakeholders.





# **OPTIMIZING BRIDGE PERFORMANCE – District 6**

- Engineering and Mechanical Review of Bridge Lifts
- Gates Options under Consideration
- Traffic Monitoring and Signal Enhancements
- Coordinated Variable Messaging through signals and boards

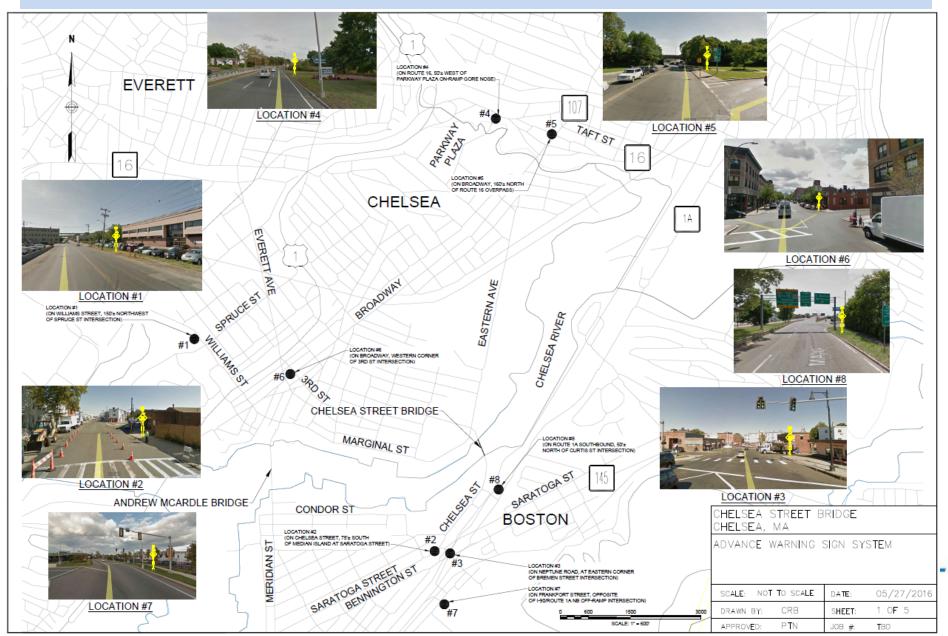




Massachusetts Bay



### **Traffic Sign Warning System**



# PURPOSE OF PHASE II: Implement Volunteer Notification Program

Engage stakeholders to develop and implement a volunteer notification program to improve the **PREDICTABILITY** of the Chelsea Street Bridge Lifts and more efficiently manage disruptions to users without adversely impacting maritime operations







# **GOALS OF PHASE II: Implement Volunteer Notification Program**

- Advance knowledge of closures (notification and routing options)
- Effectively manage disruptions to travel for all users
- Improve real-time operational performance of operators (bridge, transit and waterway) to maximize economic opportunities and minimize delays
- Communicate in real-time information on bridge closures – when information is available



It is Important to Note: Bridge will continue to open on demand as per maritime rules.





# **EXPECTED OUTCOMES OF TRIAL PROGRAM**

- Obtain quality data to establish base line conditions for waterway and roadway operations – track for one month
- Using data to confirm optimal hourly notification period
- Develop Measures Of Evaluation (MOEs) that represent interests of users to improve operational performance and optimize access – against which the notification program can be evaluated.







# **EXPECTED BENEFITS OF ADVANCED NOTIFICATION**

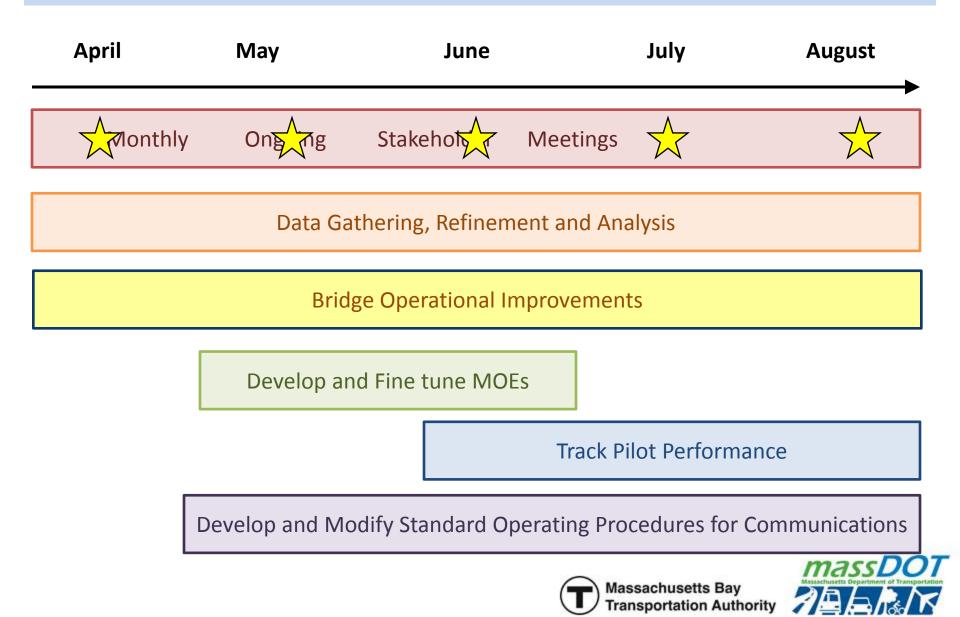
- Enable people to make an <u>alternative mode shift</u> – for example from car to transit or transit to commuter rail
- Allow people and businesses to <u>better plan and schedule</u> <u>trips</u>, such as delayed travel or alternate routes
- <u>Reduce frustration</u> and improves traveler behavior as they can better plan a delay.







# TRIAL NOTIFICATION SYSTEM TIMELINE



## **EXISTING CONDITIONS TRACKING**



Target Date for tracking Existing Conditions is: **Monday, May 6, 2019 – for one month** 





# **ESTABLISHING EXISTING CONDITIONS - Approach**



- Collect data and track existing conditions to effectively measure performance of program that meets with user needs
- Develop Measures of Evaluation (MOEs) to track, monitor and evaluate existing conditions and the performance of the trial
  - Model existing operator/agency communications and traffic management procedures





#### BASE LINE DATA SETS – Tracking, Monitoring & Evaluating Performance of Trail Program

#### **Goal: Identify available data sources and future needs for performance tracking**

Existing	<b>Notification Trial</b>	Future
Bridge Logs (Chelsea and McArdle)	Predicted Bridge Lifts	Automated Notification
	Notifications Received	Streamlined Communication
Bridge Traffic Signals and Counters	Customer Notified	Traffic Signal Enhancements
VesselTracker. Com (arrivals and departures)	Traveler Experience	Detour Routes
	Traffic Impacts – back up	Integrate and coordinate
Silver Line On –Time Performance	queues	information network
		Social Media
MPA Logan Airport Employee Shuttle Operations	Quality of do success of no program	ata is critical to otification
Do not have data from contractors or other vessel		massDO

operators (20% of lifts)

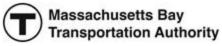




# **DEVELOPING THE NOTIFICATION PROGRAM**

- Measure Performance & Outcomes of Existing Conditions (MOEs) to refine data sets and determine trial parameters for notification times
- 2. Develop *Communications Network for Notifications* to Impacted agencies to effectively plan and manage operations and outreach to customers
- 3. Develop *Standard Operating Procedures (SOPs)* for waterway and roadway operators that details procedures, roles and responsibilities.

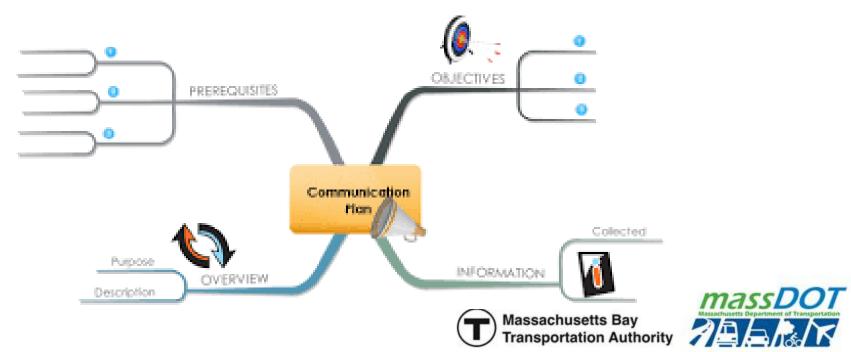




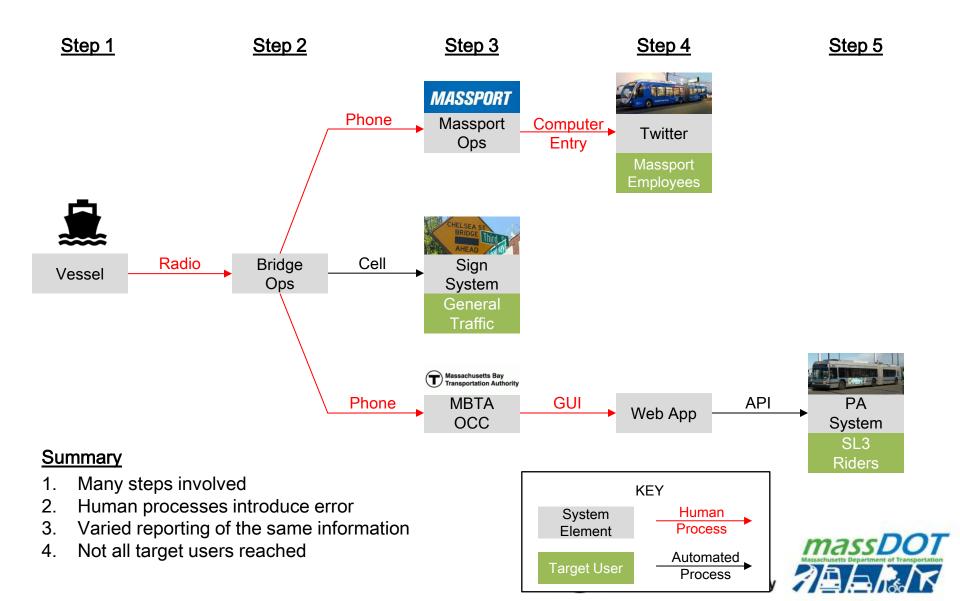


### **ESTABLSH BASE LINE COMMUNICATIONS**

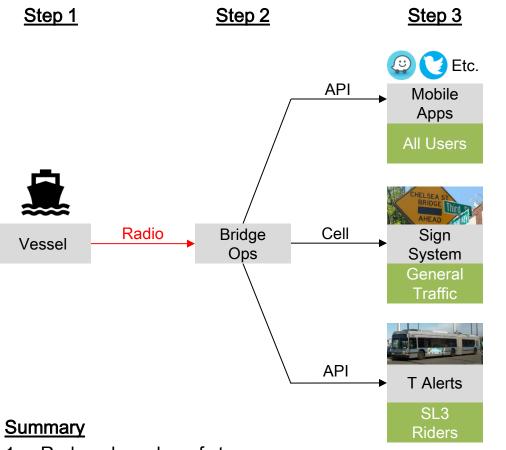
- Notification & Communications Mapping
  - MassDOT Highway, Transit and MassPORT
  - Vessel Operators
  - Tug Operators
- Gap and Overlap Analysis
- Goal to Optimize and Simplify Communications System



### **Existing Real-Time Communications Process**



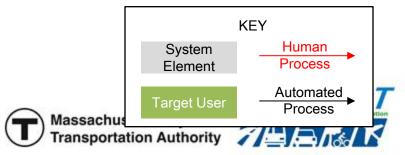
### **Simplified Real-Time Communication**



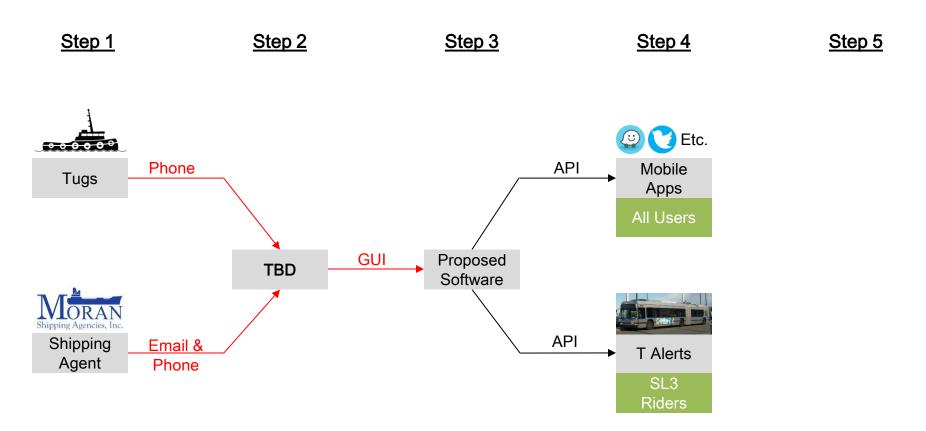
<u>Step 5</u>

Step 4

- 1. Reduced number of steps
- 2. Minimal human processes
- 3. Single point of information
- 4. All target users reached

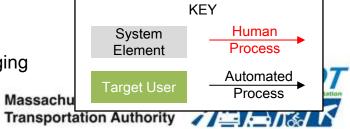


### **Optional 2-Hour Notification**





- 1. Four-step process
- 2. Some human processes necessary
- 3. Same target users as on-demand system for consistent messaging
- 4. Need to determine "TBD" responsibilities



# **IMPLEMENTING THE NOTIFICATION PROGRAM**

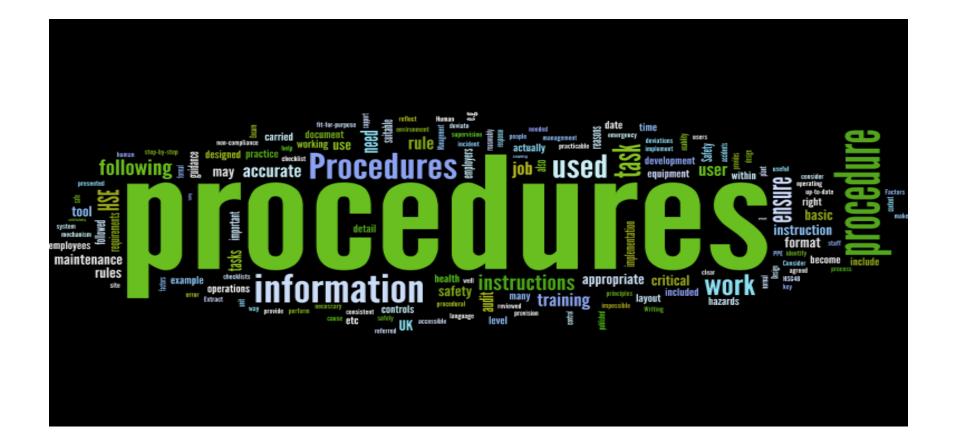
- 1. Coordinate Traffic Management Planning
- 2. Optimize and Simplify Communications
- 3. Monitor the Performance of the Program
- 4. Convene Monthly Stakeholder Meetings to refine metrics and adjust operations
- 5. Identify Other Improvements



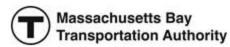




# **DEVELOPING STANDARD OPERATING PROCEDURES (SOPs)**







## LAUNCH TRIAL PERIOD FOR NOTIFICATION PROGRAM



Target Date to launch the Trial Notification Program is: Summer of 2019 – for two months





### <u>Purpose</u>

Establish the Base MOEs to begin monitoring existing conditions and upon which the notification time period can be determined. Agenda

- Update on Activity
- Response to Information requested
- Working Session
  - Review and Refine Goals / Problems / Objectives
- Break Out Groups by Goal
  - Refine Measures and evaluations

Time & Date & Location

April 17<sup>th</sup> @ 1:00 - Same Location (if available)





### **PROPOSED MEETING SCHEDULE – AGENDAS**

- April 3<sup>rd</sup> Overview and Approach to Notification Trial
- April 17<sup>th</sup> Measures of Evaluation
- May Review of data MOEs revisited & Process mapping for notifications and communication flow charts
- June MOE tracking, process flow updates and standard operating procedure reviews
- Thereafter Monthly Updates on improvement and MOEs TBA



### **QUESTIONS & DISCUSSION**





Massachusetts Bay Transportation Authority

