

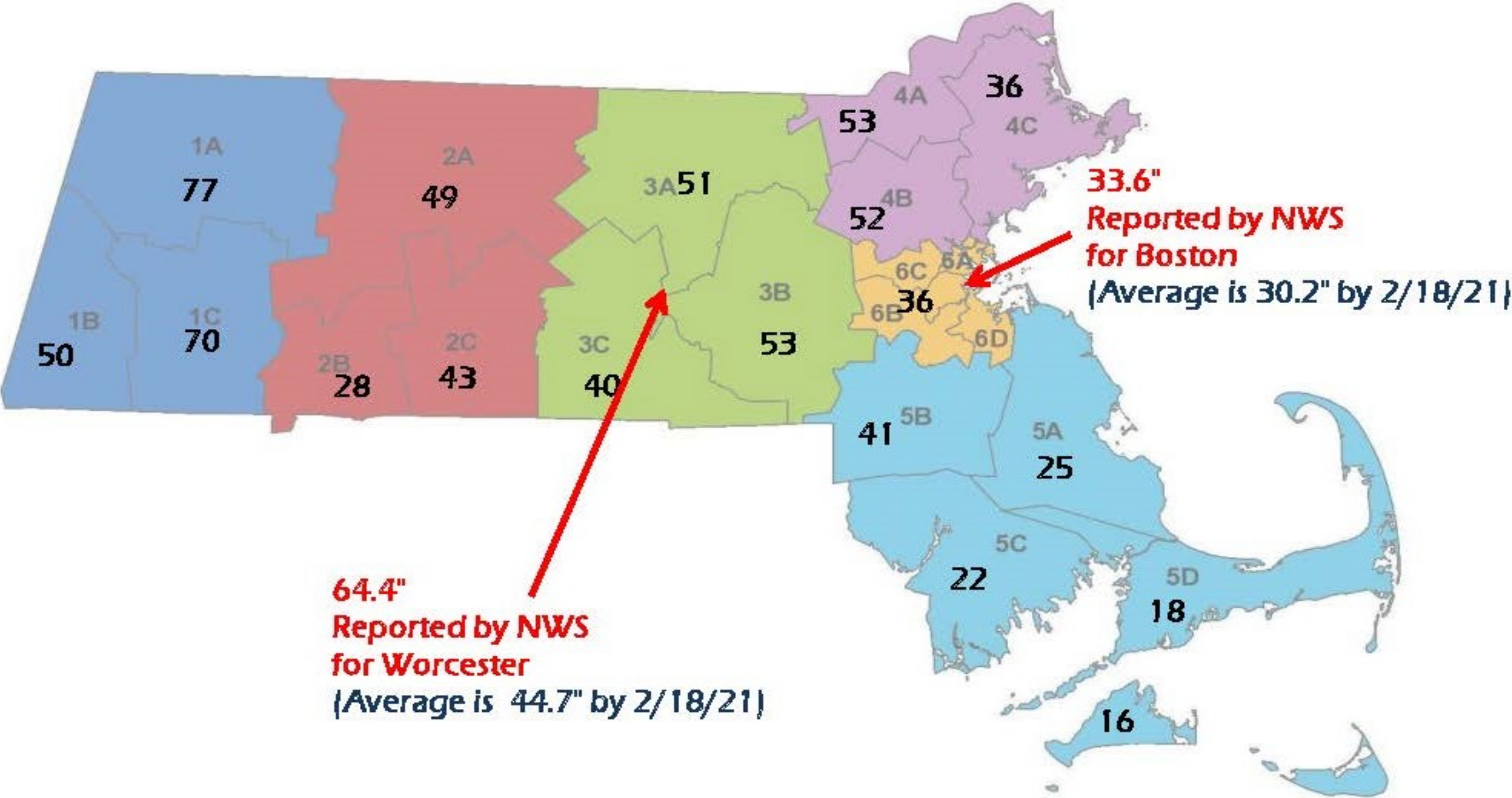


Highway Administrator's Report February 22, 2021

Snow & Ice Update



FY21 Snow Fall Amounts by District Sub-Areas (inches) of 2/18/2021
Amounts are area averages reported by MassDOT personnel at depots throughout the season.



Snow & Ice Budget Update

Snow & Ice
Budget and Expenditure Analysis

Total Annual Budget
\$97,742,197

Total YTD Expenditures
61,576,504

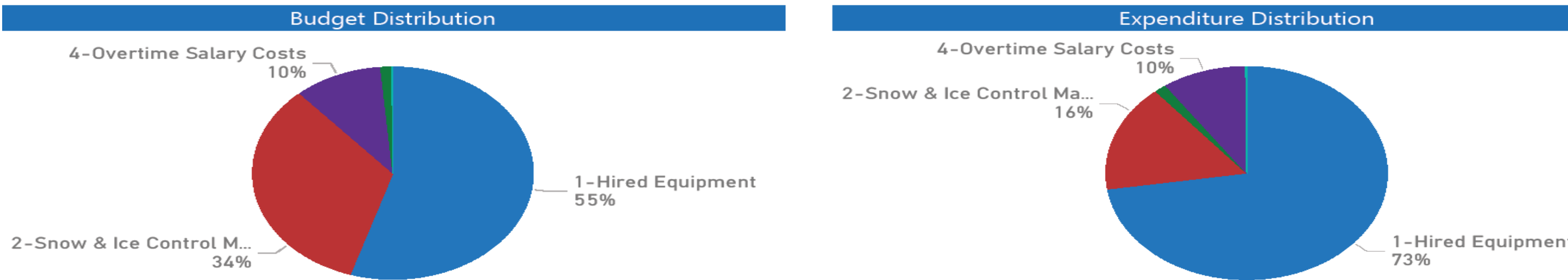
Budget Remaining
\$36,165,693

Toll Funds Spent
35%

State Funds Spent
65%

Expenditures from SIMS
\$44,704,946
Equipment Cost

Budget & Expenditures Totals				
Category	Budget	Actual YTD Expenditures	In Process (SIMS)	Budget Remaining
1-Hired Equipment	\$53,682,500	\$22,221,343	\$22,479,826	\$8,981,331
State Funded	\$53,682,500	\$22,221,343	\$22,479,826	\$8,981,331
2-Snow & Ice Control Materials	\$32,800,000	\$10,025,117		\$22,774,883
State Funded	\$28,000,000	\$8,863,638		\$19,136,362
Toll Funded	\$4,800,000	\$1,161,479		\$3,638,521
3-Equipment, Repairs & Accessories	\$1,237,500	\$863,927		\$373,573
State Funded	\$1,187,500	\$856,331		\$331,169
Toll Funded	\$50,000	\$7,596		\$42,404
4-Overtime Salary Costs	\$9,892,197	\$5,908,201		\$3,983,996
State Funded	\$6,996,465	\$4,364,850		\$2,631,615
Toll Funded	\$2,895,733	\$1,543,352		\$1,352,381
5-Operational Services	\$130,000	\$78,092		\$51,908
State Funded	\$130,000	\$78,092		\$51,908
State Funds	\$89,996,465	\$36,384,252	\$22,479,826	\$31,132,387
Toll Funds	\$7,745,733	\$2,712,426		\$5,033,307
Grand Total	\$97,742,197	\$39,096,678	\$22,479,826	\$36,165,693



Staff, Equipment & Technologies

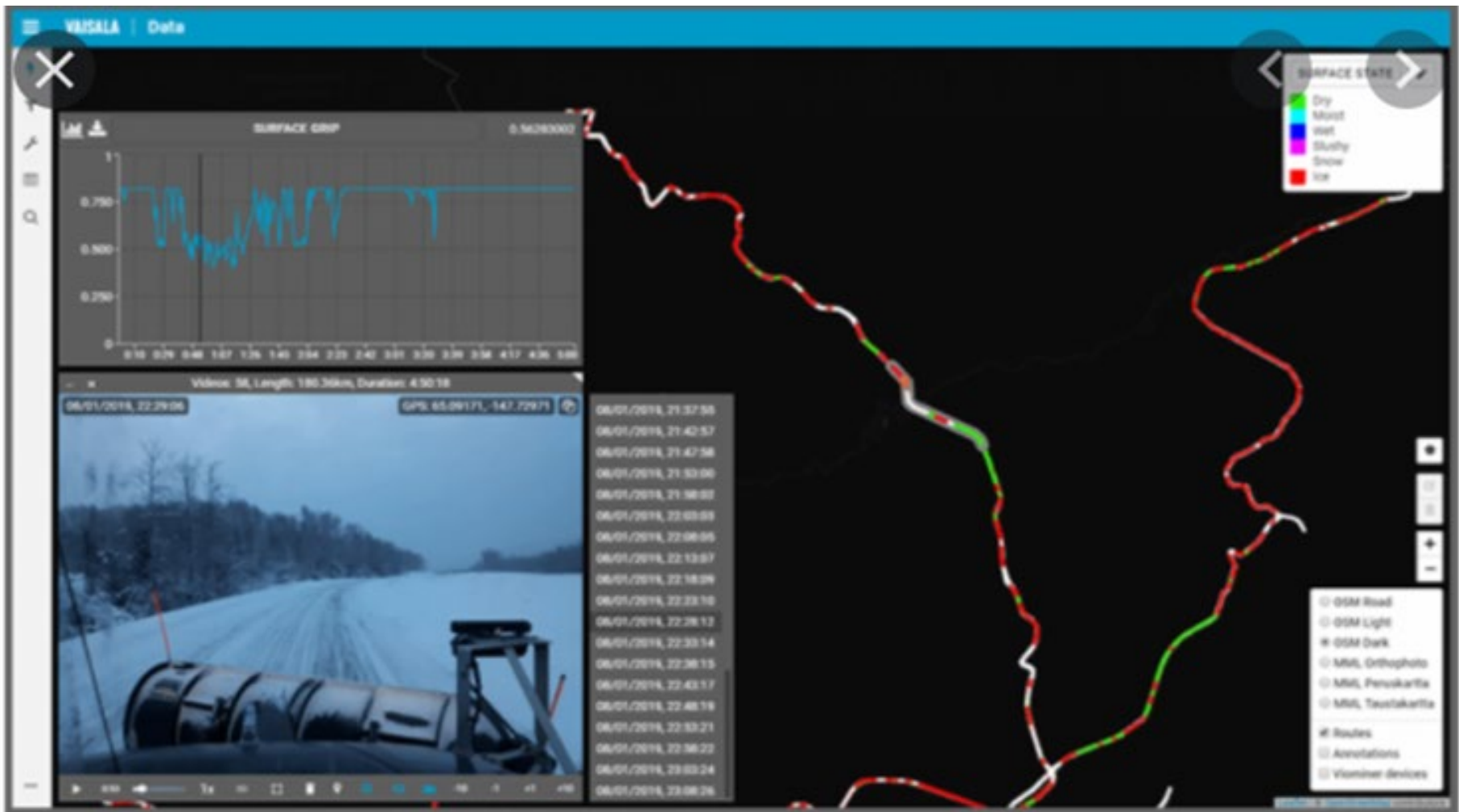
Staff and Equipment

850 MassDOT employees
(includes seasonal support staff and temporary S&I drivers)

Snow and Ice Control Equipment			
Equipment Type	Hired	State	Total
Front End Loaders	316	136	452
Combos (Spreaders with Plows)	1263	256	1519
Plows	1629	142	1771
Tow-Plows	0	19	19
Tankers	47	3	50
Other	216	20	236
Totals	3471	576	4047

Technologies

- GPS devices on all hired combos.



- 25 new Mobile Road Weather Information Sensors for District Area Supervisors.
 - Monitors road and air temperature, relative humidity, dew/frost point, surface condition and most importantly, grip.

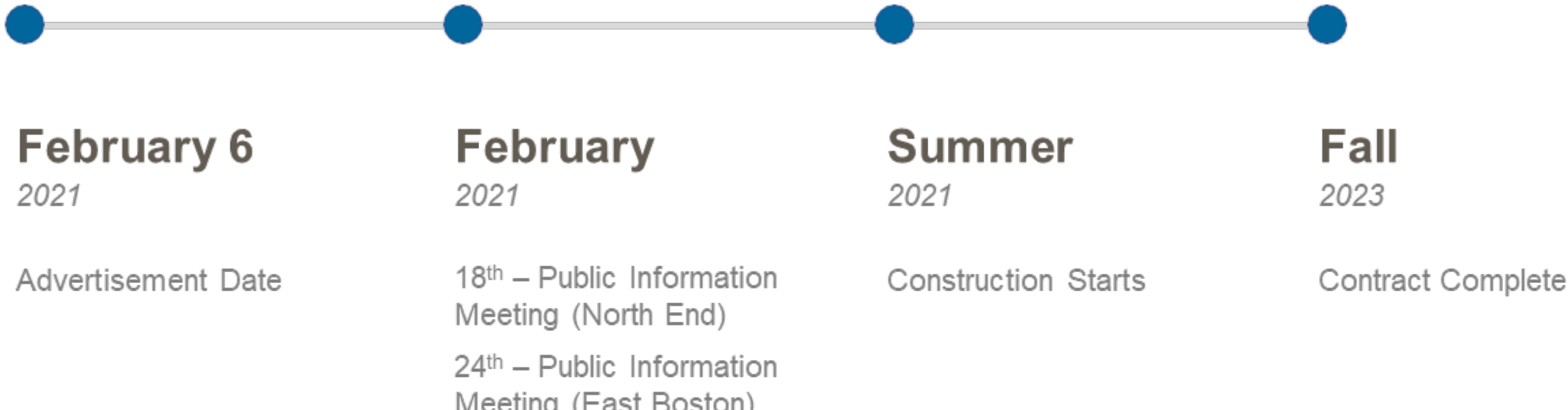


Sumner/Callahan Vent Building Upgrades

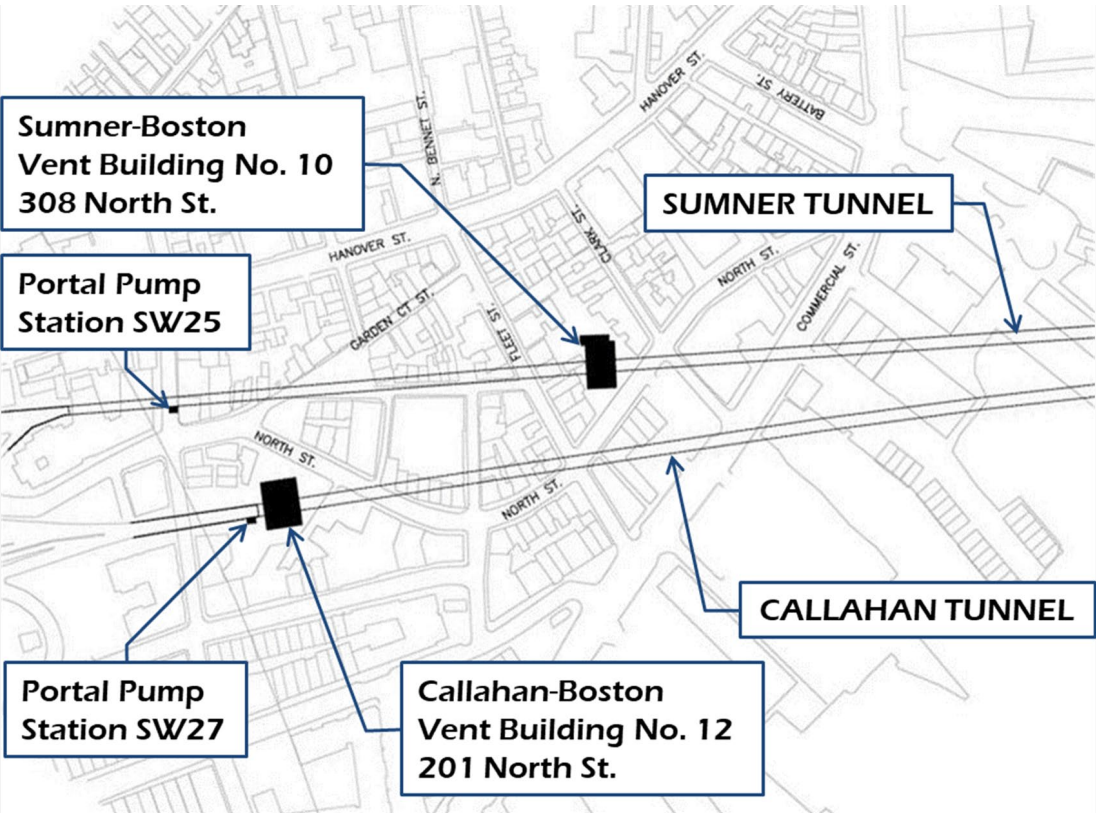
Project Goals

- Upgrade Dated Equipment
 - Improve system reliability and safety
- Extend Service Life
 - Replace with more reliable/ efficient equipment
- Provide Backup Power
 - Add generators to power life-safety systems during loss of utility power
- Minimize Disruptive Maintenance
 - New systems will require less frequent repairs

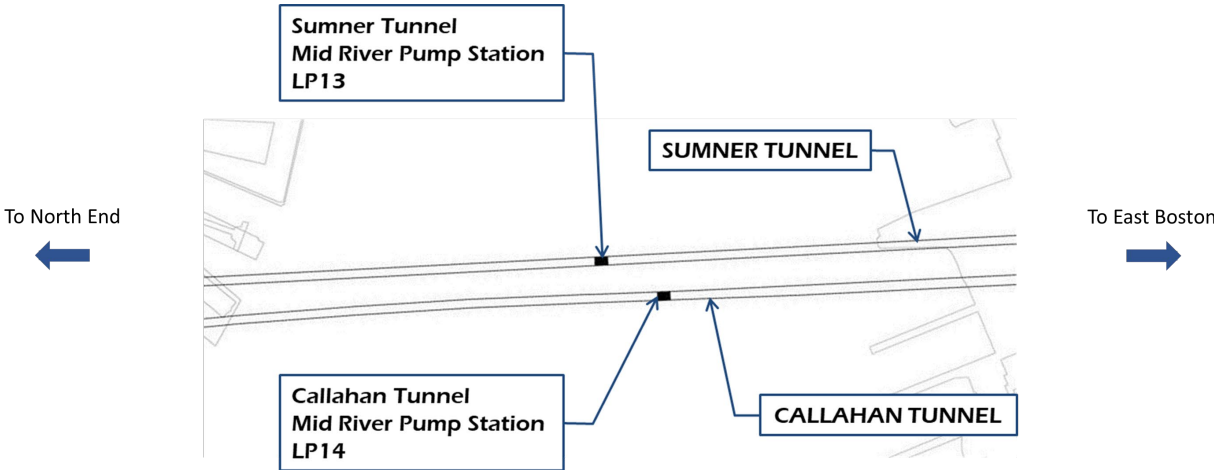
Schedule



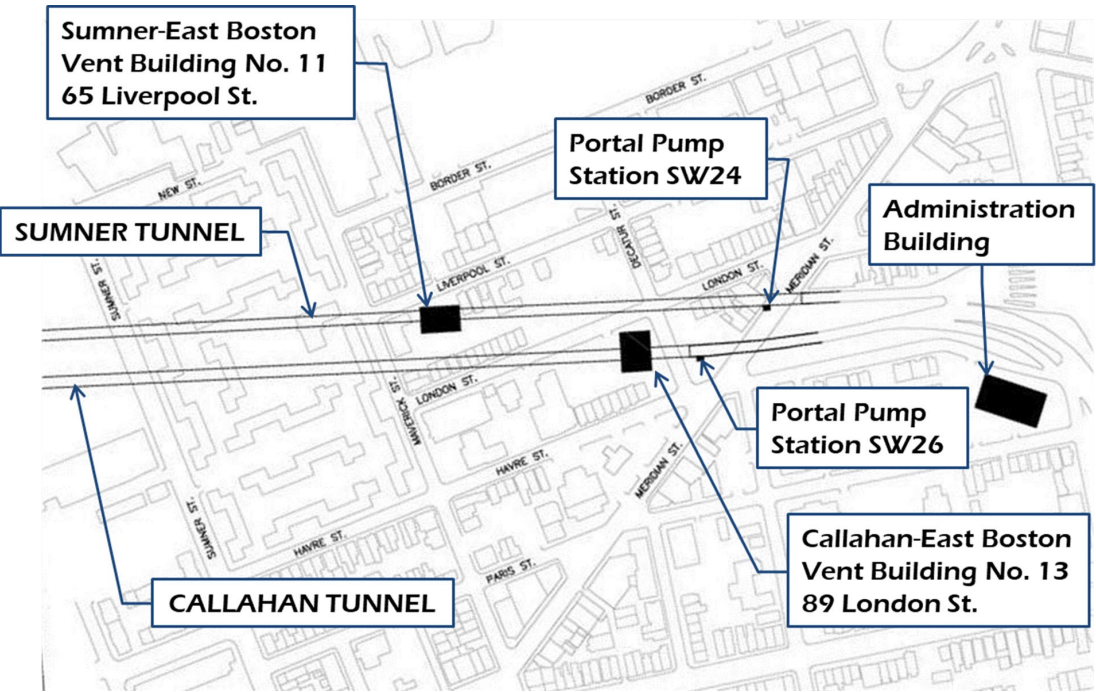
North End



Mid River



East Boston



Sumner/Callahan Vent Building Locations

Sumner/Callahan Vent Building Upgrades

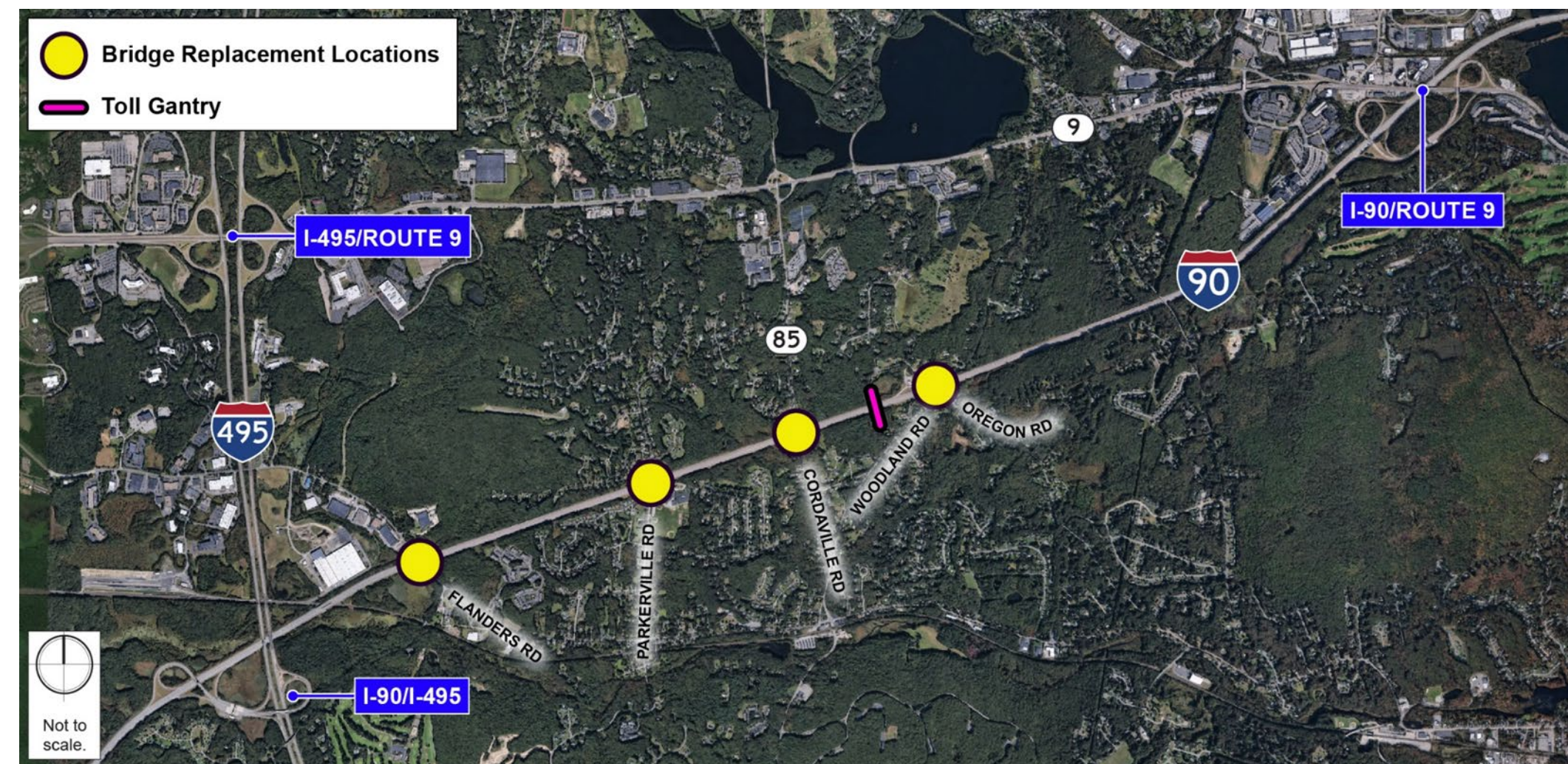
Currently the tunnels operate with regular overnight closures for routine maintenance.

This project will largely utilize these methods

- Traffic Impacts to Tunnels During Construction
 - Nighttime closures
 - Sumner Tunnel – 20 overnights
 - Detour route required – as with all other maintenance closures
 - Single lane reduction
 - Sumner Tunnel – 60 overnights
 - Callahan Tunnel – 50 overnights
 - No detour needed as one travel lane will remain open
- All tunnel closures require coordination with other regional projects
- All tunnel closures require MassDOT approval
- Community will be notified in advance

Acceler-8: Southboro/Westboro I-90 Bridge Replacements

- Replace 8 bridges in 8 weekends during Summer 2021
- 56-hour weekend construction
- Accelerated Bridge Construction using precast components
- Minimize delays to roadway users
- Design / Build – JF White
- \$49 million total construction cost
- Real Time Traffic Management Systems
- Robust Public Outreach



Acceler-8: Southboro/Westboro I-90 Bridge Replacements

Estimated Start Dates and Durations:

- November 2020 – Flanders Rd. Utility Relocation
- January 2021 – May 2021 – I-90 Median Barrier Replacement
- January 2021 – July 2021 Bridge Abutment Repairs
- March 2021 – April 2021 – Median Crossover Construction
- May 2021 – Movable Barrier Trial Run
- June 2021 – August 2021 – Bridge Replacements
- August 2021 – October 2021 – I-90 Median Barrier Replacement
- July 2021 – November 2021 – Final Paving

				56 Hour Work Window			
MassDOT I-90 Southborough - Westborough Acceler-8 Construction Sequence							
Wknd	Primary Work	Primary	Hwy.	Start	24 hrs per day over Weekend		End
No.	Location	Operation	Direction	FRI @ 9pm	SAT	SUN	MON @ 5am
1	Woodland Road	Bridge Replacement	WB	6/18/2021	6/19/2021	6/20/2021	6/21/2021
2	Cordaville Road	Full Bridge Replacement	WB	6/25/2021	6/26/2021	6/27/2021	6/28/2021
3	Woodland Road	Bridge Replacement	EB	7/9/2021	7/10/2021	7/11/2021	7/12/2021
4	Cordaville Road	Full Bridge Replacement	EB	7/16/2021	7/17/2021	7/18/2021	7/19/2021
5	Parkerville Rd & Flanders Rd	Bridge Replacement	EB	7/23/2021	7/24/2021	7/25/2021	7/26/2021
6	Woodland Parkerville & Flanders	Waterproof & Pave	EB	7/30/2021	7/31/2021	8/1/2021	8/2/2021
7	Parkerville Rd & Flanders Rd	Bridge Replacement	WB	8/6/2021	8/7/2021	8/8/2021	8/9/2021
8	Woodland Parkerville & Flanders	Waterproof & Pave	WB	8/13/2021	8/14/2021	8/15/2021	8/16/2021