Sumner closure

Fall 2023 travel behavior analysis

2023-10-12

Contents

Sumner Tunnel closure

- Major highway artery closure
- 05 July – 31 August
- Primary impact on westbound/southbound travel
- Pre-shutdown daily travel through Sumner Tunnel of 40,000 cars

Sumner Tunnel exit, Boston (2013)

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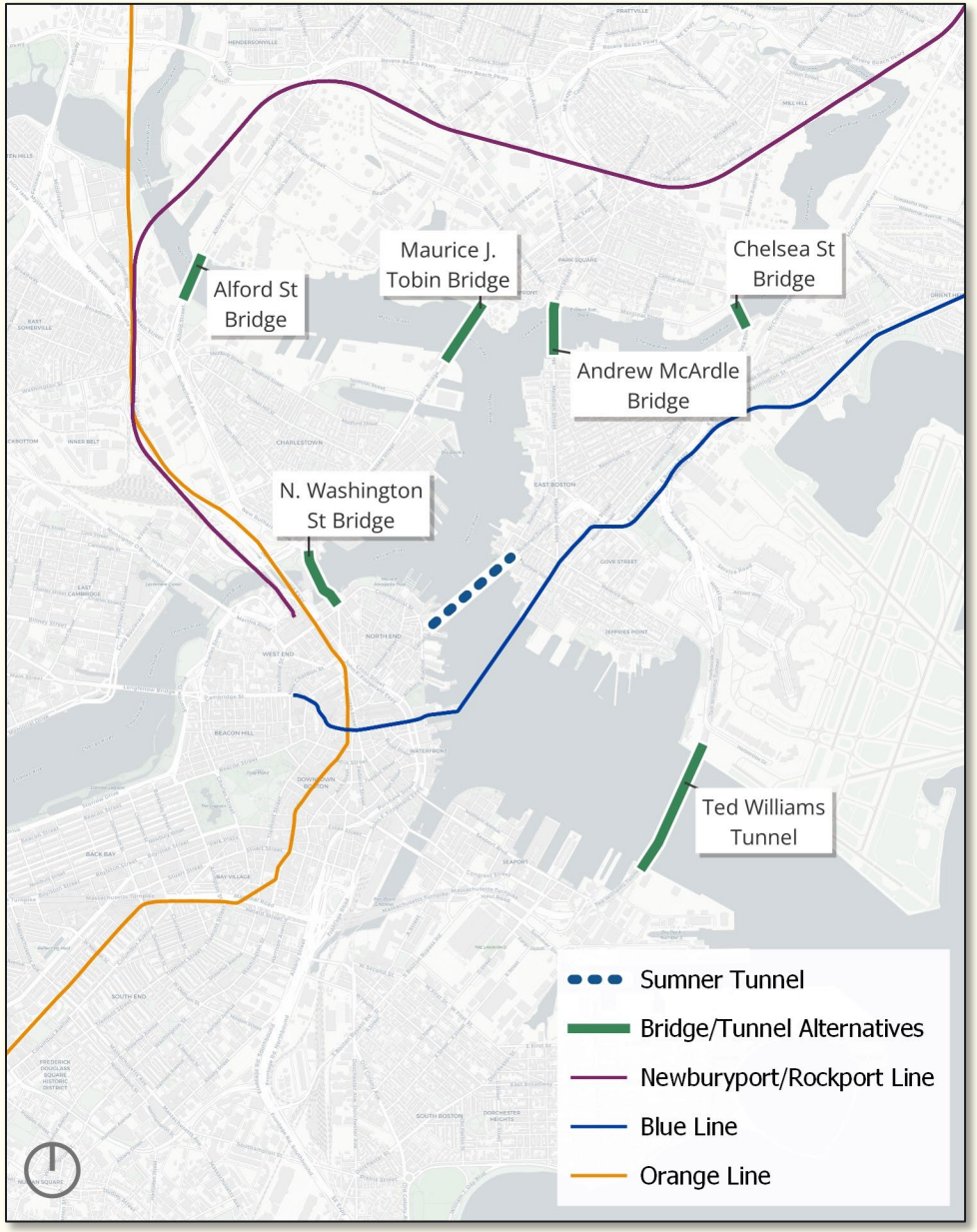
Closure expectations

Travelers usually heed carmageddon warnings:

1. Well-publicized closure of a major artery usually causes more **local congestion**
2. Irregular, worsening car traffic increases the appeal of **avoiding trips** or **shifting modes** to something faster or more reliable
3. Expected some **reduction in total trips taken and some shift to transit**

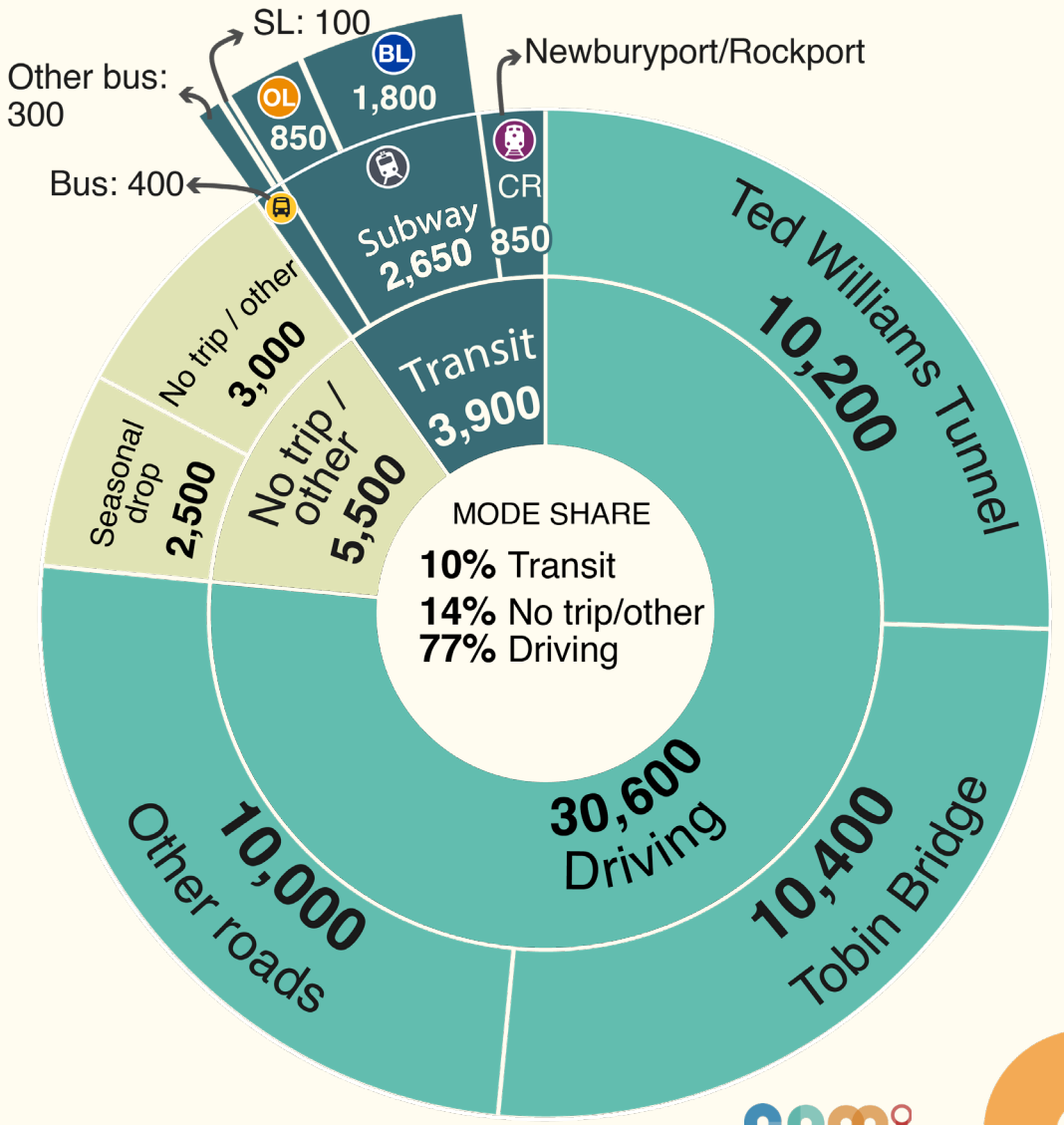


Travel behavior change

- ~40,000 daily travelers primarily **changed routes, not modes**
- Mode shift to transit starkest where **most competitive with driving**
- Limited impact of parking mitigations
- Weekend growth outpaced weekdays; increase in social trip-taking on Blue Line

Breakdown of Sumner-diverted trips by mode

Total diverted trips: 40,000



T behavior changes

- Largest increases on rail on **weekends**

BL **+ 13%** *+5,000 pax*

OL **+ 23%** *+5,600 pax*

+ 41% *+3,700 pax*

- Ridership on transit serving Sumner-affected areas saw **increases above the rest of the system**

Weekday ridership changes

BL **+ 7% (+3,600 pax)**

OL **+ 4% (+1,700 pax)**
State and points north

+ 17% (+1,700 pax)
Newburyport/Rockport

+ 3% (+555 pax)
111, 112, 114, 116, 117

SL **+ 2% (+229 pax)**
SL3

+ 72% (+350 pax)
East Boston ferry

Across both directions of travel. Compared to ridership numbers we would expect to see if the Sumner had not closed this summer.

Significant T service improvements

Increased **service**

- Blue Line – **more trains** (6-minute headways at peak)
- Orange Line – **more trains** (10-, 11-minute headways at peak)
- Ferry – two additional ferry lines

Improved transit **reliability**

- Blue Line – reduction of dropped trips by 12.6 percentage points
- Orange Line – reduction of dropped trips by 1.8 percentage points

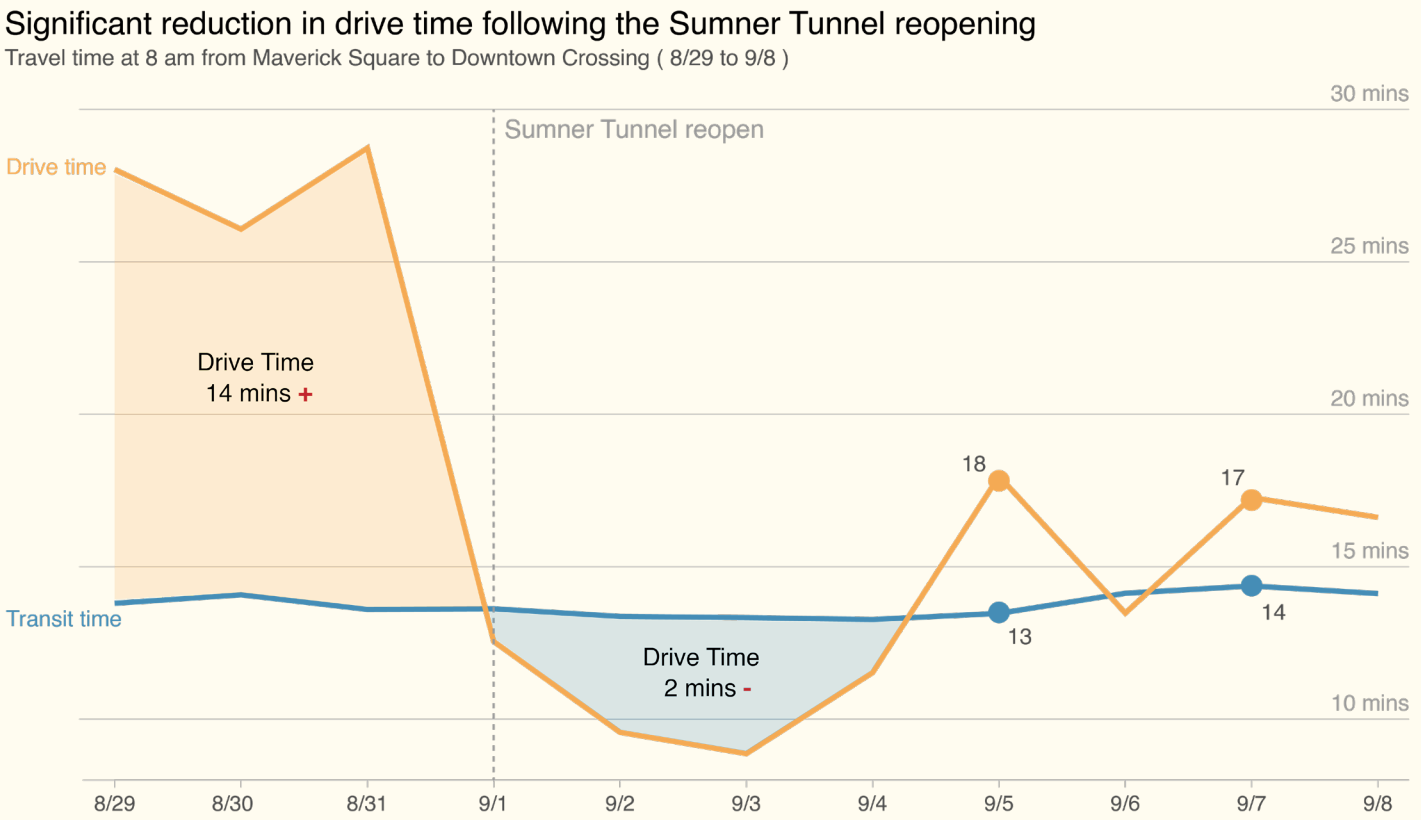
(Red Line dropped trips increased 0.8 percentage points)

T more competitive with driving

Increase in congestion made driving more difficult

- Longer travel times to downtown
- More variable, less predictable travel times

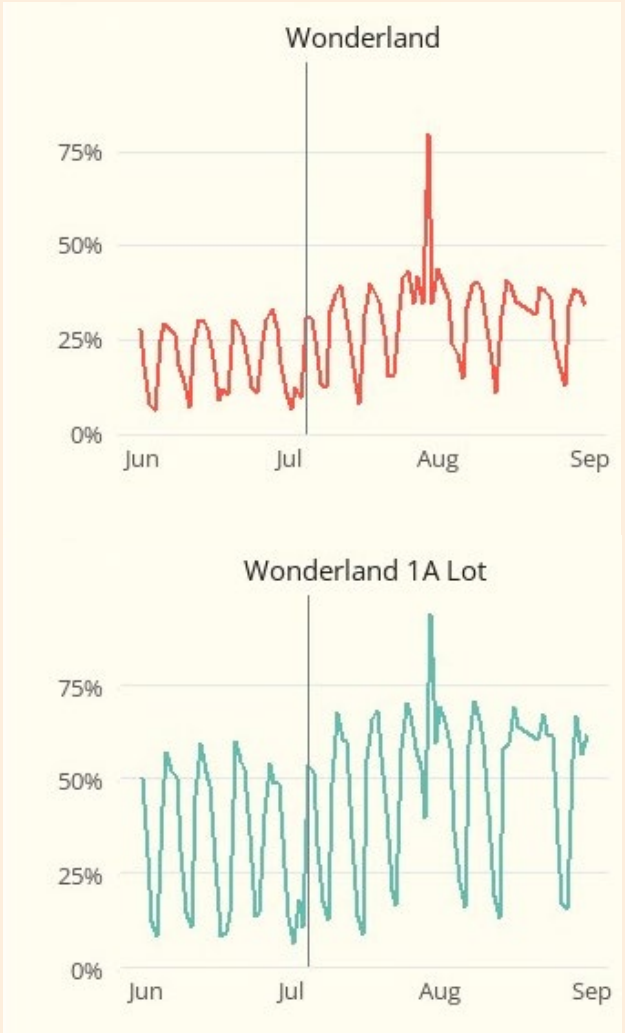
From East Boston, AM peak to downtown on the Blue Line took ***half as long*** as driving – **14 minutes by Blue Line versus 28 by car**.



Parking usage

- Some Blue Line parking went up where ridership went down: Orient Heights and Wonderland saw **ridership drop more than parking increased**
- Commuter Rail saw more parking at free lots, but **limited increase at reduced-price lots**
- Not all lots have data available

Percentage of capacity used at Blue Line parking lots



Post-reopening ridership

- Largest decreases on rail and ferry on **weekends**

BL **- 15%**
-6,700 pax

OL **+ <1%**
+100 pax

- 2%
-200 pax

- 74%
-900 pax

Weekday ridership changes

BL **- 3% (-1,700 pax)**

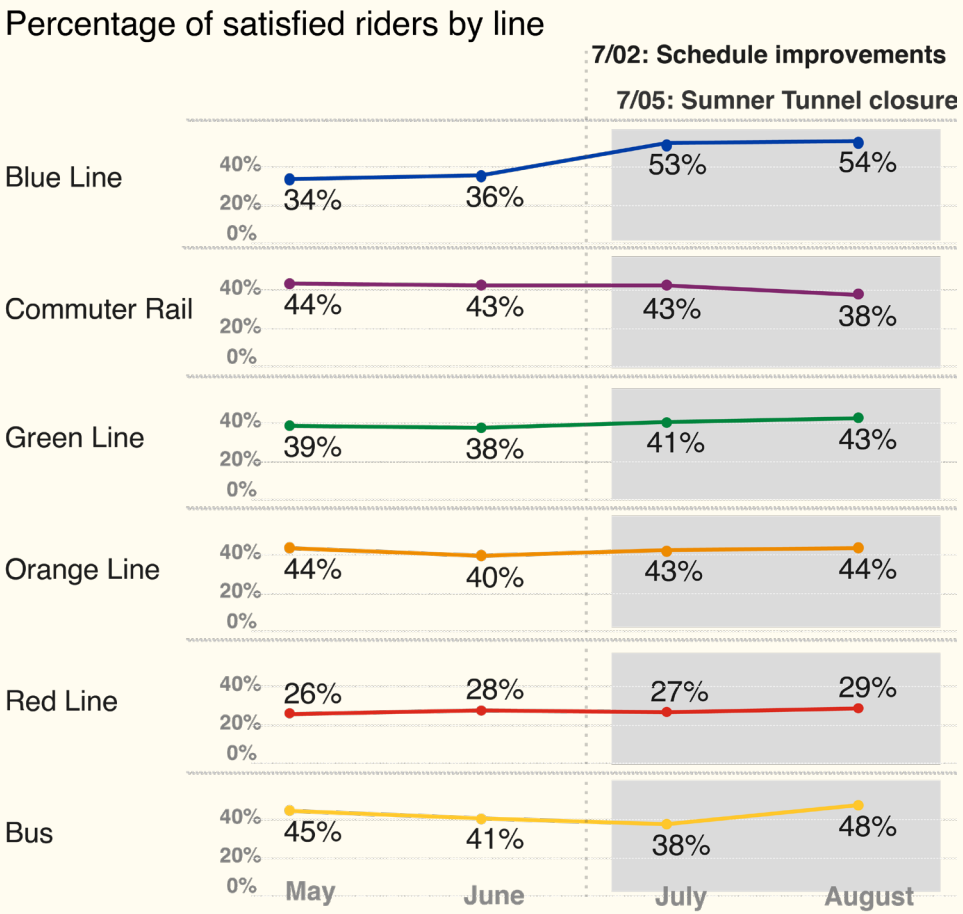
OL **+ 14% (+5,000 pax)**
Haymarket and points north

+ <1% (+100 pax)
Newburyport/Rockport

- 58% (-800 pax)
East Boston, Lynn, and Winthrop ferries

Across both directions of travel. Compared to ridership numbers observed during July-August 2023 during the Sumner closure.

Customer satisfaction



- Small sample size (Blue Line *n* = ~100)
- Slight increases across the system (except Commuter Rail)
- Largest percentage-point bump for Blue Line

Questions?