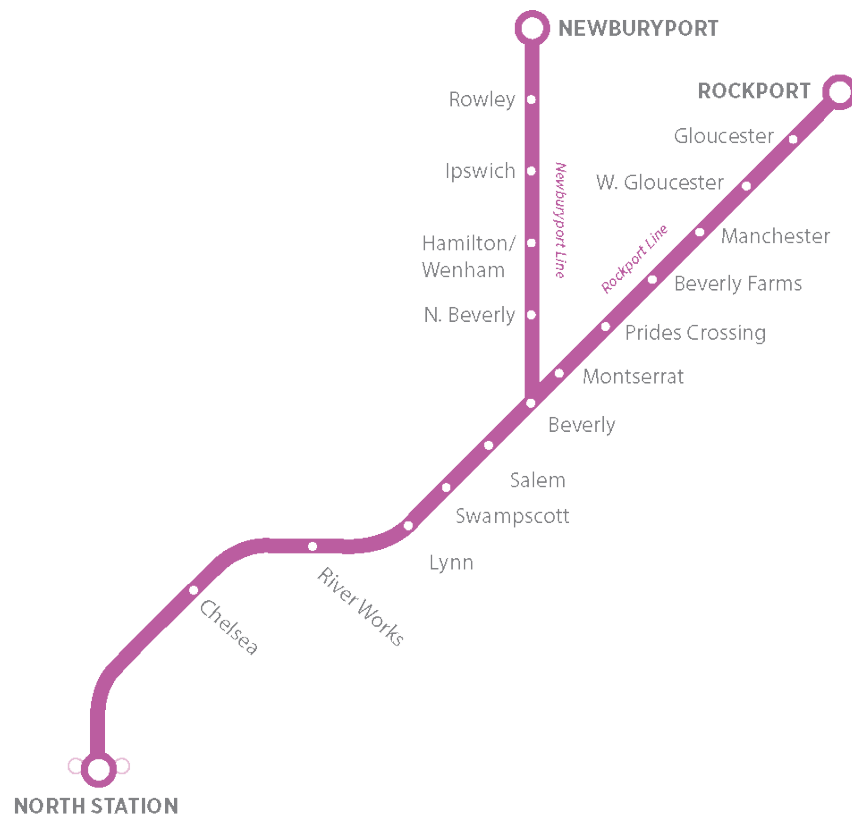


E Rail Vision Results

The Rail Vision analysis found that increasing service at Lynn increases projected ridership. This growth is strongest during peak periods towards Boston, but also occurs in off-peak periods and in both directions.

The MBTA Rail Vision, which concluded in Spring 2020, assessed how the Commonwealth could better leverage the Commuter Rail system to meet its mobility and economic development needs. Lynn is well positioned on the trunk section of the Newburyport and Rockport Lines of the Commuter Rail system, connecting Lynn to downtown Boston and other North Shore communities (Figure E-1). Three Commuter Rail stations along the Newburyport/Rockport Line serve Lynn – two within the city itself (Central Square-Lynn Station and River Works Station) and one in Swampscott, near neighborhoods in East Lynn. Existing Newburyport/Rockport Line service provides access to the Boston terminal in 20-25 minutes.

The Rail Vision evaluated six systemwide service alternatives, testing a number of different service characteristics including stopping patterns, peak and off-peak frequencies, and fares. The following subsections provide more detail about the alternatives tested, the service characteristics at the Lynn stations, and the resulting projected changes in ridership.

Figure E-1 Map of Newburyport/Rockport Line

Rail Vision Alternatives

Each of the Rail Vision alternatives provided high-frequency service throughout the day to Lynn, in both the inbound and outbound directions. The following subsections identify the service patterns, frequencies, and travel times at each of the stations serving Lynn under existing conditions and in each of the Rail Vision alternatives.

Existing Conditions

As described in Chapter 2, service is focused on peak hour, peak direction travel, aimed at providing access to downtown Boston for traditional commuters. While some Newburyport/Rockport Line express trains bypass Central Square-Lynn Station in the morning and evening rush hours, a rush hour train stops there approximately every 15-30 minutes. Midday and off-peak service is less frequent, stopping at Central Square-Lynn Station approximately every 30-60 minutes. Travel between Central Square-Lynn Station and North Station takes approximately 21-23 minutes.

All trains that stop at Central Square-Lynn Station also stop at Swampscott Station, for frequencies of approximately every 15-30 minutes during peak periods and every 30-60 minutes during off-peak periods. Travel between Swampscott Station and North Station takes approximately 25-27 minutes.

River Works Station, along the western boundary of Lynn, is only open to employees and visitors at General Electric's location there. All stops at this station are flag stops, meaning the train will only stop at the station if a passenger requests to board or alight. Most peak period trains that stop at Central Square-Lynn Station also stop at River Works Station, but off-peak service is more limited. Travel between River Works Station and North Station takes approximately 20-21 minutes.

Figure A-2 shows the Newburyport/Rockport Line schedule as of Fall 2019.

Figure E-2 Newburyport/Rockport Line Schedule, Effective October 21, 2019

Monday to Friday

| Inbound to Boston | | | AM | | | | | | | | | | | | | | | | | | | | PM | | | | | | | | | | | | | | | | | | | |
|-------------------|------------------------|---------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|---|--|--|--|--|--|
| ZONE | STATION | TRAIN # | 100 | 150 | 152 | 102 | 154 | 104 | 156 | 106 | 158 | 160 | 192 | 108 | 162 | 110 | 164 | 112 | 166 | 114 | 168 | 116 | 170 | 118 | 172 | 194 | 120 | 174 | 122 | 176 | 124 | 178 | 126 | 180 | 128 | 182 | | | | | | |
| Status Allowed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Rockport | 6 | 4:55 | - | - | 5:48 | - | 6:30 | - | 7:10 | - | - | - | 8:15 | - | 9:20 | - | 11:00 | - | 12:30 | - | 1:50 | - | 3:30 | - | - | 5:03 | - | 5:45 | - | 7:15 | - | 8:45 | - | 10:30 | - | | | | | | |
| 7 | Gloucester | 6 | 5:02 | - | - | 5:55 | - | 6:37 | - | 7:17 | - | - | - | 8:22 | - | 9:27 | - | 11:07 | - | 12:37 | - | 1:57 | - | 3:37 | - | - | 5:10 | - | 5:52 | - | 7:22 | - | 8:52 | - | 10:37 | - | | | | | | |
| 7 | West Gloucester | 6 | 5:08 | - | - | 6:01 | - | 6:43 | - | 7:23 | - | - | - | 8:28 | - | 9:33 | - | 11:13 | - | 12:43 | - | 2:03 | - | 3:43 | - | - | 5:17 | - | 5:58 | - | 7:28 | - | 8:58 | - | 10:43 | - | | | | | | |
| 6 | Manchester | 6 | 5:15 | - | - | 6:08 | - | 6:50 | - | 7:30 | - | - | - | 8:35 | - | 9:40 | - | 11:20 | - | 12:50 | - | 2:10 | - | 3:50 | - | - | 5:24 | - | 6:05 | - | 7:35 | - | 9:05 | - | 10:50 | - | | | | | | |
| 5 | Beverly Farms | 6 | 5:22 | - | - | 6:15 | - | 6:57 | - | 7:37 | - | - | - | 8:42 | - | 9:47 | - | 11:27 | - | 12:57 | - | 2:17 | - | 3:57 | - | - | 5:31 | - | 6:12 | - | 7:42 | - | 9:12 | - | 10:57 | - | | | | | | |
| 5 | Prides Crossing | 6 | - | - | - | 6:17 | - | 6:59 | - | 7:39 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | | | | |
| 4 | Montserrat | 6 | 5:28 | - | - | 6:22 | - | 7:04 | - | 7:44 | - | - | - | 8:48 | - | 9:53 | - | 11:33 | - | 1:03 | - | 2:23 | - | 4:03 | - | - | 5:37 | - | 6:18 | - | 7:48 | - | 9:18 | - | 11:03 | - | | | | | | |
| 8 | Newburyport | 6 | - | 5:20 | 5:50 | - | 6:25 | - | 7:00 | - | 7:30 | 7:55 | - | - | 9:15 | - | 10:00 | - | 11:40 | - | 1:10 | - | 2:55 | - | 4:42 | - | - | 5:48 | - | 7:08 | - | 8:09 | - | 9:22 | - | 11:03 | - | | | | | |
| 7 | Rowley | 6 | - | 5:25 | 5:55 | - | 6:30 | - | 7:05 | - | 7:35 | 8:00 | - | - | 9:20 | - | 10:05 | - | 11:45 | - | 1:15 | - | 3:00 | - | 4:47 | - | - | 5:53 | - | 7:13 | - | 8:14 | - | 9:27 | - | 11:08 | - | | | | | |
| 6 | Ipswich | 6 | - | 5:31 | 6:02 | - | 6:37 | - | 7:12 | - | 7:42 | 8:07 | - | - | 9:26 | - | 10:11 | - | 11:51 | - | 1:21 | - | 3:06 | - | 4:53 | - | - | 5:59 | - | 7:19 | - | 8:20 | - | 9:33 | - | 11:14 | - | | | | | |
| 5 | Hamilton/Wenham | 6 | - | 5:37 | 6:08 | - | 6:43 | - | 7:18 | - | 7:48 | 8:13 | - | - | 9:32 | - | 10:17 | - | 11:57 | - | 1:27 | - | 3:12 | - | 4:59 | - | - | 6:12 | - | 7:25 | - | 8:26 | - | 9:39 | - | 11:20 | - | | | | | |
| 5 | North Beverly | 6 | - | 5:41 | 6:13 | - | 6:48 | - | 7:23 | - | 7:53 | 8:18 | - | - | 9:36 | - | 10:21 | - | 12:01 | - | 1:31 | - | 3:16 | - | 5:03 | - | - | 6:17 | - | 7:29 | - | 8:30 | - | 9:43 | - | 11:24 | - | | | | | |
| 4 | Beverly | 6 | 5:33 | 5:47 | 6:18 | 6:27 | 6:53 | 7:09 | 7:28 | 7:49 | 7:58 | 8:24 | 8:33 | 8:54 | 9:42 | 9:58 | 10:27 | 11:38 | 12:07 | 1:08 | 1:37 | 2:28 | 3:21 | 4:08 | 5:10 | 5:32 | 5:42 | 6:20 | 6:25 | 7:35 | 7:53 | 8:36 | 9:23 | 9:49 | 11:08 | 11:30 | | | | | | |
| 3 | Salem | 6 | 5:37 | 5:51 | 6:22 | 6:31 | 6:57 | 7:13 | 7:33 | 7:53 | 8:02 | 8:28 | 8:37 | 8:58 | 9:46 | 10:02 | 10:31 | 11:42 | 12:11 | 1:12 | 1:41 | 2:32 | 3:26 | 4:12 | 5:15 | 5:36 | 5:49 | 6:24 | 6:29 | 7:39 | 7:57 | 8:40 | 9:27 | 9:53 | 11:12 | 11:34 | | | | | | |
| 3 | Swampscott | 6 | 5:45 | 5:59 | - | 6:39 | 7:05 | - | 7:41 | 8:01 | 8:10 | - | - | 8:45 | 9:54 | 10:10 | 10:39 | 11:52 | 12:19 | 1:20 | 1:49 | 2:40 | 3:34 | 4:20 | 5:23 | - | 5:58 | - | 6:37 | 7:47 | 8:05 | 8:48 | 9:35 | 10:01 | 11:20 | - | | | | | | |
| 2 | Lynn | 6 | 5:49 | 6:03 | - | 6:43 | 7:09 | - | 7:45 | - | 8:14 | - | 8:49 | 9:10 | 9:58 | 10:14 | 10:43 | 11:54 | 12:23 | 1:24 | 1:53 | 2:44 | 3:38 | 4:24 | 5:27 | - | 6:02 | - | 6:42 | 7:51 | 8:09 | 8:52 | 9:39 | 10:05 | 11:24 | - | | | | | | |
| 2 | River Works | 6 | 5:52 | 6:06 | - | 6:46 | 7:12 | - | 7:48 | - | 8:17 | - | 8:52 | - | 9:10 | 10:23 | 10:52 | 12:03 | 12:32 | 1:33 | 2:02 | 2:54 | 3:48 | 4:34 | 5:37 | - | 6:12 | - | 6:53 | 8:00 | 8:18 | 9:01 | 9:49 | 10:14 | 11:34 | - | | | | | | |
| 1A | Chelsea/Bellingham Sq. | 6 | 5:59 | 6:13 | - | 6:53 | 7:19 | - | 7:55 | - | 8:24 | - | 8:59 | 9:19 | 10:07 | 10:23 | 10:52 | 12:03 | 12:32 | 1:33 | 2:02 | 2:54 | 3:48 | 4:34 | 5:37 | - | 6:12 | - | 6:53 | 8:00 | 8:18 | 9:01 | 9:49 | 10:14 | 11:34 | - | | | | | | |
| 1A | North Station | 6 | 6:12 | 6:25 | 6:49 | 7:06 | 7:31 | 7:41 | 8:08 | 8:23 | 8:36 | 8:55 | 9:11 | 9:32 | 10:18 | 10:35 | 11:03 | 12:15 | 12:43 | 1:45 | 2:13 | 3:06 | 3:59 | 4:46 | 5:50 | 6:02 | 6:24 | 6:50 | 7:05 | 8:11 | 8:30 | 9:12 | 10:01 | 10:25 | 11:46 | 12:00 | | | | | | |

Trains in purple box indicate peak period trains.

Monday to Friday

| Outbound from Boston | | | AM | | | | | | | | | | | | | | | | PM | | | | | | | | | | | | | | | | AM | | | |
|----------------------|------------------------|---------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--|--|--|
| ZONE | STATION | TRAIN # | 153 | 101 | 191 | 155 | 103 | 157 | 105 | 159 | 107 | 161 | 109 | 163 | 111 | 165 | 113 | 115 | 167 | 193 | 117 | 169 | 119 | 171 | 173 | 121 | 175 | 123 | 177 | 125 | 179 | 127 | 181 | 129 | 183 | | | |
| | Bikes Allowed | | 6:26 | 6:39 | 7:08 | 7:40 | 7:50 | 8:10 | 8:35 | 9:40 | 10:35 | 11:20 | 12:00 | 1:20 | 1:50 | 3:15 | 3:30 | 4:15 | 4:30 | 4:40 | 5:00 | 5:15 | 5:30 | 5:40 | 6:05 | 6:25 | 6:45 | 7:15 | 7:52 | 8:45 | 9:30 | 10:20 | 10:50 | 12:10 | 12:15 | | | |
| 1A | North Station | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3:41 | 4:26 | - | 4:51 | - | 5:26 | - | 5:51 | 6:16 | 6:36 | 6:56 | 7:26 | 8:03 | 8:56 | 9:41 | 10:31 | 11:01 | 12:21 | 12:26 | | | |
| 2 | Chelsea/Bellingham Sq. | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3:49 | 4:34 | - | 5:00 | - | 5:35 | - | 5:59 | - | 6:44 | 7:04 | 7:33 | - | - | - | 10:38 | - | - | | | | |
| 2 | River Works | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2:08 | 3:34 | 3:49 | 4:34 | - | 5:00 | - | 5:35 | - | 6:02 | 6:25 | 6:47 | 7:07 | 7:36 | 8:12 | 9:05 | 9:50 | 10:41 | 11:10 | | | |
| 2 | Lynn | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2:11 | 3:37 | 3:51 | 4:37 | - | 5:05 | - | 5:40 | - | 6:07 | 6:30 | 6:52 | 7:12 | 7:41 | 8:17 | 9:10 | 9:55 | 10:46 | 11:15 | | | |
| 3 | Swampscott | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2:16 | 3:42 | 3:56 | 4:42 | - | 5:05 | - | 5:40 | - | 6:07 | 6:30 | 6:52 | 7:12 | 7:41 | 8:17 | 9:10 | 9:55 | 10:46 | 11:15 | | | |
| 3 | Salem | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2:23 | 3:49 | 4:03 | 4:49 | 4:56 | 5:12 | 5:26 | 5:47 | 5:56 | 6:14 | 6:37 | 6:59 | 7:19 | 7:48 | 8:24 | 9:17 | 10:02 | 10:53 | 11:22 | | | |
| 4 | Beverly | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2:23 | 3:49 | 4:03 | 4:49 | 4:56 | 5:12 | 5:26 | 5:47 | 5:56 | 6:14 | 6:37 | 6:59 | 7:19 | 7:48 | 8:24 | 9:17 | 10:02 | 10:53 | 11:22 | | | |
| 4 | Beverly | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2:23 | 3:49 | 4:03 | 4:49 | 4:56 | 5:12 | 5:26 | 5:47 | 5:56 | 6:14 | 6:37 | 6:59 | 7:19 | 7:48 | 8:24 | 9:17 | 10:02 | 10:53 | 11:22 | | | |
| 5 | North Beverly | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2:27 | 3:54 | 4:07 | 4:53 | 5:00 | 5:16 | 5:30 | 5:51 | 6:00 | 6:18 | 6:41 | 7:03 | 7:24 | 7:52 | 8:28 | 9:21 | 10:06 | 10:57 | 11:26 | | | |
| 5 | North Beverly | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2:27 | 3:54 | 4:07 | 4:53 | 5:00 | 5:16 | 5:30 | 5:51 | 6:00 | 6:18 | 6:41 | 7:03 | 7:24 | 7:52 | 8:28 | 9:21 | 10:06 | 10:57 | 11:26 | | | |
| 5 | Hamilton/Wenham | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3:59 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 5 | Hamilton/Wenham | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3:59 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 6 | Ipswich | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 6 | Ipswich | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 7 | Rowley | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:09 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 7 | Rowley | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:09 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 8 | Newburyport | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:16 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 8 | Newburyport | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:16 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 8 | Newburyport | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:16 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 4 | Montserrat | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:25 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 4 | Montserrat | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:25 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 5 | Prides Crossing | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:25 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 5 | Prides Crossing | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:25 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 5 | Beverly Farms | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:25 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 5 | Beverly Farms | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:25 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 6 | Manchester | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:25 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 6 | Manchester | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:25 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 7 | West Gloucester | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:31 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 7 | West Gloucester | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:31 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 7 | Gloucester | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:38 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 7 | Gloucester | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:38 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 8 | Rockport | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 8 | Rockport | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4:50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |

Trains in purple box indicate peak period trains.

Saturday & Sunday

| Inbound to Boston | | | AM | | | | | | | | PM | | | | | | | |
|-------------------|------------------------|------------------|------|------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|--|--|--|
| ZONE | STATION | SATURDAY TRAIN # | 1100 | 1150 | 1102 | 1152 | 1104 | 1154 | 1106 | 1156 | 1108 | 1158 | 1110 | 1160 | 1112 | | | |
| | | SUNDAY TRAIN # | 2100 | 2150 | 2102 | 2152 | 2104 | 2154 | 2106 | 2156 | 2108 | 2158 | 2110 | 2160 | 2112 | | | |
| Bikes Allowed | | | | 🚲 | 🚲 | 🚲 | 🚲 | 🚲 | 🚲 | 🚲 | 🚲 | 🚲 | 🚲 | 🚲 | 🚲 | | | |
| 8 | Rockport | 🚲 | 7:00 | - | 10:00 | - | 12:00 | - | 2:00 | - | 5:10 | - | 7:30 | - | 10:00 | | | |
| 7 | Gloucester | 🚲 | 7:07 | - | 10:07 | - | 12:07 | - | 2:07 | - | 5:17 | - | 7:37 | - | 10:07 | | | |
| 7 | West Gloucester | 🚲 | 7:13 | - | 10:13 | - | 12:13 | - | 2:13 | - | 5:23 | - | 7:43 | - | 10:13 | | | |
| 6 | Manchester | 🚲 | 7:20 | - | 10:20 | - | 12:20 | - | 2:20 | - | 5:30 | - | 7:50 | - | 10:20 | | | |
| 5 | Beverly Farms | 🚲 | 7:25 | - | 10:25 | - | 12:25 | - | 2:25 | - | 5:35 | - | 7:55 | - | 10:25 | | | |
| 4 | Montserrat | 🚲 | 7:31 | - | 10:31 | - | 12:31 | - | 2:31 | - | 5:41 | - | 8:01 | - | 10:31 | | | |
| 3 | Newburyport | 🚲 | - | 8:52 | - | 10:52 | - | 12:52 | - | 2:52 | - | 5:52 | - | 9:00 | - | | | |
| 7 | Wesley | 🚲 | - | 8:58 | - | 10:58 | - | 12:58 | - | 2:58 | - | 5:58 | - | 9:06 | - | | | |
| 6 | Ipswich | 🚲 | - | 9:05 | - | 11:05 | - | 1:05 | - | 3:05 | - | 6:05 | - | 9:13 | - | | | |
| 5 | Hamilton/Wenham | 🚲 | - | 9:12 | - | 11:12 | - | 1:12 | - | 3:12 | - | 6:12 | - | 9:20 | - | | | |
| 5 | North Beverly | 🚲 | - | 9:15 | - | 11:15 | - | 1:15 | - | 3:15 | - | 6:15 | - | 9:23 | - | | | |
| 4 | Beverly | 🚲 | 7:36 | 9:20 | 10:36 | 11:20 | 12:36 | 1:20 | 2:36 | 3:20 | 5:46 | 6:20 | 8:06 | 9:28 | 10:36 | | | |
| 3 | Salem | 🚲 | 7:40 | 9:24 | 10:40 | 11:24 | 12:40 | 1:24 | 2:40 | 3:24 | 5:50 | 6:24 | 8:10 | 9:32 | 10:40 | | | |
| 3 | Swampscott | 🚲 | 7:46 | 9:30 | 10:46 | 11:30 | 12:46 | 1:30 | 2:46 | 3:30 | 5:56 | 6:30 | 8:16 | 9:38 | 10:46 | | | |
| 2 | Lynn | 🚲 | 7:50 | 9:34 | 10:50 | 11:34 | 12:50 | 1:34 | 2:50 | 3:34 | 6:00 | 6:34 | 8:20 | 9:42 | 10:50 | | | |
| 1A | Chelsea/Bellingham Sq. | 🚲 | 7:59 | 9:44 | 10:59 | 11:44 | 12:59 | 1:44 | 2:59 | 3:44 | 6:09 | 6:44 | 8:29 | 9:52 | 10:59 | | | |
| 1A | North Station | 🚲 | 8:12 | 9:56 | 11:12 | 11:56 | 1:12 | 1:56 | 3:12 | 3:56 | 6:22 | 6:56 | 8:42 | 10:04 | 11:12 | | | |

Alternative 1: Higher Frequency Commuter Rail

Alternative 1 keeps the existing service pattern but increases frequency, particularly during off-peak periods. All trains serve all stations in the trunk of the Newburyport/Rockport Line, between Beverly and North Station. In Alternative 1, trains stop four times per hour (approximately every 15 minutes) during peak periods and two times per hour (approximately every 30 minutes) during off-peak periods, in both directions, at all three stations serving Lynn. In this alternative, travel to North Station takes approximately 27 minutes from Swampscott Station, 24 minutes from Central Square-Lynn Station, and 19 minutes from River Works Station.

Alternative 2: Regional Rail to Key Stations (Diesel)

Alternative 2 focuses service improvements at key stations, and considers Central Square-Lynn as a key station. Two trains per hour stop at all stations on the trunk of the Newburyport/Rockport Line, while two additional trains per hour stop at key stations on the trunk of the Newburyport/Rockport Line. In total, trains stop four times per hour (approximately every 15 minutes) at Central Square-Lynn Station and two times per hour (approximately every 30 minutes) at Swampscott Station and River Works Station, in both directions, throughout the entire day. In this alternative, travel to North Station takes approximately 25-27 minutes from Swampscott Station, 17-23 minutes from Central Square-Lynn Station, and 17-19 minutes from River Works Station.

Alternative 3: Regional Rail to Key Stations (Electric)

Alternative 3 offers a similar service plan as Alternative 2, but operates it with electrified trains. Frequencies are the same as in Alternative 2, but travel to North Station is faster, and takes approximately 22-23 minutes from Swampscott Station, 16-20 minutes from Central Square-Lynn Station, and 16-17 minutes from River Works Station.

Alternative 4: Urban Rail (Diesel)

Alternative 4 focuses service improvements at inner core stations. This alternative considers all three stations serving Lynn as inner core stations. Four trains per hour stop at all stations on the trunk of the Newburyport/Rockport Line (approximately every 15 minutes), throughout the entire day. In this alternative, travel to North Station takes approximately 29 minutes from Swampscott Station, 26 minutes from Central Square-Lynn Station, and 21 minutes from River Works Station.

Alternative 5: Urban Rail (Electric)

Alternative 5 offers a similar service plan as Alternative 4, but operates half of the service with electrified trains. Frequencies are the same as in Alternative 4, but travel to North Station is faster on the electrified service, so travel takes approximately 26-29 minutes from Swampscott Station, 22-26 minutes from Central Square-Lynn Station, and 19-21 minutes from River Works Station. Rail Vision also evaluated a variation of Alternative 5 that assumed lower urban rail fares (\$3.40 per trip within the inner core).

Alternative 6: Full Transformation

Alternative 6 focuses service improvements at all stations. It operates a service similar to Alternative 1 on the Newburyport/Rockport Line, with four additional trains per hour that only serve the trunk stations and connect through the North South Rail Link tunnel to serve South Station, Back Bay, and other southern stations. In total, trains stop eight times per hour (approximately every 7.5 minutes) at all trunk stations on the Newburyport/Rockport Line (including all three stations serving Lynn), throughout the entire day. In this alternative, travel to North Station takes approximately 26 minutes from Swampscott Station, 22 minutes from Central Square-Lynn Station, and 19 minutes from River Works Station.

Summary of Rail Vision Alternatives

Table E-1 compares the service frequencies across the six Rail Vision alternatives for each of the three stations serving Lynn. All frequencies included in Table E-1 represent typical frequencies in both directions.

All six alternatives include trains stopping at least four times per hour (approximately every 15 minutes) during peak periods and at least two times per hour (approximately every 30 minutes) during off-peak periods at Central Square-Lynn Station.

Four of the six alternatives include trains stopping at least four times per hour (approximately every 15 minutes) all day at Swampscott Station and River Works Station. The remaining two alternatives focus on key stations, and provide service every 30 minutes at those stations throughout the entire day.

Table E-1 Summary of Rail Vision Typical Frequencies (in minutes)

| Alternative | Swampscott | Central Square-Lynn | River Works |
|----------------------|------------------|---------------------|------------------|
| Fall 2019 (Existing) | 15-30 (Peak) | 15-30 (Peak) | 15-30 (Peak) |
| | 30-60 (Off-Peak) | 30-60 (Off-Peak) | 30-60 (Off-Peak) |
| Alternative 1 | 15 (Peak) | 15 (Peak) | 15 (Peak) |
| | 30 (Off-Peak) | 30 (Off-Peak) | 30 (Off-Peak) |
| Alternative 2 | 30 | 15 | 30 |
| Alternative 3 | 30 | 15 | 30 |
| Alternative 4 | 15 | 15 | 15 |
| Alternative 5 | 15 | 15 | 15 |
| Alternative 6 | 7.5 | 7.5 | 7.5 |

Table E-2 compares the travel times across the six Rail Vision alternatives for each of the three stations serving Lynn. All travel times included in Table E-2 represent typical frequencies in both directions.

Most of the alternatives provide travel times similar to the existing travel times. Alternatives 2 and 3 provide the greatest travel time savings with express trains that do not make any stops between Lynn and North Station. However, since Lynn is close to the downtown terminus (North Station), providing express service has a smaller impact on travel times to and from Lynn than on travel times to and from stations further north on the line. Providing high-frequency service in both directions also limits the potential for travel time improvements, as trains may need to wait for other trains to pass in the opposite direction over segments of single track.

Table E-2 Summary of Rail Vision Typical Travel Times to and from North Station (in minutes)

| Alternative | Swampscott | Central Square-Lynn | River Works |
|----------------------|------------|---------------------|-------------|
| Fall 2019 (Existing) | 25-27 | 21-23 | 19-20 |
| Alternative 1 | 27 | 24 | 19 |
| Alternative 2 | 25-27 | 21-23 (local) | 17-19 |
| | | 17-19 (express) | |
| Alternative 3 | 22-23 | 19-20 (local) | 16-17 |
| | | 16 (express) | |
| Alternative 4 | 29 | 26 | 21 |
| Alternative 5 | 26-29 | 22-26 | 19-21 |
| Alternative 6 | 26 | 22 | 19 |

Ridership Projections and Key Findings

Based on the service parameters defined in the previous section, CTPS projected future 2040 ridership for each alternative, along with future 2040 ridership without Rail Vision improvements (the “No-Build”). The projections also account for other factors that varied throughout the alternatives, such as assumptions about parking availability and the service provided at other stations.

Table E-3 and Table E-4 summarize the projected daily boardings for each alternative in the inbound and outbound directions, respectively. CTPS only projected daily boardings at the station level for select stations in each alternative – this included Central Square-Lynn in all alternatives, but Swampscott and River Works in Alternatives 4-6 only.

Based on the data shown in Tables E-3 and E-4, CTPS projects ridership to grow in all alternatives (for stations with projections). Projected ridership growth is stronger in the inbound direction than in the outbound direction, although all alternatives do have growth in outbound boardings due to the high frequencies provided in both directions. In the inbound direction, the majority of the growth occurs during the AM Peak period, although some of the growth does occur outside of the typical commuting patterns.

Reducing fares also results in stronger projected ridership, demonstrated in the comparison between Alternative 5 and Alternative 5 (with the lower urban rail fares). For example, CTPS projected 1,430 daily boardings (combined inbound and outbound) at Central Square-Lynn in Alternative 5. With reduced fares, this projection increased by over 27%, to 1,820 daily boardings.

Table E-3 Rail Vision Projected Daily Inbound Boardings

| Alternative | Swampscott | Central Square-Lynn | River Works |
|--|--------------|---------------------|--------------|
| 2018 (Existing) | 830 | 370 | 10 |
| No-Build (2040) | 900 | 480 | 10 |
| Alternative 1 (2040) | Not provided | +180 | Not provided |
| Alternative 2 (2040) | Not provided | +330 | Not provided |
| Alternative 3 (2040) | Not provided | +520 | Not provided |
| Alternative 4 (2040) | +490 | +520 | +20 |
| Alternative 5 (2040) | +470 | +580 | +30 |
| Alternative 5 (2040) (Modified Fares) | +630 | +920 | +40 |
| Alternative 6 (2040) | +1,470 | +130 | +270 |

Table E-4 Rail Vision Projected Daily Outbound Boardings

| Alternative | Swampscott | Central Square-Lynn | River Works |
|--|--------------|---------------------|--------------|
| 2018 (Existing) | 60 | 180 | 20 |
| No-Build (2040) | 70 | 190 | 20 |
| Alternative 1 (2040) | Not provided | +140 | Not provided |
| Alternative 2 (2040) | Not provided | +70 | Not provided |
| Alternative 3 (2040) | Not provided | +90 | Not provided |
| Alternative 4 (2040) | +100 | +240 | +20 |
| Alternative 5 (2040) | +80 | +180 | +20 |
| Alternative 5 (2040) (Modified Fares) | +100 | +230 | +20 |
| Alternative 6 (2040) | +760 | +320 | +270 |

All values in Tables E-3 and E-4 are rounded to the nearest 10. Projected changes in daily boardings are compared to the No-Build.