FINDINGS AND RECOMMENDATIONS
Overview

▪ Funded through the Commonwealth Community Compact to address transportation challenges along the Route 3 corridor

▪ Includes eight communities:
  
  Bedford, Billerica, Burlington, Chelmsford, Lexington, Lowell, Tewksbury and Tyngsborough
Study Phases and Process

- Phase 1 - Existing Conditions Assessment
  - Task 1 - Existing Conditions Analysis
  - Task 2 – Presentation of Task 1 Findings and Development of Goals and Objectives

- Phase 2 - Evaluation of Alternatives, Recommendations and Implementation
  - Task 3 - Identify Potential Corridors for New or Expanded Transit Service
  - Task 4 - Identify Barriers to New or Expanded Transit Service
    - MBTA / RTA Financial Review
  - Task 5 – Strategy Evaluation, Recommendations and Implementation Plan
Survey Results

Responses: Total: 20

- 18 Businesses, 2 Municipalities
- Question: How many employees do you have?
  - < 10: 8 responses (40%)
  - > 10-20: 5 responses (25%)
  - > 20-50: 3 responses (15%)
  - > 50: 4 responses (20%)
- Question: How many employees reside in Middlesex 3 Study Area?
  - 49% of employees reside in study area

![Where do Employees Reside](image-url)
Survey Results (Continued)

Question: When do employees arrive for work?

- 6:00-9:00 AM: 65%
- 9:00 AM-12:00 PM: 8%
- 12:00 PM-3:00 PM: 21%
- 3:00 PM-6:00 PM: 1%
- 6:00 PM-9:00 PM: 3%
- 9:00 PM-12:00 AM: 1%

Question: How do employees get to/from work?

- Drive Alone: 85%
- Carpool: 0%
- Public Transit: 2%
- Company Shuttle: 1%
- TMA Shuttle: 0%
- Walk/Bicycle: 10%
- Other: 0%
Survey Results (Continued)

Question: Does your business provide any transportation assistance, incentives or services for employees?

- 2 Yes Responses:
  - **Lexx Restaurant**: Uber to/from Alewife
  - **Innosight**: Onsite Shuttle/ 128 Business Council Shuttle

Question: Has your business been affected by lack of transportation options?

- 20% Responded “Yes”
  - **Lexx Restaurant** routinely has open positions that cannot be filled due to insufficient public transportation options.
  - **Lane Bryant**: issues with lack of transportation service for employees in late evenings
Survey Results (Continued)

Question: Please estimate the number of employees who have quit in the past year due to transportation issues

Question: How would you rate employee parking availability at your site?

# of Employees lost due to lack of transportation options

- 0: 78%
- 1-5: 17%
- >5: 6%

Employee parking availability

- Excellent, there is usually a surplus of parking: 52%
- Adequate: 29%
- Sometimes problematic: 14%
- Poor, there is a chronic shortage of spaces: 5%
Recommendations

- Public Private Partnerships
- Regional Facilities and Opportunities
- Identification of New/Expanded Service
  - Facilitation of Improved Transit Service between Burlington and Lowell

Implementation Categories:
- Short Term Recommendations (1-3 years)
- Intermediate Recommendations (3-5 years)
- Long Term Recommendations (> 5 years)
Regional Facilities

Park and Ride Lots

- Tyngsborough expansion of MassDOT P&R Lot on Route 113
  - Implementation Time Frame: Intermediate
- Identify/study new P&R Lot near Route 129 interchange with Route 3 and Middlesex Turnpike in Billerica
  - Implementation Time Frame: Intermediate
- Average Cost of Park and Ride Lot expansion: $15,000-$25,000/space

Regional Opportunities

- Addition of requirements for joining TMA and providing bicycle and pedestrian service in municipal permitting regulations
  - Example: Woburn requires project applicants to participate in TMA and Implement TDM programs
  - Implementation Time Frame: Short Term

- Participation in MassDOT Complete Streets Funding Program – State funds to construct pedestrian and bicycle facilities
  - 4 Middlesex 3 communities have been awarded funding for bike/ped improvement projects.
  - Implementation Time Frame: Short Term
Regional Facilities

▪ Boston Express service expansion
  ▪ Study additional service opportunities along Route 3 corridor
  ▪ Potential stop at future Burlington transit hub
  ▪ Implementation: Short Term
  ▪ Funding: Private
Public Private Partnerships

- TMA Shuttle service recommendations
  - Shuttle to Anderson/Woburn Commuter Rail Station from Burlington
  - Late night shuttle service between Lowell and Burlington
  - Implementation: Short Term
  - Potential funding source: CMAQ and employers

- Employer Subscription Service outside of TMA
Public Private Partnerships

- Municipal/Employer and Lyft/Uber partnership
  - Set parameters
    - Geography
    - Schedule of service
    - Set number of rides to limit non work/home trips
  - Ex. North Shore Community College – partnership with Uber for student discounted rides
- Potential to collaborate with LRTA
- Most widely used as a first mile/last mile connection
- Implementation: **Short Term**
- Funding Source: State Grants, Employer Subscription
Public Private Partnerships

- **Mobility Hub**: places of connectivity where different modes of transportation – from walking to transit – come together seamlessly and where there is an intensive concentration of working, living, shopping and/or playing
  - First/last mile connections
  - Proposed Locations to study:
    - Burlington Mall, Bedford Depot Park
  - Proponents – City/Town with public private partnerships for operations
  - City of Boston is developing neighborhood hubs as part of Go2030 Vision Plan. Boston MPO set aside funding in TIP for FFY 2021 to consider transit hubs.
  - Implementation Time Frame: **Long Term**
Recommendations for New/Expanded Service

Study extension of Route #17 to cover gap along Middlesex Road (est. 4 mi.)

- **Route 10 unchanged**
  - 4 additional directional route miles per trip – 8,465 one-way trips per year
  - 33,860 additional route miles per year
  - NTD 2014 $6.75/mi – estimated $228,600 cost per year

- **Route 10 truncated at Tyngsborough town line**
  - 1 additional directional route miles per trip – 8,465 one-way trips per year
  - 8,465 additional route miles per year
  - NTD 2014 $6.75/mi – estimated $57,000 cost per year

- Implementation Time Frame:
  - Short Term
Recommendations for New/Expanded Service

Study revision of Route #12 to cover gap along Main Street in Tewksbury (est. 3 mi.)

- No additional directional route miles
- Nominal additional annual cost
- Implementation Time Frame: Short Term
Recommendations for New/Expanded Service

Study Route 129 (Route 15) Revisions in Chelmsford (est. 1.5 mi)

- 1.5 additional directional route miles per trip – 6,040 one-way trips per year
- 9,060 additional route miles per year
- NTD 2014 $6.75/mi – estimated $61,200 cost per year
- Implementation Time Frame: Intermediate

Sources: LRTA, MassGIS, MassDOT, MassDEP, NMCOG
Recommendations for New/Expanded Service

Study LRTA #13 Billerica Route morning service to cover MBTA Route #350 (est. 3 mi.)

- 3 additional directional route miles per trip
- 2 one-way trips per day morning weekday
- 500 one-way trips per year
- 1,500 additional route miles per year
- NTD 2014 $6.75/mi – estimated $10,100 cost per year
- Implementation Time Frame: Short Term
Recommendations for New/Expanded Service

Study LRTA #14 Burlington Route night service

- 17 additional directional route miles per trip
- Proposed last inbound at 1:00 am (weekday)
  - Current last Inbound trip is at 8:00 pm weekday and 6:00 pm Saturday/holiday
- 10 additional trips/weekday
- 14 additional trips/Saturday
- 3,170 one-way trips per year
- 55,760 additional route miles per year
- NTD 2014 $6.75/mi – estimated $363,800 cost/year
- ADA Service – 1,640 hr/yr
- NTD 2014 $42.73/hr – estimated $70,100 cost per year
- Total cost $446,480 per year
- Implementation Time Frame: Long Term

Sources: LRTA, MassGIS, MassDOT, MassDEP, NMCOG
Recommendations for New/Expanded Service

New LRTA Service to Bedford VA Hospital and Middlesex Community College (est. 10.5 mi.)

- 22 additional directional route miles per trip – 2,510 one-way trips per year (weekday only)
- 55,220 additional route miles per year
- NTD 2014 $6.75/mi – estimated $372,700 cost per year
- Implementation Time Frame: Long Term
Municipal Transit Service

Study feasibility of improving Bedford Dash schedule and operating policy to better serve workers

Study coordination of operations between Burlington, Lexington and other regional transit services to enhance efficiency
  ◦ Overlapping service
  ◦ Schedule coordination
  ◦ Ability to transfer between systems
  ◦ Fare system study – interaction between different agencies
    ◦ Explore Universal Pass concept
Barriers to Service Expansion

- There is no mechanism for charging a community that is outside the RTA Service Area for transportation services.

- Communities within the RTA Service area are charged for the net cost of new transportation service. (Net cost = cost of new service less revenues collected on that route.)
Barriers to Service Expansion - Charter Service Prohibition

- Charter bus service is transportation provided for a fee by a Regional Transit Authority (RTA).

- Charter service is seen as unfair competition to private providers and is generally prohibited by the Federal Transit Administration (FTA) with few exceptions (government officials on official business, qualified human service organizations serving those with disabilities or very low income).
Barriers to Service Expansion - Federal Operating Funding

5307 – Urbanized Area Formula Program

- Provides grants for Capital Projects, Operating and Planning
- Provides operating assistance in areas with populations greater than 200,000
  - No more than 50% of cost of operation – between 76 and 100 buses in peak operation (LRTA)

Funds split among transit authorities serving each Urbanized Area (UZA)
Barriers to Service Expansion - ADA Paratransit Requirements

Transit Authorities are required to provide Americans with Disabilities Act (ADA), demand response service

LRTA strictly follows FTA guidelines

- ADA service is provided within ¾ miles of fixed route bus
- Time of service differs depending on hours of the bus route

MBTA provides broader ADA service

- ADA service is provided community-wide
- Time of service is from 5:00am to 1:00am
Next Steps/Implementation

▪ Middlesex 3 Coalition is scheduling focus group with area restaurant, retail and hotel businesses to assess demand

▪ Completion of Final Middlesex 3 Transportation Study Report

▪ Collaborate with LRTA and MBTA to further assess new service recommendations, finalize cost of new service, seek funding and implement

▪ Engage TMAs, Uber/Lyft, Boston Express, municipalities and area businesses to form partnerships for expanded evening service

▪ Study the feasibility of a Mobility/Transit Hub near Burlington Mall

▪ Continue discussions with MassDOT on expansion of Tyngsborough Park and Ride Lot
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