



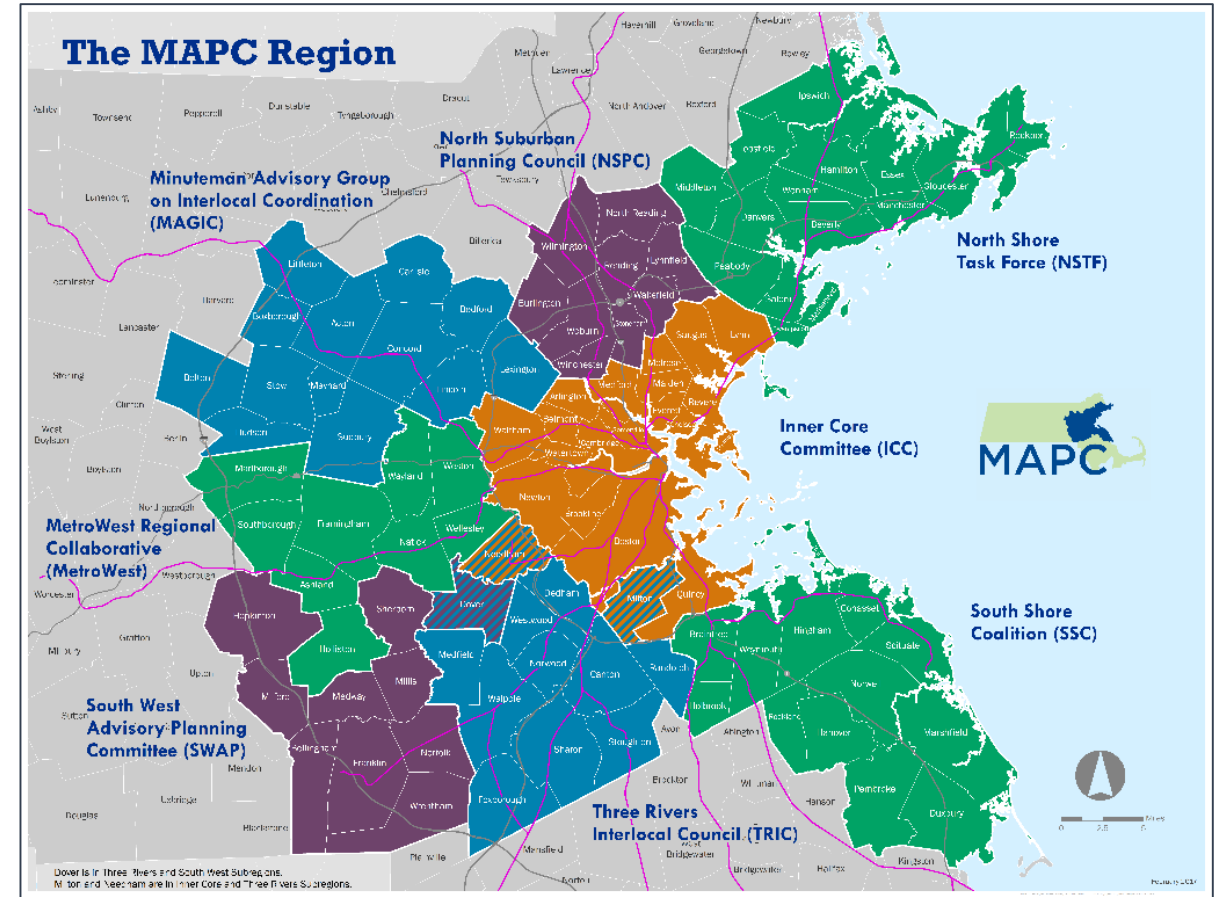
Microtransit Update

Travis Pollack, AICP – MAPC

Alice Sapienza, DBA – Sudbury

Franny Osman – Acton

MAGIC Subregional Meeting, April 4, 2019





Context

- Existing services
- MAPC RFI
- Collective findings
- Examples of options

MAGIC implementation options

- Why pilot?
- Where could pilots be implemented?
- How might they be implemented?
- Current status grant application

Conclusions/next steps



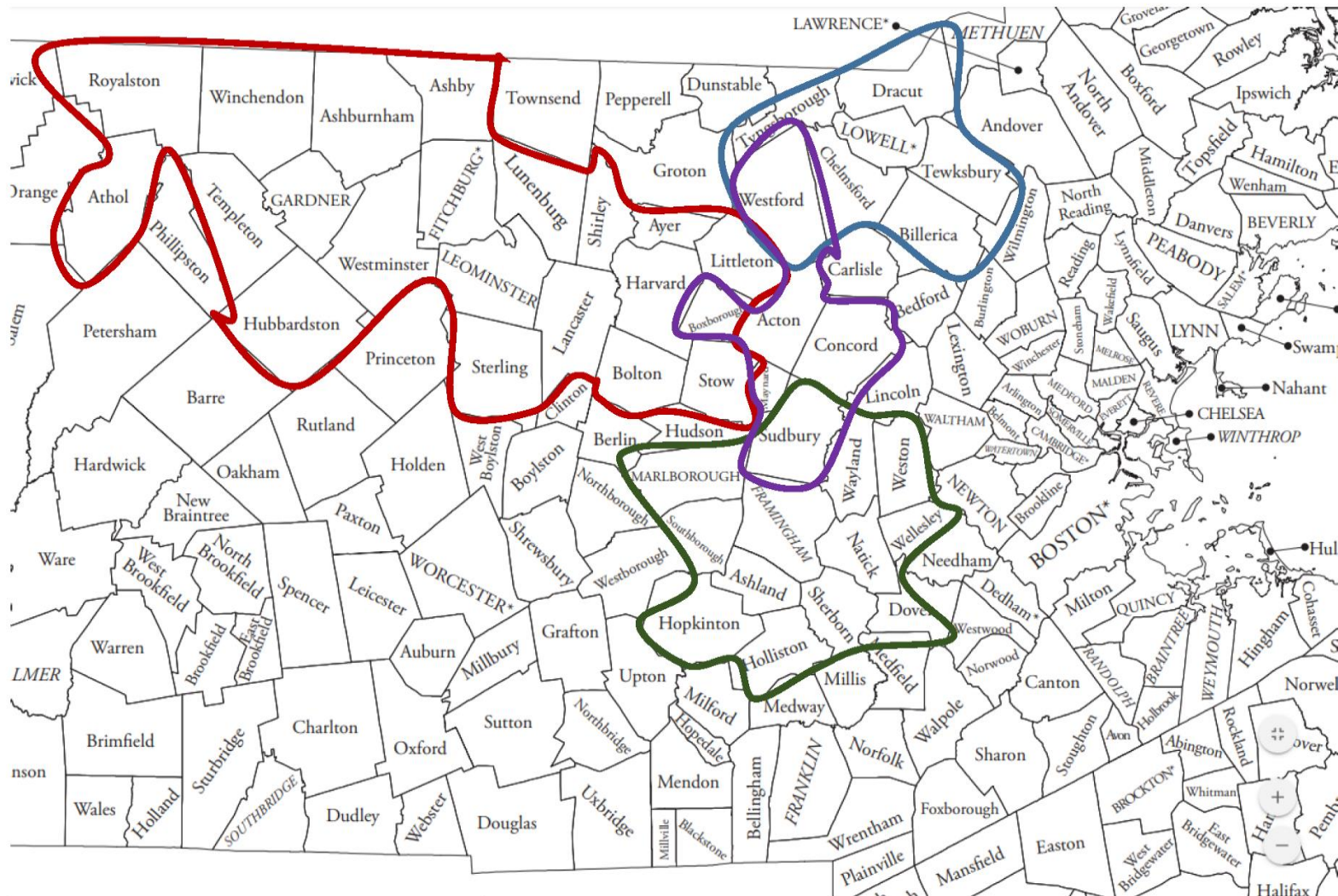
MAGIC: RTA Services

Montachusett RTA

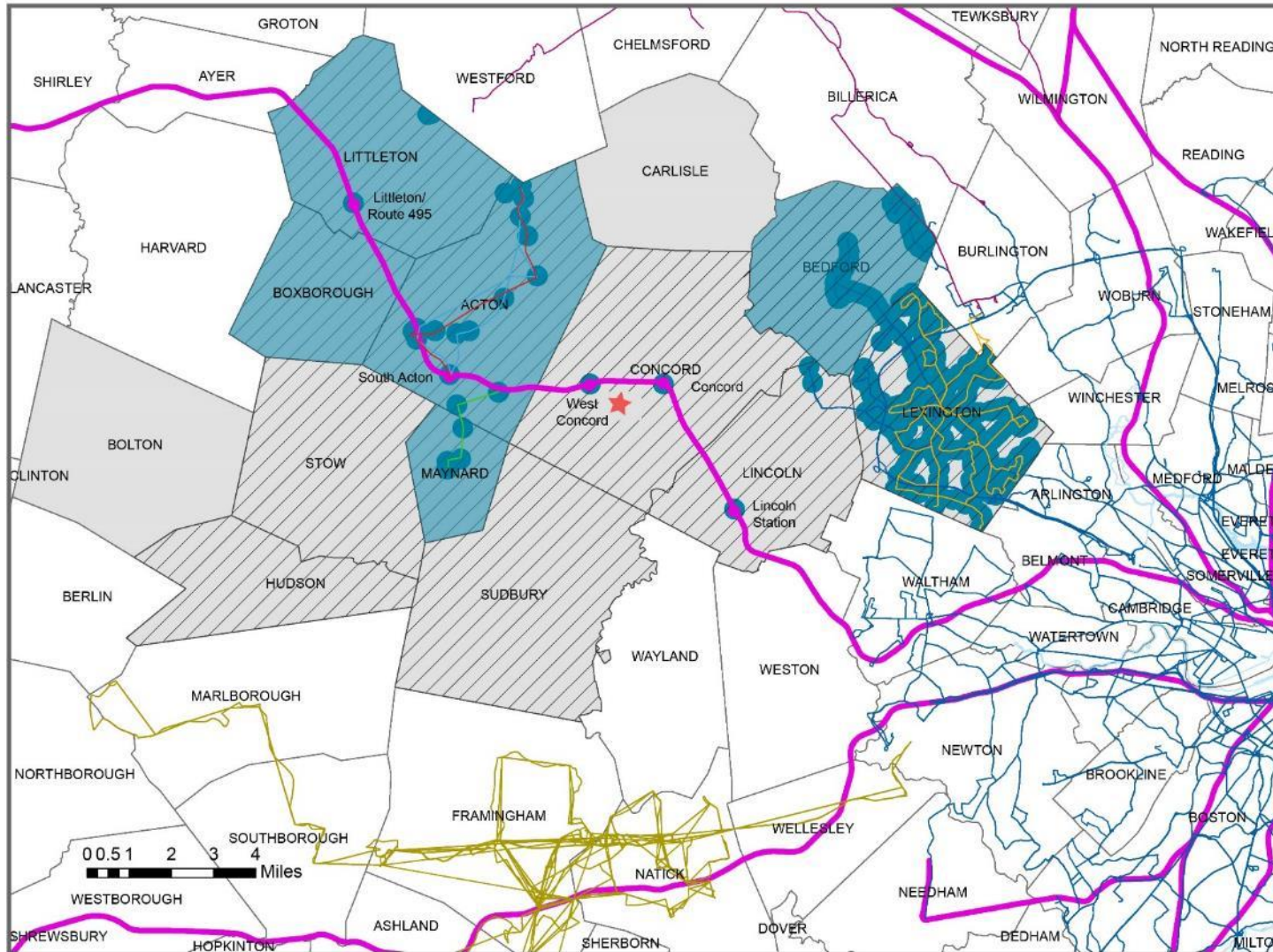
Lowell RTA

CrossTown Connect

Metro West RTA



MAGIC: Existing Transit Services – Weekday, 8 AM



Transit Coverage MAGIC Subregion

Weekday 8AM Coverage

Legend

- Emerson Hospital
- Dial-A-Ride Service
- Age Restricted, Dial-A-Ride Service
- Fixed Route Transit
- Lexpress Bus Routes
- MetroWest RTA Routes
- MBTA Bus Routes
- MBTA Commuter Rail
- MAGIC Towns
- MA Towns
- Ocean

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

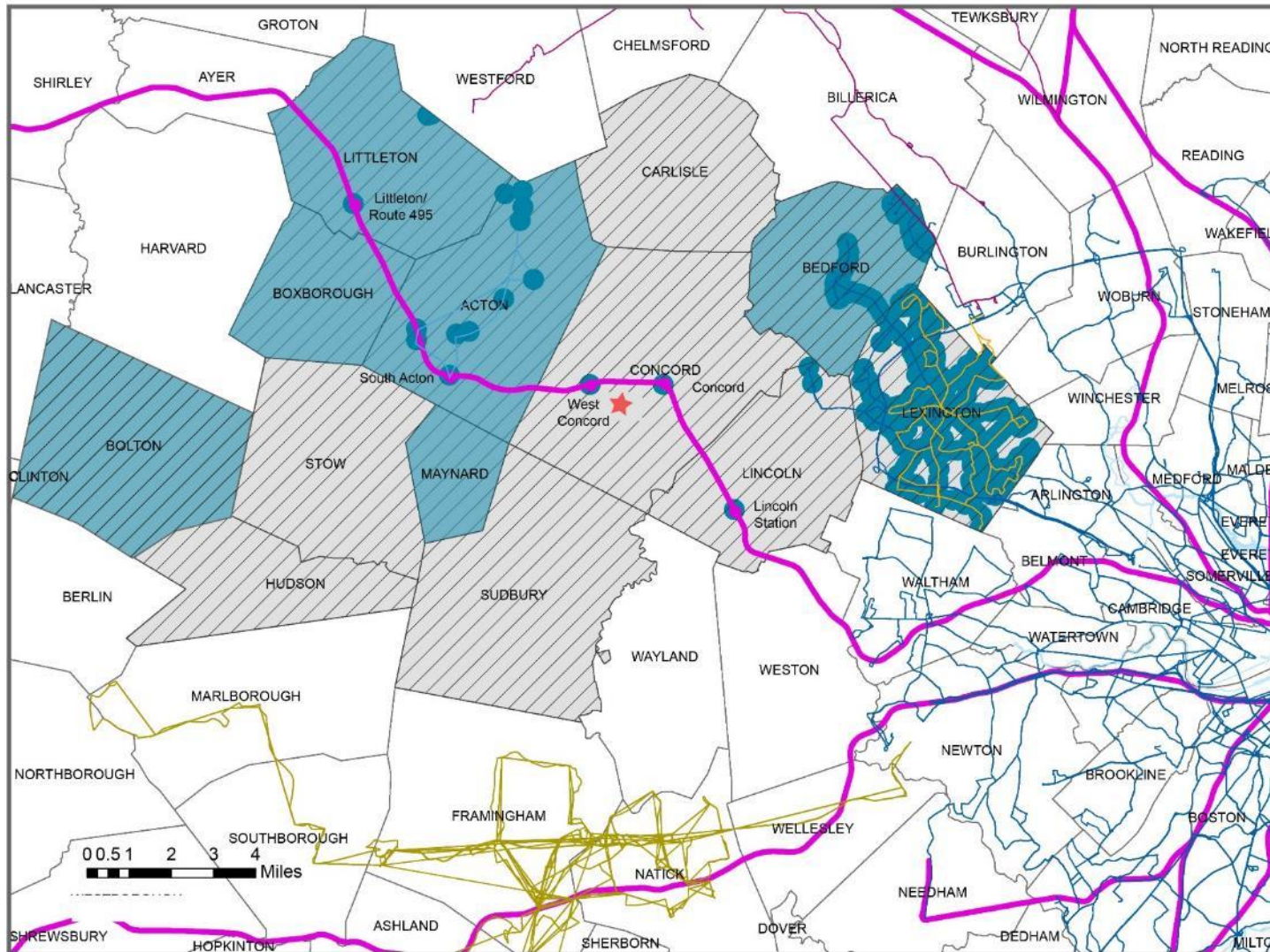
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February 2019



MAGIC: Existing Transit Services – Weekday, Noon



Transit Coverage MAGIC Subregion

Weekday 12PM Coverage

Legend

- Emerson Hospital
- Dial-A-Ride Service
- Age Restricted, Dial-A-Ride Service
- Fixed Route Transit
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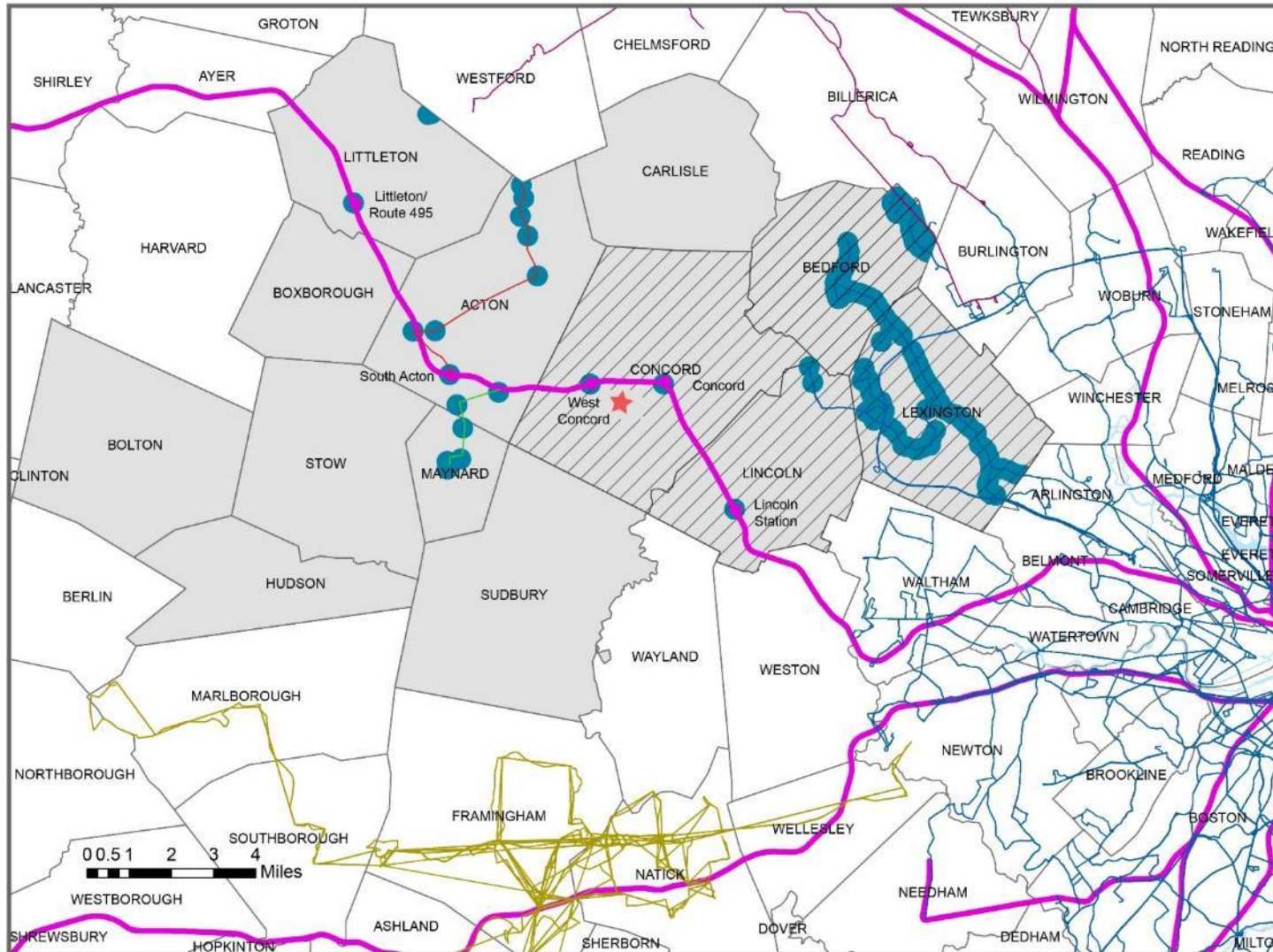
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February 2019



MAGIC: Existing Transit Services – Weekday, 7 PM



Transit Coverage MAGIC Subregion

Weekday 7PM Coverage

Legend

- Emerson Hospital
- Dial-A-Ride Service
- Age Restricted, Dial-A-Ride Service
- Fixed Route Transit
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- MA Towns
- Ocean

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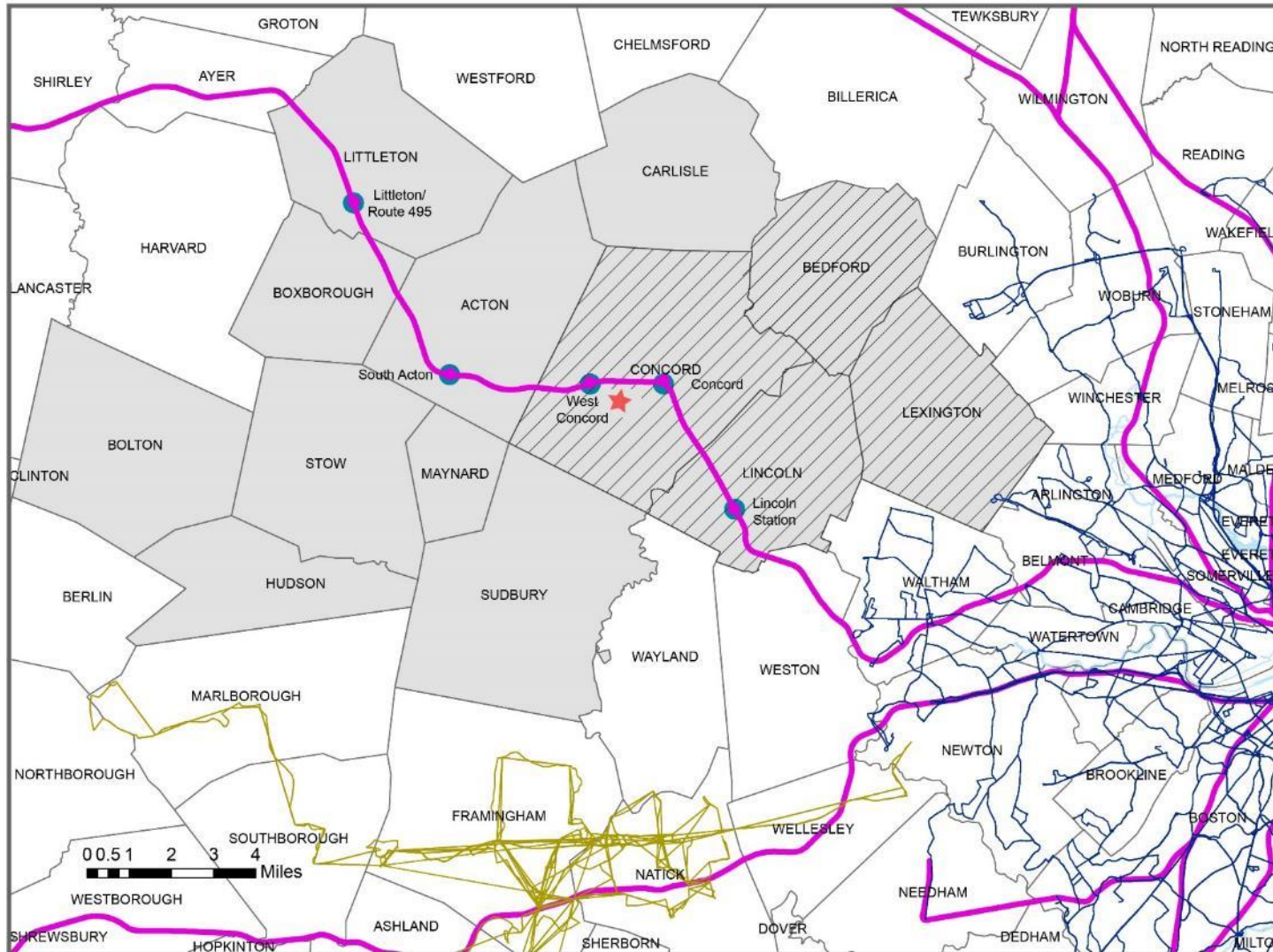
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MAGIC: Existing Transit Services – Saturday



Transit Coverage MAGIC Subregion

Saturday Coverage

Legend

- Emerson Hospital
- Dial-A-Ride Service
- Age Restricted, Dial-A-Ride Service
- Fixed Route Transit
- Lexpress Bus Routes
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- MA Towns
- Ocean

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February 2019



MAPC Request for Information (RFI)

- Microtransit*: New option for transit services
- Follow-on technical assistance from MAPC for “taxi, bus, livery” initiative (presented at MAGIC Sept. 2018)
- RFI sent to microtransit providers December 2018
- RFI Use Cases:
 - Rural areas with limited to no transit
 - Improve Council on Aging transportation
 - Connecting to regional bus and rail
 - Partnership with employers (e.g., TMAs)
- Responding Vendors: eCab, Liftango, RouteMatch, TransDev, TransLoc, Via



**Multi-passenger public transportation using dynamically generated routes derived from advanced software, and which may expect passengers to make their way to and from common pick-up or drop-off points. Unlike existing demand response transit, microtransit does not require advance scheduling.*

MAPC Request for Information (RFI) - Findings

- Microtransit will advance as one of many transportation services for MAGIC and elsewhere
- Few existing rural pilots, few multi-jurisdictional pilots
- Industry evolving quickly—pilots are crucial to
 - *Experiment*
 - *Learn*
 - *Improve*
- Wide range of implementation options: licensing single software module to contracting turnkey solutions
- Most per mile/per hour operations costs – drivers, vehicles, fuel – are similar to existing transit
(with microtransit, costs per trip and geographic reach of service can be more effective)

Microtransit Options – Software and Dispatching

- Each client's management reports can be tailored (i.e., what data are desired)
- Performance metrics can be tailored (some vendors tailor trip priorities)
- Customer options include walk-up, telephone, internet, smartphone app, concierge
- Separate modules available for customized mix (simulation, design, dispatch, operations...)
- App-based and operations software is commodified (little distinction among vendors)



TransDev

Download the
Microtransit app &
create a free account



Select SacRT then
choose a time and
location for pickup



TransLoc

Confirm your trip,
board, pay and ride!



ate -- April 4, 2019

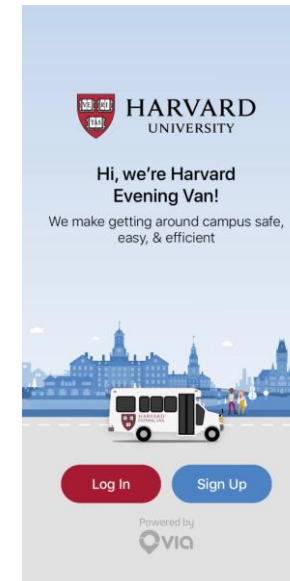
Microtransit Options – Vehicles and Drivers

Options:

- 100% turnkey: vendor provides range of vehicles (WAV), vendor-employed drivers
- Client-owned vehicles (e.g., CoA, RTA), vendor-employed drivers (and, vice versa)
- Client-owned vehicles, client-employed drivers
- Evolving: Vehicles/drivers provided by third parties (e.g., Avis, Uber, Lyft); partnerships characterize industry segment (e.g., TransDev + TransLoc, TransDev + Via, TransDev + RouteMatch, UServe, United Rentals)



TransDev



MAGIC Implementation – Why?

- Increase in senior population because of aging-in-place PLUS in-migration (age-restricted developments, etc.)
- Increase in financially vulnerable population because of affordable development expansion (“Chapter 40B”) and “housing cost burden” of seniors
- Increase in number of people with disabilities impacting mobility
- Significant gaps in existing transit services

MAGIC Implementation – Where?

Rural towns: Bolton, Boxborough, Carlisle, Stow, Sudbury

- Most difficult to provide public transportation, because of geography and density
- Above towns (plus Maynard) have neither commuter rail nor bus service
- Lower density development patterns and a lack of quality pedestrian infrastructure make it more difficult to connect residential, commercial and employment hubs

Demonstrated needs:

- Health resources (physical, mental, nutritional, social)
- Isolation-reducing resources (movies, meetings, Open Tables)
- Employment (second and third shifts, workers who cannot afford to live in towns where they work)
- First mile/last mile (missed connection)

MAGIC Implementation – How?

- Single town pilot; others watch and learn
- Multiple towns' pilot; others watch and learn
- Incorporation of Ride-Hailing/Transportation Network Companies to test/collect data for future Regional Transit Authority expansion (including microtransit)
- Regionalization of CoA vehicles, plus ride-hailing, etc.

“MAPC recommends using a combination of small changes to existing service and a regional approach for larger scale service projects. Smaller changes to existing service could begin to address some transit needs in the sub-region while larger scale projects are developed, funded, and implemented.” (MAGIC Suburban Mobility Transit Study, 2011)

MAGIC Pilot – Current Status

Proposed Community Compact application:

- **Age and Dementia Friendly Best Practice:** “Develop policies and services to improve elder economic security and help people age in community, such as... transportation for non-drivers...”
- “This application—Making the Connections—is submitted by Acton, Bolton, Boxborough, Carlisle, Stow, and Sudbury, acting as lead municipality. We are focusing on seniors, people with disabilities, financially vulnerable residents, and veterans, with the objective of providing them with transportation services to health and community resources as well as economic opportunities.
- ...The initiative will utilize taxi, ride-hailing, and other private as well as public operators of available rolling stock (e.g., the region’s CoA vehicles) to meet unmet weekday transportation demands and also serve weekend and after-hour needs as far as possible.
- ...Using data from this pilot, we intend to (1) explore the future applicability of shared microtransit platforms to optimize transit programs and regional cooperation in the larger MAGIC subregion of the MAPC, and (2) ensure the sustainability and continuous improvement of regional transportation, particularly to our most needy residents.”

Massachusetts Microtransit Pilots

Three microtransit pilots to begin in 2019-2020:

- **Newton: Microtransit within city limits for seniors**
- **CATA: Microtransit pilot to replace two fixed-route services in Gloucester**
- **MART: Microtransit pilot in Fitchburg**

MAPC will monitor these for lessons learned