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1	Study/Activity Name	Study Description	FFY 2019 Disposition
2	<i>2018 Universe--Study Concepts not Funded in FFY 2018</i>		
3	Analysis of Bicycle and Pedestrian Crash Clusters	<p>Purpose: This study would review bicycle and pedestrian crash clusters identified by the MassDOT Highway Division and the Boston Region MPO. Three locations would be selected for closer study and to develop recommendations for safety and mobility improvements to improve bicycle and pedestrian safety.</p> <p>Anticipated Outcome: MPO staff would work with municipalities and other stakeholders to propose cost-effective and low-cost improvements to increase safety for bicyclists and pedestrians at those locations.</p>	Excluded from Universe: covered under CTPS technical assistance programs
4	Before and After Studies of Bicycle- and Pedestrian-Related Improvements in TIP Projects	<p>Purpose: This study would conduct detailed counts, analyze crash data, and survey people using the street and businesses to compare "before" and "after" conditions and public perceptions of projects funded through the TIP, with an emphasis on bicycle and pedestrian projects.</p> <p>Anticipated Outcome: Identify effects of the newly constructed projects on traveler behavior, safety, and mode split compared to existing conditions and relative to conditions on similar nearby streets that did not receive newly constructed facilities.</p>	Included in Universe as A-1, "Before and After Studies of Bicycle- and Pedestrian-Related Improvements"
5	Exploring Places and Times for Car-Free Days	<p>Purpose: This study would aim to understand and analyze the appropriateness of instituting car-free days or locations. CTPS staff would work with up to three selected municipalities to analyze streets, days, and times that car-free days would benefit the community and multimodal transportation or recreation throughout the community. Aspects that could be analyzed to understand the possible costs and benefits of establishing a car-free street/day include: traffic and commuting patterns, air quality improvements, economic impact to businesses, and community support, among others.</p> <p>Anticipated Outcome: A recommended approach to implementing car-free days/streets and an analysis of the costs and benefits that could be realized.</p>	Excluded from Universe: MPO not typically directly involved in implementation (pilots/demonstrations)
6	Energy and Electric Vehicle Use in the MPO Region	<p>Purpose: MPO staff would gather information and develop a profile of energy use for transportation in the MPO region. MPO staff would focus in particular on energy-use trends that pertain to electric vehicles.</p> <p>Anticipated Outcome: This study would inventory the distribution and location characteristics of charging stations, examine the characteristics of the electric vehicle fleet in the Boston region (such as the proportions of electric vehicles that are owned by households as compared to institutions), and analyze trends in the availability and use of these vehicles. Currently, much of this data is held and organized by various municipalities and other bodies that have expressed interest in working together but have not yet done so; the MPO could serve as a clearinghouse for this data-sharing. Other activities may include an analysis of levels of consumption for different fuel types. This information may be useful to the MPO in future plan development and performance-based planning activities.</p>	Excluded from Universe: redundant with other ongoing work
7	Shopping Behavior and Mode of Arrival	<p>Purpose: This study aims to create a regional understanding and application of previous research conducted in other states about shopping behavior by mode of arrival. Previous research indicates that the mode breakdown of arrivals can vary greatly depending on the built environment and context of a retail corridor. In many urban retail corridors more shoppers than merchants might recognize arrive by non-automotive modes and that in many types of stores and retail environments pedestrians, bicyclists, and transit riders spend just as much money as drivers. The supply and availability of parking is an issue in planning and implementing priority bus lanes and bicycle/pedestrian facilities as well as when new development comes to an area. This study would select two or three specific locations in the Boston region to understand local shopping behavior by individuals arriving by various modes. One approach to this study could be to survey retail arrivals and behavior across three very different built environments; another would be to focus on major retail corridors in an urban environment (possibly choosing the locations of study could be to build off of a study that the MPO is currently conducting on priority bus lanes), recognizing that consumer behavior in those corridors is particular poorly understood.</p> <p>Anticipated Outcome: This study would seek to quantify findings about mode of arrival and/or customer spending by mode of arrival in specific commercial corridors or areas and make recommendations for allocations of scarce street space and planning resources accordingly. The local knowledge gained from this study could help municipalities adjust parking requirements for new developments and could be an important tool in gaining support for additional bicycle, pedestrian, and transit infrastructure.</p>	Excluded from Universe: has been a candidate without receiving significant support for several years; related effort included in the Universe
8	Safety Improvements at Express-Highway Interchanges	<p>Purpose: Continue to address the 2013 MassDOT Top 200 High-Crash Locations and Highway Safety Improvement Program (HSIP) crash clusters in the Boston Region MPO. Many of these are express-highway interchanges, and some of them do not need costly complete rebuilds but rather low-cost improvements that address safety and operations.</p> <p>Anticipated Outcome: The study would review the Top 200 Intersection Clusters and HSIP crash clusters to identify candidate locations. MPO staff would develop low-cost safety and operational improvements.</p>	Included in Universe
9	North Shore Mobility Study	<p>Purpose: There is significant interest in examining opportunities to build on latent demand for multimodal transportation options on the North Shore. Interesting possibilities include a South Salem commuter rail station near Salem State Univ.; reviving bikeshare on the SSU campus; coordinating rail shuttles to and from SSU and NSCC; examining possible last-mile partnerships; bringing bike-friendly options to Lynn; the North-South Rail Link and commuter rail modernization in general, with a special emphasis on making the system work for people working non-traditional schedules.</p> <p>Anticipated Outcome: A study of connections between various modes of transit and transportation on the North Shore, with a particular emphasis on connections and scheduling for non-9-to-5 users, existing and potential.</p>	Excluded from Universe: redundant with other ongoing work, including MAPC studies
10	Canton-Area Transportation Study	<p>Purpose: The Town of Canton is interested in CTPS studying several potential improvements to the transportation network in and around the town. These include crash-prone intersections, pedestrian improvements, potential impacts from South Coast Rail, and in the longer term potential changes to local interchanges, last-mile partnerships for access to commuter rail, etc.</p> <p>Anticipated Outcome: A study examining short- and longer-term ideas for multimodal transportation options in Canton and the surrounding area.</p>	Excluded from Universe: some work has been done under CTPS technical assistance programs

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11	Potential Impacts of Autonomous Vehicles	Purpose: Under this proposal, staff would study the potential ways in which automated vehicles might become part of the regional transportation environment and their potential impacts on needed infrastructure and travel behavior. Anticipated Outcome: An evaluation of ways in which the region's transportation planning and programming priorities might need to change as a result of the introduction of AVs.	Excluded from Universe: C/AV work proposed for incorporation into ongoing CTPS programs, instead of being a discrete study effort
12	Safe Routes to School Followup	Purpose: To determine the percentage of trips generated from driving children to school (consider trip chaining, distance out of way of end destination, public and private schools, metro/suburb/rural differences) and link to effectiveness of SRTS efforts. The study could utilize other data analyze the effectiveness of SRTS – not just crash data, but also health, mode share, equity, etc., but recognize that there are many other factors. This would have to take place over longer period of time. Anticipated Outcome: A study building on previous results to provide a comprehensive picture of the successes and challenges of the SRTS program.	Excluded from Universe: question about the significance of the MPO's role in this area
13	Metrics for Describing the Full Spectrum of Travel Needs	Purpose: Develop clearer, concise, and gripping ways to use data of roadway users to better communicate balance of needs on a corridor (people throughput versus amount of space used by the vehicles) to steer away from LOS and help prioritize sustainable modes. Anticipated Outcome: develop a set of metrics and/or popularly accessible terms to express the needs of all corridor travelers.	Included in Universe as M-5, "New and Emerging Metrics for Roadway Usage"
14	Monitoring On- and Off-Site Park-and-Ride Lot Use at and Near MBTA Stations	Purpose: 279 MBTA stations would need to be surveyed for bicycle parking data. Additionally, the MBTA parking lots, which have not been surveyed since 2013, also would need to be updated. The parking lots for this iteration of the park-and-ride lot survey will include any parking near stations that commuters use, including MBTA lots, private lots, and on-street parking. Because it is less costly to make a single visit to stations that offer parking for both modes, this collection effort will combine the data for both bicycle and automobile parking. This task will also include talking to communities to see what the parking trends for each station are and to see if the communities have recommendations of their own. This study would also look at the pricing and management structure of all of the publicly and privately owned parking lots at and near MBTA stations, as well as on-street parking, and might attempt to project demand and pricing dynamics into the future. Anticipated Outcome: Update the demand and supply of parking at MBTA stations and catalog the institutional structure that shapes pricing for parking in the lots.	Excluded from Universe: work ongoing under CMP
15	A Review of Bus Interlining Operations at the MBTA	Purpose: Interlining is the practice of using transit vehicles interchangeably between different routes or lines. This study's goal would be to review some of the issues with interlining and discover the conditions where interlining may and may not be operationally beneficial. It would include a review of the MBTA's practices for scheduling running time and using interlining compared with use of these practices at peer agencies. Anticipated Outcome: The results of this study would provide the MBTA with parameters they could use to fine-tune how they schedule their services—reaping the benefits of interlining when it makes sense, yet providing reliable and resilient service.	Excluded from Universe: MBTA effort is underway to review bus operations
16	Beyond Commuter: Conceptualizing a Broadly Targeted Suburban Rail System	Purpose: Many suburban stakeholders (including in public meetings on both the North and South Shores) have shown interest in making the MBTA Commuter Rail network more useful to travelers going to a variety of destinations at a variety of times outside the traditional commute hours. This desire has resonance with international, and increasingly North American, efforts to utilize suburban mainline rail infrastructure to provide full-spectrum transit service, rather than a "peaky" service targeted mainly at 9-to-5 commuters. Additionally, utilizing existing rail infrastructure more efficiently and intensively can expand regional transit options at relatively little capital expense. This study will: examine international best practices for using suburban rail infrastructure to provide consistent, frequent service throughout the day; analyze recent North American efforts in this regard, including in Denver and Toronto; and create a conceptual framework for applying the lessons to MBTA's network. Anticipated Outcome: A white paper or conceptual study that compiles information on how mainline suburban rail networks have become useful to a broader spectrum of users in other metropolitan areas and begins to develop a framework for applying those lessons to the MBTA commuter rail network.	Excluded from Universe: redundant with ongoing Commuter Rail Vision Study
17	Comprehensive Ferry Transportation Planning in the Inner Core Area	Purpose: To study the possibility of more ferry service within water-adjacent parts of the ICC area. Quincy, Medford, and Everett are already doing some things with ferry transportation. As part of the casino development, Everett will have ferry service from the casino to South Boston and the airport. This study provides an opportunity for centralizing communication and planning for expansion of ferry services, which is currently being handled by several different bodies. Anticipated Outcome: A study analyzing potential demand and trip patterns for new or improved ferry service or other water-based transportation within the inner Boston region.	Excluded from Universe: redundant with other ongoing ferry planning (by external parties)
18	Estimating Systemwide Passenger Delay Attributed to On-Board Cash Transactions	Purpose: The previous study in this series sought to quantify the amount of stop-level delay attributed to a set of variables for a set of trips observed on MBTA Routes 116 and 117. Through multiple regression modeling it was estimated that customers adding value to their CharlieCard take an extra 6.3 seconds to board, and those paying with cash take an extra 9.4 seconds to board. While this may be considered a significant amount of time per occurrence, the observed frequency of these events was low, resulting in a relatively low contribution to bus delay. This study will expand to a systemwide analysis of delay from cash payment, using the MBTA's AFC database. Delay will be assessed on each route from an operator's perspective (delay per bus trip), as well as the customer's perspective (delay per customer) using ODX. This study is important as it provides insight into the tradeoffs between the benefits and burdens of transferring to a cashless system. Anticipated Outcome: A report documenting the delay associated with cash fare payment on MBTA routes from both the operator's perspective and the customer's perspective	Excluded from Universe: irrelevant with upcoming implementation of AFC 2.0

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19	Balancing Roadway Space Allocation Among Travel Modes	<p>Purpose: Both bike lanes and dedicated bus lanes have become increasingly intriguing and popular options for mobility within the Boston region in recent years, as successful examples of both have been rolled out. A recent MPO study identified a set of roadway corridors in the Boston region where bus passengers would most benefit from the installation of dedicated bus lanes. However, in addition to challenges related to reallocating road space to non-car modes, the process of creating mobility options must work to allocate space to both bikes and transit, especially in corridors where both modes are popular but street space is scarce. This study will look at the set of previously identified corridors, and develop a strategy for each corridor for bikes and buses to coexist harmoniously. Strategies could involve looking for separate, but parallel paths, for bikes along these corridors, or designing roadway geometries that accommodate both bikes and buses where separate but parallel paths do not exist.</p> <p>Anticipated Outcome: For each identified corridor, identification of strategies for bikes and buses to coexist harmoniously, and perhaps a toolkit for designing streets that work for both transit and bikes.</p>	Included in Universe in modified form as M-5, "New and Emerging Metrics for Roadway Usage"
20	Inferring Trip Origins and Destinations Using WiFi Data	<p>Purpose: Transit agencies use a range of data, such as Automated Fare Collection (AFC) and Automated Passenger Counters (APC), in order to understand how customers use the transit system. These data sources provide information about passenger origins, but do not provide information about their destinations or their paths through the system. In a previous study, CTPS developed a procedure for using AFC data to infer customer origin-destination pairs on the rapid transit system. Additionally, the MBTA is in the process of refining a tool to infer passenger origin-destination and trip-path information for the bus and rapid transit network. However, current technology does not provide information to validate the inferred trip-path information and passenger surveys are expensive, take time to conduct and process, and can only provide a snapshot of travel patterns on the day of survey, not continuous information detailing varied travel patterns on the network. Additionally, very limited data is available about the trip patterns of commuter rail riders.</p> <p>This project would study the feasibility of using WiFi connection data to better understand passenger trip patterns, and would develop a pilot program for the MBTA. When a mobile device has WiFi enabled, it will continually search for a WiFi network by sending out a unique identifier (known as a Media Access Control) to nearby routers. In the With WiFi service offered on the Green Line and Commuter Rail, WiFi connection requests from mobile devices can be collected as passengers pass through Green Line stations or commuter rail coaches, and used to infer the passenger's origin and destination within the system. The data collected is automatically de-personalized, which means that no browsing data or personal information is collected, and no individuals can be identified.</p> <p>Origin and destination data collected for these locations will be beneficial because it can be used to compare and calibrate existing methods of inferring origin and destination information from the automatic fare collection (AFC) system on the Green Line, and offer more frequent and cost effective estimations of passenger activity on the commuter rail over traditional methods involving manual passenger counts.</p> <p>Anticipated Outcome: Assessment of the feasibility of using WiFi connection data to better understand passenger trip patterns, and development of a pilot program</p>	Excluded from Universe: deemed not feasible (data acquisition)
21	Green Line Transit Signal Priority Modeling	<p>Purpose: This study would use Synchro to estimate the time savings of transit signal priority for the B, C, and E line to determine if service frequency could be increased along the lines, or if it would merely result in reliability improvements.</p> <p>Anticipated Outcome: Estimated time savings of transit signal priority for the B, C, and E branches and determination of potential transit time savings and/or increase in service.</p>	Excluded from Universe: redundant to ongoing MBTA pilot program
22	Evaluating Adequacy of Transit Span of Service	<p>Purpose: Transit agencies currently uses ridership levels at the beginning or end of the day to evaluate whether to extend or contract a service's span, that is, the times at which a service operates. However, this data does not provide information about demand outside the existing span of service. This study would look to information beyond ridership to see if there is a consistent way to answer the question "when should this service operate?" This study would develop a methodology to compare the roadway volumes of surrounding streets throughout the day to help guide decisions about changing the span of service. This data might come from roadway counts or Google origin-destination data. Alternative data sources could be explored as well.</p> <p>Anticipated Outcome: A methodology to compare the roadway volumes of streets surrounding transit services throughout the day to help guide decisions about changing the span of service.</p>	Excluded from Universe: potentially redundant with other work; could be a DOT or MBTA led effort

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23	Bringing Excess Wait Time Across the Atlantic: Implementing a process to calculate the excess wait time resulting from uneven headways	<p>Purpose: The relatively recent implementation of various forms of automated data collection provides the opportunity to measure transit performance from a passenger perspective. For example, traditional measures of on-time performance compare scheduled to actual vehicle arrival/departure times. However, this measure does not necessarily reflect the customers' perspective, particularly on frequent services where customers may not rely on schedules to time their arrival at the stop. Transport for London (TfL) uses an "excess wait time" metric to evaluate how well its frequent bus services are running. This metric describes the additional time passengers must wait because buses are not arriving at even intervals. With this information, we would be able to quantify the 'amount' of delay experienced by passengers on the system.</p> <p>Anticipated Outcome: A methodology for calculating the excess wait time resulting from uneven headways</p>	Excluded from Universe: potentially redundant with other work; could be a DOT- or MBTA-led effort
24	Allston Transit Study	<p>Purpose: The Allston I-90 Interchange Project, which will alter the alignment of I-90 and create new land use development opportunity, includes the proposal to create a West Station along the Framingham/Worcester Commuter Rail Line. This infrastructure project also affords the possibility of a bus transit connection through the old Beacon Rail Yard, potentially providing a more direct routing of buses from the Harvard Square area to the Longwood Medical Area via a connection over I-90 and the adjacent rail lines. This proposed transportation study would assess the demand for bus transit service that could connect with the rail service.</p> <p>Anticipated Outcome: A study examining possibilities for improving transit in the Allston-Beacon Yard area of Boston, especially those afforded by the rebuilding of I-90 and the redevelopment of Beacon Yard.</p>	Included in updated form in Universe
25	MPO Staff-Generated Research Topics	<p>Purpose: This program would support work by MPO staff members on topics that relate to the Boston Region MPO's metropolitan transportation-planning process, that staff members have expressed interest in, and that are not covered by an ongoing Unified Planning Work Program (UPWP) or discrete project. This program was funded for the first time in FFY 2017.</p> <p>Anticipated Outcome: This program could bring forth valuable information for the MPO's consideration and would support staff's professional development. The opportunities afforded to staff through this program could yield highly creative solutions to transportation-planning problems.</p>	Included in Universe
26	<i>FFY 2019 New Ideas</i>		
27	Reverse Commute Areas Analysis	<p>ID areas that have significant job concentrations AND believe they cannot fill jobs at local level need access to city job market Could work with MAPC--CTPS does transportation analysis and MAPC does jobs/demographics/housing Evaluation: 1) Transit options (including shuttles) 2) Bike and ped LOS evaluation of area, especially relating to safe routes to transit 3) something about Guaranteed Ride Home</p>	Included in Universe as L-1
28	Blue Hills Area Study	<p>Area around intersections of 95/128/138/93 Canton, Milton, Blue Hills area Cascading traffic issues Lots of independent studies going on, need for areawide consolidation/study Perhaps examining transit options and TDM?</p>	Excluded from Universe: redundant with previous work
29	Greenways Gaps Analysis	<p>Potential proposal from Livable Streets Alliance and partners Looking at gaps in their proposed greenway network (and potentially other such proposals) Could work as a partner project--CTPS conducting technical analysis and MAPC "soft benefits" (econ dev, health, etc) Of regional interest basically to ICC communities</p>	Excluded from Universe: redundant with work executed under MassDOT's Statewide Bike Plan
30	Bike and Ped Infrastructure Cost Index	<p>Lots of interest from stakeholders in "knowing what it will cost" Research thus far by LSA has shown that bikeway/greenway costs are unpredictable and all over the place Need for a reliable estimate/set of estimates, especially one rooted in Boston region Study could look at bike/ped infrastructure implemented recently in Boston region, compile costs, compare management styles, etc and identify best practices and ideal/realistic costs Cost index could be used to inform TIP evaluation</p>	Excluded from Universe: cost estimation not within CTPS staff's primary skill set; relationship to MPO goals unclear
31	Automated Enforcement	<p>LSA is interested Not currently legal in MA but some interest from political stakeholders, safety groups, etc Plenty of studies from other locations but none rooted here Need for objective baseline research discussing tradeoffs of safety vs. revenue--what a system ideally set up to create safety vs. a system creating revenue might look like</p>	Excluded from Universe: legislative concern, not influenced by MPO

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32	Route 1 Corridor Study	Route 1 from Walpole to Wrentham Plenty of development expected in near future, especially around Kraft properties Want to ensure development is well-planned, including frontage roads and the like Want to be proactive given anticipated upcoming development and commuter rail pilot Possible candidate for Subregional Priority Roadways	Excluded from Universe: question regarding scope and relevance to priority needs
33	Framingham Truck Traffic and Complete Streets Study	Downtown Framingham has a Complete Streets policy and encourages TOD There is also significant truck traffic from the Adesa auto auction south of downtown Several downtown streets are designated truck corridors Looking for ways to mitigate impact of truck traffic: Potentially removing or changing truck routes Safe infrastructure for pedestrians and bikes given presence of trucks Balancing industrial/commercial and residential development needs Study concept discussed in meetings: development of handbook for Complete Streets with freight presence	Included in Universe
34	RTA Border Gaps Study	Some towns fall into gaps between RTAs Often there is no need for fixed-route services in these areas, but sometimes there is some, unexplored demand RTAs sometimes do not want to expand their core area of responsibility What can be done to coordinate service and ensure service quality in communities on the fringes of an RTA service area or at the intersection of multiple service areas? More broadly, what can be done to coordinate service (schedules, fares, etc) between RTAs whose routes and/or service zones intersect?	Excluded from Universe: more relevant to MassDOT Rail & Transit mission; unclear implementation path and role for MPO impact
35	Quantifying the Effects of Irregular Traffic Phenomena	Quantifying effects of double parking and deliveries Might effectively narrow theoretically four lane road down to 2, for example Define safety impacts--sight lines are obscured and pedestrian crossings can be hard to see Identify streets and corridors where these disruptions are common and might reduce expected capacity If streets are already experiencing effective constriction due to deliveries and double parking, they might be candidate corridors for a road diet or bus lanes	Aspects included in Universe as part of M-9, "The Future of the Curb"
36	Mobility Hubs	Lots of interest in the mobility hub concept Figures in MAPC plans and Go Boston 2030	Excluded from Universe: covered under CTPS technical assistance programs
37	Intra-North Shore Ferries	Interested in ferries to Marblehead, etc Might be more of a small Tech Assist project	Excluded from Universe: covered under CTPS technical assistance programs
38	Quantifying Non-Traditional C	Anecdotally, seeing rapidly increasing rates of working from home, commuting part-time, co-working spaces, and the like Potential need to quantify this trend and estimate its impact on transportation needs This effect may be limited to white-collar jobs	Excluded from Universe: quantifiability and availability of data unclear
39	Identifying Bus-Rail Duplicative Corridors	Some MBTA and other RTA bus corridors geographically parallel commuter rail (and sometimes rapid transit) services but provide a different type of service Identify such corridors (possible examples given here) 500 series between Newton and downtown/Worcester Line BAT 12/MBTA 240 and Middleborough/Lakeville 400 series and Newburyport/Rockport 34E and Franklin Line Compare If possible, develop demographics on ridership of parallel services to support (or not) conceptualized "segmentation" of travel market Model potential operational savings/losses vs. rider benefit from provision of more frequent/modernized commuter rail services and reduction of bus services (including reallocation of bus service hours to other routes)	Excluded from Universe: redundant with ongoing MBTA planning, including Commuter Rail vision study and bus revamp
40	Identifying Near-Miss Connections	Use MBTA vehicle location and GTFIS data to identify near-miss transfers (where a rider "just" misses a connection to another vehicle), both scheduled and where actual performance diverges from schedule Particular emphasis on connections where one or both services is infrequent Develop recommendations to minimize occurrence of these near-miss connections	Excluded from Universe: scale of problem is unclear; availability of data is unclear; ability to implement solutions is unclear
41	Transportation System Capacity	Study capacity of regional transportation network to accommodate population growth System is straining capacity	Excluded from Universe: covered under developing LRTP
42	Measuring Economic Benefits of Bike and Pedestrian Improvements	Understand economic and other measurable benefits of expansion of bike and pedestrian infrastructure Possibly using tax data	Excluded from Universe: possibly redundant with ongoing MAPC and MassDOT work

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43	Infrastructural Missed Transit Connections	There are areas where there is a small, fixable gap between two elements of transit infrastructure Case study: commuter rail and Green Line at Riverside (there was historically a commuter rail station) Suggestion (from Tegin): this could turn into a "gap management" technical assistance program.	Excluded from Universe: covered under CTPS technical assistance programs
44	Bike Share Management	Many private bikeshare companies are entering our regional market Different municipalities have signed on with different providers for both dockless and docked bikeshare Can the MPO play a role in coordinating between these and other mobility services? Potentially work with MAPC	Excluded from Universe: MPO role unclear, MAPC has led on this issue
45	Closing Paratransit Gaps	Some municipalities do not have paratransit service Others have only from non-MBTA providers	Excluded from Universe: MPO cannot manage paratransit providers and unclear if recommendations will be implemented
46	Planning for Autonomous and Connected Vehicles 3	Continue to plan for CVs/AVs Include TNCs and their interaction with AVs Effect of AVs/CVs on MBTA	Excluded from Universe: proposed for incorporation into CTPS ongoing programs
47	Effects of Bicycle/Pedestrian Infrastructure Implementation	Pre/post survey of abutters to trail and greenway infrastructure Concerns often precede construction Reporting actual results about safety, crime, etc can help assuage concerns Make sure the suburban aspect is considered	Excluded from Universe: redundant with past work from other agencies
48	Commuter Rail Parking and Access	How can commuter rail parking be reduced? What other options can be provided?	Excluded from Universe: work ongoing under CMP
49	Pre-and Post-Evaluation of Freight Infrastructure Modifications	Look at traffic impacts and overall costs/benefits of freight infrastructure changes Case in point: move of freight traffic from Beacon Yards to Worcester--did it increase truck traffic?	Excluded from Universe: data availability and ability to implement recommendations unclear
50	The Future of the Curb	There is an increasing amount of competition for curb space AVs/CVs may require less curb space for parking Deliveries (Amazon etc) are increasingly common Bus/bike lanes, often curbside, are in demand MPO should study what the curb of the future will look like and how to balance demand between all of these modes/dynamics Article on this concept: https://www.wired.com/story/city-planning-curbs/	Included in Universe
51	Bus Efficiency	Increase use of transit by increasing the number of buses How to decongest roadways specifically for transit use	Excluded from Universe: redundant with other ongoing CTPS and MassDOT work
52	Intersection Safety	Consider safety implications of roundabouts/rotaries Develop best practices for bike/ped safety at roundabouts and rotaries specifically and all intersections the MPO staff work on generally	Excluded from Universe: redundant with ongoing CTPS work and upcoming MassDOT roundabout guide
53	Blue-Red Connector Modification	Study full elimination of Bowdoin station to reduce costs for the Red-Blue connector	Excluded from Universe: would be a DOT-led effort, currently not under study.
54	Green Line Allston Branch	Study a branch of the Green Line from Packard's Corner to Boston Landing	Excluded from Universe: potentially part of broader Allston mobility study
55	Mobility Around West Station	Study multimodal mobility implications of West Station Consider 12,000-space parking garage at West Station, frequent rail service to downtown as a park and ride	Excluded from Universe: potentially part of broader Allston mobility study
56	West Station/Allston Transit Study	Study north-south and other transit mobility through the West Station area Along the same lines as City of Boston's proposal for FFY 2018 but with broader scope	Included in Universe as T-1
57	Updates to Express Highway Volumes Charts	Update express highway volume charts (under http://ctps.org/datacatalog_share/subjects/traffic-volumes) for the first time in many years.	Included in Universe
58	Congestion Scans Using 2015 Inrix Data	Purpose. In 2016, CTPS purchased a roadway dataset from INRIX that provided travel times/speeds for most roadways in the Boston region for the entire 2015 year. A similar dataset that represents 2012 data was purchased from INRIX in 2013, and congestion scans were created using the 2012 dataset. The purpose of this project is to use the 2015 dataset to create updated congestion scans. These congestion scans can be compared side-by-side with the 2012 congestion scans to see if there are any changes in congestion. These congestion scans will be very useful for before and after evaluations for projects.	Excluded from Universe: part of CMP

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59	Advanced Parking Management Systems for MBTA Parking Lots	Purpose. This Intelligent Transportation Systems study will look at options to implement advance parking management systems for some of the MBTA Park and Ride lots. Advanced parking management systems will inform MBTA commuters in real time about lots that are full or underutilized.	Excluded from Universe: part of CMP
60	Pedestrian Report Card Assessment Dashboard	Purpose. This study is a follow up study to the pedestrian level of service, which was completed in January 2017. The previous study created the Pedestrian Report Card Assessment (PRCA) tool, which allows planners and engineers to rate the suitability of roadway segments and intersections for pedestrians. This proposed study will focus on the implementation of PRCA, including creating an interactive dashboard that will monitor pedestrian suitability on intersections and roadway segments throughout the Boston Region.	Included in Universe
61	TDM Study (Ryan Hicks)	Purpose. Travel demand management strategies are recommended to be the first step of congestion reduction strategies in the CMP. Education about travel demand management will be a huge factor in this study. It will be important to show commuters the benefits acquired but travel demand management such as monetary or time based savings by not traveling in a single occupancy vehicle.	Excluded from Universe: data availability and ability to implement recommendations unclear
62	TDM Study (Pete Stidman)	The urban core of the Boston MPO is constantly struggling with congestion and parking issues. There are also several efforts afoot to improve and expand transit, and improve and expand bike and pedestrian infrastructure. There is also a changing transportation marketplace that allows "supersharing" where people use many different options to meet their needs (and then are less likely to own a car). When making these improvements, Transportation Demand Management (TDM) is a proven tool (according to FHWA and others) that helps drive new users to these new and existing options. The state of Washington's Commute Trip Reduction (another term for TDM) Law requires employers and municipalities to set goals for reducing single occupancy vehicle use and to report annually on their progress. They set goals for companies and municipalities based on existing mode share and the variation in that mode share between similarly situated employers and municipalities. This requires baseline data. There is growing interest in encouraging TDM in Boston, Brookline, Watertown, Somerville, and Cambridge. Cambridge is often looked to as the local leader, but their model is not as effective as many in the state of Washington. While Kendall Square is often cited as an example of growth without traffic, the Seattle example of adding people without traffic may be even more compelling. A study by CTPS that investigates state/municipal best practices NATIONWIDE and also creates both a baseline for SOV use and achievable goals for SOV reduction for employers in the urban core would be highly relevant. The study could also include a suggested survey in the survey monkey or similar format for internal tracking of those goals. Also here's a link to a recent story about Seattle: https://usa.streetsblog.org/2017/12/18/seattle-adds-people-without-adding-traffic/ And the CTR law https://www.wsdot.wa.gov/Transit/CTR/law.htm http://www.wsdot.wa.gov/transit/ctr and Seattle's CTR Program http://www.seattle.gov/waytogo/ctr_req.htm There are suburban examples too. I've heard Bellevue has an exceptional CTR program out there.	Excluded from Universe: data availability and ability to implement recommendations unclear
63	Locations with High Bicycle/Pedestrian Crash Rates in the Boston Region MPO Area	Purpose. The purpose of this task is to report intersections that have a high presence of pedestrian crashes and recommend improvements to these intersections. This task relates to the CMP, because it includes collecting performance data, and outlines strategies to alleviate congestion and improve safety. This is a follow up to a study that was done through the CMP in 2010 and again in 2012.	Included in Universe
64	Public Guide to the Transportation Planning Process	While individual agencies and municipalities make efforts to inform the public of their processes, the scale and complexity of the transportation landscape makes participation difficult for non-professionals (or even professionals). For this reason, MPO staff regularly connect motivated individuals with information and direct them to the entities that can best address their interests and/or concerns. MPO staff are uniquely positioned to serve as informers and connectors, as the regularly engaged in cooperative decision-making with federal, state, regional, municipal, and local actors. A singular, comprehensive guide to transportation decision-making would help MPO staff serve this role more effectively—and more broadly. Establishing the MPO as a resource for people wishing to influence transportation will raise awareness of the MPO's role and build participation in MPO processes. Thus, by helping individuals and organization advocate for their interests, regardless of whether those interests lie within the MPO's wheelhouse, the MPO will advance its Transportation Equity objective to "break down barriers to participation in MPO-decision making."	Excluded from Universe: proposed to be included in Public Participation Process ongoing program
65	Effects of Transportation Network Companies on the Mobility of Seniors and People with Disabilities	Traditionally, transit agencies contracted for paratransit services, which were provided using branded taxis, accessible vans and minibuses, and in some cases traditional taxi services. Human service agencies also traditionally contracted for transportation services or provided them using their own minivans or subsidized traditional taxis. The use of TNCs to replace some of these services has been met with frustration by riders who state that they do not have access to or have difficulty using the apps and identifying TNC vehicles, and they report finding the drivers poorly trained, particularly in assisting older adults and people with disabilities. Accessibility is also a concern when using taxis and TNCs to replace paratransit services, as their vehicles may not be able to accommodate all customers with disabilities. The goal of this study is to gain an understanding of how these recent trends affect older adults and people with disabilities and examine strategies for addressing the problems that are identified. This study will investigate a sampling of community mobility programs that are using TNCs. It will include a survey of the organizations and their customers to identify factors to consider when providing TNCs to older adults and people with disabilities. The findings from the survey will be used to identify strategies to improve services to these populations. The study advances the MPO goal of transportation equity, and the resulting recommendations could be used by transit agencies and other organizations with community mobility programs that serve older adults and people with disabilities.	Excluded from Universe: availability of data and feasibility of implementation unclear
66	Transportation Access Studies of Commercial Business Districts	The study would consist of several tasks. CTPS would conduct a literature review and summary of other studies of transportation access to CBDs. CTPS would also characterize the CBDs in the Boston metropolitan area by demographics, commercial development type and density, and existing transportation facilities and services. For a selection of CBDs, CTPS would work with the municipalities and any business associations to solicit business participation in the study. Businesses would first be asked to provide their perceptions on their customers; actual and preferred transportation access modes. Participating businesses would then be asked to encourage their customers to fill out a short survey while they wait in line at the register. The survey would ask the transportation access mode for this visit and their typical transportation access mode to that business. For each mode selected, the survey would ask how frequently the patron uses that mode to access the business and how much the patron typically spends at the business (when using that mode).	Included in Universe
67	Create an interactive census data explorer	This project would develop an online tool that would enable staff to produce interactive maps, quickly depict trends, and download relevant census data without needing to use a separate mapping program. Staff would select census tables from a dropdown menu, and the tool would query the requested data, join it to a base map by census tract, and display the results on an interactive map. The tool would be developed using the open source programming language R, the Shiny framework, and other open source packages (sets of R code that add new functionality). The tool could include functions to aggregate data for multiple census tracts selected on the map, display multiple years of census data for a given table, and generate distributions of census data over time. Users could also view different census data tables and create multiple figures more easily in the tool than in ArcGIS.	Excluded from Universe: redundant with commercially available products

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1	Study/Activity Name	Study Description	FFY 2019 Disposition
68	MPO Adoption of Person-Hours of Delay	FHWA recently changed federal guidance to encourage MPOs to use person-hours of delay, rather than vehicle-hours of delay, in measuring Peak Hour Excessive Delay (PHED) on segments of the National Highway System (see details here). This study would examine the possibility of the Boston Region MPO adopting this metric in its traffic analyses and modeling, to more accurately reflect the movement of people on the regional network. The study would examine what modifications to procedures and analysis would be necessary as a result of this change, and how certain conclusions and recommendations might change.	Included in Universe in modified form as part of M-5
69	Sweetser Circle Reconstruction and Bus Priority	Sweetser Circle (intersection of Rte 16 and Rte 99) is a major bottleneck not only for vehicles, but also for buses. Intersection is state owned. As the City seeks to extend the Broadway bus lane south through this intersection, we need state involvement to get bus priority at this location. Would be a good project for a "low cost improvements" study to see if lane markings, quick curb or other easy solutions exist to prioritize bus movement through this intersection.	Included in Universe
70	AVs and Transit	How AVs can enter the market in a way that will support transit and achieve our sustainability goals.	Excluded from Universe: AV work proposed to be incorporated into ongoing programs
71	Regionwide Handbook for Accessible Mobility	Sidewalks, transit, streets can be difficult for the elderly and people with mobility impairments to navigate Many features of new transportation modes require a smartphone or other new technology that may not be accessible or familiar to some people Some T services are not accessible or not easily accessible Create a guidebook for municipalities and other entities and coordinate between entities to ensure accessibility (including winter concerns like snow shoveling, etc) From Frank Caro, through TRIPPS survey: A strong quantitative measure is needed of need for transportation assistance among seniors and others with disabilities who do not drive. The measure is needed to evaluate the adequacy of subsidized transportation for these populations.	Excluded from Universe: MPO can be a conduit for concerns but these challenges are handled at the municipal or state-agency level
72	Study of Cordon-Style Congestion Pricing	Several public commenters suggested looking into cordon- (London) style congestion pricing in downtown Boston and/or eastern Cambridge. New York is examining this possibility as well	Excluded from Universe: legislative concern, MPO impact is limited; needs support from State and local governments
73	Pop-up bus lanes	Several commenters mention wanting to imitate pilots done quickly in Everett, Roslindale, and Somerville MPO could identify likely candidates from among the list of locations already identified	Excluded from Universe: Ongoing work (pilots/demonstrations) from MassDOT, MBTA, and municipalities