

**COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF TRANSPORTATION  
GREENDOT OFFICE**

DATE: March 24, 2015

SUBJECT: MARPA Meeting – Implementation of 310 CMR 60.05 – “Global Warming Solutions Act Requirements for the Transportation Sector and the Massachusetts Department of Transportation” for the MPO Process

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**Summary of Regulation and Requirements**

- Background on Massachusetts Department of Environmental Protection Regulation 310 CMR 60.05
  - Global Warming Solutions Act
  - Clean Energy and Climate Plan for 2020
  - Implementation to date
- Principal Requirements of Regulation
  - MPOs must evaluate and track the GHG emissions and impacts of Regional Transportation Plans (RTPs), and Transportation Improvement Programs (TIPs)
  - MPOs, in consultation with MassDOT, must develop and utilize procedures to prioritize and select projects in RTPs, TIPs, and State Transportation Improvement Programs (STIPs) based on factors that include GHG emissions and impacts
  - MassDOT must evaluate and track the GHG emissions and impacts of STIPs and state-funded projects that are not included in RTPs/TIPs/STIP
  - MassDOT must demonstrate its GHG reduction commitments and targets in the Clean Energy and Climate Plan (CECP) for 2020 (the GWSA implementation plan) are achieved
- Agency Responsibilities
  - MassDOT
    - Coordinates overall consultation process for GHG assessment of RTPs, TIPs, and STIPs
    - Provides guidance and assistance to MPOs in assessing GHG impacts of RTPs, TIPs, and STIPs and projects included in these plans, as appropriate, including guidance on modeling and GHG calculation methods and prioritizing and selecting projects based on factors that include GHG impacts
    - Reviews MPO RTPs and TIPs and GHG assessments for acceptability and content and coordinates submittal to the Department for the Department’s review
    - Demonstrates MassDOT is making best efforts on CECP for 2020 commitments, that it is pursuing supplemental GHG reduction measures where it is unable to meet CECP for 2020 commitments, and that these reductions are on track to achieve the GHG emissions targets for 2020
  - Metropolitan Planning Organizations (MPOs)
    - Develop RTPs and TIPs
    - Ensure that RPA are using appropriate planning assumptions
    - Perform regional GHG emissions analysis of RTPs and TIPs
    - Calculate GHG emissions for RTPs and TIPs
    - Develop public consultation procedures for GHG reporting and related GWSA requirements consistent with current and approved regional public participation plans

- RTAs
  - Conduct comprehensive service reviews (CSRs)
  - Identify service enhancements to increase passenger ridership
  - Identify vehicle technology and operational improvements that can reduce GHG emissions
  - Work within the MPO process to prioritize and fund GHG reduction projects and investments
- Project GHG Calculations
  - Categories of GHG impact
    - Projects with Quantified Impact
      - RTP Projects – Considered as a “package” in regional or statewide modeling
      - Quantified Decrease in Emissions from Traffic Operational Improvement, Pedestrian and Bicycle Infrastructure, Complete Streets Improvements, Park and Ride Lot, New/Additional Transit Service, Bus Replacement, or Other Improvements
      - Quantified Increase in Emissions
    - Projects with Assumed/Unquantified Impact
      - No Assumed Impact/Negligible Impact on Emissions – EXEMPT
      - Assumed Nominal Decrease in Emissions from Traffic Operational Improvements, Intelligent Transportation Systems (ITS) Sidewalk Infrastructure, Bicycle Infrastructure, or Other Improvements – Projects that would be expected to produce a minor increase in emissions that cannot be calculated with any precision
      - Assumed Nominal Increase in Emissions – Projects that would be expected to produce a minor increase in emissions that cannot be calculated with any precision
  - CMAQ spreadsheets, required inputs
    - Intersection/Traffic Flow Improvements – Traffic volume, peak hour factor, delay for each intersection movement, for AM and PM peak, existing vs. with improvement
    - Complete Streets/Pedestrian and Bicycle Improvements – Length of facility, service radius of facility, population/area served/population density, trips per day per person, pedestrian/bicycle mode shares, average pedestrian/bicycle trip length
    - Park and Ride Lot – Number of parking spaces, occupancy rate, no-build mode split, build mode split, new bus trips, distance from lot to destination, average travel speed
    - New/Additional Transit Service – Route length, trips per day, operating speed, auto person-trip reduction, average auto trip length
    - Bus Replacement – Old and new bus emissions factors, miles per year (revenue miles per year, deadhead factor)
  - Emissions factors – Status of incorporating MOVES into models, CMAQ spreadsheets
- Other Issues
  - Use of “appropriate planning assumptions” for RTPs, TIPs
  - Certification of regulatory compliance, consideration of GHG-related evaluation
  - Updates to RTPs and TIPs to reflect requirements of 310 CMR 60.05
- Schedule
  - Regulation issued – January 2, 2015
  - Agency Coordination Meeting – April 2015
  - TIP Process – April – June 2015 – Effective October 1, 2015
  - MassDOT Regulation Annual Reporting – December 31, 2015