NBTAM Traffic Model

General Plan Update Steering Committee April 3, 2019

Newport Beach Traffic Analysis Model (NBTAM)

What is it?

- Computer software platform used to model transportation systems to help plan, design and operate circulation system.
- Initially created as part of the 1988 General Plan.
- Updated in 1996 to reflect changes initiated by GP Amendments and upgrades to roadway system.
- A new model was developed in 2004 for the 2006 General Plan.
- Extensive update in 2014 as part of the proposed Land Use Element Amendment.

Model Options

- An NBTAM update would maintain the existing model framework. A new model would require changing the software and re-coding the network. Both options would include latest Orange County Projections (OCP) 2014 demographic data.
- Development of a new NBTAM model would roughly double the time, effort and cost vs. update.
- An update would be efficient and consistent with OCTA model, and would meet General Plan needs. A new NBTAM model could incorporate recent VMT analysis requirements.
- Approximate schedule for update is 4 6 months. New model development would take approximately 8 – 10 months.
- We would continue to use our long standing on-call modeling consultant. Lead staff members managed the 2004 model development and the 2014 model update.

Senate Bill 743

- Requires changes to guidelines implementing CEQA regarding the analysis of transportation impacts. Shall go into full effect statewide by July 1, 2020.
- Identifies vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project, replacing the capacity based level-of-service (LOS).
- SB 743 states that lead agencies have discretion to develop and adopt their own methodology, thresholds of significance, feasible mitigation measures.
- Basic methodology is to use the trip generation to calculate the project VMT. Then compare a project's VMT/capita (residential projects) or VMT/employee (employment projects) to average values on a regional basis.

Senate Bill 743

- SB 743 states that vehicle LOS may continue to be used for all projects as part of transportation planning or entitlement review. SB 743 only modifies the CEQA analysis process.
- In addition to the CEQA VMT metric, many cities (San Jose, Pasadena, San Diego) continue to require that project studies include analysis of local intersection operations using LOS.
- The City Traffic Phasing Ordinance (TPO) will continue to be used in addition to VMT analysis.
- Mitigation for impacts could include capacity improvements to roadway or transit, bike, pedestrian improvements, or ride-sharing requirements, etc.