

North Carolina Department of Transportation's Strategic Prioritization Process

June 2, 2010

Governor Beverly Purdue, upon taking office in January 2009, issued Executive Order No. 2 calling for Transportation Reform at NCDOT. The Order required projects to be awarded based on professional standards which meet the needs of the citizens of the State and not simply on political considerations. To support this Order the Strategic Planning Office of Transportation (SPOT) office was charged with developing a data driven process to be conducted in a transparent and easy to understand manner. The initial prioritization effort is now complete with the release of the Draft State Transportation Improvement Program (STIP) in June 2010.

The initial prioritization process focused primarily on highway projects and was based on a combination of quantitative data, qualitative input, and multimodal characteristics. This process was inclusive of NCDOT's planning partners (Metropolitan Planning Organizations (MPOs) & Rural Planning Organizations (RPOs)) and internal staff, specifically NCDOT's Division (or field) Offices. Quantitative data included volume-to-capacity ratios, crash rates, and pavement condition ratings. Qualitative input was based on the top 25 priorities of each respective MPO's, RPO's, and Division. Multi-modal characteristics addressed whether the project benefited more than one mode of transportation. The process also tied back to the Department's emphasis on improving system performance across three goals (Safety, Mobility, & Infrastructure Health) and across three system tiers (Statewide, Regional, and Subregional) of its 79,000 mile network. Each project was subsequently categorized and scored through a matrix that was weighted by goal and tier and ultimately used to rank individual projects.

Non-highway (Ferry, Bicycle & Pedestrian, Rail, Aviation, Public Transportation) projects were also prioritized by goal and system classification. Most of these projects were prioritized in a qualitative manner based on need and coordination with local officials. Future versions of prioritization will include a more data-driven approach.

After projects were categorized and released to the public, a series of investment summits were held to determine funding allocation for each category. To support these deliberations and tie future investment to expected performance NCDOT developed a Level of Service (LOS) concept. LOS is simply defined as the quality of service provided to the user of the transportation system. Business Units in NCDOT determined their current and 10 year LOS grades (A-F scoring, A for highest performance possible, F for lowest). LOS grades are based both on measures tied to the Department's performance dashboard and on subjective analysis. LOS for highway Mobility projects is based (for example) on congestion (as determined by volume-to-capacity ratios), while LOS for highway Infrastructure Health projects is based on pavement condition ratings. Summit participants, including members of NCDOT Executive staff and MPO/RPO representatives, used LOS grades to help determine their decisions on how to allocate \$10 Billion in future revenue against \$54 Billion in future transportation needs. As money was assigned to each category, projects were selected in ranked order to show the positive impact on LOS. The outcome of the summits was a statewide investment strategy for funding transportation projects.

The final step of the prioritization process was to apply other financial and scheduling constraints to the recommended investment strategy. These constraints included complying with Federal and State laws regarding funding distribution and air quality standards, as well as taking into consideration which projects are technically ready. The result of this final step is the Draft STIP.