City of Raleigh
North Carolina

May 23, 2013

MEMORANDUM

TO: Mayor McFarlane & City Councilors

FROM: Eric J. Lamb, PE
Transportation Planning Manager

SUBJECT: Transportation Workshop Materials

We are looking forward to reviewing the City's transportation needs with the City Council at next week's worksession! Here is a breakdown of the key decisions we are going to need from the Council as part of this effort:

1) Should the City consider undertaking a pilot transit project, and if so, how should the City pursue it financially?

2) How should the City prioritize individual circulator service proposals against the systematic improvements recommended in the existing Short Range Transit Plan?

3) What adjustments should the City make to the scope of the Union Station project given the financial challenges the project is facing?

4) What course of action should the City pursue with respect to Union Station Phase II and parking and development needs for the Warehouse District?

5) How should the City prioritize its transportation needs?

6) How should the City pay for its transportation needs?

Here are some other details about the information in this packet.

Transit: This section includes information about the proposed New Bern Avenue bus rapid transit project and a copy of the City's adopted Short Range Transit Plan.

Programs: This section includes information about the City's transportation program areas included within the Capital Improvement Program. These programs typically receive annual allocations based on program type and funding availability. The target costs presented for each program represents an ideal level of annual funding for each program.

Projects: These projects were selected based on public outreach, staff surveys, and previous planning efforts. Each project scope generally includes the construction of sidewalks, bike lanes, streetlights, and landscaping unless otherwise specifically noted in the project description. Transit amenities would also be included in the project scope for locations with existing transit services, which are noted on the project sheets. The cost estimates included as part of this effort have been updated based on the most recent costs available for construction and right-of-way acquisition.

Prioritization: Staff has evaluated each type of project based on a variety of possible metrics, including safety, traffic capacity, economic development needs, transit demand. We have also incorporated previous rankings from the City's adopted bicycle and pedestrian plans. We have attempted to look at the data in several different to determine which projects rank the highest in the most categories, ensuring that we are promoting the most multimodal projects possible. A copy of the most current adopted streetscape project prioritization is also included for reference.

If you have questions about details regarding any of these projects in advance of the workshop, please feel free to call me at (919) 996-2161 or email me at eric.lamb@raleighnc.gov.

Cc: Russell Allen
Carl Dawson
Mitchell Silver

Explanation of Evaluation Criteria for Prioritization

Major and Minor Street Improvement Projects

For existing streets in the City, data is readily available regarding traffic, crashes, and transit usage. This data can be converted to rates in several categories for the purposes of comparison. From these rates, staff generated rankings of all major and minor projects within each individual category. Once the ranking was determined for each category, the sum of those ranks were added together; projects consistently ranking highly in each category would yield a lower point total overall (i.e., a lower score indicates a better project). An additional score bonus was added based on the relationship of a proposed project to the City's identified targets for economic development.

Notes regarding categories:

Congestion: This category is determined by comparing the calculated average daily traffic volumes and dividing by the theoretical traffic capacity for a given street segment. A calculated volume-to-capacity ratio greater than 1.0 generally indicates that congestion is present along a street.

Crashes: Crash data has been split into three separate categories: auto crashes, pedestrian crashes, and bicycle crashes. Auto crashes are expressed in a standard rate of Crashes per 100 Million Vehicle Miles (100MVM), while bike and pedestrian crashes are each calculated by the number of crashes per mile of street.

Transit: Data regarding existing ridership was obtained from CAT and applied to each project on a per mile basis.

Bicycle and Pedestrian Plans: With the adoption of the City's Bicycle Plan and Pedestrian Plan, the Council approved the prioritization of streets based on each plan's different criteria. Each of those relative rankings have been provided here and applied to these candidate projects.

Economic Development: The 2030 Comprehensive Plan includes defined areas for targeting economic investments. For projects substantially within one of these designated areas, a bonus of -25 points was applied to the final score. For projects abutting one of these areas, a bonus of -10 points was applied.

New Street Projects

For proposed new streets within the City's system, the ranking process is more subjective in the absence of existing performance data. Only a portion of the proposed streets have been modeled for traffic projections. Instead staff applied three tests for identifying which streets should be considered:

1) Is the proposed project within or adjacent to a proposed economic development area?
2) Does the project provide relief or otherwise directly benefit an adjacent/parallel street?
3) Does to project provide direct benefit or access to a proposed transit service?

None of the streets evaluated received a Yes in all three categories. Many of the proposed projects are outside the City's proposed economic development areas, however several projects satisfied the other two criteria.