Regional Transportation Planning Study Next Steps Staff Group

Staff Development of Elected Officials' Proposed Work Elements

At their meeting on April 18, the Policy Group identified a number of potential work elements for a regional transportation planning work program. The suggested work program elements represent the Policy Group members' input for projects that could be of interest to the region, could help build trust, could be accomplished successfully, are needed, and/or would be useful or valuable in helping the region move toward Option E, the "blueprint"-based planning process, in a reasonable time frame.

However, not all of these planning projects can be undertaken simultaneously, and some may be more or less successful at accomplishing the Policy Group's goals than others. Furthermore, it was important that the staff start to flesh out what these various planning projects may include, and may yield, in benefits, and what might be the challenges in undertaking them.

Following is the staffs' work, fleshing out each of the Policy Group's proposed projects in this way.

Regional Freight Planning

Goal: Planning efficient movement of freight in the region through coordination of truck, air, rail, and proximate land uses.

Description: Address: transport modes, proximate land uses, efficient routing, intermodal linkages, intermodal facility impacts, impacts on air quality, regional job growth, noise pollution, etc.

Regional Need/Benefits:
- This is good for the job market and gives a competitive edge to our region.
- MPOs and RPOs have talked about doing a freight plan, and TCCs have been pretty supportive.
- There's local support for this, because regionally is the only way you can really do a freight plan.
- Rural areas' market access makes this important to rural areas.
- The new intermodal yard gives us an excellent opportunity to consider and plan our freight system.
- UNCC's "Seven Portals" report also makes this timely.
- NCDOT's work on logistics also makes this timely.
- This fits in with Governor's Task Force on Logistics (when will they report?)
- Nobody's doing this very well now and it represents a real benefit.
- Dealing with railroads regionally will help address their larger issues as well as small-scale problems.
- Atlanta's freight plan also included industrial parks and a lot of key origin-destination points, so had strong land use ties and addressed a lot of needs at different scales.
- There's enough here that it could be valuable; the challenge is getting data.

Challenges/Barriers:
- People who haul freight tend not to want to share data
- A lot of the data is proprietary.
- It is possible that some carriers who will provide data will also tend to exaggerate it.
- Railroads are more forthcoming with data than trucking companies.
- The trucking industry is decentralized, with varying degrees of logistics opportunity.

Stakeholders:
- The whole logistics industry are your stakeholders.
- Railroads
- Air/the intermodal facility
- The trucking industry

- Major manufacturers/distribution centers
- Economic developers/Chambers
- How about high-speed rail impacts? High-speed rail is handled at the NCDOT Secretary's level, particularly since the State owns the rail corridors. Freight typically trumps passenger movement. Laying of double-track related to HSR definitely makes them a stakeholder in freight planning.
- Rural areas have an interest of safety and access to markets, particularly for large trucks such as logging trucks that have issues getting goods to market on narrow 2-lane roads.

Costs/Funding:
- We should talk with Roberto Canales and see if there is anything in NCDOT's budget for regional logistics/freight planning.
- PL funds could be pooled from MPOs if they were willing to allocate funds to this, and perhaps do less of something else while this project is going on.
- This could also potentially pull in demonstration dollars.
- We should also ask EDA and Charlotte-Douglas International Airport, based on their intermodal facility, for funding.
- We need to be creative about how we fund this.
- We should also consider the potential impact of this project in reducing traffic during peak rush hours, which could have a positive Air Quality impact. This is a challenge in all major metro areas.

Timeline:
- If the intermodal facility is expected to be fully operational around 2013-2014, the project should be well underway or completed by then so as to maximize the region's readiness to support and benefit from this resource.
- The final report for logistics task force also important to guide moving forward.

Regional Rail and Transit

Goal: A regional plan for development of an effective, efficient and coordinated passenger rail and transit system

Description: Examination of all transit modes and their inter-connections, how land uses relate to transit, how transit relates to roads, how various transit providers coordinate transit, and costs/benefits of various transit options.

Regional Need/Benefits:

- Need is defined by how many people aren't driving cars.
- It's a huge problem in outlying counties to keep CATS Express service.
- The bad economy means ridership is down because of job loss, but gas prices make people want to ride, and transit ridership has declined less than VMT—transit planning makes sense.
- There are several communities that want more park and rides, more transit options, etc.
- Demand-response providers in outlying counties also have issues with operations, because they're tapped out on capacity, operating costs are up, ridership is up, but their operating dollars are cut.
- Most riders of demand-response systems now are general users who'll pay money to ride.
- There are also challenges with cross-county-line relays and coordination.
- We should build on local coordinated plans, because all transit providers in a county get together and look at needs, and coordinate their plans, but there's not planning across county lines. There are major efforts at doing cross-county coordination on a call-to call basis, for example, if someone from Anson County needs to get to the VA in Salisbury.
- The region has submitted a grant application for mobility management on behalf of Human Services providers in the region, at their request, which may be a basis for this.
- Part of the benefit of undertaking this (or any other of these coordinative actions) is that it will help us get grants by having coordinated plans.

Challenges/Barriers:

- Some communities do not view transit as a high priority, and see it as a "big-city" thing… but all counties have demand-response transit systems in place.
- County budgets also play into it, because of how CATS splits the costs of trips, and the fact that county match for CATS services typically comes from the general fund.
- Currently, only Mecklenburg County residents pay a transit tax.
- But the Marshville Express wasn't successful; where express bus service makes sense and where it doesn't is a tough issue.
- This might not be something we start out with.

Stakeholders:

- Transit providers
- Human Service agencies
- Clients
- Local governments (primarily counties)
- Major employers, because of the Job Access Reverse Commute (JARC) funds
- Major medical centers, because so many trips involve health-care access

Cost/Funding:

- A study of current systems may be a good foundation piece if we get the mobility management grant.
- We may also want to see if the major medical centers have any interest in providing funding since this is such a major access method for their out-of-county clients.
- JARC/New Freedom grants—would they fund a study or plan?

Timeline:

- To what extent do gas prices play into this, and will we get more information about what triggers ridership increases as a result of ridership surveys for Regional Travel Demand Model (RTDM) updates or through CATS?
- The key may be when we learn whether or not we have gotten the regional mobility management grant, which would make this of more interest to more people.

Growth Projection Versus Capacity

Goal: Regional analysis of growth trends compared with regional and local infrastructure capacities to accommodate growth

Description: Reaching agreement on the critical system components needed for growth and measures of capacity, identifying current capacities, and determining where capacity exists or is lacking relative to projected growth. The resulting analysis assists communities with adjusting growth patterns and/or determining the cost of various growth patterns.

Regional Need/Benefits:
- If we need to get the new Socio-Economic projections back to the Regional Travel Demand Model (RTDM) Team by the end of the year, this could be a good project.
- We would need to take our control totals and relate them back to census numbers, then allocate them back to the Traffic Analysis Zones. We need to not overrun regional control totals, and the allocation process is not mathematical alone, but based on good professional knowledge.
- A lot of jurisdictions would like to see growth and capacity match-ups…what does it look like if we have growth here but sewer there…I think they don't have that.
- This gets you to Option E quickly, and this is almost an "E plus."
- This may relate to work NCDOT is requesting from UNC-Chapel Hill for modeling.
- It may also relate to the growth modeling project Dr. Brian Morton has done for EPA using Mecklenburg County as his example (and there is now discussion of expanding this to Union County).
- You can also back into this from the flip side, of where we KNOW we do NOT have infrastructure capacity for growth, which may be easier.
- What are the ramifications of this project for transportation planning? The results may affect priorities and plans; a big success story in that regard is Boulder, Colorado. Or it may help us define where access points really need to be, and where they do not need to be.
- Congestion is viewed by some as a good thing; it is a measure of how active a community is, so while it is considered by others to be a measure of "exceeding capacity," it may not be a reliable indicator for that.

Challenges/Barriers:
- The problem may be the whole capacity issue, because there are a lot of assumptions, so I think that's the hard part. You have to really make assumptions not only about growth, but those assumptions have to be market-tested.
- What if we are out of capacity—it typically hasn't kept us from growing.
- The challenge is that there is a cost if we continue to grow in areas without capacity.

- Has anyone done this regionally? Some people have done it in places in the Portland area…Denver has also done something with it, because they have natural geographic barriers.
- The capacity calibration is tough. For example, with transportation, congestion isn't necessarily a good indicator of capacity.
- In doing growth allocation from regional or county control totals, you also need quality control.

Stakeholders:
- NCDOT
- Division of Community Assistance in the NC Department of Commerce
- Local governments
- Public utilities (electrical as well as water/sewer)
- Environmental groups, land trusts, etc.
- ULI

Costs/Funding:
HUD could fund this.

Timeline:
- If we could get agreement on the next growth spurt, that'd be great.

Regional Land Use Map

Goal: Development of a normalized region-wide map that depicts each county and community's current land use patterns, later expanding to include desired future land use patterns

Description: Compilation of current land uses from existing land use/zoning maps, Regional Travel Demand Model data on households and jobs, natural resource inventories, and new aerial photography from the State, to present a picture of current regional land uses

Regional Need/Benefits:

- This could be readily generated and would give our elected officials the opportunity to discuss whether the patterns look sustainable, and to see if this is really the way we want to grow, etc.
- We can do this as a collage of local maps, and does it look for a common sense vision for the future?
- This could be the basis for the growth projection/capacity study.
- We need a trust-builder and this could do it, and could be used to support many other projects.
- It's pretty close to baseline information and we don't have it.
- Start with current and then consider going to future land use.
- Do most jurisdictions have a future land use map?
- It almost seems to me that this is a building block piece.
- We could also look at the Regional Travel Demand Model (RTDM) model information on a regional scale and share it with policy folks. When you do something like that, it becomes a conversation starter.
- CCOG has done a basic map of normalized land uses (future), which could be a starting point.
- We can plot households and jobs, and you could also possibly plot them by density, or jobs by type, and natural resources.
- A good first step could be to get all the GIS folks around the region together to discuss this.
- The State has brand new aerials so matching aerials with RTDM data may be possible, because the regional model can provide a lot. We could look at that and then go with something fairly easy.
- A good product, and process, could make better SE updates easier in perpetuity.

Challenges/Barriers:

- The question is, who would do it?
- CCOG's normalized map is of future land uses, not current, and it would need more buy-in.
- The challenge of working from local maps is that there are 70-80 jurisdictions in the region, and you have to have maps from everyone, because otherwise you have holes, and you do need input on normalization.

- Adopted future land use is harder to normalize than current land use, and it also is highly subject to change.
- Current land use on the ground today is difficult, also, because you have to go to the County tax data, but not all counties indicate land use on their parcel data.
- TAZ size in rural areas is challenging unless the data can be mapped within the TAZ.
- Not all counties may have good and/or equivalent data.
- It is possible to make this as easy or as difficult (and expensive) as we choose.
- We would need to decide who would be map custodian and how updates would be done.

Stakeholders:
- Land use professionals
- GIS professionals
- Local governments
- Developers
- ULI and others

Costs/Funding:
- The project scope will govern costs, so it will need to be much better defined before we can arrive at costs.

Timeline:
- Because this effort is potentially foundational to any other type of regional collaboration, this should happen sooner rather than later.
- We should get the regional modeling team together, and see what can be teased out.

Project Priority Matching

Goal: Regional support and voice for major projects.

Description: Potential approaches could include:
- Normalize ranking criteria for major transportation projects in the region
- Analyze MPO/RPO ranking lists re: major project commonality
- Develop common data-driven process for ranking major projects

Regional Need/Benefits:
- It would be worthwhile to evaluate SPOT in light of our values, to see how SPOT rankings match with what we would want to see happening.
- SPOT rankings should reflect points for regional support for those projects that truly meet multi-MPO/RPO needs.
- We need a way to rally around projects that are important to us as a region, and to have that be considered; the Mobility Fund may help with this.

Challenges/Barriers:
- Is this the same as SPOT?
- It seems like it's been done at the state level by SPOT.
- I think we need to define regional projects.
- Once you've ranked the projects, what do you use it for?
- I don't think you'd want to reinvent SPOT, and we really have to identify what everyone's needs are, and what would help each partner.
- If we look at individual ranking criteria, we can see what we value and if it's different.
- The Equity Formula doesn't allow us to support regional projects. That may be why we haven't done a lot of those projects, and why we're limited now.
- The Mobility Fund is tapped out until 2015 and then will likely be spread to some other part of the State.

Costs/Funding:
- This was not addressed at this meeting

Timeline:
- The "Support" piece can be done now and at any time for those major projects we can all support.
- Prioritization efforts are longer-term.

- Could the region get behind the HSR corridor? What if we really agreed to support something like that?
- We need to discuss what can the region support, and what is significant enough to enough people?

Major Highway Corridors

Goal: Aligning the vision goals of NCDOT and local government needs along strategic highway corridors and other major corridors

Description: Potential approaches may include:

- Additional corridor plans (e.g. NC 73)
- Development of common project ranking criteria
- Development of a data-driven process for regional corridor prioritization, etc.

Regional Need/Benefits:

- This is an outgrowth of what was talked about in Option "C."
- It's good to help people start to understand that NCDOT doesn't have all the money, and this may be a good sub-regional outgrowth of this for some of our more rural counties.
- The SPOT Office says that upon arriving at a genuine regional cooperation, they would be willing to give added points to any project that jurisdictions all agreed on, for major highway corridors.
- There is some question about the State's strategic highway plan; we have found that strategic corridor visions diverge in some cases. If state sees all the corridors as high-capacity/high-speed, but local folks see it differently based on context, how do you deal with that? It's a testing of state's vision versus local visions, and trying to trying to marry the needs of the State with the needs of individual communities. That could be a good approach.
- This may be as much an alignment issue in terms of goals and uses, as it is promoting certain corridors. There are differences are in how we envision the ultimate vision for a corridor, and for the Metrolina region, that could be a good start.
- The State assumes that strategic highway corridors will be the people-movers of the state, and operates on a 50-100 year vision for those corridors.

Challenges/Barriers:

- It seems with this project, you're potentially only involving some people in the region. If you want to get buy-in from the whole region but you're only getting the folks on the corridors involved, how does that work? Even if you work on a corridor that crosses a couple of planning boundaries, you're still not involving the whole region, just the folks along that corridor. We need the whole region working together.
- It could be a good thing to do, but it may not be the best thing to start at.
- How do you engage if you're focused on an area within the MPO, and the rest of the region isn't involved in it? Some people do feel left out.

- I think it's a matter of how long we've been in business and how much we trust each other, and some of it depends on people's willingness to know that it'll come around to them as well.
- When we get to level E, this will be easier to do, because we will have all worked together by then. We probably need to be more comprehensive at first.
- If we go by the definition of regionally significant based on air quality conformity, we'll bring in a whole lot more projects.
- There needs to be a way to take into consideration changing land uses.
- How do we do this?

Costs/Funding:
- This is very broad and would need to be further defined in order to establish costs.

Timeline:
- Nothing is pressing this at the present time, but it should be done.

Air Quality

Goal: Developing and implementing a coordinated regional plan for improving air quality

Description: Implementing region-wide programs that effectively target major mobile sources

Regional Need/Benefits:
- There is some good regional cooperation on conformity, with different people taking a lead on that effort for the region. At a technical level, this gives us experience working together.
- One of our elected officials proposed it in terms of all getting behind one or two or three major measures, such as idle reduction, etc.
- There is an opportunity to be proactive before the new EPA standards come out, and our elected officials want to be proactive.
- We can work with other stakeholders to look at meaningful outreach, particularly on Code Orange/Red/Purple days, and there are many stakeholders on this.
- This will move us to E very quickly, if we approach the long-term solution of land use change.
- Education and information can be done at any time to help the public understand what they can do.
- The region is technically "in attainment" at the present time.

Challenges/Barriers:
- But the bottom line for air quality in terms of transportation conformity is technical work in terms of VMTs and speed. If you have speeds between 30-50 mph, and can keep VMT growth under control, then you'll be okay for conformity, at least for the current standard.
- The long-term solution to air quality is changes in development practices, and it's not an easy or quick fix.
- We can't control vehicle standards or the weather, both of which play a huge role.
- It's costly and hard to move the needle on air quality. What has had the biggest impact in Mecklenburg County has been the economy and gas prices.
- The stricter the federal air quality standard becomes, the more critical the need to look at land use change and/or other measures, to stay in conformity.
- Stakeholders will have to help frame this discussion.

Stakeholders:
- Everyone
- Environmental groups, SELC, etc.
- Chambers of Commerce

- Local governments
- NCDOT

Costs/Funding:
- Some grants available.
- Costs vary depending what activities are.

Timeline:
- EPA has said they will propose a new standard in July 2011, and although we are in "maintenance" now, we will probably be put back in non-attainment.
- Educational and informational activities can be done at any time.
- Mathematical modeling goes on all the time.
- If the goal is a plan, then it can be capacity-building.
- Can we develop a plan or some practical recommendations to have in place by the time EPA announces their new standard?