Triangle J Council of Governments

Smart Growth & Water Resources Collaborative Meeting Focus: Green & Complete Streets

Meeting Notes

Thursday, June 20, 2019
Triangle J Council of Governments

Notes briefly capture what was said in the presentation and the discussion – look at presentations for more details.

US EPA's Green & Complete Streets Tool, Jason Wright, Tetra Tech

- Technical assistance to a municipality includes three main steps: assess, convene, and identify next steps.
- Communities can apply to EPA for technical assistance. EPA selects the communities that can move forward with technical assistance. Generally community should have a complete streets ordinance already, but may be struggling with implementation. Training also helps incorporate green elements into complete streets ordinance.
- Do a community audit to pull in information from previous community engagement/outreach, ordinances, plans, codes, and advisory boards.
- What we've seen – identify good and bad elements in their existing infrastructure. Identify areas where can incorporate green infrastructure as they update failing infrastructure – sidewalks, roadways, bus stops, parking areas, etc.
- Show community a lot of examples to get an idea of their preferences – would you prefer to walk on a street like this or like that?
- Also show examples of how poorly managed stormwater can lead to economic impacts – like reduced recreation opportunities.
- Most green streets incorporate bioretention and permeable pavement.
- Benefits include reduced stormwater flow and improved water quality, enhanced pedestrian safety and comfort, reduce urban heat island effect, reduce carbon footprint, beautify neighborhoods, provide a catalyst for redevelopment.
- Visit the community and look for opportunities like tree plantings, curb lanes, excess lane width, etc.
- Suspended pavement is one tool available for stormwater management and treatment.
- Clarify with the community what green streets add to the complete streets concept for a more holistic approach.
- Make the point that it doesn't have to be the whole parking lot or the entire street; can be a crosswalk, or a parking strip.
- Mid-block bump outs can include plantings and public art as well.
- Take leftover dead space in an intersection or roadway redesign and turn into a green space.
- Green alley programs are also a great option to retrofit with permeable pavement or infiltration basins to alieve basement flooding and alley runoff. Pavement can be strong enough to withstand the load of multiple trash trucks coming through every day.
- Also talk about maintenance, like pruning trees and bushes back.

- Turn conversation back to community – check if the right goals have been identified, what the challenges and opportunities are to realizing those goals.
- Trainings are flexible to meet the needs and desires of the community.
- Finish out the training with a technical workshop that includes maintenance crews, transportation, planning, etc. to discuss the implementation and maintenance of the infrastructure across disciplines. Focus on long-term O&M standards, staff training, funding, and making a budget line item for maintenance.
- EPA has a number of funding resources on their website to help implement these types of initiatives.
- WERF has a BMP and LID Whole Life Cost Model that combines capital and ongoing maintenance costs.
- UW Green Cities Green Health has a lot of research and resources on the environmental and health benefits.
- Conduct action planning identify who will take the lead, whose support is needed, what the timeframe will be, how to pay for it, and how to measure success.
- Can apply for assistance through the EPA's building blocks program or through the green infrastructure program.
- Can contact Jason, 919-485-2064, jason.wright@tetratech.com for more information.

NCDOT's Complete Streets Policy, Hanna Cockburn, NCDOT Bicycle & Pedestrian Division

- Complete Streets policy has been in place at NCDOT for almost a decade.
- Current Secretary has indicated the importance of integrating the policy into the design standards and removing barriers to implementation.
- Complete Streets 2.0 started in 2018, evaluation to identify obstacles and create recommendations.
- Have established a cross-functional Complete Streets Task Force, and integrating CS into project improvement processes, conducting internal training to support CS implementation, and providing external CS workshop trainings.
- Changing how they assess projects in SPOT 6.0 to consider impacts on all users, not just looking at volume, capacity, and congestion metrics.
- Biggest 5 counties will absorb most of the state population growth in the future. Rural communities will see more aging in place. Will need different transportation solutions for these different contexts.
- Economic disparities across the state means transportation options will differ as well. Median income in a Tier 3 county is roughly $50,000 higher than a Tier 1 county on an annual basis.
- Population of those 18 & younger and 65 & older are going to grow between now and 2030; vehicles may not (or should not) be an option for those populations.
- Advent of micro mobility, and electrification of micro mobility is going to change our transportation system as well.
- NCDOT is currently buying two Olli autonomous circulator vehicles to test in different contexts across the state.
- Have lots of vulnerable road users – NC has 7th highest total pedestrian fatalities by state, and 8th highest rate of bicycle fatalities per capita.
- Are integrating complete streets into their policy approach – reviewed greenway, bicycle, pedestrian, bridge, roadway policies. None of them matched, some very outdated – are bringing them under one umbrella of policies.
- The green book 2018 update includes multi-modal facility integration, balancing needs, and having flexibility in design.

- Board of Transportation will take action on the policy next year, followed by the development of an implementation guide, and then developing and conducting training and workshops, and updating NC Roadway Design Standards.

Questions & Discussion

- Is NCDOT looking at the Olli to provide paratransit in rural communities? One the rationales for testing it in different sized communities is to see where it would work well. Once you have it set up, doesn't need to be on a set schedule – can run it whenever it's needed. We're fortunate that every part of the state is served by over 100 transit agencies, which is more service than many states in the southeast. But that service provision is also very expensive.
- How are counties brought into the conversation when they don't own roads? Heard loud and clear that the cost-share is an issue for local communities. Will address that in the implementation policy. Important for local communities to make sure their plans include all the multi-modal and design elements they want, and are right-sized for the context in order to take advantage of the new complete streets policy.
- People drive to the design of the street, not the posted speed limit. Need to be working on right-sizing the streets for the intended speed limit.
- How well do permeable pavements do in freeze/thaw cycles? Have case studies and research from permeable pavement in Edmonton, Canada that has been in place for 10 years and it performs very well, sometimes better than standard pavement because the water can get through the system before it freezes. Can be some issues with the vegetation in bioretention areas being impacted by salt and chlorides from snow plowing, but that can be addressed by choosing the vegetation widely.
- Maintenance – a lot of time the maintenance needs are not about staffing up, but coordinating better between staffs to maintain it well – like having parks & rec staff maintain the vegetation in a bioretention area rather than the street sweeping crew. WRI has started doing a conference specifically on operation and maintenance.
- Understanding that roadway design has been decentralized to the regional offices – is that true, and how does that impact the potential for implementing complete streets? True that much of the project development has moved to the regional level. To integrate green into complete streets will need to engage with a wide range of technical experts. Pushback often comes from a place of comfort and what they know – but it doesn't mean we shouldn't do it. In addition, a lot of the design work is being done by consultants at this point.
- From a transit perspective – there's more emphasis from the Raleigh Transit Authority board on first-mile/last-mile integration into transit plans – sidewalks, bus shelters, etc. And those are now being designed into plans by the Transportation Department, which is so much more efficient and cost-effective.
- Raleigh Road Design is getting input earlier in the process to get issues addressed sooner before go too far into design. Now have a predesign public meeting before get to 25% design. Have found that the more transparent the process is and the more engaged the public is the more support there is for a project. Have public meetings at 0%, 25%, 60%, and pre-construction. Also do surveys at meetings to get sense of level of support for the project at each phase.
- Asking for more input on what they would like to see outside the curb – crosswalks, art, etc.
- Green infrastructure is a big part of Raleigh's strategic planning process.
- Yonkers Rd. will have 12 bioretention ponds and will go to construction in the fall.
- WakeUP Wake County is having an intern building a matrix this summer that will summarize all the codes of each municipality, including bike/ped, GSI, etc.

- What can we apply from Safe Routes to School to a "Safe Routes to Bus Stops"? One of the values of SRTS is that it doesn't always follow a roadway – it weaves through neighborhoods/developments between destinations, think the same thing has to be done with bus stops. Working with developers early on can help make that happen.
- When working on roads and redesigning the physical space for SRTS, but working with NCDOT engineers they don't want to reduce the speed limit, because there isn't data to support a speed reduction, even though entire landscape is being reshaped. Typically City has a lot shorter schedule for a road than NCDOT does.
- Opportunity to incorporate green elements into NCDOT complete streets policy will have to come in another iteration of the policy, at this point the draft complete streets policy is done.
- Part of the Raleigh budget goes towards art components within the road project, and the art can be educational as well.

Topic for next meeting on September 19th has not been identified yet – any ideas?

- Steve Rao – a lot of Smart City initiatives around the region, maybe profiling a few Smart City solutions that can help with smart growth, whether it's for transportation, stormwater, water resources, etc. A lot of times Smart Cities gatherings are technology leaders talking about solutions, but towns are not always part of the conversation. Bring in Nicole Raimundo (Cary), Darnell (Raleigh), NC Riot
- Touchpoint on water capacity in the region over the next several decades and how that compares with expected population growth and development.

The chairs, TJ Cawley, and Steve Rao, closed out the meeting and thanked everyone for coming.