

## Infrastructure Stakeholders Interview

### Chatham County Comprehensive Plan

2/18/2016

Location: Dunlap Classroom

#### Attendees:

Fred Royal, Pittsboro Town Engineer

Terry Green, Siler City Public Works Director

Dan LaMontagne, Chatham County Assistant County Manager/ Public Works Director

Larry Bridges, Chatham County Utilities Director

Tim Cannup, Mayor of Goldston

Chuck Smith, Chatham Park Representative

Brian Burkhart, Chatham County Environmental Quality Director

#### Staff:

Hillary Pace, Chatham County Planning Department

Jake Petrosky, LandDesign

Meg Nealon, LandDesign

#### Accomplishments and What Keeps You Up at Night (Issues)?

##### Siler City

- Transportation Accomplishments
  - Ped plan is a success. New ped plan has policy and infill recommendations.
  - US 64 and E Raleigh street projects.
  - Love's creek greenway
  - SRTS projects.
  - Ped plan a major accomplishment. Ped framework biggest infrastructure concern.
- Transportation Concerns
  - Pedestrian improvements. Network created in the 50s. Then new subdivisions didn't have sidewalks.
- Utilities
  - Siler City:
    - Stormwater a major concern. Downtown area in particular.
    - Inflow and infiltration
    - Aging infrastructure. Clay pipes. Sewer lines in gutters.
    - 52 inches of rain this year. I & I repair, >\$1million (up till 08-09)
    - \$100,000 per year contract work + additional sport repair
    - Water infrastructure, east side of town, 12" water line extension to boost capacity.
    - Walmart carried this into their site. Now into progress blvd.
    - 5 storage tanks. 2.5 mil.
    - WTP 4 mgd, WWTP, 4 mgd. Average 1.8 mgd.

- During recession, lost 2 poultry plants. Took half of capacity. Pilgrims' pride. Went down in 2006. Towlson poultry in 2009. Jo-anne fabrics, Glendale, master craft, had pretreatment plant. 5-6. Now have 1.
  - Water plan was close to 80% rule. In prep mode for expansion. Now City has treatment capacity that can accommodate new development.
  - Have expanded both reservoirs. Due to drought. 89 upper reservoir, 90.
  - Had to hold poultry plants to limit during some droughts.
  - 10 years of permitting for lower reservoir. 2009 came on line.
  - County is one of the largest user.
  - Brookwood farms largest user. 21,000 gallons per day.
  - CRM Site is 1.5 MGD max. waterline and sewer line planned and permitted. 16" sewerline.
  - Consultant will request data from City (Jack)
  - CAM site and utilities
    - Permits submitted to state and returned back. Site ready to go. Design is ready. Uses existing capacity. Lines and easements secured.
    - Goal for utility construction is 12 months.
    - 18" water line, 16" forcemain sewer. Sewer could be an issue for tapping in the future. Gravity sewer/mini pump stations may be needed.
    - Plans are to follow Hwy 64
  - Siler City population is slowing growing
  - Siler City has a new CIP that will be ready soon.
  - Rate restructuring was needed
- Pittsboro:
  - Has been stagnant for a long time, now rapid growth
  - Utilities department mostly focused on repairs and
    - Wet weather flows are a major issue
    - Half mil grant for I&I work.
  - Sewer capacity: 3.22 MGD current permit. 1.25MGD permit for Roberson plant (only at 750k), rest in an unutilized permit for the Haw River.
  - Pittsboro sells reclaimed water to 3M. Wet weather effects this. Shuts down reclaimed water operations.
  - Plant on Roberson Creek updated twice, needs another upgrade for efficiency. Upgrading it to improve nitrogen phosphorus, odor, noise, energy efficiency, biosolid treatment improvements, boxes for composting.
  - Wet weather flows and issue. \$500k grant for reducing Inflow & Infiltration. video, smoke testing, prioritization, etc. Capital programming a goal.
  - Old infrastructure. Manholes in floodplains, service connections exposed.
  - Water system
    - Old pipes, 2" galvanized. Need to replace.
    - New water and sewer specs.
    - New engineering inspector.
    - Modernizing
    - Jordan Lake Partnership
      - Water allocation out of lake
      - 100MGD left in the lake.

- Asked for 6mgd. Future demands analyzed, submitted and state should respond shortly.
  - Will cover needs out to 2060, needs. Including chatham park.
  - Plan demonstrates regional planning
- WWTP limited allocation remaining.
  - 2 mgd sought to Sanford. \$23mil revolving loan fund approved, includes upgrade of Roberson WWTP. Modernizing included. Utility rates will be impacted.
  - Existing plant is constricted
  - Haw is at 0, only permit
  - Haw will come into play, but timeline unknown.
    - 64, under bridge
  - 5 lift stations on system
- New infrastructure
  - Elevated water tank. 300k gallon tank. On 64, to be installed north of bypass.
  - Will benefit existing users. Will keep standpipe topped off so pressure is not a problem.
  - Water age problem on southside of town. New control valves will keep fresher.
  - Chatham park will utilize reclaimed water
  - Average water use is 100 gpd per person. Includes water loss.
  - Goal is to get to 60 gpd.
- Chapel Ridge is biggest user for water.
- Purple pipe (reclaimed water) required everywhere in Chatham Park.
- Rewriting water efficiency ordinance. Irrigation, emergency, reuse, restrictions, etc.
- Bulk re-claimed fill up station. For irrigation, etc. Will reduce potable use demands. Reduce discharge into Robeson creek to make capacity last more.
- Cary as a precedent. Main reclaimed water lines for certain zones.
- 6-8 mgd demand for water long term. 2mgd can go to Sanford, 750k at Robeson creek.
- Water taste odor in southern side of town.
- Big infrastructure projects in pipeline not in design stage but close, in NE side of town. Old infrastructure in the S side of town.
  - Habitat project needs grant \$ for water line installation (0.25 miles of pipe for 35 lots)
- Will partner with County for interconnection studies to buy capacity from County or others

- County water and sewer systems:

- Purchase from Sanford, for south. From Siler city for west and sw part of county. 3mgd water plant for moncure and NE area.
- NE irrigation is an issue. Interconnection with Durham for emergencies is in place. 3mgd authorized, but depends on availability.
- System is relatively new.
- SW part of system has issues. Installation issues.
- Inherited older well systems. Maintenance issues. I.e. Fearington, Nature Trail (mh community) (replacing waterlines).
- County has not been in sewer business.
- Small wwtp for bynum community. 25k a day. 40 homes and school
- Big private developments have package plants.

- Role of the county in the future.... May include sewer.
- Poor wq an issue with rural system
- Continuing demand to provide sewer
- Have 6mg allocation from lake. Will have 12 mgd in 2040, 18 MGD in 2060.
- Where is it going? More water = Need sewer for increased in water ... then IBT becomes an issue... interbasin transfer permit if treatment capacity (and return) in another basin from water supply basin
- Some interest in decentralized systems.
- Partnerships will be key, i.e. upsizing pump stations on northside of Pittsboro
- Defining sewer sheds will be key to land use plan
- Interbasin transfer issues will need to be addressed, i.e. Jordan to deep
- Interconnection study with Pittsboro, Durham to county to bynum/Pittsboro
- Connection exists with Siler City
- Goldston has sewer and water
- Infrastructure is key to Economic Development
  - Need for additional job opportunities. 55% commute outside. >10% commercial/ind tax base, retail \$ lost

What is more pressing, utilities or transportation?

- NE maybe transportation
- Utilities are secondary..
- N/S traffic capacity is a huge issue.
- DOT, super street design for 15/501.
- Northwood bojangles @ 8:00.
- US 64 Bypass, on northside of Siler City (20+ years)
- US 421 CAM Site connector important, some county land
- RR is asset and needs to be protected.
- Link to CAM Site, potential more users
- Siler city municipal airport.
- Bike Plan is a major accomplishment
- Rocky River regional trail connection needs to be taken into account.
- Transmission lines, cardinal pipeline goes under the Lake in New Hill Area to Orange and Alamance?
- Maintenance an issue regarding roads and water/sewer. Planning effort will address strategic steps, action items, at the end of the process, maybe with a dollar figure. Brings attention to maintenance and service investments needed.
- Fracking study- the pipelines are a bigger impact than the well drilling.
  - Jake limited to Jordan Lake area, conversations with Geologist at ASU
  - Dan- Lee/Deep River area of fracking interest. Depths of shale.
    - Natural gas down
    - Helium up - could be another part of the conversations
  - BMPs will be developed with fracking study.
  - Truck traffic may be an issue with drilling. Road maintenance may be a bigger impact than the drilling.

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