Envisioning the Future: A History of PART’s Regional Planning Initiatives, Studies, and Plans

"An advanced city is not one where even the poor use cars, but rather one where even the rich use public transport."

Enrique Peñalosa, Colombian politician & urban activist
PART’s Purpose

In June 1997 the NC General Assembly:

• Passed Article 27, GS160A authorizing the formation of a Regional Transportation Authority in the Triad;
• Appropriated $750,000 to conduct two separate rail corridor studies in the Triad, administered by the regional authority; and
• Authorized new revenue sources to fund Regional Transportation Programs.

The existence of PART is based on regional cooperation and the improvement to the transportation systems of the Piedmont Triad Region of North Carolina.
PART Guided Plans and Coordination

**Developed**
- Piedmont Triad Regional Transportation Study – September 1997
- NCGA funding for the Intercity Rail Study – 2000
- Triad MIS study – 2002
- Triad International Airport Area Study 2004
- Seamless Mobility Study - August 2008
- Alternatives Analysis - November 2009
- Regional Transit Development Plan - November 2010
- Heart of Triad - June 2010
- Piedmont Together – March 2014

**Coordinated**
- Designation of the Vanpool Program and Cooperation/Participation - 2000
- MOU Regional Travel Demand Model - 2002
- MOU designating planning tasks of regional significance - 2004
- MOA governing development, maintenance and usage of PTRM - 2007
- Regional Transit Map – 2011
- Piedmont Transit Resources – (Regional Call Center) - 2015
- Regional Bus Advertising Procurement - 2016
- Digital and Mobile Faring (TouchPass) Procurement - 2018
- Piedmont Triad Tour-based Freight Model Development – Current
- Piedmont Triad Regional CommunityViz Model Implementation – Current
Late 1990’s

• Piedmont Triad Regional Transportation Study - 1997
  • Existing Conditions Report: Transportation in the Piedmont Triad
  • Congestion coming, development pattern principle cause, passenger rail should be studied

• Growing Together in the Triad – 1998

• Piedmont Triad Intercity Rail Study – 2000
  • Initial screening of routing options
Growing Together

• Land use pattern should be more compact to support use of transit and passenger rail
• 29 communities adopted resolutions supporting more compact development
Mega Regions – The Piedmont Triad’s Place in the Piedmont Atlantic Region
The Piedmont Triad’s Connection to the Northeast and the rest of the Piedmont Atlantic region – The Southeast High Speed Rail Corridor
The 2000’s

• Triad MIS study - 2002
• Triad International Airport Area Study - 2004
  • NCDOT did modeling and traffic forecast.
  • PART handled environmental review, layout of routing designs, cost estimates, handled the public outreach and comment, and generated report.
• Seamless Mobility Study – 2008
• Alternatives Analysis - November 2009
  • FTA replaced the MIS with the AA
  • Station location and typology identified
  • Population Yes / Development pattern and distribution system No
MOU with MPO’s defining PART’s role in planning tasks of regional significance - 2004

• Coordinate the implementation of land use and transportation plans and policies to promote consistent growth management.
• Assist in the development of a regional travel demand model and serve as custodian.
  • Preform annual maintenance
  • Perform regional travel demand analysis.
• Work with NCDOT and MPO’s on air quality functions
  • Convene MPO’s and facilitate the collaborative development of a regional air quality strategy and facilitate efforts to implement regional emissions reduction strategies at the regional level.
  • Study the means, opportunities, and benefits for the development of MPO and/or regional conformity analysis through PART.
• Cooperatively plan for and implement regional mass transportation systems including regional public transportation systems and passenger fixed guideway system.
• Planning and project development functions as noted below:
  • Plan for roadways projects of regional interest in cooperation, consultation and coordination with partnering agencies.
  • Collectively develop strategies for the development of regional transportation priorities in cooperation, consultation and coordination with partnering agencies.
Seamless Mobility Study

Actions Taken

- Explored joint procurement of tires and drug test
- Joint Demand Response Exercise Held
- Regional Fare Card
- Regional Marketing Meetings
- Regional Technology Meetings
- Regional Call Center
BRT and Rail DMU Alternatives

Clemmons–Burlington Corridor

Corridor 1A. NC A&T–Hanes Mall

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Coverage
- High Speed CBD Connection
- Colleges
- Malls

Corridor 1B. Greensboro–Winston-Salem

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Coverage
- High Speed CBD Connection
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MIS – FIXED GUIDEWAY STUDY
Alternatives Analysis
Locally Preferred Alternative

NC A&T to Hanes Mall – 35 miles

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Today’s Capital Cost / Mile

$10.04 M

Based on 3% inflation over 7 years
AA’s Detailed Planning Analysis

A Village Station involves small towns and new small-scale, mixed-use centers. Examples include small town centers, infill in inner city neighborhoods, "new towns," and traditional neighborhood developments featuring a blend of residential, office, shopping and public uses. Kiss-and-ride and walk-up/bike-up activity is still important, but park-and-ride facilities are limited. Local bus routes are also linked to these stations.

STATION TYPES

EXISTING RAILROAD TRACK
PROPOSED RAILROAD PASSING SIDING

PROPOSED TRACK ADJACENT TO EXISTING NCRR TRACK

REPLACE CROSSBARS AS NECESSARY
2010 to 2015

• Regional Transit Development Plan – Nov. 2010

• Regional Transit Map – June 2011

• Piedmont Together – March 2014
Regional Transit Development Plan

• Why?
  • Logical next step after Alternatives Analysis
  • HB 148

• System enhancement highlights
  • Rural Counties
    • Circulators and
    • more frequent PART service
  • Urban Core
    • BRT Route
    • Crosstown routes
    • Transit Emphasis Corridors
    • Complete funding of Winston-Salem and Greensboro Urban Street Car Systems
The Regional Network and Rural Enhancements
Urban Core
Regional Transit Development Plan

• All recommendations could be funded with combination of vehicle registration fee and sales tax

• Identified 52 million dollars worth of improvements

• Adopted by PART Board, accepted by MPO’s and RPO’s with NO recommendation on how enhancements would be funded
Route Analysis
“Keeping the RTDP Relevant”

Approximately 20,000 people commute daily from Randolph County to Guilford County. 54% head north toward Greensboro and 46% northwest to High Point. The map to the right, shows where Randolph County residents work. The chart below shows which the direction the residents travel to work.
Regional Transit Map

• First of its kind in the region
• Included routes and schedule for all three urban systems and PART
• Very popular
• Out of print
Transportation Choices

1/2 of the jobs in the region are located in Guilford and Forsyth Counties.

30% of workers in the region commute to a job outside of their county of residence.

10% of the population have access to transportation options such as transit, bicycling, and walking.

On average, local residents spend 38% of the monthly income on transportation costs.
Establish and enhance a robust network of multi-modal transportation choices at the statewide, regional, county and municipal levels involving highways, passenger rail, regional and local transit, streets, para-transit services, sidewalks and bike lanes, and recreational trails and greenways.

Establish a structure to fund and promote the development of a regional transportation network.

Increase options for daily transportation needs for a health conscious transportation system through the creation of walkable and bikeable communities.

Evaluate the roles and responsibilities of existing transportation organizations and agencies in order to be competitive for federal and state funding, reduce redundancies in planning and operations, and be better stewards of transportation resources.

Establish regional freight infrastructure improvement priorities.

Develop a multimodal freight facility in the region connecting truck, rail and air.
2015 to 2020

• Digital and Mobile Faring (TouchPass) Procurement - 2018
• Piedmont Triad Tour-based Freight Model Development – Current
• Piedmont Triad Regional CommunityViz Model Implementation – Current
What is TouchPass?

- **Electronic fare collection system** using: Smartcard (Reloadable), Mobile Phone App, Paper Tokens

- Allows passengers to create accounts to better manage their passes and usage
  - Buy passes online and load your account instantly
  - Track when you ride and where
  - Create an account so if you lose your Smartcard or Mobile Phone your passes/funds can be transferred
Tour-based Freight Modeling

- Represents the characteristics of firms and shipments
- Represents supply chains – link buyers and suppliers
- Captures trip-chaining - follow truck “tours” throughout the day
- Differentiates freight versus commercial vehicles - shipments versus goods and services
Scenario Planning with CommunityViz

Transportation planners have long struggled with how development patterns and transportation networks impact each other. The struggle lies within accurately distributing future population and employment growth across the region. Where people live and work play a significant role in what the transportation network looks like.

To help address this opportunity, PART leads the effort to introduce a scenario planning tool called CommunityViz. This tool will better inform the regional travel demand model by enhancing the results that help shape and inform each Metropolitan Planning Organizations (MPO) Transportation Plan.
On the horizon...

• Development of a regional Freight Plan
• Development of Socio-Economic Data for the Travel Demand Model “In House”
• Implementation of a regional ITS infrastructure that enhances transit operations and the passenger experience