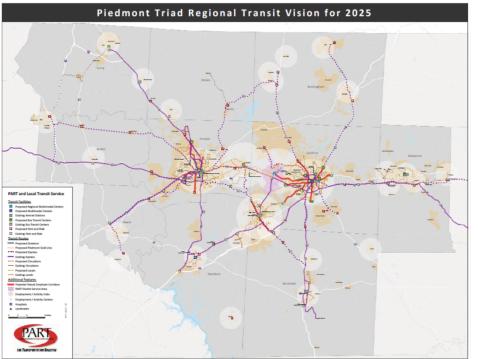
Transforming a Region – Transit, Sustainability and Affordability



Brent McKinney, P.E. Executive Director – PART Mark E. Kirstner, AICP Senior Transportation Planner – PART Robert Bush, AICP Transit Principal – HDR Engineering Ann Steedly, P.E. Planning Communities, LLC

New Partners for Smart Growth – February 3, 2011

10 Counties working as one Region -Without Borders



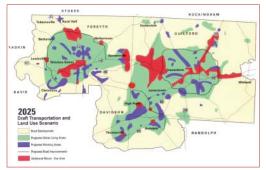
Our jurisdiction area covers over 10% of the state.

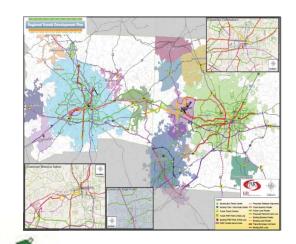




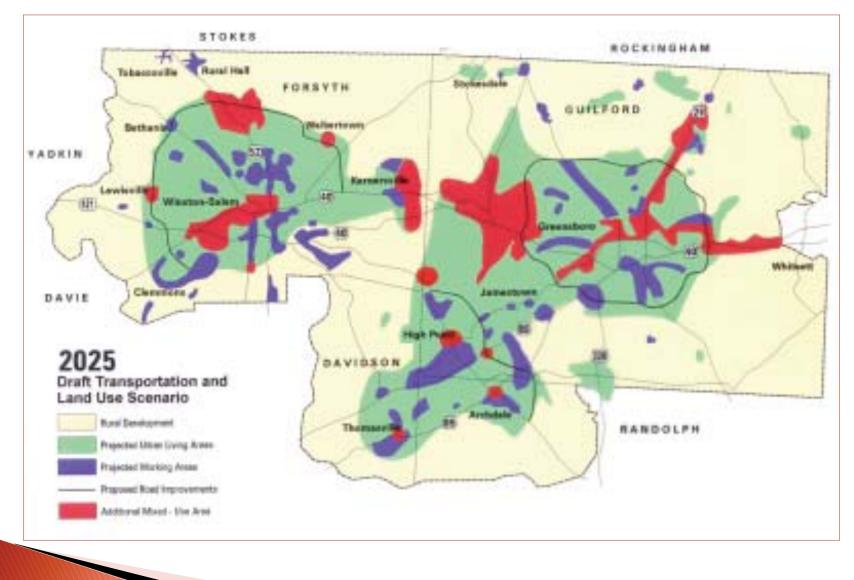
Developing a Regional Story

- PART and Piedmont Triad Partnership Formed
- Growing Together in the Triad
- Alternatives Analysis
- Seamless Mobility Study
- The Heart of the Triad
- Regional Transit Development Plan
- Livable Communities Summit
- Sustainable Communities Regional Planning Project
- Next ??





Growing Together in the Triad



Growing Together in the Triad

Issues for the Triad

- Near sole reliance on the automobile
- Rising VMT
- Growing congestion
- More time lost sitting in traffic
- Increased fuel consumption and emissions

1994	2025
20.8 million	40 million
459,000	767,000
44 mph	38 mph
70%	86%
	20.8 million 459,000 44 mph

The Sustainability Challenge

Environment

Environmental and **Energy Planning**

Mobility Plans **Mgmt Plans**

 Context Sensitive Solutions

Sustainable Solutions

· Green House Gas Community

Community, Mobility and Infrastructure Planning

• NEPA

- Renewable Energy
- Climate Plans
- Social Return On Investment

- Redevelopment
- Risk Analysis
- Carbon Markets
- Green Jobs

Economy

Cost/Benefit and **Economic Development** Transforming a Region – Transit, Sustainability and Affordability

A Vision and Philosophy for Putting Sustainability into Practice

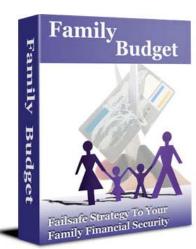




New Partners for Smart Growth - February 3, 2011

Sustainability is not new...





Making ends meet

Crop rotation

Mill villages

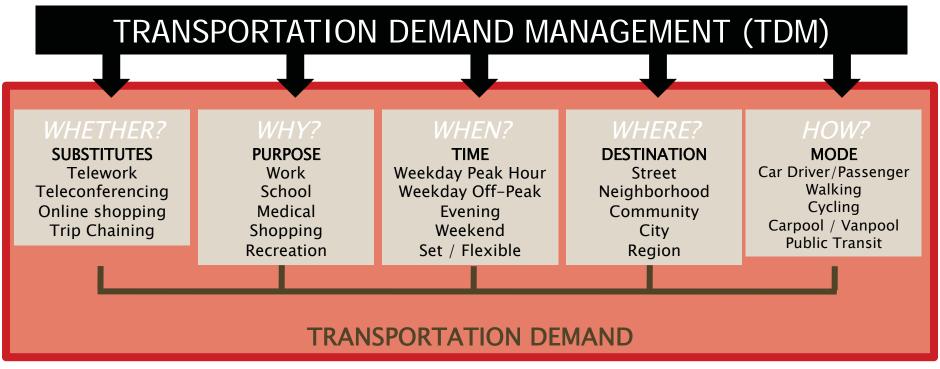


What we now know...







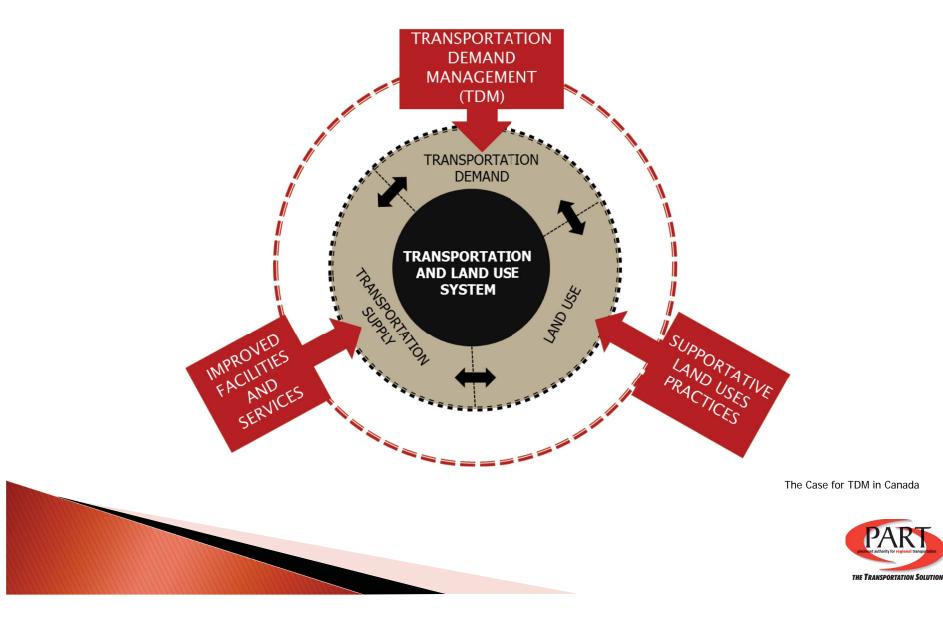


The Case for TDM in Canada

TDM encompasses several tools to help with traffic congestion mitigation by offering alternatives to the single-occupancy vehicle.

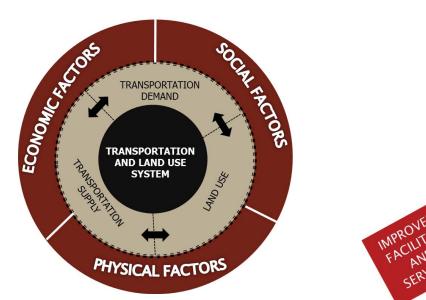


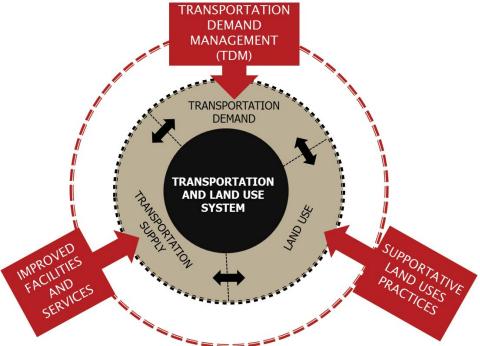
Framework for Managing Mobility



determinants of travel behavior

framework for managing mobility



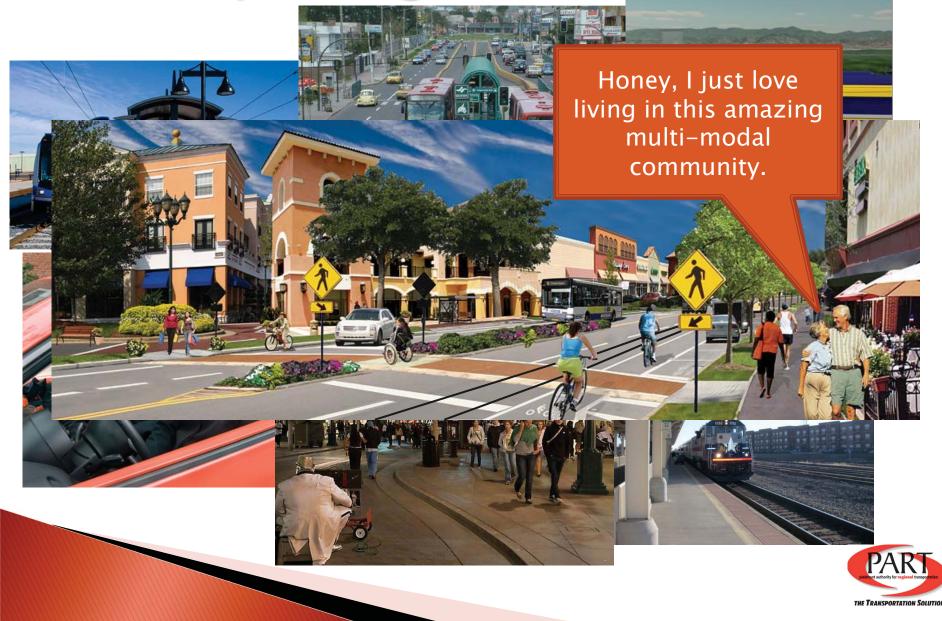




The Case for TDM in Canada



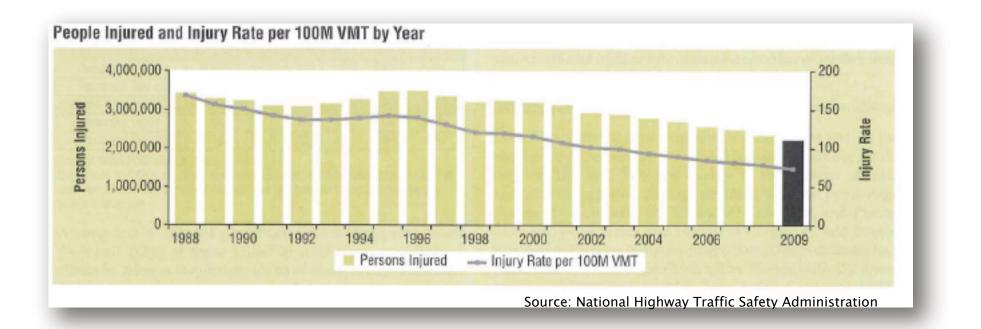
A new paradigm...



Piedmont North Carolina Commuting Patterns



Reducing VMT's



PART ridership reduced....

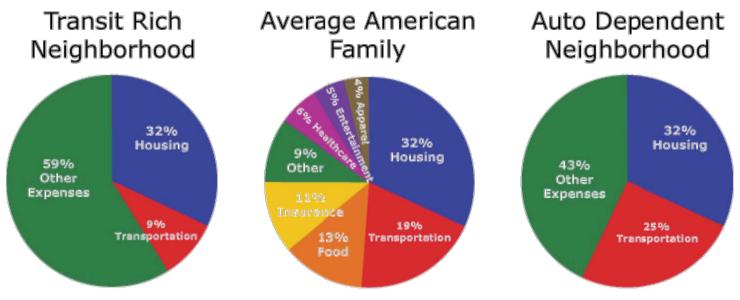
Vehicle Miles Traveled by 9,480,073 miles during FY 09 Air Pollution Emissions by 6395.33 tons during FY 10



Connectivity Its all about connecting places



Linking Transportation & Land Use Planning



Source: Center for TOD Housing + Transportation Affordability Index, 2004 Bureau of Labor Statistics

Piedmont Triad – 51.2% of family income is spent on housing and transportation 25.1% on transportation cost – 10% higher than the suggested national average



Economic

- Support economic development
- Help establish the community as a place of distinction
- Provide mobility choices work, education
- Reduce dependence on foreign oil
- Create and jobs and capital investment
 - Every \$1 billion invested in capital and operations, supports and average of 36,000 jobs.
 - These 36,000 jobs result in roughly \$3.6 billion in business sales and generate nearly \$500 million Federal, State and Local tax revenues.







Sustainable Mobility Network

An ever evolving multimodal transportation system that provides infrastructure and services which:

- ✓ attract users across all modes;
- enables a smooth transition from one mode to another;
- connects places of neighborhood, local and regional interest;
- offers alternatives for individuals seeking to reduce their energy use and carbon footprint; and
 results in a financially and
 - functionally viable network.



Todd Litman - Victoria Transport Policy Institute, July 2010



TDM Program

TDM encompasses several tools to help with traffic congestion mitigation by offering alternatives to the single-occupancy vehicle. Some of these alternatives include:

- Teleworking
- Compressed Work Week
- Trip Chaining
- Walking
- Bicycling
- Carpooling
- Vanpooling
- Using Public Transit





Planning

- Travel Demand Modeling
 - Includes 4 MPO
- Alternatives Analysis
 - 35 mile light rail/BRT corridor
- Regional Transit Development Plan
 - 10 counties including regional express, community circulators, new urban fixed route service and regional connectivity
- Sustainable Communities Regional Planning Project
 - HUD Planning grant covering 12 counties



- ACTA - DCTS - GTA + HI TRAN - PART - RCATS - TAMS + WSTA - YVEDDI -Regional Transit Development Plan BUILDING OUR FUTURE ---- THE TIME IS NOW ALAMANCE DAVIE DAVIDSON FORSYTH GUILFORD RANDOLPH ROCKINGHAM STOKES SURRY YADKIN



Regional Cooperation

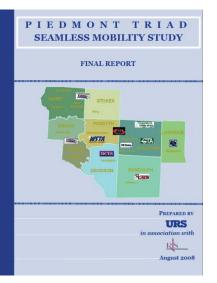
- •Marketing Triad Commute Challenge
- Technology
 - Demand Response Scheduling
 - Regional Trip Planner
 - GPS Next Bus Technology
 - Automatic Passenger Counters
- •Regional Call Center
- •Transit Route Map
- •Air Quality
 - Modeling
 - Conformity
 - Management
 - Awareness

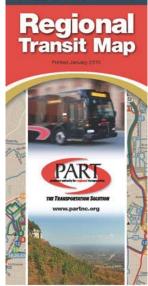
•Regional Ride Share / Vanpool Program











PIEDMONT TRIAD

Serving the Countles of: ed • Fersyth • Alamance • Randolph • Reckingtaum Sarry • Yadkin • Stekes • Wilkes • Watauga Davie • Davidsen • Orange • Durham • Wake Humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to ourselves. All things are bound together. All things connect.

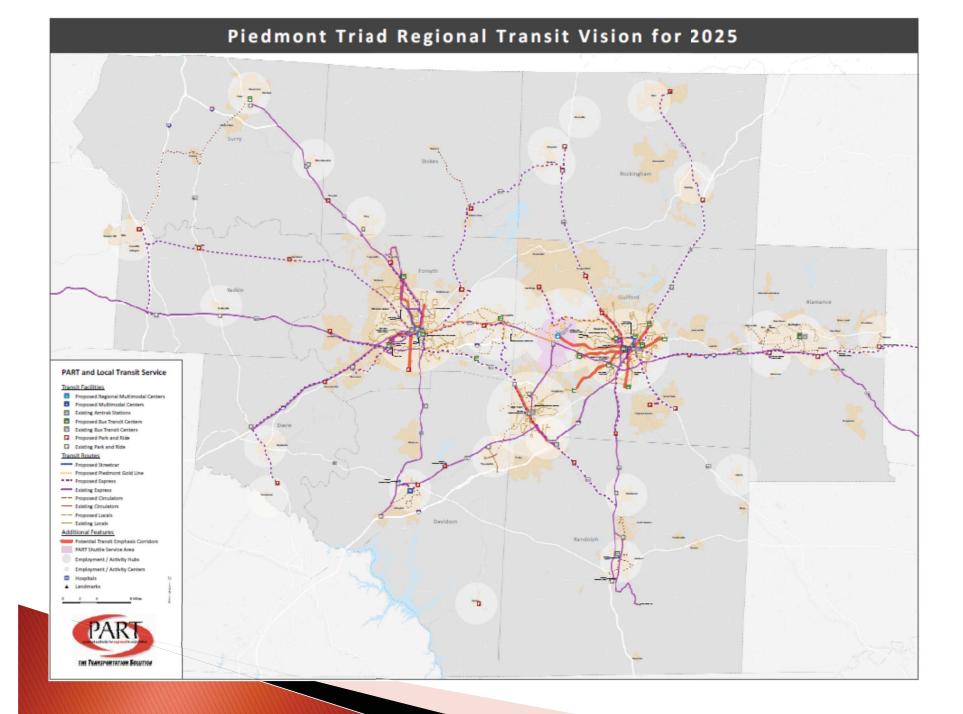




Questions?

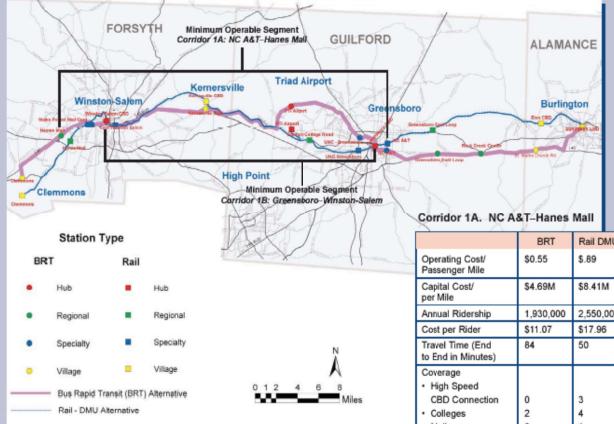
Mark E. Kirstner, AICP Senior Transportation Planner markk@partnc.org www.PARTnc.org





Mass Transit

BRT and Rail DMU Alternatives Clemmons-Burlington Corridor



Corridor 1. Clemmons-Burlington

	BRT	Rail DMU
Operating Cost/ Passenger Mile	\$0.68	\$1.20
Capital Cost/ per Mile	\$6.46M	\$11.07M
Annual Ridership	2,600,000	3,120,000
Cost per Rider	\$17.20	\$29.17
Travel Time (End to End in Minutes)	143	82
Coverage High Speed CBD Connection Colleges 	0	5
Malls	0	1

	N. C.	
	BRT	Rail DMU
Dperating Cost/ Passenger Mile	\$0.55	\$.89
Capital Cost/ er Mile	\$4.69M	\$8.41M
Annual Ridership	1,930,000	2,550,000
Cost per Rider	\$11.07	\$17.96
Travel Time (End o End in Minutes)	84	50
Coverage High Speed		
CBD Connection	0	3
Colleges	2	4
Malls	0	1

Corridor 1B. Greensboro-Winston-Salem

	BRT	Rail DMU
Operating Cost/ Passenger Mile	\$0.92	\$1.59
Capital Cost/ per Mile	\$4.82M	\$7.86M
Annual Ridership	940,000	1,210,000
Cost per Rider	\$19.10	\$30.54
Travel Time (End to End in Minutes)	63	39
Coverage • High Speed CBD Connection • Colleges • Malls	0 2 0	3 3 0

