Why MegaRegions?

Transportation, the economy, and air quality

Atlanta in 2003:
- 11th most congested area
- traffic congestion cost of $1.8 billion
- 15 bad air days

The issues are related

SOURCE: Texas Transportation Institute, U.S. EPA
Georgia, Alabama can't reach river deal

Water dispute likely headed back to court

By STACY SHELTON

Another truce in Georgia's interstate water wars ended at midnight, this one over the water flowing from Lake Allatoona into Alabama.

The dispute will likely return to federal court, where a judge could decide how much water each state is due from the northwest Georgia lake and the Coosa, Tallapoosa and Alabama rivers. It could also wind up in the U.S. Supreme Court.

Harold Melton, executive counsel for Gov. Sonny Perdue, said he tried to assure Alabama officials that Georgia was willing to "manage water wisely."

Melton said Georgia was open to compromise. "We offered all kinds of things to help get them there," he said.

But Alabama officials didn't see it that way.

"It's an extremely disappointing night," said Alabama's chief negotiator, Onis "Trey" Glenn III. "Alabama had to make a choice not to sacrifice our water future just to satisfy Atlanta's water needs."

The outcome could determine each state's ability to add jobs and continue growing.

Alabama is also worried about keeping barge traffic moving on its portion of the rivers, and producing hydropower from its dams.

Last August, Georgia and Alabama—along with Florida—ended another truce when their talks over the Chattahoochee River expired without agreement.

Federal lawsuits were quickly reactivated and remain in progress. Florida is working on a case to take to the Supreme Court.

Negotiators for Georgia and Alabama worked feverishly in recent weeks to avoid the same fate for the Coosa River basin.

Throughout Saturday, they exchanged numerous cellphone calls and e-mails trying to salvage a water-sharing deal they'd worked on for six years.

The dispute over the Coosa River was considered easier to solve than the Chattahoochee, which involves three states and supplies most of the water for metro Atlanta.

But the renewed fight over the Chattahoochee spilled over. In its most recent proposals, Georgia wanted Alabama to let metro Atlanta take more water out of the Chattahoochee as part of the deal for the Coosa.

Georgia also wanted to be able to send Alabama less water than the guaranteed minimum amount in case of a severe drought.
Why MegaRegions?

What we do today affects future generations.

SOURCE: Centennial Olympic Park, GWCC
Why MegaRegions?

- **Commodity Flows:** U.S. imported almost $2 trillion in goods and services in 2005

- **Human Capital Flows:** more than 20 percent of U.S. science and technology workers are foreign-born

- **Travel:** American made over 27 million visits outside the U.S. in 2004

SOURCES: U.S. Census Bureau, National Academies of Science, U.S. Department of Commerce
Why MegaRegions?

BESETO Corridor [BEijing, SEoul, TOkyo]
- 100 million inhabitants
- 112 cities each with population of over 200,000
- 900 mile strip
- 4 countries

SOURCE: presentation by Sang-Chuel Choe, Seoul National University, United Nations Industrial Development Organization Conference, July 2005
Why MegaRegions

European Union
Spatial Corridors of Integration and the “Blue Banana”

Why MegaRegions?

Research has identified eight to ten emerging MegaRegions.

SOURCE: University of Pennsylvania
Defining the Region

- **Natural Features:** defining geography
- **Infrastructure:** investment in transportation and public facilities
- **Patterns of Mobility:** moving people, goods, information, and money
Defining the Region

Natural Features

- Protected lands
- Watersheds
- Critical lands
- Rivers

Defining the geography
Defining the Region

Infrastructure investment in transportation and public facilities
Piedmont Atlantic MegaRegion

Core cities
## PAM today

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th>% of U.S.</th>
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<tbody>
<tr>
<td>Land Area</td>
<td>282,700 square miles</td>
<td>8%</td>
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<tr>
<td>Jobs</td>
<td>27 million</td>
<td>16%</td>
</tr>
<tr>
<td>Gross Regional Product</td>
<td>$1.5 trillion</td>
<td>15%</td>
</tr>
</tbody>
</table>

**SOURCE:** U.S. Census Bureau; Woods & Poole, Inc.; Bureau of Economic Analysis; Global Insight

PAM’s role in the nation
PAM today

Migration trends, 1995 to 2000

1.6 million people moved to PAM from the rest of the country

1.3 million people migrated to PAM internationally

SOURCE: U.S. Census Bureau
PAM Today

PAM regularly exceeding U.S. in job growth

Job Growth, 1970 and 2005:

<table>
<thead>
<tr>
<th>Period</th>
<th>U.S.</th>
<th>PAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970 to 1975</td>
<td>91%</td>
<td>138%</td>
</tr>
<tr>
<td>1975 to 1980</td>
<td></td>
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<td>1980 to 1985</td>
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<td>1995 to 2000</td>
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<tr>
<td>2000 to 2005</td>
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</tbody>
</table>

SOURCE: Woods & Poole, Inc.
# Issues Facing PAM

- **Growth**
- **Consumption and degradation**
- **Disparities**
- **Infrastructure**
- **Competiveness**
- **Fragmentation**

*Every issue is a challenge and an opportunity*
Issues Facing PAM: growth

Population concentrations, 2000

47 million people

SOURCE: Woods & Poole, Inc.
Issues Facing PAM: growth

Population growth centered on centers

2050 population
- 1 Dot = 10,000

82 million people

SOURCE: Woods & Poole, Inc.; CQGRD calculations
Issues Facing PAM: growth

Diversity Increasing, 2000-2050

- Hispanic population growing

SOURCE: Woods & Poole, Inc.
Issues Facing PAM: growth

Piedmont Atlantic MegaRegion

Issues Facing PAM: growth

PAM is aging

12 million people over 70 by 2050

SOURCE: Woods & Poole, Inc.
Issues Facing PAM: growth

Population growth means new construction.

PAM will build **84 billion square feet** of new construction between 2000 and 2030.

Issues Facing PAM: growth

A chance to do it right

Buildings constructed post-2000 will represent half of the built environment in 2030.
Issues Facing PAM: consumption

Change in Water Consumption, 1990-2000

PAM water consumption increasing faster than U.S.

SOURCE: USGS
Issues Facing PAM: consumption

SOURCE: Fulton County GIS, Georgia
Issues Facing PAM: consumption

Per capita land consumption in PAM is 0.67 acres per person; the U.S. average is 0.36.

SOURCE: Fulton County GIS, Georgia; USDA Natural Resources Inventory
Issues Facing PAM: disparities

PAM faces high rates of rural poverty

SOURCE: U.S. Census Bureau
Issues Facing PAM: disparities

Almost **12 million people** living in poverty.

SOURCE: U.S. Census Bureau
### Issues Facing PAM: disparities

- PAM states significantly **improved math scores** between 1992 and 2005

- 3 PAM states significantly **improved reading scores**

- The U.S. as a whole significantly improved both math and reading scores during the same period

A notoriously underachieving education system has made great strides, but still has much work to do.
In the four core cities the cost of traffic congestion rose from $716 million in 1993 to over $2.3 billion in 2003. That’s a 234% increase in congestion cost with only a 28% increase in population.

SOURCE: Texas Transportation Institute
Over **27% of households in PAM are reliant on septic systems**, compared to 21% in the northeast, 19% in the midwest, and 12% in the west.

Septic systems are 100% consumptive, straining already stressed water resources. One house on septic consumes as much water as 6.6 homes on sewer.

**Lack of infrastructure results in over consumption of natural resources**

**SOURCE:** American Household Survey; Metro Atlanta Chamber of Commerce
PAM has **four of the top 25 U.S. Foreign Trade Freight Gateways** (by value) with a combined total of over **$123 billion in trade**.

*Charleston* is the second busiest container port on the East and Gulf coasts, handling 1.2 million TEUs (twenty-foot equivalent units) in 2003. The Port of *Savannah* handled 1.1 million TEUs and is one of the fastest growing containers ports in the country. The other top gateways are the *Miami* and *Atlanta* Airports.

**Mode Share for Trade (by value)**

- **Water**: 40.9%
- **Land**: 28.4%
- **Air**: 26.4%
- **Other**: 4.3%

**Source**: US Department of Transportation, Bureau of Transportation Statistics
Issues Facing PAM: fragmentation

6 states
Issues Facing PAM: fragmentation

534 counties
Issues Facing PAM: fragmentation

Demanding innovative solutions and collaboration.
Strategies for PAM

- **Transportation Options:** Southeast High Speed Rail

- **Green Infrastructure:** innovating financing to protect lands

- **Spatial Planning:** a third century of national growth and development
### PAM Benchmarks

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>2004</td>
<td>Pocantico Policy Roundtable</td>
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<tr>
<td>Spring 2005</td>
<td>Georgia Tech Sustainability Course</td>
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<tr>
<td>Mar 2005</td>
<td>SuperCities Charrette in Madrid, Spain</td>
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<tr>
<td>Apr 2005</td>
<td>RPA Regional Assembly</td>
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<tr>
<td>Sept 2005</td>
<td>NARC Conference</td>
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<tr>
<td>Oct 2005</td>
<td>ACSP Conference</td>
</tr>
<tr>
<td>Spring 2006</td>
<td>Georgia Tech Sustainability Course</td>
</tr>
<tr>
<td>Jan 2006</td>
<td>Think Global, Act Regional Symposium</td>
</tr>
<tr>
<td>Feb 2006</td>
<td>Georgia Governor’s Conference</td>
</tr>
<tr>
<td>Feb 2006</td>
<td>Pocantico Policy Roundtable</td>
</tr>
<tr>
<td>Apr 2006</td>
<td>APA Conference</td>
</tr>
<tr>
<td>May 2006</td>
<td>Environmental Design Research Association</td>
</tr>
</tbody>
</table>
Think Global, Act Regional Symposium

Highlights:

- January 2006
- Introduced PAM
- Hosted 100 people from six states
- Included ULI Mayors’ Forum
- Resolution for multi-state emergency preparedness coordination
- Call for future PAM discussions
Nashville needs to be a part of any Midsouth mega-region

By GALEN SPENCER HULL

What's a "mega-region" and how do you know if you are in one? This is a question that many are asking. Piedmont Atlantic MegaRegion, or PAM, is a term used to describe a region that is growing at an unprecedented rate.

Nashville is experiencing this growth and faces many challenges. The city is creating a chain of urban areas across the region, which is interconnected by transportation and commercial linkages. PAM is a term that is increasingly being used to describe these regions as megaregions.

The challenge is to develop a framework for the conference that will bring together all of the stakeholders. Speakers addressed the challenges and opportunities associated with megaregions such as the need to preserve natural resources and green space while at the same time facing the ever-expanding appetite for growth.

There were case studies of the Northeast and Southern California regions which served to put the topic in perspective. The challenge of competing in the global market place was a theme throughout the conference.

There was a familiar theme of problems including diminishng water resources, degraded wildlife habitats, increased transportation and housing costs, and, of course, declining air quality. Clearly the driving force of the new initiative is economic. How will this new mega-regional initiative take shape? Or will we perceive the benefits of our full and active participation in it as we will in the era of the megaregion?

Will we in the Nashville area stand on the sidelines while this new mega-regional initiative takes shape? Or will we perceive the benefits of our full and active participation in it as we will in the era of the megaregion?

A five-day forecast on Page 2B

Calls for PAM inclusion
Future PAM Efforts

- facilitating visioning
- promoting leadership and “followership”
- advancing MegaRegion theory
- continuing PAM research

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