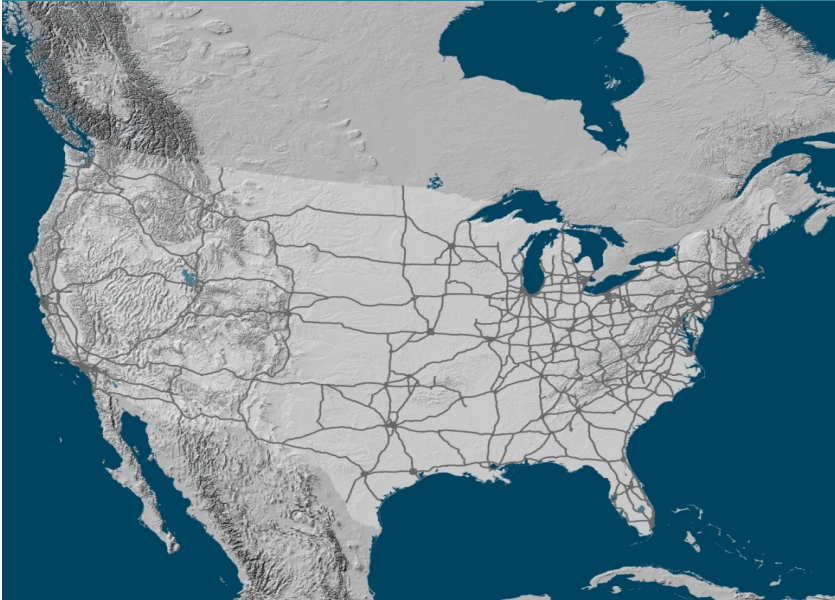


Megaregions:

Proceedings of the Megaregions and Transportation Symposium
(June 20th 2008) and Structured Telephone Interview Summaries



For
U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

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CENTER FOR QUALITY GROWTH AND REGIONAL DEVELOPMENT
at the GEORGIA INSTITUTE OF TECHNOLOGY

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**Megaregions:
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and Structured Telephone Interview Summaries**

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About the Center for Quality Growth and Regional Development

The Center for Quality Growth and Regional Development (CQGRD) is an applied research center of the Georgia Institute of Technology. The Center serves communities by producing, disseminating, and helping to implement new ideas and technologies that improve the theory and practice of quality growth.

For more information visit
www.cqgrd.gatech.edu.

I. SYMPOSIUM AGENDA

Welcome

Douglas Allen, the acting Dean of College of Architecture at Georgia Tech welcomed participants to Georgia Tech.

Symposium Overview

Catherine L. Ross, Director of the Center for Quality Growth and Regional Development gave a brief welcome from the Center for Quality Growth and explained the itinerary for the day.

National Megaregions Prospective

Emil Frankel, Former Assistant Secretary for Transportation Policy, U.S. Department of Transportation
Director of Transportation Policy, Bipartisan Policy Center

Response to National Megaregions Prospective

Michael D. Meyer, Professor, Civil and Environmental Engineering, Georgia Tech
Power point attached

International Megaregions: China

Feng Chang-Chun, Professor, Department of Urban and Regional Planning, Peking University
Power point attached

Megaregions in America 2050

Petra Todorovich, Director, America 2050, Regional Plan Association
Power point attached

Megaregions Overview

Catherine L. Ross, Director and Harry West Chair, Center for Quality Growth and Regional Development, Georgia Tech
Power point attached

Discussion of Background Paper and Explanation of Groups

Jason Barringer, Research Scientist, Center for Quality Growth and Regional Development, Georgia Tech

Groups divide and begin discussion.

II. GROUP DISCUSSIONS

Group 1 Members

Catherine L. Ross	CQGRD
Allen Molly	CQGRD
Charles Krautler	Atlanta Regional Commission
Supin Yoder	Federal Highway Administration
Jim Durrett	Livable Communities Coalition
Lester M. Passa	CSX Corporation
Chang-Chun Feng	Peking Univ
Zhu Jiajie	Peking Univ
ZhiGang Wu	Peking Univ
Jason Barringer	CQGRD
Tom Weyandt	Atlanta Regional Commission
Lyle Wray	Capitol Region Council of Governments
Emil Frankel	Bipartisan Policy Center
Saskia Benjamin	Georgia Conservancy

Group 2 Members

Harry West	CQGRD
Myungje Woo	CQGRD
Jessica Doyle	CQGRD
Michael D. Meyer	GA Tech
Adjo Amejudzi	GA Tech
Chester R. Jourdan, Jr.	Mid-Ohio Regional Planning Commission
John Humeston	Federal Highway Administration
Ed Campbell	SYSTRA Consulting
Petra Todorovich	Regional Plan Association
Glenn Coyne	EDAW
Joseph Collums	CQGRD

Group Research Questions:

- 1) Identification of a process for megaregion transportation planning. How might we describe this process? How might it function? What implementation strategies would be effective at the local, regional, state, multi-state and national levels?**

Group 1:

It would be helpful to begin megaregion planning with a multiple MPO gathering to get to know each other and discuss common themes. This is referred to as “planning on the edge.” It may be more volunteer-oriented than previous efforts.

Planning for transportation on a megaregion scale is all about building relationships. This gathering process will aid this and help to build that trust. This is especially true in the PAM where there is an imbalance of capacity among MPOs within a megaregion: Atlanta is an 800 lb. Gorilla in our megaregion with all small very MPOs, don't have the kind of involvement. Other areas are inevitably going to be suspicious of Atlanta Regional Commission. Cities can look to the example of Raleigh: Raleigh and Durham don't speak to each other let alone anyone else. Everyone is free standing. One group is doing planning and one is doing regional transportation planning and they do not work together.

There are several federal law implications: The MPO needs to cover whole urban area in question. Additionally, MPO in federal law needs to be defined in such a way that if it becomes multijurisdictional, it is housed in a freestanding multijurisdictional entity. There is a question of size requirements for MPOs: Is 50,000 still the right number to have an MPO? Should be bigger than that, and should be multijurisdictional? An example is Athens-Clarke County, not being able to make regional decisions in a collaborative way because MPO is housed in the Athens-Clarke County Planning Department even as area has grown into 2 more counties. It does not seem fair.

The issue of where TIPs are emerging from must be addressed: Is it a question of completely redefining MPOs, or is it a question of collaboration? MPOs are a valid process; it just needs to be redefined in terms of size, scope and geography. Should the state be able to say, "these are the projects that work in your region, give us your TIP"? There needs to be collaboration within larger economic unit than just urbanized area. This will require incentive for collaboration among the larger units: this can be done with any extra budget money. A bonus is having the ability to test ideas within one MPO or let an MPO try new ideas.

Role of the state in defining bigger policies:

1. Ports and Freight

We should be moving from MPO level to state level for port and freight issues. In GA we don't have an economic policy about ports and access to state and to the rest of the country. It is a definite megaregional issue, and needs a bigger context to be developed. Additionally, even if we had freight, there is a role of distrust within rail, more comfort with trucks. It is not just about creating options; it's about building the case for rail. This could be a position that everyone could get behind.

2. Globalizing in freight/ multistate

People need a 'Global gateway prospective', and a well defined freight strategy. There has been a multistate rail line that has been proposed but cut down many times. A passenger line between Raleigh and Charlotte is going very well. Upgrades have been made to rail to pick up speed; however, you still can't get from NC to ATL. Major investments are being made in one state that could have major advantages if spread to other states. This could be another rallying point.

3. Identification of common interests/ multi-modal issues

It all comes back again to building trust in a megaregion. Participants need to know that stakes are equal.

There is a question of what the place at the table is for federal government funding. Where should funding coming from? funding comes from federal funds- if MPO process is continued then funding for MPOs should be dedicated to building cooperation. States need to first figure out what other highways should and could be connected. Bringing state agencies and authorities, MPOs, and RPAs together can do this.

An example of something that needs to be addressed in this way is the possibility of a bypass north of Atlanta. Georgia and Tennessee would need to work together on this. The result of this process could be called a “strategic mobility plan.” Megaregions’ connectivity is very important to the future of moving freight. There is an opportunity to feed megaregions with non-megaregion resources. Federal funds should be used here as well creating a kind of top down approach. This brings up the issue of how to help areas surrounding megaregion cities. It could help garner support for megaregion planning for areas outside of the major hubs. The federal government should demand a strategic mobility plan and limit funds to areas with no plan. Priority should be given to national level crises that must be dealt with. The federal government should require states to have plans that are approved or else they do not get credit for what comes from the plan. Benefits only come from being outward-focused. States should say ‘yes’ to all public financing. Focusing funding, forces broader thinking. An example is Florida getting credit for shipping things from their ports to other landlocked areas of the country. There is definitely the matter of “getting credit” for the movement of goods, incentivize movement to other megaregions. Has to be a structured process that sits on top of both MPOs and DOTs. This structure will incentivize “right” behavior. We can reverse engineer incentives to have it pay to be outwardly focused. The implementation piece is going to be critical. There needs to be legal authority to implement. There could be a possibility for a TVA/ Urban Partnership Process.

The role of the public must be defined. This may simultaneously make megaregion planning more and less difficult. Another issue that can be addressed at the megaregion scale is “green infrastructure”: linking open space and recreation. This is also an aspect the public would be happy with and rally behind. We have the opportunity to take the lead on this. We need to be able to incentivize other places: climate change, infrastructure, and in significant places like ports.

Rural areas will also have a stake in this as well because much of the supply chain is rooted in rural areas. People mobility is not going to be the same in rural areas; the goals are different. Rural areas are focused more on goods mobility, funneling consumption and raw material. Without adequate transportation in place, a car manufacturer would never choose a site. Megaregions need to embrace their non-urban areas.

This is much larger than just transportation, there is an important education component; each region needs to be profiled. There is also a need to coordinate with non-transit entities likes like EPA and HUD in order to achieve the best results.

It is important not to try to program each dollar to be spent on transportation. Instead, keep a general funding focus on corridors and Mega-projects. If something is going to affect anything outside of the local area, perhaps we could build around 2 large projects. A higher level to oversee all of this, but not Washington level, something between states and Washington.

In China megaregion policy is part of the national policy. There is a need to coordinate competitiveness and benefits. The megaregion scale plans are pushed through by central government. In contrast, there is the case study of the Atlanta Airport plans to expand to Chattanooga. The idea was shot down instantly because Atlanta did not want to help Tennessee.

Group 2:

In order to address how megaregions should work, you must first identify the characters that can motivate local elected officials to re-design how planning works at the federal level, as well as on the state level to understand that it is good for Atlanta when Charlotte does well. Then local leaders must lobby for megaregional planning in Congress. The planning process must understand the administrative structure, which will involve states and local MPO's. The planning structure won't come at the federal level.

Only a funding program can cause states and MPO's to collaborate. But then they must collaborate to get that money. They would have to compete for these dollars based on a policy laid out at the federal level. This idea would still require someone to change Congress's current earmarking approach to funding transportation.

There are really two ways to structure the funding of megaregions:

1. Let states, MPO's compete for money, as discussed, where the best project wins, or
2. Fund multi-state systems where everyone gets a piece. May work better because the region would better comprehend that they are connected

New York and New Jersey have partnered to fund a \$3 billion tunnel. We need to ask, could that be expanded, though, where other states recognize that project also benefits them? We must incentivize states to be willing to agree with funding projects in other states. States have really played no role, however, in planning the Heartland Corridor project (high-speed freight line between Columbus, OH and Norfolk, VA). It was mostly planned by MPO's; counties created a revenue sharing plan, which was the toughest piece. The private sector played a huge role, and will play an increasing role in transportation projects in the future. The Heartland Corridor had political champions, though. An Ohio congressman (Hopson) advocated for it along with local leadership, against the state's wishes.

Another way that makes megaregional planning more feasible is to concentrate on a few key corridors, not entire transportation system. For example, ports along the Atlantic coast. There are 6 competing ports in 5 different states. There is a need to prioritize which port is more important. There has to be a national vision, like the interstate system.

With the Alameda Corridor, several cities competed for funding. So there are models for this type of structure. But then there's the example of Savannah, where there's gridlock and no one seems able to make a decision. And that's one city in one state. It would probably take about 4 years minimum for all these states and MPO's to collaborate, assuming there was some national vision for megaregions. Also, extending MPO's is difficult. Many exurban counties, like in Atlanta, don't want to be associated with metro area. In Cleveland area, however, suburban counties actually initiated a plan to collapse 5 MPO's into just one MPO. They've seen that they all can benefit no matter where a project takes place, and they're seeking a revenue sharing plan. It's based on a 2-year study by the Cleveland Foundation

and the private sector. Major actors for megaregional planning will most likely be states, not MPO's. However, there is a major equity problem with the megaregion concept. Some states are left off altogether. Also, it's not just a matter of government. The private sector must be on board too with megaregional planning.

Megaregion Infrastructure Bank

One interesting model is to create an infrastructure bank on the megaregion level, capitalized by federal government. It could be a revolving fund, at little or no interest, for projects that meet the megaregion criteria. This wouldn't take away from what the states are doing, and the federal government would have nothing to do with it, so system wouldn't be subject to federal rules, bureaucracy.

Each megaregion would have its own infrastructure bank. Federal legislation would mandate criteria, performance objectives for a project to qualify for megaregion funding. States that are "left out" would still have access to existing transportation programs. In other words, these banks would be additive; they won't replace any existing programs. They could start with \$10-12 billion capitalization for each megaregion. When funds are distributed on a national scale, a certain megaregion may get a bigger share because of superior grant writing. By establishing megaregion banks, each of these corridors is key to our economic growth and should have its own source of funding for transportation. Also, should be required to spend that money within a certain amount of time or it gets redistributed. Financing structure encourages collaboration, but doesn't force it. This would be simply adding a layer of financing; not creating more bureaucracy.

Criteria for a Megaregional Bank

First, there must be a national vision supporting megaregions. Federal government must realize that we no longer have a national economies, but a series of regional economies. Program must be additive, not a re-splitting of the current pot, so these banks cannot be allowed to fund projects that normally would be funded by other mechanisms.

Government must be "sneaky" to insure that proper megaregions are defined. For example, you could say that these coalitions seeking funding must represent 5% of the national population, 8% of the GDP, include multiple states, a certain component of international trade levels, etc.. This keeps smaller cities from coming together and claiming they comprise a megaregion.

It is thought that consolidating adjacent MPO's may be more feasible than collaborating among states. However, consolidating MPO's might work in the Northeast, but not in the Piedmont megaregion. There's not the concentration- for example you can't consolidate Atlanta and Nashville. But MPO's should match the scale of the metropolitan region. There shouldn't be multiple MPO's in one metro region. The idea of consolidation will bring a lot of political resistance. That's why we should focus on collaboration.

Megaregional planning is not appropriate for all transportation decisions. The local government role in planning should remain. What we need are tools to deal with issues that cross metro areas. This is where the EU is a good model. Their money comes from a value

added tax- that's how they built the bridge between Denmark and Sweden. There has to be compacts to let states plan together. That is a challenge because the idea of bottom-up planning is so ingrained in our country.

2) Problems and challenges that exist in the current transportation planning process and possible benefits of the megaregion.

Group 1:

Conformity

The whole conformity process has made effective planning virtually impossible. To think that regions and doing planning for 20, 25, 50 years down the road and have to know the number of lbs that will be produced years from now is ridiculous. Greenhouse gasses will soon be moved to the conformity process. Trying to conform to a 30 yr. process is inhibiting innovation in the present. There is a great need to focus on innovation in the present.

Institutional fragmentation

MPOs reach economic or environmental issues they must deal with. They inevitably hit road block when trying to do things that have effects outside of the MPO. The federal government is becoming less of a partner in the process yet gets to make the rules, the lesser partner shouldn't make the rules. There is a clear mismatch of rules. Until late in the planning process, the local government does not have enough of a stake. There is also the issue of defining direction, needing to set high level priorities and goals. Money should first go into preservation of the existing system. Extra money comes from deferring the preservation of roads, bridges, etc.

Broken relationships

Relationships between MPOs and DOTs are a problem. The system needs to be more egalitarian. There is also a disconnect in terms of priorities even when it is in the TIP. The playing field needs to be level. DOTs can feel as if they do not have any partner. California is a good model of MPOs working with the DOT, but in this example MPOs have the necessary scale and resources. Again, we need to rethink size of MPO. 50,000 is far too small. There is no incentive for projects to go beyond MPO borders. Small MPOs too often turn to DOTs for projects.

Too much leverage to consultation

With the emphasis on consultation, there is no one held directly accountable. People are left asking, who is really in charge of making decisions? There is a need for a strong strategic arm with real reach.

No incentive to look to global issues

A large scale focus needs to be incentivized. There is a link between the global economy and MPOs. What if GA had said they don't want I-75 running through the state? You have to draw the line. There is a strong need for a National Plan. An example used of freight in Chicago, how Cal Tran was able to push it through mobility of freight from east ports. There should be differential funding based on priority

Group 2:

Problems include a lack of structure and funding at megaregion scale, and there are equity problems that requires a major statutory code change on equity.

Challenges include:

Overcoming a sense of regional competition. There is a need to give Georgia a reason to approve of transportation investments in North Carolina. Collaboration will be difficult even at smaller scales. Adjacent MPO's find it difficult to discuss issues. The incentivizing source must be above what's already in place. We shouldn't take away from the funding that's already there. There should be reform of granting funds from competition between regions to a project prioritization process with each megaregion having access to its own funds. But competition may foster better proposals, even within megaregion structure; encourages coalitions to come together.

There is also a need to improve analytical models- people must understand linkages between MPOs, Cities, States. Collecting data is critical to defining and making case for megaregions. Ohio created a data set portal to compile different data sets. You must bring multiple agencies to megaregion level (forest service, EPA, fish & wildlife etc.), not just transportation. Megaregions are mental constructs. We should be comfortable with megaregions advancing only transportation goals, and not necessarily having to bring in other agencies.

Additionally, cities won't necessarily want to be associated with other cities. For example, a city with adequate air quality won't want to be regulated according to air quality of another city.

Another challenge is defining purpose of megaregion. The purpose is not to regulate or govern, but to enhance the economic phenomenon that has occurred. Need to enhance without adding bureaucracy. Developing a planning process in addition to financing process is a challenge. There has to be a timely approval process. Maybe declaring infrastructure projects an emergency, like we did in California after earthquakes. Interstate system planning serves as possibly the best model for collaboration between states. It too relied upon a separate pool of money, as we are proposing. Interstate legislation was very controversial, though. Southern states didn't accept it until national defense was made an issue. Funding megaregions could still be considered national defense. It's just that national defense involves competing in the global market. Once infrastructure mechanism is in place, then you can deal with other issues like cultural ties, natural resources that characterize megaregions.

Furthermore, environmental goals could be part of the criteria for funding. Environmental groups could be brought in as partners and perhaps avoid prolonged construction. However, the environmental community is not monolithic.

3) What other methodologies and criteria might be used to define megaregions?

Group 1:

There are multiple ways to define 'megaregion,' a group of cities in multiple states, a group of connections a city has with other cities- how it relates. Some terms that must be associated with 'megaregion' are safety and national connectivity. Global trade and ports may also be what drives the megaregions definition. Many also would argue that major corridors define megaregions.

There exists a discrepancy between Urban Core vs. Economic Core: If the MPO is not determined by population (50,000 people), then perhaps it should be defined by a level of economic output instead.

Megaregions should have a focus on high priority issues. For example, PAM cities need to be concerned with watersheds, rail, economic, protected lands, and commute flows. There are also political criteria that need to be highlighted. For example, Mayor Franklin will welcome a city like Charlotte to help with water issues. Receptivity is critical in this political climate. There is a need to evenly match of benefits and burdens. No one wants to bear any burdens if they will not get more benefits.

The goal remains the same: natural trading partners. The megaregions structure will create instant trading partners

The question that remains is: Who will create megaregion? Should it be a nonprofit? A governmental body? Do existing organizations or structures provide a basis for megaregion discussion? Many of these issues have yet to be addressed.

There should probably be a stronger MPO role, but other forms of organizations will need to be involved as well. Time should be taken to define local regions (40?), using census data if reliable. However, there is also the option of having megaregions self-define out of facts and self interest. There must be a national vision first.

There is also the idea of a compromise; setting basic ground rules and then letting megaregions shape themselves.

There should be two different types of megaregion structure:

Intra-megaregion= more local than federal

Inter-megaregion= more federal than local

Compulsory Strategic Mobility Plan with required interstate consultation

Major barriers to doing this right now include a culture of not dealing with anything outside of the state. Also there would need to be a change in the relationship between MPO and governor's office. To do this, go to Washington and get money to change governor's minds. It's really a function of governor personalities. We need to institutionalize a process so personalities do not play such a large role.

There needs to be a federal requirement of collaboration with neighbor states on big projects, much like counties do currently. Also, the statewide strategic plan must be consistent. An example of what happens when MPOs do not coordinate is I-41 in North Carolina. The planning process turned in to Raleigh MPO vs. Durham MPO to add a lane.

Because of lack of communication, the extra lane abruptly ends when crossing into other MPO.

Group 2:

Definitions of 'megaregion' could include: two or more metropolitan areas connected by a million people each. We could simply let census define megaregions, as they do with TMA's. Megaregions could be defined by adjoining regions with more than a million people each. There could be a multi-state component, or even a multi-national component (U.S.-Canada, U.S.-Cuba.)

Another take is that knowledge networks define megaregions. We must look at relationships that have transportation implications. Certainly there are these "virtual megaregions" that exist nationally and internationally, but they may not have on the ground transportation implications. For example, Portland and Austin, TX have more economic ties because of shared industry. Also, there should be an initiative to explore industry connections between adjacent regions before assuming they deserve transportation investments. Some adjacent regions may sprawl together, but may not have economic connections, like Tucson and Phoenix. Commuter rail may not make sense in these areas.

Regions become megaregions because of population growth. They have a shared economy. So the definition should focus on where the clusters of people are. It's not just transportation that defines megaregions. Perhaps not many people go back and forth between Charlotte and Atlanta, but a lot of financial data does.

There are multiple layers to defining megaregion: population clusters, financial flow, watersheds, flow of information, energy transmissions. Qualitative layers also define megaregions, i.e., shared circumstances of Great Lakes cities, cultural connections of Deep South, Gulf Coast. There is also commuter overlap, including airline business travel. It is very important to allow for flexibility and different scales when defining megaregions. The PAM may look different when considering water issues than when considering transportation issues.

There is the definition created for Robert Lann's "megapolitans", which are measured by overlapping commuter patterns. If these were designated by the census, that would make it even easier to conceptualize megaregions. There could also be a "facilities" method to designate megaregions, similar to how states defined the national highway system based on certain criteria.

III. STRUCTURED TELEPHONE INTERVIEWS

1. Overview

The purpose of the structured telephone interview is to incorporate practice into the new theoretical framework for megaregion planning. Structured telephone interview with transportation officials of selected state departments of transportation (DOTs) and metropolitan planning organizations (MPOs) that are contained in existing or emerging megaregions were conducted between July 25, 2008 and August 27, 2008.

The interviewees include Planning and Policy directors and their staff of state DOTs in four states (California, Florida, Washington, and Maryland) and six executive directors or transportation planning officials of MPOs: New York Metropolitan Transportation Council, Delaware Valley Regional Planning Commission, South Florida Regional Planning Council, Metropolitan Washington Council of Governments, North Central Texas Council of Governments, and San Francisco Bay Area Metropolitan Transportation Commission.

The following five questions, focusing on the practicality and functionality of large-scale regional efforts in transportation infrastructure planning, were asked:

1. What are the problems you cannot address within the current system (what would you do different if transportation infrastructure was planned and funded at a megaregional level)?
2. What infrastructure needs to be addressed at a megaregion scale?
3. What are the obstacles to multi-jurisdictional planning and implementation of infrastructure? (Examples of potential types of obstacles include communications, parochialism, legal Issues, and financing/funding mechanisms.)
4. How do you currently broker multi-state agreements?
5. Are there any existing megaregional-scale transportation efforts currently underway?

The following summaries are based solely on interviewees' statements.

2. Summary of Interviews

2.1 Problems that cannot be addressed at the current system

▪ TRANSPORTATION

From an economic and infrastructure investment perspective, there are certain returns to scale: the larger the system, the better the decisions economically. If planning and funding were handled at a megaregion scale, a lot more would probably get done and conflicts would be minimized. High-speed rail and airport issues cannot be addressed within the current system without a megaregional effort. There needs to be an approach to strategic investments which look at the region as a whole, and not state by state.

Within the current system, it is difficult to effectively coordinate the competition of transportation facilities in the region. For example, there is port competition between Baltimore and other surrounding ports.

MPOs expressed the necessity of establishing a Comprehensive National Transportation System that would include all modes. However, in the absence of such a nationwide system plan, they would support more corridor organizations such as the I-95 Corridor Coalition.

▪ ENVIRONMENT

The issues of air and water quality and climate change cannot be addressed within the current system because pollutants which may be generated in a metropolitan area nevertheless affect associated rural and outlying areas. Issues of green infrastructure and preservation of the natural environment do not stop at traditional political and administrative borders.

▪ LAND USE AND HOUSING

Land use decisions in the current system are based on what is good in the short term for the local area, not for the region in the long run. As a result, for example, it has led to a lot of sprawl in California, expanding the tax bases of local governments. It has been hard for infrastructure planning to keep up with sprawling land use patterns.

Transportation planning should be integrated with the planning for land use and housing. For example, affordable housing problems in San Francisco Bay Area reach beyond the current jurisdiction. Subsequent residential mobility affects transportation outcomes in the region as a whole. This means that megaregion planning should incorporate land use and other issues, such as housing, the environment and climate change, along with transportation planning.

2.2 The infrastructure that should be addressed at the megaregion level

Most interviewees agreed that all long-distance transportation, freight movements including trucks, rail, and port, and passenger travels, including rail, auto, bus, and air, could benefit from a megaregional approach. Specifically, since many air hubs are expected to reach their capacities in the near future, a high-speed rail system would be an alternative for future long distance travels.

One MPO representative stated that megaregional planning needs to support and enhance any existing successful multi-jurisdictional facilities and refrain from building competitive projects. A mechanism is needed to provide coordination and communication linkages between ports and airports to plan and provide high speed connections for both passengers and freight. However, to date there has been no effective means of coordination between MPOs.

The connections between regions or states should be considered at the megaregion scale because there exists a lot of movements between regions, as well as within megaregions. The infrastructure that connects those regions includes highways, bridges, and waterways. For example, a large portion of goods coming in via Los Angeles or Long Beach (part of the Southern California megaregion) is moved out of the state through those infrastructures.

Furthermore, the connections between megaregions and rural areas should be considered. For example, rural areas within a megaregion need access to the megaregion's existing and projected health-care system.

In terms of environmental planning, the relationship between green infrastructure and transportation infrastructure could be discussed at the scale of the megaregion, since green infrastructure is frequently interrupted by transportation infrastructure and often needs to be planned on a scale beyond traditional political boundaries.

2.3 The obstacles to multi-jurisdictional planning and implementation of infrastructure

Interviewees suggested that governance, funding mechanisms, and legal issues are the most important obstacles to megaregional approaches.

▪ GOVERNANCE

Organizational fragmentation would be the greatest obstacle to success in megaregion planning. Each locality does not share common problem definitions, common sustainable solutions, and common performance measurements. Currently, there is not a venue for such sharing to occur, nor is anyone charged with making that happens. In other words, no mechanism exists to address megaregional problems.

Multi-state coordination and collaboration depends on states' representatives being able to perceive benefits for their states in such efforts. In other words, states should not be asked to collaborate without expectation of return.

There should be very strong leadership to facilitate cooperation among different interests. The top-down approach would be useful for implementing megaregional planning by establishing a venue where fragmented organizations coordinate and provide rules of incentives for successful collaboration.

On the other hand, one representative of MPOs asserted that the only effort to push for a National Transportation System at the megaregion scale would be coming from MPOs because the Federal Government must consider states' objections and states are too parochial. One possible form of multi-jurisdictional collaboration could be a consortium of MPOs, DOT officials, and others.

▪ FUNDING MECHANISMS

Since different state government agencies do not share fiscal responsibilities for transportation planning, it is hard for states to influence multi-state infrastructure decisions at the megaregion scale.

At the regional scale, jurisdictions' unwillingness to share resources also functions as an obstacle to planning on a larger scale. There is unequal willingness between jurisdictions to raise funds due to different tax structures and supports, different political constituents and visions. It is hard to determine the appropriate level of funding or taxation. In California, while 20% of transportation investment comes from federal fund, a significant portion of the

remainder is locally generated. Thus local government agencies are under pressure to spend such funds locally.

Specific regional funding should be secured for megaregional planning. For example, while this is not planning at the megaregion scale, the Metropolitan Transportation Commission (MTC) in the San Francisco Bay area has been positioned to broker more than two-county arrangements for joint projects because it had control of regional funds.

Even if new planning boundaries were prepared at the megaregional level, they would be ineffective without a complementary funding mechanism. For example, a new Memorandum of Understanding (MOU) regarding megaregions was signed in the New York metro area, focusing on the tri-state region. However, there is no collaborative funding sharing. This means that some piece of the funding controlled at the megaregion level is needed to do megaregional planning.

▪ LEGAL ISSUES

Legal issues will be another important obstacle for megaregion planning. For example, who will be at fault when standards are not being met during the implementation of megaregional planning? Counties or cities do not want to deal with land use outside their traditional borders. As a result, regional efforts on land-use coordination frequently face strong opposition.

Problems are based on different government entities making their own decisions. One MPO representative within the Northeast megaregion said that even if they have money to fund regional projects, they are frequently legally restrained from pursuing those projects.

2.4 The current multi-state agreements

When there are big issues, states can agree and come together. However, this does not apply to long-range planning.

▪ MULTI-STATE MPOs

There are many multi-state MPOs. These multi-state agreements are only successful when there are common issues between states (such as water). While multi-state MPOs plan routine meetings with other states, multi-state agreements do not occur in long-range planning efforts.

▪ THE PORT AUTHORITY

The Port Authority of New York and New Jersey is an example of a multi-state agreement. The six members of the Board of Commissioners are appointed by the Governor of each state (<http://www.panynj.gov/AboutthePortAuthority/Governance/>).

▪ INTERSTATE HIGHWAY SYSTEM

There has been coordination between the district office in West Florida and the eastern office in Alabama for the I-10 corridor.

California is working with 8 states on the I-10 corridor, all about moving goods across the southern part of country. The I-10 trade corridor discussion was directly encouraged by the federal government.

▪ ENVIRONMENTAL ISSUES

There has been an agreement between California and Nevada to work together on water quality, air quality, and land use around the Tahoe Basin. However, as with the I-10 discussions, this was primarily a federally-driven situation.

2.5 The existing megaregion scale transportation efforts

▪ I-95 CORRIDOR COALITION

The I-95 Coalition has changed it from a mostly highway-based to more multimodal organization. The I-95 Corridor Coalition is “an alliance of transportation agencies, toll authorities, and related organizations, including law enforcement, from the State of Maine to the State of Florida, with affiliate members in Canada” (<http://www.i95coalition.org/about.html>).

The Washington, D.C. MPO has been interacting with the I-95 Corridor Coalition and sees this as a vehicle for better working relationships. Recently the I-95 Corridor Coalition sponsored a webinar involving all the MPOs in the corridor.

▪ I-10 NATIONAL FREIGHT CORRIDOR STUDY

The transportation agencies in eight states, including California, Arizona, New Mexico, Texas, Louisiana, Mississippi, Alabama, and Florida, have collaborated to conduct a comprehensive evaluation of the overall I-10 corridor system (http://www.i10freightstudy.org/1_overview.html).

▪ REGIONAL BLUEPRINT PLANNING PROGRAM OF CALIFORNIA

The Regional Blueprint Planning Program is a

voluntary, competitive grant program that will initiate or augment existing efforts of Metropolitan Planning Organizations (MPOs) and Councils of Government (COGs) to conduct comprehensive scenario planning that results in consensus by regional leaders, local governments and stakeholders on a preferred growth scenario – or “blueprint” – to achieve the objectives for a twenty-year planning horizon (through 2025)(http://calblueprint.dot.ca.gov/0506_grant_info_files/Regional_Blueprint_Grant_Application.pdf).

The Regional Blueprint Planning Program is intended to better inform regional and local decision-making, through pro-active engagement of all segments of the population as well as critical stakeholders in the community (including business interests, academia, builders, and environmental advocates), and to foster consensus on a vision and preferred land use pattern. It is anticipated that the regional blueprint planning grants will build capacity for regional collaboration and integrated planning that will in turn enable regions to plan to accommodate all their future growth, thereby reducing need for sprawl. One is going on in

Southern California Association of Government (SCAG) region, one in Bay Area Metropolitan Transportation Commission (MTC), one in San Joaquin Valley, and one in Sacramento. FHWA funded the blueprint grants. While this program currently supports funding at the MPO level, this might be one potential model for funding at the megaregional scale.

- (CLIMATE CHANGE LAW) OF CALIFORNIA

California implemented AB32, the climate change law. In California, transportation contributes to about 40% of greenhouse gas emissions. There has been a region-to-region effort: the West Coast Corridor Coalition. MPOs, state DOT, and some private sectors have been involved to deal with freight movement on the west coast. However, interviewees noted that while the program did have initial funding, it would not have a funding mechanism to be self-sustaining after the depletion of the initial grant.

- CONGESTION RELIEF PROJECT OF CALIFORNIA

California also supports funding for congestion relief projects in urban areas. However, the proposal should show a corridor system management plan (CSMP), incorporating the entire corridor and show how the project will be sustainable and will fit into the larger scheme.

- COLLABORATION BETWEEN CONTIGUOUS MPOS

There has been an effort of North Central Texas MPO to develop MOUs between contiguous MPOs to coordinate work efforts and to develop communication with MPOs in a larger area (similar to a megaregion) extending from Tulsa, OK, to Shreveport, LA.

3. Conclusions

While the implementation of megaregional planning may face many difficulties, particularly in the areas of governance, funding mechanisms, and legal issues, most interviewees agree that a National Transportation System that would include all modes needs to be created at the megaregional scale and that now is the time to consider these issues. Specifically, a representative of New York Metropolitan Transportation Council stated that as the MPO process changed everything when it was created in 1962, now might be the time for new change, and for the federal government to require megaregional planning to address transportation infrastructure policies and issues.

During the interviews, some suggestions for identifying megaregions and preparing to plan at the megaregional scale were made. They can be summarized as follows:

(1) It may make sense to define megaregions with rigid commonalities, such as natural resources (water). A lot of the current thinking on definitions of American megaregions tends to focus on economic-development-oriented projects, but basing regions on economic definitions can mean they are vulnerable to shifts in the economy.

(2) Megaregional planning should have a comprehensive structure where different megaregions can set their own priorities. For example, water might be the highest priority in the Southeast while it is not in the Midwest.

(3) While a megaregion is an area where population and economic activities are concentrated, it should consider rural areas that are keys to economic growth in the future.

(4) Also, improved forecasting tools for population, traffic, and land-use trends should be developed before discussing infrastructure planning. Depending on the estimation of population growth and the places where population grow, the types of infrastructure and their demand may be different.

IV. APPENDIX

A. Response to National Megaregions Prospective

B. International Megaregions

C. Megaregions in America 2050

D. Megaregions Overview

E. Background Paper