

# The Megaregion as Product and Spur of Collaboration

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*First floated in 2005, the idea of the “megaregion” is meant to foster collaborative approaches between regional entities and more geographically expansive approaches to long-standing planning problems. Transportation planners at the regional and national level have been particularly receptive to the megaregional approach to planning. This article describes some of the initiatives and conversations that megaregional research spawned in transportation, leading to collaborations within megaregions themselves, as well as partnerships spearheaded by the Federal Highway Administration (FHWA).*

## Introduction

Regional planning in the United States has a long history of fits and starts (Frisken and Norris, 2001). Collaborations between jurisdictions, such as the Regional Plan Association (RPA), which makes planning recommendations for Connecticut, New Jersey, and metropolitan New York City, or the Appalachian Regional Commission, which involves the participation of more than 400 counties and the governors of twelve states, are rare. Still, regionalism remains popular at the theoretical level, with planning scholars continuing to discuss the possibility of regional solutions to economic, environmental, and infrastructure problems that are not contained neatly within city or state borders.

One such scholar-led initiative is the idea of the “megaregion,” first introduced into American planning discourse in 2005. Proponents have concentrated on ten megaregions within the contiguous United States, which contain 80% of U.S. economic activity (Ross and Woo, 2011). These agglomerations of population and economic activity offer the potential for increased growth and innovation, but also the risk of environmental destruction, increased economic inequality, and increasingly inadequate infrastructure. The economies of megaregions bear a disproportionate share of the responsibility for American competitiveness in a rapidly changing global economy, and therefore, megaregional planning approaches “provide the strategy that allow us to act globally while addressing local quality-of-life issues” (Ross, 2009).

From the start, to promote the idea of the megaregion has been to call for collaborative planning. As the

megaregional idea found purchase among planners, it inspired new partnerships and discussions. This paper discusses the development of the megaregion concept in the context of collaborations—both the collaborations implied as necessary to megaregional planning, and the collaborations, both within and outside the proposed megaregions, spawned by megaregional research. Even if the “megaregion” never becomes fully accepted as a part of American governance or policy-making, the idea still proves fruitful in prompting conversations within and across regions.

## Creation of the Megaregion

The “megaregion,” as used in American planning, is descended directly from the mid-century discussion of the “megalopolis” by Jean Gottmann (1961). Gottmann argued that the area extending from Boston to Washington, D.C. was blending from a series of distinct cities to one long contiguous chain of urban development. Gottmann’s idea was updated and expanded by studio classes at the University of Pennsylvania and Georgia Institute of Technology, on the “Northeast” and “Piedmont Atlantic”

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Name of Megaregion	Est. Population (2010)	Major Cities Included	Source
Piedmont Atlantic	17.6 million	Atlanta, Charlotte	Contant, Ross, et al. (2005)
Northeast	52.3 million	Boston, New York, Philadelphia, Washington, D.C.	University of Pennsylvania (2005)
Northern California	14.0 million	Oakland, San Francisco, Sacramento	Metcalf and Turplan (2007)
Southern California	24.4 million	Los Angeles, San Diego, Las Vegas	Kern County Council of Governments et al. (2005)
Great Lakes	55.5 million	Chicago, Detroit, Pittsburgh, Cleveland, St. Louis, Minneapolis	Delgado et al. (2006)
Texas Triangle	19.7 million	Austin, Dallas, Fort Worth, Houston, San Antonio	Zhang et al. (2007)
Florida	17.3 million	Orlando, Tampa, Miami	South Florida Regional Planning Council (2006)
Cascadia	8.4 million (US portion only)	Portland, Seattle, Vancouver (Canada)	Portland State University (2005)
Gulf Coast	13.4 million	Houston, New Orleans	Glover Blackwell and Duval-Diop (2008)

Table 1: Major Megaregions Identified in the United States (population numbers courtesy of America 2050).

megaregions, respectively (University of Pennsylvania, 2005; Ross, 2006).

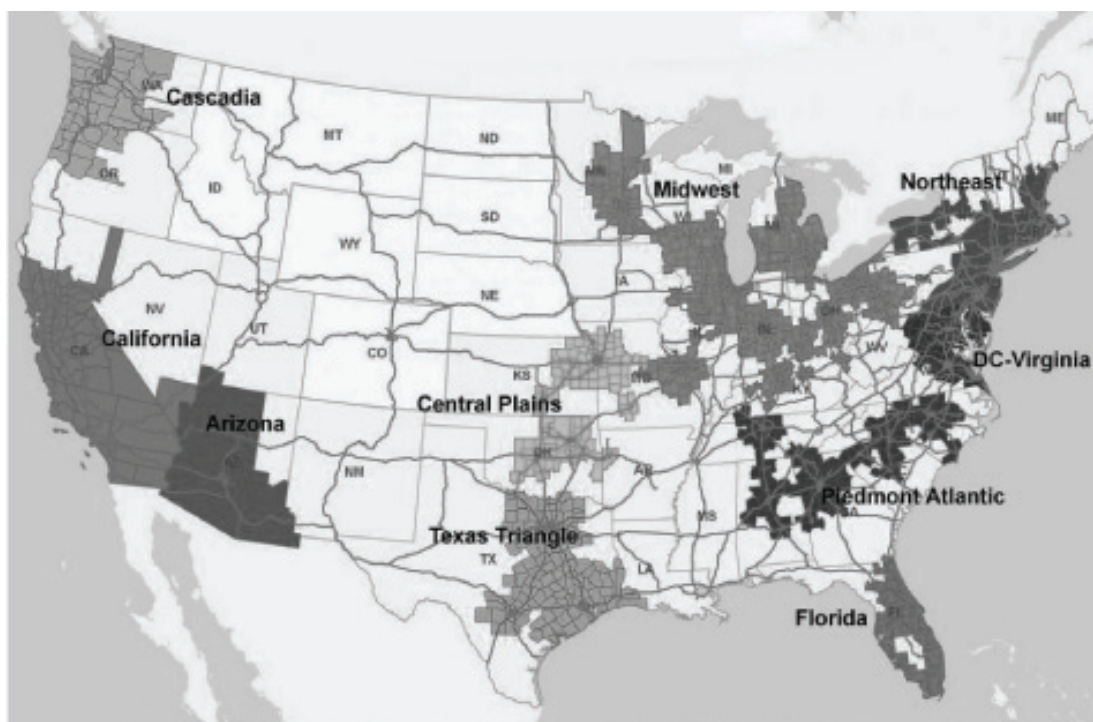
The current commonly accepted definition of the American megaregion is “networks of metropolitan centers and their areas of influence that have developed social, environmental, economic, and infrastructure relationships” (Ross and Woo, 2011). A loose coalition of researchers have identified ten significant “megaregions” in the contiguous United States, as identified in Map 1, below. No one group has a monopoly on the use of the term “megaregion,” and different studies have identified different megaregions. An alternate 2008 map published by RPA identifies eleven megaregions (RPA, 2008). These variations are a result of the bottom-up approach to megaregional research: rather than one particular theorist proposing delineation criteria, multiple groups proposed and researched particular megaregions, and among those groups, delineation criteria have varied (CQGRD, 2008). Table 1 lists the best-known megaregions and the literature identifying them.

The term “megaregion” is also in use by writers and planners outside the United States, but it has a different meaning. In the United States the term “megaregion” designates a chain of interconnected cities, geographically distinct but connected via trade, commute patterns, and transportation infrastructure. Outside the United States, the term has more frequently been used to describe a very large city and its surrounding suburbs. For example, Shanghai

and Moscow have been referred to as “megaregions” by themselves (Ozumi and Sano, 2009; Argenbright, 2013).

Closer to the American example are some European megaregions, such as the Randstad in the Netherlands (Meijers et al, 2012). The differences between American and European megaregional research lie in emphasis. Because the European Union uses regional funds to address interregional inequities, particularly in economic and infrastructure investment, much European megaregional research has concentrated on inequitable development between different parts of the same megaregion, or between a megaregion and its periphery (Faludi, 2009). The research in the United States, as discussed later in this paper, has focused, thus far, primarily on economic competitiveness and infrastructure investment. At least one paper on inequality and megaregions has argued that focusing on spatial organization is a misdirection (Fainstein and Fainstein, 2009).

Finally, in the American case, although the megaregion is a descriptive phenomenon based on analysis of existing trends in economic development and population growth, its proponents have never meant it as strictly descriptive. In her introduction to the 2009 edited volume *Megaregions: Planning for Global Competitiveness*, Catherine Ross writes, “Cities can no longer act alone to meet the economic and social challenges they face. However, the megaregion may be a more effective alternative to marshal



**Map 1: Megaregions in the United States.** *Image courtesy of CQGRD.*

the necessary resources and implement the solutions necessary to meet these challenges” (Ross, 2009). The megaregion is, thus, positioned as a tool to promote the economic competitiveness and well-being of the areas that adopt it. Not only are megaregions supposed to benefit from collaborative planning within the megaregion, but subscribing to the concept of a given area as a megaregion is intended to promote collaborative planning.

### **Examples of Megaregional Collaboration**

The idea of the American megaregion originated in an academic setting, with the first megaregional studies emerging out of universities. But several non-academic institutions support the concept as well, most notably the Regional Plan Association (RPA), a planning research and advocacy organization primarily focused on the greater New York City area; the Ford Foundation, which helped fund the research that led to the 2009 *Megaregions* edited volume; and civic organizations such as the Southern California Association of Governments (SCAG). With the help of these new partners, the original researchers organized a series of dialogues with prominent political and business actors within identified megaregions.

RPA is especially prominent in the organization of megaregional talks, under the banner of its “America 2050” project, which is meant to influence infrastructure development in the face of projected growth and economic activity. Between November 2008 and September 2009, RPA sponsored a series of six America 2050 forums that brought together researchers with policy advocates, political and business leaders within each megaregion, and focused primarily on issues of economic growth, business

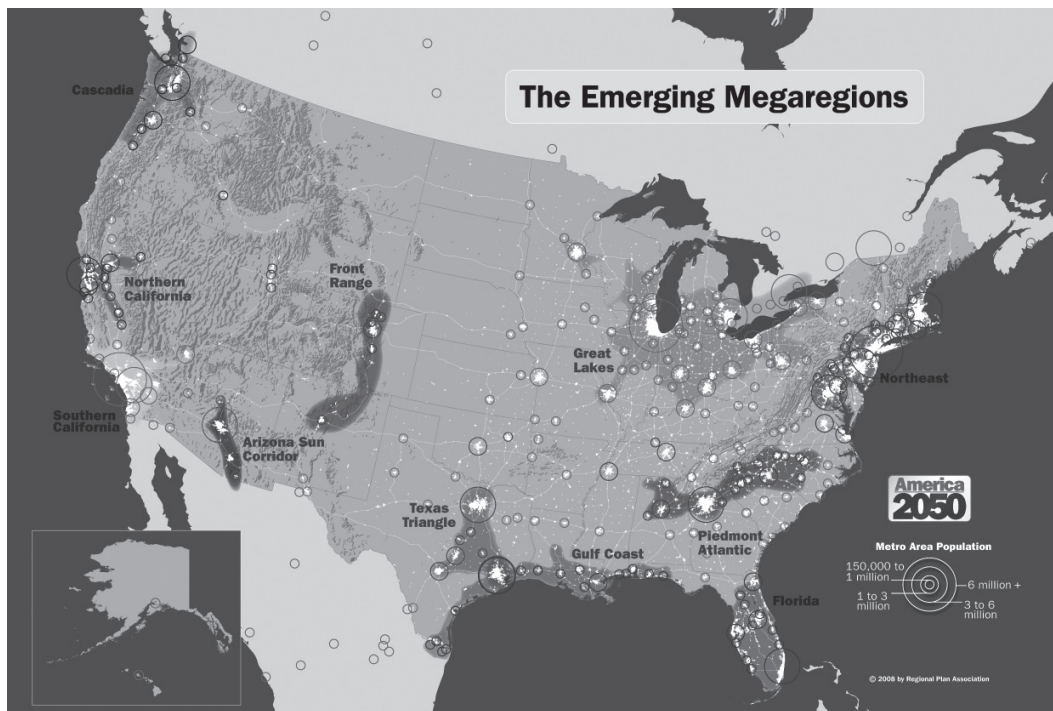
development, and infrastructure investment. In addition, the RPA sponsored research conferences devoted to megaregional issues in Healdsburg, California, in 2007 and 2012 (Pisano, 2013). In the Piedmont Atlantic megaregion, Georgia Tech’s CQGRD hosted a series of three “Mayors’ Megaregion Meetings” in North Carolina, South Carolina, and Georgia from 2009-2010 (CQGRD, n.d.).

So far, these megaregional meetings have not borne any obvious policy fruit. That is not to say that they were unproductive: it is entirely possible that discussions at any of the meetings sparked smaller, informal collaborations between individual participants. The combination of a drop in available funding caused by the recession and a political climate becoming increasingly hostile to partnerships and governance initiatives, in general, slowed the momentum of megaregion-wide meetings. Instead, both RPA and CQGRD currently focus efforts more narrowly on a particularly promising area of megaregional discussion: transportation infrastructure.

### **Transportation Planning and the Megaregion**

The American megaregion is defined, in part, by transportation infrastructure: since the boundaries of megaregions are delineated through analysis of commodity flows, highways and waterways become crucial factors (Ross and Woo, 2001). Ross, Barringer, and Amekudzi (2009) found that megaregions relied more heavily on trucks for freight transportation for both domestic and international imports and exports than did areas not part of identified megaregions. Because of their heavier population density, megaregions have fewer miles of highway and local road per 1,000 people than do areas not contained





**Map 2: Alternate delineation of American megaregions.** Image courtesy of the Regional Plan Association.

within megaregions. The authors concluded that increased transportation investment and expansion into new modes of transportation (particularly rail) would be necessary to ensure the continued economic competitiveness of American megaregions.

Meanwhile, advocates of high-speed rail (HSR) frequently use the megaregion as a setting for proposed rail systems and argue that the growth of megaregions points to the need for HSR to spur economic development with less environmental damage than automobile-centric growth. A 2011 studio project by the University of Pennsylvania's School of Design made the connection explicit:

*The Northeast Megaregion extends from Maine to Virginia and is the economic powerhouse of the nation. It is home to 50 million residents and has a \$2.6 trillion economy focused along the dense Northeast Corridor from Boston to Washington. By 2050, the Northeast is predicted to grow by an additional 20 million residents, which has the potential to generate enormous economic growth.*

This growth is threatened, however, by the strained capacity of the Northeast's infrastructure systems. Congested and deteriorating from years of deferred maintenance, the highways, runways, and rail lines of the Northeast cannot meet the needs of the future.... High-speed rail has the potential to link economies, regenerate regions, and provide new opportunities for millions of Americans. Many of America's global competitors have embraced high-speed rail, from the European Union to Russia, Brazil, and Saudi Arabia, and some have made

these systems centerpieces of their economic growth strategy. The United States risks falling behind if it does not invest in 21st Century infrastructure. (University of Pennsylvania, 2012)

The University of Washington and Portland State University jointly published a similar series of reports on the Cascadia megaregion that discussed the possibility of HSR in Cascadia (University of Washington and Portland State University, 2011).

Continuing a long tradition of advocacy for greater investment in rail and other alternatives to passenger-car-intensive transportation, RPA also pointed to the growth of megaregions in its arguments in favor of HSR. A 2011 report on HSR throughout the country contained separate analyses for each megaregion (America 2050, 2011). Discussion on the RPA's website of megaregions explicitly names HSR as "the key new links in this mobility system" (America 2050, n.d.[b]).

The affiliation between megaregions and HSR is not hard to understand. HSR is by definition multi-jurisdictional. With the exception of one section in southern Florida, all of the HSR hubs proposed in the 2009 Vision for High-Speed Rail in America involved more than one state (Federal Railroad Administration, 2009). The megaregion provides a setting in which HSR makes sense. Agreeing to help fund and build HSR is easier to do (and argue in favor of) if a policymaker has already accepted the premise that infrastructure investment that benefits the entire megaregion will benefit his or her jurisdiction.

Moreover, using megaregional language allows HSR advocates to frame the debate about whether or not to invest in HSR in the setting of competition between

regions around the world. For example, the University of Pennsylvania report referenced HSR use by America's "global competitors" while authors of the 2009 megaregions book subtitled it *Planning for Global Competitiveness*, although international trade is not a strong focus in the book. Advocates of HSR employ the megaregion to make rail seem like less of a luxury and more of a necessity: a globally popular transportation method for a globally competitive region.

By its nature, HSR is a significant investment requiring commitment from multiple jurisdictions. In 2012, Amtrak estimated that to install HSR in the Northeast Corridor between Boston and Washington, which has one of the highest levels of passenger-rail use in the country, would cost \$151 billion (Nussbaum, 2012). As such, megaregions offer a potentially useful way to bring together interested parties, facilitate discussion and agreement on goals, and coordinate the multiple steps needed in a multi-state construction project. However, to date, megaregional rhetoric has not been powerful enough to overcome long-standing political objections to rail at both the federal and state levels. The arguments of megaregional advocates have tended to focus on the need for investment, whereas opponents of rail have been concerned with the admittedly large costs of extensive rail projects. Support for HSR outside California stagnated since an initial flurry of interest in 2008 (Freemark, 2013), and even in California, where voters previously approved the issuance of nearly \$10 billion in bonds for construction, HSR remains controversial (Christie, 2014). The Federal Highway Administration (FHWA) has also been examining megaregions as a guide for directing future infrastructure investment. FHWA contracted with CQGRD to produce two separate literature reviews on megaregions, regional planning, and multi-jurisdictional transportation initiatives (CQGRD, 2008 and 2011). FHWA also conducted quarterly conference calls on megaregional research from August 2010 to March 2013 (FHWA, n.d.) and expressed an interest in research focusing on freight movements within megaregions.

As with HSR, the federal highway system is multi-jurisdictional and promotes freight and passenger flows between different areas in the megaregion. Unlike HSR, however, the federal highway system has a long history of creating, and being supported by, top-down regionalism. In the course of authorizing transportation spending in the 1970s, the federal government created Metropolitan Planning Organizations (MPOs), which help allocate transportation funding on a sub-federal level. As such, megaregional initiatives as led by the FHWA will be more federally directed than either the initial conversations over general megaregional issues or the efforts so far to use megaregional language to promote HSR.

The 2008 and 2011 CQGRD reports speak to this tension about the role of the federal government in leading megaregional efforts. In 2008, the researchers asked in the report's executive summary, "Has the time come for

empowered regional planning from the bottom up in the United States?" However, the 2011 report concludes, "[F]ederal leadership that can link and coordinate these fragmented actors and multi-scale decision making systems is essential." If the FHWA's challenge is to find a way to address the problems identified at the megaregional level while working with local actors, megaregional advocates will have to balance a potential increased role for the federal government with maintaining local dialogues and incorporating changing local concerns into megaregional analyses.

### **Conclusion: The Future of Collaborative Megaregional Planning**

Nearly a decade after the publication of the first works identifying American "megaregions," the megaregion as unit of analysis is gaining an increasing role in planning conversations, especially in the area of transportation planning. Advocates of the megaregional idea speak with urgency. If megaregions, containing so much of the United States' population and economic activity, are to be able to attract further investment and continue the economic growth needed to support their residents, then they need investment in infrastructure and megaregion-wide answers to problems of economic growth and environmental degradation.

Between 2008 and 2011, organizations promoting the megaregional idea—universities, policy advocates, civic boosters, and government officials—convened a series of conversations about a wide range of issues, both within individual megaregions and about the American megaregions as a whole. More recently, several proponents of the megaregional idea argued that the rise of the megaregion necessitates multi-jurisdictional investment in HSR. But the majority of megaregional research at the moment is being led by the Federal Highway Administration, which is not necessarily positioned to be a strong advocate for investment in rail, and the momentum is in the hands of the federal government. On the one hand, top-down regionalism has traditionally been more effective in American planning than bottom-up regionalism (CQGRD, 2011). On the other, linking megaregions to federally-led transportation planning risks limiting the usefulness of the megaregional idea to exclusive association with highway transportation, rather than functioning as a platform to discuss a variety of issues.

There remain plenty of avenues for the megaregional idea that have not yet been fully explored and that do not fall under the rubric of transportation investment. One is to investigate potential megaregional development as centered around shared environmental resources, such as watersheds. A megaregional approach, for example, could be useful in addressing the decades-long "water wars" between Alabama, Tennessee, and Georgia, all of which lie within the Piedmont Atlantic megaregion. Another is to use megaregional definitions as a guide in exploring the movement not only of goods and people,

but of ideas, and thus to understand how membership in a megaregion might affect a particular place's knowledge transfer and technology development. A third possibility of megaregional research would be to follow the European model and focus more explicitly on differences in equity between "core" and "periphery" parts of the megaregion, and the implications for economic and infrastructure development.

The strength of the megaregional idea lies in its recognition that new developments in the movements of goods, ideas, and people means that activity is happening at a scale above the local or even the state, and planning initiatives should address these supra-local, sub-federal trends. As both a unit of analysis and as a policy tool, the megaregional idea spurred new dialogues and collaborations, even as the megaregions themselves were supposed to benefit from collaborations. If the megaregion is a useful concept, then those dialogues should continue even as policy opportunities shift.

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