

II. MEGAPOLITAN DEVELOPMENT IN THE INTERMOUNTAIN WEST

Each American urban era contains a “shock city” of the day—or a place that fully captures the period’s emerging metropolitan trends and points to a new future.⁸ In the late 19th century, Chicago was that city, with its tangle of railroads and soaring downtown skyline. By the mid 20th century, Los Angeles became the shock city, as the first metropolis fully transformed by automobiles. Recognizing the importance of these places scholars began referring to a “Chicago School” of urbanism by the 1920s and a “Los Angeles School” of “post-modern urbanism” by the 1980s.⁹ In this first decade of the 21st century, the idea of Los Angeles being new seems old, in part because the city has taken on a more traditional character.



As Los Angeles settles into middle age, what urban area constitutes this era’s shock city? While there is no clear inheritor of the title, places such as Las Vegas and Phoenix may be the next shock city. Consider Las Vegas. The very fact that Las Vegas even exists on the scale it does is something of a shock. Southern Nevada would seem to lack many qualities requisite for large cities—including basics such as water. Yet, by the 1970s, the city had grown interesting enough that some architects sought to “learn from Las Vegas.”¹⁰ The important lesson from Las Vegas may have less to do with its look than how it functions. Las Vegas today is the nation’s leading convention city and perhaps the most important setting for face-to-face interactions among people working in such diverse fields as electronics, construction, and medicine.¹¹ What started with gangsters and whimsically themed hotels has matured into a giant venue for business networking. Contrary to its current mar-



keting slogan, what happens in Las Vegas often does not stay there but instead influences global commerce.

Phoenix, which just passed Philadelphia to become the nation's fifth largest city, also has a shock quality about it.¹² The Phoenix region (or the Sun Corridor) is the newest mega metropolis in the United States—built mostly in the past three decades. The nearest rival in this quality is the Atlanta metropolitan area. Where Atlanta has a strong 19th century urban tradition and a large city center, Phoenix is more like a giant suburb. In fact, the unique urban quality of greater Phoenix is that it has spawned some of the most notable suburbs in America—including Mesa, a place that is more populous than Kansas City or Cleveland. In total, the Sun Corridor has eight suburbs with more than a 100,000 residents, and another half dozen places poised to cross this mark by 2030. Yet these suburbs—or “boomburbs”—are mostly not traditional bedroom communities and instead represent a new quasi-urbanized space that appears to be a new type of city.

Other regions in the Intermountain West, such as Denver, Salt Lake City, and Albuquerque, may not shock, but they can surprise. For example, Denver and Salt Lake City rank first and second among American metropolitan areas for the investment they are making in their light rail systems. Much of the track will run through larger suburbs and will help urbanize these places. As energy constraints begin to shape the metropolis, places such as Denver and Salt Lake may demonstrate how fast a car-centered region can switch to one where alternative transportation plays a significant role. By 2030, both regions could be transformed by responding quickly and at a large scale to shifting fashions in the market space. Like Phoenix, they will offer another new form of urbanism that is not like the traditional cores of Eastern cities (or even Los Angeles) but much more “city-like” than 20th century suburbs. Albuquerque too has seen significant change and will see more. The city has one of the most recently-transformed downtowns in the United States and the region is seeing innovative and sustainable projects proposed in its suburbs.

NEW MEGAPOLITAN AREAS ARE EMERGING IN THE INTERMOUNTAIN WEST

How ought the West, as well as the rest of the nation, understand the nature and dynamics of these new urban spaces? One way is through the prism of a new geography: the megapolitan area.

Megapolitan areas link up multiple metropolitan areas into urban agglomerations connected by transportation networks and widespread economic and social activity. Megapolitan areas share a physical geography, a cultural and political history, and an economic and social reality. Many of these large-scale urban agglomerations exist throughout the United States—the most famous being the Washington to Boston contiguous urban fabric originally termed the “megalopolis” by geographer Jean Gottmann.¹³

A similar style of megapolitan development is emerging in the Intermountain West, despite the region's small population size. In fact, by 2040, five largely contiguous urban spaces of more than one million residents each may emerge in the Intermountain West. These include:

- **Sun Corridor:** metropolitan Phoenix, Tucson, and Prescott plus smaller urban areas in Cochise and Santa Cruz counties¹⁴
- **Front Range:** Colorado's I-25 corridor linking up metropolitan Boulder, Colorado Springs, Denver, Fort Collins, and Greeley
- **Wasatch Front:** Utah's I-15 corridor linking up metropolitan Logan, Ogden, Provo, and Salt Lake City plus smaller urban areas in Box Elder and Wasatch counties
- **Greater Las Vegas:** metropolitan Las Vegas plus smaller and increasingly connected urban areas in Nye County, NV and Mohave County, AZ
- **Northern New Mexico:** metropolitan Albuquerque and Santa Fe plus smaller connected urban areas in Los Alamos and Rio Arriba counties

These five megapolitan areas constitute the primary focus of the present analysis of the southern Intermountain West. Together these five megapolitan areas are home to the vast majority of the region's population, employment, and economic and cultural activity. Indeed, the megapolitan scale captures the true impact of urban development and economic growth in the Intermountain West.

About the analysis: The megapolitan geography

This study uses a new geographic unit of analysis—the megapolitan area (or mega).¹⁵

The term “megapolitan” originated with the U.S. Census Bureau in 1999 as part of a process to remake the nation’s urban geographic definitions in anticipation of the 2000 enumeration. The label was intended for “Core-Based Statistical Areas” with 1 million or more residents in the core.¹⁶ The megapolitan name would have been attached to such large regions as New York, Chicago and Los Angeles. However, the Office of Management and Budget, which oversees the U.S. Census Bureau, decided against developing a new large-scale metropolitan designation in 2000.

In 2005, Robert Lang and Dawn Dhavale revived the name “megapolitan” and attached it to the nation’s biggest metropolitan agglomerations.¹⁷ Their purposeful use of the name megapolitan was part of an effort to match the Census methods and terms in identifying large regions. Virginia Tech then further developed the megapolitan concept to geographically depict where the next 100 million Americans will live.¹⁸

The most recent Virginia Tech analysis found 20 emerging megapolitan areas based on the U.S. Census Bureau’s definition of a “combined statistical area” (CSA). The main criterion for a Census Bureau-defined CSA is economic interdependence as evidenced by overlapping commuting patterns.¹⁹ Virginia Tech’s megas are the CSAs of 2040 derived by extending the Census Bureau’s current method several decades forward. The CSAs of 2040 include the Chesapeake mega (Washington, Baltimore, and Richmond), the Carolina Piedmont mega (Charlotte and Raleigh), and the Puget Sound mega (Seattle and environs).

The megapolitan definitions used here differ slightly from earlier megapolitan definitions by anticipating what will eventually become the region’s large urban agglomerations. Virginia Tech’s latest megapolitan definition required the area to achieve a 15-percent employment interchange between major metropolitan areas with anchor cities of 50 to 200 miles apart by 2040.²⁰ While this definition works to identify megapolitan areas throughout the country, including the Sun Corridor and the Front Range, it misses some of the smaller but similarly emerging mega-urban forms in the Intermountain West.

For instance, an agglomeration of four major metropolitan areas is emerging along interstate 15 and the Wasatch Mountains, which we call the Wasatch Front. Northern New Mexico—including Albuquerque and

Santa Fe—has substantially fewer residents than other megapolitan areas in the region, but is exhibiting the same megapolitan form by connecting two proximate metropolitan areas 60 miles apart. And while Greater Las Vegas currently has only one major metropolitan area, it will likely grow out towards its smaller “micropolitan” neighbors over the coming decades to exhibit a truly megapolitan form. Las Vegas has grown quickly and is pulling itself away from the Southern California megapolitan, with which it was previously aligned.

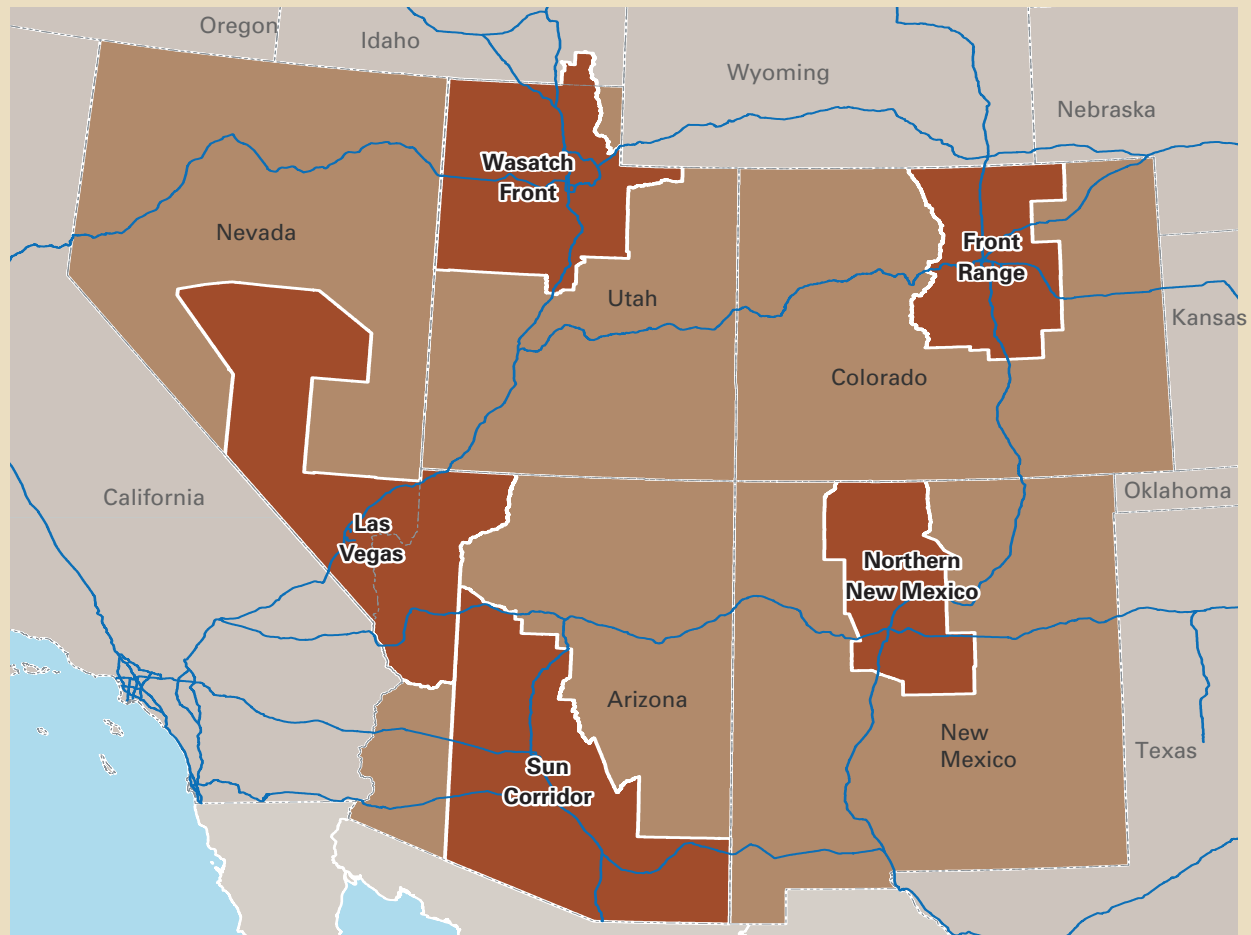
This report also relaxed the overlapping commuter shed criterion somewhat for the Intermountain West such that contiguous transportation networks, historic connectivity between metropolitan areas, and a shared cultural geography or identification were also considered.²¹ For example, metropolitan Colorado Springs does not share a high level of employment exchange with the Denver metro area. This is due in part to a large agricultural preserve in the southern part of Douglas County, CO that breaks up commuting between the two largest Front Range metro areas. However, Denver and Colorado Springs share a common history and there are considerable business and personal linkages between the two metro areas, leading us to combine Colorado Springs into the Front Range megapolitan.

Defining a new urban geography can be controversial. The goal of this report is to begin a discussion about large-scale metropolitan development in the Intermountain West and to focus attention on the leading challenges and opportunities for this growing region. The methodology can then be further refined as the region matures and its scale of development becomes clearer.

Organizations such as the Lincoln Institute of Land Policy and the Regional Plan Association of New York (or RPA) have also developed new regional models and planning strategies to manage future metropolitan expansion. RPA and Lincoln convened the National Committee for America 2050—a coalition of planners and civic leaders to develop a national framework for America’s rapid population growth and the emergence of what they call “megaregions.”²² Lincoln’s Armando Carbonell and RPA’s Robert Yaro led a University of Pennsylvania planning studio in 2005 that established a new megaregional geography. While the Penn megaregions do not maintain overlapping commuter sheds they nonetheless form networks of mostly contiguous metropolitan areas.

William Travis, a geographer at the University of

Five megapolitan areas are emerging in the Intermountain West



Note: Megapolitan areas are ultimately built from counties, which are giant in the West and give the impression that an enormous amount of space is urbanized. The reality is that only a fraction of this vast space is in urban use.

Colorado, also developed a western-specific application of Virginia Tech's original megapolitan work by adding several western metropolitan areas to the list of large connected regions. Travis shows "metro zones" along the Front Range, the Wasatch Front, and the Upper Rio Grande (or what we call Northern New Mexico).²³

About the analysis: The data

The data for this report derives largely from U.S. Census Bureau decennial censuses conducted in 1990 and 2000, and from the American Community Survey (ACS) sample of 2006. The decennial census offers the most comprehensive information on demographics, housing, and employment for varying levels of geography.

ACS provides more recent information than the decennial census on demographics and housing, although county components of megas with fewer than

60,000 residents have not yet been sampled in the ACS. This means that the most recent demographic data are missing for Santa Cruz and Cochise counties in the Sun Corridor, Box Elder and Wasatch counties in the Wasatch Front, Rio Arriba and Los Alamos counties in Northern New Mexico, and Nye County in Greater Las Vegas.

To supplement the ACS and for the most recent population counts, this report uses data from the U.S. Census Bureau's 2007 Population Estimates, which include all counties in the country.

Employment data derives primarily from the Bureau of Economic Analysis and the Bureau of Labor Statistics.

As with the ACS, some of the data are available only for metropolitan areas within the megapolitan areas, and as such are noted in the text or references.

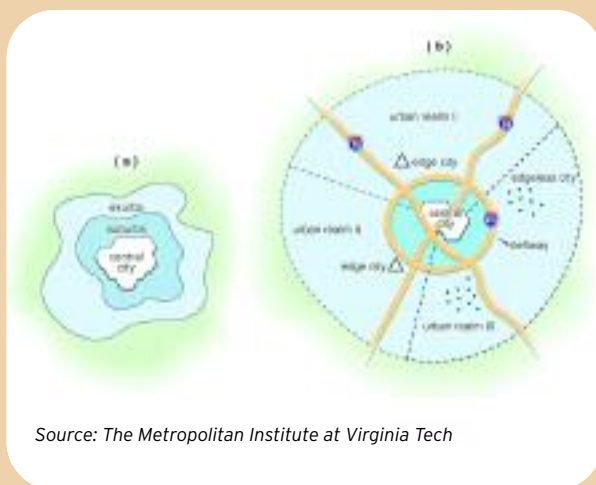
Other data sources are noted within the text and references.

The origin and evolution of megapolitan form

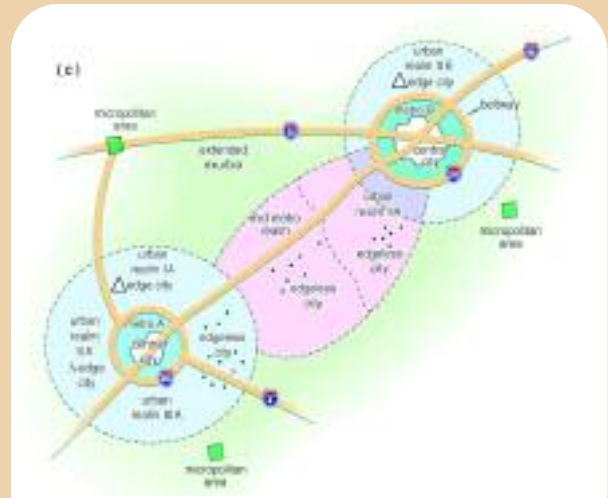
A new metropolitan form is emerging, with its most vivid expression being the megapolitan area.

In first decades of the 20th century, the large regional city emerged (see panel A).²⁴ It was an extended space yet it remained anchored to a central core. This classic regional form is the one the U.S. Census Bureau used as a model when it developed the metropolitan area statistic in 1949.²⁵ The Census Bureau only recently moved away from the “central city/suburb” scheme.²⁶ The Census Bureau now offers a poly-nuclear “principal city” category that lifts select suburbs to the status of big cities. The Census Bureau also rolled out a new “micropolitan” definition to show small urban regions.²⁷ The micropolitans fill in a large share of space in between metropolitan areas and suggest that a larger functional urban structure exists.²⁸

The late 20th century metropolis, often served by Interstates and a beltway, splintered metropolitan areas into distinct sub regions known as “urban realms” (see panel B).²⁹ Suburban business clusters—or edge cities—also arose outside the downtown core and urban realms became tied to non-central city commerce. While this metropolitan pattern seems polycentric, the reality is that office and retail development scatters in far less predictable and more decentralized ways than can be easily depicted. Along with the clustered edge cities, each urban realm also has an often even greater share of “edgeless cities,” which fail to coalesce into distinct nodes.³⁰



Source: The Metropolitan Institute at Virginia Tech



Source: The Metropolitan Institute at Virginia Tech

By 2000, a new metropolis emerged with its signature feature being the megapolitan area (see panel C). Interstate highways are the key structural elements in megapolitan development. One force driving this change is simply the massive nature of recent growth in the United States. The stylized megapolitan form includes two major metropolitan areas and several micropolitans that fall in their orbits. Urban realms now exist between metro areas and may even link two or more places. For instance, consider a place such as Fredericksburg, VA, which is halfway between Washington, DC and Richmond, VA. The area has commuters that drive both north towards Washington and south towards Richmond. Fredericksburg exists as a kind of nether-realm between the two—not really in either metropolitan area, but yet tied to both.

THE WESTERN MEGAPOLITAN AREAS HAVE A UNIQUE URBAN CHARACTER

Reflecting their growing scale and importance in the American urban system, the Intermountain West's urban spaces are becoming an active area of study.³¹ Interestingly, these places contrast with East and West Coast cities. They are mostly not the "melting pot" regions as found in California and Texas, or the "wet Sun Belt" cities of Georgia and North Carolina, and they are far removed in look and feel from the older metropolitan areas in the Northeast and Midwest.³²

Most of the interior West's settlement is located in the region's megapolitan areas, making the region the most rural and the most urban in the nation. The megapolitan West sits in a vast sea of open space.

The West's contained settlement pattern appears in the U.S. Census Bureau's original analysis of the American frontier. Census Bureau scholars developed a density-based frontier definition in the late 19th century to track national settlement since the first census in 1790. They defined the frontier as lands with a population density between 2-6 people per square mile, which is much lower density than typical rural places. The frontier definition captures deep rural land.

By 1840, about half the East had settlement that exceeded six people per square mile. Interestingly, by 2000, roughly half the West (the Pacific and Intermountain States) remained frontier.³³ The East erased half its frontier in the early industrial era—the West did at the end of the 20th century. Although the West was settled later than the East, this delay alone does not account for why so much open space has remained in the region even into the 21st century.

Despite the relatively limited reach of settlement, the West's urban centers grew rapidly. This seeming contradiction of a large, even expanding, frontier amid rapid urbanization perplexed 19th century scholars. Over a century ago, the West was showing a pattern of growth that distinguished it from the East to such an extent that social scientists were hard-pressed to explain it.

To some degree, the confusion continues. The wide-open spaces ringing Western metropolitan areas are deceptive; their ruggedness can inhibit urban expansion.³⁴ Outward expansion often requires an expensive extension of metropolitan water supply. The surrounding rural hinterland that does not share this water supply may not be able to sustain even moderate exurban development such as large-lot subdivisions. In addition, the West is mountainous and buildable land is often limited on at least one side, as happens along the Front Range of the Rockies and along the Wasatch Mountains.

The fact that the West is so arid and rugged resulted in the federal government retaining large amounts of public lands. Under various legislation beginning with the North-



west Ordinance of 1787, most public lands were designated for transfer to private parties. In the East, this transfer occurred quickly and the federal share of land was quickly reduced to relatively minor holdings. This was largely because Eastern land could be easily farmed and quickly settled. But big stretches of the West required massive irrigation projects to be "reclaimed" as farmland. In many cases, such projects did not occur until well into the 20th century. In the process, the federal government set aside much of this land as parks, monuments, forests, military reserves, and Indian reservations. In addition, most land that that was intended to be settled under the Homestead Act of 1862 was simply never claimed and defaulted to public agencies.³⁵ In extreme cases such as Nevada, the federal government now controls the vast majority of the land.

* * *

It is clear that megapolitan development in the southern Intermountain West is unique and needs to be understood on its own terms. The following chapter offers additional insights into the trends and forces at work in the Intermountain West.