

The Cascadia Corridor: New Geography, New Opportunity

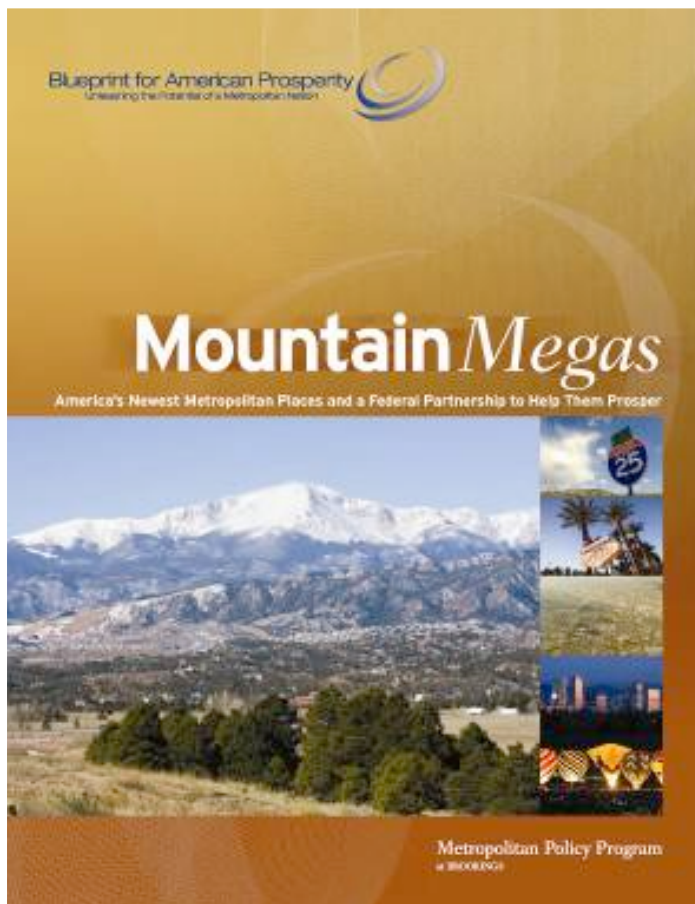
**Robert Lang, Ph.D.
Professor and Director
Brookings Mountain West
University of Nevada, Las Vegas**

**APA Washington's 2009 Conference
Vancouver, WA – November 12, 2009**

[What's in this Talk?]

- **The Megapolitan and Megaregion Models**
- **Defining Cascadia**
- **Current Conditions and Future Growth in Cascadia**
- **The Connections Between the Willamette and Puget Sound Megapolitan Areas**

[Mountain Megas Report]



**Mountain Mega
report from the
Brookings
Institution
released in 2008**

**The next round
of this research
starts in Spring
2010**

[Arizona Sun Corridor Report]



**Report From the
Morrison Institute
at Arizona State
University also
released in 2008**

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[America Keeps Growing]

200 million in 1967

300 million in 2006

400 million in 2039

America adds 100 million people faster than any other nation except India and Pakistan—But *faster* than China.

Source: US Bureau of the Census

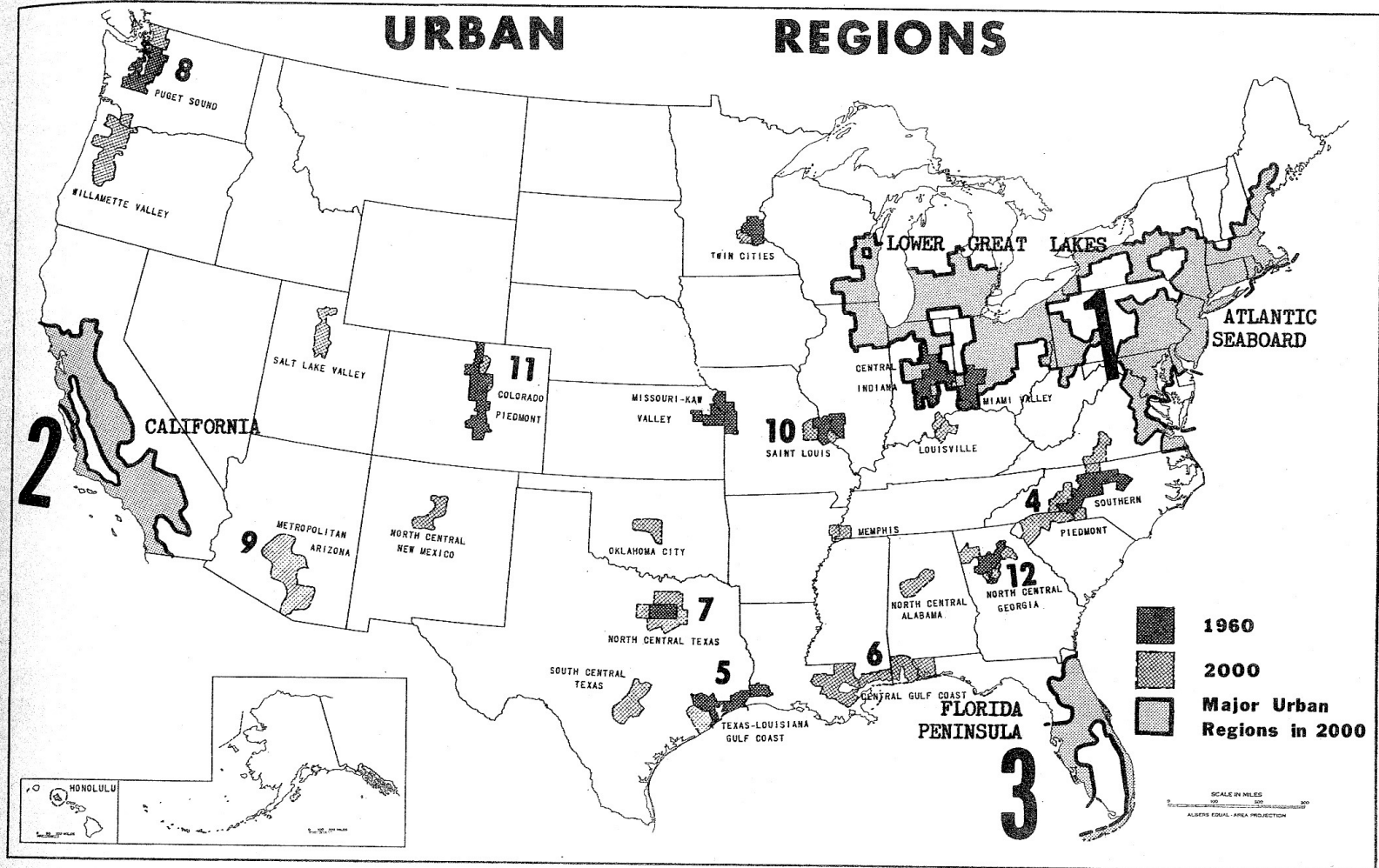
[A Billion People by 2090?]

U.S. Census Projections 2000 Census Baseline

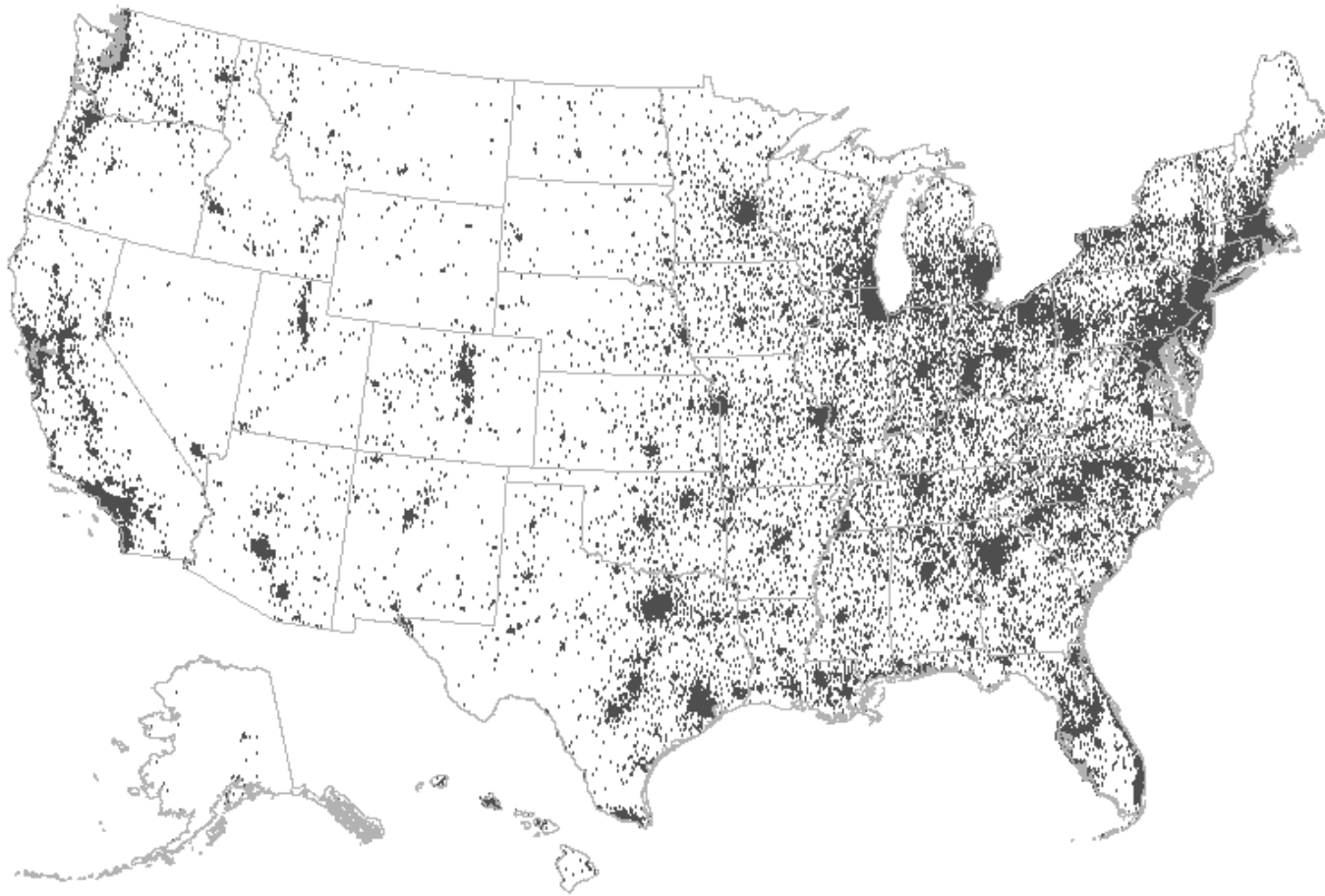
Year	High* Series	Mid* Series
2000	275	275
2010	311	300
2030	391	351
2050	553	404
2070	749	464
2090	1,017	534

* In Millions

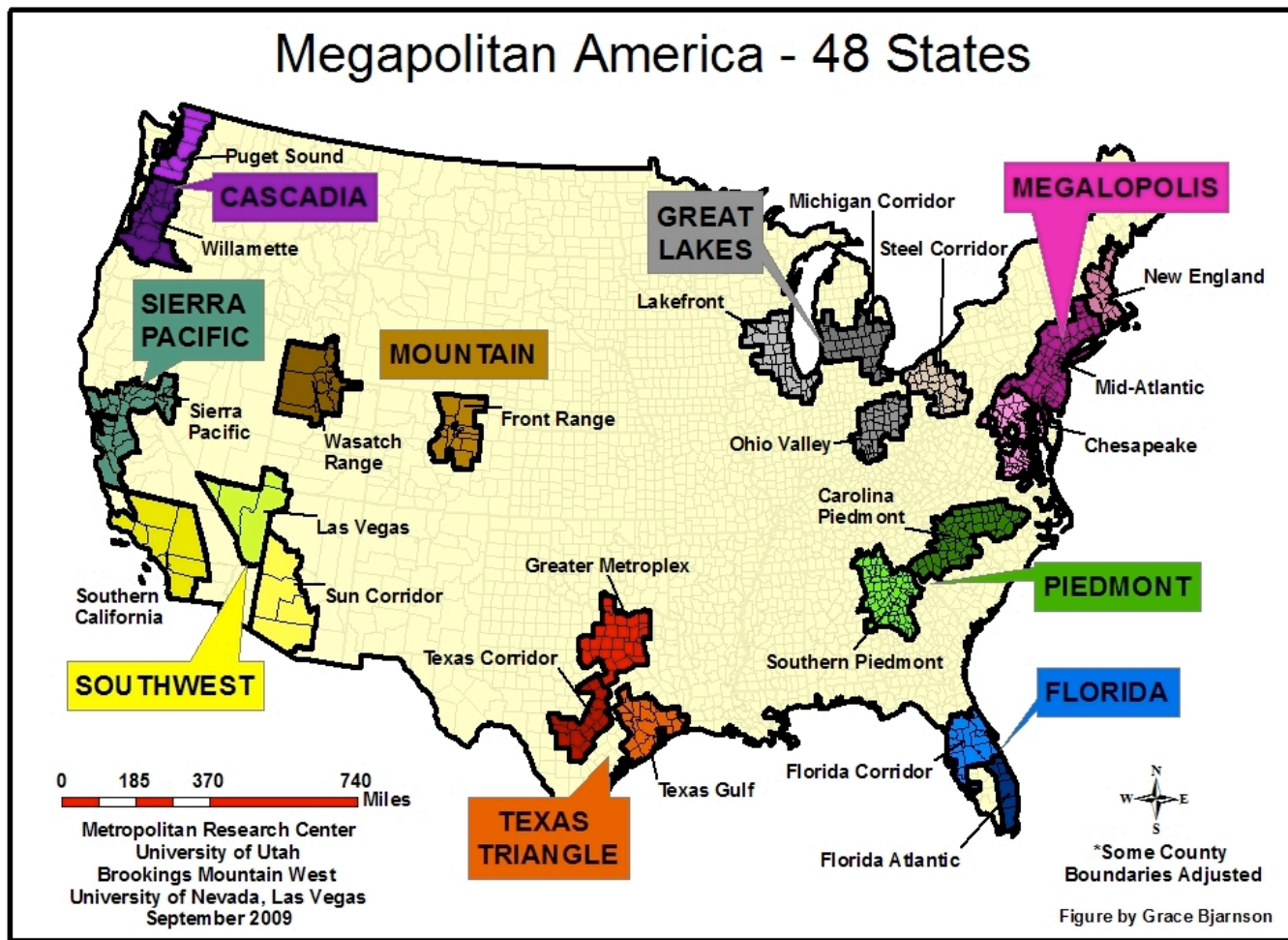
Pickard's Projection of the US Urban Regions in 2000



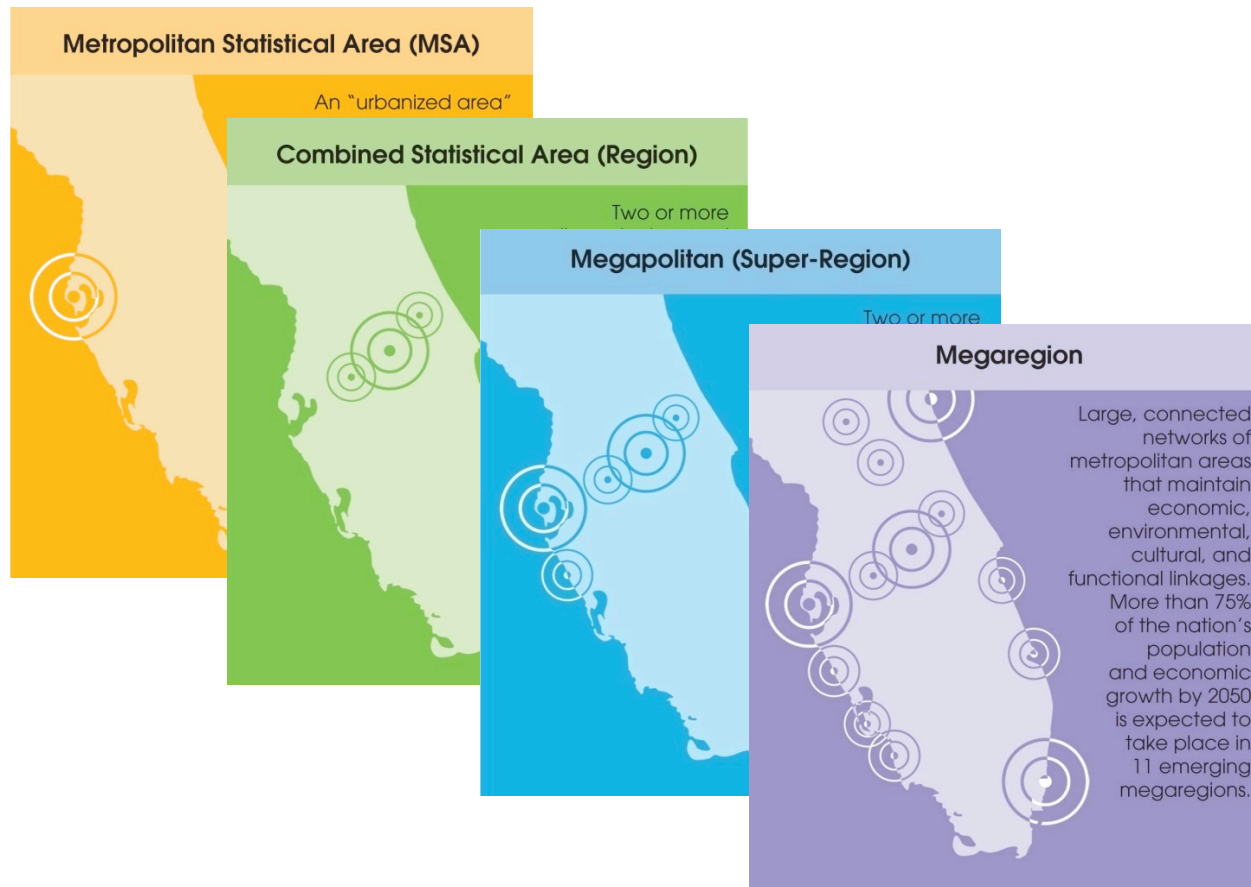
[American Development to 2040]



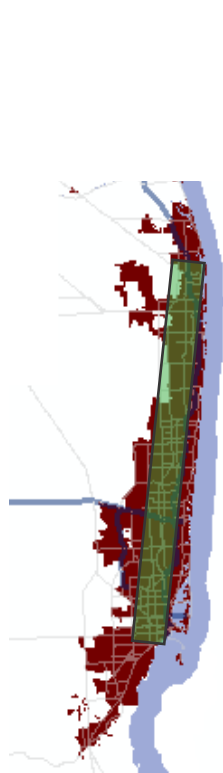
[Lang and Nelson, 2010 Book]



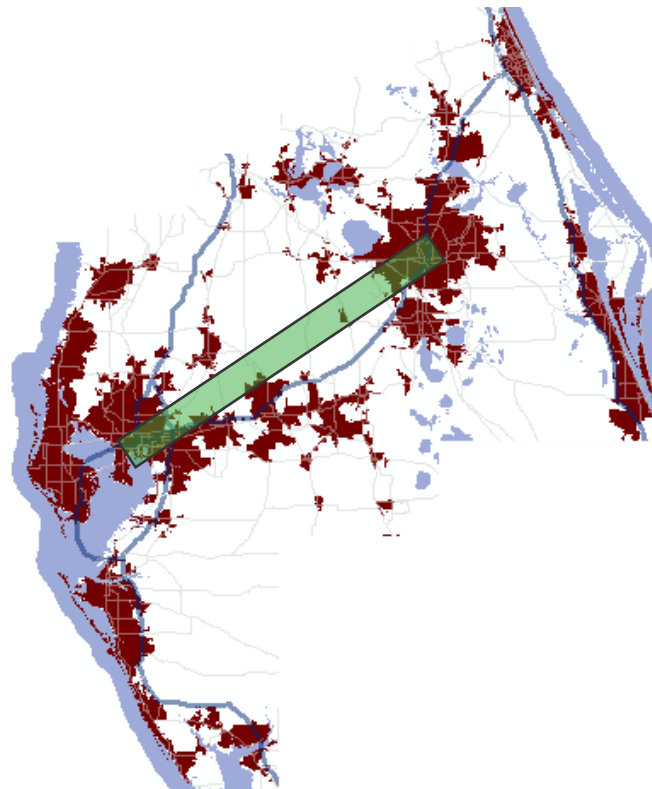
[The New Urban Hierarchy]



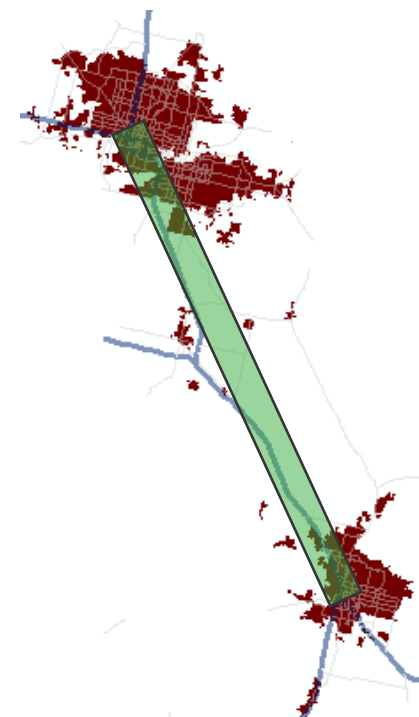
[Metros to Megas in Distance]



Florida Atlantic 65 Miles

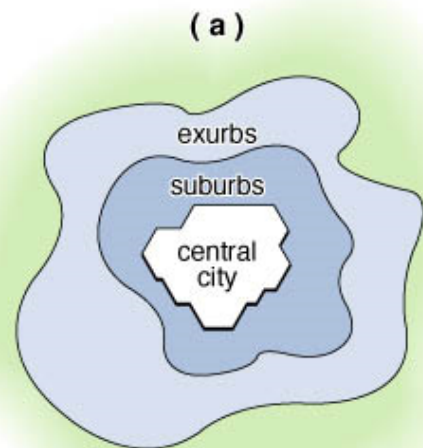


Florida Corridor 80 Miles

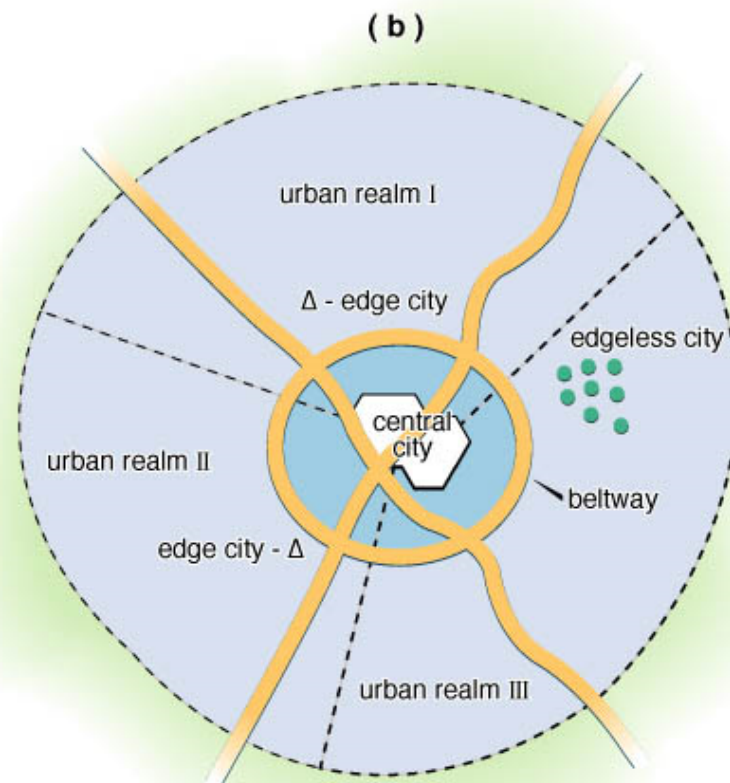


Sun Corridor 110 Miles

[20th Century Metropolitan Form]

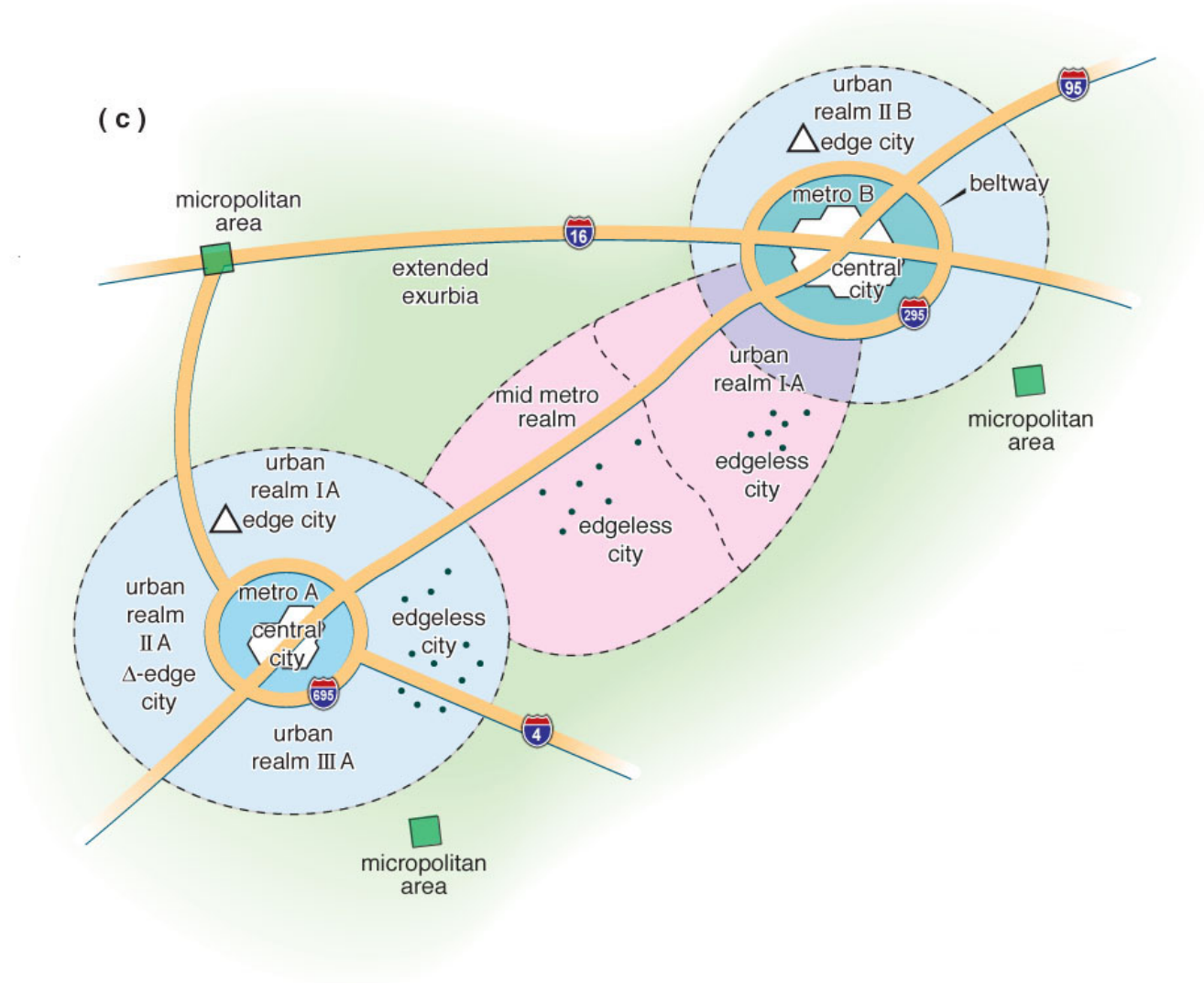


Modern Integrated Metropolis
1930 - 1970

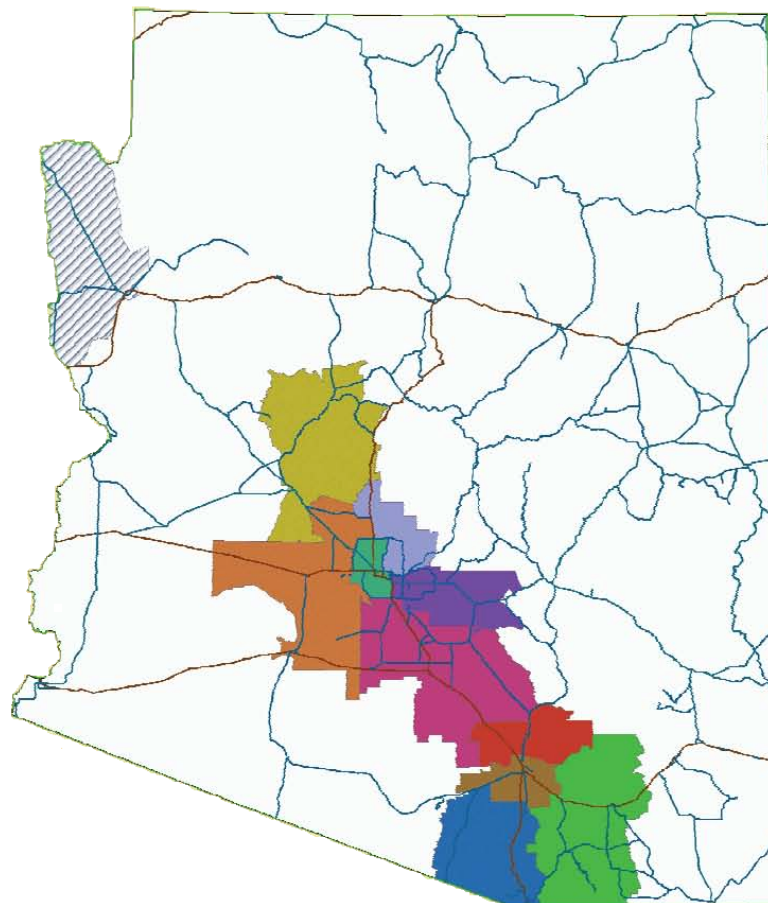
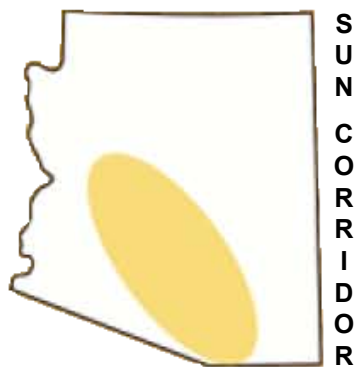


Post-modern, Quasi-integrated Metropolis
1970 - 2010

[21st Century Megapolitan Form]



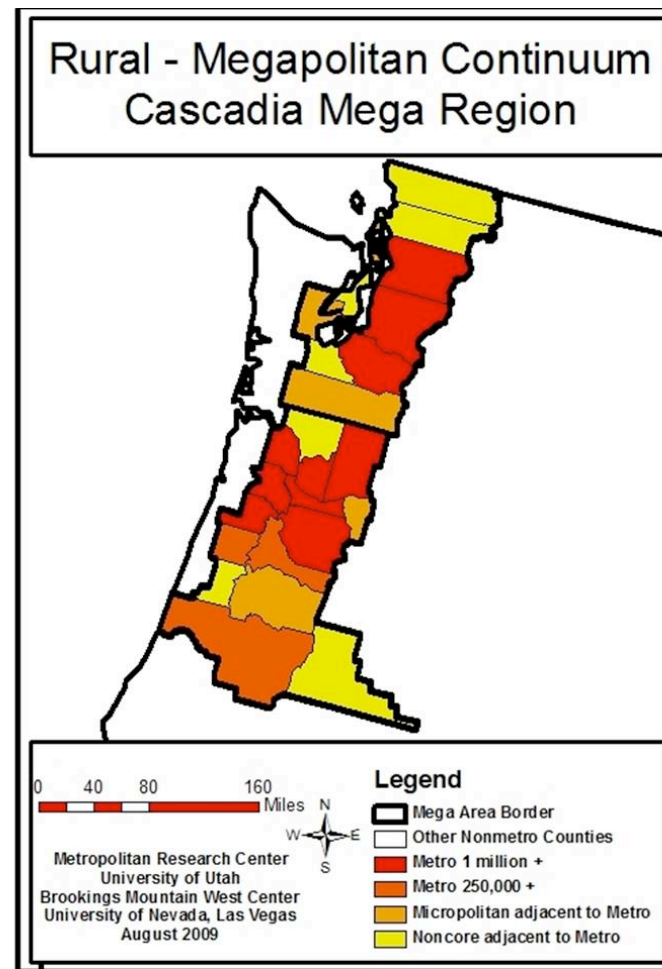
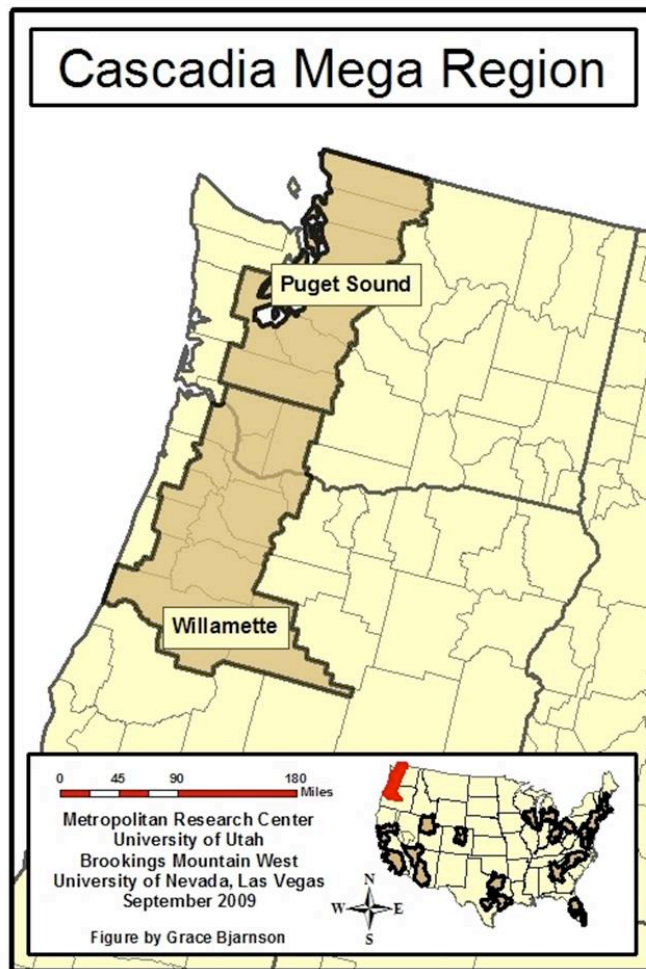
[Sun Corridor Urban Realms]



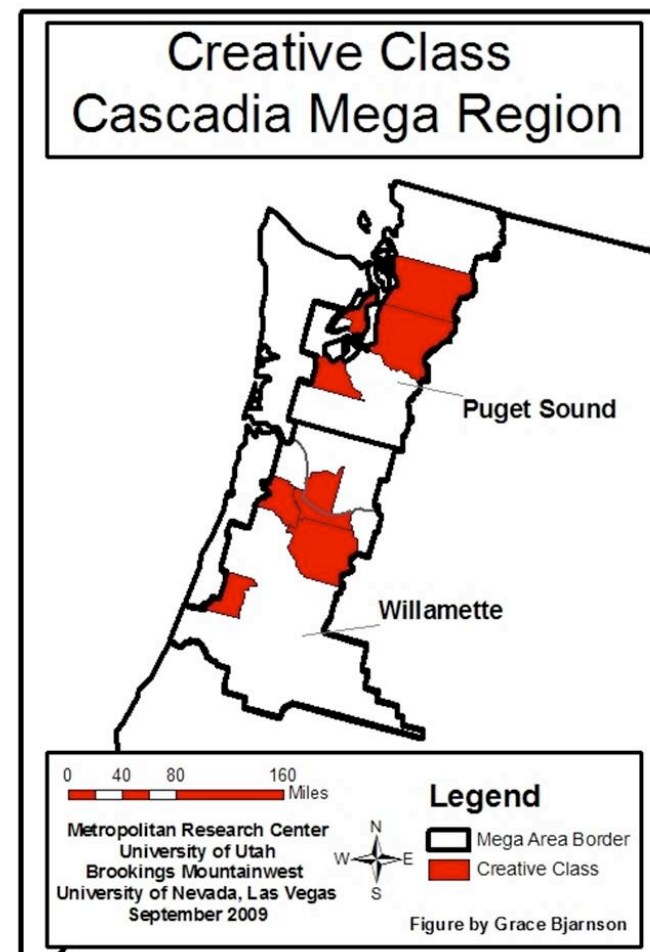
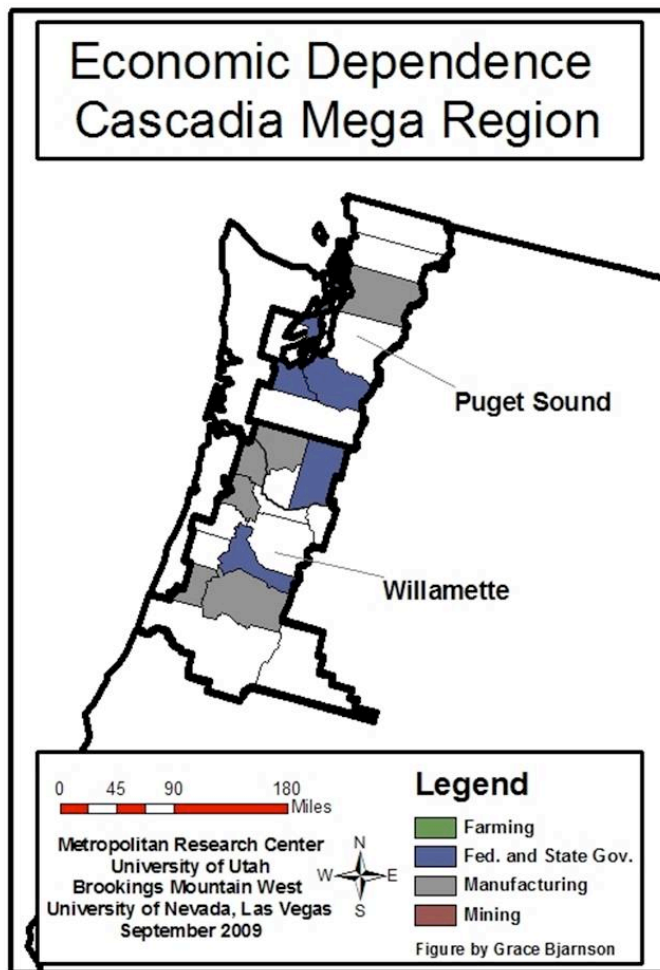
Urban Realms of the Sun Corridor

- Highlands
- West Valley
- Central Valley
- Upper East Valley
- East Valley
- Mid Corridor
- Foothills
- Rincon
- Gateway
- SouthCo

Cascadia Megaregion



Cascadia Economy



Texas and Southwest Megaregions

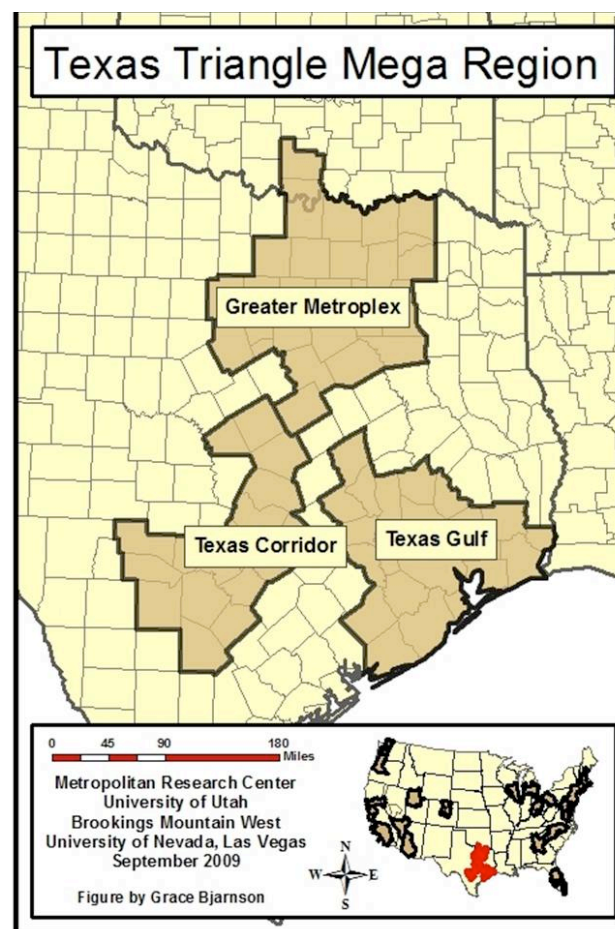
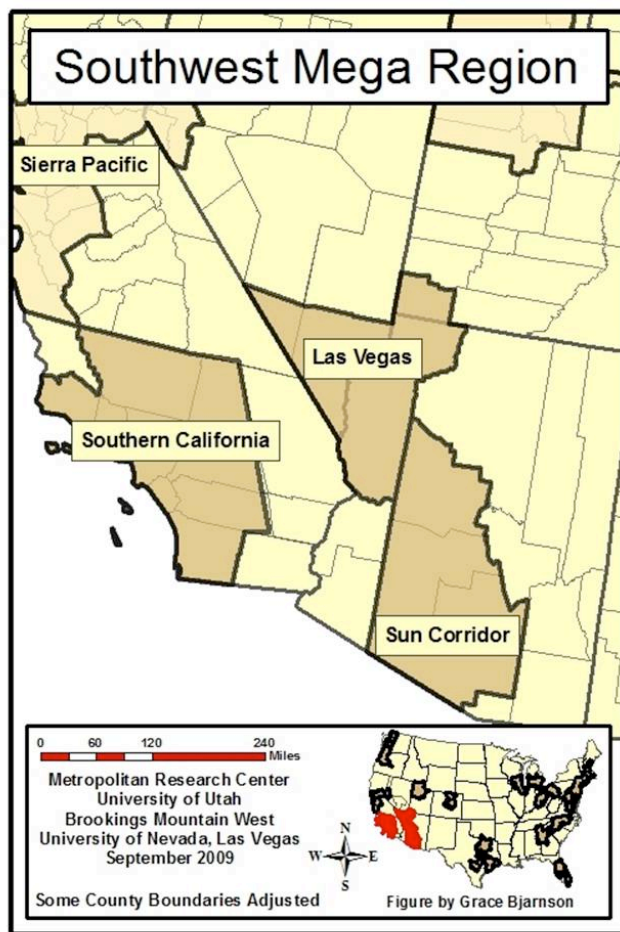


Table 1

Cascadia County Types

Cascadia Mega Region Rural-Megapolitan Continuum

Nelson-Lang Rural-Megapolitan Continuum Description	Counties	2010 Population (000s)
Counties in metropolitan areas of 1 million+ population	10	5,698
Counties in metropolitan areas of 250,000 to 1 million population	3	756
Counties in metropolitan areas of fewer than 250,000 population	7	1,188
Micropolitan area adjacent to a metropolitan area	5	357
Noncore counties adjacent to a metropolitan area	0	0
All other nonmetropolitan counties	0	0

[Cascadia Land Area]

Land Area for Cascadia Mega Region

Megapolitan Area	Total Square Miles	Estimate of Privately- Owned, Accessible Square Miles
Puget Sound	14,448	7,768
Willamette	20,812	9,222
Total	35,260	16,990

Cascadia Population Growth

**Cascadia Mega Region Population, 1970-2040
(Thousands)**

Megapolitan Area	1970	2000	2010	2025	2040	Growth	Percent
						1970-2040	1970-2040
						0	0
Puget Sound	2,245	3,955	4,483	5,412	6,369	4,125	183.8%
Willamette	1,731	3,019	3,516	4,246	4,999	3,268	188.8%
Total	3,975	6,974	7,999	9,659	11,368	7,393	186.0%

[Population Change, 1970-1940]

Southwest Megaregion Population, 1970-2040

(Thousands)

Megapolitan Area	1970	2000	2010	2025	2040	Growth '70-'40	Percent Change
Cascadia	3,975	6,974	7,999	9,659	11,368	7,393	186%
So Cal	11,976	20,237	22,635	26,386	30,273	18,297	153%
Las Vegas	323	1,674	2,407	3,416	4,442	4,119	1275%
Sun Corridor	1,447	4,297	5,699	7,447	9,233	7,786	538%
Total	13,746	26,208	30,741	37,249	43,948	30,202	220%

Source: Woods & Poole, 2009

[Growth in Minority Population]

Cascadia Mega Region Minority Population Change, 1990-2040 (thousands)

Megapolitan Area	Black 1990	Black 2040	Black Change Percent	Asian 1990	Asian 2040	Asian Change Percent	Hispanic 1990	Hispanic 2040	Hispanic Change Percent
Puget Sound	133	409	209%	183	1,116	510%	101	1,286	1176%
Willamette	47	131	180%	69	385	460%	90	1,344	1395%
Total	179	540	201%	252	1,501	496%	191	2,629	1279%

Megapolitan Area	Other 1990	Other 2040	Other Change Percent	Non White 1990	Non White 2040	Non White Change Percent	Total Population Change 1990-2040	Minority Population Change 1990-2040	Share Minority
Puget Sound	44	73	68%	460	2,884	527%	3,067	2,424	79.0%
Willamette	24	43	80%	229	1,903	731%	2,560	1,674	65.4%
Total	67	116	72%	689	4,787	595%	5,627	4,098	72.8%

Cascadia Residential Growth

Cascadia Mega Region Housing Development Summary, 2010-2040 (figures in thousands)

Megapolitan Area	Units Supported 2010	Growth-Related Units, 2010-40	Units Replaced 2010-40	Total Units Built 2010-40	Percent of Units 2010
Puget Sound	1,884	884	326	1,210	64.2%
Willamette	1,458	667	233	900	61.7%
Total	3,343	1,551	559	2,110	63.1%

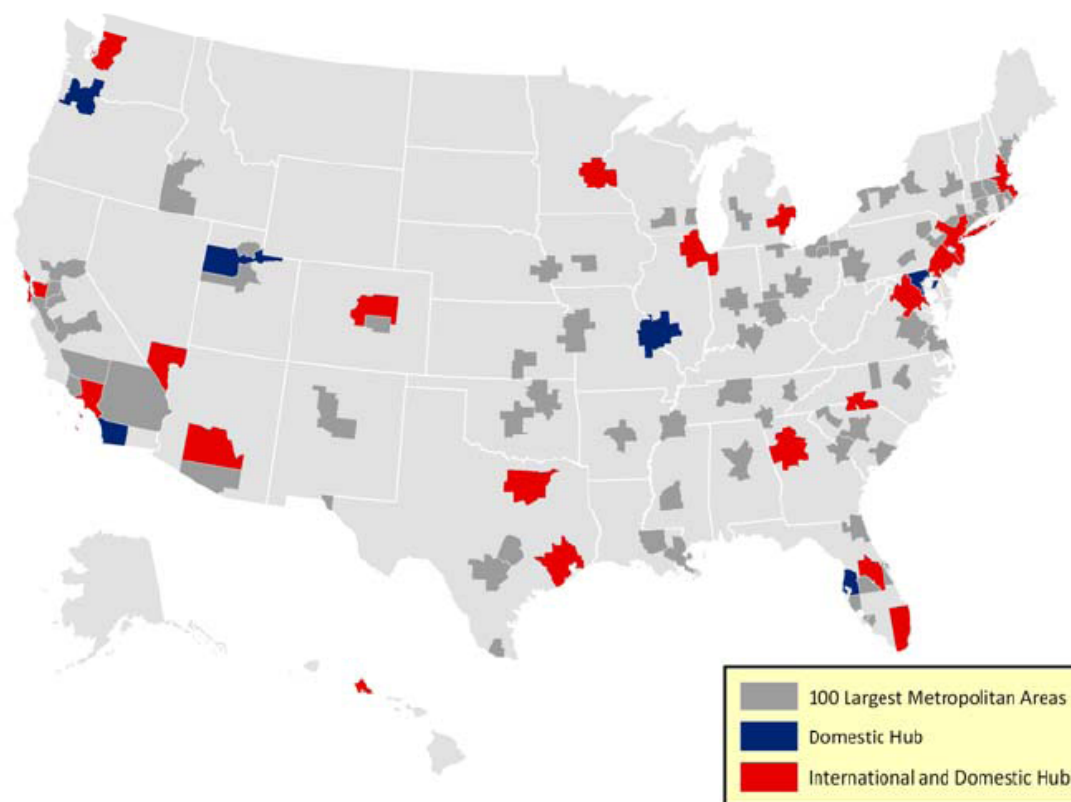
[Cascadia Commercial Growth]

Cascadia Mega Region Total Nonresidential Space Built, 2010-40 (thousands of square feet)

Megapolitan Area	Supportable Nonresidential Space 2010, Square Feet	Supportable Nonresidential Space 2040, Square Feet (000s)	Change in Nonresidential Space Supported, 2010-40, Square Feet (000s)	Growth- Related & Replaced Nonresidential Space, 2010-40, Square Feet (000s)	Built Nonresidential Space 2010-40 as Percent of Space in 2010
Puget Sound	1,357,063	1,940,116	583,053	1,773,679	130.7%
Willamette	1,052,743	1,503,387	450,644	1,367,948	129.9%
Total	2,409,806	3,443,503	1,033,697	3,141,627	130.4%

Cascadia is a Major Air Hub

Figure 3: Domestic and International Metropolitan Hubs, Annualized Passenger Levels, February 2009



Source: T-100 Market Data

[RPA's City Pair List]

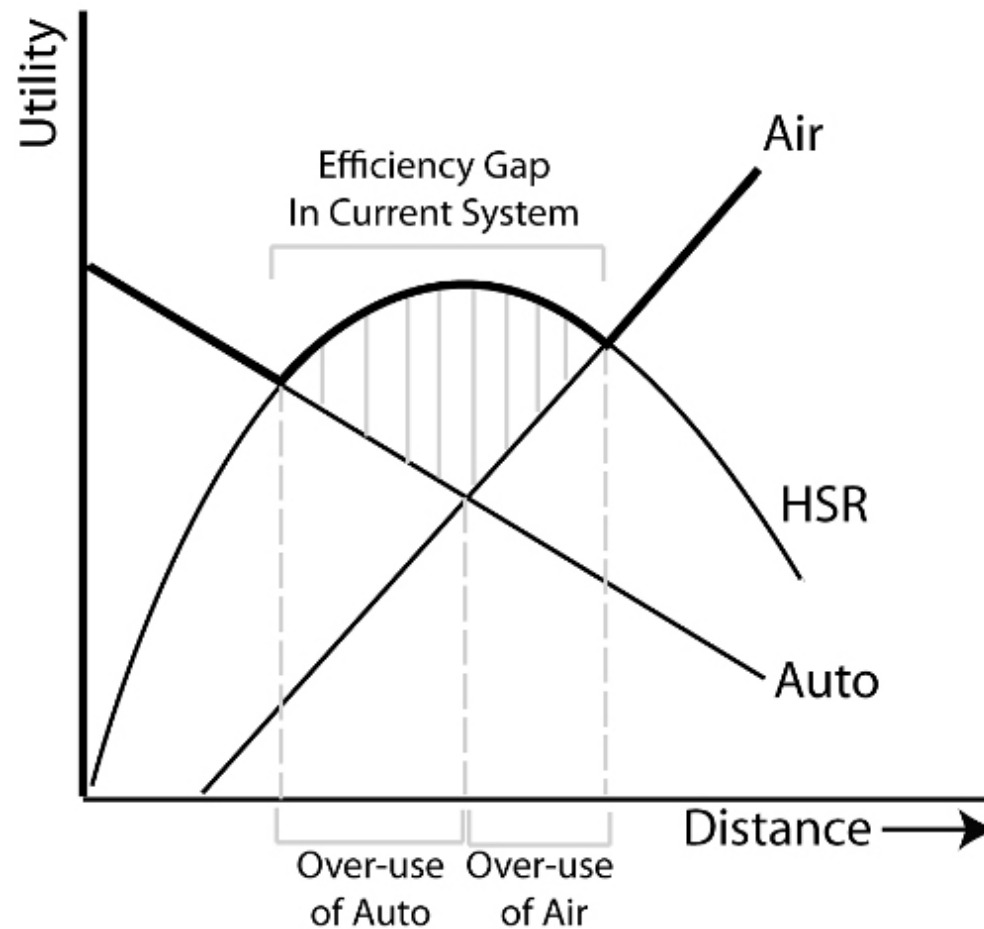
Top 50 City Pairs

Rank	City Pair	Score
1	New York-Washington	100.00
2	Philadelphia-Washington	98.24
3	Boston-New York	97.22
4	Baltimore-New York	96.83
5	Los Angeles-San Francisco	96.43
6	Boston-Philadelphia	96.05
7	Los Angeles-San Diego	94.92
8	Los Angeles-San Jose	94.19
9	Boston-Washington	92.79
10	Dallas-Houston	91.37
11	Chicago-Detroit	91.09
12	Baltimore-Boston	90.39
13	Chicago-Columbus	89.42
14	Chicago-Saint Louis	89.25
15	Los Angeles-Phoenix	89.03
16	Chicago-Cleveland	88.71
17	Charlotte-Washington	88.39
18	San Diego-San Francisco	88.32
19	Columbus-Washington	88.21
20	Cleveland-Washington	88.13
21	New York-Pittsburgh	88.03
22	Phoenix-San Diego	87.97
23	Las Vegas-Los Angeles	87.79
24	Detroit-New York	87.47
25	Chicago-Minneapolis	87.33

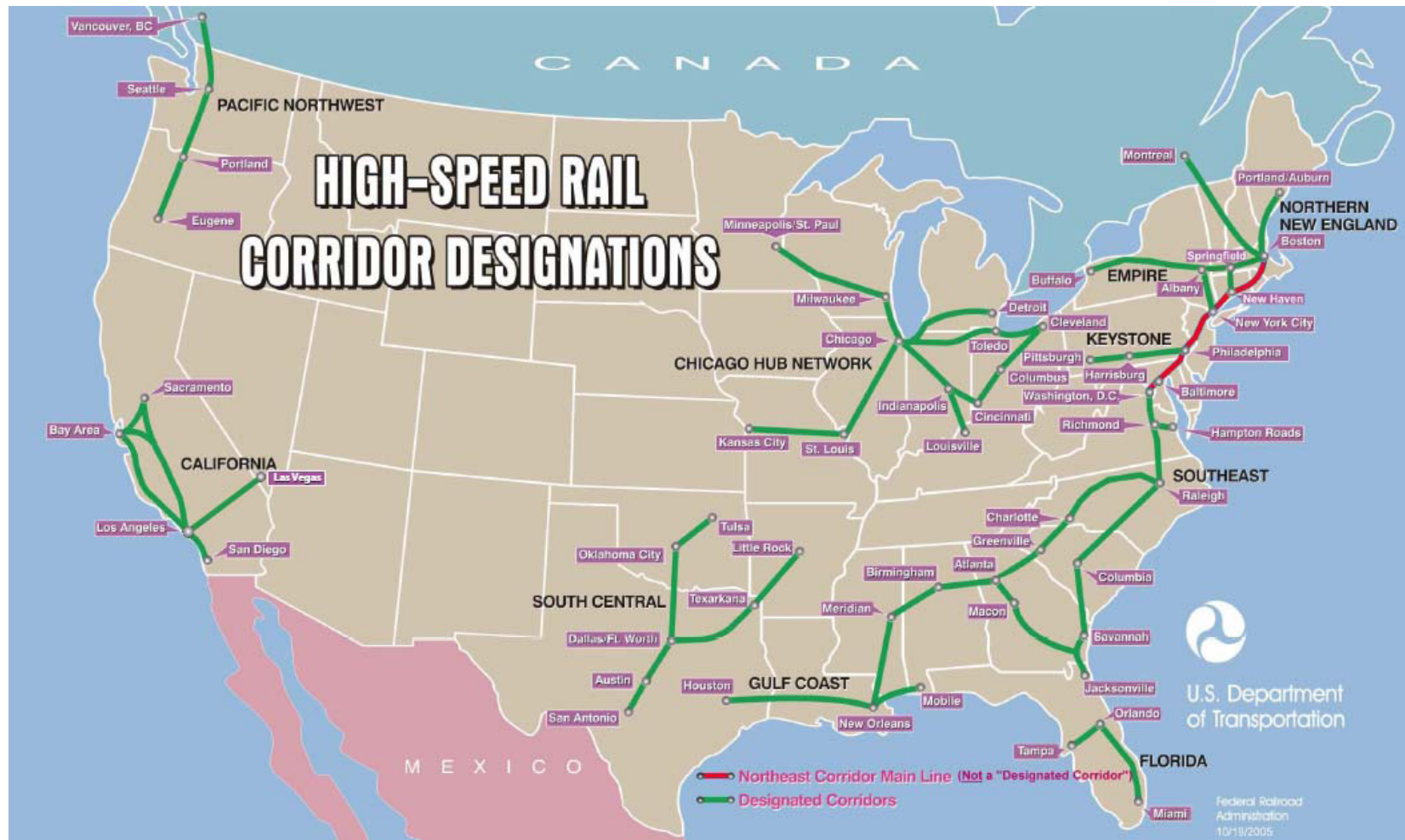
[Seattle-Portland Connect]

- **173 Miles Distance Core-to-Core—A Bit Short for High-Speed Rail**
- **According to Brookings, Seattle is More Connected by Air to LA, SF, Chicago, Denver, and *even* Anchorage than Portland**
- **According to RPA, Seattle-to-Portland Ranks as the 29th City Pair in the U.S.**

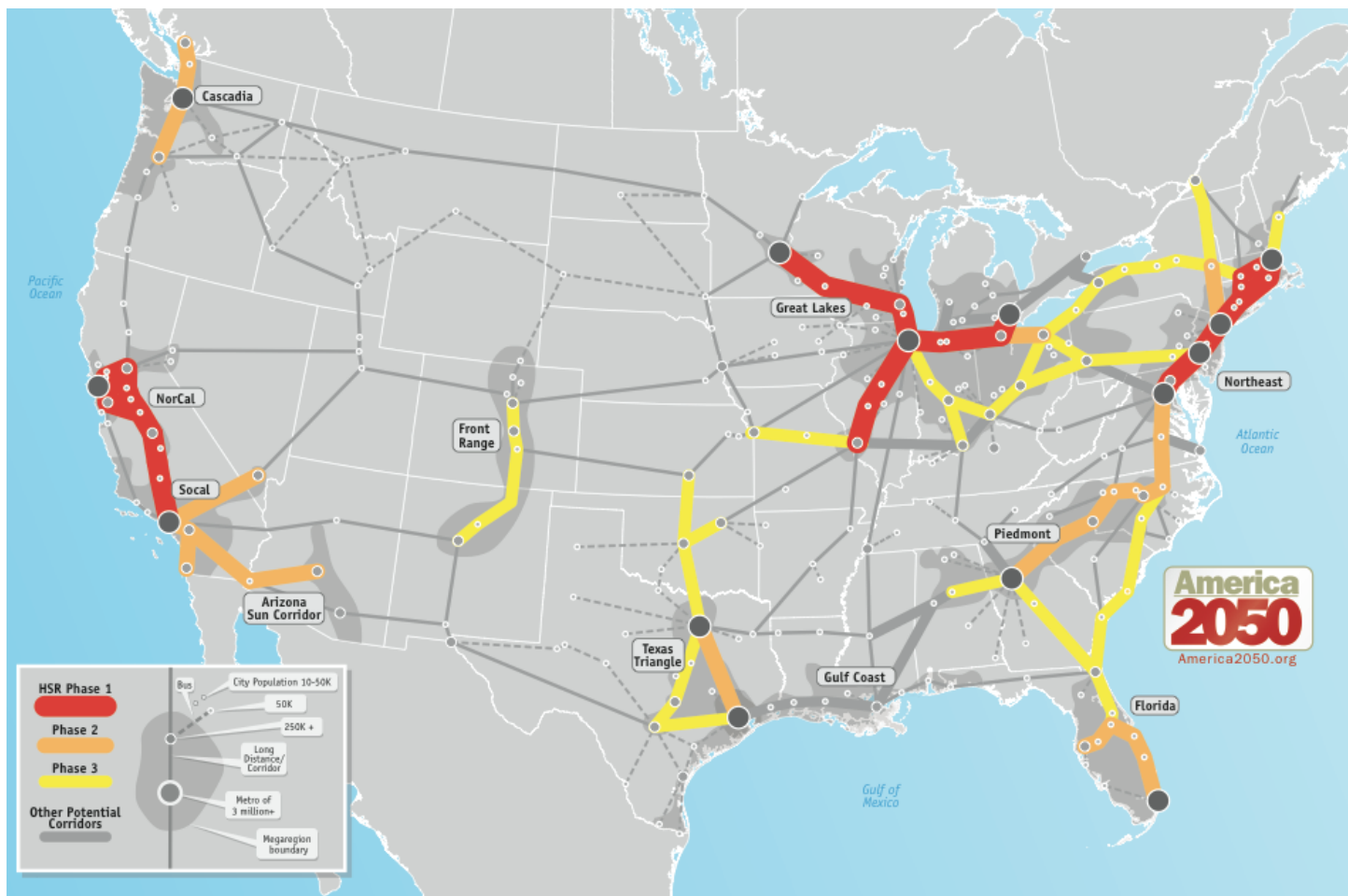
[The 300 Mile HSR Sweet Spot]



The Latest High Speed Rail Map



[RPA's Proposed HSR Phasing]



European High Speed Rail



[**Megapolitan vs. Megaregion Rail**]

- ***Megapolitans*** are mostly continuous urban corridors and are best served by “Regional High-Speed Rail”
- ***Megaregions*** are proximate but discrete urban complexes that need “Express High-Speed Rail” to bridge the gaps between multiple megapolitan areas

[Megapolitan vs. Megaregion Rail]

- **In Megapolitans—Trains mostly compete with autos and should make multiple stops at key centers along the route**
- **In Megaregions—Trains mostly compete with short-haul air service and should make very few stops in order to maintain maximum speed**

California/Mountain West HSR

■ **Megapolitans**

- **Front Range = Regional HSR**
- **Sun Corridor = Regional HSR**
- **Wasatch Front = Regional HSR**

■ **Megaregions**

- **So Cal to Las Vegas = Express HSR**
- **So Cal to Nor Cal = Express HSR**
- **So Cal to Sun Corridor = Express HSR**

[Look for...

A New Book out Summer 2010

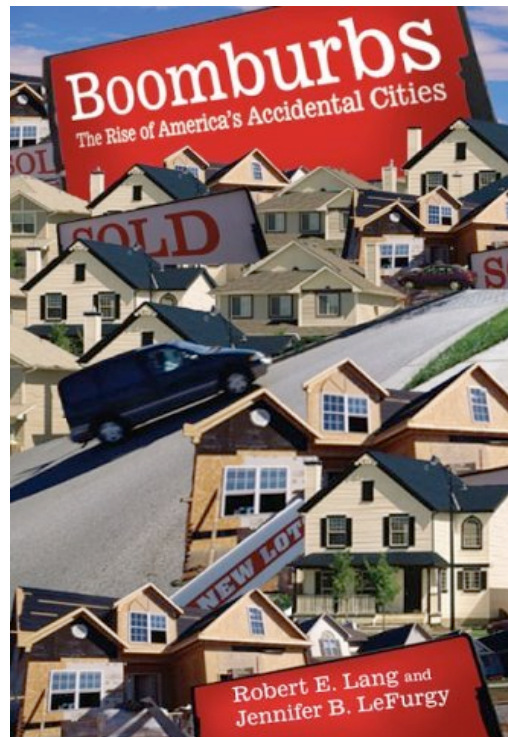
Megapolitans and Megaregions:
The Emergence of Large-Scale American Urban Systems

By Robert E. Lang, Arthur C. Nelson, and Casey Dawkins

From

**American Planning Association
Lincoln Institute of Land Policy**

[Recent Books]





Thank You!