OES/Wage Survey Methodology Impact:
Multi-State Metropolitan Projections Feasibility.

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Abstract
Technical and institutional barriers may slow the widespread development of
industry employment and occupation projections for multi-state MSA. Modeling
and data exchange issues will be easier to resolve than ALMIS staff shortages or
the lack of a clear consensus on customer demand. Despite these challenges,
projections are currently available for five cross-border metropolitan areas.

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Report Summary.

Changes to the Occupational Employment Survey (OES) initiated in 1997 will be fully implemented next year. One implication of this change is that customers will start to see wage data for Metropolitan Statistical Areas (MSA) and may expect geographic comparability for outlook data. Creating industry employment and occupation projections at the MSA-level will be more complicated where the metropolitan area cuts across state borders. This report examines the cross-border subset of MSAs, and the potential barriers to generating employment projections for these areas. The report's findings are based on telephone conversations with LMI professional in states where cross-border areas.

There are 40 MSAs that include multi-state areas, involving a total of 37 States and the District of Columbia. Few states generate MSA-level projections, including just five cross-border metropolitan areas. While aware of the OES changes, most ALMIS members have no immediate plans to create MSA-level projections. This position can be accounted for by a number of factors. Most important perhaps is the lack of strong customer demand for such information. Other administrative area reporting is perceived as a higher research priority, and for many, this situation is compounded by an acute shortage of technically capable staff.

Beyond these institutional factors, a variety of technical issues must also be resolved before cross-border MSA projections are widely performed. One fundamental concern is to establish a means for exchanging industry and other data. Providing historic data in the current environment of data series breaks, and changing MSA definitions, will require a high level of cooperation among ALMIS members. Additional procedures will be needed to reconcile projection estimates within states and among multi-state collaborators. Favoring a positive resolution to these issues is the long lead-time now available, and a high level of customer commitment by ALMIS staff.

Scope of Work.

This report is part of a broader examination of possible repercussions from changes in the Occupational Employment Statistics (OES) Survey. The new OES survey features a number of significant changes, including for the first time, reporting at the metropolitan area level. Labor market information users may see this new format and want geographically comparable employment projection data. The purpose of this study is to assess current demand for long-term industry employment and occupation projections at the metropolitan area level, and identify barriers to generating cross-border estimates. This is a starting point to see if there is the capacity to issue more information about true labor market areas. And since cross-state work necessitates cooperation with neighboring states, it is more than a technical exercise.

The original research proposal suggests some specific outcomes:

❖ Discover extent to which states are already engaged in cross-state work.
❖ Review the desire for metropolitan area data by users.
❖ Develop recommended agreed-upon procedure for states to follow.
❖ Suggest a target date for having good, useable estimates.

This research was conducted in August and September of 1998. Telephone conversations with ALMIS members and LMI users in states with cross-border metropolitan areas form the basis for much of this report.[1] Although the interview selection process was largely ad-hoc, more than one hundred individuals were contacted.

Multi-State Metropolitan Areas.

Metropolitan Areas are a geographic standard for collecting and presenting federal statistical data.[2] They are typically composed of a county containing a central city of 50,000 or more inhabitants, but they may also include contiguous counties that are socially and economically integrated with the central city. Indeed, the term Metropolitan Area embodies a set of three definitions. The most familiar form is the Metropolitan Statistical Area (MSA), which is a relatively free standing metropolitan area, typically surrounded by non-metropolitan counties. When the population of an area reaches one million persons, it is referred to as a Primary Metropolitan Statistical Area. These PMSA can consist of a large urbanized county, or cluster of counties that demonstrate strong

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1 America's Labor Market Information System (ALMIS) is the consortium of state employment security agencies responsible for generating labor market information (LMI).

2 Population and MSA data is available at the U.S. Census website, http://www.census.gov

internal economic and social links. Finally, Consolidated Metropolitan Statistical Area (CMSA) denotes the concentration of multiple MSA and/or PMSA, which together have shared socio-economic ties within the larger metropolitan area. [3]

Most Metropolitan Areas are defined by county government boundaries, except in some Northeast and Mid-Atlantic States, where cities, towns, and minor civil divisions are also important legal entities. The number of MSAs and their individual components, change overtime with population and other dynamics. Commuting patterns, in particular, are an important determinant. Counties are added or dropped, and whole new MSA are created; the latest is Missoula, Montana from Missoula County, MT. on June 30, 1998. This report is concerned with the subset of metropolitan areas that are not confined to one state, but instead consist of a "home" state and one or more "neighbor" states. The simplest and most common case involves two counties and two states. The most complex is the District of Columbia PMSA, which in addition to D.C. itself, contains 18 counties and 6 cities in 3 states.

There are 335 metropolitan areas in the U.S. and Puerto Rico; 259 MSA and 76 PMSA. Cross border situations occur in 40 of these metropolitan areas, involving 37 states and the District of Columbia. Eleven of the 40 cross-border metropolitan areas are PMSA, or areas with more than one million persons. The appendix provides a list of multi-state metropolitan areas, their 1990 Census population, the change in population from 1990 to 1996, plus the names of county (and non-county) components.

The incidence of cross-border metropolitan areas is far from uniform among the states. Thirty of the multi-state MSA are found east of the Mississippi River. This is not surprising, given the Nation's early settlement pattern. Nor is the fact that many cross-border boundaries are rivers, since rivers often became the demarcation for statelines. The cross-border phenomenon is particularly important for a few states. West Virginia is the home state for two cross-border metropolitan areas, and neighbor state in four other. Minnesota shares in five cross-border areas, is home state or neighbor, as does Ohio. Tennessee, Kentucky, and Wisconsin, each has a stake in four cross-border situations.

Cross-border metropolitan areas also tend to have larger populations than single-state MSAs. The Office of Management and Budget categorizes metropolitan areas from level A to level D based on population size.[4] Level A areas are the largest, with more than 1 million inhabitants. The smallest

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3 Multi-state CMSA are not a subject of this study, only their MSA and PMSA components. For example, the Chicago CMSA is made up of three MSAs that are each defined within individual states. There are 19 CMSA nationally.

4 OMB Bulletin No. 98-06, Statistical Policy Office, Office of Management and Budget, June 23, 1998.

are level D areas, with less than 100,000 persons. Level B and level C areas fill the gap, being split at 250,000 persons. The graph below shows the relative distribution of cross-border metropolitan areas versus those confined to single states. Thirty-percent of cross border situations are level A, compared to only 12-percent of the single-state areas. By contrast, no level D cross-border metropolitan areas exist, compared to ten percent of all single-state MSA.

Multi-state MSA have larger than average populations.
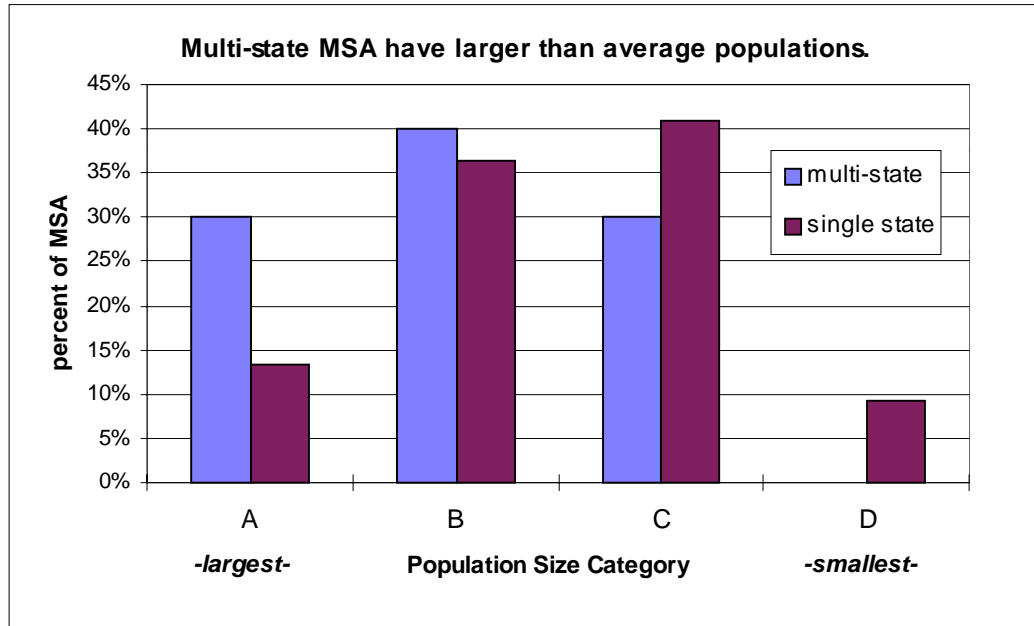
Projections Development Status.

Current Activities

Most ALMIS members generate long-term industry employment and occupation projections at a sub-state level. These estimates are typically proportional allocations of the larger statewide projections. Job Training Partnership Act workforce programs are the central purpose for most sub-state reports, and while titles vary from state to state, the most common reporting unit is the Service Delivery Area. Other administrative areas include planning regions or development districts, and some state report multiple area configurations, again based on the allocation of statewide values.

But not every ALMIS member creates sub-state projections. Five states in the study group only produce statewide estimates. Two states view themselves as too small geographically to justify sub-state projections. They see the true labor market as being larger than the state. Besides, any sub-state projection would be dominated by the metropolitan areas, a problematic condition for reporting the remaining non-metro portion. One state has the opposite problem; a large area geographically, but too few workers. In this case, confidentiality screens out many large industries, where there are just a few companies. The problem in the remaining two states is simply the loss of key technical personal.

In addition to administrative area projections, eight ALMIS members report some form of MSA data. But only three states and the District of Columbia generate projections for five metropolitan areas, complete with all cross-border components. Cincinnati, OH is the smallest of the five, with a population of 1.5 million persons. The other four are Kansas City, and Saint Louis, MO., the District of Columbia, and Philadelphia, PA.

Future Plans

Documenting existing multi-state research efforts is more certain than predicting future work. It is reasonable to assume: 1) states currently generate MSA-level projections will continue doing so, 2) members who now create partial MSA projections will incorporate the cross-border portions in future reporting, and 3) states small in geography or population will not change their practices. Expectations for the remaining states vary from likely, to unlikely, to a wait-and-see attitude. The majority response of ALMIS staff interviewed for this report ranked cross-border metropolitan area projections as a low priority, and have no plans to incorporate it into their current research agenda. A core minority exists, however, that sees a strong customer interest, and will pursue cross-border projections when the 3-year OES cycle completes in 1999.

ALMIS research efforts are driven by a strong customer focus, and multi-state projections will need to find their place on a growing list of other LMI demands. For some members, the real geographic issues involve their national border areas, while for others it is a labor market larger than their state alone. Still other members are concerned with economic differentials (north-south or urban-rural) within their state. Even for large population areas, some multi-state MSA may not be worth doing. For example, the Boston PMSA straddles the New Hampshire stateline, and includes two New Hampshire towns. But these towns account for just 10,000 of the 3.2 million people in the Boston metropolitan area.

Several ALMIS staff recalled past metropolitan area projection efforts that were dropped in favor of reporting another administrative area. The recollection

was that despite a lot of analytical work, MSA-level data attracted little customer interest. But analysts report similar experiences with other data: "a lot of work, and nobody used them." The reciprocal result is strong customer interest and continued improvements in reporting. Nearly all ALMIS members acknowledge that they will comply with whatever reporting format the federal government prescribes.

Customer Demand

A diligent analysis of customer demand for long-term projections data would require more time and resources than this study allowed. But anecdotal evidence from a broad set of interests suggests there is a diverse opinion on the value of projections data. The level of customer demand for long-term industry employment and occupation data measured by this study is inconclusive. Some ALMIS members felt there was a strong or substantial interest locally for metropolitan area data, while others could not recall the last customer request. More generally their response was that there was "some customer interest". The customers most often mentioned were economic development professionals, the media, educational interests, and the Federal Reserve Bank.

Other potential data users include employers, job seekers, planners, government agencies, schools, colleges and universities. Among the random selection of users contacted for this study, some were more interested than others in MSA-level data. Yet even the interested users often focused on more specific industry, occupation, or geographic information. Many users recognize that ALMIS projections are the only occupation level assessment, and that there is a growing demand for data on future job trends. Nearly all were aware of a various other government, corporate and academic organizations that issued employment projections, but their accuracy and motivations were sometimes suspect.

Prior ALMIS research offers an additional perspective. The September 1997 report "ALMIS Occupational Information Users' Survey," reveals the data predilections for a cross section of users.[5] Respondents ranked MSA-level data, along with county-level data, more desirable than statewide or administrative area values. Yet they also ranked long-term projections the least useful, compared to short- and medium-term estimates.

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5 ALMIS Occupational Information User's Survey: Results for All Respondents, Research and Statistics Office, Minnesota Department of Economic Security, September, 1997.

Technical and Institutional Constraints.

ALMIS members are far from consensus on the procedures or timelines for developing long-term industry employment and occupation projections in multi-state metropolitan areas. But they do raise collectively a number of concerns about potential barriers. This section outlines discussion points, from which other issues will no doubt surface, leading eventually to a set of agreements.

Modeling and Data

Long-term forecasting is an evolving practice among ALMIS members. Since other ALMIS researchers are investigating specifically how members do projections, what data they use, etc., this study defers on numerous technical issues. In its simplest form, projection modeling begins with the gathering of economic, demographic, and employment data. Boundaries are forecast for the number of jobs statewide in some future year, and then employment by industry is projected. These values, along with the appropriate staffing patterns, are inputs for the ALMIS Micromatrix software to create net openings for each occupation category.

Extending the process to multi-state MSA using existing software is not seen as a technically difficult problem by ALMIS members. But the projections process relies in part on regression analysis of time-series data, and there are a variety of concerns about the availability and reliability of this data. Concerns like:

Where will the (time-series) data come from if a new county is added or a new MSA created? Will we exchange DOT or ONET job descriptions, and at what level of detail? When and how will we adjust to the NAICS industry coding from SIC? Is the data sufficiently robust in small MSA, and what happens if the OES response rate falls? These and other issues are described briefly below.

Data <u>series breaks</u> are an inevitable part of empirical research, however, serious changes are on the horizon. Starting in the fall of 1998, the "outmoded" Dictionary of Titles (DOT) job classification system will be replaced by the Occupational Information Network (ONET) system. The number of occupations will go from 764 in 7 major categories, to 810 in 23 categories. As beneficial as this update may prove, in the short-run it represents for the projections analyst an untested and unfamiliar vector of information.

Similarly, the Standard Industry Classification (SIC) system will be phased-out over the next three years in favor of the North American Industry Classification System (NAICS). The July 1998 *Monthly Labor Review* describes this as one of the most profound changes in statistical programs since the

1930's. It further predicts the change <u>will create significant difficulties</u> for data collectors and users. Many historical datasets that are based on the SIC format will experience series breaks so significant that reconstructing time-series data will be difficult.

Another data issue involves the Current Employment Statistics (CES) series. While the OES survey is administered in <u>every MSA</u>, the same is not true for the CES survey. Since this is an important data source in the modeling process, how should these areas be treated or reported? A kindred problem occurs where the industry data is not statistically reliable, such that detailed reporting can be developed. What is the decision rule for reporting employment and occupation details in these <u>data deficient areas</u>?

<u>Roll-up issues</u> describe the nested interconnections of a data series. Geographic continuity is one example; can data at the town or city boundary be contained within an administrative region, and do these regions then fit within larger areas, such as MSAs. A similar problem exists with descriptive data, such as the occupational titles or industrial codes. Exchange agreements that recognizes this nesting will help extend the data's usefulness and value.

<u>Staffing patterns</u> represent the distribution of job classifications among various industry sectors, and are at the heart of estimating occupational projections. Of the states that did create complete cross-border MSA projections, only one created a separate staffing matrix, while the others simply modified existing statewide patterns. The new OES will provide the staffing pattern for multi-state MSA, but there is concern. What will happen to data reliability should the OES <u>survey response rates</u> fall? How will the "remainder areas" be treated, when the MSA-level staffing pattern dominates the statewide matrix?

The schedule for data exchange and reporting must also be addressed. The projections process has a number of interdependent and time sensitive steps, so <u>data delivery dates</u> should be established. The frequency of exchanges is also an open question. Not all ALMIS members agree annual updates are needed, but suggest instead a <u>2-year cycle</u> for metropolitan area projections. Judging from the experience of ALMIS members already working with multi-state MSA data, exchanges both create scheduling delays and are time consuming.

Consistent Reporting.

Reporting results in a way that is not confusing to the user is as important as creating accurate projections in the first place. The clever user is likely to add or subtract values from various occupations or regional tables, and come to some erroneous conclusions. Reports need to <u>explicitly state data restrictions</u> or

other caveats to avoid such errors. For instance, if an MSA shares a county with an administrative area, is the user free to conclude any mathematical difference is attributable to that county or overlapping area.

It may also be difficult to reconcile interstate differences when initial projection variables, such as job growth or population, are imposed on the model by an outside source. This may be particularly true where the data and the source are both politically sensitive. As reporting areas get smaller, these exogenous decisions have a greater impact on consistency and accuracy.

Projections data users may be sophisticated labor market information consumers, but they can still be confused by too many reporting formats or repeated changes in sub-state reporting unit. The issue here is not so much the particular configuration, but the temptation to switch configurations from say, MSAs to SDAs to some other region or district.

Staff and Funding.

Data and software are important, but not more than the human capital of the projections analyst. This resource has been declining for many ALMIS members, however, with advances in the national economy. The loss of key personnel is creating holes in the institutional memory of many ALMIS organizations. Members rank the shortage of technically capable personnel as their most immediate research constraint. The problem centers largely on the inability of state government salary structures to compete with private industry's current demand for technical and computer skilled workers. Ironically, funding for research initiative is not a constraint according to the majority of ALMIS members interviewed. But that sentiment is not universal, particularly among states with large populations, who feel disadvantaged by the ETA/BLS base-plus-population funding formula. Staff shortages will affect new research, as well as existing commitments, into the foreseeable future.

ALMIS members have a long and growing list of research responsibilities. They will need to absorb the changes and series breaks described above, initiate long-term and short-term projections for various reporting units, plus continue to develop software and data applications. LMI managers need to recognize that each change creates its own impact on staff workloads. The cross-border MSA exercise, for example, requires the analyst to replicate and modify existing sub-state programs, files, and reports. However minor the initiative appears, multi-state projections will consume staff time. The scarcity of this resource will dictate the extent to which MSA-level reporting occurs. Cross-border cooperation and capacity building among the staff are also necessary for success. Analysts need a working knowledge of critical trends in neighboring state industries. Capacity

building also means relationship building, through the personal contacts made with other analysts at training sessions and the like.

Conclusions.

The new OES may create customer expectations for metropolitan area data, and where these areas cross statelines the projections process becomes more complicated. Despite current data shortcomings, employment and occupation data is now available for five large multi-state metropolitan areas. With full implementation of the new OES, other ALMIS members are likely to extend their projections effort to include cross-border situations.

Sub-state projections are commonly, although not universally, created by ALMIS members. The various geographic reporting formats for administrative areas, such as SDAs, are likely to continue. Cross-border metropolitan area estimates are not a high research priority for the majority of ALMIS members, and no clear consensus exists on the desire for metropolitan area data, either among LMI users or ALMIS staff.

Consequently, there is no consensus on a set of procedures for creating cross-border projections, nor is there an agreement on the timeline for such data. Absent a federal reporting mandate, customer demand and staff capabilities will drive the development of multi-state projections for individual states. Technical challenges include data availability, reliability, and exchange protocols, data series breaks, and the reconfiguration of MSAs.

The largest cross-border MSAs are likely to be analyzed when the new OES data is available. But small geographic and low population areas are not likely to create detailed projections. Even large population areas may resist incorporating cross-border areas where those areas contribute marginally to the outcome. Existing ALMIS modeling software can be used to creating multi-state projections with minimum modifications. Funding is a less important issue than is the issue of staff retention. The most significant constraint with many ALMIS members is the lack of technical staff.

APPENDIX – Multi-State Metropolitan Statistical Areas

Metropolitan Area Name *(CMSA name were applicable)*	1990 Population	Population % Change 1990 to 1996

Augusta-Aiken, GA-SC MSA   415,220   9.20%

Columbia County, GA	McDuffie County, GA	Aiken County, SC
Edgefield County, SC	Richmond County, GA	

Boston, MA-NH PMSA   3,227,707   1.10%

Boston-Worcester-Lawrence, MA-NH-ME-CT

Bristol County, MA (pt.)	Everett city	Medway town
Berkley town	Framingham town	Millis town
Dighton town	Holliston town	Milton town
Mansfield town	Hopkinton town	Needham town
Norton town	Hudson town	Norfolk town
Taunton city	Lexington town	Norwood town
Essex County, MA (pt.)	Lincoln town	Plainville town
Amesbury town	Littleton town	Quincy city
Beverly city	Malden city	Randolph town
Danvers town	Marlborough city	Sharon town
Essex town	Maynard town	Stoughton town
Gloucester city	Medford city	Walpole town
Hamilton town	Melrose city	Wellesley town
Ipswich town	Natick town	Westwood town
Lynn city	Newton city	Weymouth town
Lynnfield town	North Reading town	Wrentham town
Manchester by the Sea town	Reading town	Plymouth County, MA (pt.)
Marblehead town	Sherborn town	Carver town
Middleton town	Shirley town	Duxbury town
Nahant town	Somerville city	Hanover town
Newbury town	Stoneham town	Hingham town
Newburyport city	Stow town	Hull town
Peabody city	Sudbury town	Kingston town
Rockport town	Townsend town	Marshfield town
Rowley town	Wakefield town	Norwell town
Salem city	Waltham city	Pembroke town
Salisbury town	Watertown city	Plymouth town
Saugus town	Wayland town	Rockland town
Swampscott town	Weston town	Scituate town
Topsfield town	Wilmington town	Wareham town
Wenham town	Winchester town	Suffolk County, MA
Middlesex County, MA (pt.)	Woburn city	Boston city
Acton town	Norfolk County, MA (pt.)	Chelsea city
Arlington town	Bellingham town	Revere city
Ashland town	Braintree town	Winthrop town
Ayer town	Brookline town	Worcester County, MA (pt.)
Bedford town	Canton town	Berlin town
Belmont town	Cohasset town	Blackstone town
Boxborough town	Dedham town	Bolton town
Burlington town	Dover town	Harvard town
Cambridge city	Foxborough town	Hopedale town
Carlisle town	Franklin city	Lancaster town
Concord town	Holbrook town	Mendon town
	Medfield town	Milford town

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Millville town	Upton town		Seabrook town
Southborough town	Rockingham County, NH (pt.)		South Hampton town
Charlotte-Gastonia-Rock Hill, NC-SC MSA		1,162,140	13.70%
Lincoln County, NC	Gaston County, NC		Rowan County, NC
Union County, NC	Cabarrus County, NC		
York County, SC	Mecklenburg County, NC		
Chattanooga, TN-GA MSA		424,347	5.10%
Catoosa County, GA	Hamilton County, TN		Walker County, GA
Dade County, GA	Marion County, TN		
Cincinnati, OH-KY-IN PMSA		1,526,090	4.70%
Cincinnati-Hamilton, OH-KY-IN			
	Kenton County, KY		Campbell County, KY
Brown County, OH	Hamilton County, OH		Boone County, KY
Warren County, OH	Grant County, KY		Clermont County, OH
Pendleton County, KY	Gallatin County, KY		
Ohio County, IN	Dearborn County, IN		
Clarksville-Hopkinsville, TN-KY MSA		169,439	10.00%
Christian County, KY	Montgomery County, TN		
Columbus, GA-AL MSA		260,862	4.40%
Chattahoochee County, GA	Muscogee County, GA		
Harris County, GA	Russell County, AL		
Cumberland, MD-WV MSA		101,643	-1.00%
Allegany County, MD	Mineral County, WV		
Davenport-Moline-Rock Island, IA-IL MSA		350,855	2.00%
Henry County, IL	Rock Island County, IL		Scott County, IA
Duluth-Superior, MN-WI MSA		239,971	-0.20%
St. Louis County, MN	Douglas County, WI		
Evansville-Henderson, IN-KY MSA		278,990	3.50%
Posey County, IN	Warrick County, IN		
Vanderburgh County, IN	Henderson County, KY		

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Metropolitan Area Name *(CMSA name were applicable)*	1990 Population	Population % Change 1990 to 1996
Fargo-Moorhead, ND-MN MSA	153,296	7.80%

Cass County, ND   Clay County, MN

Flagstaff, AZ-UT MSA   101,760   16.00%

Coconino County, AZ   Kane County, UT

Fort Smith, AR-OK MSA   175,911   8.90%

Sequoyah County, OK   Sebastian County, AR   Crawford County, AR

Grand Forks, ND-MN MSA   103,272   0.60%

Polk County, MN   Grand Forks County, ND

Huntington-Ashland, WV-KY-OH MSA   312,529   1.30%

Boyd County, KY   Carter County, KY   Lawrence County, OH
Cabell County, WV   Greenup County, KY   Wayne County, WV

Johnson City-Kingsport-Bristol, TN-VA MSA   436,047   5.10%

Carter County, TN   Unicoi County, TN   Bristol city, VA
Washington County, VA   Sullivan County, TN   Scott County, VA
Washington County, TN   Hawkins County, TN

Kansas City, MO-KS MSA   1,582,874   6.80%

Lafayette County, MO   Leavenworth County, KS   Cass County, MO
Ray County, MO   Jackson County, MO   Miami County, KS
Platte County, MO   Clinton County, MO   Johnson County, KS
Wyandotte County, KS   Clay County, MO

La Crosse, WI-MN MSA   116,401   4.40%

Houston County, MN   La Crosse County, WI

Las Vegas, NV-AZ MSA   852,646   40.90%

Clark County, NV   Mohave County, AZ   Nye County, NV

Louisville, KY-IN MSA   949,012   4.50%

Bullitt County, KY   Clark County, IN   Floyd County, IN

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Metropolitan Area Name _(CMSA name were applicable)_		1990 Population	Population % Change 1990 to 1996
Harrison County, IN	Oldham County, KY		
Jefferson County, KY	Scott County, IN		

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Metropolitan Area Name *(CMSA name were applicable)*	1990 Population	Population % Change 1990 to 1996
Lawrence, MA-NH PMSA	353,232	5.50%

Boston-Worcester-Lawrence, MA-NH-ME-CT

Essex County, MA (pt.)
 Andover town
 Boxford town
 Georgetown town
 Groveland town
 Haverhill city
 Lawrence city
 Merrimac town
 Methuen city

North Andover town
West Newbury town
Rockingham County, NH (pt.)
 Atkinson town
 Chester town
 Danville town
 Derry town
 Fremont town
 Hampstead town

Kingston town
Newton town
Plaistow town
Raymond town
Salem town
Sandown town
Windham town

Lowell, MA-NH PMSA	280,578	3.60%

Boston-Worcester-Lawrence, MA-NH-ME-CT

Middlesex County, MA (pt.)
Billerica town
Chelmsford town
Dracut town
Dunstable town

Groton town
Lowell city
Pepperell town
Tewksbury town
Tyngsborough town

Westford town
Hillsborough County, NH (pt.)
 Pelham town

Memphis, TN-AR-MS MSA	1,007,306	7.00%

Crittenden County, AR
Tipton County, TN

Shelby County, TN
DeSoto County, MS

Fayette County, TN

Minneapolis-St. Paul, MN-WI MSA	2,538,776	8.90%

Ramsey County, MN
Carver County, MN
Wright County, MN
Washington County, MN
St. Croix County, WI

Sherburne County, MN
Scott County, MN
Pierce County, WI
Isanti County, MN
Hennepin County, MN

Chisago County, MN
Anoka County, MN
Dakota County, MN

New London-Norwich, CT-RI MSA	290,734	-1.40%

Middlesex County, CT (pt.)
 Old Saybrook town
New London County, CT (pt.)
 Bozrah town
 East Lyme town
 Franklin town
 Griswold town
 Groton town
 Ledyard town

Lisbon town
Montville town
New London city
North Stonington town
Norwich city
Old Lyme town
Preston town
Salem town
Sprague town

Stonington town
Waterford town
Windham County, CT (pt.)
 Canterbury town
 Plainfield town
Washington County, RI (pt.)
 Hopkinton town
 Westerly town

Newburgh, NY-PA PMSA	335,613	8.00%

New York-Northern New Jersey-Long Island, NY-NJ-CT-PA

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Metropolitan Area Name *(CMSA name were applicable)*		1990 Population	Population % Change 1990 to 1996
Orange County, NY	Pike County, PA		

Norfolk-Virginia Beach-Newport News, VA-NC MSA — 1,444,710 — 6.60%

Newport News city, VA	Poquoson city, VA	Chesapeake city, VA
Suffolk city, VA	Norfolk city, VA	Gloucester County, VA
York County, VA	James City County, VA	Mathews County, VA
Virginia Beach city, VA	Isle of Wight County, VA	Currituck County, NC
Portsmouth city, VA	Hampton city, VA	Williamsburg city, VA

Omaha, NE-IA MSA — 639,580 — 6.60%

Cass County, NE	Sarpy County, NE	Pottawattamie County, IA
Washington County, NE	Douglas County, NE	

Parkersburg-Marietta, WV-OH MSA — 149,169 — 1.60%

Washington County, OH	Wood County, WV

Philadelphia, PA-NJ PMSA — 4,922,257 — 0.60%
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD

Chester County, PA	Montgomery County, PA	Burlington County, NJ
Salem County, NJ	Gloucester County, NJ	Bucks County, PA
Philadelphia County, PA	Camden County, NJ	
Delaware County, PA		

Portland-Vancouver, OR-WA PMSA — 1,515,452 — 16.10%
Portland-Salem, OR-WA

Multnomah County, OR	Columbia County, OR	Yamhill County, OR
Washington County, OR	Clark County, WA	
	Clackamas County, OR	

Portsmouth-Rochester, NH-ME PMSA — 223,271 — 3.30%
Boston-Worcester-Lawrence, MA-NH-ME-CT

York County, ME (pt.)	East Kingston town	Newington town
Berwick town	Epping town	Newmarket town
Eliot town	Exeter town	North Hampton town
Kittery town	Greenland town	Portsmouth city
South Berwick town	Hampton town	Rye town
York Town	Hampton Falls town	Stratham town
Rockingham County, NH (pt.)	Kensington town	Strafford County, NH (pt.)
Brentwood town	New Castle town	Barrington town
	Newfields town	Dover city

APPENDIX – Multi-State Metropolitan Statistical Areas

Metropolitan Area Name *(CMSA name were applicable)*		1990 Population	Population % Change 1990 to 1996
Durham town	Madbury town		Rollinsford town
Farmington town	Milton town		Somersworth city
Lee town	Rochester city		

Providence-Fall River-Warwick, RI-MA MSA   1,134,350   -0.90%

Bristol County, MA (pt.)	Warwick city	Lincoln town
Attleboro city	West Greenwich town	North Providence town
Fall River city	West Warwick town	North Smithfield town
North Attleborough town	Newport County, RI (pt.)	Pawtucket city
Rehoboth town	Jamestown town	Providence city
Seekonk town	Little Compton town	Scituate town
Somerset town	Tiverton town	Smithfield town
Swansea town	Providence County, RI	Woonsocket city
Westport town	Burrillville town	Washington County, RI (pt.)
Bristol County, RI	Central Falls city	Charlestown town
Barrington town	Cranston city	Exeter town
Bristol town	Cumberland town	Narragansett town
Warren town	East Providence city	North Kingstown town
Kent County, RI	Foster town	Richmond town
Coventry town	Glocester town	South Kingstown town
East Greenwich town	Johnston town	

St. Louis, MO-IL MSA   2,492,348   2.20%

St. Charles County, MO	St. Louis city, MO	Jersey County, IL
Clinton County, IL	St. Clair County, IL	Franklin County, MO
Warren County, MO	Madison County, IL	Jefferson County, MO
St. Louis County, MO	Lincoln County, MO	Monroe County, IL

Steubenville-Weirton, OH-WV MSA   142,523   -3.00%

Hancock County, WV	Jefferson County, OH	Brooke County, WV

Texarkana, TX-Texarkana, AR MSA   120,132   3.20%

Miller County, AR	Bowie County, TX

Washington, DC-MD-VA-WV PMSA   4,222,830   8.10%
Washington-Baltimore, DC-MD-VA-WV

Stafford County, VA	Montgomery County, MD	Culpeper County, VA
Clarke County, VA	Prince George's County, MD	Charles County, MD
King George County, VA	Spotsylvania County, VA	Calvert County, MD
Jefferson County, WV	Warren County, VA	Berkeley County, WV
Loudoun County, VA	Prince William County, VA	Arlington County, VA
Manassas city, VA	Fauquier County, VA	Alexandria city, VA
Manassas Park city, VA	Falls Church city, VA	Frederick County, MD
Fredericksburg city, VA	Fairfax County, VA	District of Columbia
	Fairfax city, VA	

APPENDIX – Multi-State Metropolitan Statistical Areas

Metropolitan Area Name *(CMSA name were applicable)*	1990 Population	Population % Change 1990 to 1996
Wheeling, WV-OH MSA	159,301	-2.20%

Ohio County, WV   Belmont County, OH   Marshall County, WV

	1990 Population	Population % Change 1990 to 1996
Wilmington-Newark, DE-MD PMSA *Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD*	513,293	7.30%

Cecil County, MD   New Castle County, DE

	1990 Population	Population % Change 1990 to 1996
Worcester, MA-CT PMSA *Boston-Worcester-Lawrence, MA-NH-ME-CT*	478,384	1.40%

Windham County, CT (pt.)	East Brookfield town	Shrewsbury town
Thompson town	Grafton town	Southbridge town
Hampden County, MA (pt.)	Holden town	Spencer town
Holland town	Leicester town	Sterling town
Worcester County, MA (pt.)	Millbury town	Sturbridge town
Auburn town	Northborough town	Sutton town
Barre town	Northbridge town	Uxbridge town
Boylston town	North Brookfield town	Webster town
Brookfield town	Oakham town	Westborough town
Charlton town	Oxford town	West Boylston town
Clinton town	Paxton town	West Brookfield town
Douglas town	Princeton town	Worcester city
Dudley town	Rutland town	