

March 10, 2008

# Payment Areas for Medicare Physician Services: Selected Alternatives

## Volume I Report

Prepared for

**Jesse Levy, Ph.D.**  
Centers for Medicare & Medicaid Services  
7500 Security Boulevard  
Baltimore, MD 21244-1850

Prepared by

**Walter Adamache, Ph.D.**  
**Gregory C. Pope, M.S.**  
RTI International  
Health, Social, and Economics Research  
1440 Main Street–Suite 310  
Waltham, MA 02452-8414

**Stephen Zuckerman, Ph.D.**  
Urban Institute

RTI Project Number 0207964.016

# **PAYMENT AREAS FOR MEDICARE PHYSICIAN SERVICES: SELECTED ALTERNATIVES**

by Gregory C. Pope, M.S., Project Director  
Walter Adamache, Ph.D

Stephen Zuckerman, Ph.D.  
Urban Institute

Federal Project Officer: Jesse Levy, Ph.D.

RTI International

CMS Contract No. 500-00-0024, TO #16

March 10, 2008

This project was funded by the Centers for Medicare & Medicaid Services under contract no. 500-00-0024, TO #16. The statements contained in this report are solely those of the authors and do not necessarily reflect the views or policies of the Centers for Medicare & Medicaid Services. RTI assumes responsibility for the accuracy and completeness of the information contained in this report.

---

RTI International is a trade name of Research Triangle Institute.

ii

***INFORMATION NOT RELEASABLE TO THE PUBLIC UNLESS AUTHORIZED BY LAW:*** This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law.

## CONTENTS

EXECUTIVE SUMMARY .....	1
ES.1 Background.....	1
ES.2 Results.....	1
ES.2.1 MSA-Based Payment Areas .....	1
ES.2.2 Using CMS hospital wage data instead of Census wage data in the practice expense GPCI.....	2
ES.2.3 Localities that group counties with similar practice costs within state.....	2
ES.2.4 Incremental modification of current localities .....	3
ES.2.4.1 Addition of counties to existing localities within multi-locality states.....	3
ES.2.4.2 Creation of sub-state localities in states that are currently statewide localities .....	4
SECTION 1 INTRODUCTION AND BACKGROUND.....	5
1.1 Introduction.....	5
1.2 Project Motivation and Scope.....	5
1.3 Background on Current Localities .....	5
1.3.1 Evolution of the Current Locality Configuration.....	5
1.3.2 Recent Criticism of the Current Localities .....	7
1.4 Methods and Data .....	8
SECTION 2 ANALYSIS OF OPTIONS FOR LOCALITY CONFIGURATION .....	11
2.1 MSA-based localities .....	11
2.1.1 Using CMS county GAFs .....	11
2.1.2 Using CMS hospital wage data instead of Census wage data in the practice expense GPCI.....	14
2.2 Localities that group counties with similar practice costs within state.....	16
2.3 Incremental modification of current localities .....	17
2.3.1 Addition of counties to existing localities within multi-locality states.....	17
2.3.2 Creation of sub-state localities in states that are currently statewide localities .....	19
REFERENCES .....	105
APPENDIX TABLES A, B and C in Volume II	

**List of tables**

Table 1 MSA-based GAFs by state, 2006 ..... 22

Table 2 2006 GAFs for metropolitan divisions ..... 37

Table 3 MSAs with a GAF that is lower than the state non-metropolitan area's GAF, 2006 ... 39

Table 4 MSA versus current locality GAF, by MSA and county, 2006 ..... 41

Table 5 Counties with the fifty largest increases from their current locality GAF to their MSA GAF, 2006 ..... 43

Table 6 Counties with the fifty largest decreases from their current locality GAF to their MSA GAF, 2006 ..... 45

Table 7 Fifty counties whose MSA GAF exceeds their county GAF by the largest percentage, 2006..... 47

Table 8 Fifty counties whose county GAF exceeds their MSA GAF by the largest percentage, 2006..... 49

Table 9 Largest differences in MSA-based GAFs between contiguous counties, 2006 ..... 51

Table 10 Current locality-based GAFs and MSA-based GAFs by urbanicity, 2006 ..... 53

Table 11 Actual and imputed MSA-based GAFs for MSAs that have Metropolitan Divisions, 2006..... 54

Table 12 MSA-based actual and imputed GAFs by state, 2006..... 56

Table 13 MSA-based areas where the imputed GAF exceeds the actual GAF by the largest percentage, 2006..... 79

Table 14 MSA-based areas where the imputed GAF is less than the actual GAF by the largest percentage, 2006..... 80

Table 15 MSA-based actual and imputed GAFs by urbanicity, 2006..... 81

Table 16 Creating payment areas from counties with 2006 GAFs within 5% of the seed county, California..... 82

Table 17 Creating payment areas from counties with 2006 GAFs within 5% of the seed county, national results..... 85

Table 18 Incrementally add counties to existing localities, reconfigured Atlanta, GA locality, 2006 ..... 90

Table 19 Incrementally add counties to existing localities (other than to the rest of state localities), 2006 ..... 91

Table 20 Break up statewide localities when county GAFs differ from the statewide GAF by more than 5%, 2006..... 99

## EXECUTIVE SUMMARY

### ES.1 Background

The payment localities CMS uses for the purpose of making geographic adjustments in the Medicare Physician Fee Schedule have come under criticism in recent years because they may not allow for adjustments that accurately reflect differences in practice costs. In order to explore alternatives to the current configuration of localities, CMS asked RTI and its subcontractor the Urban Institute (UI) to analyze several geographic options that might better track differences in costs. Selected options involving metropolitan statistical areas (MSAs), grouping counties with similar practice costs within states, and incremental revisions in the current localities were considered. Incremental approaches retained the current localities, but made small changes to address what seemed to be the areas generating the most complaints or in which the data suggested the largest payment inaccuracy.

Our analysis for this report was initial and exploratory. We focused on defining the methods to generate the geographic areas and Geographic Adjustment Factors (GAFs) for each locality option, the number of localities generated, and differences in GAFs between the current and new locality configurations. It was beyond the scope of our analysis to conduct a systematic evaluation of each locality option on a comprehensive set of criteria. Therefore we do not make recommendations about whether revisions in the current payment localities are desirable, and if revisions were to be made, which revised locality options are preferred.

RTI/UI used 2006 county-level GAFs to measure county-level physician practice costs. GAFs for many counties are identical in these data as the underlying Census wage or Department of Housing and Urban Development rental data may have only been available at the MSA/state nonmetropolitan area level, not truly at the county level.

### ES.2 Results

RTI/UI, working with CMS staff, agreed to examine selected locality/GAF options derived from four variants: (1) MSA-based localities, (2) using CMS hospital wage index data instead of Census wage data in the practice expense GPCI<sup>1</sup>, (3) grouping similar-cost counties within state into localities, and (4) modifying the existing payment localities incrementally.

#### ES.2.1 MSA-Based Payment Areas

When MSAs are the basis of payment localities, there are 387 metropolitan payment areas (including MSAs and “metropolitan divisions” within large MSAs) and 51 non-metropolitan payment areas, as compared to the existing 89 payment localities. The counties with the largest increases from the MSA-based GAF (Table 5) are outlying counties in large MSAs that are included in the current “rest of state” or other rural/small city localities. These outer ring MSA counties have experienced population growth and urbanization as large urban

---

<sup>1</sup> GPCI is Geographic Practice Cost Index.

areas have expanded over time, and have been incorporated into MSAs. The current localities may reflect an earlier time period when these counties were essentially rural/small town. They are concentrated in a few states: Virginia, Illinois, Maryland, Michigan, Georgia, Missouri, and Texas. In the case of Virginia, for example, the counties are part of the current statewide Virginia locality but are now also part of the Washington DC MSA. In Georgia, the gaining counties are currently in the “Rest of Georgia” locality, but have become part of the Atlanta MSA. The counties with the largest declines from the MSA-based GAF are typically nonmetropolitan counties that are part of urban or statewide current localities.

The MSA-based GAF for metropolitan areas is 0.6 percent higher than the current locality-based GAF, while it is 3.8 percent lower for non-metropolitan areas. Large metropolitan areas gain the most from MSA-based versus current localities, while the GAF declines in small metropolitan areas with MSA-based localities. Both the “adjacent” and the “not-adjacent” non-metropolitan areas have MSA-based GAFs that are about 3.8 percent lower than the current locality-based GAFs. Urban areas, especially large urban areas, gain when current statewide localities are broken up into higher-cost MSAs and lower-cost state nonmetropolitan areas. Conversely, nonmetropolitan areas lose in this process.

### **ES.2.2 Using CMS hospital wage data instead of Census wage data in the practice expense GPCI**

CMS’s hospital wage index data provide an alternative source for measuring the relative wages of nonphysician employees in physician offices. The Census wage data currently used in the practice expense GPCI measure the all-industry wages of occupations typically employed in physician offices. The hospital wage data measure the wages of hospital employees. We compared the GAF for MSA-based localities when relative hospital wages versus relative all-industry Census wages are used in the practice expense GPCI. We refer to the GAF using relative Census wages in the practice expense GPCI as the “actual GAF” and the GAF using relative hospital wages in the practice expense GPCI as the “imputed GAF”.

For the most part, the differences between the two GAFs are relatively small, less than 5 percent. But the differences are substantial for some particular MSAs and state nonmetropolitan areas. The imputed GAF is 0.3 percent lower than the actual GAF for metropolitan areas overall, while it is 2.2 percent higher for non-metropolitan areas overall. Among metropolitan areas, large metropolitan areas lose from the imputed GAF, but medium and small metropolitan areas gain. Both “adjacent” and “not-adjacent” non-metropolitan areas gain from the imputed GAF. These results indicate that using relative hospital wages in the practice expense GPCI instead of Census wages would tend to benefit smaller metropolitan areas and rural areas.

### **ES.2.3 Localities that group counties with similar practice costs within state**

An alternative to defining localities as MSAs is to create them from the smallest geographic unit for which unique GAFs are available: counties. County-based localities can result in payment areas with more homogeneous county GAFs than MSAs. We explored one specific method of creating localities from counties. In this method, counties within each state

that have similar GAFs are grouped into the same locality using an iterative algorithm that limits the range in county GAFs within a locality to be no more than 5 percent. A locality's counties are not required to be contiguous to each other but were required to be within the same state. All localities nationwide are redefined using this methodology.

Nationally, the use of this method resulted in 134 localities, as compared to the 89 existing localities. The number of statewide localities is reduced from 36 to 7. California has the most localities with six, followed by five each in New York and Virginia. This method can create multiple localities, and hence differences in payment, within MSAs, especially those that cross state lines. The configuration of some of this method's localities might not be desirable for other reasons. For instance, the Washington, DC locality does not include the Maryland and Virginia counties that are part of the current localities. The results of the method could be modified to limit changes in current localities or to accommodate other exceptions.

#### **ES.2.4 Incremental modification of current localities**

Incremental changes may be able to achieve significant improvements to the current localities without creating the disruptions and redistributions (winners and losers) of wholesale changes in the localities. Two methods were used to incrementally modify current localities. The first method was applied to states where there are already multiple payment localities. The second method was applied to states where there is currently one "statewide" locality.

##### **ES.2.4.1 Addition of counties to existing localities within multi-locality states.**

Counties contiguous to an existing locality in a multi-locality state were candidates to be added to it. To join a current locality, the candidate's GAF had to be within 5 percent of the current locality's GAF. Only counties that are classified in the "Rest of State" localities were allowed to be candidates to be added to an existing locality. In addition, the candidate counties must be in the same state as the existing locality. The algorithm starts in descending order with the current locality that has the highest GAF. Finally, no changes to the District of Columbia's locality were permitted.

Nationally, the use of this method resulted in adding 49 counties to existing localities in currently multi-locality states. The number of counties added to a locality ranged from 1 to 6, with the most counties being added to the Atlanta, Georgia locality. The state that had the most counties added to existing localities was Texas with 16 counties added to five localities. States that did not have any counties moved from one locality to another included Michigan, New York, and Pennsylvania. Except for the states in which no counties changed localities, the GAFs for the Rest of State areas all fell, ranging from -4.8 percent to -0.01 percent. The changes in the locality GAFs other than Rest of State ranged from -2.0 percent to +0.002 percent. The changes in the GAFs for the counties that entered a locality ranged from 0.6 percent to 15.2 percent.

#### **ES.2.4.2 Creation of sub-state localities in states that are currently statewide localities.**

Counties whose GAFs differ by at least 5 percent from the statewide GAF are “pulled out” to create sub-state localities. Since county GAFs might differ by more than 5 percent above and below the statewide GAF, both high- and low-GAF counties were identified and then used as building blocks for configuring sub-state localities. For some states, this might lead to division into three areas: high GAF, middle GAF, and low GAF. Unlike counties in the high–and low-GAF areas, the counties in the middle-GAF area remain together as one locality. Counties remaining within the middle-GAF localities are not required to be contiguous.

Of the current 36 statewide localities, 17 remain as statewide localities. The other 19 states were disaggregated into 54 payment localities: 23 payment localities were comprised of low-GAF counties, 12 were comprised of high-GAF counties, and the remaining 19 were comprised of middle-GAF counties.



# SECTION 1 INTRODUCTION AND BACKGROUND

## 1.1 Introduction

In this introductory Section 1, we first describe the motivation for this project, and the scope of its analysis. Then we provide policy background and history on the Medicare physician payment localities, also known as the “fee schedule areas”. Next we briefly describe the data and methods that were employed in our analysis. Section 2 of the report describes and presents results of the payment locality configurations that RTI/UI analyzed. The appendix contains several tables that augment the text tables.

## 1.2 Project Motivation and Scope

The payment localities CMS uses for the purpose of making geographic adjustments in the Medicare Physician Fee Schedule have come under criticism in recent years because they may not allow for adjustments that accurately reflect differences in practice costs. In order to explore alternatives to the current configuration of localities, CMS asked RTI and its subcontractor the Urban Institute (UI) to analyze several geographic options that might better track differences in costs. Selected options involving metropolitan statistical areas (MSAs), grouping counties with similar practice costs within states, and incremental revisions in the current localities were considered. Incremental approaches retained the current localities, but made small changes to address what seemed to be the areas generating the most complaints or in which the data suggested the largest payment inaccuracy. In most cases, the localities in the options did not cross state lines, but we did allow for MSA-based localities to cross state lines when the MSAs did so. In addition, RTI/UI considered an option that replaced the Census wage data with the Medicare hospital wage index to measure the relative wages of nonphysician employees in physician offices. The specifics of the full range of options considered in this project is discussed in Section 2 of this report.

Our analysis for this report was initial and exploratory. We focused on defining the methods to generate the geographic areas and the geographic adjustment factors (GAFs) for each locality option, the number of localities generated, and differences in GAFs between the current and new locality configurations. It was beyond the scope of our analysis to conduct a systematic evaluation of each locality option on a comprehensive set of criteria. Therefore we do not make recommendations about whether revisions in the current payment localities are desirable, and if revisions were to be made, which revised locality options are preferred.

## 1.3 Background on Current Localities

### 1.3.1 Evolution of the Current Locality Configuration

Prior to the implementation of the fee schedule, Medicare carriers administered physician payments within state boundaries and had a great deal of discretion as to how payments for services would vary across geographic areas within their jurisdictions. Although there were 16 statewide “payment localities,” some states had highly disaggregated payment areas. For

example, Texas was divided into 33 payment areas for some specialties. Overall, there were 240 carrier-defined payment localities used between that start of the program in 1966 and the implementation of the Medicare Physician Fee Schedule in 1992.

The original 240 localities were retained during the initial stages of the fee schedule implementation, but state medical societies were allowed to request that their state be converted to a statewide locality. A movement from a multi-locality state to a single-locality state, in most instances, would result in an increase in payments in rural areas and a decrease in payments in urban areas. CMS required that a state medical society requesting a statewide locality had to demonstrate that it had “overwhelming support” for the change. The agency gauged the level of support based on the formal request it received from the state medical society, the share of physicians who were society members and direct physician comments. Six states – Iowa, Minnesota, Nebraska, North Carolina, Ohio, and Oklahoma - became statewide localities as a result of this process between 1992 and 1995. As a result, there were 210 payment localities in 1996, of which 22 were statewide.

Prior to the implementation of the Fee Schedule, CMS had “acknowledged the lack of consistency among localities and the significant demographic and economic changes that had occurred since the localities were originally established (61FR34615).” However, there was no plan for major changes until the fee schedule was fully implemented in 1996. During 1996, CMS proposed locality changes based on analyses from a study conducted by Health Economics Research (1995). One of the major goals of these changes was to “reduce the number of areas, leading to greater simplicity, understandability, ease of administration, reduction in urban/rural payment differences, reduction in payment differences among adjacent areas, and stability of payment updates resulting from the periodic GPCI revisions (61FR34616).” With one exception, the options that CMS considered retained the 22 statewide localities and, as CMS discussion of the non-selected options suggested, there was a preference for only allowing sub-state localities in the remaining 28 states when intrastate variation in the GAFs exceeded a specified threshold. The intrastate variation was measured across the existing localities as well as across MSAs.

The option that CMS chose used localities as the sub-state geographic building blocks. After ordering the localities from the higher to lowest GAF, CMS made the highest locality a separate fee schedule payment area if its GAF exceeded the weighted average of the remaining localities by 5 percent or more. They then made this same type of comparison for the locality with the second highest GAF and made it a separate payment area if its GAF exceeded the weighted average of the remaining localities by 5 percent or more. When a high GAF locality was compared to the remaining localities and the difference was less than 5 percent, it was included with the “rest of the state.” In cases where the highest-GAF locality in a state was less than 5 percent above the weighted average of the remaining localities in the state, CMS designated the state as a statewide locality.

This process led to a reduction in the number of localities from 210 to 89 (including 34 statewide localities); however, the magnitudes of the GAF changes were small. Specifically, in the 28 states that did not have statewide payment areas in 1996, the geographic area revision

changed GAFs in 154 out of 188 of the original payment localities; the average change in these 154 areas was less than 3 percent in the overall GAF.<sup>2</sup> Although the changes were small, this revision served to raise fees in lower cost areas and reduce them in higher cost areas of states. The result was that there were fewer localities, and smaller differences between GAFs at locality boundaries but, on a county-by-county basis, the accuracy of the GAFs to measure input prices fell by about 25 percent.

### 1.3.2 Recent Criticism of the Current Localities

CMS acknowledged that demographic and economic changes could require revisions in the fee schedule areas but, since 1997, has not made any further revisions in the locality configuration. The agency has pointed out that locality changes need to be made in a budget neutral manner and would create significant redistributive effects. Despite these potential effects, CMS has put forward several targeted locality revision options to address concerns raised by physicians from California and the California Medical Association. The central issue raised by California physicians is that county-level costs, in California and elsewhere, have changed over time and, as a result, there are several counties within the current set of localities that are significantly underpaid relative to the best available measures of their costs (Bentley and DeGhetaldi, 2006). Although the California Medical Association believes that CMS has the authority to adopt changes in the locality structure and avoid some redistributive effects, CMS does not believe that this is the case. In fact, in response to a proposed rule for 2006, the California Medical Association indicated that “a nationwide legislative solution that would provide additional funding is the only solution we are supporting at this time (70FR70151).”

The Government Accountability Office (GAO) also explored the issues related to payment localities because “concerns have been raised that the boundaries of some payment localities do not accurately address variations in physicians’ costs” (GAO, 2007). The three main components of the study were to: (1) review the development of the current localities, (2) assess how well the current configuration reflects variations in practice costs, and (3) evaluate alternative approaches to configuring localities. GAO created locality-level GAFs from data on the constituent counties and then compared the locality GAFs to the constituent counties’ GAFs to determine the magnitude of “payment differences.” The analysis concluded that over 50 percent of the current localities included counties for which the difference between the county’s costs and the geographic adjuster for the current locality was at least 5 percent. There were 447 counties in this situation, with a disproportionate number being in California, Georgia, Minnesota, Ohio, and Virginia. The last three of these states are statewide localities.

The GAO concludes that a common methodology should be used to configure and update physician payment localities and that the methodology needs to strike a balance between

---

<sup>2</sup> Health Care Financing Administration, “Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule for Calendar Year 1997; Proposed Rule,” *Federal Register* 61(128):34614-35662, July 2, 1996.

payment accuracy and administrative burden. GAO also recommends that CMS periodically (at least every ten years) review and, if necessary, update the locality configurations. In particular, the GAO does not believe that the current mix of statewide and multi-locality states is appropriate because it was not based on a uniform methodology that had been applied nationally. CMS agrees that a common methodology should be considered, but that the redistributive effects of locality revisions also warrant attention. CMS, however, does not support the idea of reviewing the localities at least every 10 years and, instead, would continue its approach of responding to concerns raised by interested parties or its own analysis.

Congress almost stepped into this issue when the House passed the Children’s Health and Medicare Protection Act of 2007 (H.R. 3162), but the bill was not passed by the Senate. Section 308 of H.R. 3162 stipulated that one of the proposed CMS options (July 12, 2007 Federal Register) be adopted for California for physician payments during CY 2008. The option would have applied a methodology similar to the one used in the 1997 locality revisions. However, instead of building new localities from existing localities, CMS would have used counties as the building blocks.<sup>3</sup> H.R. 3162 also required that CMS review and make revisions to payment localities prior to January 1, 2011. The bill allowed CMS to revise payment localities in single-locality as well as in multiple-locality states, but required that CMS use a common methodology to establish new localities in both instances.

#### 1.4 Methods and Data

Our analysis in Section 2 of this report focuses on the GAF. The GAF is a summary measure of geographic adjustments to physician payments in Medicare’s physician fee schedule. Physician fees are determined by the following equation:

$$\text{Fee}(i, j) = \text{CF} \times [\text{RVU}_w(i) \times \text{GPCI}_w(j) + \text{RVU}_{pe}(i) \times \text{GPCI}_{pe}(j) + \text{RVU}_m(i) \times \text{GPCI}_m(j)],$$

where

Fee(i, j) = fee for service i in area j,

CF = factor converting relative value units into dollars,

RVU<sub>w</sub>(i) = work relative value units (RVUs) for service i,

GPCI<sub>w</sub>(j) = work geographic practice cost index (GPCI) in area j,

RVU<sub>pe</sub>(i) = practice expense RVUs for service i,

GPCI<sub>pe</sub>(j) = practice expense GPCI in area j,

RVU<sub>m</sub>(i) = malpractice insurance RVUs for service i, and

GPCI<sub>m</sub>(j) = malpractice insurance GPCI for area j.

---

<sup>3</sup> CMS would have compared the highest-GAF county to the second highest and included them in the same locality if the difference between their GAFs was 5 percent or less. The third highest would then be compared to the highest-GAF county and included if its difference was 5 percent or less. This iterative process would continue until a county had a GAF difference that was more than 5 percent. When this occurred, that county would become the highest county in a new payment locality and the process would be repeated for all counties in the State.

As the formula above indicates, the geographic adjustment varies with each service's mix of work, practice expense, and malpractice RVUs. To create the GAF, the national practice cost shares for work, practice expense, and malpractice expense are substituted for any one service's RVUs. This creates an index with a national practice cost-weighted average of one that measures the "average" geographic adjustment for an area, and can be used to compare alternative geographic adjustments. The GAF, then, is given by the following formula:

$$\text{GAF} = \text{PRVU}_w \times \text{GPCI}_w(j) + \text{PRVU}_{pe} \times \text{GPCI}_{pe}(j) + \text{PRVU}_m \times \text{GPCI}_m(j),$$

where  $\text{PRVU}_w$ ,  $\text{PRVU}_{pe}$ , and  $\text{PRVU}_m$  are the national practice cost shares for work, practice expense, and malpractice expense, respectively, across all physician fee schedule services (the three shares sum to one).

RTI/UI used 2006 county-level GAFs to measure county-level physician practice costs. The county GAFs were provided to RTI by CMS. Values for many counties are identical in these data as the underlying Census wage or Department of Housing and Urban Development (HUD) rental data may have only been available at the MSA/state nonmetropolitan area level, not truly at the county level.

Census occupational wage data from the 2000 decennial census are used in the work and practice expense GPCIs. Census occupational wage data are available at the county level for only those counties that, in 2000, were part of consolidated metropolitan statistical areas (CMSAs). For metropolitan statistical areas (MSAs), occupational wage data are available for the MSA as a whole, but not for the individual counties that comprise them. Similarly, for state non-metropolitan areas, occupational wage data are available for the state non-metropolitan areas as a whole, but not for the individual counties that comprise them.

Not only are data not usually available at the county level, but the data used to measure cost differences among localities are proxies for physician work costs, employee compensation and office rents. That is, wage data for various categories of employees are used to proxy the actual wages of physician employees. Thus, the underlying data are proxies for actual costs, and the resulting GPCIs do not measure actual cost differences among localities.

In general, analyses were weighted by the county physician services RVUs that were provided by CMS. Contiguous counties were identified using a variable from the Health Resources and Services Administration's (HRSA's) Area Resource File.



## SECTION 2 ANALYSIS OF OPTIONS FOR LOCALITY CONFIGURATION

RTI/UI, working with CMS staff, agreed to examine selected locality options derived from three variants: (1) MSA-based localities, (2) grouping similar-cost counties within state, and (3) modifying the existing payment localities incrementally. All text tables are placed at the end of Section 2.

### 2.1 MSA-based localities

The Office of Management and Budget (OMB) uses Core-Based Statistical Areas (CBSAs) as an umbrella term encompassing Metropolitan Statistical Areas (MSAs) and Micropolitan Statistical Areas. Selected larger MSAs are divided into metropolitan divisions, which replace the previous concepts of Consolidated Metropolitan Statistical Areas (CMSAs) and Primary Metropolitan Statistical Areas (PMSAs). In this section, we consider the option of calculating GAFs for each metropolitan division; for each MSA that does not contain metropolitan divisions; and for each state nonmetropolitan area. Together, these three types of areas are exhaustive of all U.S. counties. We label this locality option “MSA-based localities”. Another major Medicare geographic payment adjuster, the Inpatient Prospective Payment System hospital wage index, uses this same MSA basis for its geographic payment areas.

RTI/UI considered two variants of MSA-based localities: one using the GAFs provided by CMS and the other using GAFs derived from geographic practice cost indices (GPCIs) in which the practice expense GPCI was derived using the Inpatient Prospective Payment System (IPPS) hospital wage index in place of the usual Census wage data. A total of 15 tables were produced for these two analyses. All areas analyzed are aggregations of counties. GAFs for larger areas such as MSAs or localities are weighted means of constituent county GAFs, where the weight is total RVUs by county.

#### 2.1.1 Using CMS county GAFs

We begin our analysis with a table listing all of the MSA-based GAFs. Then we explore MSA-based GAFs for two particular types of areas, large metropolitan areas that contain metropolitan divisions, and MSAs with GAFs below their state nonmetropolitan area GAF. Next we explain the format of, and show a partial version of, a lengthy appendix table that provides a detailed comparison by county of MSA-based GAFs with current locality GAFs. We then explore the largest differences between the MSA-based GAFs and the current locality GAFs, and the differences by level of urbanicity. We also investigate some properties of the MSA-based localities, such as the largest GAF differences across locality boundaries.

Table 1 is a list, for each state sorted alphabetically, of the GAFs of each of its metropolitan divisions, MSAs without metropolitan divisions, and non-metropolitan area. The MSA-wide GAFs for MSAs that cross state boundaries are shown for all states in which the MSA is located. There are 387 MSAs/metropolitan divisions and 51 non-metropolitan areas in the table, as compared to the 89 existing payment localities. The areas include the District of

Columbia, Puerto Rico, and U.S. possessions (Guam and the US Virgin Islands). Aside from Puerto Rico and U.S. possessions, the lowest GAFs are 0.8510 for the non-metropolitan area of North Dakota while the highest is 1.2580 for the San Jose-Sunnyvale-Santa Clara, CA MSA. Among the non-metropolitan state areas, the highest GAF of 1.0478 is for Alaska. Among the MSAs, the lowest GAF is 0.8568 for Hot Springs, AR.

Table 2 shows GAFs for the 29 metropolitan divisions. For comparative purposes, average MSA GAFs are also shown each of the eleven MSAs that contain metropolitan divisions, although these MSA GAFs are not used in the MSA-based locality alternative. Decomposing MSAs into metropolitan divisions allows for MSA payment variation within large MSAs that tracks cost differences. For example, within the Boston MSA, the GAFs range from 1.152 for the Boston-Quincy metropolitan division to 1.017 for the Rockingham County-Strafford County New Hampshire metropolitan division.

In general, physician practice costs may be expected to be at least as high in metropolitan areas as in adjacent nonmetropolitan areas. Table 3 shows 46 MSAs, however, that have a lower GAF than their state's non-metropolitan area GAF. The 46 MSAs are widely distributed throughout the country. The largest difference of 0.0738 is for Pittsfield, MA. If MSA-based GAFs were to be implemented, establishing the state nonmetropolitan area GAF as a floor for a state's MSA GAFs could be considered.

Table 4 compares the MSA-based GAF to the current locality GAF for parts of two states, California, and Georgia, where questions have been raised about the accuracy of the current locality GAF. The rightmost column of the table shows the percent difference between the MSA-based GAF and current locality-based GAF. A positive value in this column indicates that the MSA-based GAF is higher than the current locality-based GAF while a negative value indicates the opposite. For areas where all constituent counties have the same MSA- and current-locality-based GAFs, only the single GAF for the entire area is listed. Where this is not the case, GAFs for individual counties are shown. For example, in the case of the San Francisco-San Mateo-Redwood City, California metropolitan division, the three constituent counties are part of three different current localities, so GAFs are shown for all three counties. Appendix Table B contains a version of Table 4 for all states.

In California, moving from the current locality GAF to an MSA-based GAF would have a significant effect on the GAF of many counties. Among large urban areas, Los Angeles, Orange, and Alameda/Contra Costa (Oakland) counties are unaffected, and San Francisco, San Mateo, and Santa Clara (San Jose) counties are little affected, but Marin county north of San Francisco would gain 8.8 percent and San Diego county would gain 5.5 percent. Most counties in the current "rest of California" locality (which includes rural areas and many Central Valley cities) would see declines of around 5 percent in their payments. San Benito county, which would move from the current "rest of California" locality to the San Jose MSA would see an increase of 23.8 percent, and Santa Cruz would see an increase of 10.1 percent. By moving San Diego out of "rest of California" into its own MSA-based locality, its GAF of 1.0722 would be close to those of Los Angeles (1.0878), as compared to its current locality value of 1.0162.



In Georgia, the most significant effects of moving to MSA-based localities are in the Atlanta area. The Atlanta-Sandy Springs-Marietta, GA MSA is comprised of counties that belong to the current Atlanta payment locality and counties that are outside of the current locality. These two sets of counties are shown separately in Table 4. The GAF of the Atlanta MSA counties that are part of the current Atlanta locality is little changed by the MSA-based GAF. But the GAF of the Atlanta MSA counties that are not part of the current Atlanta locality rise by 11.8 percent under the MSA-based GAF.

Tables 5 and 6 identify the largest differences between the MSA-based and current locality GAFs on a national basis. Table 5 shows the 50 counties whose MSA GAF exceeds their current locality GAF by the largest percentage—listed in descending order of the percent difference. Table 6 shows the 50 counties whose current locality GAF exceeds their MSA GAF by the largest percentage—listed in descending order of the size of the difference.

The counties with the largest increases from the MSA-based GAF (Table 5) are outlying counties in large MSAs that are included in the current “rest of state” or other rural/small city localities. These outer ring MSA counties have experienced population growth and urbanization as large urban areas have expanded over time, and have been incorporated into MSAs. The current localities may reflect an earlier time period when these counties were essentially rural/small town. They are concentrated in a few states: Virginia, Illinois, Maryland, Michigan, Georgia, Missouri, and Texas. In the case of Virginia, for example, the counties are part of the current statewide Virginia locality but are now also part of the Washington DC MSA. In Georgia, the gaining counties are currently in the “Rest of Georgia” locality, but have become part of the Atlanta MSA.

The counties with the largest declines from the MSA-based GAF (Table 6) are typically nonmetropolitan counties that are part of urban or statewide current localities. Minnesota accounts for the largest number of counties with lower MSA-based GAFs, which is due to a lower GAF in nonmetropolitan Minnesota when the current statewide locality is replaced by MSAs and a state nonmetropolitan area.

Tables 7 and 8 show the largest differences between a county’s GAF and its MSA-based GAF. (The MSA-based GAF is an RVU-weighted average of the constituent county GAFs.) Table 7 of the counties whose MSA GAF most exceeds their county GAF is comprised largely of counties that were classified as nonmetropolitan for the purpose of collecting their wage data from the 2000 Decennial Census, but that were classified as metropolitan in the 2006 MSA definitions used for this report. Table 8 of the counties whose county GAF most exceeds their MSA GAF is comprised largely of nonmetropolitan counties with HUD rental values that are higher than the rental values of other nonmetropolitan counties in their state.

Table 9 shows the contiguous (adjacent) counties with the differences in their GAFs of 15 percent or greater, calculated using the MSA-based payment localities. In other words, Table 9 shows the largest GAF differences across MSA-based locality boundaries. For instance, with a difference of 30.4 percent, Merced and San Benito counties have the largest difference in

GAFs using MSA-based areas. Merced County is the sole county in the Merced MSA while San Benito County is one of the counties in San Jose-Sunnyvale-Santa Clara, CA MSA. The GAF for the Merced MSA is 0.9646 and the GAF for the San Jose-Sunnyvale-Santa Clara, CA MSA is 1.2580. Tied for the largest percent difference is the Merced and Santa Clara pair. Santa Clara County is also part of the San Jose-Sunnyvale-Santa Clara, CA MSA. The third largest difference of 30.3 percent is between Fresno County (Fresno MSA) and San Benito County. Overall, there are 19 pairs of counties that have a difference greater than or equal to 20 percent, 35 pairs that have a difference between 15 and 20 percent, and 277 pairs that have a difference of 10 to 15 percent (not shown in Table 9; a longer version of Table 9 showing the largest 500 boundary differences is included in Appendix Table C).

Table 10 summarizes differences between current locality GAFs and MSA GAFs by urbanicity. The urbanicity classification was derived from the U.S. Department of Agriculture’s 2003 Rural-Urban Continuum Areas (RUCA) codes, and is based on 2003 OMB MSA definitions. The MSA-based GAF for metropolitan areas is 0.6 percent higher than the current locality-based GAF, while it is 3.8 percent lower for non-metropolitan areas. Large metropolitan areas gain the most from MSA-based versus current localities, while the GAF declines in small metropolitan areas with MSA-based localities. Both the “adjacent” and the “not-adjacent” non-metropolitan areas have MSA-based GAFs that are about 3.8 percent lower than the current locality-based GAFs. Urban areas, especially large urban areas, gain when current statewide localities are broken up into higher-cost MSAs and lower-cost state nonmetropolitan areas. Conversely, nonmetropolitan areas lose in this process.

### **2.1.2 Using CMS hospital wage data instead of Census wage data in the practice expense GPCI**

The GAF analyzed in this section uses the IPPS hospital wage index in place of the Census wage data in the practice expense GPCI. The hospital wage data provide an alternative source for measuring the relative wages of nonphysician employees in physician offices. The Census wage data measure the all-industry wages of occupations typically employed in physician offices. The hospital wage data measure the wages of hospital employees. The purpose of our analysis is to compare the GAF for MSA-based localities when relative hospital wages versus relative all-industry Census wages are used in the practice expense GPCI. We refer to the GAF using relative Census wages in the practice expense GPCI as the “actual GAF” and the GAF using relative hospital wages in the practice expense GPCI as the “imputed GAF”.

The true pre-reclassified 100% occupationally-adjusted IPPS wage index for fiscal year 2007 was obtained from CMS. We mapped the hospital wage indices (HWI) to the constituent counties of each MSA and non-metropolitan area. The “revised 2005 rental index (RI)” locality-specific values in Addendum E of the August 5, 2004 Federal Register were also mapped to the constituent counties of each current physician payment locality. The practice expense GPCI was then imputed as follows:

$$\text{GPCI\_PE\_imp} = 0.428 \times \text{HWI} + 0.279 \times \text{RI} + 0.293 \times \text{SEM}$$

where SEM denotes “supplies, equipment, and miscellaneous” and was set equal to one for all counties. The weights were derived from the 2004-2006 practice cost “indices” in Table 5 of the August 5, 2004 Federal Register. The weight for each practice expense component is equal to its share (index value) divided by the overall practice expense share of 43.7 percent. By design, the weights sum to 1.0. GPCI\_PE\_imp was scaled to have the same RVU-weighted mean across counties as the practice expense GPCI (GPCIPE06) that CMS had supplied to RTI/UI. Finally, the GAF was imputed:

$$\text{GAF\_imp} = 0.52466 \times \text{GPCIW06} + 0.43669 \times \text{GPCI\_PE\_imp} + 0.038695 \times \text{GPCIMP06}$$

where GPCIW06 and GPCIMP06 are, respectively, the work and malpractice GPCIs that CMS had supplied to RTI/UI.

Table 11 compares the actual and imputed GAFs for large metropolitan areas that have metropolitan divisions. The imputed GAFs are lower than the actual GAFs for most of the areas, implying that use of hospital wages instead of Census wages would result in a reduction in payments for physician services provided in large metropolitan areas. The largest declines of about 6 percent are in the Washington DC area and in Essex county, Massachusetts (suburban Boston).

Table 12 compares the MSA-based actual and imputed GAFs for areas within each state. The MSA-wide GAFs for MSAs that cross state boundaries are shown in all states in which the MSA is located. There are 387 MSAs (including metropolitan divisions) and 51 non-metropolitan areas in the table. The areas include the District of Columbia, Puerto Rico, and U.S. possessions. For the most part, the differences between the two GAFs are relatively small, less than 5 percent. The largest differences and differences by urbanicity are shown in the next tables.

Table 13 shows the 10 MSA-based areas whose imputed GAFs exceed their actual GAFs by the largest percentage, listed in descending order of the percent difference. Six of the 10 areas are small MSAs or the nonmetropolitan part of California, implying that hospital wages are relatively higher than the all-industry Census wages in these parts of California. Two of the areas are in Minnesota, nonmetropolitan and a small city (St. Cloud).

Table 14 shows the nine MSA-based areas whose imputed GAFs are less than their actual GAFs by the largest percentage, listed in descending order of the percentage difference. Several of these MSAs are in the Washington DC area, several are in North Carolina, and several are in Puerto Rico. They are a mix of large and small MSAs and a nonmetropolitan area.

Table 15 summarizes differences between the MSA-based actual and imputed GAFs by urbanicity. The imputed GAF is 0.3 percent lower than the actual GAF for metropolitan areas overall, while it is 2.2 percent higher for non-metropolitan areas overall. Among metropolitan areas, large metropolitan areas lose from the imputed GAF, but medium and small metropolitan areas gain. Both “adjacent” and “not-adjacent” non-metropolitan areas gain from the imputed GAF. These results indicate that using relative hospital wages in the practice expense GPCI

instead of all-industry Census wages would tend to benefit smaller metropolitan areas and rural areas.

## 2.2 Localities that group counties with similar practice costs within state

An alternative to defining localities as MSAs is to create them from the smallest geographic unit for which unique GAFs are available: counties. County-based localities can result in payment areas with more homogeneous county GAFs than MSAs. In this section, we explore one specific method of creating localities from counties. In this method, counties within each state that have similar GAFs are grouped into the same locality. A locality's counties are not required to be contiguous to each other. All localities nationwide are redefined using this methodology.

**Methods.** Aside from the District of Columbia payment locality, none of the localities that were developed were allowed to cross state boundaries. Counties within a state were first sorted in descending order of their county GAFs. The county with the highest GAF became the first (seed) county in the first locality. The county with the next highest GAF in the state became a candidate county. If the candidate's GAF was within 5 percent of the seed county's GAF, then the candidate became part of the locality. The next candidate's GAF was then compared to the seed county's GAF. If the candidate's GAF was not within 5% of the seed county's GAF, then the candidate county became the seed county for a new locality. This was done iteratively until all the counties in a state were assigned to a payment locality.

**Results.** Table 16 shows the detailed results for California as a test case. The method created six California localities. The counties in each locality are listed in entry order (descending order of the county GAFs). Since the localities were constructed on the basis of similarities in the county GAFs, as expected, the range of county GAFs within the localities is relatively small. The largest range in county GAFs within the localities is only 5 percentage points (Locality 5).

Although the methodology does not require the counties within a locality to be contiguous, the counties comprising each of the first two localities are, in fact, contiguous. Both of these localities are in the greater San Francisco Bay area. The four counties in the first locality comprise the San Francisco/San Jose area (Santa Clara, San Mateo, San Francisco, and Marin) while the two counties in the second locality are in the Oakland area (Contra Costa and Alameda).

The nine counties in Locality 3 all border the Pacific Ocean or are part of the greater San Francisco Bay area. In Northern California, the three counties are Sonoma, Napa, and Solano. In Central California are Santa Cruz and Monterey counties. And in Southern California, the four counties are Orange, Los Angeles, San Diego, and Ventura. Within each of these three subareas, the counties happen to be contiguous.

Locality 4 is comprised of five counties in two subareas: Sacramento, El Dorado, and Placer counties in North/Central California and Santa Barbara and San Luis Obispo counties in California's Central Coast area. Within both subareas, the counties are contiguous.

Locality 5 is comprised of 17 counties, most of which are contiguous within the "Central Valley" part of the state. Locality 6 is comprised of 21 counties ranging from Imperial in the south (the only Southern California county in the locality) to the northern counties bordering Oregon and to most of the eastern counties that border Nevada.

Nationally, the use of this method resulted in 134 localities (Table 17), as compared to the 89 existing localities. In contrast to the Fiscal Year 2006 (FY06) localities in which there are 36 statewide localities (including Alaska, Hawaii, Puerto Rico, and the Virgin Islands), there are now only seven statewide localities (District of Columbia, Guam, Idaho, Montana, Nevada, Rhode Island, and the Virgin Islands). Idaho, Montana, Nevada, and Rhode Island are all FY06 statewide localities. (Note that Guam is part of the FY06 Hawaii locality.) California has the most localities with six, followed by five each in New York and Virginia.

This method can create multiple localities, and hence differences in payment, within MSAs, especially those that cross state lines. The configuration of some of this method's localities might not be desirable for other reasons. For instance, the DC locality does not include the Maryland and Virginia counties that are part of the FY06 locality. The results of the method could be modified to limit changes in current localities or to accommodate other exceptions.

## **2.3 Incremental modification of current localities**

Incremental changes may be able to achieve significant improvements to the current localities without creating the disruptions and redistributions (winners and losers) of wholesale changes in the localities. Two methods were used to "incrementally" modify current localities. The first method was applied to states where there are already multiple payment localities. The second method was applied to states where there is currently one "statewide" locality. In these approaches to altering or constructing payment localities, we require the counties to be contiguous.

### **2.3.1 Addition of counties to existing localities within multi-locality states**

**Methodology.** Counties contiguous to an existing locality in a multi-locality state were candidates to be added to it. To join a current locality (e.g., Atlanta, Georgia), the candidate's GAF had to be within 5% of the current locality's GAF. Only counties that are classified in the FY06 "Rest of State" localities were allowed to be candidates to be added to an existing locality. In addition, the candidate counties must be in the same state as the existing locality. The algorithm starts in descending order with the current locality that has the highest GAF. Finally, no changes to the District of Columbia's locality were permitted.

In this initial version of the methodology, simplifications were adopted to handle two potential complications. First, as the number of counties in the locality increases, the algorithm

does not include as candidates those counties that are not contiguous to the original locality but are contiguous to the newly added counties. Second, a candidate county could be contiguous to more than one current locality. In the algorithm, the candidate was added to the first locality in which the difference in their GAFs was less than 5 percent. The first locality in this instance refers to the current locality that has the highest GAF as the algorithm proceeds in descending order.

**Results.** Georgia was used as the test case (Table 18). In FY06, Georgia has two localities: Atlanta and the rest of the state. The current FY06 Atlanta locality consists of 15 counties of which all but one (Butts) have county GAFs of 1.04429; Butts' is 0.91841 (top half of Table 3). The weighted FY06 Atlanta locality GAF is 1.043996. As a result of implementing the algorithm to add contiguous counties that have GAFs within 5% of the existing locality's GAF, six counties (bottom half of Table 3) were added to the Atlanta locality. The GAF for Atlanta actually increased slightly by 0.0025% to 1.044022 as a result of adding the six counties. The reason is that the county GAFs of the newly added counties are all equal to 1.04429, which is slightly higher than the FY06 locality's GAF. (Of the 21 counties in the reconfigured Atlanta locality, all but one (Butts) were in the 1999 Atlanta MSA, the geographic definition underlying the 2006 GAF data. All counties in the 1999 MSAs have the same GAFs.)

The GAF for the rest of state locality, prior to the shifting of the six counties to Atlanta, was 0.93307. After removing the six counties added to Atlanta, the GAF for the rest of state locality fell to 0.92631, a reduction of 0.724% (Table 19).

Nationally, the use of this method resulted in adding 49 counties to existing FY06 localities in currently multi-locality states (Table 19). There is an entry for each locality (including Rest of State) in states that have multiple localities. The Locality Number is the same one that is shown in the Federal Register (i.e., Final Rule published on November 21, 2005) and the Fee Schedule Area names are also the same as published in the Federal Register except "Rest of State" is used instead of "Rest of state name". The counties belonging to the FY06 localities are shown in the "Existing Counties" column while the counties added to the locality are shown in the following column. The next column shows the county GAFs of the added counties. Since the county GAFs of the entrants might differ, each entrant county is shown on a separate line. The next two columns show locality GAFs. For the incumbent counties, the "Old" GAF is the GAF prior to any entry and the "New" GAF is the post-entry GAF. For entering counties, the "Old" GAF is the GAF of the locality to which the entrant belonged prior to moving and the "New" GAF is the post-entry GAF of the locality that it entered. The final column shows the percent change between the Old and New GAFs. GAFs are not shown for localities that do not have entrants.

To illustrate Table 19, two example localities—Los Angeles and Ventura—from California are discussed. Since there were no entrants to the Los Angeles locality, the entry for the "Added Contiguous Counties" column is "none" and no GAFs are shown in the next three columns. Santa Barbara and San Luis Obispo counties are entrants to the Ventura locality. Ventura's pre-entry GAF is 1.08139 and its post-entry GAF is 1.06001, a decrease of 2%. With

county GAFs of 1.05158 and 1.02814, respectively, for Santa Barbara and San Luis Obispo counties, they qualified to enter the Ventura locality. Since they each received the Rest of State GAF prior to entry, they would experience a 4.3% increase in payments by entering the Ventura locality.

The number of counties added to a locality ranged from 1 to 6, with the most counties being added to the Atlanta, Georgia locality. The state that had the most counties added to existing localities was Texas with 16 counties added to five localities (Austin, Beaumont, Dallas, Fort Worth, and Houston). States that did not have any counties moved from one locality to another included Michigan, New York, and Pennsylvania.

Except for the states in which no counties changed localities, the GAFs for the Rest of State areas all fell, ranging from -4.8% (Maryland) to -0.01% (Florida and Louisiana). The changes in the locality GAFs other than Rest of State ranged from -2.0% for California localities 26 (Orange county) and 17 (Ventura county) to +0.002% for Georgia Locality 01 (Atlanta). The changes in the GAFs for the counties that entered a locality ranged from 0.6% for entrants to Texas locality 20 (Beaumont) to 15.2% for McHenry County that entered Illinois locality 15 (Suburban Chicago).

Some counties that have county GAFs that are significantly higher than the Rest of State current GAFs did not qualify for entry into an existing locality because their county GAFs were not within 5% of the existing contiguous localities. Santa Cruz (California) is one such example. Its county GAF of 1.12 is 10.1% higher than the California Rest of State existing GAF of 1.02. However, Santa Cruz's county GAF was not within 5% of the GAFs of the two localities to which it is contiguous: Santa Clara county's locality GAF is 1.26 and San Mateo county's locality GAF is also 1.26. If the methodology had allowed the number of contiguous counties to increase as counties were added to a locality, then both Monterey County (GAF = 1.08) and Santa Cruz County would have been added to the expanded Ventura locality.

### **2.3.2 Creation of sub-state localities in states that are currently statewide localities**

**Methodology.** Counties whose GAFs differ by at least 5% from the statewide GAF are "pulled out" to create sub-state localities. Since county GAFs might differ by more than 5% above and below the statewide GAF, both high- and low-GAF counties were identified and then used as building blocks for configuring sub-state localities. For some states, this might lead to division into three areas: high GAF, middle GAF, and low GAF. Unlike counties in the high- and low-GAF areas, *the counties in the middle-GAF area remain together as one locality.* Counties remaining within the middle-GAF localities are not required to be contiguous.

**High-GAF Localities.** To construct new localities from the high-GAF counties that are pulled out, the counties were sorted in descending order of their GAFs. The county with the highest GAF was used as a seed county in constructing localities. Counties to be included with the seed county had to be contiguous to the seed county. These candidates were then combined with the seed county if their GAF was within 5% of the seed county's GAF. The number of contiguous counties was allowed to increase as the number of counties in the locality increased.

That is, counties that were not contiguous to the seed county but were contiguous to counties added to the locality were allowed to become candidates.

Once there were no more contiguous counties that had a GAF within 5% of the seed county, the unassigned county with the highest GAF became the seed county for another locality. The process was continued until every high-GAF county was assigned to a sub-state locality. Since the algorithm required that localities must have contiguous counties, it is possible that some localities consisted of only one county.

**Low-GAF Localities.** The construction of localities from low-GAF counties was the mirror process of the high-GAF localities. The counties were sorted in ascending order of their GAFs. The county with the lowest GAF was used as a seed county in constructing localities. To be candidates for inclusion with the seed county, counties had to be contiguous to the seed county. These candidates were then combined with the seed county if their GAF was within 5% of the seed county's GAF.

**Results.** Of the 36 states listed in Table 20, 17 remain as statewide localities: Alabama, Alaska, Hawaii/Guam, Idaho, Indiana, Iowa, Montana, Nevada, North Dakota, Oklahoma, Puerto Rico, Rhode Island, South Carolina, South Dakota, Vermont, Virgin Islands, and Wyoming. To help readily recognize them in Table 20, the phrase "Still Statewide" is used in the "State Fee Schedule Area" column and their statewide GAF is listed only in the "Old (Statewide GAF)" column.

The other 19 states were disaggregated into 54 payment localities: 23 payment localities were comprised of low-GAF counties, 12 were comprised of high-GAF counties, and the remaining 19 were comprised of middle-GAF counties. Each of these states is subdivided into numbered "State Fee Schedule Areas". Their constituent counties are listed as well as the GAF-Type Area (low, middle, or high) into which they have been classified, their Old (Statewide) GAF, the New GAF (a weighted average of GAFs for the counties comprising the area), and the percent change between the old statewide GAF and the new GAF. For instance, two payment areas were created for Arizona, a low-GAF area in which the new GAF of 0.92865 is 6.3 percent less than the old statewide GAF of 0.99080. The remaining counties in Arizona comprised the Rest of State locality; the locality GAF for these counties increased by 0.8 percent. When a state has multiple localities, the Rest of State locality is listed last and usually has the most counties. (Our algorithm currently does not automatically assign locality numbers from high to low or any other consistent standard. This is because not all states have low-, middle-, and high-GAF areas.)

Because counties in the middle-GAF area are not required to be contiguous, the counties in several of the middle-GAF payment localities are, in fact, not contiguous. For example, the nine middle-GAF counties of Adams, Buffalo, Cass, Dakota, Douglas, Hall, Lancaster, Sarpy, and Washington in Nebraska are located in three different areas within the state. Dakota County is located in northeastern Nebraska as part of the Sioux City MSA. Buffalo, Hall, and Adams counties form a contiguous block in south-central Nebraska, while the other five form a contiguous block in eastern Nebraska. Of the other four states that we examined, the middle-



GAF counties in three (Tennessee, Utah, and Virginia) were also not all contiguous, while Minnesota's middle-GAF area has only one county (Olmsted, where Rochester is located).

In Arkansas, Mississippi, Kentucky, and West Virginia, there is only one county comprising the high-GAF area. In all four cases, these single-county localities are part of an MSA whose core counties are located in another state. Similarly, the only two high-GAF counties in Wisconsin (St. Croix and Pierce) are part of the Minneapolis and St. Paul, Minnesota MSA.

Five states have a single county in their low-GAF payment area: Connecticut, Delaware, Kentucky, New Hampshire, and North Carolina. It is not obvious what, if any, commonalities exist in these five cases. In Delaware and New Hampshire, the low-GAF county is the most isolated county in the state. This is not true in the other three cases. Indeed, the Kentucky low-GAF county (Pendleton) is part of the Cincinnati MSA. Low HUD Fair Market Rental values may be contributing to the low GAF values in these counties.

In some states, there are multiple low-GAF payment localities. The GAFs of the low-GAF localities are similar within each of these states. The reason that they are separate localities instead of one is because of the requirement that the counties in the low-GAF payment areas must be contiguous. This explains why Box Elder (Utah), Johnson (Tennessee), and Louisa (Virginia) are their own payment localities. They are separated from other low-GAF counties by middle- and high-GAF counties.

Aside from the Arkansas, Mississippi, Kentucky, and West Virginia high-GAF payment localities already discussed, there are only seven high-GAF payment localities. All but one of these areas—Santa Fe and Los Alamos counties in New Mexico—is centered in a large metropolitan area. In Colorado, the high-GAF payment locality is comprised of the Denver City/County. In Kansas, the four counties belonging to the Kansas City MSA comprise a payment locality. The counties belonging to the Twin Cities MSA in Minnesota all form part of the high-GAF payment locality. All six counties of the Raleigh-Durham-Chapel Hill MSAs form the high-GAF locality in North Carolina. Only Virginia has two high-GAF payment localities; both are in northern part of the state. All counties in the two localities were part of the 1999 Washington DC CMSA. Manassas and Fredericksburg cities and Prince William, Loudon, Fauquier, and Stafford counties comprise one payment locality with a new GAF of 1.07 that is 12.1% higher than the current statewide GAF. The other high-GAF payment locality is Spotsylvania County. Its GAF of 1.02 wasn't sufficiently high to be combined with the other high-GAF counties.

**Table 1**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	MSA/Metro division name	GAF
<b>ALABAMA</b>			
11500		Anniston-Oxford, AL	0.8819
12220		Auburn-Opelika, AL	0.9013
13820		Birmingham-Hoover, AL	0.9381
17980		Columbus, GA-AL	0.9202
19460		Decatur, AL	0.9067
20020		Dothan, AL	0.8891
22520		Florence-Muscle Shoals, AL	0.8905
23460		Gadsden, AL	0.8812
26620		Huntsville, AL	0.9426
33660		Mobile, AL	0.9039
33860		Montgomery, AL	0.9204
46220		Tuscaloosa, AL	0.9195
999AL		Non-metropolitan Areas in AL	0.8768
<b>ALASKA</b>			
11260		Anchorage, AK	1.0515
21820		Fairbanks, AK	1.0321
999AK		Non-metropolitan Areas in AK	1.0478
<b>ARIZONA</b>			
22380		Flagstaff, AZ	0.9961
38060		Phoenix-Mesa-Scottsdale, AZ	1.0097
39140		Prescott, AZ	0.9329
46060		Tucson, AZ	0.9616
49740		Yuma, AZ	0.9480
999AZ		Non-metropolitan Areas in AZ	0.9798
<b>ARKANSAS</b>			
22220		Fayetteville-Springdale-Rogers, AR-MO	0.8899
22900		Fort Smith, AR-OK	0.8833
26300		Hot Springs, AR	0.8568
27860		Jonesboro, AR	0.8778
30780		Little Rock-North Little Rock, AR	0.9197
32820		Memphis, TN-MS-AR	0.9527
38220		Pine Bluff, AR	0.9108
45500		Texarkana, TX-Texarkana, AR	0.9157
999AR		Non-metropolitan Areas in AR	0.8515
<b>CALIFORNIA</b>			
12540		Bakersfield, CA	0.9766
17020		Chico, CA	0.9611
20940		El Centro, CA	0.9467

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	MSA/Metro division name	GAF
CALIFORNIA (continued)			
23420		Fresno, CA	0.9653
25260		Hanford-Corcoran, CA	0.9437
31100	31084	Los Angeles-Long Beach-Glendale, CA	1.0878
31100	42044	Santa Ana-Anaheim-Irvine, CA	1.1194
31460		Madera, CA	0.9653
32900		Merced, CA	0.9646
33700		Modesto, CA	0.9920
34900		Napa, CA	1.0996
37100		Oxnard-Thousand Oaks-Ventura, CA	1.0814
39820		Redding, CA	0.9449
40140		Riverside-San Bernardino-Ontario, CA	0.9952
40900		Sacramento-Arden-Arcade-Roseville, CA	1.0542
41500		Salinas, CA	1.0840
41740		San Diego-Carlsbad-San Marcos, CA	1.0722
41860	36084	Oakland-Fremont-Hayward, CA	1.1755
41860	41884	San Francisco-San Mateo-Redwood City, CA	1.2502
41940		San Jose-Sunnyvale-Santa Clara, CA	1.2580
42020		San Luis Obispo-Paso Robles, CA	1.0281
42060		Santa Barbara-Santa Maria, CA	1.0516
42100		Santa Cruz-Watsonville, CA	1.1191
42220		Santa Rosa-Petaluma, CA	1.0987
44700		Stockton, CA	1.0092
46700		Vallejo-Fairfield, CA	1.0865
47300		Visalia-Porterville, CA	0.9593
49700		Yuba City, CA	0.9509
999CA		Non-metropolitan Areas in CA	0.9565
COLORADO			
14500		Boulder, CO	1.0302
17820		Colorado Springs, CO	0.9617
19740		Denver-Aurora, CO	1.0361
22660		Fort Collins-Loveland, CO	0.9635
24300		Grand Junction, CO	0.9161
24540		Greeley, CO	0.9690
39380		Pueblo, CO	0.9246
999CO		Non-metropolitan Areas in CO	0.9275

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	MSA/Metro division name	GAF
<b>CONNECTICUT</b>			
14860		Bridgeport-Stamford-Norwalk, CT	1.1284
25540		Hartford-West Hartford-East Hartford, CT	1.0645
35300		New Haven-Milford, CT	1.0870
35980		Norwich-New London, CT	1.0587
999CT		Non-metropolitan Areas in CT	1.0364
<b>DELAWARE</b>			
20100		Dover, DE	0.9732
37980	48864	Wilmington, DE-MD-NJ	1.0409
999DE		Non-metropolitan Areas in DE	0.9602
<b>DISTRICT OF COLUMBIA</b>			
47900	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214
<b>FLORIDA</b>			
15980		Cape Coral-Fort Myers, FL	0.9637
19660		Deltona-Daytona Beach-Ormond Beach, FL	0.9401
23020		Fort Walton Beach-Crestview-Destin, FL	0.9346
23540		Gainesville, FL	0.9436
27260		Jacksonville, FL	0.9754
29460		Lakeland, FL	0.9283
33100	22744	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL	1.0297
33100	33124	Miami-Miami Beach-Kendall, FL	1.0608
33100	48424	West Palm Beach-Boca Raton-Boynton Beach, FL	1.0342
34940		Naples-Marco Island, FL	1.0066
36100		Ocala, FL	0.9301
36740		Orlando-Kissimmee, FL	0.9975
37340		Palm Bay-Melbourne-Titusville, FL	0.9623
37460		Panama City-Lynn Haven, FL	0.9282
37860		Pensacola-Ferry Pass-Brent, FL	0.9244
38940		Port St. Lucie-Fort Pierce, FL	0.9766
39460		Punta Gorda, FL	0.9548
42260		Sarasota-Bradenton-Venice, FL	0.9757
42680		Sebastian-Vero Beach, FL	0.9566
45220		Tallahassee, FL	0.9666
45300		Tampa-St. Petersburg-Clearwater, FL	0.9897
999FL		Non-metropolitan Areas in FL	0.9287
<b>GEORGIA</b>			
10500		Albany, GA	0.9201
12020		Athens-Clarke County, GA	0.9289
12060		Atlanta-Sandy Springs-Marietta, GA	1.0429

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	MSA/Metro division name	GAF
GEORGIA (continued)			
12260		Augusta-Richmond County, GA-SC	0.9518
15260		Brunswick, GA	0.9187
16860		Chattanooga, TN-GA	0.9307
17980		Columbus, GA-AL	0.9202
19140		Dalton, GA	0.9095
23580		Gainesville, GA	0.9251
25980		Hinesville-Fort Stewart, GA	0.9099
31420		Macon, GA	0.9477
40660		Rome, GA	0.9050
42340		Savannah, GA	0.9498
46660		Valdosta, GA	0.9125
47580		Warner Robins, GA	0.9483
999GA		Non-metropolitan Areas in GA	0.9059
GUAM			
999GU		Non-metropolitan Areas in GU	1.0748
HAWAII			
26180		Honolulu, HI	1.0447
999HI		Non-metropolitan Areas in HI	1.0346
IDAHO			
14260		Boise City-Nampa, ID	0.9240
17660		Coeur d'Alene, ID	0.9014
26820		Idaho Falls, ID	0.8920
30300		Lewiston, ID-WA	0.8938
30860		Logan, UT-ID	0.9014
38540		Pocatello, ID	0.8832
999ID		Non-metropolitan Areas in ID	0.8817
ILLINOIS			
14060		Bloomington-Normal, IL	0.9610
16580		Champaign-Urbana, IL	0.9464
16980	16974	Chicago-Naperville-Joliet, IL	1.0973
16980	29404	Lake County-Kenosha County, IL-WI	1.0701
19180		Danville, IL	0.8979
19340		Davenport-Moline-Rock Island, IA-IL	0.9262
19500		Decatur, IL	0.9287
28100		Kankakee-Bradley, IL	0.9717
37900		Peoria, IL	0.9570
40420		Rockford, IL	0.9645
41180		St. Louis, MO-IL	0.9825
44100		Springfield, IL	0.9671
999IL		Non-metropolitan Areas in IL	0.8958

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	MSA/Metro division name	GAF
<b>INDIANA</b>			
11300		Anderson, IN	0.9516
14020		Bloomington, IN	0.9066
16980	23844	Gary, IN	0.9576
17140		Cincinnati-Middletown, OH-KY-IN	0.9827
18020		Columbus, IN	0.9058
21140		Elkhart-Goshen, IN	0.9280
21780		Evansville, IN-KY	0.9010
23060		Fort Wayne, IN	0.9219
26900		Indianapolis-Carmel, IN	0.9512
29020		Kokomo, IN	0.9307
29140		Lafayette, IN	0.9200
31140		Louisville-Jefferson County, KY-IN	0.9431
33140		Michigan City-La Porte, IN	0.8964
34620		Muncie, IN	0.9055
43780		South Bend-Mishawaka, IN-MI	0.9353
45460		Terre Haute, IN	0.8862
999IN		Non-metropolitan Areas in IN	0.8936
<b>IOWA</b>			
11180		Ames, IA	0.8844
16300		Cedar Rapids, IA	0.9242
19340		Davenport-Moline-Rock Island, IA-IL	0.9262
19780		Des Moines-West Des Moines, IA	0.9509
20220		Dubuque, IA	0.8887
26980		Iowa City, IA	0.9320
36540		Omaha-Council Bluffs, NE-IA	0.9382
43580		Sioux City, IA-NE-SD	0.9041
47940		Waterloo-Cedar Falls, IA	0.9040
999IA		Non-metropolitan Areas in IA	0.8720
<b>KANSAS</b>			
28140		Kansas City, MO-KS	0.9780
29940		Lawrence, KS	0.9055
41140		St. Joseph, MO-KS	0.8927
45820		Topeka, KS	0.9173
48620		Wichita, KS	0.9377
999KS		Non-metropolitan Areas in KS	0.8683
<b>KENTUCKY</b>			
14540		Bowling Green, KY	0.8910
17140		Cincinnati-Middletown, OH-KY-IN	0.9827
17300		Clarksville, TN-KY	0.8935

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	MSA/Metro division name	GAF
21780		Evansville, IN-KY	0.9010
26580		Huntington-Ashland, WV-KY-OH	0.9305
30460		Lexington-Fayette, KY	0.9350
31140		Louisville-Jefferson County, KY-IN	0.9431
36980		Owensboro, KY	0.8908
999KY		Non-metropolitan Areas in KY	0.8836
<b>LOUISIANA</b>			
10780		Alexandria, LA	0.9075
12940		Baton Rouge, LA	0.9333
26380		Houma-Bayou Cane-Thibodaux, LA	0.9061
29180		Lafayette, LA	0.9054
29340		Lake Charles, LA	0.9242
33740		Monroe, LA	0.9147
35380		New Orleans-Metairie-Kenner, LA	0.9726
43340		Shreveport-Bossier City, LA	0.9272
999LA		Non-metropolitan Areas in LA	0.8943
<b>MAINE</b>			
12620		Bangor, ME	0.9178
30340		Lewiston-Auburn, ME	0.9156
38860		Portland-South Portland-Biddeford, ME	0.9788
999ME		Non-metropolitan Areas in ME	0.9124
<b>MARYLAND</b>			
12580		Baltimore-Towson, MD	1.0401
19060		Cumberland, MD-WV	0.9133
25180		Hagerstown-Martinsburg, MD-WV	0.9443
37980	48864	Wilmington, DE-MD-NJ	1.0409
41540		Salisbury, MD	0.9493
47900	13644	Bethesda-Gaithersburg-Frederick, MD	1.1131
47900	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214
999MD		Non-metropolitan Areas in MD	0.9568
<b>MASSACHUSETTS</b>			
12700		Barnstable Town, MA	1.0424
14460	14484	Boston-Quincy, MA	1.1522
14460	15764	Cambridge-Newton-Framingham, MA	1.1429
14460	21604	Essex County, MA	1.1128
38340		Pittsfield, MA	0.9728
39300		Providence-New Bedford-Fall River, RI-MA	1.0205

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	MSA/Metro division name	GAF
<b>MASSACHUSETTS (continued)</b>			
44140		Springfield, MA	0.9900
49340		Worcester, MA	1.0439
999MA		Non-metropolitan Areas in MA	1.0466
<b>MICHIGAN</b>			
11460		Ann Arbor, MI	1.0935
12980		Battle Creek, MI	0.9870
13020		Bay City, MI	0.9832
19820	19804	Detroit-Livonia-Dearborn, MI	1.1162
19820	47644	Warren-Troy-Farmington Hills, MI	1.1024
22420		Flint, MI	1.0043
24340		Grand Rapids-Wyoming, MI	0.9924
26100		Holland-Grand Haven, MI	0.9960
27100		Jackson, MI	0.9829
28020		Kalamazoo-Portage, MI	0.9870
29620		Lansing-East Lansing, MI	1.0042
33780		Monroe, MI	1.0307
34740		Muskegon-Norton Shores, MI	0.9960
35660		Niles-Benton Harbor, MI	0.9630
40980		Saginaw-Saginaw Township North, MI	0.9832
43780		South Bend-Mishawaka, IN-MI	0.9353
999MI		Non-metropolitan Areas in MI	0.9457
<b>MINNESOTA</b>			
20260		Duluth, MN-WI	0.9101
22020		Fargo, ND-MN	0.9143
24220		Grand Forks, ND-MN	0.9063
29100		La Crosse, WI-MN	0.9097
33460		Minneapolis-St. Paul-Bloomington, MN-WI	1.0316
40340		Rochester, MN	0.9804
41060		St. Cloud, MN	0.9105
999MN		Non-metropolitan Areas in MN	0.8851
<b>MISSISSIPPI</b>			
25060		Gulfport-Biloxi, MS	0.9217
25620		Hattiesburg, MS	0.8690
27140		Jackson, MS	0.9378
32820		Memphis, TN-MS-AR	0.9527
37700		Pascagoula, MS	0.9200
999MS		Non-metropolitan Areas in MS	0.8720

(continued)



**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	MSA/Metro division name	GAF
<b>MISSOURI</b>			
17860		Columbia, MO	0.9168
22220		Fayetteville-Springdale-Rogers, AR-MO	0.8899
27620		Jefferson City, MO	0.8745
27900		Joplin, MO	0.8716
28140		Kansas City, MO-KS	0.9780
41140		St. Joseph, MO-KS	0.8927
41180		St. Louis, MO-IL	0.9825
44180		Springfield, MO	0.8958
999MO		Non-metropolitan Areas in MO	0.8686
<b>MONTANA</b>			
13740		Billings, MT	0.9212
24500		Great Falls, MT	0.9156
33540		Missoula, MT	0.9090
999MT		Non-metropolitan Areas in MT	0.8975
<b>NEBRASKA</b>			
30700		Lincoln, NE	0.9156
36540		Omaha-Council Bluffs, NE-IA	0.9382
43580		Sioux City, IA-NE-SD	0.9041
999NE		Non-metropolitan Areas in NE	0.8571
<b>NEVADA</b>			
16180		Carson City, NV	0.9922
29820		Las Vegas-Paradise, NV	1.0203
39900		Reno-Sparks, NV	1.0183
999NV		Non-metropolitan Areas in NV	0.9996
<b>NEW HAMPSHIRE</b>			
14460	40484	Rockingham County-Strafford County, NH	1.0169
31700		Manchester-Nashua, NH	1.0376
999NH		Non-metropolitan Areas in NH	0.9697
<b>NEW JERSEY</b>			
10900		Allentown-Bethlehem-Easton, PA-NJ	0.9924
12100		Atlantic City, NJ	1.0509
35620	20764	Edison, NJ	1.1115
35620	35084	Newark-Union, NJ-PA	1.1182
35620	35644	New York-White Plains-Wayne, NY-NJ	1.1526
36140		Ocean City, NJ	1.0332
37980	15804	Camden, NJ	1.0639

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	MSA/Metro division name	GAF
NEW JERSEY (continued)			
37980	48864	Wilmington, DE-MD-NJ	1.0409
45940		Trenton-Ewing, NJ	1.1230
47220		Vineland-Millville-Bridgeton, NJ	1.0219
NEW MEXICO			
10740		Albuquerque, NM	0.9588
22140		Farmington, NM	0.8880
29740		Las Cruces, NM	0.9027
42140		Santa Fe, NM	1.0141
999NM		Non-metropolitan Areas in NM	0.8940
NEW YORK			
10580		Albany-Schenectady-Troy, NY	0.9692
13780		Binghamton, NY	0.9238
15380		Buffalo-Niagara Falls, NY	0.9552
21300		Elmira, NY	0.9109
24020		Glens Falls, NY	0.9322
27060		Ithaca, NY	0.9432
28740		Kingston, NY	0.9765
35620	35004	Nassau-Suffolk, NY	1.1974
35620	35644	New York-White Plains-Wayne, NY-NJ	1.1526
39100		Poughkeepsie-Newburgh-Middletown, NY	1.0653
40380		Rochester, NY	0.9630
45060		Syracuse, NY	0.9537
46540		Utica-Rome, NY	0.9195
999NY		Non-metropolitan Areas in NY	0.9268
NORTH CAROLINA			
11700		Asheville, NC	0.9227
15500		Burlington, NC	0.9449
16740		Charlotte-Gastonia-Concord, NC-SC	0.9670
20500		Durham, NC	0.9961
22180		Fayetteville, NC	0.9094
24140		Goldsboro, NC	0.9082
24660		Greensboro-High Point, NC	0.9403
24780		Greenville, NC	0.9301
25860		Hickory-Lenoir-Morganton, NC	0.9086
27340		Jacksonville, NC	0.8725
39580		Raleigh-Cary, NC	0.9992
40580		Rocky Mount, NC	0.9017
47260		Virginia Beach-Norfolk-Newport News, VA-NC	0.9566

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	CBSA/Metro division name	GAF
NORTH CAROLINA (continued)			
48900		Wilmington, NC	0.9403
49180		Winston-Salem, NC	0.9449
999NC		Non-metropolitan Areas in NC	0.9038
NORTH DAKOTA			
13900		Bismarck, ND	0.8962
22020		Fargo, ND-MN	0.9143
24220		Grand Forks, ND-MN	0.9063
999ND		Non-metropolitan Areas in ND	0.8510
OHIO			
10420		Akron, OH	0.9792
15940		Canton-Massillon, OH	0.9325
17140		Cincinnati-Middletown, OH-KY-IN	0.9827
17460		Cleveland-Elyria-Mentor, OH	1.0076
18140		Columbus, OH	0.9820
19380		Dayton, OH	0.9667
26580		Huntington-Ashland, WV-KY-OH	0.9305
30620		Lima, OH	0.9203
31900		Mansfield, OH	0.9079
37620		Parkersburg-Marietta-Vienna, WV-OH	0.9309
41780		Sandusky, OH	0.9155
44220		Springfield, OH	0.9673
45780		Toledo, OH	0.9530
48260		Weirton-Steubenville, WV-OH	0.9149
48540		Wheeling, WV-OH	0.9071
49660		Youngstown-Warren-Boardman, OH-PA	0.9310
999OH		Non-metropolitan Areas in OH	0.9142
OKLAHOMA			
22900		Fort Smith, AR-OK	0.8833
30020		Lawton, OK	0.8817
36420		Oklahoma City, OK	0.9016
46140		Tulsa, OK	0.9127
999OK		Non-metropolitan Areas in OK	0.8566
OREGON			
13460		Bend, OR	0.9272
18700		Corvallis, OR	0.9385
21660		Eugene-Springfield, OR	0.9394
32780		Medford, OR	0.9303
38900		Portland-Vancouver-Beaverton, OR-WA	1.0023
41420		Salem, OR	0.9651
999OR		Non-metropolitan Areas in OR	0.9114

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	CBSA/Metro division name	GAF
<b>PENNSYLVANIA</b>			
10900		Allentown-Bethlehem-Easton, PA-NJ	0.9924
11020		Altoona, PA	0.9073
21500		Erie, PA	0.9126
25420		Harrisburg-Carlisle, PA	0.9742
27780		Johnstown, PA	0.9022
29540		Lancaster, PA	0.9570
30140		Lebanon, PA	0.9742
35620	35084	Newark-Union, NJ-PA	1.1182
37980	37964	Philadelphia, PA	1.0681
38300		Pittsburgh, PA	0.9583
39740		Reading, PA	0.9585
42540		Scranton--Wilkes-Barre, PA	0.9330
44300		State College, PA	0.9294
48700		Williamsport, PA	0.9201
49620		York-Hanover, PA	0.9502
49660		Youngstown-Warren-Boardman, OH-PA	0.9310
999PA		Non-metropolitan Areas in PA	0.9175
<b>PUERTO RICO</b>			
10380		Aguadilla-Isabela-San Sebastián, PR	0.7537
21940		Fajardo, PR	0.7929
25020		Guayama, PR	0.7466
32420		Mayagüez, PR	0.7674
38660		Ponce, PR	0.7668
41900		San Germán-Cabo Rojo, PR	0.7659
41980		San Juan-Caguas-Guaynabo, PR	0.7987
49500		Yauco, PR	0.7610
999PR		Non-metropolitan Areas in PR	0.7466
<b>RHODE ISLAND</b>			
39300		Providence-New Bedford-Fall River, RI-MA	1.0205
<b>SOUTH CAROLINA</b>			
11340		Anderson, SC	0.9294
12260		Augusta-Richmond County, GA-SC	0.9518
16700		Charleston-North Charleston, SC	0.9264
16740		Charlotte-Gastonia-Concord, NC-SC	0.9670
17900		Columbia, SC	0.9337
22500		Florence, SC	0.8999
24860		Greenville, SC	0.9276
34820		Myrtle Beach-Conway-North Myrtle Beach, SC	0.9073
43900		Spartanburg, SC	0.9294
44940		Sumter, SC	0.8862
999SC		Non-metropolitan Areas in SC	0.9000

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	CBSA/Metro division name	GAF
<b>SOUTH DAKOTA</b>			
39660		Rapid City, SD	0.8948
43580		Sioux City, IA-NE-SD	0.9041
43620		Sioux Falls, SD	0.9185
999SD		Non-metropolitan Areas in SD	0.8537
<b>TENNESSEE</b>			
16860		Chattanooga, TN-GA	0.9307
17300		Clarksville, TN-KY	0.8935
17420		Cleveland, TN	0.8806
27180		Jackson, TN	0.9114
27740		Johnson City, TN	0.8951
28700		Kingsport-Bristol-Bristol, TN-VA	0.8950
28940		Knoxville, TN	0.9159
32820		Memphis, TN-MS-AR	0.9527
34100		Morristown, TN	0.8753
34980		Nashville-Davidson--Murfreeseboro, TN	0.9529
999TN		Non-metropolitan Areas in TN	0.8773
<b>TEXAS</b>			
10180		Abilene, TX	0.9110
11100		Amarillo, TX	0.9262
12420		Austin-Round Rock, TX	1.0228
13140		Beaumont-Port Arthur, TX	0.9404
15180		Brownsville-Harlingen, TX	0.9130
17780		College Station-Bryan, TX	0.9257
18580		Corpus Christi, TX	0.9469
19100	19124	Dallas-Plano-Irving, TX	1.0359
19100	23104	Fort Worth-Arlington, TX	0.9966
21340		El Paso, TX	0.9356
26420		Houston-Sugar Land-Baytown, TX	1.0202
28660		Killeen-Temple-Fort Hood, TX	0.9253
29700		Laredo, TX	0.9196
30980		Longview, TX	0.9169
31180		Lubbock, TX	0.9160
32580		McAllen-Edinburg-Mission, TX	0.9067
33260		Midland, TX	0.9365
36220		Odessa, TX	0.9365
41660		San Angelo, TX	0.9042
41700		San Antonio, TX	0.9641
43300		Sherman-Denison, TX	0.9332
45500		Texarkana, TX-Texarkana, AR	0.9157
46340		Tyler, TX	0.9393

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	CBSA/Metro division name	GAF
TEXAS (continued)			
47020		Victoria, TX	0.9296
47380		Waco, TX	0.9339
48660		Wichita Falls, TX	0.9088
999TX		Non-metropolitan Areas in TX	0.9034
U.S. VIRGIN ISLANDS			
999VI		Non-metropolitan Areas in VI	0.9885
UTAH			
30860		Logan, UT-ID	0.9014
36260		Ogden-Clearfield, UT	0.9710
39340		Provo-Orem, UT	0.9014
41100		St. George, UT	0.9179
41620		Salt Lake City, UT	0.9702
999UT		Non-metropolitan Areas in UT	0.8961
VERMONT			
15540		Burlington-South Burlington, VT	0.9788
999VT		Non-metropolitan Areas in VT	0.9274
VIRGINIA			
13980		Blacksburg-Christiansburg-Radford, VA	0.8933
16820		Charlottesville, VA	0.9652
19260		Danville, VA	0.9001
25500		Harrisonburg, VA	0.9031
28700		Kingsport-Bristol-Bristol, TN-VA	0.8950
31340		Lynchburg, VA	0.9064
40060		Richmond, VA	0.9921
40220		Roanoke, VA	0.9196
47260		Virginia Beach-Norfolk-Newport News, VA-NC	0.9566
47900	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214
49020		Winchester, VA-WV	0.9098
999VA		Non-metropolitan Areas in VA	0.8940
WASHINGTON			
13380		Bellingham, WA	0.9642
14740		Bremerton-Silverdale, WA	1.0082
28420		Kennewick-Richland-Pasco, WA	1.0027
30300		Lewiston, ID-WA	0.8938
31020		Longview, WA	0.9367
34580		Mount Vernon-Anacortes, WA	0.9562
36500		Olympia, WA	1.0266
38900		Portland-Vancouver-Beaverton, OR-WA	1.0023

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	CBSA/Metro division name	GAF
<b>WASHINGTON (continued)</b>			
42660	42644	Seattle-Bellevue-Everett, WA	1.0558
42660	45104	Tacoma, WA	1.0058
44060		Spokane, WA	0.9485
48300		Wenatchee, WA	0.9336
49420		Yakima, WA	0.9583
999WA		Non-metropolitan Areas in WA	0.9406
<b>WEST VIRGINIA</b>			
16620		Charleston, WV	0.9633
19060		Cumberland, MD-WV	0.9133
25180		Hagerstown-Martinsburg, MD-WV	0.9443
26580		Huntington-Ashland, WV-KY-OH	0.9305
34060		Morgantown, WV	0.9218
37620		Parkersburg-Marietta-Vienna, WV-OH	0.9309
47900	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214
48260		Weirton-Steubenville, WV-OH	0.9149
48540		Wheeling, WV-OH	0.9071
49020		Winchester, VA-WV	0.9098
999WV		Non-metropolitan Areas in WV	0.9131
<b>WISCONSIN</b>			
11540		Appleton, WI	0.9297
16980	29404	Lake County-Kenosha County, IL-WI	1.0701
20260		Duluth, MN-WI	0.9101
20740		Eau Claire, WI	0.9192
22540		Fond du Lac, WI	0.9136
24580		Green Bay, WI	0.9341
27500		Janesville, WI	0.9407
29100		La Crosse, WI-MN	0.9097
31540		Madison, WI	0.9673
33340		Milwaukee-Waukesha-West Allis, WI	0.9780
33460		Minneapolis-St. Paul-Bloomington, MN-WI	1.0316
36780		Oshkosh-Neenah, WI	0.9297
39540		Racine, WI	0.9541
43100		Sheboygan, WI	0.9179
48140		Wausau, WI	0.9300
999WI		Non-metropolitan Areas in WI	0.8986

(continued)

**Table 1 (continued)**  
**MSA-based GAFs by state, 2006**

State/ CBSA code	Metro division code	CBSA/Metro division name	GAF
WYOMING			
16220		Casper, WY	0.9039
16940		Cheyenne, WY	0.9389
999WY		Non-metropolitan Areas in WY	0.8914

NOTE: GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data.



**Table 2**  
**2006 GAFs for metropolitan divisions**

CBSA code	Metro division code	MSA/Metro division name	GAF
14460		Boston-Cambridge-Quincy, MA-NH	1.135*
14460	14484	Boston-Quincy, MA	1.152
14460	15764	Cambridge-Newton-Framingham, MA	1.143
14460	21604	Essex County, MA	1.113
14460	40484	Rockingham County-Strafford County, NH	1.017
16980		Chicago-Naperville-Joliet, IL-IN-WI	1.081*
16980	16974	Chicago-Naperville-Joliet, IL	1.097
16980	23844	Gary, IN	0.958
16980	29404	Lake County-Kenosha County, IL-WI	1.070
19100		Dallas-Fort Worth-Arlington, TX	1.024*
19100	19124	Dallas-Plano-Irving, TX	1.036
19100	23104	Fort Worth-Arlington, TX	0.997
19820		Detroit-Warren-Livonia, MI	1.107*
19820	19804	Detroit-Livonia-Dearborn, MI	1.116
19820	47644	Warren-Troy-Farmington Hills, MI	1.102
31100		Los Angeles-Long Beach-Santa Ana, CA	1.094*
31100	31084	Los Angeles-Long Beach-Glendale, CA	1.088
31100	42044	Santa Ana-Anaheim-Irvine, CA	1.119
33100		Miami-Fort Lauderdale-Miami Beach, FL	1.043*
33100	22744	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL	1.030
33100	33124	Miami-Miami Beach-Kendall, FL	1.061
33100	48424	West Palm Beach-Boca Raton-Boynton Beach, FL	1.034
35620		New York-Northern New Jersey-Long Island, NY-NJ-PA	1.152*
35620	20764	Edison, NJ	1.111
35620	35004	Nassau-Suffolk, NY	1.197
35620	35084	Newark-Union, NJ-PA	1.118
35620	35644	New York-White Plains-Wayne, NY-NJ	1.153
37980		Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1.063*
37980	15804	Camden, NJ	1.064
37980	37964	Philadelphia, PA	1.068
37980	48864	Wilmington, DE-MD-NJ	1.041

(continued)

**Table 2 (continued)**  
**2006 GAFs for metropolitan divisions**

CBSA code	Metro division code	MSA/Metro division name	GAF
41860		San Francisco-Oakland-Fremont, CA	1.215*
41860	36084	Oakland-Fremont-Hayward, CA	1.175
41860	41884	San Francisco-San Mateo-Redwood City, CA	1.250
42660		Seattle-Tacoma-Bellevue, WA	1.044*
42660	42644	Seattle-Bellevue-Everett, WA	1.056
42660	45104	Tacoma, WA	1.006
47900		Washington-Arlington-Alexandria, DC-VA-MD-WV	1.119*
47900	13644	Bethesda-Gaithersburg-Frederick, MD	1.113
47900	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.121

NOTES: GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

\* Entire MSA GAF. Not used in MSA-based GAFs. Shown for illustrative purposes.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data.

**Table 3**  
**MSAs with a GAF that is lower than the state non-metropolitan area's GAF, 2006**

State	MSA	MSA GAF	State Non-metro GAF
Alaska	Fairbanks, AK	1.0321	1.0478
Arizona	Tucson, AZ	0.9616	0.9798
Arizona	Yuma, AZ	0.9480	0.9798
Arizona	Prescott, AZ	0.9329	0.9798
California	Yuba City, CA	0.9509	0.9565
California	El Centro, CA	0.9467	0.9565
California	Redding, CA	0.9449	0.9565
California	Hanford-Corcoran, CA	0.9437	0.9565
Colorado	Pueblo, CO	0.9246	0.9275
Colorado	Grand Junction, CO	0.9161	0.9275
Florida	Lakeland, FL	0.9283	0.9287
Florida	Panama City-Lynn Haven, FL	0.9282	0.9287
Florida	Pensacola-Ferry Pass-Brent, FL	0.9244	0.9287
Georgia	Rome, GA	0.9050	0.9059
Indiana	Terre Haute, IN	0.8862	0.8936
Massachusetts	Worcester, MA	1.0439	1.0466
Massachusetts	Barnstable Town, MA	1.0424	1.0466
Massachusetts	Providence-New Bedford-Fall River, RI-MA	1.0205	1.0466
Massachusetts	Springfield, MA	0.9900	1.0466
Massachusetts	Pittsfield, MA	0.9728	1.0466
Maryland	Salisbury, MD	0.9493	0.9568
Maryland	Hagerstown-Martinsburg, MD-WV	0.9443	0.9568
Maryland	Cumberland, MD-WV	0.9133	0.9568
Michigan	South Bend-Mishawaka, IN-MI	0.9353	0.9457
Mississippi	Hattiesburg, MS	0.8690	0.8720
North Carolina	Rocky Mount, NC	0.9017	0.9038
North Carolina	Jacksonville, NC	0.8725	0.9038
New Mexico	Farmington, NM	0.8880	0.8940
Nevada	Carson City, NV	0.9922	0.9996
New York	Binghamton, NY	0.9238	0.9268
New York	Utica-Rome, NY	0.9195	0.9268
New York	Elmira, NY	0.9109	0.9268
Ohio	Mansfield, OH	0.9079	0.9142
Ohio	Wheeling, WV-OH	0.9071	0.9142
Pennsylvania	Erie, PA	0.9126	0.9175
Pennsylvania	Altoona, PA	0.9073	0.9175
Pennsylvania	Johnstown, PA	0.9022	0.9175
South Carolina	Florence, SC	0.8999	0.9000
South Carolina	Sumter, SC	0.8862	0.9000
Tennessee	Morristown, TN	0.8753	0.8773
Virginia	Blacksburg-Christiansburg-Radford, VA	0.8933	0.8940

(continued)

**Table 3 (continued)**  
**MSAs with a GAF that is lower than the state non-metropolitan area's GAF, 2006**

State	MSA	MSA GAF	State Non-metro GAF
Washington	Longview, WA	0.9367	0.9406
Washington	Wenatchee, WA	0.9336	0.9406
Washington	Lewiston, ID-WA	0.8938	0.9406
West Virginia	Winchester, VA-WV	0.9098	0.9131
West Virginia	Wheeling, WV-OH	0.9071	0.9131

NOTE: GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data.

**Table 4**  
**MSA versus current locality GAF, by MSA and county in selected areas of California and Georgia, 2006**

CBSA code	MSA name	Counties	Current locality name	Current locality GAF	MSA GAF	Percent of difference of MSA from locality GAF
<b>California</b>						
31084	Los Angeles-Long Beach-Glendale, CA	Los Angeles	Los Angeles	1.0878	1.0878	0.0
41740	San Diego-Carlsbad-San Marcos, CA	San Diego	Rest of California	1.0162	1.0722	5.5
41884	San Francisco-San Mateo-Redwood City, CA	Marin	Marin/Napa/Solano	1.1487	1.2502	8.8
		San Francisco	San Francisco	1.2537	1.2502	-0.3
		San Mateo	San Mateo	1.2563	1.2502	-0.5
41940	San Jose-Sunnyvale-Santa Clara, CA	Santa Clara	Santa Clara	1.2628	1.2580	-0.4
		San Benito	Rest of California	1.0162	1.2580	23.8
42100	Santa Cruz-Watsonville, CA	Santa Cruz	Rest of California	1.0162	1.1191	10.1
999CA	Non-metropolitan		Rest of California	1.0162	0.9565	-5.9
<b>Georgia</b>						
12060	Atlanta-Sandy Springs-Marietta, GA	Butts Cherokee Clayton Cobb DeKalb Douglas Fayette Forsyth Fulton Gwinnett Henry Newton Paulding Rockdale	Atlanta	1.0440	1.0429	-0.1

(continued)

**Table 4 (continued)**  
**MSA versus current locality GAF, by MSA and county in selected areas of California and Georgia, 2006**

CBSA code	MSA name	Counties	Current locality name	Current locality GAF	MSA GAF	Percent of difference of MSA from locality GAF
GEORGIA (continued)		Walton				
12060	Atlanta-Sandy Springs-Marietta, GA (continued)	Barrow	Rest of Georgia	0.9331	1.0429	11.8
		Bartow				
		Carroll				
		Coweta				
		Dawson				
		Haralson				
		Heard				
		Jasper				
		Lamar				
		Meriwether				
		Pickens				
		Pike				
		Spalding				

**NOTE:** MSAs include Metropolitan Divisions. Current Locality is FY2006 Fee Schedule Areas.

GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

**SOURCE:** RTI analysis of CMS 2006 Geographic Practice Cost Index Data.

**Table 5**  
**Counties with the 50 largest increases from their current locality GAF to their MSA GAF, 2006**

County Name	MSA Name	MSA GAF	Locality Name	Current Locality GAF	Percent Difference
Brazoria	Houston-Sugar Land-Baytown, TX	1.0202	Brazoria, TX	0.7946	28.4%
San Benito	San Jose-Sunnyvale-Santa Clara, CA	1.2580	Rest of California	1.0162	23.8
Jefferson	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	West Virginia	0.9341	20.1
Pike	Newark-Union, NJ-PA	1.1182	Rest of Pennsylvania	0.9469	18.1
Clarke	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Virginia	0.9510	17.9
Fauquier	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Virginia	0.9510	17.9
Fredericksburg City	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Virginia	0.9510	17.9
Loudoun	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Virginia	0.9510	17.9
Manassas City	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Virginia	0.9510	17.9
Manassas Park City	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Virginia	0.9510	17.9
Prince William	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Virginia	0.9510	17.9
Spotsylvania	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Virginia	0.9510	17.9
Stafford	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Virginia	0.9510	17.9
Warren	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Virginia	0.9510	17.9
DeKalb	Chicago-Naperville-Joliet, IL	1.0973	Rest of Illinois	0.9398	16.8
Grundy	Chicago-Naperville-Joliet, IL	1.0973	Rest of Illinois	0.9398	16.8
Kendall	Chicago-Naperville-Joliet, IL	1.0973	Rest of Illinois	0.9398	16.8
McHenry	Chicago-Naperville-Joliet, IL	1.0973	Rest of Illinois	0.9398	16.8
Calvert	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Rest of Maryland	0.9765	14.8
Charles	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Rest of Maryland	0.9765	14.8
Frederick	Bethesda-Gaithersburg-Frederick, MD	1.1131	Rest of Maryland	0.9765	14.0
Kenosha	Lake County-Kenosha County, IL-WI	1.0701	Wisconsin	0.9443	13.3
Lapeer	Warren-Troy-Farmington Hills, MI	1.1024	Rest of Michigan	0.9813	12.3
Livingston	Warren-Troy-Farmington Hills, MI	1.1024	Rest of Michigan	0.9813	12.3
St. Clair	Warren-Troy-Farmington Hills, MI	1.1024	Rest of Michigan	0.9813	12.3
Barrow	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Bartow	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Carroll	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8

(continued)

**Table 5 (continued)**  
**Counties with the 50 largest increases from their current locality GAF to their MSA GAF, 2006**

County Name	MSA Name	MSA GAF	Locality Name	Current Locality GAF	Percent Difference
Coweta	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Dawson	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Haralson	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Heard	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Jasper	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Lamar	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Meriwether	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Pickens	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Pike	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Spalding	Atlanta-Sandy Springs-Marietta, GA	1.0429	Rest of Georgia	0.9331	11.8
Franklin	St. Louis, MO-IL	0.9825	Rest of Missouri	0.8864	10.8
Lincoln	St. Louis, MO-IL	0.9825	Rest of Missouri	0.8864	10.8
Warren	St. Louis, MO-IL	0.9825	Rest of Missouri	0.8864	10.8
Washington	St. Louis, MO-IL	0.9825	Rest of Missouri	0.8864	10.8
Putnam	New York-White Plains-Wayne, NY-NJ	1.1526	Poughkpsie/N NYC Suburbs, NY	1.0412	10.7
Collin	Dallas-Plano-Irving, TX	1.0359	Rest of Texas	0.9361	10.7
Delta	Dallas-Plano-Irving, TX	1.0359	Rest of Texas	0.9361	10.7
Denton	Dallas-Plano-Irving, TX	1.0359	Rest of Texas	0.9361	10.7
Ellis	Dallas-Plano-Irving, TX	1.0359	Rest of Texas	0.9361	10.7
Hunt	Dallas-Plano-Irving, TX	1.0359	Rest of Texas	0.9361	10.7
Kaufman	Dallas-Plano-Irving, TX	1.0359	Rest of Texas	0.9361	10.7
Rockwall	Dallas-Plano-Irving, TX	1.0359	Rest of Texas	0.9361	10.7

NOTE: GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data.



**Table 6**  
**Counties with the 50 largest decreases from their current locality GAF to their MSA GAF, 2006**

County Name	MSA Name	MSA GAF	Locality Name	Current Locality GAF	Percent Difference
Monroe	Non-Metropolitan FL	0.9287	Miami, FL	1.0595	-12.3%
Warren	Allentown-Bethlehem-Easton, PA-NJ	0.9924	Northern NJ	1.1299	-12.2
Houston	Non-Metropolitan TX	0.9034	Houston, TX	1.0248	-11.9
Columbia	Non-Metropolitan NY	0.9268	Poughkpsie/N NYC Suburbs, NY	1.0412	-11.0
Delaware	Non-Metropolitan NY	0.9268	Poughkpsie/N NYC Suburbs, NY	1.0412	-11.0
Greene	Non-Metropolitan NY	0.9268	Poughkpsie/N NYC Suburbs, NY	1.0412	-11.0
Sullivan	Non-Metropolitan NY	0.9268	Poughkpsie/N NYC Suburbs, NY	1.0412	-11.0
Montgomery	Non-Metropolitan IL	0.8958	East St. Louis, IL	0.9978	-10.2
Randolph	Non-Metropolitan IL	0.8958	East St. Louis, IL	0.9978	-10.2
Washington	Non-Metropolitan IL	0.8958	East St. Louis, IL	0.9978	-10.2
Aitkin	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Becker	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Beltrami	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Big Stone	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Blue Earth	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Brown	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Cass	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Chippewa	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Clearwater	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Cook	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Cottonwood	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Crow Wing	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Douglas	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Faribault	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Fillmore	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Freeborn	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Goodhue	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Grant	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0

(continued)

**Table 6 (continued)**  
**Counties with the 50 largest decreases from their current locality GAF to their MSA GAF, 2006**

County Name	MSA Name	MSA GAF	Locality Name	Current Locality GAF	Percent Difference
Hubbard	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Itasca	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Jackson	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Kanabec	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Kandiyohi	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Kittson	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Koochiching	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Lac qui Parle	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Lake	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Lake of the Woods	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Le Sueur	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Lincoln	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Lyon	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Mahnomen	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Marshall	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Martin	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
McLeod	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Meeker	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Mille Lacs	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Morrison	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Mower	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0
Murray	Non-Metropolitan MN	0.8851	Minnesota	0.9724	-9.0

NOTE: GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data.

**Table 7**  
**Fifty counties whose MSA GAF exceeds their county GAF by the largest percentage, 2006**

County Name	County GAF	MSA Name	MSA GAF	Percent Difference
San Benito	0.9907	San Jose-Sunnyvale-Santa Clara, CA	1.2580	27.0%
Manassas Park City	0.8895	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	26.1
Clarke	0.9542	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	17.5
Warren	0.9569	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	17.2
Delta	0.8972	Dallas-Plano-Irving, TX	1.0359	15.5
Haralson	0.9048	Atlanta-Sandy Springs-Marietta, GA	1.0429	15.3
Heard	0.9048	Atlanta-Sandy Springs-Marietta, GA	1.0429	15.3
Lamar	0.9048	Atlanta-Sandy Springs-Marietta, GA	1.0429	15.3
Meriwether	0.9048	Atlanta-Sandy Springs-Marietta, GA	1.0429	15.3
Jasper	0.9058	Atlanta-Sandy Springs-Marietta, GA	1.0429	15.1
Pike	0.9712	Newark-Union, NJ-PA	1.1182	15.1
Austin	0.8893	Houston-Sugar Land-Baytown, TX	1.0202	14.7
Pike	0.9108	Atlanta-Sandy Springs-Marietta, GA	1.0429	14.5
Jefferson	0.9824	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	14.1
Pendleton	0.8612	Cincinnati-Middletown, OH-KY-IN	0.9827	14.1
San Jacinto	0.8972	Houston-Sugar Land-Baytown, TX	1.0202	13.7
Dawson	0.9173	Atlanta-Sandy Springs-Marietta, GA	1.0429	13.7
Butts	0.9184	Atlanta-Sandy Springs-Marietta, GA	1.0429	13.6
Linn	0.8638	Kansas City, MO-KS	0.9780	13.2
Bates	0.8639	Kansas City, MO-KS	0.9780	13.2
Washington	0.8681	St. Louis, MO-IL	0.9825	13.2
Clear Creek	0.9161	Denver-Aurora, CO	1.0361	13.1
Franklin	0.8669	Kansas City, MO-KS	0.9780	12.8
Caldwell	0.8672	Kansas City, MO-KS	0.9780	12.8
Elbert	0.9218	Denver-Aurora, CO	1.0361	12.4
Park	0.9245	Denver-Aurora, CO	1.0361	12.1
DeKalb	0.9801	Chicago-Naperville-Joliet, IL	1.0973	12.0
Bracken	0.8791	Cincinnati-Middletown, OH-KY-IN	0.9827	11.8
Dodge	0.8774	Rochester, MN	0.9804	11.7
Amelia	0.8895	Richmond, VA	0.9921	11.5
Sussex	0.8895	Richmond, VA	0.9921	11.5
King William	0.8923	Richmond, VA	0.9921	11.2
Wabasha	0.8829	Rochester, MN	0.9804	11.0
Wise	0.8975	Fort Worth-Arlington, TX	0.9966	11.0
Person	0.8971	Durham, NC	0.9961	11.0
Franklin	0.8865	Cincinnati-Middletown, OH-KY-IN	0.9827	10.8
Cumberland	0.8950	Richmond, VA	0.9921	10.8
Louisa	0.8958	Richmond, VA	0.9921	10.7
King and Queen	0.8963	Richmond, VA	0.9921	10.7
Gallatin	0.8909	Cincinnati-Middletown, OH-KY-IN	0.9827	10.3
Spotsylvania	1.0173	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	10.2
Saunders	0.8514	Omaha-Council Bluffs, NE-IA	0.9382	10.2
Gilpin	0.9414	Denver-Aurora, CO	1.0361	10.1
Kenosha	0.9723	Lake County-Kenosha County, IL-WI	1.0701	10.1
Grant	0.8929	Cincinnati-Middletown, OH-KY-IN	0.9827	10.1
Lapeer	1.0026	Warren-Troy-Farmington Hills, MI	1.1024	9.9

(continued)

**Table 7 (continued)**  
**50 Counties whose MSA GAF exceeds their county GAF by the largest percentage, 2006**

County Name	County GAF	MSA Name	MSA GAF	Percent Difference
Marshall	0.8676	Memphis, TN-MS-AR	0.9527	9.8
Tunica	0.8676	Memphis, TN-MS-AR	0.9527	9.8
Kalawao	0.9437	Non-Metropolitan HI	1.0346	9.6
Ohio	0.8975	Cincinnati-Middletown, OH-KY-IN	0.9827	9.5

NOTE: GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data.

**Table 8**  
**Fifty counties whose county GAF exceeds their MSA GAF by the largest percentage, 2006**

County Name	County GAF	MSA Name	MSA GAF	Percent Difference
Los Alamos	1.0141	Non-Metropolitan NM	0.8940	-11.8%
Ceiba	0.8859	Fajardo, PR	0.7929	-10.5
San Miguel	1.0249	Non-Metropolitan CO	0.9275	-9.5
Pitkin	1.0123	Non-Metropolitan CO	0.9275	-8.4
Monroe	1.0063	Non-Metropolitan FL	0.9287	-7.7
Culpeper	0.9684	Non-Metropolitan VA	0.8940	-7.7
King George	0.9681	Non-Metropolitan VA	0.8940	-7.6
Warren	1.0727	Allentown-Bethlehem-Easton, PA-NJ	0.9924	-7.5
Ogle	0.9645	Non-Metropolitan IL	0.8958	-7.1
Lincoln	0.9682	Non-Metropolitan NC	0.9038	-6.7
Rowan	0.9682	Non-Metropolitan NC	0.9038	-6.7
Lenawee	1.0127	Non-Metropolitan MI	0.9457	-6.6
Crawford	0.9276	Non-Metropolitan MO	0.8686	-6.4
Madison	0.9350	Non-Metropolitan KY	0.8836	-5.5
Hood	0.9554	Non-Metropolitan TX	0.9034	-5.4
Nantucket	1.1069	Non-Metropolitan MA	1.0466	-5.4
Pottawatomie	0.9027	Non-Metropolitan OK	0.8566	-5.1
Allegan	0.9960	Non-Metropolitan MI	0.9457	-5.1
Ashtabula	0.9608	Non-Metropolitan OH	0.9142	-4.9
Island	0.9883	Non-Metropolitan WA	0.9406	-4.8
Westchester	1.2091	New York-White Plains-Wayne, NY-NJ	1.1526	-4.7
Catano	0.8377	San Juan-Caguas-Guaynabo, PR	0.7987	-4.7
Peach	0.9483	Non-Metropolitan GA	0.9059	-4.5
St. James	0.9359	Non-Metropolitan LA	0.8943	-4.4
Montgomery	0.9692	Non-Metropolitan NY	0.9268	-4.4
Davidson	0.9449	Non-Metropolitan NC	0.9038	-4.3
Mohave	1.0242	Non-Metropolitan AZ	0.9798	-4.3
Asotin	0.9336	Lewiston, ID-WA	0.8938	-4.3
Sevier	0.9159	Non-Metropolitan TN	0.8773	-4.2
Barceloneta	0.8315	San Juan-Caguas-Guaynabo, PR	0.7987	-4.0
Bethel (CA)	1.0906	Non-Metropolitan AK	1.0478	-3.9
Denali (B)	1.0904	Non-Metropolitan AK	1.0478	-3.9
Juneau (B)	1.0904	Non-Metropolitan AK	1.0478	-3.9
Scott	0.9296	Non-Metropolitan IN	0.8936	-3.9
Teton	0.9273	Non-Metropolitan WY	0.8914	-3.9
Blaine	0.9167	Non-Metropolitan ID	0.8817	-3.8
Midland	0.9832	Non-Metropolitan MI	0.9457	-3.8
Genesee	0.9630	Non-Metropolitan NY	0.9268	-3.8
Monroe	0.9527	Non-Metropolitan PA	0.9175	-3.7
Mineral	0.9481	Cumberland, MD-WV	0.9133	-3.7
Somerset	1.1537	Edison, NJ	1.1115	-3.7
Webster	0.9275	Non-Metropolitan LA	0.8943	-3.6

(continued)

**Table 8 (continued)**  
**50 counties whose county GAF exceeds their MSA GAF by the largest percentage, 2006**

County Name	County GAF	MSA Name	MSA GAF	Percent Difference
Northwest Arctic (B)	1.0861	Non-Metropolitan AK	1.0478	-3.5
Maui	1.0722	Non-Metropolitan HI	1.0346	-3.5
Salem	1.0788	Wilmington, DE-MD-NJ	1.0409	-3.5
Taos	0.9263	Non-Metropolitan NM	0.8940	-3.5
Summit	0.9609	Non-Metropolitan CO	0.9275	-3.5
The District	1.1615	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	-3.5
Sullivan	0.9593	Non-Metropolitan NY	0.9268	-3.4
Eagle	0.9592	Non-Metropolitan CO	0.9275	-3.3

NOTE: GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data.

**Table 9**  
**Largest differences in MSA-based GAFs between contiguous counties, 2006**

County	MSA	MSA GAF	Contiguous Counties		MSA GAF	Absolute Percent Difference in MSA GAFs
			County	MSA		
Merced	Merced, CA	0.9646	San Benito	San Jose-Sunnyvale-Santa Clara, CA	1.2580	30.4%
Merced	Merced, CA	0.9646	Santa Clara	San Jose-Sunnyvale-Santa Clara, CA	1.2580	30.4
Fresno	Fresno, CA	0.9653	San Benito	San Jose-Sunnyvale-Santa Clara, CA	1.2580	30.3
Culpeper	Non-Metropolitan VA	0.8940	Fauquier	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	25.4
Culpeper	Non-Metropolitan VA	0.8940	Spotsylvania	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	25.4
Culpeper	Non-Metropolitan VA	0.8940	Stafford	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	25.4
King George	Non-Metropolitan VA	0.8940	Stafford	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	25.4
Orange	Non-Metropolitan VA	0.8940	Spotsylvania	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	25.4
Page	Non-Metropolitan VA	0.8940	Warren	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	25.4
Rappahannock	Non-Metropolitan VA	0.8940	Warren	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	25.4
Shenandoah	Non-Metropolitan VA	0.8940	Warren	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	25.4
San Joaquin	Stockton, CA	1.0092	Santa Clara	San Jose-Sunnyvale-Santa Clara, CA	1.2580	24.6
Frederick	Winchester, VA-WV	0.9098	Warren	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	23.3
Frederick	Winchester, VA-WV	0.9098	Jefferson	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	23.3
Monroe	Non-Metropolitan PA	0.9175	Pike	Newark-Union, NJ-PA	1.1182	21.9
Santa Clara	San Jose-Sunnyvale-Santa Clara, CA	1.2580	Stanislaus	Modesto, CA	0.9920	21.1
Sullivan	Non-Metropolitan NY	0.9268	Pike	Newark-Union, NJ-PA	1.1182	20.7
Charles	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	King George	Non-Metropolitan VA	0.8940	20.3
Fauquier	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Rappahannock	Non-Metropolitan VA	0.8940	20.3
Chambers	Non-Metropolitan AL	0.8768	Heard	Atlanta-Sandy Springs-Marietta, GA	1.0429	18.9
Cleburne	Non-Metropolitan AL	0.8768	Carroll	Atlanta-Sandy Springs-Marietta, GA	1.0429	18.9
Cleburne	Non-Metropolitan AL	0.8768	Haralson	Atlanta-Sandy Springs-Marietta, GA	1.0429	18.9
Randolph	Non-Metropolitan AL	0.8768	Carroll	Atlanta-Sandy Springs-Marietta, GA	1.0429	18.9
Randolph	Non-Metropolitan AL	0.8768	Heard	Atlanta-Sandy Springs-Marietta, GA	1.0429	18.9
Clarke	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Frederick	Winchester, VA-WV	0.9098	18.9
Washington	Hagerstown-Martinsburg, MD-WV	0.9443	Loudoun	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	18.8
Washington	Hagerstown-Martinsburg, MD-WV	0.9443	Jefferson	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	18.8
Berkeley	Hagerstown-Martinsburg, MD-WV	0.9443	Jefferson	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	18.8
DeKalb	Chicago-Naperville-Joliet, IL	1.0973	La Salle	Non-Metropolitan IL	0.8958	18.4
DeKalb	Chicago-Naperville-Joliet, IL	1.0973	Lee	Non-Metropolitan IL	0.8958	18.4
DeKalb	Chicago-Naperville-Joliet, IL	1.0973	Ogle	Non-Metropolitan IL	0.8958	18.4
Grundy	Chicago-Naperville-Joliet, IL	1.0973	La Salle	Non-Metropolitan IL	0.8958	18.4
Grundy	Chicago-Naperville-Joliet, IL	1.0973	Livingston	Non-Metropolitan IL	0.8958	18.4
Kendall	Chicago-Naperville-Joliet, IL	1.0973	La Salle	Non-Metropolitan IL	0.8958	18.4
McHenry	Chicago-Naperville-Joliet, IL	1.0973	Walworth	Non-Metropolitan WI	0.8986	18.1
Pike	Newark-Union, NJ-PA	1.1182	Wayne	Non-Metropolitan PA	0.9175	18.0
Frederick	Bethesda-Gaithersburg-Frederick, MD	1.1131	Adams	Non-Metropolitan PA	0.9175	17.6

(continued)

INFORMATION NOT RELEASABLE TO THE PUBLIC UNLESS AUTHORIZED BY LAW: This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law.

**Table 9 (continued)**  
**Largest differences in MSA-based GAFs between contiguous counties, 2006**

County	MSA	MSA GAF	Contiguous Counties		Absolute Percent Difference in MSA GAFs	
			County	MSA		
Frederick	Bethesda-Gaithersburg-Frederick, MD	1.1131	Franklin	Non-Metropolitan PA	0.9175	17.6
Goodhue	Non-Metropolitan MN	0.8851	Pierce	Minneapolis-St. Paul-Bloomington, MN-WI	1.0316	16.6
Le Sueur	Non-Metropolitan MN	0.8851	Scott	Minneapolis-St. Paul-Bloomington, MN-WI	1.0316	16.6
McLeod	Non-Metropolitan MN	0.8851	Wright	Minneapolis-St. Paul-Bloomington, MN-WI	1.0316	16.6
Meeker	Non-Metropolitan MN	0.8851	Wright	Minneapolis-St. Paul-Bloomington, MN-WI	1.0316	16.6
Mille Lacs	Non-Metropolitan MN	0.8851	Sherburne	Minneapolis-St. Paul-Bloomington, MN-WI	1.0316	16.6
Rice	Non-Metropolitan MN	0.8851	Scott	Minneapolis-St. Paul-Bloomington, MN-WI	1.0316	16.6
Monterey	Salinas, CA	1.0840	San Benito	San Jose-Sunnyvale-Santa Clara, CA	1.2580	16.1
Kenosha	Lake County-Kenosha County, IL-WI	1.0701	Walworth	Non-Metropolitan WI	0.8986	16.0
Clarke	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	Berkeley	Hagerstown-Martinsburg, MD-WV	0.9443	15.8
Lenawee	Non-Metropolitan MI	0.9457	Washtenaw	Ann Arbor, MI	1.0935	15.6
Alameda	Oakland-Fremont-Hayward, CA	1.1755	Stanislaus	Modesto, CA	0.9920	15.6
Frederick	Bethesda-Gaithersburg-Frederick, MD	1.1131	Washington	Hagerstown-Martinsburg, MD-WV	0.9443	15.2
Gilmer	Non-Metropolitan GA	0.9059	Pickens	Atlanta-Sandy Springs-Marietta, GA	1.0429	15.1
Gordon	Non-Metropolitan GA	0.9059	Pickens	Atlanta-Sandy Springs-Marietta, GA	1.0429	15.1
Morgan	Non-Metropolitan GA	0.9059	Newton	Atlanta-Sandy Springs-Marietta, GA	1.0429	15.1
Morgan	Non-Metropolitan GA	0.9059	Walton	Atlanta-Sandy Springs-Marietta, GA	1.0429	15.1
Lake	Non-Metropolitan CA	0.9565	Napa	Napa, CA	1.0996	15.0

NOTE: GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

Table shows differences of 15 percent or larger.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data.



**Table 10**  
**Current locality-based GAFs and MSA-based GAFs by urbanicity, 2006**

Urbanicity	Mean GAF based on current localities	Mean GAF based on MSAs	Percent Difference Between GAFs
National	0.998	0.998	0.0%
Metropolitan Areas	1.006	1.012	0.6
Large	1.043	1.055	1.2
Medium	0.962	0.964	0.2
Small	0.944	0.930	-1.5
Non-Metropolitan Areas	0.938	0.902	-3.8
Adjacent to a Metro Area	0.944	0.907	-3.9
Not-Adjacent to a Metro Area	0.928	0.893	-3.8

NOTE: GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data.

**Table 11**  
**Actual and imputed MSA-based GAFs for MSAs that have Metropolitan Divisions, 2006**

CBSA code	Metro division code	MSA/Metro division title	Mean actual GAF	2006 imputed GAF	Percent differences
14460		Boston-Cambridge-Quincy, MA-NH	1.1346	1.1087	-2.3%*
14460	14484	Boston-Quincy, MA	1.1522	1.1298	-1.9
14460	15764	Cambridge-Newton-Framingham, MA	1.1429	1.1278	-1.3
14460	21604	Essex County, MA	1.1128	1.0449	-6.1
14460	40484	Rockingham County-Strafford County, NH	1.0169	1.0079	-0.9
16980		Chicago-Naperville-Joliet, IL-IN-WI	1.0806	1.0702	-1.0*
16980	16974	Chicago-Naperville-Joliet, IL	1.0973	1.0880	-0.9
16980	23844	Gary, IN	0.9576	0.9372	-2.1
16980	29404	Lake County-Kenosha County, IL-WI	1.0701	1.0624	-0.7
19100		Dallas-Fort Worth-Arlington, TX	1.0239	1.0124	-1.1*
19100	19124	Dallas-Plano-Irving, TX	1.0359	1.0200	-1.5
19100	23104	Fort Worth-Arlington, TX	0.9966	0.9950	-0.2
19820		Detroit-Warren-Livonia, MI	1.1072	1.0938	-1.2*
19820	19804	Detroit-Livonia-Dearborn, MI	1.1162	1.1048	-1.0
19820	47644	Warren-Troy-Farmington Hills, MI	1.1024	1.0879	-1.3
31100		Los Angeles-Long Beach-Santa Ana, CA	1.0937	1.0946	0.1*
31100	31084	Los Angeles-Long Beach-Glendale, CA	1.0878	1.0906	0.3
31100	42044	Santa Ana-Anaheim-Irvine, CA	1.1194	1.1120	-0.7
33100		Miami-Fort Lauderdale-Miami Beach, FL	1.0427	1.0309	-1.1*
33100	22744	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL	1.0297	1.0232	-0.6
33100	33124	Miami-Miami Beach-Kendall, FL	1.0608	1.0500	-1.0
33100	48424	West Palm Beach-Boca Raton-Boynton Beach, FL	1.0342	1.0176	-1.6

(continued)

**Table 11 (continued)**  
**Actual and imputed MSA-based GAFs for MSAs that have Metropolitan Divisions, 2006**

CBSA code	Metro division code	MSA/Metro division title	Mean actual GAF	2006 imputed GAF	Percent differences
35620		New York-Northern New Jersey-Long Island, NY-NJ-PA	1.1520	1.1534	0.1*
35620	20764	Edison, NJ	1.1115	1.0913	-1.8
35620	35004	Nassau-Suffolk, NY	1.1974	1.1750	-1.9
35620	35084	Newark-Union, NJ-PA	1.1182	1.1177	0.0
35620	35644	New York-White Plains-Wayne, NY-NJ	1.1526	1.1691	1.4
37980		Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1.0635	1.0590	-0.4*
37980	15804	Camden, NJ	1.0639	1.0628	-0.1
37980	37964	Philadelphia, PA	1.0681	1.0643	-0.3
37980	48864	Wilmington, DE-MD-NJ	1.0409	1.0274	-1.3
41860		San Francisco-Oakland-Fremont, CA	1.2148	1.2499	2.9*
41860	36084	Oakland-Fremont-Hayward, CA	1.1755	1.2219	4.0
41860	41884	San Francisco-San Mateo-Redwood City, CA	1.2502	1.2751	2.0
42660		Seattle-Tacoma-Bellevue, WA	1.0441	1.0341	-1.0*
42660	42644	Seattle-Bellevue-Everett, WA	1.0558	1.0462	-0.9
42660	45104	Tacoma, WA	1.0058	0.9946	-1.1
47900		Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1189	1.0514	-6.0*
47900	13644	Bethesda-Gaithersburg-Frederick, MD	1.1131	1.0448	-6.1
47900	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	1.0544	-6.0

NOTES: The “imputed” GAF replaces the Census wage data with the IPPS hospital wage index in the practice expense GPCI.

GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

\* Entire MSA GAF. Not used in MSA-based GAFs. Shown for illustrative purposes.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data, the FY 2005 rental index, and the FY2007 hospital wage index.

**Table 12**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
<b>Alabama</b>					
11500		Anniston-Oxford, AL	0.8819	0.8923	1.2%
12220		Auburn-Opelika, AL	0.9013	0.8938	-0.8
13820		Birmingham-Hoover, AL	0.9381	0.9238	-1.5
17980		Columbus, GA-AL	0.9202	0.9229	0.3
19460		Decatur, AL	0.9067	0.9052	-0.2
20020		Dothan, AL	0.8891	0.8884	-0.1
22520		Florence-Muscle Shoals, AL	0.8905	0.8972	0.8
23460		Gadsden, AL	0.8812	0.8981	1.9
26620		Huntsville, AL	0.9426	0.9352	-0.8
33660		Mobile, AL	0.9039	0.8939	-1.1
33860		Montgomery, AL	0.9204	0.9004	-2.2
46220		Tuscaloosa, AL	0.9195	0.9148	-0.5
999AL		Non-metropolitan Areas in AL	0.8768	0.8889	1.4
<b>Alaska</b>					
11260		Anchorage, AK	1.0515	1.0567	0.5
21820		Fairbanks, AK	1.0321	1.0347	0.3
999AK		Non-metropolitan Areas in AK	0.8774	1.0293	17.3
<b>Arizona</b>					
22380		Flagstaff, AZ	0.9961	1.0159	2.0
38060		Phoenix-Mesa-Scottsdale, AZ	1.0097	1.0056	-0.4
39140		Prescott, AZ	0.9329	0.9829	5.4
46060		Tucson, AZ	0.9616	0.9784	1.7
49740		Yuma, AZ	0.9480	0.9671	2.0
999AZ		Non-metropolitan Areas in AZ	0.9798	0.9806	0.1

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
<b>Arkansas</b>					
22220		Fayetteville-Springdale-Rogers, AR-MO	0.8899	0.8989	1.0
22900		Fort Smith, AR-OK	0.8833	0.8785	-0.5
26300		Hot Springs, AR	0.8568	0.8910	4.0
27860		Jonesboro, AR	0.8778	0.8764	-0.2
30780		Little Rock-North Little Rock, AR	0.9197	0.9224	0.3
32820		Memphis, TN-MS-AR	0.9527	0.9367	-1.7
38220		Pine Bluff, AR	0.9108	0.9097	-0.1
45500		Texarkana, TX-Texarkana, AR	0.9157	0.9271	1.2
999AR		Non-metropolitan Areas in AR	0.8515	0.8655	1.6
<b>California</b>					
12540		Bakersfield, CA	0.9766	1.0310	5.6
17020		Chico, CA	0.9611	1.0116	5.3
20940		El Centro, CA	0.9467	0.9760	3.1
23420		Fresno, CA	0.9653	1.0219	5.9
25260		Hanford-Corcoran, CA	0.9437	1.0038	6.4
31100	31084	Los Angeles-Long Beach-Glendale, CA	1.0878	1.0906	0.3
31100	42044	Santa Ana-Anaheim-Irvine, CA	1.1194	1.1120	-0.7
31460		Madera, CA	0.9653	0.9744	0.9
32900		Merced, CA	0.9646	1.0227	6.0
33700		Modesto, CA	0.9920	1.0364	4.5
34900		Napa, CA	1.0996	1.1627	5.7
37100		Oxnard-Thousand Oaks-Ventura, CA	1.0814	1.0827	0.1
39820		Redding, CA	0.9449	1.0370	9.7
40140		Riverside-San Bernardino-Ontario, CA	0.9952	1.0202	2.5

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
California (continued)					
40900		Sacramento--Arden-Arcade--Roseville, CA	1.0542	1.0692	1.4
41500		Salinas, CA	1.0840	1.0951	1.0
41740		San Diego-Carlsbad-San Marcos, CA	1.0722	1.0290	-4.0
41860	36084	Oakland-Fremont-Hayward, CA	1.1755	1.2219	4.0
41860	41884	San Francisco-San Mateo-Redwood City, CA	1.2502	1.2751	2.0
41940		San Jose-Sunnyvale-Santa Clara, CA	1.2580	1.2946	2.9
42020		San Luis Obispo-Paso Robles, CA	1.0281	1.0265	-0.2
42060		Santa Barbara-Santa Maria, CA	1.0516	1.0256	-2.5
42100		Santa Cruz-Watsonville, CA	1.1191	1.1034	-1.4
42220		Santa Rosa-Petaluma, CA	1.0987	1.0915	-0.7
44700		Stockton, CA	1.0092	1.0336	2.4
46700		Vallejo-Fairfield, CA	1.0865	1.1970	10.2
47300		Visalia-Porterville, CA	0.9593	0.9999	4.2
49700		Yuba City, CA	0.9509	1.0080	6.0
999CA		Non-metropolitan Areas in CA	0.9565	1.0171	6.3
Colorado					
14500		Boulder, CO	1.0302	1.0011	-2.8
17820		Colorado Springs, CO	0.9617	0.9863	2.6
19740		Denver-Aurora, CO	1.0361	1.0174	-1.8
22660		Fort Collins-Loveland, CO	0.9635	0.9764	1.3
24300		Grand Junction, CO	0.9161	0.9725	6.2
24540		Greeley, CO	0.9690	0.9869	1.8

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
Colorado (continued)					
39380		Pueblo, CO	0.9246	0.9563	3.4
999CO		Non-metropolitan Areas in CO	0.9275	0.9649	4.0
Connecticut					
14860		Bridgeport-Stamford-Norwalk, CT	1.1284	1.0994	-2.6
25540		Hartford-West Hartford-East Hartford, CT	1.0645	1.0641	0.0
35300		New Haven-Milford, CT	1.0870	1.0868	0.0
35980		Norwich-New London, CT	1.0587	1.0848	2.5
999CT		Non-metropolitan Areas in CT	1.0364	1.0688	3.1
Delaware					
20100		Dover, DE	0.9732	0.9959	2.3
37980	48864	Wilmington, DE-MD-NJ	1.0409	1.0274	-1.3
999DE		Non-metropolitan Areas in DE	0.9602	0.9862	2.7
Dist. of Columbia					
47900	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	1.0544	-6.0
Florida					
15980		Cape Coral-Fort Myers, FL	0.9637	0.9980	3.6
19660		Deltona-Daytona Beach-Ormond Beach, FL	0.9401	0.9649	2.6
23020		Fort Walton Beach-Crestview-Destin, FL	0.9346	0.9645	3.2
23540		Gainesville, FL	0.9436	0.9655	2.3
27260		Jacksonville, FL	0.9754	0.9776	0.2
29460		Lakeland, FL	0.9283	0.9618	3.6

(continued)

INFORMATION NOT RELEASABLE TO THE PUBLIC UNLESS AUTHORIZED BY LAW: This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law.

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
Florida (continued)					
33100		Fort Lauderdale-Pompano Beach-Deerfield Beach, FL	1.0297	1.0232	-0.6
33100		Miami-Miami Beach-Kendall, FL	1.0608	1.0500	-1.0
33100		West Palm Beach-Boca Raton-Boynton Beach, FL	1.0342	1.0176	-1.6
34940		Naples-Marco Island, FL	1.0066	1.0149	0.8
36100		Ocala, FL	0.9301	0.9546	2.6
36740		Orlando-Kissimmee, FL	0.9975	0.9836	-1.4
37340		Palm Bay-Melbourne-Titusville, FL	0.9623	0.9869	2.6
37460		Panama City-Lynn Haven, FL	0.9282	0.9524	2.6
37860		Pensacola-Ferry Pass-Brent, FL	0.9244	0.9404	1.7
38940		Port St. Lucie-Fort Pierce, FL	0.9766	1.0032	2.7
39460		Punta Gorda, FL	0.9548	0.9765	2.3
42260		Sarasota-Bradenton-Venice, FL	0.9757	0.9831	0.8
42680		Sebastian-Vero Beach, FL	0.9566	1.0009	4.6
45220		Tallahassee, FL	0.9666	0.9678	0.1
45300		Tampa-St. Petersburg-Clearwater, FL	0.9897	0.9746	-1.5
999FL		Non-metropolitan Areas in FL	0.9287	0.9592	3.3
Georgia					
10500		Albany, GA	0.9201	0.9383	2.0
12020		Athens-Clarke County, GA	0.9289	0.9338	0.5
12060		Atlanta-Sandy Springs-Marietta, GA	1.0429	1.0268	-1.5
12260		Augusta-Richmond County, GA-SC	0.9518	0.9557	0.4
15260		Brunswick, GA	0.9187	0.9585	4.3
16860		Chattanooga, TN-GA	0.9307	0.9299	-0.1
17980		Columbus, GA-AL	0.9202	0.9229	0.3

(continued)

INFORMATION NOT RELEASABLE TO THE PUBLIC UNLESS AUTHORIZED BY LAW: This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law.



**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
Georgia (continued)					
19140		Dalton, GA	0.9095	0.9301	2.3
23580		Gainesville, GA	0.9251	0.9352	1.1
25980		Hinesville-Fort Stewart, GA	0.9099	0.9090	-0.1
31420		Macon, GA	0.9477	0.9578	1.1
40660		Rome, GA	0.9050	0.9440	4.3
42340		Savannah, GA	0.9498	0.9432	-0.7
46660		Valdosta, GA	0.9125	0.9215	1.0
47580		Warner Robins, GA	0.9483	0.9395	-0.9
999GA		Non-metropolitan Areas in GA	0.9059	0.9090	0.3
Guam					
999GU		Non-metropolitan Areas in GU	0.8774		
Hawaii					
26180		Honolulu, HI	1.04473	1.03519	-0.9
999HI		Non-metropolitan Areas in HI	1.0346	1.01998	-1.4
Idaho					
14260		Boise City-Nampa, ID	0.9240	0.9184	-0.6
17660		Coeur d'Alene, ID	0.9014	0.9111	1.1
26820		Idaho Falls, ID	0.8920	0.9075	1.7
30300		Lewiston, ID-WA	0.8938	0.9304	4.1
30860		Logan, UT-ID	0.9014	0.9446	4.8
38540		Pocatello, ID	0.8832	0.9098	3.0
999ID		Non-metropolitan Areas in ID	0.8817	0.8885	0.8

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
<b>Illinois</b>					
14060		Bloomington-Normal, IL	0.9610	0.9546	-0.7
16580		Champaign-Urbana, IL	0.9464	0.9429	-0.4
16980	16974	Chicago-Naperville-Joliet, IL	1.0973	1.0880	-0.9
16980	29404	Lake County-Kenosha County, IL-WI	1.0701	1.0624	-0.7
19180		Danville, IL	0.8979	0.9458	5.3
19340		Davenport-Moline-Rock Island, IA-IL	0.9262	0.9344	0.9
19500		Decatur, IL	0.9287	0.9320	0.4
28100		Kankakee-Bradley, IL	0.9717	0.9656	-0.6
37900		Peoria, IL	0.9570	0.9537	-0.3
40420		Rockford, IL	0.9645	0.9690	0.5
41180		St. Louis, MO-IL	0.9825	0.9754	-0.7
44100		Springfield, IL	0.9671	0.9501	-1.8
999IL		Non-metropolitan Areas in IL	0.8958	0.9248	3.2
<b>Indiana</b>					
11300		Anderson, IN	0.9516	0.9280	-2.5
14020		Bloomington, IN	0.9066	0.8976	-1.0
16980	23844	Gary, IN	0.9576	0.9372	-2.1
17140		Cincinnati-Middletown, OH-KY-IN	0.9827	0.9655	-1.7
18020		Columbus, IN	0.9058	0.9269	2.3
21140		Elkhart-Goshen, IN	0.9280	0.9230	-0.5
21780		Evansville, IN-KY	0.9010	0.9170	1.8
23060		Fort Wayne, IN	0.9219	0.9292	0.8
26900		Indianapolis-Carmel, IN	0.9512	0.9456	-0.6

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
<b>Indiana (continued)</b>					
29020		Kokomo, IN	0.9307	0.9458	1.6
29140		Lafayette, IN	0.9200	0.9011	-2.1
31140		Louisville-Jefferson County, KY-IN	0.9431	0.9296	-1.4
33140		Michigan City-La Porte, IN	0.8964	0.9193	2.6
34620		Muncie, IN	0.9055	0.9056	0.0
43780		South Bend-Mishawaka, IN-MI	0.9353	0.9400	0.5
45460	31084	Terre Haute, IN	0.8862	0.9133	3.1
999IN	42044	Non-metropolitan Areas in IN	0.8936	0.9106	1.9
<b>Iowa</b>					
11180		Ames, IA	0.8844	0.9205	4.1
16300		Cedar Rapids, IA	0.9242	0.9177	-0.7
19340		Davenport-Moline-Rock Island, IA-IL	0.9262	0.9344	0.9
19780		Des Moines-West Des Moines, IA	0.9509	0.9267	-2.5
20220		Dubuque, IA	0.8887	0.9107	2.5
26980		Iowa City, IA	0.9320	0.9201	-1.3
36540		Omaha-Council Bluffs, NE-IA	0.9382	0.9250	-1.4
43580		Sioux City, IA-NE-SD	0.9041	0.9153	1.2
47940		Waterloo-Cedar Falls, IA	0.9040	0.9081	0.4
999IA		Non-metropolitan Areas in IA	0.8720	0.9002	3.2
<b>Kansas</b>					
28140		Kansas City, MO-KS	0.9780	0.9628	-1.6
29940		Lawrence, KS	0.9055	0.8948	-1.2
41140		St. Joseph, MO-KS	0.8927	0.9325	4.5

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
Kansas (continued)					
45820		Topeka, KS	0.9173	0.9194	0.2
48620		Wichita, KS	0.9377	0.9294	-0.9
999KS		Non-metropolitan Areas in KS	0.8683	0.8924	2.8
Kentucky					
14540		Bowling Green, KY	0.8910	0.9006	1.1
17140		Cincinnati-Middletown, OH-KY-IN	0.9827	0.9655	-1.7
17300		Clarksville, TN-KY	0.8935	0.9089	1.7
21060		Elizabethtown, KY	0.8855	0.9109	2.9
21780		Evansville, IN-KY	0.9010	0.9170	1.8
26580		Huntington-Ashland, WV-KY-OH	0.9305	0.9365	0.6
30460		Lexington-Fayette, KY	0.9350	0.9195	-1.7
31140		Louisville-Jefferson County, KY-IN	0.9431	0.9296	-1.4
36980		Owensboro, KY	0.8908	0.9091	2.1
999KY		Non-metropolitan Areas in KY	0.8836	0.8955	1.3
Louisiana					
10780		Alexandria, LA	0.9075	0.8994	-0.9
12940		Baton Rouge, LA	0.9333	0.9153	-1.9
26380		Houma-Bayou Cane-Thibodaux, LA	0.9061	0.9077	0.2
29180		Lafayette, LA	0.9054	0.9154	1.1
29340		Lake Charles, LA	0.9242	0.9100	-1.5
33740		Monroe, LA	0.9147	0.9040	-1.2
35380		New Orleans-Metairie-Kenner, LA	0.9726	0.9530	-2.0
43340		Shreveport-Bossier City, LA	0.9272	0.9221	-0.5
999LA		Non-metropolitan Areas in LA	0.8943	0.8998	0.6

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
<b>Maine</b>					
12620		Bangor, ME	0.9178	0.9244	0.7
30340		Lewiston-Auburn, ME	0.9156	0.9215	0.6
38860		Portland-South Portland-Biddeford, ME	0.9788	0.9822	0.3
999ME		Non-metropolitan Areas in ME	0.9124	0.9050	-0.8
<b>Maryland</b>					
12580		Baltimore-Towson, MD	1.0401	1.0228	-1.7
19060		Cumberland, MD-WV	0.9133	0.9447	3.4
25180		Hagerstown-Martinsburg, MD-WV	0.9443	0.9648	2.2
37980	48864	Wilmington, DE-MD-NJ	1.0409	1.0274	-1.3
41540		Salisbury, MD	0.9493	0.9681	2.0
47900	13644	Bethesda-Gaithersburg-Frederick, MD	1.1131	1.0448	-6.1
47900	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	1.0544	-6.0
999MD		Non-metropolitan Areas in MD	0.9568	0.9685	1.2
<b>Massachusetts</b>					
12700		Barnstable Town, MA	1.0424	1.0691	2.6
14460	14484	Boston-Quincy, MA	1.1522	1.1298	-1.9
14460	15764	Cambridge-Newton-Framingham, MA	1.1429	1.1278	-1.3
14460	21604	Essex County, MA	1.1128	1.0449	-6.1
38340		Pittsfield, MA	0.9728	1.0270	5.6
39300		Providence-New Bedford-Fall River, RI-MA	1.0205	1.0311	1.0
44140		Springfield, MA	0.9900	1.0211	3.1
49340		Worcester, MA	1.0439	1.0458	0.2
999MA		Non-metropolitan Areas in MA	1.0466	1.0277	-1.8

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
<b>Michigan</b>					
11460		Ann Arbor, MI	1.0935	1.0869	-0.6
12980		Battle Creek, MI	0.9870	0.9879	0.1
13020		Bay City, MI	0.9832	0.9854	0.2
19820	19804	Detroit-Livonia-Dearborn, MI	1.1162	1.1048	-1.0
19820	47644	Warren-Troy-Farmington Hills, MI	1.1024	1.0879	-1.3
22420		Flint, MI	1.0043	1.0167	1.2
24340		Grand Rapids-Wyoming, MI	0.9924	0.9841	-0.8
26100		Holland-Grand Haven, MI	0.9960	0.9787	-1.7
27100		Jackson, MI	0.9829	0.9920	0.9
28020		Kalamazoo-Portage, MI	0.9870	1.0090	2.2
29620		Lansing-East Lansing, MI	1.0042	0.9929	-1.1
33780		Monroe, MI	1.0307	1.0019	-2.8
34740		Muskegon-Norton Shores, MI	0.9960	0.9953	-0.1
35660		Niles-Benton Harbor, MI	0.9630	0.9702	0.7
40980		Saginaw-Saginaw Township North, MI	0.9832	0.9818	-0.1
43780		South Bend-Mishawaka, IN-MI	0.9353	0.9400	0.5
999MI		Non-metropolitan Areas in MI	0.9457	0.9639	1.9
<b>Minnesota</b>					
20260		Duluth, MN-WI	0.9101	0.9639	5.9
22020		Fargo, ND-MN	0.9143	0.8932	-2.3
24220		Grand Forks, ND-MN	0.9063	0.8926	-1.5
29100		La Crosse, WI-MN	0.9097	0.9421	3.6
33460		Minneapolis-St. Paul-Bloomington, MN-WI	1.0316	0.9929	-3.8
40340		Rochester, MN	0.9804	0.9996	2.0

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
Minnesota (continued)					
41060		St. Cloud, MN	0.9105	0.9795	7.6
999MN		Non-metropolitan Areas in MN	0.8851	0.9396	6.2
Mississippi					
25060		Gulfport-Biloxi, MS	0.9217	0.9077	-1.5
25620		Hattiesburg, MS	0.8690	0.8683	-0.1
27140		Jackson, MS	0.9378	0.8982	-4.2
32820		Memphis, TN-MS-AR	0.9527	0.9367	-1.7
37700		Pascagoula, MS	0.9200	0.8961	-2.6
999MS		Non-metropolitan Areas in MS	0.8720	0.8797	0.9
Missouri					
17860		Columbia, MO	0.9168	0.8988	-2.0
22220		Fayetteville-Springdale-Rogers, AR-MO	0.8899	0.8989	1.0
27620		Jefferson City, MO	0.8745	0.8969	2.6
27900		Joplin, MO	0.8716	0.8963	2.8
28140		Kansas City, MO-KS	0.9780	0.9628	-1.6
41140		St. Joseph, MO-KS	0.8927	0.9325	4.5
41180		St. Louis, MO-IL	0.9825	0.9754	-0.7
44180		Springfield, MO	0.8958	0.9008	0.6
999MO		Non-metropolitan Areas in MO	0.8686	0.8878	2.2
Montana					
13740		Billings, MT	0.9212	0.9296	0.9
24500		Great Falls, MT	0.9156	0.9166	0.1
33540		Missoula, MT	0.9090	0.9164	0.8
999MT		Non-metropolitan Areas in MT	0.8975	0.9169	2.2

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
<b>Nebraska</b>					
30700		Lincoln, NE	0.9156	0.9268	1.2
36540		Omaha-Council Bluffs, NE-IA	0.9382	0.9250	-1.4
43580		Sioux City, IA-NE-SD	0.9041	0.9153	1.2
999NE		Non-metropolitan Areas in NE	0.8571	0.8910	4.0
<b>Nevada</b>					
16180		Carson City, NV	0.9922	1.0126	2.1
29820		Las Vegas-Paradise, NV	1.0203	1.0329	1.2
39900		Reno-Sparks, NV	1.0183	1.0491	3.0
999NV		Non-metropolitan Areas in NV	0.9996	0.9987	-0.1
<b>New Hampshire</b>					
14460	40484	Rockingham County-Strafford County, NH	1.0169	1.0079	-0.9
31700		Manchester-Nashua, NH	1.0376	1.0203	-1.7
999NH		Non-metropolitan Areas in NH	0.9697	1.0165	4.8
<b>New Jersey</b>					
10900		Allentown-Bethlehem-Easton, PA-NJ	0.9924	0.9834	-0.9
12100		Atlantic City, NJ	1.0509	1.0853	3.3
35620	20764	Edison, NJ	1.1115	1.0913	-1.8
35620	35084	Newark-Union, NJ-PA	1.1182	1.1177	0.0
35620	35644	New York-White Plains-Wayne, NY-NJ	1.1526	1.1691	1.4
36140		Ocean City, NJ	1.0332	1.0533	1.9
37980	15804	Camden, NJ	1.0639	1.0628	-0.1
37980	48864	Wilmington, DE-MD-NJ	1.0409	1.0274	-1.3
45940		Trenton-Ewing, NJ	1.1230	1.0781	-4.0
47220		Vineland-Millville-Bridgeton, NJ	1.0219	1.0418	1.9

(continued)



**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
<b>New Mexico</b>					
10740		Albuquerque, NM	0.9588	0.9516	-0.8
22140		Farmington, NM	0.8880	0.9140	2.9
29740		Las Cruces, NM	0.9027	0.9350	3.6
42140		Santa Fe, NM	1.0141	0.9845	-2.9
999NM		Non-metropolitan Areas in NM	0.8940	0.9153	2.4
<b>New York</b>					
10580		Albany-Schenectady-Troy, NY	0.9692	0.9433	-2.7
13780		Binghamton, NY	0.9238	0.9425	2.0
15380		Buffalo-Niagara Falls, NY	0.9552	0.9489	-0.7
21300		Elmira, NY	0.9109	0.9155	0.5
24020		Glens Falls, NY	0.9322	0.9307	-0.2
27060		Ithaca, NY	0.9432	0.9481	0.5
28740		Kingston, NY	0.9765	1.0056	3.0
35620	35004	Nassau-Suffolk, NY	1.1974	1.1750	-1.9
35620	35644	New York-White Plains-Wayne, NY-NJ	1.1526	1.1691	1.4
39100		Poughkeepsie-Newburgh-Middletown, NY	1.0653	1.0595	-0.5
40380		Rochester, NY	0.9630	0.9463	-1.7
45060		Syracuse, NY	0.9537	0.9593	0.6
46540		Utica-Rome, NY	0.9195	0.9324	1.4
999NY		Non-metropolitan Areas in NY	0.9268	0.9293	0.3
<b>North Carolina</b>					
11700		Asheville, NC	0.9227	0.9328	1.1
15500		Burlington, NC	0.9449	0.9268	-1.9
16740		Charlotte-Gastonia-Concord, NC-SC	0.9670	0.9459	-2.2

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
North Carolina (continued)					
20500		Durham, NC	0.9961	0.9562	-4.0
22180		Fayetteville, NC	0.9094	0.9334	2.6
24140		Goldsboro, NC	0.9082	0.9312	2.5
24660		Greensboro-High Point, NC	0.9403	0.9341	-0.7
24780		Greenville, NC	0.9301	0.9344	0.5
25860		Hickory-Lenoir-Morganton, NC	0.9086	0.9238	1.7
27340		Jacksonville, NC	0.8725	0.9046	3.7
39580		Raleigh-Cary, NC	0.9992	0.9576	-4.2
40580		Rocky Mount, NC	0.9017	0.9262	2.7
47260		Virginia Beach-Norfolk-Newport News, VA-NC	0.9566	0.9462	-1.1
48900		Wilmington, NC	0.9403	0.9448	0.5
49180		Winston-Salem, NC	0.9449	0.9400	-0.5
999NC		Non-metropolitan Areas in NC	0.9038	0.9189	1.7
North Dakota					
13900		Bismarck, ND	0.8962	0.8729	-2.6
22020		Fargo, ND-MN	0.9143	0.8932	-2.3
24220		Grand Forks, ND-MN	0.9063	0.8926	-1.5
999ND		Non-metropolitan Areas in ND	0.8510	0.8670	1.9
Ohio					
10420		Akron, OH	0.9792	0.9501	-3.0
15940		Canton-Massillon, OH	0.9325	0.9516	2.0
17140		Cincinnati-Middletown, OH-KY-IN	0.9827	0.9655	-1.7
17460		Cleveland-Elyria-Mentor, OH	1.0076	0.9705	-3.7
18140		Columbus, OH	0.9820	0.9804	-0.2
19380		Dayton, OH	0.9667	0.9649	-0.2

(continued)

INFORMATION NOT RELEASABLE TO THE PUBLIC UNLESS AUTHORIZED BY LAW: This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law.

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
Ohio (continued)					
26580		Huntington-Ashland, WV-KY-OH	0.9305	0.9365	0.6
30620		Lima, OH	0.9203	0.9410	2.3
31900		Mansfield, OH	0.9079	0.9452	4.1
37620		Parkersburg-Marietta-Vienna, WV-OH	0.9309	0.9458	1.6
41780		Sandusky, OH	0.9155	0.9506	3.8
44220		Springfield, OH	0.9673	0.9520	-1.6
45780		Toledo, OH	0.9530	0.9597	0.7
48260		Weirton-Steubenville, WV-OH	0.9149	0.9296	1.6
48540		Wheeling, WV-OH	0.9071	0.9022	-0.5
49660		Youngstown-Warren-Boardman, OH-PA	0.9310	0.9443	1.4
999OH		Non-metropolitan Areas in OH	0.9142	0.9398	2.8
Oklahoma					
22900		Fort Smith, AR-OK	0.8833	0.8785	-0.5
30020		Lawton, OK	0.8817	0.8911	1.1
36420		Oklahoma City, O	0.9016	0.8991	-0.3
46140		Tulsa, OK	0.9127	0.8933	-2.1
999OK		Non-metropolitan	0.8566	0.8730	1.9
Oregon					
13460		Bend, OR	0.9272	0.9495	2.4
18700		Corvallis, OR	0.9385	0.9703	3.4
21660		Eugene-Springfield, OR	0.9394	0.9550	1.7
32780		Medford, OR	0.9303	0.9529	2.4
38900		Portland-Vancouver-Beaverton, OR-WA	1.0023	1.0064	0.4
41420		Salem, OR	0.9651	0.9587	-0.7
999OR		Non-metropolitan Areas in OR	0.9114	0.9353	2.6

(continued)

INFORMATION NOT RELEASABLE TO THE PUBLIC UNLESS AUTHORIZED BY LAW. This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law.

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
<b>Pennsylvania</b>					
10900		Allentown-Bethlehem-Easton, PA-NJ	0.9924	0.9834	-0.9
11020		Altoona, PA	0.9073	0.9236	1.8
21500		Erie, PA	0.9126	0.9330	2.2
25420		Harrisburg-Carlisle, PA	0.9742	0.9593	-1.5
27780		Johnstown, PA	0.9022	0.9258	2.6
29540		Lancaster, PA	0.9570	0.9593	0.2
30140		Lebanon, PA	0.9742	0.9478	-2.7
35620	35084	Newark-Union, NJ-PA	1.1182	1.1177	0.0
37980	37964	Philadelphia, PA	1.0681	1.0643	-0.3
38300		Pittsburgh, PA	0.9583	0.9392	-2.0
39740		Reading, PA	0.9585	0.9616	0.3
42540		Scranton--Wilkes-Barre, PA	0.9330	0.9277	-0.6
44300		State College, PA	0.9294	0.9085	-2.3
48700		Williamsport, PA	0.9201	0.9238	0.4
49620		York-Hanover, PA	0.9502	0.9510	0.1
49660		Youngstown-Warren-Boardman, OH-PA	0.9310	0.9443	1.4
999PA		Non-metropolitan Areas in PA	0.9175	0.9261	0.9
<b>Puerto Rico</b>					
10380		Aguadilla-Isabela-San Sebastián, PR	0.7537	0.7578	0.6
21940		Fajardo, PR	0.7929	0.7608	-4.0
25020		Guayama, PR	0.7466	0.7427	-0.5
32420		Mayagüez, PR	0.7674	0.7571	-1.3
38660		Ponce, PR	0.7668	0.7709	0.5
41900		San Germán-Cabo Rojo, PR	0.7659	0.7764	1.4

(continued)

INFORMATION NOT RELEASABLE TO THE PUBLIC UNLESS AUTHORIZED BY LAW: This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law.

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
Puerto Rico (continued)					
41980		San Juan-Caguas-Guaynabo, PR	0.7987	0.7743	-3.0
49500		Yauco, PR	0.7610	0.7531	-1.0
999PR		Non-metropolitan Areas in PR	0.8774	0.7535	-14.1
Rhode Island					
39300		Providence-New Bedford-Fall River, RI-MA	1.0205	1.0311	1.0
South Carolina					
11340		Anderson, SC	0.9294	0.9225	-0.7
12260		Augusta-Richmond County, GA-SC	0.9518	0.9557	0.4
16700		Charleston-North Charleston, SC	0.9264	0.9225	-0.4
16740		Charlotte-Gastonia-Concord, NC-SC	0.9670	0.9459	-2.2
17900		Columbia, SC	0.9337	0.9215	-1.3
22500		Florence, SC	0.8999	0.9064	0.7
24860		Greenville, SC	0.9276	0.9342	0.7
34820		Myrtle Beach-Conway-North Myrtle Beach, SC	0.9073	0.9087	0.2
43900		Spartanburg, SC	0.9294	0.9246	-0.5
44940		Sumter, SC	0.8862	0.8968	1.2
999SC		Non-metropolitan Areas in SC	0.9000	0.9116	1.3
South Dakota					
39660		Rapid City, SD	0.8948	0.8974	0.3
43580		Sioux City, IA-NE-SD	0.9041	0.9153	1.2
43620		Sioux Falls, SD	0.9185	0.9116	-0.7
999SD		Non-metropolitan Areas in SD	0.8537	0.8809	3.2

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
<b>Tennessee</b>					
16860		Chattanooga, TN-GA	0.9307	0.9299	-0.1
17300		Clarksville, TN-KY	0.8935	0.9089	1.7
17420		Cleveland, TN	0.8806	0.9030	2.6
27180		Jackson, TN	0.9114	0.9203	1.0
27740		Johnson City, TN	0.8951	0.9037	1.0
28700		Kingsport-Bristol-Bristol, TN-VA	0.8950	0.9073	1.4
28940		Knoxville, TN	0.9159	0.9114	-0.5
32820		Memphis, TN-MS-AR	0.9527	0.9367	-1.7
34100		Morristown, TN	0.8753	0.8986	2.7
34980		Nashville-Davidson--Murfreesboro, TN	0.9529	0.9422	-1.1
999TN		Non-metropolitan Areas in TN	0.8773	0.9000	2.6
<b>Texas</b>					
10180		Abilene, TX	0.9110	0.9254	1.6
11100		Amarillo, TX	0.9262	0.9523	2.8
12420		Austin-Round Rock, TX	1.0228	1.0078	-1.5
13140		Beaumont-Port Arthur, TX	0.9404	0.9406	0.0
15180		Brownsville-Harlingen, TX	0.9130	0.9523	4.3
17780		College Station-Bryan, TX	0.9257	0.9281	0.3
18580		Corpus Christi, TX	0.9469	0.9416	-0.6
19100	19124	Dallas-Plano-Irving, TX	1.0359	1.0200	-1.5
19100	23104	Fort Worth-Arlington, TX	0.9966	0.9950	-0.2
21340		El Paso, TX	0.9356	0.9512	1.7
26420		Houston-Sugar Land-Baytown, TX	1.0202	1.0177	-0.2

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
Texas (continued)					
28660		Killeen-Temple-Fort Hood, TX	0.9253	0.9401	1.6
29700		Laredo, TX	0.9196	0.9246	0.5
30980		Longview, TX	0.9169	0.9408	2.6
31180		Lubbock, TX	0.9160	0.9271	1.2
32580		McAllen-Edinburg-Mission, TX	0.9067	0.9385	3.5
33260		Midland, TX	0.9365	0.9616	2.7
36220		Odessa, TX	0.9365	0.9709	3.7
41660		San Angelo, TX	0.9042	0.9297	2.8
41700		San Antonio, TX	0.9641	0.9513	-1.3
43300		Sherman-Denison, TX	0.9332	0.9440	1.2
45500		Texarkana, TX-Texarkana, AR	0.9157	0.9271	1.2
46340		Tyler, TX	0.9393	0.9468	0.8
47020		Victoria, TX	0.9296	0.9449	1.6
47380		Waco, TX	0.9339	0.9436	1.0
48660		Wichita Falls, TX	0.9088	0.9279	2.1
999TX		Non-metropolitan Areas in TX	0.9034	0.9269	2.6
US Virgin Islands					
999VI		Non-metropolitan Areas in VI	0.8774	0.8863	1.0
Utah					
30860		Logan, UT-ID	0.9014	0.9446	4.8
36260		Ogden-Clearfield, UT	0.9710	0.9567	-1.5
39340		Provo-Orem, UT	0.9014	0.9431	4.6
41100		St. George, UT	0.9179	0.9536	3.9
41620		Salt Lake City, UT	0.9702	0.9641	-0.6
999UT		Non-metropolitan Areas in UT	0.8961	0.9312	3.9

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
<b>Vermont</b>					
15540		Burlington-South Burlington, VT	0.9788	0.9576	-2.2
999VT		Non-metropolitan Areas in VT	0.9274	0.9509	2.5
<b>Virginia</b>					
13980		Blacksburg-Christiansburg-Radford, VA	0.8933	0.9237	3.4
16820		Charlottesville, VA	0.9652	0.9659	0.1
19260		Danville, VA	0.9001	0.9340	3.8
25500		Harrisonburg, VA	0.9031	0.9414	4.2
28700		Kingsport-Bristol-Bristol, TN-VA	0.8950	0.9073	1.4
31340		Lynchburg, VA	0.9064	0.9359	3.3
40060		Richmond, VA	0.9921	0.9598	-3.3
40220		Roanoke, VA	0.9196	0.9447	2.7
47260		Virginia Beach-Norfolk-Newport News, VA-NC	0.9566	0.9462	-1.1
47900	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	1.0544	-6.0
49020		Winchester, VA-WV	0.9098	0.9583	5.3
999VA		Non-metropolitan Areas in VA	0.8940	0.9219	3.1
<b>Washington</b>					
13380		Bellingham, WA	0.9642	0.9858	2.2
14740		Bremerton-Silverdale, WA	1.0082	1.0032	-0.5
28420		Kennewick-Richland-Pasco, WA	1.0027	0.9839	-1.9
30300		Lewiston, ID-WA	0.8938	0.9304	4.1
31020		Longview, WA	0.9367	0.9717	3.7
34580		Mount Vernon-Anacortes, WA	0.9562	0.9713	1.6
36500		Olympia, WA	1.0266	1.0047	-2.1

(continued)



**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
Washington (continued)					
38900		Portland-Vancouver-Beaverton, OR-WA	1.0023	1.0064	0.4
42660	42644	Seattle-Bellevue-Everett, WA	1.0558	1.0462	-0.9
42660	45104	Tacoma, WA	1.0058	0.9946	-1.1
44060		Spokane, WA	0.9485	0.9804	3.4
48300		Wenatchee, WA	0.9336	0.9706	4.0
49420		Yakima, WA	0.9583	0.9688	1.1
999WA		Non-metropolitan Areas in WA	0.9406	0.9706	3.2
West Virginia					
16620		Charleston, WV	0.9633	0.9520	-1.2
19060		Cumberland, MD-WV	0.9133	0.9447	3.4
25180		Hagerstown-Martinsburg, MD-WV	0.9443	0.9648	2.2
26580		Huntington-Ashland, WV-KY-OH	0.9305	0.9365	0.6
34060		Morgantown, WV	0.9218	0.9357	1.5
37620		Parkersburg-Marietta-Vienna, WV-OH	0.9309	0.9458	1.6
47900	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1214	1.0544	-6.0
48260		Weirton-Steubenville, WV-OH	0.9149	0.9296	1.6
48540		Wheeling, WV-OH	0.9071	0.9022	-0.5
49020		Winchester, VA-WV	0.9098	0.9583	5.3
999WV		Non-metropolitan Areas in WV	0.9131	0.9208	0.8
Wisconsin					
11540		Appleton, WI	0.9297	0.9415	1.3
16980	29404	Lake County-Kenosha County, IL-WI	1.0701	1.0624	-0.7
20260		Duluth, MN-WI	0.9101	0.9639	5.9
20740		Eau Claire, WI	0.9192	0.9413	2.4

(continued)

**Table 12 (continued)**  
**MSA-based actual and imputed GAFs by state, 2006**

CBSA code	Metro division code	CBSA/metro division title	Mean actual GAF	2006 imputed GAF	Percent difference
Wisconsin (continued)					
22540		Fond du Lac, WI	0.9136	0.9538	4.4
24580		Green Bay, WI	0.9341	0.9427	0.9
27500		Janesville, WI	0.9407	0.9514	1.1
29100		La Crosse, WI-MN	0.9097	0.9421	3.6
31540		Madison, WI	0.9673	0.9664	-0.1
33340		Milwaukee-Waukesha-West Allis, WI	0.9780	0.9674	-1.1
33460		Minneapolis-St. Paul-Bloomington, MN-WI	1.0316	0.9929	-3.8
36780		Oshkosh-Neenah, WI	0.9297	0.9374	0.8
39540		Racine, WI	0.9541	0.9509	-0.3
43100		Sheboygan, WI	0.9179	0.9369	2.1
48140		Wausau, WI	0.9300	0.9515	2.3
999WI		Non-metropolitan Areas in WI	0.8986	0.9395	4.6
Wyoming					
16220		Casper, WY	0.9039	0.9226	2.1
16940		Cheyenne, WY	0.9389	0.9293	-1.0
999WY		Non-metropolitan Areas in WY	0.8914	0.9198	3.2

NOTES: The “imputed” GAF replaces the Census wage data with the IPPS hospital wage index in the practice expense GPCI. GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.  
 SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data, the FY 2005 rental index, and the FY2007 hospital wage index

**Table 13**  
**MSA-based areas where the imputed GAF exceeds the actual GAF**  
**by the largest percentage, 2006**

MSA code	Metro div code	MSA/metro div/ non-metro name	2006		
			Actual GAF	Imputed GAF	Percent difference
999AK		Non-metropolitan Alaska	0.8774	1.0293	17.3
46700		Vallejo-Fairfield, CA	1.0865	1.1970	10.2
39820		Redding, CA	0.9449	1.0370	9.7
41060		St. Cloud, MN	0.9105	0.9795	7.6
25260		Hanford-Corcoran, CA	0.9437	1.0038	6.4
999CA		Non-metropolitan California	0.9565	1.0171	6.3
999MN		Non-metropolitan Minnesota	0.8851	0.9396	6.2
24300		Grand Junction, CO	0.9161	0.9725	6.2
32900		Merced, CA	0.9646	1.0227	6.0
49700		Yuba City, CA	0.9509	1.0080	6.0

NOTES: The “imputed” GAF replaces the Census wage data with the IPPS hospital wage index in the practice expense GPCI.

GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data, the FY 2005 rental index, and the FY2007 hospital wage index.

**Table 14**  
**MSA-based areas where the imputed GAF is less than the actual GAF**  
**by the largest percentage, 2006**

MSA code	Metro div code	MSA/metro div/ non-metro name	2006		
			Actual GAF	Imputed GAF	Percent difference
999PR		Non-metropolitan Puerto Rico	0.8774	0.7535	-14.1%
47900	13644	Bethesda-Gaithersburg-Frederick, MD Met Div	1.1131	1.0448	-6.1
14460	21604	Essex County, MA	1.1128	1.0449	-6.1
47900	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV Met Div	1.1214	1.0544	-6.0
27140		Jackson, MS	0.9378	0.8982	-4.2
39580		Raleigh-Cary, NC	0.9992	0.9576	-4.2
21940		Fajardo, PR	0.7929	0.7608	-4.0
41740		San Diego-Carlsbad-San Marcos, CA MSA	1.0722	1.0290	-4.0
20500		Durham, NC	0.9961	0.9562	-4.0

NOTES: The “imputed” GAF replaces the Census wage data with the IPPS hospital wage index in the practice expense GPCI.

GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data, the FY 2005 rental index, and the FY2007 hospital wage index.

**Table 15**  
**MSA-based actual and imputed GAFs by urbanicity, 2006**

Urbanicity	2006		
	Actual GAF	Imputed GAF	Percent difference
National	0.998	0.998	
Metropolitan	1.012	1.009	-0.3%
Large	1.055	1.046	-0.9
Medium	0.964	0.967	0.3
Small	0.930	0.942	1.3
Non-Metropolitan	0.902	0.922	2.2
Adjacent to a Metro Area	0.907	0.927	2.2
Not-Adjacent to a Metro Area	0.893	0.914	2.4

NOTES: The “imputed” GAF replaces the Census wage data with the IPPS hospital wage index in the practice expense GPCI.

GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data, the FY 2005 rental index, and the FY2007 hospital wage index.

**Table 16**  
**Creating payment areas from counties with 2006 GAFs**  
**within 5% of the seed county, California**  
**Seed counties are bolded**

Locality	Order county entered locality	FIPS state- county code	County	County GAF (GAF06)	County total RVUs	Locality GAF
<b>1</b>	<b>1</b>	<b>06085</b>	<b>Santa Clara</b>	<b>1.263</b>	<b>4,853,412</b>	<b>1.255</b>
1	2	06081	San Mateo	1.256	2,222,875	1.255
1	3	06075	San Francisco	1.254	4,083,794	1.255
1	4	06041	Marin	1.222	971,761	1.255
<b>2</b>	<b>1</b>	<b>06013</b>	<b>Contra Costa</b>	<b>1.179</b>	<b>2,566,675</b>	<b>1.175</b>
2	2	06001	Alameda	1.173	3,981,123	1.175
<b>3</b>	<b>1</b>	<b>06059</b>	<b>Orange</b>	<b>1.119</b>	<b>11,474,130</b>	<b>1.091</b>
3	2	06087	Santa Cruz	1.119	1,026,093	1.091
3	3	06055	Napa	1.100	724,411	1.091
3	4	06097	Sonoma	1.099	1,596,804	1.091
3	5	06037	Los Angeles	1.088	49,894,764	1.091
3	6	06095	Solano	1.086	566,419	1.091
3	7	06053	Monterey	1.084	1,850,188	1.091
3	8	06111	Ventura	1.081	3,438,048	1.091
3	9	06073	San Diego	1.072	10,150,042	1.091
<b>4</b>	<b>1</b>	<b>06067</b>	<b>Sacramento</b>	<b>1.063</b>	<b>4,004,571</b>	<b>1.051</b>
4	2	06083	Santa Barbara	1.052	2,352,048	1.051
4	3	06017	El Dorado	1.049	464,972	1.051
4	4	06061	Placer	1.037	847,538	1.051
4	5	06079	San Luis Obispo	1.028	1,683,067	1.051
<b>5</b>	<b>1</b>	<b>06077</b>	<b>San Joaquin</b>	<b>1.009</b>	<b>2,049,477</b>	<b>0.983</b>
5	2	06071	San Bernardino	0.999	4,004,109	0.983
5	3	06113	Yolo	0.996	309,485	0.983
5	4	06065	Riverside	0.992	5,336,318	0.983
5	5	06099	Stanislaus	0.992	1,771,455	0.983
5	6	06069	San Benito	0.991	86,432	0.983

(continued)

**Table 16 (continued)**  
**Creating payment areas from counties with 2006 GAFs**  
**within 5% of the seed county, California**  
**Seed counties are bolded**

Locality	Order county entered locality	FIPS state- county code	County	County GAF (GAF06)	County total RVUs	Locality GAF
5	7	06051	Mono	0.985	12,223	0.983
5	8	06057	Nevada	0.977	528,153	0.983
5	9	06029	Kern	0.977	2,524,267	0.983
5	10	06019	Fresno	0.965	3,541,766	0.983
5	11	06039	Madera	0.965	232,635	0.983
5	12	06047	Merced	0.965	893,059	0.983
5	13	06045	Mendocino	0.964	353,897	0.983
5	14	06005	Amador	0.963	162,464	0.983
5	15	06109	Tuolumne	0.962	360,199	0.983
5	16	06007	Butte	0.961	1,525,377	0.983
5	17	06107	Tulare	0.959	1,776,082	0.983
<b>6</b>	<b>1</b>	<b>06033</b>	<b>Lake</b>	<b>0.956</b>	<b>300,074</b>	<b>0.947</b>
6	2	06023	Humboldt	0.954	685,120	0.947
6	3	06009	Calaveras	0.954	132,339	0.947
6	4	06015	Del Norte	0.954	156,770	0.947
6	5	06101	Sutter	0.951	636,880	0.947
6	6	06115	Yuba	0.951	278,803	0.947
6	7	06027	Inyo	0.950	99,878	0.947
6	8	06043	Mariposa	0.948	18,038	0.947
6	9	06025	Imperial	0.947	557,810	0.947
6	10	06089	Shasta	0.945	1,954,043	0.947
6	11	06003	Alpine	0.944	208	0.947
6	12	06031	Kings	0.944	315,144	0.947
6	13	06091	Sierra	0.942	73,681	0.947
6	14	06035	Lassen	0.940	57,444	0.947
6	15	06011	Colusa	0.938	27,423	0.947
6	16	06021	Glenn	0.938	13,580	0.947
6	17	06049	Modoc	0.938	10,623	0.947

(continued)

**Table 16 (continued)**  
**Creating payment areas from counties with 2006 GAFs**  
**within 5% of the seed county, California**  
**Seed counties are bolded**

Locality	Order county entered locality	FIPS state- county code	County	County GAF (GAF06)	County total RVUs	Locality GAF
6	18	06063	Plumas	0.938	38,874	0.947
6	19	06093	Siskiyou	0.938	200,006	0.947
6	20	06103	Tehama	0.938	265,316	0.947
6	21	06105	Trinity	0.938	28,545	0.947

NOTE: GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data



**Table 17**  
**Creating payment areas from counties with 2006 GAFs within 5% of the seed county,**  
**national results**

State	State Locality Number	National Locality Number	Number of Counties	Locality GAF	GAFs of Constituent Counties		Range= Maximum- Minimum
					Minimum	Maximum	
Alaska	1	1	11	1.057	1.036	1.091	0.054
Alaska	2	2	11	1.028	1.003	1.033	0.031
Alabama	1	3	16	0.927	0.901	0.943	0.041
Alabama	2	4	51	0.879	0.870	0.890	0.020
Arkansas	1	5	6	0.920	0.911	0.949	0.037
Arkansas	2	6	69	0.867	0.849	0.890	0.041
Arizona	1	7	4	1.011	0.996	1.024	0.028
Arizona	2	8	11	0.949	0.924	0.962	0.038
California	1	9	4	1.255	1.222	1.263	0.041
California	2	10	2	1.175	1.173	1.179	0.006
California	3	11	9	1.091	1.072	1.119	0.047
California	4	12	5	1.051	1.028	1.063	0.035
California	5	13	17	0.983	0.959	1.009	0.050
California	6	14	21	0.947	0.938	0.956	0.019
Colorado	1	15	8	1.036	1.012	1.043	0.030
Colorado	2	16	13	0.962	0.930	0.975	0.045
Colorado	3	17	40	0.919	0.915	0.925	0.010
Connecticut	1	18	2	1.109	1.087	1.128	0.041
Connecticut	2	19	6	1.060	1.024	1.070	0.046
D. of Columbia	1	20	1	1.162	1.162	1.162	0.000
Delaware	1	21	1	1.041	1.041	1.041	0.000
Delaware	2	22	2	0.965	0.960	0.973	0.013
Florida	1	23	3	1.043	1.030	1.061	0.031
Florida	2	24	23	0.982	0.957	1.007	0.050
Florida	3	25	41	0.933	0.922	0.955	0.032
Georgia	1	26	20	1.044	1.044	1.044	0.000
Georgia	2	27	32	0.936	0.909	0.956	0.047
Georgia	3	28	102	0.905	0.905	0.908	0.003
Guam	1	29	1	1.075	1.075	1.075	0.000

(continued)

**Table 17 (continued)**  
**Creating payment areas from counties with 2006 GAFs within 5% of the seed county,**  
**national results**

State	State Locality Number	National Locality Number	Number of Counties	Locality GAF	GAFs of Constituent Counties		Range= Maximum- Minimum
					Minimum	Maximum	
Hawaii	1	30	3	1.048	1.045	1.072	0.028
Hawaii	2	31	1	1.000	1.000	1.000	0.000
Iowa	1	32	9	0.932	0.907	0.952	0.045
Iowa	2	33	90	0.874	0.870	0.889	0.019
Idaho	1	34	43	0.902	0.879	0.925	0.046
Illinois	1	35	5	1.099	1.056	1.105	0.049
Illinois	2	36	8	1.015	1.006	1.046	0.040
Illinois	3	37	14	0.960	0.940	0.980	0.040
Illinois	4	38	75	0.899	0.891	0.929	0.037
Indiana	1	39	28	0.944	0.922	0.960	0.039
Indiana	2	40	64	0.896	0.886	0.908	0.022
Kansas	1	41	7	0.952	0.938	0.971	0.033
Kansas	2	42	7	0.901	0.875	0.919	0.044
Kansas	3	43	88	0.864	0.864	0.871	0.008
Kentucky	1	44	17	0.942	0.914	0.962	0.048
Kentucky	2	45	103	0.884	0.861	0.899	0.037
Louisiana	1	46	15	0.952	0.928	0.973	0.046
Louisiana	2	47	49	0.905	0.887	0.924	0.037
Massachusetts	1	48	4	1.147	1.113	1.168	0.056
Massachusetts	2	49	2	1.096	1.096	1.107	0.011
Massachusetts	3	50	4	1.038	1.028	1.044	0.016
Massachusetts	4	51	4	0.986	0.973	0.991	0.018
Maryland	1	52	4	1.115	1.067	1.122	0.055
Maryland	2	53	7	1.041	1.019	1.062	0.043
Maryland	3	54	4	0.975	0.960	1.000	0.040
Maryland	4	55	9	0.937	0.911	0.950	0.039
Maine	1	56	2	0.980	0.945	0.989	0.044
Maine	2	57	14	0.915	0.909	0.937	0.028
Michigan	1	58	4	1.111	1.093	1.116	0.023
Michigan	2	59	19	0.998	0.983	1.035	0.052
Michigan	3	60	20	0.954	0.934	0.983	0.049
Michigan	4	61	39	0.934	0.934	0.934	0.000

(continued)

**Table 17 (continued)**  
**Creating payment areas from counties with 2006 GAFs within 5% of the seed county,**  
**national results**

State	State Locality Number	National Locality Number	Number of Counties	Locality GAF	GAFs of Constituent Counties		Range= Maximum–Minimum
					Minimum	Maximum	
Minnesota	1	62	12	1.017	0.982	1.032	0.050
Minnesota	2	63	75	0.894	0.877	0.911	0.034
Missouri	1	64	14	0.980	0.976	0.985	0.009
Missouri	2	65	7	0.903	0.893	0.928	0.035
Missouri	3	66	94	0.870	0.864	0.876	0.012
Mississippi	1	67	7	0.934	0.922	0.954	0.031
Mississippi	2	68	74	0.871	0.868	0.884	0.016
Montana	1	69	51	0.908	0.893	0.921	0.028
North Carolina	1	70	13	0.983	0.958	0.999	0.042
North Carolina	2	71	37	0.926	0.898	0.945	0.047
North Carolina	3	72	48	0.892	0.872	0.897	0.025
North Dakota	1	73	4	0.907	0.896	0.915	0.018
North Dakota	2	74	43	0.851	0.847	0.856	0.009
Nebraska	1	75	6	0.929	0.904	0.939	0.035
Nebraska	2	76	73	0.857	0.851	0.870	0.019
New Hampshire	1	77	3	1.028	1.002	1.038	0.036
New Hampshire	2	78	7	0.970	0.940	0.975	0.035
New Jersey	1	79	11	1.128	1.105	1.154	0.049
New Jersey	2	80	9	1.065	1.033	1.079	0.046
New Jersey	3	81	1	1.022	1.022	1.022	0.000
New Mexico	1	82	2	1.014	1.014	1.014	0.000
New Mexico	2	83	4	0.958	0.926	0.959	0.033
New Mexico	3	84	26	0.893	0.885	0.903	0.017
Nevada	1	85	14	1.017	0.987	1.020	0.033
New York	1	86	5	1.191	1.166	1.209	0.043
New York	2	87	6	1.123	1.084	1.138	0.054
New York	3	88	1	1.049	1.049	1.049	0.000
New York	4	89	26	0.959	0.932	0.976	0.044
New York	5	90	24	0.918	0.902	0.924	0.022
Ohio	1	91	21	0.990	0.965	1.014	0.049
Ohio	2	92	24	0.936	0.914	0.961	0.047

(continued)

**Table 17 (continued)**  
**Creating payment areas from counties with 2006 GAFs within 5% of the seed county,**  
**national results**

State	State Locality Number	National Locality Number	Number of Counties	Locality GAF	GAFs of Constituent Counties		Range= Maximum- Minimum
					Minimum	Maximum	
Ohio	3	93	43	0.907	0.886	0.912	0.027
Oklahoma	1	94	14	0.905	0.877	0.915	0.038
Oklahoma	2	95	63	0.853	0.851	0.862	0.012
Oregon	1	96	6	0.996	0.960	1.007	0.047
Oregon	2	97	30	0.924	0.907	0.941	0.033
Pennsylvania	1	98	5	1.068	1.049	1.072	0.023
Pennsylvania	2	99	19	0.964	0.935	0.984	0.049
Pennsylvania	3	100	43	0.918	0.902	0.933	0.031
Puerto Rico	1	101	1	0.886	0.886	0.886	0.000
Puerto Rico	2	102	12	0.819	0.798	0.838	0.040
Puerto Rico	3	103	40	0.777	0.757	0.796	0.039
Puerto Rico	4	104	25	0.747	0.747	0.747	0.000
Rhode Island	1	105	5	1.016	1.014	1.042	0.028
South Carolina	1	106	14	0.932	0.922	0.961	0.040
South Carolina	2	107	32	0.897	0.886	0.907	0.021
South Dakota	1	108	3	0.911	0.896	0.919	0.024
South Dakota	2	109	59	0.854	0.848	0.868	0.020
Tennessee	1	110	21	0.939	0.911	0.956	0.044
Tennessee	2	111	74	0.882	0.873	0.895	0.022
Texas	1	112	17	1.024	0.992	1.043	0.051
Texas	2	113	20	0.951	0.936	0.985	0.049
Texas	3	114	198	0.913	0.889	0.934	0.045
Utah	1	115	5	0.971	0.925	0.971	0.046
Utah	2	116	24	0.905	0.893	0.918	0.025
Virginia	1	117	6	1.129	1.087	1.142	0.055
Virginia	2	118	5	1.063	1.040	1.084	0.044
Virginia	3	119	16	0.993	0.968	1.017	0.049
Virginia	4	120	24	0.950	0.920	0.966	0.045
Virginia	5	121	81	0.898	0.882	0.916	0.034
Virgin Islands	1	122	3	0.988	0.969	1.002	0.033

(continued)

**Table 17 (continued)**  
**Creating payment areas from counties with 2006 GAFs within 5% of the seed county, national results**

State	State Locality Number	National Locality Number	Number of Counties	Locality GAF	GAFs of Constituent Counties		Range= Maximum–Minimum
					Minimum	Maximum	
Vermont	1	123	5	0.969	0.933	0.980	0.047
Vermont	2	124	9	0.926	0.906	0.930	0.024
Washington	1	125	4	1.049	1.008	1.059	0.051
Washington	2	126	9	0.988	0.956	1.006	0.050
Washington	3	127	26	0.943	0.934	0.949	0.015
Wisconsin	1	128	2	1.042	1.042	1.042	0.000
Wisconsin	2	129	9	0.970	0.935	0.980	0.044
Wisconsin	3	130	61	0.910	0.896	0.930	0.034
West Virginia	1	131	8	0.956	0.940	0.982	0.042
West Virginia	2	132	46	0.916	0.910	0.932	0.022
Wyoming	1	133	4	0.920	0.901	0.939	0.038
Wyoming	2	134	19	0.887	0.887	0.887	0.000

NOTES: \*The national locality number reflects are the order that they were created in the algorithm. The state identifier used in the algorithm was the state abbreviation. This yields a different order than that based on the state name.

GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data

**Table 18**  
**Incrementally add counties to existing localities, reconfigured Atlanta, GA locality, 2006**

FIPS State-County Code	County	County GAF	County Total RVUs
<i>FY06 Locality, GAF = 1.043996</i>			
13121	Fulton	1.04429	6,712,247
13089	De Kalb	1.04429	2,591,559
13067	Cobb	1.04429	1,991,203
13135	Gwinnett	1.04429	1,083,506
13063	Clayton	1.04429	912,822
13247	Rockdale	1.04429	335,529
13057	Cherokee	1.04429	301,862
13113	Fayette	1.04429	282,646
13151	Henry	1.04429	230,747
13097	Douglas	1.04429	201,849
13217	Newton	1.04429	155,204
13117	Forsyth	1.04429	132,048
13297	Walton	1.04429	115,103
13223	Paulding	1.04429	46,392
13035	Butts	0.91841	35,367
<i>Counties added to FY06 Locality, new GAF = 1.044022</i>			
13045	Carroll	1.04429	477,362
13077	Coweta	1.04429	335,546
13255	Spalding	1.04429	304,535
13015	Bartow	1.04429	246,292
13013	Barrow	1.04429	76,231
13227	Pickens	1.04429	54,820

NOTE: GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data

**Table 19**  
**Incrementally add counties to existing localities (other than to the rest of state localities), 2006**

Locality Number	State	Fee Schedule Area	Existing Counties	Added Contiguous Counties	County GAFs of Added Counties	Locality GAF		
						Old*	New	Percent Change
26	California	Anaheim/Santa Ana	Orange	San Diego	1.07224	1.11938	1.09726	-2.0%
						1.01617	1.09726	8.0%
18		Los Angeles	Los Angeles	none				
03		Marin/Napa/Solano	Marin, Napa, and Solano	Sonoma	1.09874	1.14874	1.12805	-1.8%
						1.01617	1.12805	11.0%
07		Oakland/Berkley	Alameda and Contra Costa	none				
05		San Francisco	San Francisco	none				
06		San Mateo	San Mateo	none				
09		Santa Clara	Santa Clara	none				
17		Ventura	Ventura	Santa Barbara, San Luis Obispo	1.05158 1.02814	1.08139	1.06001	-2.0%
						1.01617	1.06001	4.3%
						1.01617	1.06001	4.3%
99		Rest of State	All other counties			1.01617	0.99581	-2.0%

(continued)

**Table 19 (continued)**  
**Incrementally add counties to existing localities (other than to the rest of state localities), 2006**

Locality Number	State	Fee Schedule Area	Existing Counties	Added Contiguous Counties	County GAFs of Added Counties	Locality GAF			
						Old*	New	Percent Change	
03	Florida	Fort Lauderdale	Broward, Collier, Indian River, Lee, Martin, Palm Beach, and St. Lucie			1.00954	1.00445	-0.5%	
					Osceola,	0.99752	0.96775	1.00445	3.8%
					Brevard	0.96233	0.96775	1.00445	3.8%
04		Miami	Dade and Monroe	none					
99		Rest of State	All other counties			0.96775	0.96765	-0.01%	
01	Georgia	Atlanta	Butts, Cherokee, Clayton, Cobb, Dekalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, Rockdale and Walton			1.04400	1.04402	0.002%	
					Carroll,	1.04429	0.93307	1.04402	11.9%
					Coweta,	1.04429	0.93307	1.04402	11.9%
					Spalding,	1.04429	0.93307	1.04402	11.9%
					Bartow,	1.04429	0.93307	1.04402	11.9%
					Barrow,	1.04429	0.93307	1.04402	11.9%
					Pickens	1.04429	0.93307	1.04402	11.9%
99		Rest of State	All other counties			0.93307	0.92631	-0.7%	
16	Illinois	Chicago	Cook	none					

(continued)



**Table 19 (continued)**  
**Incrementally add counties to existing localities (other than to the rest of state localities), 2006**

Locality Number	State	Fee Schedule Area	Existing Counties	Added Contiguous Counties	County GAFs of Added Counties	Locality GAF		
						Old*	New	Percent Change
12		East St. Louis	Bond, Calhoun, Clinton, Jersey, Macoupin, Madison, Monroe, Montgomery, Randolph, St. Clair, and Washington			0.99778	0.98368	-1.4%
				Sangamon	0.96709	0.93979	0.98368	4.7%
15		Suburban Chicago	Dupage, Kane, Lake and Will			1.08528	1.08294	-0.2%
				Mc Henry	1.04581	0.93979	1.08294	15.2%
99		Rest of State	All other counties			0.93979	0.93149	-0.9%
01	Louisiana	New Orleans	Jefferson, Orleans, Plaquemines and St. Bernard			0.97318	0.97316	-
				St Charles	0.97055	0.91883	0.97316	5.9%
99		Rest of State	All other counties			0.91883	0.91873	-0.01%
03	Maine	Southern Maine	Cumberland and York			0.97954	0.97879	-0.1%
				Sagadahoc	0.93713	0.91478	0.97879	7.0%
99		Rest of State	All other counties			0.91478	0.91449	-0.03%

(continued)

INFORMATION NOT RELEASABLE TO THE PUBLIC UNLESS AUTHORIZED BY LAW. This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law.

**Table 19 (continued)**  
**Incrementally add counties to existing localities (other than to the rest of state localities), 2006**

Locality Number	State	Fee Schedule Area	Existing Counties	Added Contiguous Counties	County GAFs of Added Counties	Locality GAF		
						Old*	New	Percent Change
01	Maryland	Baltimore/Surr. Cntys	Anne Arundel, Baltimore, Baltimore City, Carroll, Harford and Howard			1.03949	1.04156	0.2%
				Calvert	1.08953	1.00442	1.04156	3.7%
				Frederick	1.06202	1.00442	1.04156	3.7%
				Cecil	1.00006	1.00442	1.04156	3.7%
99		Rest of State	All other counties except Montgomery and Prince George's			1.00442	0.95615	-4.8%
01	Massachusetts	Metropolitan Boston	Middlesex, Norfolk and Suffolk			1.15427	1.14741	-0.6%
				Essex	1.11281	1.04300	1.14741	10.0%
99				Rest of State	All other counties			1.04300
01	Michigan	Detroit	Macomb, Oakland, Washtenaw and Wayne	none				
99					Rest of State	All other counties		
02	Missouri	Metropolitan Kansas City	Clay, Jackson and Platte			0.98539	0.98529	-0.01%
				Cass,	0.98329	0.88637	0.98529	11.2%
				Clinton,	0.98329	0.88637	0.98529	11.2%
				Lafayette,	0.98329	0.88637	0.98529	11.2%
				Ray	0.98329	0.88637	0.98529	11.2%

(continued)

**Table 19 (continued)**  
**Incrementally add counties to existing localities (other than to the rest of state localities), 2006**

Locality Number	State	Fee Schedule Area	Existing Counties	Added Contiguous Counties	County GAFs of Added Counties	Locality GAF			
						Old*	New	Percent Change	
01		Metropolitan St. Louis	Jefferson, St. Charles, St. Louis and St. Louis City			0.97778	0.97772	-0.01%	
					Franklin,	0.97604	0.88637	0.97772	10.3%
					Lincoln,	0.97604	0.88637	0.97772	10.3%
					Warren	0.97604	0.88637	0.97772	10.3%
99		Rest of State	All other counties		0.88637	0.88197	-0.5%		
01	New Jersey	Northern NJ	Bergen, Essex, Hudson, Hunterdon, Middlesex, Morris, Passaic, Somerset, Sussex, Union and Warren			1.12992	1.12659	-0.3%	
					Mercer,	1.12304	1.07793	1.12659	4.5%
					Monmouth	1.10457	1.07793	1.12659	4.5%
99		Rest of State	All other counties		1.07793	1.06213	-1.5%		
01	New York	Manhattan	New York	none					
02		NYC Suburbs/Long Island	Bronx, Kings, Nassau, Richmond, Rockland, Suffolk and Westchester	none					

(continued)

**Table 19 (continued)**  
**Incrementally add counties to existing localities (other than to the rest of state localities), 2006**

Locality Number	State	Fee Schedule Area	Existing Counties	Added Contiguous Counties	County GAFs of Added Counties	Locality GAF		
						Old*	New	Percent Change
03	Oregon	Poughkpsie/N NYC Suburbs	Columbia, Delaware, Dutchess, Greene, Orange, Putnam, Sullivan and Ulster	none				
04		Queens	Queens	none				
99		Rest of State	All other counties					
01		Portland	Clackamas, Multnomah and Washington			1.00484	0.99641	-0.8%
				Marion,	0.96627	0.92895	0.99641	7.3%
				Yamhill,	0.96427	0.92895	0.99641	7.3%
				Columbia	0.96017	0.92895	0.99641	7.3%
99		Rest of State	All other counties		0.92895	0.92362	-0.6%	
01	Pennsylvania	Metropolitan Philadelphia	Bucks, Chester, Delaware, Montgomery and Philadelphia	none				
99		Rest of State	All other counties					
31	Texas	Austin	Travis		1.02143	1.02278	0.1%	
			Bastrop,	1.02940	0.93604	1.02278	9.3%	
			Caldwell,	1.02940	0.93604	1.02278	9.3%	
			Hays,	1.02940	0.93604	1.02278	9.3%	
			Williamson	1.02940	0.93604	1.02278	9.3%	

(continued)

**Table 19 (continued)**  
**Incrementally add counties to existing localities (other than to the rest of state localities), 2006**

Locality Number	State	Fee Schedule Area	Existing Counties	Added Contiguous Counties	County GAFs of Added Counties	Locality GAF		
						Old*	New	Percent Change
20		Beaumont	Jefferson			0.94024	0.94161	0.1%
				Liberty,	0.95890	0.93604	0.94161	0.6%
				Hardin,	0.94262	0.93604	0.94161	0.6%
				Orange	0.94262	0.93604	0.94161	0.6%
09		Brazoria	Brazoria	none				
11		Dallas	Dallas			1.03962	1.03731	-0.2%
				Collin,	1.04281	0.93604	1.03731	10.8%
				Rockwall,	1.03208	0.93604	1.03731	10.8%
				Denton,	1.01301	0.93604	1.03731	10.8%
				Ellis	1.00578	0.93604	1.03731	10.8%
28		Fort Worth	Tarrant			1.00142	0.99815	-0.3%
				Parker,	0.96736	0.93604	0.99815	6.6%
				Johnson	0.95649	0.93604	0.99815	6.6%
15		Galveston	Galveston	none				
18		Houston	Harris			1.02537	1.02324	-0.2%
				Chambers,	1.01948	0.93604	1.02324	9.3%
				Fort Bend,	1.01185	0.93604	1.02324	9.3%
				Montgomery	0.99170	0.93604	1.02324	9.3%
99		Rest of State	All other counties			0.93604	0.92778	-0.9%

(continued)

INFORMATION NOT RELEASABLE TO THE PUBLIC UNLESS AUTHORIZED BY LAW: This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law.

**Table 19 (continued)**  
**Incrementally add counties to existing localities (other than to the rest of state localities), 2006**

Locality Number	State	Fee Schedule Area	Existing Counties	Added Contiguous Counties	County GAFs of Added Counties	Locality GAF		
						Old*	New	Percent Change
02	Washington	Seattle (King Cnty)	King	Snohomish	1.03932	1.05901	1.05579	-0.3%
						0.97767	1.05579	8.0%
99		Rest of State	All other counties			0.97767	0.97209	-0.6%

NOTES: \*For existing localities, the *Old Locality GAF* is the GAF for the incumbent counties. For entrant counties, the *Old Locality GAF* is the Rest of State GAF prior to movement of counties to other localities. For the “Rest of State” counties, the *Old Locality GAF* is the Rest of State GAF prior to movement of counties to other localities.

GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data

**Table 20**

**Break up statewide localities when county GAFs differ from the statewide GAF by more than 5%, 2006**

Old locality number	State	State fee schedule area	Counties	GAF-type area	Old (statewide) GAF	New GAF	Percent change
00	Alabama	Still Statewide	All Counties		0.91113		
01	Alaska	Still Statewide	All Counties		1.04813		
00	Arizona	1	Greenlee, Apache, Graham, Cochise, Navajo, Gila, Santa Cruz, Yavapai, and La Paz	Low	0.99080	0.92865	-6.3%
		2	Rest of State	Middle	0.99080	0.99827	0.8
13	Arkansas	2	Crittenden	High	0.88720	0.94866	6.9
		1	Rest of State	Middle	0.88720	0.88647	-0.1
01	Colorado	3	Denver	High	0.99001	1.04272	5.3
		2	Adams, Arapahoe, Boulder, Broomfield, Douglas, Eagle, El Paso, Gilpin, Jefferson, La Plata, Larimer, Pitkin, San Miguel, Summit, and Weld	Middle	0.99001	0.99405	0.4
		1	Rest of State	Low	0.99001	0.91951	-7.1
00	Connecticut	1	Windham	Low	1.08678	1.02407	-5.8
		2	Rest of State	Middle	1.08678	1.08804	0.1
01	Delaware	1	Sussex	Low	1.01619	0.96015	-5.5
		2	Rest of State	Middle	1.01619	1.03112	1.5
01	Hawaii/Guam	Still Statewide	All Counties		1.04255		
00	Idaho	Still Statewide	All Counties		0.90233		
00	Indiana	Still Statewide	All Counties		0.92825		
00	Iowa	Still Statewide	All Counties		0.90857		
00	Kansas	3	Johnson, Wyandotte, Leavenworth, and Miami	High	0.91753	0.97146	5.9
		2	Butler, Douglas, Finney, Ford, Harvey, Riley, Saline, Sedgwick, Seward, and Shawnee	Middle	0.91753	0.92145	0.4
		1	Rest of State	Low	0.91753	0.86409	-5.8

(continued)

**Table 20 (continued)**  
**Breakup statewide localities when county GAFs differ from the statewide GAF by more than 5%, 2006**

Old locality number	State	State fee schedule area	Counties	GAF-type area	Old (statewide) GAF	New GAF	Percent change
00	Kentucky	3	Kenton	High	0.91534	0.96158	5.1
		1	Pendleton	Low	0.91534	0.86116	-5.9
		2	Rest of State	Middle	0.91534	0.91341	-0.2
00	Minnesota	3	Hennepin, Ramsey, Anoka, Dakota, Carver, Scott, Wright, Sherburne, Washington, Isanti, and Chisago	High	0.97239	1.03150	6.1
		2	Olmsted	Middle	0.97239	0.98185	1.0
		1	Rest of State	Low	0.97239	0.89402	-8.1
00	Mississippi	2	Desoto	High	0.89557	0.95362	6.5
		1	Rest of State	Middle	0.89557	0.89423	-0.1
01	Montana	Still Statewide	All Counties		0.90842		
00	Nebraska	2	Adams, Buffalo, Cass, Dakota, Douglas, Hall, Lancaster, Sarpy, and Washington	Middle	0.90326	0.91912	1.8
		1	Rest of State	Low	0.90326	0.85269	-5.6
00	Nevada	Still Statewide	All Counties		1.01730		
40	New Hampshire	1	Coos	Low	1.00328	0.93993	-6.3
		2	Rest of State	Middle	1.00328	1.00431	0.1
05	New Mexico	2	Santa Fe and Los Alamos	High	0.93103	1.01411	8.9
		1	Rest of State	Middle	0.93103	0.92298	-0.9
00	North Carolina	3	Wake, Durham, Johnston, Chatham, Franklin, and Orange	High	0.93823	0.99918	6.5
		1	Onslow	Low	0.93823	0.87245	-7.0
		2	Rest of State	Middle	0.93823	0.92829	-1.1
01	North Dakota	Still Statewide	All Counties		0.89177		

(continued)



**Table 20 (continued)**  
**Breakup statewide localities when county GAFs differ from the statewide GAF by more than 5%, 2006**

Old locality number	State	State fee schedule area	Counties	GAF-type area	Old (statewide) GAF	New GAF	Percent change
00	Ohio	2	Allen, Ashtabula, Athens, Auglaize, Butler, Carroll, Clark, Clermont, Clinton, Columbiana, Cuyahoga, Defiance, Delaware, Fairfield, Franklin, Fulton, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucas, Madison, Mahoning, Medina, Miami, Montgomery, Pickaway, Portage, Stark, Summit, Trumbull, Union, Warren, and Wood	Middle	0.96672	0.97811	1.2
01	Rhode Island	Still Statewide	All Counties		1.01634		
01	South Carolina	Still Statewide	All Counties		0.92083		
02	South Dakota	Still Statewide	All Counties		0.88897		
35	Tennessee	1	Lake, Obion, Weakley, Gibson, Crockett, Carroll, Henry, Stewart, Benton, Decatur, Henderson, Lauderdale, Houston, Humphreys, Perry, Wayne, Hardin, Lewis, Mc Nairy, Lawrence, and Hardeman	Low	0.92253	0.87282	-5.4
		2	Moore, Franklin, Lincoln, Grundy, Sequatchie, Warren, Van Buren, Bledsoe, Cannon, De Kalb, White, Rhea, Smith, Cumberland, Meigs, Jackson, Morgan, Macon, Fentress, Roane, Clay, Pickett, Scott, Overton, Mc Minn, Polk, Monroe, Campbell, Claiborne, Hancock, Grainger, Jefferson, Hamblen, Cocke, and Greene	Low	0.92253	0.87359	-5.3
		3	Johnson	Low	0.92253	0.87268	-5.4
		4	Rest of State	Middle	0.92253	0.92929	0.7
09	Utah	2	Rich and Morgan	Low	0.94824	0.89290	-5.8
		3	Box Elder	Low	0.94824	0.89355	-5.8
		4	Cache, Daggett, Davis, Iron, Kane, Salt Lake, Summit, Tooele, Utah, Washington, and Weber	Middle	0.94824	0.95109	0.3
		1	Rest of State	Low	0.94824	0.89290	-5.8

(continued)

**Table 20 (continued)**  
**Breakup statewide localities when county GAFs differ from the statewide GAF by more than 5%, 2006**

Old locality number	State	State fee schedule area	Counties	GAF-type area	Old (statewide) GAF	New GAF	Percent change
50	Vermont	Still Statewide	All Counties		0.94962		
50	Virgin Islands	Still Virgin Islands	All County Equivalents		0.98846		
00	Virginia*	2	Middlesex, King and Queen, Essex, Richmond, King William, Northumberland, and Lancaster	Low	0.95100	0.89461	-5.9
		3	Northampton and Accomack	Low	0.95100	0.88964	-6.5
		4	Lousia	Low	0.95100	0.89584	-5.8
		5	Albemarle, Amherst, Bedford, Botetourt, Campbell, Caroline, Charles City, Chesterfield, Clarke, Culpeper, Dinniddie, Fluvanna, Frederick, Gloucester, Goochland, Greene, Hanover, Henrico, Isle Of Wight, James City Co, King George, Mathews, New Kent, Orange, Powhatan, Prince George, Rappahannock, Roanoke, Warren, Westmoreland, York, Charlottesville City, Chesapeake, Colonial Heights, Hampton City, Hopewell City, Lynchburg City, Newport News City, Norfolk City, Petersburg City, Poquoson City, Portsmouth City, Richmond City, Roanoke City, Salem, Suffolk City, Virginia Beach City, Williamsburg City, and Winchester City	Middle	0.95100	0.95823	0.8
		6	Manassas City, Prince William, Loudoun, Fauquier, Fredericksburg City, and Stafford	High	0.95100	1.06580	12.1
		7	Spotsylvania	High	0.95100	1.01725	7.0
		1	Rest of State	Low	0.95100	0.89359	-6.0
16	West Virginia	2	Jefferson	High	0.93407	0.98243	5.2
		1	Rest of State	Middle	0.93407	0.93380	0.0

(continued)

**Table 20 (continued)**  
**Breakup statewide localities when county GAFs differ from the statewide GAF by more than 5%, 2006**

Old locality number	State	State fee schedule area	Counties	GAF-type area	Old (statewide) GAF	New GAF	Percent change
00	Wisconsin	2	Kewaunee and Manitowoc	Low	0.94431	0.89578	-5.1
		3	Brown, Calumet, Chippewa, Columbia, Dane, Dodge, Door, Douglas, Dunn, Eau Claire, Fond Du Lac, Jefferson, Kenosha, La Crosse, Marathon, Milwaukee, Outagamie, Ozaukee, Portage, Racine, Rock, Sauk, Sheboygan, Walworth, Washington, Waukesha, Winnebago, and Wood	Middle	0.94431	0.95022	0.6
		4	St Croix and Pierce	High	0.94431	1.04192	10.3
		1	Rest of State	Low	0.94431	0.89583	-5.1
21	Wyoming	Still Statewide	All Counties		0.90667		

NOTE: \*Except for Alexandria City, Arlington, Fairfax, Fairfax City, and Falls Church City.

GAF is Geographic Adjustment Factor, the factor by which payment for Medicare Physician Fee Schedule services is varied geographically for a service with average proportions of work, practice expense, and malpractice relative value units (RVUs). The RVU-weighted national average of the GAF is 1.0000.

SOURCE: RTI analysis of CMS 2006 Geographic Practice Cost Index Data.



## REFERENCES

Bentley, E. and DeGhetaldi, L.: A County-Based Model for Grouping Medicare Physician Payment Localities: Analysis and Redesign of the Methodology Used by HCFA in 1996. California Medical Association. January 2006

Federal Register 61 (128): 34614-35662, July 2, 1996.

Federal Register 70 (223): 70115-70476, November 21, 2005.

Federal Register 72 (133): 38121-38395, July 12, 2007.

Government Accountability Office. Geographic Areas Used to Adjust Physician Payments for Variation in Practice Costs Should be Revised (GAO-07-466). June 2007.

Pope, G.C., Tarantino, R.L., Dayhoff, D., and Hwang, C.W.: Assessment and Redesign of Medicare Fee Schedule Areas (Localities). Final Report to the Health Care Financing Administration under Contract No. 500-92-0020, November, 1995. Waltham, MA: Health Economics Research, Inc.

U.S. House of Representatives. Children's Health and Medicare Protection Act of 2007, Section 308 of H.R. 3162, 2007.