



MISSISSIPPI STATE DEPARTMENT OF HEALTH

MEMORANDUM

TO: Members of the Mississippi State Board of Health

**Ed Thompson, M.D., M.P.H.
State Health Officer**

Interested Parties

**FROM: Donald E. Eicher, III, Director
Office of Health Policy and Planning
Rachel E. Pittman, Chief
Division of Health Planning and Resource Development**

DATE: October 16, 2008

**Re: Issues and staff recommendations for October 29, 2008 meeting
of the CON Task Force**

Find attached the issues and recommendations of the staff of the Mississippi State Department of Health, Division of Health Planning and Resource Development to the Mississippi State Board of Health, CON Task Force to address issues for the FY 2010 Mississippi State Health Plan. Copies of the proposed issues and staff recommendations to the CON Task Force may be found on our website at www.msdh.state.ms.us or www.healthyMS.com, (choose Regulation and Licensure and click on Certificate of Need) and in the Office of Health Policy and Planning.

Written comments will be accepted during the period of October 16, 2008 to October 27, 2008. In addition, the CON Task Force will hold a public hearing will be held on these matters in the Fourth Floor Executive Conference Room, Osborne Building, at the Mississippi State Department of Health, 570 Woodrow Wilson Avenue, Jackson, Mississippi, on October 29, 2008, at 10:00 a.m.

TOPICS FOR TASK FORCE CONSIDERATION

STATE PLAN CHANGES

1a. Hospital Service Areas

Staff Recommendation: See attached three proposed statewide changes in Hospital Service Areas.

1b. Long-Term Care

Staff Recommendation: No change necessary.

2. Criteria Re: Indigent/Medicaid Care

Staff Recommendation: No change in policy but new staff monitoring and data collection.

3. Criteria RE: Trauma System Participation

Staff Recommendation: General policy for all applications to be evaluated on impact to Mississippi Trauma Care System.

The MSDH specifically intends to give deference to any application that will enable the applicant to enhance the Mississippi Trauma Care System or enhance or expand the applicant's ability to provide trauma care to Mississippi residents. In addition, the MSDH intends to evaluate any application for the proposed project's negative impact on the applicant's ability to continue to participate in the Mississippi Trauma Care System or provide trauma care to Mississippi residents at its current or appropriate level.

4. Neonatal Intensive Care Bed Formula

Staff Recommendation: Add criteria for high occupancy facilities to add neonatal special care beds.

Projects for existing providers of neonatal special care services which seek to expand capacity by the addition or conversion of neonatal special care beds : The applicant shall document the need for the proposed project. The applicant shall demonstrate that the facility in question has maintained an occupancy rate for neonatal special care services of at least 70 percent for the most recent two (2) years or 80 percent neonate special care services occupancy rate for the most recent year, notwithstanding the neonatal special care bed need outlined in Table 10-4 below. The applicant may be approved for such additional or conversion of neonatal special care beds to meet projected demand balanced with optimum utilization rate for the Perinatal Planning Area, but in no event shall such addition or conversion exceed 20 percent increase of the existing neonatal special care beds of such facility.

5. PET/MRI Minimum Procedure Numbers

Staff Recommendation: No change necessary.

6. Establishment of an End Stage Renal Disease (ESRD) Facility Need Criterion

For Discussion

INDEX FOR CON TASK FORCE TOPICS

1a. Hospital Service Areas

- Proposed General Hospital Service Areas A
- Proposed General Hospital Service Areas B
- Proposed General Hospital Service Areas C

1b. Long-Term Care

- Total Nursing Home Licensed Beds FY 2007
- Nursing Home Vacant Beds FY 2007
- Nursing Home Occupancy Rate by Percentage % FY 2007
- Long-Term Care Bed Need (Difference) FY 2007
- Long-Term Care Planning Areas by 2010 Population Projection FY 2007
- Skilled Nursing Home Approved Beds FY 2007
- Skilled Nursing Facility Total Bed Need FY 2007
- Skilled Nursing Facility Bed Need Based on 2020 Population Projections
- Skilled Nursing Facility Bed Need-2020 Population Projections (Difference)

2. Criteria Re: Indigent/Medicaid Care

- Mississippi Requirements and other selected States Requirements
- No Maps

3. Criteria Re: Trauma System Participation

- General Policy for CON Trauma

- Mississippi Trauma Care Centers as of 09/12/08
 - Levels I, II, and III
 - Levels I, II, III, and IV

- Mississippi Trauma Care Centers (Proposed Without Services 7 Days Per Week)
 - Levels I, II, and III
 - Levels I, II, III, and IV

4. Neonatal Intensive Care Bed Formula

- Neonate Intensive Care Service Demand
- Certificate of Need Criteria and Standards for Neonatal Special Care Services
- Low Birth Weight ($\leq 2,500$ Grams) by Residency FY 2007
- Very Low Birth Weight ($\leq 1,500$ Grams) by Residency FY 2007
- Very Low Birth Weight by Occurrence FY 2007
- Neonatal Intensive Care Unit (NICU) Beds, Specialists by County, and Occupancy Percent by Perinatal Planning Area

5. PET/MRI Minimum Procedure Numbers

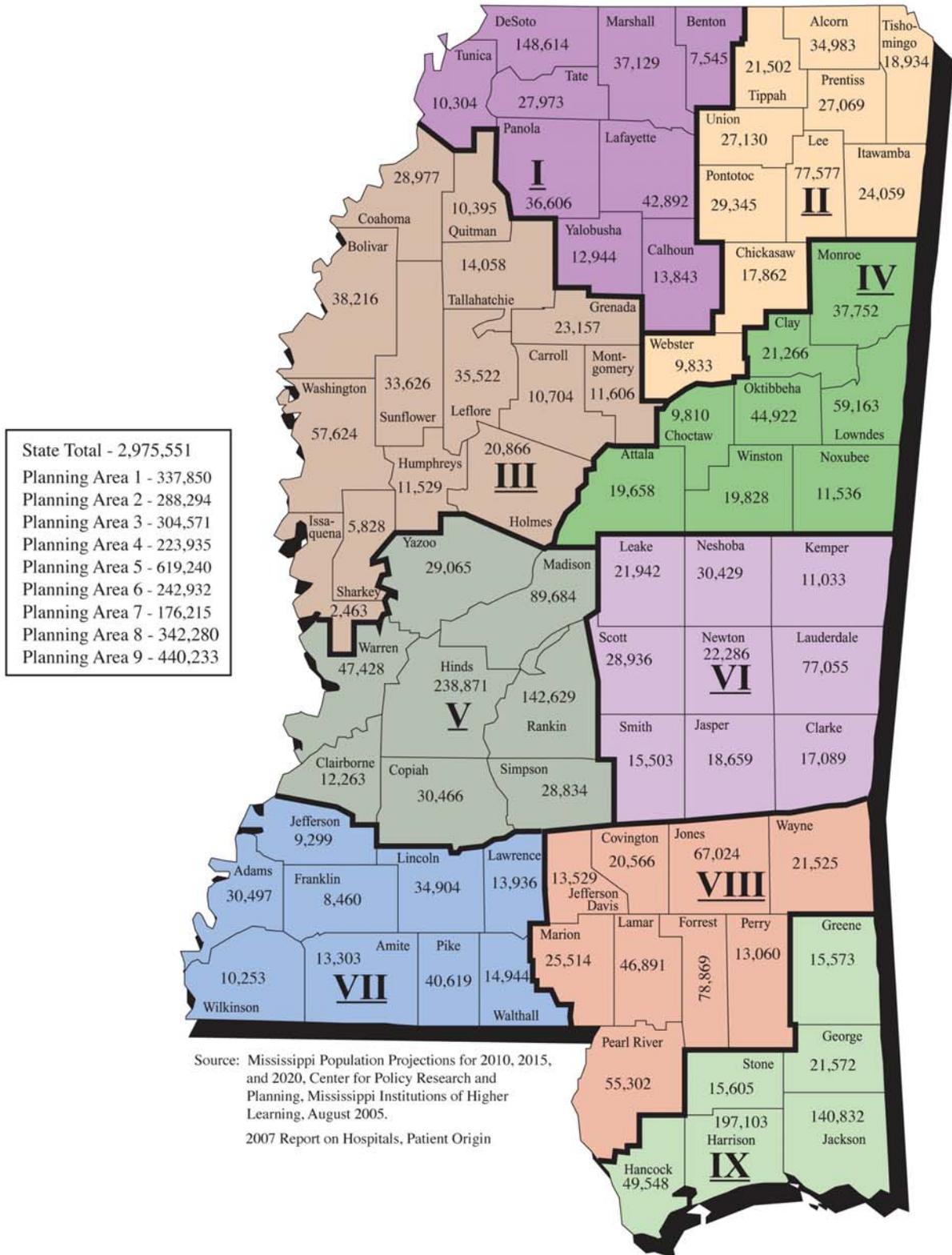
- PET/MRI Mississippi Statistics
- Location and Number of PET Procedures FY 2007
- Number of MRI Providers in the State of Mississippi FY 2007
- Number of MRI Units (Fixed and Mobile) in the State of Mississippi FY 2007
- Location of MRI Units (Fixed and Mobile) and the Number of Procedures FY 2007
- Mobile MRI Providers and Their Routes FY 2007
- MRI Units (Fixed and Mobile), and Mobile MRI Providers and Their Routes FY 2007
- Counties without MRI Units (Fixed and/or Mobile) FY 2007

6. End Stage Renal Disease (ESRD)

- ESRD Facilities Statewide
(Facility Locations, Number of Stations, Prevalence, and Relative Risk Counties)

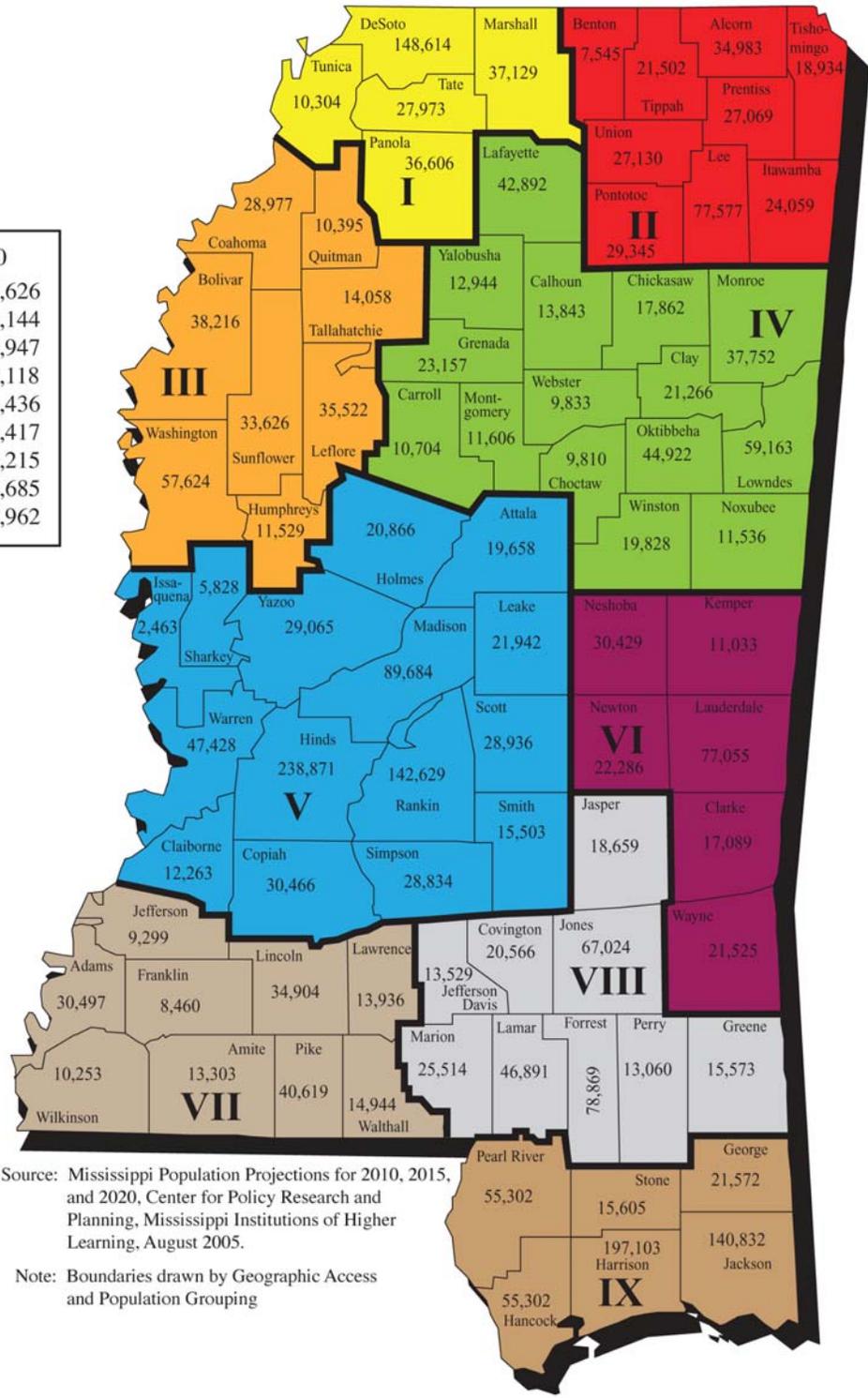
1A. HOSPITAL SERVICE AREAS

Proposed General Hospital Service Areas A



Proposed General Hospital Service Areas B

State Total - 2,975,550
 Planning Area 1 - 260,626
 Planning Area 2 - 268,144
 Planning Area 3 - 229,947
 Planning Area 4 - 347,118
 Planning Area 5 - 734,436
 Planning Area 6 - 179,417
 Planning Area 7 - 176,215
 Planning Area 8 - 299,685
 Planning Area 9 - 479,962



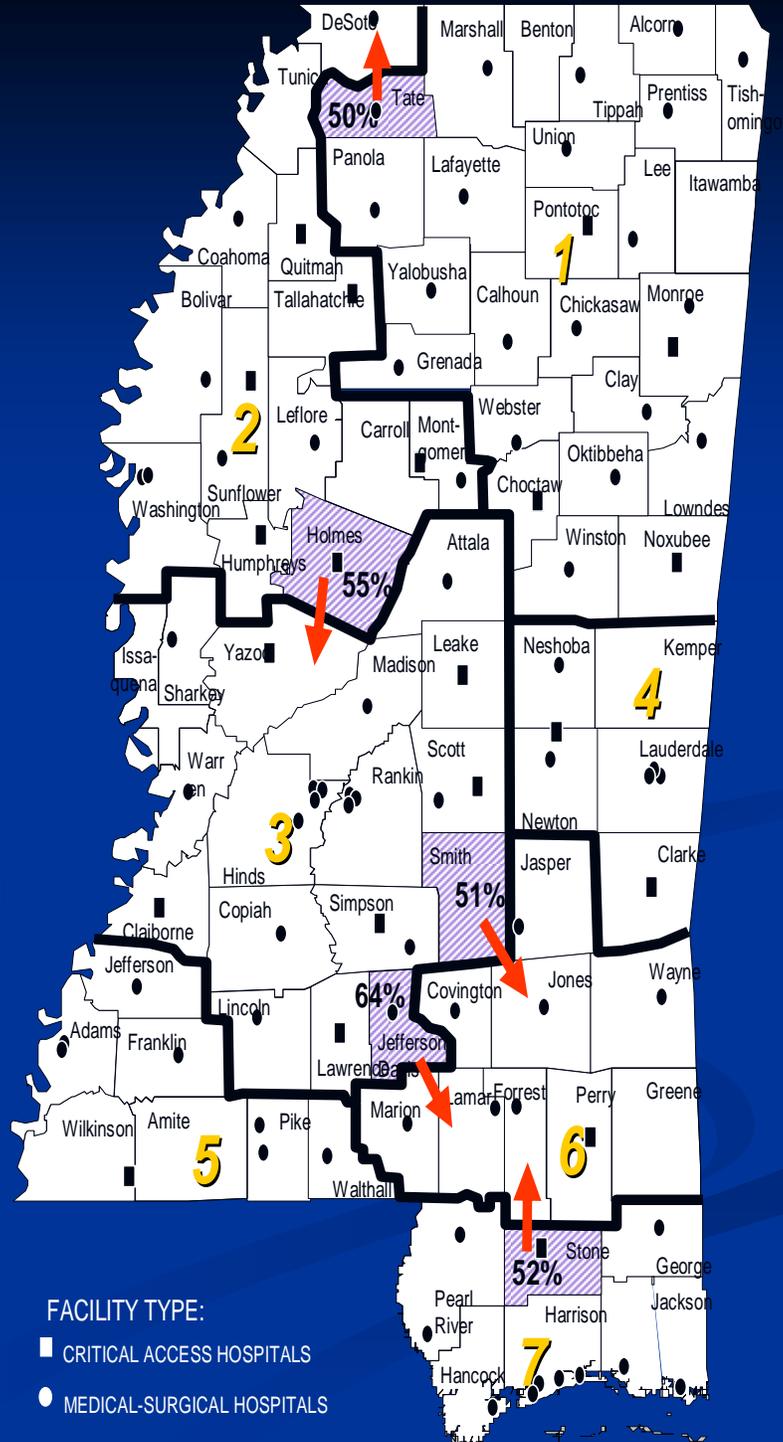
Source: Mississippi Population Projections for 2010, 2015, and 2020, Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, August 2005.

Note: Boundaries drawn by Geographic Access and Population Grouping

Proposed General Hospital Service Areas C

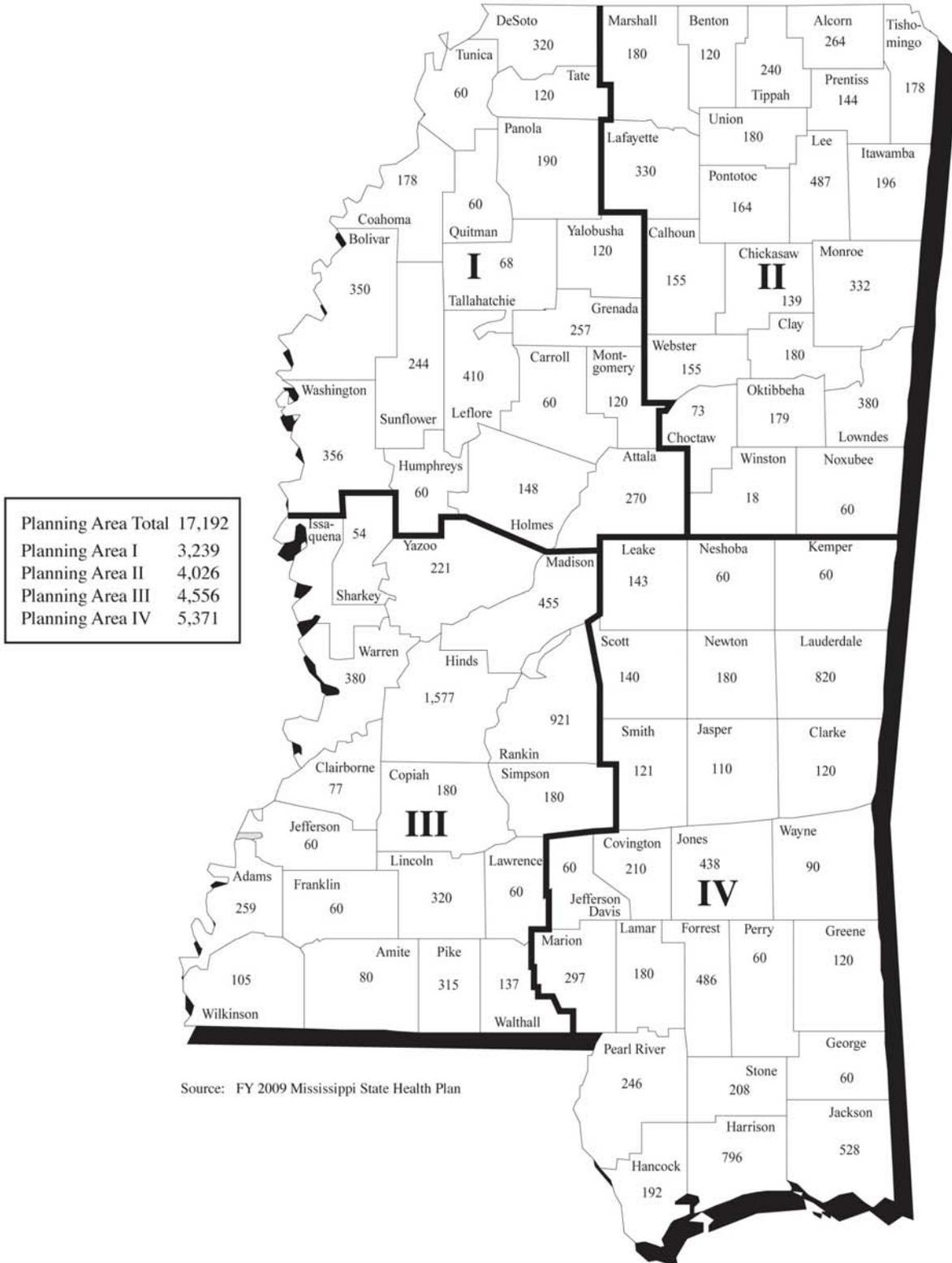
Counties Where Majority of Population Utilizes Facilities in Other Districts

 Majority of County Residents Utilize Hospital Facilities in Another GHSA



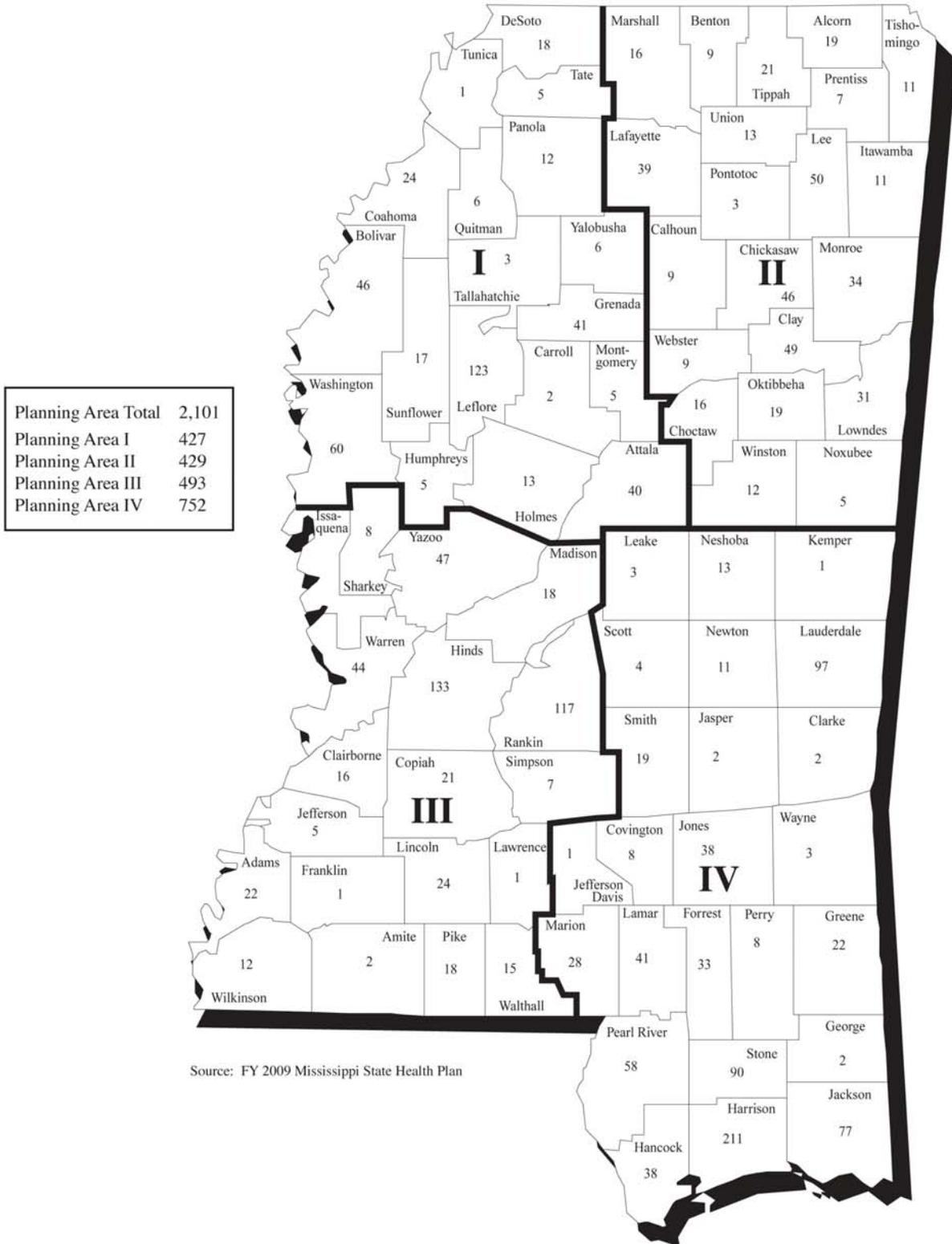
1B. LONG TERM CARE

Total Nursing Home Licensed Beds FY 2007



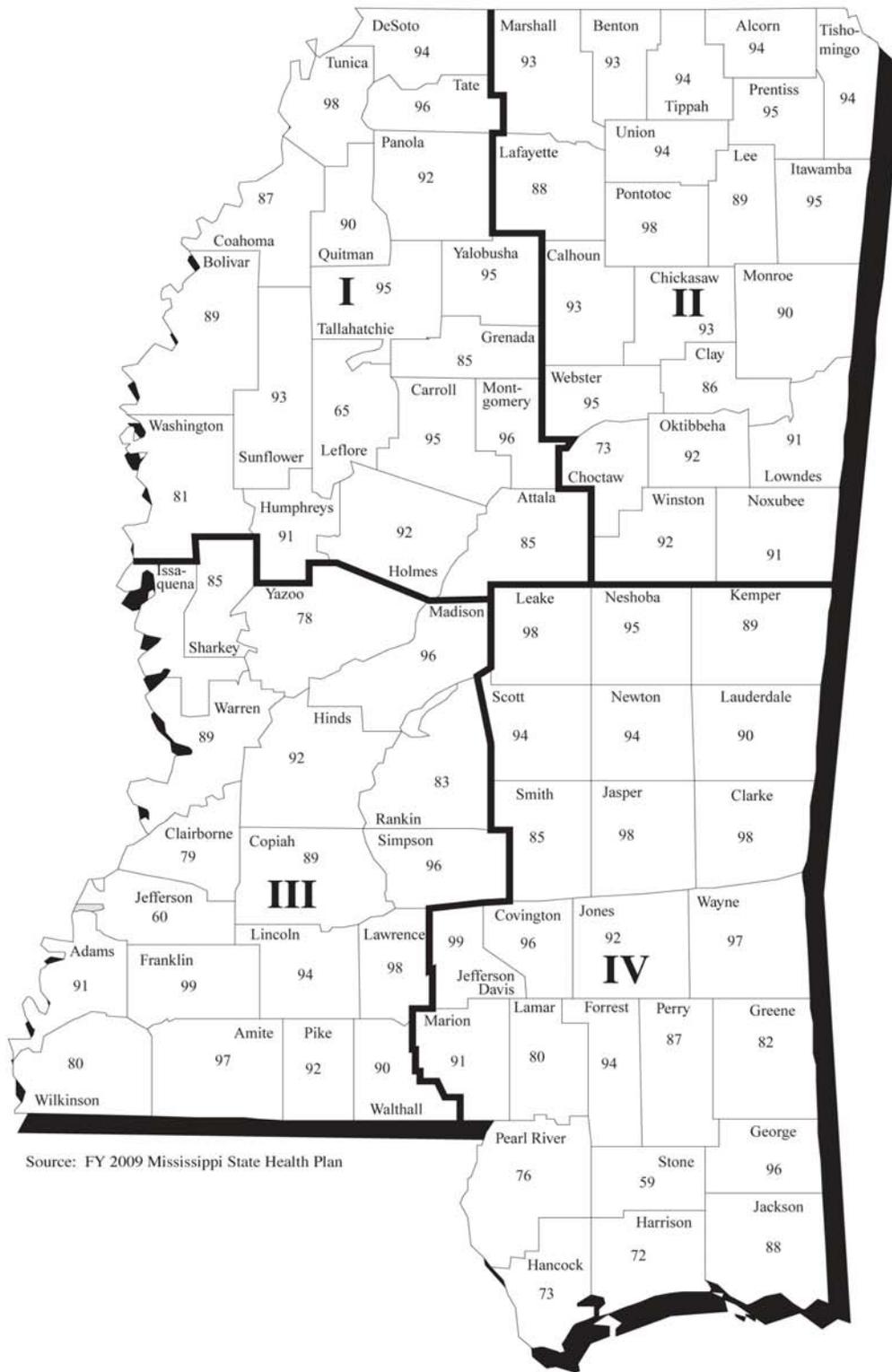
Source: FY 2009 Mississippi State Health Plan

Nursing Home Vacant Beds FY 2007



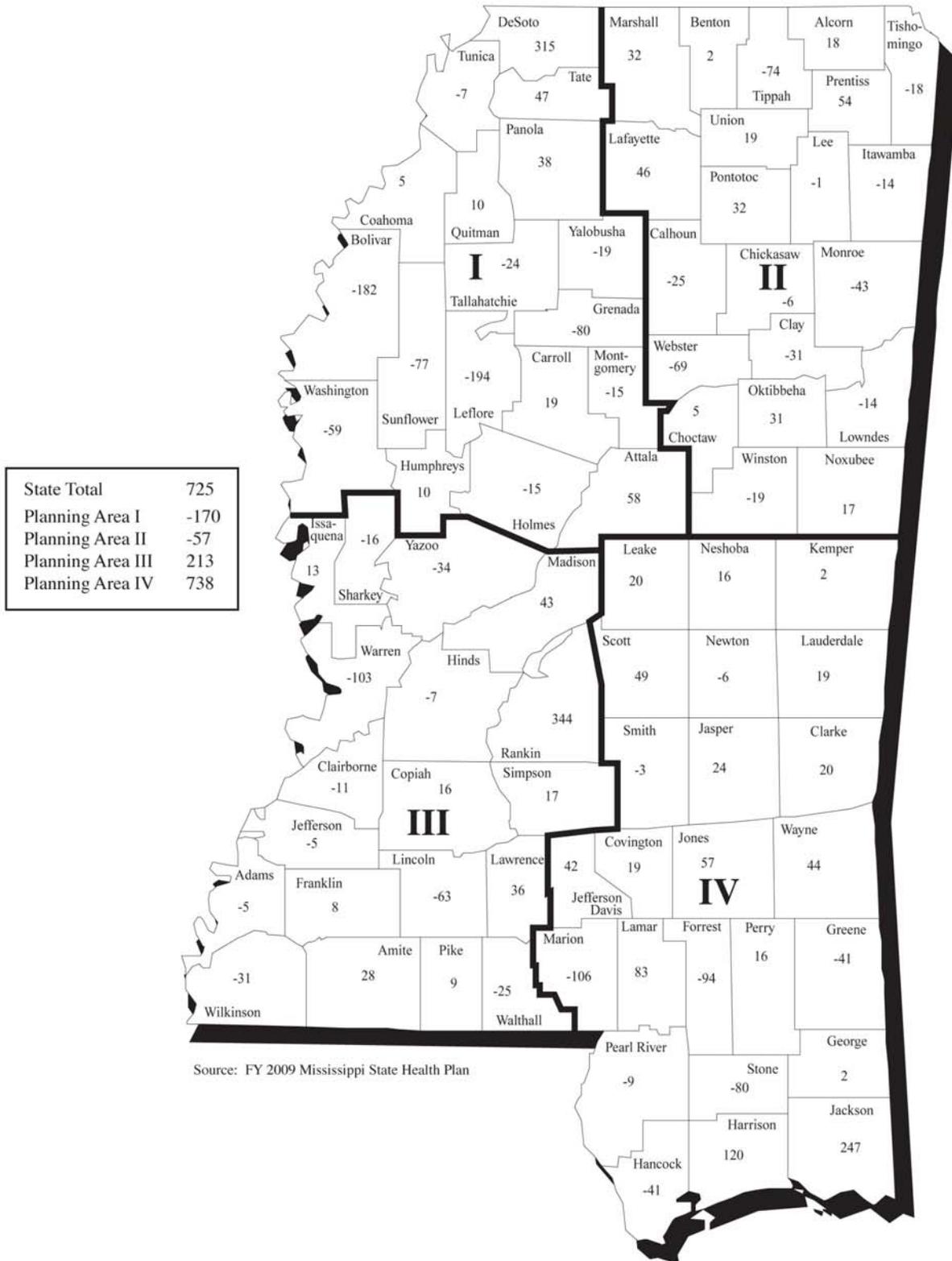
Source: FY 2009 Mississippi State Health Plan

Nursing Home Occupancy Rate by Percentage % FY 2007

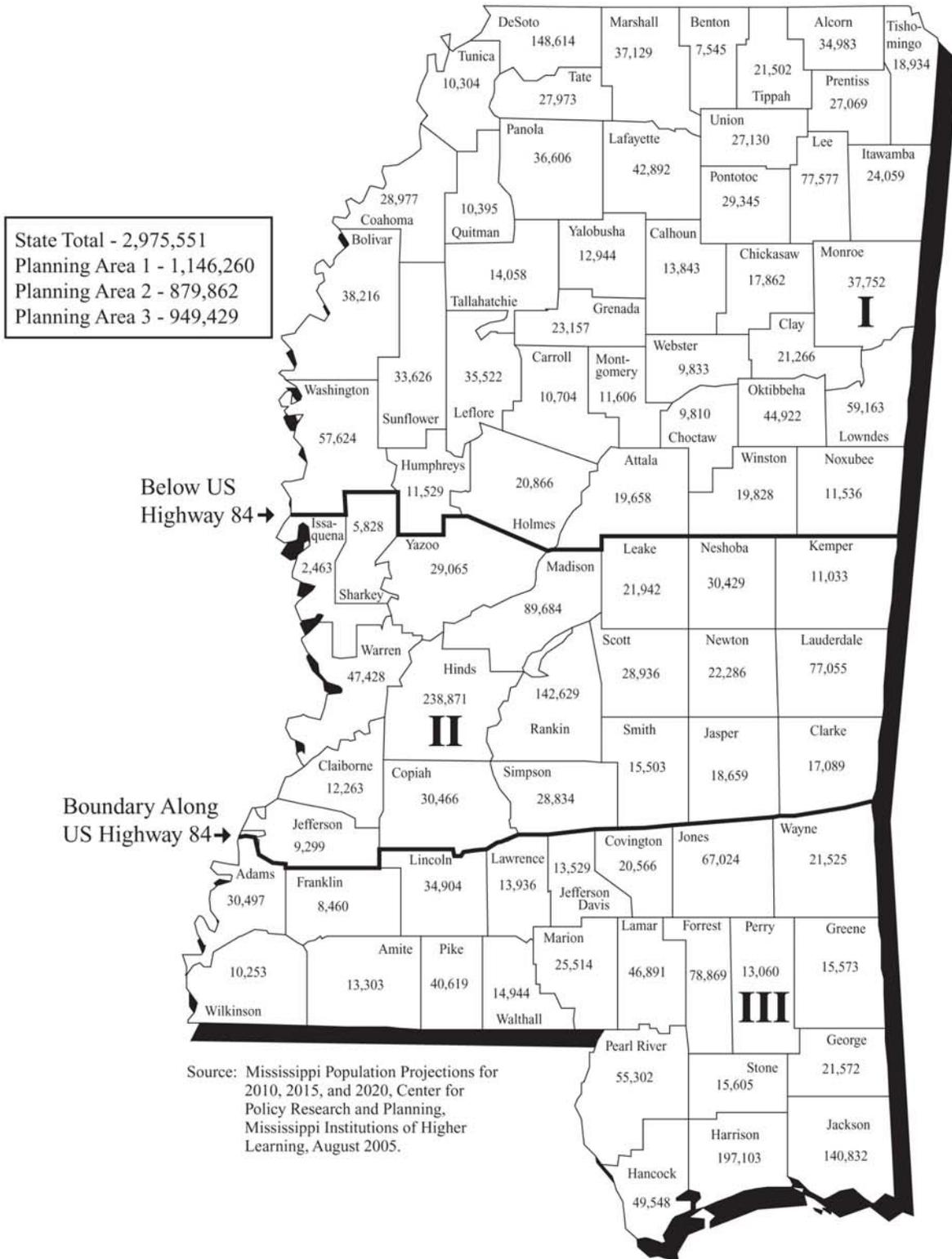


Source: FY 2009 Mississippi State Health Plan

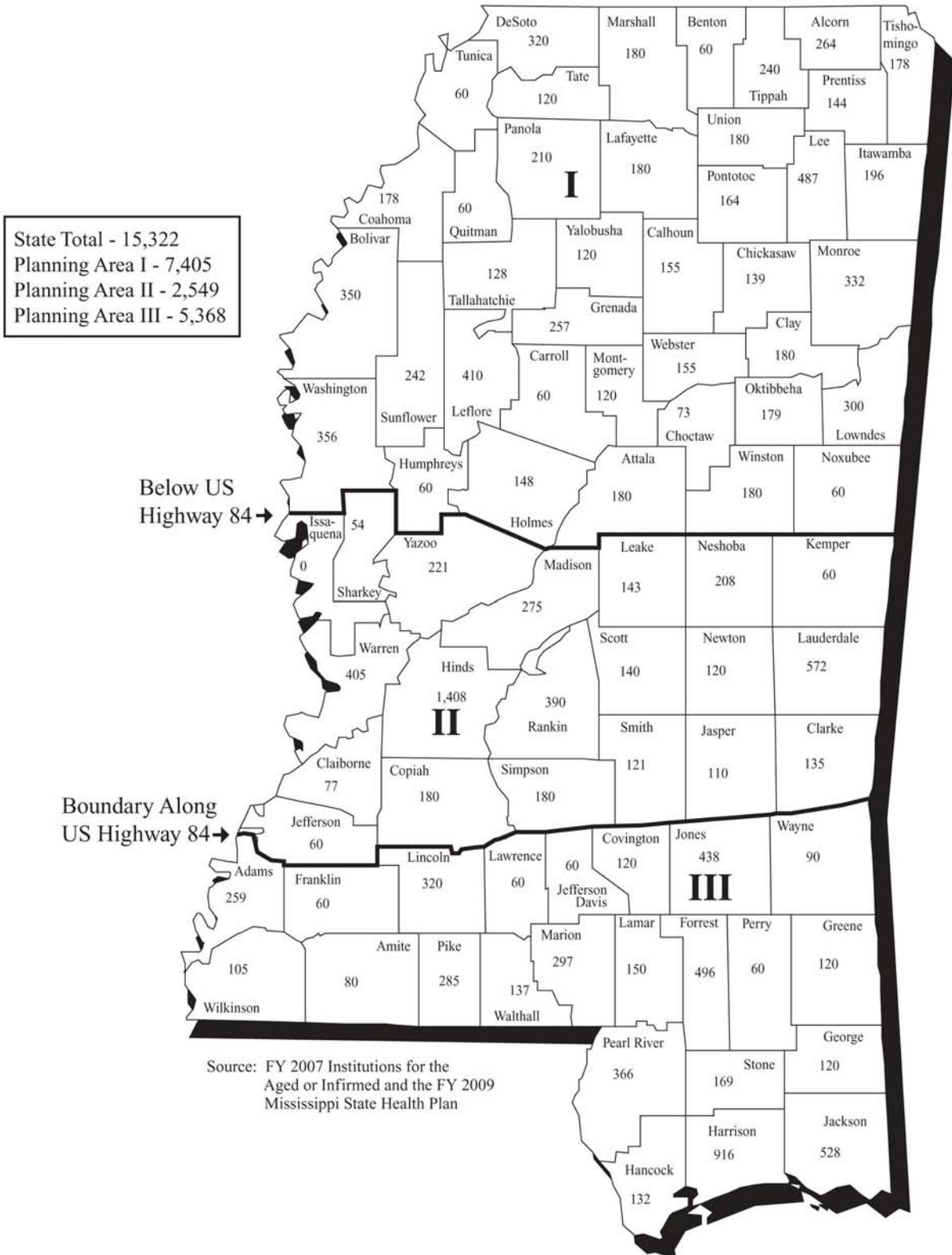
Long-Term Care Bed Need (Difference)



Long-Term Care Planning Areas By 2010 Population Projection

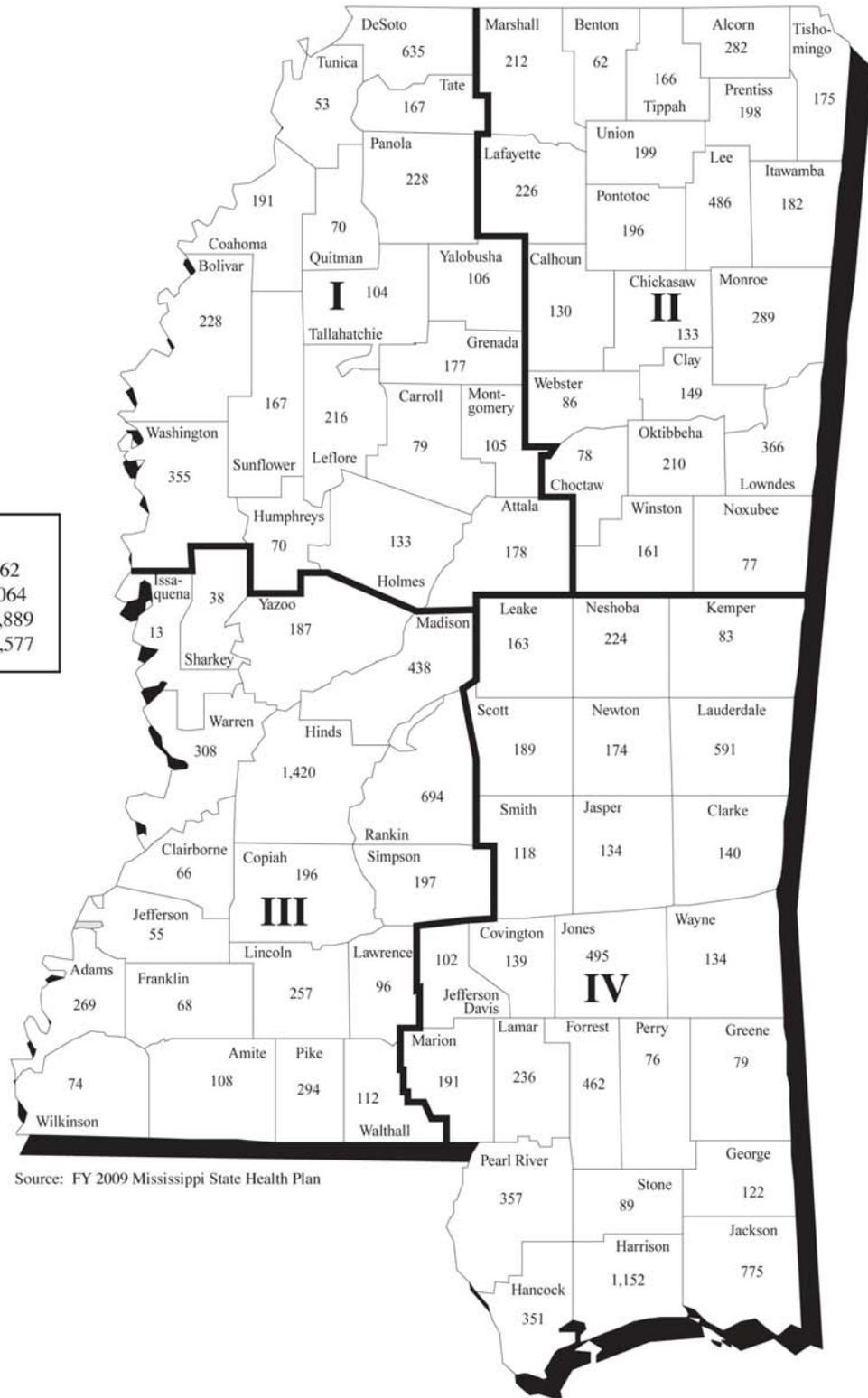


Skilled Nursing Home Approved Beds FY 2007



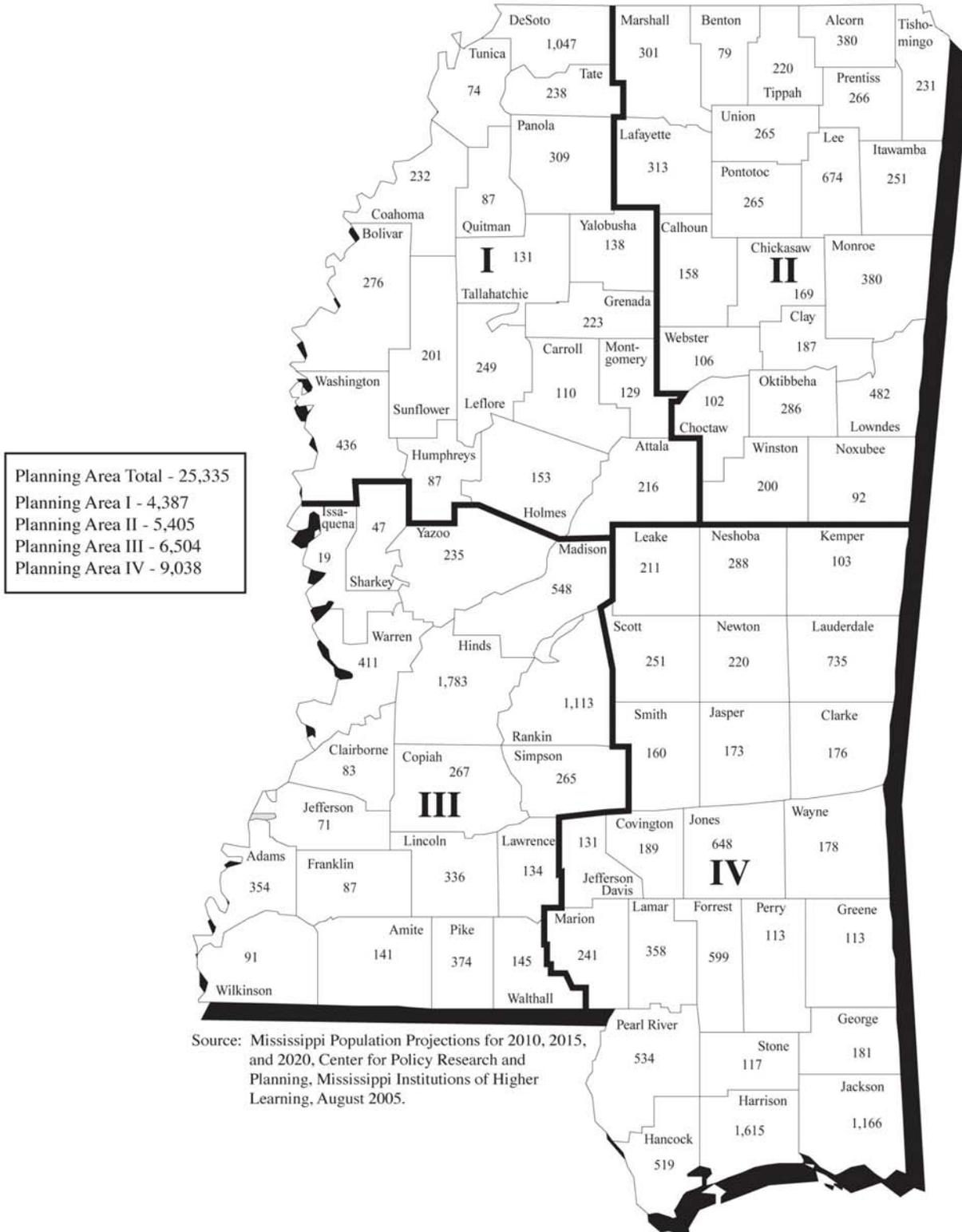
Skilled Nursing Facility Total Bed Need FY 2007

State Total - 18,792
 Planning Area I - 3,262
 Planning Area II - 4,064
 Planning Area III - 4,889
 Planning Area IV - 6,577

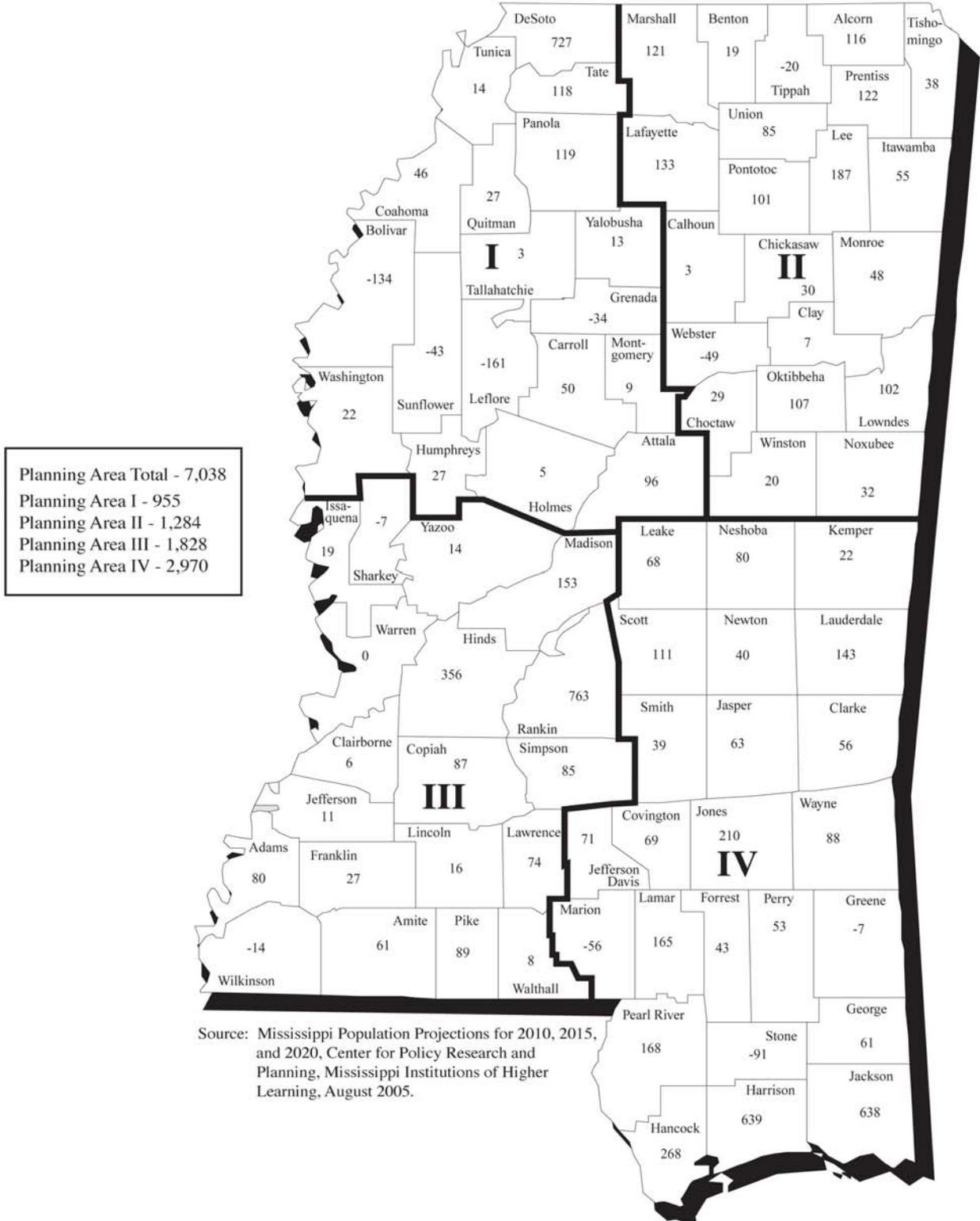


Source: FY 2009 Mississippi State Health Plan

Skilled Nursing Facility Bed Need Based on 2020 Population Projections



Skilled Nursing Facility Bed Need 2020 Population Projections (Difference)



2. CRITERIA RE: INDIGENT/MEDICAID CARE

Mississippi Requirement and Other Select States Requirements

The FY 2009 State Health Plan states that: “The MSDH intends to disapprove CON applications which fail to confirm that the applicant shall provide a reasonable amount of indigent care, or if the applicant’s admission policies deny or discourage access to care by indigent patients. Furthermore, the MSDH intends to disapprove CON applications if such approval would have a significant adverse effect on the ability of any existing facility or service to provide indigent care.

The Plan further indicates that the State Health Officer shall determine whether the amount of indigent care provided or proposed to be offered is “reasonable.” The Plan does not define “reasonable” but does indicate that it should be comparable to the amount of such care offered by other providers of the requested service within the same, or proximate, geographic area.

This language appears to be consistent with what other states are doing. Therefore, it is recommended that the Department maintain the current policy regarding indigent care, add policy regarding Medicaid care, and collect necessary data to monitor and enforce policy.

A summary of information gathered from other states with indigent/Medicaid Care policies is as follows:

Rhode Island required a percentage of net patient revenue (1% or 2% or 5% depending on the facility type) to be provided in the form of charity care. This has resulted in applicant's being out of compliance as they argue that they are a referred service and they cannot control the referrals to their facility and they cannot attain the required percentage. Most recently, they have allowed the applicant to formally contract with a community health center and a free clinic to refer patients to their facility. The applicant is permitted to rely on a determination by the community health center or free clinic that a patient meets the qualifications to be considered a charity care patient. This relieves the applicant from the burden of having to qualify patients. This approach intends to construct an infrastructure to increase the levels of charity care provided by health care facilities in Rhode Island.

Virginia conditions COPNs on the applicant's agreement to provide a certain amount of indigent care.

- if the applicant has a recent history of providing indigent charity care at a rate greater than or equal to the Health Planning Regional average, no condition is recommended and therefore generally not included on the COPN.
- if the applicant's history of providing charity care to the indigent falls short of the regional average we recommend a condition that they provide indigent care at a rate equal to the regional average, based on gross patient revenue.
- if the applicant has no history (new facility/entity) we recommend a condition that they provide indigent care at a rate equal to the regional average.
- if the applicant proffers a rate higher than the regional average in their COPN application (sometimes done to be a more attractive applicant) we will recommend

- that the COPN be conditioned at the proffered rate, regardless of the applicant's history.
- recommended conditions are generally accepted by the State Health Commissioner and included on the COPN.

This past year Virginia had 100% compliance with conditions and can account for over \$10M in additional (more than would have otherwise been expected of the provider based on history) care provided to the indigent. The reported overall regional averages have been increasing over the last several years.

The average % of gross charges provided to persons at or below 200% of the federal poverty level (adjusted for disproportionate share payments and payments to/from the indigent care trust fund) divided by the gross revenue for all acute care hospitals in that region is the % set for charity care conditions on COPN requests for all applicants that don't have a consistent record of providing charity care above the regional average.

Florida traditionally gave preferences in the CON review for applicants that promised to do more than their share of care to Medicaid and/or charity patients. This is roughly defined as the average for the planning area, which is typically a multi-county area. This approach can also be applied in reverse, which means that if an existing provider does more than their share and they would be affected by a CON applicant that proposes to do less, the applicant would be penalized. This is not done with a formula and is applied somewhat informally (but as consistently as possible) depending on the circumstances.

They have an annual reporting requirement that requires verification of their promises. Failure to deliver the promised level of Medicaid/charity care can result in a fine of up to \$365,000 per year.

3. CRITERIA RE: TRAUMA SYSTEM PARTICIPATION

100 General Certificate of Need Policies

Mississippi's health planning and health regulatory activities have the following purposes:

- To improve the health of Mississippi residents
- To increase the accessibility, acceptability, continuity, and quality of health services
- To prevent unnecessary duplication of health resources
- To provide some cost containment

The MSDH intends to approve an application for CON if it substantially complies with the projected need and with the applicable criteria and standards presented in this *Plan*, and to disapprove all CON applications which do not substantially comply with the projected need or with applicable criteria and standards presented in this *Plan*.

The MSDH intends to disapprove CON applications which fail to confirm that the applicant shall provide a reasonable amount of indigent care, or if the applicant's admission policies deny or discourage access to care by indigent patients. Furthermore, the MSDH intends to disapprove CON applications if such approval would have a significant adverse effect on the ability of an existing facility or service to provide indigent care. Finally, it is the intent of the Mississippi State Department of Health to strictly adhere to the criteria set forth in the *State Health Plan* and to ensure that any provider desiring to offer healthcare services covered by the Certificate of Need statutes undergoes review and is issued a Certificate of Need prior to offering such services.

The MSDH specifically intends to give deference to any application that will enable the applicant to enhance the Mississippi Trauma Care System or enhance or expand the applicant's ability to provide trauma care to Mississippi residents. In addition, the MSDH intends to evaluate any application for the proposed project's negative impact on the applicant's ability to continue to participate in the Mississippi Trauma Care System or provide trauma care to Mississippi residents at its current or appropriate level.

The State Health Officer shall determine whether the amount of indigent care provided or proposed to be offered is "reasonable." The Department considers a reasonable amount of indigent care as that which is comparable to the amount of such care offered by other providers of the requested service within the same, or proximate, geographic area.

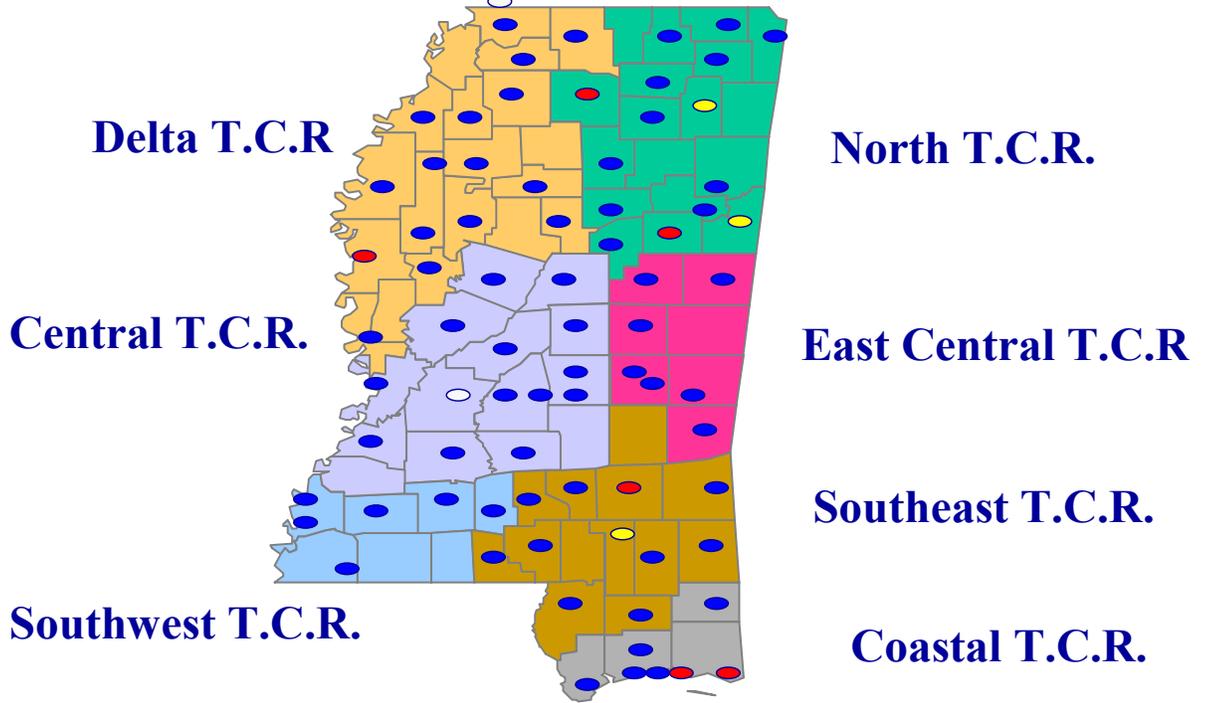
The MSDH may use a variety of statistical methodologies including, but not limited to, market share analysis or patient origin data to determine substantial compliance with projected need and with applicable criteria and standards in this *Plan*.



Mississippi Trauma Care Centers

As of 9/12/2008

2 Level I  3 Level II  6 Level III  66 Level IV 



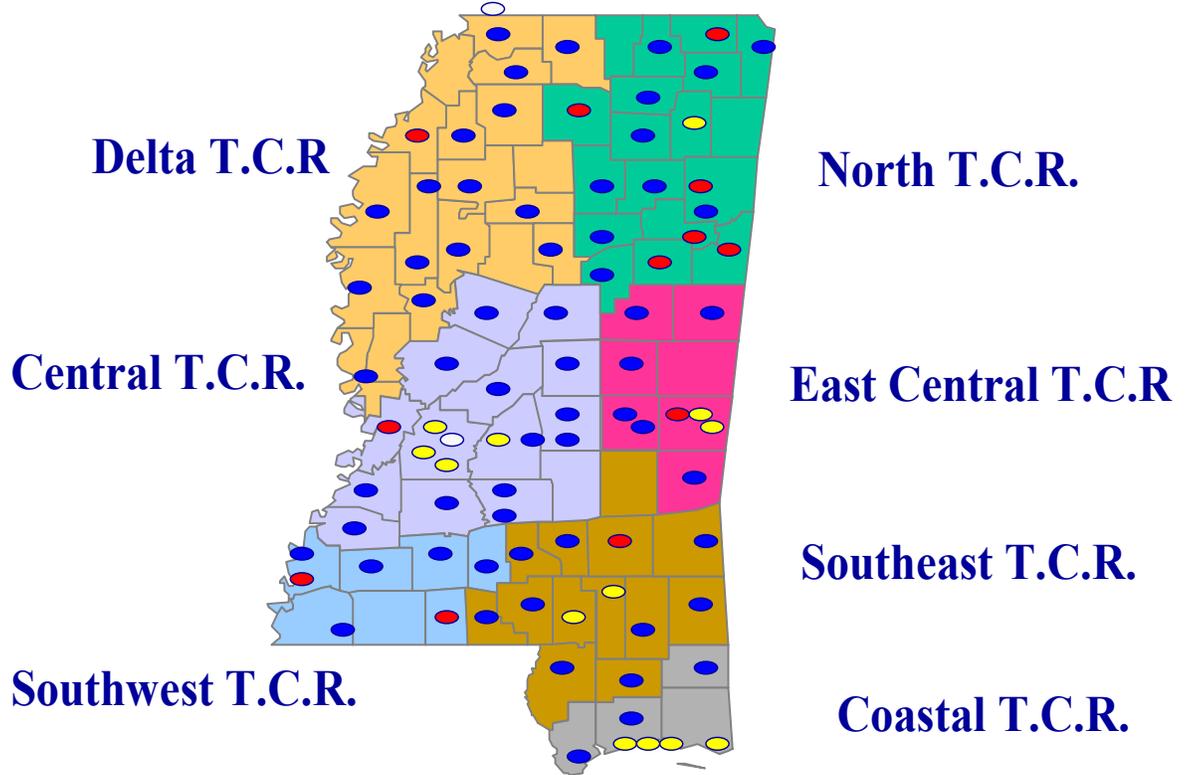
Mississippi State Department of Health - Office of Emergency Planning and Response



Mississippi Trauma Care Centers

PROPOSED WITHOUT SERVICES 7 DAYS PER WEEK

2 Level I  13 Level II  12 Level III  61 Level IV 





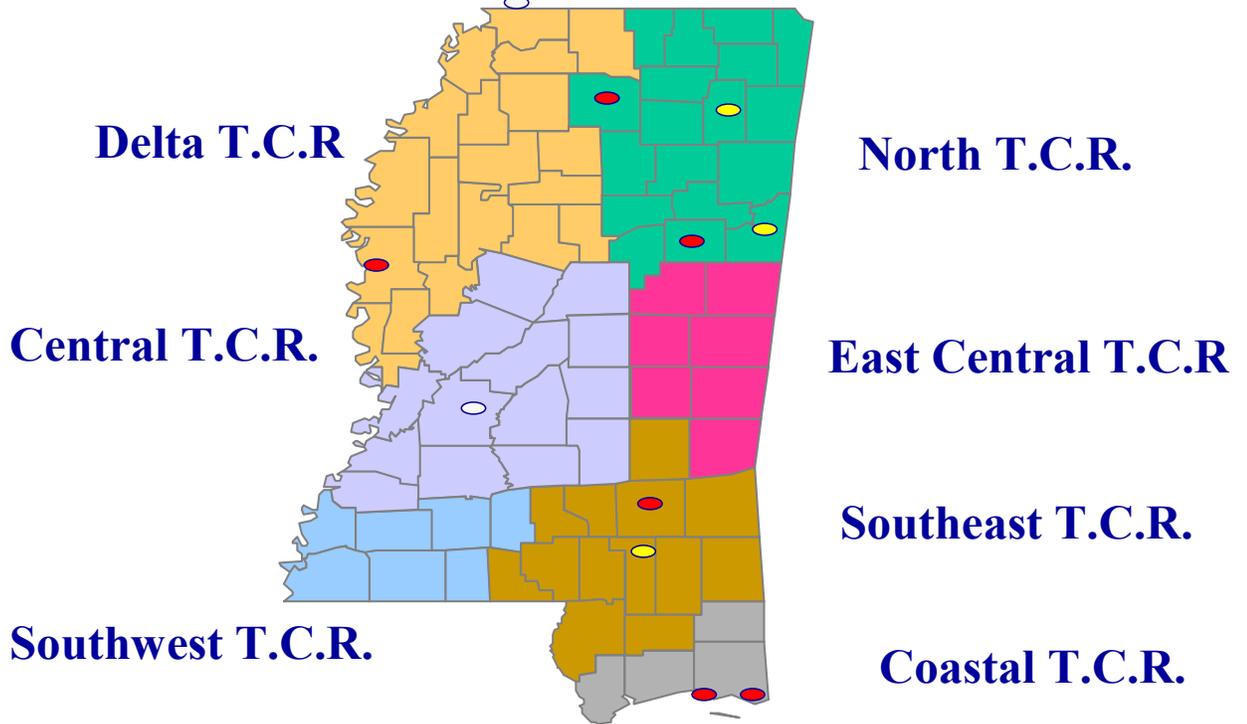
Mississippi Trauma Care Centers

As of 9/12/2008

2 Level I 

3 Level II 

6 Level III 



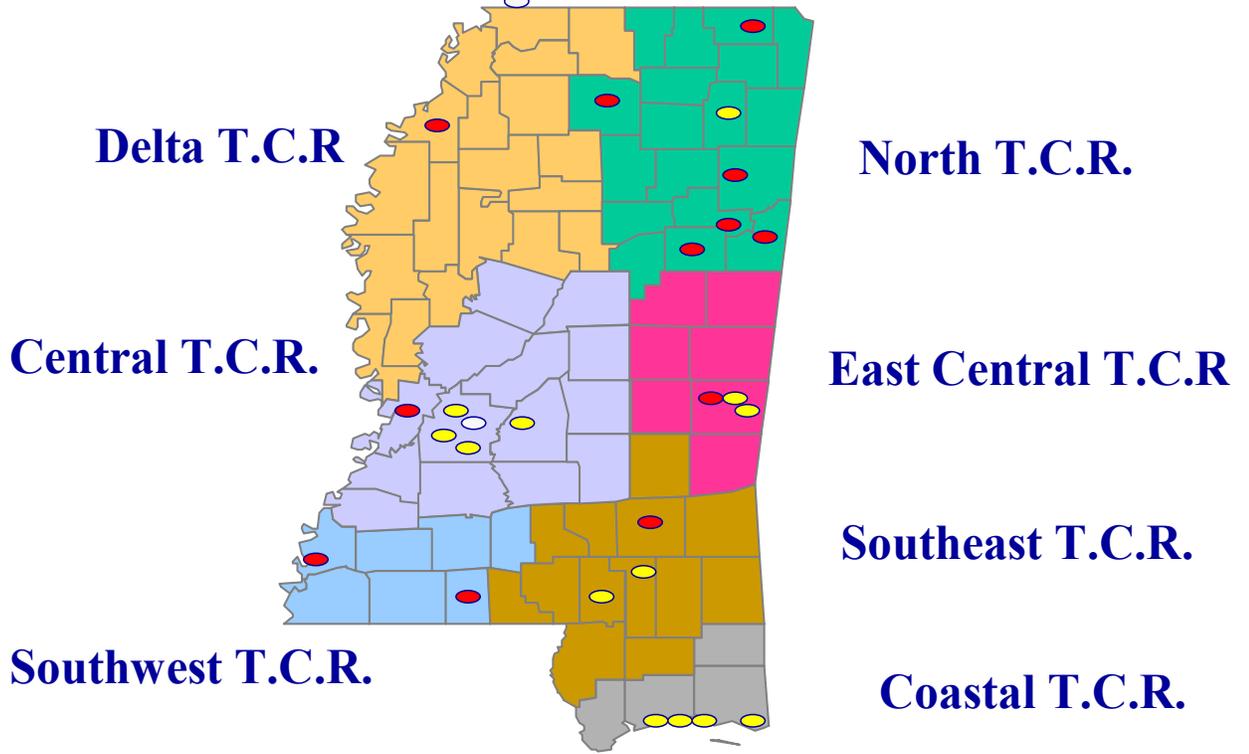
Mississippi State Department of Health - Office of Emergency Planning and Response



Mississippi Trauma Care Centers

PROPOSED WITHOUT SERVICES 7 DAYS PER WEEK

2 Level I  13 Level II  12 Level III 



4. NEONATAL INTENSIVE CARE BED FORMULA

| Neonate Intensive Care Service Demand | | | | | | | | | |
|--|------------------------------|-------------------|-----------------------|--------------|---------------|---------------------------|-----------------------|---------------------|-----------------------|
| Perinatal Planning Areas | Licensed Bed Capacity | Discharges | Discharge Days | ALOS | ADC | Occupancy Rate (%) | Inpatient Days | SHP Bed Need | Bed Need Diff. |
| PPA I | | | | | | | | 20 | 20 |
| PPA II | 22 | 353 | 7,030 | 19.92 | 20.17 | 91.67 | 7,361 | 20 | -2 |
| North MS Medical Center | 22 | 353 | 7,030 | 19.92 | 20.17 | 91.67 | 7,361 | | |
| PPA III | | | | | | | | 16 | 16 |
| PPA IV | 6 | 55 | 616 | 11.20 | 1.68 | 28.04 | 614 | 15 | 9 |
| Gilmore Regional Medical Center | 6 | 55 | 616 | 11.20 | 1.68 | 28.04 | 614 | | |
| PPA V | 134 | 2,422 | 35,413 | 14.62 | 98.48 | 73.49 | 35,945 | 41 | -93 |
| Central MS Medical Center | 15 | 287 | 1,498 | 5.22 | 4.12 | 27.43 | 1,502 | | |
| Miss Baptist Medical Center | 23 | 153 | 3,215 | 21.01 | 9.90 | 43.05 | 3,614 | | |
| River Region Health System | 5 | 931 | 2,130 | 2.29 | 5.84 | 116.71 | 2,130 | | |
| University Medical Center | 75 | 842 | 25,772 | 30.61 | 70.61 | 94.14 | 25,772 | | |
| Woman's Hospital | 16 | 209 | 2,798 | 13.39 | 8.02 | 50.12 | 2,927 | | |
| PPA VI | 16 | 315 | 3,938 | 12.50 | 10.97 | 68.58 | 4,005 | 16 | 0 |
| Jeff Anderson Reg. Med Center | 10 | 196 | 2,468 | 12.59 | 7.24 | 72.44 | 2,644 | | |
| Rush Foundation Hospital | 6 | 119 | 1,470 | 12.35 | 3.73 | 62.15 | 1,361 | | |
| PPA VII | 5 | 24 | 102 | 4.25 | 0.11 | 2.19 | 40 | 11 | 6 |
| Southwest MS Reg. Med. Center | 5 | 24 | 102 | 4.25 | 0.11 | 2.19 | 40 | | |
| PPA VIII | 16 | 218 | 5,730 | 26.28 | 14.34 | 89.64 | 5,235 | 20 | 4 |
| Forrest General Hospital | 6 | 46 | 2,388 | 51.91 | 6.32 | 105.39 | 2,308 | | |
| Wesley Medical Center | 10 | 172 | 3,342 | 19.43 | 8.02 | 80.19 | 2,927 | | |
| PPA IX | 18 | 395 | 4,417 | 11.18 | 11.79 | 65.51 | 4,304 | 25 | 7 |
| Memorial Hospital at Gulfport | 18 | 395 | 4,417 | 11.18 | 11.79 | 65.51 | 4,304 | | |
| State Total | 217 | 3,782 | 57,246 | 15.14 | 157.55 | 72.60 | 57,504 | 184 | -33 |

Source: Application for Renewal of Hospital License for Calendar Year 2008 and FY 2007 Annual Hospital Report.

CERTIFICATE OF NEED
CRITERIA AND STANDARDS
FOR
NEONATAL SPECIAL CARE SERVICES

100 Certificate of Need Criteria and Standards for Neonatal Special Care Services

Note: Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

100.01 Policy Statement Regarding Certificate of Need Applications for the Offering of Neonatal Special Care Services

1. An applicant is required to provide a reasonable amount of indigent/charity care as described in Chapter 1 of this *Plan*.
2. Perinatal Planning Areas (PPA): The MSDH shall determine the need for obstetrical services using the Perinatal Planning Areas as outlined on Map 10-3 at the end of this chapter.
3. Bed Limit: The total number of neonatal special care beds should not exceed four (4) per 1,000 live births in a specified PPA as defined below:
 - a. one (1) intensive care bed per 1,000 live births; and
 - b. three (3) intermediate care beds per 1,000 live births.
4. Size of Facility: A single neonatal special care unit (Specialty or Subspecialty) should contain a minimum of 15 beds.
5. Optimum Utilization: For planning and CON purposes, optimum utilization is defined as 75 percent occupancy per annum for all existing providers of neonatal special care services within an applicant's proposed Perinatal Planning Area.
6. Levels of Care:
Basic — Units provide uncomplicated care.

Specialty — Units provide basic, intermediate, and recovery care as well as specialized services.

Subspecialty — Units are staffed and equipped for the most intensive care of newborns as well as intermediate and recovery care.
7. An applicant proposing to offer neonatal special care services shall agree to provide an amount of care to Medicaid babies comparable to the average percentage of Medicaid care offered by the other providers of the requested services.

100.02 Certificate of Need Criteria and Standards for Neonatal Special Care Services

The Mississippi State Department of Health will review applications for a Certificate of Need to establish neonatal special care services under the statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code of 1972, as amended. The MSDH will also review applications for Certificate of Need according to the general criteria listed in the Mississippi Certificate of Need Review Manual; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

Neonatal special care services are reviewable under Certificate of Need when either the establishment or expansion of the services involves a capital expenditure in excess of \$2,000,000.

Those facilities desiring to provide neonatal special care services shall meet the minimum standards for the specified facility (Specialty or Subspecialty) as previously listed under Minimum Standards of Care for Neonatal Special Care Services.

1. **Need Criterion: The application shall demonstrate that the Perinatal Planning Area (PPA) wherein the proposed services are to be offered had a minimum of 3,600 deliveries for the most recent 12-month reporting period and that each existing provider of neonatal special care services within the proposed PPA maintained an optimum utilization rate of 75 percent for the most recent 12-month period. The MSDH shall determine the need for neonatal special care services based upon the following:**
 - a. **one (1) neonatal intensive care bed per 1,000 live births in a specified Perinatal Planning Area for the most recent 12-month reporting period; and**
 - b. **three (3) neonatal intermediate care beds per 1,000 live births in a specified Perinatal Planning Area for the most recent 12-month reporting period.**

Projects for existing providers of neonatal special care services which seek to expand capacity by the addition or conversion of neonatal special care beds : The applicant shall document the need for the proposed project. The applicant shall demonstrate that the facility in question has maintained an occupancy rate for neonatal special care services of at least 70 percent for the most recent two (2) years or 80 percent neonate special care services occupancy rate for the most recent year, notwithstanding the neonatal special care bed need outlined in Table 10-4 below. The applicant may be approved for such additional or conversion of neonatal special care beds to meet projected demand balanced with optimum utilization rate for the Perinatal Planning Area, but in no event shall such addition or conversion exceed 20 percent increase of the existing neonatal special care beds of such facility.

2. A single neonatal special care unit (Specialty or Subspecialty) should contain a minimum of 15 beds (neonatal intensive care and/or neonatal intermediate care). An adjustment downward may be considered for a specialty unit when travel time to an alternate unit is a serious hardship due to geographic remoteness.

3. The application shall document that the proposed services will be available within one (1) hour normal driving time of 95 percent of the population in rural areas and within 30 minutes normal driving time in urban areas.
4. The application shall document that the applicant has established referral networks to transfer infants requiring more sophisticated care than is available in less specialized facilities.
5. The application shall affirm that the applicant will record and maintain, at a minimum, the following information regarding charity care and care to the medically indigent and make it available to the Mississippi State Department of Health within 15 business days of request:
 - a. source of patient referral;
 - b. utilization data e.g., number of indigent admissions, number of charity admissions, and inpatient days of care;
 - c. demographic/patient origin data;
 - d. cost/charges data; and
 - e. any other data pertaining directly or indirectly to the utilization of services by medically indigent or charity patients which the Department may request.
6. The applicant shall document that within the scope of its available services, neither the facility nor its participating staff shall have policies or procedures which would exclude patients because of race, age, sex, ethnicity, or ability to pay.

100.03 Neonatal Special Care Services Bed Need Methodology

The determination of need for neonatal special care beds/services in each Perinatal Planning Area will be based on four (4) beds per 1,000 live births as defined below.

1. One (1) neonatal intensive care bed per 1,000 live births in the most recent 12-month reporting period.
2. Three (3) neonatal intermediate care beds per 1,000 live births in the most recent 12-month reporting period.

**Table 10 - 1
Neonatal Special Care Bed Need
2008**

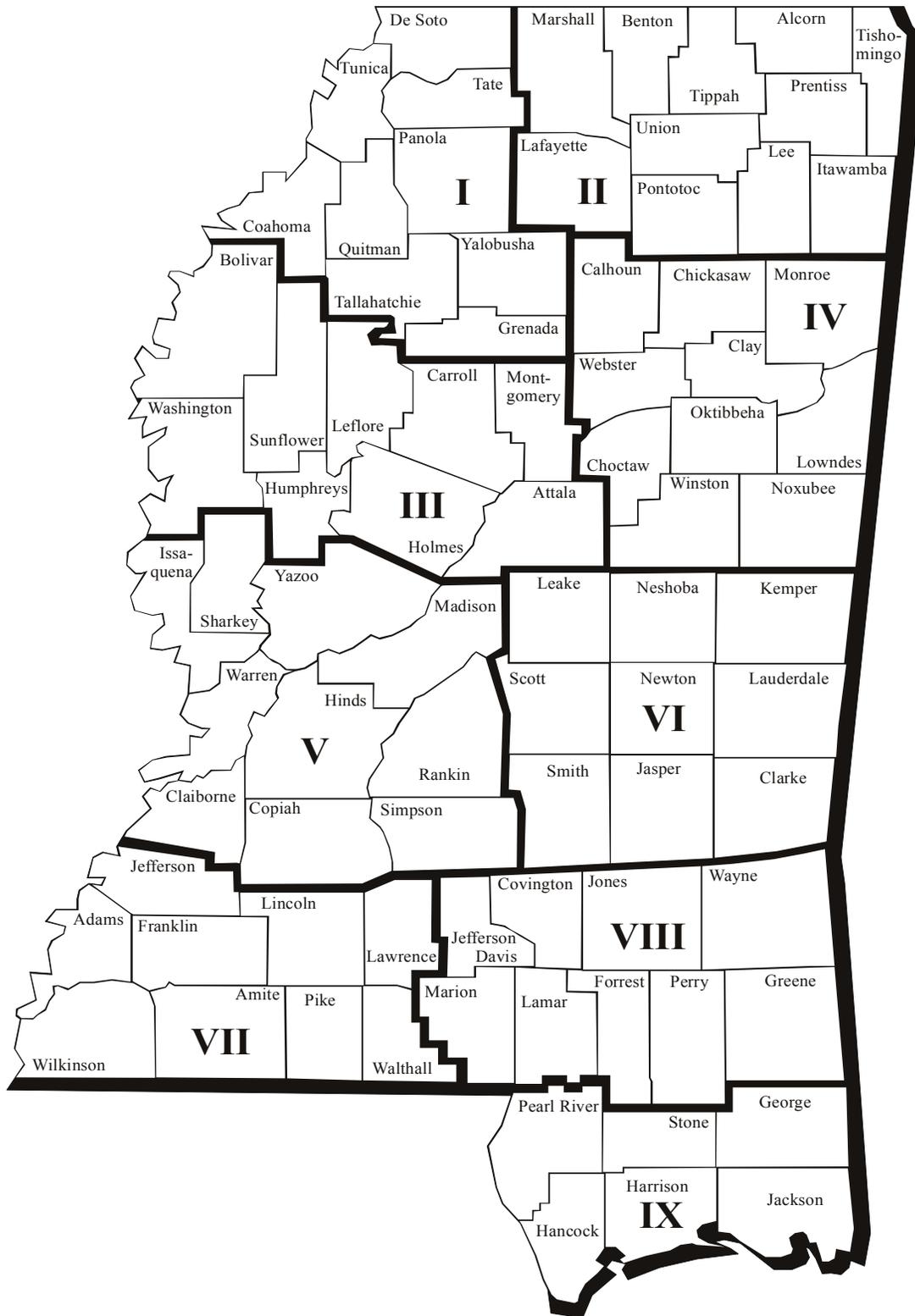
| Perinatal Planning Areas | Number Live Births¹ | Neonatal Intensive Care Bed Need | Neonatal Intermediate Care Bed Need |
|---------------------------------|---------------------------------------|---|--|
| PPA I | 4,912 | 5 | 15 |
| PPA II | 5,063 | 5 | 15 |
| PPA III | 4,150 | 4 | 12 |
| PPA IV | 3,601 | 4 | 11 |
| PPA V | 10,217 | 10 | 31 |
| PPA VI | 3,988 | 4 | 12 |
| PPA VII | 2,758 | 3 | 8 |
| PPA VIII | 4,893 | 5 | 15 |
| PPA IX | 6,464 | 6 | 19 |
| State Total | 46,046 | 46 | 138 |

¹ By Place of Birth

Sources: Mississippi State Department of Health, Division of Licensure and Certification; and Division of Health Planning and Resource Development Calculations, 2008

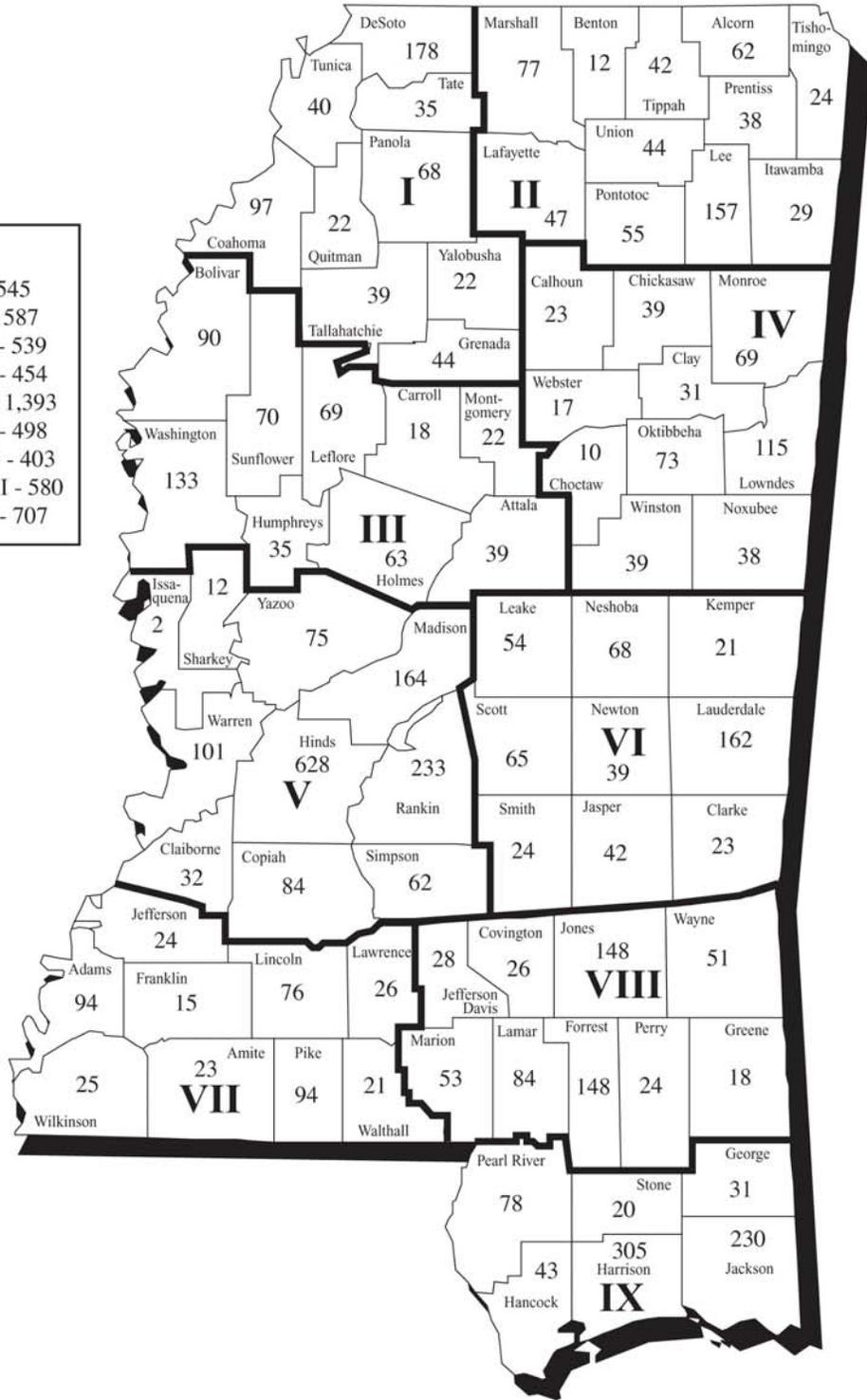
Source: Bureau of Public Health Statistics

**Map 10 - 1
Perinatal Planning Areas**



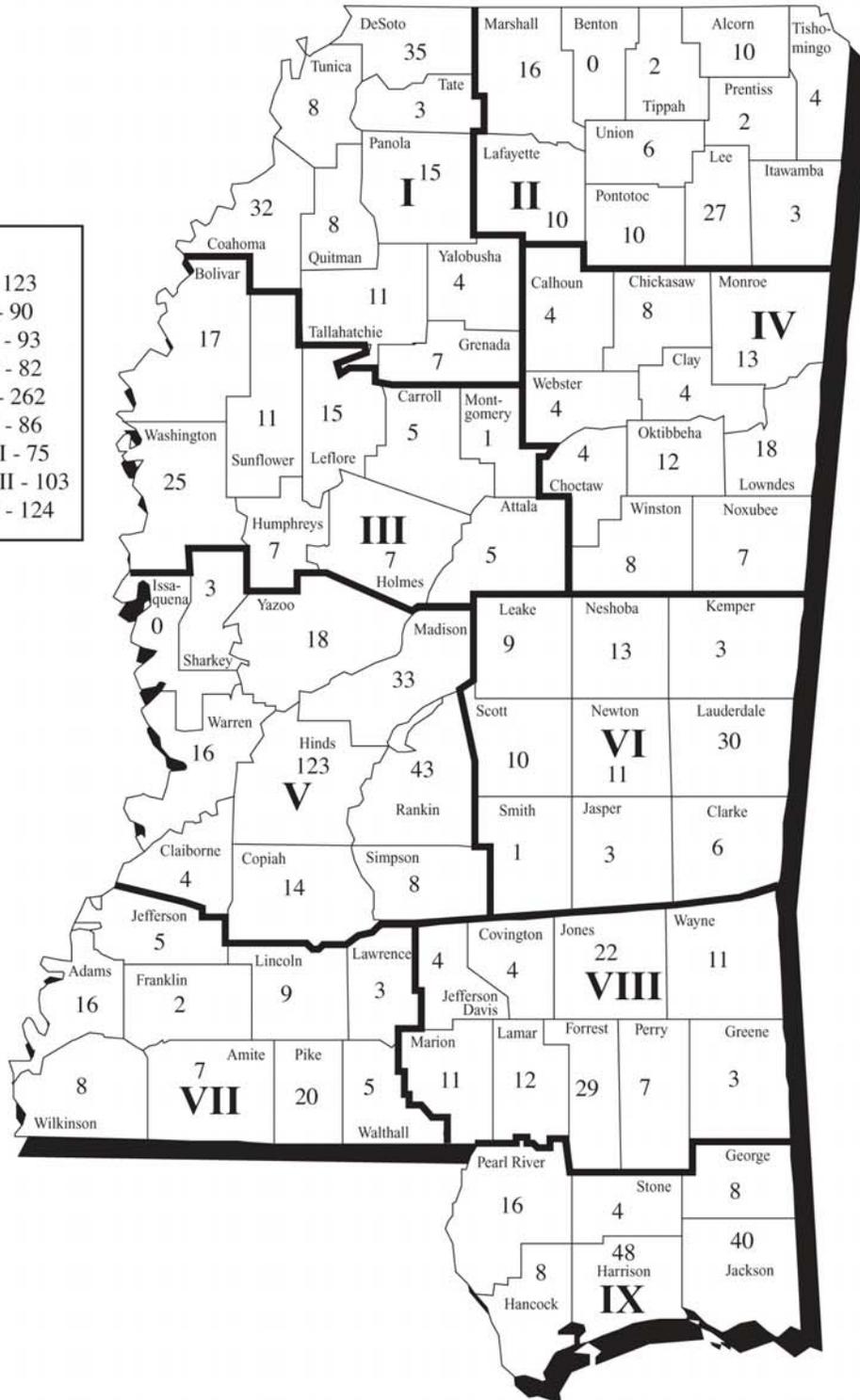
Low Birth Weight ($\leq 2,500$ Grams) by Residency FY 2007

Total - 5,706
 Planning Area I - 545
 Planning Area II - 587
 Planning Area III - 539
 Planning Area IV - 454
 Planning Area V - 1,393
 Planning Area VI - 498
 Planning Area VII - 403
 Planning Area VIII - 580
 Planning Area IX - 707



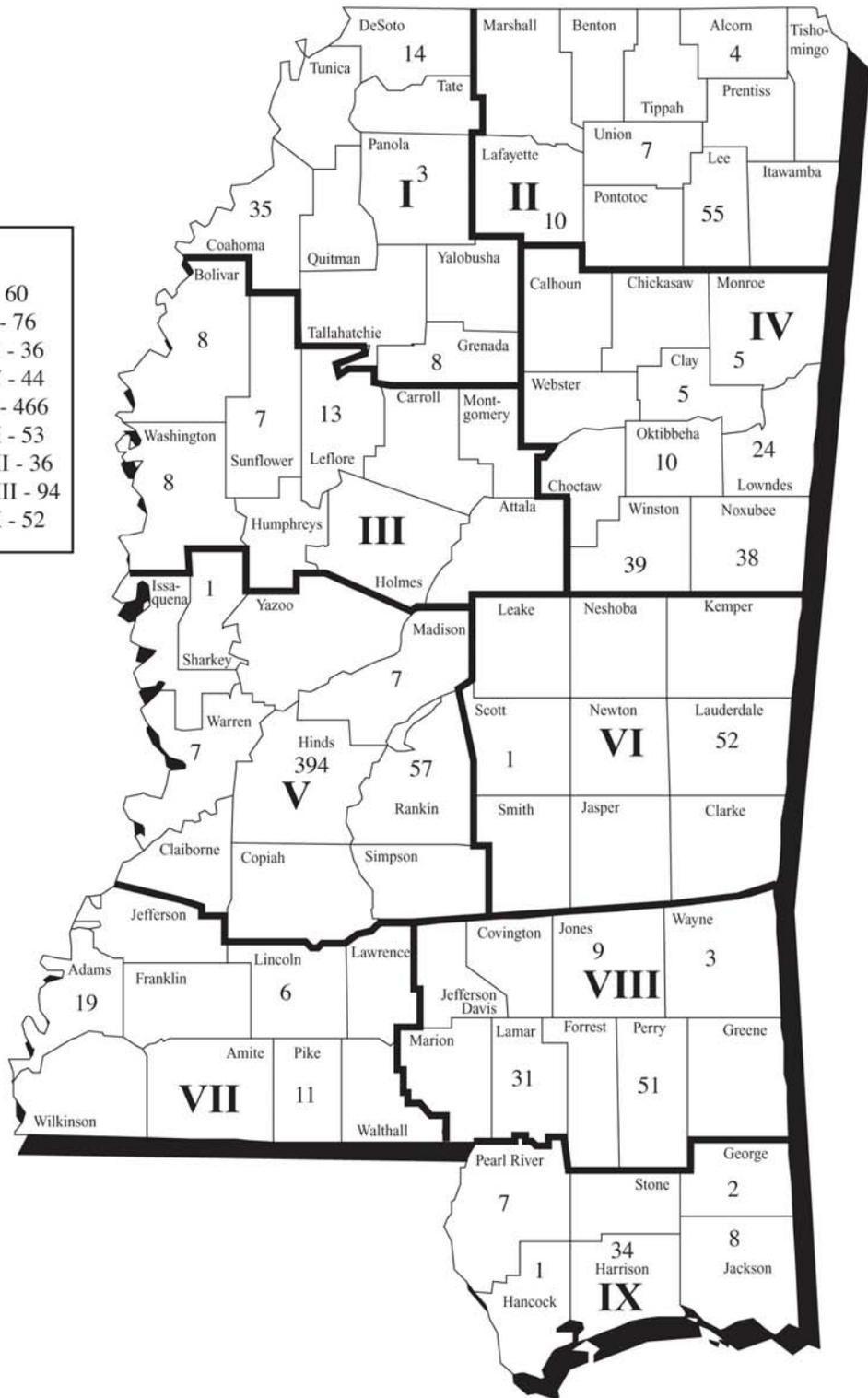
Very Low Birth Weight ($\leq 1,500$ Grams) by Residency FY 2007

Total - 1,038
 Planning Area I - 123
 Planning Area II - 90
 Planning Area III - 93
 Planning Area IV - 82
 Planning Area V - 262
 Planning Area VI - 86
 Planning Area VII - 75
 Planning Area VIII - 103
 Planning Area IX - 124



Very Low Birth Weight by Occurrence FY 2007

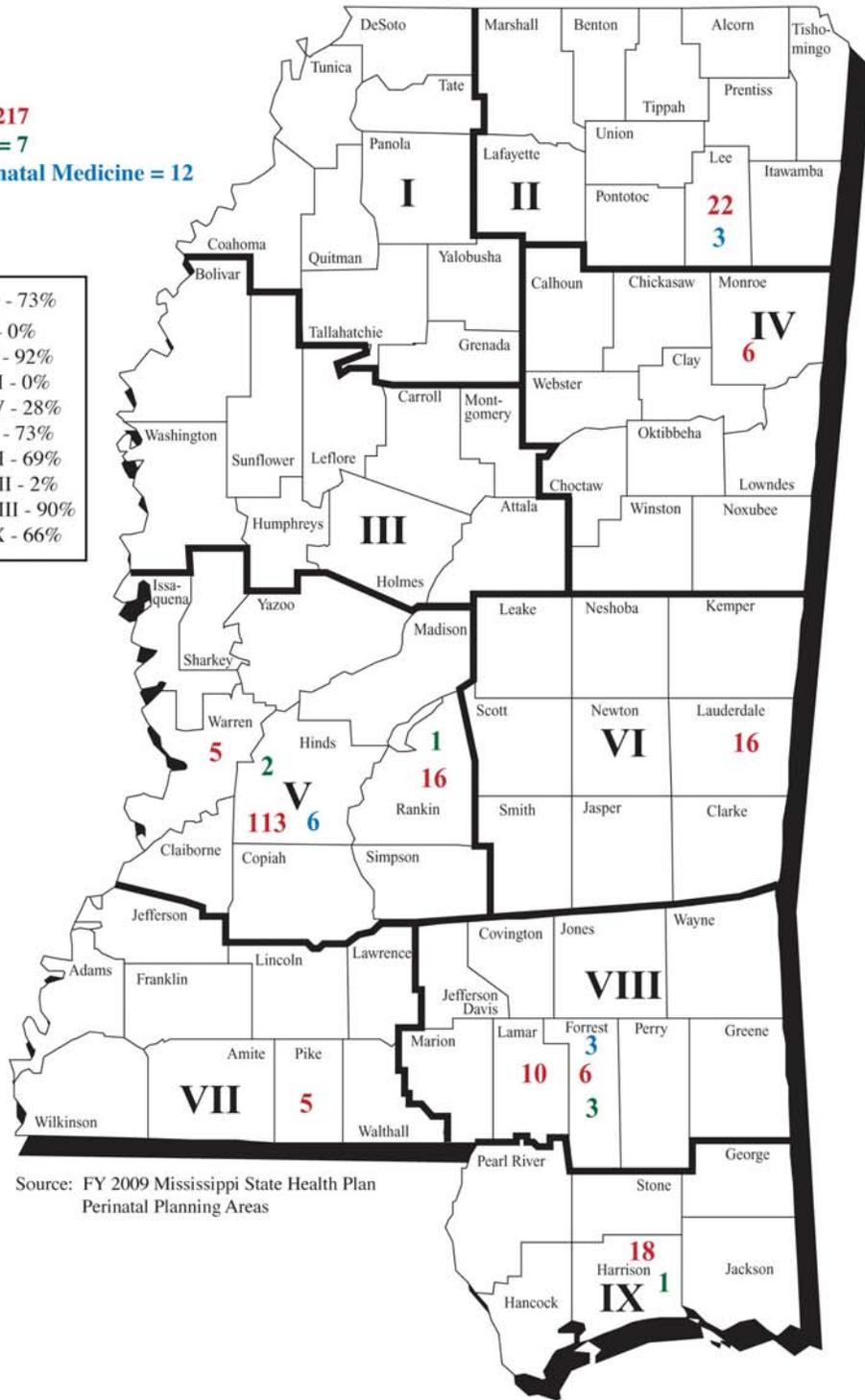
| |
|-------------------------|
| Total - 917 |
| Planning Area I - 60 |
| Planning Area II - 76 |
| Planning Area III - 36 |
| Planning Area IV - 44 |
| Planning Area V - 466 |
| Planning Area VI - 53 |
| Planning Area VII - 36 |
| Planning Area VIII - 94 |
| Planning Area IX - 52 |



Neonatal Intensive Care Unit (NICU) Beds, Specialists by County, and Occupancy Percent by Perinatal Planning Area

NICU Beds = 217
Neonatologist = 7
Neonatal-Perinatal Medicine = 12

| |
|--------------------------|
| State Occupancy - 73% |
| Planning Area I - 0% |
| Planning Area II - 92% |
| Planning Area III - 0% |
| Planning Area IV - 28% |
| Planning Area V - 73% |
| Planning Area VI - 69% |
| Planning Area VII - 2% |
| Planning Area VIII - 90% |
| Planning Area IX - 66% |



5. PET/MRI MINIMUM PROCEDURE NUMBERS

PET/MRI Minimum Procedure Numbers

Positron Emission Tomography

The need for PET equipment is estimated to be one per 300,000 population. Based on this estimate, Mississippi needs 10 PET units. The state currently has approximately 12 units in service (seven fixed and five mobile).

One unit is expected to perform 1,000 procedures per year (4 clinical procedures per day times 250 days). The current 12 units are performing an average of approximately 890 procedures per year.

The MSDH may approve additional units only when it is demonstrated that the existing PET equipment is performing 1,500 clinical procedures per PET unit per year (6 clinical procedures per day x 250 working days per year).

No change is recommended to the minimum PET procedure requirement.

Magnetic Resonance Imaging

The FY 2009 State Health Plan uses a population-based formula for projection of MRI service volume (service area determined by applicant).

$$(X*Y) \div 1,000 = V$$

Where, X = Applicant's Defined Service area population

Y = Mississippi's MRI Use Rate

V = Expected Volume

Based on the FY 2009 State Health Plan, a total of 255,662 MRI procedures were performed in Mississippi during 2007, resulting in a Use Rate of 85.9 MRI procedures per 1,000 population (based on 2010 Projected Population estimates).

Therefore, given $V = 2,700$ MRI procedures, an applicant must have a minimum projected population base of 31,432.

$$(31,432 \times 85.9) \div 1,000 = 2,700$$

Estimated statewide need is one MRI unit per 32,000 persons or 93 units.

Total fixed units in State as of FY 2009 Plan – 81

Total mobile MRI units as of FY 2009 Plan - 36

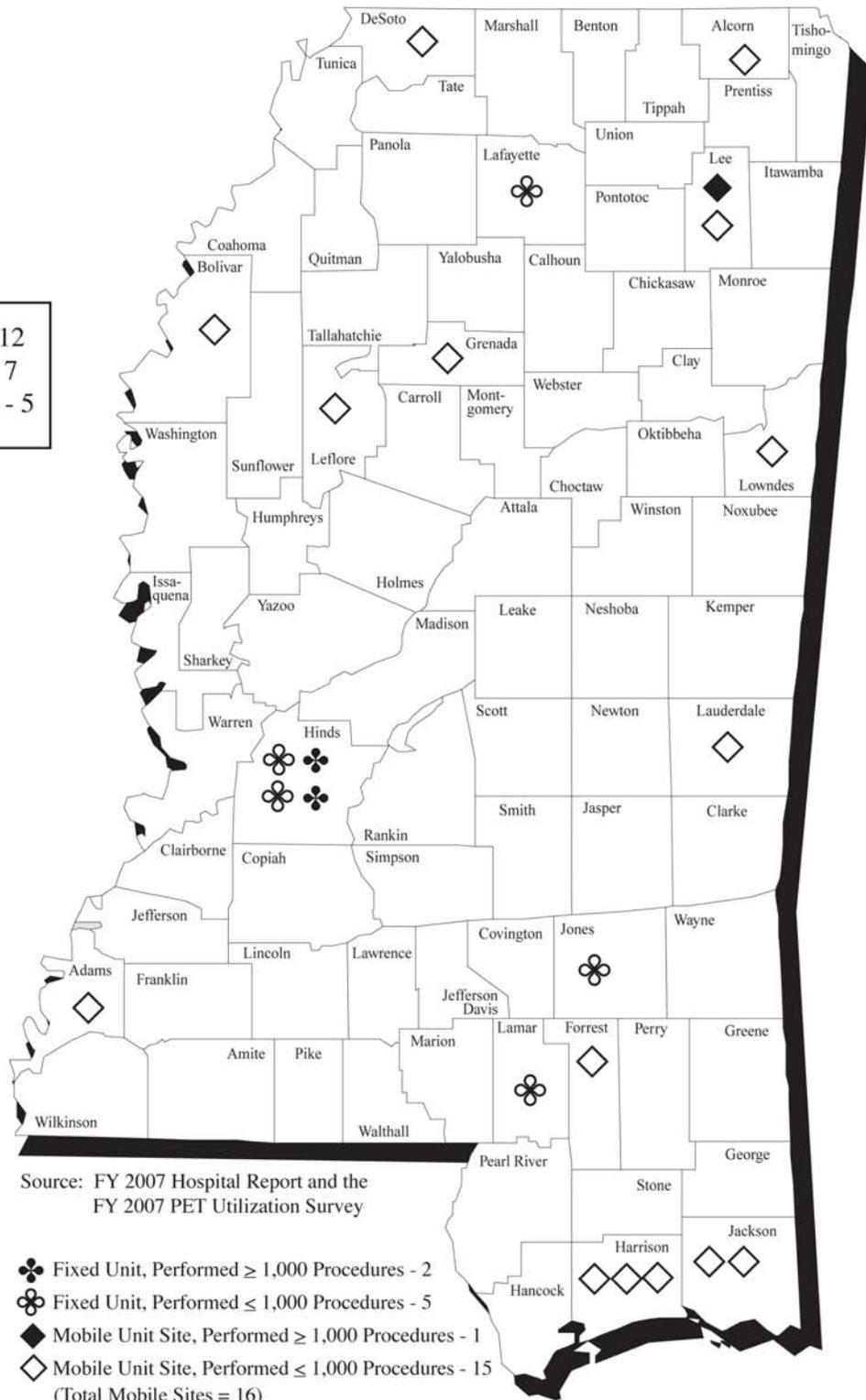
Total Units = 117

Excess Units = 24

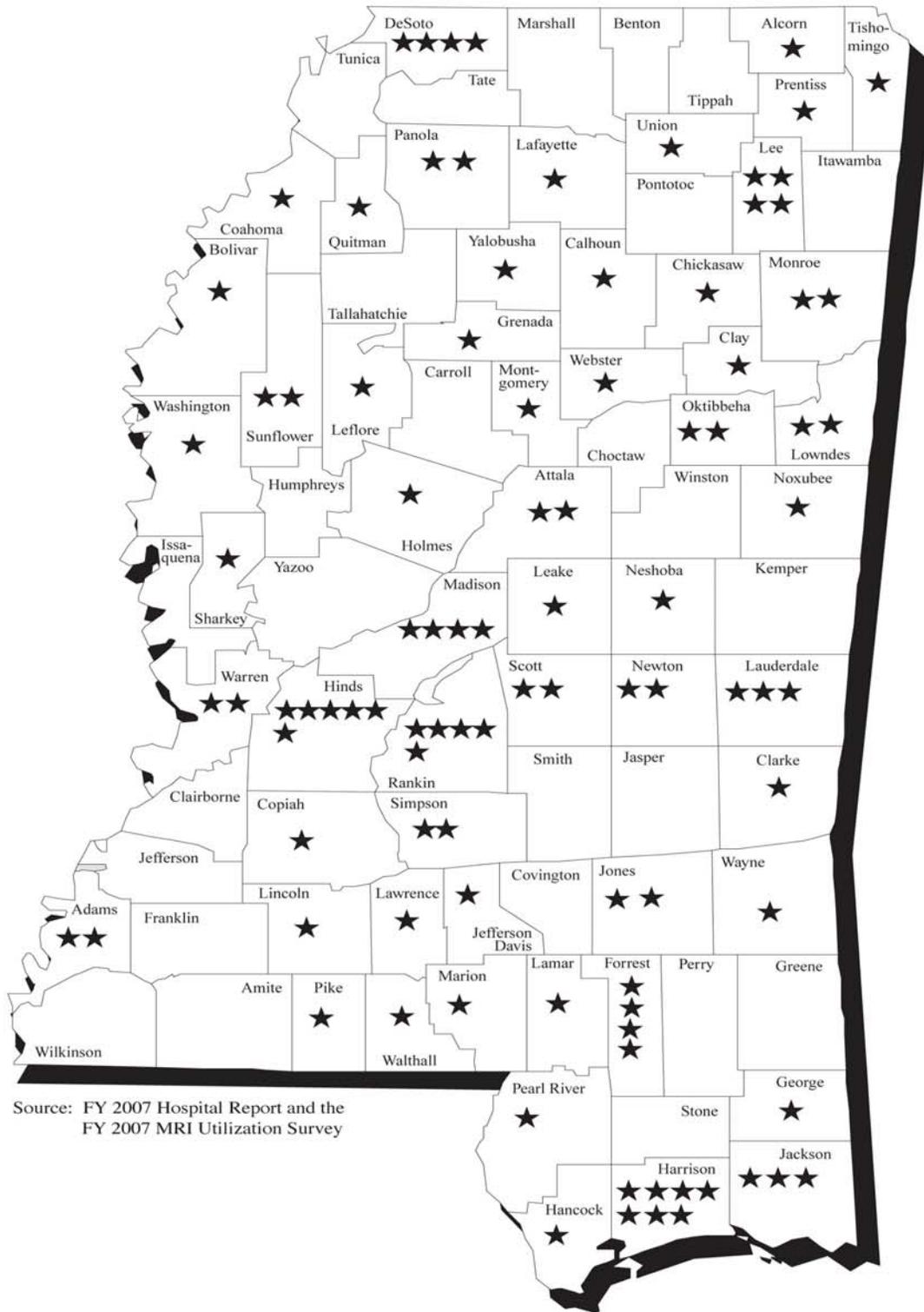
No change is recommended to the minimum MRI procedure requirement.

Location and Number of PET Procedures FY 2007

Total Units - 12
Fixed Units - 7
Mobile Units - 5



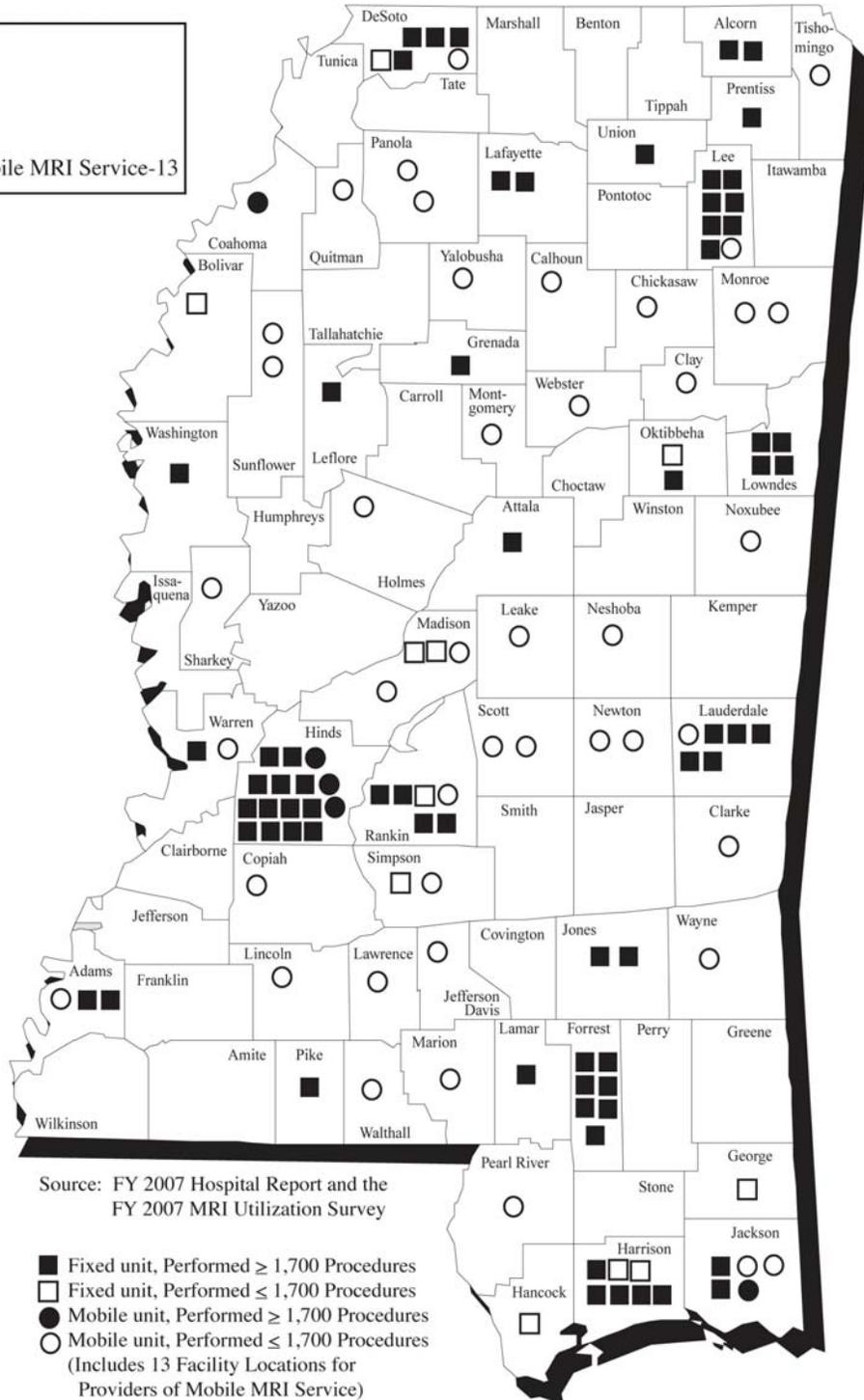
Number of MRI Providers in the State of Mississippi FY 2007



Source: FY 2007 Hospital Report and the
FY 2007 MRI Utilization Survey

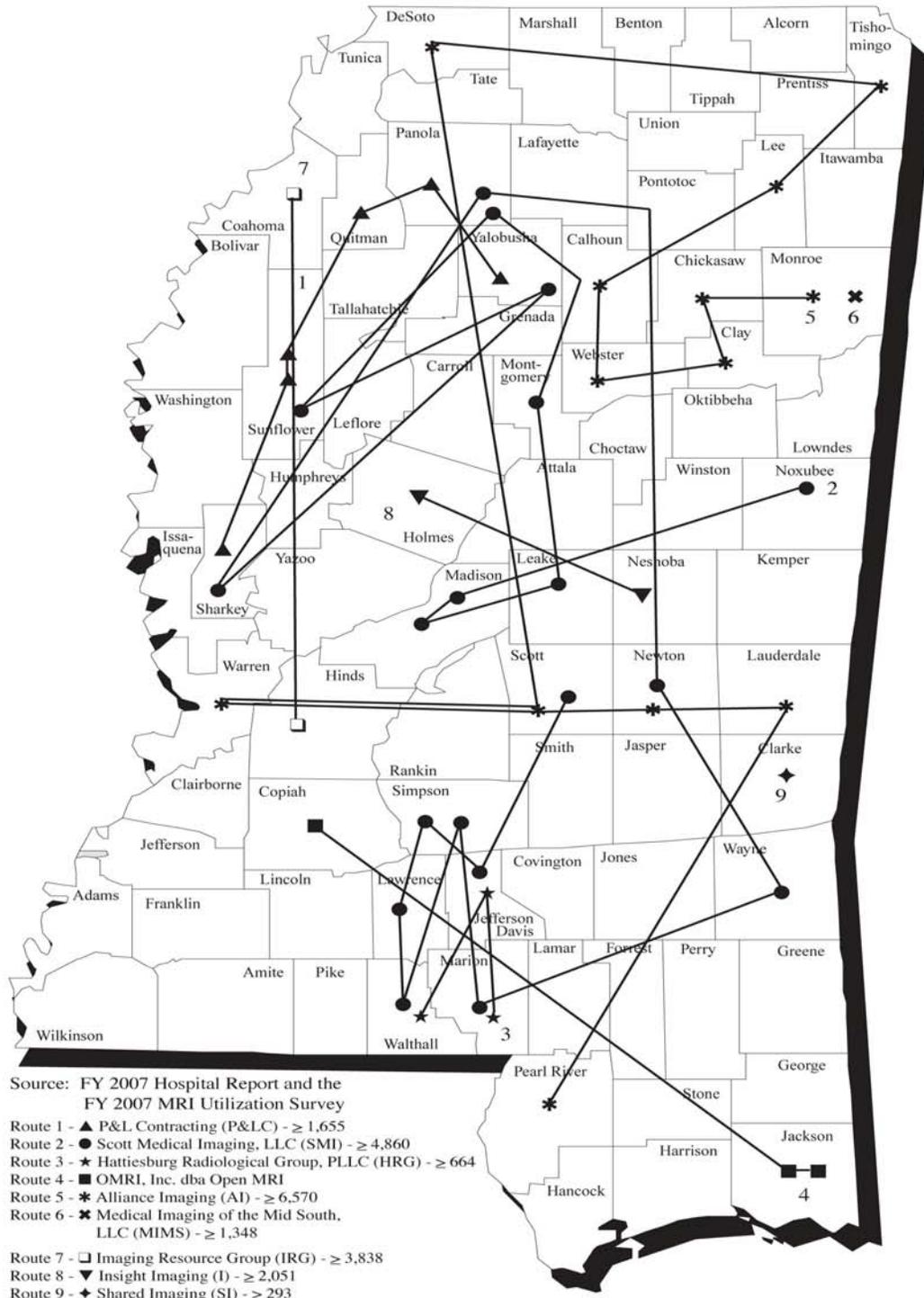
Location of MRI Units (Fixed and Mobile) and The Number of Procedures FY 2007

TOTAL
 Fixed Units-81
 Mobile Units-36
 Facility Locations
 For Providers of Mobile MRI Service-13



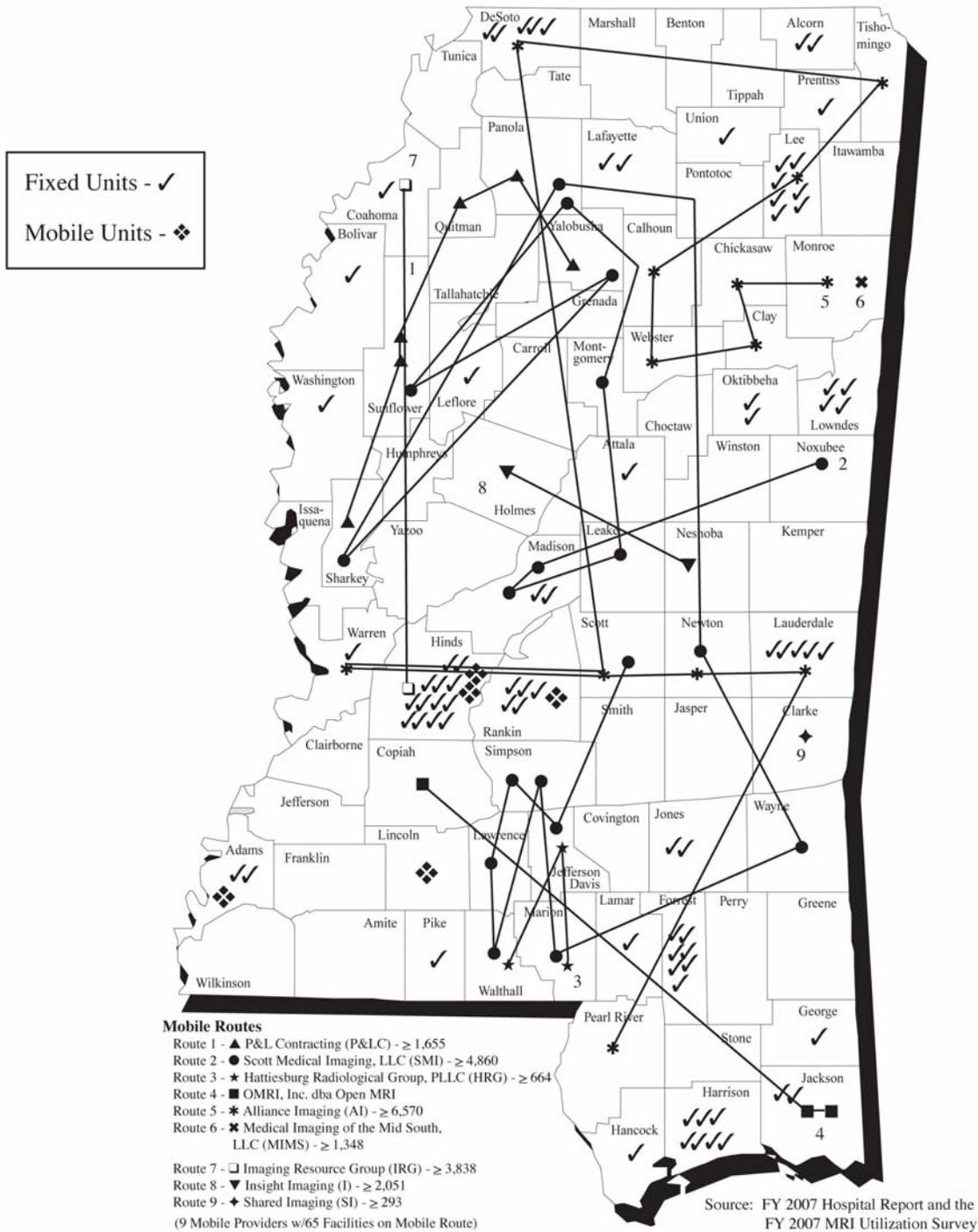
Mobile MRI Providers and Their Routes FY 2007

(9 Mobile Providers w/65 Facilities on Mobile Route)



Note: In the FY 2007 Hospital Report, total MRI procedures are shown for each facility. The numbers shown above are a portion of the total number reported in the Hospital Report.

MRI Units (Fixed and Mobile), and Mobile MRI Providers and Their Routes FY 2007



Note: In the FY 2007 Hospital Report, total MRI procedures are shown for each facility.
The numbers shown above are a portion of the total number reported in the Hospital Report.

6. END STAGE RENAL DISEASE FACILITIES

