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BUILDING A HEALTHIER SAINT LOUIS

A REPORT ON THE INTEGRITY OF SAINT LOUIS' HEALTH CARE SAFETY NET
SAINT LOUIS REGIONAL HEALTH COMMISSION

03
REPORT

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Together, we will build a healthier St. Louis.

Thank You,

The St. Louis Regional Health Commission, March 2003

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SECTION I: EXECUTIVE SUMMARY

Introduction

Nearly 307,000 people in St. Louis City and Saint Louis County (approximately one in every five citizens) are either uninsured or covered by Missouri Medicaid¹. These individuals must rely upon safety net providers to meet their health care needs.

While St. Louis is blessed with an abundance of committed health care safety net institutions, navigating this complex system from a patient perspective is both challenging and confusing. In addition, there are critical shortages in the number of medical specialists and dentists to care for the uninsured and Medicaid populations. These and other barriers lead to delayed medical care and otherwise preventable complications that diminish quality of life and life-span.

This is confirmed by an analysis of more than 60 key health indicators. These statistics reveal particularly unfavorable health outcomes among persons living in St. Louis City and pockets of Saint Louis County, most notably northern portions of the County. Health disparities are clearly linked to socioeconomic status and race, with African-Americans in our community having poorer health status than Whites for most clinical outcomes, and new Americans facing unique barriers to accessing the health care system.

The health care safety net in St. Louis City and County is also under-funded by at least \$166 Million. Barring intervention, this gap is likely to widen in the near future. Approximately 20% of current funding for community-based primary and specialty care services has been designated as “transitional” by the Federal government, and could be lost as early as February 2004. In addition, mounting fiscal pressures on Federal and State budgets could lead to drastic cuts in safety net programs and a further 25% increase in the number of uninsured persons in our community. Such cuts would place even greater fiscal stress on an already under-funded system.

Based upon a recommendation of the Indigent Care Task Force of Civic Progress, governmental leaders and committed community members joined with the leadership of the health care sector in St. Louis to form the St. Louis Regional Health Commission (RHC). In September of 2001, Missouri Governor Bob Holden, Mayor Francis Slay and County Executive Buzz Westfall, along with regional health care leaders and community members, officially announced its creation.

The charge of the new Commission is to improve health care access, reduce health disparities, and improve health outcomes for the uninsured and under-insured in St. Louis City and Saint Louis County.

The Commission itself is a 19-member body, which includes representatives from area governments, health care providers, and the community at large. The RHC also has two Advisory Boards of 25 individuals per Board. The Community Advisory Board represents community organizations, citizens, and users of the safety net system; the Provider Advisory Board represents health service safety net providers in the region.

¹ *This number is higher (338,000) if Medicaid recipients who also qualify for Medicare are included.*

As part of ongoing discussions with Federal and State governments, the Commission was immediately charged with a critical task: to prepare a strategic plan for the delivery of primary and specialty health care services to the uninsured and underinsured people in the St. Louis area by the end of 2003.

Therefore, the RHC's initial focus is to solve an immediate problem in our community – how to create a financially sustainable primary and specialty care safety net system for St. Louis City and Saint Louis County. This effort is urgent, immediate, and the focus of the RHC's planning efforts through 2003.

This report has been written for three main purposes:

1. To provide the St. Louis community with a “snap-shot” of where we stand in terms of health status, health disparities, and the integrity of the health care safety net as it is currently organized and financed.
2. To serve as the basis for making recommendations on alternative mechanisms for organizing and financing primary and specialty care services in our region.
3. To meet the requirements of the Federal and State governments under the terms of an agreement with the St. Louis community that was developed in June of 2002.

The creation of this report has been a collaborative effort between the RHC, its Advisory Boards, and the community at large, with over 250 individuals and organizations providing input into this process. We are indebted to the time and energy of everyone involved in this process.

While an important milestone, this report is only a first step in the RHC's work to improve access and reduce health disparities in St. Louis City and Saint Louis County. Throughout the remainder of 2003, the RHC will continue to work with the St. Louis community to develop solutions to the primary and specialty care issues found in this report. Specific recommendations for improving access, enhancing coordination of care and greater cost-effectiveness will be presented in late 2003 as part of a comprehensive strategic plan. In 2004, the RHC will release recommendations for prevention, health education, and community health services.

We look forward to you joining us in this effort.

Summary of Detailed Key Findings in this Report

In order to complete this report, the RHC:

- Summarized the status of health outcomes for the St. Louis community for over 60 health indicators (Section III).
- Examined the current integrity of the health care safety net, collecting data on the demand for services, as well as organization, capacity, and financing of the current system (Section IV).
- Examined the barriers individuals face in obtaining access to health care services (Section V).
- Reviewed determinants of health status other than the medical system (Section VI).
- Assessed the current way health information is collected and reported to the citizens of the region (Section VII).

The major key findings for each Section of the Report are summarized in the following pages:

Health Outcomes (Section III)

1. In geographic areas and in population groups with higher incomes and more education, health outcomes are more favorable. In areas with lower incomes and less education, health outcomes are less favorable.
2. Disparities are greatest for birth-related indicators such as lack of early prenatal care and low infant birth weight. Lack of early prenatal care carries a greater risk for prematurity and low birth weight. Premature and low birth weight infants are at substantially higher risk for long-term mental and physical disabilities as well as early death.
3. There are significant disparities in health outcomes between various geographic areas in our region, and between African Americans and whites, in both St. Louis City and Saint Louis County. (Race-comparative rates are limited to White and African American, as concentrations of other groups in the region are too small for detailed analysis.)
4. The areas of greatest disparity between African Americans and whites in our region are: teen births, low birth weight, lack of first-trimester prenatal care, homicide, tuberculosis, prostate cancer mortality and diabetes mortality.

The Integrity of the Safety Net (Section IV)

Organization of the Safety Net

1. Health care delivery systems are complex and can be difficult to navigate. This is challenging for all patients and many providers, but can be a particular barrier for safety net patients due to the added complexity of the structure of the safety net in St. Louis City and Saint Louis County.

Factors that contribute to health disparities include:

- Limited collaboration and care coordination among safety net providers
- A lack of understanding on the part of patients and providers as to how to navigate and most effectively utilize the system as currently structured.
- Organizational barriers to accessing medical care, which are described in detail in Section V of this report.

Primary Care

1. Safety net institutions provide primary care services at 33 geographically distributed sites throughout St. Louis City and County. These institutions are critical components of the safety net, providing 493,366 primary care visits to 252,919 individuals. Approximately 90% of these individuals are either uninsured or covered by Medicaid. A small cadre of community physicians also provides primary care to safety net patients in the region.

2. Except for a small portion of near North Saint Louis County, the areas of highest need in St. Louis City and County are within 20 minutes travel time to a primary care safety net provider.

3. Appointment wait times for preventive and routine primary care are comparable to that encountered in the private sector; however, hours of operation are largely restricted to weekdays between 8:30 a.m. and 5 p.m.

While appointment wait times and physical plant capacity suggest there is adequate primary capacity to meet current demand, many safety net patients may not avail themselves of these services, and some choose to utilize alternative facilities such as hospital Emergency Departments or urgent care centers for their primary care needs.

4. Hospital Emergency Departments provide a large amount of non-emergent care to safety net patients – an average of 219 patients per day, about half of whom arrive for care after 4 p.m. Although the use of the ED may be understandable from the patient's perspective, primary care delivered in EDs has proven to be a less medically effective option for the patients themselves, as well as being a strain on the medical system overall.

5. Urgent care centers could play an important role in meeting non-emergent patient needs on weekends and after-hours. However, except for the ConnectCare Urgent Care Center, which opened in November 2002, and Health Care for Kids, there are no urgent care centers located within 20 minutes of the areas of highest “safety net” need in St. Louis City and Saint Louis County.

6. Over 94% of the individuals seen in the safety net system were under the age of 65, indicating that most St. Louis City and Saint Louis County residents eligible for Medicare utilize community physicians or other non-safety net providers for their primary care needs.

Specialty Care

1. Six institutions in St. Louis City and Saint Louis County provide the vast majority of safety net specialty care in the region: Washington University Faculty Group Practice (36%), Cardinal Glennon Hospital Specialty Clinics (20%), Saint Louis University Faculty Group Practice (15%), Barnes-Jewish Specialty Clinics (13%), Saint Louis ConnectCare (13%), and St. John's Mercy Clinic (3%).
2. Appointment wait times for subspecialty care are excessive, indicating that the demand for subspecialty care is significantly greater than existing safety net capacity. These wait times can extend to 3 months or greater for some key specialty services such as Gastroenterology, Pulmonology, or Neurosurgery.
3. Based on the size and demographics of the uninsured and Medicaid populations, there is a projected need for up to an additional 246,400 subspecialty doctor visits per year.
4. Very few private practice sub-specialists care for uninsured and under-insured patients. Major barriers to broadening physician participation include:
 - The inability to cover clinical practice overhead costs (i.e. supplies, equipment, office staff, rent, utilities) under Missouri's current Medicaid fee schedule. Missouri Medicaid payments to physicians are among the lowest in the nation (48th out of 50 states) and with rare exception, have remained unchanged since 1995.
 - Many community subspecialists fear that caring for uninsured or Medicaid patients will adversely affect their professional liability insurance premiums or result in the inability to obtain malpractice insurance at all. This concern is based on the perception that lawsuits involving safety net patients are more likely to be heard in venues such as St. Louis City where juries are overly sympathetic toward plaintiffs.

- Physician concerns about professional liability have become even more acute over the past 18 months as malpractice insurance premiums have skyrocketed. Indeed, some local safety net providers have closed their practices or moved to other states because of inability to obtain malpractice insurance.
- Lost physician productivity due to high “no show” appointment rates among safety net patients.

Dental Services

1. Safety net institutions provide dental care services at 17 geographically distributed sites throughout St. Louis City and County. These institutions are critical components of the safety net, providing over 56,000 dental care visits per year.
2. Despite the efforts of these safety net providers, there is a shortage of dentists accepting safety net patients.
3. Appointment wait times were reported as approximately two months for routine dental care at most locations.
4. Many uninsured and underinsured people do not receive preventive dental services and suffer preventable pain and suffering as well as long-term consequences that could be avoided through regular dental check-ups, preventive care and education.

Pharmacy Services

1. The rapidly increasing cost of medications makes them unaffordable for many safety net patients. Failure to fill needed prescriptions and take medication as directed negatively impacts the health of these safety net patients and contributes to health outcome disparities.
2. Comprehensive patient counseling regarding medication use leads to better clinical outcomes and decreases the risk of adverse events such as medication errors, drug interactions and serious allergic reactions. Few safety net pharmacies have the resources to provide comprehensive medication counseling for their patients.
3. Many safety net patients and providers are unaware of financial assistance programs, discount programs and other available options for providing medications at reduced cost. Eligibility criteria for these types of programs are also not widely known.
4. The level of financial assistance for outpatient medications through the Missouri Medicaid program is in jeopardy due to the State's budget shortfall.
5. While there are at least 36 dispensing pharmacies in areas in greatest need of safety net services in St. Louis City and County, 75% of these are commercial stores with no special services for uninsured and underinsured patients.
6. There is no common formulary among institutional safety net providers in St. Louis City and Saint Louis County. The formularies for the traditional Medicaid and managed Medicaid (MC+) programs also differ. This contributes to inefficiency, higher cost and confusion for both providers and safety net patients.

Mental Health: Psychiatric and Substance Abuse Services

1. There is limited coordination between the mental health care system and the physical health care system. The mental health system is "carved out" or separated from the physical health system.
2. Availability of mental health services is limited for both psychiatric and substance abuse services. For example, Department of Mental Health contracted providers see an estimated 46% of those in need of safety net psychiatric services and an estimated 38% of those in need of substance abuse services.
3. Most psychiatric care safety net providers handle after hours mental health care through a contract with Behavioral Health Response or with on-call staff persons. These after-hours services are designed for crises.
4. A majority of safety net substance abuse providers surveyed are open 24-hours a day or provide evening hours.
5. It is difficult for some people in need of psychiatric and substance abuse services to find adequate information regarding who can be serviced and what services are available.
6. Limited coordination among organizations providing children's mental health services leads to parallel systems and confusion among families with children in need of care.
7. Mental health services have been reduced due to budget cuts at the state and local level. Other funding cuts are currently being discussed.

The Financing of the Safety Net System

1. Unlike some major metropolitan areas, St. Louis does not have a strong coordinating, monitoring, or financing body for its health care safety net. This makes accounting for dollars spent in the region challenging.
2. At least \$460 Million per year would be required to provide basic primary and specialty care services to the estimated 307,000 safety net patients in St. Louis City and St. Louis County. This amount does not include costs for behavioral health or dental care, and does not account for the fact that disabilities and health disparities may be more common among uninsured and Medicaid patients than other populations.

By comparison, actual expenditures for these services are approximately \$294 Million per year for a gap of at least \$166 Million between available and needed medical resources. The various sources of estimated current funding for primary and specialty safety net services include, but are not limited to:

MEDICAID TRADITIONAL & MEDICAID MANAGED CARE PAYMENTS	\$ 205,000,000	70 %
DISPROPORTIONATE SHARE HOSPITAL (DSH) FUNDING THROUGH A SPECIAL FEDERAL SECTION 1115 WAIVER	\$ 20,000,000	07%
GRANTS FROM THE STATE OF MISSOURI	\$ 4,000,000	01%
FEDERAL SUPPORT UNDER SECTION 330 LEGISLATION (TO FEDERALLY QUALIFIED CENTERS)	\$ 13,000,000	04%
FOUNDATION SUPPORT	\$ 5,000,000	02%
ST. LOUIS CITY TAX SUPPORT	\$ 5,000,000	02%
SAINT LOUIS COUNTY TAX SUPPORT	\$ 15,000,000	05%
UNCOMPENSATED CARE PROVIDED BY MEDICAL SCHOOLS	\$ 16,000,000	05%
UNCOMPENSATED CARE PROVIDED BY HOSPITAL-BASED CLINICS	\$ 11,000,000	04%
TOTAL SOURCES	\$294,000,000	100%

3. As noted above, the 1115 DSH waiver accounts for 07% (\$20 million) of the safety net funds flowing into the St. Louis area, and represents 20% of the funds supporting community-based health centers in the region. This one-of-a-kind waiver of Medicaid regulations allows monies from the Disproportionate Share Hospital (DSH) program to be used for outpatient care.

The DSH waiver funds are currently being used to support Saint Louis ConnectCare, which relinquished its hospital license in the fall of 2002. This money is “transitional” in nature, meaning that these funds will no longer be available to support primary and specialty care once the “transition” period is completed.

4. Missouri is facing a serious budget deficit that could jeopardize the availability of safety net services, especially if cuts in Medicaid funding are required to balance the State’s operating budget. If major cuts to the Medicaid program that are currently being discussed are implemented, the number of uninsured individuals in St. Louis City and County would increase by approximately 25%.
5. Local governmental bodies spent approximately \$20 million for direct primary and specialty care for the underserved in the region. Saint Louis County, through a dedicated tax for health care, spends approximately \$15 million in direct care costs for the uninsured and underinsured, excluding expenditures for correctional patients and family mental health services. St. Louis City spends \$5 million through a dedicated portion of a use tax passed in 2001.
6. The Federal government provides support for safety net care through Section 330 of the Public Health Service (PHS) Act. In 2001, the area received approximately \$13 million in direct grants from the Federal government through region’s Federally Qualified Health Centers (FQHCs).

Barriers to Care (Section V)

The medically underserved encounter barriers that significantly limit their ability to access the safety net health care system. These include:

System Barriers

- Lack of information about available safety net medical services
- Lack of transportation
- Shortage of specialist care providers and dentists
- Policies and hours of operation of institutional safety net providers
- Disruption of services for children with special needs entering adulthood
- Limitations to the voucher/purchase order system

Financial Barriers

- Lack of insurance
- Cost of care and medical debt
- Prioritization of other needs over health care

Cultural Barriers

- Stigma associated with safety net care
- Lack of respect toward safety net patients
- Cultural barriers for minorities
- Cultural and linguistic barriers for new Americans
- Lack of health literacy

VI. Other Determinants of Health

1. Factors such as lifestyle and behavior, genetics and the environment each have a greater impact on individual health than the medical delivery system.
2. Over the next year, the RHC will conduct an analysis of prevention and health education in the region. In 2004 the RHC will release an analysis, recommendations and an implementation plan for improving prevention and education.
3. The RHC currently supports and lends expertise to initiatives working to improve prevention and health education in the region.

VII. Health Status Measurement and Reporting

1. The State of Missouri, St. Louis City and Saint Louis County have the opportunity to improve the system of health measurement and health status reporting to the community.
2. Currently, there is no ongoing comprehensive source of data and analysis reported to the St. Louis City and Saint Louis County region.
3. The RHC proposes that the St. Louis City and Saint Louis County region report on health status on an annual basis.

SECTION II: INTRODUCTION TO THE RHC AND THIS REPORT TO THE COMMUNITY

A. History Leading to the RHC

For decades, the St. Louis region has been a world-class center for medical research, training, and delivery of health care services. The citizens of the region remain fortunate to have two medical schools that serve as a hub for cutting-edge research and treatment. The region has several nationally ranked hospitals, including the first health care organization ever to win the Malcolm Baldrige Award for Quality. We also have an abundance of physicians and other medical professionals, and excellent schools of pharmacy, nursing, and public health within our community. Our public health clinic system currently is comprised of 33 safety net clinic sites (see Appendix 1 for a definition and listing of safety net sites), some of which have been recognized as national models of excellence.

However, the history of health care in St. Louis, especially for low-income residents, has not been without its share of controversy and crisis in recent years. In 1979, faced with mounting fiscal pressure, St. Louis City closed Homer G. Phillips Hospital, which for decades was one of the premier training centers for African-American physicians and nurses in the country. In 1985, St. Louis City closed its remaining public hospital, City Hospital at 1515 Lafayette, and Saint Louis County closed its public hospital. A single new not-for-profit hospital with a public mission was then formed to provide health care services for the uninsured and underinsured in the region: St. Louis Regional Medical Center (Regional).

Regional entered into a 10-year contract with the City of St. Louis and Saint Louis County governments. In addition to hospital care, the contracts required Regional to operate the four primary care clinics formerly run by the City. By 1990, the direct subsidies from St. Louis City and Saint Louis County had ceased. In 1995, St. Louis City and Saint Louis County did not renew the existing contract with Regional, and the State of Missouri implemented a Medicaid

managed care program in St. Louis. By 1997, Regional faced significant financial pressures, and the Board felt it was unable to operate in a fiscally responsible way.

Regional ceased operations on June 30, 1997. This led to the formation of Saint Louis ConnectCare (ConnectCare). The inpatient hospital was reduced to 24 beds, from over 300, while ConnectCare focused its services on providing primary and specialty care in its clinic system.

In 1999 and 2000, ConnectCare faced mounting fiscal pressure and was in danger of significantly reducing its services or even closing. Between April 2000 and March 2001, a task force created by St. Louis Civic Progress and other community organizations formed to address the immediate funding crisis and discuss solutions to health care for the medically underserved. One of the key goals of these discussions was to find a way to overcome what many saw as institutional competition and infighting between various organizations that comprised the safety net, so that a consensus plan could emerge for the region.

Therefore, one of the group's core recommendations was the development of a new Regional Health Commission to "bring together the various players in the region's fragmented safety net...to create a long-range, community-based plan designed to continuously improve the collective health status of the St. Louis Community."^{2,1}

B. The Work of the RHC and Results to Date: The Beginnings of a New Day

In September 2001, Missouri Governor Bob Holden, Mayor Francis Slay, and County Executive Buzz Westfall announced the creation of the St. Louis Regional Health Commission (RHC). The new Commission was charged with improving health care access and delivery to the uninsured and underinsured in the St. Louis region. The RHC consolidated the efforts of a number of groups that were working to address health care in St. Louis, including the Indigent Care Task Force of Civic Progress and the Access to Health Partnership (AHP), a collaborative effort initiated by St. Louis 2004 to address health access issues in the St. Louis area.

In February 2002, two significant events occurred in the history of health care for the underserved in St. Louis:

1. With support of the RHC, and in conjunction with the federal Health Resources Services Administration, a community-wide “Call to Action” meeting was held to build momentum for change in health care in the region and to move toward 100% access and 0% disparities. Over 400 people from across the region participated and generated ideas for change to help guide the efforts of the RHC in the years to come.
2. The RHC, its Advisory Boards and others from around the region joined together to unanimously support the State of Missouri in its application for a Medicaid 1115 Waiver.

Based upon this community wide support, the federal government approved a one-of-a-kind program that maintained approximately \$20 million per year to support the delivery of health care for the uninsured in St. Louis City and Saint Louis County through at least February 2004.

During the remainder of 2002 and beginning of 2003, the RHC completed the following:

- Served as the lead body for the region in discussions with the State and Federal government concerning the \$20 million annual waiver.
- Established two Advisory Boards of citizens and health service providers to aid in determining priorities and potential solutions.
- Hired staff and formed planning Workgroups to accomplish the work of the RHC.
- Created a Workplan to guide its activities through 2004 (see Appendix 2).
- Sought input from over 100 neighborhood and/or health-related organizations concerning the work of the RHC.
 - Collected and analyzed primary health care data for over 60 key indicators concerning the health status of St. Louis City and Saint Louis County.
- Surveyed and summarized data from over 125 organizations or providers that comprise the region’s health care safety net.
 - Prepared “Building A Healthier St. Louis” for April 2003 release.

C. The Mission and Role of the RHC: Now and in the Future

The RHC is a network of individuals with responsibility and commitment to improving health in St. Louis City and Saint Louis County. The following types of organizations are represented on the RHC’s Commission and Advisory Boards:



The Commission itself is a 19-member body appointed as follows:

SAINT LOUIS COUNTY EXECUTIVE	3	MEMBERS
MAYOR - CITY OF ST. LOUIS	3	MEMBERS
GOVERNOR OF MISSOURI	2	MEMBERS
ST. LOUIS AREA HOSPITALS/HEALTH SYSTEMS	2	MEMBERS
ST. LOUIS AREA PRIMARY CARE CLINICS	2	MEMBERS
SAINT LOUIS CONNECTCARE	1	MEMBER
ST. LOUIS AREA MEDICAL SCHOOLS	1	MEMBER
"AT-LARGE" FROM COMMUNITY	3	MEMBERS
CHAIRS OF ADVISORY BOARDS	2	MEMBERS
TOTAL APPOINTMENTS	19	MEMBERS

The RHC also has two Advisory Boards of 25 individuals per Board. One Advisory Board represents community organizations, citizens, and users of the safety net system; the other Advisory Board represents health service providers in the region.

The Committee structure of the RHC can be found in the Workplan in Appendix 2 of this report. A list of Commissioners and Advisory Board members as of February 15, 2003 can be found in Appendix 3.

D. The Initial Focus of the RHC

As part of the discussions with the Federal and State governments, the RHC was immediately charged with a critical task under the terms of the Medicaid 1115 Waiver program: “to prepare a strategic plan for delivery of health care services to the medically indigent people in the St. Louis area” by the end of 2003.^{2,1}

The primary goal of the federal and state governments in approving the preservation of the approximately \$20 million revenue stream was to “enable the St. Louis region to transition its safety net system of care for the medically indigent to a viable model not dependent on demonstration funds long-term.”^{2,1}

Therefore, the primary focus of the RHC’s efforts in the short term must be to solve an immediate problem in our community: how to create a financially sustainable primary and specialty care safety net system for St. Louis City and Saint Louis County. This effort is urgent, immediate, and the focus of the RHC’s planning efforts through 2003.

As part of these efforts, the RHC is also working to advance the tracking and regular reporting to the public of specific metrics documenting progress toward better health care outcomes in St. Louis. The RHC accepted this charge in response to recommendations from the community.

Also in 2003, the RHC will continue to be involved in discussions with the State of Missouri and Federal governments to extend the Medicaid 1115 Waiver past February 2004 to preserve the approximately \$20 million annual revenue stream through the implementation of the RHC’s plan.

Despite this immediate task and focus, the RHC also recognizes that the health status of the region is impacted by more than just the availability of health care services. Therefore, a Workgroup has been established to investigate how prevention, health education, and public health services can be improved for the citizens of our region.

The Commission has already begun partnerships with several organizations in the community to advance community health in several key focus areas in the near term. The Commission’s long-term recommendations concerning how to strengthen prevention, health education, and public health will be developed and presented in 2004.

E. RHC Schedule of Events for 2003-2004

In order to accomplish its mission, the RHC has completed a Workplan to guide its efforts, which is detailed in Appendix 2.

The RHC is committed to taking immediate action to improve access to care and reduce health disparities by supporting efforts of existing organizations in our community. We are proactively seeking partners for this work and have already begun efforts with several organizations as listed in Section VI of this report.

As part of its Workplan, and as a condition of the federal Medicaid Section 1115 Waiver for St. Louis, the RHC has also agreed to release “Building A Healthier St. Louis” This report is intended to serve that purpose.

In the future, the RHC anticipates the following work to be completed and released to the public:

Ongoing

- Development of partnerships to improve access to care and reduce health disparities
- Discussions with State and Federal agencies concerning DSH Waiver addendum for the St. Louis community

April 2003

- Situational Analysis: “Building A Healthier St. Louis”

July 2003

- Initial recommendations for improving the health care safety net of the St. Louis region (Primary & Specialty Care)

December 2003

- Final plan and implementation strategy (Primary and Specialty Care)

January-December 2004

- Implementation activities (Primary and Specialty Care)

June 2004

- Situational Analysis: A report on prevention, health education, and public health services in St. Louis City and Saint Louis County
- Initial recommendations for improving prevention, health education, and public health services in St. Louis City and Saint Louis County
- Final plan and implementation strategy (prevention, health education, and public health services)

F. Importance of Community Participation

The RHC believes that collaborative partnerships are a powerful way to improve health in our region. We understand that in order to create and implement change in our health care system, it is critical that our work be inclusive, and that citizens are engaged in our decision-making processes.

We also recognize that in order for us to succeed, several things must occur:

- Actions must be community driven—Without support from the entire community, efforts for improvement will fail.
- Partnerships must be developed with communities.
- The engagement efforts must recognize and respect community diversity.
- Community assets must be identified and mobilized.

It is important to our work that community members play a key role in defining the problems and in planning and instituting steps to create solutions. In February 2001, concerned individuals from across the region came together for the “Call to Action” Initiative.²² Community members provided the RHC with recommendations for improving health in our region, including:

- Develop a coordinated business plan for improving access to health care services and reducing health disparities.
- Support and encourage collaboration among safety net providers in our community.
- Work with the St. Louis City and Saint Louis County Departments of Health to measure and report progress toward improving regional health status.

The RHC has taken its direction from the community priorities raised at the “Call to Action” Initiative, and from citizen forums conducted by other groups in our region. (For a complete listing of all 13 “Call to Action” recommendations and the RHC response to date, see Appendix 4.)

Throughout our work in creating this report, we have also relied on the RHC Advisory Boards. The Advisory Boards are made up of health care providers, community organization representatives, safety net patients and other community leaders. The Advisory Board members have worked with the Commissioners to help define the problems, conduct research, and write and revise this report.

In addition, community organizations from across St. Louis City and County have provided critical input into our work. Over the past several months, we have met with over 100 neighborhood, community, and health-related groups. These organizations have contributed to both our process and priorities. They have also assisted us in compiling, writing, and revising a great deal of the information in this report.

In the coming months, the RHC will continue to reach out to the community. The public is invited to all of our meetings, which are posted on our web site at www.stlrhc.org. We will also be working throughout the year to gather additional community feedback and to develop solutions for strengthening the safety net system.

We will hold several town hall meetings this spring and summer and look forward to your participation. In addition, members of the Commission, our Advisory Boards, or the RHC staff would be pleased to have an opportunity to meet with your community or neighborhood group.

Together, St. Louis City and Saint Louis County residents will improve health for the citizens in our region. Thank you for joining us in this work.

G. Purpose of this Report: A User's Guide

This report has been written to serve three main purposes:

1. To provide the St. Louis community with a “snapshot” of where we stand regarding health outcomes, health disparities, and the integrity of the health care safety net as it currently is organized and financed. The intent is to begin to engage in a community-wide conversation so that health status will be improved for the region as a whole in the future.
2. To serve as a platform for the RHC to make recommendations in the next year concerning the organization and financing of primary and specialty care services in our region.
3. To meet the requirements of the Federal and State governments under the terms of the agreement with the St. Louis community completed in June 2002.

It is our hope that the data and conclusions will spur and support efforts to improve health care in our region, especially for those most in need. In particular, we hope that community groups, practitioners, and policymakers utilize the data over time to target specific efforts where they may make the most impact long term.

Data Limitations and Caution

Great care has been taken to ensure the accuracy of the data in this report. However, given the complexity of many of the measures, caution should be taken in drawing conclusions from the data. In many instances, particularly as a result of small numbers within a given geographic area, a specific rate for a particular health indicator for a zip code may require further investigation before meaningful conclusions can be drawn.

It should be noted that on the accompanying maps (as noted in each map's legend) indication has been made where there are possible data validity/reliability issues due to a small number of events or population.

All data contained within the report were obtained from secondary data collection sources such as vital records data from the Missouri Department of Health and Senior Services and Medicaid data from the Missouri Department of Social Services. Even within the data that these agencies report there could be errors due to incorrect coding or improper categorization of the data when it was originally collected. Also, since some of the measures were derived from data from multiple sources, there could be underlying methodological issues with how each source calculated a measure or handled the data.

For example, some organizations collect and report data by the federal fiscal year (September to October) instead of by calendar year. It is assumed that the impact of such differences is minor. However, because of the small numbers of events for some of the measures at the zip code, City neighborhood or County municipality level, even something as benign as a difference in timing of data collection could cause significant error in the resulting analyses.

For instances of data collected from area health care institutions, including data from RHC surveys, each institution was given the opportunity to verify its data for accuracy. The RHC is not attesting to the complete accuracy of all of the data in this report due to the margin for error in data sources, as indicated above. However, the extensive effort to validate the data has significantly minimized potential inaccuracies. Data inaccuracies that may remain for individual entities, we believe, would have minimal impact on average values and would have no impact on the overall conclusions made in this report. Readers are encouraged to read the appendices to this report, or contact the RHC with questions concerning methodology or data validity.

A Call to Action

As noted by Vision for Children at Risk, a community-based organization in St. Louis working to improve the lives of children in the region, “one of our greatest challenges as a community is to turn data and statistics into a mobilizing force for action.”^{2,3}

It is our deep hope, and our commitment to the citizens of this region, that this report serves as a mobilizing force for change in the health care community. We look forward to you joining us in this effort.

SECTION III: HEALTH STATUS INDICATORS IN ST. LOUIS CITY AND COUNTY

Key Findings of Section III

1. *In geographic areas and in population groups with higher incomes and more education, health outcomes are more favorable. In areas with lower incomes and less education, health outcomes are less favorable.*
2. *Disparities are greatest for birth-related indicators such as lack of early prenatal care and low infant birth weight. Lack of early prenatal care carries a greater risk for prematurity and low birth weight. Premature and low birth weight infants are at substantially higher risk for long-term mental and physical disabilities as well as early death.*
3. *There are significant disparities in health outcomes between various geographic areas in our region, and between African Americans and whites, in both St. Louis City and Saint Louis County. (Race-comparative rates are limited to white and African American, as concentrations of other groups in the region are too small for detailed analysis.)*
4. *The areas of greatest disparity between African Americans and whites in our region are: teen births, low birth weight, lack of first-trimester prenatal care, homicide, tuberculosis, prostate cancer mortality, and diabetes mortality.*

This section provides a data-based health assessment of the population of St. Louis City and Saint Louis County. This analysis reveals significant disparities in health status for different population groups and in different geographic areas of the region. As a result, it offers a variety of useful applications, including:

1. A method for judging whether the health care delivery and public health systems meet community needs.
2. A context for analyzing the effectiveness of the delivery system; identification of the areas and populations of greatest need for safety net services within the community.
3. Information needed for developing specific health programs targeted to populations and geographic areas of greatest need.

A. Sources and Methodology

Data sources for this section are vital records databases from the Missouri Department of Health and Senior Services for mortality and birth outcomes, 2000 Census data from the Census Bureau for demographic and socioeconomic data, the St. Louis City and County Departments of Health for infectious disease and lead poisoning data and the Missouri Department of Social Services for Medicaid data. The Center for Disease Control web site is the source of comparative data for birth outcomes and mortality for the U.S.

Three years of the most recently available data (1999-2001) have been aggregated for all birth and death indicator rates. All of the indicators have been developed as rates to allow comparisons across populations and geographic areas. Race-comparative rates are limited to two groups, white and African American, as concentrations of the other race categories, American Indian or Alaska Native, Asians or Pacific Islanders are too small for detailed analysis. It is important to note that Hispanic is an ethnicity and not a race. Data are not generally collected by ethnicity.

All mortality rates have been age-adjusted to allow comparisons among different zip codes and different subpopulations. Age-adjustment removes the effect of differences in the age distribution of different subpopulations. Older populations naturally have higher rates of death, which cause higher mortality rates solely based on an aging population. Without age-adjustment, zip codes with older populations would look as though they had higher mortality rates, which would be misleading. The data have been age-adjusted to the 2000 U.S. standard population.

Each map indicates, with a cross hatching pattern, where the reliability of the data may be questionable. The reliability of the data may be in question as a result of the small number of “health events” that occurred within a given area. Where three-year aggregate data fall below 20 deaths or 500 births within a zip code, a City neighborhood, or County municipality, the data must be assessed with caution. However, experience has shown that even in areas where the numbers of health events and/or births are deemed “small,” and thus potentially questionable, the same patterns still emerge.

A total of 32 indicators are included in this section of the RHC report. (The data book that accompanies this report includes information on over 60 indicators.) The indicators are separated into two categories—those representing socioeconomic concerns and those specifically representing health outcomes. Socioeconomic data are presented because studies suggest a strong correlation between socioeconomic status (SES) and health, specifically that that “as SES levels increase, rates of physical morbidity and mortality decrease.”^{3.1}

SOCIOECONOMIC AND DEMOGRAPHIC INDICATORS (N-13)	
1	AVERAGE HOUSEHOLD INCOME*
2	PERSONS LIVING BELOW POVERTY*
3	UNEMPLOYED PERSONS
4	FEMALE HEADED HOUSEHOLD*
5	ADULTS 25 + YEARS WITHOUT A HIGH SCHOOL DEGREE*
6	RACIAL POLARIZATION*
7	BIRTH RATE PER 1,000 POPULATION*
8	TEEN BIRTHS (LESS THAN 18 YEARS OLD)
9	BIRTHS TO WOMEN 35+ YEARS
10	HOMICIDE RATE
11	UNINSURED PERSONS
12	TRADITIONAL MEDICAID ELIGIBLE PERSONS
13	MEDICAID MC+ ELIGIBLE PERSONS

Each of the above indicators is presented on the following pages. Each includes a brief narrative on its health status significance, geographic- and race-comparative rates, and a zip code level map. The maps show a quartile distribution of City and County zip codes for each of the indicators examined, ranging from best to worst. For certain indicators, a Neighborhood/Municipality map is also included on the page following the zip code level information. This mapping feature allows easy identification of emerging patterns of areas and populations of greatest concern within St. Louis City and County.

HEALTH STATUS INDICATORS (N-19)	
1	BIRTHS WITHOUT EARLY PRENATAL CARE
2	LOW BIRTH WEIGHT (< 5.5 LBS.) BIRTHS
3	VERY LOW BIRTH WEIGHT (< 3.3 LBS.) BIRTHS
4	PREVENTABLE HOSPITALIZATIONS
5	OVERALL MORTALITY
6	HEART DISEASE MORTALITY
7	CVA (STROKE) MORTALITY
8	DIABETES MORTALITY
9	CANCER MORTALITY
10	BREAST CANCER MORTALITY
11	PROSTATE CANCER MORTALITY
12	LUNG CANCER MORTALITY
13	COPD (CHRONIC OBSTRUCTIVE PULMONARY DISEASE)
14	NON-MOTOR VEHICLE ACCIDENT MORTALITY
15	SUICIDE
16	LEAD POISONING SCREENED PREVALENCE
17	TUBERCULOSIS CASES PER 100,000
18	AVERAGE LIFE EXPECTANCY
19	HIV INFECTIONS

* Indicators that are also presented at the St. Louis City neighborhood and the Saint Louis County municipality level.

B. Summary of Findings

The series of maps in this report show consistent patterns of health status disparity in various areas of St. Louis City and County. In general, significantly less favorable health outcomes are noted in the City of St. Louis, particularly in the north area of the city and extending into the northern portion of Saint Louis County that is contiguous with the city.

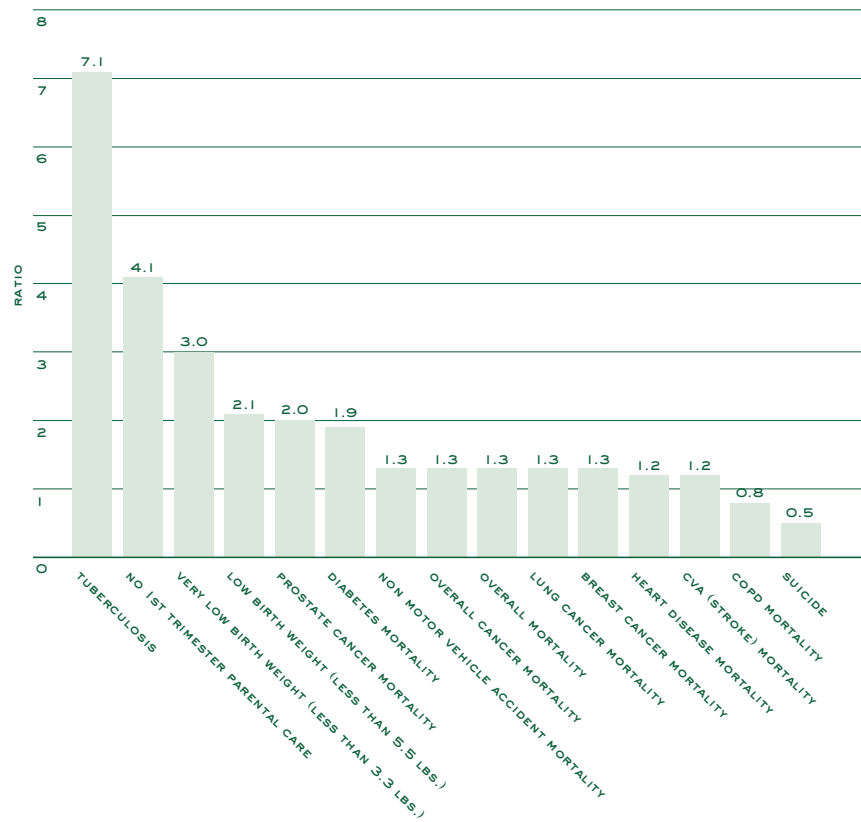
Lower educational levels, low household income, lack of health insurance and high unemployment rates are also strongly correlated with less favorable health status. This pattern is generally seen across all 19 health status indicators, with only two exceptions—suicide rates and mortality from chronic obstructive pulmonary disease (COPD includes medical conditions such as emphysema and chronic bronchitis, which are strongly linked to cigarette smoking).

Disparities are greatest for birth-related health outcome indicators such as lack of early prenatal care and low infant birth weight. Lack of early prenatal care is associated with a greater risk for prematurity and low birth weight. Premature and low birth weight infants are at substantially higher risk for long-term mental and physical disabilities as well as early death.

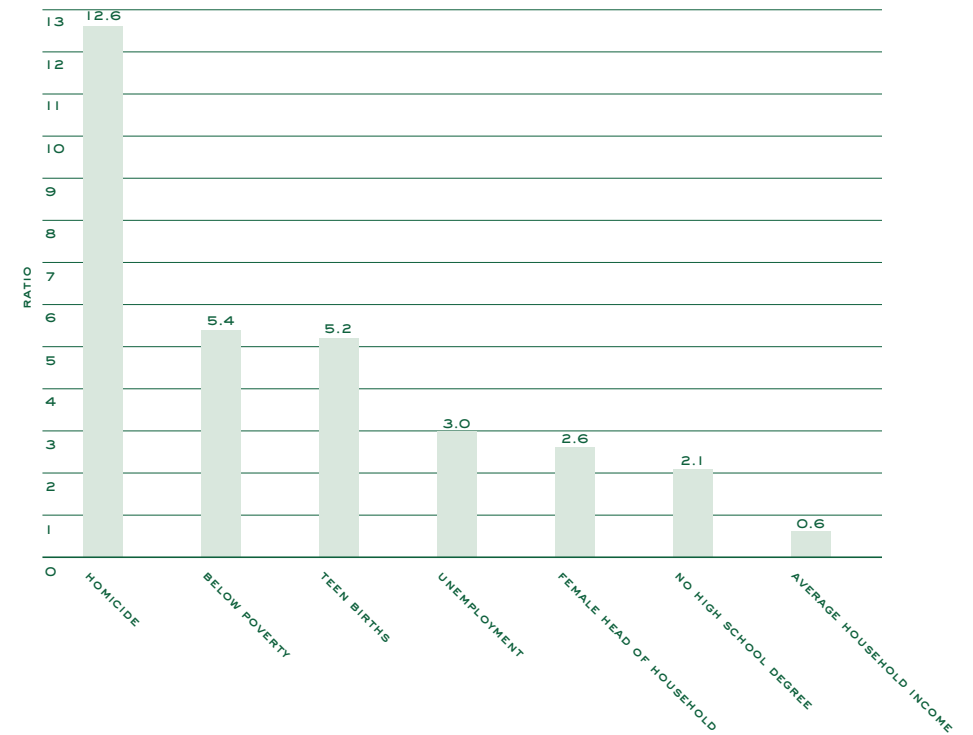
For most measures, African Americans have lower health status than the white population. However, it is an error to attribute poor health outcomes solely to race. These disparities are related to multiple factors, including socioeconomic status and racial discrimination, which are described in detail in Section V of this report.

The following graphs present a clear picture of racial disparities in both socioeconomic characteristics and health status. The greatest disparities are in homicide rates (12 times more common among African Americans as compared to whites), tuberculosis (7 times more common in African Americans), teen births (5 times more common in African Americans), and lack of early prenatal care (4 times more common in African Americans). Death rates for many diseases such as cancer and diabetes are also higher among African Americans, although the racial disparities for these indicators are less dramatic. Suicide rates and chronic obstructive lung disease (COPD) are the only two conditions that show lower rates for African Americans compared to whites. The sources of data for each graph below differ for each indicator, and are included on the maps in subsequent pages of this section of the report.

DIFFERENCES IN HEALTH STATUS BY RACE



DIFFERENCES IN SOCIOECONOMIC CHARACTERISTICS BY RACE



Data sources are cited on the maps on the subsequent pages of this section.

Identifying City Neighborhoods & County Municipalities of High Need

The RHC Access To Care / Care Coordination and Measurement Workgroups collaboratively developed a way to summarize patterns of health status in order to identify those City neighborhoods and County municipalities that suffer disproportionately from poor health outcomes and limited access to medical care.

Zip codes meeting both of the following criteria were considered at highest risk:

1. Zip codes falling above the mean based on a summary statistic that included the following indicators suggestive of inadequate access to care:

- Percentage of uninsured households
- Percentage of Medicaid recipients
- Rate of avoidable hospitalizations

2. Zip codes falling above the mean for one or both of the following indicators of poor health outcome:

- Rate of heart disease mortality
- Rate of low birth weight infants (less than 5.5 lbs.)

These indicators were chosen for the following reasons:

Summary Statistic of Access Indicators

Access to care is known to be more limited among the uninsured and Medicaid populations while avoidable hospitalizations typically reflect a lack of primary and preventive care.

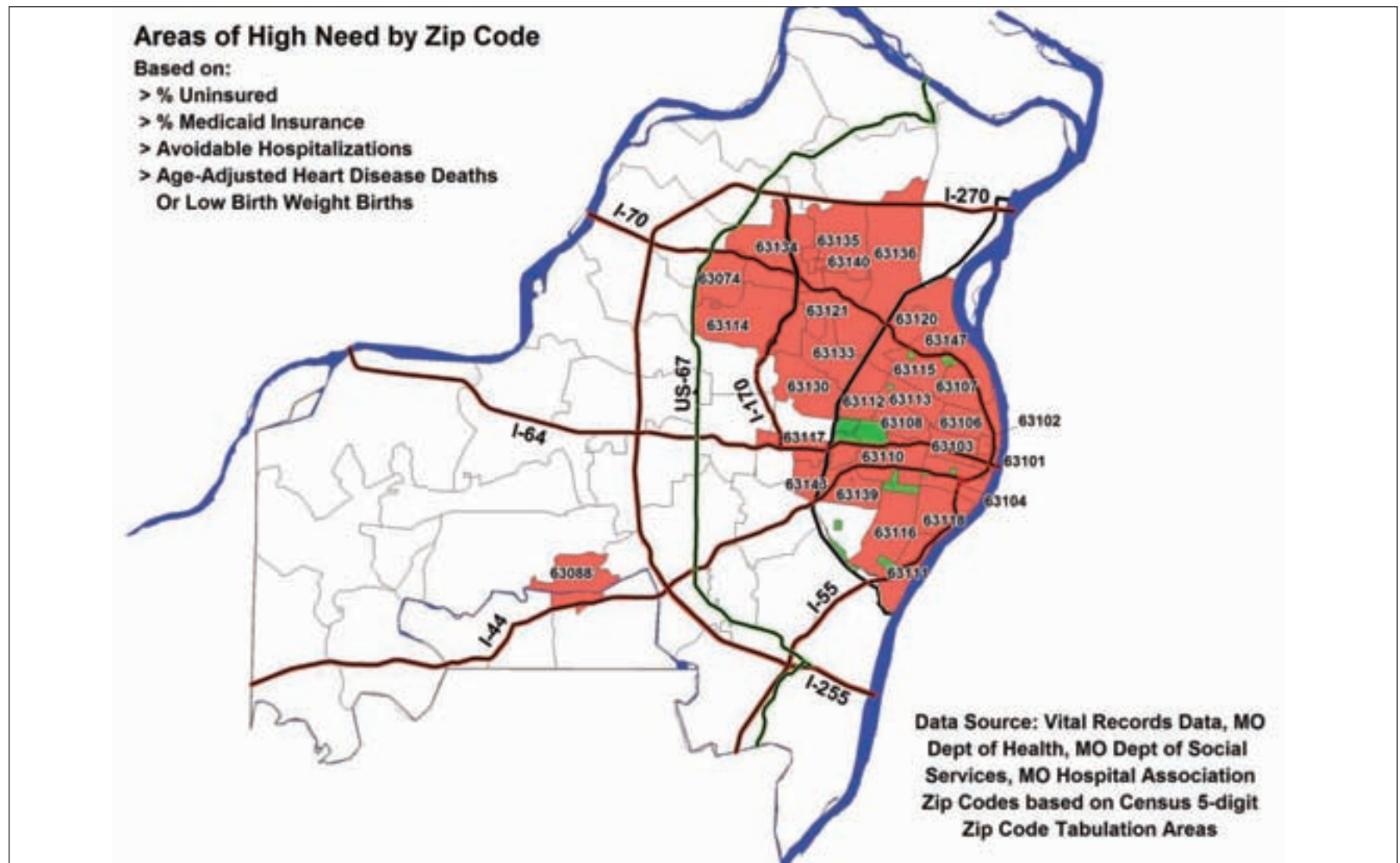
Heart Disease Mortality

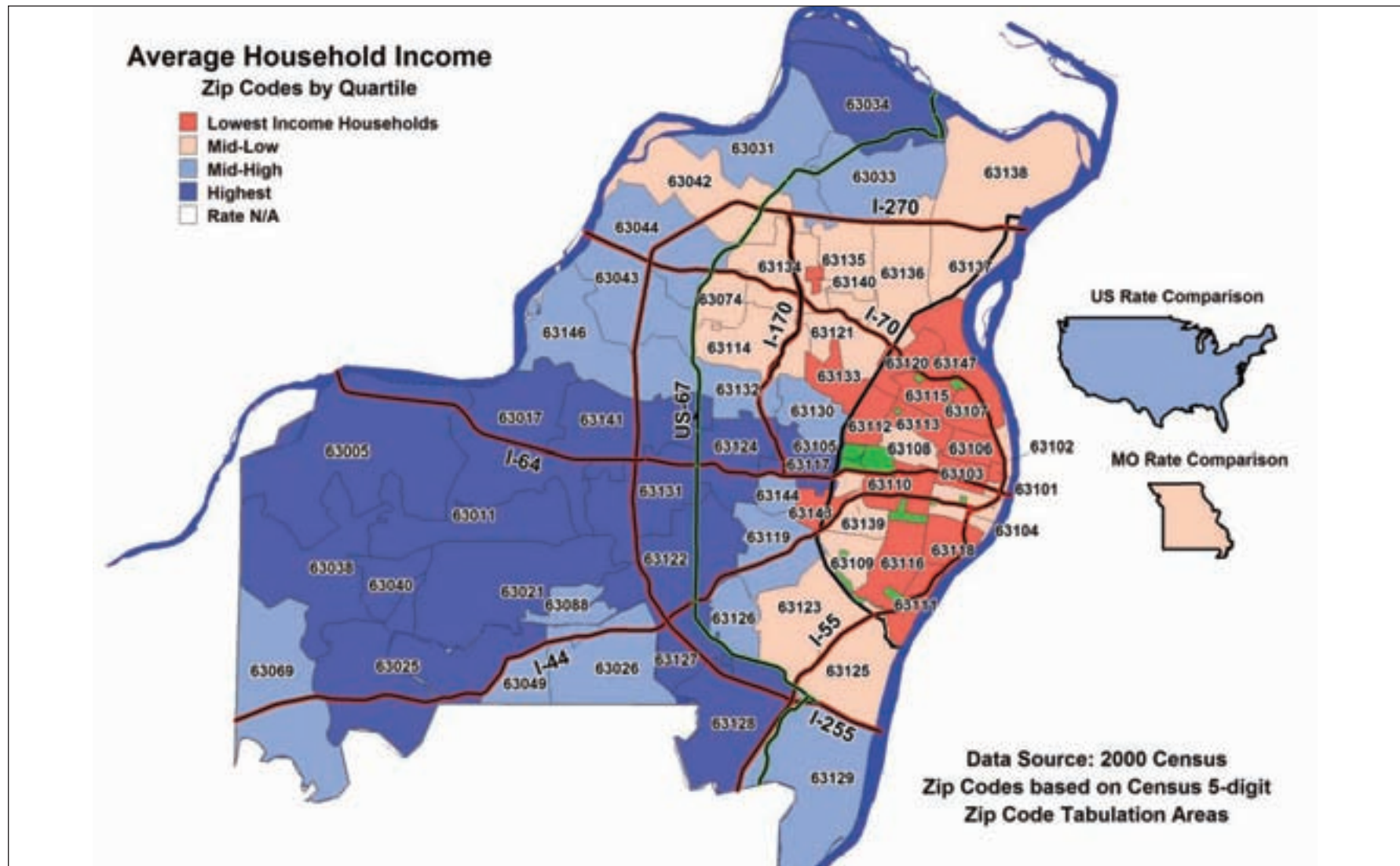
Heart disease is an indicator of adult mortality that affects a large percentage of the population. As an indicator, heart disease mortality is preferable to overall mortality rates because it does not include traumatic deaths.

Low Birth Weight (less than 5.5 lbs.)

Very low birth weight is an important indicator of maternal/child health status. Newborns weighing less than 5.5 lbs. are at substantial risk for serious short- and long-term morbidity as well as excess mortality.

The zip codes identified as areas of need utilizing this methodology are shown below:

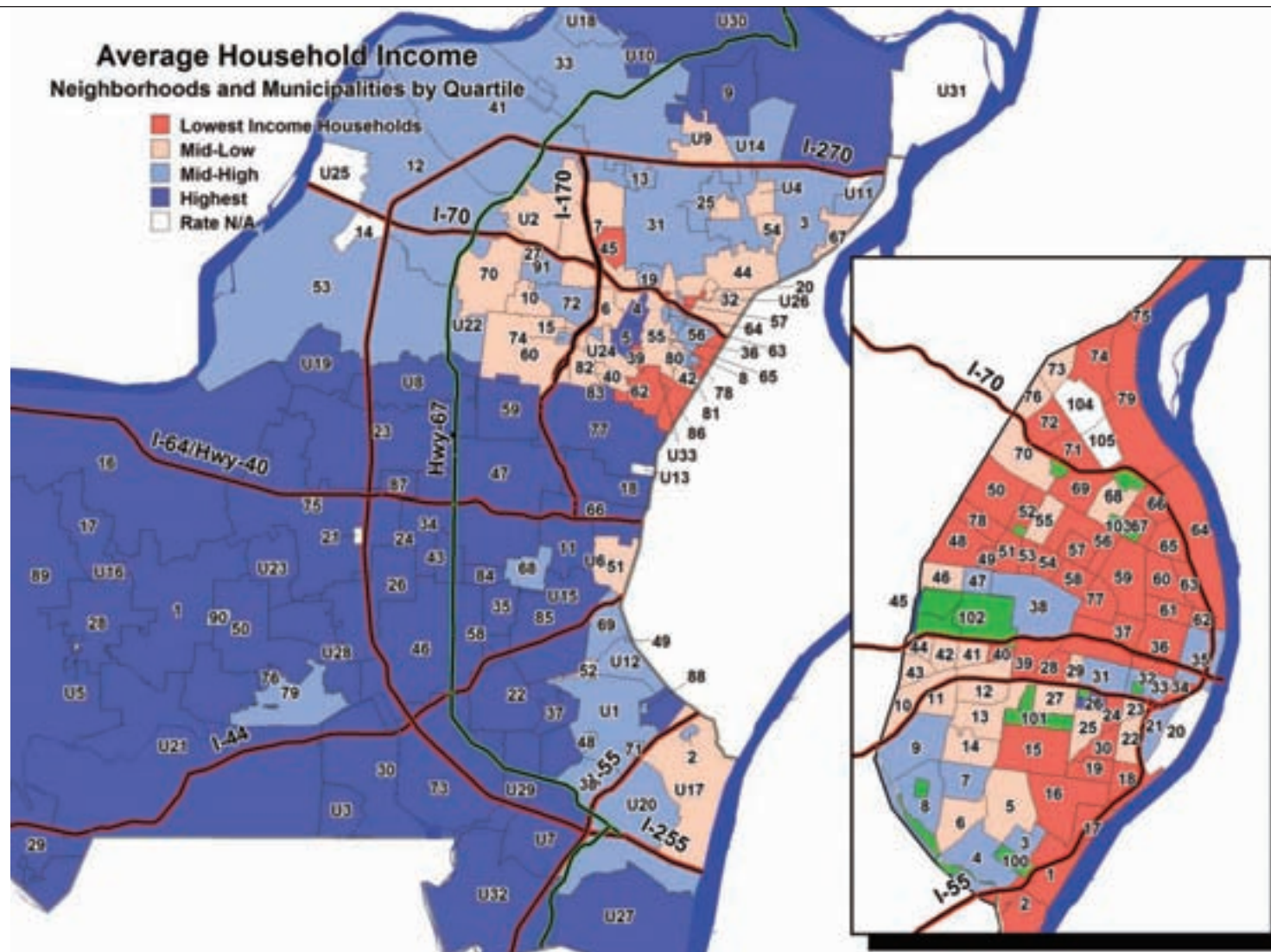


C. Reporting of Indicators

AVERAGE HOUSEHOLD INCOME (*Zip Codes by Quartile*)

AVERAGE HOUSEHOLD INCOME	
STL CITY	37,455
STL COUNTY	68,509
STL CITY/CO	60,283
MO	50,016
US	56,675
STL CITY BLACK	30,270
STL CITY WHITE	43,860
STL CO BLACK	45,704
STL CO WHITE	73,471
STL CITY/CO BLACK	38,183
STL CITY/CO WHITE	67,895
MO BLACK	37,453
MO WHITE	51,601
US BLACK	39,774
US WHITE	59,649

- Research shows that the poor have worse health than those with greater income. Higher levels of socioeconomic status (SES) have a direct correlation with lower levels of disease (morbidity) and death (mortality).
- Research also shows that where gaps in income are widest, there is a greater likelihood of poor health. The difference in mortality resulting from economic inequality is significant.
- Average household income for St. Louis City and Saint Louis County's African American population is 56% lower than for whites. African Americans living in St. Louis City have the lowest average household incomes. The average income gap between the city African American and county white population is \$43,000 per household.
- Eliminating health disparities will require strategies for improving socioeconomic status including a living wage standard, equal access to high quality education and the economic revitalization of neighborhoods.



AVERAGE HOUSEHOLD INCOME (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
19. Gravois Park
20. Kosciusko
21. Soulard
22. Benton Park West
23. McKinley Heights
24. Fox Park
25. Tower Grove East
26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
44. Hi-Point
45. Wydown/Sinker
46. Skinker/DeBaliviere
47. DeBaliviere Place
48. West End
49. Visitation Park
50. Wells/Goodfellow
51. Academy
52. Kingsway West
53. Fountain Park
54. Lewis Place
55. Kingsway East
56. The Greater Ville
57. The Ville
58. Vandeventer
59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
73. North Point

74. Riverview
76. Walnut Park West
77. Covenant Blu/Grand Center
78. Hamilton Heights
79. North Riverfront
100. Carondelet Park
101. Tower Grove Park
102. Forest Park
103. Fairground Park
104. Calvary Cemetery
105. Bellefontaine Cemetery

County Municipalities

1. Ballwin
5. Bel-Nor
6. Bel-Ridge
2. Bella Villa
3. Bellefontaine Neighbors
4. Bellerive
7. Berkeley
8. Beverly Hills
9. Black Jack
10. Breckenridge Hills
11. Brentwood
12. Bridgeton
13. Calverton Park
14. Champ
15. Charlack
16. Chesterfield
17. Clarkson Valley
18. Clayton
19. Cool Valley
20. Country Club hills
21. Country Life Acres
22. Crestwood
23. Creve Coeur
24. Crystal Lake Park

25. Dellwood
26. Des Peres
27. Edmundson
28. Ellisville
29. Eureka
30. Fenton
31. Ferguson
32. Flordell Hills
33. Florissant
34. Frontenac
35. Glen Echo Park
36. Glendale
37. Grantwood Village
38. Green Park
39. Greendale
40. Hanley Hills
41. Hazelwood
42. Hillsdale
43. Huntleigh
44. Jennings
45. Kinloch
46. Kirkwood
47. Ladue
48. Lakeshire
49. Mackenzie
50. Manchester
51. Maplewood
52. Marlborough
53. Maryland Heights
54. Moline Acres
55. Normandy
56. Northwoods
57. Norwood Court
58. Oakland
59. Olivette
60. Overland
61. Pacific

62. Pagedale
63. Pasadena Hills
64. Pasadena Park
65. Pine Lawn
66. Richmond Heights
67. Riverview
68. Rock Hill
69. Shrewsbury
70. St. Ann
71. St. George
72. St. John
73. Sunset Hills
74. Sycamore Hills
75. Town and Country
76. Twin Oaks
77. University City
78. Uplands Park
79. Valley Park
80. Velda City
81. Velda Village Hills
82. Vinita Park
83. Vinita Terrace
84. Warson Woods
85. Webster Groves
86. Wellston
87. Westwood
88. Wilbur Park
89. Wildwood
90. Winchester
91. Woodson Terrace

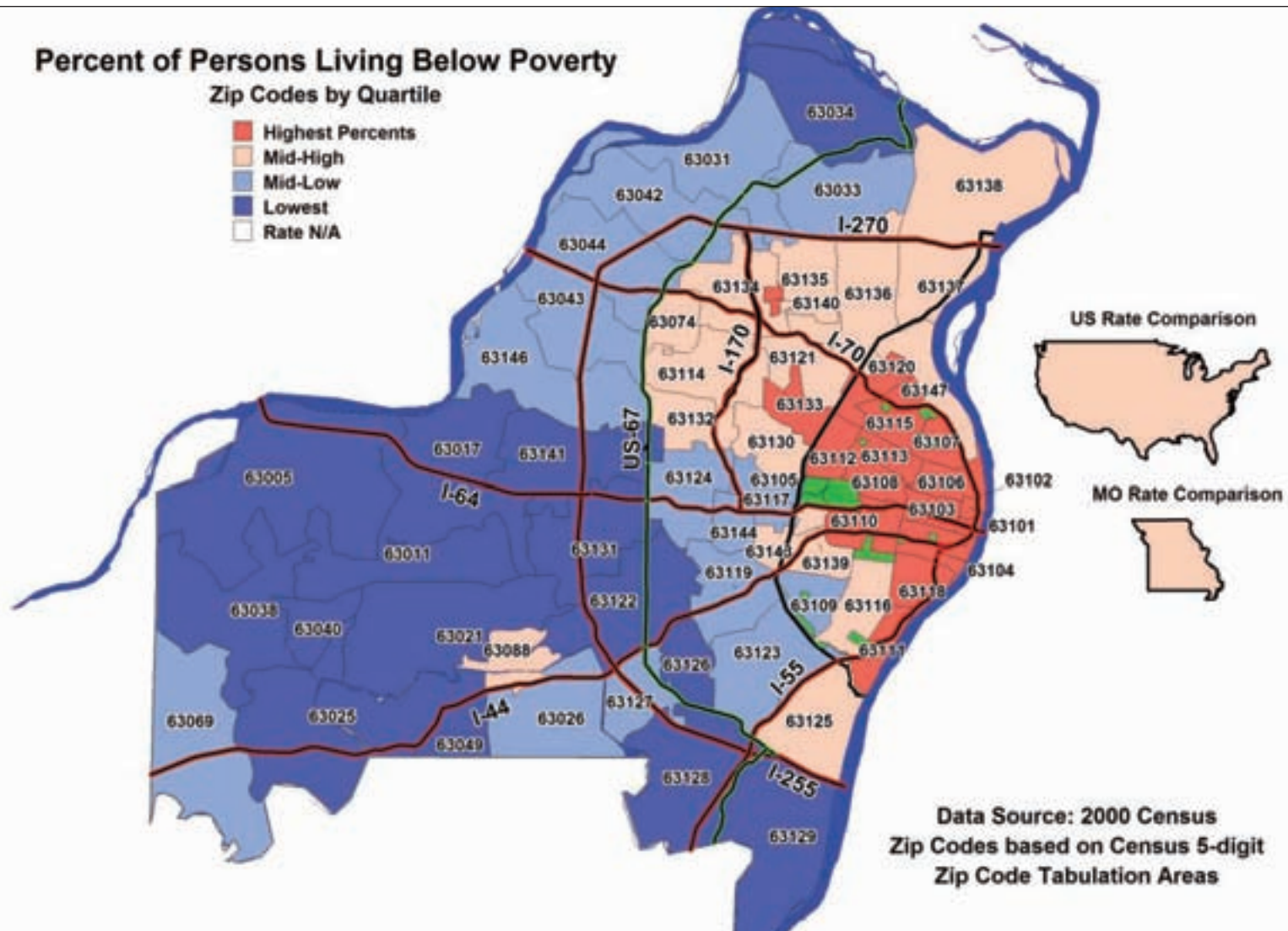
County - Unincorporated Areas

U1. Afton - unincorp
U2. Airport - unincorp
U3. Bonhomme - unincorp
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U30. Spanish Lake
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U32. Tesson Ferry - unincorp
U33. University - unincorp

Percent of Persons Living Below Poverty

Zip Codes by Quartile

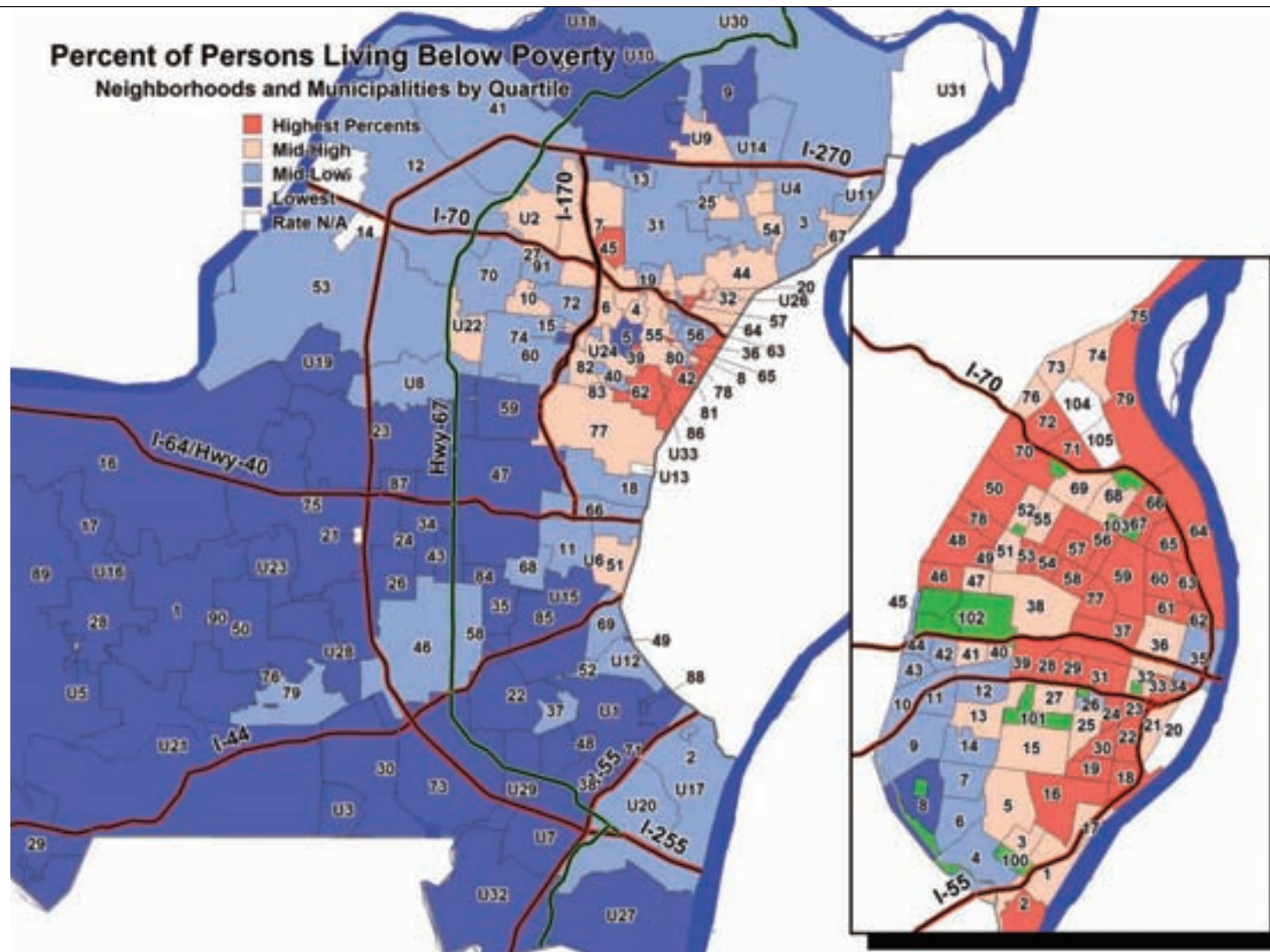
- Highest Percents
- Mid-High
- Mid-Low
- Lowest
- Rate N/A



PERCENT OF PERSONS LIVING BELOW POVERTY (*Zip Codes by Quartile*)**PERCENT OF PERSONS
LIVING BELOW POVERTY**

STL CITY	24.3
STL COUNTY	6.7
STL CITY/CO	11.1
MO	11.7
US	12.4
STL CITY BLACK	34.1
STL CITY WHITE	12.9
STL CO BLACK	17.4
STL CO WHITE	4.1
STL CITY/CO BLACK	25.4
STL CITY/CO WHITE	5.5
MO BLACK	25.5
MO WHITE	9.6
US BLACK	24.9
US WHITE	9.1

- Health status disparities are most striking among persons living below the poverty level. These disparities include shorter life expectancy as well as higher rates of cancer, birth defects, infant death, asthma, diabetes, and cardiovascular disease.
- A recent county-by-county study of the U.S. population found that life expectancy was decreased by as much as 15 years in areas of high poverty. The study also found that exposure to extreme poverty early in life has detrimental and long-lasting effects on health status later in life
- The percentage of African Americans in St. Louis City and Saint Louis County who live in poverty is 5 times the percentage of white persons in the area.



PERCENT OF PERSONS LIVING BELOW POVERTY (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
19. Gravois Park
20. Kosciusko
21. Soulard
22. Benton Park West
23. McKinley Heights
24. Fox Park
25. Tower Grove East
26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
44. Hi-Point
45. Wydown/Skinker
46. Skinker/DeBaliviere
47. DeBaliviere Place
48. West End
49. Visitation Park
50. Wells/Goodfellow
51. Academy
52. Kingsway West
53. Fountain Park
54. Lewis Place
55. Kingsway East
56. The Greater Ville
57. The Ville
58. Vandeventer
59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
73. North Point

74. Riverview
76. Walnut Park West
77. Covenant Blu/Grand Center
78. Hamilton Heights
79. North Riverfront
100. Carondelet Park
101. Tower Grove Park
102. Forest Park
103. Fairground Park
104. Calvary Cemetery
105. Bellefontaine Cemetery

County Municipalities

1. Ballwin
5. Bel-Nor
6. Bel-Ridge
2. Bella Villa
3. Bellefontaine Neighbors
4. Bellerive
7. Berkeley
8. Beverly Hills
9. Black Jack
10. Breckenridge Hills
11. Brentwood
12. Bridgeton
13. Calverton Park
14. Champ
15. Charlack
16. Chesterfield
17. Clarkson Valley
18. Clayton
19. Cool Valley
20. Country Club hills
21. Country Life Acres
22. Crestwood
23. Creve Coeur
24. Crystal Lake Park

25. Dellwood
26. Des Peres
27. Edmundson
28. Ellisville
29. Eureka
30. Fenton
31. Ferguson
32. Flordell Hills
33. Florissant
34. Frontenac
35. Glen Echo Park
36. Glendale
37. Grantwood Village
38. Green Park
39. Greendale
40. Hanley Hills
41. Hazelwood
42. Hillsdale
43. Huntleigh
44. Jennings
45. Kinloch
46. Kirkwood
47. Ladue
48. Lakeshire
49. Mackenzie
50. Manchester
51. Maplewood
52. Marlborough
53. Maryland Heights
54. Moline Acres
55. Normandy
56. Northwoods
57. Norwood Court
58. Oakland
59. Olivette
60. Overland
61. Pacific

62. Pagedale
63. Pasadena Hills
64. Pasadena Park
65. Pine Lawn
66. Richmond Heights
67. Riverview
68. Rock Hill
69. Shrewsbury
70. St. Ann
71. St. George
72. St. John
73. Sunset Hills
74. Sycamore Hills
75. Town and Country
76. Twin Oaks
77. University City
78. Uplands Park
79. Valley Park
80. Velda City
81. Velda Village Hills
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83. Vinita Terrace
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87. Westwood
88. Wilbur Park
89. Wildwood
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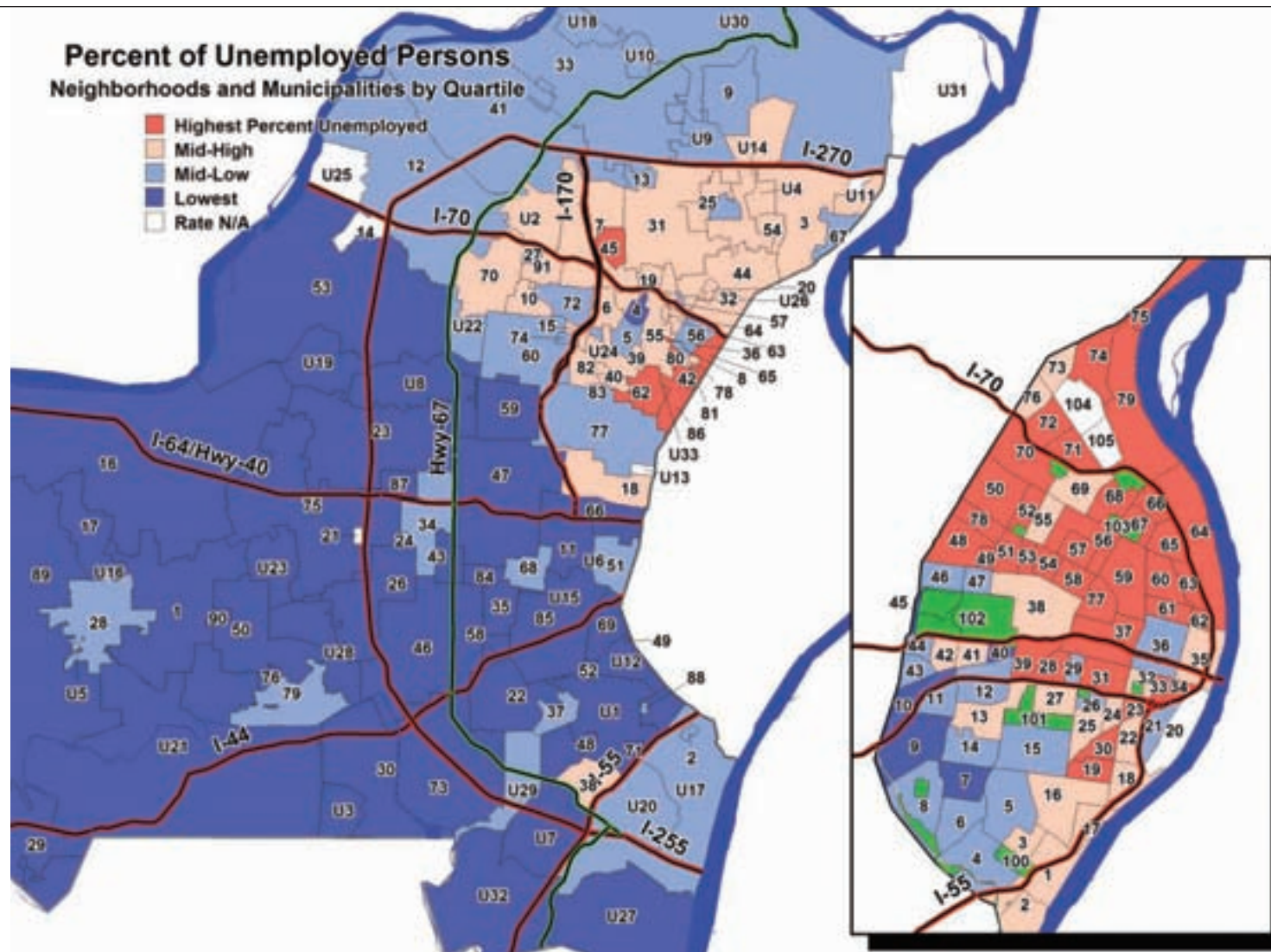
County - Unincorporated Areas

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U2. Airport - unincorp
U3. Bonhomme - unincorp
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U22. Midland - unincorp
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U25. Northwest - unincorp
U26. Norwood - unincorp
U27. Oakville - unincorp
U28. Queeny - unincorp
U29. Sappington - unincorp
U30. Spanish Lake
U31. St. Ferdinand - unincorp
U32. Tesson Ferry - unincorp
U33. University - unincorp

PERCENT OF UNEMPLOYED PERSONS (*Zip Codes by Quartile*)**PERCENT UNEMPLOYED**

STL CITY	11.0
STL COUNTY	4.0
STL CITY/CO	6.0
MO	5.3
US	5.8
STL CITY BLACK	17.0
STL CITY WHITE	7.0
STL CO BLACK	9.0
STL CO WHITE	3.0
STL CITY/CO BLACK	12.0
STL CITY/CO WHITE	4.0
MO BLACK	12.3
MO WHITE	4.4
US BLACK	11.6
US WHITE	4.6

- As the economy continues to stagnate and insurance premiums rise, the number of Americans without health insurance will undoubtedly grow. Research at Massachusetts Institute of Technology and the Kaiser Family Foundation indicate that 85% of people losing their jobs also lose health insurance coverage.
- The unemployment rate among St. Louis City and Saint Louis County's African-American population is 3 times the rate for the City-County white population.
- Being unemployed puts one's health at risk. Studies in other countries clearly show, even after allowing for other factors, that unemployed people and their families have a 20% greater risk of premature death including suicide. The adverse health effects associated with unemployment are linked to both its psychological consequences and financial problems, especially debt.



PERCENT OF UNEMPLOYED PERSONS (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
19. Gravois Park
20. Kosciusko
21. Soulard
22. Benton Park West
23. McKinley Heights
24. Fox Park
25. Tower Grove East
26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
44. Hi-Point
45. Wydown/Skinker
46. Skinker/DeBaliviere
47. DeBaliviere Place
48. West End
49. Visitation Park
50. Wells/Goodfellow
51. Academy
52. Kingsway West
53. Fountain Park
54. Lewis Place
55. Kingsway East
56. The Greater Ville
57. The Ville
58. Vandeventer
59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
73. North Point

74. Riverview
76. Walnut Park West
77. Covenant Blu/Grand Center
78. Hamilton Heights
79. North Riverfront
100. Carondelet Park
101. Tower Grove Park
102. Forest Park
103. Fairground Park
104. Calvary Cemetery
105. Bellefontaine Cemetery

County Municipalities

1. Ballwin
5. Bel-Nor
6. Bel-Ridge
2. Bella Villa
3. Bellefontaine Neighbors
4. Bellerive
7. Berkeley
8. Beverly Hills
9. Black Jack
10. Breckenridge Hills
11. Brentwood
12. Bridgeton
13. Calverton Park
14. Champ
15. Charlack
16. Chesterfield
17. Clarkson Valley
18. Clayton
19. Cool Valley
20. Country Club hills
21. Country Life Acres
22. Crestwood
23. Creve Coeur
24. Crystal Lake Park

25. Dellwood
26. Des Peres
27. Edmundson
28. Ellisville
29. Eureka
30. Fenton
31. Ferguson
32. Flordell Hills
33. Florissant
34. Frontenac
35. Glen Echo Park
36. Glendale
37. Grantwood Village
38. Green Park
39. Greendale
40. Hanley Hills
41. Hazelwood
42. Hillsdale
43. Huntleigh
44. Jennings
45. Kinloch
46. Kirkwood
47. Ladue
48. Lakeshire
49. Mackenzie
50. Manchester
51. Maplewood
52. Marlborough
53. Maryland Heights
54. Moline Acres
55. Normandy
56. Northwoods
57. Norwood Court
58. Oakland
59. Olivette
60. Overland
61. Pacific

62. Pagedale
63. Pasadena Hills
64. Pasadena Park
65. Pine Lawn
66. Richmond Heights
67. Riverview
68. Rock Hill
69. Shrewsbury
70. St. Ann
71. St. George
72. St. John
73. Sunset Hills
74. Sycamore Hills
75. Town and Country
76. Twin Oaks
77. University City
78. Uplands Park
79. Valley Park
80. Velda City
81. Velda Village Hills
82. Vinita Park
83. Vinita Terrace
84. Warson Woods
85. Webster Groves
86. Wellston
87. Westwood
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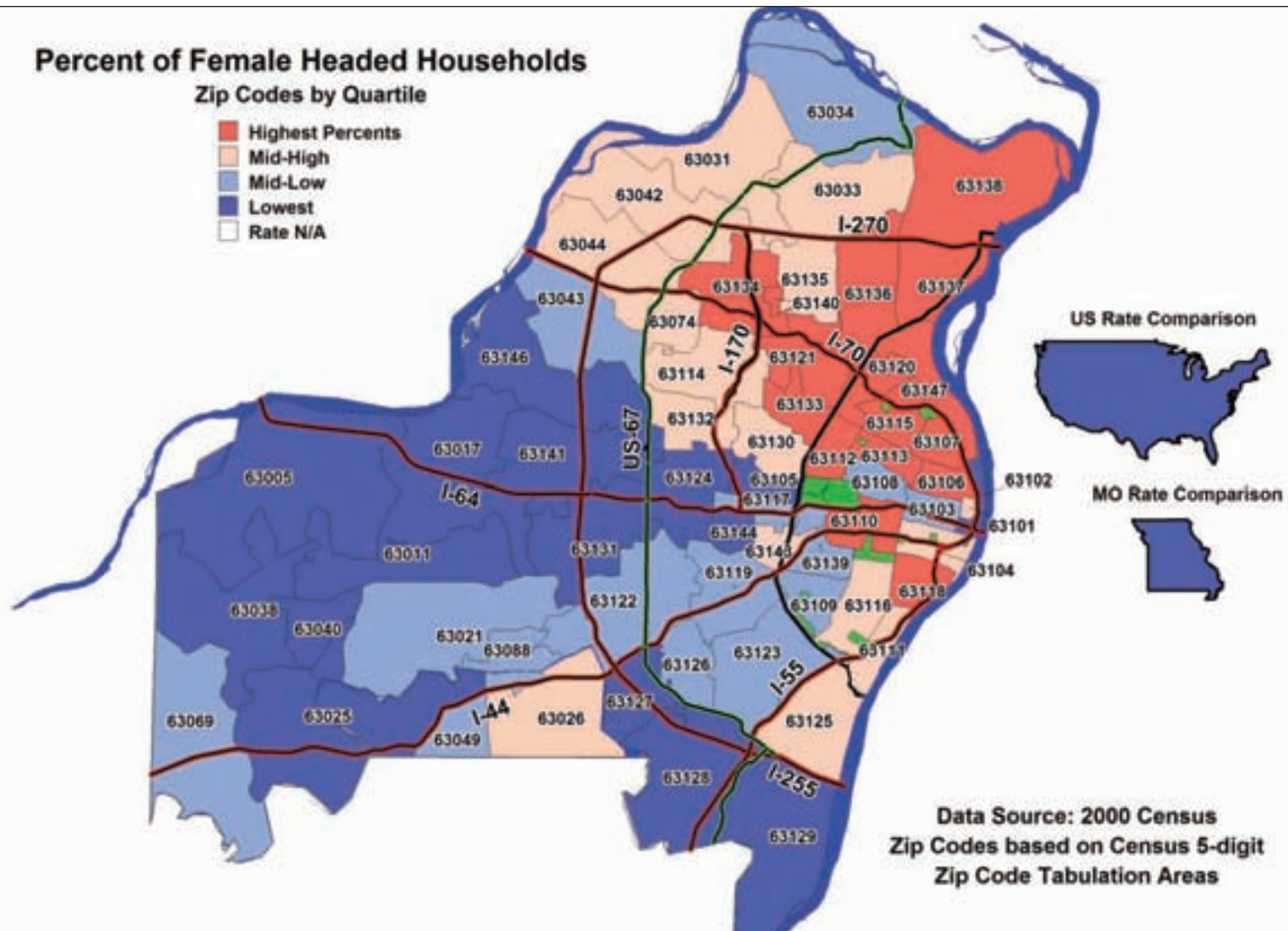
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U10. Florissant - unincorp
U11. Glasgow Village - unincorp
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U13. Hadley - unincorp
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U20. Mehlville - unincorp
U21. Meramec - unincorp
U22. Midland - unincorp
U23. Missouri River - unincorp
U24. Normandy - unincorp
U25. Northwest - unincorp
U26. Norwood - unincorp
U27. Oakville - unincorp
U28. Queeny - unincorp
U29. Sappington - unincorp
U30. Spanish Lake
U31. St. Ferdinand - unincorp
U32. Tesson Ferry - unincorp
U33. University - unincorp

Percent of Female Headed Households

Zip Codes by Quartile

- Highest Percents
- Mid-High
- Mid-Low
- Lowest
- Rate N/A



PERCENT OF FEMALE HEADED HOUSEHOLDS (*Zip Codes by Quartile*)**PERCENT OF FEMALE
HEADED HOUSEHOLDS**

STL CITY	12.8
STL COUNTY	7.2
STL CITY/CO	8.7
MO	7.0
US	7.0
STL CITY BLACK	22.4
STL CITY WHITE	4.2
STL CO BLACK	21.6
STL CO WHITE	4.1
STL CITY/CO BLACK	22.0
STL CITY/CO WHITE	4.1
MO BLACK	21.5
MO WHITE	5.2
US BLACK	19.2
US WHITE	4.9

- Children in female-head and female-head extended households, are more likely to be in suboptimal health as compared to children living in households where the child's father or the mother's male partner is present.
- The prevalence of African-American female headed households in St. Louis City and Saint Louis County is 5 times greater than white female headed households in the area.

PERCENT OF FEMALE HEADED HOUSEHOLDS (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
19. Gravois Park
20. Kosciusko
21. Soulard
22. Benton Park West
23. McKinley Heights
24. Fox Park
25. Tower Grove East
26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
44. Hi-Point
45. Wydown/Sinker
46. Skinker/DeBaliviere
47. DeBaliviere Place
48. West End
49. Visitation Park
50. Wells/Goodfellow
51. Academy
52. Kingsway West
53. Fountain Park
54. Lewis Place
55. Kingsway East
56. The Greater Ville
57. The Ville
58. Vandeventer
59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
73. North Point

74. Riverview
76. Walnut Park West
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14. Champ
15. Charlack
16. Chesterfield
17. Clarkson Valley
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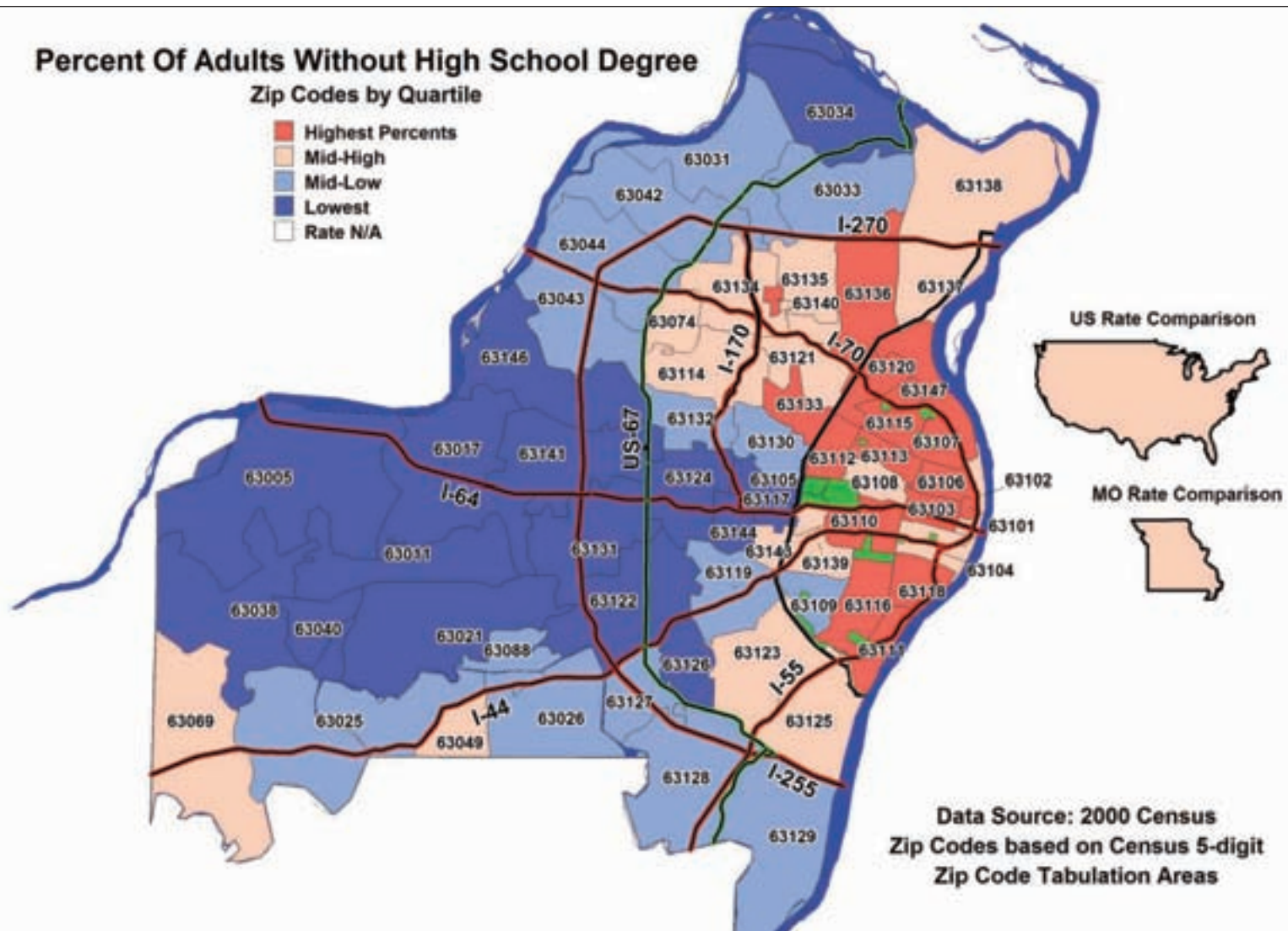
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U28. Queeny - unincorp
U29. Sappington - unincorp
U30. Spanish Lake
U31. St. Ferdinand - unincorp
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U33. University - unincorp

Percent Of Adults Without High School Degree

Zip Codes by Quartile

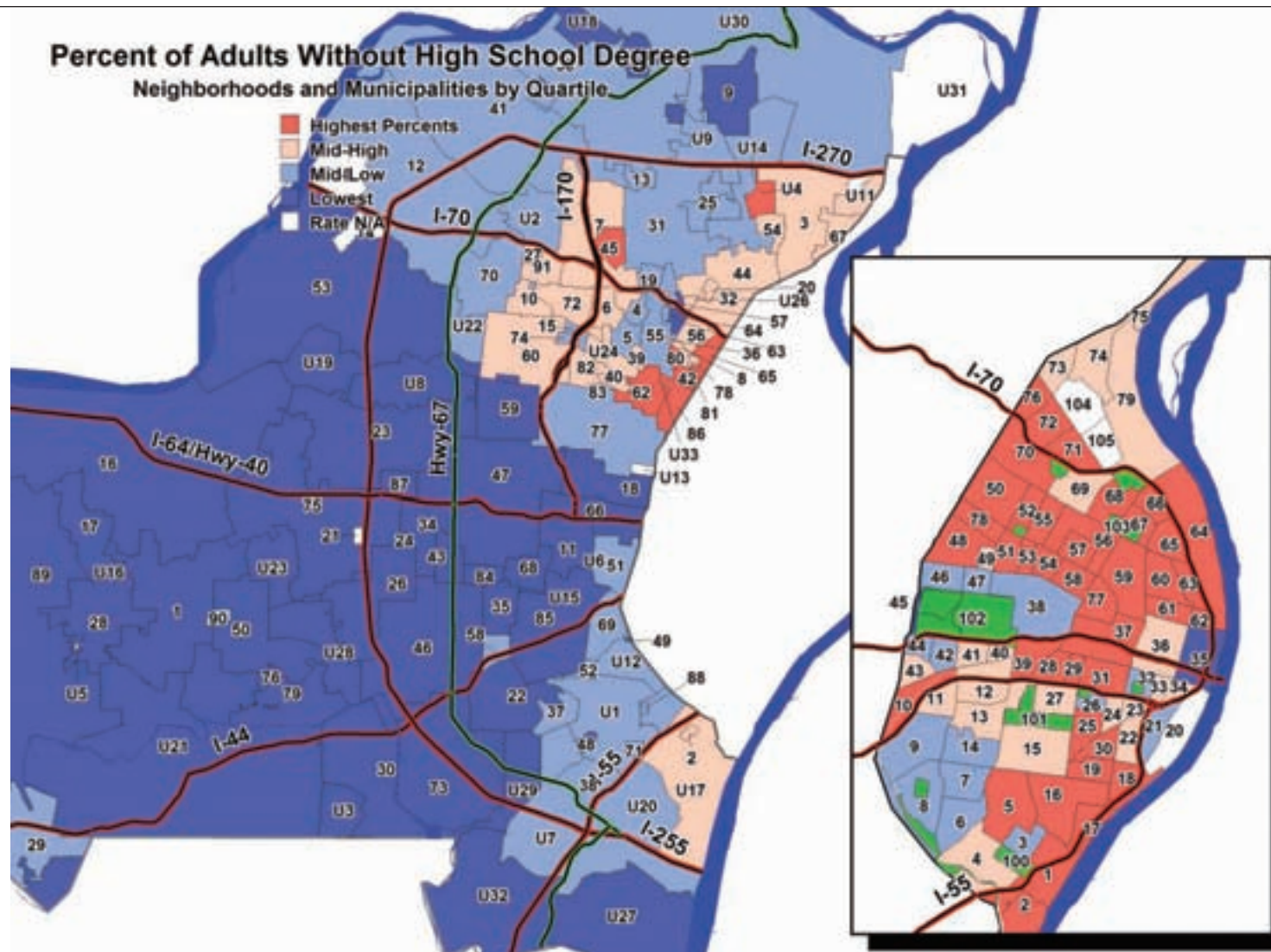
- Highest Percents
- Mid-High
- Mid-Low
- Lowest
- Rate N/A



PERCENT OF ADULTS 25+ YEARS WITHOUT HIGH SCHOOL DEGREE (*Zip Codes by Quartile*)**PERCENTAGE OF ADULTS
25+ YEARS WITHOUT
HIGH SCHOOL DEGREE**

STL CITY	28.5
STL COUNTY	12.0
STL CITY/CO	16.0
MO	18.4
US	18.9
STL CITY BLACK	35.3
STL CITY WHITE	22.3
STL CO BLACK	18.5
STL CO WHITE	10.7
STL CITY/CO BLACK	26.5
STL CITY/CO WHITE	12.6
MO BLACK	26.1
MO WHITE	17.6
US BLACK	27.7
US WHITE	16.4

- Education influences health through cultural, social, and psychological means. For example, education can increase exposure to information about health and disease prevention. Education also enhances the likelihood of positive health-related behaviors such as seeking early prenatal care.
- Death rates from chronic diseases, communicable diseases and injuries are also associated with educational attainment. In 1995, the death rate for men with chronic diseases who had less than 12 years of education was 2.5 times that of men with chronic diseases who had more than 12 years of education. The comparable ratio among women was 2.1 to 1.
- 2000 Census data show that the percentage of African Americans (over age 25) in St. Louis City and Saint Louis County without a high school degree is over two times the percentage of whites not having a degree.



PERCENT OF ADULTS 25+ YEARS WITHOUT HIGH SCHOOL DEGREE (*Neighborhoods and Municipalities by Quartile*)

City Neighborhoods

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
19. Gravois Park
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24. Fox Park
25. Tower Grove East
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27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
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42. Clayton/Tamm
43. Franz Park
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46. Skinker/DeBaliviere
47. DeBaliviere Place
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49. Visitation Park
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53. Fountain Park
54. Lewis Place
55. Kingsway East
56. The Greater Ville
57. The Ville
58. Vandeventer
59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
73. North Point

74. Riverview
76. Walnut Park West
77. Covenant Blu/Grand Center
78. Hamilton Heights
79. North Riverfront
100. Carondelet Park
101. Tower Grove Park
102. Forest Park
103. Fairground Park
104. Calvary Cemetery
105. Bellefontaine Cemetery

County Municipalities

1. Ballwin
5. Bel-Nor
6. Bel-Ridge
2. Bella Villa
3. Bellefontaine Neighbors
4. Bellerive
7. Berkeley
8. Beverly Hills
9. Black Jack
10. Breckenridge Hills
11. Brentwood
12. Bridgeton
13. Calverton Park
14. Champ
15. Charlack
16. Chesterfield
17. Clarkson Valley
18. Clayton
19. Cool Valley
20. Country Club hills
21. Country Life Acres
22. Crestwood
23. Creve Coeur
24. Crystal Lake Park

25. Dellwood
26. Des Peres
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28. Ellisville
29. Eureka
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31. Ferguson
32. Flordell Hills
33. Florissant
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35. Glen Echo Park
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39. Greendale
40. Hanley Hills
41. Hazelwood
42. Hillsdale
43. Huntleigh
44. Jennings
45. Kinloch
46. Kirkwood
47. Ladue
48. Lakeshire
49. Mackenzie
50. Manchester
51. Maplewood
52. Marlborough
53. Maryland Heights
54. Moline Acres
55. Normandy
56. Northwoods
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58. Oakland
59. Olivette
60. Overland
61. Pacific

62. Pagedale
63. Pasadena Hills
64. Pasadena Park
65. Pine Lawn
66. Richmond Heights
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68. Rock Hill
69. Shrewsbury
70. St. Ann
71. St. George
72. St. John
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78. Uplands Park
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91. Woodson Terrace

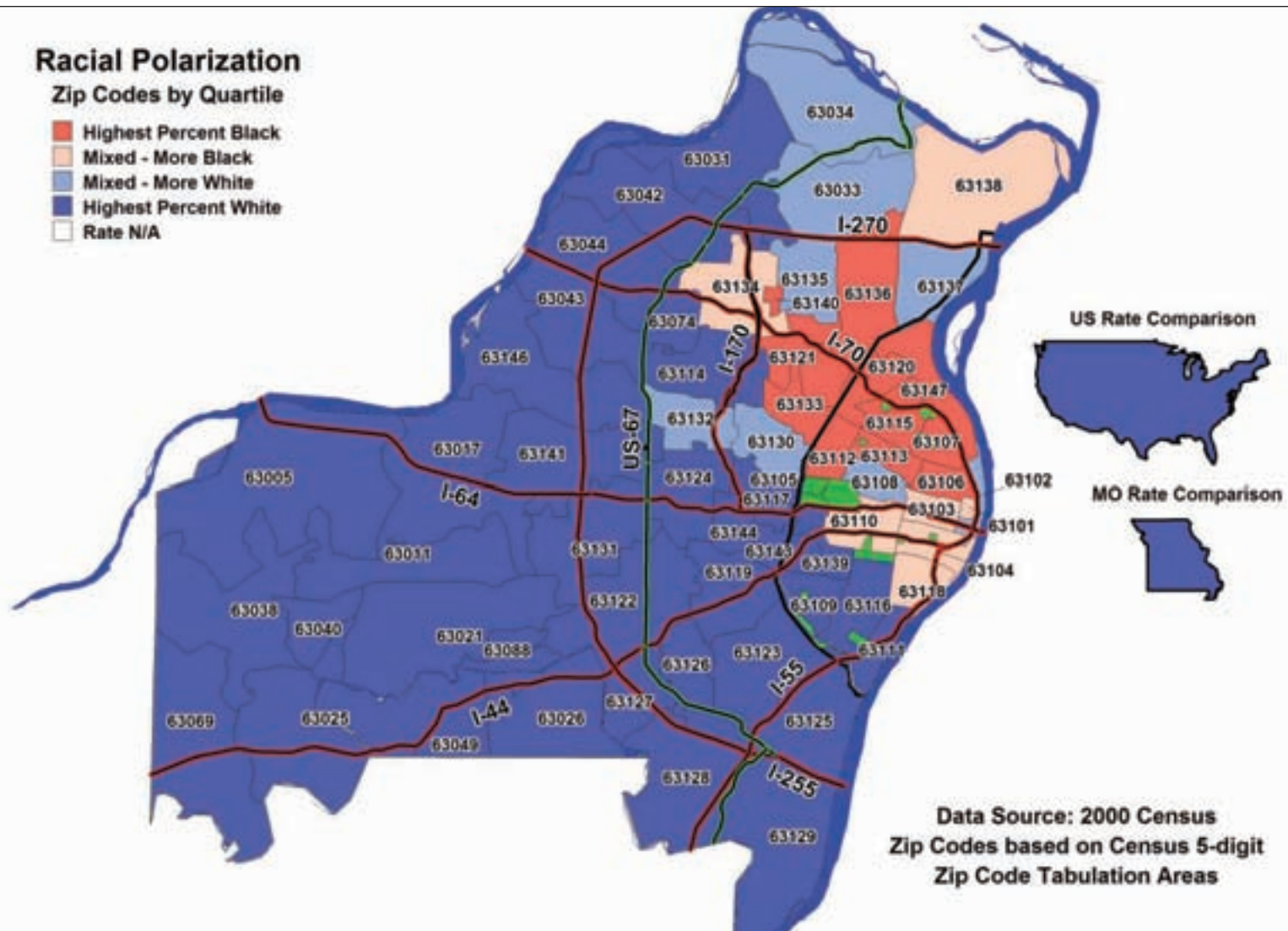
County - Unincorporated Areas

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U33. University - unincorp

Racial Polarization

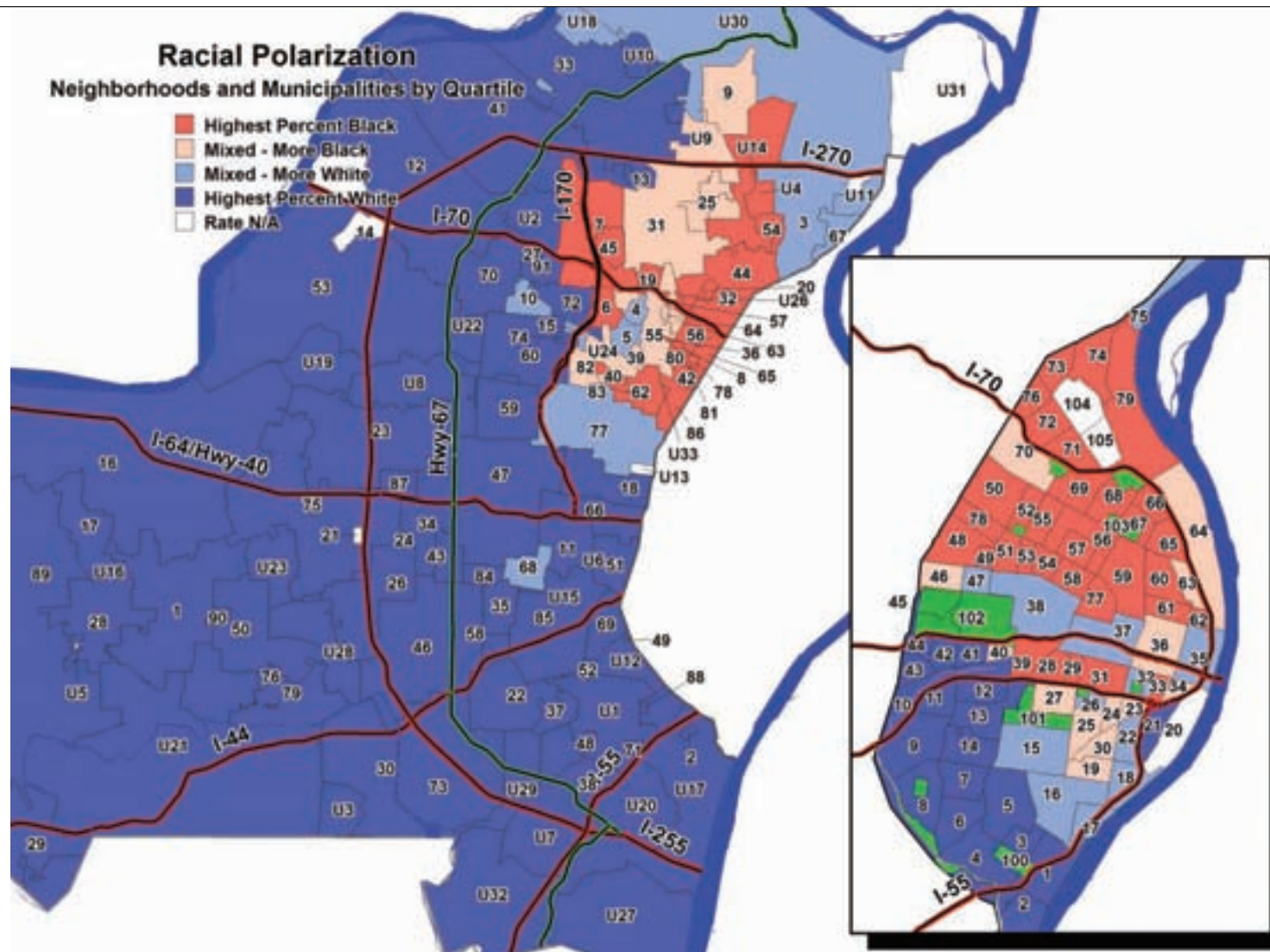
Zip Codes by Quartile

- Highest Percent Black
- Mixed - More Black
- Mixed - More White
- Highest Percent White
- Rate N/A



RACIAL POLARIZATION (*Zip Codes by Quartile*)

- Disparities in health status and access to health care among African Americans and other minority populations are a continuing public health concern. Nationally, eliminating racial and ethnic disparities has become a priority.
- Many areas in St. Louis City and Saint Louis County show extreme racial imbalance. For this report Zip codes, neighborhoods and municipalities are considered racially isolated if they are 75% or greater African-American.
- African Americans face significant added risk of premature death and disease when compared with the total population of the United States.



RACIAL POLARIZATION (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
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16. Dutchtown
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20. Kosciusko
21. Soulard
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24. Fox Park
25. Tower Grove East
26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
44. Hi-Point
45. Wydown/Sinker
46. Skinker/DeBaliviere
47. DeBaliviere Place
48. West End
49. Visitation Park
50. Wells/Goodfellow
51. Academy
52. Kingsway West
53. Fountain Park
54. Lewis Place
55. Kingsway East
56. The Greater Ville
57. The Ville
58. Vandeventer
59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
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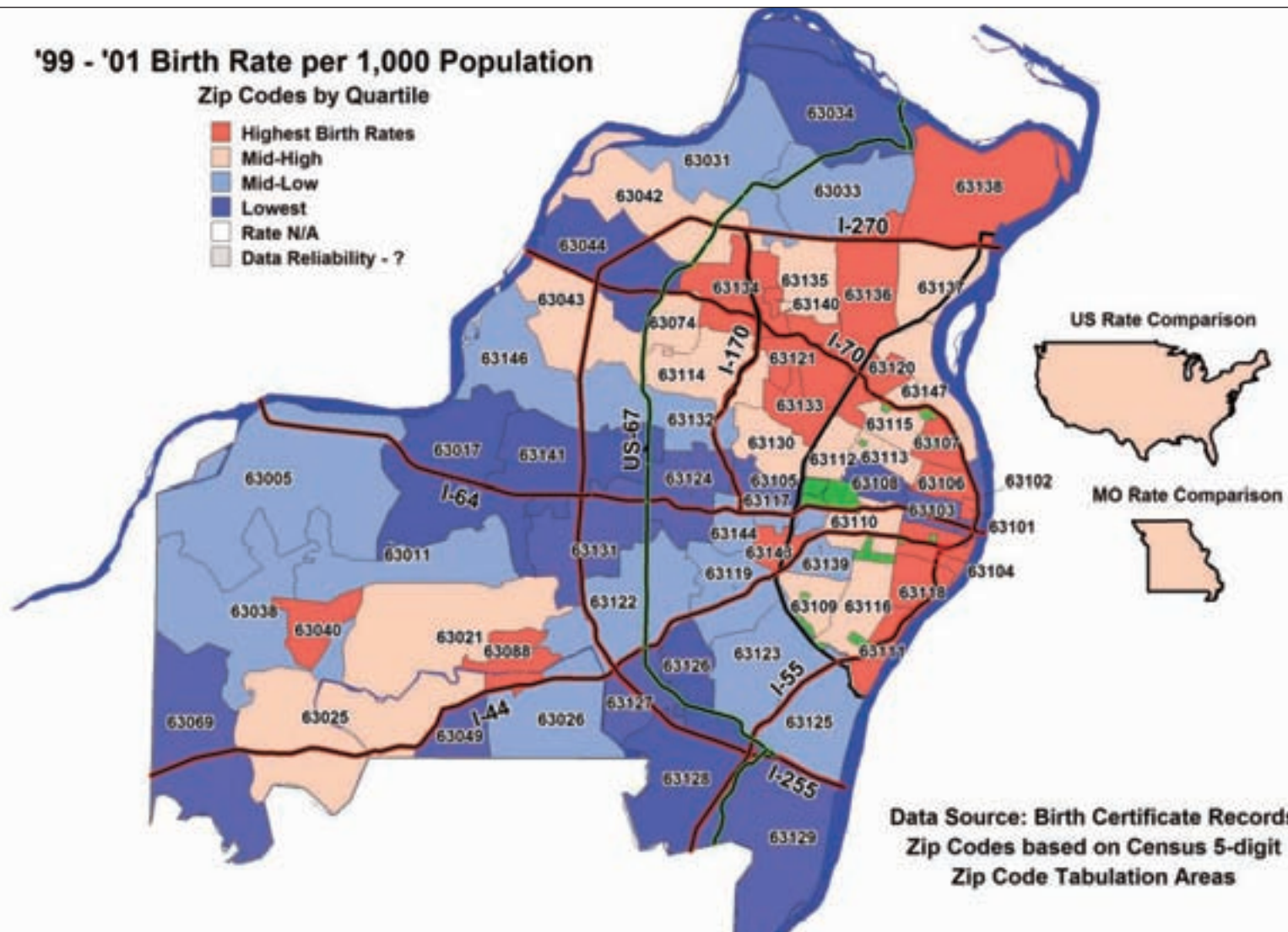
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- U30. Spanish Lake
- U31. St. Ferdinand - unincorp
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'99 - '01 Birth Rate per 1,000 Population

Zip Codes by Quartile

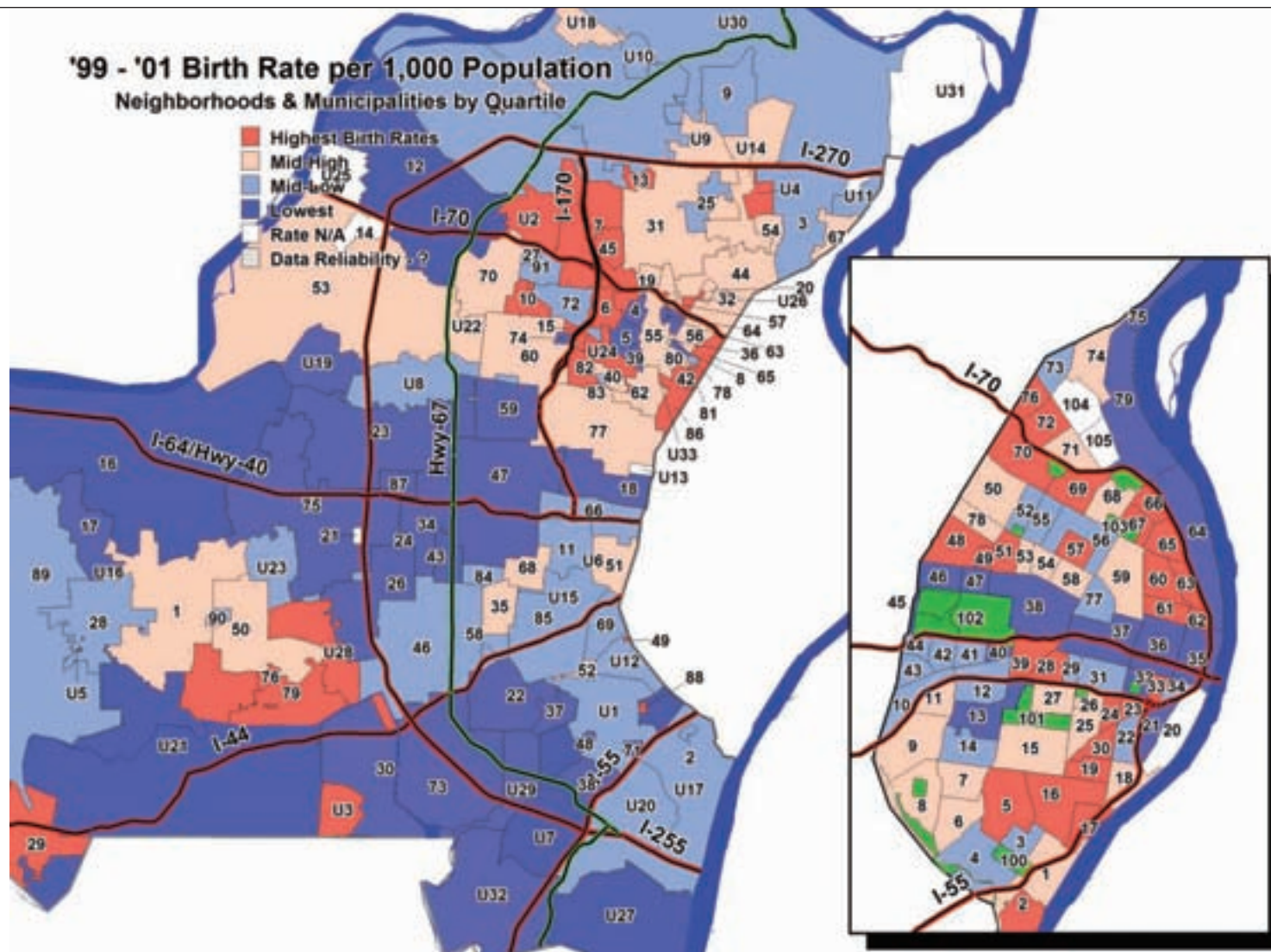
- Highest Birth Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 BIRTH RATE PER 1,000 POPULATION (*Zip Codes by Quartile*)**BIRTH RATE***Per 1,000 Population*

STL CITY	15.6
STL COUNTY	12.3
STL CITY/CO	13.1
MO	13.5
US	14.6
STL CITY BLACK	18.7
STL CITY WHITE	12.6
STL CO BLACK	17.2
STL CO WHITE	11.1
STL CITY/CO BLACK	17.9
STL CITY/CO WHITE	11.3
MO BLACK	18.1
MO WHITE	13.1
US BLACK	17.3
US WHITE	14.0

- Birth rate gives an indication of the natural growth of the population in a given area.
- The 1999-2001 average birth rate for St. Louis City and Saint Louis County is slightly less than the comparative Missouri rate and about ten percent less than the US rate.
- The 1999-2001 average birth rate for the African-American population in the St. Louis City and County population is almost 60 percent higher than in the white population in St. Louis City and Saint Louis County in the same time period.
- The 1999-2001 average birth rate for St. Louis City and Saint Louis County for the African-American population is similar to comparative rates for African-American populations in Missouri and the US. However, the birth rate for St. Louis City and Saint Louis County white population is 20 percent lower than that of Missouri and the US.



'99 - '01 BIRTH RATE PER 1,000 POPULATION (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
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11. Clifton Heights
12. The Hill
13. Southwest Garden
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26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
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45. Wydown/Sinker
46. Skinker/DeBaliviere
47. DeBaliviere Place
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56. The Greater Ville
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59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
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69. Penrose
70. Mark Twain/I-70 Industrial
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55. Normandy
56. Northwoods
57. Norwood Court
58. Oakland
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61. Pacific

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68. Rock Hill
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70. St. Ann
71. St. George
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73. Sunset Hills
74. Sycamore Hills
75. Town and Country
76. Twin Oaks
77. University City
78. Uplands Park
79. Valley Park
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81. Velda Village Hills
82. Vinita Park
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86. Wellston
87. Westwood
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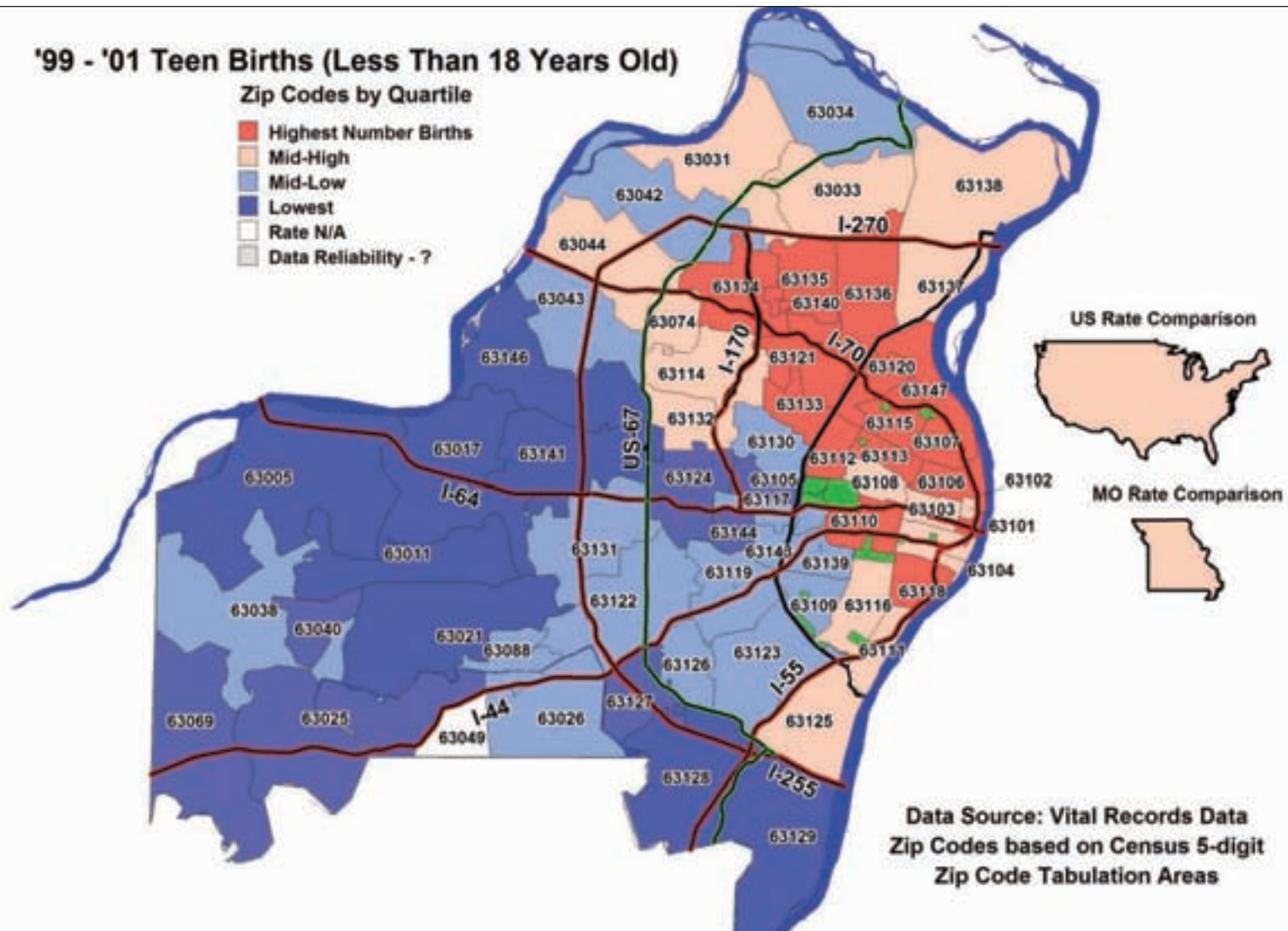
County - Unincorporated Areas

U1. Afton - unincorp
U2. Airport - unincorp
U3. Bonhomme - unincorp
U4. Castle Point - unincorp
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'99 - '01 Teen Births (Less Than 18 Years Old)

Zip Codes by Quartile

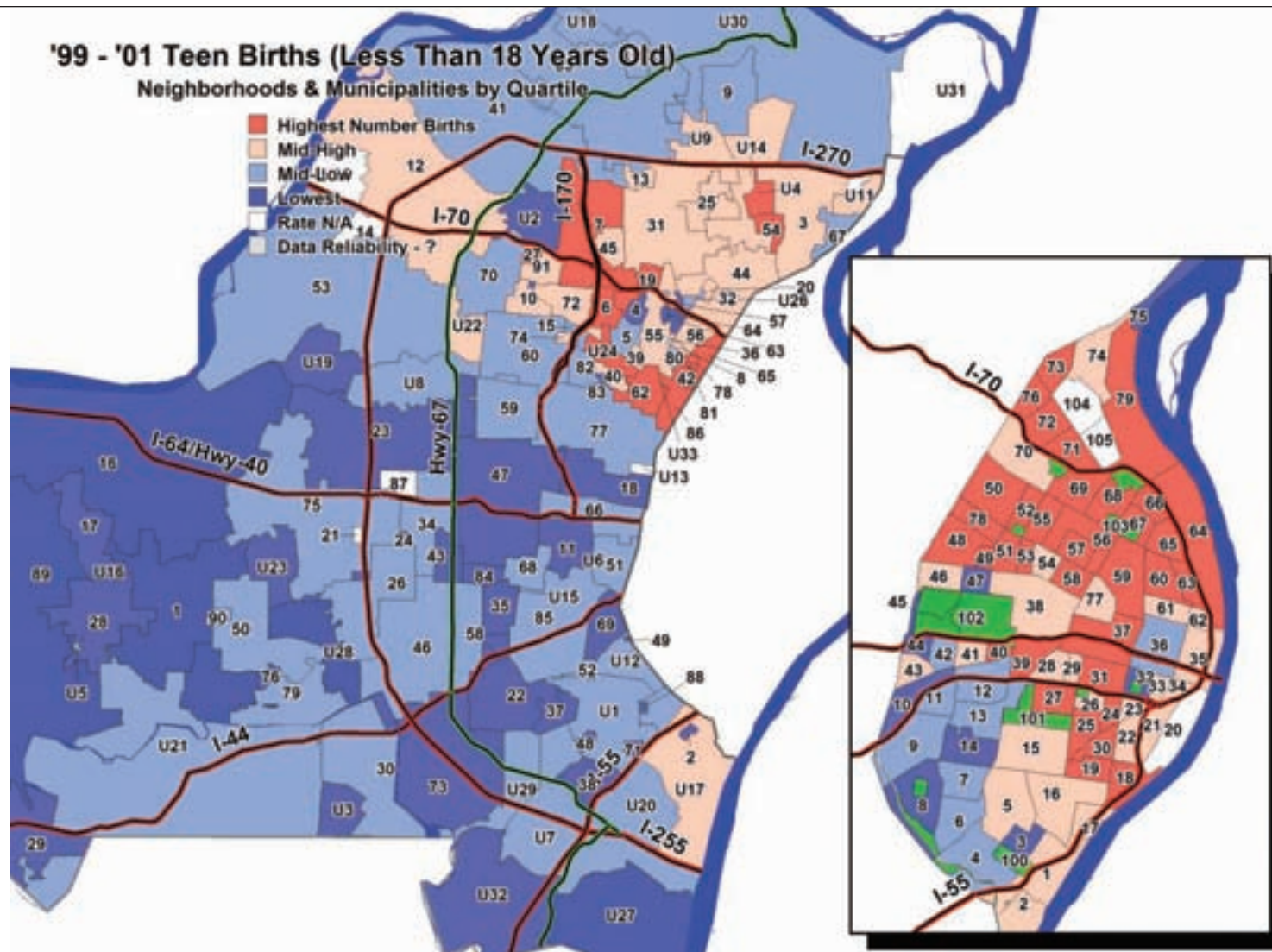
- Highest Number Births
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 TEEN BIRTHS (LESS THAN 18 YEARS OLD) (Zip Codes by Quartile)**TEEN BIRTHS <18**
% of Live Births

STL CITY	7.5
STL COUNTY	2.9
STL CITY/CO	4.3
MO	4.3
US	4.1
STL CITY BLACK	10.5
STL CITY WHITE	2.7
STL CO BLACK	7.2
STL CO WHITE	1.4
STL CITY/CO BLACK	8.9
STL CITY/CO WHITE	1.7
MO BLACK	8.9
MO WHITE	3.4
US BLACK	7.8
US WHITE	3.5

- Early childbearing is more commonly associated with poverty and other adverse socioeconomic circumstances. Babies born to teen mothers are at higher risk for prematurity and related complications including infant death and long-term handicaps.
- The 1999-2001 average teen birth rate for St. Louis City and Saint Louis County is similar to the comparative Missouri and US rates.
- The 1999-2001 average teen birth rate for the African-American population in St. Louis City and Saint Louis County is more than five times the rate in the white population in St. Louis City and Saint Louis County for the same time period.
- The 1999-2001 average teen birth rate for the African American population in St. Louis City and Saint Louis County is similar to the comparative African- American rates for Missouri and the US. The teen birth rate among the white population in St. Louis City and Saint Louis County is 50 percent lower than the comparative rates for Missouri and the US.



'99 - '01 TEEN BIRTHS (LESS THAN 18 YEARS OLD) (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
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12. The Hill
13. Southwest Garden
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15. Tower Grove South
16. Dutchtown
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40. Kings Oak
41. Cheltenham
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U33. University - unincorp

'99 - '01 BIRTHS TO WOMEN 35+ YEARS (*Zip Codes by Quartile*)**BIRTHS TO WOMEN 35+ YEARS**
% of Live Births

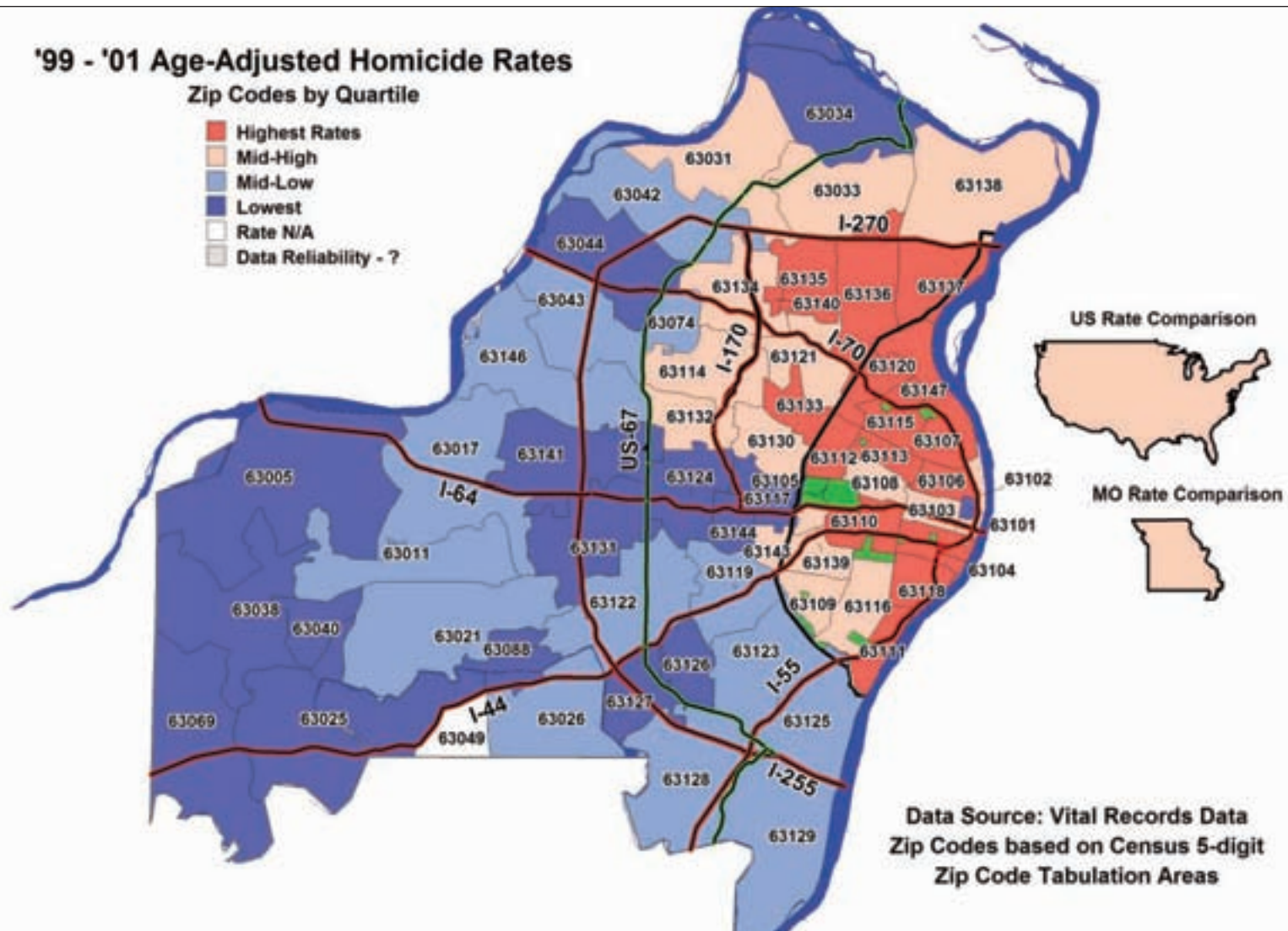
STL CITY	9.0
STL COUNTY	17.8
STL CITY/CO	15.2
MO	10.9
US	13.4
STL CITY BLACK	6.6
STL CITY WHITE	13.3
STL CO BLACK	8.6
STL CO WHITE	21.2
STL CITY/CO BLACK	7.6
STL CITY/CO WHITE	19.9
MO BLACK	7.2
MO WHITE	11.5
US BLACK	9.7
US WHITE	13.9

- Babies born to older women generally experience more problems, including prematurity and low birth weight. Fertility problems increase after about age 35, miscarriage rates double and there is a higher risk of chromosomal abnormalities such as Down's Syndrome. Older patients are also at greater risk of developing conditions during pregnancy such as hypertension and diabetes. However, countering the risks of later childbirth are other factors: older mothers tend to be married, be better educated and have higher incomes; and advances in reproductive technology have made birthing over age 35 less risky.
- The 1999-2001 average "births to mothers 35 and older" rate for St. Louis City and Saint Louis County is almost 40% higher than the comparative Missouri rate.
- The 1999-2001 average "births to mothers 35 and older" rate for whites in St. Louis City and Saint Louis County is 2.6 times the rate in African Americans in St. Louis City and Saint Louis County.

'99 - '01 Age-Adjusted Homicide Rates

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 AGE-ADJUSTED HOMICIDE RATES (*Zip Codes by Quartile*)**HOMICIDE***Age-adjusted rates per 100,000*

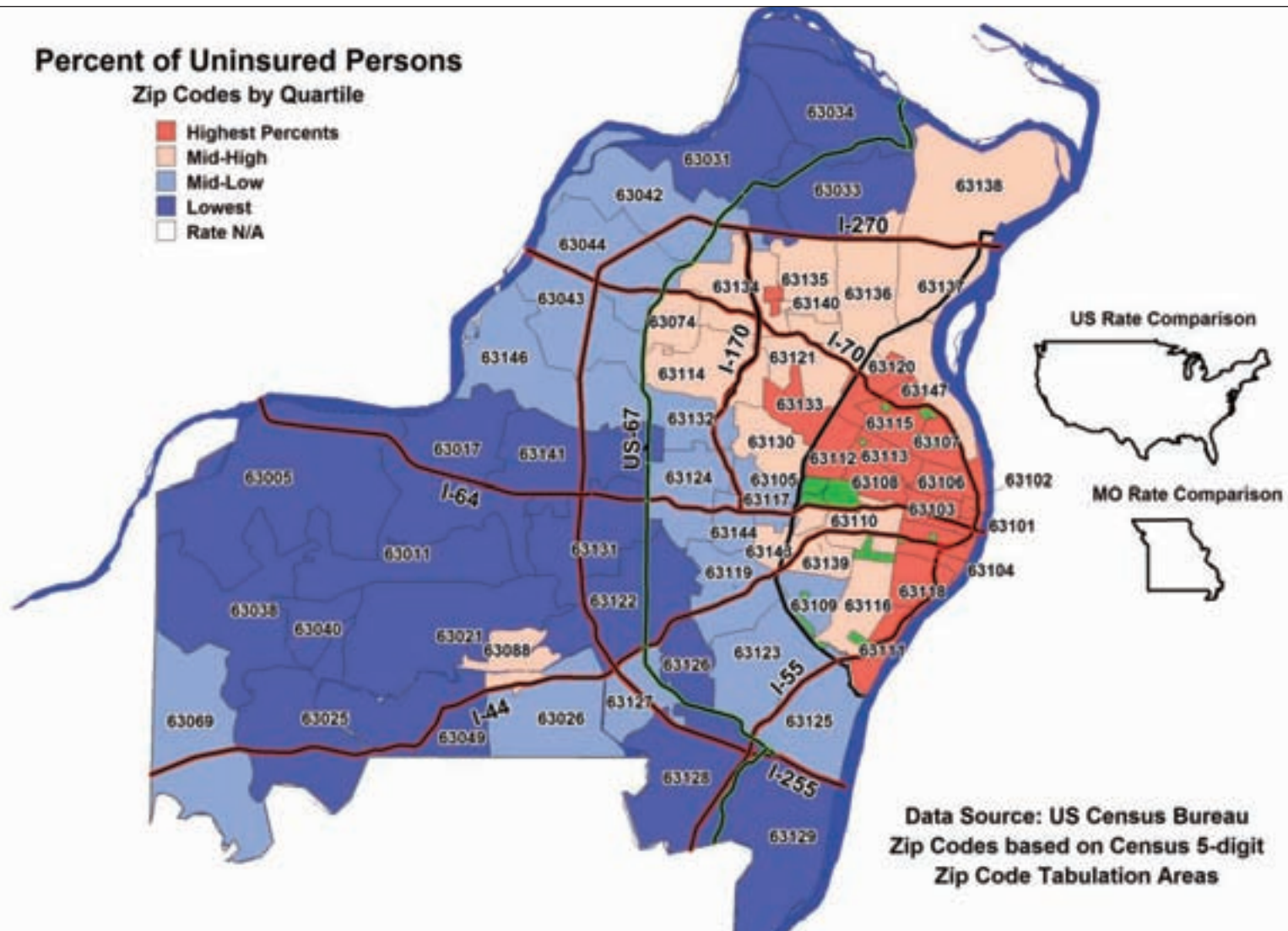
STL CITY	31.5
STL COUNTY	5.7
STL CITY/CO	12.6
MO	7.2
US	5.9
STL CITY BLACK	56.2
STL CITY WHITE	7.0
STL CO BLACK	19.1
STL CO WHITE	2.0
STL CITY/CO BLACK	36.5
STL CITY/CO WHITE	2.9
MO BLACK	35.8
MO WHITE	3.4
US BLACK	21.7
US WHITE	4.0

- Deaths from homicides and legal intervention include injuries inflicted by another person with the intent to injure or kill, by any means, and injuries inflicted by police or other law-enforcing agents in the course of legal action. Close to 70 percent of all homicides are committed with a firearm. The homicide rate is highest among older teens (14-17) and young adults (18-24).
- The 1999-2001 average age-adjusted homicide mortality rate for St. Louis City and Saint Louis County is 75 percent higher than the Missouri rate and over two times the US rate.
- The 1999-2001 average age-adjusted homicide mortality rate for African Americans in St. Louis City and Saint Louis County is more than 12 times the rate in the white population in St. Louis City and Saint Louis County for the same time period.
- The 1999-2001 average age-adjusted homicide mortality rate for African Americans in St. Louis City and Saint Louis County is about the same as the rate for Missouri African Americans, but almost 70 percent higher than the US African American rate. The homicide mortality rate in the white population in St. Louis City and Saint Louis County is lower than the white rates for Missouri and the US.

Percent of Uninsured Persons

Zip Codes by Quartile

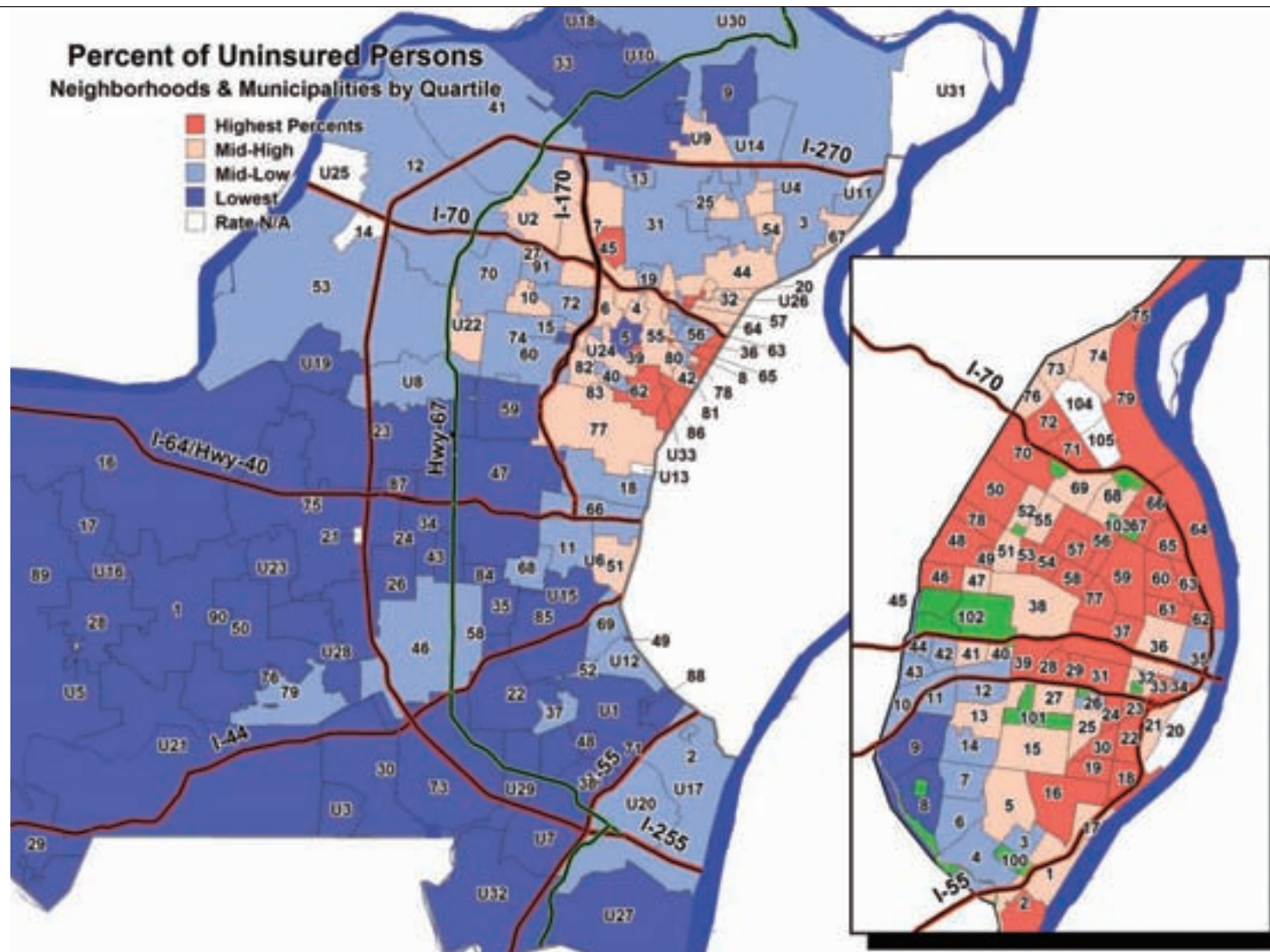
- Highest Percents
- Mid-High
- Mid-Low
- Lowest
- Rate N/A



Data Source: US Census Bureau
 Zip Codes based on Census 5-digit
 Zip Code Tabulation Areas

PERCENT OF UNINSURED PERSONS (*Zip Codes by Quartile*)

- See Section V for more information on lack of insurance.



PERCENT OF UNINSURED PERSONS (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
19. Gravois Park
20. Kosciusko
21. Soulard
22. Benton Park West
23. McKinley Heights
24. Fox Park
25. Tower Grove East
26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
44. Hi-Point
45. Wydown/Sinker
46. Skinker/DeBaliviere
47. DeBaliviere Place
48. West End
49. Visitation Park
50. Wells/Goodfellow
51. Academy
52. Kingsway West
53. Fountain Park
54. Lewis Place
55. Kingsway East
56. The Greater Ville
57. The Ville
58. Vandeventer
59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
73. North Point

74. Riverview
76. Walnut Park West
77. Covenant Blu/Grand Center
78. Hamilton Heights
79. North Riverfront
100. Carondelet Park
101. Tower Grove Park
102. Forest Park
103. Fairground Park
104. Calvary Cemetery
105. Bellefontaine Cemetery

County Municipalities

1. Ballwin
5. Bel-Nor
6. Bel-Ridge
2. Bella Villa
3. Bellefontaine Neighbors
4. Bellerive
7. Berkeley
8. Beverly Hills
9. Black Jack
10. Breckenridge Hills
11. Brentwood
12. Bridgeton
13. Calverton Park
14. Champ
15. Charlack
16. Chesterfield
17. Clarkson Valley
18. Clayton
19. Cool Valley
20. Country Club hills
21. Country Life Acres
22. Crestwood
23. Creve Coeur
24. Crystal Lake Park

25. Dellwood
26. Des Peres
27. Edmundson
28. Ellisville
29. Eureka
30. Fenton
31. Ferguson
32. Flordell Hills
33. Florissant
34. Frontenac
35. Glen Echo Park
36. Glendale
37. Grantwood Village
38. Green Park
39. Greendale
40. Hanley Hills
41. Hazelwood
42. Hillsdale
43. Huntleigh
44. Jennings
45. Kinloch
46. Kirkwood
47. Ladue
48. Lakeshire
49. Mackenzie
50. Manchester
51. Maplewood
52. Marlborough
53. Maryland Heights
54. Moline Acres
55. Normandy
56. Northwoods
57. Norwood Court
58. Oakland
59. Olivette
60. Overland
61. Pacific

62. Pagedale
63. Pasadena Hills
64. Pasadena Park
65. Pine Lawn
66. Richmond Heights
67. Riverview
68. Rock Hill
69. Shrewsbury
70. St. Ann
71. St. George
72. St. John
73. Sunset Hills
74. Sycamore Hills
75. Town and Country
76. Twin Oaks
77. University City
78. Uplands Park
79. Valley Park
80. Velda City
81. Velda Village Hills
82. Vinita Park
83. Vinita Terrace
84. Warson Woods
85. Webster Groves
86. Wellston
87. Westwood
88. Wilbur Park
89. Wildwood
90. Winchester
91. Woodson Terrace

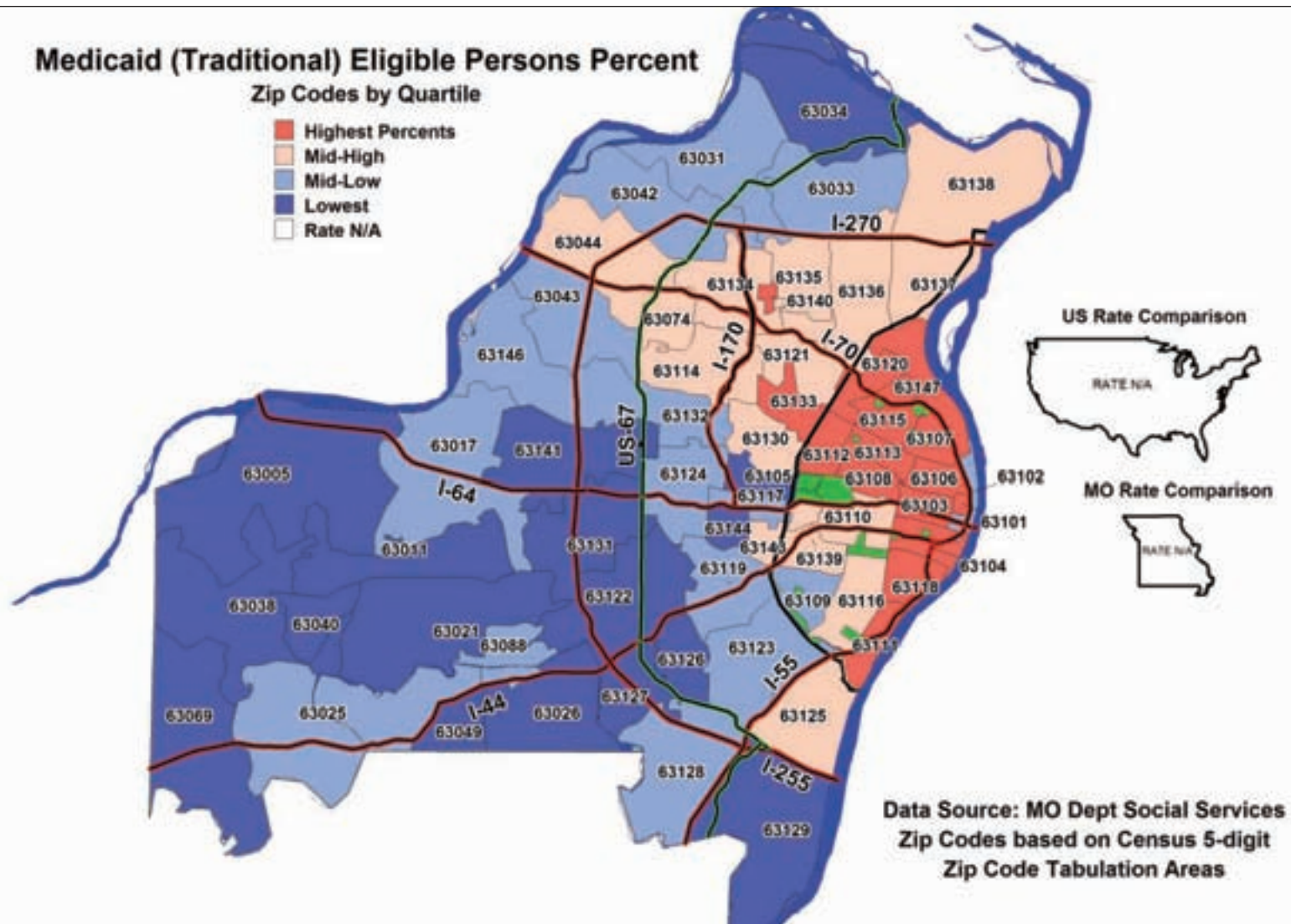
County - Unincorporated Areas

U1. Afton - unincorp
U2. Airport - unincorp
U3. Bonhomme - unincorp
U4. Castle Point - unincorp
U5. Chesterfield - unincorp
U6. Clayton - unincorp
U7. Concord - unincorp
U8. Creve Coeur - unincorp
U9. Ferguson - unincorp
U10. Florissant - unincorp
U11. Glasgow Village - unincorp
U12. Gravois - unincorp
U13. Hadley - unincorp
U14. Halls Ferry - unincorp
U15. Jefferson - unincorp
U16. Lafayette - unincorp
U17. Lemay - unincorp
U18. Lewis and Clark - unincorp
U19. Maryland Heights - unincorp
U20. Mehlville - unincorp
U21. Meramec - unincorp
U22. Midland - unincorp
U23. Missouri River - unincorp
U24. Normandy - unincorp
U25. Northwest - unincorp
U26. Norwood - unincorp
U27. Oakville - unincorp
U28. Queeny - unincorp
U29. Sappington - unincorp
U30. Spanish Lake
U31. St. Ferdinand - unincorp
U32. Tesson Ferry - unincorp
U33. University - unincorp

Medicaid (Traditional) Eligible Persons Percent

Zip Codes by Quartile

- Highest Percents
- Mid-High
- Mid-Low
- Lowest
- Rate N/A



MEDICAID (TRADITIONAL) ELIGIBLE PERSONS PERCENT (*Zip Codes by Quartile*)**MEDICAID ELIGIBLE
TRADITIONAL**
% of Total Population

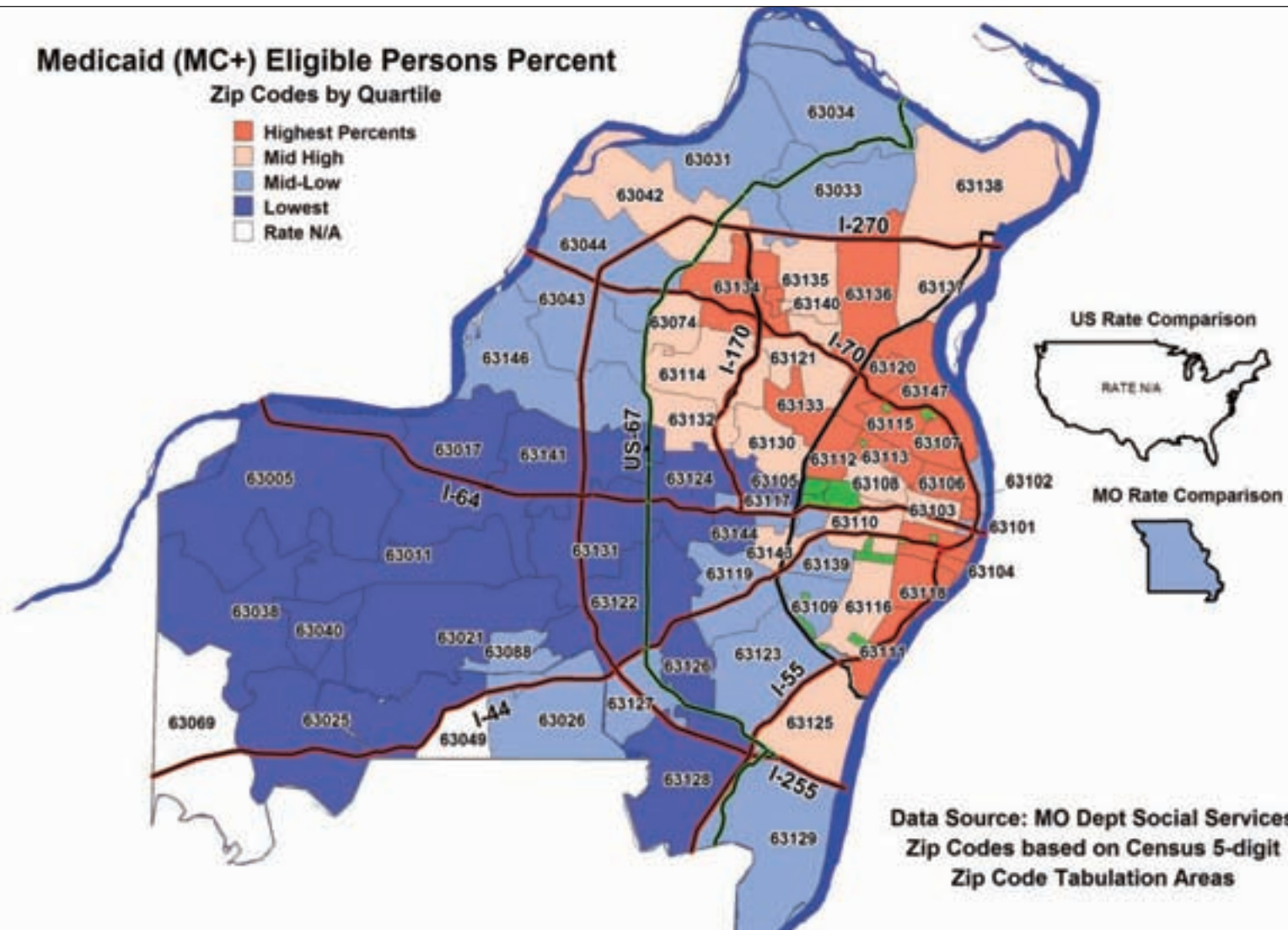
STL CITY	7.0
STL COUNTY	2.0
STL CITY/CO	3.3
MO	N/A
US	N/A
STL CITY BLACK	9.6
STL CITY WHITE	3.9
STL CO BLACK	4.6
STL CO WHITE	1.3
STL CITY/CO BLACK	7.0
STL CITY/CO WHITE	1.7
MO BLACK	N/A
MO WHITE	N/A
US BLACK	N/A
US WHITE	N/A

- Traditional Medicaid refers to the jointly-funded, Federal-State health insurance program for certain low-income individuals and others in need. These individuals have a comprehensive benefit package and may receive services from any provider enrolled in Medicaid. An “eligible” person is one who has signed up with the program and has received a Medicaid identification card.
- The distribution of traditional Medicaid “eligibles” in St. Louis City and Saint Louis County is as follows: disabled (59%), elderly (33%) and infants and children (3%).
- The percentage of St. Louis City and Saint Louis County African-American “eligibles” is over 4 times the white percentage.

Medicaid (MC+) Eligible Persons Percent

Zip Codes by Quartile

- Highest Percents
- Mid High
- Mid-Low
- Lowest
- Rate N/A



MEDICAID (MC+) ELIGIBLE PERSONS PERCENT (*Zip Codes by Quartile*)**MEDICAID ELIGIBLE MC+**
% of Total Population

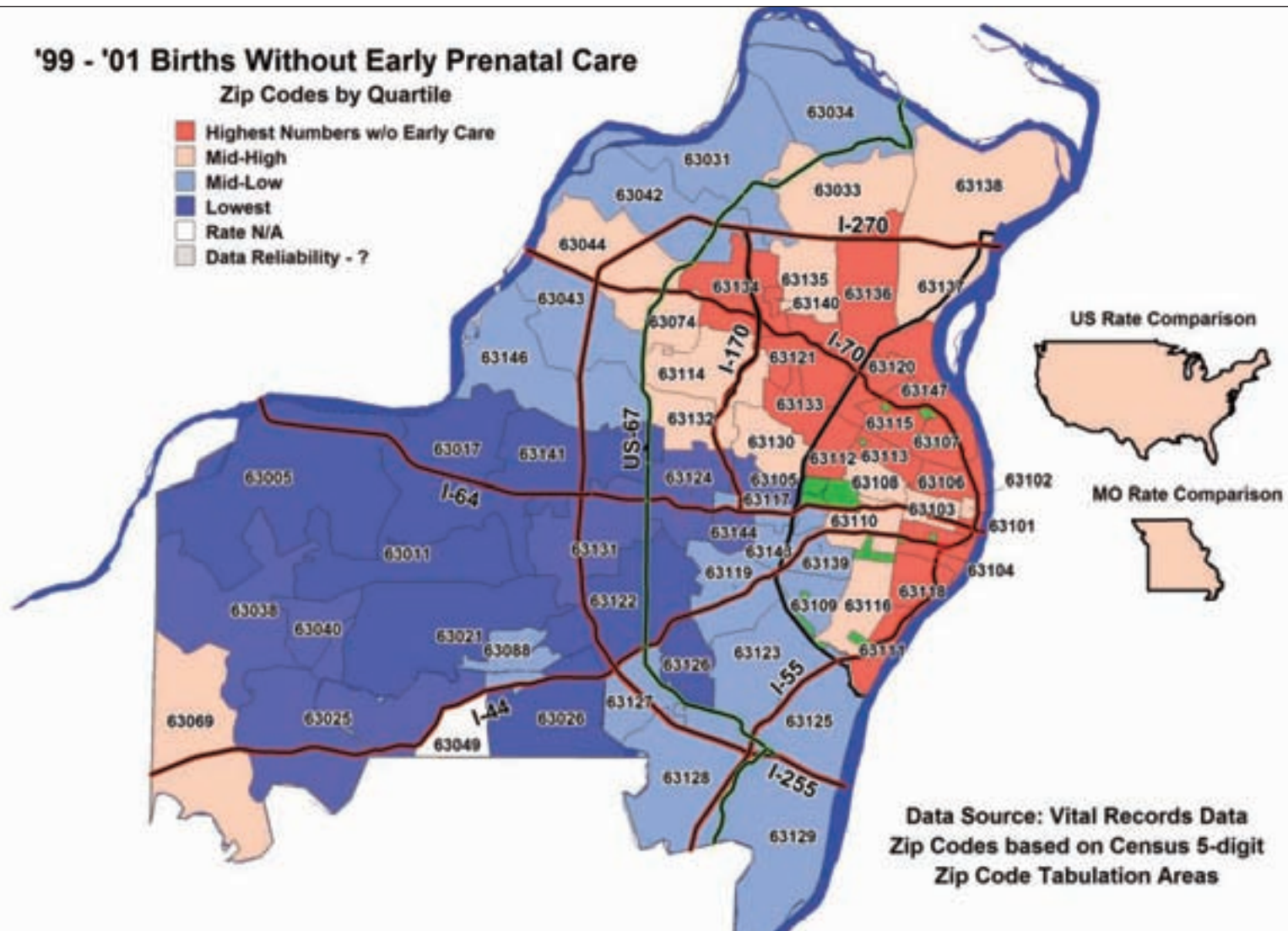
STL CITY	24.2
STL COUNTY	7.9
STL CITY/CO	12.0
MO	12.1
US	N/A
STL CITY BLACK	37.5
STL CITY WHITE	6.7
STL CO BLACK	26.9
STL CO WHITE	3.0
STL CITY/CO BLACK	32.0
STL CITY/CO WHITE	3.6
MO BLACK	31.3
MO WHITE	9.6
US BLACK	N/A
US WHITE	N/A

- MC+ refers to the statewide medical assistance program for low income pregnant women, children and uninsured parents. MC+ recipients receive their care through a managed care delivery system in St. Louis City and Saint Louis County. An “eligible” person is defined for this report as one who has signed up with the MC+ program and received an MC+ identification card.
- The distribution of MC+ “eligibles” in St. Louis City and Saint Louis County is as follows: infants and children (75%), parents with children (24%) and pregnant women (1%).
- September 2002 data show the percentage of “eligibles” in St. Louis City and Saint Louis County as the same as the percentage for Missouri.
- The percentage of St. Louis City and Saint Louis County African-American “eligibles” is close to 9 times the white percentage.

'99 - '01 Births Without Early Prenatal Care

Zip Codes by Quartile

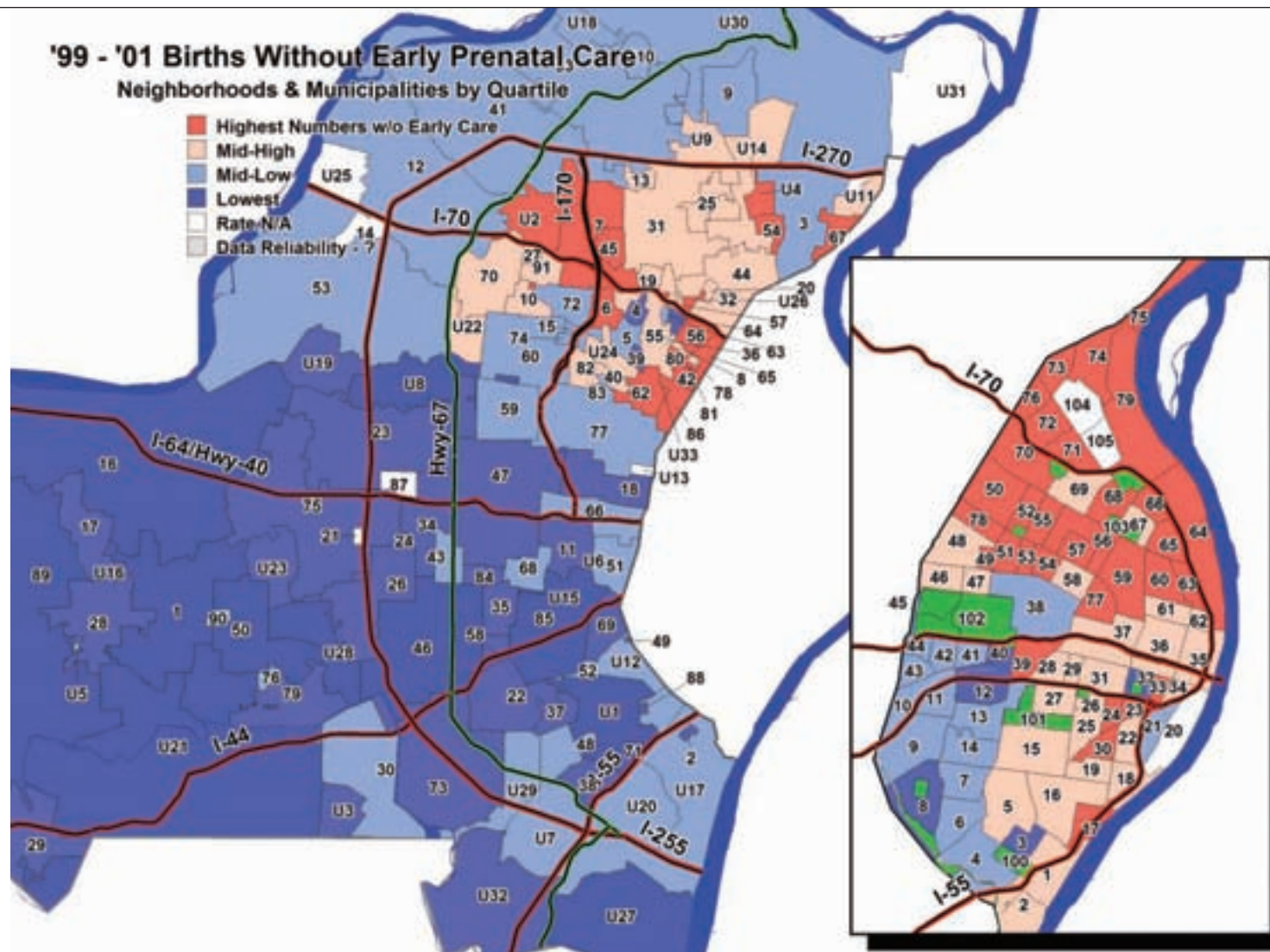
- Highest Numbers w/o Early Care
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 BIRTHS WITHOUT EARLY PRENATAL CARE (*Zip Codes by Quartile*)**BIRTHS WITHOUT EARLY
PRENATAL CARE**
% of Live Births

STL CITY	18.3
STL COUNTY	8.0
STL CITY/CO	11.1
MO	12.2
US	6.3
STL CITY BLACK	23.7
STL CITY WHITE	9.2
STL CO BLACK	18.3
STL CO WHITE	4.2
STL CITY/CO BLACK	21.0
STL CITY/CO WHITE	5.1
MO BLACK	20.9
MO WHITE	10.5
US BLACK	24.7
US WHITE	14.6

- Children born to women not receiving early prenatal care (care in the 1st trimester) are at greater risk for low-birth-weight, physical and mental handicap and infant death. A CDC study found that barriers to early prenatal care include failure to recognize the pregnancy (largest percentage), lack of money or insurance to pay for their visits and inability to get a doctor appointment.
- The 1999-2001 average “no 1st trimester prenatal care” rate for St. Louis City and Saint Louis County compares favorably to the Missouri and US rates. It is about 10 percent lower than the Missouri rate and over 30% lower than the US rate.
- The 1999-2001 average “no 1st trimester prenatal care” rate for African Americans in St. Louis City and Saint Louis County is over four times the rate for the white population in St. Louis City and Saint Louis County.
- The 1999-2001 average “no 1st trimester prenatal care” rate for the African-American community in St. Louis City and Saint Louis County is the same as the Missouri rate but 15 percent lower than the US rate for African Americans. The white rate for St. Louis City and Saint Louis County is even more positive, 50 percent and 65 percent lower than the Missouri and US white rates respectively.



'99 - '01 BIRTHS WITHOUT EARLY PRENATAL CARE (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
19. Gravois Park
20. Kosciusko
21. Soulard
22. Benton Park West
23. McKinley Heights
24. Fox Park
25. Tower Grove East
26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
44. Hi-Point
45. Wydown/Sinker
46. Skinker/DeBaliviere
47. DeBaliviere Place
48. West End
49. Visitation Park
50. Wells/Goodfellow
51. Academy
52. Kingsway West
53. Fountain Park
54. Lewis Place
55. Kingsway East
56. The Greater Ville
57. The Ville
58. Vandeventer
59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
73. North Point

74. Riverview
76. Walnut Park West
77. Covenant Blu/Grand Center
78. Hamilton Heights
79. North Riverfront
100. Carondelet Park
101. Tower Grove Park
102. Forest Park
103. Fairground Park
104. Calvary Cemetery
105. Bellefontaine Cemetery

County Municipalities

1. Ballwin
5. Bel-Nor
6. Bel-Ridge
2. Bella Villa
3. Bellefontaine Neighbors
4. Bellerive
7. Berkeley
8. Beverly Hills
9. Black Jack
10. Breckenridge Hills
11. Brentwood
12. Bridgeton
13. Calverton Park
14. Champ
15. Charlack
16. Chesterfield
17. Clarkson Valley
18. Clayton
19. Cool Valley
20. Country Club hills
21. Country Life Acres
22. Crestwood
23. Creve Coeur
24. Crystal Lake Park

25. Dellwood
26. Des Peres
27. Edmundson
28. Ellisville
29. Eureka
30. Fenton
31. Ferguson
32. Flordell Hills
33. Florissant
34. Frontenac
35. Glen Echo Park
36. Glendale
37. Grantwood Village
38. Green Park
39. Greendale
40. Hanley Hills
41. Hazelwood
42. Hillsdale
43. Huntleigh
44. Jennings
45. Kinloch
46. Kirkwood
47. Ladue
48. Lakeshire
49. Mackenzie
50. Manchester
51. Maplewood
52. Marlborough
53. Maryland Heights
54. Moline Acres
55. Normandy
56. Northwoods
57. Norwood Court
58. Oakland
59. Olivette
60. Overland
61. Pacific

62. Pagedale
63. Pasadena Hills
64. Pasadena Park
65. Pine Lawn
66. Richmond Heights
67. Riverview
68. Rock Hill
69. Shrewsbury
70. St. Ann
71. St. George
72. St. John
73. Sunset Hills
74. Sycamore Hills
75. Town and Country
76. Twin Oaks
77. University City
78. Uplands Park
79. Valley Park
80. Velda City
81. Velda Village Hills
82. Vinita Park
83. Vinita Terrace
84. Warson Woods
85. Webster Groves
86. Wellston
87. Westwood
88. Wilbur Park
89. Wildwood
90. Winchester
91. Woodson Terrace

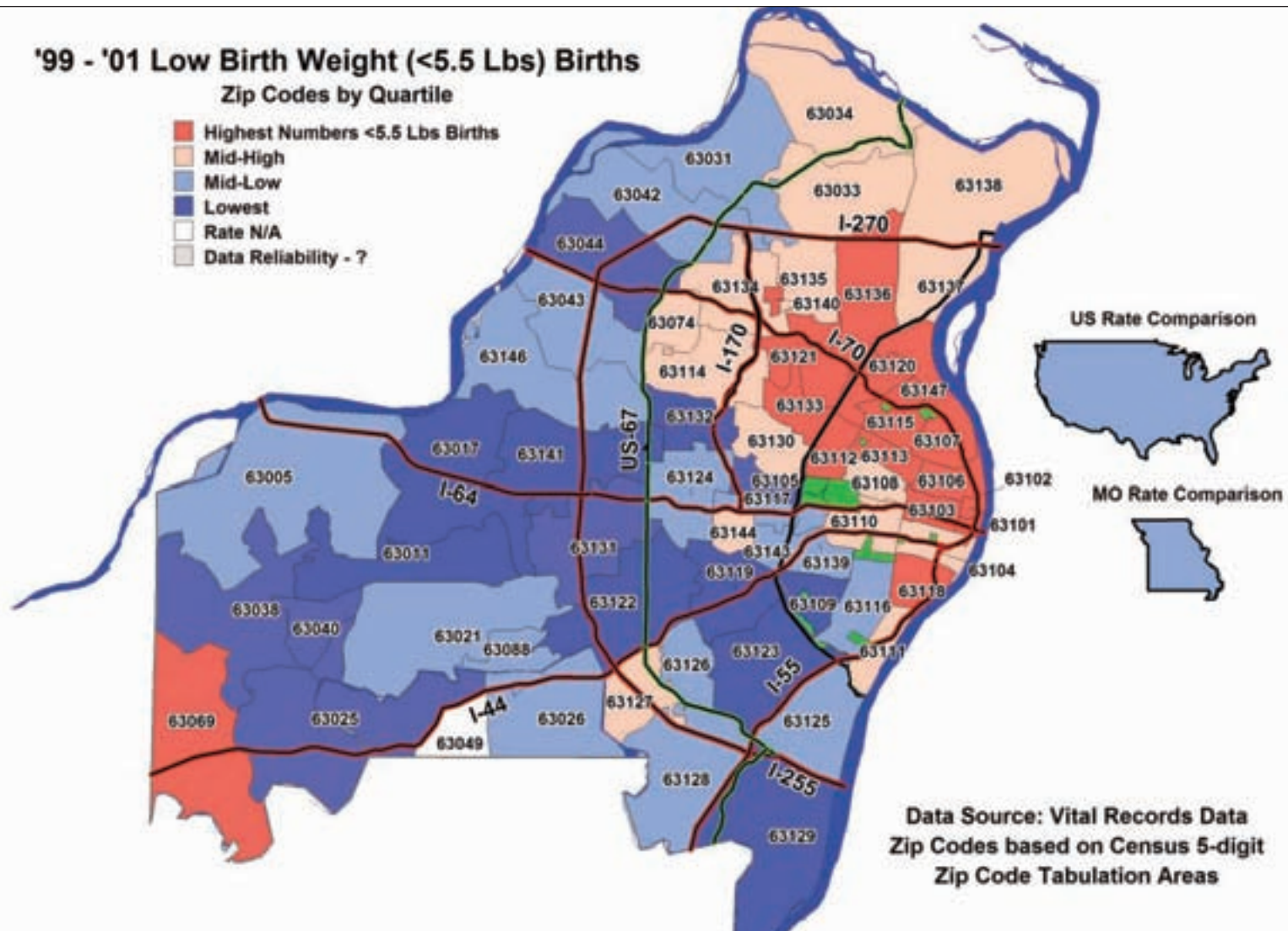
County - Unincorporated Areas

U1. Afton - unincorp
U2. Airport - unincorp
U3. Bonhomme - unincorp
U4. Castle Point - unincorp
U5. Chesterfield - unincorp
U6. Clayton - unincorp
U7. Concord - unincorp
U8. Creve Coeur - unincorp
U9. Ferguson - unincorp
U10. Florissant - unincorp
U11. Glasgow Village - unincorp
U12. Gravois - unincorp
U13. Hadley - unincorp
U14. Halls Ferry - unincorp
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U16. Lafayette - unincorp
U17. Lemay - unincorp
U18. Lewis and Clark - unincorp
U19. Maryland Heights - unincorp
U20. Mehlville - unincorp
U21. Meramec - unincorp
U22. Midland - unincorp
U23. Missouri River - unincorp
U24. Normandy - unincorp
U25. Northwest - unincorp
U26. Norwood - unincorp
U27. Oakville - unincorp
U28. Queeny - unincorp
U29. Sappington - unincorp
U30. Spanish Lake
U31. St. Ferdinand - unincorp
U32. Tesson Ferry - unincorp
U33. University - unincorp

'99 - '01 Low Birth Weight (<5.5 Lbs) Births

Zip Codes by Quartile

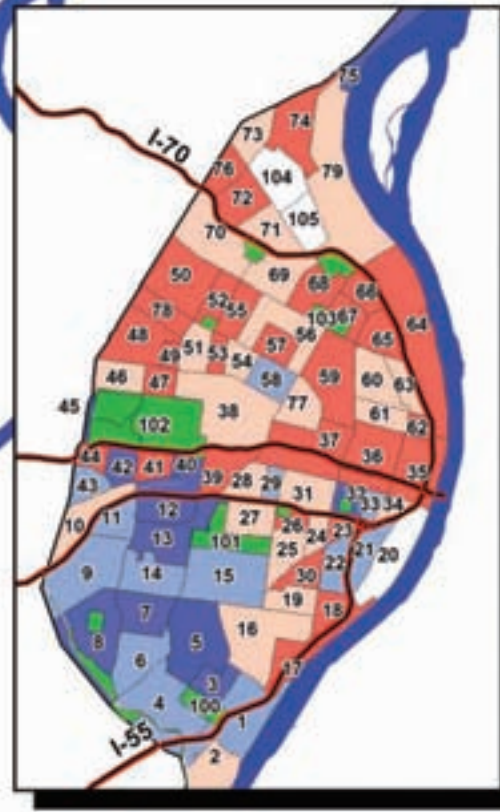
- Highest Numbers <5.5 Lbs Births
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 LOW BIRTH WEIGHT (<5.5 LBS) BIRTHS (*Zip Codes by Quartile*)**LOW BIRTHWEIGHT
<2500 GRAMS**
% of Live Births

STL CITY	11.6
STL COUNTY	8.2
STL CITY/CO	9.2
MO	7.7
US	7.6
STL CITY BLACK	14.3
STL CITY WHITE	7.5
STL CO BLACK	12.9
STL CO WHITE	6.4
STL CITY/CO BLACK	13.6
STL CITY/CO WHITE	6.5
MO BLACK	13.2
MO WHITE	6.7
US BLACK	13.0
US WHITE	6.6

- Low birthweight infants are those born weighing less than 2,500 grams or about 5.5 pounds. Some are born prematurely, some are full-term but small for their gestational age and some are both premature and small. These infants are at higher risk of death or long term disability than infants of normal weight. Birth weight is one of the most important predictors of an infant's subsequent health and survival.
- The 1999-2001 average low birthweight rate for St. Louis City and Saint Louis County is about 20 percent higher than the comparative rates for Missouri and the US.
- The 1999-2001 average low birthweight rate for the African American population in St. Louis City and Saint Louis County is more than two times the rate for the white population in St. Louis City and Saint Louis County.



'99 - '01 LOW BIRTH WEIGHT (<5.5 LBS) BIRTHS (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
19. Gravois Park
20. Kosciusko
21. Soulard
22. Benton Park West
23. McKinley Heights
24. Fox Park
25. Tower Grove East
26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
44. Hi-Point
45. Wydown/Sinker
46. Skinker/DeBaliviere
47. DeBaliviere Place
48. West End
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50. Wells/Goodfellow
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52. Kingsway West
53. Fountain Park
54. Lewis Place
55. Kingsway East
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57. The Ville
58. Vandeventer
59. Jeff Cander Lou
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64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
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104. Calvary Cemetery
105. Bellefontaine Cemetery

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54. Moline Acres
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56. Northwoods
57. Norwood Court
58. Oakland
59. Olivette
60. Overland
61. Pacific

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63. Pasadena Hills
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77. University City
78. Uplands Park
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87. Westwood
88. Wilbur Park
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91. Woodson Terrace

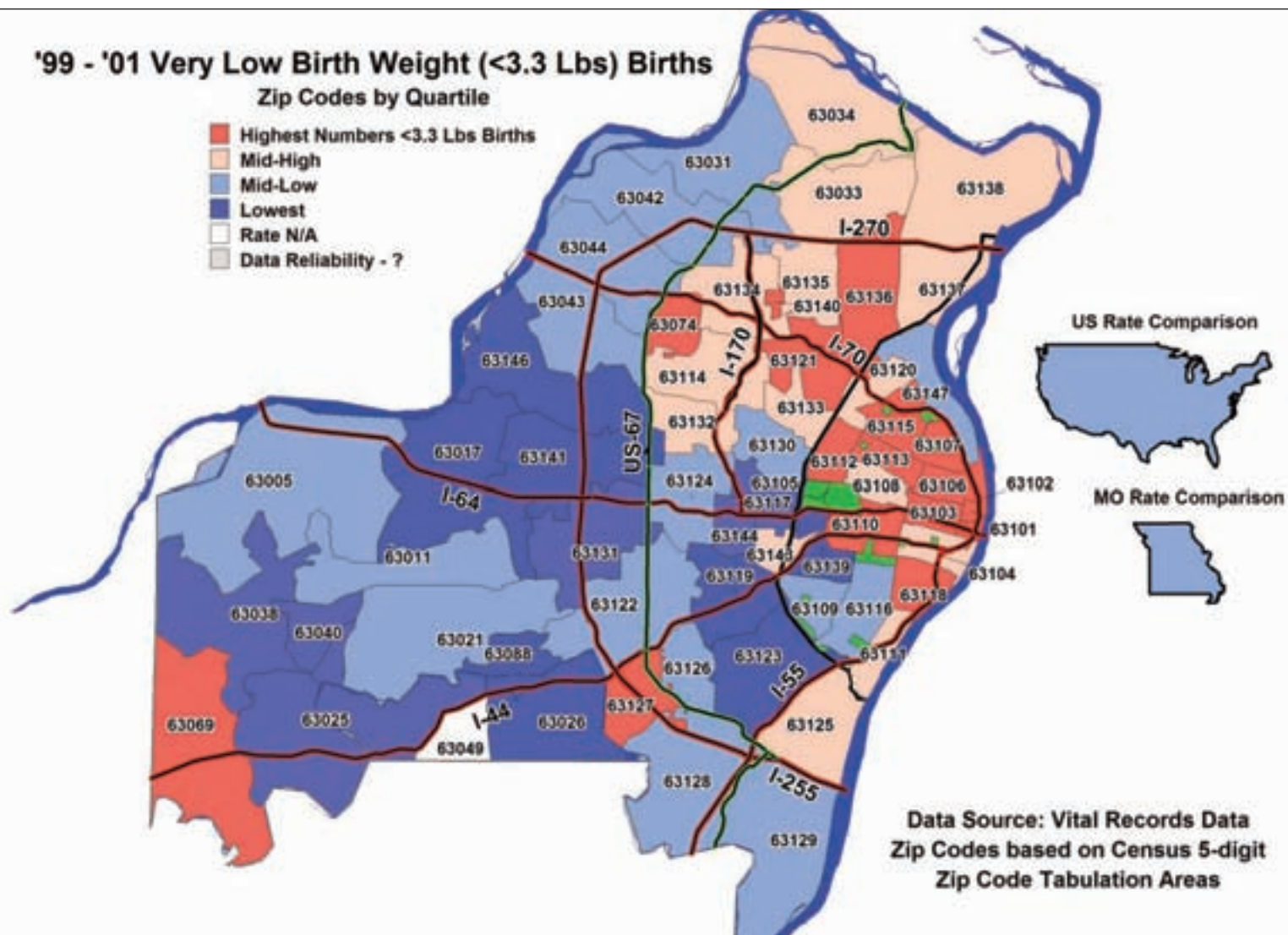
County - Unincorporated Areas

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U3. Bonhomme - unincorp
U4. Castle Point - unincorp
U5. Chesterfield - unincorp
U6. Clayton - unincorp
U7. Concord - unincorp
U8. Creve Coeur - unincorp
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U10. Florissant - unincorp
U11. Glasgow Village - unincorp
U12. Gravois - unincorp
U13. Hadley - unincorp
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U15. Jefferson - unincorp
U16. Lafayette - unincorp
U17. Lemay - unincorp
U18. Lewis and Clark - unincorp
U19. Maryland Heights - unincorp
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U21. Meramec - unincorp
U22. Midland - unincorp
U23. Missouri River - unincorp
U24. Normandy - unincorp
U25. Northwest - unincorp
U26. Norwood - unincorp
U27. Oakville - unincorp
U28. Queeny - unincorp
U29. Sappington - unincorp
U30. Spanish Lake
U31. St. Ferdinand - unincorp
U32. Tesson Ferry - unincorp
U33. University - unincorp

'99 - '01 Very Low Birth Weight (<3.3 Lbs) Births

Zip Codes by Quartile

- Highest Numbers <3.3 Lbs Births
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 VERY LOW BIRTH WEIGHT (<3.3 LBS) BIRTHS (*Zip Codes by Quartile*)**VERY LOW BIRTHWEIGHT
<1500 GRAMS***% of Live Births*

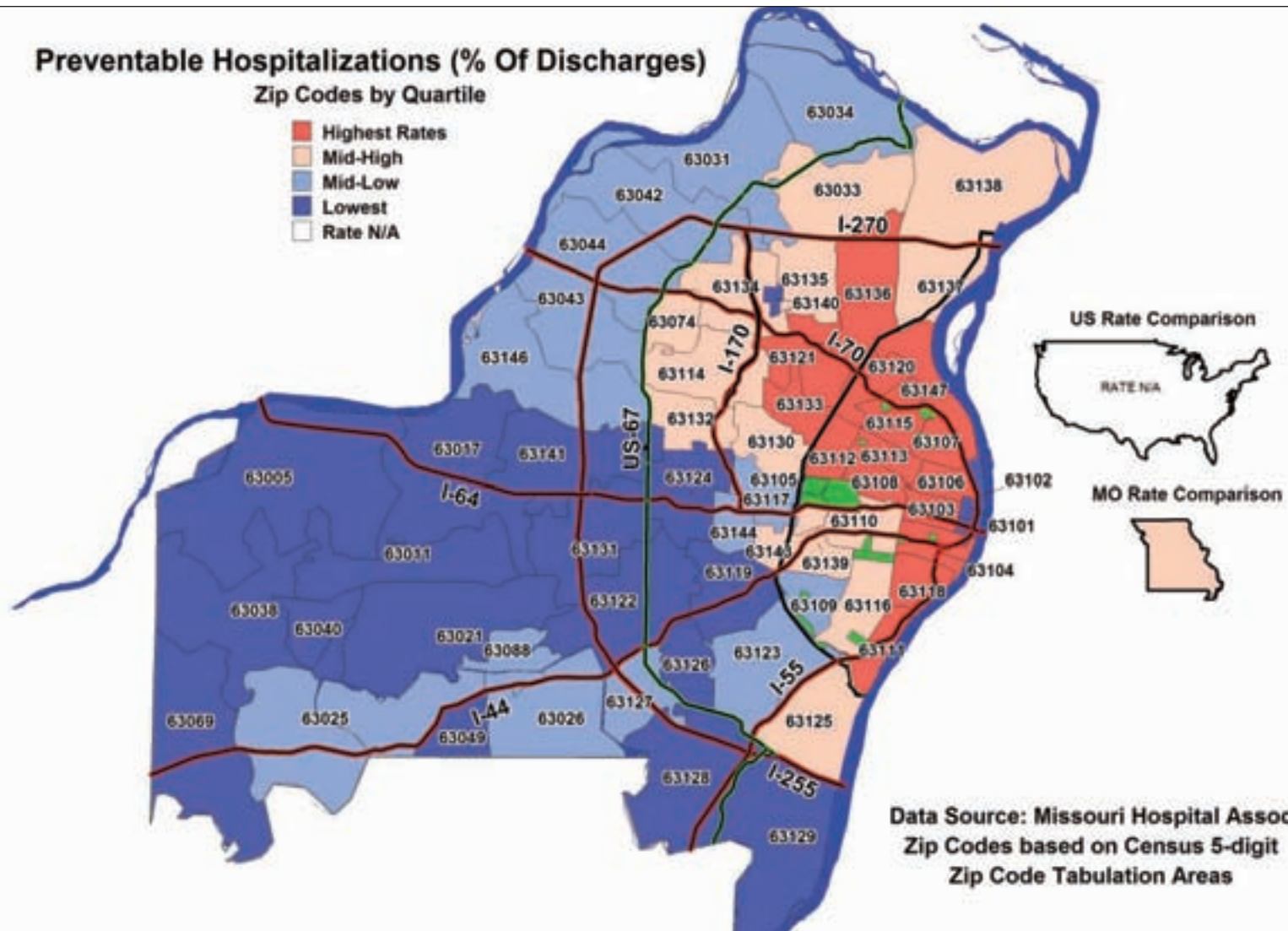
STL CITY	2.7
STL COUNTY	1.5
STL CITY/CO	1.9
MO	1.4
US	1.4
STL CITY BLACK	3.5
STL CITY WHITE	1.4
STL CO BLACK	3.0
STL CO WHITE	1.0
STL CITY/CO BLACK	3.3
STL CITY/CO WHITE	1.1
MO BLACK	3.1
MO WHITE	1.2
US BLACK	3.1
US WHITE	1.1

- Very low birthweight infants are those born weighing less than 1500 grams or about 3.3 pounds. These children have the greatest risk for long-term mental and physical handicap and infant death.
- The 1999-2001 average very low birthweight rate for St. Louis City and Saint Louis County is 36% higher than the comparative rates for Missouri and the US.
- The 1999-2001 average very low birthweight rate for the African-American population in St. Louis City and Saint Louis County is three times the rate for the white population in St. Louis City and Saint Louis County.

Preventable Hospitalizations (% Of Discharges)

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A



PREVENTABLE HOSPITALIZATIONS (% OF DISCHARGES) (Zip Codes by Quartile)**PREVENTABLE
HOSPITALIZATIONS***Rate per 1,000 Population age 0-64*

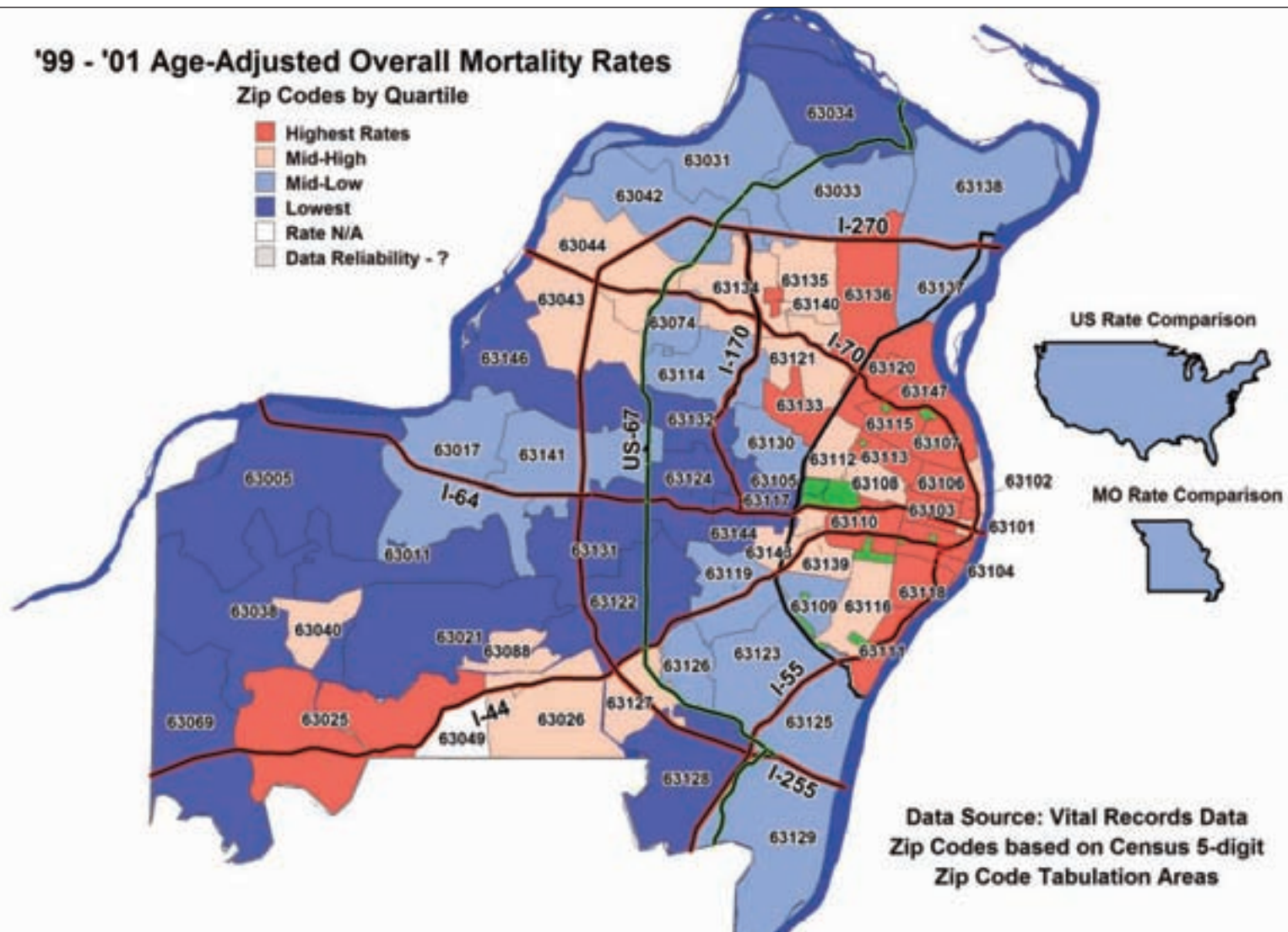
STL CITY	27.2
STL COUNTY	13.3
STL CITY/CO	16.7
MO	16.1
US	N/A
STL CITY BLACK	34.9
STL CITY WHITE	17.0
STL CO BLACK	29.1
STL CO WHITE	9.8
STL CITY/CO BLACK	32.0
STL CITY/CO WHITE	10.9
MO BLACK	29.0
MO WHITE	14.2
US BLACK	N/A
US WHITE	N/A

- Research shows that inpatient hospitalizations for certain health conditions could possibly be avoided if patients were able to access timely and appropriate outpatient health care. Examples of such conditions include diabetes, asthma, congestive health failure and some forms of pneumonia. Hospitalizations for these types of disease are referred to as “avoidable hospitalizations”.
- The 1998-2000 preventable hospitalization rate for St. Louis City and Saint Louis County is about the same as the comparative Missouri rate.
- The 1998-2000 preventable hospitalization rate for the African-American population in St. Louis City and Saint Louis County is close to three times the St. Louis City and Saint Louis County white rate.
- The 1998-2000 preventable hospitalization rate for the African-American population in Saint Louis County is similar to the comparative African-American rate for Missouri. However, the rate for the African-American population in St. Louis City is 20 percent higher than the comparative African-American rate for Missouri.

'99 - '01 Age-Adjusted Overall Mortality Rates

Zip Codes by Quartile

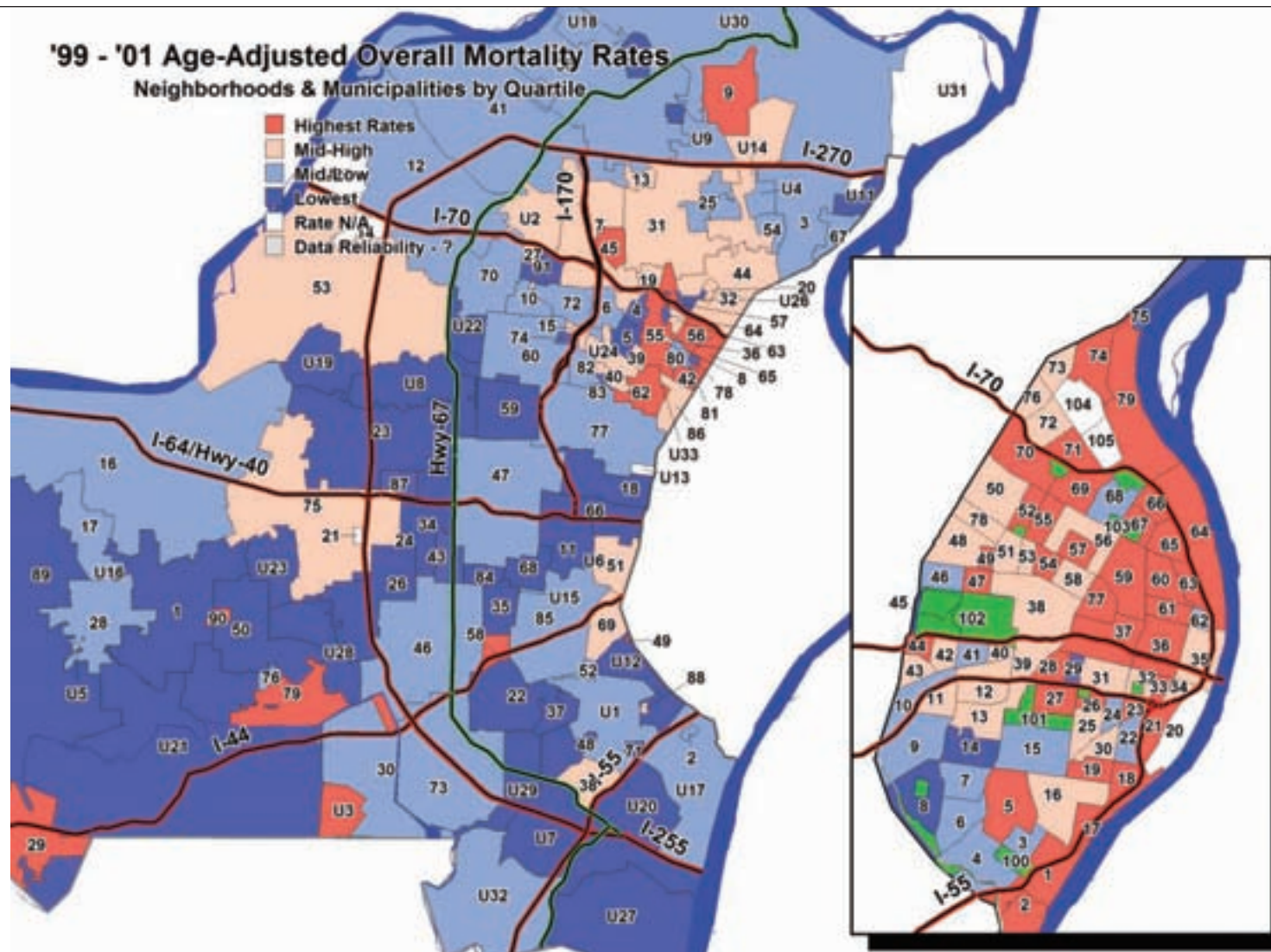
- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 AGE-ADJUSTED OVERALL MORTALITY RATES (*Zip Codes by Quartile*)**OVERALL MORTALITY***Age-adjusted rates per 100,000*

STL CITY	1,175.7
STL COUNTY	862.7
STL CITY/CO	937.9
MO	934.8
US	863.0
STL CITY BLACK	1,281.9
STL CITY WHITE	1,111.3
STL CO BLACK	1,073.7
STL CO WHITE	839.4
STL CITY/CO BLACK	1,164.4
STL CITY/CO WHITE	882.7
MO BLACK	1,180.5
MO WHITE	924.3
US BLACK	1,118.9
US WHITE	879.1

- Overall mortality rates are important in identifying high-risk populations and geographic differences.
- The 1999-2001 average age-adjusted overall mortality rate for St. Louis City and Saint Louis County is the same as the Missouri rate but close to 10 percent higher than the US rate.
- The 1999-2001 average age-adjusted overall mortality rate for African Americans in St Louis City and County is one-third higher than the rate for white overall mortality.
- The 1999-2001 average age-adjusted overall mortality rate for St. Louis City and County for both African Americans and whites is very similar to comparative rates for Missouri and the US by race.



'99 - '01 AGE-ADJUSTED OVERALL MORTALITY RATES (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
19. Gravois Park
20. Kosciusko
21. Soulard
22. Benton Park West
23. McKinley Heights
24. Fox Park
25. Tower Grove East
26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
44. Hi-Point
45. Wydown/Skinker
46. Skinker/DeBaliviere
47. DeBaliviere Place
48. West End
49. Visitation Park
50. Wells/Goodfellow
51. Academy
52. Kingsway West
53. Fountain Park
54. Lewis Place
55. Kingsway East
56. The Greater Ville
57. The Ville
58. Vandeventer
59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
73. North Point

74. Riverview
76. Walnut Park West
77. Covenant Blu/Grand Center
78. Hamilton Heights
79. North Riverfront
100. Carondelet Park
101. Tower Grove Park
102. Forest Park
103. Fairground Park
104. Calvary Cemetery
105. Bellefontaine Cemetery

County Municipalities

1. Ballwin
5. Bel-Nor
6. Bel-Ridge
2. Bella Villa
3. Bellefontaine Neighbors
4. Bellerive
7. Berkeley
8. Beverly Hills
9. Black Jack
10. Breckenridge Hills
11. Brentwood
12. Bridgeton
13. Calverton Park
14. Champ
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24. Crystal Lake Park

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39. Greendale
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42. Hillsdale
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45. Kinloch
46. Kirkwood
47. Ladue
48. Lakeshire
49. Mackenzie
50. Manchester
51. Maplewood
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53. Maryland Heights
54. Moline Acres
55. Normandy
56. Northwoods
57. Norwood Court
58. Oakland
59. Olivette
60. Overland
61. Pacific

62. Pagedale
63. Pasadena Hills
64. Pasadena Park
65. Pine Lawn
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67. Riverview
68. Rock Hill
69. Shrewsbury
70. St. Ann
71. St. George
72. St. John
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74. Sycamore Hills
75. Town and Country
76. Twin Oaks
77. University City
78. Uplands Park
79. Valley Park
80. Velda City
81. Velda Village Hills
82. Vinita Park
83. Vinita Terrace
84. Warson Woods
85. Webster Groves
86. Wellston
87. Westwood
88. Wilbur Park
89. Wildwood
90. Winchester
91. Woodson Terrace

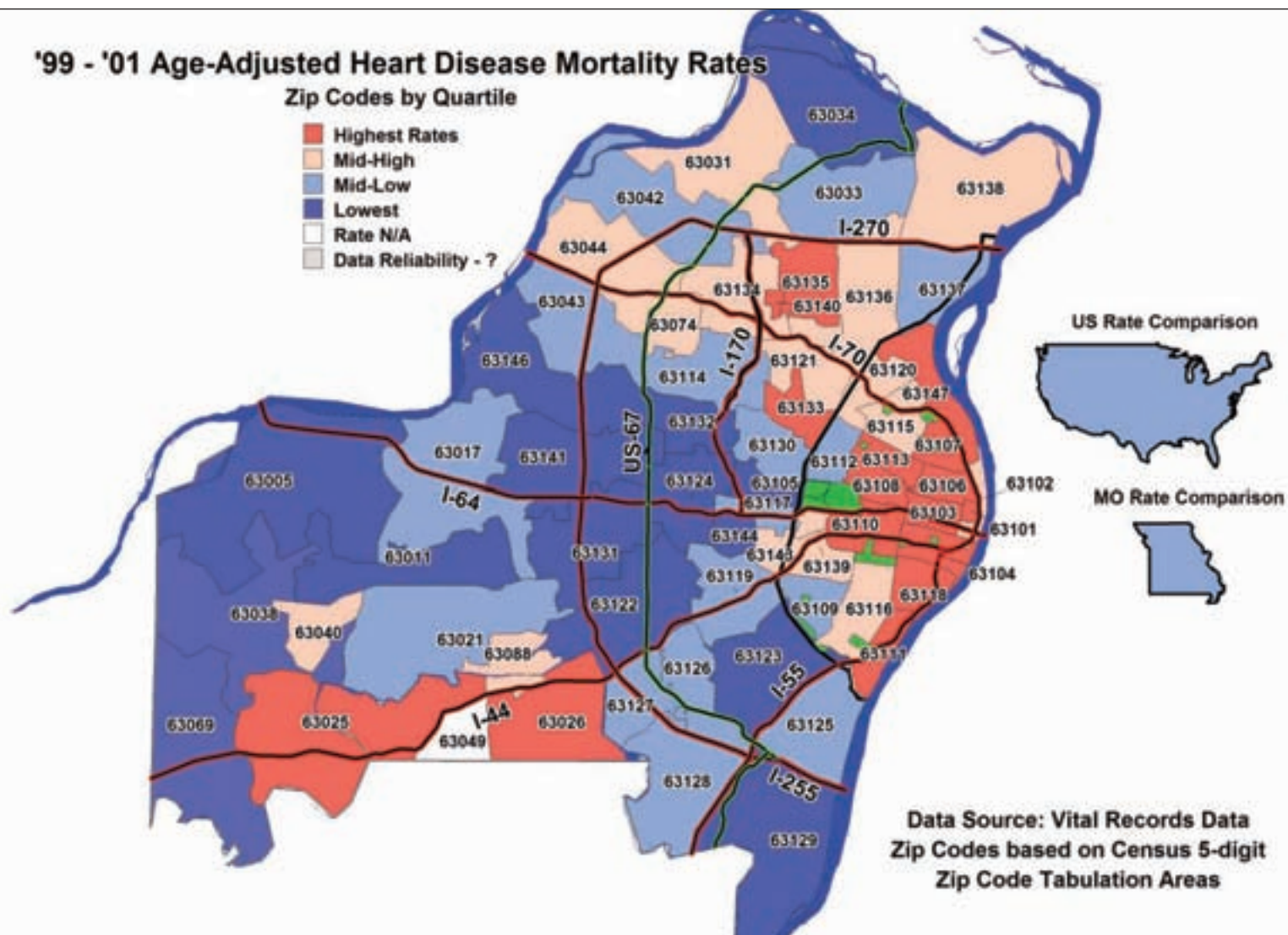
County - Unincorporated Areas

U1. Afton - unincorp
U2. Airport - unincorp
U3. Bonhomme - unincorp
U4. Castle Point - unincorp
U5. Chesterfield - unincorp
U6. Clayton - unincorp
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U19. Maryland Heights - unincorp
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U21. Meramec - unincorp
U22. Midland - unincorp
U23. Missouri River - unincorp
U24. Normandy - unincorp
U25. Northwest - unincorp
U26. Norwood - unincorp
U27. Oakville - unincorp
U28. Queeny - unincorp
U29. Sappington - unincorp
U30. Spanish Lake
U31. St. Ferdinand - unincorp
U32. Tesson Ferry - unincorp
U33. University - unincorp

'99 - '01 Age-Adjusted Heart Disease Mortality Rates

Zip Codes by Quartile

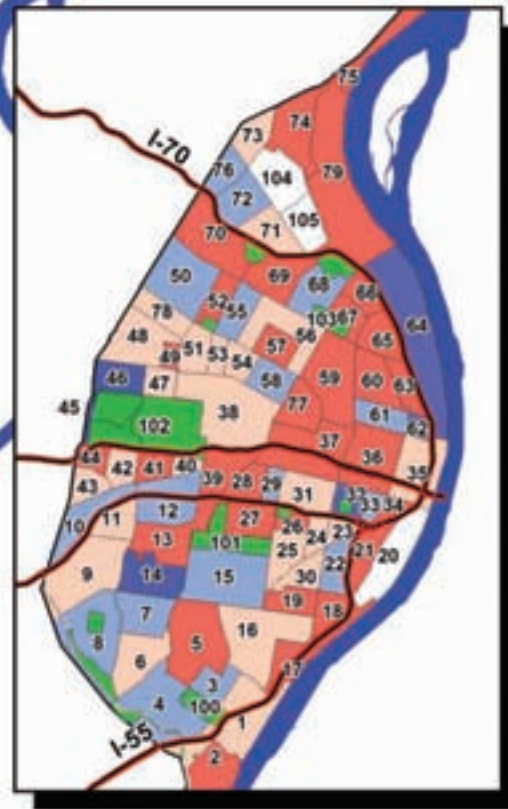
- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 AGE-ADJUSTED HEART DISEASE MORTALITY RATES (*Zip Codes by Quartile*)**HEART DISEASE MORTALITY***Age-adjusted rates per 100,000*

STL CITY	375.0
STL COUNTY	283.7
STL CITY/CO	305.3
MO	291.7
US	258.9
STL CITY BLACK	382.5
STL CITY WHITE	378.2
STL CO BLACK	341.7
STL CO WHITE	278.9
STL CITY/CO BLACK	359.4
STL CITY/CO WHITE	294.8
MO BLACK	350.1
MO WHITE	290.6
US BLACK	322.6
US WHITE	264.3

- Heart disease is a common cause of ill health and the number one cause of death in the St. Louis region as well as the nation. Controllable risk factors associated with heart disease include cigarette smoking, high cholesterol levels, obesity, high blood pressure and physical inactivity.
- The 1999-2001 average age-adjusted mortality rate due to heart disease for St. Louis City and Saint Louis County is only slightly higher than the Missouri rate but close to 20% higher than the US rate.
- The 1999-2001 average age-adjusted rate for heart disease mortality in African Americans in St. Louis City and Saint Louis County is more than 20% higher than the rate for the white population for the same time period.
- The 1999-2001 average age-adjusted rate for heart disease mortality for both African Americans and whites is very similar to the Missouri rates by race but is slightly over 10% higher than the US rates for both races.



'99 - '01 AGE-ADJUSTED HEART DISEASE MORTALITY RATES (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
19. Gravois Park
20. Kosciusko
21. Soulard
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23. McKinley Heights
24. Fox Park
25. Tower Grove East
26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
44. Hi-Point
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46. Skinker/DeBaliviere
47. DeBaliviere Place
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54. Lewis Place
55. Kingsway East
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57. The Ville
58. Vandeventer
59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
73. North Point

74. Riverview
76. Walnut Park West
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78. Hamilton Heights
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105. Bellefontaine Cemetery

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3. Bellefontaine Neighbors
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13. Calverton Park
14. Champ
15. Charlack
16. Chesterfield
17. Clarkson Valley
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24. Crystal Lake Park

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47. Ladue
48. Lakeshire
49. Mackenzie
50. Manchester
51. Maplewood
52. Marlborough
53. Maryland Heights
54. Moline Acres
55. Normandy
56. Northwoods
57. Norwood Court
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60. Overland
61. Pacific

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64. Pasadena Park
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67. Riverview
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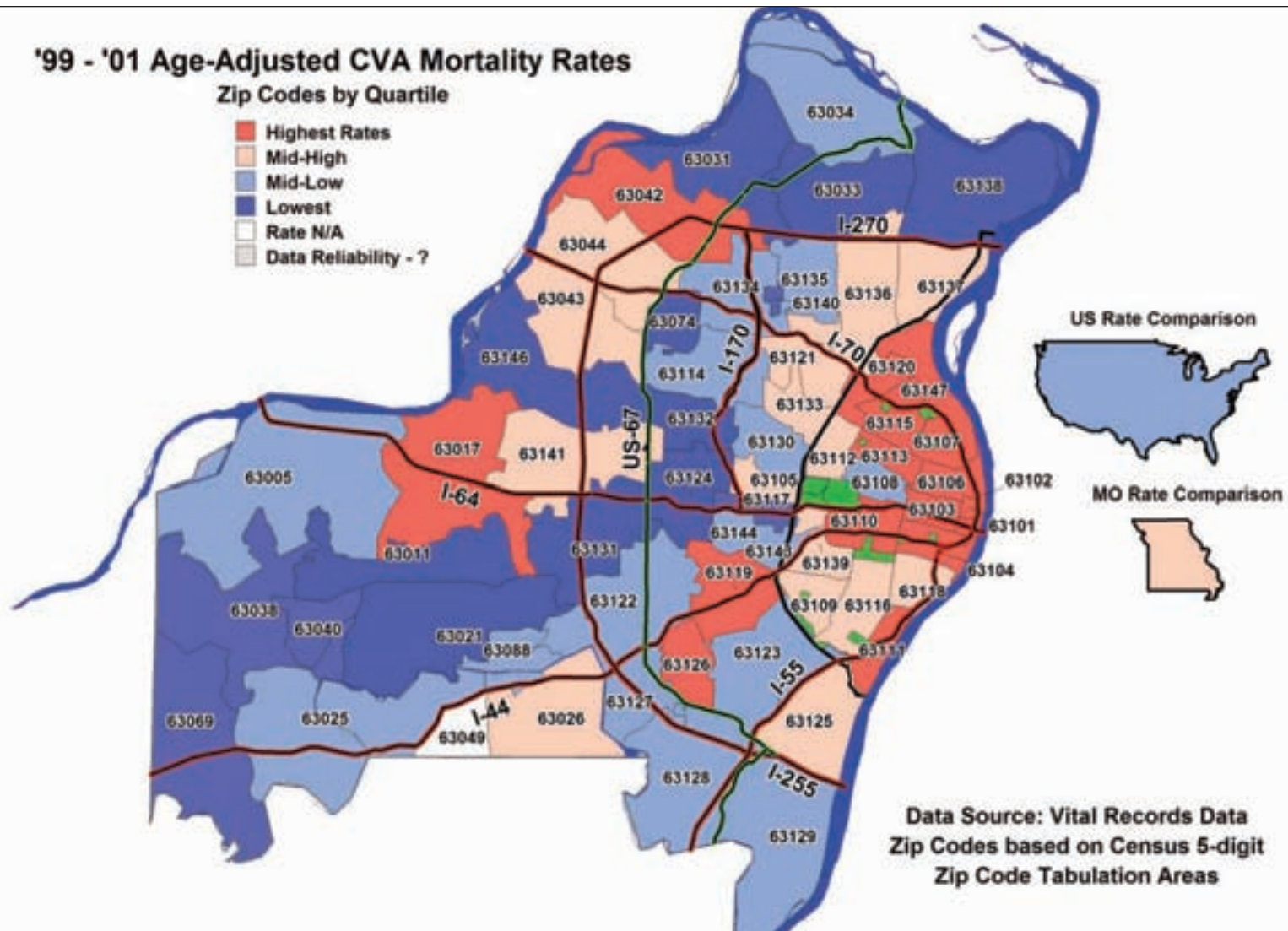
County - Unincorporated Areas

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U5. Chesterfield - unincorp
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U26. Norwood - unincorp
U27. Oakville - unincorp
U28. Queeny - unincorp
U29. Sappington - unincorp
U30. Spanish Lake
U31. St. Ferdinand - unincorp
U32. Tesson Ferry - unincorp
U33. University - unincorp

'99 - '01 Age-Adjusted CVA Mortality Rates

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 AGE-ADJUSTED CVA MORTALITY RATES (*Zip Codes by Quartile*)**CEREBROVASCULAR DISEASE
MORTALITY***Age-adjusted rates per 100,000*

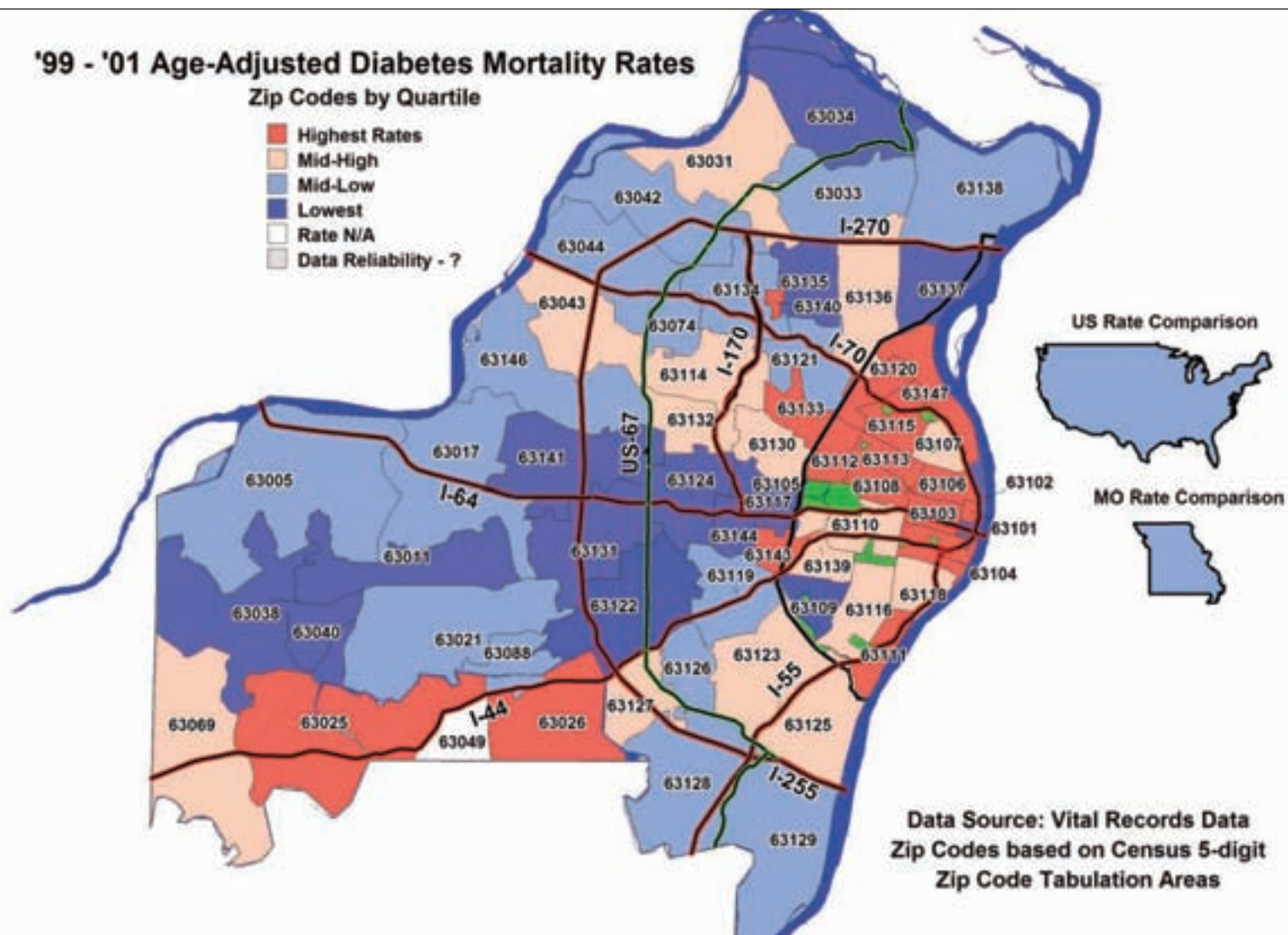
STL CITY	75.4
STL COUNTY	59.1
STL CITY/CO	62.9
MO	65.4
US	60.4
STL CITY BLACK	78.9
STL CITY WHITE	73.7
STL CO BLACK	69.7
STL CO WHITE	58.0
STL CITY/CO BLACK	73.4
STL CITY/CO WHITE	60.5
MO BLACK	77.2
MO WHITE	65.1
US BLACK	79.6
US WHITE	60.6

- Cerebrovascular disease (CVA) or “stroke” is the third leading cause of death in St. Louis City and Saint Louis County as well as in the nation. African Americans are at a much greater risk of death due to CVA, in part due to a greater incidence of high blood pressure. Controllable risk factors include cigarette smoking and taking medications for high blood pressure control.
- The 1999-2001 average age-adjusted mortality rate of CVA for St. Louis City and Saint Louis County is close to the rates for Missouri and the US.
- The 1999-2001 average age-adjusted rate for CVA mortality for African Americans in St. Louis City and Saint Louis County is over 20% higher than in the white population in St. Louis City and Saint Louis County for the same time period.
- The 1999-2001 average age-adjusted rate for CVA mortality for St. Louis African Americans is slightly less than the respective race related rates for Missouri and for US. The US white comparative rate is the same.

'99 - '01 Age-Adjusted Diabetes Mortality Rates

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 AGE-ADJUSTED DIABETES MORTALITY RATES (*Zip Codes by Quartile*)**DIABETES MORTALITY***Age-adjusted rates per 100,000*

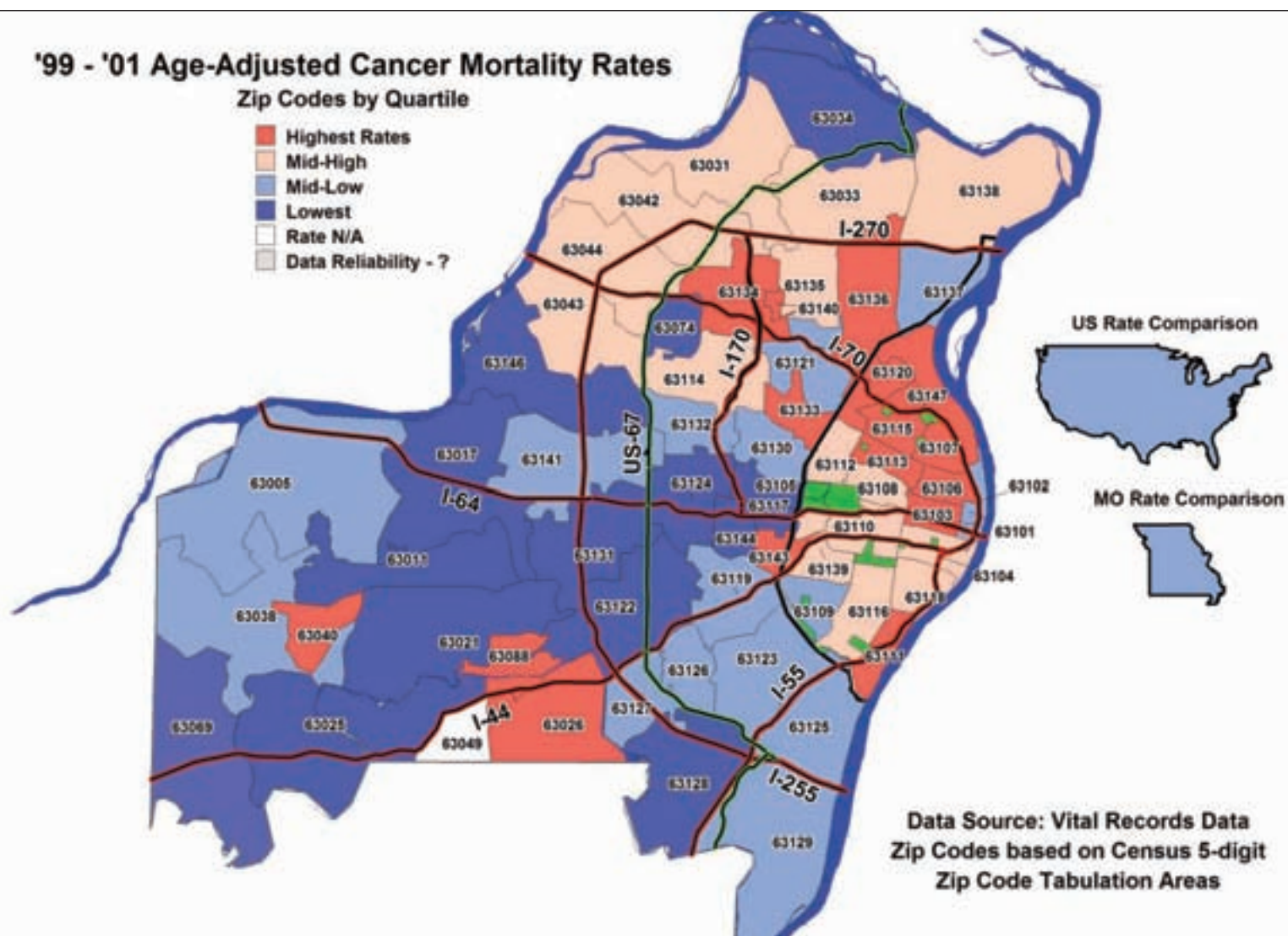
STL CITY	40.8
STL COUNTY	23.5
STL CITY/CO	27.6
MO	25.6
US	24.8
STL CITY BLACK	53.4
STL CITY WHITE	31.1
STL CO BLACK	37.7
STL CO WHITE	21.9
STL CITY/CO BLACK	45.3
STL CITY/CO WHITE	23.4
MO BLACK	49.6
MO WHITE	23.9
US BLACK	49.2
US WHITE	23.3

- There are two types of diabetes: Type 1 most often appears during childhood or adolescence. Type 2 represents over 95% of all diabetes cases and is linked to obesity and inactivity. African Americans are twice as likely as whites to have diabetes.
- The 1999-2001 average age-adjusted mortality rate from diabetes for St. Louis City and Saint Louis County is about 10 percent higher than the comparative rates for Missouri and the US.
- The 1999-2001 average age-adjusted rate from diabetes mortality for African Americans in St. Louis City and Saint Louis County is almost two times the rate in the white population in St. Louis City and Saint Louis County.

'99 - '01 Age-Adjusted Cancer Mortality Rates

Zip Codes by Quartile

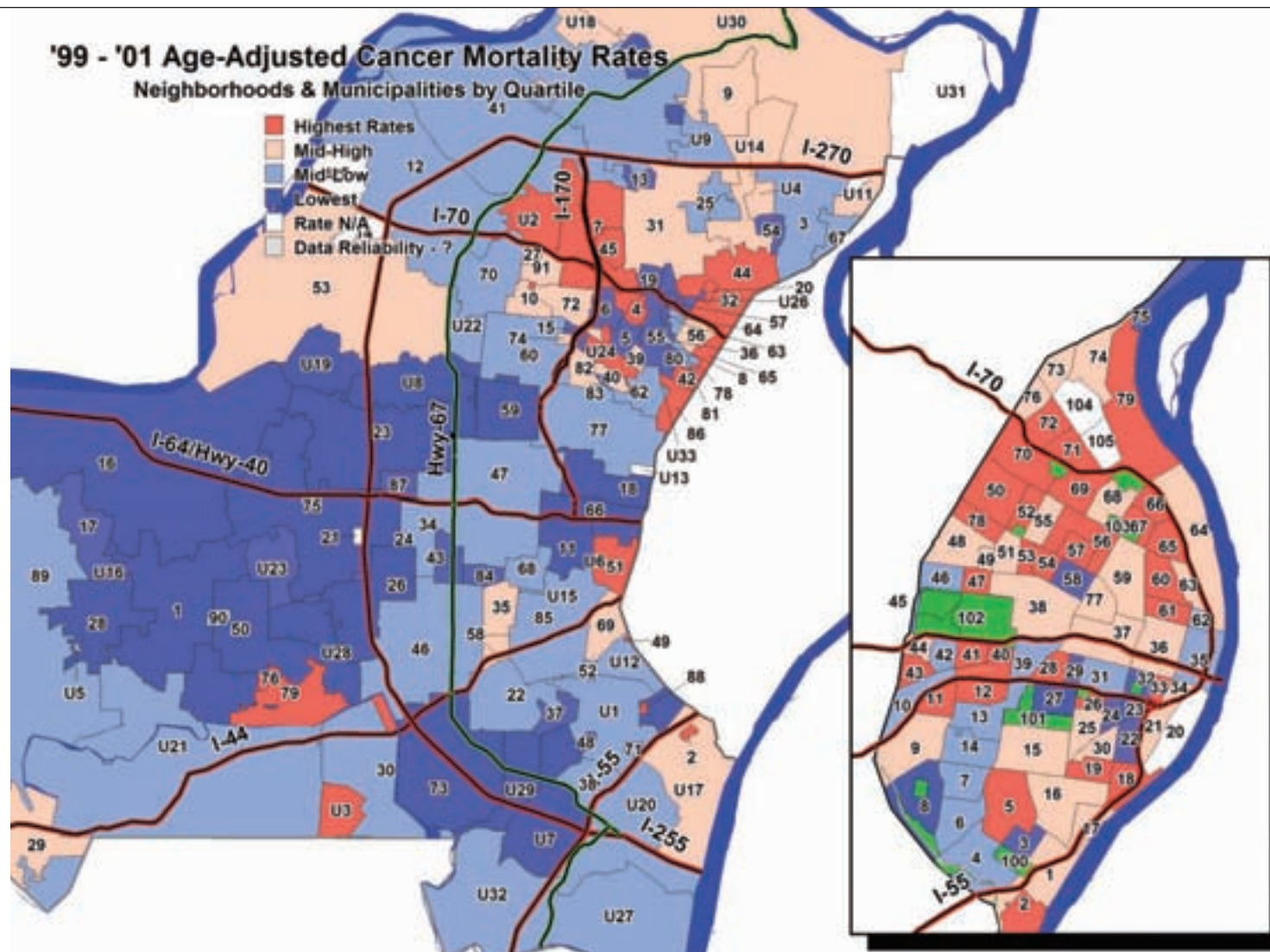
- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 AGE-ADJUSTED CANCER MORTALITY RATES (*Zip Codes by Quartile*)**CANCER MORTALITY***Age-adjusted rates per 100,000*

STL CITY	239.1
STL COUNTY	195.6
STL CITY/CO	205.6
MO	208.0
US	198.6
STL CITY BLACK	267.8
STL CITY WHITE	223.4
STL CO BLACK	254.2
STL CO WHITE	189.1
STL CITY/CO BLACK	259.1
STL CITY/CO WHITE	194.9
MO BLACK	264.7
MO WHITE	206.3
US BLACK	250.2
US WHITE	203.5

- Cancer is the second leading cause of death in the US, as well as in St. Louis City and Saint Louis County. Increased prevention and early detection activities will reduce future incidence and mortality rates. Tobacco use is the single most recognized cause of cancer.
- The 1999-2001 average age-adjusted mortality rate from all cancers for St. Louis City and Saint Louis County is about the same as the comparative rates for Missouri and the US.
- The 1999-2001 average age-adjusted rate for cancer mortality for African Americans in St. Louis City and Saint Louis County is 33 percent higher than for the white population in St. Louis City and Saint Louis County for the same time period.
- The 1999-2001 average age-adjusted cancer mortality rate in St. Louis City and Saint Louis County is slightly lower for both races when compared to Missouri. The region African-American rate is slightly higher than the US comparative rate for African Americans.



'99 - '01 AGE-ADJUSTED CANCER MORTALITY RATES (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
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26. Compton Heights
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32. Lafayette Square
33. Peabody, Darst, Webbe
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35. Downtown
36. Downtown West

37. Midtown
38. Central West End
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42. Clayton/Tamm
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64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
73. North Point

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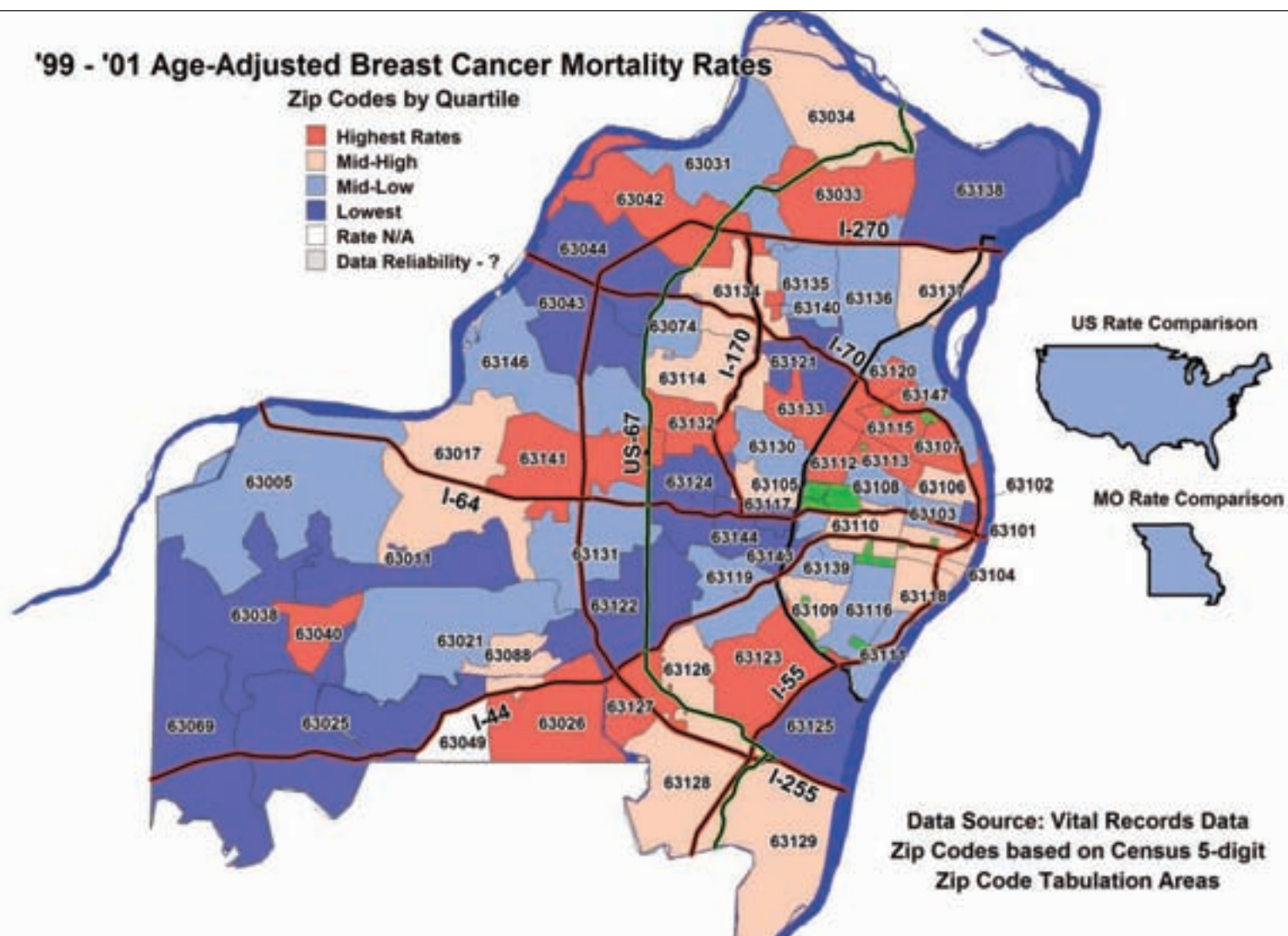
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U13. Hadley - unincorp
U14. Halls Ferry - unincorp
U15. Jefferson - unincorp
U16. Lafayette - unincorp
U17. Lemay - unincorp
U18. Lewis and Clark - unincorp
U19. Maryland Heights - unincorp
U20. Mehlville - unincorp
U21. Meramec - unincorp
U22. Midland - unincorp
U23. Missouri River - unincorp
U24. Normandy - unincorp
U25. Northwest - unincorp
U26. Norwood - unincorp
U27. Oakville - unincorp
U28. Queeny - unincorp
U29. Sappington - unincorp
U30. Spanish Lake
U31. St. Ferdinand - unincorp
U32. Tesson Ferry - unincorp
U33. University - unincorp

'99 - '01 Age-Adjusted Breast Cancer Mortality Rates

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 AGE-ADJUSTED BREAST CANCER MORTALITY RATES (*Zip Codes by Quartile*)**BREAST CANCER MORTALITY***Age-adjusted rates per 100,000*

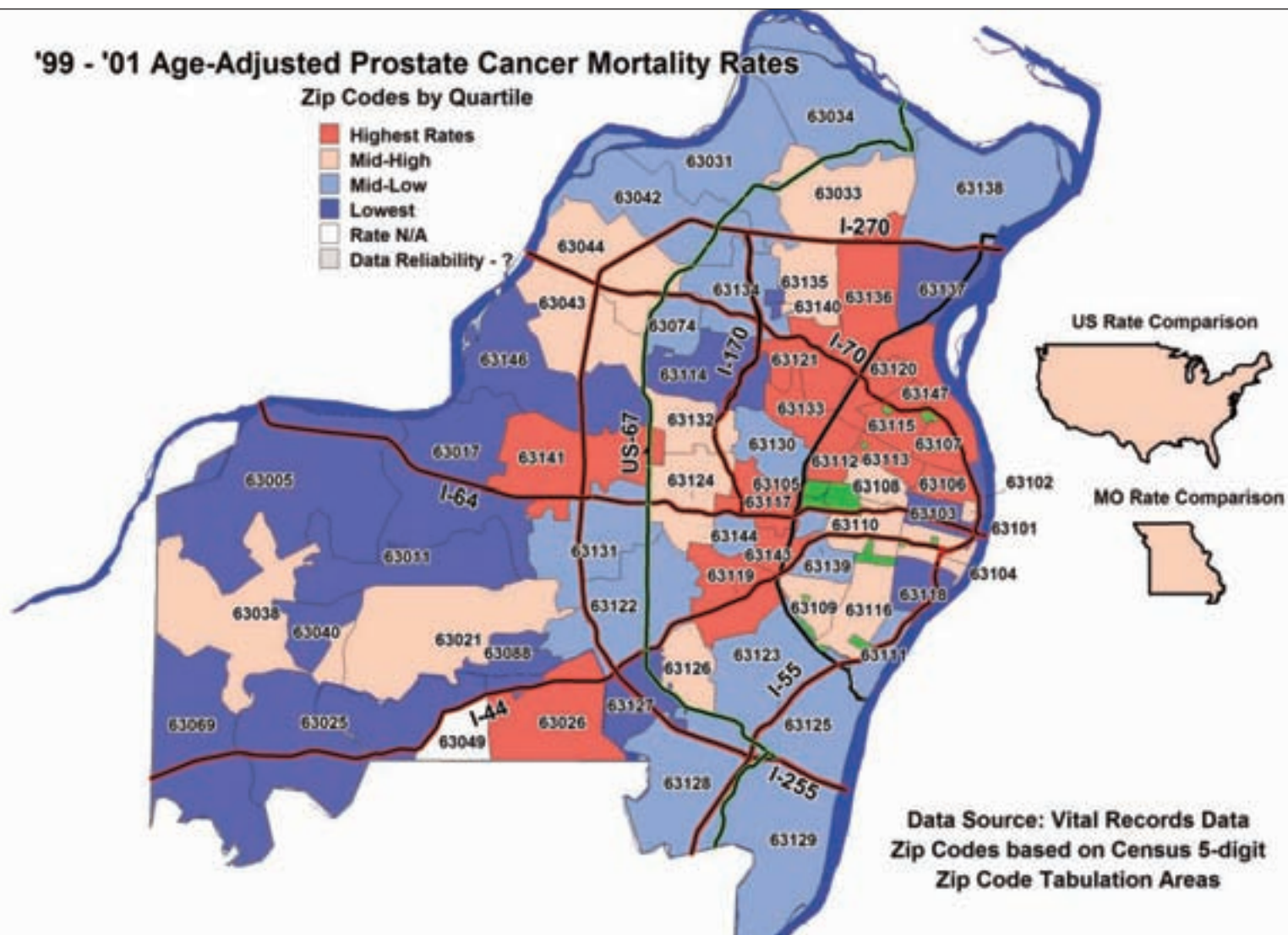
STL CITY	18.7
STL COUNTY	16.9
STL CITY/CO	17.3
MO	15.5
US	15.1
STL CITY BLACK	21.8
STL CITY WHITE	16.7
STL CO BLACK	20.3
STL CO WHITE	16.5
STL CITY/CO BLACK	21.0
STL CITY/CO WHITE	16.5
MO BLACK	21.0
MO WHITE	15.2
US BLACK	20.7
US WHITE	15.3

- In women, breast cancer is the second leading cause of deaths due to cancer. African-American women develop breast cancer less often than white women, but they have higher mortality rates.
- The 1999-2001 average age-adjusted breast cancer mortality rate for St. Louis City and Saint Louis County is, respectively, 12 and 15 percent higher than the comparative Missouri and US rates.
- The 1999-2001 age-adjusted breast cancer mortality rate for African Americans in St. Louis City and Saint Louis County is 27 percent higher than in the white population in St. Louis City and Saint Louis County.
- The 1999-2001 average age adjusted breast cancer mortality rate in St. Louis City and Saint Louis County for African Americans is about the same as the comparative rates for Missouri and the US. However, the mortality rate for the white population in St. Louis City and Saint Louis County is nearly 10 percent higher than the comparative rates for Missouri and the US.

'99 - '01 Age-Adjusted Prostate Cancer Mortality Rates

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 AGE-ADJUSTED PROSTATE CANCER MORTALITY RATES (*Zip Codes by Quartile*)**PROSTATE CANCER MORTALITY***Age-adjusted rates per 100,000*

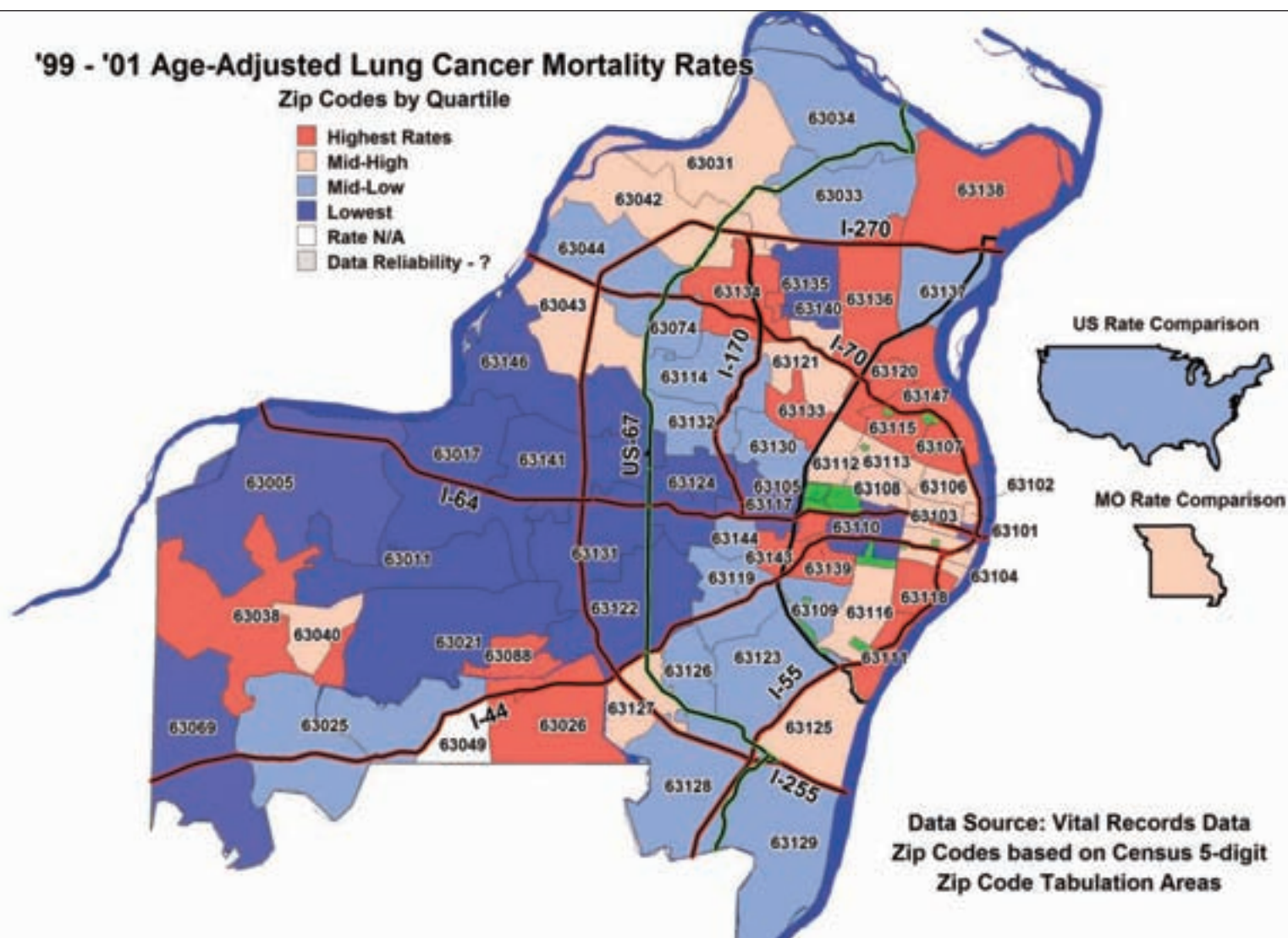
STL CITY	13.5
STL COUNTY	9.6
STL CITY/CO	10.6
MO	10.3
US	11.3
STL CITY BLACK	17.7
STL CITY WHITE	10.5
STL CO BLACK	18.5
STL CO WHITE	8.8
STL CITY/CO BLACK	18.1
STL CITY/CO WHITE	9.1
MO BLACK	20.5
MO WHITE	9.6
US BLACK	23.4
US WHITE	10.7

- Prostate cancer is the most common type of cancer in men in the US (other than skin cancer). Of all the men who are diagnosed with cancer each year, more than one-fourth have prostate cancer. African-American men are 50 percent more likely to develop prostate cancer than men of any other racial or ethnic group. African-American men in the US have the highest reported rate of prostate cancer worldwide.
- The 1999-2001 average age-adjusted prostate cancer mortality rate in St. Louis City and Saint Louis County is slightly higher than the Missouri comparative rate but slightly lower than the US rate.
- In St. Louis City and Saint Louis County, the 1999-2001 average age-adjusted prostate cancer mortality rate for African Americans is twice as high as the rate in the white population.
- The mortality rates, for both the African-American and the whites in St. Louis City and Saint Louis County are lower than the respective comparative rates for Missouri and the US.

'99 - '01 Age-Adjusted Lung Cancer Mortality Rates

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 AGE-ADJUSTED LUNG CANCER MORTALITY RATES (*Zip Codes by Quartile*)**LUNG CANCER MORTALITY***Age-adjusted rates per 100,000*

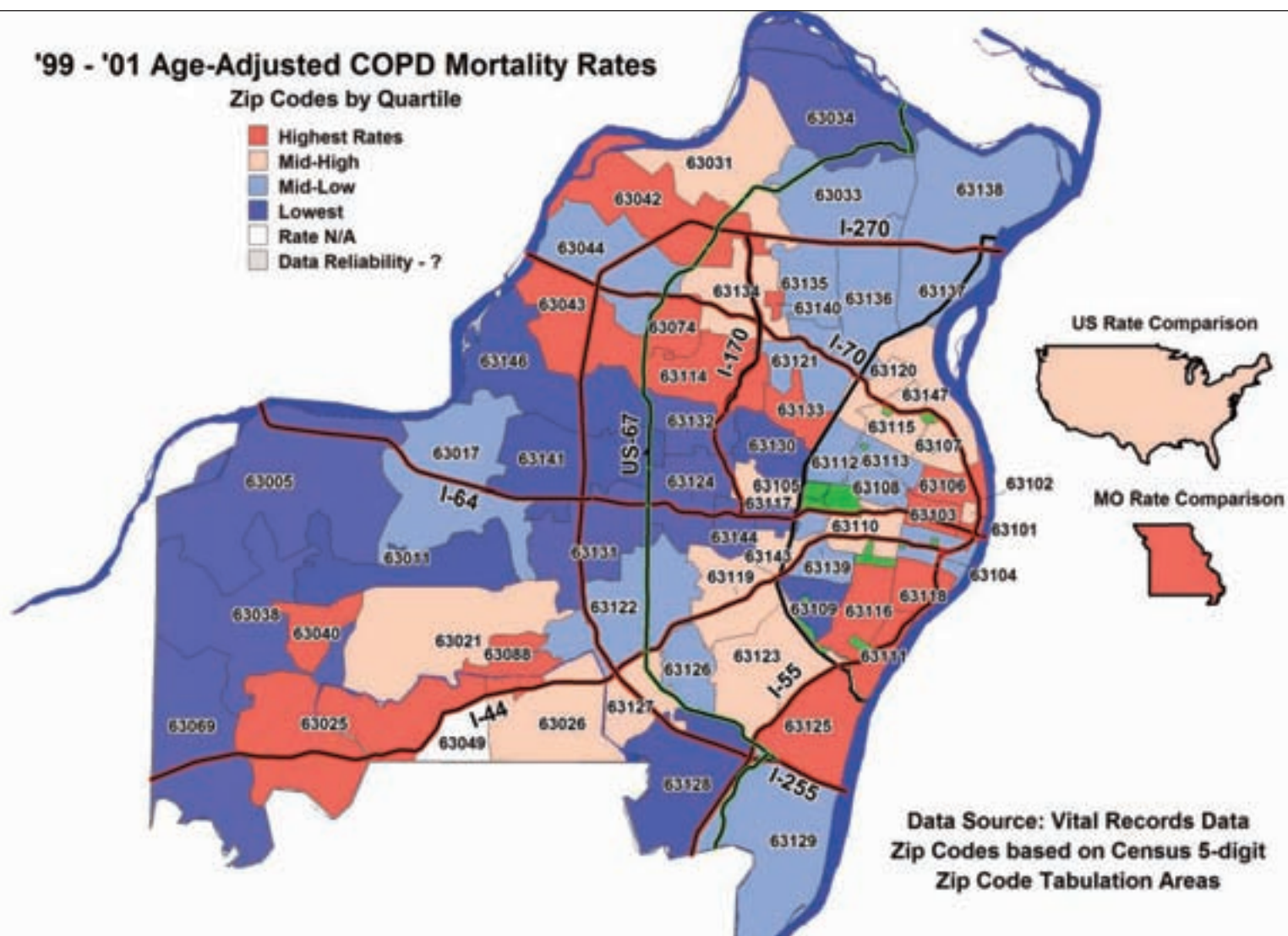
STL CITY	71.5
STL COUNTY	54.5
STL CITY/CO	58.4
MO	63.0
US	55.4
STL CITY BLACK	79.3
STL CITY WHITE	67.6
STL CO BLACK	66.0
STL CO WHITE	53.7
STL CITY/CO BLACK	72.7
STL CITY/CO WHITE	55.7
MO BLACK	75.9
MO WHITE	62.9
US BLACK	65.0
US WHITE	57.4

- Lung cancer is now the most common form of cancer diagnosed in the US. Lung cancer accounts for 28% of all cancer deaths. Cigarette smoking is responsible for an estimated 87% of lung cancer deaths. The incident rate of lung cancer for African-American males is more than 54% higher than that of white men.
- The 1999-2001 average age-adjusted lung cancer mortality rate in St. Louis City and Saint Louis County is slightly lower than the Missouri rate but slightly higher than the US rate.
- The 1999-2001 average age-adjusted lung cancer mortality rate for African Americans in St. Louis City and Saint Louis County is over 30 percent higher than in the white population in St. Louis City and Saint Louis County.
- The 1999-2001 average age-adjusted lung cancer mortality rate in African Americans in St. Louis City and Saint Louis County is slightly lower than the Missouri rate for African Americans but over ten percent higher than the US African American rate.

'99 - '01 Age-Adjusted COPD Mortality Rates

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 AGE-ADJUSTED COPD MORTALITY RATES (*Zip Codes by Quartile*)**COPD MORTALITY***Age-adjusted rates per 100,000*

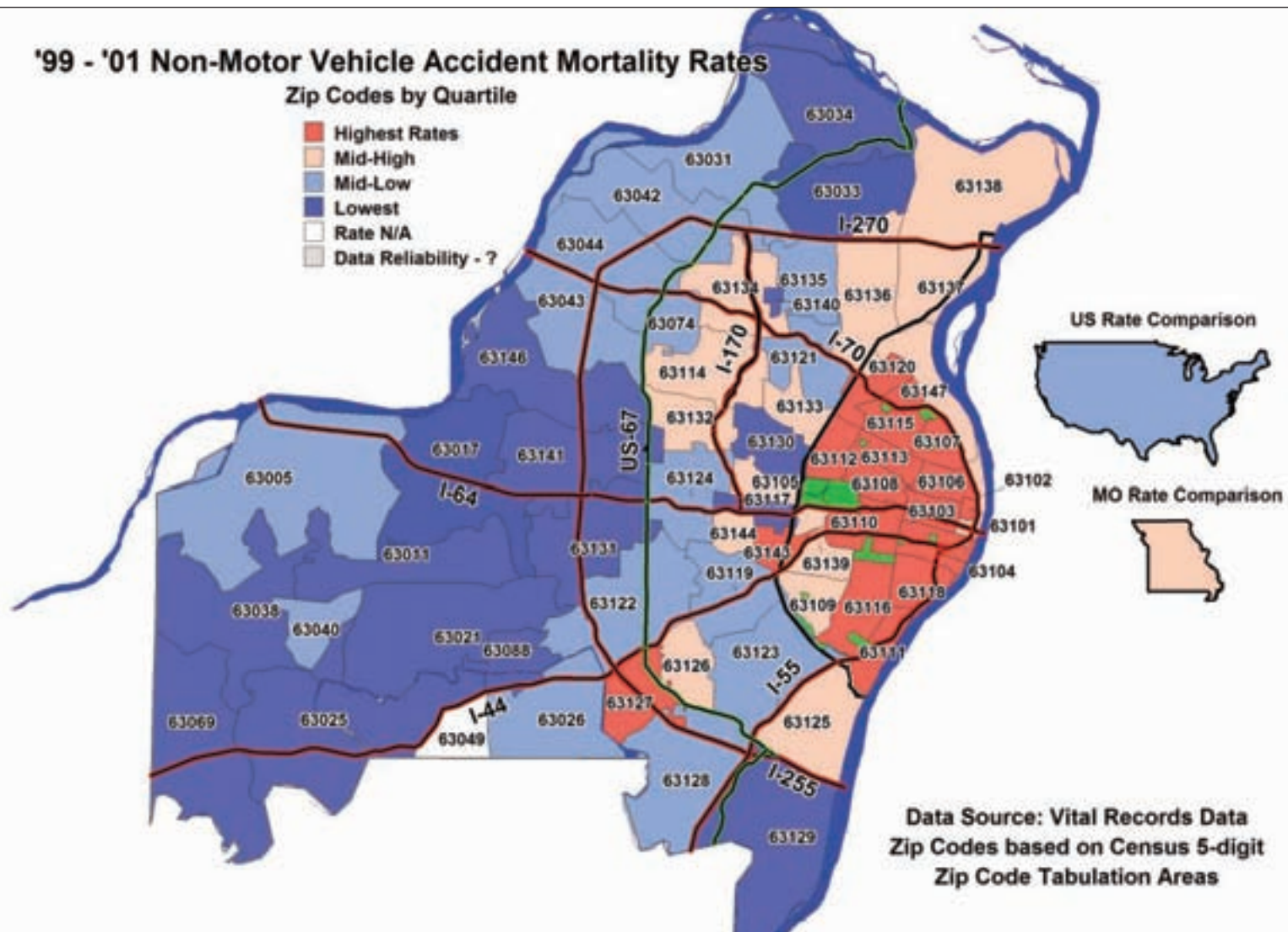
STL CITY	43.7
STL COUNTY	37.8
STL CITY/CO	39.1
MO	49.1
US	44.4
STL CITY BLACK	37.0
STL CITY WHITE	50.5
STL CO BLACK	29.4
STL CO WHITE	38.8
STL CITY/CO BLACK	33.5
STL CITY/CO WHITE	40.6
MO BLACK	34.1
MO WHITE	50.9
US BLACK	32.1
US WHITE	47.7

- Chronic obstructive pulmonary disease (COPD) is an umbrella term for chronic bronchitis and/or emphysema. COPD is the fourth most common cause of death in the US. Cigarette smoking is the leading cause of COPD and has been implicated in 80-90 percent of all cases. In general, mortality rates for COPD are higher in the white population than in the African-American population.
- The 1999-2001 average age-adjusted mortality rate from COPD in St. Louis City and Saint Louis County is 20 percent lower than the Missouri rate and about ten percent lower than the US rate.
- The 1999-2001 average age-adjusted COPD mortality rate for whites in St. Louis City and Saint Louis County is 17 percent higher than in the African-American population in St. Louis City and Saint Louis County.
- The 1999-2001 average age-adjusted COPD mortality rate for the white population in St. Louis City and Saint Louis County is 20 percent lower than the Missouri comparative rate and 15 percent lower than the US comparative rate.

'99 - '01 Non-Motor Vehicle Accident Mortality Rates

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 NON-MOTOR VEHICLE ACCIDENT MORTALITY RATES (*Zip Codes by Quartile*)**NON-MV ACCIDENT MORTALITY***Age-adjusted rates per 100,000*

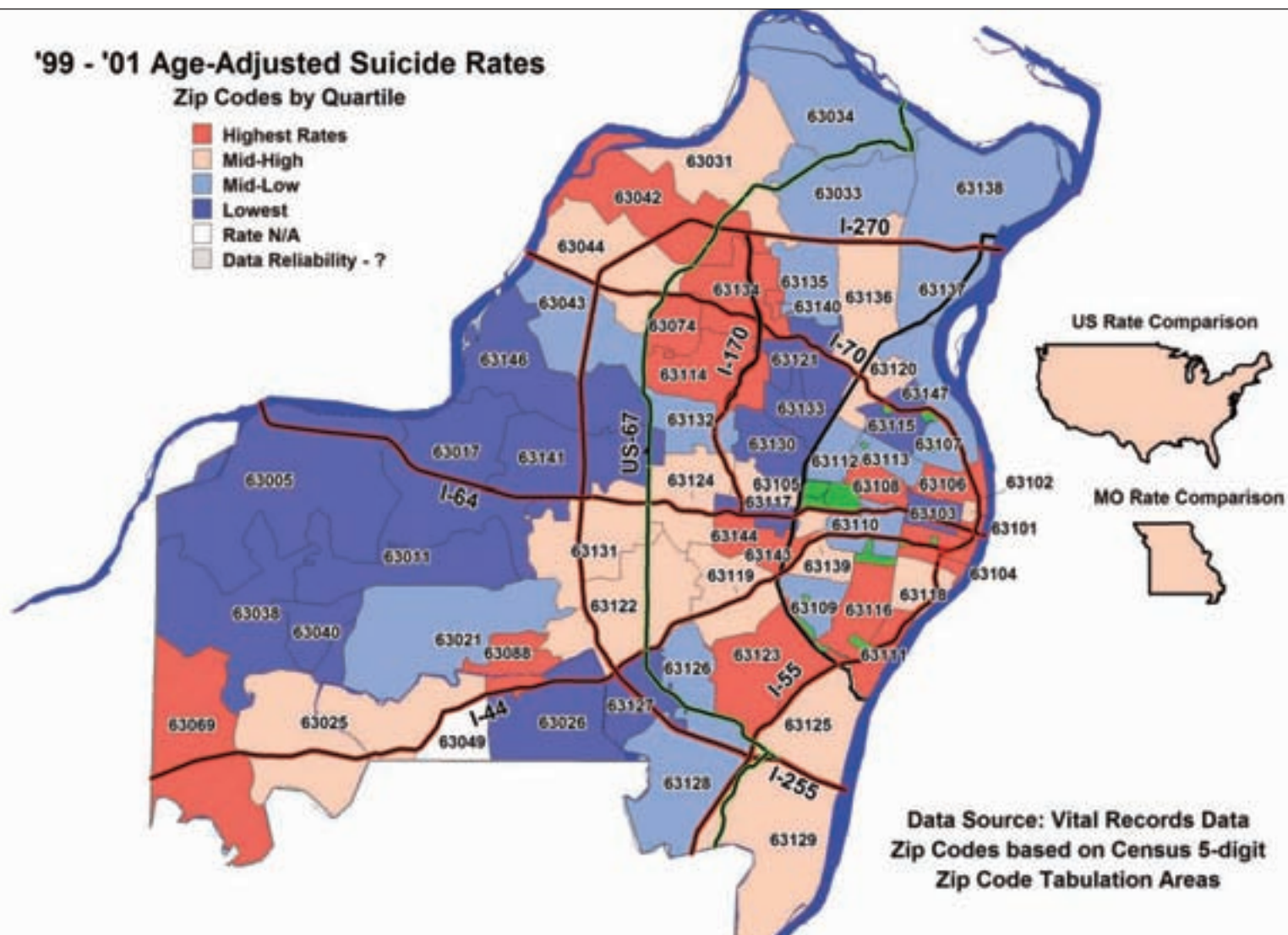
STL CITY	38.1
STL COUNTY	18.1
STL CITY/CO	23.0
MO	22.0
US	19.6
STL CITY BLACK	39.3
STL CITY WHITE	37.1
STL CO BLACK	18.2
STL CO WHITE	17.9
STL CITY/CO BLACK	28.3
STL CITY/CO WHITE	21.1
MO BLACK	30.3
MO WHITE	21.4
US BLACK	23.5
US WHITE	20.8

- The leading causes of non-motor vehicle accident deaths are due to falls, poisoning, drowning, and fire and burns. Unintentional injuries are the leading cause of death in the US for people under age 44.
- The 1999-2001 average age-adjusted non-motor vehicle accident mortality rate for St. Louis City and Saint Louis County is higher than the comparative rates for both Missouri and US rates, five percent and over 17 percent, respectively.
- The 1999-2001 average age-adjusted non-motor vehicle accident mortality rate for African Americans in St. Louis City and Saint Louis County is a third higher than for the whites in residing in St. Louis City and Saint Louis County.

'99 - '01 Age-Adjusted Suicide Rates

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 AGE-ADJUSTED SUICIDE RATES (*Zip Codes by Quartile*)**SUICIDE***Age-adjusted rates per 100,000*

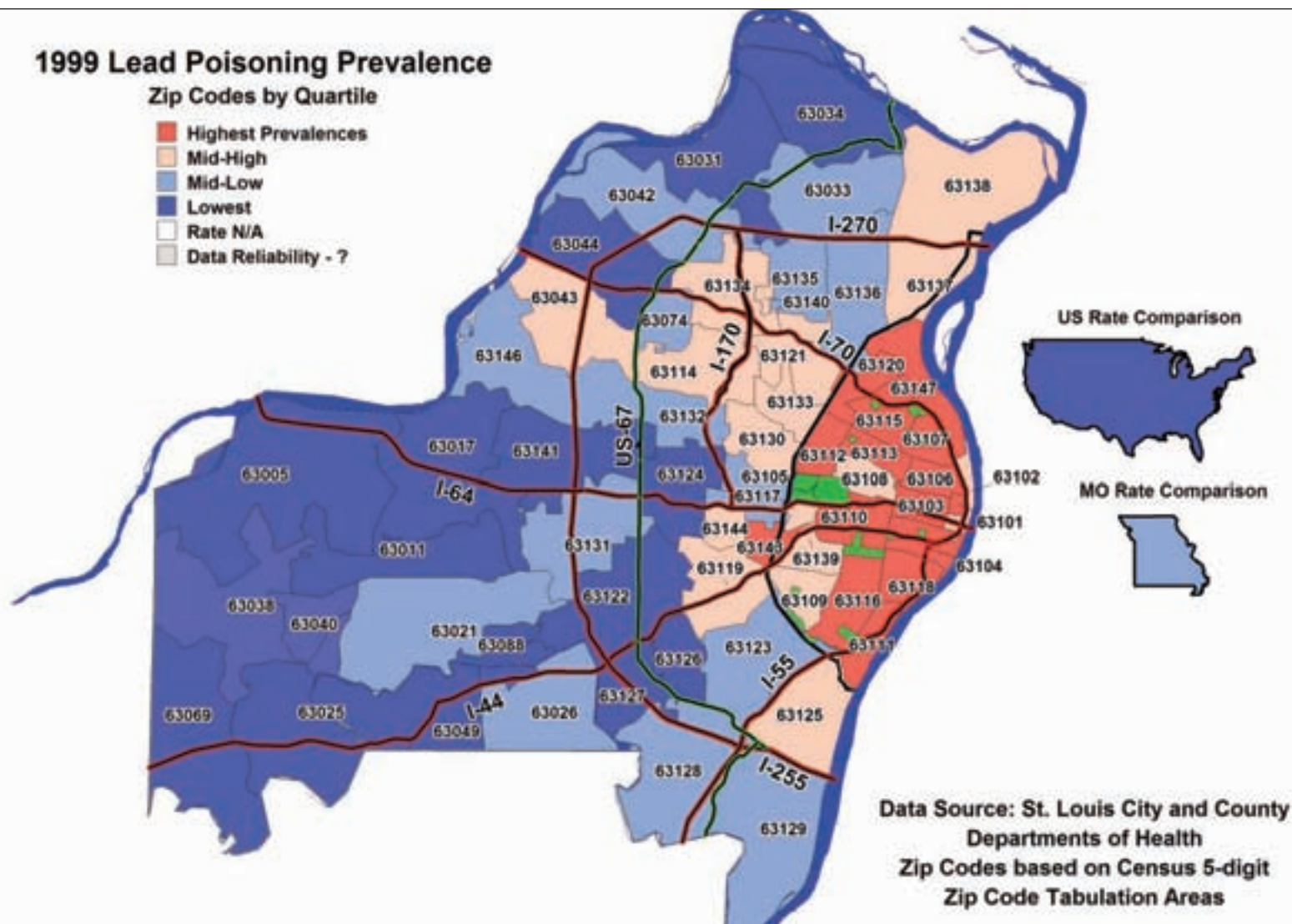
STL CITY	12.6
STL COUNTY	10.6
STL CITY/CO	11.1
MO	12.6
US	10.4
STL CITY BLACK	6.7
STL CITY WHITE	18.8
STL CO BLACK	6.4
STL CO WHITE	11.9
STL CITY/CO BLACK	6.6
STL CITY/CO WHITE	13.0
MO BLACK	7.6
MO WHITE	13.6
US BLACK	5.8
US WHITE	12.1

- Suicide rates are based on death certificate data and may underestimate the true incidence of self-inflicted and intentional deaths by as much as 10-50 percent. Nationally, the white population accounts for over 90% of all suicides.
- The 1999-2001 average age-adjusted suicide mortality rate in St. Louis City and Saint Louis County is about 10% lower than the Missouri comparative rate, but 7% higher than the US comparative rate.
- The 1999-2001 average age-adjusted suicide mortality rate for whites in St. Louis City and Saint Louis County is 50 percent higher than the rate for the African-American population in St. Louis City and Saint Louis County.
- The 1999-2001 average age-adjusted suicide mortality rates in St. Louis City and Saint Louis County, for both African Americans and whites, are lower than the Missouri rates but somewhat higher than the US rates for both African Americans and whites.

1999 Lead Poisoning Prevalence

Zip Codes by Quartile

- Highest Prevalences
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



Data Source: St. Louis City and County
Departments of Health
Zip Codes based on Census 5-digit
Zip Code Tabulation Areas

'99 - '01 LEAD POISONING PREVALENCE (*Zip Codes by Quartile*)**LEAD POISONING 2000***Screened Prevalence Rates*

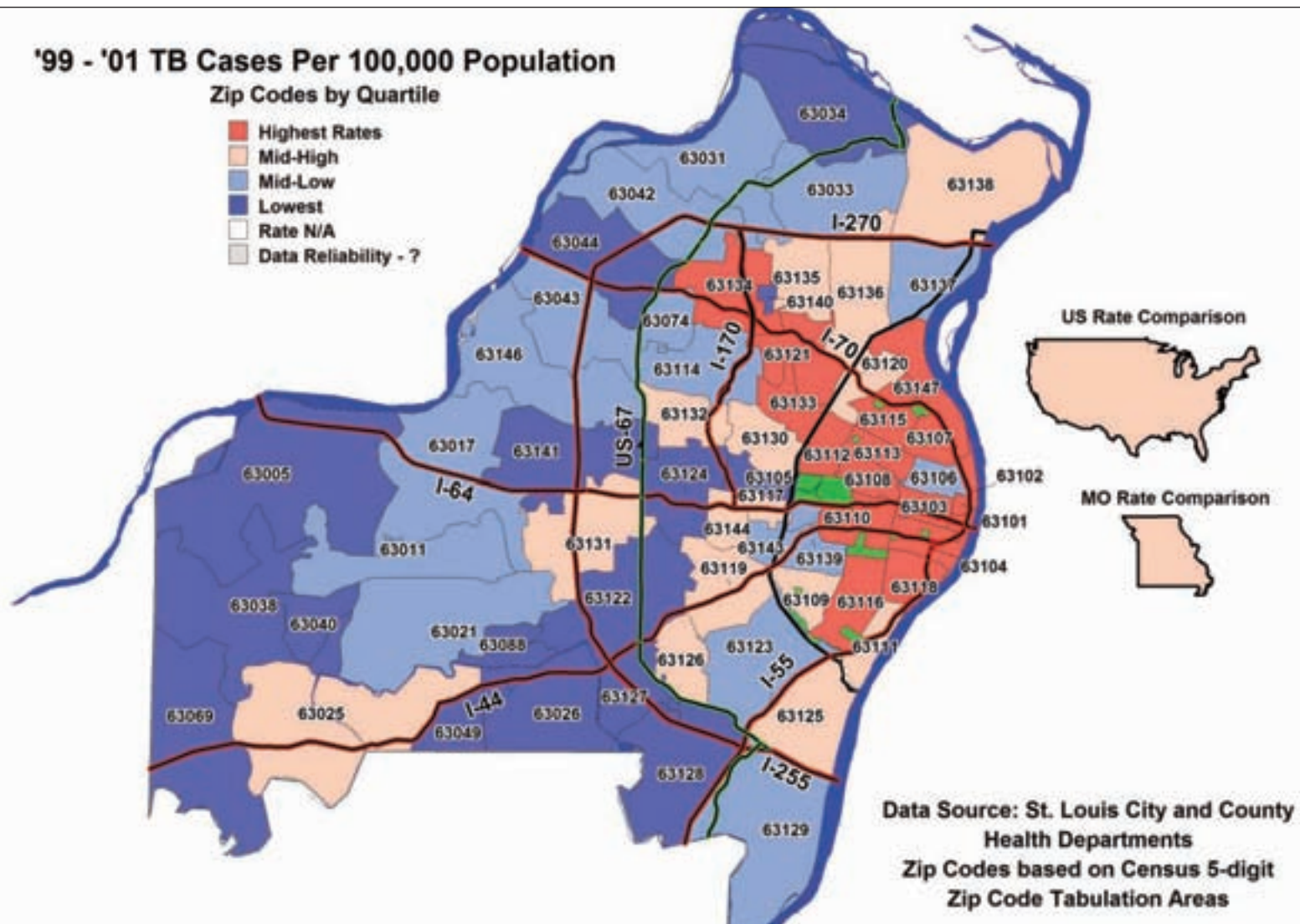
STL CITY	31.1
STL COUNTY	6.3
STL CITY/CO	18.0
MO	9.9
US	2.2
STL CITY BLACK	38.7
STL CITY WHITE	27.3
STL CO BLACK	N/A
STL CO WHITE	N/A
STL CITY/CO BLACK	N/A
STL CITY/CO WHITE	N/A
MO BLACK	N/A
MO WHITE	N/A
US BLACK	N/A
US WHITE	N/A

- Lead poisoning is a preventable illness that when it strikes, causes irreversible harm to young children, including permanent reductions in IQ. Childhood lead poisoning is defined as a blood lead level of 10 micrograms of lead per deciliter of blood. Children from all social and economic levels can be affected by lead poisoning, however children (under six years of age) who are living at or below the poverty line and live in older housing (particularly housing built before 1950) are at greatest risk.
- The 2000 Screened Prevalence Rate (SPR) for St. Louis City is almost five times the Saint Louis County rate. SPR is the percentage of lead poisoned children of those who are screened.
- The 2000 SPR for St. Louis City and Saint Louis County is 1.8 times the Missouri SPR.

'99 - '01 TB Cases Per 100,000 Population

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



'99 - '01 TB PER 100,000 POPULATION (*Zip Codes by Quartile*)**TB CASES***Rates per 100,000*

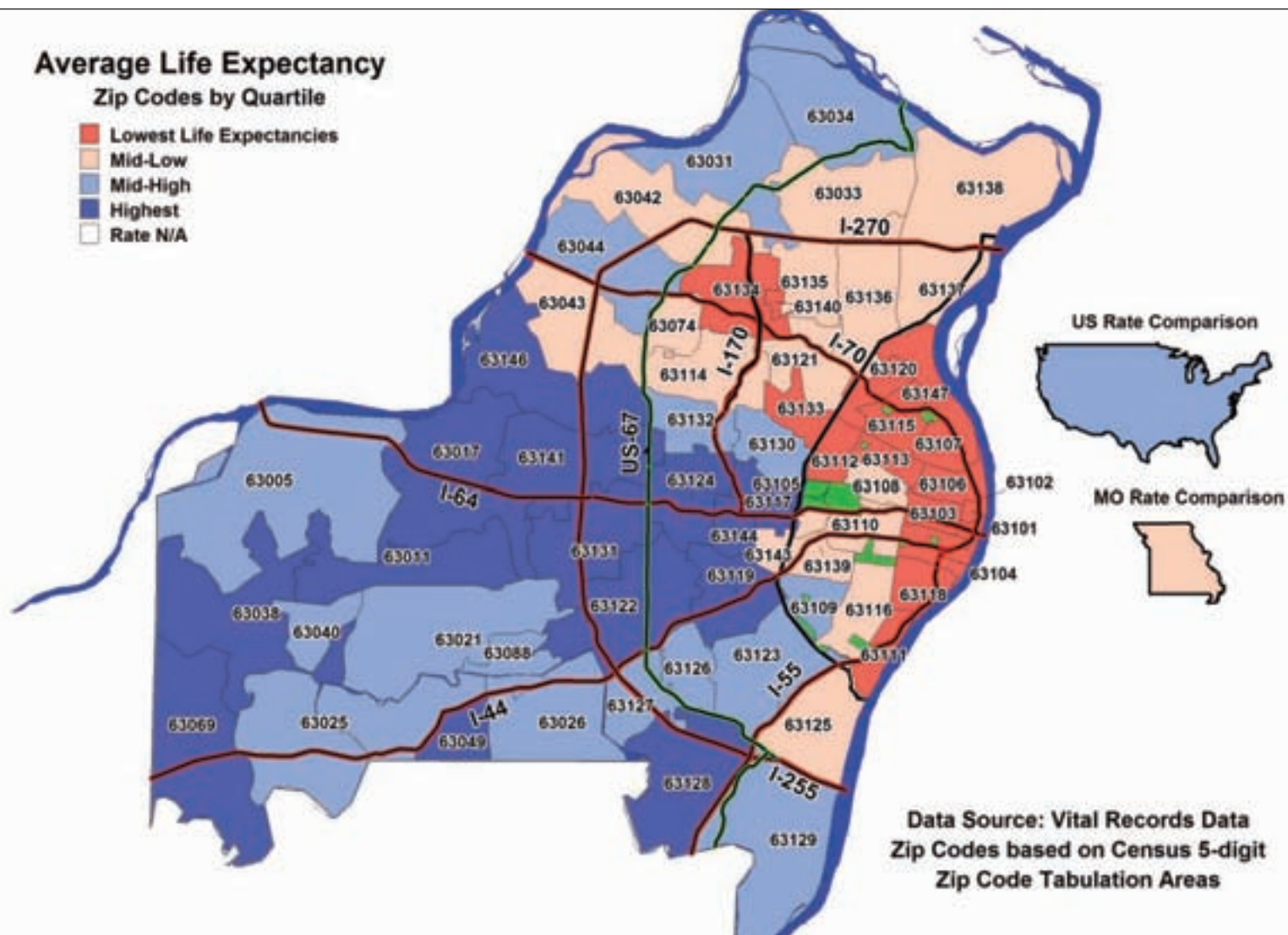
STL CITY	12.1
STL COUNTY	3.0
STL CITY/CO	5.3
MO	3.4
US	5.9
STL CITY BLACK	17.2
STL CITY WHITE	5.2
STL CO BLACK	7.3
STL CO WHITE	1.1
STL CITY/CO BLACK	12.1
STL CITY/CO WHITE	1.7
MO BLACK	12.4
MO WHITE	1.7
US BLACK	15.2
US WHITE	1.9

- Tuberculosis (TB) is one of the leading infectious disease causes of death in the world today. In the US there has been a decrease in the number of new TB cases among US-born persons. However, since 1994 the data show an increased number of new cases in US residents born outside of the US and its territories. In 2000, 46% of reported TB cases were in foreign-born persons.
- The 1999-2001 average TB rate for St. Louis City and Saint Louis County is over 50% higher than the Missouri rate but 10% lower than the US rate.
- The 1999-2001 average TB rate for the African-American population in St. Louis City and Saint Louis County is over 7 times the rate in the white population.

Average Life Expectancy

Zip Codes by Quartile

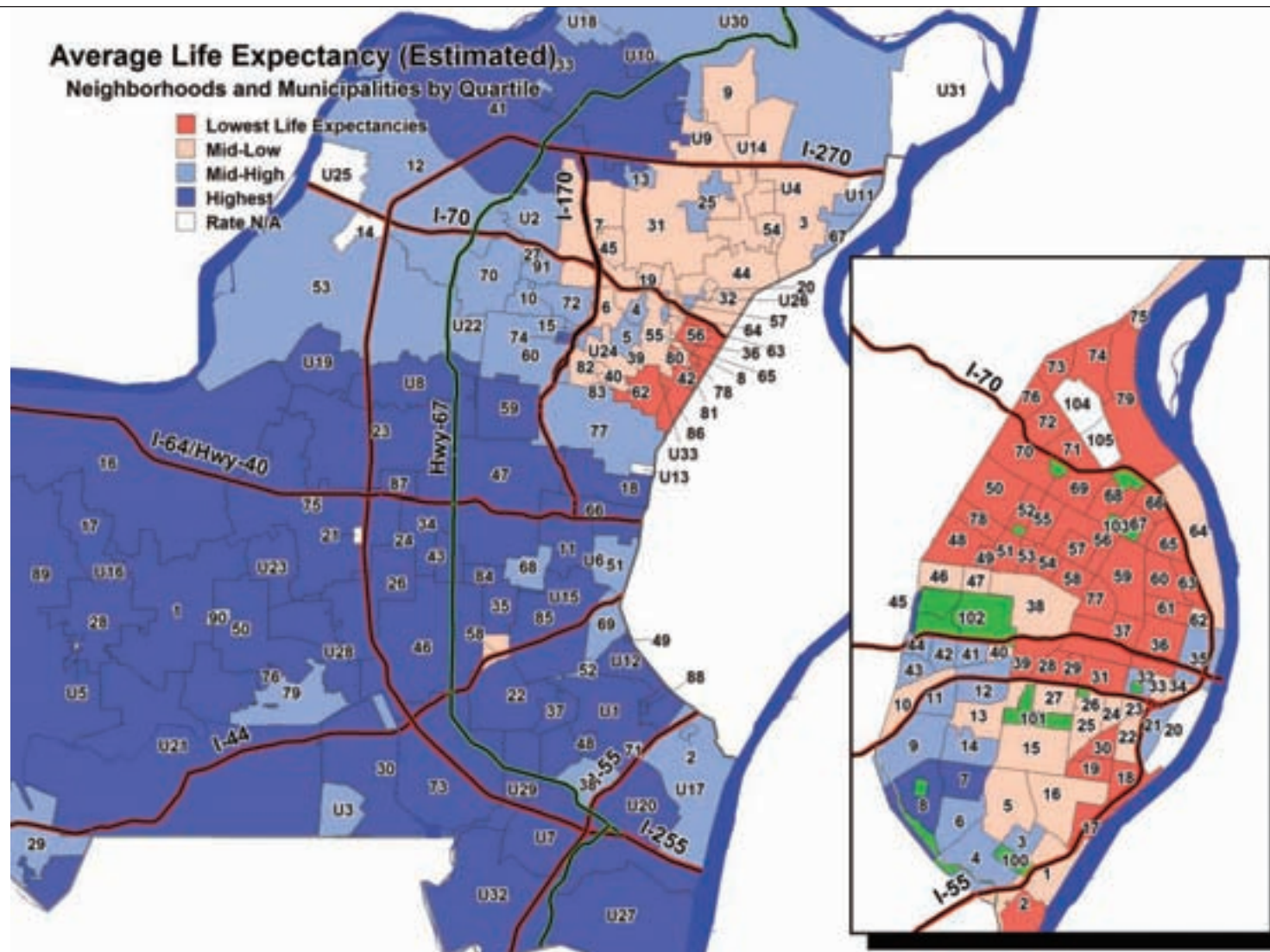
- Lowest Life Expectancies
- Mid-Low
- Mid-High
- Highest
- Rate N/A



AVERAGE LIFE EXPECTANCY (*Zip Codes by Quartile*)**LIFE EXPECTANCY IN YEARS**

STL CITY	71.4
STL COUNTY	77.8
STL CITY/CO	76.1
MO	76.3
US	76.9
STL CITY BLACK	68.2
STL CITY WHITE	74.3
STL CO BLACK	71.8
STL CO WHITE	78.8
STL CITY/CO BLACK	70.2
STL CITY/CO WHITE	78.1
MO BLACK	N/A
MO WHITE	N/A
US BLACK	71.8
US WHITE	77.4

- Life expectancy is defined as the number of years a baby born in an area could be expected to live if it experienced the current age-specific mortality rates of that area. Studies show that the two factors that have the most significant impact on life expectancy are infant mortality (death under one year of age) and income distribution (gap between high and low incomes).
- The 1999-2001 average life expectancy of St. Louis City and Saint Louis County African Americans is eight years less than the St. Louis City and Saint Louis County white population.
- The 1999-2001 average life expectancy of St. Louis City and Saint Louis County combined is the same as the comparative Missouri and US rates.



AVERAGE LIFE EXPECTANCY (*Neighborhoods and Municipalities by Quartile*)*City Neighborhoods*

1. Carondelet
2. Patch
3. Holly Hills
4. Boulevard Heights
5. Bevo Mill
6. Princeton Heights
7. South Hampton
8. St. Louis Hills
9. Lindenwood Park
10. Ellendale
11. Clifton Heights
12. The Hill
13. Southwest Garden
14. North Hampton
15. Tower Grove South
16. Dutchtown
17. Mount Pleasant
18. Marine Villa
19. Gravois Park
20. Kosciusko
21. Soulard
22. Benton Park West
23. McKinley Heights
24. Fox Park
25. Tower Grove East
26. Compton Heights
27. Shaw
28. McRee Town
29. Tiffany
30. Benton Park
31. The Gate District
32. Lafayette Square
33. Peabody, Darst, Webbe
34. Lasalle
35. Downtown
36. Downtown West

37. Midtown
38. Central West End
39. Forest Park Southeast
40. Kings Oak
41. Cheltenham
42. Clayton/Tamm
43. Franz Park
44. Hi-Point
45. Wydown/Sinker
46. Skinker/DeBaliviere
47. DeBaliviere Place
48. West End
49. Visitation Park
50. Wells/Goodfellow
51. Academy
52. Kingsway West
53. Fountain Park
54. Lewis Place
55. Kingsway East
56. The Greater Ville
57. The Ville
58. Vandeventer
59. Jeff Cander Lou
60. St. Louis Place
61. Car Square
62. Columbus Square
63. Old North St. Louis
64. Near North Riverfront
65. Hyde Park
66. College Hill
67. Fairground Neighborhood
68. O'Fallon
69. Penrose
70. Mark Twain/I-70 Industrial
71. Mark Twain
72. Walnut Park East
73. North Point

74. Riverview
76. Walnut Park West
77. Covenant Blu/Grand Center
78. Hamilton Heights
79. North Riverfront
100. Carondelet Park
101. Tower Grove Park
102. Forest Park
103. Fairground Park
104. Calvary Cemetery
105. Bellefontaine Cemetery

County Municipalities

1. Ballwin
5. Bel-Nor
6. Bel-Ridge
2. Bella Villa
3. Bellefontaine Neighbors
4. Bellerive
7. Berkeley
8. Beverly Hills
9. Black Jack
10. Breckenridge Hills
11. Brentwood
12. Bridgeton
13. Calverton Park
14. Champ
15. Charlack
16. Chesterfield
17. Clarkson Valley
18. Clayton
19. Cool Valley
20. Country Club hills
21. Country Life Acres
22. Crestwood
23. Creve Coeur
24. Crystal Lake Park

25. Dellwood
26. Des Peres
27. Edmundson
28. Ellisville
29. Eureka
30. Fenton
31. Ferguson
32. Flordell Hills
33. Florissant
34. Frontenac
35. Glen Echo Park
36. Glendale
37. Grantwood Village
38. Green Park
39. Greendale
40. Hanley Hills
41. Hazelwood
42. Hillsdale
43. Huntleigh
44. Jennings
45. Kinloch
46. Kirkwood
47. Ladue
48. Lakeshire
49. Mackenzie
50. Manchester
51. Maplewood
52. Marlborough
53. Maryland Heights
54. Moline Acres
55. Normandy
56. Northwoods
57. Norwood Court
58. Oakland
59. Olivette
60. Overland
61. Pacific

62. Pagedale
63. Pasadena Hills
64. Pasadena Park
65. Pine Lawn
66. Richmond Heights
67. Riverview
68. Rock Hill
69. Shrewsbury
70. St. Ann
71. St. George
72. St. John
73. Sunset Hills
74. Sycamore Hills
75. Town and Country
76. Twin Oaks
77. University City
78. Uplands Park
79. Valley Park
80. Velda City
81. Velda Village Hills
82. Vinita Park
83. Vinita Terrace
84. Warson Woods
85. Webster Groves
86. Wellston
87. Westwood
88. Wilbur Park
89. Wildwood
90. Winchester
91. Woodson Terrace

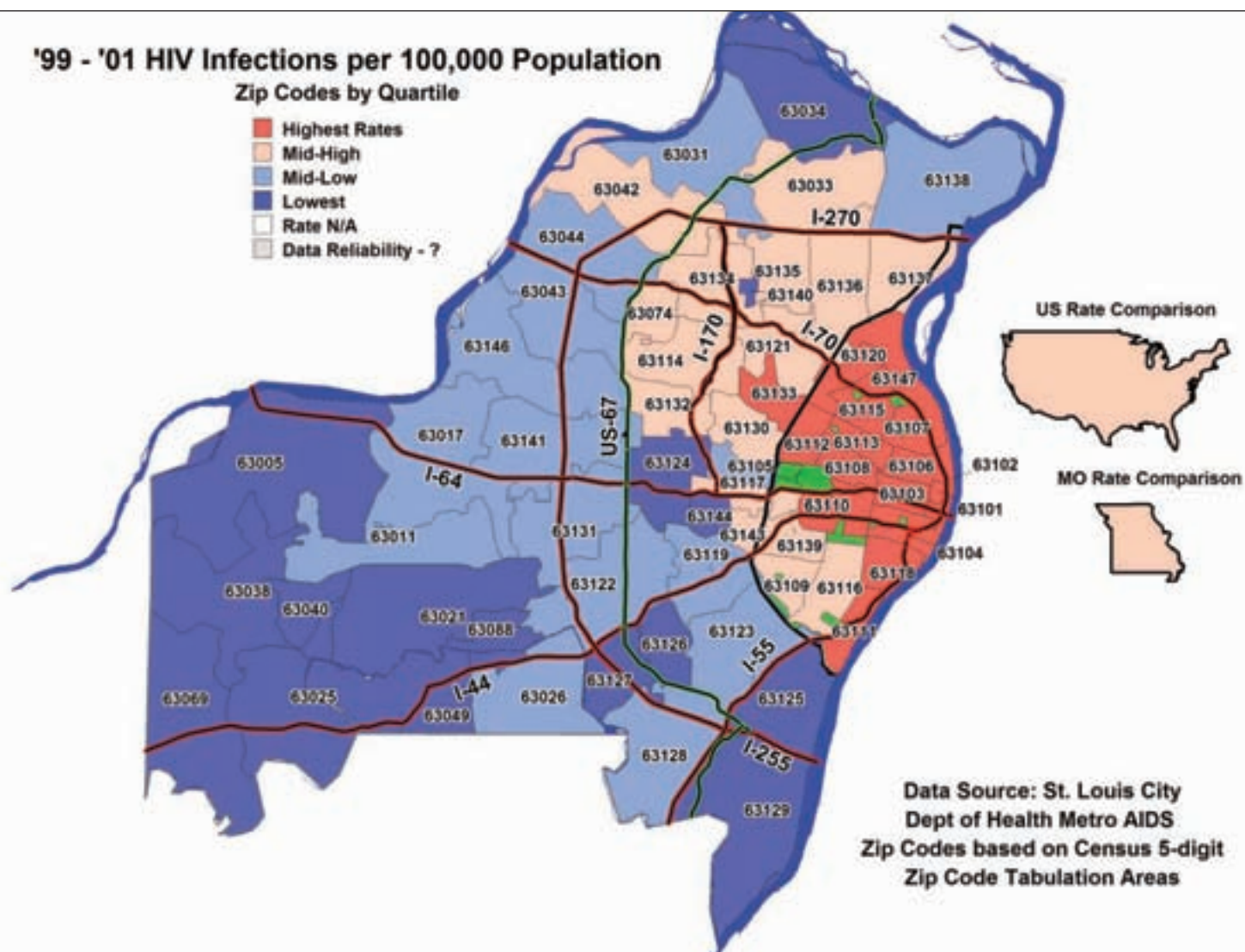
County - Unincorporated Areas

- U1. Afton - unincorp
- U2. Airport - unincorp
- U3. Bonhomme - unincorp
- U4. Castle Point - unincorp
- U5. Chesterfield - unincorp
- U6. Clayton - unincorp
- U7. Concord - unincorp
- U8. Creve Coeur - unincorp
- U9. Ferguson - unincorp
- U10. Florissant - unincorp
- U11. Glasgow Village - unincorp
- U12. Gravois - unincorp
- U13. Hadley - unincorp
- U14. Halls Ferry - unincorp
- U15. Jefferson - unincorp
- U16. Lafayette - unincorp
- U17. Lemay - unincorp
- U18. Lewis and Clark - unincorp
- U19. Maryland Heights - unincorp
- U20. Mehlville - unincorp
- U21. Meramec - unincorp
- U22. Midland - unincorp
- U23. Missouri River - unincorp
- U24. Normandy - unincorp
- U25. Northwest - unincorp
- U26. Norwood - unincorp
- U27. Oakville - unincorp
- U28. Queeny - unincorp
- U29. Sappington - unincorp
- U30. Spanish Lake
- U31. St. Ferdinand - unincorp
- U32. Tesson Ferry - unincorp
- U33. University - unincorp

'99 - '01 HIV Infections per 100,000 Population

Zip Codes by Quartile

- Highest Rates
- Mid-High
- Mid-Low
- Lowest
- Rate N/A
- Data Reliability - ?



Data Source: St. Louis City
Dept of Health Metro AIDS
Zip Codes based on Census 5-digit
Zip Code Tabulation Areas

'99 - '01 HIV INFECTIONS PER 100,000 POPULATION**HIV INFECTIONS RATES
PER 100,000**

STL CITY	34.8
STL COUNTY	6.3
STL CITY/CO	13.6
MO	7.2
US	9.1
STL CITY BLACK	43.3
STL CITY WHITE	25.4
STL CO BLACK	21.5
STL CO WHITE	2.6
STL CITY/CO BLACK	32.0
STL CITY/CO WHITE	6.3
MO BLACK	30.9
MO WHITE	3.9
US BLACK	39.4
US WHITE	3.9

- HIV (human immunodeficiency virus) is the virus that causes AIDS. People with HIV have what is called HIV infection and most will subsequently develop AIDS. There are medical treatments that can slow down the rate at which HIV weakens the immune system, however there are no treatments that cure AIDS.
- 2001 showed an increase in HIV infection incidence in St. Louis City and St. Louis County. This is a reversal of a more positive trend where, in recent years, there has been a decline in HIV infection cases.
- The HIV infection incidence rate reflects the number of new cases of HIV Infection. Over 60% of all new HIV infection cases in St. Louis City and St. Louis County, in the 1999 - 2001 time period, are in the African-American population.
- The 1999-2001 average HIV infection incidence rate for St. Louis City and St. Louis County is almost twice the Missouri rate and 1.5 times the US rate.
- The 1999-2001 average HIV infection incidence rate in African Americans in St. Louis City and St. Louis County is 5 times the rate for the white population.

SECTION IV: THE INTEGRITY OF HEALTH CARE SAFETY NET

Key Findings of Section IV

Organization of the Safety Net

1. Health care delivery systems are complex and can be difficult to navigate. This is challenging for all patients and many providers, but can be a particular barrier for safety net patients due to the added complexity of the structure of the safety net in St. Louis City and Saint Louis County.

Factors that contribute to health disparities include:

1. Limited collaboration and care coordination across safety net providers.
2. A lack of understanding on the part of patients and providers as to how to navigate and most effectively utilize the system as currently structured.
3. Organizational barriers to accessing medical care, which are described in detail in Section V of this report.

Primary Care

1. Safety net institutions provide primary care services at 33 geographically distributed sites throughout St. Louis City and County (see Appendix 1 for a definition of “safety net” and listing of safety net sites). These institutions are critical components of the safety net, providing 493,366 primary care visits to 252,919 individuals. Approximately 90% of these individuals are either uninsured or covered by Medicaid. A small cadre of community physicians also provides primary care to safety net patients in the region.
2. Except for a small portion of near North Saint Louis County, the areas of highest need in St. Louis City and Saint Louis County are within 20 minutes travel time to a primary care safety net provider.

3. Appointment wait times for preventive and routine primary care are comparable to those encountered in the private sector; however, hours of operation are largely restricted to weekdays between 8:30 a.m. and 5 p.m.

While appointment wait times and physical plant capacity suggest there is adequate primary care capacity to meet current demand, many safety net patients may not avail themselves of these services, and some choose to utilize alternative facilities such as hospital Emergency Departments for their primary care needs.

4. Hospital Emergency Departments provide a large amount of non-emergent care to safety net patients—an average of 219 patients per day, about half of whom arrive for care after 4 p.m. Although the use of the ED may be understandable from the patient’s perspective, primary care delivered in EDs has proven to be a less medically effective option for the patients themselves, as well as being a strain on the medical system overall.
5. Urgent care centers could play an important role in meeting non-emergent patient needs on weekends and after-hours. However, except for the ConnectCare Urgent Care Center, which opened in November 2002, and Health Care for Kids, there are no urgent care centers located within 20 minutes of the areas of highest “safety net” need in St. Louis City and Saint Louis County.
6. Over 94% of the individuals seen in the safety net system were under the age of 65, indicating that most St. Louis City and County residents eligible for Medicare utilize community physicians or other non-safety net providers for their primary care needs.

Specialty Care

1. Six institutions in St. Louis City and County provide the vast majority of safety net specialty care in the region: Washington University Faculty Group Practice (36%), Cardinal Glennon Hospital Specialty Clinics (20%), Saint Louis University Faculty Group Practice (15%), Barnes-Jewish Specialty Clinics (13%), Saint Louis ConnectCare (13%), and St. John's Mercy Clinic (3%).
2. Appointment wait times for subspecialty care are excessive, indicating that the demand for subspecialty care is significantly greater than existing safety net capacity. These wait times can extend to 3 months or greater for some key specialty services such as Gastroenterology, Pulmonology, or Neurosurgery.
3. Based on the size and demographics of the uninsured and Medicaid populations, there is a projected need for up to an additional 246,400 subspecialty doctor visits per year.
4. Very few private practice subspecialists care for uninsured and underinsured patients. Major barriers to broadening physician participation include:
 - The inability to cover clinical practice overhead costs (i.e. supplies, equipment, office staff, rent, utilities) under Missouri's current Medicaid fee schedule. Missouri Medicaid payments to physicians are among the lowest in the nation (48th out of 50 states) and with rare exception, have remained unchanged since 1995.
 - Many community subspecialists fear that caring for uninsured or Medicaid patients will adversely affect their professional liability insurance premiums or result in the inability to obtain malpractice insurance at all. This concern is based on the perception that lawsuits involving safety net patients are more likely to be heard in venues such as St. Louis City where juries are overly sympathetic toward plaintiffs.

- Physician concerns about professional liability have become even more acute over the past 18 months as malpractice insurance premiums have skyrocketed. Indeed, some local safety net providers have closed their practices or moved to other states because of inability to obtain malpractice insurance.
- Lost physician productivity due to high “no show” appointment rates among safety net patients.

Dental Services

1. Safety net institutions provide dental care services at 17 geographically distributed sites throughout St. Louis City and County. These institutions are critical components of the safety net, providing over 56,000 dental care visits.
2. Despite the efforts of these safety net providers, there is a shortage of dentists accepting safety net patients.
3. Appointment wait times were reported as approximately two months for routine dental care at most locations.
4. Many uninsured and underinsured people do not receive preventive dental services and experience preventable pain and suffering as well as long-term consequences that could be avoided through regular dental check-ups, preventive care and education.

Pharmacy Services

1. The rapidly increasing cost of medications makes them unaffordable for many safety net patients. Failure to fill needed prescriptions and take medication as directed negatively impacts the health of these safety net patients and contributes to health outcome disparities.
2. Comprehensive patient counseling regarding medication use leads to better clinical outcomes and decreases the risk of adverse events such as medication errors, drug interactions and serious allergic reactions. Few safety net pharmacies have the resources to provide comprehensive medication counseling for their patients.
3. Many safety net patients and providers are unaware of financial assistance programs, discount programs and other available options for providing medications at reduced cost. Eligibility criteria for these types of programs are also not widely known.
4. The level of financial assistance for outpatient medications through the Missouri Medicaid program is in jeopardy due to the state's budget shortfall.
5. While there are at least 36 dispensing pharmacies in areas in greatest need of safety net services in St. Louis City and County, 75% of these are commercial stores with no special services for uninsured and underinsured patients.
6. There is no common formulary among institutional safety net providers in St. Louis City and County. The formularies for the traditional Medicaid and managed Medicaid (MC+) programs also differ. This contributes to inefficiency, higher cost and confusion for both providers and safety net patients.

Mental Health: Psychiatric and Substance Abuse Services

1. There is limited coordination between the mental health care system and the physical health care system. The mental health system is “carved out” or separated from the physical health system.
2. Availability of mental health services is limited for both psychiatric and substance abuse services. For example, Department of Mental Health contracted providers see an estimated 46% of those in need of safety net psychiatric services and an estimated 38% of those in need of substance abuse services.
3. Most psychiatric care safety net providers handle after hours mental health care through a contract with Behavioral Health Response or with on-call staff persons. These after-hours services are designed for crises.
4. A majority of safety net substance abuse providers surveyed are open 24-hours a day or provide evening hours.
5. It is difficult for some people in need of psychiatric and substance abuse services to find adequate information regarding who can be serviced and what services are available.
6. Limited coordination among organizations providing children's mental health services leads to parallel systems and confusion among families with children in need of care.
7. Mental health services have been reduced due to budget cuts at the state and local level. Other funding cuts are currently being discussed.

Key Findings:

1. Unlike some major metropolitan areas, St. Louis does not have a strong coordinating, monitoring, or financing body for its health care safety net. This makes accounting for dollars spent in the region challenging.
2. At least ***\$460 Million per year*** would be required to provide basic primary and specialty care services to the estimated 307,000 safety net patients in St. Louis City and St. Louis County. This amount does not include costs for behavioral health or dental care, and does not account for the fact that disabilities and health disparities may be more common among uninsured and Medicaid patients than other populations.

By comparison, actual expenditures for these services are approximately ***\$294 Million per year*** for a gap of at least ***\$166 Million*** between available and needed medical resources. The various sources of estimated current funding for primary and specialty safety net services include, but are not limited to:

MEDICAID TRADITIONAL & MEDICAID MANAGED CARE PAYMENTS	\$ 205,000,000	70 %
DISPROPORTIONATE SHARE HOSPITAL (DSH) FUNDING THROUGH A SPECIAL FEDERAL SECTION 1115 WAIVER	\$ 20,000,000	07%
GRANTS FROM THE STATE OF MISSOURI	\$ 4,000,000	01%
FEDERAL SUPPORT UNDER SECTION 330 LEGISLATION (TO FEDERALLY QUALIFIED CENTERS)	\$ 13,000,000	04%
FOUNDATION SUPPORT	\$ 5,000,000	02%
ST. LOUIS CITY TAX SUPPORT	\$ 5,000,000	02%
SAINT LOUIS COUNTY TAX SUPPORT	\$ 15,000,000	05%
UNCOMPENSATED CARE PROVIDED BY MEDICAL SCHOOLS	\$ 16,000,000	05%
UNCOMPENSATED CARE PROVIDED BY HOSPITAL-BASED CLINICS	\$ 11,000,000	04%
TOTAL SOURCES	\$ 294,000,000	100%

3. As noted above, the 1115 DSH waiver accounts for 07% (\$20 million) of the safety net funds flowing into the St. Louis area, and represents 20% of the funds supporting community-based health centers in the region. This one-of-a-kind waiver of Medicaid regulations allows monies from the Disproportionate Share Hospital (DSH) program to be used for outpatient care.

The DSH waiver funds are currently being used to support St. Louis ConnectCare, which relinquished its hospital license in the fall of 2002. This money is “transitional” in nature, meaning that these funds will no longer be available to support primary and specialty care once the “transition” period is completed.

4. Missouri is facing a serious budget deficit that could jeopardize the availability of safety net services, especially if cuts in Medicaid funding are required to balance the state’s operating budget. If major cuts to the Medicaid program that are currently being discussed are implemented, the number of uninsured individuals in St. Louis City and St. Louis County would increase by approximately 25%.

5. Local governmental bodies spent approximately \$20 million for direct primary and specialty care for the underserved in the region. St. Louis County, through a dedicated tax for health care, spends approximately \$15 million in direct care costs for the uninsured and underinsured, excluding expenditures for correctional patients and family mental health services. St. Louis City spends \$5 million through a dedicated portion of a use tax passed in 2001.
6. The Federal government provides support for safety net care through Section 330 of the Public Health Service (PHS) Act. In 2001, the area received approximately \$13 million in direct grants from the Federal government through region’s Federally Qualified Health Centers (FQHCs).

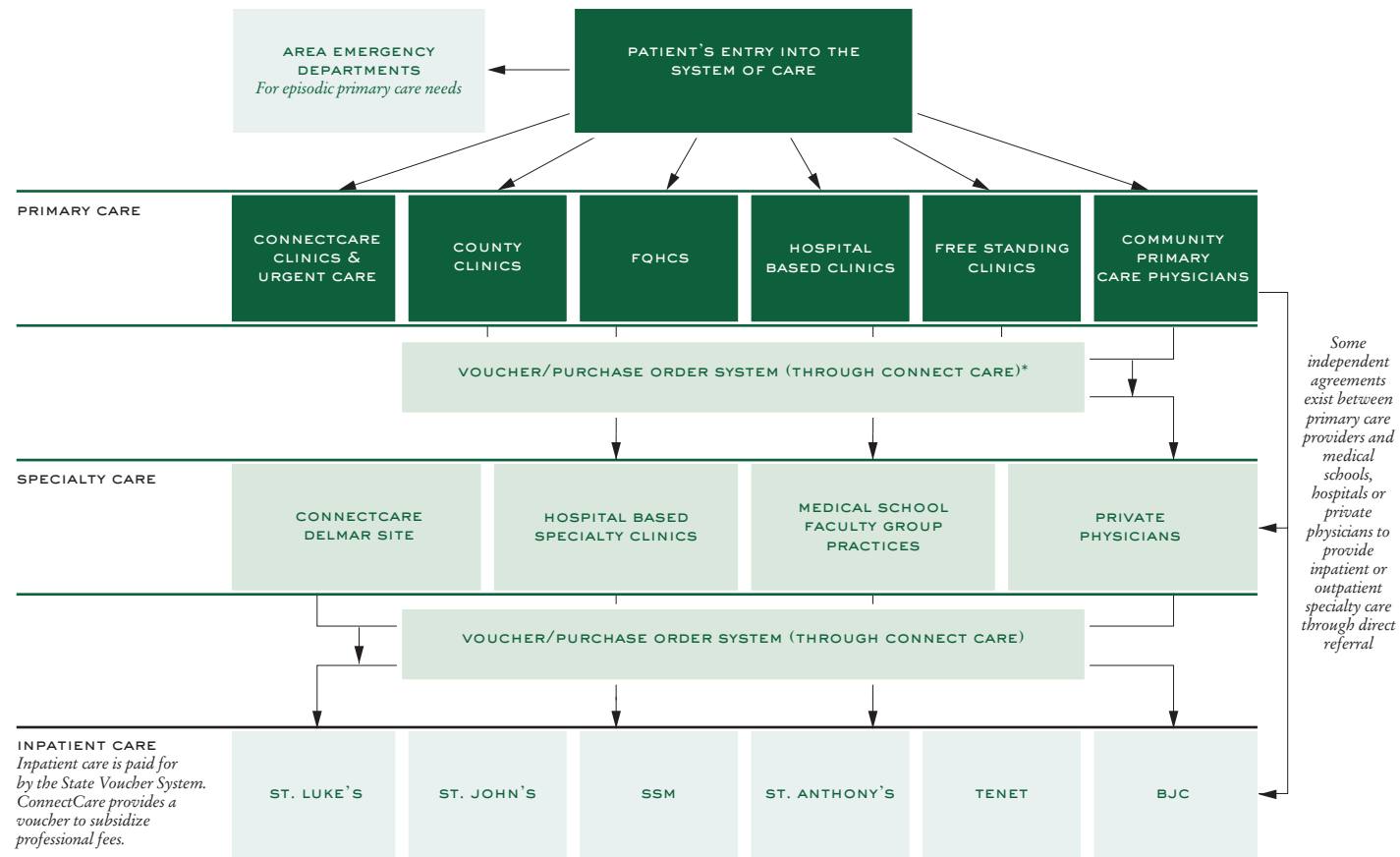
A. Organization of the Health Care Safety Net in St. Louis City and Saint Louis County

The Institute of Medicine has defined a “safety net” provider as one “that delivers a significant level of care to uninsured, Medicaid, and other vulnerable populations.”^{4.1} The health care safety net in St. Louis City and County is composed of both institutional providers and individual community practitioners. The institutional providers include:

- 4 Federally Qualified Health Centers offering primary care services at 13 geographic locations
- 3 primary care health centers funded and operated by Saint Louis County government
- Saint Louis ConnectCare, which operates 6 facilities and offers primary care, specialty care and urgent care
- 9 hospital-based clinics offering primary care and some specialty care services
- 3 “free-standing” public health clinics offering primary care
- 2 medical school faculty practice groups offering primarily specialty and sub-specialty care (St. Louis University faculty also provide primary care for children)
- The City and County Health Departments, which offer an array of public health services including programs related to prevention and treatment of infectious diseases, childhood immunization, prevention and screening for lead poisoning, maternal and child health, sickle cell disease and cancer education, screening and control.

THE SAFETY NET SYSTEM (ADULTS) — ST. LOUIS CITY AND ST. LOUIS COUNTY, 2002

The roles of various providers and the flow of adult patients through this safety net system are depicted in the diagram below.



*Note: Vouchers and purchase orders for uninsured patients only.

It should be noted that the previous diagram does not fully reflect the complexity of the safety net health care system. Many steps are typically required to arrange for patient referrals and to coordinate the support services that safety net patients commonly need (ex: social services, transportation, pharmacy, etc). In addition, most mental health services are “carved out” into a separate system, which is described later in this section.

The Voucher/Purchase Order System through ConnectCare

The voucher and purchase order systems were developed in April 1997, when St. Louis Regional Hospital was closing, to reimburse hospitals that would begin caring for Regional Hospital’s uninsured and underinsured patients. In October 1997, Saint Louis ConnectCare assumed responsibility for the program to meet the needs of its patients requiring hospital care beyond that offered at ConnectCare’s Delmar site. The voucher program was designed to cover emergency room visits, acute inpatient care, some elective surgical procedures, some elective admissions and invasive diagnostic procedures not performed at ConnectCare facilities, when the services are determined to be medically necessary.

When the program was first established, vouchers were only issued if the patient first presented at the ConnectCare Emergency Department, one of its ambulatory care centers, or one of the ConnectCare specialty clinics. In its early incarnation, only a ConnectCare doctor could request a voucher. This process was modified in 2000, and since then, the clinics of the Saint Louis County Department of Health, the Federally Qualified Health Centers (FQHCs), and other free-standing community health centers have had access to the voucher program. These providers can contact ConnectCare’s Utilization Management Department directly to request a voucher. A ConnectCare physician does not need to act as a “go-between” for a voucher to be provided.

The voucher is only good for the service for which it was issued and for those patients without health insurance. If at anytime the patient is found to have had medical coverage for the date of service for which the voucher was issued, the voucher is voided and any payment made is recouped from the hospital.

The voucher program, as originally designed, does not cover professional fees, cosmetic procedures, services to prisoners, pregnancy-related services, and psychiatric patients.

Numerous providers and community members indicate that there may be a lack of awareness and clarity concerning the direct voucher system, and current policies and procedures.

Purchase Orders

The purchase order program is a carry-over program from St. Louis Regional Medical Center and is used for the purchase of diagnostic services and some treatment programs not offered directly, or in sufficient quantity, by ConnectCare for uninsured or underinsured patients. Purchase orders are issued for all uninsured patients regardless of ability to pay, and for some underinsured patients with only Medicare Part A (hospital) coverage. A purchase order is only issued when medical necessity is established by ConnectCare’s Utilization Management Department. The purchase order program covers cardiac catheterization procedures, as well as outpatient, noninvasive treatments and diagnostic tests such as radiology, radiation therapy, chemotherapy, rehabilitation services, and specialty consultation services not available at ConnectCare.

Typically, the purchase order is issued prior to services being provided; however, it may be issued retroactively with appropriate documentation.

The ConnectCare Utilization Management department authorizes and issues purchase orders upon the request of the referring physician. The patient does not have to be seen by a ConnectCare physician before the purchase order is issued, if the referring physician has fully completed the request form, which includes documenting the procedure's medical necessity.

Further information about the ConnectCare voucher/purchase order system is provided in Section V of this report.

Safety Net Health Care System For Children

The safety net health care system for children is different from that for adults. Children from low-income families in the St. Louis region are typically eligible for insurance coverage under the Missouri Medicaid MC+ Program. Primary care to this population is provided by both the institutional safety net providers listed above, as well as by community-based pediatricians. The St. Louis region is also fortunate to have two world-class pediatric hospitals affiliated with medical schools: Saint Louis University/Cardinal Glennon Hospital for Children and Washington University/St. Louis Children's Hospital. Specialty and inpatient safety net care for children are typically provided by these two institutions.

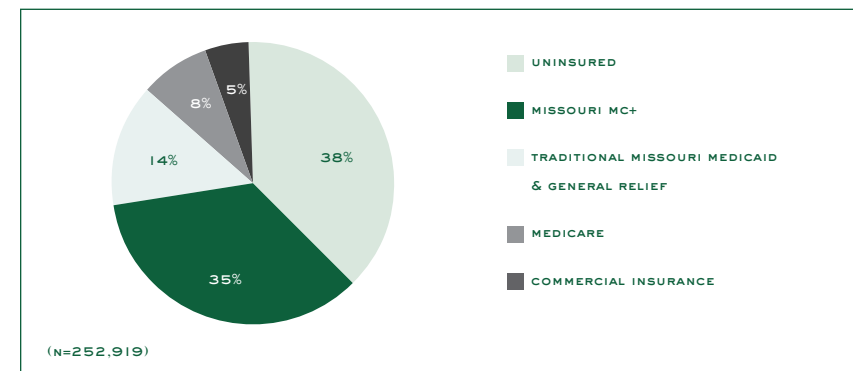
Subsequent sections of this report will discuss various components of the safety net in greater detail.

B. Safety Net Primary Care Services

Role of Safety Net Institutions in Providing Primary Care

The safety net institutions described in Section IV A. provide primary care services at 33 geographically distributed sites throughout St. Louis City and County. A recent survey conducted by the St. Louis Regional Health Commission revealed that during 2001, nearly 252,919¹ patients received primary care services at one of these institutional clinics². ***This represents over 1 in every 6 individuals in St. Louis City and County.***

SAFETY NET PATIENTS BY INSURANCE STATUS, 2001—PRIMARY CARE ONLY



Almost 90% of the individuals accessing safety net primary care providers are people without insurance or those receiving Medicaid—those people most in need in our community.

¹ There may be a slight overstatement in the number of patients that received primary care due to potential double-counting of patients seen at different sites within the safety net system.

² Based on the number of unduplicated patients at each safety net institution during CY01. Some patients may have sought services at more than 1 institution site during CY01.

Many of these individuals utilized the safety net system more than once during the year. Over 493,366 patient visits were recorded by the institutional safety net providers in 2001, as follows:

SAFETY NET INSTITUTION PRIMARY CARE VOLUMES (2001)

ADULT VISITS	233,536	(47%)
PEDIATRIC VISITS	129,300	(26%)
OB VISITS	74,186	(15%)
DENTAL NEW VISITS	56,344	(12%)
TOTAL AMBULATORY ENCOUNTERS	493,366	
	(437,022 ENCOUNTERS EXCLUDING DENTAL VISITS)	

The Age/Gender make up of the patients seeking primary care at safety net institutions was:

MALES > AGE 65	1.8%
FEMALES > AGE 65	3.7%
MALES – AGES 19-64	16.9%
FEMALES – AGES 19-64	38.5%
MALES < AGE 18	17.5%
FEMALES < AGE 18	21.6%
TOTAL	100%

Over 94% of the individuals seen in the safety net system were under the age of 65, indicating that most St. Louis City and County residents eligible for Medicare utilize community physicians or other non-safety net providers for their primary care needs.^{4,2}

Adult males under the age of 65 are also under-represented among patients cared for by safety net institutions. This is likely due to a combination of lack of insurance coverage and a greater tendency for males not to seek routine health care services.

Utilization of Services by the Safety Net Population

Institutional safety net providers play a vital role in meeting the primary care needs of the uninsured and Medicaid populations in St. Louis City and County. For analyses in this report, the total safety net population has been calculated as the number of uninsured residents, as estimated in Section V of this report, plus the number of individuals receiving Medicaid, the governmental program designed to serve low-income individuals. Some low-income individuals over the age of 65 are dually eligible for both Medicare and Medicaid, and can be classified as “Dual Eligibles.” As Medicare is the primary insurer for these individuals, and volume counts from most safety net providers record these individuals as “Medicare,” we have excluded “Dual Eligibles” from the total safety net population for analyses in this report.

The number of St. Louis City and County residents receiving Medicaid was provided by the staff of the State of Missouri Division of Medical Services, as follows:

164,000	INDIVIDUALS COVERED BY MANAGED MEDICAID (MC+)
14,000	INDIVIDUALS COVERED BY TRADITIONAL MEDICAID, EXCLUDING “DUAL ELIGIBLES”
31,000	INDIVIDUALS COVERED BY BOTH MEDICARE AND MEDICAID (GENERALLY OVER AGE 65)
209,000	TOTAL INDIVIDUALS COVERED BY MISSOURI MEDICAID
178,000	INDIVIDUALS COVERED BY MEDICAID, EXCLUDING “DUAL ELIGIBLES”
129,000	ESTIMATED NUMBER OF UNINSURED IN ST. LOUIS CITY AND COUNTY (SEE SECTION V FOR DETAIL)
307,000	TOTAL ESTIMATED SAFETY NET POPULATION

- Approximately 95,000 uninsured patients sought primary care services from an institutional safety net provider during 2001. This represents 74% of the estimated 129,000 uninsured individuals in St. Louis City and Saint Louis County. (See Section V–Lack of Insurance for further details on the number of uninsured in the region).
- Approximately 121,000 individuals, or approximately 68% of the 178,000 St. Louis City and County residents insured under traditional Missouri Medicaid and the Missouri Medicaid MC+ program, received primary care from institutional safety net providers during 2001.

Role of Community Physicians in Safety Net Primary Care

As noted in the table below, a small but important cadre of community physicians also play a role in providing primary care services to the Medicaid and uninsured populations in St. Louis City and County.

SPECIALTY	TOTAL PRIMARY CARE PHYSICIANS	SAFETY NET PHYSICIANS ²
PEDIATRICS	459	50 (10.9%)
INTERNAL MEDICINE/ FAMILY PRACTICE	914	35 (3.8%)
OBSTETRICS	326	27 (8.3%)
TOTAL	1,699	112 (6.6%)

² Defined as physicians with more than 250 uninsured or Medicaid patient visits per year as determined by data from Missouri Medicaid program or physician self-reporting.

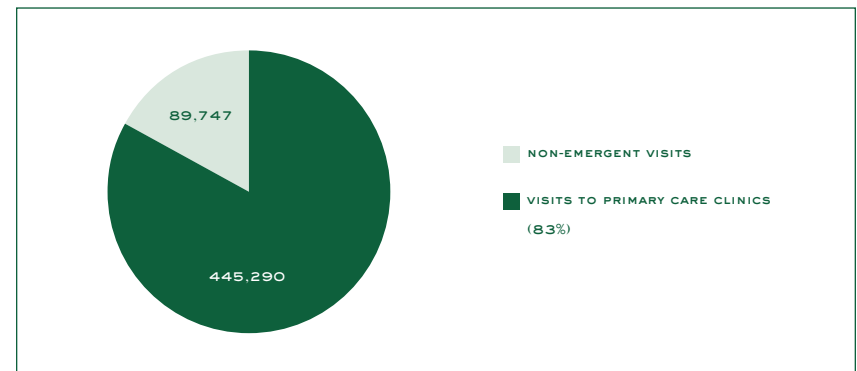
Most of these physicians practice in St. Louis City and north Saint Louis County.

While difficult to estimate the magnitude of their contribution, recent RHC survey data suggests that 3-15% of the patients cared for by these physicians are uninsured while 10-70% of their patients are covered by Missouri Medicaid.^{4,2}

Role of Hospital Emergency Departments in Providing Safety Net Primary Care

Finally, local hospital Emergency Departments (EDs) serve a vital role in providing routine care to uninsured and Medicaid patients in our region. The RHC survey revealed that during 2001, City and County EDs saw 79,910 uninsured and Medicaid patients for non-emergent medical problems. **This accounts for 16% of all ambulatory encounters** for these safety net populations.^{4,2}

NON-EMERGENT CARE PROVIDED TO SAFETY NET PATIENTS
IN HOSPITAL EMERGENCY ROOMS, 2001

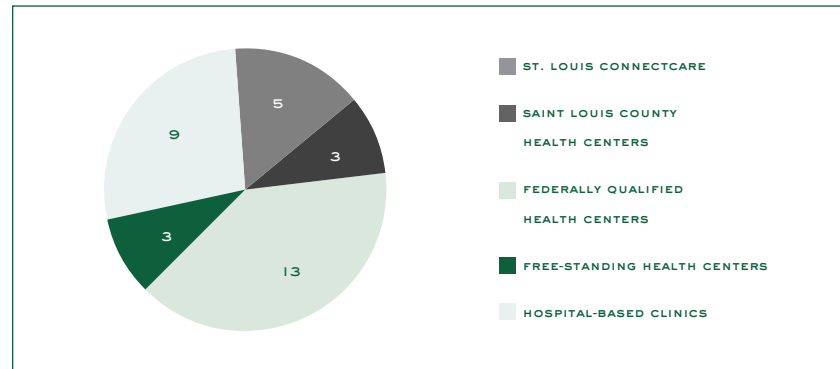


As discussed below, geographically accessible primary care is currently available to the vast majority of Medicaid and uninsured individuals in St. Louis City and County. This suggests that other barriers to care may account for the frequent use of hospital emergency departments for non-emergent care.

Geographic Accessibility Of Institutional Primary Care Sites

According to the survey completed for the RHC by safety net institutional providers, there are currently 33 safety net primary care sites in St. Louis City and County, organized as follows:

NUMBER OF SAFETY NET CLINICS SITES BY TYPE (N=33)

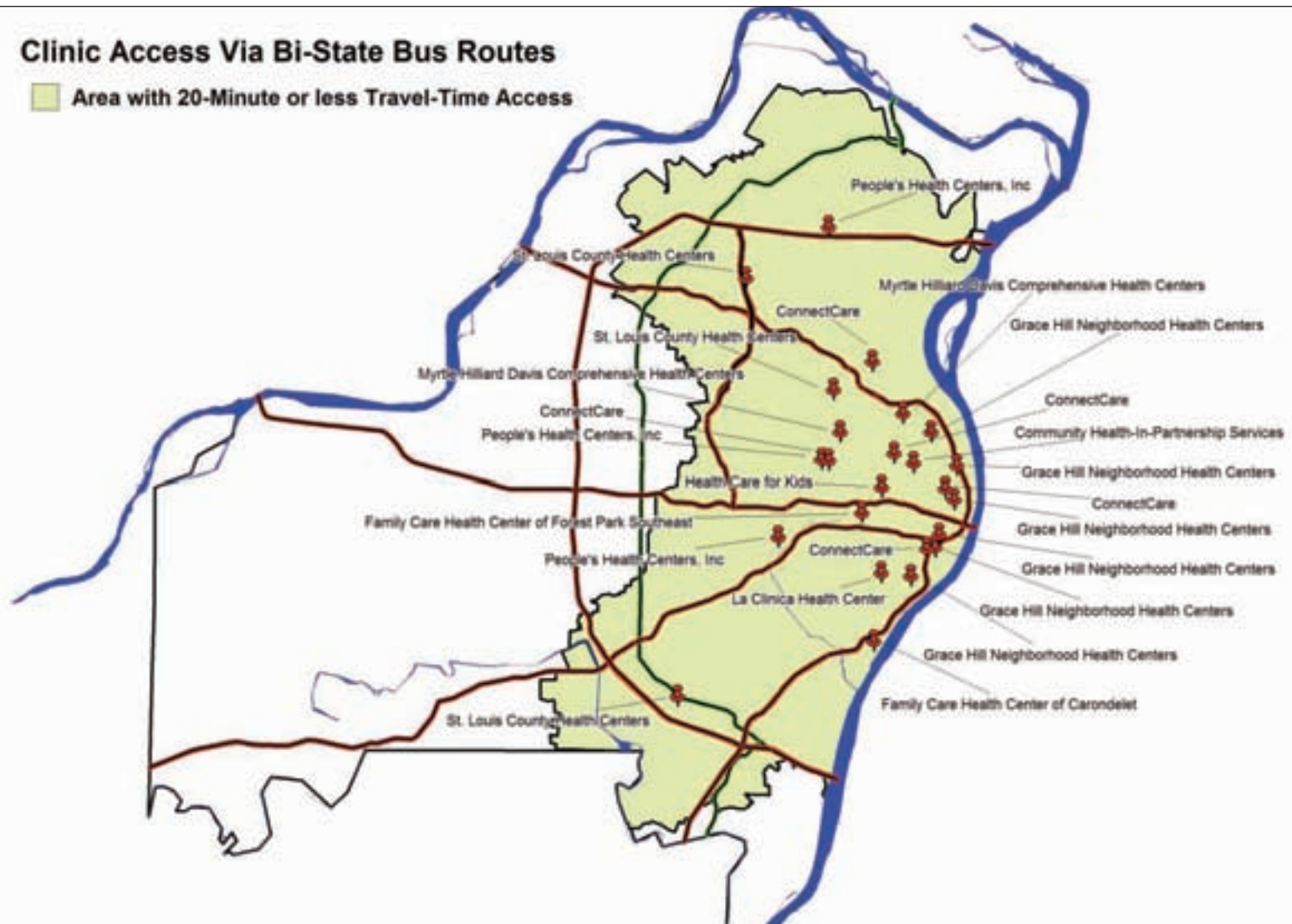


The clinic sites, exclusive of the hospital-based primary care clinics, are mapped on the next pages – the shaded areas indicate those regions within 20 minutes of a clinic site via public transportation, per information provided by the St. Louis Bi-State Development Agency, the regional operator of the public transportation system. This 20-minute time frame does not take into account bus stop wait times or the reliability of public transportation.





As noted in Section V, many safety net patients lack a consistent means of transportation, and there are significant challenges for those that utilize the public transportation system to access clinic sites. This analysis is not intended to minimize the barriers of accessing care through public transportation, but rather is intended to highlight whether or not gaps exist in the geographic locations of safety net sites in our region currently.

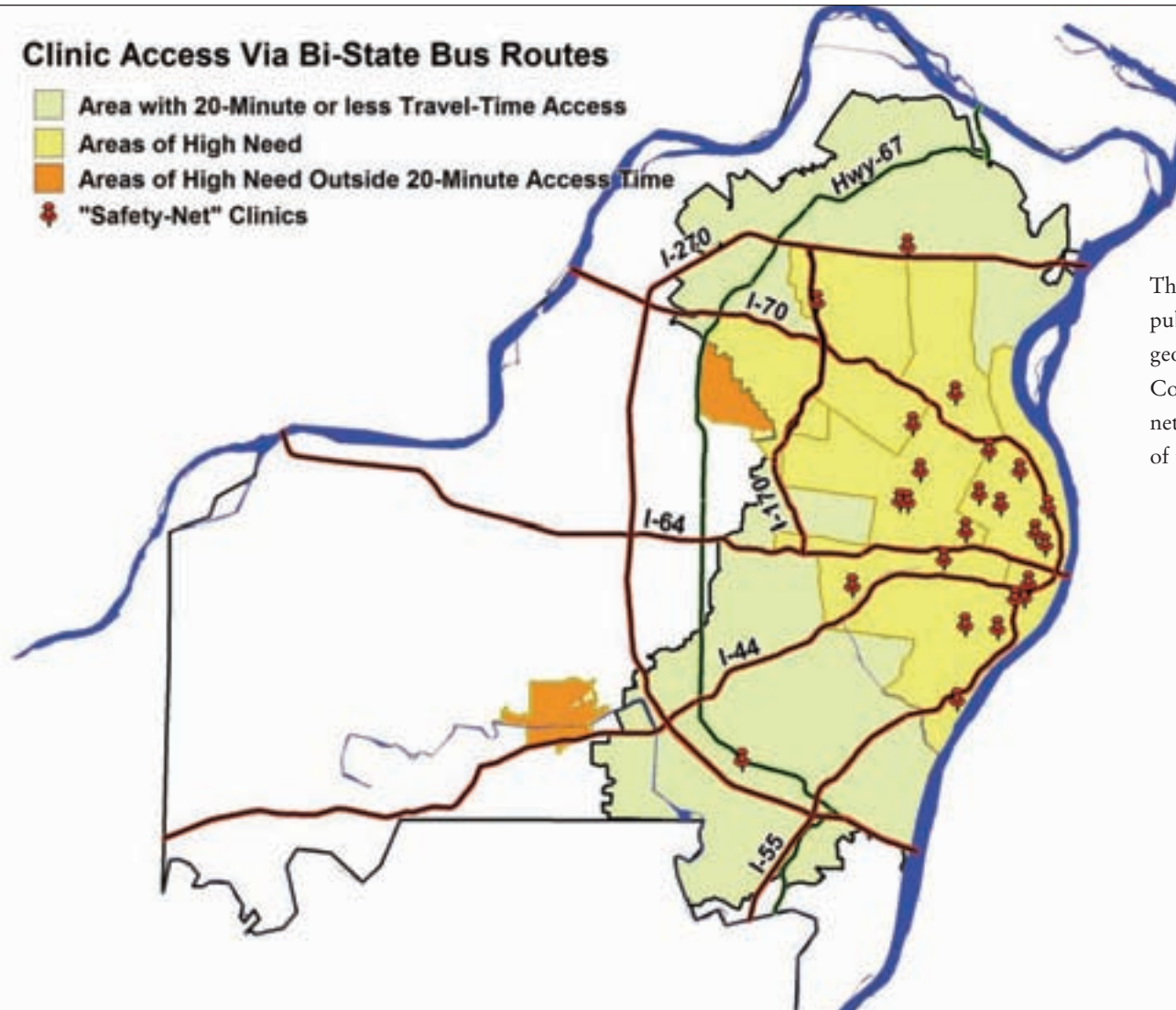
Clinic Access Via Bi-State Bus Routes

■ Area with 20-Minute or less Travel-Time Access



Clinic Access Via Bi-State Bus Routes

-  Area with 20-Minute or less Travel-Time Access
-  Areas of High Need
-  Areas of High Need Outside 20-Minute Access Time
-  "Safety-Net" Clinics



This map illustrates travel time by public transportation in those geographic areas of the City and County in greatest need for safety net services, as identified in Section III of this report.

This analysis confirms that one or more safety net primary care sites are accessible within 20 minutes by public transportation to the areas of highest need within our community. The exceptions are a small section in near North Saint Louis County (around St. John's, Overland, and Vinita Park), and areas in and around Valley Park in Southwest Saint Louis County, as indicated in red.

Appointment Availability at Institutional Primary Care Sites

Overall, wait times for routine primary care are comparable to those encountered in the private sector and are unlikely to be a deterrent to health. Ideally, preventive care should be available within four to eight weeks of patient request, routine patient appointments should be available within 14 days of request, and urgent care requests should be available within one business day, according to standards set by the National Committee for Quality Assurance.^{4.3}

The number of institutional primary care sites that reported offering non-urgent appointments within **14 days** is summarized below:

	ADULTS	PEDIATRIC	OBSTETRICAL
NEW VISIT	25/29 (86%)	22/26 (85%)	25/27 (93%)
RETURN VISIT	26/29 (89%)	25/26 (96%)	27/27 (100%)

Note: All 33 primary care sites provided data regarding appointment availability. However, only 29 of the 33 sites provide adult care; only 26 of the sites provide pediatric care; and only 27 of the sites provide obstetrical care.

In February 2003, the community action group, Metropolitan Congregations United (MCU), conducted a brief survey on primary care appointment availability. Eight primary care safety net sites were called for routine primary care appointments; all indicated a 30-day wait for a primary care appointment. Two sites were called with emergent scenarios (both children with asthma and shortness of breath)—one site indicated a 5-day waiting period; the other 2 weeks. The sites called were a representative sample of the 33 primary care sites in the St. Louis City and County region.^{4.4}

While the MCU survey revealed longer appointment wait times than self-reported by those same institutions, overall wait times for preventive and routine primary care are comparable to that typically encountered in the private sector. A discussion concerning the availability of urgent care services is included later in this report.

Physical Plant Capacity of Institutional Primary Care Sites

The RHC survey indicated a total of 477 patient exam rooms at the 33 institutional primary care sites in St. Louis City and County.^{4.2} Assuming each facility is open 5 days per week and operates 48 weeks per year, this equates to an average of **3.8 patient visits per exam room per day** (437,022 reported ambulatory encounters not including dental/477 patient rooms/240 days). By comparison, a typical physician's office would see at least 8 patients per exam room per day. The geographic distribution of these exam rooms relative to population needs further study.

Total Expected Demand vs. Capacity for Safety Net Primary Care Services

The data concerning geographic accessibility, appointment wait times, and physical plant capacity suggest that there is adequate primary care capacity to meet the current demand for safety net care. While true, the RHC's analysis also indicates that area hospital emergency departments provide a substantial amount of non-emergent care that could be delivered more cost-effectively in a primary care setting.

The average person visits a primary care physician approximately 1.8 times per year, according to information published by the National Center for Health Statistics.^{4,5} Based on the size and demographics of the safety net population, the expected number of primary care visits to safety net providers would be approximately 552,600 visits per year, calculated as follows:

164,000	INDIVIDUALS COVERED BY MANAGED MEDICAID (MC%)
14,000	INDIVIDUALS COVERED BY TRADITIONAL MEDICAID
129,000	UNINSURED PERSONS (ESTIMATED, SEE SECTION V)
307,000	POTENTIAL POPULATION SERVED X 1.8 VISITS = 552,600 VISITS

By comparison, institutional primary care providers reported a total of 437,022 annual patient visits in the RHC survey.

While this figure does not include the number of primary care visits to safety net community physicians, there is likely a substantial gap in the observed versus expected use of primary care services.

There is adequate physical plant capacity to accommodate up to approximately **915,840 primary care visits per year** (477 exam rooms x 8 exams per day x 240 days) at the 33 institutional safety net sites in St. Louis City and County.

This analysis points to the fact that the current physical plant capacity for primary safety net care could accommodate all of the expected demand for primary care services if every potential user of the system utilized the system at an average rate. However, safety net institutions would need to hire additional staff if all uninsured and Medicaid patients sought and received the ideal number of primary care visits per year, as estimated above.

Availability of After-Hours Care

One of the barriers frequently cited in the reports concerning citizen perception of the safety net system is the lack of availability of after-hours care for the uninsured/underinsured in the region.

The majority of uninsured persons in St. Louis City and County are employed in low-wage jobs with little working schedule flexibility. Many of these individuals work more than one job to make ends meet. Weekday daytime doctor visits are often not an option for this population.

As noted below, weekend and after-hours care (after 6 p.m.) at the safety net clinic sites is relatively limited.

AFTER-HOURS CARE AT SAFETY NET PRIMARY CARE SITES

WEEKEND	
SATURDAY	6 SITES (1 FULL-DAY; 4 HALF-DAY; 1 HALF-DAY EVERY 3RD SATURDAY)
SUNDAY	1 SITE (HALF-DAY)
EVENING	
MONDAY	3 SITES (2 SITES TIL 6:30 PM, 1 TIL 9 PM)
TUESDAY	8 SITES (2 SITES TIL 6:30 PM, 1 TIL 7 PM, 1 TIL 8 PM, 3 TIL 8:30 PM, 1 TIL 9 PM, 1 TIL 10 PM)
WEDNESDAY	8 SITES (5 SITES TIL 7 PM, 2 TIL 8:30 PM, 1 TIL 9 PM, 1 TIL 10 PM)
THURSDAY	3 SITES (1 SITE TIL 8:00 PM, 1 TIL 8:30 PM, 1 TIL 9 PM, 1 TIL 10 PM)
FRIDAY	1 SITE TIL 9 PM

*Note that this schedule accounts for the reduction in after-hours care planned for the John C. Murphy (Berkeley) and South County clinic sites scheduled for 1st quarter, 2003. See Appendix 5 for a listing of after-hours resources in the community.*⁴²

Urgent Care

Urgent Care sites serve patients that have immediate, non-life threatening conditions such as:

- Minor scrapes, cuts or bruises
- Muscle cramps or joint sprains
- Back pain
- Rashes
- Insect or animal bites
- Rashes
- Eye irritation
- Cough, cold or flu symptoms
- Sore throats and earaches
- Minor fever
- Painful urination
- Vaginal discharge

Most urgent care sites in St. Louis City and County operate in far West or South County, which are not areas easily accessible for safety net residents in St. Louis City or North County. In November 2002, ConnectCare converted its emergency department to an urgent care center focused on adults, which is open from 9 a.m. to 9 p.m. seven days per week. In addition, Health Care For Kids on Lindell Boulevard offers weekend and after-hours pediatric Urgent Care services 7 days per week from 9 a.m. to 9 p.m. These are the only after-hours urgent care centers with close proximity of the areas of highest need of safety net services within St. Louis City and County.

Use of Hospital Emergency Departments for Non-Emergent Care

All sixteen (16) hospitals that operate an Emergency Department within the borders of St. Louis City or Saint Louis County responded to the RHC's survey on Emergency Department use. These institutions accounted for 625,521 total ED visits during CY2001. Key findings include the following:

- 37% (229,366) Emergency Department visits were for non-emergent medical problems. This equates to 628 non-emergent ED visits each day to St. Louis area hospitals.
- 54% of these non-emergent patient visits occurred after 4 p.m.
- Of the 625,521 total ED visits in St. Louis City and County, 246,936 visits were made by safety net patients. Of this amount, 79,910 (32%) visits were for conditions that were non-medical emergencies.
- It is important to note that the commercially insured population utilized the ED for non-emergent care at a similar rate to uninsured and Medicaid patient populations.^{4,2}

The use of EDs for non-emergent care is less than ideal for several reasons:

1. An established doctor-patient relationship and continuity of care are key imperatives to optimizing health promotion and clinical outcomes. Both are compromised when non-emergent care is sought in an ED environment
2. Arranging for timely post-ED visit follow-up care is difficult, especially for safety net patients without a primary care home.
3. Use of hospital EDs for non-emergent care compromises the ability of these facilities to care for truly emergent patients and contributes to long ED lengths of stay and inordinately high ambulance diversion rates.
4. Providing non-emergent care in an ED setting is very costly and consumes precious medical resources unnecessarily.

The reasons individuals utilize Emergency Departments for non-emergent care are complex. Some of the key factors include:

1. Inflexible work schedules or lack of childcare making it difficult for patients to visit their primary care physician during daytime hours.
2. Difficulty in obtaining same day or next day doctor appointments for urgent (but not emergency) medical problems such as respiratory infections, minor injuries, urinary tract infections and gynecologic problem (vaginitis, vaginal bleeding, etc.).
3. Patients without a primary care physician often utilize hospital EDs as an alternative. In addition, these patients commonly wait to access care until their discomfort becomes acute. This phenomenon was recently confirmed by focus group participants in a study of health care in St. Louis City conducted by the Episcopal-Presbyterian Charitable Health and Medical Trust.^{4,6}

C. Safety Net Subspecialty Care Services

The vast majority of uninsured and Medicaid patients in need of subspecialty care are referred to one of the following institutional providers:

1. ConnectCare subspecialty clinics
2. Subspecialists on the faculty of Washington University and St. Louis University Schools of Medicine
3. Hospital-based subspecialty resident clinics at Barnes-Jewish Hospital, Cardinal Glennon or St. Johns Mercy Medical Center

The ConnectCare subspecialty clinics are staffed by a combination of employed and contracted physicians. ConnectCare's contracted subspecialists include both community practitioners and faculty from Washington University and Saint Louis University Schools of Medicine.

Patients in need of specialty services not available at ConnectCare's Delmar site must first must obtain a "voucher" from ConnectCare that enables payment for these services.

The RHC survey data below show the number of uninsured and Medicaid patient visits by subspecialty care provider:

SUBSPECIALTY PROVIDER	SAFETY NET PATIENT VISITS ^{4,2}		
	UNINSURED	MEDICAID	TOTAL(%)
WASHINGTON U FACULTY	20,631	31,658	52,289 (36%)
CARDINAL GLENNON	1,200	28,100	29,300 (20%)
SAINT LOUIS UNIVERSITY	6,013	16,111	22,124 (15%)
BARNES-JEWISH CLINIC	4,004	15,403	19,407 (13%)
ST. LOUIS CONNECTCARE	10,243	8,201	18,444 (13%)
ST. JOHNS MERCY CLINIC	2,237	1,983	4,220 (3%)
TOTAL PATIENT VISITS	44,328	101,456	145,784 (100%)

It should be noted that about one-third of the uninsured and Medicaid patient visits at Washington University School of Medicine come from beyond the St. Louis region. The same is true for Saint Louis University School of Medicine. This is related to the tertiary and quaternary nature of the subspecialty services provided by these academic institutions.

Some community subspecialists also accept patient referrals from safety net primary care providers, although the majority of these patients are covered by Medicare or commercial insurance. The number of community subspecialists caring for uninsured and Medicaid patients is quite small for several reasons as cited by the RHC Provider Services Advisory Board and in interviews with community-based specialists:

- Missouri Medicaid payments to physicians are among the lowest in the nation (48th out of 50 states) and with rare exception, have remained unchanged since 1995. Medicaid payments for ambulatory encounters typically cover less than 50% of the associated office overhead expenses (support staff, malpractice insurance, medical supplies, rent, utilities, etc.).

- Many community subspecialists fear that caring for uninsured or Medicaid patients will adversely affect their professional liability insurance premiums or result in the inability to obtain malpractice insurance at all. This concern is based on the perception that lawsuits involving safety net patients are more likely to be heard in venues such as St. Louis City where juries are overly sympathetic toward plaintiffs.
- Appointment “no show” rates tend to be higher among safety net patients resulting in lost physician productivity.

It should be acknowledged that low Medicaid payments, professional liability costs, and appointment “no show” rates are also barriers to expanding the number of primary care physicians caring for safety net patients.

Appointment Availability For Safety Net Patients In Need Of Subspecialty Care

While the vast majority of safety net providers offer routine primary care appointments within 14 days of request, appointment wait times for subspecialty care are much longer as noted in the table:

SUBSPECIALTY	4 WEEKS AND UNDER	5-8 WEEKS	9-12 WEEKS	MORE THAN 12 WEEKS
GASTROENTEROLOGY (N=29)	10 (34%)	1 (4%)	12 (41%)	6 (21%)
CARDIOLOGY (N=31)	12 (39%)	11 (35%)	5 (16%)	3 (10%)
PULMONOLOGY (N=29)	15 (52%)	8 (27%)	0 (0%)	6 (21%)
NEUROLOGY (N=30)	13 (43%)	5 (17%)	9 (30%)	3 (10%)
MEDICAL ONCOLOGY (N=29)	15 (52%)	11 (38%)	0 (0%)	3 (10%)
MENTAL HEALTH (N=22)	7 (32%)	12 (54%)	3 (14%)	0 (0%)
NEUROSURGERY (N=22)	7 (32%)	4 (18%)	8 (36%)	3 (14%)
UROLOGY (N=29)	8 (28%)	10 (34%)	11 (38%)	0 (0%)
ORTHOPEDICS (N=30)	11 (37%)	16 (53%)	0 (0%)	3 (10%)
GENERAL SURGERY (N=30)	16 (53%)	11 (37%)	3 (10%)	0 (0%)
OTOLARYNGOLOGY (N=29)	17 (59%)	9 (31%)	3 (10%)	0 (0%)
EYE CARE (N=31)	23 (74%)	3 (10%)	5 (17%)	0 (0%)

As this table shows, in many subspecialties, appointment wait times are in excess of 3 months. These data indicate that the demand for subspecialty care is substantially greater than existing safety net capacity.

It should also be noted that *none* of the institutional safety net subspecialty providers offer weekend or after-hours appointments. This can represent a substantial barrier to care for low-income working families.

The need for more subspecialist care is further corroborated by comparing the size and demographics of the uninsured and Medicaid populations to the overall number of subspecialist patient visits provided to this population, as reported by subspecialty providers in the RHC's recent survey.^{4,2}

According to data from the National Center for Health Statistics, the average person visits a subspecialty physician approximately 1.2 times per year.^{4,5} Based on the size and demographics of the safety net population, the expected number of subspecialty care visits to safety net providers would be approximately 368,400 visits per year, calculated as follows:

164,000	INDIVIDUALS COVERED BY MANAGED MEDICAID (MC+)
14,000	INDIVIDUALS COVERED BY TRADITIONAL MEDICAID
129,000	UNINSURED PERSONS (ESTIMATED, SEE SECTION V)
307,000	POTENTIAL POPULATION SERVED X 1.2 VISITS = 368,400 VISITS

The safety net subspecialty providers reported a total of 145,784 outpatient visits in CY2001. As noted earlier in this section, approximately one-third of the uninsured and Medicaid patients at Washington University School of Medicine and Saint Louis University School of Medicine live outside of the St. Louis region. These two institutions represent approximately 50% of the total safety net specialty care safety net visits in the region.

Adjusting for this factor, the number of specialty care visits for safety net patients residing in St. Louis City and Saint Louis County is estimated at 122,000. This suggests a potential need for up to **246,400 additional subspecialty visits per year** among these safety net patients (368,400 expected visits - 122,000 reported visits).

Additional evidence confirming the shortage of subspecialists comes from one of the managed Medicaid (MC+) plans in St. Louis, which currently transports patients 30 miles or more to obtain certain types of subspecialty care. Qualitative input from several primary care providers suggests access is particularly challenging for patients in need of evaluation and care by orthopedists, neurologists, and gastroenterologists.

The above findings suggest a need to substantially enhance the safety net subspecialty provider network.

The Link to Inpatient Care for Safety Net Patients

With the closing of inpatient services at Saint Louis ConnectCare in 2002, the St. Louis region no longer has an inpatient facility focused on serving the safety net population. Instead, safety net patients are admitted to area hospitals either directly through their Emergency Departments, or in coordination with area safety net providers.

For those uninsured patients needing inpatient services, a voucher system has been established through ConnectCare, which was explained earlier in this section.

For those uninsured patients who do not utilize the voucher system, or for those who have insurance that does not fully cover the cost of care, hospitals have developed systems to provide charity care to these individuals. Each area hospital has its own set of policies and procedures for how an individual qualifies for charity care. Typically, a sliding scale for payment is set based upon income levels and family size.

The impact of lack of insurance, the cost of medical care, and medical debt on the uninsured and underinsured in our region is fully discussed in Section V of this report.

D. Dental Care Services

In his 2000 Report On Oral Health in America, the U.S. Surgeon General noted:

“Oral health is integral to general health...Ignoring oral health problems can lead to needless pain and suffering, causing devastating complications to an individual’s well-being, with financial and social costs that significantly diminish quality of life.”^{4.7}

In addition to pain and suffering, multiple tooth loss, gum disease and significant health problems are common long-term consequences of poor dental and oral health. Research findings also point to possible associations between chronic oral infections and diabetes, heart and lung diseases, stroke, and low-birth weight, and premature births.^{4.7}

Many complications associated with poor dental and oral health can be avoided through regular dental check-ups, preventive care, proper nutrition, and education.^{4.7}

While regular dental visits are critical to oral health, access to dental care is difficult for uninsured and Medicaid populations. This is evidenced by the fact that:

- 80% of tooth decay in Missouri’s children occurs among Medicaid and uninsured populations.^{4.8}
- Nationally, fewer than one in five Medicaid-covered children received a single dental visit in a recent year-long study period. Tooth decay is the most common chronic childhood disease.^{4.9}
- American adults with incomes at or above the poverty level are twice as likely to report a dental visit in the past 12 months as those who are below the poverty level.^{4.7}

Role of Safety Net Institutions In Providing Dental Care

The RHC identified six safety net institutions providing routine and preventive dental care at 17 different geographic sites in St. Louis City and County as of December 2002:

ORGANIZATION	GEOGRAPHIC SITES
CHIPS	1
FEDERALLY QUALIFIED HEALTH CENTERS (INCLUDES 1 MOBILE UNIT)	8
HEALTH CARE FOR KIDS	1
SAINT LOUIS CONNECTCARE	3
ST. LOUIS COMMUNITY COLLEGE AT FOREST PARK DENTAL HYGIENE CLINIC	1
SAINT LOUIS COUNTY HEALTH CENTERS	3
TOTAL	17

Several institutions (such as Saint Louis University) offer safety net specialty care dental services. These services were not examined by the RHC and warrant further examination.

According to the RHC's recent survey, the preventive and routine dental care institutions accounted for 56,344 (includes totals from 15/17 sites) dental visits in a one-year period.

The estimate of the total population that could be served by these safety net dentists is approximately 307,000 individuals, as follows:

164,000	INDIVIDUALS WITH MC% IN ST. LOUIS CITY & SAINT LOUIS COUNTY
14,000	INDIVIDUALS WITH TRADITIONAL MEDICAID IN ST. LOUIS CITY & SAINT LOUIS COUNTY
129,000	UNINSURED PERSONS IN ST. LOUIS CITY & SAINT LOUIS COUNTY
307,000	POTENTIAL POPULATION SERVED

If it is assumed that each of these persons should have an annual dental visit, the gap between the ideal number of dental visits (307,000) versus those we can account for (56,344) is substantial. Although a few community dentists are providing critical services to the safety net population (see below), their contribution does not begin to close the gap in dental service for low-income residents in our region.

The RHC survey revealed 62 dental operatories, or dental "chairs," at 15 of the safety net institutions offering oral health care (data unavailable for 2 sites). Assuming each facility is open 5 days per week and operates 48 weeks per year, this equates to 3.8 patients per dental chair per day (56,344 visits/62 dental operatories/240 days). This suggests that physical plant capacity is not currently a barrier to expanding dental health services.^{4,2}

The number of annual dental visits per safety net dentist at the 15 sites was 2,615, which is equivalent to the national average of 2,611 annual visits per dentist as reported by the American Dental Association 2000 Survey.^{4,10}

Appointment Wait Times and Limited Hours of Operation

Appointment wait times for patients needing routine and preventive dental care are approximately 2 months at most locations.

As with primary care, very few safety net sites offer weekend or after-hours dental care services. This is problematic given that work schedule inflexibility and lack of childcare make it difficult for many safety net patients to access dental services during standard 8:30 a.m. – 5 p.m. weekday hours.

Role of Community Dentists in Providing Safety Net Oral Health Care

As with primary care, a small but dedicated cadre of community dentists provide oral health care to the uninsured and Medicaid populations.

SPECIALTY	TOTAL PROVIDERS	SAFETY NET PROVIDERS ¹
DENTISTS	708	14 (2%)
SPECIALISTS ²	165	UNKNOWN
TOTAL	873	14 (<2%)

While there are more than 14 area community dentists who are signed up as providers in the state's Medicaid program, most of these practices are closed to new Medicaid patients. This was confirmed by a telephone survey conducted by Citizens for Missouri's Children in February, 2000 which found that only 30% of the dentists listed as Medicaid providers were actually accepting any Medicaid patients.^{4,8}

¹ Defined as dentists with more than 250 uninsured or Medicaid patient visits per year as determined by data from Missouri Medicaid program or dentist self-reporting

² Includes oral surgeons, endodontists, pediatric dentists

Expanding dentist participation in the Medicaid program will require the State of Missouri to increase reimbursement for services rendered. A study by Citizen's for Missouri's children finds that dentists are only reimbursed for about two-thirds of the costs incurred in treating Medicaid/MC+ patients.^{4,8} At present, Medicaid reimbursements do not cover the office overhead costs (supplies, equipment, support staff, rent, utilities, etc) associated with providing care to this population.

Shortage of Dental Providers

Another factor contributing to the limited number of safety net dentists is an overall shortage of dentists in Missouri and the St. Louis region. Both dental schools in the St. Louis region have closed, and the University of Missouri, Kansas City School of Dentistry is the only active dental school in the state. (Saint Louis University operates the Center for Advanced Dentistry, but this is for specialty dentistry.) According to the Missouri Coalition for Oral Health Access, the number of retiring dentists each year is estimated at 70, while the number of new dentists is less than half that number.^{4,9}

Volunteer Dental Providers

Due to the shortage in safety net dental care providers, the Greater St. Louis Dental Society organizes volunteer dentists, dental hygienists and dental assistants to provide free oral health services to children in need. In 2002, the society's "Give Kids A Smile" program treated over 700 children and delivered over \$150,000 worth of dental treatment. In addition, the Elks Club provides some dental services for mentally and physically challenged children and adults through a mobile unit.

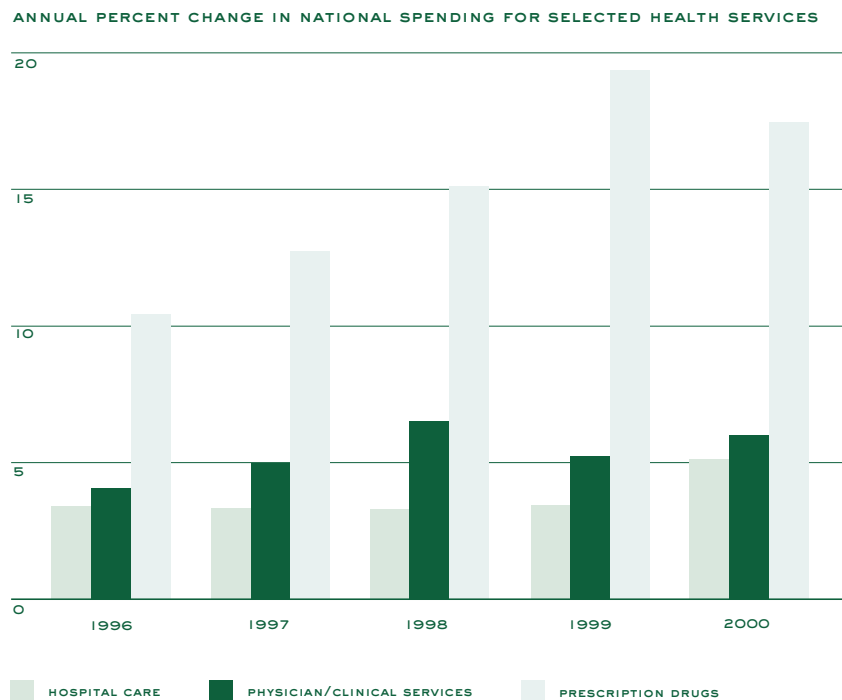
While efforts such as this are laudable, safety net dental care remains sub-optimal in our community and a more comprehensive and effective solution needs to be identified.

E. Pharmacy Services

The Episcopal-Presbyterian Charitable Health and Medical Trust in St. Louis recently commissioned a study of citizen's perceptions of the health care safety net system. One of the key findings is that "perhaps the most consistent comment regarding the current health care system was that medicine was extremely costly for everyone and, for some, high cost severely reduced their access to it".^{4,6}

One focus group participant in the study articulated the problem many in our region are facing when they said "(the cost of) medicine is literally wiping them out, totally wiping them out..."^{4,6}

The problem of the cost of pharmaceuticals is not unique to the St. Louis region, nor unique to the safety net population. Pharmaceuticals are an increasingly important part of medical care, and have become the fastest growing component of health care spending, as shown in the following table:



Source: Kaiser Family Foundation, *Prescription Drug Trends, a Chartbook Update*, November 2001, updated using data from the Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group, CMS web site: www.hcfa.gov, January 2002. ^{4.11}

This phenomenon is being driven by: i) an overall increase in the number of prescriptions being written, ii) new, more costly medications, and iii) higher unit prices for all drugs.

Although in-depth studies have not been completed in the St. Louis region to date, a recent study by the Commonwealth Fund of conditions in New York and seven other states provides insight into the level of access to prescription drugs for low-income individuals. The study found that:

- One of five of all New York seniors (20%) and one-third of New York seniors lacking drug coverage (32%) did not fill prescriptions or skipped doses to stretch out medicines during the past year. Those without coverage went without needed medicines at twice the rate of those with coverage (32% vs. 17%).
- Skipping medication and unfilled prescription rates were disturbingly high among seniors with chronic illness and without drug benefits. One-third of seniors without coverage who had congestive heart failure, diabetes, or hypertension skipped doses, compared with only 9 to 14 percent of those with chronic illnesses who had drug benefits.
- Drug costs can force trade-offs with basic living costs. One of five (19%) low-income seniors in New York spent less on food and rent in order to afford their medications.

These problems exist despite the fact that New York operates Elderly Pharmaceutical Insurance Coverage (EPIC), one of the oldest and largest state pharmaceutical benefit programs, with over 300,000 enrollees. ^{4.12}

The dialogue concerning prescription costs has reached national levels, with both major political parties offering various programs and plans to assist individuals in purchasing prescription drugs and to reign in the soaring cost of pharmaceuticals.

Role of Medicaid in Prescription Drugs for Low-Income Individuals

The Medicaid program plays a fundamental role in the provision of outpatient pharmacy services to low-income populations, particularly in the absence of a Medicare drug benefit. In St. Louis City and County, the State of Missouri paid \$114 million in claims for pharmacy services in FY 2001. This represents 13.5 % of the \$841 million in total Medicaid spending during the same time period.^{4.13}

Without this important benefit, many low-income individuals would have limited ability to access to needed prescription drugs. Unfortunately, drug costs continue to rapidly climb at a time of economic crisis for most state budgets. The combined shortfall in states' budgets across the country is estimated at \$45 billion, and approximately \$1 billion in the State of Missouri. Numerous cuts to the Missouri Medicaid program were enacted in 2002, and at least \$250 Million more in cuts are projected for next year (see Section IV G).

In addition, not all low-income people qualify for Medicaid coverage, and people with low incomes who need prescription drugs but who do not have drug coverage are serially disadvantaged. They do not benefit from volume discounts negotiated by the State with insurers through the Medicaid program, and they must pay the full cost for their medications out of pocket – costs that can take up large proportions of their household income or can cause them to forgo filling their prescriptions.

National Programs (Discount Cards)

In response to escalating medication costs, seven of the major pharmaceutical companies in collaboration with the National Association of Chain Drug stores, have formed a discount program for Medicare enrollees meeting eligibility criteria. A 20 to 40 percent discount is offered on 150 medications.^{4.14} Other manufacturers such as Eli Lilly and Pfizer have established similar private programs.

However, these programs are unlikely to completely fill the gap created by the rapidly rising cost of pharmaceuticals. A study by the Governmental Accounting Office in early 2002 found that the savings from such programs ranged on average from 8.2% to 20% for name-brand drugs, and an average of 37% for generic drugs.^{4.15} As Michael Polzin, a spokesman for Walgreens, recently told the Chicago Tribune, “If you can’t afford a \$100 prescription, chances are you can’t afford it at \$90.”^{4.16}

Resources in Our Community

SenioRx

To address this issue in Missouri, Governor Holden formed a 15-member bipartisan Prescription Drug Task Force in 2001. As a result, the Missouri SenioRx Program was established by statute during a special legislative session in September 2001. This program offers prescription drug benefits for senior citizens, age 65 and older, whose household income is \$17,000 or below for an individual, and \$23,000 or below for a couple. The program pays 60% of covered prescription drugs up to \$5,000, after the participant pays an enrollment fee and meets the deductible.^{4.17}

Approximately 21,900 seniors have enrolled during this first program year, which ends June 30, 2003. The program expects enrollment to increase for the next program year beginning July 1, 2003. The enrollment period established by state law, runs from January 1 through February 28. Based on census data, there are approximately 170,000 potentially eligible seniors in Missouri.

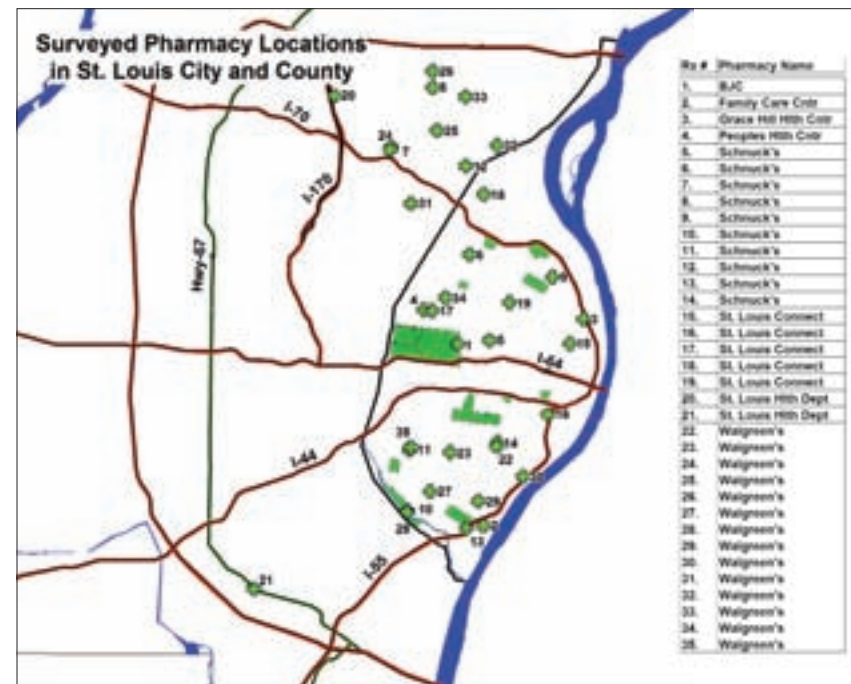
The program acknowledges that it has faced a number of challenges in its first year of operation. The enrollment period of January and February are difficult months to reach senior citizens. The weather is unpredictable and keeps many seniors from getting out for training sessions and outreach events. Also, the program design, with the deductible, enrollment fee and co-pay can be complicated for seniors to understand.

More emphasis on targeted outreach, and a simplified application and training approach, are two of the goals of the program for this next year.

As with many State programs, the current level of funding for the SenioRx program is threatened due to significant budget constraints for the State of Missouri, as described in Section IV G of this report.

Safety Net Providers

Data was collected by personnel in the St. Louis College of Pharmacy of 36 pharmacy sites in the zip codes designated as areas of “high need” for safety net services (see Section III for description of “high need” areas), as noted in the map below:



However, of these pharmacies, 27 (75%) are commercial stores with no special services for uninsured and underinsured populations. Special services may include free prescriptions, assistance in accessing manufacturer free-medication programs, or medication management information.

The community and hospital-based health clinics in the area provide a substantial portion of pharmacy care to safety net patients in the region. In the RHC survey of institutional safety net providers, as well as in interviews conducted by the St. Louis College of Pharmacy in collaboration with the RHC, 13 of the 33 safety net sites reported that they provided pharmacy services, with one (Family Care Health Centers) planning to open a pharmacy once its new building opens in 2003. These 13 sites reported filling approximately 325,000 new and 300,000 refill prescriptions per year.^{4,2,4,18}

As part of their mission, many safety net institutions provide free medications to safety net patients. Specifically, 9 safety net institutions reported that over 40% of the prescriptions they dispense are provided at no charge to the patient. Collectively, these institutions provide more than \$7 million per year in free prescription drugs to low-income residents in St. Louis City and Saint Louis County.

To meet the needs of their patients, safety net pharmacies rely heavily on free physician samples provided by various pharmaceutical companies. Surveyed safety net pharmacies indicated annual savings of \$1,050,000 via the use of physician samples. Retail pharmacies cannot legally dispense samples.

Safety net pharmacies also take advantage of patient assistance programs (PAP) such as Pfizer's Share the Care® Program. Individual safety net pharmacies reported annual savings ranging from \$24,000 to \$500,000 via this mechanism. The availability of social workers, financial counselors, and other "wrap-around" services are critical to the ability of safety net providers to make these pharmacy assistance programs accessible to their patients.

Also, those pharmacies associated with the Federally Qualified Health Centers are able to obtain "340B pricing" for medications due to their federal status. This allows these health centers to access substantial government discounts not available to other pharmacies (see Glossary for definition of 340B Pricing).

Use of Pharmacists in Educating Patients About Medication Use

Patients who have the benefit of discussing their prescribed medications with their pharmacist are more likely to comply with directions for use.^{4,19} Comprehensive medication counseling has also been shown to lower overall medical costs by reducing the prevalence of adverse events attributable to medication duplication, incorrect dosing, drug interactions and allergic reactions.

All dispensing sites provide some patient counseling by pharmacists, as required by state and federal law. Only key points related to proper medication use can be communicated with the limited resources and personnel available. More extensive counseling beyond these minimum requirements is generally limited due to time constraints, limited personnel, and prescription volume. The majority of safety net providers report that comprehensive medication counseling is not routinely provided even though the pharmacists want to provide this needed service.

F. Mental Health: Psychiatric & Substance Abuse Services

The 1999 Report of the Surgeon General on Mental Health argues for the prioritization of mental health as a public health issue. According to the report:

“The impact of mental illness on overall health and productivity is profoundly under-recognized...Mental disorders collectively account for more than 15% of the overall burden of disease.”^{4,20}

Due to the stigma associated with mental disorders, under-diagnosis is common. In addition, the prevalence of mental health problems may be greater than appreciated because of a number of problems, including improper analysis and coding. However, the following data from the Missouri Department of Mental Health (DMH) provide some insight into the impact of mental disorders in our community:

- 415,000 Missourians (7.4% of the population) have a serious need for psychiatric services.^{4,21} Applying this data to the region, it can be estimated that over 101,000 St. Louis City and County residents are in serious need of psychiatric care.
- More than 100,000 Missourians are affected by schizophrenia, bi-polar disorder, clinical depression, and other mental illnesses.^{4,21} In St. Louis City and County, it is estimated that nearly 25,000 people are affected by these mental illnesses (total derived by applying state percent to the City and County).
- An estimated 92,000 Missouri children suffer from severe emotional disturbances (SED) that affect their ability to function at home and school.^{4,21} It is estimated that over 22,000 children in St. Louis City and County are affected by SED (total derived by applying state percent to the City and County).

Mental health is an important component of the health care safety net system. Insurance coverage for mental health problems is often less comprehensive than coverage for physical problems. As a result, safety net mental health services are

critical. However, funding for mental health services has been adversely affected by Missouri’s current budget difficulties. For example, in 2002 Missouri reduced by \$1.9 million the Department of Mental Health budget for children’s services to children with severe emotional disturbances. Other funding cuts are currently being discussed.

The RHC chose to provide a separate discussion of mental health, as its impact on health is often underestimated, and the organization and funding of the mental health safety net differs from other primary and specialty care safety net services.

The RHC examined the provision and availability of two key areas of mental health services in St. Louis City and County: psychiatric services and substance abuse services.

Mental Health System Carve Out

The mental health system is commonly referred to as “carved out” or separated from the system of physical health care. Safety net treatment and service delivery are coordinated through separate state departments and networks of providers.

Persons covered under Missouri’s traditional (non-managed care) Medicaid program receive mental health services (both psychiatric and substance abuse) via programs administered by the Missouri Department of Mental Health, and often in the case of children, the Department of Social Services and the Department of Elementary and Secondary Education. People who are uninsured also rely on the Department of Mental Health.

Persons eligible for managed Medicaid (MC+) receive general health services through their Medicaid HMO. However, mental health services for MC+ recipients are subcontracted to various Behavioral Health Organizations (BHOs).

The provision of services for psychiatric care and substance abuse services differ substantially and are discussed separately.

Psychiatric Care

Psychiatric care refers to the treatment of a range of psychiatric, psychological, emotional and behavioral disorders. Treatment providers include psychiatrists, psychologists, counselors, social workers, and case managers. Unless otherwise specified, discussion of psychiatric care in this report refers to this comprehensive definition, not just treatment provided by psychiatrists.

Psychiatric Services Safety Net

The Department of Mental Health divides Missouri into 25 service areas for the administration of psychiatric services to the uninsured and underinsured. For each service area, the State contracts with a service provider designated as an Administrative Agent.

Administrative Agents are responsible for public mental health assessment and services. They provide these services through employed and contracted psychiatrists, psychologists, counselors, social workers and case managers at the Administrative Agent sites and at contracted providers' offices throughout the community. The Administrative Agents also provide follow-up services for people released from state-operated inpatient services.

Two Administrative Agents coordinate outpatient and residential services for the service areas in St. Louis City and Saint Louis County:

- ***BJC Behavioral Health Services*** (3 sites): serves as the Administrative Agent for South St. Louis City and County.
- ***Hopewell Center*** (2 sites): serves as the Administrative Agent for North St. Louis City.

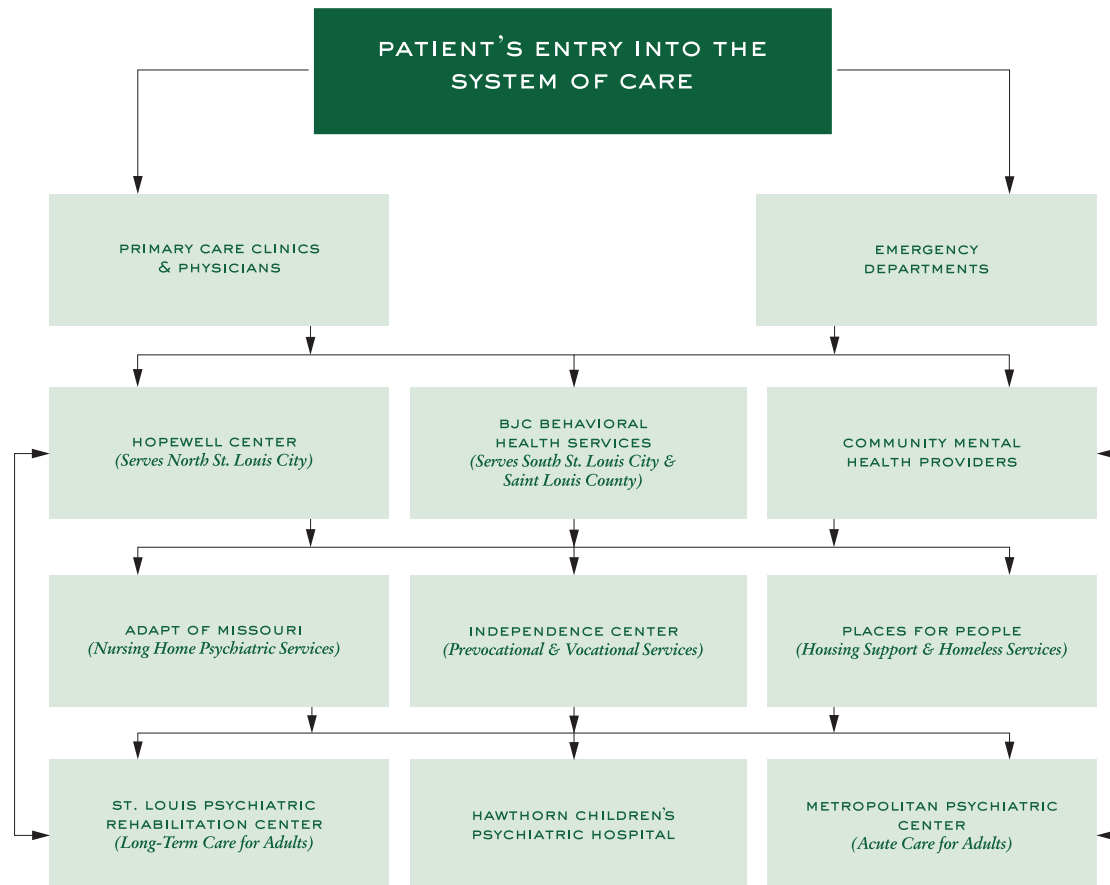
The Administrative Agents coordinate specialty psychiatric services through Affiliate organizations. There are three Affiliates serving St. Louis City and County. Each Affiliate provides general community-based psychiatric services in addition to the specialty services detailed below:

- ***Adapt of Missouri*** (5 sites): specializes in nursing home psychiatric services.
- ***Independence Center*** (5 sites): specializes in pre-vocational and vocational services.
- ***Places for People*** (1 site): specializes in housing support and homeless services.

Three psychiatric hospitals provide inpatient safety net mental health care:

- ***Hawthorn Children's Psychiatric Hospital***: provides acute and residential care for children.
- ***Metropolitan St. Louis Psychiatric Center***: provides acute care for adults.
- ***St. Louis Psychiatric Rehabilitation Center***: provides long-term care for adults.

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A number of private practice providers also accept Medicaid and uninsured patients. In addition, the Department of Corrections coordinates psychiatric services for people who are incarcerated. These organizations provide important safety net services in the community, but the majority of safety net psychiatric care for adults is coordinated through the Department of Mental Health.

The roles of various providers and the flow of patients through the safety net psychiatric care system are depicted in the diagram below. The diagram predominantly represents the adult safety net system. The mental health care safety net for children is discussed later in this section.

Number of Clients Served

A recent RHC survey of 33 mental health providers, revealed 10,549 unduplicated clients being served by St. Louis City and County mental health Administrative Agents (See Appendix 1 for survey methodology and respondent list.) The age/gender breakdown of this population is shown below:

MALES, AGE 65+	73 (<1%)
FEMALES, AGE 65+	263 (3%)
MALES, AGE 19-64	3,712 (35%)
FEMALES, AGE	4,528 (43%)
MALES, AGE ≤18	1,257 (12%)
FEMALES, AGE <18	716 (7%)
TOTAL UNDUPLICATED CLIENTS	10,549 (100%)

The number of new and return psychiatric visits for this patient population is as follows:

VISIT TYPE	ADULT VISITS	PEDIATRIC VISITS (ADOLESCENT AND CHILD)	TOTAL VISITS
NEW	2,862	3,061	5,923
RETURN	132,711	19,181	151,892
TOTAL	135,573	22,242	157,815

As noted below, the uninsured and Medicaid populations account for over 88% of client visits to City and County Administrative Agents.^{4.2}

INSURANCE TYPE	CLIENT VISITS
UNINSURED	39%
TRADITIONAL MEDICAID	45%
MANAGED MEDICAID (MC+)	4%
GENERAL RELIEF	<1%
MEDICARE	11%
COMMERCIAL INSURANCE	<1%

Need and for Psychiatric Services

As stated previously, 415,000 Missourians, or 7.4% of the state population, are in serious need of psychiatric care.^{4.21} Assuming that the need for services is at least as high for the safety net population in our region, it can be estimated that *at least 22,718 safety net patients in St. Louis City and County are in serious need of psychiatric care.*

The vast majority of mental health services to the adult population is coordinated through Department of Mental Health Administrative Agents. Administrative Agents see *10,549 unduplicated clients in a given year, or 46% of the safety net population estimated to be in serious need of services.* This indicates that a large number of people in need of services are not receiving them.

Wait times for mental health services (both psychiatric and substance abuse), as reported by safety net providers in our region, indicate a need for greater service availability:

- 65% of respondents (13 respondents) report that wait times for mental health services are four weeks or more.
- Only 30% (7 respondents) report wait times of two weeks or under.^{4.2}

After Hours Psychiatric Care

The majority of the safety net psychiatric care providers surveyed by the RHC report their hours of operation as 8 a.m. to 5 or 6 p.m. Monday through Friday.^{4.2} Most providers have a staff person on call 24 hours a day or contract with Behavioral Health Response to handle crisis situations.

The after hours care systems for Administrative Agents, Affiliates and community providers is discussed below:

Administrative Agents

The weekday hours of operation for Administrative Agents fall between 8 a.m. and 5:00 p.m., with one site offering care until 6 p.m. Another site is open until 7 p.m. on Tuesdays only.

Two of the five Administrative Agent sites offer weekend care from 10 a.m. to 4 p.m. on Saturdays. The other sites are closed during the weekends. According to the Administrative Agents, many psychiatric care services are provided out in the community, and staff often work after-hours to meet client needs.

Behavioral Health Response is a 24-hour mental health crisis service center offering telephone crisis intervention services, mobile community crisis assessments and crisis stabilization beds.

The Administrative Agents contract with Behavioral Health Response to handle calls after hours, weekends, and holidays. Both Administrative Agents also have a staff person on call to assist Behavioral Health Response when necessary. These after-hour services are mostly for crisis situations, and as one FQHC provider noted, “are not designed to ensure continuity of care. Clients cannot rely on after-hours calls for regular services.”^{4.22}

Affiliates and Community Safety Net Providers

The Affiliate weekday hours of operation fall between 7:30 a.m. and 6 p.m. with 2 of the 11 sites staffed 24 hours a day. The 9 sites without round-the-clock hours of operation contract with Behavioral Health Response or have staff people on call 24 hours a day.

The RHC received five surveys back from community psychiatric safety net providers, one of which offers 24-hour care seven days a week. Of the 4 remaining sites, one site offers weekend hours and two sites offer evening hours until 8 or 9 p.m. Monday through Friday.

Three of the community providers contract with Behavioral Health Response or have staff on call 24 hours a day. One site has no after-hours system in place.

Psychiatric Services through Other Providers

Many of the services provided by the Department of Mental Health are for chronic and often acute mental health problems. A number of providers not associated with DMH provide important mental health services to safety net patients in the community, including services for episodic mental health problems. These providers include private practitioners, community and faith-based providers, some FQHC locations, and the Saint Louis County Department of Health, which operates Family Mental Health.

Family Mental Health provides outpatient psychiatric services for children, adolescents, adults, couples, and families who live in Saint Louis County. The department also works closely with school districts and other outside agencies to coordinate care for clients involved in the program or in crisis situations.^{4.23}

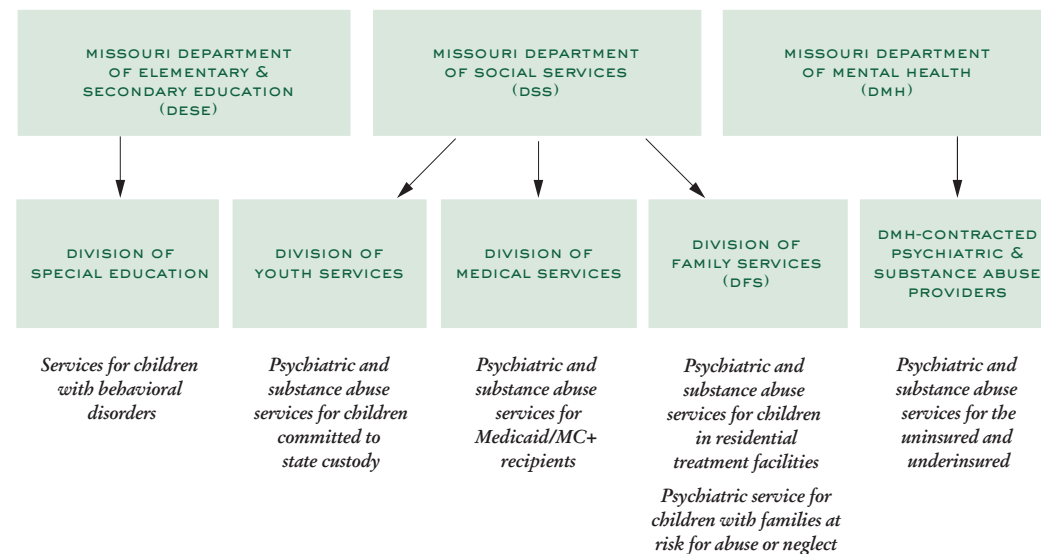
The Family Mental Health staff includes licensed clinical social workers, psychologists and psychiatrists. A sliding fee scale is available and some insurance is accepted. Services are provided at four Saint Louis County Department of Health locations throughout the County.

Family Mental Health estimates that it serves 300 to 400 clients at any one time and between 3000 and 4000 visits per year. Between 1000 and 1500 of these visits are unduplicated clients.

DEPARTMENTS PROVIDING CHILDREN'S MENTAL HEALTH SAFETY NET SERVICES

Children's Mental Health Safety Net Services

The organization of the children's mental health safety net differs from the adult system and warrants a separate discussion. Multiple departments provide children's mental health services, including the Department of Mental Health, the Department of Social Services (DSS), and the Department of Elementary and Secondary Education (DESE).



Children whose families are uninsured or underinsured may receive services through the Department of Mental Health or through community mental health providers. Neither of the two children's hospitals in St. Louis provide inpatient mental health services for children.

Children whose families receive MC+ or traditional Medicaid may receive services through private managed care insurance companies contracted by DSS or through the Department of Mental Health.

In addition, children identified with behavioral disorders at their schools receive mental health services through the Division of Special Education in DESE. Alternatively, the Division of Family Services (DFS) in DSS provides services for children of families who have been identified as at-risk for child neglect or abuse. DFS provides both psychiatric and substance abuse services for children who have been placed in residential treatment facilities. The Division of Youth Services, also in DSS, provides psychiatric and substance abuse services for youth committed to state custody.

A 2002 Report by Citizen's for Missouri's Children (CMC) offers an in-depth discussion of mental health care for children. CMC finds that limited coordination among the departments providing children's mental health services leads to confusion for families and parallel systems of services.^{4.24}

Substance Abuse

Substance abuse and dependence is diagnosed using criteria specified by the American Psychiatric Association. In general, substance abuse can be defined as a "mental disorder which includes use of, and dependence on, alcohol or other drugs."^{4.25}

Estimates from the National Household Survey on Drug Abuse indicate that approximately 12.8 million Americans (about 6% of the population age 12 and older) currently use illicit drugs, and about 32 million Americans (15.8% of the population) have engaged in binge or heavy drinking (five or more drinks on the same occasion at least once in the previous month).^{4.26}

In addition alcohol-related disorders occur in up to 26% of general medical clinic patients. However, it has been documented that despite the prevalence of substance abuse disorders, many physicians do not identify alcoholics when they are admitted to the hospital.^{4.26}

In 1999, the Division of Alcohol and Drug Abuse (ADA) completed a needs assessment for substance abuse services in the Eastern Region of Missouri, which includes St. Louis City, Saint Louis County, St. Charles, Lincoln, Warren, Franklin and Jefferson Counties.^{4.27}

Based on this report, over *130,000 persons (9.5% of people) in St. Louis City and County are in need of substance abuse services, with 20% of these individuals being under age 18*. By applying the 9.5% to the number of safety net patients in St. Louis City and County, it can be estimated that *at least 29,165 people in the region's safety net are in need of substance abuse services*.

Types of Substance Abuse Problems

Data on the primary substance abuse problems of those who receive ADA treatment lends insight into the types of substance abuse problems in the region. ADA reports 10,576 program admissions for St. Louis City and County residents in 2001.

35% of those who received services had cocaine use as a primary problem, with crack cocaine accounting for 92% of the cocaine use. The second-most commonly treated primary problem was alcohol abuse at 23.5%.

PRIMARY SUBSTANCE ABUSE PROBLEM OF THOSE WHO RECEIVED SERVICES FROM DMH—2001

	STL CITY	STL COUNTY	CITY & COUNTY TOTAL
COCAINE (TOTAL)	2,116 (40%)	1,648 (31.1%)	3,764 (35.6%)
– CRACK COCAINE	1,975 (37.3%)	1,490 (28.1%)	3,465 (32.8%)
ALCOHOL	1,244 (23.5%)	1,715 (32.4%)	2,959 (28%)
MARIJUANA/HASHISH	1,149 (21.7%)	1,246 (23.5%)	2,395 (22.6%)
HEROIN	680 (12.9%)	530 (10%)	1,210 (11.4%)
STIMULANT (TOTAL)	40 (0.7%)	60 (1.1%)	100 (0.9%)
– METHAMPHETAMINE	34 (0.6%)	57 (1.1%)	91 (0.9%)
PCP, LSD, OTHER	34 (0.6%)	30 (0.6%)	64 (0.6%)
HALUCINOGEN			
ANALGESIC EXCEPT	17 (0.3%)	29 (0.5%)	46 (0.4%)
HEROIN (TOTAL)			
– NON-PRESCRIPTION	3 (<0.1%)	8 (<0.1%)	11 (<0.1%)
METHADONE			
TRANQUILIZER	3 (<0.1%)	11 (0.2%)	14 (0.3%)
SEDATIVE	1 (<0.1%)	5 (<0.1%)	6 (<0.1%)
INHALANT	0 (<0.1%)	2 (<0.1%)	2 (<0.1%)
ANY OTHER RX OR ILLCIT DRUG	1 (<0.1%)	13 (<0.1%)	14 (0.1%)
TOTAL	5,287 (100%)	5,289 (100%)	10,576 (100%)

Alcohol- and Drug-Related Deaths

In 2000, there were 195 alcohol- and drug-related deaths in St. Louis City and County, representing 1.4% of the total deaths in the City and County.^{4,28}

ALCOHOL- AND DRUG-RELATED DEATHS—2000

	STL CITY	STL COUNTY	CITY & COUNTY TOTAL
TOTAL RESIDENT DEATHS	4,163	9,661	13,824
ALCOHOL-RELATED DEATHS	50 (1.2% OF TOTAL DEATHS)	37 (0.4%)	87 (0.6%)
DRUG-RELATED DEATHS	50 (1.2%)	58 (0.6%)	108 (0.8%)
TOTAL ALCOHOL AND DRUG-RELATED DEATHS	100 (2.4%)	95 (1%)	195 (1.4%)

Alcohol and Drug-Related Hospital and Emergency Department Visits

The Missouri ADA reports that in 2000 there were nearly 13,000 alcohol-related hospital and Emergency Department visits in St. Louis City and County. Alcohol-related ED visits made up approximately 1.3% of total ED visits. In the same year, there were over 8,000 drug-related ED visits and hospitalizations. Drug-related ED visits represented approximately 0.8% of total ED visits. Together, alcohol and drug-related ED visits made up approximately 2.1% of total ED visits. (Total ED patient volume based on 2001 ED data as reported in the RHC survey. 2000 patient volume is likely to be comparable to 2001.)^{4,2}

It is likely that alcohol- and drug-related ED visits and hospitalizations are underreported and that the total number and percent of visits is actually higher.

ALCOHOL-RELATED HOSPITAL AND EMERGENCY DEPARTMENT VISITS — 2000

	STL CITY	STL COUNTY	CITY & COUNTY TOTAL
DIRECT HOSPITALIZATIONS	2,013	2,452	4,465
EMERGENCY DEPT. HOSPITALIZATIONS	1,771	2,395	4,166
EMERGENCY DEPARTMENT OUTPATIENT	2,327	2,002	4,329
TOTAL ALCOHOL-RELATED VISITS	6,111	6,849	12,960

DRUG-RELATED HOSPITAL AND EMERGENCY DEPARTMENT VISITS — 2000

	STL CITY	STL COUNTY	CITY & COUNTY TOTAL
DIRECT HOSPITALIZATIONS	1,256	1,525	2,781
EMERGENCY DEPARTMENT HOSPITALIZATIONS	1,375	1,495	2,870
EMERGENCY DEPARTMENT OUTPATIENT	1,503	1,265	2,768
TOTAL DRUG-RELATED VISITS	4,134	4,285	8,419

Alcohol- and Drug-Related Arrests and Traffic Accidents

Data on arrests and traffic accidents also provide insight into the impact of substance abuse in the region. In 2000, police reports indicate that there were 4,801 arrests for driving while intoxicated (DWI/DUI) and 7,788 drug arrests.^{4,28}

ALCOHOL AND DRUG ARRESTS—2000

	STL CITY	STL COUNTY	CITY & COUNTY TOTAL
DWI/DUI	605	4,196	4,801
DRUG ARRESTS	4,855	2,993	7,788

In addition, the Missouri Division of Alcohol and Drug Abuse reports over 1,500 alcohol and drug-related traffic accidents in St. Louis City and County in 2000. The tables below provide further detail.^{4,28}

ALCOHOL-RELATED TRAFFIC ACCIDENTS—2000

	STL CITY	STL COUNTY	CITY & COUNTY TOTAL
TOTAL ALCOHOL-INVOLVED CRASHES	350	1,038	1,388
FATAL CRASHES	7	9	16
INJURY CRASHES	144	422	566
PROPERTY DAMAGE CRASHES	199	607	806
CRASH FATALITIES	10	12	22
CRASH INJURIES	270	632	902

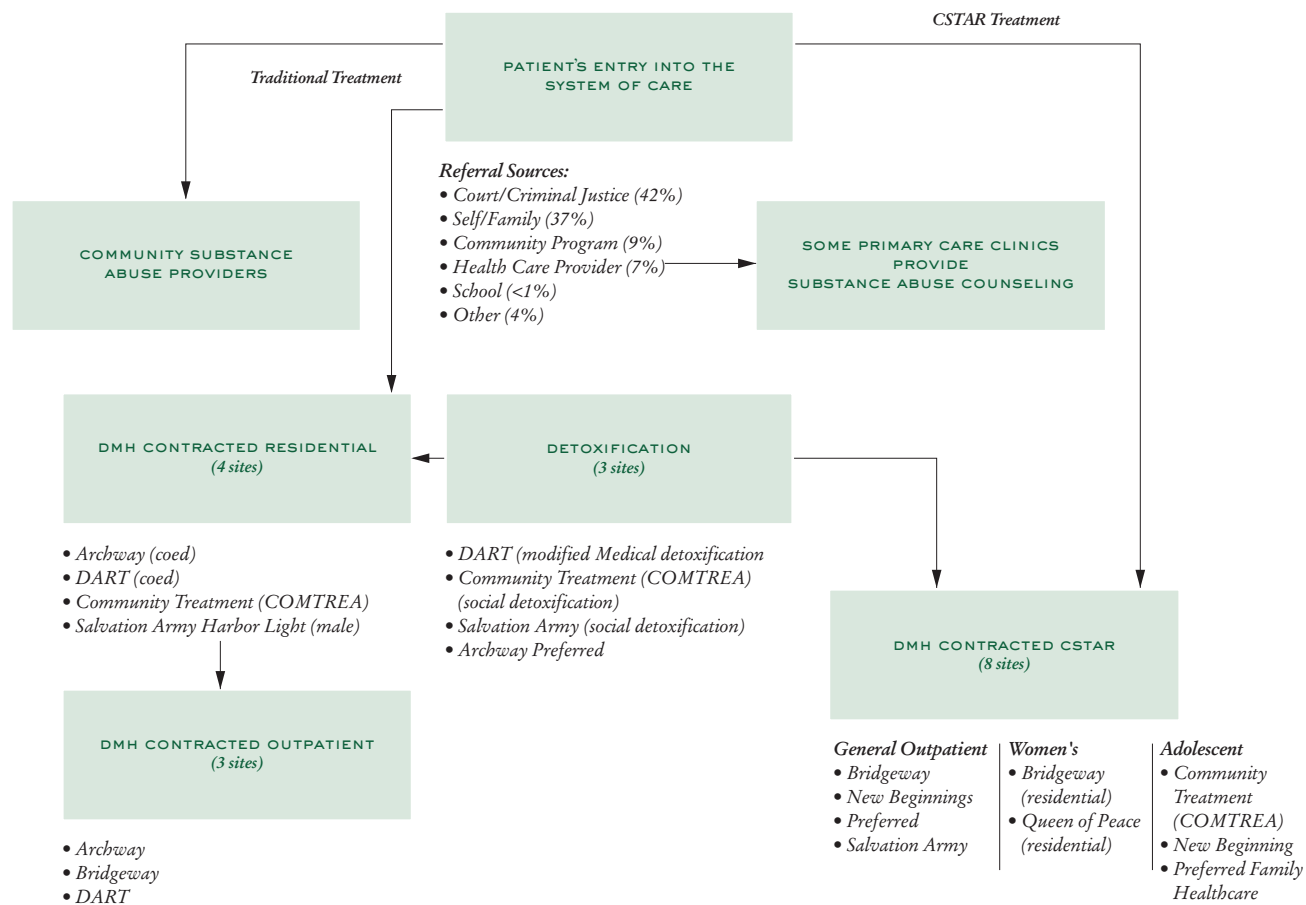
DRUG-RELATED TRAFFIC ACCIDENTS—2000

	STL CITY	STL COUNTY	CITY & COUNTY TOTAL
TOTAL DRUG-INVOLVED CRASHES	47	94	141
FATAL CRASHES	2	1	3
INJURY CRASHES	18	39	57
PROPERTY DAMAGE CRASHES	27	54	81
CRASH FATALITIES	4	1	5
CRASH INJURIES	28	48	76

Organization of the Substance Abuse Safety Net

The Division of Alcohol and Drug Abuse (ADA) in the Missouri Department of Mental Health provides services through a network of contractors who operate treatment and detoxification programs.^{4,21,4,29}

ORGANIZATION OF THE SUBSTANCE ABUSE SAFETY NET



Detoxification

As shown in the table, our ADA contractors provide two types of detoxification services, modified medical detoxification and social detoxification.

- *Modified medical detoxification*
Drug Alcohol Rehabilitation & Treatment (DART) provides modified medical detoxification. This detoxification service includes oversight by a registered nurse and is designed for clients who may need medical attention for their withdrawal symptoms.
- *Social detoxification*
Three organizations—Archway, Community Treatment, Inc., and the Salvation Army—provide social detoxification, which does not include medical oversight.

Treatment

Residential and outpatient services are provided through two types of treatment programs—traditional programs and CSTAR.

- *Traditional treatment programs*
Traditional treatment programs contracted by ADA include four residential programs and three outpatient programs.

In general, a patient in traditional treatment receives 30 days of treatment in a residential facility followed by 5 months of outpatient after-care treatment. Traditional programs cannot bill Medicaid.
- *CSTAR programs*
CSTAR stands for Comprehensive Substance Treatment and Rehabilitation. Eight CSTAR programs serve St. Louis City and County residents. CSTAR was created as an alternative to traditional treatment and provides three levels of care. Clients are followed for up to two years in a care plan developed specifically for their needs. As clients advance in their treatment, their level of care lessens.

Special CSTAR programs exist for adolescents and for women. The Women's CSTAR programs treat single women, pregnant women and women with children. Adolescent and Women's CSTAR programs include residential care. The Adolescent CSTAR is billable under Medicaid.

Residential care is not billable under Medicaid for men or women over the age of 18.

Treatment Referral Source

The referral sources for those receiving substance abuse treatment through ADA in 2001 are outlined below. The most frequent referral source (47%) was the courts and criminal justice system, indicating that many people do not receive treatment until compelled to do so by the judicial system. The second-most common referral source was self or family. Only 6.3% of referrals were from health care providers.

ADA REFERRAL SOURCES—2001

	STL CITY	STL COUNTY	CITY & COUNTY TOTAL
COURT/CRIMINAL JUSTICE	2,223 (42%)	2,762 (52.2%)	4,985 (47.1%)
SELF/FAMILY	1,986 (37.6%)	1,753 (33.1%)	3,721 (35.2%)
COMMUNITY PROGRAM	470 (8.9%)	334 (6.3%)	3,804 (36%)
HEALTH CARE PROVIDER	387 (7.3%)	284 (5.4%)	671 (6.3%)
OTHER/NOT REPORTED	219 (4.1%)	148 (2.8%)	367 (3.5%)
SCHOOL	2 (< 0.1%)	8 (0.2%)	10 (<1%)
TOTAL	5,287 (100%)	5,289 (100%)	10,576 (100%)

Number of Clients Served

In fiscal year 2002, 11,210 City and County residents were admitted to ADA substance abuse programs. This included 8,561 first-time admissions and 2,649 repeat admissions.^{4,28} The total number of clients served represents 38% (11,210/29,165) of the safety net population estimated to be in need of services.

PROGRAM ADMISSIONS	FIRST TIME	REPEAT	TOTAL ADMISSIONS
ADULT	7,477	2,503	9,980
PEDIATRIC	1,084	146	1,230
TOTAL	8,561	2,649	11,210

Nearly 70% of patients admitted to substance abuse programs were uninsured and approximately 20% *were covered by Medicaid*.

The age/gender breakdown of patients enrolled in substance abuse programs is as follows:

MALES, AGE 65+	49 (<1%)
FEMALES, AGE 65+	7 (<1%)
MALES, AGE 19-64	6,660 (59%)
FEMALES, AGE 19-64	3,185 (28%)
MALES, AGE ≤18	903 (8%)
FEMALES, AGE <18	484 (4%)

Treatment Services Provided

The breakdown of services provided by ADA in 2001 is outlined below. CSTAR and other outpatient services comprised 70% of the services provided.

ADA TREATMENT SERVICES PROVIDED—2001

	STL CITY		STL COUNTY		CITY & COUNTY TOTAL
DETOXIFICATION	661	(12.5%)	422	(8%)	1,083 (10.2%)
TRADITIONAL RESIDENTIAL (NOT CSTAR)	1,028	(19.4%)	997	(18.9%)	2,025 (19.1%)
OUTPATIENT (NOT CSTAR)	1,788	(33.8%)	1,775	(33.6%)	3,563 (33.7%)
CSTAR	1,810	(34.2%)	2,095	(39.6%)	3,905 (36.9%)
– CSTAR ADOLESCENT	26	(0.5%)	413	(7.8%)	439 (4.2%)
– CSTAR WOMEN AND CHILDREN	1,012	(19.1%)	797	(15.1%)	1,809 (17.1%)
– CSTAR GENERAL TREATMENT	772	(14.6%)	885	(12.1%)	1,657 (15.7%)
TOTAL	5,287	(100%)	5,289	(100%)	10,576 (100%)

ADA reports that approximately 11% of those who received treatment services were also in need of psychiatric care.^{4.28}

Availability of Substance Abuse Services

In the RHC survey, substance abuse providers reported wait times of between one and four weeks for safety net treatment services.^{4.2} 65% of safety net primary care providers reported wait times of 4 weeks or more for mental health services in general, and 48% indicate wait times of up to eight weeks.^{4.2}

Anecdotally, safety net primary care providers report that substance abuse appointment availability often depends on insurance status. They report that they have the greatest difficulty securing treatment for uninsured males. They also noted that while they may be able to schedule an assessment for a client within a week, it may take much longer for the client to be admitted into a treatment program, particularly for clients requiring residential care.^{4.30}

Finally, a study conducted by the City of St. Louis Mental Health Board of Trustees finds that availability of substance abuse services is limited in the City:

“The need for traditional treatment services continues to exceed its availability. Support for the SA treatment system is of paramount importance.”^{4.31}

After Hours Substance Abuse Care

The majority of safety net substance abuse providers are open 24 hours a day or provide evening hours. Of the ten substance abuse providers that responded to the RHC Mental Health Survey, five are open 24 hours a day, seven days a week. Three offer care until 8 p.m. or 9 p.m. at least four days a week. Four of the sites do not offer any weekend hours.

After-hours crisis calls are typically handled by an on-call staff person, or contracted organization such as Behavioral Health Response.^{4.2}

Difficulty in Accessing A Complex System

Beyond service availability, the uninsured and underinsured encounter barriers that limit their ability to access to both psychiatric and substance abuse services. The Surgeon General's Report on Mental Health found that, in particular, clients often find the organization of safety net mental health services to be complex and confusing:

“Individuals with the most complex needs and fewest financial resources often find the system fragmented and difficult to use.” ^{4.20}

A survey conducted by the City of St. Louis Mental Health Board of Trustees supports the conclusion that consumers have a need for clear information regarding both psychiatric and substance abuse services:

“The responses of many consumers indicated an unmet need for information about available services and assistance in obtaining the services they needed.” ^{4.24}

In particular, consumers were not aware of crisis intervention services, including 24-hour assistance.

In addition, Citizens for Missouri's Children reports that information regarding children's mental health services is not readily available.

“Confusing and inadequate information exists about who can be serviced and what services are available, so that even state workers are not able to assist families with children in state financed programs.” ^{4.24}

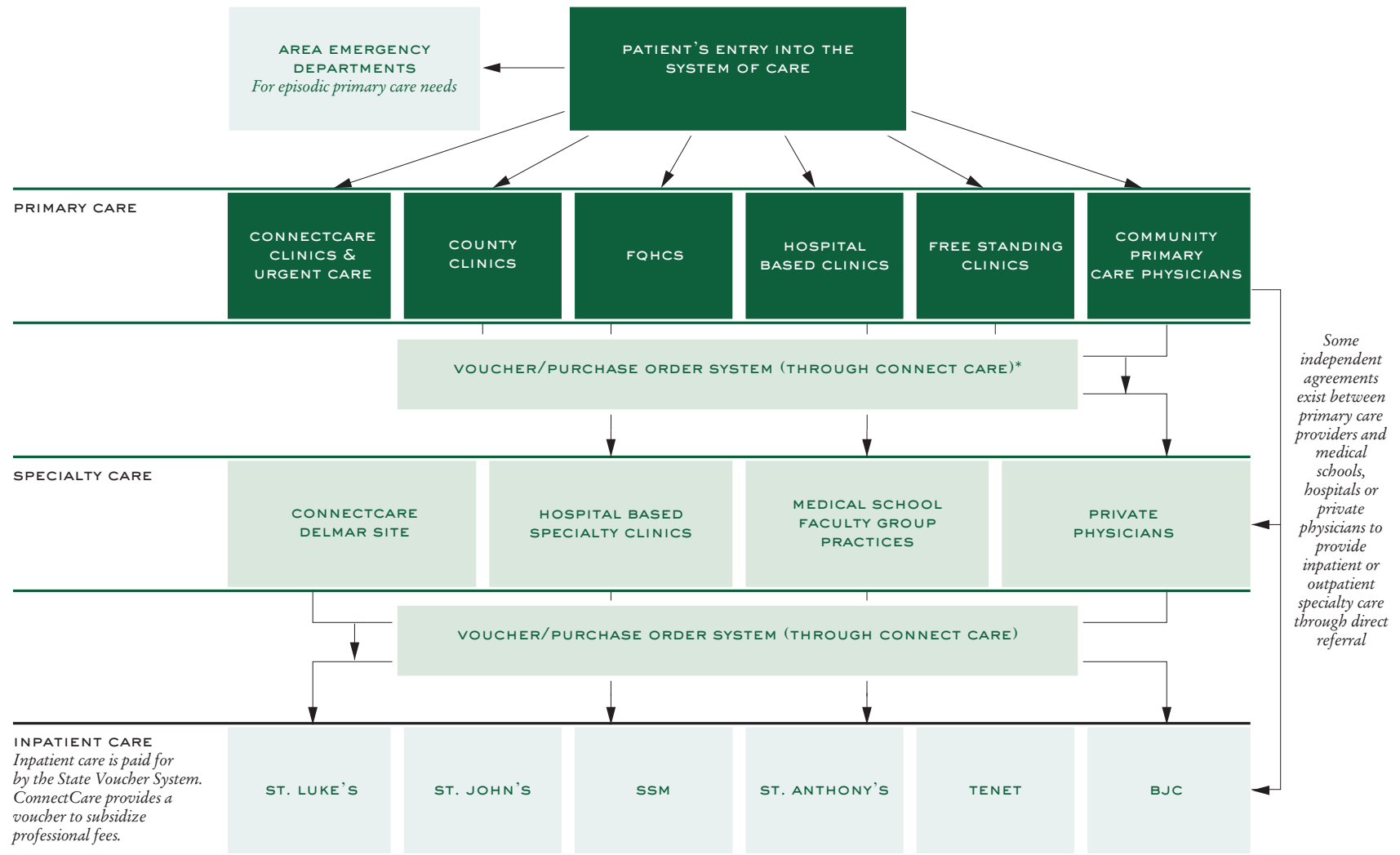
Citizen's for Missouri's Children attributes some of this confusion to a lack of coordination between the multiple departments engaged in providing mental health services to children, including the Department of Mental Health, the Department of Social Services, and the Department of Elementary and Secondary Education.

SECTION IV G: THE FINANCING OF THE SAFETY NET

A. Scope & Methodology

As noted earlier in this report, the health care safety net in St. Louis City and St. Louis County is a complex system. Unlike some major metropolitan areas, St. Louis does not have a single coordinating, monitoring, or financing body for its health care safety net. Each entity within the safety net has access to different funding streams to finance care for the uninsured and underinsured, depending on its structure and relationships with Federal and local governmental bodies. This fragmentation has historically made accounting for the dollars spent in health care safety net impossible to assess and report to citizens in the region.

THE SAFETY NET SYSTEM (ADULTS) – ST. LOUIS CITY AND SAINT LOUIS COUNTY 2002



The RHC financing analysis is intended to provide *global estimates* of the financial resources available to support outpatient primary and specialty care to safety net patients in St. Louis City and Saint Louis County. This includes physician services, outpatient pharmacy, outpatient diagnostic testing, transportation, social services and other wrap-around services. It should be recognized that area hospitals also play a critical role in providing uncompensated care to safety net patients who require hospitalization. Further study of this issue by the Commission is warranted in the future.

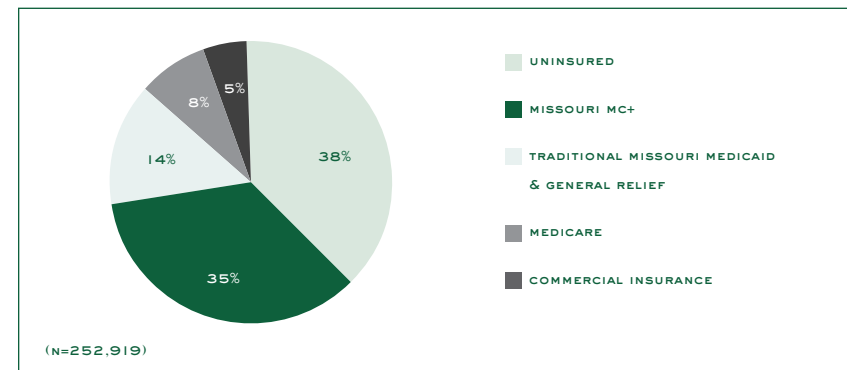
Much of the data used in this analysis has been voluntarily self-reported. Where possible, public documents such as IRS 990 forms and financial statements have been examined for purposes of verification.

Please note that categorization and allocation methods may vary from provider to provider. Also, in some instances, existing accounting methods do not clearly identify uninsured patients or their cost of care, and payments received by providers are seldom explicitly earmarked as paying for the care of uninsured. Therefore, many of the methodologies employed in this analysis only provide “high-level” estimates of the need for care, the sources of funds to pay for this care, and the uses of funds. More detailed study in this area may be warranted in the future.

B. Financial Challenges Faced by Area Safety Net Providers

As reported earlier in this section, only 5% of the patients seen by area safety net primary care providers have commercial insurance, and only 8% receive Medicare benefits. Nearly 40% of patients seen have no insurance at all, and the vast majority of these patients have very limited means to pay for their care. While 49% of the patients seen by safety net providers have Medicaid, reimbursement is typically less than the cost of providing care to this population. This presents area safety net providers with a significant financial challenge.

SAFETY NET PATIENTS BY INSURANCE STATUS, 2001—PRIMARY CARE ONLY



This problem is becoming even more acute given the recent budget crisis of State governments, including Missouri. According to the National Governor's Association's 2002 Fiscal Survey of the States, November 2002, "nearly every state is in fiscal crisis" ^{4.32} due to the combination of shrinking state revenues and mounting spending pressures, creating "massive budget shortfalls" ^{4.32} estimated at approximately \$45-50 Billion in 2002, and over \$80 Billion in 2003.

One of the key cost drivers of the States' budgets has been the Medicaid program. The cost of the Medicaid program rose 13.2 percent nationally in fiscal 2002. Many States have begun enacting cuts to their Medicaid program to meet existing or projected budget shortfalls. In 2002, the State of Missouri enacted the following cuts to the programs affecting safety net patients:

- Reduced Medicaid eligibility benefits for poor adults from 100% of the poverty level to 77% of the federal poverty level, cutting health care service effective June 30, 2002 to 24,987 individuals. (17,051 had benefits restored for up to one year under a court injunction.)
- Altered the Medicaid Spend-Down structure to require individuals to pay more out of pocket costs to access health care.
- Eliminated dental care for adult Medicaid recipients affecting over 350,000 people. (Service restored due to court injunction.)
- Eliminated optical services (eyeglasses) for adult Medicaid recipients with limited exceptions, affecting over 350,00 people. (Services restored due to court injunction.)
- Reduced by \$1.9 million the Department of Mental Health budget for children's services to children with severe emotional disturbances.

- Reduced Women's health services for poor women who have just given birth from two years of follow-up treatment to one year, impacting 4,810 individuals.
- Eliminated Medicaid coverage for non-custodial parents and Parent's Fair Share participants, affecting 1,617 individuals.
- Reduced Temporary Assistance to Needy Families (TANF) funding by \$5 million.
- Limited extended transitional Medicaid for low-income working parents from two years to one year, and required that to be eligible the family's income must remain under the federal poverty level, affecting 1,125 individuals beginning June 30, 2002.

Additional cuts will have a significant negative impact on the ability of the safety net providers in St. Louis City and St. Louis County to maintain services at a time when the numbers of uninsured and underserved in our community are increasing.

In response, the St. Louis Regional Health Commission passed a "RESOLUTION TO RECOMMEND THE PROTECTION OF STATE FUNDS TO MISSOURI MEDICAID PROGRAM" on February 19, 2003 (see Appendix 6).

C. How Much Money is Needed to Provide Safety Net Care in St. Louis City & Saint Louis County

As noted earlier in Section IV of this report, the total number of potential “safety net patients” in St. Louis City and St. Louis County is estimated as follows:

164,000	INDIVIDUALS COVERED BY MANAGED MEDICAID (MC+)
14,000	INDIVIDUALS COVERED BY TRADITIONAL MEDICAID (NET “DUAL ELIGIBLES”)
129,000	UNINSURED PERSONS (ESTIMATED, SEE SECTION V)
307,000	POTENTIAL POPULATION SERVED, MARCH 2002 POINT IN TIME
PLUS	
22,000	UNINSURED PERSONS FOR PORTION OF YEAR, 2002

As noted, the total of 307,000 potential patients of the safety net that was utilized for this analysis does not include the estimated 22,000 additional individuals who are likely uninsured for a portion of a year, as discussed in Section V.

The total cost of providing medical care to privately insured persons under age 65 averaged approximately \$2,565 per person per year in 2001 (see Appendix 8 for details for information concerning the source of this benchmark). This figure includes inpatient and outpatient physician, hospital and pharmacy costs. Physician care, outpatient pharmacy and outpatient hospital services account for 58.4% of total medical costs, or approximately \$1,498 per person per year.^{4.34}

Using this private sector benchmark of \$1,498 per person, approximately \$460 Million would be required to provide outpatient medical care to the 307,000 safety net patients in St. Louis City and County as of March 2002. By comparison, actual expenditures for outpatient safety net health care services are estimated at \$294 Million per year (see below). The gap between available and needed medical resources is therefore estimated at \$166 Million per year.

It should be noted that the above analysis excludes behavioral health and dental care services as well as the cost of providing care for the estimated 22,000 individuals who are uninsured for a portion of a year. In addition, disabilities and chronic health disparities are more common among uninsured and Medicaid patients as compared to the private sector.

Accordingly, the estimated gap of \$166 Million between available versus needed medical resources should be considered conservative.

D. Sources of Revenue for Safety Net Care

Historical Perspective

At the turn of the century, cities, not the federal government, provided much of the health safety net for the poor. Cities, and particularly St. Louis, possessed ample resources and the federal government relatively few. Through the early 20th century, the St. Louis City and Saint Louis County Health Departments tackled responsibility of safety net care through a range of activities, including directly owning and operating several safety net facilities that provided outpatient, inpatient and mental health services.^{4,35}

However, in the later half of the 20th century, a fundamental shift occurred in how safety net care was financed, as costs moved from local entities to States and the Federal government. A watershed event occurred in 1965 when Congress enacted Medicare and Medicaid, effectively providing medical insurance to millions of elderly and low-income people. Medicare entitled health insurance to every person over age 65, and certain individuals under 65 that meet certain disability requirements, while Medicaid benefited people meeting certain income or disability criteria. The law also stipulated that any hospital accepting Medicare or Medicaid must not discriminate on the basis of race.

The Federal government, in conjunction with the State governments through the Medicaid program, now provides a large portion of financing for the safety net in our region. As noted in the pie chart on page 4 of this section, 47% of all patients cared for at city and county safety net institutions are insured under the Missouri Medicaid program.

Sources of Revenue - Today

The major sources of revenue currently supporting safety net primary and specialty care in St. Louis City and St. Louis County in 2002 was approximately:

MEDICAID TRADITIONAL & MEDICAID MANAGED CARE PAYMENTS	\$ 205,000,000	70 %
DISPROPORTIONATE SHARE HOSPITAL (DSH) FUNDING THROUGH A SPECIAL FEDERAL SECTION 1115 WAIVER	\$ 20,000,000	07%
GRANTS FROM THE STATE OF MISSOURI	\$ 4,000,000	01%
FEDERAL SUPPORT UNDER SECTION 330 LEGISLATION (TO FEDERALLY QUALIFIED CENTERS)	\$ 13,000,000	04%
FOUNDATION SUPPORT	\$ 5,000,000	02%
ST. LOUIS CITY TAX SUPPORT	\$ 5,000,000	02%
SAINT LOUIS COUNTY TAX SUPPORT	\$ 15,000,000	05%
UNCOMPENSATED CARE PROVIDED BY MEDICAL SCHOOLS	\$ 16,000,000	05%
UNCOMPENSATED CARE PROVIDED BY HOSPITAL-BASED CLINICS	\$ 11,000,000	04%
TOTAL SOURCES	\$294,000,000	100%

It is important to note that additional uncompensated primary and specialty care is being provided by community physicians, emergency rooms, and community health centers that has not been quantified in the above analysis. Further study of these sources of revenue may be warranted in the future.

The total safety net population in St. Louis City and County is estimated as follows:

164,000	INDIVIDUALS COVERED BY MANAGED MEDICAID (MC+)
14,000	INDIVIDUALS COVERED BY TRADITIONAL MEDICAID (NET DUAL ELIGIBLES)
178,000	TOTAL INDIVIDUALS COVERED BY MEDICAID (NET DUAL ELIGIBLES)
129,000	UNINSURED PERSONS AT ANY POINT IN TIME (ESTIMATED, SEE SECTION V)
307,000	TOTAL SAFETY NET POPULATION

The total amount reported in Medicaid payments for primary and specialty care services in Fiscal Year 2001 was approximately \$205,000,000 for 178,000 Medicaid recipients that were not eligible for the Federal Medicare program. This equates to a per capita spending amount of \$1,152 for the area's Medicaid population as compared to the private sector benchmark of \$1,498 per person per year.

Excluding payments for Medicaid-eligible individuals, the remaining funds available to support primary and specialty care services for the uninsured is \$89 Million per year. The number of uninsured in St. Louis City and Saint Louis County at March 2002 was 129,000. Accordingly, FY01 per capita spending on the uninsured for basic primary and specialty care services is estimated at \$690 per year as compared to the private sector benchmark of \$1,498 per person per year.

Missouri Medicaid Program

Medicaid is the nation's major public financing program for providing health and long-term care coverage to low-income people. In 1998, 40.4 million people – more than 1 in 7 Americans – were enrolled in Medicaid at a cost of \$169.3 billion nationally. Authorized under Title XIX of the Social Security Act, Medicaid is a means-tested entitlement program financed by the state and federal governments and administered by the states. Federal financial assistance is provided to states for coverage of specific groups of people and benefits through federal matching payments based on the state's per capita income. Missouri draws federal matching dollars via three specific mechanisms:

1. Federal Reimbursement Allowance Program (FRA): this tax on hospitals is essential to Missouri's ability to fund the state Medicaid program. The hospital provider tax and resulting federal matching monies pay for nearly 30% of the state's Medicaid expenses including outpatient, inpatient, nursing home and pharmacy care. In State Fiscal Year 2002, hospitals in the St. Louis City and County paid a tax of \$177,659,877. The state also collects a tax from the nursing home and pharmacy programs in our community.
2. Intergovernmental Transfers: federal match on city and county tax dollars which support health care
3. State Government Funds: federal match on state tax dollars which support health care (in State Fiscal Year 2002, approximately \$700 million in state general revenues were designated for health care services).

In Missouri, the federal share is 61 percent for those who qualify for services based upon Medicaid eligibility and 73 percent for children who qualify through the state's CHIP program. Thus, for every dollar spent for Medicaid services, Missouri pays 27-39 cents and the federal government pays the rest.

Although Medicaid was created to assist low income Americans, coverage is dependent upon several other criteria in addition to income. Eligibility is primarily for those persons falling into particular "categories," such as low-income children, pregnant women, the elderly, people with disabilities, and parents meeting specific income thresholds.

In St. Louis City and St. Louis County, the total Medicaid expenditure was just over \$840 Million in FY2001, as reported by the Missouri Division of Medical Services, which was a 7.7% increase from FY2000. These Medicaid funds were utilized for the following categories of care in the combined St. Louis City and St. Louis County region in FY2001, as reported by the Missouri Division of Medical Services:

CATEGORY	TOTAL PAID CLAIMS, FY2001	PERCENT OF TOTAL
NURSING FACILITIES	\$ 158,703,279	18.9%
HOSPITALS	\$ 144,665,440	17.2%
DENTAL SERVICES	\$ 1,642,688	0.2%
PHARMACY	\$ 113,802,147	13.5%
PHYSICIAN RELATED	\$ 42,283,028	5.0%
IN-HOME SERVICES	\$ 65,916,096	7.8%
MENTAL HEALTH	\$ 59,075,014	7.0%
STATE INSTITUTIONS	\$ 52,083,032	6.2%
REHAB & SPECIALTY SERVICES	\$ 13,001,023	1.5%
MANAGED CARE	\$ 189,323,820	22.5%
TOTAL	\$840,495,567	100%

Medicaid funds used to provide primary and specialty care approximated **\$205,000,000 million**, or approximately 24% of all Medicaid expenditures in the region. This estimate was derived from information provided by the Division of Medical Services, Department of Social Services, for the State of Missouri.^{4,36} A detailed explanation of the methodology used to estimate this total can be found in Appendix 8.

Contrary to common belief, many individuals with income near or below the Federal poverty level are not covered by the Medicaid program. For example, in Missouri, childless married couples or single adults that do not meet disability requirements are ineligible for any Medicaid coverage.

Missouri Medicaid Managed Care (MC + Plans)

MC+ refers to the statewide medical assistance program for low income families, pregnant women, children, and uninsured parents. MC+ Managed Care serves MC+ Managed Care members in 37 counties of Missouri, including St. Louis City and St. Louis County.

MC+ Managed Care members must select a managed care plan and a primary care provider (PCP) within the plan. Three MC + managed care plans currently operate in the St. Louis City and Saint Louis County area: HealthCare USA, Community Care Plus, and Mercy Health Plans. Providers must be in the MC+ health plan network. MC+ Managed Care members must select a managed care plan and a primary care provider within that plan.

MC+ For Kids

MC+ for Kids is a subgroup of MC+ and refers to health insurance for uninsured children funded through the State Children's Health Insurance Program (SCHIP). The children eligible for this program must be under age 19, have a family income below 300% poverty, are uninsured for 6 months or more, and have no access to other health insurance coverage for less than \$331 per month (for premium group only).

According to the Missouri Department of Social Services, approximately 90,000 uninsured Missouri children are believed to be eligible for MC+ for Kids.^{4,36}

Children in the program receive all medically-necessary services including: primary, acute and preventive care; hospital care; sports physicals; physical, occupational and speech therapy; dental; home and community-based services such as nursing and personal care; medical equipment and supplies; pharmacy; vision care; lab and x-ray; and behavioral services such as outpatient counseling and inpatient psychiatric treatment.

Based on income, some participants are required to pay monthly premiums and co-payments. Families pay no more than 5% of their annual income for premiums and co-payments in a year. If out-of pocket expenses reach the 5% limit, the family will not have to pay the premium and/or co-payment.

According to data recently compiled by the Missouri Primary Care Association^{4,37} and Citizens for Missouri's Children,^{4,38} the projected cost of the MC+ Program for Kids in FY04 is \$25 Million from State Revenues, which would be matched with approximately \$69 Million from the Federal government.

The average monthly cost to the State of Missouri to cover a child enrolled in CHIP was approximately \$24 in FY01, or about \$300 per year, with the Federal government contributing the remainder. In contrast, the average cost of one Emergency Department visit for a child is \$550.

As of March 19, 2003, the legislature of the State of Missouri was deliberating over the fate of the MC+ for Kids program. In early March, the House Appropriations Committee on Health, Mental Health, and Social Services voted to eliminate the Children's Health Insurance Program.

Also, the Committee voted to reduce Medicaid eligibility for the traditional Medicaid program to 25% of poverty (from 77% of poverty), eliminating approximately 76,000 individuals from the program State-wide.

As noted earlier, additional cuts in reimbursement levels will have a significant negative impact on the ability of the safety net providers in St. Louis City and Saint Louis County to maintain services at a time when the numbers of uninsured and underserved in our community are increasing.

In response, the St. Louis Regional Health Commission passed a "RESOLUTION TO RECOMMEND THE PROTECTION OF STATE FUNDS TO MISSOURI MEDICAID PROGRAM" on February 19, 2003 (see Appendix 6).

Disproportionate Share Hospital (DSH) Dollars Supporting Outpatient Care

Between its passage in 1965 and 1981, Medicaid had paid the same reimbursement rate as Medicare. With passage of the Omnibus Budget Reconciliation Act of 1981, however, the federal government reduced reimbursement rates for Medicaid. Congress simultaneously created the Disproportionate Share Hospital (DSH) program to partially offset the impact of reduced Medicaid reimbursement on hospitals providers who cared for large numbers of Medicaid patients, and partially to compensate those hospitals providers that provided a large amount of uncompensated care.^{4,39}

In order to maximize the availability of federal Medicaid and DSH funds, the State of Missouri developed a "tax" on hospitals in the 1993. This taxing mechanism is known as the Federal Reimbursement Allowance Reallocation Program or FRA. Each hospital pays a tax to the state. The state then uses that money to draw federal matching dollars and to run its Medicaid program, including making disproportionate share hospital payments to hospitals. Under the program, each hospital in the State contributes money into a state fund designated for health care, and the federal government matches that fund. The pool of Medicaid and DSH funds are then distributed to Missouri hospitals based on the volume and cost of Medicaid and uncompensated inpatient care provided by each hospital. In this way, those hospitals in Missouri that serve a "disproportionate share" of safety net patients are compensated in part for this service.

In State Fiscal Year (SFY) 2002, hospitals in St. Louis City and County spent \$219,033,270 providing care to Medicaid patients and an additional \$112,058,658 on care for the uninsured. These figures are based on actual hospital costs. These same St. Louis area hospitals paid an additional \$177,659,877 in FRA tax in SFY2002 bringing their total safety net care expenses to \$508,751,805. State Medicaid and DSH payments to St. Louis area hospitals during this same period totaled approximately \$350,449,227¹ for a net loss of approximately \$158,302,578.

This loss represents the cost of the uncompensated care provided by area hospitals. Hospitals cover these losses by increasing their charges and contracted rates with private insurers. In turn, these private insurers pass the additional costs on to area employers.

In August of 2001, the State of Missouri applied on behalf of the St. Louis community to the Centers for Medicare and Medicaid (CMS) for a Section 1115 Waiver. The State requested that a capped amount of DSH dollars be made available under a demonstration project to support outpatient safety net care. This would allow ConnectCare to relinquish its hospital license and close the small inpatient service it had been operating in order to qualify for DSH payments, which is typically not allowable under current Federal regulations. The total capped amount requested was 9.89% of the total statewide DSH cash distributions for acute care hospitals, excluding DSH distributions to state mental hospitals. This percentage was equivalent to the share of DSH payments made in state fiscal year 2001 to ConnectCare.

This Waiver was essential to the stability of the safety net in St. Louis due to the unusual circumstances surrounding St. Louis Regional Hospital's transition to Saint Louis ConnectCare. Since DSH funds are based upon Medicaid hospital cost reports four years retrospectively, ConnectCare was still receiving federal DSH funding in 2000 based upon the volume of Medicaid and uninsured acute care patients seen by Regional Hospital in 1996. However, beginning in 2001,

this money would be significantly reduced, since the average inpatient daily census had declined at ConnectCare to approximately 6 per day after Regional ceased operations in 1997.

ConnectCare stood to lose over \$20 million annually, which represented 50% of its approximately \$40 million operating budget, which threatened the stability of the entire safety net, especially given ConnectCare's unique role in providing specialty care.

In June of 2002, the Centers for Medicare & Medicaid approved the State of Missouri's DSH waiver request as an addendum to the state's existing Section 1115 Demonstration Project that authorizes the MC+ Program. This allowed approximately *\$20 Million* in annual DSH funding to continue to flow to the St. Louis region to support primary and specialty care for the uninsured and underinsured. The money is currently administered by the St. Louis Regional DSH Funding Authority (RDFA), and is distributed based upon recommendations provided by the St. Louis Regional Health Commission (RHC). The Waiver addendum requires renewal by CMS by March 1st, 2004 for funding to continue.

The Waiver addendum states that the purpose of the Demonstration Proposal is "to enable the St. Louis region to transition its "safety net system" of care for the medically indigent to a viable model not dependent on demonstration funds long-term."^{4,40} Part of the role of the RHC is to develop a long-term plan that meets the needs of the uninsured in our region that is consistent with this charge of the Federal government under the terms of the Waiver addendum.

¹ Includes \$177,223,100 in Medicaid per diem payments, \$84,373,335 in Medicaid add-on payments and approximately \$88,852,792 in State payments equivalent to 90% of the cost of uninsured care based on hospital cost-to-charge ratios. Source: Missouri Hospital Association

Federal Grants

A segment of the community health centers in the St. Louis region have been designated by the Federal government as “Federally Qualified Health Centers” (FQHC’s). In St. Louis, the FQHC providers are:

- Family Care Health Centers
- Grace Hill Neighborhood Health Centers
- Myrtle Hilliard Davis Comprehensive Health Centers
- People’s Health Centers

Due to their Federally Qualified status, these providers accrue substantial benefits under Section 330 of the Public Health Service (PHS) Act (42 U.S.C. 254b). As described by the law firm of Feldesman, Tucker, Leifer, Fidell, & Bank LLP, these benefits include:

1. Access to Federal grants, i.e. expansion grants, to support the cost of otherwise uncompensated comprehensive primary and preventative health care and “enabling services” delivered to uninsured and underinsured populations.
2. Access to reimbursement under the Prospective Payment System (PPS) or other state-approved alternative payment methodology (which is predicated on a cost-based reimbursement methodology) for Medicaid services and cost-based reimbursement for services provided under Medicare.
3. Access to favorable drug pricing under Section 340B of the PHS Act, which allows FQHCs to purchase covered outpatient prescription pharmaceuticals for health center patients at substantially discounted prices for distribution either directly by a health center pharmacy or through contract with a retail pharmacy.
4. Reimbursement by Medicare for “first dollar” of services rendered to Medicare beneficiaries, i.e., deductible is waived.

A full list of benefits provided by the Federal government under Section 330 legislation is found in Appendix 7.

Given the scope of benefits provided by the Federal government in favorable reimbursement methodology, as well as cost relief, to community health centers under Section 330, it is difficult to estimate the total benefit provided by the Federal government to the St. Louis region through Section 330 regulation.

However, the area FQHCs reported receiving approximately **\$13 million** in direct Federal grants for care for the uninsured and underinsured in 2002 (self-reported data and data from IRS 990 forms), separate from reimbursement or cost relief benefits that were accrued.

Of the nearly 490,000 safety net primary care ambulatory encounters in the St. Louis region in 2001, approximately 190,000, or 39%, were seen by a provider with Federally Qualified status. An estimate of the amount of dollars that the St. Louis region does not capture from the Federal government due to the large percentage of primary care visits not seen in an FQHC setting is beyond the scope of this analysis and subject to further study.

State Grants

In addition to the Medicaid program, the State of Missouri makes health care grants available through the Department of Health and Senior Services (DHSS). In 2002, the State of Missouri had approximately 160 active DHSS grants with organizations in the St. Louis region, totaling approximately \$71 million. The recipients of these grants are not all health care safety net providers, and vary from school districts to health education/promotion non-profits to providers of direct care to safety net patients. Approximately \$38 million, or 53% of this total, was in one grant to Healthcare Strategic Initiatives, which is the Statewide benefits administrator for HIV/AIDS Care Services in Missouri.

Of its 160 active grants, DHSS reported that only 33 of these were grants placed with area community health safety net providers, totaling approximately **\$4 Million**. DHSS also reported 31 active grants with the St. Louis County Health Department, and 32 active grants with the St. Louis City Health Department, totaling approximately \$12 million together, for prevention and outreach efforts.^{4,41}

Local Taxes

Unlike many metropolitan areas across the country, the St. Louis area does not have a governmental entity, supported by its own taxing district, that is responsible for the provision care for the uninsured and underinsured. However, Saint Louis County and St. Louis City do finance provision of care through taxes, albeit in differing ways:

St. Louis County Property Tax

The St. Louis County Health Department is supported by a \$.165 property tax rate dedicated to health care services (both public health and direct service to safety net patients), which generated approximately \$31 million in revenue in 2001. This tax accounts for approximately 2/3 of the county health department's budget, with the rest being generated through means such as fees, grants, or payments from the Federal/State Medicare and Medicaid programs. This money is spent for a wide-range of public health services.

Despite the rapid rise in health care costs over the past two decades, this tax rate was last raised in 1980, when it stood at a \$.300 tax rate. The rate was decreased in 1985, 1987, and most recently in 1989, and now stands at a current level of \$.165.

A portion of the funds raised through the Saint Louis County Property Tax is spent on providing direct care to the uninsured and underinsured. The total budgeted costs for the St. Louis County Health Department for providing primary and specialty care to the residents of St. Louis County in 2003 is approximately \$22.5 million. This amount includes the operations of 3 primary care clinics, pharmacy and dental services, and the cost of specialty care services provided through Saint Louis ConnectCare.

The total budgeted revenue for these services are approximately \$7.5 million from Medicare, Medicaid, self-pay patients, and other sources. The total tax amount that is allocated to indigent care costs by St. Louis County is approximately **\$15 million** for 2003, the difference between the total budgeted costs and the revenue that these services generate.^{4,42}

This amount excludes an additional \$6 Million dollars of net tax revenue spent on family mental health, health services to individuals in correctional facilities, and home health/homemaker chore services.

St. Louis City Use Tax

Historically, the City of St. Louis made a deep commitment to the provision of health care for the otherwise underserved, and as late as the 1970's, the City had over 5,000 employees on payroll dedicated to this service. In the past, the cost for these services was appropriated through general revenues, and no dedicated tax was established to support this service.

However, with the closing of Homer G. Phillips Hospital and City Hospital #1, and the transition of St. Louis Regional Hospital into ConnectCare in 1997, the City of St. Louis provides only limited direct care services to residents, through its Health Department, and focuses its services on public health efforts.

Instead of providing direct services itself, the City currently provides **\$5 million** in funding to ConnectCare to support direct care to the underserved. This revenue is generated through a portion of a use tax passed in 2001 through "Proposition H", a successful ballot initiative which places a tax on out-of-state purchases made by local businesses.

Uncompensated Care Provided by Medical Schools

The two area medical schools are disproportionate providers of care for safety net patients living in St. Louis city and county as well as for medically underserved patients in out-state Missouri and Illinois. On a cost basis, Washington University School of Medicine provided **\$9.9 million** in uncompensated physician care services to low-income uninsured and Medicaid patients in FY02. St. Louis University School of Medicine reported providing **\$5.7 Million** in uncompensated care during this same time period, for a total of **\$15.6 million** by area medical schools.

Uncompensated Care Provided by Hospital-Based Clinics

Area hospital-based clinics also provide uncompensated care to safety net patients living in St. Louis City and County, accounting for approximately 25% of the safety net primary care volumes reported in the RHC Institutional Safety Net Provider survey (see Appendix 1 for survey methodology and list of respondents). Most of these institutions have sliding fee schedules based upon family size and income. The terms and conditions of these fee schedules vary from provider to provider.

The total cost of uncompensated primary and specialty care clinics is generally not reported separately by hospitals, and can be difficult to estimate given variances in how overhead costs are allocated to departments and other variances in accounting procedures between hospital systems.

To provide an estimate of this amount, the RHC asked the hospital systems in St. Louis City and Saint Louis County to estimate their cost for uncompensated primary and specialty care. Two hospital systems responded to this request. These two systems accounted for approximately 70% of the total primary care visits to hospital-based systems. A cost per visit for these two systems was then

calculated, and applied to the total number of visits seen by all hospitals in the area.

Given this data, one can estimate that, on a cost basis, uncompensated care expenditures totaled approximately **\$11.2 Million** for the 8 hospital-based clinic sites in St. Louis City and County that provide services to safety net patients.

These sites include:

BARNES JEWISH HOSPITAL	BJH MEDICINE CLINIC / WOMEN'S WELLNESS CENTER (OB-GYN CLINIC)
TENET FOREST PARK HOSPITAL	AMBULATORY CARE CENTER (INTERNAL MEDICINE) / WOMEN'S HEALTH CENTER/FAMILY MEDICINE OF ST. LOUIS
ST. JOHN'S MERCY MEDICAL CENTER	MERCY NEIGHBORHOOD HEALTH CENTER (SOUTH CITY)
ST. JOHN'S MERCY MEDICAL CENTER	JOHN F. KENNEDY CLINIC (ST. JOHN'S CAMPUS)
ST. JOHN'S MERCY MEDICAL CENTER	MEACHAM PARK CLINIC
DEPAUL HEALTH CENTER	ADULT CLINIC/OB CLINIC
ST. MARY'S HOSPITAL	CLAYTON ROAD
ST. LUKE'S HOSPITAL	PEDIATRIC CENTER ST. CHARLES ROCK ROAD

It should be noted that this amount is likely understated due to the difficulty of allocating indirect service costs such as accounting, administration, and marketing to these clinic sites. Cost-estimates for important support services such as social workers, transportation services, and interpreters are also likely underreported in this estimate, given cost-accounting limitations.

It should also be noted that The St. Louis Area Business Health Coalition will be releasing additional information concerning hospital charity care in the summer of 2003.

Health-Oriented Foundations and Other Granting Agencies

When a non-profit health care entity is sold or converted to a for-profit entity, the accrued benefit the entity received from not paying taxes over a series of years can be considered to be “public assets”. In St. Louis, numerous hospitals, as well as the regional Blue Cross/Blue Shield insurance plan, converted to for-profit status over the past 20 years. In many of these instances, local/regional foundations with a focus on health and human services have been created by these conversions, as follows:

MISSOURI BLUE CROSS/BLE SHIELD	MISSOURI FOUNDATION FOR HEALTH
LUTHERAN HOSPITAL	LUTHERAN FOUNDATION
DEACONESS/INCARNATE WORD	DEACONESS FOUNDATION
HEATH SYSTEM	INCARNATE WORD FOUNDATION
ST. LUKE'S HOSPITAL	EPISCOPAL-PRESBYTERIAN
(THROUGH SALE OF PROPERTY, 1985)	CHARITABLE HEALTH & MEDICAL
DEPAUL HEALTH CENTER	TRUST
	DAUGHTER'S OF CHARITY
	FOUNDATION
ST. LOUIS UNIVERSITY HOSPITAL	ASSETS TRANSFERRED TO
	SUPPORT ST. LOUIS UNIVERSITY
	MEDICAL SCHOOL

Notably, the Missouri Foundation for Health was established 2000 with the specific purpose of identifying and filling the gaps in the myriad of public and private health care services already available to the uninsured and underinsured in its region. Due to the 2001 merger of RightChoice with WellPoint, a national health care company, the assets of the Foundation significantly increased, with the Foundation currently having assets of nearly \$800 million dollars as of March 2003.^{4,43}

Several other charitable bodies in the region also focus a portion of their grant-making activities on health-related services, including:

- Greater St. Louis Health Foundation
- Saigh Foundation
- St. Louis Community Foundation
- Whitaker Foundation
- United Way of Greater St. Louis.

Also, St. Louis area corporate foundations that do not necessarily target health services do frequently give to area safety net providers in annual fund-raising events or during important capital campaigns.

In almost all instances, these granting agencies do not provide money for direct care, nor subsidize coverage for safety net patients. However, foundation resources provide some financial assistance to many of the safety net sites for health outreach and coordination projects in the community, or capital projects, and serve an important role in the financing of community health services across the region.

The total amount of funds given to safety net providers in the St. Louis region by Foundations and grant-making bodies is difficult to estimate, primarily since these foundations focus on prevention activities that fall outside of clinic and hospital setting.

However, approximately \$10-15 million will be dispersed annually by the newly formed Missouri Foundation for Health to health-related entities in the St. Louis area. If one assumes the other 9 health-related funders average approximately \$2 to \$3 Million in annual disbursements to area health organizations, an additional \$20-25 million additional disbursements by other health-related funders can be estimated.

However, a very small portion of this amount is targeted specifically to safety net providers. Based upon a cursory review of financial information from select area safety net providers, the total giving to the safety net providers in the region from area foundations likely approximates *\$5 Million per year*.

A more detailed study of the distribution of foundation grants and community giving to area health-related organizations is beyond the scope of this analysis, and warrants further study in the future.

D. Uses of Funds

As noted earlier, estimating the total amount spent on safety net primary and specialty care is difficult due to the lack of uniformity of categorization and allocation methods between providers, as well as the level of detail available.

However, based upon financial reports for the most recently available 12 month period and data from the Division of Medical Services of the State of Missouri,^{4,36} following uses of funds can be estimated:

TOTAL USES – PRIMARY/SPECIALTY CARE SAFETY NET EXPENDITURES*	
COMMUNITY-BASED CENTERS	\$ 95,000,000
MEDICAID PAYMENTS TO O/P HOSPITAL	\$ 73,000,000
MEDICAID PAYMENTS TO O/P PHARMACY	\$ 73,000,000
MEDICAID MANAGED CARE PLANS ADMIN (AMOUNT SUPPORTING OUTPATIENT CARE SERVICES ONLY)	\$ 13,000,000
MEDICAID PAYMENTS TO PHYSICIANS	\$ 46,000,000
TOTAL USES OF FUNDS – PRIMARY/SPECIALTY CARE	\$ 300,000,000

* Excludes behavioral health services

Please see Appendix 8 for Description of Methodology used to estimated Medicaid payments in St. Louis City and Saint Louis County.

Note that there remains an unexplained variance between Sources and Uses of Funds in this analysis of approximately 11%. For a description of the margin of error in this analysis, please see Appendix 8.

Estimating the total amount supporting Community-Based Health Centers

Based upon financial reports for the most recently available 12 month period, the community health centers listed below spent an estimated \$95 million providing outpatient safety net care (excludes hospital/medical school charity care).

Primary Care Clinic Sites (n=23 sites + 1 “mobile” site)

- St. Louis County (3 sites)
- Community-Health-In-Partnership (CHIPS) (1site)
- ConnectCare (5 sites + Specialty care + Urgent Care)
- Family Care Centers (2 sites)
- Grace Hill (6 sites + 1 “mobile” site)
- HC for Kids (1 site)
- Myrtle Davis Comprehensive Care (2 sites)
- People’s Health Centers (3 sites)

TOTAL AMOUNT TO SUPPORT PRIMARY & SPECIALTY SAFETY NET CARE (COMMUNITY HEALTH CENTERS)

PRIMARY CARE CLINIC OPERATIONS	\$51,820,108
PHARMACY	\$15,563,918
OTHER (ST. LOUIS COUNTY) DIVISION OF HEALTH SERVICES	\$ 7,020,956
SPECIALTY CARE	\$ 6,287,000
DIALYSIS	\$ 3,169,000
URGENT CARE	\$ 3,087,000
LAB/RADIOLOGY	\$ 4,911,000
SUBTOTAL EXCLUDING DENTAL SERVICES	\$ 91,858,982
DENTAL	\$ 3,412,083
TOTAL COST OF SAFETY NET CARE COMMUNITY HEALTH CENTERS	\$ 95,271,065

Note that the full cost of operating the community health safety net sites (direct care costs plus administrative overhead and support services such as transportation, social workers, and interpreters) was included in this analysis.

V. BARRIERS TO ACCESSING THE HEALTH CARE SYSTEM: A CONSUMER PERSPECTIVE

Key Findings of Section V

The medically underserved encounter barriers that significantly limit their ability to access the safety net health care system. these include the following:

System Barriers

- *Lack of information about available safety net medical services*
- *Lack of transportation*
- *Shortage of specialty care providers and dentists*
- *Policies and hours of operation of institutional safety net providers*
- *Disruption of services for children with special needs entering adulthood*
- *Limitations of the voucher/purchase order system*

Financial Barriers

- *Lack of insurance*
- *Cost of care and medical debt*
- *Prioritization of other needs over health care*

Cultural Barriers

- *Stigma associated with safety net care*
- *Lack of respect toward safety net patients*
- *Cultural barriers for minorities*
- *Cultural and linguistic barriers for new Americans*
- *Lack of health literacy*

A recent RHC survey found safety net capacity sufficient to meet the current demand for primary care services (See Section IV.B for detail). Currently, an estimated 82% of the total safety net population in St. Louis City and County utilize these safety net institutions in a given year.^{5.1}

Despite the apparent availability of primary care services, the region suffers from poor health outcomes and wide disparities. A focus group participant in a recent study conducted by the Episcopal-Presbyterian Charitable Health and Medical Trust articulated the problem:

“Of course that’s one of the big issues we’ve always had in this town—we know there are consumers that need the service out there. Where are they? You name the group, there are services for them, but there never seems to be utilization that’s even close to expected.”^{5.2}

As this comment indicates, having an available supply of health care services is not enough to ensure that people will access the system. This section discusses barriers that limit people’s ability to use health care services in our region. Much of the information is drawn from several recent studies that examined access issues in focus groups of safety net patients, providers, and other community residents across the region. These studies include the following:

- *A Crisis of Care: The community’s perspective on health care in St. Louis City.* by Richard Kurz, Ph.D. and Darcell P. Scharff, Ph.D. Sponsored by the Episcopal-Presbyterian Charitable Health and Medical Trust.^{5.2}
- *Speak Out Report: St. Louis Community Voices on Health Care* by Rosetta Keeton and Katie Plax, M.D. Sponsored by Metropolitan Congregations United (MCU), ACORN, and other community organizations.^{5.3}
- *Public Health: Understanding Our Needs* prepared by Louise Quesada. Conducted by the City of St. Louis Department of Health.^{5.4}

* There may be a slight overstatement in the percent of the safety net population that utilized safety net primary care services due to potential double-counting of patients seen at different sites within the safety net system

These studies and other research referenced throughout this section identify multiple barriers to optimal medical care, beyond the issue of primary and specialty care availability:

System Barriers

- Lack of information about available safety net medical services
- Lack of transportation
- Shortage of specialty care providers and dentists
- Policies and hours of operation of institutional safety net providers
- Disruption of services for children with special needs entering adulthood
- Limitations of the voucher/purchase order system

Financial Barriers

- Lack of insurance
- Cost of care and medical debt
- Prioritization of other needs over health care

Cultural Barriers

- Stigma associated with safety net care
- Lack of respect toward safety net patients
- Cultural barriers for minorities
- Cultural and linguistic barriers for new Americans
- Lack of health literacy

Each of these barriers to access is discussed in more detail on the following pages.

A. System Barriers

1. Lack of Information about Available Safety Net Medical Services

Lack of information about available safety net medical services is a major barrier to health care access. In a focus group conducted by the St. Louis City Department of Health, one participant explained, “People don’t know how to access available health services.”^{5.4} A participant from another focus group noted, “People often do not realize the types of services offered.”^{5.3}

Many safety net patients and providers find the health care system to be complicated and confusing. Kurz and Scharff found that a lack of information regarding how to access the safety net system often led people to go to Emergency Departments for primary care or to not seek care at all. The safety net system can appear particularly complex to those in need of follow-up care. Safety net patients “were not clear on how and with whom to follow up if a problem was identified”.^{5.2}

This barrier to care is especially problematic for those who are illiterate or who have limited education. Some patients have difficulty understanding written information such as explanations of services and would like the information presented in a different format.^{5.2} Some medically underserved people also believe that information on available medical services is “more available at ‘richer clinics’ or private physician offices”.^{5.2} One focus group participant explained:

“The public places such as—let’s use for instance —, the places around here as opposed to out in West County...They (West County) may have more variety of things?”^{5.2}

2. Lack of Transportation

Transportation is consistently identified as a barrier to accessing health care in St. Louis City and County. According to the Episcopal-Presbyterian Trust, focus group participants “viewed transportation as a problem that affected their health and access to health services.”^{5.2, 5.3}

In an analysis of clinic locations and transportation routes, the RHC, in conjunction with the Bi-State Development Agency, found that primary care sites are accessible from most locations in the region within a 20-minute bus ride. (See Section IV. B for map of clinic locations and transportation routes.) However, this analysis does not account for bus stop wait times, cost, safety, or ease of using the bus system, particularly for after-hours, urgent medical care.

Many focus group participants “viewed transportation as a more complex issue than merely moving an individual from one point to another. For those dependent on public transportation, the transportation system was viewed as lacking flexibility with greater availability of service during the daytime rather than evening hours”.^{5.2}

Safety net providers make an effort to reduce transportation difficulties for their patients. Thirteen of the institutional safety net providers surveyed by the RHC offer bus vouchers to their patients. The institutional safety net providers also reported operating a total of 15 vans to provide free transportation for patients. In addition, 21 of the institutional safety net providers contract with private cab companies, and five contract with OATS (Older Adult Transportation Services), to provide free transportation through a voucher system.^{5.1}

State Medicaid and MC+ Plans also fund free transportation services for Medicaid and MC+ recipients. In addition, several organizations provide mobile care services in which medical vans visit underserved areas to provide screenings and other medical services.

While these programs provide important services, people are sometimes not aware that they are available.

3. Shortage of Specialty Care Providers and Dentists

As noted in Section IV, there is a shortage of safety net specialty care providers and dentists. This shortage makes it difficult for patients to access needed services. Particularly in the case of specialty care, provider shortages result in long wait times.^{5.3, 5.2} This is confirmed by a recent RHC survey of safety net providers which found that while primary care appointments are almost universally available within 14 days of patient request, wait times for subspecialty medical/surgical care are inordinately long (See Section IV.C). For example:

- 57% of patients seeking a cardiology appointment wait longer than five weeks to see a physician.
- 60% of gastroenterology patients wait longer than nine weeks to see a physician.

Several focus group participants discussed their frustration with excessive appointment wait times. For example:

“You know it’s months down the line to get an appointment for the referral.”^{5.2}

4. Policies and Hours of Operation of Institutional Safety Net Providers

Several operational issues at health centers pose barriers to patients. First, policies and documents required to verify eligibility for reduced fees vary from clinic to clinic. These differences in standard operating procedures make it difficult for patients to know what documentation they must present, for what types of services they are eligible for reduced fees, and the amount they may be required to pay at a particular health center.

This is confirmed by a recent phone survey of a representative sample of 10 safety net clinics in St. Louis City and Saint Louis County conducted by the community action group Metropolitan Congregations United (MCU). In these calls, MCU found that some safety net clinics told potential patients that they must present an income tax statement, picture identification, and a Social Security number at time of registration if they wanted to qualify for reduced fees. For children, the parents were instructed that they must present the income tax form on which the child was claimed. If the patient was unemployed, some clinics asked for proof that the patient had filed for unemployment. These eligibility requirements for reduced fees increase the barriers to accessing health care services for people who do not have these documents readily available.^{5.5}

Some safety net providers reported that they offer a range of documentation options for reduced fees, including allowing patients to present a check stub at their next visit or an unemployment letter.

Beyond the barriers posed by eligibility requirements for reduced fees, limited health center hours of operation are also seen as a barrier to accessing care.^{5.4}

As a participant of the City of St. Louis's focus group explained:

“Time clinics are open [is a problem] – we need extended hours.”^{5.2}

The RHC found that only one institutional site is open Sundays and that only four sites offer evening care – three until 8:30 p.m. and one until 10:00 p.m. In addition, the sites that offer care evening care only do so on Tuesdays, Wednesdays, or Thursdays. The limited availability of after-hours care may partially account for the high use of Emergency Departments for non-emergent care. Overall, 35% of patients in city and county hospital Emergency Departments present with non-emergent conditions. Half of these non-emergent patients arrive for care between 4:00 p.m. and midnight.^{5.1}

5. Disruption of Services for Children with Special Needs Entering Adulthood

Children with special health care needs – defined as those with disability or chronic illness—often encounter difficulties in accessing services when they enter adulthood. Services during childhood are fairly accessible because such children are often covered under their parents' insurance or are more often Medicaid – eligible because of their disability or their ability to take advantage of special Medicaid enhancements available only to children. In addition, the two children's hospitals in St. Louis often offer multidisciplinary clinics to improve access to all the caregivers required to optimize the outcomes of their special challenges.

As these children move to adulthood, they face a range of problems in accessing services. They are often no longer eligible for family coverage once they reach age 19. Eligibility for Medicaid for those over 18 is much more restrictive. Private insurance with these pre-existing conditions is costly and premiums are beyond the budget of most of these young adults. Adult providers, both primary care and specialty care, are less likely to accept Medicaid. In some cases, providers may avoid these patients because they are unfamiliar with many of their problems. Improved pediatric services are allowing children to reach adulthood with some problems for which adult specialists were never trained. Furthermore, most adult practitioners do not practice in multidisciplinary settings, so one-stop service is no longer available and case management becomes much more difficult.

6. Limitations of the Voucher/Purchase Order System

While the ConnectCare Voucher/Purchase Order Program is extremely important, there are certain limitations under this system, as noted below (the voucher/purchase order system is explained in more detail in Section IV. A):

1. The funds to pay for the voucher system are limited and come from the DSH waiver allocation received by ConnectCare. Loss of ConnectCare's DSH payments would therefore eliminate the funding source for the current voucher program.
2. The voucher program is based upon the same guidelines used by Medicaid and Medicare (InterQual) for authorizing services. Accordingly, vouchers may not be issued for all services that require hospitalization or that may be requested by a patient or physician. For example, psychiatric care, cosmetic surgery, and certain pregnancy-related services are not covered by the ConnectCare voucher program.
3. Elective procedures must be pre-authorized at least 72 hours in advance to allow ConnectCare's Utilization Department to verify patient eligibility for the voucher program, i.e., lack of health insurance or other financial means. This preauthorization process is industry standard, and is not different than what is typically done throughout the health care industry.
4. As with private health insurance, ConnectCare preauthorizes only the specific service requested by the referring physician. Some patients and physicians do not want to seek additional vouchers for services beyond their initial request, and desire open-ended or "reusable" vouchers.
5. Vouchers are only available to uninsured patients. Underinsured patients such as those covered by Missouri Medicaid are not eligible for the ConnectCare voucher program.

B. Financial Barriers

1. Lack of Insurance

In 2002, the Institute of Medicine released a comprehensive report regarding the consequences of being uninsured on health status. They found “a consistent and statistically significant relationship between health insurance coverage and health outcomes for adults.” They concluded that “working-age Americans without health insurance are more likely to:

- Receive too little medical care and receive it too late;
- Be sicker and die sooner;
- Receive poorer care when they are in the hospital even for acute situations like a motor vehicle crash.”^{5,6}

Likewise, the Kaiser Commission on Medicaid and the Uninsured reports substantial barriers to care for the uninsured and underinsured. They note that nationally:

- Nearly 40% of uninsured adults and 25% of uninsured children have no regular source of health care. Coupled with a fear of high medical bills, many delay or forgo needed care.
- Uninsured children are 70% more likely than insured children not to have received medical care for common conditions such as ear infections, and 30% less likely to receive medical attention when they are injured.
- Nearly 40% of uninsured adults skipped a recommended medical test or treatment, and 20% say they needed but did not get care for a serious problem in the past year.

- Both uninsured adults and children are less likely to receive preventive care. Uninsured adults are over 30% less likely than insured adults to have had a checkup in the past year. Similarly, one-third of uninsured children did not see a doctor in the past year.
- The uninsured are more likely than those with insurance to be hospitalized for conditions that could have been avoided, such as pneumonia and uncontrolled diabetes.
- The uninsured with various forms of cancer are more likely to be diagnosed with late-stage cancer. Death rates for uninsured women with breast cancer are significantly higher compared to women with insurance.^{5,7}

According to the U.S. Census Bureau, the number of people without health insurance rose by 1.4 million individuals, up to 41.2 million total uninsured, which represents 14.6% of the population in the United States. There was also a decline in employment-based insurance of 1 percentage point, down to 62.6% of the population.^{5,8}

Despite the Medicaid program, the U.S. Census Bureau reported that 10.1 million poor people, or 30.7% of the poor, had no health insurance of any kind during 2001. It is estimated that approximately 10.3% of Missouri residents were uninsured in early 2002 according to U.S. Census Bureau data. Missouri ranked 37th in 2002 in the number of uninsured, meaning that 36 states had a higher percentage of uninsured individuals than Missouri. The rate of uninsured among the non-elderly population in Missouri is approximately 11%.^{5,8}

2002 ESTIMATE OF UNINSURED BY STATE—U.S. CENSUS BUREAU, MARCH 2002 CENSUS POPULATION SURVEY

STATE	% UNINSURED ALL AGES*	RANK	% UNINSURED NONELDERLY**	RANK
UNITED STATES	15%	—	17%	—
TEXAS	24%	1	26%	2
NEW MEXICO	21%	2	26%	1
CALIFORNIA	20%	3	21%	4
LOUISIANA	19%	4	21%	6
OKLAHOMA	18%	5	22%	3
ARIZONA	18%	6	19%	8
FLORIDA	18%	7	21%	5
GEORGIA	17%	8	17%	16
MISSISSIPPI	16%	9	17%	17
ARKANSAS	16%	10	18%	9
NEVADA	16%	11	18%	12
IDAHO	16%	12	18%	10
WYOMING	16%	13	18%	14
ALASKA	16%	14	19%	7
COLORADO	16%	15	17%	15
NEW YORK	16%	16	18%	13
UTAH	15%	17	15%	24
NORTH CAROLINA	14%	18	16%	18
ILLINOIS	14%	19	15%	21
MONTANA	14%	20	18%	11
WEST VIRGINIA	13%	21	16%	19
ALABAMA	13%	22	15%	20
NEW JERSEY	13%	23	15%	23
WASHINGTON	13%	24	15%	25
OREGON	13%	25	14%	26
KENTUCKY	12%	26	15%	22
MARYLAND	12%	27	13%	31

STATE	% UNINSURED ALL AGES*	RANK	% UNINSURED NONELDERLY**	RANK
SOUTH CAROLINA	12%	28	14%	27
INDIANA	12%	29	13%	28
KANSAS	11%	30	13%	29
TENNESSEE	11%	31	12%	37
IOHIO	11%	32	13%	32
VIRGINIA	11%	33	13%	33
MICHIGAN	10%	34	11%	40
MAINE	10%	35	13%	30
CONNECTICUT	10%	36	12%	34
MISSOURI	10%	37	11%	41
HAWAII	10%	38	11%	39
NORTH DAKOTA	10%	39	12%	35
VERMONT	10%	40	10%	46
NEBRASKA	10%	41	11%	42
NEW HAMPSHIRE	9%	42	10%	44
SOUTH DAKOTA	9%	43	12%	36
DELAWARE	9%	44	11%	38
PENNSYLVANIA	9%	45	10%	45
MASSACHUSETTS	8%	46	10%	43
MINNESOTA	8%	47	9%	48
RHODE ISLAND	8%	48	9%	49
WISCONSIN	8%	49	9%	50
IOWA	8%	50	9%	47

* Percent of 2002 estimated total population

** Percent of 2002 Under 65 estimated population

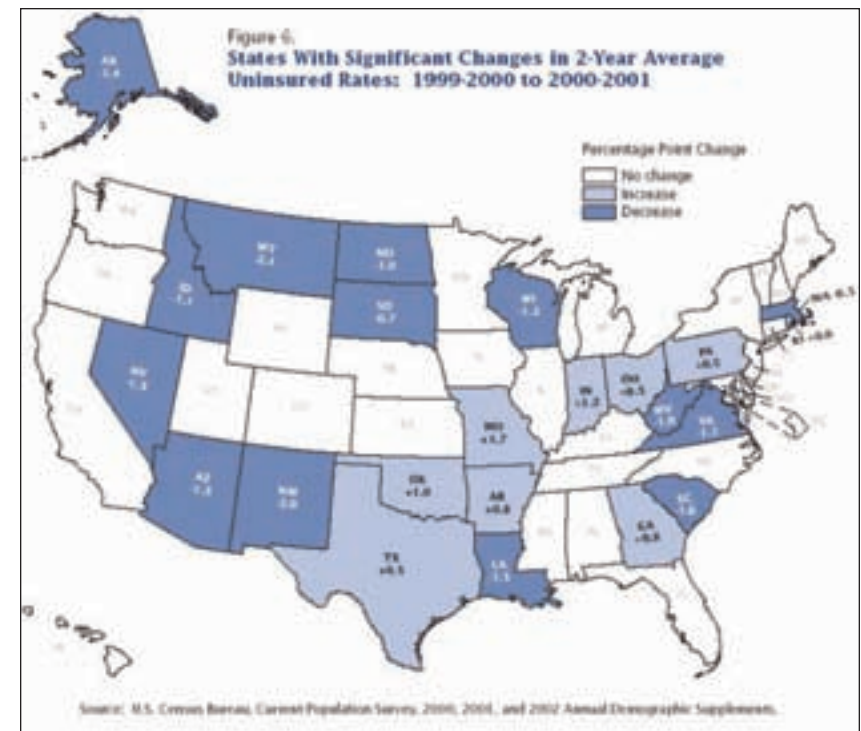
2002 Uninsured Population by State. Data from from the U.S. Census Bureau's 2002 Current Population Survey (CPS) Annual Demographic Supplement.

FIGURE 6: STATES WITH SIGNIFICANT CHANGES IN 2-YEAR AVERAGE UNINSURED RATES: 1999-2000 TO 2000-2001

Note: The U.S. Census Bureau uses a two-year average of uninsured rates in many of its analyses to increase the reliability of the estimates at the state level. The Census Bureau also considers that the data collected in the annual March supplement are reflective of persons' situations during the prior year. Therefore, data collected in March 2002 are labeled as 2001 in the Census Bureau's reports of CPS data (as is the map above). Many experts feel that for some of the items in the survey, particularly the question regarding insurance status, people surveyed respond with their status at the "point" of time of the survey, or March 2002. Further discussion of the challenges of estimating the number of uninsured is contained in Appendix 9 of this report.

While Missouri has a lower rate of uninsured individuals than many states, it is important to note that the availability of insurance alone does not assure access to health care services for safety net patients. Another important component is the availability of providers willing to accept individuals in insurance programs such as Medicaid. As noted in Section IV of this report, Missouri Medicaid reimbursement levels are in the lower quartile of the nation, and a severe shortage exists in safety net specialists, dentists, and mental health providers in the St. Louis region. Thus, many individuals covered under the Missouri Medicaid program face similar barriers to access as the uninsured population.

In addition, comparing two-year moving averages (1999-2000 and 2000-2001), *the number of uninsured individuals rose 1.7% in Missouri*, which was significantly more than the increase of uninsured in any other state, as noted in the map below. This increase in the uninsured does not take into account the fact that over 30,000 more individuals are no longer eligible for Medicaid benefits due to Missouri legislative action in 2001. These rates could be even more substantially impacted by proposed legislative action in the 2003 Missouri General Assembly to reduce the number of eligible residents covered under the Missouri Medicaid program, as discussed in greater detail in Section IV of this report.



Estimates of the Uninsured—St. Louis City and Saint Louis County

Data on the number of uninsured in St. Louis City and Saint Louis County are not regularly collected or reported, and the number is difficult to estimate given statistical challenges inherent in any current estimating method. A full discussion of this challenge, and various methodologies used to estimate the uninsured, is found in Appendix 9.

For purposes of estimating the number of uninsured in St. Louis City and County, state-wide rates of uninsured for the non-elderly population by federal poverty level from the CPS for Missouri were applied to the numbers of non-elderly persons in the City and County by federal poverty level.

The St. Louis City and County population data by federal poverty level was taken from the U.S. 2000 Census. These estimates were then multiplied by the rates of uninsured for Missouri from the March 2002 CPS survey, the most recent data available to the RHC. This technique results in an estimate of approximately **128,555 uninsured persons** in the two areas without insurance at the time of the CPS survey. This number has been rounded to 129,000 uninsured individuals in St. Louis City and Saint Louis County as of 2001, and used in Section IV in analyses that estimate the total number of safety net patients in the region.

The table, below, shows the number of uninsured by St. Louis City and Saint Louis County, separately and combined utilizing the data from the US Census Bureau.^{5,8}

	BELOW POVERTY	ABOVE POVERTY	TOTAL
A. POPULATION AGED 0 TO 65 IN STL CITY (US 2000 CENSUS)	77,476	224,171	301,647
B. RATES OF UNINSURED FOR MO (US CENSUS, MARCH 2002 CPS)	25%	9%	—
C. NUMBER UNINSURED IN STL CITY (COLUMNS A X C)	19,369	20,175	39,544 (13.1%)
D. POPULATION AGED 0 TO 65 IN STL COUNTY (US 2000 CENSUS)	62,463	815,496	877,958
E. RATES OF UNINSURED FOR MO (US CENSUS, MARCH 2002 CPS)	25%	9%	—
F. NUMBER UNINSURED IN STL COUNTY (COLUMNS D X E)	15,616	73,395	89,011 (10.1%)
G. NUMBER OF UNINSURED IN STL CITY & COUNTY (COLUMNS C + F)	34,985	93,570	128,555 (10.9%)

While the rate of uninsured persons is higher in the City of St. Louis, it is important to note that approximately 70% of the uninsured in the combined region live in Saint Louis County.

While the U.S. Census Bureau annual data have been used to estimate the uninsured, these estimates can be considered “point-in-time” snap-shots that do not fully reflect the total level of uninsurance, since research has shown that they may not reflect estimates of the impact of uninsurance on the citizenry over a “period-of-time”.^{5,8}

In order to account for the flux in the number of individuals that are uninsured throughout the calendar year, a period-of-time estimate of uninsured persons in St. Louis City and County was made through a complex modeling process utilizing data from both the Current Population Survey (CPS) and the Behavioral Risk Factor Surveillance System (BRFSS). This model produced an estimate of approximately **151,000 persons** in the area who were without insurance for some amount of time during a 12-month period, as follows:

TABLE 5. Number of Uninsured Persons in St. Louis City and Saint Louis County by Length of Time without Insurance

LENGTH OF TIME W/O INSURANCE	EST. TOTAL NO. OF PERSONS PER YR
1-2 MONTHS	7,377
3-5 MONTHS	18,328
6-8 MONTHS	7,612
9-12 MONTHS	5,974
13+ MONTHS	111,856
TOTAL	151,147

This number is approximately **22,000 more persons** than the point-in-time estimate of uninsured persons.

Using the above techniques, the total number of uninsured in the region can be estimated as:

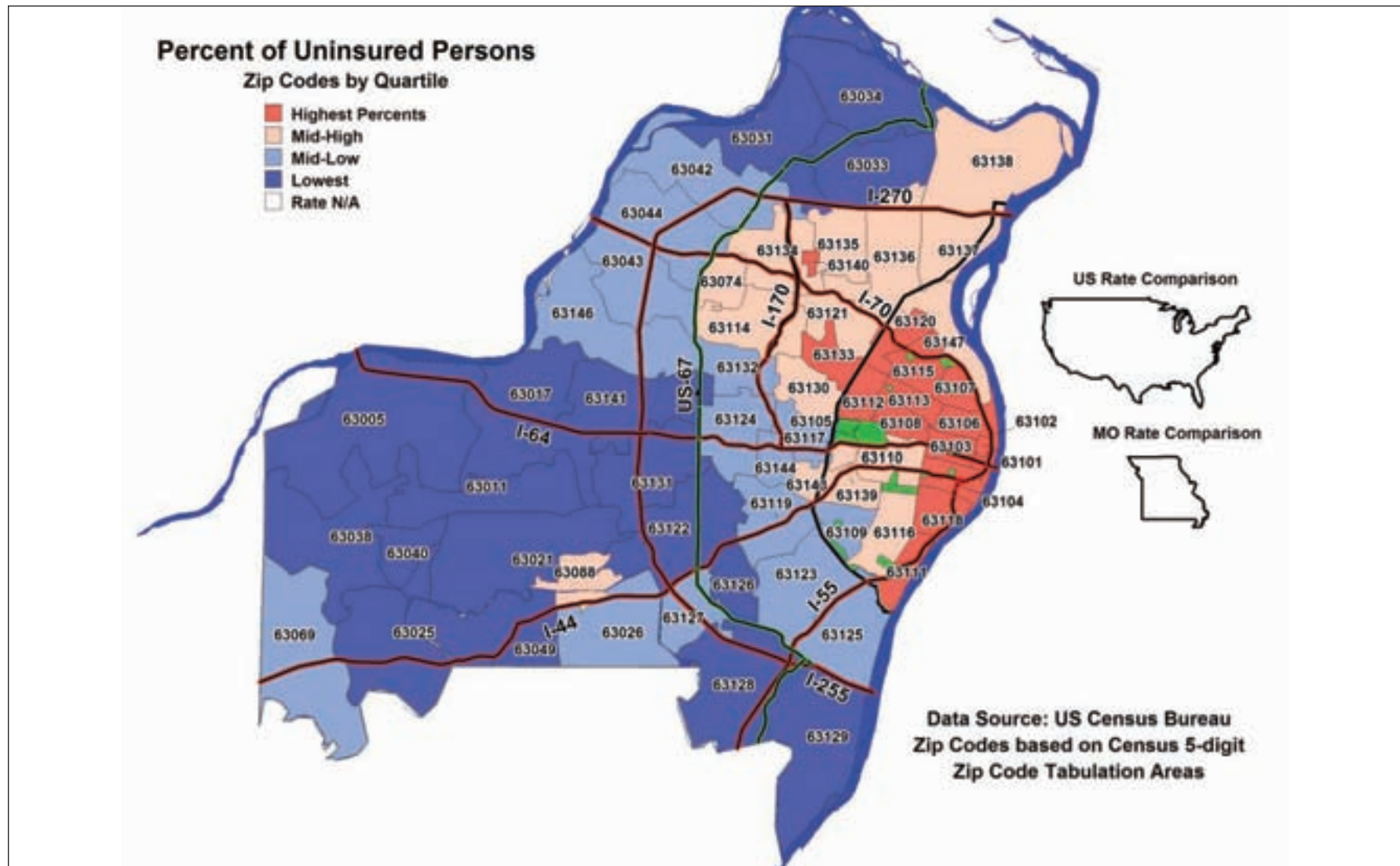
129,000	UNINSURED AT ANY POINT IN TIME
22,000	ADDITIONAL UNINSURED FOR SOME PERIOD OF TIME OVER A YEAR
151,000	TOTAL UNINSURED INDIVIDUALS DURING A 12-MONTH PERIOD OF TIME

For a more robust description of this topic and the modeling techniques that were utilized, please refer to Appendix 9 of this report.^{5,9}

To be conservative in its estimates, the RHC has chosen to use the figure of **129,000 uninsured in the region** for planning calculations utilized in Section IV. However, it must be acknowledged that this figure represents the low end of the range for the potential number of uninsured in the region, and that at least 22,000 additional individuals may be impacted by the problems associated with a lack of insurance in any given year. It also must be reiterated that this estimate does not take into account the fact that thousands of individuals in St. Louis City and Saint Louis County are no longer eligible for Medicaid benefits due to Missouri legislative action in 2001. Also, these rates could be even more substantially impacted by proposed legislative action in the 2003 Missouri General Assembly to reduce the number of eligible residents covered under the Missouri Medicaid program, as discussed in greater detail in Section IV of this report.

Utilizing the U.S. Census Bureau data as referenced above, the uninsured in the St. Louis City and Saint Louis County region are estimated to be distributed across the region, as shown by the following map:^{5,8}

DISTRIBUTION OF UNINSURED PERSONS IN ST. LOUIS CITY AND SAINT LOUIS COUNTY, BY ZIP CODE



2. Cost of Care and Medical Debt

The cost of medical care and prescription medications poses a serious barrier to care for safety net patients. One St. Louis focus group participant spoke to this problem:

“...their medicine is literally wiping them out, totally wiping them out to where they can’t even...pay the rent, partial on utilities, medicine, and whatever they can basically scrounge from missions, canned goods, food or whatever, and personally, this is totally, totally wrong.”^{5.2}

The vast majority of the approximately 129,000–151,000 uninsured in St. Louis City and County are employed, but they have jobs that do not provide health care benefits. Due to eligibility requirements of the Medicaid program, governmental programs do not cover these individuals. At the same time, the cost of private insurance can be prohibitive for these citizens, especially since many of the jobs that do not include health insurance coverage are low paying as well. As discussed previously, lack of insurance is associated with decreased access to care and worse health outcomes. It also leads to medical debt, which has its own repercussions—and for more than the uninsured individual.

Medical debt may create a downward spiral capable of consuming all aspects of a person’s life: job, house, family, and social/psychological status. The spiral begins when an uninsured individual is either discouraged from seeking care or is unable to get it. The Access Project found that 46% of the people surveyed in a recent study were indebted to their safety net care center, and 26% said that their debt would deter them from seeking care in the future. This was noted by respondents as follows:

- *“I am ashamed to take my kids to the physician because I think they know I owe \$35.”*
- *“I still owe [for] the operation on my breast and I don’t visit the clinic because I am afraid that I won’t be able to pay.”*
- *“I am embarrassed by my old bill. The office staff makes you feel uncomfortable about the bill. So I pray I never have a dire emergency.”*^{5.10}

A neglected medical condition then worsens, sometimes past reversible stages, and can exacerbate existing medical conditions or lead to new ones. (For example, an untreated leg injury decreases mobility, which pushes a weight-control problem into frank obesity with all its associated, long-term effects.) Often, care is postponed until the condition becomes unbearable, at which time the person comes (or is brought) to an Emergency Department, where they are treated at great cost to themselves, yet do not necessarily receive appropriate follow-up and ongoing care – the very care that might have prevented the problem to begin with. Meanwhile, more debt accumulates, raising the person’s threshold for seeking or being able to obtain care, for the underlying logic is unchanged. Little opportunity exists for breaking this downward spiral.

Eventually, the whole family may be pulled into the vortex. People with medical debt become the target of aggressive collection agencies. Many lose their credit, jobs, or job opportunities, and even their homes. In many states, “personal bankruptcy can be viewed as an insurer of last resort for families in that it allows them to protect certain assets such as their home or retirement accounts”.^{5.11} A national survey found that one in every four people in debt identified an illness or injury of themselves or a family member as a reason for filing bankruptcy. “A good health insurance policy,” Daly concludes, “is protection against financial ruin for many Americans.”^{5.11}

What financial assistance and/or counseling is available to help people with medical debt? Unfortunately, this has been a neglected aspect of health care delivery. The Access Project survey found that “while only 3 of 10 respondents said [hospital] staff ‘always’ offered to look into possible assistance for them, nearly half – 48% – said staff ‘never’ offered such help when financial assistance was offered, it was most often an offer to allow payment of the full bill in installments (32%), as opposed to discounting (12%) or waiving (13%) the bill”.^{5.10}

There are many unintended consequences of the system. First, through this spiral, even insignificant amounts of medical debt can trigger very significant costs for the individual, their families—and eventually society. Second, people can actually be discouraged from obtaining a second or better job to help pay medical and other bills because, for example, their children might lose health coverage under the Children’s Health Insurance Program (CHIPs) as a result. Perhaps the cruelest irony is that medical care is often most expensive for those who can least afford it.^{5.10} Almost one in five hospitals do not offer reduced rates to the uninsured, who are billed at higher rates than people who belong to large insurance plans that negotiate volume discounts.^{5.11}

3. Prioritization of Other Needs Over Health Care

It is difficult for some uninsured and underinsured people to view health care, particularly preventive health care, as a priority because they are dealing with many other pressing needs, often associated with poverty.

“Family crises, often created by poverty, made it difficult, if not impossible for participants to make health care decisions. This often placed the health of children or dependent family members at risk.”^{5.2}

One focus group participant described the need to choose between health care and paying the utility bill:

“You know, that’s one of the things you just go without. It’s like either you buy bread or you buy milk. Or, you know, you pay the light bill or you send little Timmy to the doctor.”^{5.2}

Another focus group member explained that for some low-income families, poor health is only one of many problems they face on a day-to-day basis.

“We made a home visit on a family in north St. Louis to, um, because they had missed preventive care...Obviously they were in health crisis...but [the mother] didn’t know where to begin. There were so many layers to peel away from this family that to get to their health care was...and they definitely had health care needs.”^{5.2}

In many cases, people do not seek care until their health problems become serious. Some participants “reported that they waited until they could not take the pain or discomfort any longer and then went to the emergency room”.^{5.2}

C. Cultural Barriers

1. Stigma Associated with Safety Net Care

Some uninsured and underinsured people are reluctant to seek care due to the stigma associated with relying on the safety net system. Kurz and Scharff found that some focus group members did not want to accept assistance.

“Several participants expressed the belief that they were responsible for taking care of themselves and their families and had a desire not to have to rely on the system taking care of them.”^{5.2}

While services may be available, a desire to be self-reliant causes some people to choose not to seek them, particularly in non-urgent situations.

2. Lack of Respect Toward Safety Net Patients

The quality of personal interactions between safety net patients and their health care providers is often mentioned as a reason people avoid seeking care.^{5.3, 5.2} Kurz and Scharff found that “many participants felt that health care providers did not respect them.”^{5.2} Often, the health care providers included not only the physicians but also the nursing, reception, and auxiliary staff.

Participants reported situations in which they felt they were treated disrespectfully:

“I would say that—again, it wasn’t discrimination, but I wasn’t treated well in the office of a pediatric doctor. He was just talking around me, you know. And when I went to pose a question to him, it was like, ‘Okay, this, this, and this—don’t you understand? Don’t you know?’”

“...I had been going to that doctor for a long time and he had some new receptionists, which they were very arrogant. I mean when I say arrogant, I do mean arrogant.”^{5.2}

While this example is from a private physician’s office, patients report similar situations at safety net clinics. In particular, safety net patients felt they were treated differently than patients with private insurance.

Focus group participants also reported being treated poorly during registration:

“Well, one, when I entered the place, they didn’t even acknowledge me for one. For two, I’m standing at the desk, I sign my name in, which two more other people come in – I’m still standing here...They talked over me talking to them as if I wasn’t even standing there. I’m just a piece of the furniture at this point.”^{5.2}

Participants cited an “uncaring atmosphere”^{5.3} and a concern that “administrative processes took precedence over medical care”.^{5.2} Many participants in the Episcopal-Presbyterian Trust study commented that although a health care provider might not think patients were being treated disrespectfully, the situation was “interpreted that way by patients, and therefore was very real to them.”^{5.2}

3. Cultural Barriers for Minorities

There are significant cultural barriers to care that limit access for minority populations to the health care system and possibly result in minorities receiving either inappropriate or inadequate care. The cultural differences between health care providers and patients can shape the health care encounter and affect the quality of care received by the patient.^{5.12}

The cultural barriers include but are not limited to:

- Ethnic, racial and other forms of discrimination that interfere with appropriate diagnoses and treatment.
- Lack of culturally sensitive providers.
- Cultural values about health care that limit how and when minorities seek health services.
- Historical discrimination and medical mistreatment that result in distrust of the health care system.

One significant cultural barrier to health care is the discrimination experienced by some minorities who feel they are victimized because of negative stereotypes about their race, gender, or other demographic grouping. These negative patient-provider encounters result in the development of a general mistrust of the medical and health care system.

A recent study by a Georgetown University doctor found that black patients complaining of heart pain were 40% less likely to be referred for a top-notch diagnostic test for heart disease. The researchers believe the disparity in care occurs because some doctors perceive black patients to be poorer than white patients.

Many minorities perceive the health care system as hostile and culturally insensitive to the needs of minority populations. Historical evidence of medical mistreatment and neglect, combined with confirmed cases of inhumane treatment of minorities, such as the infamous Tuskegee Experiments, which intentionally left African-American men untreated for syphilis, only serve to reinforce minorities' suspicions concerning the health care system. ^{5.13}

Some minority populations have historically preferred traditional, ancestral, or spiritual healing over western medicine and only seek the health care system when other interventions fail. These cultural values about health care create a significant barrier to health care and may impede the ability of the health professional to properly diagnose the patient.

Also, the lack of culturally sensitive providers may cause patients to be apprehensive about seeking care. Fearing they may be stigmatized by health care professionals, patients may postpone care or not seek care at all. When these patients access care they are at risk for being misdiagnosed. For example, some patients seeking psychological help have tended to communicate their sense of distress to health care professionals as physical complaints, such as non-specific pain, weakness, and/or fatigue. This phenomenon reflects culturally traditional modes of seeking help and views of what is relevant to bring to a medical setting, and may result in improper diagnosis and treatment.

Finally, the cultural competence of the provider is another significant barrier to health care. A large body of literature has documented significant racial and ethnic disparities in health care and health outcomes, with minority patients receiving less health care and suffering worse health. Many minorities face barriers to accessing health care and to receiving appropriate treatment. ^{5.14}

Providers can unknowingly impose their own cultural understandings and values upon patients from differing cultures. This can impede the provider's ability to collect information regarding the patient's medical history and present problems in the context of the patient's cultural background. ^{5.15}

4. Cultural and Linguistic Barriers for New Americans¹

The immigrant and refugee population in St. Louis City and Saint Louis County has grown rapidly over the past two decades, and now makes up approximately 5% of the total population in our region, according to data from the 2000 U.S..

Foreign-Born Residents—Bureau of the Census, 2000

COUNTY	EUROPE	ASIA	AFRICA	N/S AMERICA	TOTAL	% OF TOTAL POPULATION
STL CITY	8,543	6,538	1,500	2,961	19,542	5.6%
STL COUNTY	14,042	19,198	2,306	7,156	42,702	4.2%
TOTAL	22,585	25,736	3806	10,117	62,244	4.6%

Although more recent Census data is not available, community groups that work with new American¹ populations believe that the number of foreign-born residents is actually greater than 62,244 due to a significant influx of immigrants and refugees since 2000, as well as significant undercounts in Census data, particularly for undocumented and recent arrivals.^{5,16}

The influx of foreign-born residents is reflected in the populations served by the safety net providers. In a survey of Institutional Safety Net Providers in the St. Louis community, 13 of the 33 sites reported that over 10% of their clients do not have English as their primary language. Of these 13 sites, five reported seeing over 10% Spanish-speaking residents, four reported seeing over 10% Bosnian/Serbian/Croatian residents, and one reported seeing over 10% Vietnamese residents.^{5,1}

It is anticipated that the number of new Americans seen by safety net providers will continue to grow as the refugee and immigrant population increases, and as foreign-born residents access the health care system in greater numbers.

The RHC, in partnership with the International Institute and the City of St. Louis Mental Health Board of Trustees, recently conducted two focus groups concerning the ability of new Americans to access the health care system. The focus groups included physical and mental health care providers that frequently serve new Americans, as well as representatives from community organizations who work with this population. These sessions highlighted the fact that in addition to all the barriers listed in Section V of this report, refugees and immigrants also encounter unique barriers to accessing the health care system in our region, including:

- Language barriers
- Obtaining information on where to go for care, and how the American health care system works
- Fear of deportation or detainment, even for those that are legally in the country, especially given the amount of information asked for by health care providers
- Cultural barriers
- Fear and lack of understanding of “modern” medicine and westernized medicine providers

In addition, there are a number of physical diseases and conditions that particularly impact new Americans, including dental problems, nutritional deficiencies, untreated and under-treated chronic conditions and diseases, and disfigurement from trauma and war violence, which underscore the importance of adequately serving this community.

¹ The term “new Americans” generally refers to newly arrived immigrants and refugees, and also includes undocumented and migrant workers.^{5,16}

Refugees and immigrants are also disproportionately affected by mental health issues, often due to trauma associated with war or violence in their home countries or difficulty in adjusting to a new language and culture. Some specific mental health issues include:

- Post Traumatic Stress Disorder (PTSD) and other consequences of oppression and trauma experienced by refugees
- Depression
- Anxiety
- Adjustment to new culture
- Grief

A more detailed analysis concerning the particular barriers faced by new Americans in our community can be found in Appendix 10.

5. *Lack of Health Literacy*

The Institute of Medicine's recent report, "Priority Areas for National Action: Transforming Health Care Quality"^{5.17}, identifies health literacy/self-management as one of 20 top priorities in health care. It is also one of only two (along with care-coordination) identified as "cross-cutting:" applicable to people of any age, race, gender, income level, and health status. As such, health literacy is a cornerstone of an effective health care delivery system. A person is health literate if she/he is able to comprehend and act on basic health information. Although low health literacy affects mostly white, native-born Americans, it disproportionately impacts minorities, the elderly, and the poor (50% of Hispanics, 40% of blacks, 33% of Asians, 66% of the elderly, and 45% of the poor)^{5.18}.

There is a correlation between basic literacy and health literacy. Approximately 92 million U.S. adults (46%) are either functionally illiterate or marginally literate, according to the National Adult Literacy Survey (AMA, 1999). In other words, almost half of adults read at or below the 8th grade level. According to an article in the New England Journal of Medicine:

"Educational materials for patients and informed-consent documents present highly complex information that must be understood by patients. This complexity is a major barrier to comprehension for...American adults with low literacy skills. A low level of literacy is independently associated with poor health outcomes and billions of dollars of additional annual health care expenditures...The text of informed-consent documents can be written at a 4th grade level."

A survey by the American Medical Association (AMA) found that 46% of U.S. adults are functionally illiterate in dealing with the health care system. The AMA estimates additional direct and indirect U.S. expenditures due to health illiteracy at \$73 billion annually, with employers shouldering up to 17% of this burden.^{5.19} No comparable studies for St. Louis or Missouri have been performed to our knowledge.

Being health literate is essential for staying healthy, and for actively participating in one's own management when medical care is required. Multiple research studies demonstrate that people with low health literacy are more likely to be non-compliant with treatment plans,^{5.20} make medication errors^{5.21}, and require hospitalization^{5.22} than health literate people.^{5.23}

However, other studies indicate that health education alone is not always enough to markedly change health outcomes. An example is a famous study, the “Multiple Risk Factor Intervention Trial,” performed in the 1970s. The study included over 12,000 men at risk for cardiovascular disease. Men in the control group had results of a screening exam and laboratory tests sent to their primary physicians, with no other intervention. The treatment group additionally received extensive counseling on behavioral modifications to reduce risk factors for cardiovascular disease, focusing on hypertension, cholesterol, and smoking. The counseling was performed both individually and in group sessions, by a team of physicians, nurses, nutritionists, and behavioral scientists, every four months for six years. The study found real but small changes in risk factors, and no statistically significant difference in mortality, between the two groups.

Several smaller recent studies reach conclusions of a similar vein. The Institute of Medicine’s previously mentioned report identifies a few noteworthy examples. Examining the impact of self-management education and regular practitioner review on adults with asthma, one study found statistically significant decreases in episodes of nocturnal asthma, hospitalizations, emergency room visits, unscheduled doctor visits, and days lost from work.^{5.25} A more recent analysis by Gibson et al. of similar randomized controlled trials concluded that education influenced outcomes only when coupled with goal-oriented treatment plans involving self-monitoring and regular physician review.^{5.26} Likewise, an analysis of self-management training for diabetics by Norris et al. concludes that “factors other than knowledge are needed to achieve long-term behavioral change; ... improved motivations are more effective than knowledge in improving metabolic control in type II diabetes”.^{5.27}

This body of evidence suggests that improving health outcomes through interventions aimed at increasing health literacy and self-management requires the following (short of a raise in educational levels in general):

- *Presentation of health information in a culturally sensitive manner and tailored to the educational level of the patient.* It is important to recognize that one size does not fit all. For example, the patient is a health-care professional, give her/him a medical review article; if college educated, pamphlets and an Internet web site; if Spanish speaking and educated, the same—in Spanish (if available); if Spanish speaking and undereducated, pictographs with bilingual instructions. Verbal communication must accompany written and graphic material.
- *Personal contact and active review by practitioners in a goal-oriented treatment program, preferably in an ongoing doctor-patient relationship.*
- *Motivation of the individual to be a participant in his/her own care.*

SECTION VI: OTHER DETERMINANTS OF HEALTH

Key Findings of Section VI

- 1. Factors such as lifestyle and behavior, genetics, and the environment each have a greater impact on individual health than the medical delivery system.*
- 2. Over the next year, the RHC will conduct an analysis of prevention and health education in the region. In 2004 the RHC will release an analysis, recommendations, and implementation plan for improving prevention and education.*
- 3. The RHC currently supports and lends expertise to initiatives working to improve prevention and health education in the region.*

The RHC embraces the World Health Organization's definition of health:

“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”^{6.1}

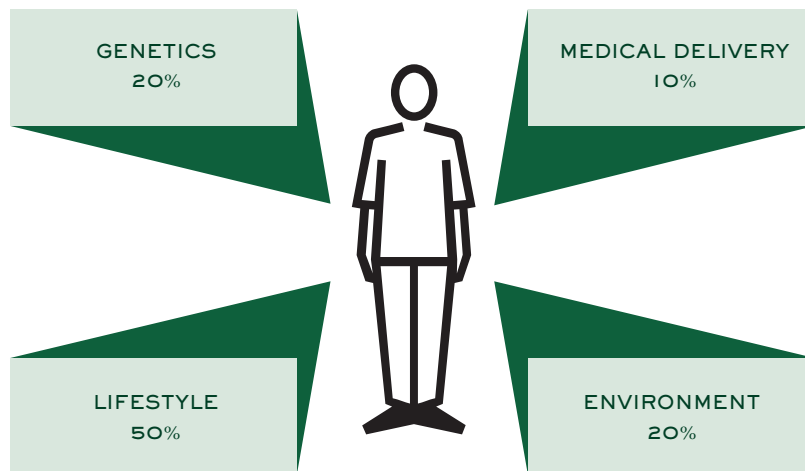
We believe that the factors that determine health go beyond medical services, and include factors such as education, socioeconomic status, governmental policy, and the environment.

However, the RHC also recognizes a need to focus our efforts and limited resources in order to effect change. In this, our first report, we examine the integrity of the health care safety net. As required by the federal and state governments under the terms of the Medicaid waiver granted to St. Louis, we provide an assessment of the primary and specialty care system for the uninsured and underinsured. Later in 2003, we will release recommendations and a detailed implementation plan for strengthening the safety net.

Our intent is to draw attention to the need for change in our community, and to generate action toward implementing solutions. We know that our region must do better, that we cannot be content with the poor health outcomes and wide disparities that currently exist. We also know that availability of and access to primary and specialty care services, while important, is only part of the answer.

Research indicates that other factors, such as lifestyle and behavior, genetics, and the environment each have a greater impact on individual health than the medical delivery system. Lifestyle and behavior alone have a 50% impact on health status, while medical services have only a 10% influence.^{6.2}

A. Factors Which Influence Health Status



Source: National Civic League

According to Lisa Berkman and Kimberly Lochner, “to make advances in population health, a nation must move beyond clinical interventions” and address interventions that “prevent people from becoming sick in the first place”.

^{6.3} For this reason, over the next year the RHC will examine prevention and health education in St. Louis City and Saint Louis County. In 2004, we will release an analysis, recommendations, and implementation plan for strengthening prevention and education.

In particular, the RHC will consider evidence-based strategies for promoting healthy behavior and health knowledge. In many cases, the people most at risk for being uninsured or underinsured are also at risk for having unhealthy lifestyles:

“People who are poor, have low levels of education, or are socially isolated are more likely to engage in a wide range of risk-related behaviors and less likely to engage in health-promoting ones.” ^{6.3}

In addition, social patterns often impact health behavior:

“We now understand that most behaviors are not randomly distributed in the population. Rather, they are socially patterned and often cluster with one another. Thus, many people who drink also smoke cigarettes, and those who follow health-promoting dietary practices also tend to be physically active.” ^{6.3}

While it is difficult to promote widespread behavior change, the Institute of Medicine emphasizes the importance of making prevention and education a focus of community health initiatives:

“Approximately half of all causes of mortality in the United States are linked to social and behavioral factors such as smoking, diet, alcohol use, sedentary lifestyle, and accidents. Yet less than 5% of the approximately \$1 trillion spent annually on health care in the United States is devoted to reducing risks posed by these preventable conditions. Behavioral and social interventions therefore offer great promise to reduce morbidity and mortality, but as yet their potential to improve the public’s health has been relatively poorly tapped.” ^{6.4}

B. RHC Support of Initiatives to Strengthen Education and Prevention

As the RHC conducts an analysis of prevention and education, we will also continue to support and lend expertise to organizations addressing prevention and education in our community. In particular, the RHC focuses on initiatives designed to:

- Remove identified barriers to health care services for the medically uninsured and underinsured as outlined in Section V of this report.
- Improve health outcomes in populations and geographic regions in our community that exhibit wide negative disparities.
- Encourage care coordination and collaboration among health service providers in the safety net system.
- Bring funds for improving health outcomes into the region.

In order to deepen our impact, the RHC targets initiatives that are central to the core competencies of the membership base of the RHC, including primary, specialty, preventive, and public health services. The RHC also prioritizes initiatives targeting focus diseases and conditions, and focus zip codes, which are detailed below.

Focus diseases and conditions

The RHC prioritizes initiatives that target the following diseases and conditions for which there are wide health disparities and poor regional health outcomes:

- Asthma education
- Cancer education and prevention
- Cardiovascular Disease / Hypertension
- Cigarette smoking prevention and cessation
- Diabetes
- Healthy lifestyle education, especially programs emphasizing exercise
- HIV/AIDS/STD education and prevention
- Lead screening and abatement programs
- Maternal and child health education
- Mental health and substance abuse education and prevention

The target diseases and conditions were selected based on health priorities defined by:

- The State of Missouri in the *Report to the Board of the Missouri Foundation for Health, Understanding Our Needs* ^{6.5}
- The City of St. Louis in *Understanding Our Needs*, a health needs assessment ^{6.6}
- Community members in qualitative reports such as the “*Call to Action*” *Initiative* ^{6.7} and *Speak Out* ^{6.8}

Focus zip codes

In addition, the RHC prioritizes initiatives working in zip codes that exhibit a wide negative disparity as defined by the St. Louis City and Saint Louis County Departments of Health. These zip codes include:

- 63106
- 63107
- 63113
- 63115
- 63120
- 63121
- 63136
- 63133

The RHC also targets zip codes with high refugee and immigrant populations, as defined by the International Institute, including:

- 63109
- 63111
- 63116
- 63118

C. RHC Community Response to Date

The RHC currently partners with several organizations in their efforts to improve regional health outcomes, including the St. Louis Lead Prevention Coalition, the St. Louis Regional Asthma Consortium, and the St. Louis Healthy Heart Coalition. More information on these partnerships appears below.

St. Louis Lead Prevention Coalition

The St. Louis Lead Prevention Coalition is a community-based, not-for-profit organization working to reduce lead poisoning and increase collaboration between the different groups addressing lead in St. Louis.

In order to support the efforts of the Coalition, the RHC has agreed to:

- Endorse the St. Louis Lead Prevention Coalition.
- Provide assistance to help the Coalition build partnerships in the community and with RHC partners on the Commission and Advisory Boards, when and as the need arises.
- Utilize the community report that the Coalition is preparing, and help get the word out about the results.

St. Louis Regional Asthma Consortium

The St. Louis Regional Asthma Consortium is a community-based, not-for-profit organization focused on closing the gap that exists between people affected by asthma and the knowledge and services that will help them. The Consortium also works to increase collaboration between different groups addressing asthma in St. Louis.

In order to support the efforts of the Consortium, the RHC has agreed to:

- Endorse the St. Louis Regional Asthma Consortium.
- Write a letter of support for the Consortium to use in its application for the implementation phase of a CDC grant.
- Encourage the exchange of information between the Commission and the Consortium.

Healthy Heart Coalition

The St. Louis Healthy Heart Coalition is a broad-based program of cardiovascular prevention services to African-American residents living in zip codes 63101, 63103, 63106, 63107, 63113, 63115, 63120, and 63147.

In order to support the efforts of Healthy Heart, the RHC has agreed to:

- Collaborate and lend expertise to partnering Healthy Heart agencies conducting prevention.
- Actively participate and support the work of the Coalition of individuals and agencies that have been developed to guide the implementation of Healthy Heart.

In addition, the RHC has met with Taking 63106 by Storm, a neighborhood-based group of residents and health care providers working to improve health outcomes in the 63106 zip code. The RHC has offered assistance and is encouraging the initial efforts of this group to make positive change in their neighborhood.

These current RHC efforts are only a starting point for our support of community initiatives to improve regional health. The RHC will enhance our education and prevention activities in 2003 while we look at long-term structural change.

VII. HEALTH STATUS MEASUREMENT AND REPORTING

Key Findings of Section VII

- 1. The state of Missouri, St. Louis City and Saint Louis County have the opportunity to improve the system of health measurement and health status reporting to the community.*
- 2. Currently, there is no ongoing, comprehensive source of data and analysis reported to the St. Louis City and Saint Louis County region.*
- 3. The RHC proposes that the St. Louis City and Saint Louis County region report on health status on an annual basis.*

A. Importance of Health Status Reporting

The regular measurement and reporting of health status is important to the health of a region. Communities that measure and report health status are better able to:

- Track patterns and trends in regional health indicators.
- Prioritize diseases, health and social conditions, and public health issues most in need of attention.
- Target efforts to areas and populations most affected by poor health status.
- Demonstrate the need to allocate resources toward regional health improvement.

B. Current Measurement and Reporting in St. Louis

The RHC conducted an assessment of current measurement and reporting of health status in the St. Louis City and County region. The RHC determined that:

- Few organizations are reporting on region-wide health status in St. Louis.
- The reports that are produced tend to fall into one or more of the following categories:
 - Focus on a specific issue, such as a disease.
 - Published at irregular intervals.
 - Provide data that are specific to a jurisdiction or organization.
 - Report on few health indicators.
- The City of St. Louis Department of Health released a comprehensive report on the City's health status in April 2001.
- The State of Missouri is a prime data collector and disseminator of health-related information. The MICA web site allows individuals to analyze data to fit their needs. However, a basic level of expertise is needed to use and interpret the data.
- Demographic and socioeconomic census data are readily available through the Missouri Census Data Center. The data are available at a low level of granularity (census tract). Efforts have been recently completed in Saint Louis County, and are underway in St. Louis City, to aggregate this data into meaningful unit blocks (i.e. neighborhoods, municipalities) for the general public. These analyses have not been published to date.
- Data on health status and behavioral risk factors are readily available at the county and zip code level through the State of Missouri at www.dhss.state.mo.us. This data is often used by “issue specific” groups in their reports to the community. Given the difficulty of small sample sizes, this data has not been translated into unit blocks smaller than zip codes.
- Efforts to obtain and report qualitative information regarding health care services have been sporadic. Several recent reports (discussed in Section V of this report) provide comprehensive information on barriers to access and impressions of the health care system. However, there are no set plans to repeat these studies.
- Data regarding the uninsured population in the region are generally not collected nor reported, and can only reliably be estimated at the county-level using known methods. Past efforts to estimate this number have relied on a proprietary model created by the Lewin consulting group in 2000 using 1997-1999 data.
- There is a lack of intermediate indicator data available at the state and regional levels. Intermediate indicators reflect changes that may lead to shifts in health outcomes, i.e. the rate of people trying to quit smoking or the percent of people advised by their doctors to quit smoking.
- The Missouri Department of Health and Senior Services issues an annual *Buyer's Guide to Managed Care Plans*. The guide reports on quality of care, access to care and member satisfaction indicators for hospital institutions. The purpose of the guide is to allow consumers to make informed choices on health care providers.

C. Provider Impressions of Health Status Measurement and Reporting

In the RHC survey of institutional safety net providers, a number of respondents commented on the need for improved data collection and reporting of health status. (See Appendix 1 for survey methods.) In particular, providers discussed the fragmentation of current measurement efforts. For example, one provider commented:

“Data collection must come from multiple sources and sites, making it difficult to evaluate comprehensive programs and gaps in programs.”

Another provider noted that the current measurement system poses challenges for area-wide planning:

“For area-wide planning, common definitions are the greatest challenge. There is no single source for reporting/collecting data.”

When asked to describe any challenges or barriers in how data are currently collected and reported, another provider responded:

“The lack of community wide coordinated system. The State’s...system is a good start. However, [there should be] a comprehensive MIS [Management Information System] for safety net providers to enter, access and retrieve data.”

D. Health Status Reporting in Other Communities

The RHC also reviewed the measurement efforts of several other communities currently working to improve regional health status (For a listing of communities and more detailed findings, see Appendix 12).

The RHC found that there are a number of coordinated, effective reporting practices used in other communities that could be adopted in St. Louis. Several of these practices include:

- Data sharing and collaboration in data collection across systems, including state, city, county, health departments, and providers.
- The collection and reporting of a comprehensive list of health indicators that can be tracked over time to evaluate progress.
- The comparison of health outcomes to benchmarks such as the state, nation, and Healthy People 2010 goals (national health objectives established by the Department of Health and Human Services)
- The reporting of data at the zip code level.

E. Proposal for Health Status Reporting

Based on a review of measurement and reporting in the St. Louis region and other communities, the RHC proposes that the region measure and report health status for the City and County on an annual basis. The proposed reporting framework and health indicators are discussed below.

Proposed Reporting Framework

- *Key Indicators*

A concise list of key indicators reported for St. Louis City, Saint Louis County and the City/County region by black, white and overall population. The list focuses on disparities, outcomes and access. It provides readers with a quick overview of where the region stands in terms of health as a community. Each of the indicators is compared to the State of Missouri, the nation, and Healthy People 2010 Targets. Each indicator is also plotted on a line chart to show the basis for monitoring future trends.

- *Comprehensive Indicators*

A comprehensive list of indicators reported for St. Louis City, Saint Louis County and the City/County region by black, white and overall population. These are also reported by zip code, with maps of the region that show zip code outcomes by quartile. The intent is to provide information for community members who want a more detailed understanding of citizen health in the region. Each of the indicators is compared to the State of Missouri, the nation, and Healthy People 2010 Targets (where applicable). Each indicator is also plotted on a line chart to show trends by year for black, white and overall population.

- *Summary Statistic*

Provides a summary score for zip codes in the St. Louis region based on the comprehensive indicators. The statistic will help the community identify areas of highest need.

F. Selection of Proposed Health Indicators

The RHC proposes the indicators in the tables below be reported on an annual basis. The proposed key indicators and comprehensive indicators are below:

KEY INDICATORS

DISPARITIES AND OUTCOMES	
1	INFANT MORTALITY
2	BREAST CANCER—RATIO OF EARLY STAGE TO LATE STAGE DIAGNOSIS
3	HEART DISEASE MORTALITY
4	DIABETES MORTALITY
5	HIV INFECTION INCIDENCE
6	LEAD POISONING SCREENED PREVALENCE RATE—AGE 0-5
7	ADULT SMOKING RATE (BRFSS)*
8	SUICIDE
9	OBESITY (BMI)* (BRFSS)*
ACCESS TO CARE	
1	PREVENTABLE HOSPITALIZATIONS
2	BIRTHS WITHOUT EARLY PRENATAL CARE (1 ST TRIMESTER)

* Data not available at zip code level. Available as an aggregate for the 7-county region.

COMPREHENSIVE INDICATORS

INDICATOR	
DEMOGRAPHIC	
1	POPULATION CHANGE (1990-2000)
2	· AGE 0-4
3	· AGE 5-14
4	· AGE 15-44 FEMALE
5	· AGE 15-44 MALE
6	· AGE 65+
7	RACIAL POLARIZATION
8	OVERALL POPULATION
9	BIRTH RATE PER 1,000 POPULATION
10	DEATH RATE PER 1,000 POPULATION
11	FERTILITY RATE

SOCIOECONOMIC

12	AVERAGE HOUSEHOLD INCOME
13	PERSONS LIVING BELOW POVERTY
14	FEMALE HEADED HOUSEHOLDS
15	ADULTS ≥5% YEARS WITHOUT A HIGH SCHOOL DEGREE
16	UNEMPLOYED PERSONS

ACCESS

17	PREVENTABLE HOSPITALIZATIONS
18	EMERGENCY ROOM VISITS

UNINSURED POPULATION

19	UNINSURED PERSONS (ESTIMATE)
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MEDICAID POPULATION (MC+)

20	MEDICAID MC+ ELIGIBLE PERSONS
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MEDICAID POPULATION (TRADITIONAL)

21	TRADITIONAL MEDICAID ELIGIBLE PERSONS
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HEALTH STATUS INDICATORS

22	BREAST CANCER—RATIO OF EARLY STAGE TO LATE STAGE DIAGNOSES
23	HOSPITAL ADMISSION RATES

COMPREHENSIVE INDICATORS (CONTINUED)

MATERNAL AND CHILD HEALTH	
24	INFANT MORTALITY
25	BIRTHS WITHOUT EARLY PRENATAL CARE (1 ST TRIMESTER)
26	TEEN BIRTHS (AGES 10-14)
27	TEEN BIRTHS (AGES 10-17)
28	BIRTHS TO WOMEN MORE THAN 34 YEARS OLD
29	LOW BIRTH WEIGHT (LESS THAN 2500 GRAMS OR 5.5 POUNDS)
30	VERY LOW BIRTH WEIGHT (LESS THAN 1500 GRAMS OR 3.3 POUNDS)
31	LEAD POISONING PERCENT TESTED (AGE 0-5)
32	LEAD POISONING SCREENED PREVALENCE RATE (AGE 0-5)
33	ASTHMA HOSPITALIZATIONS
34	BIRTH-MEDICAID
35	BIRTH-WIC
36	BIRTH-FOOD STAMPS
37	BIRTH-SMOKING
38	BIRTH-ALCOHOL
39	BIRTH-EDUCATION

MORTALITY (AGE-ADJUSTED)	
40	LEADING CAUSES OF DEATH
41	OVERALL MORTALITY
42	LIFE EXPECTANCY
43	HEART DISEASE
44	CVA (STROKE)
45	COPD (CHRONIC OBSTRUCTIVE PULMONARY DISEASE)
46	CANCER
47	BREAST CANCER
48	PROSTATE CANCER
49	LUNG CANCER
50	DIABETES
51	HOMICIDE
52	SUICIDE
53	MOTOR VEHICLE ACCIDENT
54	NON-MOTOR VEHICLE ACCIDENT
55	OVERALL ACCIDENT
56	INFLUENZA AND PNEUMONIA

COMPREHENSIVE INDICATORS (CONTINUED)

INFECTIOUS DISEASE	
57	HIV INFECTION INCIDENCE
58	AIDS INCIDENCE
59	GONORRHEA RATES (NA BY RACE)
60	SYPHILIS RATES
61	TUBERCULOSIS CASES PER 100,000
62	AIDS MORTALITY
63	CHLAMYDIA (NA BY RACE)
64	HEPATITIS A
65	HEPATITIS B
66	HEPATITIS C
ENVIRONMENTAL	
67	POSSIBLE ENVIRONMENTAL INDICATORS (E.G. AIR QUALITY)

ADDITIONAL COMPREHENSIVE INDICATORS FOR SUBSEQUENT YEARS

The following indicators are not currently available at the zip code level on an annual basis. While these indicators are often difficult to track, they give useful insight into behavior that affects health outcomes. The RHC proposes that these indicators be tracked in future years if and as the data becomes more readily available.

1	ADOLESCENT HEAVY AND BINGE DRINKING IN PAST 30 DAYS
2	ADULT HEAVY AND BINGE DRINKING IN PAST 30 DAYS
3	ADULT ILLICIT DRUG USE IN PAST 30 DAYS
4	OBESITY (BMI)
5	RATE OF PHYSICAL ACTIVITY
6	RATE OF 5 OR MORE SERVINGS OF FRUIT AND VEGETABLES

Criteria

The RHC relied on the following criteria in the selection of proposed health indicators:

1. Data are already aggregated on at least a zip code basis (the RHC made several exceptions to this criterion, in cases where members believed the indicator was important enough to report on at least a regional level).
2. Data can be tracked over time.
3. Data are comparable to health data from other communities, and State & National data.
4. Data are statistically reliable, clinically valid and sustainable over time.
5. Indicators reflect a broad definition of Community Health and are consistent with the mission and focus of the Regional Health Commission's activities.
6. Procedural measures and behavioral measures can be correlated to health status.
7. Data are comprehensive enough to satisfy the individual reporting needs of the St. Louis City and Saint Louis County Departments of Health.

Resources

The RHC consulted the following resources in developing the proposed list of indicators:

- Healthy People 2010 Leading Health Indicators ^{7.1}
- *Public Health: Understanding Our Needs*, City of St. Louis Department of Health ^{7.2}
- *Strategic Plan 2000-2005: 2003 Update*, State of Missouri Department of Health and Human Services ^{7.3}
- RHC findings regarding health outcomes and disparities in St. Louis City and County
- The Centers for Disease Control and Prevention's (CDC) consensus set of health status indicators ^{7.4}
- City of St. Louis Department of Health
- Saint Louis County Department of Health
- State of Missouri

VIII. NEXT STEPS FOR THE COMMUNITY AND HOW TO GET INVOLVED

The RHC is committed to taking immediate action to improve access to care and reduce health disparities by supporting the efforts of existing organizations in our community. We are proactively seeking partners for this work and have already begun efforts with several organizations as listed in Section VI of this report. We also invite any organization that is working to improve health in our region to contact us to see how the RHC may be able to lend support to your efforts.

The RHC is also committed to finalizing a “business plan” by the end of 2003 for improving the way primary and specialty safety net care is delivered in St. Louis City and Saint Louis County. In 2004, the RHC will release recommendations for prevention, health education, and public health services according to the following schedule:

April 2003

Building A Healthier St. Louis (Primary and Specialty Care)

July 2003

Initial recommendations for improving the health care safety net of St. Louis City and Saint Louis County (Primary and Specialty Care)

December 2003

Final plan and implementation strategy (Primary and Specialty Care)

January–December 2004

Implementation activities (Primary and Specialty Care)

June 2004

Situational analysis and strategic recommendations for improving prevention, health education, and public health services in St. Louis City and Saint Louis County

Given the findings in this report, the St. Louis community faces difficult questions in the near future, including:

- How should the safety net system be organized in the future?
- How should the safety net system be financed?
 - How can we leverage and better utilize existing resources?
 - What new sources of revenue are available to stabilize the system?
- How can we increase access to care? How can we enable more people to use the resources already available in the community?
- How can we increase resources in areas of critical shortage for those most in need?
- What interventions will be most effective in improving health outcomes and reducing health disparities? How as a community can we best target our limited resources to make the most impact?

In July 2003, the RHC will begin to recommend solutions to these questions. Given the current economic environment, there will be no easy answers. However, the findings of this report clearly indicate that:

- St. Louis City and Saint Louis County lag behind the nation and the State of Missouri in certain key health status indicators.
- Disparities in health outcomes are significant in our region.
- The safety net system is fragmented and is not financially sustainable in the long term without major change.
- A sufficient amount of primary care service is available in our community; however, barriers to accessing these resources are significant and require coordinated, dedicated action to correct.
- A lack of specialty care resources exists for safety net patients that significantly impacts access to these services for those most in need.
- The current fiscal environment for safety net services is very challenging, requiring unprecedented coordination of resources to even maintain the current level of service in the near term.

In February 2002, the St. Louis community was “Called to Action”^{8.1} to improve health care for all in our region. This report confirms that significant and systemic change is needed to build a healthier St. Louis. The RHC has accepted the charge to coordinate a response to this Call to Action in the months to come.

However, meaningful and lasting change cannot occur without the active involvement of health care providers, community groups, associations, labor unions, businesses, neighborhoods, and citizens of the region. Over 100 organizations have already contributed to the work of the RHC through this report, and the RHC has drawn heavily on the voices of the community heard in sessions held by the RHC and other organizations over the past months.

We invite the community to continue to participate in this effort in the following ways:

- Attend RHC community input events this spring and summer.
- Ask a Commissioner or RHC staff member to speak and listen to you at a meeting of your neighborhood or community group.
- Attend our meetings—all are open to the public and times and locations are posted on our web site at www.stlrhc.org.
- E-mail your thoughts and comments to us at info@stlrhc.org, or send them to us at 4236 Lindell Blvd, Suite 207, St. Louis, MO 63108.

The RHC is committed to improving access to health care, reducing health disparities, and improving health outcomes for the citizens of St. Louis City and Saint Louis County.

We look forward to you joining us in this effort.

GLOSSARY

Age-adjustment	Practice of removing the effect of differences in the age distribution of different subpopulations. The RHC age-adjusted the mortality rates presented in this report. Without age adjustment, zip codes with older populations would look as though they had higher mortality rates.
Emergent care	Care for immediate life-threatening emergencies.
Ethnicity	The Census Bureau defines ethnicity or origin as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Spanish, Hispanic, or Latino may be of any race. (http://www.census.gov/Press-Release/www/2001/raceqandas.html)
Health Disparities	Differences in health status between geographic regions or populations.
Indigent	Someone who is at a level of poverty in which real hardship and deprivation are suffered and comforts of life are wholly lacking.
Insolvency	Having liabilities in excess of a reasonable market value of assets held.
IRS 990 Forms	IRS form issued from the Department of the Treasury Internal Revenue Service – Return of Organization Exempt From Income Tax, used for Not-For-Profit Organizations.
MC +	Missouri Managed Care Plus (MC+) is a statewide program that provides Medicaid managed care to all eligible adults and children in the state with gross income up to 300% Federal Poverty Level. (Centers for Medicare and Medicaid Services website http://cms.hhs.gov/medicaid/1115/mofact.pdf)

Medicaid	A jointly funded federal-state health insurance program that pays for medically necessary services to low-income and needy people. (Centers for Medicare and Medicaid Services website http://cms.hhs.gov/medicaid).
Medicare	Medicare is a federal insurance program. It serves people over 65 primarily, whatever their income; and serves younger disabled people and dialysis patients. Medical bills are paid from trust funds that those covered have paid into. Patients pay part of costs through deductibles for hospital and other costs. Small monthly premiums are required for non-hospital coverage. It is run by the Centers for Medicare & Medicaid Services. (Centers for Medicare and Medicaid Services website http://cms.hhs.gov/medicare).
Post Traumatic Stress Disorder	Post-traumatic stress disorder (PTSD) is a debilitating condition that can occur after exposure to a terrifying event or ordeal in which grave physical harm occurred or was threatened. (National Mental Health Association website, http://www.nmha.org/reassurance/ptsd.cfm)
Poverty	The state of one who lacks a usual or socially acceptable amount of money or material possessions. The state and federal governments use United States Department of Health and Human Services Federal Poverty Level guidelines to determine financial eligibility for certain programs.
Primary Care	The provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community. (Institute of Medicine website definition, http://www.iom.edu)

Race	<p>The concept of race used by the Census Bureau reflects self-identification by people according to the race or races with which they most closely identify. For the purposes of this report, the RHC gives race-comparative rates on health status for two groups, African American and white, defined below (http://www.fedstats.gov):</p> <ul style="list-style-type: none"> • African American: a person having origins in any of the black racial groups of Africa. • White: a person having origins in any of the original peoples of Europe, the Middle East or North Africa. 	340 B Pricing	Section 340 B of the Public Health Service (PHS) Act allows FQHCs to purchase covered outpatient prescription pharmaceuticals for health center patients at substantially discounted prices for distribution either directly by a health center pharmacy or through contract with a retail pharmacy.
Safety Net	Providers that serve a significant number of patients who are uninsured or receive Missouri Medicaid.		
Specialty Care	Programs that offer diagnostic and treatment services that are provided by physicians who have special training and expertise in one clinical area of practice which focuses on a specific age group (e.g., geriatrics, pediatrics), an organ or system of the body (e.g., internal medicine, obstetrics/gynecology) or on complex scientific techniques developed to diagnose or treat certain types of disorders (e.g., nuclear medicine, radiology) (http://informcalgary.org).		
Urgent Care Center	A facility that provides care and treatment for problems that are not life-threatening but require attention over the short term. These units function like emergency rooms but are separate from hospitals with which they may have backup affiliation arrangements. (Missouri Hospital Association Annual Licensing definition)		

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Appendix 4 – Call to Action Update: The St. Louis Regional Health Commission Response to Community Recommendations

A4.1 St. Louis Health Care “*Call to Action Initiative*”: A Report to the St. Louis Regional Health Commission from the Broad Community. 26 March 2002.

Appendix 8 – Methodologies Used to Estimate Sources and Uses of Funds Primary and Specialty Care – St. Louis City and County

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APPENDIX I: REGIONAL HEALTH COMMISSION’S SURVEY METHODOLOGY AND RESPONDENT LIST

The St. Louis Regional Health Commission defines “safety net provider” as a provider that serves a significant number of people who are uninsured or covered under Missouri Medicaid.

In order to gather data on access and availability of safety net services, the RHC conducted a survey of 140 safety net medical providers in St. Louis City and County. Much of the data reported in Section IV of this report was gathered through this survey process. The RHC surveyed providers in seven different categories including Institutional Primary Care Safety Net Providers, Community Practitioner Primary Care Safety Net Providers, Institutional Specialty Care Safety Net Providers, Community Specialist Safety Net Providers, Oral Health/Dentistry Safety Net Providers, Mental Health Safety Net Providers, and Hospital Emergency Departments. In addition, the St. Louis College of Pharmacy conducted a survey that the RHC utilized for the pharmacy survey data cited in Section IV of the report.

The survey questions were developed by RHC Workgroups, with significant input from Commissioners and Advisory Board members. Individuals from community organizations with expertise in the different types of health care services that were being examined also provided input into the survey design.

The providers that responded to the survey are listed in the following tables. A survey was collected for each site providing safety net care within each organization surveyed. A total of 115 surveys were returned. Respondents were asked to reply either by mail or via an online survey. Of the providers that were surveyed, 82% responded.

Response Rate by Category

CATEGORY	RESPONSE RATE
INSTITUTIONAL PRIMARY CARE SAFETY NET PROVIDERS	100%
INSTITUTIONAL SPECIALTY SAFETY NET PROVIDERS	100%
HOSPITAL EMERGENCY DEPARTMENTS	100%
MENTAL HEALTH SAFETY NET PROVIDERS	66%
COMMUNITY PRACTITIONER SAFETY NET PROVIDERS	50%
COMMUNITY SPECIALIST SAFETY NET PROVIDERS	12%
ORAL HEALTH/DENTISTRY SAFETY NET PROVIDERS	44%

Results were aggregated using Microsoft Access database software, with the final outputs exported into Microsoft Excel.

Respondent List – Separated by Category

INSTITUTIONAL PRIMARY CARE SAFETY NET PROVIDERS (N=33)	
ORGANIZATION	HEALTH CENTER NAME
1. SAINT LOUIS CONNECTCARE	DELMAR
2. SAINT LOUIS CONNECTCARE	FLORENCE HILL CENTER – RIVERVIEW
3. SAINT LOUIS CONNECTCARE	HOMER G. PHILLIPS HEALTH CENTER
4. SAINT LOUIS CONNECTCARE	MAX C. STARKLOFF HEALTH CENTER
5. SAINT LOUIS CONNECTCARE	LILLIAN E. COURTNEY
6. SAINT LOUIS COUNTY HEALTH CENTERS	NORTH CENTRAL COMMUNITY HEALTH CENTER (PINE LAWN)
7. SAINT LOUIS COUNTY HEALTH CENTERS	JOHN C. MURPHY
8. SAINT LOUIS COUNTY HEALTH CENTERS	SOUTH COUNTY
9. PEOPLES HEALTH CENTERS	DELMAR
10. PEOPLES HEALTH CENTERS	FLORISSANT
11. PEOPLES HEALTH CENTERS	MAPLEWOOD
12. FAMILY CARE HEALTH CENTER	CARONDOLET
13. FAMILY CARE HEALTH CENTERS	FOREST PARK SOUTHEAST
14. MYRTLE DAVIS COMPREHENSIVE	MARTIN LUTHER KING/NEWSTEAD
15. GRACE HILL HEALTH CENTERS	HADLEY
16. GRACE HILL HEALTH CENTERS	SOULARD NEIGHBORHOOD HEALTH CENTER
17. GRACE HILL HEALTH CENTERS	GRACE HILL SOUTH HEALTH CENTER
18. GRACE HILL HEALTH CENTERS	GRACE HILL @ ST. PATRICK HEALTH SERVICES
19. GRACE HILL HEALTH CENTERS	GRACE HILL ST. STEPHENS HEALTH SERVICES
20. GRACE HILL HEALTH CENTERS	WATER TOWER HEALTH CENTER

21. GRACE HILL HEALTH CENTERS	"MOBILE" SITE
22. HEALTH CARE FOR KIDS	LINDELL AVE
23. ACCION SOCIAL COMMUNITARIA/ LA CLINICA HEALTH CENTER	LACLINICA
24. CHIPS	2431 N. GRAND
25. BARNES JEWISH HOSPITAL	BJH MEDICINE CLINIC/ WOMEN'S WELLNESS CENTER (OB-GYN CLINIC)
26. TENET FOREST PARK HOSPITAL	AMBULATORY CARE CENTER (INTERNAL MEDICINE)/ WOMEN'S HEALTH CENTER/ FAMILY MEDICINE OF ST. LOUIS
27. ST. JOHN'S MERCY MEDICAL CENTER	MERCY NEIGHBORHOOD HEALTH CENTER (SOUTH CITY)
28. ST. JOHN'S MERCY MEDICAL CENTER	JOHN F. KENNEDY CLINIC (ST. JOHN'S CAMPUS)
29. ST. JOHN'S MERCY MEDICAL CENTER	MEACHAM PARK CLINIC
30. DEPAUL HEALTH CENTER	ADULT CLINIC/OB CLINIC
31. ST. MARY'S HOSPITAL	CLAYTON ROAD
32. ST. LUKE'S HOSPITAL	PEDIATRIC CENTER – ST. CHARLES ROCK ROAD
33. CARDINAL GLENNON HOSPITAL	CARDINAL GLENNON

COMMUNITY PRACTITIONER PRIMARY CARE SAFETY NET PROVIDERS (N=13)

1. ST. LUKE'S PEDIATRIC CARE
2. HINES FAMILY CARE CENTER, INC.
3. FAMILY HEALTH CARE CENTER
4. MECCA T. MCDONALD, MD, LLC
5. NATHANIEL MURDOCK
6. ALISON C. NASH
7. HOMER NASH
8. SERENITY WOMEN'S HEALTHCARE
9. HILLARD SCOTT
10. WEST END INTERNAL MEDICINE
11. MARY A.T. TILLMAN, MD, PC
12. MIDWEST MEDICAL SPECIALISTS
13. JEROME WILLIAMS, JR.

COMMUNITY SPECIALIST SAFETY NET PROVIDER (N=2)

1. JACQUELINE GARRETT, M.D.
2. JULIAN MOSLEY, M.D.

ORAL HEALTH/DENTISTRY SAFETY NET PROVIDERS (N=8)

1. DONALD V. COLEMAN
2. BYRON DUVAL
3. JOSEPH O. ERONDU
4. BEN QUAYNOR
5. CHARLES QUIGLESS
6. DENTAL CARE FOR KIDS
7. MYRTLE DAVIS COMP. HEALTH CENTER
8. PEOPLE'S HEALTH CLINIC – E. FOWLER

INSTITUTIONAL SPECIALTY CARE SAFETY NET PROVIDERS (N=9)

1. BARNES JEWISH HOSPITAL
2. WASHINGTON UNIVERSITY
3. CARDINAL GLENNON
4. ST. JOHN'S MERCY
5. ST. LOUIS CONNECT CARE – DELMAR
6. ST. LOUIS CONNECT CARE – MAX C. STARKLOFF HEALTH CENTER
7. ST. LOUIS CONNECT CARE – HOMER G. PHILLIPS HEALTH CENTER
8. ST. LOUIS CONNECT CARE – LILLIAN E. COURTNEY
9. SAINT LOUIS UNIVERSITY
10. TENET

MENTAL HEALTH SAFETY NET PROVIDERS (N=21)	
PROVIDER	HEALTH CENTER
1. ADAPT OF MISSOURI	HAMPTON CLUB
2. ADAPT OF MISSOURI	COMMUNITY SUPPORT
3. ADAPT OF MISSOURI	NORTHVIEW
4. ADAPT OF MISSOURI	BERNARD CARE CENTER
5. ADAPT OF MISSOURI	SUNSET
6. BJC BEHAVIORAL HEALTH	BJC SOUTH
7. BJC BEHAVIORAL HEALTH	BJC NORTH
8. BJC BEHAVIORAL HEALTH	BJC CENTRAL
9. BRIDGEWAY COUNSELING SERVICES	119 CHURCH STREET
10. BRIDGEWAY COUNSELING SERVICES	1011 EAST CHERRY STREET
11. BRIDGEWAY COUNSELING SERVICES	1601 OLD SOUTH RIVER ROAD
12. BRIDGEWAY COUNSELING SERVICES	UNION CENTER 113 LIBERTY PLAZA
13. HOPEWELL CENTER	SOUTH GRAND
14. HOPEWELL CENTER	NORTH NEWSTEAD
15. INDEPENDENCE CENTER	COMMUNITY CARE PARTIAL HOSPITAL
16. INDEPENDENCE CENTER	MIDWEST PSYCHIATRY
17. INDEPENDENCE CENTER	CLUB HOUSES (COMBINED, WEST PINE HOUSE, MIDLAND HOUSE)
18. INDEPENDENCE CENTER	STREPP APTS
19. INDEPENDENCE CENTER	NEWSTEAD PLACE RCFII
20. PREFERRED FAMILY HEALTHCARE, INC.	3800 S. BROADWAY
21. PREFERRED FAMILY HEALTHCARE, INC.	5652 PERSHING AVE

HOSPITAL EMERGENCY DEPARTMENTS (N=15)	
BJC	
1. BARNES/JEWISH HOSPITAL	
2. CHILDREN'S HOSPITAL	
3. CHRISTIAN HOSPITAL NORTHEAST/NORTHWEST	
4. MISSOURI BAPTIST MEDICAL CENTER	

SSM	
5. ST. MARY'S HOSPITAL	
6. ST. JOSEPH'S HOSPITAL KIRKWOOD	
7. DEPAUL HOSPITAL	
8. CARDINAL GLENNON	

TENET	
9. FOREST PARK HOSPITAL	
10. ST. ALEXIUS HOSPITAL	
11. SAINT LOUIS UNIVERSITY HOSPITAL	

FREESTANDING	
12. ST. ANTHONY'S MEDICAL CENTER	
13. ST. JOHN'S MEDICAL CENTER	
14. SAINT LOUIS CONNECTCARE	
15. ST. LUKE'S MEDICAL CENTER	

APPENDIX 2: ST. LOUIS REGIONAL HEALTH COMMISSION WORKPLAN

Revised June 19, 2002

Approved by Commission on June 19, 2002

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I. Background and History

A task force was convened by Civic Progress in April 2000 to address an immediate crisis related to funding for St. Louis ConnectCare. The Indigent Health Task Force was chaired by James Buford and William Danforth, M.D. and was successful in securing funding to avert the immediate crisis. The task force also recognized that the issue was much broader than the immediate funding shortfall of ConnectCare and elected to continue meeting to address the issue.

As part of this process, the Lewin Group was engaged to provide an in-depth analysis on the provision of indigent health care in St. Louis City and St. Louis County. The Lewin Group presented its findings in November 2000 and recommended the formation of a body to collect and analyze data, coordinate efforts, and provide leadership toward indigent health care needs.

Based on the findings and recommendations of the Lewin Group, the Indigent Health Task Force formed a subcommittee to begin to develop the framework of a Regional Health Commission. This framework was presented as part of their recommendations to the entire task force in February 2001, and was approved unanimously.

In May 2001, the Board of Directors of Access to Health Partnership (AHP) unanimously voted to transfer AHP's corporate identity and assets to help form the St. Louis Regional Health Commission. AHP was established as a tax-exempt non-profit corporation in March 2000 by St. Louis 2004's Access to Health Executive Committee. AHP was a collaborative effort by the region's health care leaders and the community to address health access issues in the St. Louis area.

In June 2001, the co-chairs of the Indigent Health Task Force, in coordination with leaders of the AHP initiative, met with representatives from the Governor's Office, St. Louis Mayor's Office, and St. Louis County Executive's Office and secured enthusiastic governmental support for the creation of the RHC. The formation of the RHC was announced publicly in late July 2001 at a press conference held by Governor Holden, Mayor Slay, and a representative of County Executive Westfall.

The first organizational meeting of the St. Louis Regional Health Commission was held on September 13, 2001. Subsequently, by-laws for the Commission were developed, and a twenty-five (25) member Community Advisory Board and twenty-five (25) member Provider Services Advisory Board were established. A search for a permanent Chief Executive Officer began in February 2002, and a new CEO was hired beginning May 1, 2002.

II. Mission/Role

The mission/role of the St. Louis Regional Health Commission (RHC), as discussed and confirmed in a June 12th, 2002 Special Session of the Commission, is as follows:

Strategic Planning

- Design a financially sustainable system for the delivery of public health and health services to the medically indigent population in St. Louis City and Saint Louis County
- Utilize an “intensive and inclusive” approach that seeks the active participation all segments of the community in its planning efforts

Communication/Reporting

- Advance the tracking of specific metrics documenting progress toward better health care outcomes in St. Louis
- Seek to become the authoritative source of information for dealing with the problem of the delivery of services to the medically-indigent population in St. Louis City and County
- Create various communication vehicles and venues to keep the public informed of the Regional Health Commission's activities

Education

- Actively educate the public and various constituencies about the needs of the uninsured in the community, the state, and, when appropriate, nationally

Funding Guidance

- Work to attract additional funds to support the delivery of care to the medically underserved, and, to the extent possible, distribute, or at least assure, those funds support the strategic plan
- Make recommendations to the Regional DSH Funding Authority (RDFA) concerning the disbursement of the DSH funds available to the RDFA

Community Health Improvement

- Create, support, and help implement community health initiatives that will increase access to care, reduce health disparities, and improve health outcomes in St. Louis City and County

Other documentation of the Mission/Role of the RHC can be found in:

(I) The Corporate Purpose, as filed with the State of Missouri; (II) The Missouri Medicaid 1115 Waiver, submitted by the State of Missouri in August 2001 to the Centers of Medicare and Medicaid Services (CMS); and (III) a May 15 2002 Resolution of the RHC in response to recommendations from the “Call to Action” Steering Committee, as follows:

A. Corporate Purpose

The Corporate Purpose for the St. Louis Regional Health Commission, filed with the State of Missouri, states that the Commission will:

1. “Seek the active participation and support of a wide range of agencies and organizations in the metropolitan area in its planning and program efforts;
2. Design and undertake an intensive and inclusive planning process involving all segments of the community, and prepare a strategic plan for delivery of public health and health services to the medically indigent in St. Louis City and County;
3. Develop and carry out activities which promote the strategic plan and which promote patient-centered continuity of care involving a variety of community agencies and organizations that provide public health and/or health care services to medically underserved people;
4. Develop and maintain both structural and operational linkages to units of local government and to the state government;
5. Seek to become the authoritative source of information and program suggestions for dealing with the problem of uninsurance and delivery of services to the medically-indigent population on a region-wide basis, including needed data acquisition, analysis and dissemination;

6. Undertake to attract additional funds from current sources as well as developing new sources of support for delivery of care to the medically underserved, and, to the extent possible, distribute, or at least assure, those funds support the strategic plan;
7. Develop a regional plan designed to continuously improve the collective health status of the St. Louis community by promoting 100 percent Access to health services and Zero Disparities in health status amongst different types of groups of people. Provide leadership for securing sufficient resources for the implementation of such a plan;
8. Actively advocate for the needs of the uninsured in the community, the state, and, when appropriate, nationally in order to provide a voice for this largely “voiceless” population at risk; and
9. Periodically assess the effectiveness of activities either coordinated or funded in meeting the community needs identified in the planning process and report to the community concerning such assessment.”

B. Missouri Medicaid 1115 Waiver

In addition, the following description of the mission and role of the St. Louis Regional Health Commission was submitted to the Centers for Medicare and Medicaid Services as part of the Missouri Department of Social Services (DSS) Missouri Medicaid 1115 Waiver, August 21, 2001:

“A new Regional Health Commission (RHC) will be established as the foundation of the 1115 Demonstration to bring together the various participants in the region’s fragmented safety net for uninsured and medically underserved residents. The RHC will submit to the director of DSS and the RDFA [the St. Louis Regional DSH Funding Authority] a long-range, community based plan designed to continuously improve the collective health status of the St. Louis community by promoting 100% access to health services and improved quality of care for the indigent by:

- Assessing current indigent care service delivery patterns
- Identifying areas of need, gaps in the system
- Supporting and encouraging the RDFA’s efforts to engage the area provider systems in developing an area-wide indigent care management system. This system would be a collaborative effort by the health provider community working throughout St. Louis City and County.
- Facilitating an on-going public dialog about the health care needs of the area
- Making recommendations to the RDFA and area health care providers on current and future delivery system needs and improvements.
- Providing assessment and input on the importance of developing a 24-hour urgent care center in north St. Louis City and identifying service needs a center would need to address.

- Advising the St. Louis City, County, Missouri state, and federal governments on health care issues and needs important to their citizenry and suggesting ways to support improvements.
- Assessing the problem of uninsured and indigent care and recommending ways to develop global access to a functioning health care system.

Annually, the Commission shall make a recommendation to the RDFA concerning the disbursement of the DSH funds available to the RDFA for that year.

The St. Louis City/County RHC will be chartered to seek the active participation and support of a wide range of agencies and organizations in the metropolitan area in its planning and program efforts; design and undertake an intensive and inclusive planning process involving all segments of the community and prepare a strategic plan for delivery of public health and health services to the medically-indigent in St. Louis City and Saint Louis County; and actively advocate for the needs of the uninsured in the community, the state, and when appropriate, nationally in order to provide a voice for this largely “voiceless” population at risk.”

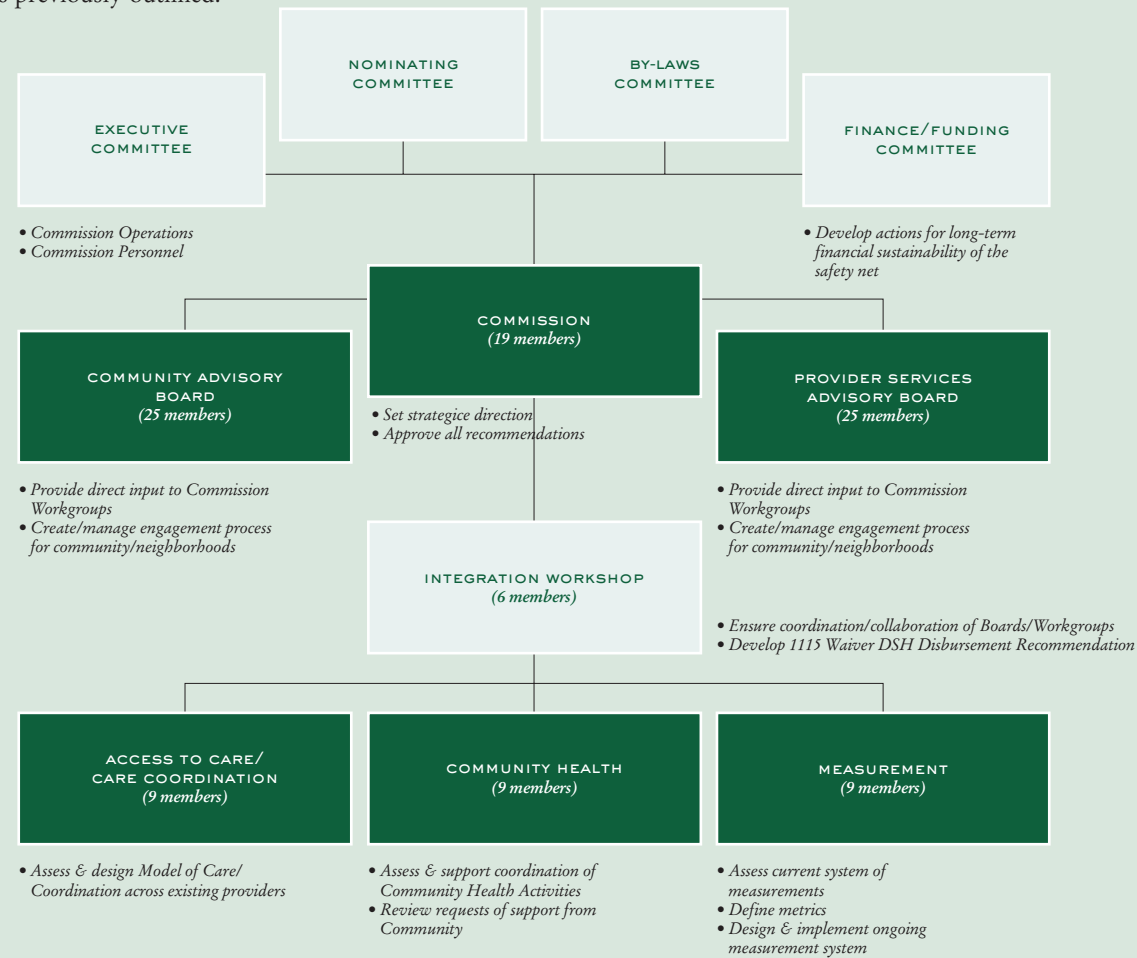
C. Resolution of St. Louis Regional Health Commission - May 15, 2002

Additionally, on May 15, 2002, the Regional Health Commission unanimously passed a resolution in response to a report from a “Call to Action” summit of over 350 St. Louis community leaders concerning access to health and health care issues. In the resolution, the RHC committed to the community that they would:

- “Support the linking of currently available community resources and enhance coordination of effort across key components of our local health care safety net;
- Develop a coordinated business plan for moving toward 100% Access and Zero Health Disparities in our community;
- Advance the tracking and regularly reporting to the public of specific metrics documenting progress toward better health care outcomes in St. Louis; and
- Create appropriate communication vehicles and venues to: i) keep the public informed of the Regional Health Commission’s activities, ii) complement these communication efforts by issuing an annual report summarizing the RHC’s progress, and iii) position the broad community for future pace setting events at periodic intervals.”

III. Proposed Structure

The following organizational structure has been designed to meet the mission and objectives of the Commission, as previously outlined:



Description of Proposed Roles

Regional Health Commission

A major task of the RHC is to (1) create a business plan for the provision of health care to the indigent in the St. Louis region, based upon rigorous analysis and collaboration, and then (2) coordinate the implementation of the plan once developed. In order to achieve this task, the RHC will assume various key “roles” throughout the life cycle of the process, including being:

- The body that initiates dialogue, seeks input, and engages the community on the issues of the health care safety net in our community;
- The body that filters and analyzes data, facts, and various points-of-view;
- The body that proposes and recommends changes to the current system, and develops priorities and coordinates areas of focus for action;
- The body that builds support for the changes through communication, education, and organizational support and commitment;
- The body that mobilizes and coordinates resources for achieving the plan, once developed;
- The body that develops vehicles for measurement and communication of success on a long-term basis.

Specifically, and in relation to the other Advisory Boards and workgroups of the RHC, the 19-member Commission will:

- Serve as the chartering authority for Advisory Boards and workgroups
- Serve as the final approval body for all decisions/recommendations from the Commission
- Establish direction and priorities of the Commission
- Approve all work plans/budgets
- Hire and supervise Commission staff
- Approve RHC policies/procedures
- Submit strategic business plan to DSS and RDFA
- Finalize and approve public communication vehicles (i.e. periodic reports, plans, press releases)
- Make annual recommendations to the RDFA concerning the disbursement of the DSH funds available to the RDFA.

Regional Health Commission Executive Committee

The Executive Committee of the Regional Health Commission shall:

- Serve as the liaison with Chief Executive Officer to provide guidance on day-to-day operational issues of Commission, as necessary
- Serve as Personnel Committee to provide recommendations to the Commission regarding staffing, hiring practices, performance management structures, compensation decisions, and discipline matters regarding Commission staff
- Execute its duties as described in Article VIII, Section 1 of the Bylaws of the Commission

Nominating Committee

The Nominating Committee of the Regional Health Commission shall:

- Nominate Directors and officers for election by the Board of Directors in accordance with the provisions of the Bylaws, Article VIII, Section 2

Nominate members of Advisory Boards, Workgroups, and Committees, for the approval of the Commission, in accordance with the provisions of the Bylaws

Bylaws Committee

The Bylaws Committee of the Regional Health Commission shall:

- Assess and recommend to the Commission any changes to the Bylaws of the Commission

Finance/Funding Committee

The Finance/Funding Committee of the Regional Health Commission shall:

- Provide recommendations as to specific actions to support the long-term financial sustainability of the “safety-net” system, as designed in the coordinated business plan for indigent care to be completed by the Commission

Advisory Boards

The Advisory Boards shall support the work of the Commission in three critical ways: (1) to provide direct input to the Commission and the Commission’s Workgroups concerning the work being completed; (2) to create and manage the engagement of the broader community into the planning process of the Commission; and (3) to serve as a primary conduit of information from the Commission out to the broader community.

Community Advisory Board

The Community Advisory Board will:

- Provide constructive input and feedback to the Commission regarding Commission activities;
- Act as a “sounding board” for initial ideas and draft plans of the Workgroups of the Commission;
- Create and manage the process for seeking the active participation and support of a wide range of agencies and organizations in the metropolitan area in the Commission’s planning and program efforts;
- Design and implement a process to involve all segments of the community and neighborhoods in the planning process of the Commission;
- Serve as a primary vehicle for dissemination of information from the Commission to the community/neighborhoods in the St. Louis region;
- Have a voice and vote on the Commission decisions through its Chairperson.

Provider Services Advisory Board

The Provider Services Advisory Board will:

- Provide constructive input and feedback to the Commission regarding Commission activities;
- Act as a “sounding board” for initial ideas and draft plans of the Workgroups of the Commission;
- Create and manage the process for seeking the active participation and support of a wide range of provider services agencies and organizations in the metropolitan area in the Commission’s planning and program efforts;
- Design and implement a process to involve all segments of the provider services community in the planning process of the Commission;
- Serve as a primary vehicle for dissemination of information from the Commission to the broader provider services community in the St. Louis region;
- Have a voice and vote on the Commission decisions through its Chairperson.

Workgroups

Given the complex analysis and planning necessary to achieve its mission, the Commission has chartered three (3) “Workgroups” to be responsible for the execution of day-to-day project tasks. They will be responsible for conducting the primary analyses and creating the set of recommendations for the “community-wide business plan for health care services for the uninsured and underinsured” in the St. Louis City and County region, pending Commission approval. The members of the workgroups will coordinate and manage these necessary work steps with Commission staff/consultants, as directed by the Commission. As with the Advisory Boards, the Nominating Committee of the Commission will recommend the members of the workgroups to the Commission for their approval.

The Workgroups initially chartered include:

Access to Care/Care Coordination

- Will focus on the model of care and care coordination of primary and specialist services in the St. Louis City and County to enhance access to care, reduce duplication, encourage coordination among existing providers, and reduce health disparities across the region.

Community Health

- Will focus on supporting and strengthening collaborative community health efforts in the St. Louis City and County region.
- Will also define process for handling requests of support to the Commission by community/provider groups, and make recommendations to the Commission regarding such requests.
- Will determine specific elements of “Call to Action” recommendations, and other reports as appropriate, to begin immediate implementation.

Measurement

- Will focus on advancing the tracking and regularly reporting to the public of specific metrics documenting progress toward: status of access to care, advancements in coordination of care and efficient allocation of resources; progress toward better health care outcomes in St. Louis

Integration Committee

Due to the potential for overlaps and gaps in the work of Workgroups, the Chairs of each Committee, plus the Chairs of the Community and Provider Services Advisory Boards and the Chair of the Commission will serve as an Integration Committee. This body will resolve issues such as questions of scope, potential conflicting designs, and gaps in the Workgroup’s recommendations. They will also work together to synthesize the recommendations for the 1115 DSH Waiver Disbursements, for final approval by the Commission.

IV. Proposed Approach

Potential Activities of Workgroups

WORKGROUP	INITIATE	DEVELOP SITUATIONAL ANALYSIS	CONCEPTUAL PLAN/Framework	IMPLEMENTATION
ACCESS TO CARE/ CARE COORDINATION	(2-3 MONTHS)	(4-6 MONTHS)	(6-8 MONTHS)	(ON-GOING 3-5 YEARS)
COMMUNITY HEALTH	(2-3 MONTHS)	(4-6 MONTHS) (2-3 MONTHS) DEVELOP PROCESS FOR COMMUNITY INITIATIVES	(6-8 MONTHS) INITIATE AND SUPPORT COMMUNITY HEALTH INITIATIVES	(ON-GOING 3-5 YEARS)
MEASUREMENT	(2-3 MONTHS)	(4-6 MONTHS)	(6-8 MONTHS)	(ON-GOING 3-5 YEARS)
				
	INITIATE	DEVELOP ENGAGEMENT PLAN	IMPLEMENT ENGAGEMENT PLAN	
COMMUNITY ADVISORY BOARD	(2-MONTHS)	(2 MONTHS)	(ON-GOING 3-5 YEARS)	
PROVIDER	(2 MONTHS)	(2 MONTHS)	(ON-GOING 3-5 YEARS)	

REGIONAL HEALTH COMMISSION WORKPLAN SCHEDULE

RHC ACTIVITIES	JULY 02	AUG 02	SEPT 02	OCT 02	NOV 02	DEC 02	JAN 03	FEB 03	MAR 03	APR 03	MAY 03	JUNE 03	JULY 03	AUG 03	SEPT 03	OCT 03	NOV 03	DEC 03	JAN 04
WORKGROUPS	INITIATE (2-3 MONTHS)			DEVELOP SITUATIONAL ANALYSIS (4-6 MONTH)			ACTION PLAN/Framework (6-8 MONTHS)			IMPLEMENTATION (ONGOING)									
ACCESS TO CARE/ CARE COORDINATION	<ul style="list-style-type: none">• Nomination of members (July 02)• Review of existing reports (Aug 02 - Sept 02)			<ul style="list-style-type: none">• Collection missing data and hire consultants, as needed• Confirm number of uninsured• Collect models from other communities• Examine issues such as<ul style="list-style-type: none">– Current capacity vs. need/demand– Current referral patterns– Funds flow analysis			<ul style="list-style-type: none">• Create detailed recommendations on future state delivery system• Examples may include actions to strengthen/streamline<ul style="list-style-type: none">– Points of access– Care coordination mechanisms– Payment mechanisms– Provider networks– Future referral patterns• Recommendations for DSH fund disbursements			<ul style="list-style-type: none">• Create detailed transition plans, where necessary• Begin implementation, where appropriate, with state/local/community organizations									
COMMUNITY HEALTH	<ul style="list-style-type: none">• Nomination of members (July)• Review of existing reports (Aug - Sept)			<ul style="list-style-type: none">• Examine what is working well in St. Louis community public health arena• Assess key areas for potential collaboration• Collect models from other communities• Develop and implement a process for how to handle requests from community for RHC support• Begin to initiate and support community health initiatives			<ul style="list-style-type: none">• Develop recommendations for enhancing community collaboration and strengthening non-traditional health infrastructure• Continue to manage process for handling requests from community• Continue to initiate and support community health initiatives			<ul style="list-style-type: none">• Develop detailed transition plans for recommendations where appropriate• Basic implementation, where appropriate, with state/local/community organizations• Continue managing requests from community									
MEASUREMENT	<ul style="list-style-type: none">• Nomination of members (July 02)			<ul style="list-style-type: none">• Examine examples/models of measurement in St. Louis• Assess gaps/overlaps in current system• Research models in other communities			<ul style="list-style-type: none">• Create recommendations on how to strengthen/streamline current system of measuring and reporting• Develop and validate metrics to be used for measurement• Develop structure/process for return on investment reporting• Begin populating baselines			<ul style="list-style-type: none">• Begin implementation for long-term measurement/reporting of progress									
INTEGRATION	<ul style="list-style-type: none">• Nomination of members (July 02)			<ul style="list-style-type: none">• Begin to ensure coordination of efforts between groups <div>Publish first report (Situational Analysis and Accomplishments to Date)</div>			<ul style="list-style-type: none">• Continue to ensure coordination on efforts between groups <div>Publish second report (Detailed Recommendation Accomplishments to Date)</div>			<ul style="list-style-type: none">• Continue to ensure coordination of efforts between groups									

RHC Activities	JULY 02	AUG 02	SEPT 02	OCT 02	NOV 02	DEC 02	JAN 03	FEB 03	MAR 03	APR 03	MAY 03	JUNE 03	JULY 03	AUG 03	SEPT 03	OCT 03	NOV 03	DEC 03	JAN 04	
WORKGROUPS	INITIATE (2-3 MONTHS)			DEVELOP SITUATIONAL ANALYSIS (4-6 MONTH)					ACTION PLAN/FRAMEWORK (6-8 MONTHS)					IMPLEMENTATION (ONGOING)						
ADVISORY BOARDS	• Develop “Engagement Plan” for obtaining input into planning process			• Review and comment on workgroup report drafts • Begin process for obtaining community input • Feedback to commission input					• Continue to review and comment upon workgroup report drafts • Aggressively implement community engagement process					• On-going review/input/feedback through implementation						
COMMISSION	• Oversight • Approve recommendations • Set strategic direction • Funding																			
FUNDING	• \$ 250,000 AHP – carry (July 02) • \$ 100,000 City – receive (July 02) • \$ 100,000 County – receive (July 02) • \$ 200,000 Pending CMS/DSH waiver approved (July 02)			• \$100,000 – From other sources (Oct 02) • Seek foundation support for consultants as needed (Aug-Oct 02)					• \$100,000 City (Jan 03) • \$100,000 County (Jan 03)					• \$ 200,000 DSH/State (July 03) • \$ 100,000 From other sources (Oct 03)						
STAFFING	• Interview for 3 professionals, (July 02) • Hire staff (Aug 02)																			

Access to Care/ Care Coordination — Potential Activities

INITIATE 2-3 months	Key Activities <ul style="list-style-type: none"> • Form Committee • Define scope/work plans • Review reports/data • Assess need for additional data 	Key Outputs <ul style="list-style-type: none"> • Work Program • Agreement on viability of existing data • List of information/data still needed
SITUATIONAL ANALYSIS 4-6 months	Key Activities <ul style="list-style-type: none"> • Examine primary/specialist capacity • Review demand/use rate projections • Confirm/Detail Community Needs Assessment • Confirm number of uninsured • Research models of care from other communities • Develop a rationale for change • Examine projected funding needs and current funding sources 	Key Outputs <ul style="list-style-type: none"> • Capacity/demand analysis with analysis of mismatches • Referral flow analysis • Community needs assessment documentation • Report from other communities • Rationale for change • Funds flow analysis
DEVELOP CONCEPTUAL PLAN 6-8 months	Key Activities <ul style="list-style-type: none"> • Agree to, and validate, key elements of coordinated care system 	Key Outputs Examples of concepts may include: <ul style="list-style-type: none"> • Strategic actions to strengthen/streamline: <ul style="list-style-type: none"> – Points of access – Provider networks <ul style="list-style-type: none"> • Primary networks • Specialists • Facility capacity – Care coordination mechanisms <ul style="list-style-type: none"> • Care management (intra-organizational) • Clinical information sharing – Future referral patterns – Payment mechanisms • Recommendations for DSH fund disbursements
IMPLEMENTATION On-going (Pending Conceptual Plan)	Key Activities/Outputs <ul style="list-style-type: none"> • Develop transitional plans for items such as: <ul style="list-style-type: none"> – Facilities – Information systems – Staffing – Physician recruitment – Patient flow – Funding streams/mechanisms – Legislative actions – Legal frameworks • Begin coordination implementation of new model of care 	

Community Health — Proposed Activities

INITIATE 2-3 months	Key Activities <ul style="list-style-type: none"> • Form Committee • Define scope/work plans • Review reports/data • Assess need for additional data 	Key Outputs <ul style="list-style-type: none"> • Work Program • Agreement on viability of existing data • List of information/data still needed
SITUATIONAL ANALYSIS 4-6 months	Key Activities <ul style="list-style-type: none"> • Investigate what is working well in St. Louis • Research examples from other communities • Assess areas of potential community collaboration efforts 	Key Outputs <ul style="list-style-type: none"> • Community asset list with areas of potential collaboration highlighted • Report on models from other communities • Community support process/procedures
DEVELOP CONCEPTUAL PLAN 6-8 months	Key Activities/Outputs <ul style="list-style-type: none"> • Develop/encourage vehicles for community collaboration • Recommend ways to strengthen current community/public health system • Review requests for support/recommend Commission action where appropriate • Continue to initiate and support community health initiatives, as appropriate 	
IMPLEMENTATION On-going	Key Activities/Outputs <ul style="list-style-type: none"> • Continue to review requests for support from community • Implement collaborative designs, as appropriate 	

Note: Within 2-3 months of Initiation, it is expected that the Community Health Workgroup will develop and begin to implement processes for (1) reviewing requests for support from community and (2) initiating and supporting community health initiatives.

Measurement — Proposed Activities

INITIATE <i>2-3 months</i>	<i>Key Activities</i> <ul style="list-style-type: none"> • Form Committee • Define scope/work plans 	<i>Key Outputs</i> <ul style="list-style-type: none"> • Work Program
SITUATIONAL ANALYSIS <i>4-6 months</i>	<i>Key Activities</i> <ul style="list-style-type: none"> • Research examples/models of measurement in other communities • Determine current systems for health measurement used in St. Louis community • Assess gaps/overlaps in current systems, as appropriate 	<i>Key Outputs</i> <ul style="list-style-type: none"> • Report on models of measurement in other communities • Needs analysis of reporting/measurement in St. Louis community • Inputs into rationale for change document
DEVELOP CONCEPTUAL PLAN <i>6-8 months</i>	<i>Key Activities/Outputs</i> <ul style="list-style-type: none"> • Develop and validate metrics • Develop structure/process for baseline development • Develop structure/process for ROI reporting • Develop design for on-going support of measurement activities • Begin populating baselines, as appropriate 	
IMPLEMENTATION <i>On-going</i>	<i>Key Activities/Outputs</i> <ul style="list-style-type: none"> • Finalize population of baselines • Implement system for long-term measurement/reporting of progress 	

VI. Key Success Factors

Throughout the planning process, the members of the Commission, Advisory Boards, Workgroups, and Staff will continuously need to manage the following key success factors:

- Maintaining *sponsorship* of the process through frequent communication with governmental, community, and health care leaders, whose support will be critical to long-term success;
- Championing a *fact-based, data-driven approach* that engenders trust in the process and seeks to maximize benefit for those that utilize the health care safety net in our community;
- Passionately and systematically *communicating* with the groups of people (i.e. providers, community and faith-based groups, schools, advocacy groups, legislators and governmental bodies) whose support and mobilization will be essential to achieving the plan;
- Creating and maintaining a *disciplined approach* to getting the vast amount of work accomplished in such a short period of time;
- Facilitating *integration and collaboration* between the Commission and its Work Groups and Advisory Boards, and among each other;
- Communicating the *sense of purpose and urgency* needed to capitalize on the narrow window of opportunity the St. Louis community now has to truly make progress in stabilizing the health care safety net.

APPENDIX 3: ST. LOUIS REGIONAL HEALTH COMMISSION ROSTERS AS OF APRIL 2003

COMMISSION ROSTER

Peter Sortino (Chair) <i>President</i> St. Louis 2004	Betty Jean Kerr <i>Chief Executive Officer</i> People's Health Centers	Melba R. Moore, MS (Secretary) <i>Commissioner of Health</i> City of St. Louis Department of Health
E. Andrew Balas, MD, PhD <i>Dean</i> School of Public Health Saint Louis University	Scott Lakin <i>Director</i> Missouri Department of Insurance	Reverend B.T. Rice <i>Pastor</i> New Horizon Seven Day Christian Church
Sister Betty Brucker, FSM (Chair, Community Advisory Board) <i>Executive Director</i> Catholic Community Services/ Archbishop's Commission on Community Health	Ron Levy <i>President & Chief Executive Officer</i> SSM Health Care St. Louis	Beverly Roche <i>Finance Director</i> City of Jennings
James Buford <i>President & Chief Executive Officer</i> Urban League of Metropolitan St. Louis	Steven Lipstein (Treasurer) <i>President & Chief Executive Officer</i> BJC HealthCare	Will Ross, MD <i>Associate Dean & Director</i> <i>of the Office of Diversity Programs</i> Washington University School of Medicine
Deborah Cooper <i>Chief Program Officer</i> Missouri Foundation for Health	Ancelmo Lopes <i>President & Chief Executive Officer</i> Saint Louis ConnectCare	Corinne A. Walentik, MD, MPH (Chair, Provider Services Advisory Board) <i>Professor of Pediatrics, Division</i> <i>of Neonatal-Perinatal Medicine</i> Saint Louis University and SSM Cardinal Glennon Children's Hospital
James P. Crane, MD (Chair, Access To Care Workgroup) <i>Associate Vice Chancellor</i> <i>for Clinical Affairs</i> Washington University School of Medicine	Jacquelynn A. Meeks, DrPH (Vice Chair) <i>Director</i> Saint Louis County Department of Health	Robert Fruend, Jr. (Ex Officio) <i>Chief Executive Officer</i> Regional Health Commission

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Rita Denise Heard Days

Mid-County Partners for Progress

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St. Louis African American
Clergy Coalition

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Faith Beyond Walls

Susan Lauritsen

Lauritsen & Associates

Suzanne LeLaurin, LCSW

International Institute St. Louis

Roxanna Parker

Witness Project

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Deaconess Foundation

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Rabbi Susan Talve

Central Reform Congregation

Chuck Tyler

Adams Park Community Center

Sidney Watson

School of Law,
Saint Louis University

Pamela Willingham

Patient Advocate

Robert Freund, Jr. (Ex Officio)

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Chief Executive Officer

Brooke Hatton

Director of Strategic Planning

Edward L. Bryant

*Director of Communications /
Community Engagement*

APPENDIX 4: CALL TO ACTION UPDATE: THE ST. LOUIS REGIONAL HEALTH COMMISSION RESPONSE TO COMMUNITY RECOMMENDATIONS

In February 2002, over 350 individuals in the St. Louis community participated in a “Call to Action” Initiative to develop recommendations for improving access to health care and reducing health disparities in St. Louis City and County.^{A4.1} The Call to Action participants developed 13 recommendations for the RHC. These recommendations and the RHC response to date are listed in the table below.

<i>Recommendation for the RHC</i>	<i>RHC Response</i>
1. Support the development of a coordinating entity in St. Louis to link currently available community resources and enhance coordination of effort across key components of our local health care safety net.	The RHC Access to Care Workgroup and the Community Health Workgroup are in the process of developing a plan for linking community resources and enhancing coordination across the local health care safety net. Recommendations for primary and specialty care will be released in late 2003. Recommendations for prevention and education will be released in 2004.
2. Develop a coordinated business plan for achieving 100% Access and Zero Health Disparities in our community. This plan should have: <ul style="list-style-type: none"> • Measurable goals and objectives. • A demonstrable return on investment (ROI). 	<p>The Commission and three RHC Workgroups are collecting and analyzing data on:</p> <ul style="list-style-type: none"> • Community priorities. • Supply and demand. • Access to care. • Disparities. • Funds flow. <p>The RHC will release a coordinated business plan in late 2003.</p>

<i>Recommendation for the RHC (continued)</i>	<i>RHC Response (continued)</i>
<p>3. Work with the City and County public health departments to regularly monitor and publicly report zip code-specific metrics documenting progress toward better health care outcomes in St. Louis.</p>	<p>The RHC worked with the health departments to report zip-code specific metrics for over 60 indicators in this report and the accompanying data book. In addition, the RHC Measurement Workgroup is assessing the current system of metrics and developing recommendations for documenting progress toward better health outcomes. The RHC will release the recommendations in 4th quarter 2003.</p>
<p>4. Create appropriate communication vehicles and venues to:</p> <ul style="list-style-type: none"> • Keep the public informed of the Regional Health Commission's activities. • Complement these communication efforts by issuing an annual written report summarizing the RHC's progress. • Position the broad community for future pacesetting events at periodic intervals. 	<p>The RHC communications and community engagement process is underway:</p> <ul style="list-style-type: none"> • The RHC hired a Director of Communications/Community Engagement • The RHC Advisory Boards are charged with engaging the community in the RHC planning process • The RHC has met with over 100 community/neighborhood groups and health associations and advocacy groups • The RHC produces a monthly newsletter and appears in local media (print and broadcast) • The RHC is planning a series of Town Hall meetings for the months of April, May and June

RECOMMENDATIONS FOR IMMEDIATE TACTICAL ACTION BY THE RHC

<i>Recommendation for the RHC</i>	<i>RHC Response</i>
5. Adopt a resolution expressing its unanimous support for Presumptive Eligibility For Children, and interact with elected and appointed state officials to assure implementation of this program.	Presumptive Eligibility for Children passed the Missouri State Legislature in 2002.
6. Adopt a resolution expressing unanimous support for Reauthorization of the CHIPS/MC+ Program, and interact with elected and appointed state officials to assure extension of this vital program.	The RHC adopted a Resolution to Recommend the Protection of State Funds to Missouri Medicaid Program at it February 19, 2003 meeting. The RHC Community Advisory Board and the Provider Services Advisory Board adopted the resolution in a joint session on March 10, 2003.
7. Adopt a resolution expressing its unanimous support for the 4 key elements of House Bill 1479, and help assure a successful voter referendum as authorized by either the Missouri General Assembly or an initiative petition.	The RHC endorsed Proposition A, the “Tobacco Tax,” at its September 19, 2002 meeting. The RHC Provider Services Advisory Board endorsed the Proposition at its October 1, 2002 meeting. The RHC Community Advisory Board endorsed the Proposition at its October 14, 2002 meeting.

<i>Recommendation for the RHC (continued)</i>	<i>RHC Response (continued)</i>
<p>8. Recognize Saint Louis ConnectCare and the 4 Federally Qualified Community Health Centers (FQHCs) for reaching a new cooperative agreement, encourage additional efforts to enhance communication and care coordination between ConnectCare and the FQHCs, and ask for periodic progress reports on specific milestones resulting from this new collaborative</p>	<p>The Access to Care/Care Coordination Workgroup is developing a plan for enhancing communication and care coordination among health care safety net providers, and creating a process for documenting progress on specific milestones. The CEOs of ConnectCare and the Federally Qualified Community Health Centers (FQHCs), as members of the RHC, are continuing to work together to improve access and reduce disparities in the region.</p>
<p>9. Endorse the “Friends of 106 Campaign” and assist this Work Group’s efforts to identify corporate sponsors and other necessary resources to assure 100% access to early and regular prenatal care in St. Louis zip code 106.</p>	<p>63106 is one of the initial zip code areas to which the RHC gives priority in responding to requests from the community. Also, the RHC Community Health Workgroup has directed RHC staff to coordinate with the “Friends of 106 Campaign” to determine how the organizations can work together long-term.</p>

RECOMMENDATIONS FOR THE RHC TO CONSIDER AS PART OF ITS STRATEGIC PLANNING PROCESS

<i>Recommendation for the RHC</i>	<i>RHC Response</i>
10. Promote the St. Louis Lead Prevention Coalition to other health care safety net stakeholders as a model for success.	Lead poisoning is one of 9 diseases/conditions to which the RHC gives priority in responding to requests from the community. The RHC has endorsed the efforts of the St. Louis Lead Prevention Coalition, offered to provide assistance in building community partnerships between the Coalition and other groups, and will utilize the information included in the Coalition's research.
11. Actively encourage area health care providers to: <ul style="list-style-type: none"> • Offer and provide language assistance at no cost to patients with limited English proficiency. • Develop collaborative health care and wellness programs with ethnic communities. 	The RHC Access to Care/Care Coordination Workgroup gathered data on barriers to care for new Americans, including issues surrounding the availability of language assistance and cultural services. This information is reported in Section V and the Cultural and Linguistic Barriers for New Americans Appendix of this report (Appendix 10). The RHC has included this issue in its strategic planning process will release recommendations in late 2003.

<i>Recommendation for the RHC (continued)</i>	<i>RHC Response (continued)</i>
12. Endorse the pharmacy community's efforts to provide medication services to the underserved of St. Louis and provide assistance in soliciting community support and funding.	The RHC Access to Care/Care Coordination Workgroup collaborated with the St. Louis College of Pharmacy to gather data from the City and County pharmacy community. The findings are included in Section IV of this report. The RHC has included this issue in its strategic planning process will release recommendations in late 2003.
13. Endorse the dental community's effort to improve dental health and access to dental care and add a member of the dental community to the RHC Provider Services Advisory Board.	Lack of dental care is one of 9 diseases/conditions to which the RHC gives priority in responding to requests from the community. In addition, the RHC Provider Services Advisory Board includes two members from the dental community. The RHC surveyed dental safety net providers and included this information in Section IV. of this report. The RHC has included this issue in its strategic planning process will release recommendations in late 2003.

APPENDIX 5: SAFETY NET AFTER-HOURS RESOURCES

The following chart lists the hours of operation of the 33 primary care safety net institutions in St. Louis City and Saint Louis County as of January 2003. Shaded boxes indicate evening hours.

ORGANIZATION	HEALTH CENTER NAME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
SAINT LOUIS CONNECTCARE	DELMAR	8-4:30	8-4:30	8-4:30	8-4:30	8-4:30	CLOSED	CLOSED
SAINT LOUIS CONNECTCARE	FLORENCE HILL CENTER - RIVERVIEW	8-4:30	8-4:30	8-4:30	8-4:30	8-4:30	CLOSED	CLOSED
SAINT LOUIS CONNECTCARE	HOMER G. PHILLIPS HEALTH CENTER	8-4:30	8-4:30	8-4:30	8-4:30	8-4:30	CLOSED	CLOSED
SAINT LOUIS CONNECTCARE	MAX C. STARKLOFF HEALTH CENTER	8-4:30	8-4:30	8-4:30	8-4:30	8-4:30	CLOSED	CLOSED
SAINT LOUIS CONNECTCARE	LILLIAN E. COURTNEY	8-4:30	8-4:30	8-4:30	8-4:30	8-4:30	CLOSED	CLOSED
SAINT LOUIS COUNTY HEALTH CENTERS	NORTH CENTRAL COMMUNITY HEALTH CENTER (PINE LAWN)	8:30-5	8:30-5	8:30-6	8:30-6	8:30-5	CLOSED	CLOSED
SAINT LOUIS COUNTY HEALTH CENTERS	JOHN C. MURPHY	8:30-5	9:30-6	8:30-5	8:30-5	8:30-5	CLOSED	CLOSED
SAINT LOUIS COUNTY HEALTH CENTERS	SOUTH COUNTY	8:30-5	8:30-5	9:30-6	8:30-5	8:30-5	CLOSED	CLOSED
PEOPLES HEALTH CENTERS	DELMAR	8:30-5:30	8:30-8:30	8:30-5:30	8:30-8:30	8:30-5:30	CLOSED	CLOSED
PEOPLES HEALTH CENTERS	FLORISSANT	8:30-5:30	8:30-5:30	11:30-8:30	8:30-5:30	8:30-5:30	CLOSED	CLOSED
PEOPLES HEALTH CENTERS	MAPLEWOOD	8:30-5:30	11:30-8:30	8:30-5:30	8:30-5:30	8:30-5:30	CLOSED	CLOSED
FAMILY CARE HEALTH CENTER	CARONDOLET	8-5	8-8	8-5	8-8	8-5	12-2	CLOSED
FAMILY CARE HEALTH CENTERS	FOREST PARK SOUTHEAST	8-5	8-7	8-5	8-5	8-5	10-2	CLOSED
MYRTLE DAVIS COMPREHENSIVE	COMBINED LOCATIONS	9-5:30	9-8:30	9-8:30	9-5:30	9-5:30	CLOSED	CLOSED
GRACE HILL HEALTH CENTERS	HADLEY	10-6:30	9-5:30	10:30-7	9-5:30	9-5:30	CLOSED	CLOSED
GRACE HILL HEALTH CENTERS	SOULARD HEALTH CENTER	9-5:30	10-6:30	10:30-7	9-5:30	9-5:30	9:00-1	CLOSED
GRACE HILL HEALTH CENTERS	GRACE HILL SOUTH	9-5:30	10-6:30	10:30-7	9-5:30	9-5:30	9-5:30	CLOSED
GRACE HILL HEALTH CENTERS	ST. PATRICK HEALTH SERVICES	8-4:30	CLOSED	8:00 - 12	8:00 - 12	8:00 - 12	CLOSED	CLOSED
GRACE HILL HEALTH CENTERS	ST. STEPHENS HEALTH SERVICES	9:30-5:30	9:30-5:30	9:30-5:30	9:30-5:30	CLOSED	CLOSED	CLOSED
GRACE HILL HEALTH CENTERS	WATERTOWER	10-6:30	9-5:30	10:30-7	9-5:30	9-5:30	CLOSED	CLOSED
GRACE HILL HEALTH CENTERS	MOBILE SERVICES "SEVENTH SITE"	8-5	8-5	8-5	8-5	8-5	CLOSED	CLOSED
HEALTH CARE FOR KIDS	LINDELL AVE	9-9	9-9	9-9	9-9	9-9	12-6	12-6
ACCION SOCIAL COMUNITARIA LA CLINICA HEALTH CENTER	LA CLINICA	9-5	10-JAN	10-JAN	10-JAN	9-5	CLOSED	CLOSED

ORGANIZATION	HEALTH CENTER NAME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
CHIPS	2431 N. GRAND	9:00-5:00	9:00-5:00	9:00-7:00	9:00-5:00	9:00-5:00	9-12 (EVERY 3RD SATURDAY)	CLOSED
BARNES JEWISH HOSPITAL	BJH MEDICINE CLINIC	8:00-5:00	8:00-5:00	8:00-5:00	8:00-5:00	8:00-5:00	CLOSED	CLOSED
BARNES JEWISH HOSPITAL	WOMEN'S WELLNESS CENTER (OB-GYN CLINIC)	8:30-5	8:30-5	8:30-5	8:30-5	8:30-4:30	CLOSED	CLOSED
TENET FOREST PARK HOSPITAL	AMBULATORY CARE CENTER (INTERNAL MEDICINE)	1:00-5	1:00-5	1:00-5	1:00-5	1:00-5	1-SEP	CLOSED
TENET FOREST PARK HOSPITAL	WOMEN'S HEALTH CENTER	8:00-4	8:00-4	8:00-4	8:00-4	8:00-4:00	CLOSED	CLOSED
TENET FOREST PARK HOSPITAL	FAMILY MEDICINE OF ST. LOUIS	8:30-4:30	8:30-4:30	8:30-4:30	8:30-4:30	8:30-4:30	12-SEP	CLOSED
ST. JOHN'S MERCY MEDICAL CENTER	MERCY NEIGHBORHOOD HEALTH CENTER (SOUTH CITY)	7:30-4	9:30-4	CLOSED	7:30-4	7:30-4	CLOSED	CLOSED
ST. JOHN'S MERCY MEDICAL CENTER	JOHN F. KENNEDY CLINIC (ST. JOHN'S CAMPUS)	8-4:30	8-4:30	8-4:30	8-4:30	8-4:30	CLOSED	CLOSED
ST. JOHN'S MERCY MEDICAL CENTER	MEACHAM PARK CLINIC	8-4:30	8-4:30	8-4:30	8-4:30	8-4:30	CLOSED	CLOSED
DEPAUL HEALTH CENTER	ADULT CLINIC	8-4	8-4	8-4	8-4	8-4	CLOSED	CLOSED
DEPAUL HEALTH CENTER	OB CLINIC	8-12	8-12	8-12	8-12	8-12	CLOSED	CLOSED
ST. MARY'S HOSPITAL	CLAYTON	CLOSED	1:00-4:00	1:00-4:00	1:00-4:00	CLOSED	CLOSED	CLOSED
ST. LUKE'S HOSPITAL	PEDIATRIC CENTER	8-4:30	8-4:30	8-4:30	8-4:30	8-4:30	CLOSED	CLOSED



EVENING OR WEEKEND HOURS

APPENDIX 6: RESOLUTION TO RECOMMEND THE PROTECTION OF STATE FUNDS TO MISSOURI MEDICAID PROGRAM

WHEREAS, St. Louis Regional Health Commission (hereafter referred to as “the Commission”) was established in the Fall of 2001 to bring together the leaders of the health care safety net in St. Louis City and Saint Louis County; and

WHEREAS in its corporate mission the Commission has determined to “actively advocate for the needs of the uninsured in the community, the state, and, when appropriate, nationally in order to provide a voice for this largely “voiceless” population at risk”; and

WHEREAS, the Commission recognizes there is a need to at least maintain the level of services currently available in the community for the medically underserved as improvements are made to the safety net system; and

WHEREAS, in 2002 the State of Missouri reduced health care services to those most in need in our community, including:

- Reduced Medicaid eligibility benefits for poor adults from 100% of the poverty level to 77% of the federal poverty level, cutting health care service effective June 30, 2002 to 24,987 individuals. (17,051 had benefits restored for up to one year under a court injunction.)
- Altered the Medicaid Spend-Down structure to require individuals to pay more out of pocket costs to access health care.
- Eliminated dental care for adult Medicaid recipients affecting over 350,000 people. (Service restored due to court injunction.)
- Eliminated optical services (eyeglasses) for adult Medicaid recipients with limited exceptions, affecting over 350,00 people. (Court action pending.)
- Reduced by \$1.9 million the Department of Mental Health budget for children’s services to children with severe emotional disturbances.
- Reduced Women’s health services for poor women who have just given birth from two years of follow-up treatment to one year, impacting 4,810 individuals.
- Eliminated Medicaid coverage for non-custodial parents and Parent’s Fair Share participants, affecting 1,617 individuals.
- Reduced Temporary Assistance to Needy Families (TANF) funding by \$5 million.
- Limited extended transitional Medicaid for low-income working parents from two years to one year, and required that to be eligible the family’s income must remain under the federal poverty level, affecting 1,125 individuals beginning June 30, 2002.

NOW, THEREFORE, BE IT RESOLVED that the St. Louis Regional Health Commission recommends that the State of Missouri:

- Assure that all income eligible children obtain and retain Medicaid/MC+ health insurance.
 - Maintain current eligibility levels for Medicaid/MC+
 - Assure full access to federally mandated EPSDT services
 - Provide funding to allow youth (18 to 21 years old) moving out of foster care to continue Medicaid/MC+ coverage
- Protect funding for Medicaid/MC+ reimbursements to pediatric dental, mental health and pediatric providers at a level sufficient to ensure health professionals' participation in the program.
- Restore the eligibility of low-income families for Medicaid to 100% of the federal poverty level.
- Expand eligibility for low-income elderly and disabled adults to 100% of the federal poverty level pursuant to state law.
- Avoid instituting Medicaid co-payments or other cost-sharing measures on Medicaid recipients.
- Continuing Medicaid co-payments and deductibles for low-income Medicare/Medicaid dual eligible individuals.

Adopted by a vote by:
St. Louis Regional Health Commission
February 19, 2003

Peter Sortino, Chairman
Jacquelynn Meeks, Dr.PH, Vice Chair
Steven Lipstein, Treasurer
Melba Moore, MS, Secretary
E. Andrew Balas, M.D., Ph.D.
Sister Betty Brucker, FSM
James Buford
Deborah Cooper
James P. Crane, M.D.
Betty Jean Kerr
Scott Lakin
Ron Levy
Ancelmo Lopes
Robert Massie, D.D.S.
Reverend B.T. Rice
Beverly Roche
Will Ross, M.D.
Corinne Walentik, M.D.

APPENDIX 7: 330 LEGISLATION

As described by the law firm of Feldesman, Tucker, Leifer, Fidell, & Bank LLP, the benefits of 330 Legislation include:

1. Access to Federal grants, i.e. expansion grants, to support the cost of otherwise uncompensated comprehensive primary and preventative health care and “enabling services” delivered to uninsured and underinsured populations.
2. Access to Federal grants to support the costs of planning and developing a network or plan for the provision of health services which may include the provision of services on a prepaid basis or through another managed care arrangement.
3. Access to grant support and loan guarantees for capital improvements.
4. Access to reimbursement under the Prospective Payment System (PPS) or other state-approved alternative payment methodology (which is predicated on a cost-based reimbursement methodology) for Medicaid services and cost-based reimbursement for services provided under Medicare.
5. Access to Federal loan guarantees of the principal and interest on loans made by non-Federal lenders for the costs of developing and operating managed care networks or plans which are majority owned and/or controlled by Section 330-supported health centers.
6. Access to Federal Tort Claims Act (FTCA) coverage (in lieu of purchasing malpractice insurance) for the Section 330-supported health center and its health care professionals.
7. Access to favorable drug pricing under Section 340B of the PHS Act, which allows FQHCs to purchase covered outpatient prescription pharmaceuticals for health center patients at substantially discounted prices for distribution either directly by a health center pharmacy or through contract with a retail pharmacy.
8. Absent an alternative approved by Centers for Medicare and Medicaid Services (CMS), right to have State Medicaid agencies outstation Medicaid eligibility workers on FQHC site.
9. Reimbursement by Medicare for “first dollar” of services rendered to Medicare beneficiaries, i.e., deductible is waived.
10. Safe harbor under the Federal anti-kickback statute for waiver of co-payments to the extent a patient is below 200% of Federal income poverty guidelines and therefore entitled to a discount based on the health center’s application of its schedule of discounts.
11. Access to providers through the National Health Service Corps if the health center’s service area is designated a Health Professional Shortage Area.
12. Access to the Federal Vaccine for Children Program, which distributes to FQHCs vaccinations at no charge for either the vaccine or its delivery to the FQHC to be provided by the FQHC to uninsured children.

APPENDIX 8: METHODOLOGIES USED TO ESTIMATE SOURCES AND USES OF FUNDS FOR PRIMARY AND SPECIALTY CARE — ST. LOUIS CITY AND COUNTY

As noted earlier in this report, the health care safety net in St. Louis City and County is a complex system. Unlike some major metropolitan areas, St. Louis does not have a single coordinating, monitoring, or financing body for its health care safety net. Each entity within the safety net has access to different funding streams to finance care for the uninsured and underinsured, depending on its structure and relationships with Federal and local governmental bodies. This fragmentation has historically made accounting for the dollars spent in health care safety net impossible to assess and report to citizens in the region.

The Financing analysis is intended to provide estimates of the financial resources available to support outpatient primary and specialty care to safety net patients in St. Louis City and County. This includes physician services, outpatient pharmacy, outpatient diagnostic testing, transportation, social services and other wrap-around services.

Much of the data used in this analysis has been voluntarily self-reported. Where possible, public documents such as IRS 990 forms and financial statements have been examined for purposes of verification.

Categorization and allocation methods may vary from provider to provider. Also, in most instances, existing accounting methods do not clearly identify uninsured patients or their cost of care, and payments received by providers are seldom explicitly earmarked as paying for the care of uninsured. Therefore, many of the methodologies employed in this analysis only provide “high-level” estimates of the need for care, the sources of funds to pay for this care, and the uses of funds.

Also, various entities that fund safety net care do not explicitly track if money is spent for safety net care, or if it is specially utilized to support primary and specialty care operations.

The RHC is not attesting to the complete accuracy of all of the data in this report due to the margin for error in data sources and estimating methodology. However, the extensive effort to validate the data has significantly minimized potential inaccuracies. Data inaccuracies that may remain for individual entities, we believe, would have minimal impact on average values and would have no impact on the overall conclusions made in this report.

In this Appendix, each significant estimate of the RHC is listed, with a description of the methodology used to obtain this estimate, as follows:

Estimate of Need

Calculation

NUMBER OF SAFETY NET POPULATION
X
AVERAGE ANNUAL COST OF PROVIDING PRIMARY
AND SPECIALTY CARE TO ONE PATIENT

Sources

- The Number of Safety Net Population = 307,000 individuals

Derived by adding the number of individuals in the Missouri Medicaid program, per Missouri Department of Social Services, Division of Medical Services, as of September 2002, to the estimated number of uninsured in the region (see Appendix 9 for description of estimating the number of uninsured). As noted in Section IV, the number of individuals dually eligible for Medicare and Medicaid was not included in this total.

164,000	INDIVIDUALS COVERED BY MANAGED MEDICAID (MC+)
14,000	INDIVIDUALS COVERED BY TRADITIONAL MEDICAID, EXCLUDING "DUAL ELIGIBLES"
31,000	INDIVIDUALS COVERED BY BOTH MEDICARE AND MEDICAID (GENERALLY OVER AGE 65)
209,000	TOTAL INDIVIDUALS COVERED BY MISSOURI MEDICAID
178,000	INDIVIDUALS COVERED BY MEDICAID, EXCLUDING "DUAL ELIGIBLES"
129,000	ESTIMATED NUMBER OF UNINSURED IN ST. LOUIS CITY AND COUNTY (SEE SECTION V FOR DETAIL)
307,000	TOTAL ESTIMATED SAFETY NET POPULATION

- Average annual cost of Providing Primary /Specialty Care to One Person under the age of 65 = \$1,498 per person

This benchmark for average annual cost of medical care was derived by triangulating estimates from three (3) sources: a research study on "How Much Medical Care Do the Uninsured Use, And Who Pays For It"; ^{A8.1} data from the US Census Bureau Statistical Abstract of the United States, 2001; ^{A8.2} and a benchmark from data provided by a private insurer concerning its Missouri population. ^{A8.3} This total was then multiplied by 58.5%, which according to data from the Missouri Division of Medical Services was the percentage of the total medical costs spent for physician care, outpatient pharmacy and outpatient hospital and ancillary services in FY01. ^{A8.4}

Hadley & Holohan

The total cost of providing medical care to privately insured persons under age 65 averaged \$2,233 per person per year, according to the report written by Hadley & Holahan, based upon data from 1996-1998 Medical Expenditure Panel Survey.^{A8.1} This amount was inflated by the medical CPI for 1998-2001 (approximately 13%, per U.S. Department of Labor, Bureau of Labor Statistics) to arrive at a benchmark of \$2,516.

US Census Bureau, Statistical Abstract

The total cost of providing hospital care, physician and clinical services, and prescription drugs per consumer unit was obtained from the US Census Bureau, Statistical Abstract, 2001^{A8.2}, Table No 122.^{A8.5} The reported amount of \$2,735 per person. This figure was adjusted to exclude costs associated with the over 65 population yielding an annual per capita benchmark of \$2,606 for individuals under age 65.

Private Insurer

Data from a large private HMO insurer was obtained for a Missouri-based population. The total cost of providing hospital care, physician care, prescription drugs and other clinical services averaged \$2,573 per consumer unit for this population in FY01.

These three numbers were averaged to arrive at a final benchmark figure of \$2,565 utilized in this report. This average per capita benchmark excludes costs for behavioral health and dental care services as well as the cost of support services such as transportation and interpretative services which are critical to safety net populations.^{A8.3}

*Sources of Revenue**Calculation*

Sum of all identified sources of safety net care.

The sources of revenue were identified by a focus group of Chief Financial Officers from safety net providers in the St. Louis area and State of Missouri held October 29, 2002. Three types of sources of funds to safety net providers were excluded from this analysis by definition: Medicare payments, payments made by patients themselves (self-pay), and payments to safety net providers from Commercial Insurers. Medicare and Commercial Insurance payors represented approximately 13% of the total number of visits to safety net providers in 2001, per the RHC Institutional Provider Primary Care survey, 2002.^{A8.6}

Source identified and quantified for this analysis included:

MEDICAID TRADITIONAL & MEDICAID MANAGED CARE PAYMENTS	\$205,000,000
DISPROPORTIONATE SHARE HOSPITAL (DSH) FUNDING THROUGH A SPECIAL FEDERAL	\$20,000,000
SECTION 1115 WAIVER (X%) GRANTS FROM THE STATE OF MISSOURI	\$4,000,000
FEDERAL SUPPORT UNDER SECTION 330	\$13,000,000
LEGISLATION (TO FEDERALLY QUALIFIED CENTERS) FOUNDATION SUPPORT	\$5,000,000
ST. LOUIS CITY TAX SUPPORT	\$5,000,000
SAINT LOUIS COUNTY TAX SUPPORT	\$15,000,000
UNCOMPENSATED CARE PROVIDED BY MEDICAL SCHOOLS	\$16,000,000
UNCOMPENSATED CARE PROVIDED BY HOSPITAL-BASED CLINICS	\$11,000,000

Medicaid traditional & Medicaid managed care payments (\$205 million)

The total paid claims for the Missouri Medicaid Program were obtained from the Missouri Department of Social Services Report, FY2001, pages 61 and 62.^{A8.7} The Total Paid Claims line items for St. Louis City and Saint Louis County were added together. This report delineated the total paid claims into the following categories, with associated amounts for St. Louis City and Saint Louis County:

CATEGORY	TOTAL PAID CLAIMS, FY2001	PERCENT OF TOTAL
NURSING FACILITIES	\$ 158,703,279	18.9%
HOSPITALS	\$ 144,665,440	17.2%
DENTAL SERVICES	\$ 1,642,688	0.2%
PHARMACY	\$ 113,802,147	13.5%
PHYSICIAN RELATED	\$ 42,283,028	5.0%
IN-HOME SERVICES	\$ 65,916,096	7.8%
MENTAL HEALTH	\$ 59,075,014	7.0%
STATE INSTITUTIONS	\$ 52,083,032	6.2%
REHAB & SPECIALTY SERVICES	\$ 13,001,023	1.5%
MANAGED CARE	\$ 189,323,820	22.5%
TOTAL	\$840,495,567	100%

To compare to the Estimate of Need benchmark utilized in this analysis, it was determined in conversations with staff from the Division of Medical Services (DMS) that the following categories should be excluded from this analysis:

- Nursing Facilities
- Dental Services
- In-Home Services
- Mental Health
- State Institutions
- Rehab & Specialty Services

It was also determined that the following line items had a portion of the total supporting outpatient primary and specialty care:

- Hospitals
- Managed Care
- Physician Related

It was determined that the following line items fully supported outpatient primary and specialty care:

- Pharmacy

It was also determined that the cost for individuals dually eligible for Medicare and Medicaid should not be included in this analysis, as the volume counts provided by most safety net providers did not include the over 65 population in the volume counts for Medicaid. An ad hoc report was created by DMS that quantified the number and cost for dual eligible individuals by category. This amount was then subtracted from the total amount of each category.^{A8.8}

To estimate the total amount of outpatient primary and specialty care hospital claims included in the total \$144,65,440 payments to hospitals in FY01, a rate of outpatient to total claims was derived from data provided by DMS, calculated at 38.12%, and then the amount was adjusting for the portion of these costs attributable to dual eligibles, per DMS data.

RATE OF OUTPATIENT HOSPITAL TO TOTAL HOSPITAL PER DMS DATA:	38.12%
TOTAL CLAIMS PAID TO HOSPITALS IN HOSPITAL LINE ITEM FROM DSS REPORT:	\$144,665,440
TOTAL CLAIMS PAID IN HOSPITALS LINE ITEM – OUTPATIENT ONLY (\$144,665,440 X 38.12%)	\$55,146,466
COSTS ASSOCIATED WITH DUAL ELIGIBLES	(\$10,678,876)
HOSPITAL LINE ITEM NET DUAL ELIGIBLES	\$44,467,589

To estimate the total amount of outpatient primary and specialty care pharmacy claims included in the total \$113,802,147 payments in pharmacy in FY01, a rate of outpatient to total claims was derived from data provided by DMS, calculated at 100%, and then the amount was adjusted for the costs of dual eligibles, per DMS data.

TOTAL CLAIMS PAID PHARMACY LINE ITEM PER DMS DATA (100% OUTPATIENT)	\$113,802,147
COSTS ASSOCIATED WITH DUAL ELIGIBLES	(\$75,543,234)
PHARMACY LINE ITEM NET DUAL ELIGIBLES	\$38,258,913

To estimate the total amount of outpatient primary and specialty care physician claims included in the total payments to physicians in FY01, a rate of outpatient payments to physicians as a percent of the total claims was derived from data provided by DMS, calculated at 33.45%, and then the amount was adjusted for the costs of dual eligibles, per DMS data.

TOTAL CLAIMS PAID PHYSICIAN-RELATED PER DMS DATA:	\$42,283,028
COSTS ASSOCIATED WITH DUAL ELIGIBLES	(\$7,751,224)
PHYSICIAN-RELATED LINE ITEM NET DUAL ELIGIBLES	\$34,531,804
TOTAL CLAIMS PAID TO OUTPATIENT PHYSICIAN SERVICES PER DMS DATA (\$34,531,224 X 33.45%)	\$11,550,888

To estimate the total amount of outpatient primary and specialty care claims paid within the total Managed Care line item, the Division of Medical Services of the State of Missouri provided an estimated breakdown of the Managed Care Capitation rates, by percentage by major category, for the Eastern Region for the Contract Period 2003.

This data indicated that Total Outpatient Amount in the Managed Care Line Item was 58.36% for the three outpatient categories: O/P Hospital – Physical Health, Physician Services, & Pharmacy. These categories were selected to match the benchmark utilized to calculate the Estimate of Need. Inpatient categories, Behavioral Health, Dental, and Transportation percentages were excluded for this purpose.

Applying this percentage to the \$189,323,820 Managed Care line item produces an estimated total of \$110,489,381 paid claims to support outpatient primary and specialty care services, as defined above.

The total Missouri Medicaid estimate for outpatient primary and specialty care services was then calculated as \$204,766.772, as follows:

CATEGORY	TOTAL PAID CLAIMS, FY2001
HOSPITALS LINE-ITEM (OUTPATIENT ONLY)	\$44,467,589
PHARMACY	\$38,258,913
PHYSICIAN RELATED	\$11,550,888
MANAGED CARE (OUTPATIENT ONLY)	\$110,489,381
TOTAL	\$204,766,772

Disproportionate Share Hospital (DSH) Funding through a special Federal Section 1115 Waiver (\$20 Million)

Per the Section 1115 Waiver Addendum documentation submitted by the State of Missouri to the Centers for Medicare and Medicaid in August, 2001, the total capped amount of the DSH payments to the St. Louis community to support outpatient care will be 9.89% of the statewide DSH cash distributions, excluding DSH distributions to state mental hospitals. This percentage was equivalent to the share of DSH payments made in state fiscal year 2001 to ConnectCare.

This amount is subject to annual fluctuation, depending on the amount of total statewide DSH cash distributions each year. However, in FY2001 and FY2002, these payments approximated \$20 Million, according to data provided by the State of Missouri and Saint Louis ConnectCare.^{A8.9}

Grants from the State of Missouri (\$4 Million)

The Missouri Department of Health and Senior Services provided a listing of all existing contracts in place with St. Louis City and County entities. The end dates of these contracts were selected to be those after 6/30/02, which is the beginning of the state fiscal year. In cases where there had been contract amendments, the Current Amount total was utilized rather than the Original Amount total.

The total grant amounts provided to safety net providers, as listed in Appendix 1, were then segregated and totaled to arrive at a total of approximately \$4 Million.

Federal support under Section 330 Legislation (to Federally Qualified Centers) (\$13 Million)

Through the Missouri Bureau of Primary Care, each Federally Qualified Health Center in St. Louis City and Saint Louis County was asked to provide budget data concerning revenue sources and the total amount of Federal grants received in their most recent Fiscal Year. Each center responded, and the total amount from each center was added together to produce the \$13 Million estimate.

The total estimate provided was then correlated to each entity's most recent Return of Organization Exempt from Income Tax Form 990 to verify for reasonableness.

Foundation support (\$5 Million)

The total estimate of \$10-\$15 Million in annual giving for the Missouri Foundation for Health was provided by Foundation staff. Estimates of \$2-\$3 Million in average disbursements for other Health Funders was derived from interviews with selected Foundation staff and Board members, and a review of annual reports for those Foundations that made such reports available. The estimate of the total to support safety net care was derived from these interviews, as well as a review of Return of Organization Exempt from Income Tax Form 990 of Community Health Centers.

St. Louis City Tax Support (\$5 Million)

Amount reported by City Health Department personnel.

Saint Louis County Tax Support (\$15 Million)

Per analysis completed by the Financial Department of the Saint Louis County Department of Health and provided to the Saint Louis Regional Health Commission.

A portion of the funds raised through the Saint Louis County Property Tax is spent on providing direct care to the uninsured and underinsured. The total budgeted costs for the Saint Louis County Health Department for providing primary and specialty care to the residents of Saint Louis County in 2003 is approximately \$22.5 million. This amount includes the operations of 3 primary care clinics, pharmacy and dental services, and the cost of specialty care services provided through Saint Louis ConnectCare.

The total budgeted revenue for these services are approximately \$7.5 million from Medicare, Medicaid, self-pay patients, and other sources. The total tax amount that is allocated to indigent care costs by Saint Louis County is approximately \$15 million for 2003, the difference between the total budgeted costs and the revenue that these services generate. ^{A8.10}

This amount excludes an additional \$6 Million dollars of net tax revenue spent on family mental health, health services to individuals in correctional facilities, and home health/homemaker chore services.

Uncompensated care provided by medical schools (\$16 Million)

Amounts provided directly by Washington University School of Medicine and St. Louis University School of Medicine. Methodology utilized to calculate this amount was cost, not charge, basis.

Uncompensated care provided by hospital-based clinics (\$11 Million)

The RHC asked the hospital systems in St. Louis City and Saint Louis County to estimate their cost for uncompensated primary and specialty care. Two hospital systems responded to this request. These two systems accounted for approximately 70% of the total primary care visits to hospital-based systems. A cost per visit for these two systems was then calculated, and applied to the total number of visits seen by all hospitals in the area.

Uses of Funds

Calculation

Sum of all identified uses of funds for safety net care.

The identified uses were segregated into two categories:

- Community Health Centers
- Other recipients of Medicaid Payments

Community Health Centers

Data was collected from financial information provided directly by the Community Health Centers, and/or information from the Return of Organization Exempt from Income Tax Form 990 of each institution for the most recently available 12 month period. The entities for which data was collected included:

Primary Care Clinic Sites (n=23 sites + 1 “mobile” site)

- Saint Louis County (3 sites)
- Community-Health-In-Partnership (CHIPS) (1site)
- ConnectCare (5 sites + Specialty care + Urgent Care)
- Family Care Centers (2 sites)
- Grace Hill (6 sites + 1 “mobile” site)
- HC for Kids (1 site)
- Myrtle Davis Comprehensive Care (2 sites)
- People’s Health Centers (3 sites)

Data concerning pharmacy, dental, specialty care, dialysis, urgent care, and lab/radiology line items were provided directly by the Community Health Centers.

The full cost of operating the community health safety net sites (direct care costs plus administrative overhead and support services such as transportation, social workers, and interpreters) was included in this analysis.

Medicaid Payment Allocations

The Division of Medical Services of the State of Missouri provided an estimated breakdown of the Managed Care Capitation rates, by percentage by major category, for the Eastern Region for the Contract Period 2003. From this data, estimates were derived for major Medicaid primary/specialty care expenditures (net expenses for dual eligibles), as follows:

MEDICAID PAYMENTS TO OUTPATIENT (O/P) HOSPITAL	\$72,621,755
MEDICAID PAYMENTS TO OUTPATIENT (O/P) PHARMACY	\$73,188,769
MEDICAID MANAGED CARE PLANS ADMIN	\$13,092,992
MEDICAID PAYMENTS TO PHYSICIANS	\$45,863,256
TOTAL	\$204,766,772

In order to derive these totals, the amounts supporting each category that are imbedded in the Managed Care line item of \$189,323,820 had to be allocated to each category, and added to the amounts as indicated in the other respective line items as reported by the Department of Social Services (DSS).

As noted earlier, the Division of Medical Services of the State of Missouri provided an estimated breakdown of the Managed Care Capitation rates, by percentage by major category, for the Eastern Region for the Contract Period 2003. This data indicated that Total Outpatient Amount in the Managed Care Line Item was 58.36% for the three outpatient categories: O/P Hospital - Physical Health, Physician Services, & Pharmacy. These categories were selected to match the benchmark utilized to calculate the Estimate of Need. Inpatient categories, Behavioral Health, Dental, and Transportation percentages were excluded for this purpose.

Prior to allocating the \$189,323,820 Managed Care line item to the categories, the estimated amount of administration costs for managed care plans of 11.85% (from data from the Missouri Division of Medical Services) was subtracted from the remaining total, for a total allocated amount of \$166,888,947.

Utilizing this total figure of \$166,888,947 and the estimated percentages by category from the Managed Care Capitation rates, the amounts in each Managed Care line item were estimated, as follows:

MEDICAID PAYMENTS TO OUTPATIENT (O/P) HOSPITAL

RATE OF OUTPATIENT HOSPITAL TO TOTAL HOSPITAL PER DMS DATA:	38.12%
TOTAL CLAIMS PAID TO HOSPITALS IN HOSPITAL LINE ITEM FROM DSS REPORT:	\$144,665,440
TOTAL CLAIMS PAID IN HOSPITALS LINE ITEM – OUTPATIENT ONLY (\$144,665,440 X 38.12%)	\$55,146,466
COSTS ASSOCIATED WITH DUAL ELIGIBLES	(\$10,678,876)
HOSPITAL LINE ITEM NET DUAL ELIGIBLES	\$44,467,589

AMOUNT O/P HOSPITAL IMBEDDED IN MANAGED CARE LINE ITEM REPORTED BY DSS:

MEDICAID PAYMENTS TO OUTPATIENT (O/P) HOSPITAL (O/P HOSPITAL - PHYSICAL HEALTH PERCENTAGE FROM DMS APPLIED TO TOTAL MANAGED CARE MEDICAID AMOUNT: (\$166,888,947 X 16.87%)	\$28,154,165
TOTAL MEDICAID PAYMENTS TO O/P HOSPITAL (\$44,467,589 + \$28,154,165)	\$72,621,755

MEDICAID PAYMENTS TO OUTPATIENT PHARMACY

AMOUNT FROM PHARMACY LINE ITEM REPORTED BY DSS: (ALL OUTPATIENT CLAIMS PAID, PER DMS) NET DUAL ELIGIBLES	\$38,258,913
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AMOUNT O/P PHARMACY IMBEDDED IN MANAGED CARE LINE ITEM REPORTED BY DSS:

MEDICAID PAYMENTS TO O/P PHARMACY (O/P PHARMACY PERCENTAGE FROM DMS APPLIED TO TOTAL MANAGED CARE MEDICAID AMOUNT: (\$166,888,947 X 20.93%)	\$34,929,857
TOTAL MEDICAID PAYMENTS TO PHARMACY (\$38,258,913 + \$34,929,857)	\$73,188,769

MEDICAID MANAGED CARE PLAN ADMINISTRATION

AMOUNT OF OUTPATIENT MEDICAID PAYMENTS:	\$110,489,381
ESTIMATED ADMINISTRATION PERCENTAGE:	11.85%
TOTAL MEDICAID MANAGED CARE PLANS ADMINISTRATION COSTS	\$13,092,992

MEDICAID PAYMENTS TO PHYSICIAN SERVICES

TOTAL CLAIMS PAID PHYSICIAN-RELATED LINE ITEM FROM DSS REPORT, NET DUAL ELIGIBLES	\$34,531,804
RATE OF PAYMENTS TO PHYSICIANS IN PHYSICIAN-RELATED SERVICES LINE ITEM PER DMS DATA	33.45%
TOTAL CLAIMS PAID TO PHYSICIANS IN PHYSICIAN-RELATED LINE ITEM (\$34,531,804 X 33.45%)	\$11,550,888

AMOUNT PAYMENTS TO PHYSICIANS IMBEDDED IN MANAGED CARE LINE**ITEM REPORTED BY DSS:**

MEDICAID PAYMENTS TO O/P PHYSICIAN (O/P PHYSICIAN PERCENTAGE FROM DMS APPLIED TO TOTAL MANAGED CARE MEDICAID AMOUNT: (\$166,888,947 X 20.56%)	\$34,312,368
TOTAL MEDICAID PAYMENTS TO PHYSICIANS (\$11,550,888 + 34,312,368)	\$45,863,256

APPENDIX 9: ESTIMATE OF NUMBER OF NON-ELDERLY, UNINSURED PERSONS IN ST. LOUIS CITY AND COUNTY

Overview

There are several sources of information about the number of uninsured in the United States. Two widely used are the Behavioral Risk Factor Surveillance System (BRFSS) and the Current Population Survey (CPS). Both of these surveys are done by, or under the auspices of, federal governmental agencies. Each of these surveys has its own advantages and disadvantages, which are discussed further below.

To estimate the number of uninsured persons in St. Louis City and County, state-wide rates of uninsured for the non-elderly population by federal poverty level from the CPS A9.1 for Missouri were applied to the numbers of non-elderly persons in St. Louis City and County by federal poverty level. Table 1 shows the details of this calculation which results in an estimate of approximately 129,000 persons in the area without insurance at the time of the most recent CPS survey (March, 2002). The table, below, shows the results of this calculation by St. Louis City and County separately and combined.

	BELOW POVERTY	ABOVE POVERTY	TOTAL
A. POPULATION AGED 0 TO 65 IN STL CITY (US 2000 CENSUS)	77,476	224,171	301,647
B. RATES OF UNINSURED FOR MO (US CENSUS, MARCH 2002 CPS)	25%	9%	—
C. NUMBER UNINSURED IN STL CITY (COLUMNS A X C)	19,369	20,175	39,544 (13.1%)
D. POPULATION AGED 0 TO 65 IN STL COUNTY (US 2000 CENSUS)	62,463	815,496	877,958
E. RATES OF UNINSURED FOR MO (US CENSUS, MARCH 2002 CPS)	25%	9%	—
F. NUMBER UNINSURED IN STL COUNTY (COLUMNS D X E)	15,616	73,395	89,011 (10.1%)
G. NUMBER OF UNINSURED IN STL CITY & COUNTY (COLUMNS C + F)	34,985	93,570	128,555 (10.9%)

The previous estimate is what is called a “point-in-time” estimate. That is, it represents the number of individual’s who did or did not have health insurance at the time of either the CPS or BRFSS surveys. There are significant numbers of persons, however, who may have been uninsured for only a portion of a year. To determine the number of these individuals researchers often use a “period-of-time” approach to size the population of uninsured persons in an area. A period-of-time estimate determines the number of individuals who did not have health insurance at any time over a set time period. Most often this time period is 12 months.

A period-of-time estimate of uninsured persons in St. Louis City and County was made through a complex modeling process based on several assumptions. This model produced an estimate of approximately *151,000 persons* in the area who were without insurance for some amount of time during a 12-month period. This number is approximately *22,000 more persons* than the point-in-time estimate of uninsured persons (129,000 persons without insurance). The remainder of this narrative describes the modeling process used to develop this period-of-time estimate.

Discussion of Estimate of Uninsured Persons

Estimating the number of uninsured in a small geography can be problematic. This is because many people’s health insurance status changes in relationship to their employment status, since the majority of persons under age-65 get health insurance through an employer. This fact is reflected in the large variances often seen in estimates of uninsured persons from different sources. Some estimates are based on a “point-in-time” (e.g., uninsured at the time of a survey) while others are based on a “period-of-time” (e.g., uninsured at any time during a specific period to the survey); the range in estimates of uninsured made using different time frames can be significant. For example, the US Census Bureau’s estimate of uninsured persons in the United States, based on the CPS, is approximately *41 million persons*. In a recent study titled, “Going Without Health Insurance: Nearly One in Three Non-Elderly Americans”, which was done by the Lewin Group and Families USA for the Robert Wood Johnson (RWJ) Foundation, the authors estimate the number of uninsured to be *72 million persons*.^{A9.2} The difference between the two estimates, over *30 million persons*, is due to the different time frames used by the Census Bureau and RWJ studies, which is discussed in more detail below.

As noted earlier the Current Population Survey (CPS) is one of two sources for state-wide rates of uninsured. The other source is the Behavioral Risk Factor Surveillance System (BRFSS).

The BRFSS is conducted by states as a telephone survey. The survey process is coordinated nationally by the Centers for Disease Control of the Department of Health and Human Services. The CPS is a monthly survey conducted by The U.S. Census Bureau. The primary intent of the CPS is to provide government statistics on labor force participation. However, each year, in March, a supplement to the core CPS survey includes questions concerning respondents' health insurance coverage.

It is important to note that for purposes of estimating the number of uninsured in St. Louis City and County that the rates of uninsured reported from the CPS were treated as “point-in-time” estimates. The US Census Bureau, itself, reports the rates of uninsured from the CPS as “period-of-time” estimates. Many researchers, however, feel that the CPS results are actually a point-in-time estimate because individuals interviewed seem to be reporting their current health insurance status rather than their coverage over the past year. In the RWJ study, referenced above, the authors compared the CPS to another survey which gives both period in time and point in time estimates of uninsured persons. Using data from the Survey of Income and Program Participation (SIPP) the RWJ researchers found that the CPS “period” rate was closer to the SIPP “point” estimate of the rate uninsured. (The SIPP, also conducted by the U.S. Census Bureau, collects information about labor force behavior, income, and participation in public programs, to measure the effectiveness of various federal programs. The structure of the survey does not allow for state-level estimates to be made from SIPP data. *However, at the national level, SIPP is felt by many experts to be the best data set for analyzing the dynamics of the uninsured over long time periods.*)^{A9.3}

Assuming the CPS provides point-in-time estimates of uninsured allows comparison of the CPS rates to the BRFSS rates. The BRFSS does not report uninsured rates for persons under 18. However, comparison of the rates for persons 18 to 64 years of age can be made between the BRFSS and the CPS for Missouri.

The uninsured rates for this age group in Missouri are 12.9% and 13.0% for the BRFSS^{A9.4} and CPS^{A9.1} respectively. The fact that two surveys, done by separate organizations, determine approximately the same rate of uninsured should give a degree of confidence in the validity of this approach.

Admittedly, it would be wrong to infer that this estimate of uninsured persons in St. Louis City and County has the same degree of confidence as the state-level estimates from either the BRFSS or CPS. However, without data from a specific survey for St. Louis City and County, it is reliable enough for the purposes of this report.

Period-of-Time Estimate of Uninsured Persons in St. Louis City and County

The determination of 129,000 uninsured persons in St. Louis City and County is a “point-in-time” estimate based on the CPS survey. That is, it is the number of persons without health insurance at the time of the CPS survey. Included in this number are both persons who may have been without health insurance for only a short time (e.g., 3 to 5 months or less) and those whose uninsured status is a long-term situation (e.g. more than 1-year). For purposes of planning an appropriate “safety net” of services it is helpful to have some idea of the length of time, or duration, uninsured persons are likely to be uninsured. It is also useful to have an idea of the number of persons who become uninsured over a “period-of-time” as opposed to just the number who are uninsured at a point-in-time. Estimates of both these variables can be derived from the point-in-time estimate of 129,000 uninsured persons in St. Louis City and County.

To develop these estimates it is necessary to use data from both the BRFSS and the RWJ study cited earlier. The BRFSS survey asks persons how long they have been without health insurance at the time of the survey. Based on recent BRFSS results it is likely that approximately 70% of the 129,000 uninsured, approximately 89,000 persons, have been without insurance for more than 1 year. Of the remaining 40,000 persons, approximately 23,000 are likely to have been without insurance for less than 6 months and 17,000 are likely to have been without insurance for more than 5 months, but less than 1 year. How much longer the individuals in this cohort of 40,000 persons will go without insurance can be estimated. Data from the RWJ A9.2 study, shown in Table 2 below, give a base for estimating the total length of time these individuals will be without insurance.

**DURATION WITHOUT HEALTH INSURANCE FOR UNINSURED PEOPLE
UNDER AGE 65, 2001-2002**

MONTHS INSURED	NUMBER INSURED	AS PERCENT OF ALL INSURED
1 TO 2 MONTHS	7,502,000	10.0%
3 TO 5 MONTHS	18,634,000	24.9%
6 TO 8 MONTHS	9,374,000	12.5%
9 TO 12 MONTHS	7,314,000	9.8%
13 TO 23 MONTHS	13,959,000	18.7%
24 MONTHS	17,924,000	24.0%
TOTAL	74,706,000	100.0%

Incorporating the percentages from Table 2 in a matrix model (shown on the next page) it is estimated that the approximately 40,000 persons in St. Louis City and County without insurance for less than 1- year will go without insurance for the following total time periods;

TIME WITHOUT INSURANCE	# OF PERSONS
1 TO 2 MONTHS	922 PERSONS
3 TO 5 MONTHS	6,109 PERSONS
6 TO 8 MONTHS	4,441 PERSONS
9 TO 12 MONTHS	5,227 PERSONS
1-YR AND LONGER	22,786 PERSONS.

It should be noted that the data regarding the duration without health insurance are based on the period 2001–2002. Given that many persons get their health insurance from an employer any change in the labor market due to the economy since that time period could change the length of time persons go without health insurance.

It can be assumed that in a declining economy, such as exists at the time of this report's publication, the numbers of persons losing their health insurance because of a job loss are increasing. It can also be assumed as jobs become more difficult to obtain, again because of the declining economy, the length of time persons go without health insurance is probably increasing as well. Therefore, because of the current poor economy relative to the period 2001–2002 it is likely that these estimates are conservative, that is, they are likely to understate both the number of uninsured persons in St. Louis City and County and the length of time that they are likely to go without insurance.

The matrix in Table 3, below, shows the likelihood, or probability, of the total length of time a person will be without health insurance based on the period of time that they have already been uninsured. For example, a person who just recently became uninsured (e.g. 1 month already uninsured) has a 10% probability of being uninsured a total of 1 to 2 months and a 25% probability of being uninsured 3 to 5 months. A person entering their 12 month without insurance has a 36% probability of being uninsured another 13 to 23 months.

TABLE 3. LIKELIHOOD OF TOTAL LENGTH OF TIME UNINSURED

TOTAL LENGTH OF TIME UNINSURED	NUMBER OF MONTHS ALREADY UNINSURED AT TIME OF SURVEY					
	1 MO	2 MO	3 MO	4 MO	5 MO	6 MO
1-2 MO	10.0%	10.0%	0.0%	0.0%	0.0%	0.0%
3-5 MO	24.9%	24.9%	27.7%	27.7%	27.7%	0.0%
6-8 MO	12.5%	12.5%	13.9%	13.9%	13.9%	19.3%
9-12 MO	9.8%	9.8%	10.9%	10.9%	10.9%	15.1%
13-23 MO	18.7%	18.7%	20.8%	20.8%	20.8%	28.7%
24+ MO	24.0%	24.0%	26.7%	26.7%	26.7%	36.9%
	7 MO	8 MO	9 MO	10 MO	11 MO	12 MO
1-2 MO	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3-5 MO	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6-8 MO	19.3%	19.3%	0.0%	0.0%	0.0%	0.0%
9-12 MO	15.1%	15.1%	18.7%	18.7%	18.7%	18.7%
13-23 MO	28.7%	28.7%	35.6%	35.6%	35.6%	35.6%
24+ MO	36.9%	36.9%	45.7%	45.7%	45.7%	45.7%

Table 4, on the following page, applies the percentages from Table 3 to the estimate of uninsured persons in St. Louis City and County. The total estimate of approximately 129,000 uninsured persons in St. Louis City and County likely includes 89,000 persons who have been without health insurance for 1-year or longer and 40,000 persons who likely have been without health insurance for less than 1-year. Of the persons without insurance for less than 1-year approximately 23,000 are likely to have been without insurance for less than 6 months and 17,000 are likely to have been without insurance for more than 5 months, but less than 1-year. These estimates are based on data from the BRFSS.^{A9.4} Unfortunately, the BRFSS does not give more detailed breakdowns of time without insurance (for example, the number uninsured for one month, two months, three months and so on). In the Table 4, below, absent specific month to month estimates, the number of persons without health insurance for less than 6 months (22,956 persons) was divided by 5 and the result allocated to each of the first five months (4,591 per month). The number of persons without health insurance for 6 to 12 months (16,529 persons) was similarly distributed across the remaining 7 individual months by dividing the total by 7 and then allocating the result (2,361 per month) to each month.

TABLE 4.

TOTAL LENGTH OF TIME UNINSURED	NUMBER OF UNINSURED IN ST. LOUIS CITY & COUNTY BY NUMBER OF MONTHS ALREADY UNINSURED AT TIME OF SURVEY						
	1 MO ⁽¹⁾	2 MO ⁽¹⁾	3 MO ⁽¹⁾	4 MO ⁽¹⁾	5 MO ⁽¹⁾	6 MO ⁽²⁾	
	4,591	4,591	4,591	4,591	4,591	2,361	
NUMBER OF UNINSURED BY TOTAL LENGTH OF TIME UNINSURED							
1-2 MO	461	461	0	0	0	0	
3-5 MO	1,145	1,145	1,273	1,273	1,273	0	
6-8 MO	576	576	640	640	640	456	
9-12 MO	449	449	500	500	500	356	
13-23 MO	858	858	954	954	954	679	
24+ MO	1,102	1,102	1,225	1,225	1,225	871	
	7 MO ⁽²⁾	8 MO ⁽²⁾	9 MO ⁽²⁾	10 MO ⁽²⁾	11 MO ⁽²⁾	12 MO ⁽²⁾	TOTAL
	2,361	2,361	2,361	2,361	2,361	2,361	39,485
1-2 MO	0	0	0	0	0	0	922
3-5 MO	0	0	0	0	0	0	6,109
6-8 MO	456	456	0	0	0	0	4,441
9-12 MO	356	356	441	441	441	441	5,227
13-23 MO	679	679	841	841	841	841	9,976
24+ MO	871	871	1,080	1,080	1,080	1,080	12,810

⁽¹⁾ Monthly number is one-fifth of total number of uninsured persons without insurance for 5 months or less, or 22,956/5.

⁽²⁾ Monthly number is one-seventh of total number of uninsured persons without insurance for 6 to 12 months, or 16,529/7.

For example, in the matrix delineated in Table 4, of the total persons in St. Louis City and County estimated to have been uninsured for less than 6 months (23,000 persons) one-fifth, or approximately 4,600 persons, are assumed to have been without insurance for only 1 month. Of these, given the probabilities associated for the duration without health insurance from Table 3, it is estimated that 10%, or approximately 460 persons, will likely go without insurance for only 1 to 2 months. An additional 24.9%, or 1,145 persons, will likely go without insurance for 3 to 5 months.

Table 4 shows that given the probabilities of the total length of time without insurance (from Table 3), one could expect the following results for uninsured persons in St. Louis City and County;

- 922 of the approximately 40,000 persons uninsured-for-less-than-a-full-year will be uninsured for a total of 1 to 2 months,
- 6,109 of the 40,000 will be uninsured for a total of 3 to 5 months,
- 4,441 of the 40,000 will be uninsured for a total of 6 to 8 months,
- 5,227 of the 40,000 will be uninsured for a total of 9 to 12 months, and,
- 22,786 of the 40,000 will go on to be uninsured for more than one year.

The above information is useful for planning an appropriate “safety net” of services because it gives an idea of the length of time, or duration, uninsured persons are likely to be uninsured. That is, the health care needs of individuals only uninsured 1 to 2 months are likely to be different than the needs of those who have been uninsured for longer periods. Also for purposes of planning an appropriate safety net of services it is useful to have an idea of the number of persons who become uninsured over a “period-of-time” as opposed to just the number who are uninsured at a point-in-time.

For example, during a year's time the number of persons uninsured for 1 to 2 months will "turn-over" approximately 8 times (12 months divided by 1.5—the midpoint of the 1 to 2 month range). The number of persons uninsured 3 to 5 months will turn-over approximately 3 times (12 months divided by 4—the midpoint of the 3 to 5 month range). The number of persons uninsured 6 to 8 months will turn-over approximately 1.7 times (12 months divided by 7). The number of persons uninsured 9 to 12 months will turn-over approximately 1.1 times.

Based on these turn-over rates, a year-long, period-of-time estimate of uninsured persons can be made for St. Louis City and County. This estimate is shown in Table 5. During a year, the population of persons who are likely to be without insurance for a short period of time, 1 to 2 months, turns over 8 times. Therefore the total number of persons in St. Louis City and County who are without health insurance for a period of 1 to 2 months during a 12-month period is approximately 7,400. The number of persons without insurance for 3 to 5 months during a year's time is approximately 18,000.

TABLE 5. PERIOD-OF-TIME ESTIMATE OF UNINSURED PERSONS
IN ST. LOUIS CITY AND COUNTY

NUMBER OF TOTAL MONTHS WITHOUT INSURANCE	NUMBER OF UNINSURED PERSONS (POINT-OF-TIME ESTIMATE)	TURN-OVER RATES RATES PER YEAR	NUMBER OF UNINSURED PERSONS (PERIOD- OF-TIME ESTIMATE)
1-2 MOS	922	8.0	7,377
3-5 MOS	6,109	3.0	18,328
6-8 MOS	4,441	1.7	7,612
9-12 MOS	5,227	1.1	5,974
13+ MOS	111,856	-	111,856
TOTAL	128,555	-	151,147

Summary

The population of uninsured persons in St. Louis City and County is estimated, as of March, 2002 to be approximately 129,000 persons. This is a point-in-time estimate of the number without insurance as of that date. An estimate of the number of persons without insurance at anytime during a 12-month period-of-time in St. Louis City and County is approximately 151,000 persons. Both of these numbers are estimates based on multiple assumptions.

The two primary assumptions underlying these estimates are;

1. the rate at which people lose their insurance, and,
2. the duration they are likely to be without insurance.

The assumptions used in this analysis are based on data gathered from 2001 to 2002. Since health insurance in this country is frequently linked to employment it is likely that swings in the economy impacting employment rates are also very likely to impact factors related to health insurance coverage. In fact recent economic data shows that the St. Louis area has 10,000 fewer persons employed in January, 2003 ^{A9.5} compared to the same time last year.

It can be assumed that in a declining economy, such as exists at the time of this report's publication, the numbers of persons losing their health insurance because of a job loss are increasing. It can also be assumed as jobs become more difficult to obtain, again because of the declining economy, the length of time persons go without health insurance is probably increasing as well. Therefore, because of the current poor economy relative to the period 2001–2002 it is likely that these estimates are *conservative*, that is, they are likely to understate both the number of uninsured persons in St. Louis City and County and the length of time that they are likely to go without insurance.

APPENDIX IO: CULTURAL AND LINGUISTIC BARRIERS FOR NEW AMERICANS

Key Findings:

1. *The immigrant and refugee population in St. Louis City and Saint Louis County has grown rapidly over the past two decades.*
2. *There are a number of physical diseases and conditions that particularly impact new Americans, including dental problems, nutritional deficiencies, untreated and undertreated chronic conditions and diseases, disfigurement from trauma and war violence, and others.*
3. *There are aspects of the safety net health care system that are working well for new Americans, including:*
 - *Newly arrived refugees receive effective support in finding out how to access the health care safety net upon arrival and for future needs.*
 - *Though improvements can be made, resources are becoming more available for non-English speaking citizens at safety net providers.*
 - *Some safety net providers are doing a better job at coordinating health care resources across entities for the new American population.*
4. *However, refugees and immigrants encounter unique barriers to accessing the health care system, including:*
 - *Language barriers.*
 - *Obtaining information on where to go for care and how the American health care system works.*
 - *Fear of deportation or detainment, even for those who are legally in the country, especially given the amount of information asked for by health care providers.*
- *Cultural barriers.*
- *Fear and lack of understanding of “modern” medicine and westernized medicine providers.*
5. *New Americans are disproportionately affected by mental health issues, often due to trauma associated with war or violence in their home countries or difficulty in adjusting to a new language and culture. Some specific mental health issues include:*
 - *Post Traumatic Stress Disorder (PTSD) and other consequences of oppression and trauma experienced by refugees*
 - *Depression*
 - *Anxiety*
 - *Difficulty adjusting to new culture*
 - *Grief*
6. *There are barriers limiting new Americans’ ability to access mental health services, including a lack of providers and difficulty in providing counseling and therapy using interpreter services. Also, there is a lack of standardized trauma and torture assessment performed by providers.*

New Americans¹ often encounter difficulties in accessing the system or understanding health care providers due to differences in language and culture. These barriers are becoming increasingly acute in the region as the immigrant and refugee population in St. Louis City and Saint Louis County has grown rapidly over the past two decades.

The U.S. Census Bureau reported the number of foreign-born residents in St. Louis City and Saint Louis County in 2000 as 62,244, or approximately 5% of the total population. The estimate for St. Louis City alone is 19,542, or nearly 6% of the total population. ^{A10.2}

Although more recent Census data is not available, community groups that work with new American populations believe that the number of foreign-born residents is actually greater than 62,244 due to a significant influx of immigrants and refugees since 2000. ^{A10.1}

The influx of foreign-born residents is reflected in the populations served by the safety net providers. In a survey of Institutional Safety Net Providers in the St. Louis community, 13 of the 33 sites reported that 10% or more of their clients do not have English as their primary language. Of these 13 sites, five

reported seeing over 10% Spanish-speaking residents, four reported seeing over 10% Bosnian/Serbian/Croatian residents, and one reported seeing over 10% Vietnamese residents. ^{A10.3}

It is anticipated that the number of new Americans seen by safety net providers will continue to grow as the refugee and immigrant population increases, and as foreign-born residents access the health care system in greater numbers.

In an effort to gather information on health and access issues facing new Americans, the RHC partnered with the International Institute and the City of St. Louis Mental Health Board of Trustees to hold two focus groups of community organization representatives and health care providers who serve the new American community. The first group discussed general health and access issues. The second group focused on mental health issues and access to mental health services for immigrants and refugees.

Much of the information discussed in this section was gathered through these focus groups and through the RHC survey of Institutional Safety Net Providers in the St. Louis community. ^{A10.3}

FOREIGN-BORN RESIDENTS BY ORIGIN — U.S. CENSUS BUREAU, 2000

	EUROPE	ASIA	AFRICA	NORTH & SOUTH AMERICA	TOTAL	PERCENT OF TOTAL POPULATION
ST. LOUIS CITY	8,543	6,538	1,500	2,961	19,542	5.6
SAINT LOUIS COUNTY	14,042	19,198	2,306	7,156	42,702	4.2
TOTAL	22,585	25,736	3,806	10,117	62,244	4.6

¹ The term “new Americans” generally refers to newly arrived immigrants and refugees, and also includes undocumented and migrant workers. ^{A10.1}

A. *Health Issues for New Americans*

The new American community is impacted by many of the same health problems that affect the general population. However, there are a number of diseases and conditions that are particularly problematic or that generally only exist among refugee and immigrant populations, including:

- Osteoporosis due to inadequate dietary calcium
- Severe dental problems due to lack of preventive care and lack of fluoridated water in native country
- Nutritional deficiencies due either to long-term dietary issues in the country of origin or problems arising during recent periods of civil unrest and/or war
- Goiter due to lack of iodized salt
- Gastrointestinal problems and parasites
- Untreated and undertreated chronic conditions and diseases such as heart disease and diabetes
- Smoking-related diseases
- Hypertension
- Disfigurement from trauma and war violence
- Obstetrical and gynecological problems related to female cutting (sometimes referred to as female circumcision or female genital mutilation), and problems associated with relatively high utilization of abortion as a method of birth control

- Tuberculosis, rubella, congenital rubella syndrome, and other conditions which are preventable with immunizations
- Untreated or undertreated cancer
- Specific mental health issues discussed later in this section

Many of these health issues affect both children and adults, with children's conditions possibly having complications into adulthood. Focus group members indicated that the new American community is less likely to receive treatment for health problems than the general population. In addition, refugees and immigrants are generally diagnosed later and have a higher rate of morbidity for many conditions. According to one focus group member, new Americans suffer from: ^{A10.4}

“Higher morbidity and mortality for just about everything that benefits from early detection and intervention. Higher morbidity because things are caught later and require more aggressive management...Higher mortality in that studies have shown that diagnosis is often made at later stages of diseases.”

Focus group members also noted that some new Americans come from cultures that are not aware of prevention tools to obtain and maintain good health.

B. Current System for New Americans

St. Louis City and County safety net providers have a number of processes in place to help meet the health care needs of refugees and immigrants. The responses of safety net providers to the RHC survey, while self-reported, give a picture of the services targeted to foreign-born residents that are being provided by area safety net providers.

The 33 identified primary care “safety net” sites (those seeing a large percentage of Medicaid and/or uninsured patients) were asked questions regarding services for foreign-born, non-English speaking patients.

Thirty-one of these 33 sites responded to questions regarding this topic. The self-reported responses are as follows:

Culturally Appropriate Services (n=31)

- 28 reported incorporating patient cultural health beliefs and practices.
- 23 reported staff and leadership are representative of the demographic characteristics of the service area.
- 27 reported having ongoing education and training in culturally and linguistically appropriate service delivery.

Language Access Services at No Cost to the Patient (n=31)

- 28 reported having bilingual staff available.
- 30 reported contracting for on-site interpreter services.
- 21 reported having telephone interpreter services available.
- 20 reported using friends and/or family members of the patient.

In addition, 24 of the 31 respondents reported that a verbal notice of the right to receive language assistance services at no cost was provided, and most reported that their staff had attended training sessions on cultures and sensitivities hosted by either the International Institute of Metro St. Louis or by Language Access Metro Project (LAMP).

Survey responses indicate a need for improvement in several areas. For example, it is considered medically inappropriate and contrary to federal policy guidance to use friends and/or family members of the patient for language services. In addition, only seven of the 31 respondents (23%) indicated that a written notice is given to the patient informing him/her of the right to receive language assistance services at no cost. Also, only 15 of the 31 respondents (48%) reported that vital documents (e.g., consent forms, requests for records, Patient’s Bill of Rights, etc.) are available in the most frequently encountered languages, and only 14 (45%) reported that signage in the most frequently encountered languages is utilized in service areas. ^{A10.3}

Assets of the Current System

Participants from the new American focus groups indicated that, in recent years, safety net providers have made improvements in their efforts to meet the needs of refugees and immigrants. The participants also identified a number of aspects of the safety net health care system that are working well for new Americans, including: ^{A10.4}

- Newly arrived refugees receive support in accessing the safety net system
- Improved interface among some components of the safety net system
- Groups advocate for the health care needs of new Americans
- Improved data collection on new Americans

Newly Arrived Refugees Receive Support in Accessing the Safety Net System

Focus group members agreed that newly arrived refugees are often able to access and navigate the primary care safety net system with assistance from resettling organizations. System navigation and comprehension often takes a great deal of time and instruction. Resettlement caseworkers take clients to and from medical services, explain the system processes, and model behaviors to access care.

“Resettling agencies play an important role in giving information for the health care system here. Without them, they get lost...[These organizations] help link them into the system...Many people I talk to express this.” A10.4

Improved Coordination Among Some Components of the Safety Net System

New Americans are experiencing fewer difficulties in moving between different components of the safety net system. One focus group member explained: A10.4

“I see a lot more cooperation among the various hospitals and clinics.”

In particular, focus group members discussed improved interfaces between one hospital system and certain primary care sites. When a refugee or immigrant is seen at a hospital, the system for moving that patient back into the primary care system for follow-up care has improved.

“The interfaces have improved tremendously in terms of the interfaces between say [a primary care clinic and a hospital] for pregnant women, and between neighborhood health centers and [a hospital system]. The interfaces between the primary sites and the tertiary care sites where the patient’s been identified have strengthened entirely in terms of being able to track back to hand back off that sort of stuff. That seems a lot more solid than it has been in recent history. But again, that’s for an identified and engaged patient.” A10.4

In addition, there is improved coordination in providing interpreter services and translated materials for patients once they have entered the system.

Groups Advocate for the Health Care Needs of New Americans

There are a number of groups that advocate for the needs of new Americans and work to help them access health care.

“We’ve grown in advocacy a lot...There are people out in the community who care a lot about what is happening to refugees and immigrants. The [large number of groups] may tell us that they’re an indicator that our system is not working great, but they are an asset. They are a huge asset for St. Louis. All these little groups that have popped up, either social services or health services, are the way to link people into the bigger services... I don’t think we can overlook them as being a really important part of the puzzle.” A10.4

These groups have made strides in raising awareness about the needs of new Americans using the health care system. One focus group participant commented that her organization has experienced an increase in requests for language services, indicating that more providers may be referring patients to the organization.

“We have seen some increase in patients calling us for language services. This is a sign...[providers] know there is a language issue.” A10.4

Improved Data Collection on New Americans

Focus group members also indicated that the safety net providers have improved in their ability to track the number of new Americans accessing the system and the services provided to them. Better accuracy in tracking has helped raise awareness about the need for culturally and linguistically appropriate services.

“I would say the tracking has improved in terms of numbers. Even if it’s not ideal and we won’t be able to meet the CLAS guidelines, I can easily now go to an ethics committee and say we need to look at how we’re doing consent because we’ve got X number of patients for whom the western model of consent is a real [problem] and we need to look at something else. And I have enough numbers and enough data to be able to say, ‘Look, here it is.’” A10.4

C. Barriers to Accessing Health Services for New Americans

While a number of aspects of the safety net health system work well for new Americans, significant barriers still limit the ability of refugees and immigrants to access health services. Many of the barriers discussed in Section V of this report are true for new Americans. Issues such as lack of transportation, lack of insurance, and prioritization of other needs over health care all limit access for new Americans.

There are also a number of barriers that particularly impact refugees and immigrants, including:

- Language barriers, including lack of literacy in native language
- Few linkages into the health care system
- Fear of deportation or detainment for those who are undocumented or out of status
- Cultural barriers

Language Barriers

Providers have made strides in ensuring that interpreter services are available for appointments. But there are a number of areas in which interpretation and translation services could be improved.

Lack of “Gateway” Interpretation

Immigrants and refugees who speak limited English often have difficulty entering and navigating the safety net health care system. While interpreter services are generally available for appointments, interpretation often is not provided at the initial entry point into the health care system. This causes new Americans difficulties in scheduling appointments and gaining information about health services. One focus group member explained: ^{A10.4}

“Even if you have a system that has interpreters buried deep, they may not be at the reception level and the initial referral level. The gatekeeping system is nonlinguistically friendly.”

In addition, many providers do not have interpreters on staff. In cases where system gatekeepers do not know the interpreter requirements or procedures, new Americans must take on the responsibility of securing an interpreter from another organization themselves.

“Many [providers] don’t have interpreters on staff. What we see every day is a patient calling us from the reception desk saying, ‘I need an interpreter and I’m not getting one.’ Then you would get a nurse on the phone who doesn’t even know this patient has been sitting there.” ^{A10.4}

Few Rare Language Interpreters

There is a limited supply of interpreters for immigrants and refugees who speak less common languages. As one focus group member noted: ^{A10.4}

“If you speak a major language—Bosnian, Spanish, even Kurdish, you’re OK. If you speak [a lesser known language] you could be in trouble.”

Lack of Translated Communication Materials

Focus group members also noted that a number of communication materials are not translated for limited English speakers. Signage is often in English only. In addition, bills, forms, referrals, instructions on medication usage, and information about follow-up appointments are often not translated. And some refugees do not have a high level of literacy in their native language, so even translated materials using more complex language may not be useful.

Limited Linkages into the Health Care System

Focus group members noted that newly arrived refugees often receive assistance in accessing health care from resettling agencies. But other new American groups are generally not linked to resettling agencies and are less likely to receive such assistance. One focus group member noted: ^{A10.4}

“Linkages into the system for the secondary migrants [refugees who were resettled in other communities in the U.S. and then moved to St. Louis] and the immigrants are a barrier.”

Without assistance in entering the health care system, new Americans are less likely to access health services.

“I would say that there are two systems in place right now. One system is for the new [refugee] arrivals and that works pretty well. The other system is for the [refugee] non-new arrivals [and immigrants] and it’s broken.” ^{A10.4}

Fear of Deportation or Detainment

Some new Americans do not access the health care system out of a fear of deportation or detainment. This applies to those who are in the U.S. without legal status (undocumented), as well as those who are out of status (i.e., someone who has an expired visitor's visa).

“There are a lot of people who simply don’t access care because of fear of deportation, or fear of imprisonment, or fear of detainment, or fear of just being booting out of the country. American-born people don’t have that same fear”. ^{A10.4}

This is particularly the case for undocumented immigrants: ^{A10.4}

“Particularly for migrant or Hispanic workers, they’re trying not to disclose their [undocumented] status and their perception is at they are at risk in the health care system. There is a basic fear of being found out...so they are unwilling to access parts of the system that would be available to them”.

Focus group members also noted that some legal immigrants fear that they will be deported for accessing benefits such as Medicaid, since their sponsor (usually a relative) had to assure the U.S. government that the immigrant would not access public benefits.

Cultural Barriers

Cultural differences also present barriers to accessing the health care system. These may show up in conceptual differences around such things as locus of control, concepts of self, communication styles, power distances, and levels of societal obligation. Because of these factors, immigrants and refugees do not understand or are uncomfortable with the American approach to health care.

Less Emphasis on Early Detection and Prevention

In some cultures people do not visit the doctor unless they are feeling ill. These cultures put less emphasis on early detection and prevention. As one focus group member explained: ^{A10.4}

“Some immigrants and refugees think, ‘If I am not sick why should I go to the doctor?’ If they basically are well young adults...they have absolutely no understanding or interest in getting registered in any clinic. Then they would come down with all sorts of illnesses and not get seen.”

Discomfort in Discussing Health Issues

New Americans may also be uncomfortable speaking about health issues in the frank manner that is used in western medicine. They sometimes fear that acknowledging an issue or discussing prevention may actually cause health problems. This “jinx” is much more common in other cultures than in the U.S.

“Let’s not mention cancer because it might suddenly materialize...Cultural norms say that you don’t talk about those bad things that could happen.” ^{A10.4}

Lack of Provider Cultural Competency

Focus group members noted that some providers are not aware of or sensitive to the culture or health issues of refugee and immigrant populations. For instance, some immigrants and refugees choose to address health issues with traditional practices. But as one focus group member commented: ^{A10.4}

“Providers may not be able to differentiate which traditional practices are harmful, harmless...or beneficial.”

As a result, providers may discourage patients from incorporating traditional practices into their health regimen.

Focus group members also agreed that providers may be able to better serve new American populations if they had a greater awareness of some of the health issues facing various refugee and immigrant groups.

“Providers don’t know the prevailing health issues of immigrant groups. We don’t know how to figure out what people need and how to ask it. Providers are also aware that new Americans sometimes distrust American providers and the system. Patients will frequently try their own remedies and only as a last resort seek medical care.” A10.4

D. Mental Health Issues and Access to Services

New Americans are disproportionately affected by mental health issues, often due to trauma associated with war or violence in their home countries as well as difficulty in adjusting to a new language and culture. While immigrants and refugees are impacted by all the mental disorders and problems that affect the general population, some problems which particularly impact the new American community include:

- Post Traumatic Stress Disorder (PTSD)
- Depression
- Anxiety
- Difficulty adjusting to new culture
- Grief

There are a number of organizations in the St. Louis community specifically working to meet the mental health needs of immigrants and refugees. Several of these organizations specialize in providing services to those who have experienced war trauma and torture.

Barriers to Accessing Mental Health Services

The barriers that limit new Americans’ ability to access health services in general also affect access to mental health issues. In addition, there are barriers specific to accessing mental health services, including:

- Lack of providers knowledgeable about and skilled in providing services to war survivors.
- Difficulty in providing counseling and therapy with interpreter services.

Lack of Providers

As discussed in Section IV, there is limited availability of mental health services for the general safety net population. According to focus group members, availability of providers to serve the new American community is particularly a problem. An estimated 15,000 of the approximately 60,000 immigrants and refugees living in the city and county have experienced torture; many more have experienced varying degrees of trauma, which would suggest the need for mental health services. Yet fewer than a dozen mental health practitioners specialize in psychotherapy and counseling for such individuals.

“But the truth of it is we don’t have enough mental health care providers in general, and we don’t have enough that are able to provide culturally competent services. We need more providers who...develop an interest and experience in working with these populations.” A10.1

Focus group members also commented that as new populations enter the country, the region needs providers who are able to learn and adapt their practices to treat people in multiple different cultures.

“The populations change, especially with refugees. So the important thing is not just knowing a specific culture, but the willingness and openness to learn about the culture when the next population comes.” A10.4

Difficulty in Providing Counseling and Therapy with Interpreter Services

Therapy and counseling are key components of mental health treatment. Since many therapists and counselors are not fluent in the language of the mental health clients, and clients are not fluent in English, mental health interpreters become a critical part of the mental health delivery system for new Americans.

Focus group members commented that, in some cases, interpreters have not been adequately trained to provide interpreting in such situations. In therapy, the interpreter becomes a part of the therapeutic team and needs specialized training and skills for mental health settings. Less than half a dozen interpreters specialize in this. Comments from several focus group participants emphasize the need for trained interpreters. A10.4

“We need competent people who know how to interpret and who are also knowledgeable about the culture.”

“We also need people who are knowledgeable about mental health. It’s not just being fluent in two languages and being somewhat bicultural in the ability to bridge cultures. It’s also understanding mental health.”

In some cases, interpreters do not interpret all of what a client says, making it difficult to provide treatment.

“We come and see the patient. We ask a simple question, ‘How has your mood been?’ There is a 10-minute conversation between them and then the interpreter says, ‘OK.’ Ten-minute conversation and the answer is ‘OK.’” A10.4

Focus group members also noted that even in situations where interpreters have the necessary skills, the presence of an interpreter makes a client less likely to speak freely in sessions. This is especially true in smaller language groups, where the interpreter may play other roles in the ethnic community, such as community leader or case manager for resettlement.

E. Conclusion

There are aspects of the safety net health care system that are working well for new Americans. However, immigrants and refugees encounter unique linguistic and cultural barriers in accessing the safety net health care system. As the new American population continues to grow rapidly, the St. Louis community must work to correct the barriers this population encounters.

APPENDIX II: MEASUREMENT IN OTHER COMMUNITIES

The Measurement Workgroup of the St. Louis Regional Health Commission examined the methods of tracking and reporting of health status in select communities. The Workgroup researched three areas in each community: the general approach to measurement and reporting, the health status and socioeconomic indicators the communities reported to the public, and the data sources that the communities used for gathering health status information.

The communities researched include:

- Madison, Wisconsin
- Multnomah County – Portland, Oregon
- Santa Clara County – San Jose, California
- Ramsey County – St. Paul, Minnesota
- Chicago, Illinois
- Canada

MADISON, WISCONSIN	
APPROACH	<p>The Madison Department of Public Health uses five criteria to select the health indicators for its periodic community health status report:</p> <ul style="list-style-type: none">• Data is available on a City or County-wide basis• Data can be tracked over time• Data is comparable to health data from other communities• Data is significant and will be sustained over time• Data reflects a focus area <p>Madison compares its health status to the standards or targets set by Healthy People 2010. The comparison indicates areas of favorable health status, areas that need improvement and emerging health trends to track.</p>

MADISON, WISCONSIN (<i>Continued</i>)	
HEALTH STATUS	<ul style="list-style-type: none"> • Access to Care – Insurance Status
INDICATORS	<ul style="list-style-type: none"> • Health Care Resources – Primary Care Physicians to Population Ratio; Dentists to Population Ratio • Leading Causes of Death by Age Group • Selected Preventable Causes of Death – Cancer, Coronary Heart Disease, Stroke, Lung Cancer, COPD, Breast Cancer, Diabetes, Other Injuries, Suicide, Chronic Liver Disease, Motor Vehicle Injuries, AIDS/HIV • Leading Causes of Hospitalization • Selected Chronic Diseases – Hypertension, Asthma, Diabetes • Children with Selected Chronic Disease (Asthma, Diabetes, Dental Disease) • Behavioral Risk Factors – Sedentary Lifestyle, Overweight, Smoking, Smoked while Pregnant, Chronic Drinking, Binge Drinking, Drinking and Driving, Always Use Seat Belts • Youth Behavioral Risk Factors (Vigorous Exercise, Regular Smoking, Binge Drinking, Drinking and Driving, Always Use Seat Belts) • Adult Preventive Services – Blood Pressure Screening during past 1 year • Mammograms Over 50 years during past 1 year, Medicare Flu Immunizations • Child Preventive Services (under 3 years) – Lead Screened, Immunizations

	<ul style="list-style-type: none"> • Maternal and Infant Health (by race and ethnicity) – First Trimester Prenatal Care, Low Birth Weight, Very Low Birth Weight, Infant Mortality Rate • Infectious Diseases – STDs (Gonorrhea, Chlamydia, Herpes); Gastrointestinal Illnesses (Campylobacter, Salmonella, Hepatitis A, Shigella); Tuberculosis Case Reports • Environmental Health – Air Quality, Toxic Chemicals, Water Quality, Lead Exposure
DATA SOURCES	<ul style="list-style-type: none"> • U.S. Census Bureau • U.S. Health Resources and Services Administration • Bureau of Health Information, DHFS • Bureau of Health Information - Wisconsin Behavioral Risk Factor Survey, Family Health Survey, Birth Certificates • Wisconsin Department of Health and Family Services – Office of Health Information, Bureau of Health Information, Bureau of Health Care Financing • Health Care Financing Administration • Madison Department of Public Health – National Immunization Survey • Chronic Illness Data, Madison Metropolitan School District • Dane County Youth Survey • Wisconsin Youth Risk Behavior Survey, Wisconsin Department of Public Instruction

MULTNOMAH COUNTY – PORTLAND, OREGON	
APPROACH	<p>The Health of Multnomah County 2000 report presents the County's performance in comparison to:</p> <ul style="list-style-type: none"> • Healthy People 2010 Health Indicators • Peer counties selected by the Health Resources and Services Administration <p>Multnomah County also compares its performance to the state of Oregon and the nation.</p>
HEALTH STATUS INDICATORS	<p>Healthy People 2010 Goals</p> <ul style="list-style-type: none"> • Physical Activity – Adolescent physical activity, Adult physical activity • Overweight – Child/Adolescent Obesity; Adult Obesity • Tobacco Use – 11th grade tobacco use; Adult smoking • Substance Abuse – Adolescent alcohol use in past 30 days, Adult Binge Drinking • Responsible Sexual Behavior – Adolescent abstinence or condom use; Sexually active person condom use • Injury and Violence – Deaths due to motor vehicle crashes; homicides • Environmental Quality – Persons exposed to air that does not meet US EPA standards for ozone • Immunization – Non-institutionalized adults 65+ vaccinated annually • Access to Health Care – Persons with health insurance/specific source of ongoing care; 1st trimester prenatal care • Peer County and U.S. Comparison – Measures of Births and Deaths
	<ul style="list-style-type: none"> • Birth Measures – Low Birth Weight; Premature Births; Teen Births; No Care in First Trimester • Infant Mortality – White, African American and total • Death Measures – Breast Cancer, Colon Cancer, Heart Disease, Homicide, Lung Cancer, Motor Vehicle Injury, Stroke, Suicide, Unintentional Injury
DATA SOURCES	<ul style="list-style-type: none"> • Oregon Youth Risk Behavior Survey • National Risk Youth Behavior Survey • Oregon Behavioral Risk Factor Surveillance System • National Behavioral Risk Factor Surveillance System • 1988-1994 Center for Disease Control and Prevention, National Center for Health Statistics, Division of Health Examination Statistics • 1998 National Household Survey on Drug Abuse • Oregon Health Division Vital Statistics • 1997 National Vital Statistics Report Vol. 27, 1999 • 1998 Oregon Population Survey • 1997 Monthly Vital Statistics Report, Vol 47 • Oregon State Department of Environmental Quality

SANTA CLARA COUNTY – SAN JOSE, CALIFORNIA

APPROACH	<p>Santa Clara County has released periodic reports comparing its health outcomes to the goals set forth in the Healthy People 2000 Initiative.</p> <p>The 1997 Health Status Report is based, to a large degree, on data from the Santa Clara County (SCC) Behavioral Risk Factor Survey. The survey was conducted by phone in English and Spanish.</p> <p>SCC also released reports of key indicators of well-being for seniors and children, based on survey data and data maintained within the County health department.</p>
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HEALTH STATUS INDICATORS	<ul style="list-style-type: none"> • Access to Care – Coverage by insurance type • Mental Health – estimated service need by race and ethnicity; usage rates • Tobacco use by race, ethnicity and gender; intent to quit; amount used; comparison of drinking practices of smokers and non-smokers; rates of COPD and lung cancer • Alcohol and drug use – binge drinking rates; chronic alcohol abuse rates; cirrhosis mortality rates; drug-related mortality • Women's Health – utilization of cancer screening procedures – clinical breast exam and mammography; breast cancer mortality; Pap screening exam; mortality due to cervical cancer; STDs in females and among reproductive-age women; pelvic inflammatory disease • Maternal and Infant Health – infant mortality; adolescent births; conditions and outcomes in births by mother's age and race/ethnicity; very low birth-weight babies by race and ethnicity • Heart Disease and stroke • Ambulatory Care Sensitive Conditions (ACS) • HIV and AIDS • Sexually Transmitted Disease • Tuberculosis, Immunization and Vaccine-Preventable Diseases
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SANTA CLARA COUNTY – SAN JOSE, CALIFORNIA (*Continued*)

DATA SOURCES	<ul style="list-style-type: none"> • Santa Clara County Behavioral Risk Factor Survey • Youth Risk Behavioral Survey • Vital Statistics • Hospitalization Discharge Database • Census Data • California Department of Finance, Population Projection, 1985-1996 • Department of Mental Health, Services Research Division • AIDS Registry, SCC Public Health Department • Confidential Morbidity Reports, Disease Control and Prevention, Public Health Department • HIV Medical Care Survey, Disease Control and Prevention, Public Health Department • Immunization Registry, Planning and Evaluation Division, Public Health Department • Tuberculosis Information Management System, Tuberculosis Prevention and Control, Public Health Department • Senior Survey, Council on Aging, Silicon Valley & Data Management and Statistics, Silicon Valley • California Safe Schools Assessment Data • California Statewide Integrated Traffic Reporting System • California Alcohol and Drug Data System • National Immunization Survey • Hospitalization Injury Surveillance System • Perinatal Substance Abuse Exposure Study – University of California, Berkeley
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- Santa Clara County Office of Education Vital Signs report
- Santa Clara County Probation Department
- Santa Clara County Social Services Agency

RAMSEY COUNTY – ST. PAUL, MN

APPROACH	<p>The Saint Paul – Ramsey County Department of Public Health puts out a series of fact sheets to inform citizens, health care providers and policy makers of the community's health status. The fact sheets are based on priorities developed in the County's Community Health Services Assessment and Plan for 2000-2003, including Health Disparities, Immunizations, and Tuberculosis.</p> <p>Ramsey County receives state funds to eliminate health disparities in the following areas: HIV/AIDS and STDs; immunizations; teen pregnancy; infant mortality; violence and unintentional injuries; diabetes; breast and cervical cancer; and cardiovascular disease</p> <p>The County reports data on those areas of health disparity from the state and Ramsey County.</p>
HEALTH STATUS	<ul style="list-style-type: none"> • HIV/AIDS and Sexually Transmitted Infections
INDICATORS	<ul style="list-style-type: none"> • Immunization Rates - % Up-to-Date at age 24 months by school district for DPT, Polio and MMR • Teen pregnancy • Infant mortality • Diabetes • Breast and cervical cancer • Cardiovascular disease

DATA SOURCES

- Minnesota Department of Health
- Retrospective Survey – Minnesota Department of Health
- St. Paul – Ramsey County Public Health
- U.S. Census
- Center for Health Statistics – Minnesota Department of Health
- Centers for Disease Control and Prevention
- American Thoracic Society

CHICAGO, ILLINOIS

APPROACH	<p>Data from multiple sources are gathered and organized into five general categories to provide an overall understanding of the current health conditions in the city.</p> <ul style="list-style-type: none"> • Demographics and Socioeconomic indicators • Health status indicators • Health Perceptions and Health-Related Behaviors • Social and Environmental Factors • Health Delivery and Access to Care
HEALTH STATUS INDICATORS	<ul style="list-style-type: none"> • Mortality – Leading Causes of Death (rates of heart disease, cancer, stroke, pneumonia/ influenza, pulmonary disease, homicide, diabetes for Black, White and Hispanic); Years of Potential Life Lost • Maternal and Child Health Status – Births to Teens; Infant Mortality; Prenatal Care; Maternal Substance Abuse (smoking and other); Leading Causes of Mortality for Children • Infectious Disease Indicators – STDs (Syphilis, Gonorrhea, Chlamydia); HIV and AIDS; Tuberculosis; Coincident HIV/TB; Vaccine Preventable Diseases (Measles, Mumps, Rubella, Pertussis) • Selected Chronic Disease Indicators – Heart Disease; Cerebrovascular Disease/Stroke; Chronic Liver Disease and Cirrhosis; Diabetes • Selected Cancers – Lung Cancer; Colorectal Cancer; Breast Cancer; Cervical Cancer; Prostate Cancer

- Perceptions of Health
- Substance Abuse – Smoking; Alcohol Use; Other Drug Use
- Violence Related Behaviors – Physical Fighting; Weapon Carrying; Suicide
- Exercise and Nutrition – Physical Fitness; Weight Control; Nutrition/Diet
- Preventive Health Screening – Blood pressure and Cholesterol Screening; Colorectal Screening; Mammography
- Sexual Activity and Related Screening – Sexual Behaviors; HIV Testing; STD Testing; Childhood Lead Poisoning; Housing Stock; Environmental Pollution; Exposure to Smoke; Neighborhood Safety and Drugs

CHICAGO, ILLINOIS (*Continued*)

DATA SOURCES	<p>The Chicago Department of Public Health (CDPH) receives reports and maintains data on a variety of health conditions for the city, vital records birth and death files, and surveillance data on several reportable diseases. These data served as the baseline of the Chicago Health Profile and were supplemented with information from several additional sources. Data sources include:</p> <ul style="list-style-type: none"> • Vital records (to determine leading causes of death and to measure maternal and child health indicators) • Surveillance systems maintained by the City, State, or private entities (including AIDS Reporting System operated by the CDPH Epidemiology office; STD Surveillance; Tuberculosis Control; Lead Poisoning Prevention – tracked by the Systematic Tracking of Elevated Lead Levels and Remediation (STELLAR) data system; Community Health Information System (CHIS) – provides information resulting from an ongoing collaboration between the Illinois Hospital and Health Systems Association (IHHA) and the Illinois Department of Public Health)
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- Metropolitan Chicago Information Center (MCIC) (Each year, MCIC conducts a large survey of the greater Chicago metropolitan area, collecting information on a broad range of policy issues, including health status and service delivery. Information is presented on the city as a whole, by race/ethnicity, and by household income.)
- Behavioral Risk Factor Surveillance System (BRFSS) (Annual CDC Survey asking adults about their health behaviors)
- Youth Risk Behavior Surveillance System (CDC survey of high school students in 17 sites around the country – including Chicago)
- Chicago Police Department Violent Crimes Dataset

CANADA	
Research on health status measurement and reporting in Canada was limited to a report of health status indicators.	
HEALTH STATUS	<ul style="list-style-type: none"> • Age – percent of population over 65
INDICATORS	<ul style="list-style-type: none"> • Poverty – percentage of population a) below federal poverty limit, b) meeting guidelines for food stamps, c) eligible for Medicaid • Violence: Per 100,000 population a) simple assaults, b) domestic violence, c) burglaries • Health care Resources: - Number of licensed MDs, dentists and RNs per 1000 population • Infectious morbidity - Enteric cases per 100,000 per children under age 6 • Cancer Morbidity – Smoking-related cancer (age-adjusted) per 100,000 population • Adverse birth outcomes – a) white and non-white infant deaths per 1000 live births, and b) white and non-white neonatal deaths per 1000 live births



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