

Health Care Planning  
for  
Tarrant County  
and the Role of  
JPS Health Network



**Report of the  
Citizens Blue Ribbon Committee**

February 27, 2018



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Note: Passages were taken verbatim from the appended Health Management Associates, and Cumming/Percival 2017 reports with permission.

## Executive Summary

In light of projections for unprecedented population growth in Tarrant County in the coming decades and after many years of deliberations related to the JPS Health Network (JPS) facilities planning, the Tarrant County Commissioners Court established a Citizens Blue Ribbon Committee (the “Committee”) charged with evaluating the county’s current and future health care needs, the current delivery system and the role of the JPS Health Network. Appointed in December 2016, the Committee is comprised of 12 voting members and four non-voting liaisons -- two County Commissioners and two members of the JPS Board of Managers. Provided with two recent Court-commissioned consultant reports focused on long-range planning for Tarrant County and JPS Health Network, the Committee deliberated between February and September 2017 to produce this report of overall findings and recommendations, and will present the report to the Court and the JPS Board of Managers.

The Committee studied national trends in health care and their relevance to Tarrant County; analyzed the health status of the county population, demographics and population projections; and assessed the current health care delivery system. Committee members toured JPS facilities and reviewed an independent consultant’s assessment of the conditions of these facilities. The Committee came to recognize that the rapid growth, aging and increasing diversity of the population will have enormous implications for health care capacity, facilities, workforce, service array and approaches used in health care, public health and social services offered in Tarrant County.

The Committee examined themes from a recent consultant-led, stakeholder engagement process which included 130 individual interviews as well as focus groups and community forums. This process explored stakeholder perception of community needs and opportunities to better meet the health and health care needs of low-income uninsured and under-insured county residents now and in the future.

The analysis and community voices made it clear to the Committee that a “Call to Action” is in order. While the Committee was not charged with creating a financial model to support its recommendations, the proposals are based on a compelling need and require a shift in the way we think about and approach population health.

**The key findings and recommendations are outlined in further detail, and in no specific order or priority assigned, in the final section of this report; below are the highlights:**

### Key Findings

- It is critical for health systems to continue to shift the emphasis from hospital care – for medical and behavioral health issues – to ambulatory care to decrease the need for preventable and costly inpatient care. To do this, JPS must invest in rapid development of community health centers with integrated behavioral health, and to the extent possible, oral health care services in priority areas throughout the county.

- In light of the community need for behavioral health services, it is imperative JPS lead a countywide planning effort related to a behavioral health system of care to ensure robust outpatient behavioral health services, substance abuse services, jail diversion programming, and access to strategically placed psychiatric emergency services.
- Given the dramatic projected increases in population and the aging of the population in the county, the need for inpatient care will increase substantially in the coming decades, despite all efforts to expand ambulatory care services.
- The condition of the JPS main hospital tower and behavioral health facility is such that independent consultants do not recommended these buildings for future inpatient care. The size of these existing facilities do not meet the current demand and will certainly not be able to meet expected increases in future demand. There are chronic bottlenecks in the JPS emergency department as patients wait for inpatient medical beds to become available.
- Due to space constraints in the current psychiatric facility, JPS contracts with private behavioral health hospitals for patient overflow. Many of these community hospitals are not equipped to care for the most complex patients with serious mental illness that seek care at JPS.
- Tarrant County has health profession shortages and currently only meets about 75 percent of the expected primary care need for the county population as a whole. It is critical that we ensure an adequate health care workforce now and for the future.
- A strong integrated delivery system can be accomplished by partnering with other entities that serve uninsured and underinsured populations to ensure optimal management of their health conditions. This requires technology and an investment in human resources to identify high risk patients and provide extra support to help them manage their conditions; identify patients due for preventive health care and reach out to ensure they receive it; as well as facilitate communication between health care entities that care for this patient population.
- While enhanced health care facilities and an adequate workforce are critical, we recognize that the solution to improving the health of Tarrant County's population is not just about health care. In fact, the majority of what causes poor health outcomes in the U.S. population has little to do with health care. It has to do with health behaviors like tobacco use, diet and exercise; socioeconomic factors such as education and employment; and the physical environment like clean air and water.

### **Key Recommendations**

- Four new community health centers should be built in the next five to 10 years with a plan for continued health center development over the next 20 years. (pg. 28-36)
- A new Ambulatory Surgery Center (ASC) is needed on campus to alleviate capacity constraints and move lower acuity surgical cases to a more appropriate, lower cost setting. In addition, the Committee recognizes the JPS Center for Cancer Care would be more ideally located in a patient-friendly, dedicated new facility on or near campus. (pg. 36)

- A new JPS main hospital tower with supporting ancillary departments should be constructed. This recommendation is based on a facilities consultant evaluation that indicates the existing JPS main hospital facilities are not recommended for inpatient acute medical services because it does not meet industry standards. The health system consultant report focusing on population growth projections and need indicated the extent to which the bed size of the hospital tower falls short of the current and 20-year predicted need. A majority vote targeted approximately 676 beds for the hospital. (pg.38-39)
- A new JPS behavioral health facility should be built. The facilities consultant's evaluation concluded that the existing JPS facilities are not recommended for inpatient behavioral health care services because the total psychiatric inpatient bed count falls far short of both the current and 20-year predicted need. This inpatient capacity is critical as JPS is best positioned to serve the most complex behavioral health patients in the community. A majority vote targeted approximately 298 beds for the behavioral health facility. (pg. 40-41)
- JPS should take a leadership role in a countywide planning effort to build and retain a future health care workforce to address the growing needs, as well as build particular service lines at JPS where we anticipate dramatic increases in demand such as geriatrics. (pg. 45)
- A strong integrated health care delivery system should be created for low-income uninsured and underinsured patients to reduce preventable, duplicative and costly health care utilization and improve quality of life. (pg. 45)
- To approach the county's overall health in a holistic manner, and to decrease the overall costs of health care, a series of cross-sector, countywide strategies should be developed, focused on disease prevention and the social determinants of health. (pg. 45)

Although many decisions related to these recommendations must still be made, particular needs are great enough that the Committee was able to come to unanimous agreement on the report. Tarrant County is in the enviable position of planning for growth and rapid change. We have the opportunity now to make Tarrant County a healthier place for the next generation to live and a place where we can take even greater pride in our collective ability to meet the needs of our population.

## Introduction

JPS is committed to serving the needs of Tarrant County and meeting the significant responsibilities of a health system that provides access to quality health care and leadership in the improvement of the overall health of the population.

In light of the rapidly growing population, the Tarrant County Commissioners Court determined the need to conduct a market analysis with a focus on demographic projections and health care capacity in the county, a stakeholder engagement process and an analysis of JPS Health Network's role in meeting the current and future healthcare needs of the county. The Court engaged a national consulting firm to conduct these tasks and make recommendations on overall strategies to meet the needs of the growing county population including health care facilities. In addition, a facility planning consultant was engaged to evaluate prior facilities reports, conduct an assessment of the JPS main campus and develop an independent evaluation of JPS's ambulatory network plan.

In December 2016, the Court established the Citizens Blue Ribbon Committee and charged the Committee with using the independent consultant reports and other information to evaluate the county's current and future health care needs and delivery system, put forth strategies to improve the health status of residents and make a recommendation as to whether to move forward with the JPS Strategic Facilities Utilization Plan and Capital Construction Project, including revisions to those plans based on community health needs. This report is an outgrowth of the work of the Committee and presents an overwhelming consensus of recommendations based on the needs of county residents.

## Background

### JPS Health Network

The JPS Health Network (JPS) has served Tarrant County as its public hospital since 1939. Since that time, JPS has experienced growth and changes in the population served, demands for its services, as well as technological and medical innovations, all in an environment of financial and operational constraints. JPS serves the community from its main campus and with over forty (40) unique locations throughout Tarrant County (Appendix III). The following are some key contributions of JPS:

- 14 community health centers and 20 school-based health centers, serving 13 school districts;
- A main hospital with Tarrant County's only Level 1 Trauma Center;
- A behavioral health facility with the only psychiatric emergency center in Tarrant County;
- Over 1 million patient encounters per year (including 20,000 patients with behavioral health diagnoses);
- 140,000 Emergency Department visits per year;
- 60,000 Urgent Care visit per year;
- 4,400 babies delivered annually;
- 60,000 correctional health encounters per year;
- 6,500 team members within JPS Health Network making it the 8<sup>th</sup> largest employer in the county;
- Sponsorship of 18 residency and fellowship programs for 200 graduate students, including the nation's largest hospital-based family medicine residency program;
- Undergraduate programs comprised of affiliation agreements with over 50 institutions for more than 1,000 health profession students.

The JPS mission is to *Transform Healthcare for the Communities We Serve*. The JPS Vision is to be a regional and national leader in improving the patient and family experience; improving the quality and outcomes of population health; and improving access to care.

As a public hospital, JPS is uniquely equipped to provide a critical role in serving the Tarrant County community at large, including caring for the underserved, trauma patients, behavioral health patients, correctional health patients and the training of future health care providers. As JPS continues to improve health care quality, operational performance and financial stewardship, it uses data and community needs to determine how and when it should develop or change programs and service lines to meet the needs of the community.

The JPS Board of Managers has worked closely with staff to develop a strategic plan, organizational pillars, a strategic facilities utilization plan and long-term destination metric goals, all of which consider strategic service lines, community demographic trends and the evolution of provider reimbursement in the changing health care industry.

## Background Analysis and Reports

In 2009, JPS issued a Request for Proposals for a Strategic Facilities Utilization Plan (the “Plan”), and in 2010, JPS retained BOKA Powell to develop the Plan. This consultant conducted more than 140 interviews with stakeholders to validate needs and conceptual recommendations for the proposed facilities. In 2011, BOKA Powell presented the Plan to the JPS Board of Managers (BOM). Over the years, the BOM approved and completed several of the projects consistent with the Plan that did not require debt financing.

In 2013, the JPS BOM requested validation of the 2010 conceptual recommendations, including proposed project prioritization and high-level cost estimates. In 2014, the JPS BOM formed a Planning Steering Committee comprised of Board Members, staff and physicians to evaluate, challenge and once again validate the Plan. JPS engaged Broaddus & Associates and Blue Cottage Consulting to conduct functional and space programming and prepare complete and detailed cost estimates of the proposed construction projects.

In 2015, the JPS BOM directed JPS staff to proceed with financing strategies for the purpose of constructing new facilities and enhancing and upgrading current facilities to meet the mission of the hospital district in providing quality health care for the residents of Tarrant County. JPS staff formally briefed the Tarrant County Commissioners Court on the plans and need for financing. As a result, the Commissioners Court held four town hall meetings throughout the county to gather public feedback.

Based on the public’s feedback, in 2016, the Tarrant County Commissioners Court adopted a resolution to undergo a thorough and transparent process to engage the community in the conversation about Tarrant County’s current and future health care needs and what role JPS will play in addressing these needs. In addition, the Commissioners Court voted to engage nationally recognized consulting firms to analyze future health care needs in Tarrant County and appointed the Citizens Blue Ribbon Committee to review the reports and make recommendations to the Court.

Tarrant County executed a contract in August 2016 with Health Management Associates (HMA) to develop “The Long-Range Planning and Analysis Related to the JPS Health Network.” Experts in public hospital strategic planning, HMA evaluated the priorities for Tarrant County and JPS in the context of demographic projections and the health and health care needs of the population now and in the coming decades. The report addresses JPS’s delivery system capacity and needs; medical education and workforce issues; financing; and collaboration. HMA conducted a stakeholder engagement process including over 130 interviews, 4 community forums, and 2 focus groups to ensure that community voices informed the recommendations.

In early 2017, to compliment this work, Tarrant County executed a contract with Cumming to work concurrently with HMA to provide a “Long Range Planning and Facilities Analysis Related to the JPS Health Network.” Experts in facility planning; Cumming evaluated prior facilities reports; conducted an architectural facilities assessment of the hospital/main campus; assessed the mechanical and electrical facilities of the hospital/main campus; provided a replace-in-place versus new facility cost analysis; evaluated medical and information technology equipment evaluation; and studied the ambulatory network.

The reports from HMA and Cumming informed the recommendations of the Citizens Blue Ribbon Committee and are appended to this report.



## Citizens Blue Ribbon Committee

The Tarrant County Commissioners Court established the Citizens Blue Ribbon Committee in March 2016 and charged the Committee with evaluating the county's current and future health care needs and delivery systems and the role of JPS. More specifically, in collaboration with the Committee's liaisons from the Tarrant County Commissioners Court and the JPS Board of Managers (BOM), County and JPS Health Network staff, the Committee was charged to:

- Assess the current and projected community health needs of Tarrant County and recommend strategies to improve the health status of residents in an effective, efficient and measurable model, involving diverse community and health care services stakeholders;
- Review documentation on current and future demographic projections;
- Assess the current and projected health care delivery systems' capacity to meet current and projected population demand and recommend collaborative partnerships and collaborations between JPS, non-governmental health care providers, community agencies and civic organizations;
- Come to a conclusion about the need to fund and implement the JPS Strategic Facilities Utilization Plan and Capital Construction Project, including recommended revisions to those plans based upon community health needs in Tarrant County.

Listed below, the Commissioners Court appointed 12 voting members and four non-voting liaisons to the Committee, including two County Commissioners and two members of the JPS BOM. Each Court Commissioner appointed two members each, and the co-chairs were appointed by the Court as a whole.

Citizens Blue Ribbon Committee Membership	
Co-Chairs	
<b>1-Randy Moresi</b> Former CEO, North Hills Hospital	<b>2-Lorraine C. Miller</b> President, LLM Ventures, LLC
<b>Judge's Office:</b>	<b>3-Stuart Flynn, MD</b> Dean, UNTHSC & TCU Fort Worth MD School
	<b>4-Dee J. Kelly Jr.</b> Kelly Hart & Hallman LLP, Partner
<b>Precinct 1</b>	<b>5-Elizabeth Treviño, PhD</b> Adjunct Professor, University of North Texas Health Science Center (Formerly, Chief Executive Officer, North Texas Area Community Health Center, Inc.)
	<b>6-Tiesa R. Leggett</b> Project Coordinator, Blue Zones Project
<b>Precinct 2</b>	<b>7-Pastor Michael Evans, PhD.</b> President, Board of Trustees, Mansfield Independent School District
	<b>8-Howard Patterson Hezmall, M.D.</b> Partner, Blue Moon Strategies, LLC
<b>Precinct 3</b>	<b>9-Mark R. Berry</b> CEO and Chairman, Teage Nall and Perkins, Inc.
	<b>10-Scott W. Fisher</b> Senior Pastor, Metroplex Chapel
<b>Precinct 4</b>	<b>11-Sтивен L. Simmons, D.O.</b> Pain and Sports Medicine Specialist, Southwest Sports and Spine
	<b>12-Sarah Hollenstein</b> Owner, Norco Trucking, Inc.
<b>JPS Board of Managers Liaisons</b>	<b>Dr. Roy Lowry, D.O.</b>
	<b>Trent Petty</b>
<b>Tarrant County Commissioners Court Liaisons</b>	<b>Commissioner Roy Charles Brooks</b>
	<b>Commissioner Andy Nguyen</b>

The Committee meetings were open to the public and were digitally recorded. The recordings were posted to the Tarrant County [website](#). Meetings were held on February 14, 2017; March 7, 2017; April 18, 2017; May 9, 2017; May 23, 2017; June 6, 2017; July 11, 2017; and August 22, 2017. Committee members participated in an educational process, beginning with tours of JPS facilities on March 24 and 28 and then a series of presentations on each of the main chapters of the HMA and Cumming consultant reports.

This was followed by Committee deliberations, including a process to identify and answer outstanding questions, and a facilitated voting process to adopt final recommendations on countywide health planning and implementation efforts. It also set priorities and sizing of JPS facility projects. The voting process included a round robin of public voting on each of the facility recommendations, as well as the countywide planning and implementation recommendations. Each member was asked to cast a vote by presenting a number (one through five) to represent the extent to which they support or did not support the recommendation. Each member was provided an opportunity to discuss the reason for their vote before moving on to the next member. Staff to the Committee documented and tallied the votes in writing visible to the Committee.

The Committee will present this report to the Commissioners Court and JPS BOM for consideration and action.

## National Trends in Health Care and Relevance to Tarrant County

Based on national trends, the Committee acknowledges five domains of change that will likely impact JPS's policies and programs, as well as Tarrant and surrounding counties in the coming decades.

**Culture of Health.** In 2014, the Robert Wood Johnson Foundation launched a "Culture of Health" vision and action plan that provides a useful framework for Tarrant County to assess the impact of new approaches to achieving community health. After decades of focus on the health care system, health care leaders have come to recognize that complex social factors have a powerful influence on an individual's well-being. To truly improve health, all sectors must engage to improve population health, well-being and equity. Community-based and collaborative efforts that adopt a broader definition of community health, including making health a shared value; fostering cross sector collaboration to improve well-being; creating healthier, more equitable communities; and strengthening integration of health services and systems.

A theme that emerged from focus groups conducted by HMA was that, to really improve the health status of the county population, a community should emphasize prevention and address social determinants of health. This emphasis is informed by foundational research undertaken by McGinnis and Foege, which identified and quantified the major external (non-genetic) factors that contribute to death in the United States. The authors found that the most prominent contributors to mortality in 1990 were tobacco (estimated 400,000 deaths); diet and activity patterns (300,000); alcohol (100,000); microbial agents (90,000); toxic agents (60,000); firearms (35,000); sexual behavior (30,000); motor vehicles (25,000); and illicit use of drugs (20,000). While these are approximations, the authors concluded that approximately half of all deaths that occurred in 1990 in the U.S. could be attributed to the factors identified above, the greatest being tobacco use, poor diet and a lack of physical activity. These factors impose a considerable public health burden, and can help to shape public policy and programming priorities.<sup>1</sup> This study was replicated by Mokdad et al, in 2014, and published in the Journal of the American Medical Association.<sup>2</sup>

Building on this research, the Wisconsin Public Health and Health Policy Institute concluded that actual health care drives only about 10 percent of health outcomes. Health behaviors are believed to comprise approximately 40 percent of the determinants of outcomes with issues of tobacco use, diet, and exercise as key behaviors consistent with the findings above. Socioeconomic factors determine another 40 percent of outcomes, and are comprised of important "social determinants" such as education, employment, transportation infrastructure among others. Finally, the physical environment contributes the remaining 10 percent and includes such important factors as air and water quality and housing with lead risk.<sup>3</sup>

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<sup>1</sup> J. Michael McGinnis and William H. Foege. "Actual Causes of Death in the United States." Journal of the American Medical Association 1993;270 (18):2207-12.

<sup>2</sup> Ali H. Mokdad et al. "Actual Causes of Death in the United States, 2000. JAMA 2004; 291 (24):1238-45.

<sup>3</sup> Paul Peppard et. al. "An initial attempt at ranking population health outcomes and determinants." Wisconsin Medical Journal (2004), Volume 103, No. 3, pp. 52-56.

While the emphasis on prevention is aligned with the mission of a local health department, leaders in health care, business, government, organizations and individuals play a significant role. A strengthening of the alliance between JPS and Tarrant County Public Health to engage others in countywide prevention planning and implementation efforts is consistent with a Culture of Health.

Social determinants of health also require cross-sector engagement. Tarrant County Public Health and JPS, again, should both be active participants -- through policy and other efforts -- to help create healthy social and physical environments. Priorities might include education, employment, access to healthy food, safe neighborhoods, stable housing and access to health care services, including transportation.

**Health System Transformation and Integration.** Healthcare 3.0 is a conceptual model developed by Neal Halfon, MD, MPH, Director of the UCLA Center for Healthier Children, Family and Communities. It provides a vision of universal access to affordable, quality health care for all and requires a transformation of the current system. The transformation involves a shift in the traditional *Acute Care System* of episodic, non-integrated care (Healthcare 1.0), to a more *Coordinated Seamless Healthcare System* that is person-centered; focused on prevention and care management; and features integrated health information technology and accountable provider networks (Healthcare 2.0). The model aspires to move the transformation even further to a *Community Integrated Healthcare System* which is population health focused; healthy-population centered; and includes telehealth/e-health with integrated healthcare networks linked to community resources capable of addressing psycho-social and economic needs (Healthcare 3.0).

Though provider systems within Tarrant County are embracing parts of the Healthcare 2.0 model (including JPS), the efforts tend to be payer-prompted and are not seamless between health systems. Certainly for the population for which JPS has the clearest mission (vulnerable populations including those who are uninsured or underinsured), Tarrant County health care as a whole is still very much episodic and non-integrated. Many individuals in these vulnerable populations do not have primary care relationships, visit the emergency room for low acuity issues and are not able to manage chronic diseases. Care delivered in this manner results in negative consequences including lack of attention to preventive care, incurring avoidable health care costs, overcrowding Tarrant County emergency rooms and increasing the burden on the police, courts and jails. In fact, the recommendations in this report related to sizing facilities for future need assume that health care delivery will be transformed and integrated over time.

These very real avoidable costs and impacts in a defined population (<250 percent FPL) create an opportunity for many of the health systems in the county to come together and define a rational, planned approach to delivering transformed care that shares responsibility among various parties: the non-profit health systems, JPS (the public system), the county, and beneficiaries of the transformed care.

The Committee's recommendations help to support Tarrant County in a transformation to a Healthcare 3.0 model.

**Whole Person Care.** The Blue Shield of California Foundation published a 2014 report, "National Approaches to Whole-Person Care in the Safety Net" that advocates for improved integration of care, including social determinants of health – described earlier as often the more significant factors in health status. Whole-person care requires the coordination of physical health, behavioral health and social services in a patient-centered manner with the goals of improved health outcomes and effective use of resources.

Co-location of services – such as primary care, behavioral and oral health care – in a single community health center, with staff and electronic systems that serve to coordinate care, begins to describe a health system that supports whole person care. Another important feature of whole-person care is person-centered care management for high-risk patients tailored to help manage different conditions. Care managers, often embedded in a community health center, work with patients to address a multitude of needs that relate to their health. The care manager integrates medical, behavioral and oral health, as well as functional, social and other services patients receive to create a system of care around that individual.

The process includes a person-centered assessment, care planning, and care delivery processes to identify and respond to what is important to each individual patient, considering their strengths, goals, and culture, so each patient understands why, how and when to access appropriate care, and feels comfortable and empowered to do so. The whole-person care approach views the patient as a whole individual and not just a disease or condition. For example, for a patient with diabetes, this condition is not the sole focus of care management. The patient's diabetes, poorly treated depression, lack of transportation for medical appointments and inability to buy food will all be addressed by a single, designated care manager, often supported by an unlicensed care coordinator, and in collaboration with the patient's care team.

To improve management of low-income patients, JPS and other systems should continue down the path of service integration and whole-person care management.

**Value-Based Payment.** While individual providers and health systems are clearly seeking high quality care and want to do so efficiently, historical payment systems do not incentivize quality. Many payments are still being made simply on the service that is provided, without any regard to the impact of the service. If a CT scan is completed for a patient that would be deemed dangerous and without benefit by an objective outside entity (such as the Choosing Wisely recommendations, which have been adopted by a large number of professional groups), the CT scan, in general, would be paid for anyway. The historical payment system has grossly overpaid late-stage, high-intensity medical interventions over low-cost, but time-consuming preventive care.

The current trend is to shift payments from traditional volume-based payment, as exemplified by fee-for-service payments, to payments that are more closely aligned with value, measured by health outcomes, patient experience and cost. The Center for Medicaid and Medicare Services (CMS) has introduced a framework for categorizing and describing these new payment models. Within this framework:

- Category 1 refers to the historical model of paying simply for the service delivered.
- Category 2 is already familiar to most health systems, including JPS, and makes up a few percentage points of their overall revenue. These include pay for reporting and rewards (or penalties) for performance. In other words, a supplemental payment is made for the health system meeting a particular quality measure.
- Category 3 continues payments for services but creates positive and negative risk to the health system for the overall financial performance related to the services. Examples include episode of care payments, where a health system is paid a set fee for an entire hip replacement through full recovery. Bad outcomes and management of those outcomes have a negative impact on the bottom line, as opposed to being billed for separately.
- Category 4 payments are population-based. Maryland's hospital payments are a rare example of a truly population-based payment. In these models, the health care provider gets a payment that is

independent of the amount of services that are delivered. Improvements in care delivery and outcomes result in significant financial gains.

Health systems need to position their delivery systems to perform well under these new types of payment models, knowing that Category 4 payments are likely to come within the decade. In fact, one strategy to accelerate an environment of population health payment is for health systems to create an Accountable Care Organization (ACO) or a provider-led health plan. While this requires significant capital investment, this structure allows the health system to be directly rewarded for improving the health and costs for a population. Other health systems in the U.S. are responding to the coming tsunami of change by making a number of targeted investments in people/capabilities, technology and data.

The human resources are focused on population health management, care management, quality improvement, efficiency and patient engagement. Also important are competencies in the inter-organizational relationships necessary for the integrated care described above in the Health System Transformation and Integration section. Technology innovations in these same areas include text-based automated health coaching, targeted incentives, tele-visits, e-consults, electronic health record innovations to improve quality and efficiency and mobile platforms to improve patient engagement. Data acquisition and management are foundational to excelling in any population-based payment. Systems that are succeeding are leveraging the incredible advances and falling costs of creating large databases that reveal opportunities for better management and reducing costs for treating populations and individual patients.

JPS will increasingly be paid under these new “value-based” models. JPS is making high-value delivery system transformations and is continuing to invest in the ability to report on and improve indicators of clinical and operational quality and patient experience to demonstrate value. Steps toward being able to take financial accountability for a population will align with future revenue sources and this will require significant investments.

**Medical Education and Provider Supply.** Medicaid and uninsured populations in areas of population growth often face a shortage of health care physicians, providers and staff. Given the estimated total number of licensed primary care physicians in Tarrant County (778), HMA estimates that approximately 75 percent of the total primary care need in the county is currently being met. In other words, Tarrant County as a whole has fewer physicians than needed to meet the expected demand. While it is not possible to quantify this, we would expect that a significantly lower proportion of need is being met for the low-income and uninsured populations.

Medical care is increasingly shifting from the hospital to the outpatient and home settings which increases demand for primary care providers. In part, this is driven by financial pressures related to the expensive costs of inpatient hospitalizations. Pressures by insurers to limit long inpatient stays and advances in health care that provide less invasive diagnostic and therapeutic treatments have each contributed to the decline in inpatient stays.

There is currently a growing shortage of primary care physicians nationally compounded by a drop in the percentage of medical school graduates who say they intend to go into primary care. There is also a shortfall in the number of physicians across specialties. Emphasis is being placed on non-physician primary care providers -- Nurse Practitioners (NPs) and Physician Assistants (PAs). The two-decade national trend has been to increase the scope of practice of these providers (NPs and PAs) to help meet primary care demands.

Communities are reallocating educational resources towards areas of need, including primary care, behavioral health and integrated practice models of care, as well as adopting new multidisciplinary training programs. Leading public hospitals are working closely with medical educational institutions to develop strategies to care more effectively and economically for safety net populations. The future success of public hospitals will be related to their ability to meet the demands of providing the best care to diverse and high-need populations.<sup>4</sup>

Expanding and strengthening Graduate Medical Education (GME) programs are essential in Tarrant County. JPS programs are the best potential source of future JPS staff and faculty physicians. Studies show that most physicians ultimately practice within 50 miles of the location of their residency training. JPS is engaged in discussions on GME consortium planning for the county on internal medicine and, potentially, surgery residency training in Fort Worth. JPS should play a leading role in the development of these programs. JPS also has an opportunity to play a major role in shaping undergraduate medical education planning for TCU and UNTHSC, helping to create both undergraduate and graduate medical education curricula that address the health needs of medically underserved populations. JPS community-based training sites provide an excellent opportunity to train future physicians in practice locations where future demand for ambulatory care is increasing.

These national trends are considered in the Committee's recommendations and must be key factors in Tarrant County and JPS decisions to maintain and improve the health status of the population and allocate resources appropriately.

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<sup>4</sup> Wartman, S.M., et al. Health Reform and Academic Medical Centers. *Academic Medicine*. December 2015; 90(12).

## Health Status of the Tarrant County Population

The Citizens Blue Ribbon Committee reviewed the Community Health Needs Assessment HMA conducted for Tarrant County, which includes an examination of the health status of the population and comparison of county health status indicators to national benchmarks; a description of the demographics of the county including population projections, trends in population growth and demographics by zip code; and health system capacity for primary, specialty and tertiary (hospital) care for the low-income population.

HMA researched the health status of Tarrant County for the total population, comparing Tarrant County, Texas, and the United States. In their report, they included health indicators and rates of screening and treatment where available for the following domains: diabetes and obesity, cardiovascular disease, and cancer; health indicators related to perinatal and prenatal health, child health; behavioral health and substance use; and other health indicators such sexually transmitted infections, oral health, and adults that could not see a doctor in the past year due to cost. While the overall health status and health indicators of Tarrant County are good, HMA developed maps depicting prevalence of several health indicators which reveal stark health disparities within the population.

Health indicators that are areas of concern for the total county population are highlighted. These indicators exceed national “severe benchmarks,” *defined as exceeding the top 25<sup>th</sup> percentile nationally*. Health disparities are noted as available.

Overall, Tarrant County has a high rate of adult obesity<sup>5</sup> (33 percent), age-adjusted diabetes prevalence (10 percent)<sup>6</sup>, and diabetes mortality rate (26 percent)<sup>7</sup>. These are all above the national severe benchmark.

In 2014, the infant mortality rate overall was 7.22 per 1000 live births<sup>8</sup>; this rate was the highest of the most populous counties in Texas, and just under the national severe benchmark (8.88 per 1000), with zip codes in Fort Worth as high as 9.8.<sup>9</sup> According to Tarrant County Public Health, infant mortality is trending in a positive direction with a 2015 overall rate of 6.10 per 1000. Late entry into prenatal care (39 percent), which refers to entry after the first trimester, is well above the severe national benchmark (21 percent).<sup>10</sup>

There is a high percentage of children (ages 19-35 months) in Tarrant County not receiving recommended immunizations (38 percent) as compared to the severe national benchmark (35 percent).<sup>11</sup> In addition, there is a high proportion of children (ages 10-17) who are obese (18 percent) which is on par with the severe national benchmark.<sup>12</sup>

In terms of behavioral health, major depressive episodes are almost twice as high (13 percent) as the national severe benchmark (7 percent).<sup>13</sup>

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<sup>5</sup> Behavioral Risk Factor Surveillance Survey (BRFSS), 2014

<sup>6</sup> IBID

<sup>7</sup> Centers for Disease Control and Prevention (CDC) WONDER, 2014

<sup>8</sup> Texas Health Data Center for Health Statistics, 2013

<sup>9</sup> ESRI, 2013 5 year average

<sup>10</sup> Texas Health Data Center for Health Statistics, 2013

<sup>11</sup> CDC NIS, 2014; Texas Health Data Center for Health Statistics, 2011; Child Health Data, 2012

<sup>12</sup> IBID

<sup>13</sup> BRFSS, 2012



Substance use for the Metropolitan Service Area – Dallas-Fort Worth-Arlington – is 13 percent, and has a significant impact on the community. The Tarrant County Criminal District Attorney’s office reported that over 30,000 cases related to substance use (i.e., possession, DWI) were filed in 2013-2014. In addition, on a national basis, 77.5 percent of all federal, state and local prison and jail violent cases that serve as the inmates’ primary offense involve substance use.<sup>14</sup>

In Texas, more than half (52 percent) of individuals in the state’s psychiatric hospital system are part of the forensic population. Nearly all incarcerated men and women return to the community within two years, and the chronic diseases, mental illnesses and substance use disorders they may have had before remain with them during and after incarceration.<sup>15</sup>

The chlamydia infection rate (444.9 per 100,000)<sup>16</sup> is significantly higher than the severe national benchmark (389.5 per 100,000) and may be an indicator of rates of other sexually transmitted infections. The HIV infection prevalence (.2 percent)<sup>17</sup> is on par with the severe national benchmark (.2 percent)

The percent of adults without a dental visit in the last year (40.1 percent) is particularly high, exceeding the national benchmark by almost a third. This rate is nearly 50 percent in some zip codes in Fort Worth.<sup>18</sup> The percent of adults that could not see a doctor in the past year due to cost (16.2 percent) is above the severe national benchmark.<sup>19</sup> These data are obtained through self-reported, nationally-sponsored telephone surveys. Based on this self-report, access to affordable primary care, and dental care for low-income persons, appears to be difficult.

Linguistic isolation is defined as a percent of people 5 years and older who speak a language other than English at home. A large proportion of the county’s population is considered linguistically isolated (26.9 percent)<sup>20</sup> – concentrated in the Fort Worth and Arlington geographies. It is more than double the severe national benchmark (10.3 percent). This isolation and significant transportation barriers make it all the more challenging to navigate and access the health care system.

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<sup>14</sup> Challenge of Tarrant County. (2015). *The Other Nine: A Community Needs Assessment of Substance Use Disorder in Tarrant County*.

<sup>15</sup> Strugar-Fritsch, D. & Follenweider, L. *A Call for New Models of Care in Correctional Health*. National Commission on Correctional Health Care. 2016.

<sup>16</sup> TX DSHS, 2015

<sup>17</sup> CDC, 2013

<sup>18</sup> BRFSS, 2012

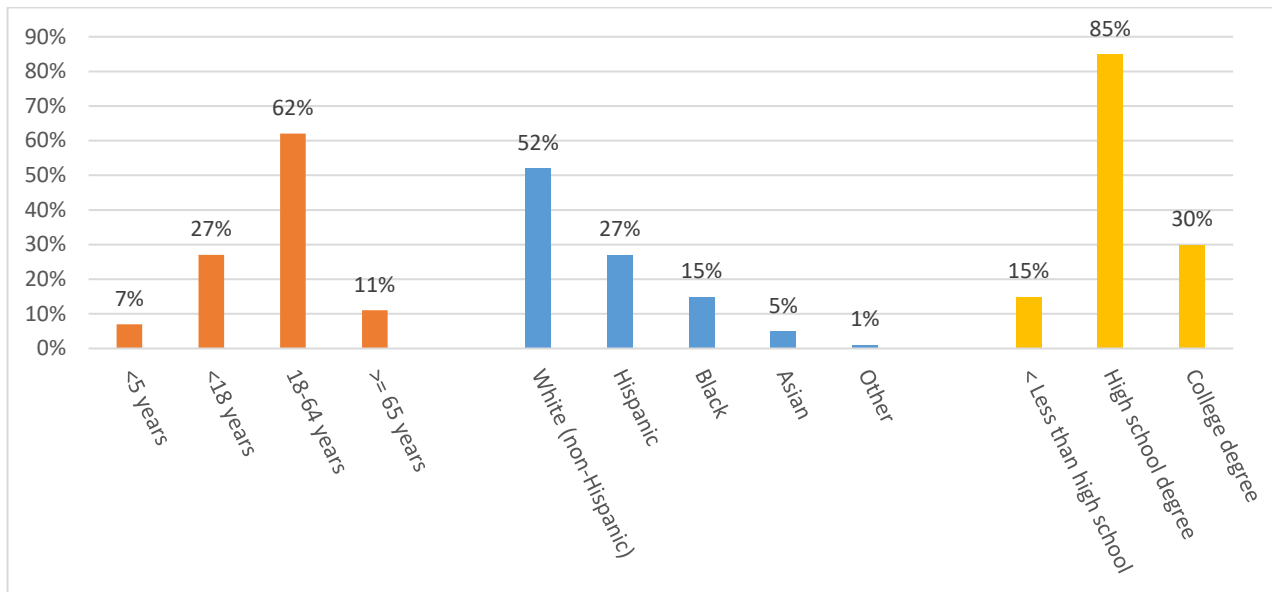
<sup>19</sup> IBID

<sup>20</sup> US Census American Community Survey, 2014

## Demographics and Population Projections

**Key Demographics.** The North Central Texas Council of Governments’ population projection for Tarrant County on January 1, 2017, was estimated to be 1,966,440. The most recent U.S. Census American Communities Survey estimates that for the 5 years between 2011 and 2015, 19.3 percent of the Tarrant County population had no health insurance, compared to 20.6 percent statewide. Figure 1 below, summarizes the most recent census data for the county in terms of age, race/ethnicity, and educational attainment. In addition, 28 percent of the county’s residents speak a language other than English at home.

**Figure 1. Tarrant County: Selected Demographic Indicators**



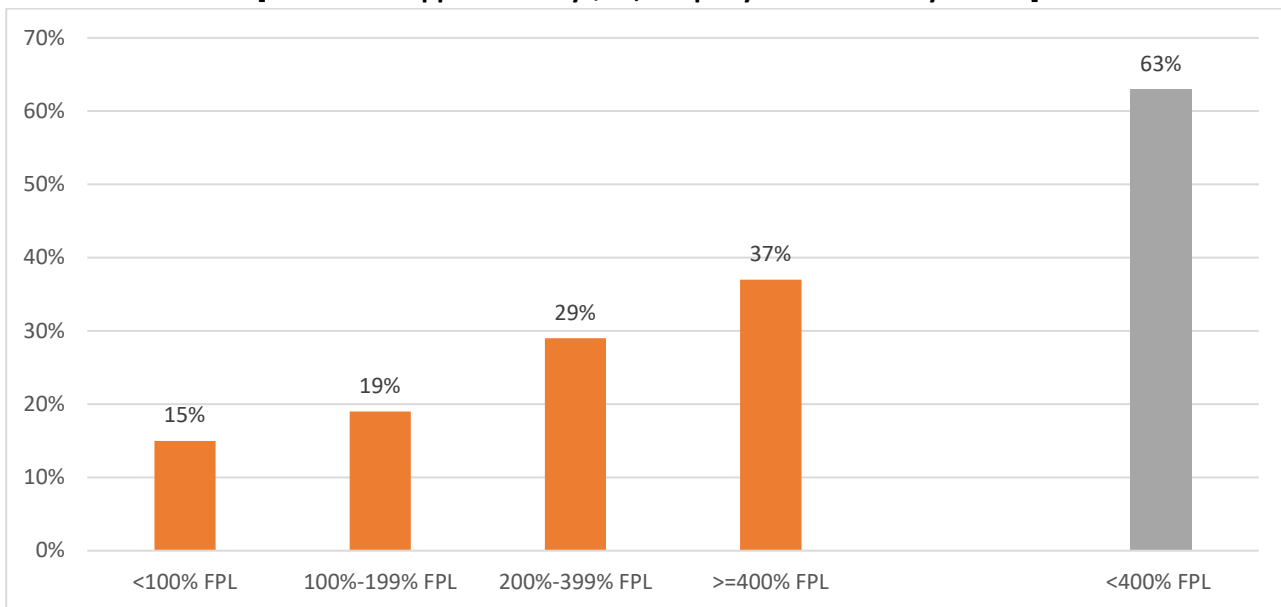
Source: US Census

Note: While the racial/ethnic demographics sum to 100%, the age and education graphs are not intended to sum to 100% as one bar in the chart may be a sub-set of another.

**Population Projections with Emphasis on Low-Income Populations.** In the next 20 years, the total Tarrant County population will increase by about 1 million people; from approximately 2 million to nearly 3 million; a 46 percent increase in population. The number of low-income residents -- defined as those with household incomes below 250 percent of the Federal Poverty Level (<250 percent FPL) -- is expected to increase from 857,000 to 1,250,000 by 2037. A family of four at 250 percent FPL earns just under \$60,000 per year.

Figure 2 below depicts county income distribution by percentage of Federal Poverty Level (FPL) which, in 2015, was \$24,300 per year for a family of four. The percent of residents living at less than 200 percent FPL is 34 percent, which is slightly less than Texas as a whole (39 percent). Large numbers of county residents (1,191,930 individuals or 63 percent of the total) are below 400 percent FPL which is significant because this is the cutoff for health insurance subsidies through the Health Exchange, operated in Texas by the Federal government.

**Figure 2. Tarrant County: Income Distribution by 2015 Federal Poverty Level (FPL)**  
**[2015 FPL is approximately \$24,000 per year for a family of four]**

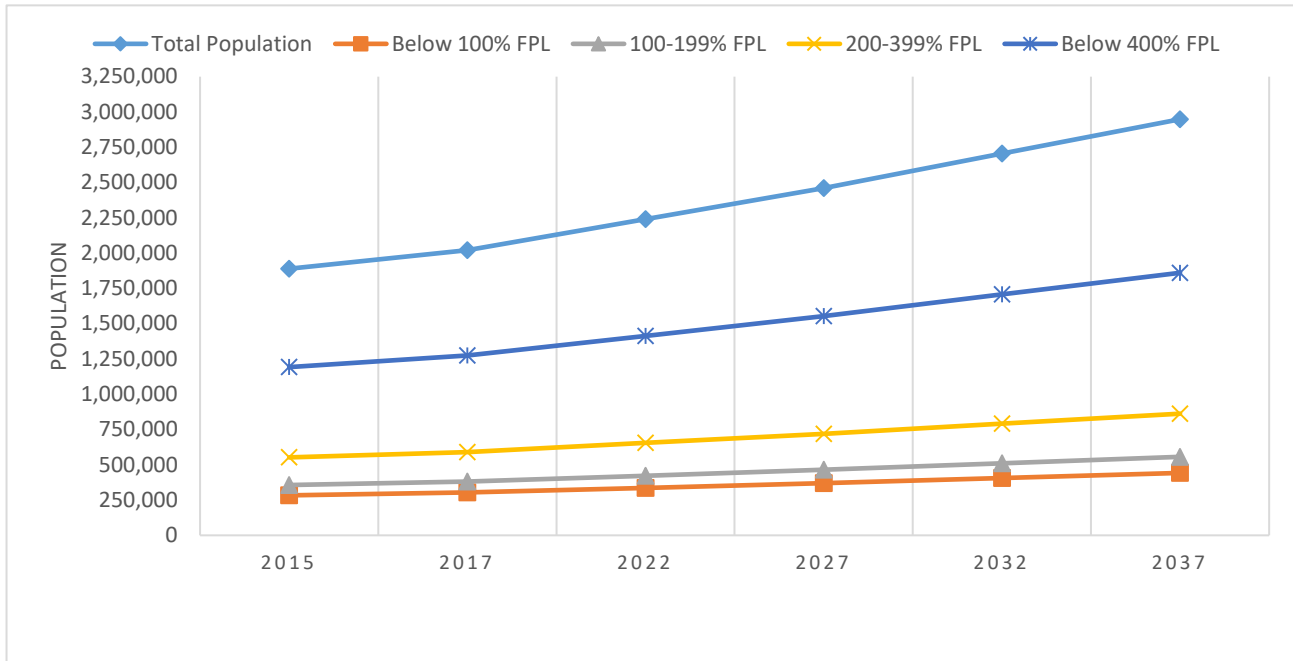


Source: US Census

Note: For family of four, 100% of the FPL is approx.. \$24,000; 250% of the FPL is approx..\$60,000; 400% FPL is approx. \$95,000. The three sub-populations of the <400% FPL (15%, 19% and 29%) sum to the <400% FPL bar (63%.)

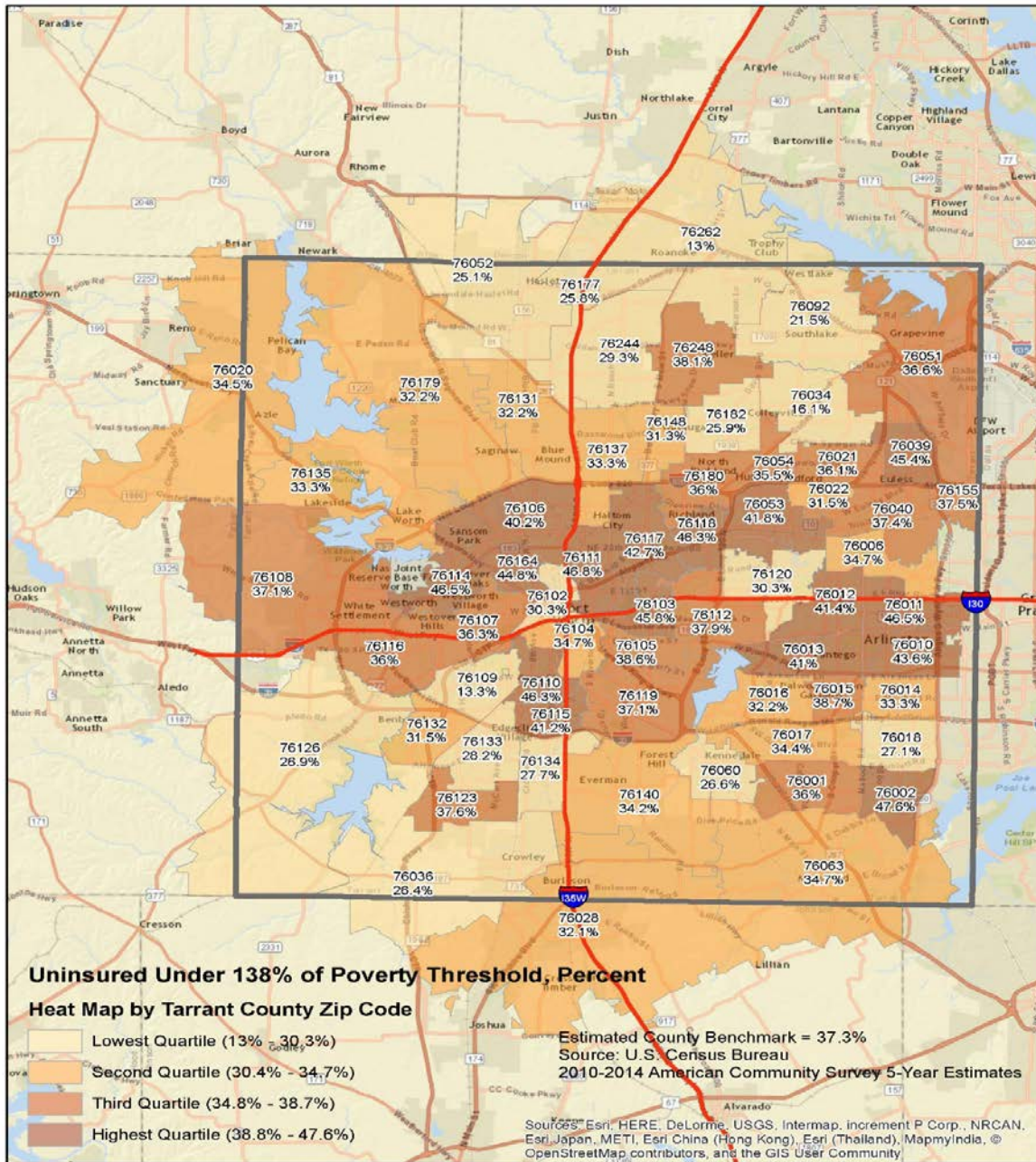
Figure 3 below shows this steady projected increase in growth over the next 20 years for the Tarrant County population by percent of the Federal Poverty Level.

**Figure 3: Population Projections by Percent FPL from 2017 – 2037, Tarrant County Texas**



Source: US Census for 2015 population, North Central Texas Council of Governments.

States that have expanded Medicaid coverage have done so for people who are <138 percent of FPL (\$33,534 for a family of four). Texas did not expand Medicaid. In Tarrant County, people at <138 percent FPL are geographically distributed as depicted in Map 1. These very low-income populations are concentrated in Fort Worth’s urban center, in certain adjacent zip codes to the west, and in several zip codes of the Arlington area.



While the number of low-income residents (income below 250 percent FPL) is expected to increase from 857,000 to 1,250,000 by 2037, nearly half (approximately 620,000 of low-income residents) are expected to be JPS Connection eligible in 2037.

**Aging and Increasing Diversity of the Population.** Different ages of the population will grow at different rates. Between the years 2015 through 2021, the population change in the 0-5 year old population is 10.5 percent and population change in the over 18 population is 13.54 percent, while the population change in the over 65 population is an astounding 40.51 percent. Because population growth will be significant in the youngest (age 5 and younger) and oldest age groups (over 65 years), this has important implications in terms of the need for future maternal and child health services, and for the management of chronic conditions, long-term care services and supports, as well as care at the end-of-life.

The population in Tarrant County will continue to grow increasingly diverse, with particularly high rates of growth in the Hispanic, Asian and Black populations, which implies an increasing need for a culturally competent workforce and strategies to engage increasingly diverse communities. Undocumented populations (approximately 7 percent or 141,419 individuals in 2017) are not eligible for Medicaid or the JPS Connection program, with many struggling to access needed care. Refugee populations are eligible for Medicaid upon arrival in the United States.

The growth, aging and increasing diversity of the population have enormous implications for capacity, workforce, service array and approaches used in health care, public health and social services in Tarrant County.

## Community Voices

One of the key drivers of change identified is the strong interest and equally strong opinions displayed by residents of Tarrant County's diverse communities on how the county and JPS can improve the health and healthcare of its citizens, including low-income uninsured and other vulnerable populations. Health Management Associates conducted two focus groups with 20 community leaders and patients, and four community forums throughout the county, open to the public, with a total of 158 participants. The Committee considered the following themes in developing recommendations.

### Community Forums and Focus Groups

**JPS Improvements are Recognized and Appreciated by the Community.** Community leaders and patients expressed satisfaction with JPS improvements under current leadership. Several patients provided anecdotes of "very good people inside of JPS."

**Behavioral Health Service Needs.** The community expresses a strong perceived need to expand capacity of behavioral health services both inpatient and outpatient, now and in the future. Community stakeholders also indicated the need for efforts to reduce stigma and better promote existing behavioral health services.

**Service Expansion and Creativity in Service Delivery are required to Meet Current and Future Needs.** "We need to look at different ways of delivering care that [are] easily accessible to people in their communities." Suggestions included increasing the number of community health centers and extending hours. Other examples shared included using school-based clinics as multi-generational clinics, or the expansion of pharmacies with Nurse Practitioners. Community leaders and patients indicated the need to expand emergency department capacity.

**Transportation Barriers.** A concern was expressed regarding lack of transportation options and the difficulty this poses for individuals seeking care at the downtown JPS location. Community advocates indicated: "People have JPS Connection but they go to free clinics because they don't have transportation to JPS [community health centers.]" Patients emphasized that all the departments at JPS need to know transportation options and inform patients about them.

**Focus on the "Needy" Population.** Perspective from several commenters that JPS should focus on "the needy" population; those unable to afford care elsewhere, and not compete with private sector.

**Focus More on Prevention and Social Determinants of Health.** Many of the community advocates agreed that the system needs to focus more on prevention and management of chronic conditions. They emphasized social determinants of health including healthy food, access to care, social networks and transportation. Advocates also discussed potential synergies between JPS and Tarrant County Public Health. These two entities are well positioned to bring different strengths to this effort, while still maintaining their independence. Advocates indicated that, "JPS is positioned to champion the integration of medical care and social services in Tarrant County."



### **Community Partnerships are required to Overcome Challenges in Meeting Needs of a Diverse**

**Population.** Community advocates agreed that JPS needs to “broaden [their] strategy to include more partnerships with diverse communities.” Community advocates indicated that a network of free clinics are struggling to manage underinsured and uninsured patients and reduce preventable visits to the JPS emergency department.

### **Stakeholder Interviews**

*In addition to community forums and focus groups, HMA conducted 130 individual stakeholder interviews. Since many of the recommendations in this report deal with facilities, we note below the perspectives from Tarrant County hospital CEOs about JPS facility plans. The Committee considered the following interview findings in developing recommendations.*

#### **Chief Executive Officers of High Volume Hospitals in Tarrant County**

**(Six Hospitals Represented)**

**Emphasis on Ambulatory.** The CEOs emphasized the need for a “comprehensive plan” that “focuses on ambulatory care.” In addition, the group expressed the “need for additional satellite/community health centers to improve access.” The group agreed “JPS needs to be largely in the community where patients are located.” They also expressed concern and questioned the perceived “downtown only strategy,” when Arlington and the Northeast sectors face transportation barriers to accessing care. Some leaders in the group felt that “distributed care sites should be pursued rather than having JPS add beds.” Lastly, it was noted that while JPS needs to “upgrade its medical facility,” “more hospitals are being developed by current and new entrant health systems.”

**Focus on Behavioral Health.** There is a “massive need” for behavioral health services – inpatient and outpatient --and “JPS provides incredibly good service.” Full support for “behavioral health expansion” plans particularly in light of “increasing difficulty placing behavioral health patients without insurance.”

**Public/Private Partnerships.** Expressed overall need for improved communication between JPS and private hospitals; suggested exploration of public-private partnerships.

**JPS Outreach and Communication with Communities.** Believes that the “communication needs apply to JPS relationship with the general public.” Potential JPS patients “do not appear to be informed as to how to access the JPS Network/JPS Connection.” “Need more JPS outreach into communities.”

#### **Chief Executive Officers of Behavioral Health Hospitals in Tarrant County**

**(Three Hospitals)**

**Behavioral Health Hospital Beds.** All three behavioral health hospital CEOs interviewed contract with JPS for hospital beds for uninsured when there is “overflow” from Trinity Springs. All indicated that they valued JPS’s role and competence -- particularly with most acute patients -- in the behavioral health community. Indicated positive and “respectful” experiences and generally “smooth referral processes.”



Acknowledgement that, given population growth, Tarrant County is “definitely behind in the number of [behavioral health] beds.” At this point in time, “JPS can’t do it without us and we can’t do it without them.” “Private hospitals see JPS contracts as a security blanket.” CEO’s expressed that JPS is a critical safety net for the county and they are also a competitor especially if JPS doubles the beds they have. “If they have enough beds and have a nice facility, it could have a significant impact on private psychiatric facilities.” One CEO commented: “But it’s not their (JPS’s) job to keep us afloat. We are positioning ourselves, from a business perspective, to go forward without JPS referrals.”

**Continuum of Care.** Need to focus on outpatient services across the county. “Providers need to come together to manage the continuum better.”

**Other Challenges and Needs.** Challenged by caring for medically complex. The county needs more chemical dependency beds. All indicated need for adolescent psychiatric beds. Two of three CEO’s indicated bed needs for patients younger than 12 years old, while one thought Cook had that covered.

## JPS Board of Managers

JPS BOM has been engaged in a deliberative process to address facility needs since 2009, focusing on the replacement of existing facilities which are – by several consultant reports – no longer recommended for inpatient care, and an expansion of the number of community health centers. Testimony by JPS Board of Managers’ representative Trent Petty at a Citizens Blue Ribbon Committee meeting concluded the following.

On the System and Campus Level:

- Outpatient demand is growing and evolving.
- Hospital services are fragmented and physically separated by Main Street.
- Hospital and outpatient services lack efficiency, capacity, and are in challenging locations.

On the Department Level:

- Inpatient bed use is high which creates bottlenecks in other areas like the Emergency Department.
- Inpatient units are outdated (semi-private rooms, lack of support space, etc.).
- The Emergency Department has reached maximum capacity, compounded by lack of appropriate support space and organization.
- Behavioral health has disparate and challenging locations and lacks capacity.
- Women’s and Children’s Services lack clear access and adequate facilities.
- Outpatient clinics and Urgent Care on the main campus are undersized and poorly configured.
- JPS needs to continue community health center expansion in areas of greatest need.

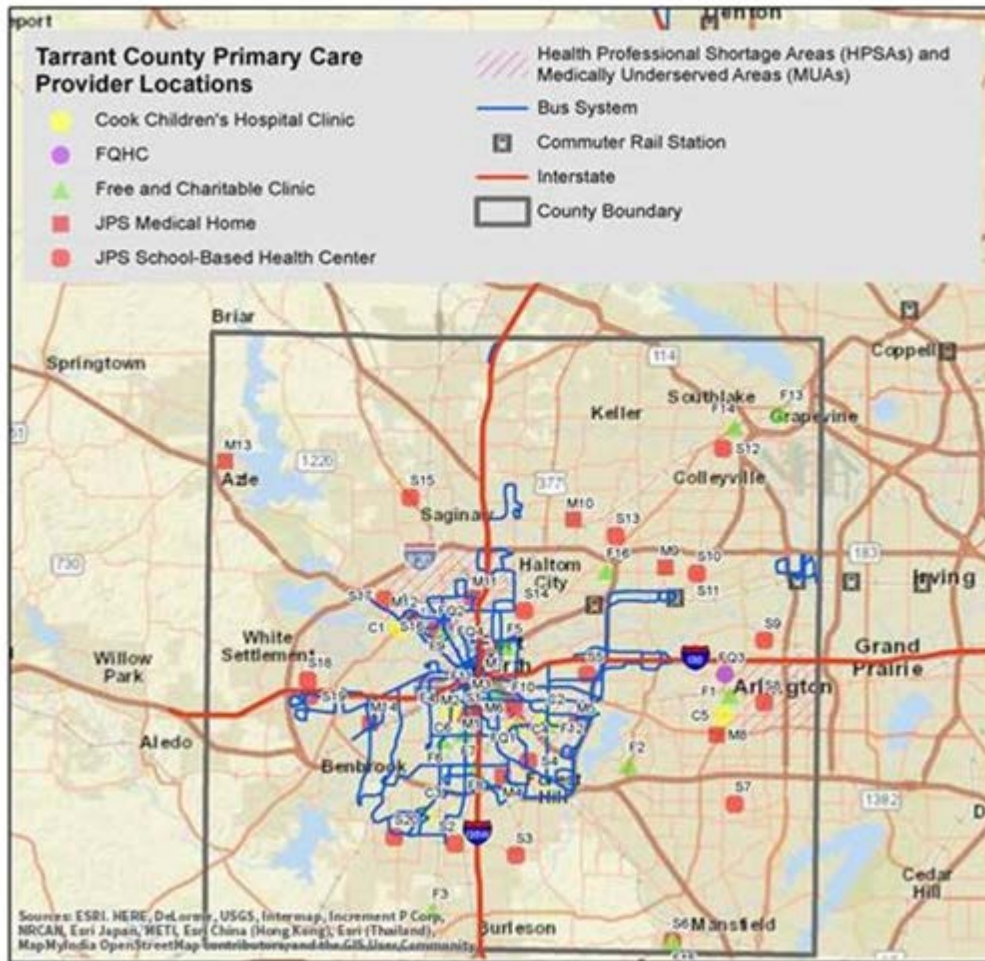
## Implications of Population Growth on Ambulatory Care Capacity

**Primary Care Capacity.** Good primary care is the foundation of an effective delivery system. In addition to being accountable for prevention, diagnosis and treatment, the primary care team is responsible for coordinating patient care throughout the continuum of care. The main primary care organizations in Tarrant County's "safety net" include:

- JPS Health Network's 14 community health centers and 20 School-Based Health Centers;
- North Texas Area Community Health Center's three locations (Federally Qualified Health Center) with a fourth in the planning stages (this Federally Qualified Health Center has 8 Full Time Equivalent providers, and a primary care visit volume for 2016 estimated at 35,000);
- Twelve (12) Free and Charitable Clinics, predominantly sponsored by faith-based organizations;
- Cook Children's Hospital has multiple pediatric clinics in the county, six of which are well-child clinics with reduced fees for low-income families and accept Medicaid and most other insurance.

Map 2 depicts these primary care community health centers and clinics, along with federally designated Health Professions Shortage Areas (HPSAs), Medically Underserved Areas (MUAs) and public transportation lines.

**Map 2: Tarrant County Safety Net Primary Care Provider Locations by Type with HPSA, MUA Designated Geographies, and Public Transportation Lines, November 2016.**



The full legend for Map 2 – including clinic names and addresses -- is included in Appendix I.

The Committee recognizes there are several barriers to accessing care in Tarrant County, including the number of residents per primary care physician provider. Given the estimated total number of licensed primary care physicians in Tarrant County (778), HMA estimates that approximately 75 percent of the total primary care need in the county is currently being met. In other words, Tarrant County, as a whole, has fewer physician Full Time Equivalents (FTEs) than needed to meet the expected demand. The demand for those under the 250 percent of the Federal Poverty Level (FPL) is only a portion of the overall need.

**Primary Care Workforce.** Table 1 below indicates the total number of Primary Care Provider (PCP) FTE workforce in Tarrant County that is estimated to be needed to serve the low-income (<250 percent FPL) population now and over the next 20 years. These calculations exclude the undocumented.

Table 1: Primary Care Demand for Population < 250 percent poverty - Tarrant County, TX

Primary Care Demand for Population < 250% poverty* - Tarrant County, TX					
	2017	2022	2027	2032	2037
<b>Total Number of FTEs Needed in County</b>	378	423	469	521	573
<b>Age &lt; 65</b>	319	349	377	408	437
<b>Age 65 and older</b>	59	75	92	113	136

\*Projection excludes individuals who are undocumented immigrants.

If all residents of Tarrant County received primary care at a population rate consistent with the National Ambulatory Care Survey (a rate based on actual use of primary care across the U.S. population), the county would need 378 FTE primary care providers in 2017 to care for the population <250 percent FPL. JPS is currently staffed with 98 FTE PCPs which is estimated to have capacity for 26 percent of this need. (98 of 378 is 26 percent.)

Much of the balance of that need (74 percent) is likely being met in low acuity ED visits at JPS and other hospitals, Federally Qualified Health Centers, charity care and private practices. To achieve the reduction in preventable emergency department visits and hospitalizations, JPS needs to place emphasis on ambulatory care services. Particularly given the limited options for primary care for the target population, JPS must consider strategies to meet or otherwise ensure that a significantly greater percentage of the primary care need for this population is met.

Table 2 provides a projection of the number of PCPs needed over the next 20 years for the target population, if JPS were to continue to have capacity for 26 percent of the primary care need versus incrementally increasing the percent of this capacity to 50 percent over 20 years.

**Table 2: Number of JPS PCPs Needed to Meet Current (26 percent) and an Enhanced Percent (50 percent) of Primary Care Demand for Population < 250 percent FPL - Tarrant County, TX**

Primary Care Demand for Population < 250% FPL* - Tarrant County, TX					
	2017	2022	2027	2032	2037
<b>Number of JPS PCP FTEs Needed to Continue to meet current 26% of Demand through 2037</b>	98 (current)	110	122	135	149
<b>Percent of demand met by JPS</b>	26.0%	26.0%	26.0%	26.0%	26.0%
<b>Number of JPS PCP FTEs Needed to Meet 50% of demand by 2037</b>	98 (current)	135	178	229	287
<b>Percent of demand met</b>	26.0%	32.0%	38.0%	44.0%	50.0%

\*Projection excludes individuals who are undocumented immigrants.

There are significant unmet primary care needs in the county as evidenced by heavy utilization of JPS primary care providers, wait times for new patient appointments and low acuity ED utilization. Expanding primary care capacity in the county for low-income adults, including the undocumented, will help to reduce the burden on JPS and other hospitals' emergency services. This "emergency" access is serving as a highly expensive workaround to primary care.

As shown in Table 3 , increasing JPS' capacity to meet the primary care needs of up to 50 percent of the <250 percent FPL population would require an estimated 19 additional community health centers in the county in 20 years. The addition of community health centers is recommended at the rate of between four and six new health centers in each five to ten year period with the caveat that the need would be reassessed every five years. Given that the primary care workforce availability and financial resources will influence the rate at which community health centers can be built, HMA and Cumming recommend construction of at least four community health centers in the next five to ten years.

**Table 3: Incremental Primary Care FTEs and Health Center Needs with Assumptions to Meet 50 percent Need of Population <250 percent FPL, Tarrant County, TX**

Incremental Primary Care FTEs and Health Center Needs for < 250%FPL – Tarrant County, TX					
	2022	2027	2032	2037	Total in 20 Years
<b>Number of FTEs Needed to be Added by the Indicated Year</b>	37	43	51	57	188
<b>Number of Health Centers Needed to be Added by the Indicated Year</b>	4	4	5	6	19

The Cumming team incorporated HMA's projections of community need and associated primary care provider requirements into their recommendations. What follows are the Cumming team's goals, findings and recommendations for JPS community health center development in Tarrant County.

The goals of the enhanced ambulatory network include:

- More convenient access for patients.
- Greater integration between JPS and the communities it serves whereby JPS patient care is delivered out in the community closer to where JPS patients live.
- Increased visibility and awareness of JPS services.
- Delivery of healthcare services in lower-cost sites of care (relative to higher-cost JPS inpatient sites).
- Greater utilization of preventive care to diagnose and develop treatment plans for conditions before they become more serious health issues.

Key findings of this analysis which contributed to the recommendations include:

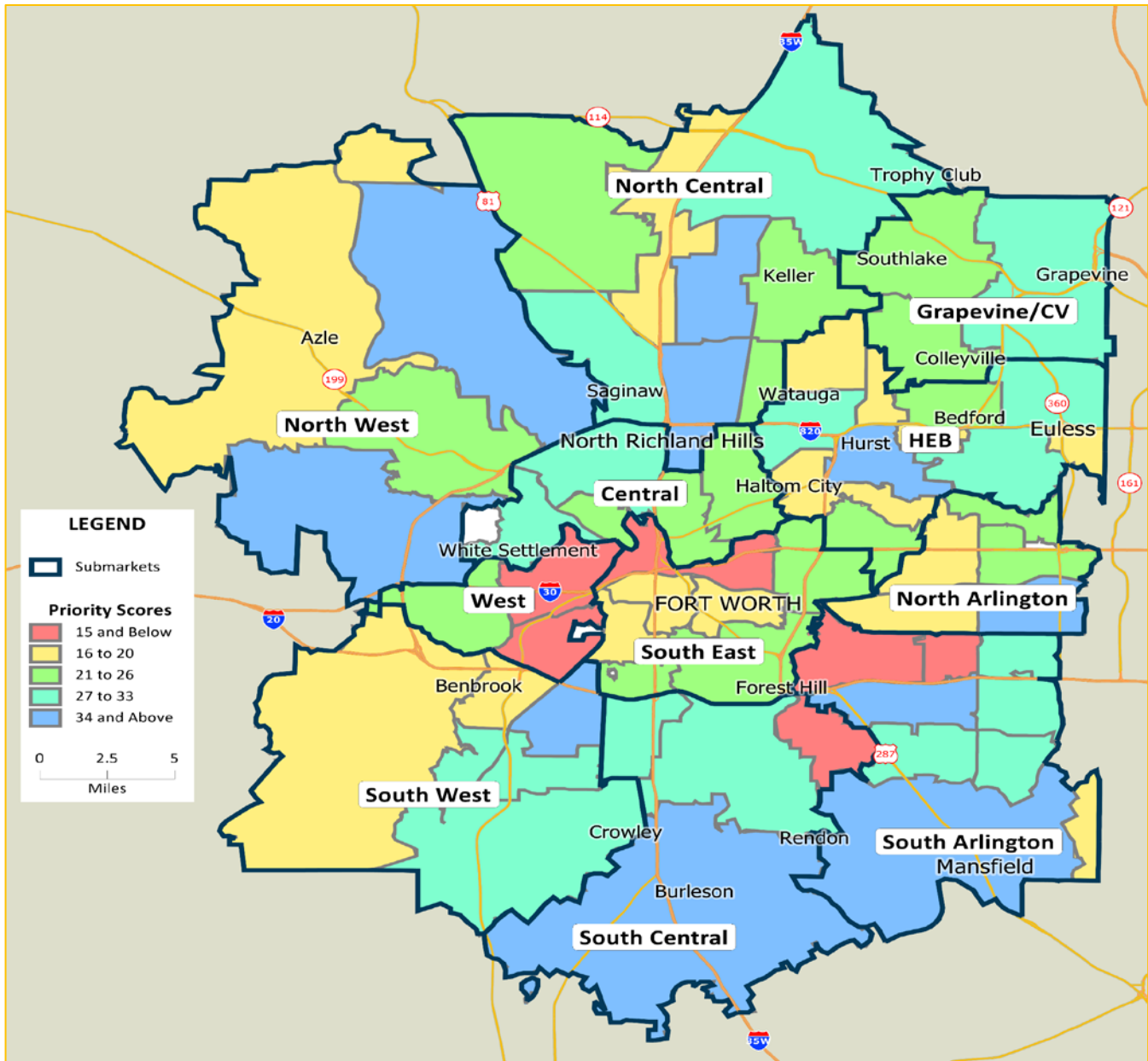
- While JPS has made a significant investment in the growth of ambulatory sites over the last 10 years, the inventory of current ambulatory sites is inadequate to meet current and future needs. Some community health centers have long wait times, some are at or near capacity.
- Aggregating basic health care services and providers in community health centers promotes team-based care, has operational efficiencies and cost benefits of shared staff and overhead.
- New sites will provide an alternative to main campus congestion while delivering outpatient care in a lower cost setting and at a lower investment expense while providing a better patient experience.
- JPS community health center growth has been rapid. Over the years, the system has developed a successful medical home model of care to meet the unique primary care needs of its targeted population. The focus of the recommendations has therefore been to leverage the success and best practices of this model into a greater number of targeted locations where access is needed most.

- While the focus of the community health center planning has been on the primary medical care services provided at these locations, behavioral health services have been integrated into new medical home sites and should continue. To the extent possible, oral health prevention and services should be integrated as well.

As part of this process, Cumming developed a method to prioritize zip codes for targeted community health center sites based on multiple demographic and health care metrics supported by qualitative information. The methodology heavily factored in the current provision of services and gaps in physician coverage (both from a market and JPS perspective). A map of priority zip codes is presented below, with the highest scores (blue) having the highest priority.

Many zip codes with lower priority scores have been determined to have existing JPS facility capacity sufficient to meet projected future health care demand. Conversely, higher priority zip codes are typically deemed to have insufficient facility capacity to meet projected demand and are better positioned for success.

**Map 3: Tarrant County Zip Code Prioritization for Future JPS Community Health Centers, Cumming/Percival, July 2017.**

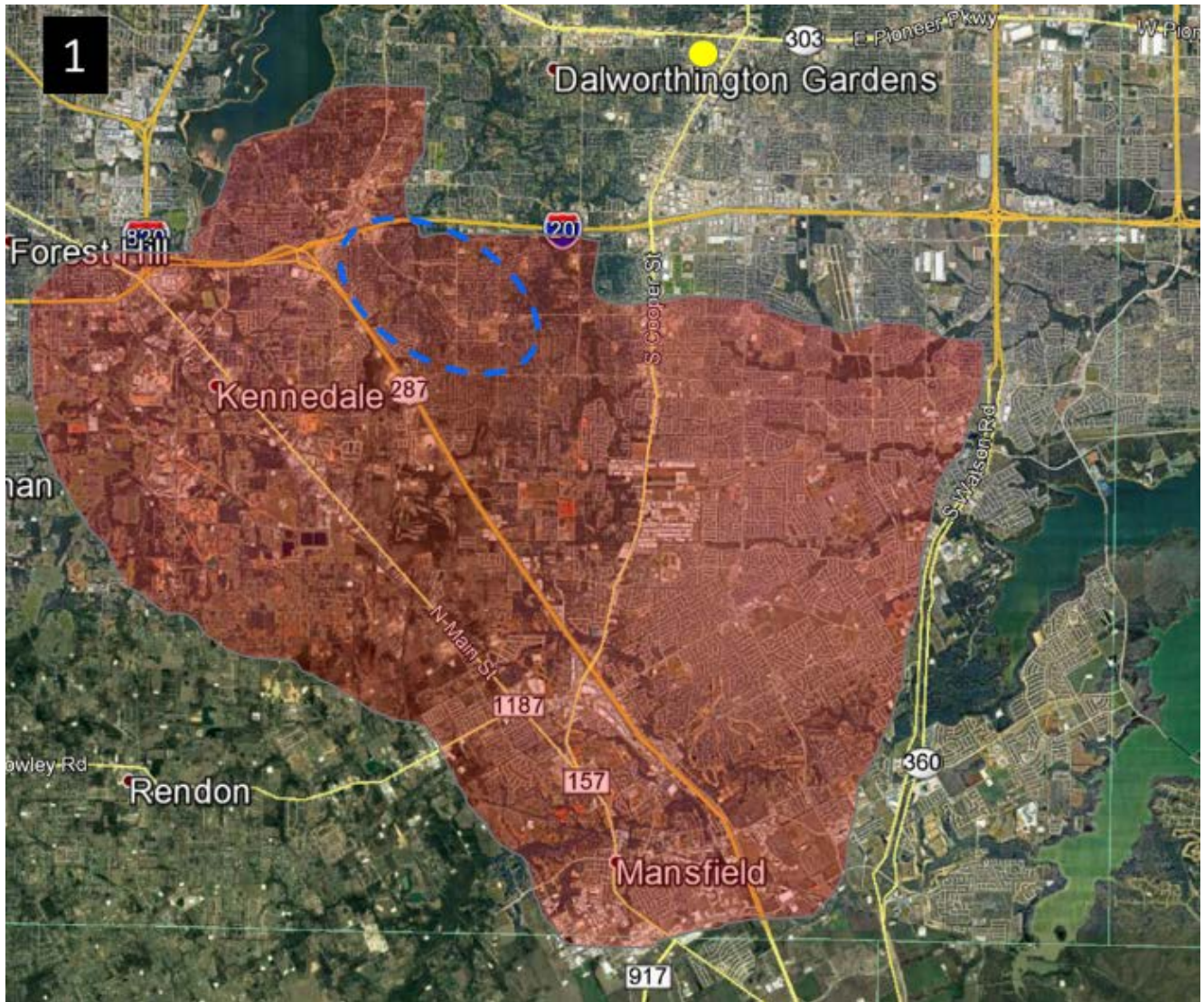


Based on the prioritization scores and other factors, four sites were targeted for new community health center development. The development of sites is dependent on primary care workforce availability, land or site opportunities in suggested areas, and human and financial resources to develop the new sites in the next five to ten years. A fifth site (in the HEB area closer to Richland Hills or west Hurst) was recommended after the first four are developed, although this could move up in the timeline if the newly relocated Northeast community health center hits capacity quickly or if it is warranted by market conditions.

The four new recommended site locations are described and depicted in the images below. The red shaded area on the images represent the target population, yellow dots are existing JPS community health centers, and blue dotted circles are the general recommended area for new sites.

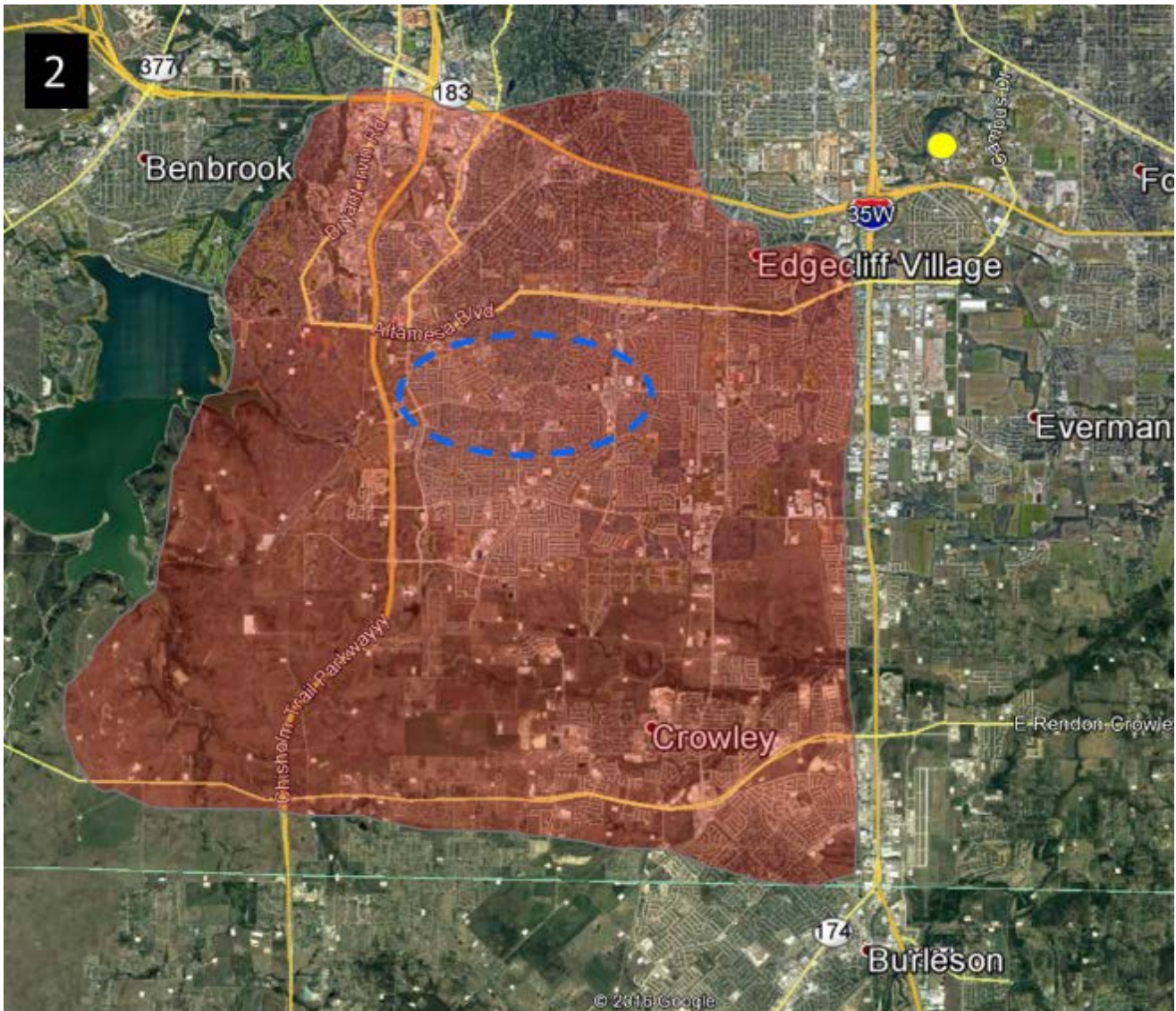


**1-South Arlington:** As depicted in Image 1 below, South Arlington has a service area population of 191,000 with five-year growth of nine percent. The focus is on the populations south of the current Southeast Community Health Center, South Arlington residents and the Mansfield population. The Southeast site – a site that is a consolidation of other health centers in 2015 -- serves significant density in North Arlington and has double JPS visits compared to some other JPS community health centers.



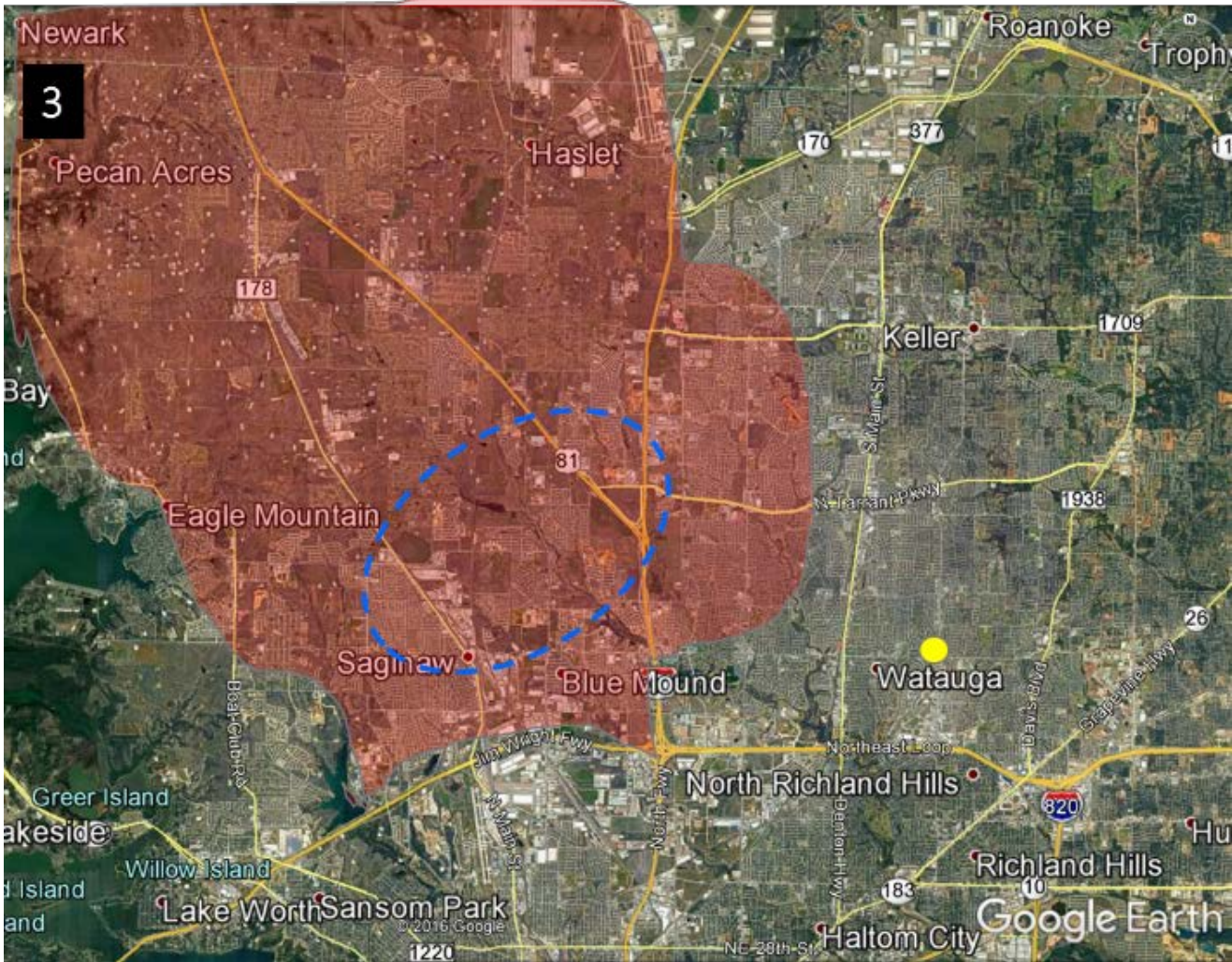


**2-Southwest:** As depicted in Image 2, Southwest has a service area population of 166,000 with five-year growth of eight percent. The Benbrook population northwest of the golf course will more easily access the Viola M. Pitts Community Health Center. Most of the Burleson population is not in Tarrant County but the northwest portion of Burleson within the county could access this proposed site. The South Campus Community Health Center does not have a natural direct route to the clear majority of the target area.



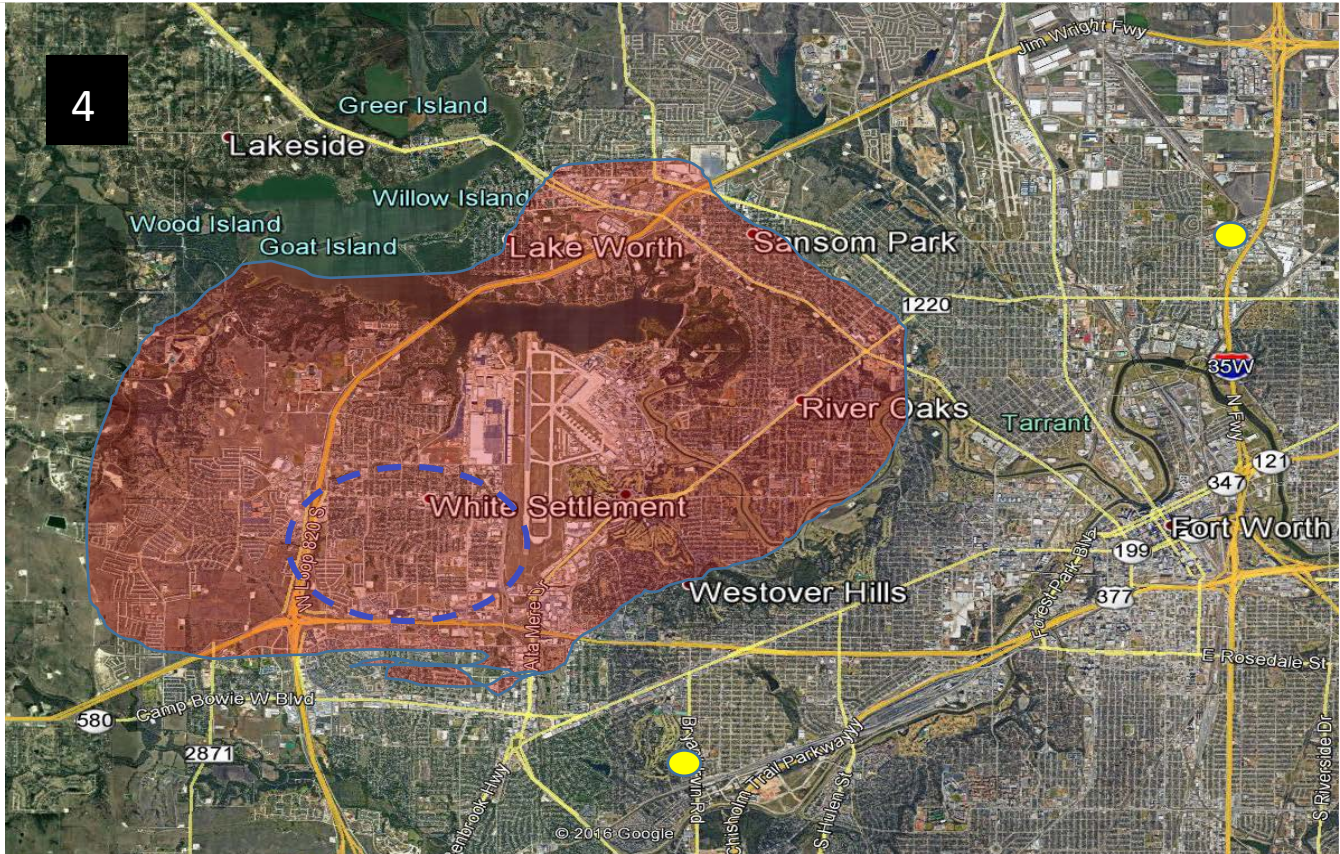


**3- Northwest / North Central:** As depicted in Image 3, this service area population is 201,000 with five-year growth of 12 percent. Road patterns in this area are challenging with some industrial areas, US Highway 81, natural barriers and non-intuitive indirect routes. The Bus 287/Bailey Boswell intersection is a 20-minute drive from Gertrude Tarpley Community Health Center.





**4- Northwest / Central:** As depicted in Image 4, this service area has a population of 125,000 with five-year growth of six percent. The service area will slightly overlap with the western edges of Diamond Hill’s service area, which is in a residential area near schools. Based on road patterns, the Viola M. Pitts site does not have natural flow nor natural direct routes to most of this population. If constructed on the west side, this would likely be a smaller site. Both nearby existing sites have large volumes. JPS owns 11 acres at the bottom-center of the west circle.



**Community Behavioral Health.** There are a limited number of organizations providing outpatient behavioral health services to low-income, uninsured residents in the county. The key organizations include:

- JPS Health Network has 11 behavioral health specialty outpatient clinics, a psychiatric emergency center, a partial hospitalization program (step-down/transition from hospital to community-based care), intensive outpatient program, and psychiatric day rehabilitation. JPS is increasingly integrating behavioral health services in JPS community health centers.
- MHMR's 10 behavioral health outpatient clinics.

These providers are located primarily in the greater Fort Worth area with some sites east in the Arlington area and one west in White Settlement.

**Oral Health.** There are a very limited number of organizations providing oral health care services to low-income, uninsured residents in the county. JPS is the main organization providing these services:

- JPS Health Network has six dental clinic locations with demand far exceeding capacity, and an oral surgery clinic with several months wait to be seen.

**Specialty Care.** The availability of specialty care physicians to treat Medicaid and uninsured adult populations is limited by public system staffing resources and frequent non-participation of private sector physicians in Medicaid. JPS currently has approximately 317 FTE specialty physicians, while the estimated need countywide for the total population below 250 percent FPL is 644. The expected population growth by 2037 would require a total of approximately 991 specialty physicians for this population in the specialties analyzed by HMA.

JPS currently has FTE capacity that would be expected to be able to serve, on average, 27 percent of specialty demand. This ranges from JPS meeting approximately six percent (dermatology) to 72 percent (infectious disease) of the estimated need of the population with incomes below 250 percent FPL.

The Committee recognizes that for many specialties, the current percentage of need met is not adequate, as evidenced by both the HMA analysis and the wait times for appointments. (Specialty appointment wait times are provided in the Appendix of the HMA report.) Recommendations include hiring in strategic specialty areas, and organizing space and staff to more specifically respond to the highest need/highest impact specialty services; using nurse practitioners (NPs) and physician assistants (PA) in specialty areas; partnering with other institutions; strengthening specialty referral rules to ensure that all referrals are appropriate; and deploying innovative access initiatives such as e-consults whereby primary care providers have the opportunity to discuss a patient case with a specialist to help determine whether a referral is necessary.

Specialty physician ambulatory services are primarily offered through JPS at the main campus and in Arlington. Specialty clinics on campus are not ideally located and are impacted by facility issues. These clinics need an on-campus solution with more space and new or reconfigured space.

Based on Cumming's review, the Committee offers the following recommendations for ambulatory specialty services.

- Utilizing as much of the previously completed work as feasible, identify and develop on-campus solutions for major specialty clinics, an ambulatory surgery center and service centers of excellence.
- After the campus solution has been completed, consider a second location for regional access to specialty medical and consult services.
  - JPS' Southeast community health center currently provides specialty services. A second location in or near the Northwest/North Central would improve access and provide a third convenient location in the market for specialty services.
- A new Ambulatory Surgery Center (ASC) – day surgery -- is needed on campus to alleviate capacity constraints and move lower acuity surgical cases to a more appropriate low-cost setting. Planning for the ASC should be coordinated with planning for the location of specialty clinics, especially surgical specialties, to maximize physician efficiency and patient convenience.
- The JPS Center for Cancer Care provides Medical Oncology, Radiation Oncology, Surgical Oncology, Infusion Therapy, Oncology Pain Management, and Palliative Care services. The Cancer Center is not directly on campus but just down the street (West Terrell Ave.) in a constrained facility.
  - The size of the building is not big enough to support all the services and there is no room for expansion or growth.
  - The current set-up and infrastructure of the site does not support current standards of medicine and is not conducive to patient friendly care and recovery, which is especially important for sick cancer patients undergoing a series of treatments.
  - The services would be more ideally located in a dedicated, patient friendly, high-profile new cancer center on or near campus.

#### **Citizens Blue Ribbon Committee Recommendation**

The Committee recommends the construction of four community health centers in the next five to ten years as feasible, on-campus clinics and support services, including an on-campus Ambulatory Surgery Center.

## Implications of Population Growth on JPS Main Hospital Capacity

**Tarrant County Main Hospital Beds.** In 2016, Tarrant County had 4,084 acute care beds, of which 409 or approximately 10 percent were JPS beds. Tarrant County, as a whole, is in the 50th percentile nationwide for hospital beds per population. Currently there are enough medical beds in Tarrant County to serve the entire population if all institutions provided full access to all segments of the population. However, JPS takes on 45 percent of the costs countywide for uncompensated care. Given the uneven distribution of hospital bed demand for persons with low-income, JPS has demand beyond its capacity, despite the adequate overall countywide capacity of inpatient beds. Population growth and the aging of the population will put additional strains on JPS and other hospital systems in the county without a planned response.

The future need should be met by a combination of increasing bed capacity and reducing bed demand through better primary care, care management and reduced lengths of stay. There is a trend nationally toward improving the way health care teams manage patients that is resulting in reduced hospital admissions and lengths of stay, ultimately reducing the number of hospital beds needed. The HMA report indicates that the degree to which future bed demand can be reduced is uncertain, but a reasonable (though aggressive ) target is to expect bed utilization to be reduced from the current 50<sup>th</sup> percentile to the 10<sup>th</sup> percentile of hospital regions<sup>21</sup> providing the “target rate” over 20 years as depicted in Table 4 below. This represents an almost 18 percent reduction in bed need in 20 years.

While we expect JPS will experience a reduction in bed need due to efficiency gains, population growth will exceed these gains. Table 4 below projects beds per thousand available to Tarrant County residents over the next 20 years *if no further capacity were built in the county*. Target beds are defined by the number needed to get the county to the 10<sup>th</sup> percentile of beds per thousand population<sup>22</sup> over 20 years. The figures represent the path toward a utilization rate that is possible with payment reform and health system investment. The number of new beds needed is the difference between the first and second row (the actual and the target number of beds per thousand population) multiplied by the population expected in that year. The number of beds for the county, as a whole, is adequate right now, and therefore the current number of beds needed is shown as “not applicable.” Given these assumptions, 770 beds will be needed in the next 20 years in Tarrant County.

Although the analysis of overall bed need starts with the recognition that current beds are adequate, it is also true that there is currently an inadequate number of hospital beds for the population under 250 percent FPL as evidenced by long waits at JPS. Therefore, HMA conducted an additional analysis, which is the number of beds that will be needed just for the new residents in the <250 percent FPL category, assuming these new residents are immediately managed to the 2037 target rate of 1.65 beds per thousand. It is likely that the bulk of this bed demand will fall on JPS. The number of beds needed for the population growth in the <250 percent FPL segment is estimated to be 648 indicated in the bottom right cell of Table 4 below.

<sup>21</sup> Based on 2011 data.

<sup>22</sup> As above, based on 2011 data.



**Table 4: Acute Medical Hospital Bed Needs\* - Tarrant County, TX**

Acute Medical Hospital Bed Needs* - Tarrant County, TX					
	2017	2022	2027	2032	2037
<b>Beds per thousand for Tarrant County predicted population if no further capacity built</b>	2.0	1.8	1.7	1.5	1.4
<b>Target beds per thousand for Tarrant County population</b>	n/a	1.92	1.82	1.73	1.65
<b>Number of new beds needed for Tarrant County population</b>	n/a	219	404	603	770
<b>Number of new beds needed just for growth of population &lt; 250% FPL at final target rate</b>	n/a	154	307	478	<b>648</b>

\*Bed needs in this table are for Tarrant County as a whole.

Assumptions:

- Current Total Tarrant County Acute Care Beds: 4,084
- Bed Rate Decline Maximum: 1% per year or a total of 5% per 5 Year Period

**Estimated bed need for JPS Main Hospital in 20 years.** Currently, the proportion of main hospital beds utilized by Medicare, uninsured and JPS Connection patients (225 of the 409 beds, or 55 percent) is adequate to meet approximately 34 percent of the need for a defined high need population. We are defining the high need population as residents who are JPS Connection-eligible (<250 percent FPL, not eligible for Medicaid) and Medicare-eligible (<250 percent FPL.) The bed needs for this population are expected to rise from 659 to 964 over the next 20 years, with aging of this population counteracting the effects of falling hospital bed needs in the overall population. To maintain the same level of bed need met (about 34 percent) in 20 years, when there will be 964 beds needed in total for the defined high need population, 327 beds will be needed at JPS for this population. JPS is expected to maintain a similar proportion of hospital beds for the target population (about 55 percent). Therefore, 594 beds are estimated to be needed.

This estimate of 594 incorporates the targets defined above for an 18 percent reduction in need over 20 years. This estimate is potentially attainable, however, there are factors that may influence it, such as external payment reform, which are beyond the county's control. When using a more conservative assumption for bed need reduction as used in the Cumming report (estimated previously in a JPS Commissioned 2014 report by Broaddus/Blue Cottage consultants as a 10.6 percent reduction over that time period), the future need is estimated to be 664 beds.

The two bed need reduction estimates create a range for the < 250 percent FPL population in Tarrant County of **594 to 664 hospital beds needed in 20 years**. The 2014 Broaddus/Blue Cottage report referenced above recommended 496 beds at completion plus 120 "shell beds"<sup>23</sup> for a build out at a later date due to financial constraints. This total of 616 beds (496 +120) falls in the range that HMA estimates will be needed in the next 20 years. Given this alignment of estimates of need, HMA adopted the recommendation of building out a total of **616 beds** with no shell space.

**Existing JPS Main Hospital tower is not recommended for inpatient acute medical services.** The Cumming team evaluated the existing JPS buildings west of Main Street to determine their suitability for renovation to accommodate components of the aforementioned 2014 proposed construction project. The existing 1960's vintage tower is limiting for renovated acute care purposes.

<sup>23</sup> 120 shell beds refers to vacant space that could be built out at a later date to accommodate 120 beds.

Major findings from these are listed below:

- Patient rooms on the west side of Main Street (all patient rooms excluding the patient rooms in the Patient Pavilion), do not meet contemporary care models necessary to meet industry and best practice standards.
- Approximately 60 percent of the inpatient beds are in a semi-private environment. Moving to an all private room model has several benefits, namely improved infection control, better patient outcomes, and improved patient satisfaction (a factor in maximizing reimbursement).
- The structure has low floor-to-floor distance: 11 feet versus current standard 14-15 feet.
- Existing mechanical, electrical and plumbing systems are significantly beyond useful life. Complete replacement would be required.
- Windows and curtain wall glass are all inefficient single pane and beyond useful life, requiring full replacement.
- The small footprint leads to inefficient bed units (14-17 versus 30 beds).
- If renovation of the tower were pursued, it would only support approximately 112 beds, which will not satisfy the projected need. A new tower is needed regardless. A renovation approach would also perpetuate the inefficient split bed unit layout.

#### **Citizens Blue Ribbon Committee Recommendation**

The Committee recommends the construction of a new main hospital tower with supporting ancillary departments. A majority vote targeted approximately **676 beds**. This number was derived from HMA's recommendation to fully build out Broaddus/Blue Cottage recommendation of 616 beds, and the Committee's decision to select the top of the range and consistent with an additional completed floor of 60 beds ( $616 + 60 = 676$ ).



## Implications of Population Growth on JPS Behavioral Health Facility

**The Behavioral Health Facility.** The number of psychiatric beds, unlike acute care medical beds for Tarrant County as a whole, are well below the current need level. Projected population growth will only increase the gap. In 2016, Tarrant County had 550 acute psychiatric beds in Tarrant County, JPS had 132 or 24 percent. JPS currently has 96 in-patient psych beds on the main campus, primarily in the Trinity Springs Pavilion. Additionally, JPS leases 36 beds, for a total of 132 beds currently available for psychiatric services.

**Estimated size needed for JPS behavioral health facility in 20 years.** Table 5 below bases public psychiatric bed need on total population, with 70 beds per 100,000 population. Although the total number of public psychiatric beds needed by 2037 is estimated to be 2,064, a robust system of community behavioral health services could result in reducing this need to 1,032. If JPS plans to meet about one-half of this need, 516 beds will be needed, compared to the current 132 beds.

**Table 5: Psychiatric Bed Needs - Tarrant County, TX**

Psychiatric Bed Needs* - Tarrant County, TX					
	2017	2022	2027	2032	2037
<b>Total public beds needed at literature-supported level of 70 beds per 100,000 population</b>	1,414	1,568	1,722	1,893	2,064
<b>Total public beds needed with investments in new programing</b>	707	784	861	947	1,032
<b>JPS beds required to meet target of 50% of need</b>	354	392	431	473	516
<b>JPS actual (current) beds</b>	132	132	132	132	132
<b>Proportion of target contribution met</b>	37%	34%	31%	28%	26%

*Excludes undocumented*

*Assumptions:*

- *Current literature-supported need for public beds per 100,000:* 70
- *Percentage decrease from literature-supported level possible with enriched services:* 50
- *Target percentage need met by JPS:* 50

Due to lack of capacity, in fiscal year 2015, JPS transferred 3,100 psychiatric service line patients to other hospitals for inpatient admission and paid \$3.1 million to private hospitals for a portion of these patients who had no resources. Often, private hospitals are not fully equipped to meet the needs of individuals with highly complex psychiatric conditions, and JPS believes they could care for these complex patients themselves at a lower cost. Although additional psychiatric beds and hospitals are being developed, especially in the private sector, the shortfall in psychiatric bed inventory for Medicaid, and uninsured residents in particular, will continue to stress access for low-income populations.

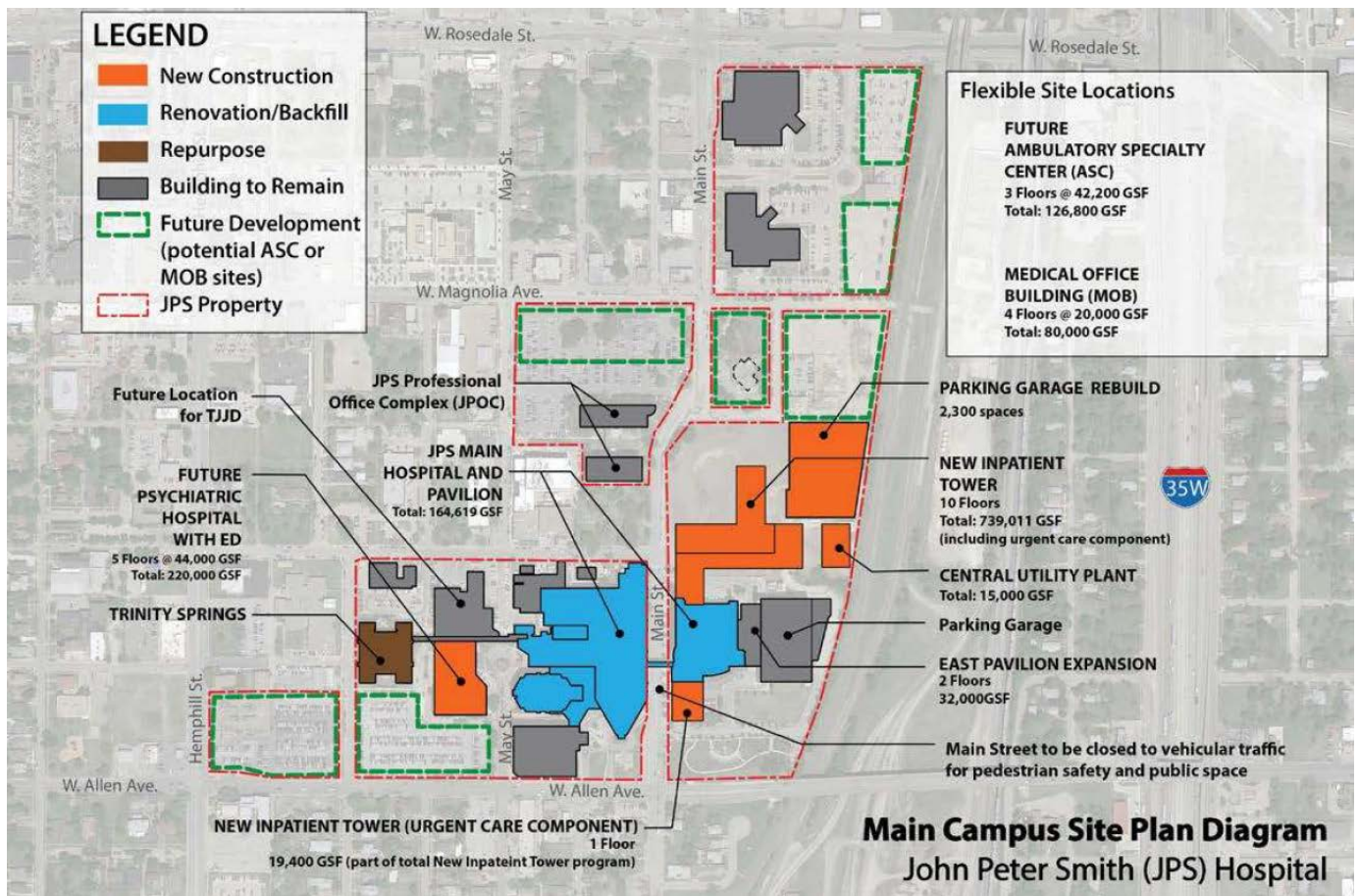
**Existing JPS facilities not recommended for inpatient behavioral health care services.** Cumming considered HMA's community need estimates and evaluated existing JPS facilities relevant to assessment and admission of patients with acute behavioral health needs. Cumming concluded that not only does the total psychiatric bed count fall far short of current and predicted need, but also there are additional issues related to the existing facilities and locations.

- JPS relies on semi-private rooms to achieve maximum capacity. Often patients with behavioral health diagnoses are unsuitable for a semi-private environment, thereby forcing a double-occupancy room to be used as a private room.
- Behavioral health services are spread across the campus. The Psychiatry Intake/Emergency Department is located on the tenth floor of the inpatient tower. Incoming patients are forced to take an elevator ride from the ground floor to the tenth floor. Once a patient is deemed in need of admission, they are then transported down the elevator to a long tunnel to the Trinity Springs Pavilion. Not only is this transport inefficient from a staffing standpoint, it is also problematic for patient care.

#### **Citizens Blue Ribbon Committee Recommendation**

The Committee recommends the construction of a new behavioral health facility of **298 beds**. This number was derived by taking the 2014 Broaddus/Blue Cottage recommendation of 198 beds and the Committee's decision to select the top number of beds achievable given population need. This is consistent with two additional completed floors of 100 beds (198 +100 = 298.)

The proposed Main Campus Site Plan Diagram is presented below. The Facility Planning, Financing and Construction Schedule is presented in Appendix II.



## Overall Recommendations of the Committee including JPS Health Network Facilities and Countywide Strategies to Improve Health and Health Care

The Committee reviewed, in detail, the work of Health Management Associates and the Cumming/Percival team. Each consulting firm provided multiple presentations and answers to subsequent questions of the Committee. The group studied national trends in health care and its relevance to Tarrant County. The health status of the population, demographics and population projections were also reviewed. Consumers, advocates and providers, including JPS, were heard, both through transcript summaries and in person. In addition, the current health system and JPS capacity to care for the low-income uninsured populations in both the ambulatory care and hospital facilities was studied.

The Committee's charge was to assess the current and projected community health needs of Tarrant County and recommend collaborative strategies to improve the health status of residents in an effective and efficient manner based on that need. It was also charged with coming to a conclusion about the need to fund and implement the JPS Strategic Facilities Utilization Plan and Capital Construction Project including any revisions to those plans based on community health needs. The Committee was not charged with addressing a financial model or funding sources. Through its deliberations, the Committee presents the following consensus recommendations in no particular order.

**Ambulatory Care Infrastructure.** While it is important to expand the number of medical hospital beds to meet the needs of a growing population, it is critical for JPS to continue to shift the emphasis from hospital care to ambulatory care. This concurrent development is crucial to reducing demand for inpatient services and saving overall health care costs and providing access to coordinated and cost-effective care. The Committee recommends an expansion of the primary care network throughout the community that integrates medical, behavioral health and to the extent possible, oral health care services.

The Committee recommends a plan to incrementally increase the capacity of JPS community health centers over the next 20 years to nearly double the capacity of low-income residents JPS will care for (from 26 percent to 50 percent). It recommends beginning this expansion with four new community health centers to be built in the next five to 10 years (by 2022). Primary care workforce availability and financial resources will influence the rate at which these health centers can be built.

These community health centers should be built in priority areas identified by Cumming – South Arlington, Southwest, Northwest/North Central, and Northwest/Central -- with refinement of geographic location by JPS as appropriate. The plan should be revisited at least every five years given potential changes in the health care environment unknown at this time.

A new Ambulatory Surgery Center (ASC) – day surgery – is needed on campus to alleviate capacity constraints and move lower acuity surgical cases to a more appropriate low-cost setting. Planning for the ASC should be coordinated with planning for the location of specialty clinics, especially surgical specialties, to maximize

physician efficiency and patient convenience. Other new ambulatory on-campus clinics and support services will need to be developed such as diagnostic and treatment services and hospital-based primary care.

**Countywide Outpatient Behavioral Health Infrastructure.** Continue to shift the emphasis from behavioral health hospital care to outpatient, community-based behavioral health programming to reduce the demand for psychiatric/behavioral beds. The Committee recommends the integration of behavioral health care services in all of JPS health centers to the extent possible.

Further, it recommends that JPS lead a countywide planning effort related to a behavioral health system of care that includes key partners in ensuring robust outpatient behavioral health services, substance abuse services, jail diversion programs, and strategically placed psychiatric emergency services.

**Main Hospital.** John Peter Smith Hospital has functional limitations and capacity concerns in light of current demand and a 46 percent growth in population over the next 20 years. The Committee recommends the construction of a properly located and sized patient tower to meet the future needs of Tarrant County.

The current number of beds is 409, which is capacity needed to meet 34 percent of the low-income population needs for inpatient care for medical conditions. To maintain this market share, the 20 years population estimate bed need is 594-664 depending on assumptions used for reducing preventable admissions and reducing length of stay. While 3 members voted for a total of 616 beds, the majority of the Committee voted to exceed this range and support building a hospital of approximately 676 beds.

JPS has the highest level trauma center in the county, serving beyond its borders, and will continue to provide this essential function with excellence. Given that the demand for trauma services will rise in the coming decades, the Committee recommends that JPS partner with new entrants in the market to lead trauma services planning, continue its current level of service and invest in strategies to reduce trauma incidence such as substance abuse prevention and treatment.

**Behavioral Health Facility.** There is a direct connection between inadequate psychiatric resources for the severely mentally ill and the costs and tragedies that occur in the criminal justice system as well as other social costs. JPS, unlike other psychiatric hospitals in the county, is equipped to address the needs of patients with the most complex behavioral health needs. The Trinity Springs Pavilion has significant limitations. The facilities are no longer recommended for inpatient behavioral health care services. The size is far from being able to meet the needs of persons with behavioral health diagnoses now and in the coming decades. The Committee strongly recommends a replacement behavioral health facility with expanded capacity and centralized services that improves the ability of JPS to meet the growing needs of county residents.

The current number of beds is 132, which is capacity needed to meet 37 percent of the low-income population needs for inpatient care for behavioral health conditions. Given that the size is not adequate for the current population and the population growth expected over the next 20 years is 46 percent, the Committee recommends a significant expansion of the facility with capacity for 298 beds. This number was derived by taking the 2014 Broaddus/Blue Cottage recommendation of 198 beds and adding two additional completed floors of 100 beds. The Committee voted unanimously to endorse 298 beds – a facility size that is more aligned with population need and is likely achievable.

**Workforce.** JPS is a vital contributor to the education and training of Tarrant County’s future health care professionals. The county has federally designated Health Professional Shortage Areas and Medically Underserved Area. The growth of the population will further exacerbate these shortages. The county will soon have a second medical school that can feed into local residency programs – a key source for physician recruitment. Therefore, the Committee recommends a countywide planning effort related to Graduate Medical Education and other health professions training and recruitment strategies to meet the needs of the entire Tarrant County population in the coming decades.

**Integrated Delivery System.** The sustainability of JPS requires an Integrated Delivery System (IDS) that is well positioned for Alternative Payment Methodologies - payment methods that incentivize high value and accountable care. This calls for continued work to reduce hospital length of stay, preventable admissions, readmissions and low-acuity ED utilization. A Patient-Centered Medical Home model of care with integrated behavioral health services is the foundation of an IDS. The Committee recommends continued efforts to strengthen population health management capabilities for prevention and early detection of disease, and risk-based care management to optimize outcomes for the highest impact groups, such as those with multiple chronic conditions.

The JPS Connection-eligible population, which is much larger than the Connection-enrolled population, includes those that need a coordinated system of care in order to avoid future high-cost care and poor outcomes. JPS and many other health systems and providers are impacted by preventable ER visits, hospitalizations and the results of untreated chronic conditions among this population. This shared risk creates opportunity for JPS, other hospital systems and community providers to create a countywide IDS to serve this population, and manage the high risk among this population. The Committee recommends JPS consider partnering with other institutions to define synergies, strengths and win-win arrangements. This shift towards population management requires JPS to invest in human resources and health information technology such as a data warehouse, risk stratification capabilities and health information exchange.

**Elder Care.** As the population ages, JPS will need to build capacity across the continuum of services for elder care. The Committee recommends JPS develop capacity in geriatrics in primary care, behavioral health and inpatient services, as well as work with others in the county to ensure an adequate infrastructure for the county’s long-term care services and supports.

**Prevention and Social Determinants of Health.** To approach the county’s health system in a holistic manner, and to decrease the overall costs of health care, the Committee recommends a series of cross-sector, countywide strategies focused on disease prevention and the social determinants of health. We recommend a more formal, strategic alliance between JPS and Tarrant County Public Health, and a countywide planning and implementation effort to prevent health conditions of high prevalence and cost that are amenable to change, e.g., diabetes, preterm birth. It also recommends Tarrant County, with support from JPS, systematically address social determinants of health – through policy and other efforts – to create healthy social and physical environments. Priorities might include education, employment, as well as access to healthy food, safe neighborhoods, stable housing and health care services, including transportation.



## Conclusion

In this report, the Citizens Blue Ribbon Committee assessed the current and projected community health needs of Tarrant County and recommended strategies to improve the health status of residents. The Committee studied the current and projected health care delivery systems' capacity to meet current and projected population demand and recommended collaborative partnerships to address these needs. The group came to a conclusion about the need to fund and implement the JPS Strategic Facilities Utilization Plan and Capital Construction Project, which includes recommended revisions to those plans based upon need.

Although health care is complex, and many decisions must still be made, particular needs and solutions are so clear that the Committee was able to report back unanimously on the recommendations in this report.

Tarrant County is in the enviable position of planning for growth and rapid change. We have the opportunity now to make Tarrant County a healthier place for the next generation to live and a place where we can take even greater pride in our collective ability to meet the needs of our population. While this report fulfills the charge of the Citizens Blue Ribbon Committee, we see this report as a beginning, a "Call to Action" for the public and private sector to work together toward this collective vision.



# Appendices

## Appendix I – Map 1: Legend

Name of Health Center	Address	City	Health Center Type	Map Locator
<b>Southeast Community Health Center</b>	2909 Mitchell Blvd	Fort Worth	FQHC	FQ1
<b>Northside Community Health Center</b>	2106 N Main St	Fort Worth	FQHC	FQ2
<b>Arlington Community Health Center</b>	979 N Cooper St	Arlington	FQHC	FQ3
<b>North Texas Area Community Health Centers, Inc.</b>	2100 N Main St	Fort Worth	FQHC	FQ4
<b>School-Based Health Center - Southside</b>	2115 Hemphill Street	Fort Worth	JPS School-Based	S1
<b>School-Based Health Center - Crowley</b>	1320 W. Everman Parkway	Fort Worth	JPS School-Based	S2
<b>School-Based Health Center - Everman</b>	600 Townley Drive	Everman	JPS School-Based	S3
<b>School-Based Health Center - Forest Oak</b>	3250 Pecos Street	Fort Worth	JPS School-Based	S4
<b>School-Based Health Center - Eastern Hills</b>	5900 Yosemite Drive	Fort Worth	JPS School-Based	S5
<b>School-Based Health Center - Mansfield</b>	901 W. Broad Street	Mansfield	JPS School-Based	S6
<b>School-Based Health Center - Ferguson</b>	600 S.E. Green Oaks Blvd	Arlington	JPS School-Based	S7
<b>School-Based Health Center - Central</b>	600 New York Avenue	Arlington	JPS School-Based	S8
<b>School-Based Health Center - Nichols</b>	1850 Brown Blvd	Arlington	JPS School-Based	S9
<b>School-Based Health Center - Georgia Kidwell</b>	3115 W. Pipeline Road	Euless	JPS School-Based	S10
<b>School-Based Health Center - HEB</b>	3115 W. Pipeline Road	Euless	JPS School-Based	S11
<b>School-Based Health Center - Grapevine/Colleyville</b>	3050 Timberline Drive	Grapevine	JPS School-Based	S12
<b>School-Based Health Center - Birdville</b>	8200 OBrian Way	North Richland Hills	JPS School-Based	S13
<b>School-Based Health Center - Haltom City</b>	2807 Layton Avenue	Fort Worth	JPS School-Based	S14
<b>School-Based Health Center - Eagle Mountain-Saginaw</b>	1029 N. Saginaw Blvd	Saginaw	JPS School-Based	S15
<b>School-Based Health Center - Northside</b>	2011 Prospect Avenue	Fort Worth	JPS School-Based	S16
<b>School-Based Health Center - Castleberry - Lake Worth</b>	5300 Buchanan Road	Fort Worth	JPS School-Based	S17
<b>School-Based Health Center - White Settlement</b>	8301 Downe Drive	White Settlement	JPS School-Based	S18
<b>School-Based Health Center - Western Hills</b>	8376 Mojave Trail	Fort Worth	JPS School-Based	S19
<b>School-Based Health Center - Chapel Hill Acad.</b>	4640 Sycamore School Road	Fort Worth	JPS School-Based	S20
<b>John Peter Smith Hospital</b>	1500 S. Main Street	Fort Worth	JPS Medical Home	M1
<b>Professional Office Complex</b>	1400 S. Main Street	Fort Worth	JPS Medical Home	M2
<b>Health Center for Women - Fort Worth</b>	1201 S. Main Street	Fort Worth	JPS Medical Home	M3

<b>Health Center - South Campus</b>	2500 Circle Drive	Fort Worth	JPS Medical Home	M4
<b>Health Center Stop Six/ Walter B. Barbour</b>	3301 Stalcup Road	Fort Worth	JPS Medical Home	M5
<b>Health Center - Polytechnic</b>	1650 S. Beach	Fort Worth	JPS Medical Home	M6
<b>Health Center - Cypress</b>	1350 E. Lancaster	Fort Worth	JPS Medical Home	M7
<b>Medical Home Southeast Tarrant</b>	1050 W. Arkansas Lane	Arlington	JPS Medical Home	M8
<b>Health Center - Northeast</b>	837 Brown Trail	Bedford	JPS Medical Home	M9
<b>Health Center - Gertrude Tarpley/Watauga</b>	6601 Watauga Road	Watauga	JPS Medical Home	M10
<b>Health Center - Diamond Hill</b>	3308 Deen Road	Fort Worth	JPS Medical Home	M11
<b>Health Center for Women &amp; Children NW</b>	2200 Ephriham Avenue	Fort Worth	JPS Medical Home	M12
<b>Health Center - Northwest/Iona Reed</b>	401 Stribling Drive	Fort Worth	JPS Medical Home	M13
<b>Health Center - Viola M. Pitts/Como</b>	4701 Bryant Irvin Road N	Fort Worth	JPS Medical Home	M14
<b>Mission Arlington</b>	210 W. South Street	Arlington	Free/Charitable Clinic	F1
<b>Open Arms Health Clinic</b>	3921 W. Green Oaks Blvd	Arlington	Free/Charitable Clinic	F2
<b>Crowley House of Hope</b>	208 N. Magnolia	Crowley	Free/Charitable Clinic	F3
<b>Baylor Community Care @ Fort Worth</b>	1650 W. Magnolia	Fort Worth	Free/Charitable Clinic	F4
<b>Cornerstone Assistance Network</b>	3500 Noble Avenue	Fort Worth	Free/Charitable Clinic	F5
<b>Fort Worth Pregnancy Center</b>	3221 Cleburne Road	Fort Worth	Free/Charitable Clinic	F6
<b>Mercy Clinic</b>	775 West Bowie Street	Fort Worth	Free/Charitable Clinic	F7
<b>Mission Fort Worth</b>	4401 Vermont Avenue	Fort Worth	Free/Charitable Clinic	F8
<b>Northside Community Health Center</b>	2106 N. Main Street	Fort Worth	Free/Charitable Clinic	F9
<b>Christian Community Health Clinic</b>	1709 E. Hattie Street	Fort Worth	Free/Charitable Clinic	F10
<b>Healing Shepherd Clinic</b>	1350 E Lancaster Avenue	Fort Worth	Free/Charitable Clinic	F11
<b>Southside Community Health Center</b>	3212 Miller Avenue	Fort Worth	Free/Charitable Clinic	F12
<b>GRACE Community Clinic</b>	837 East Walnut Street	Grapevine	Free/Charitable Clinic	F13
<b>RealChoices Pregnancy Medical Clinic</b>	2401 Ira E. Woods	Grapevine	Free/Charitable Clinic	F14
<b>Caring Place</b>	901 W. Broad Street	Mansfield	Free/Charitable Clinic	F15
<b>Al-Shifa Clinic</b>	7600 Glenview Drive	North Richland Hills	Free/Charitable Clinic	F16

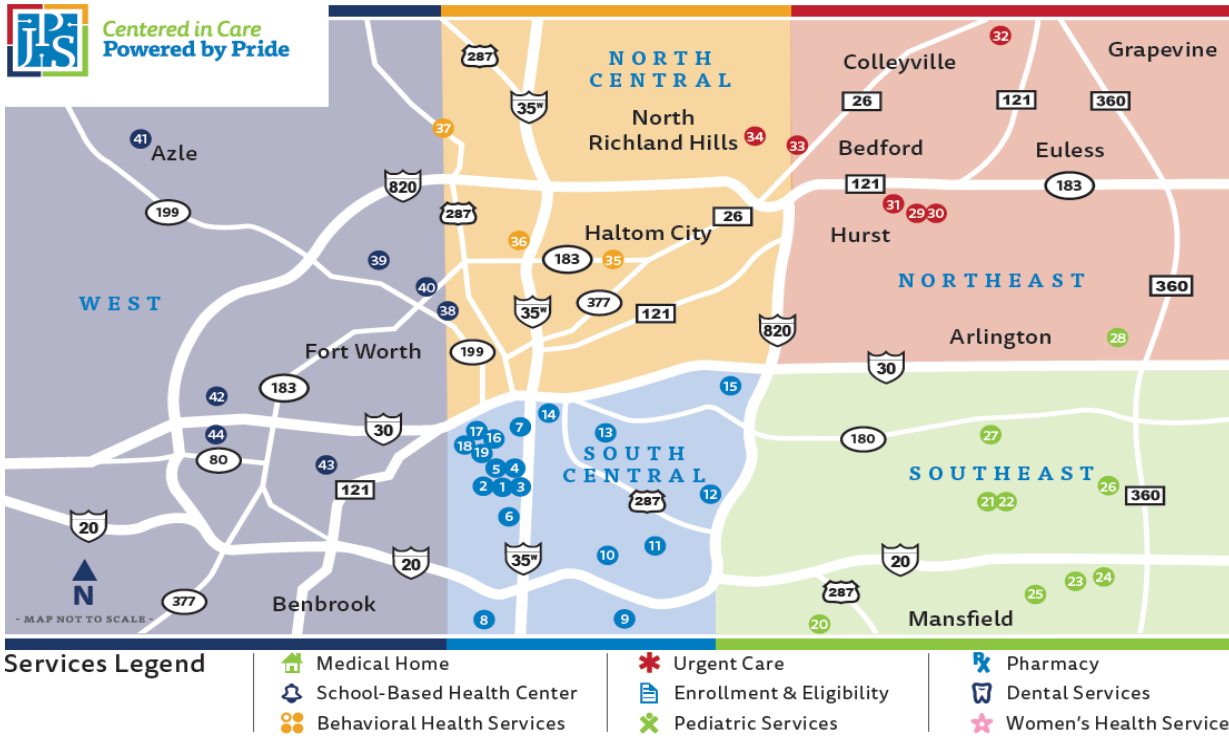
<b>Cook Children's Neighborhood Clinic-Northside</b>	4405 River Oaks Blvd	Fort Worth	Cook Children's Hospital	C1
<b>Cook Children's Neighborhood Clinic-Miller</b>	2755 Miller Ave	Fort Worth	Cook Children's Hospital	C2
<b>Cook Children's Neighborhood Clinic-McCart</b>	6421 McCart Ave	Fort Worth	Cook Children's Hospital	C3
<b>Cook Children's Neighborhood Clinic-Berry</b>	2600 E Berry St	Fort Worth	Cook Children's Hospital	C4
<b>Cook Children's Neighborhood Clinic-Arlington</b>	1525 S Cooper Arlington	Fort Worth	Cook Children's Hospital	C5
<b>Cook Children's Neighborhood Clinic- 8<sup>th</sup> Ave</b>	1729 Eighth Ave	Fort Worth	Cook Children's Hospital	C6

## Appendix II – Facility Planning, Financing and Construction Schedule

Below is a schedule for facility planning, financing and construction developed by Cumming. The CBRC endorses this schedule.

Project Activity	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7							
	q 1	q 2	q 3	q 4	q 1	q 2	q 3	q 4	q 1	q 2	q 3	q 4	q 1	q 2	q 3	q 4	q 1	q 2	q 3	q 4	q 1	q 2	q 3	q 4	q 1	q 2						
Secure Funding																																
Project Planning																																
Project Design																																
Parking Garage Construction																																
New Tower Construction																																
BH Hospital Construction																																
Backfill/ Renovation																																

## Appendix III – JPS Locations



### South Central Tarrant County

1	John Peter Smith Hospital	1500 S. Main Street, Fort Worth, Texas 76104 • Family Health Center 817-702-1215 • Urgent Care Center 817-702-1451 • Surgical Specialty Clinic 817-702-3000 • Psychiatric Emergency Center 817-702-4151 • Hemphill Behavioral Health 817-702-3100 • Trinity Springs Pavilion 817-702-3636 • Labor & Delivery • Outpatient Pharmacy 817-702-3531	817-702-3431	
2	Hemphill Behavioral Health Center	1617 Hemphill Street, Fort Worth, Texas 76104	817-702-3100	
3	Patient Care Pavilion	1575 S. Main Street, Fort Worth, Texas 76104 • Emergency • Surgery • Heart and Vascular Invasive Care • Trauma • ICU	817-702-3431	
4	Eligibility & Enrollment Center	1325 S. Main Street, Fort Worth, Texas 76104	817-702-1001	
5	Professional Office Complex	1400 S. Main Street, Fort Worth, Texas 76104 • Cardiology Center 817-702-6926 • Pediatric Center 817-702-1307 • Post Hospital Discharge Clinic 817-702-4952 • JPS Magnolia Health Center • Medicine Specialty Clinics - Dermatology, Endocrinology, Neurology, Pulmonology, Rheumatology 817-702-8400 • Health Connect Clinic 817-702-4925 • (Geriatrics) 1350 S. Main Street, Fort Worth, Texas 76104 • HealingWings/Infectious Disease 817-702-3701 • Medicine Specialty Clinics - Gastroenterology (GI) Clinic, Hepatitis C, Renal Clinic 817-702-8400 • (Eligibility and Enrollment inside Healing Wings) • Medical Procedures Clinic & Lab 817-702-1919		
6	School-Based Health Center - Southside	2115 Hemphill Street, Fort Worth, Texas 76110	817-702-5155	
7	Health Center for Women - Fort Worth	1201 S. Main Street, Fort Worth, Texas 76104	817-702-6500	
8	School-Based Health Center - Crowley	1320 W. Everman Parkway, Fort Worth, Texas 76134	817-702-4788	
9	School-Based Health Center - Everman	600 Townley Drive, Everman, Texas 76140	817-702-4848	
10	Health Center - South Campus	2500 Circle Drive, Fort Worth, Texas 76119	817-702-7340	
11	School-Based Health Center - Forest Oak	3250 Pecos Street, Fort Worth, Texas 76119	817-702-4864	
12	Health Center Stop Six/ Walter B. Barbour	3301 Stalcup Road, Fort Worth, Texas 76119	817-702-7150	
13	Health Center - Polytechnic	1650 S. Beach, Fort Worth, Texas 76105	817-702-6100	
14	Medical Home at True Worth Place	1513 E Presidio St, Fort Worth, Texas 76102	817-702-1100	
15	School-Based Health Center - Eastern Hills	5900 Yosemite Drive, Fort Worth, Texas 76112	817-702-4867	
16	Center for Cancer Care	601 W. Terrell Avenue, Fort Worth, Texas 76104	817-702-8300	
17	Center for Pain Management	701 W. Leuda Street, Fort Worth, Texas 76104	817-702-5958	
18	Klabzuba OB-Gyn Clinic	1300 W. Terrell Ave., Fort Worth, Texas 76104	817-735-2300	
19	Ben Hogan Bone & Joint Institute	800 5th Ave., Fort Worth, Texas 76104	817-735-2900	

## Southeast Tarrant County

<b>20</b> School-Based Health Center Mansfield <i>(located at the Linda Nix Family Caring Place)</i>	901 W. Broad Street, Mansfield, Texas 76063	<b>817-702-5120</b>	
<b>21</b> Medical Home Southeast Tarrant	1050 W. Arkansas Lane, Arlington, Texas 76013	<b>817-702-1100</b>	
<b>22</b> JPS Eligibility Center - Arlington	1030 W. Arkansas Lane, Arlington, Texas 76013	<b>817-702-1001</b>	
<b>23</b> Bardin Road Specialty Clinics	1741 E. Bardin Road, Arlington, Texas 76018	<b>817-702-8700</b>	
<b>24</b> Surgical Center - Arlington	4400 New York Avenue, Arlington, Texas 76018	<b>817-702-8500</b>	
<b>25</b> School-Based Health Center - Ferguson	600 S.E. Green Oaks Blvd., Arlington, Texas 76018	<b>817-702-4844</b>	
<b>26</b> School-Based Health Center - Central	600 New York Avenue, Arlington, Texas 76010	<b>817-702-5071</b>	
<b>27</b> Central Arlington Behavioral Health	501 W. Main Street, Arlington, Texas 76013	<b>817-702-3100</b>	
<b>28</b> School-Based Health Center - Nichols	1850 Brown Blvd., Suite A, Arlington, Texas 76006	<b>817-702-5135</b>	

## Northeast Tarrant County

<b>29</b> School-Based Health Center - Georgia Kidwell	3115 W. Pipeline Road, Building D, Euless, Texas 76040	<b>817-702-5253</b>	
<b>30</b> School-Based Health Center - HEB	3115 W. Pipeline Road, Building B, Euless, Texas 76040	<b>817-702-5234</b>	
<b>31</b> Health Center - Northeast	837 Brown Trail, Bedford, Texas 76022	<b>817-702-1100</b>	
<b>32</b> School-Based Health Center - Grapevine/Colleyville	3050 Timberline Drive, Grapevine, Texas 76051	<b>817-702-4857</b>	
<b>33</b> School-Based Health Center - Birdville	8200 O'Brian Way, North Richland Hills, Texas 76180	<b>817-702-4855</b>	
<b>34</b> Health Center - Gertrude Tarpley/Watauga	6601 Watauga Road, Suite 124, Watauga, Texas 76148	<b>817-702-1100</b>	

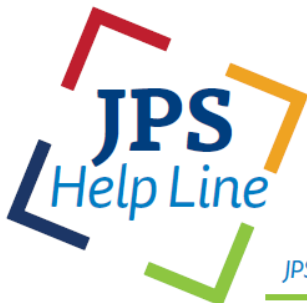
## North Central Tarrant County

<b>35</b> School-Based Health Center - Haltom City	2807 Layton Avenue, Fort Worth, Texas 76117	<b>817-702-4861</b>	
<b>36</b> Health Center - Diamond Hill	3308 Deen Road, Fort Worth, Texas 76106	<b>817-702-7000</b>	
<b>37</b> School-Based Health Center Eagle Mountain-Saginaw	1029 N. Saginaw Blvd., N. Town Center, Suite E-3, Saginaw, Texas 76179	<b>817-702-4874</b>	

## West Tarrant County

<b>38</b> School-Based Health Center - Northside	2011 Prospect Avenue, Fort Worth, Texas 76106	<b>817-702-4871</b>	
<b>39</b> School-Based Health Center - Castleberry - Lake Worth	5300 Buchanan Road, Fort Worth, Texas 76114	<b>817-702-5066</b>	
<b>40</b> Health Center for Women & Children NW	2200 Ephriham Avenue, Fort Worth, Texas 76164	<b>817-702-6500</b>	
<b>41</b> Health Center - Northwest/Iona Reed	401 Stribling Drive, Azle, Texas 76020	<b>817-702-1100</b>	
<b>42</b> School-Based Health Center - White Settlement	8301 Downe Drive, White Settlement, Texas 76108	<b>817-702-3334</b>	
<b>43</b> Health Center - Viola M. Pitts/Como	4701 Bryant Irvin Road N., Fort Worth, Texas 76107	<b>817-702-1100</b>	
<b>44</b> School-Based Health Center - Western Hills	8376 Mojave Trail, Fort Worth, Texas 76116	<b>817-702-4881</b>	
School-Based Health Center - Chapel Hill Acad.	Moved to the Southside School-Based Health Center	<b>817-702-5155</b>	

*School-based behavioral health services are available by referral only from a JPS School-Based Health Center provider or by calling 817-702-3100.*



[JPSmychart.org](http://JPSmychart.org)

[JPSHealthnet.org](http://JPSHealthnet.org)



## 24-Hour Nurse Advice

Call for health concerns, nurse advice or to make and reschedule appointments.

# 817-702-1100