

BEFORE THE MARYLAND HEALTH CARE COMMISSION

IN THE MATTER OF

ADVENTIST HEALTHCARE, INC. D/B/A
WASHINGTON ADVENTIST HOSPITAL

Matter No. 13-15-2349

**EXCEPTIONS OF INTERESTED PARTY, MEDSTAR MONTGOMERY
MEDICAL CENTER, TO REVIEWER'S RECOMMENDED DECISION**

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Interested Party, MedStar Montgomery Medical Center (“MMMC”), pursuant to COMAR 10.24.01.09B., submits the following exceptions to the November 18, 2015 Recommended Decision of the Reviewer (“Recommended Decision”) on the modified application of applicant, Adventist HealthCare, Inc., d/b/a Washington Adventist Hospital (“WAH”), for a Certificate of Need (“CON”).

INTRODUCTION

In the present application, WAH seeks a CON to: (1) relocate its existing facilities in Takoma Park in Montgomery County to a site in White Oak/Fairland on a corporate campus adjacent to the United States Food and Drug Administration (“FDA”) Complex and replace its existing facilities with a 170-bed general hospital; and (2) renovate the inpatient psychiatric facilities on the existing Takoma Park campus and relicense those facilities as a special hospital-psychiatric. In the Recommended Decision, the Reviewer concluded that WAH’s modified CON application should be approved with conditions. The Memorandum accompanying the Recommended Decision explains that WAH initially filed a CON application which resulted in a September 2012 Recommended Decision by Commissioner/Reviewer Barbara McLean who found that she “regretfully” had to recommend denial of the application on grounds that the size and scope of the project proposed by WAH was “unlikely to be viable” (at 2). The initial project had an estimated cost of \$397,705,000. (*Id.*) The Reviewer in the present case found that the project currently proposed by WAH has a total estimated cost of \$336.1 million is viable. (*Id.*)

The current Recommended Decision is based in large measure on the findings of the September 2012 Recommended Decision regarding WAH’s previous application to relocate the hospital to White Oak/Fairland and the health care environment that existed at that time. The prior recommended decision in 2012, however, could not have anticipated, and did not reflect, the

significant changes that have occurred since that decision, including the State's decision to support the replacement and relocation of the Prince George's Hospital Center, the entirely new financial incentives created by the new Medicare Waiver and implementing policies, the Affordable Care Act and the continuing effects of new technology and public health policies on hospital utilization. As a result, several of the findings contained in the 2012 recommended decision are no longer applicable or correct. In particular, WAH's contention that its proposed project is economically feasible and viable turns on assumptions as to future utilization that do not reflect the changes that have occurred in the health care field and Maryland regulatory environment. Substantial changes have profoundly affected hospital utilization throughout the State. WAH's most intense service areas have been affected dramatically. Nonetheless, WAH's application is based on the remarkably optimistic assumption that utilization will increase in the face of evidence that WAH's utilization in its most intense and important service areas has declined precipitously in recent years. In its Memorandum on WAH's application, the Health Services Cost Review Commission ("HSCRC") urged caution as to the validity of WAH's utilization assumptions and stated its recommendation that this Commission examine closely the need for the extensive, new facilities that WAH proposes. MMMC respectfully submits that an evidentiary hearing is appropriate to explore these issues, particularly the express reservations of the HSCRC as to the size of the new facilities.

There are other pivotal public health and planning issues presented by this application that should be addressed in an evidentiary hearing. WAH seeks to move from an area inside the Capital Beltway with large concentration of indigent and medically vulnerable persons to a corporate campus in an affluent area that is already well served by many acute care hospitals. The relocation of WAH in this manner is unprecedented and a more detailed and complete investigation and an

evidentiary hearing should be conducted to determine the impact of the proposed relocation on the access to care of the underprivileged population and whether a site could be assembled in Takoma Park, perhaps with downsized facilities, that would continue to serve the needs of this vulnerable population. This analysis was not developed in the 2012 proceedings before Commissioner McLean and thus was not addressed by her.

EXCEPTION NO. 1

THE NEED FOR FURTHER INVESTIGATION OF FINANCIAL FEASIBILITY/VIABILITY IN LIGHT OF THE HSCRC MEMORANDUM

MMMC excepts to the Reviewer's recommended finding that WAH has satisfied the standards set forth in COMAR 10.24.01.01B(13) and COMAR 10.24.01.08G(3)(d) governing the financial feasibility and viability of WAH's proposed replacement hospital. COMAR 10.24.01.01B(13) provides in pertinent part:

A hospital capital project shall be financially feasible and shall not jeopardize the long-term financial viability of the hospital. ***

(b) Each applicant must document that:

- (i) Utilization projections are consistent with observed historic trends in use of the applicable services(s) by the service area population of the hospital or State Health Plan need projections, if relevant;
- (ii) Revenue estimates are consistent with utilization projections and are based on current charge levels, rates of reimbursement, contractual adjustments and discounts, bad debt, and charity care provisions, as experienced by the applicant hospital or, if a new hospital, the recent experience of other similar hospitals;
- (iii) Staffing and overall expense projections are consistent with utilization projections and are based on current expenditure levels and reasonably anticipated future staffing levels as experienced by the applicant hospital, or, if a new hospital, the recent experience of other similar hospitals; and
- (iv) The hospital will generate excess revenues over total expenses (including debt service expenses and plant and equipment depreciation), if utilization forecasts are achieved for the specific

services affected by the project within five years or less of initiating operations with the exception that a hospital may receive a Certificate of Need for a project that does not generate excess revenues over total expenses even if utilization forecasts are achieved for the services affected by the project when the hospital can demonstrate that overall hospital financial performance will be positive and that the services will benefit the hospital's primary service are a population.

COMAR 10.24.01.08G(3)(d) provides in pertinent part:

For purposes of evaluating an application under this subsection, the Commission shall consider the availability of financial and non-financial resources, including community support necessary to implement the project within the time frame set forth in the Commission's performance requirements, as well as the availability of resources necessary to sustain the project.

1. **Summary of the Reviewer's Recommended Decision**

In concluding that WAH's proposed project was financially feasible and viable, the Reviewer relied heavily on the HSCRC's November 6, 2015 Memorandum ("HSCRC Memorandum") reviewing and commenting on the financial feasibility and underlying assumptions of WAH's proposed project. (Reviewer Memorandum at 3-4). The HSCRC Memorandum, however, raised a number of significant concerns with the feasibility and viability of WAH's project and the assumptions made by WAH. The chief concern expressed by the HSCRC is that WAH's financial projections are based on an assumption that its volumes will increase despite a consistent decline in volumes in recent years. The HSCRC Memorandum noted this decline in volumes in the context of the fact that "there has been a steady decline in inpatient hospital utilization over decades, in spite of an aging population." (HSCRC Memorandum at 5). Based on this data, the HSCRC cautioned the Commission to revisit the issue of the size of the bed need for WAH's proposed facility and the consequences to feasibility if excess capacity should be constructed (*id.* at 5):

Our advice is that attention should be directed to making sure that bed need projections account for these trends and changes while the State is evaluating the

size of the facility. There is a risk that excess capacity could develop, and that this excess capacity could affect the feasibility of the WAH project.

Further, the HSCRC pointed out that the assumptions regarding the financial viability are reasonable (at 12):

... depending on WAH attaining the volumes projected in the CON. The current environment of change in health care financing and delivery increase the probability that inpatient volumes will decline.

The Reviewer's Recommended Decision was issued close on the heels of the HSCRC Memorandum and did not address in detail the express recommendation of the HSCRC that a further investigation be conducted as to WAH's projected utilization and the size of the facilities proposed by WAH.

2. The Grounds for MMMC's Exception

a. Utilization is Pivotal to Financial Feasibility and Viability

WAH's contention that its proposed project is economically feasible and viable is based on the optimistic assumption that utilization will increase in the face of evidence that WAH's utilization has declined precipitously in recent years in its most important and intense service areas. The viability of WAH's proposal turns on assumptions as to future utilization that do not reflect the substantial changes in the health care arena since 2012 that have profoundly affected hospital utilization. MMMC respectfully submits that an evidentiary hearing is appropriate to explore these issues.

b. WAH's Assumptions Regarding Future Utilization are the Cornerstone of WAH's Operating Projections and Conflict with Reality

WAH's optimistic assumptions regarding future utilization fly in the face of the fact that it has experienced consistently declining volumes. WAH's utilization projections are the basis for its projected financial "turnaround" from a \$12.6 million loss in 2013 to a \$2.6 million positive margin in 2014 and projected positive margin of \$7.6 million in 2015. WAH attributes this

“turnaround” to “improved efficiencies” and “expense reduction initiatives in 2014.” It is true that WAH’s costs decreased to some extent, but the decrease was demonstrably not due to “initiatives” and better management. Rather, MMMC showed that the improved margin was likely due to (1) a dramatic reduction in volumes of high intensity cases as well as the precipitous overall volume decline, and (2) the large decline in Uncompensated Care (“UCC”) losses that have not yet been reflected in WAH’s rates. The volume reduction in WAH’s most intense and important service lines is dramatic:

<u>Statistic</u>	<u>% Difference from CY13 to Annualized CY15</u>
Total Discharges	(6.4%)
Case-Mix Index	(2.4%)
CMI Adjusted Discharges	(8.6%)
Circulatory (Heart) System Cases	(26.3%)
Pregnancy, Childbirth Cases	13.2%

(HSCRC Inpatient Abstract Data Tapes, CY 2013, 2014 and First Three Quarters of 2015 (annualized))

Accordingly, WAH’s margin improvement was a direct result of substantial decreases in volumes in intense cases, such as circulatory cases, and substantial increases in volumes in low cost services, such as births. The dramatic decline in volumes in WAH’s most important and intensive services – 26.3% in its flagship circulatory program – is an unmistakable sign of operational and financial decline.

Even with its utilization projections, the revised operating projections (inflated) submitted by WAH for the proposed new hospital and for the facilities and services remaining at its Takoma Park campus show a breakeven margin for the initial years and a modest 0.5% margin by Year 5 B. (11/5/15 Comments of MMMC on WAH Projections, at 3). These results constitute the

slimmest of margins which do not establish a financially sound or feasible project. WAH's projected margins for the new hospital, remaining facilities in Takoma Park and total project are as follows:

<u>Income (Loss) from Operations of:</u>	<u>CY 2019</u>	<u>CY 2020</u>	<u>CY 2021</u>	<u>CY 2022</u>	<u>CY 2023</u>
The Project	\$5,361	\$5,460	\$6,084	\$6,447	\$6,738
Takoma Park	<u>(5,359)</u>	<u>(5,772)</u>	<u>(5,528)</u>	<u>(5,322)</u>	<u>(5,199)</u>
Total (per WAH revision)	\$2	\$(312)	\$556	\$1,125	\$1,539

A further contributing factor to the improved margin in 2014 and 2015 (annualized) that cannot be sustained is the reduction in bad debt and charity ("UCC") experienced by WAH. WAH's UCC losses dropped precipitously from 2014 to 2015. In fact, WAH's revenue deductions dropped by over \$10 million in 2015, largely as a result of a decline in UCC. WAH's rates, however, include a UCC adjustment based rate years prior to this decline in UCC. When WAH's rates are adjusted to reflect the significant decline in UCC, its margins will deteriorate. The total margin in 2015 is projected to be \$7.6 million. This margin, however, is driven to a significant degree by the disparity between the UCC adjustment in WAH's rates and its actual UCC. This gap is demonstrable. The UCC provision in rates for rate year 2015 was 12.8% and for 2016 is 12.2%. WAH's actual 2015 (annualized) UCC is 11.5%.

In short, WAH has projected a breakeven margin after the project is completed, not a healthy vibrant facility. Even these breakeven margins are wishful thinking in light of its assumption that utilization will increase.

c. WAH's Financial Ratios Indicate a Significant Barrier to Borrowing

Another financial concern that should be further addressed in an evidentiary hearing is WAH's ability to borrow over \$300 million in light of WAH's financial ratios. Even with the benefit of WAH's tenuous improvement of its margins in 2014 and 2015, the key financial ratios

as reported by WAH have not significantly improved. WAH's financial ratios are considerably lower than industry standards and not supportive of a major (over \$300 million) debt issue.

A comparison of the statistics for WAH's Obligated Group, prior and updated, compared to the Moody's Rating Service medians demonstrates that WAH's key financial ratios will not support a major debt issuance (11/5/15 Comments of MMMC, at 6):

<u>Financial Ratio</u>	<u>Adventist</u>		<u>Moody's Medians</u>	
	<u>2013 (Original)</u>	<u>2014 (Revised)</u>	<u>All Hospitals</u>	<u>Baa Hospitals</u>
Debt Service Coverage Ratio	1.8	2.1	4.5	3.1
Days Cash on Hand	125	132	198	148
Debt to Capitalization	45%	43%	35%	43%

In short, in all three relevant financial ratios, WAH is well below the Moody's medians for all rated hospitals and continues to be below or at the level of the lowest rated (Baa) group. It should also be noted that WAH's Obligated Group debt numbers exclude the lease amounts (which should be capitalized and reflected in the ratios) for the utility plant associated with the project. The inclusion of these costs – consistent with GAAP – will cause WAH's ratios to be even more unacceptable.

The ability for WAH to borrow over \$300 million to finance this project is speculative in light of the overall financial position (financial ratios) and WAH's financial projections indicating only the slimmest of margins – at best.

3. Relief Requested

MMMC respectfully requests that this application should be returned to the Reviewer for further investigation and an evidentiary hearing on (1) the impact of declining volumes at WAH

on the feasibility and viability of the proposed project, (2) WAH's utilization projections and the need for the size of the facilities proposed by WAH, and (3) whether WAH's project can be financed given its ratios that are far below industry standards.

EXCEPTION NO. 2

IMPACT OF WAH'S RELOCATION ON THE ACCESS OF THE INDIGENT AND MEDICALLY VULNERABLE TO HEALTH CARE

MMMC excepts to the Reviewer's recommended finding that WAH has satisfied the standard set forth in COMAR 10.24.10.04B, which provides in pertinent part (emphasis supplied):

(4) A capital project undertaken by a hospital **shall not have an unwarranted adverse impact** on hospital charges, **availability of services, or access to services**. The Commission will grant a Certificate of Need only if the hospital documents the following: * * *

(b) If the project reduces the potential availability or accessibility of a facility or service by eliminating, downsizing, or otherwise modifying a facility or service, the applicant shall document that each proposed change **will not inappropriately diminish, for the population in the primary service area, the availability or accessibility to care, including access for the indigent and/or uninsured.**

1. Summary of the Reviewer's Analysis

In reviewing whether the project will inappropriately diminish access to care by the underprivileged population that WAH serves, the Reviewer recognized that an attempt to analyze the impact on the indigent and medically underserved when conducted at the zip code area level may obscure the impact given the size and diversity of the zip code area populations. (Recommended Decision at 36). Accordingly, the Reviewer analyzed the travel time and utilization of the top 20 CBGs by volume of emergency department ("ED") visits to WAH and the CBGs sending more than 50% of their total ED visits to WAH. The Reviewer's findings are listed on page 37 of the Recommended Decision. The Reviewer found that in the present case the impact on the indigent and medically underserve will not be unacceptable because none of the CBGs

proximate to existing WAH will be more than 15 minutes from a hospital ED if the project is implemented. (*Id.* at 36-37). The Reviewer's analysis focused only on access to emergency services, not the full spectrum of hospital-based health care services or the medical needs and socio-economic condition of the neighborhood closest to WAH. The Reviewer found that in the present case the impact on the indigent and medically underserved will not be unacceptable and based this conclusion entirely on changes in drive times from WAH's primary service area to another hospital ED. (*Id.* at 36-37).

The Reviewer acknowledged that the removal of WAH from the underprivileged neighborhoods near existing WAH would have an impact on access to care and for this reason recommended that approval of the CON be conditioned on WAH establishing and maintaining the 24/7/365 urgent care center. (*Id.* at 36-37). Specifically, the Reviewer concluded (*Id.* at 167):

[S]ince the applicant has committed to transforming its current ED into a 24/7/365 urgent care center if/when it moves to White Oak, my analysis shows that anywhere from 25% to 45% of the visits to its ED could be served in an urgent care setting, and thus could continue to access this facility. Given the importance of this [urgent care center] to mitigating impact ... I am recommending a condition be attached to an approval of this project that obligates AHC to maintain 24/7/365 [urgent care center] access unless it receives approval from MHCC to reduce its hours of operation.

2. The Grounds for MMMC's Exception

The present case involves an unprecedented request. The proposal is a pivotal one for Maryland health care planning and public health policy. WAH seeks to relocate from an urbanized area inside the Capital Beltway with an underprivileged and vulnerable population to a location outside the Capital Beltway in a far more suburban and affluent area. In the past, Maryland hospitals, such as The Johns Hopkins Hospital, Mercy Hospital and Franklin Square Hospital – to name a few – have eschewed the temptation of leaving their underprivileged neighborhoods for a more affluent, suburban area, and instead have chosen to remain a critical part of their communities

and to continue their mission. The decision on WAH's proposed relocation should be made only with the benefit of the most complete and effective analysis of the impact on the underprivileged neighborhoods and communities left behind. This study can be undertaken by the Commission staff, by WAH or by MMMC and should be the subject of careful critique, in the context of an evidentiary hearing.

The investigation and analysis undertaken by the Reviewer to determine the impact of the proposed relocation of WAH on the indigent and medically vulnerable population in its community was consistent with past practice. The analysis was not adequate in light of the unprecedented and pivotal health care policy issues presented by this application. During the comment period, MMMC retained Kenneth Thorpe, Ph.D., a professor at Emory University and nationally renowned expert in the field of public health policy, to design a research study to assess the impact of the proposed relocation on the indigent and medically vulnerable persons in the neighborhoods that WAH currently serves. (A copy of the Emory University Faculty Profile for Dr. Thorpe is attached as Exhibit 18). Such a study would be based on patient-specific information to determine effectively the impact on the indigent and medically vulnerable persons in WAH's community that currently rely on that hospital.¹

The proposed study would be consistent with the Commission's governing statute which states that one of its duties in the area of health planning and development is to "... periodically participate in or perform analyses and studies that related to: (i) Adequacy of services and financial resources to meet the needs of the population; (ii) distribution of health care resources; (iii) allocation of health care resources. . ." [Health-General §19-115(a)(2)].

¹ MMMC, in its Comments, explained how such information could be produced by disguising patient identity pursuant to procedures approved by federal privacy laws.

a. **The Critical Relationship Between Proximity and Utilization**

The relationship of proximity to hospital utilization is a complex one but important to health planning policy. Academic research has established that the impact of the relocation on the underprivileged population can be effectively measured. Any analysis of the impact of the proposed WAH relocation on indigent and medically vulnerable persons in the communities served by WAH must begin with recognition of the statistical relationship between hospital utilization and proximity. The academic research, published in leading health care economics journals, has established that proximity is a critical determinant of hospital utilization, and not just ED use.² Additionally, academic research has established that, even in metropolitan areas, small increases in travel time or distance for general (and particularly indigent) patients will reduce the percentage of those patients that actually seek services.³ For example, a 1% increase in patients' travel time to a new location will result in (*id.*):

- a 1.2% reduction in the patients' use of medical-surgical services;
- a 0.7% reduction in the patients' use of obstetric/gynecology services;
- a 1.5% reduction in the patients' use of hospital services among children; and
- a 0.6% reduction in patients' use of psychiatric services.

b. **An Analysis at the CBG Level Demonstrates that Takoma Park has a Markedly More Underprivileged and Vulnerable Population than White Oak/Fairland**

Demographic differences between Takoma Park and the White Oak/Fairland area, and thus differences in patient behavior, are clear at the census block group ("CBG") level, but not at the zip code or Primary Service Area level. The Primary Service Area of a hospital is the Maryland

² Luft, *et al.*, "Does Quality Influence Choice of Hospital," JAMA Vol. 263, No. 21 (June 6, 1990); Burns *et al.*, *The Impact of Physician Characteristics in Conditional Choice Models for Hospital Care*, Journal of Health Economics, Vol. 11, pp. 43-62 (1992).

³ M. McGuick and F. Powell, *Spatial Patterns of Hospital Utilization: The Impact of Distance and Time*, Inquiry 21(1) 1984: 84-95.

postal zip code areas from which the first 60% of the hospital's patient discharges originate during the most recent 12 month period. COMAR 10.24.10.06.25(i). Zip codes, however, can be long, irregularly shaped, and include numerous, disparate communities and neighborhoods. For example, zip code 20783 extends from the border with the District of Columbia almost to WAH's proposed new site in White Oak/Fairland, well outside the Capital Beltway. (Exhibit 2)⁴.

On the other hand, data at the CBG level analyzed in the context of the closest proximate hospital can effectively be utilized to measure the impact of a change in location and available services. Data by CBG shows that significant areas for which the current WAH is the closest hospital are demographically quite different than areas for which the proposed location is the closest hospital. A review of the demographic data at the CBG level conclusively establishes that zip code areas are too large and irregularly shaped to show these distinctions and too geographically dispersed to conduct a meaningful analysis (see Exhibit 2).⁵

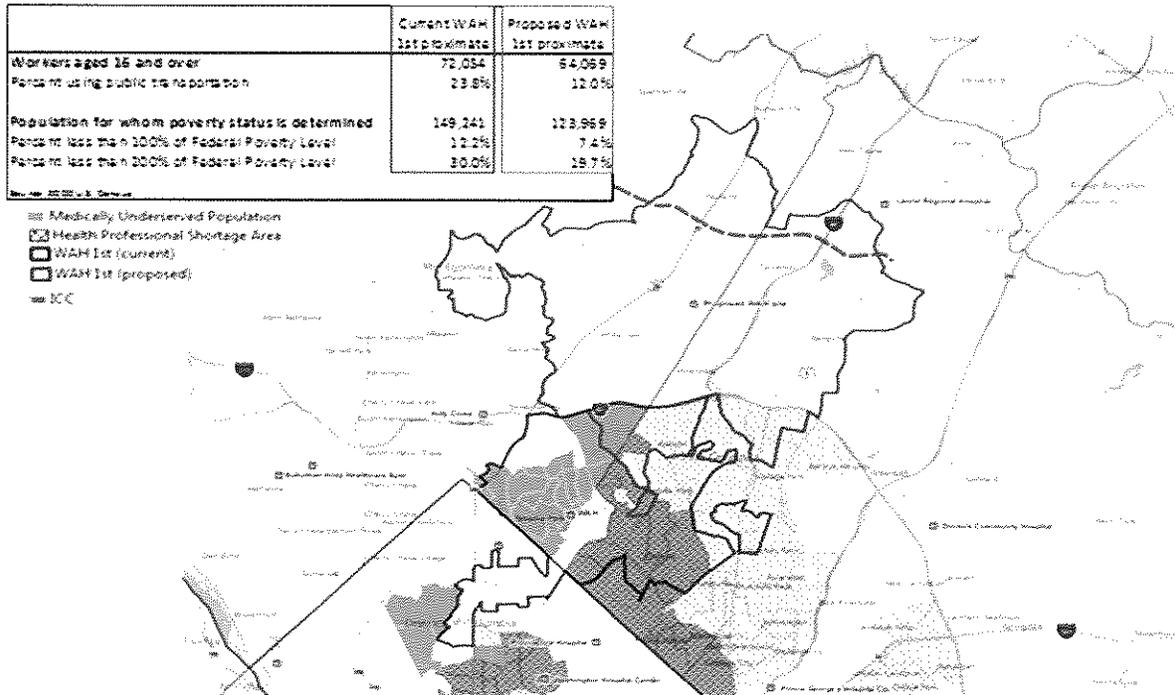
For purposes of analyzing the impact of WAH's proposed relocation on indigent and medically vulnerable people, it is indisputable that at its current location, the existing WAH is the closest hospital to large concentrations of people who are indigent and vulnerable. U.S. Health Resources and Services Administration ("HRSA") data shows areas that are designated as Medically Underserved Areas/Populations ("MUA/Ps") or Health Professional Shortage Areas

⁴ MMMC has attached to these exceptions Exhibits 1-2 and 4-13 which were the corresponding exhibits filed with MMMC's Comments on the modified application. Exhibit 3 to these Exceptions is a map set forth in MMMC's Comments at page 15. Further, MMMC has attached as Exhibits 14-16 photographs of the community surrounding existing WAH. Exhibit 17 is a photograph of the proposed WAH site.

⁵ The demographic and statistical information in these Exceptions relating to the areas for which the current WAH and the proposed WAH are the most proximate and second most proximate hospital are based on the prefiled testimony of Jeffrey Bubblo and accompanying exhibits submitted by Montgomery General Hospital in the evidentiary hearing on WAH's initial CON application to relocate to the White Oak/Fairland area, which application was withdrawn following the Reviewer's issuance of a recommendation that the application be denied. This demographic and statistical information should be updated if the Commission determines to hold an evidentiary hearing on the current modified CON application as MMMC believes is appropriate.

(“HPSAs”)⁶ surround the current WAH site and that these areas are inside the Capital Beltway

(Exhibit 3):



On Exhibit 3, the areas in orange reflect areas of medically underserved populations and the hatched areas reflect health professional shortage areas, all of which are inside the Capital Beltway, near existing WAH.⁷ The area outlined in blue shows the communities for which existing WAH is the closest hospital, all inside the Capital Beltway. The area outlined in red is the area for which the proposed WAH will be the closest hospital. Virtually all of these areas are outside

⁶ MUA/Ps are areas or populations designated by HRSA as having: too few primary care providers, high infant mortality, high poverty and/or high elderly population. Health Professional Shortage Areas (HPSAs) are designated by HRSA as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), demographic (low income population) or institutional comprehensive health center, federally qualified health center or other public facility). An HPSA is a geographic area, population group, or health care facility that has been designated by HRSA as having a shortage of health professionals (<http://bhpr.hrsa.gov/shortage/hpsas/faq.html>). MUA/Ps are geographic areas “in which residents have a shortage of personal health services,” and “may include groups of persons who face economic, cultural or linguistic barriers to health care. HPSAs are areas having a shortage of primary medical care or medical or other public health facilities.

⁷ Exhibit 3 hereto was introduced at the evidentiary hearing on WAH’s initial application for a CON, as Montgomery General Hospital Exhibit 19. Exhibit 3 hereto was also reproduced at page 15 of the Comments filed by MMMC on WAH’s current modified application.

the beltway. Exhibit 3 also shows that there is very little overlap between the areas for which both existing WAH and the proposed WAH are the closest hospital. Furthermore, Exhibit 3 demonstrates that the proposed WAH location, in the area outlined in red, is well removed from the concentrations of indigent and medically underserved persons WAH currently serves.

Demographic data generated by the U.S. Census Bureau and other published sources by CBG establishes that the areas for which the existing WAH is the closest hospital are: (a) more densely populated, (b) growing faster, and (c) more economically and medically underserved than the area for which WAH's proposed new site is the closest hospital (Exhibit 4, [Bubblo Prefiled Testimony], at 19-20).⁸ Furthermore, U.S. Census Bureau data by census block groups on poverty levels show that the current population for which WAH is the closest hospital has a significantly higher rate of poverty. That is, 30.0% of the population are below 200% of the Federal Poverty Level ("FPL") compared to 19.7% in the population closest to the proposed location. The current population for which WAH is the closest hospital also has a higher percentage of severe poverty (less than 100% of FPL). The areas for which current WAH is the closest hospital have a 12.2% severe poverty percentage, compared to 7.4% for the proposed location. (Exhibit 4, [Bubblo Prefiled Testimony], p. 21).

Information on WAH's patients from CBGs is required to adequately assess the impact of the indigent populations that WAH currently serves. Hospital discharge data, including payer mix, are currently not publicly available at the census block group level. Therefore, a conclusive and effective analysis can only be accomplished by obtaining CBG level data on patients from WAH and analyzing this data.

⁸ Exhibit 4 to these Exceptions is a copy of the Direct Testimony of Keith Bubblo in the evidentiary hearing on WAH's initial application.

c. **The Urgent Care Center Condition is Unenforceable**

In the Recommended Decision on WAH's proposed relocation in 2012, Commissioner McLean found (at 39) that, while it would be "tempting" to require the establishment and operation of an urgent care center as a condition to the CON to mitigate adverse impact on the underprivileged, the "Commission does not have an adequate enforcement mechanism to ensure the implementation of [urgent care center] services outside the hospital."

This conclusion was correct. The Commission has no jurisdiction over the establishment or operation of an urgent care center. Further, under COMAR 10.24.01.12, the CON is only required to be maintained in good standing by the applicant "up to completion, licensure, and first use of the approved project." While the CON may require WAH to initially establish a 24/7/365 urgent care center, have it licensed and obtain first use approval from the Commission, the Commission has no ongoing enforcement authority under the CON after licensure and first use. Further, nothing in the law requires WAH to obtain Commission approval before changing the hours of operation of an urgent care center or before shutting the center down altogether. In short, as Commissioner McLean recognized, this condition is illusory and unenforceable.

The statutory authority under §19-126 to "approve with conditions" a CON does not give the Commission unlimited authority to impose CON conditions. *See, e.g., Fort Washington Community Hospital, Inc. v. Southern Maryland Hospital Center*, 66 Md. App. 480, *affirmed*, 308 Md. 323 (1987). It is settled that an agency is not permitted to regulate a matter outside of its statutory jurisdiction even if it does so in aid of regulating a matter within its jurisdiction. In *Holy Cross Hospital v. Health Services Cost Review Commission*, 283 Md. 677 (1978), the Court of Appeals rejected the HSCRC's attempt to set the rates charged by physicians, which the HSCRC argued was necessary in order to carry out its statutory charge to assure the public that total hospital

costs are reasonably related to the total services provided. Likewise, in *Consumer Protection Division v. George*, 383 Md. 505 (2004), the Court of Appeals held that the Consumer Protection Division's authority to impose financial penalties against a violator did not authorize it to issue an order stating that if the violator failed to pay the assessed penalty, the violator was required to submit a list of assets and other financial information to the agency. The Court rejected the agency's argument that it could impose this requirement in furtherance of its statutory authority to impose penalties. Here, it is beyond dispute that the Commission does not have jurisdiction over the establishment and operation of an urgent care center, and thus could not authorize (let alone require) WAH to establish and operate a 24/7/365 urgent care center directly. Accordingly, it cannot do so indirectly by making it a condition to CON approval.

Accordingly, there is no certainty that the impact on the underprivileged communities will be ameliorated by the 24/7 urgent care center as the Reviewer envisions. This is particularly so in light of the fact that WAH's operations remaining in Takoma Park are projected to operate at approximately a \$5 million annual loss and thus may not be sustainable.

3. Relief Requested

The effect of WAH's proposed relocation on the people in the communities in the vicinity of existing WAH should be studied in detail at the CBG level, since zip code boundaries do not generate data adequate for an effective analysis of this issue. MMMC believes that the only way that the Commission can make an informed decision regarding the impact on the indigent and vulnerable people that WAH currently serves is to undertake a comprehensive study with more detailed information on this population than is publicly available.

The level of detailed analysis is consistent with the research literature which states that fewer individuals, particularly indigent individuals, would seek hospital services if the distance and travel time to a hospital increases. Based on this evidence, the analysis will allow the parties

and the Commission to determine the actual increased travel time of Medicaid and uninsured persons who rely on WAH at the current time for their care and the impact of the proposed relocation on them in terms of whether they will continue to seek care. The precise parameters of the study could be further established and refined by the Commission staff with the participation of the parties. In short, a compelling analysis can be developed regarding the extent to which indigent and medically vulnerable persons will and will not obtain necessary health care as a result of the proposed WAH location.

An evidentiary hearing should be held to consider the impact of the loss of proximity to WAH for this vulnerable population and the fact that, based on the cited academic research, underprivileged persons simply may not seek, or may forego continued, chronic care and management if a hospital is no longer proximate. Accordingly, this application should be returned to the Reviewer with a direction to more thoroughly analyze the impact of the proposed relocation on access of the underprivileged and medically underserved to all services, not just ED services, consistent with academic research cited above.

Dr. Thorpe designed a research study to assess the impact of WAH's proposed relocation on the indigent and medically vulnerable communities that it currently serves. The analysis would be based on patient-specific information produced by law in a manner that is consistent with federal privacy laws. This analysis would include the following:

- examination of the distribution of travel time for indigent patients to the current WAH location, the proposed relocation site and the hospital that would be the new most proximate hospital;
- examination of the frequency of use across inpatient and outpatient services (number of admissions, visits, etc.) of indigent and uninsured patients;
- tabulation of the distribution of chronic medical conditions across sites (need for frequent use and medical management);

- use of the published research literature on the relationship between travel time and hospital use, calculation of the expected reduction in utilization among uninsured and Medicaid patients as a result of the proposed relocation; and
- application of these reductions to the types of care that would be at risk of not being provided, such as chronic illnesses.

The analysis designed by Dr. Thorpe will allow the parties and the Commission to determine the actual increased travel time of Medicaid and uninsured persons who rely on WAH now for their care and the impact of the proposed relocation on them in terms of whether they will continue to seek care.

This level of detailed analysis is consistent with the research literature which states that fewer individuals, particularly indigent individuals, would seek hospital services if the distance and travel time to a hospital increases. The detailed analysis is also appropriate in a situation where a hospital is seeking to leave a location with a substantial and growing population of indigent and medically underserved and vulnerable people. This study is well within the Commission's authority under HG§19-115(a)(2). See Exhibit 5 for additional details about the study requirements.

EXCEPTION NO. 3

THE NEED FOR A GENERAL HOSPITAL IN TAKOMA PARK VERSUS WHITE OAK/FAIRLAND

MMMC excepts to the Reviewer's recommended finding that WAH satisfied COMAR 10.24.01.08G(3)(b) which provides in pertinent part:

The Commission shall consider the applicable need analysis in the State Health Plan. If no State Health Plan need analysis is applicable, **the Commission shall consider whether the applicant has demonstrated unmet needs of the population to be served, and established that the proposed project meets those needs.** (Emphasis added)

1. **Summary of the Reviewer's Analysis**

The Reviewer disagreed with MMMC's position that the needs of the population currently served by WAH in Takoma Park should be the focus of the need analysis under COMAR 10.24.01.08G(3)(b). The Reviewer found that a general hospital in White Oak/Fairland replacing a general hospital in Takoma Park will in all likelihood result in some changes to the catchment areas of general hospitals in the region. (Recommended Decision at 131). Indeed, the Reviewer had earlier concluded that the ED at HCH would be the most appropriate choice for CBGs in the vicinity of existing WAH. (*Id.* at 36-37). The Reviewer found, however, that the region was marked by multiple hospitals within reasonable travel times for the vast majority of the region's population, and did not address the needs of the population currently served by WAH specifically. (*Id.*)

2. **The Grounds for MMMC's Exception**

a. **Evidence for Takoma Park as the Most Appropriate Location for a General Hospital**

WAH's application failed to demonstrate that the needs of the population currently being served are met by relocation to the White Oak/Fairland site. The Reviewer accepted that, following WAH's relocation, HCH, not WAH, would be the most proximate hospital for the CBGs in the vicinity of existing WAH. (Recommended Decision at 36-37). The Reviewer also concluded that the areas surrounding WAH's proposed, new location are already well served by more than three acute care hospitals. (*Id.* at 46-37, See Exhibit 1). Indeed, the proposed location is already much better served by acute care hospitals than the Takoma Park location that WAH seeks to abandon, which is in the primary service area of only one other hospital, HCH. This difference in the availability of acute care services to the neighborhoods and communities closest to existing WAH would only be exacerbated by the proposed relocation.

Given the statistical relationship between hospital proximity and utilization, it is an inescapable conclusion that WAH's proposed relocation to the White Oak/Fairland site to the north and outside of the Capital Beltway will result in WAH shedding volume in the southern part of the areas for which it is currently the closest hospital, areas which contain significant indigent and medically underserved populations. WAH would not be the closest hospital for these areas if it were relocated to White Oak/Fairland. At the same time, WAH's relocation will result in it gaining volumes in the more affluent areas closest to its proposed new location. The Takoma Park location is also in an area with a higher population density (Exhibit 6) and is growing faster, as described above. Further, the Takoma Park area has higher use rates. (Exhibits 7-9). Thus, White Oak/Fairland cannot be a more effective location for a hospital than Takoma Park.

b. The Community Need Index Further Demonstrates the Greater Need for a Hospital in Takoma Park

Another useful illustration of the general need for services in the Takoma Park area over the White Oak/Fairland area is the Community Need Index ("CNI") score. To inform decisions about prioritization and effectively distributing hospital and other health care resources by providing qualitative and statistical justification for choosing specific communities with the greatest need for health services, Dignity Health and Truven Health developed the CNI in 2004. The CNI strongly supports the conclusion that the Takoma Park area is a superior location for a new WAH facility in terms of the public need. (See Exhibit 10).

The CNI compiles socio-economic factors from the community that are statistically linked to variations in community needs for healthcare services. The CNI score is an average of five different barriers to access to healthcare services including income, cultural, education, insurance, and housing which are correlated with health status. The CNI provides a score for every populated zip code in the United States on a scale of 1.0 to 5.0. A score of 1 indicates the community is

doing well with the least need for healthcare services. A score of 5 is not good, meaning there is a need for additional services. The purpose is to provide statistical support for choosing specific communities for services designed to address health disparities.

As can be seen from the map in Exhibit 11, the CNI score for the Takoma Park zip code (20912) is 3.8. The CNI scores are higher, indicating greater need for additional services, in Takoma Park's zip code, as well as Takoma Park's contiguous zip codes (20782, 20783, 20903). The proposed relocation site, housed in 20904, has a CNI score of 3.2, indicating less need. According to this CNI methodology, therefore, the need for health services is greater in Takoma Park than in the White Oak/Fairland section of the County. These results also show that relocating the hospital would likely only exacerbate the difference in the need for services of these two areas.

If this public policy decision is made based on where is the best place for a hospital to meet the public health needs of the State, the site chosen will be at or near WAH's existing location inside the Capital Beltway serving a growing population with significant areas of indigent and medically underserved persons, not the White Oak/Fairland area. By proposing to leave Takoma Park, WAH is seeking to abandon the very people that need easy access to health care services the most. WAH seeks to move from an area of greater need to an area that -- quite simply -- does not need another acute care hospital.

3. Relief Requested

MMMC respectfully requests that the Commission return this issue to the Reviewer with directions to consider whether the proposed relocation will meet the needs of the population WAH currently serves – the population for which WAH is the most proximate hospital. Although the Reviewer's Recommended Decision is consistent with the Commission's traditional bed-need analysis on a County-wide basis, in light of the pivotal and precedent setting public policy issues

presented by WAH's proposed relocation, the Commission should eschew the broader approach and order both that (1) the study designed by Dr. Thorpe be conducted by the Commission staff or others, and (2) an analysis be undertaken as to whether the need for a general hospital is greater in Takoma Park or the White Oak/Fairland area. MMMC submits that this analysis will demonstrate that the severe impact of the relocation on Takoma Park's underprivileged neighborhoods is glaring in light of the absence of any such need in the White Oak/Fairland area.

EXCEPTION NO. 4

**WAH'S FAILURE TO EXPLORE A
COST-EFFECTIVE ALTERNATIVE IN TAKOMA PARK**

MMMC excepts to the Reviewer's recommended finding that WAH has satisfied the standard set forth in COMAR 10.24.10.04B which provides in pertinent part:

- (5) A proposed hospital capital project should represent the most cost effective approach to meeting the needs that the project seeks to address.
 - (a) To demonstrate cost effectiveness, an applicant shall identify each primary objective of its proposed project and shall identify at least two alternative approaches that it considered for achieving these primary objectives. For each approach, the hospital must:
 - (i) To the extent possible, quantify the level of effectiveness of each alternative to achieving each primary objective;
 - (ii) Detail the capital and operational cost estimates and projections developed by the hospital for each alternative; and
 - (iii) Explain the basis for choosing the proposed project and rejecting alternative approaches to achieving the project's objectives.

1. **Summary of the Reviewer's Analysis**

The Reviewer accepted WAH's representation that no other site was available and found that assembling a new site in Takoma Park is likely to be problematic. (Recommended Decision at 140-41).

2. **The Grounds for MMMC's Exception**

WAH did not present any meaningful analysis of alternatives for remaining in the Takoma Park area. Thus far, WAH has repeatedly assembled barriers to this alternative, an alternative that would greatly benefit not only the City of Takoma Park and the people in that area, but also the effectiveness of the State's health care delivery system. The unprecedented relocation proposed by WAH in the present case necessitates a careful, detailed analysis of whether a site can be assembled in Takoma Park. The Commission should reject as shallow and self-serving WAH's argument that White Oak/Fairland is the only viable, cost effective and available alternative to the current location. Both Mercy Medical Center and The Johns Hopkins Hospital have received CON approval to build modern patient towers on small challenging parcels and on road systems which were less than optimal. The City of Takoma Park has repeatedly and adamantly stated that it supports retaining the hospital and would work with WAH to find a solution. Both the State and the County could exercise eminent domain to assemble a new site for WAH, with WAH funding the required acquisitions. *See 2A Nichols on Eminent Domain* §7.06[14]. Such a teamwork approach to determining a more appropriate location would be consistent with a common goal of improving and retaining health care services for the Takoma Park community. A replacement hospital in Takoma Park will contribute not only to the provision of health care to its underprivileged and vulnerable population, but also to the economic development of this area of the County.

3. **Relief Requested**

MMMC requests that the Commission return this case to the Reviewer with directions that an analysis be undertaken to determine whether a site can be assembled in Takoma Park and to conduct an evidentiary hearing on the issue.

CONCLUSION

For the reasons stated, MMMC requests the Commission to grant to these Exceptions and grant the relief requested above.

Respectfully submitted,



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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 2nd day of December, 2015, a copy of the foregoing Exceptions of Interested Party, MedStar Montgomery Medical Center, to Reviewer's Recommended Decision was sent via electronic mail and by first class mail, postage prepaid, to:

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BEFORE THE MARYLAND HEALTH CARE COMMISSION

IN THE MATTER OF

ADVENTIST HEALTHCARE, INC. D/B/A
WASHINGTON ADVENTIST HOSPITAL

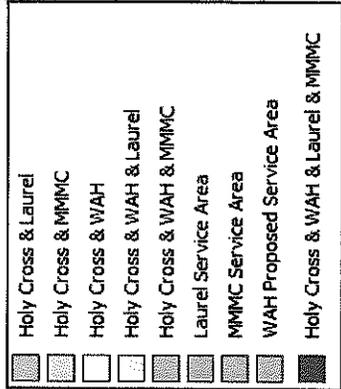
Matter No. 13-15-2349

**EXHIBITS TO THE
EXCEPTIONS OF INTERESTED PARTY, MEDSTAR MONTGOMERY
MEDICAL CENTER, TO REVIEWER'S RECOMMENDED DECISION**

- Exhibit 1 Primary Service Area Overlap at White Oak/Fairland Proposed Site
- Exhibit 2 Maryland ZIP Code Area Boundaries
- Exhibit 3 Medically Underserved Areas/Populations in Census Block Groups Where Washington Adventist Hospital is the Closest Hospital
- Exhibit 4 Prefiled Testimony of Keith Bubblo, In the Matter of Washington Adventist Hospital Relocation CON, Matter No. 09-15-2295
- Exhibit 5 Additional Details of Proposed Kenneth E. Thorpe, Ph.D. Study
- Exhibit 6 Population Density by ZIP Code
- Exhibit 7 Use Rates by ZIP Code, MSGA Patients Age 0-64
- Exhibit 8 Use Rates by ZIP Code, MSGA Patients Age 65+
- Exhibit 9 Use Rates by ZIP Code, Obstetric Patients
- Exhibit 10 Truven Health Analytics' Community Need Index, Methodology and Source Notes
- Exhibit 11 Community Need Index Map, Takoma Park Area and White Oak/Fairland Area
- Exhibit 12 Moody's August 2014 Rating Report (excerpt)
- Exhibit 13 Market Share Information (HSCRC Data Set)
- Exhibit 14 Photograph of Location just East of New Hampshire Avenue at Merrimac Drive, near existing WAH
- Exhibit 15 Photograph of Location near Riggs Road at Jasmine Terrace, near existing Washington Adventist Hospital
- Exhibit 16 Photograph of Location just East of New Hampshire Avenue at Merrimac Drive, near existing Washington Adventist Hospital
- Exhibit 17 Photograph of the Site of Washington Adventist Hospital's Proposed New Hospital
- Exhibit 18 Kenneth E. Thorpe, Ph.D., Emory University Faculty Profile

Overlap of Holy Cross, Laurel Regional, MMMC, and Proposed WAH, Primary Service Areas

WAH is proposing a move to zip code 20904 which is already served by four hospitals today - Holy Cross, Laurel, MMMC, and WAH.

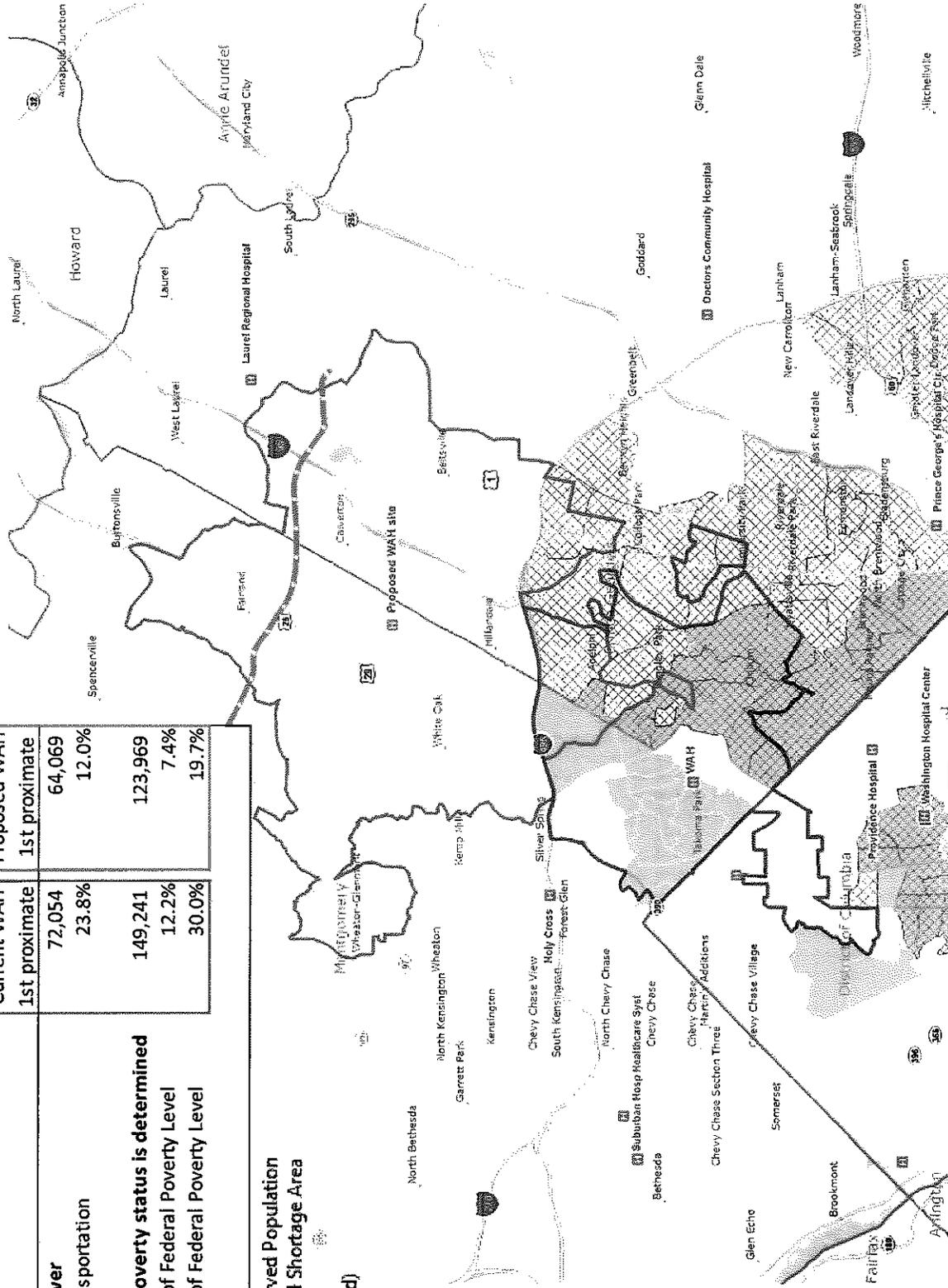


Note: Service area is defined as the first 60% of discharges.
 Source: MapPoint DCHA WebFocus, CY13

	Current WAH 1st proximate	Proposed WAH 1st proximate
Workers aged 16 and over	72,054	64,069
Percent using public transportation	23.8%	12.0%
Population for whom poverty status is determined	149,241	123,969
Percent less than 100% of Federal Poverty Level	12.2%	7.4%
Percent less than 200% of Federal Poverty Level	30.0%	19.7%

Source: 2000 U.S. Census

-  Medically Underserved Population
-  Health Professional Shortage Area
-  WAH 1st (current)
-  WAH 1st (proposed)
-  ICC



BEFORE THE MARYLAND HEALTH CARE COMMISSION

IN THE MATTER OF:

WASHINGTON ADVENTIST HOSPITAL

RELOCATION CON

Matter No.

09-15-2295

MONTGOMERY GENERAL HOSPITAL'S

PREFILED DIRECT TESTIMONY OF KEITH BUBBLO

1.

**BACKGROUND QUALIFICATIONS
AND PROFFER OF EXPERT WITNESS**

Q1. Please state your full name and business address.

A1. My name is Keith Bubblo and my business address is 50 Sewall Street, Suite 102, Portland, Maine 04102.

Q2. What is Hearing Exhibit No. MGH 7?

A2. It is my curriculum vitae.

Q3. By whom are you employed?

A3. I am employed by Stroudwater Associates, a healthcare consultancy advising hospitals and health care systems on strategic issues.

Q4. What is your position with Stroudwater Associates?

A4. I am an Analyst.

Q5. What are your duties and responsibilities as an Analyst?

A5. I assist clients with market data analysis and research by drawing upon available health care data sources and using Geographic Information System (GIS) and visual data tools.

Q6. How long have you held this position?

A6. Six years.

Q7. What positions did you hold prior to becoming an Analyst at Stroudwater Associates?

A7. I was a Project Assistant at Stroudwater Associates and before that I was a Document Control Specialist at Fairchild Semiconductor.

Q8. Briefly state your educational background.

A8. I earned a Bachelor of Arts from Wilkes University in Wilkes-Barre, Pennsylvania and a Certificate in Geographic Information Systems from the University of Southern Maine in Gorham, Maine.

**MGH OFFERS MR. KEITH BUBBLO AS AN EXPERT
IN THE FIELD OF HEALTH CARE PLANNING.**

2.

ASSIGNMENT

Q9. What were you asked to do for purposes of this case?

A9. Montgomery General Hospital ("MGH") asked me to identify the nature and scope of the indigent and underserved population served by the Washington Adventist Hospital ("WAH"). MGH also asked me to model the effect of the proposed WAH relocation on the access to care for this population, specifically focusing on the impact of the change in travel time to the nearest hospital. Specifically, MGH asked me to address certain aspects of Commissioner Worthington's Issue Area #1 with regard to (1) changes in travel time to the nearest hospital for the Takoma Park population and its implications, and (2) more specific information on the size and socio-economic characteristics of that population than is currently in the record.

Q10. Have you reviewed the prefiled testimony of Jeffrey B. Sommer?

A10. Yes.

Q11. Do you agree with Mr. Sommer's analysis and conclusions?

A11. Yes.

2.

**ANALYSIS AND COMPARISON OF THE CORE PROXIMATE
POPULATION OF WAH'S CURRENT LOCATION AND ITS
PROPOSED RELOCATION TO THE WHITE OAK / FAIRLAND LOCATION**

Q12. Did you review the CON application materials filed by WAH in this proceeding?

A12. Yes.

Q13. Do you recall the following statements from the March 28, 2011 CON Application?

- **"The project...does not reduce the potential availability or accessibility of its services, or change the availability or accessibility to care for indigent or uninsured residents of its service area. In fact, this project is needed specifically to assure continued availability and accessibility to these very residents to the hospital and health services that they really need" (at p. 34).**
- **"The relocation of WAH will not significantly change the communities serviced or the services provided, except for the better." (at p. 97).**

A13. Yes.

Q14. Based on your training and experience and your investigation in this case, do you have an opinion, to a reasonable degree of professional certainty, as to the accuracy of these two statements?

A14. Yes.

Q15. What is that opinion?

A15. It is my opinion that these statements are not accurate. Based on my investigation and analysis, it is highly unlikely that WAH's core population will be the same at its proposed relocation to the White Oak / Fairland area as it is at WAH's current location in Takoma Park. The proximity analysis demonstrates that the core population that surrounds and relies upon the WAH in Takoma Park will change significantly. Thus, the availability and accessibility for the residents that most need hospital services, such as the indigent and uninsured which are

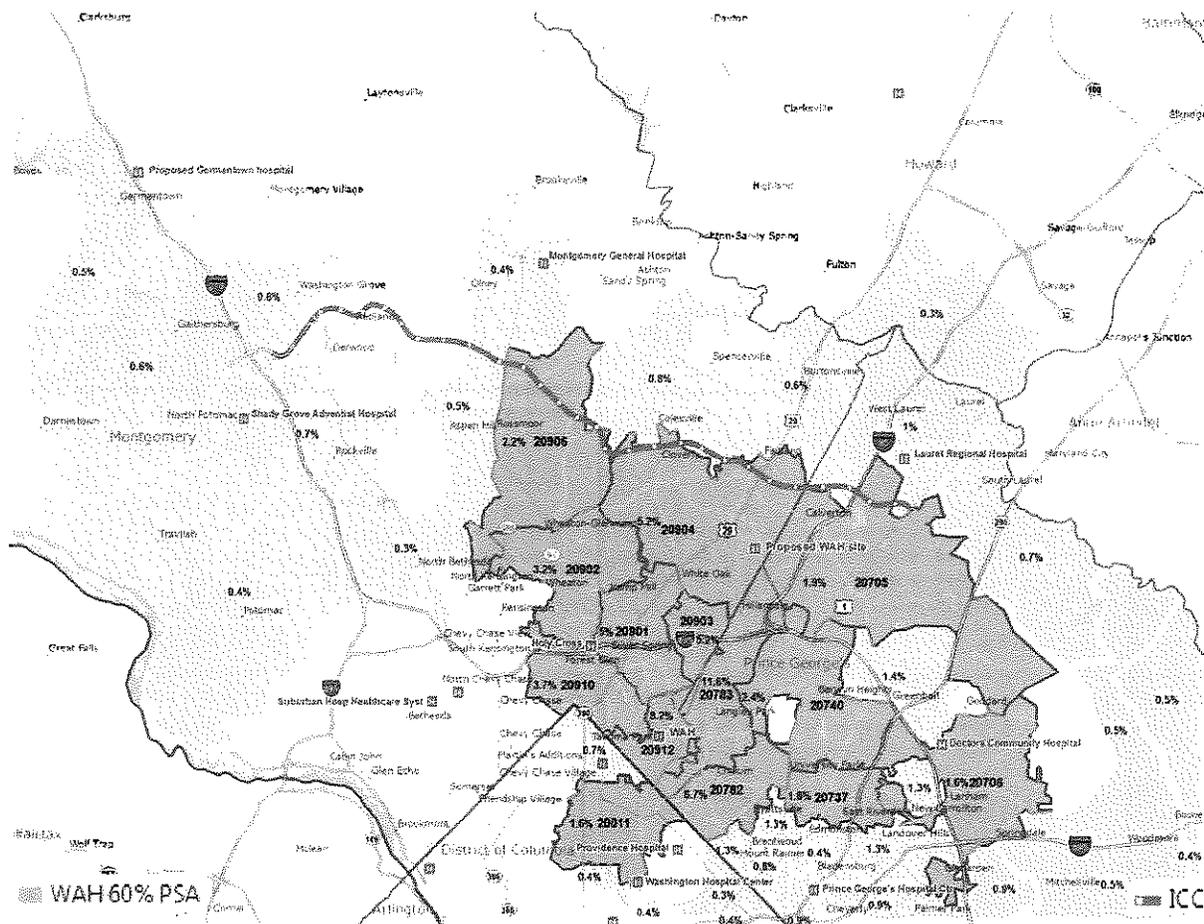
concentrated inside the Capital Beltway, will be reduced by WAH's proposed relocation to the White Oak / Fairland area.

Q16. What is the first step in your analysis in connection with WAH's core proximate population?

A16. I first looked at WAH's primary service area.

Q17. What is Hearing Exhibit No. MGH 8 which is reproduced below?

**TABLE 1: Washington Adventist Hospital Primary Service Area 2009
(Total Discharges excluding Normal Newborns)
Source: DCHA Maryland, DC and Virginia Hospital Discharge Data**



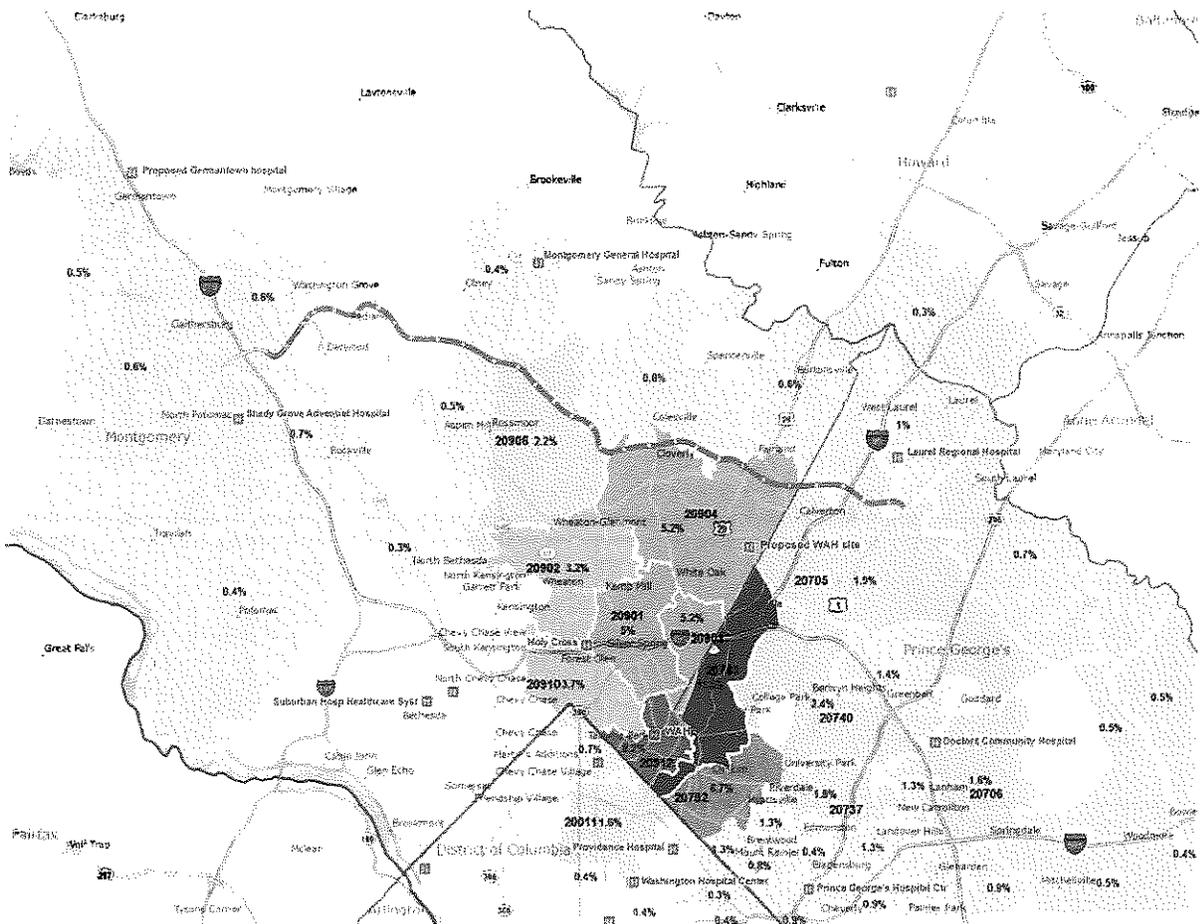
A17. It is a map which shows in red WAH's primary service area, as defined by the Maryland State Health Plan's (SHP) definitions for CON purposes. Using 2009 patient origin data and the 60% patient origin standard, the primary service area is a set of fourteen ZIP Codes:

Q18. What is the next step in your analysis in connection with WAH's core proximate population?

A18. I next looked at the relative patient origin within those zip codes.

Q19. What is Hearing Exhibit No. MGH 9?

**TABLE 2: WAH Patient Origin 2009 (Total Discharges excluding Normal Newborns)
Source: DCHA Maryland, DC and Virginia Hospital Discharge Data**



A19. It is a map which shows that the largest proportion of WAH's patients - 26.7% - come from three 'core' zip codes. Almost 12% (11.8%) of all admissions came from 20783 (Hyattsville), 8.2% from 20912, WAH's home zip code, and 6.7% from 20782 (also Hyattsville). This is shown in the darker brown shades.

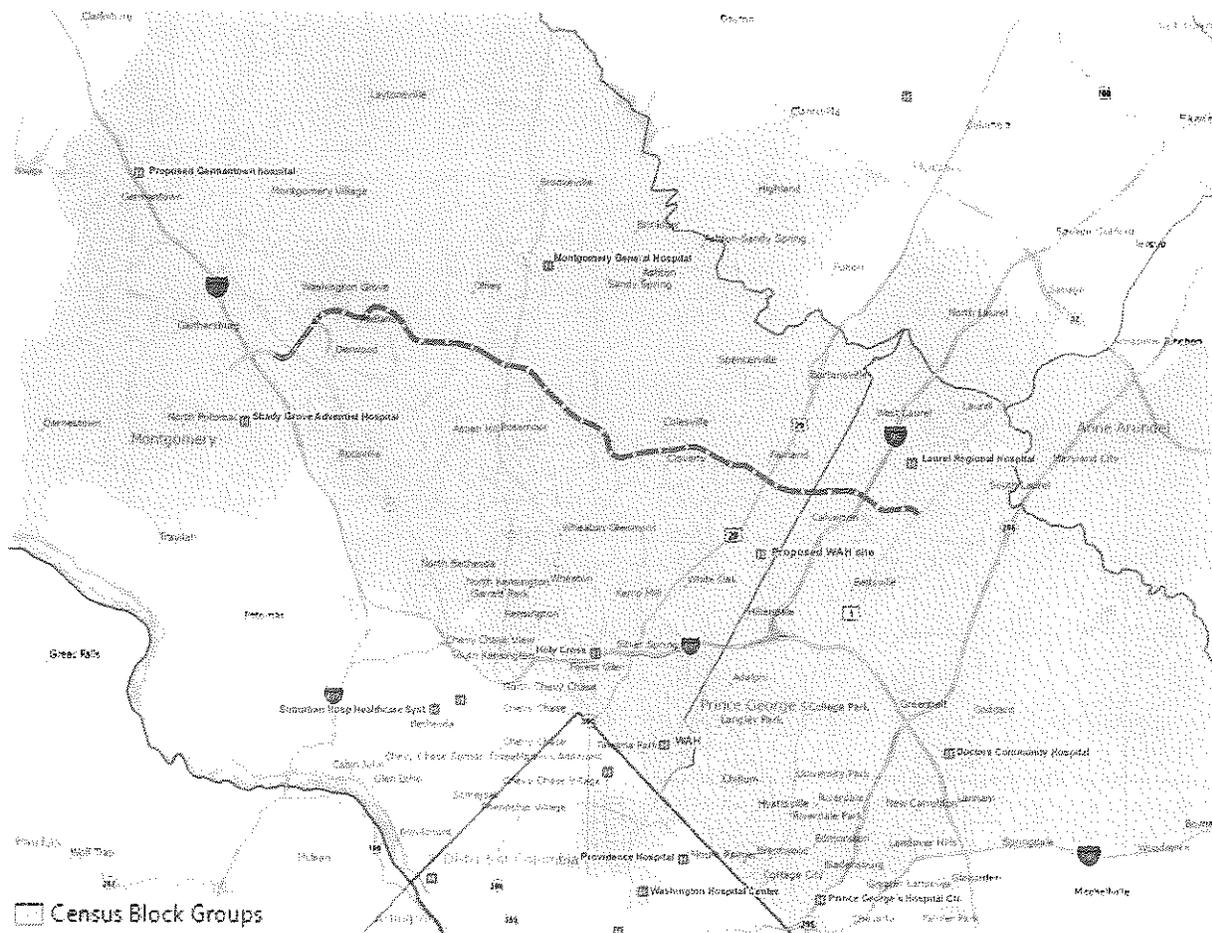
Q20. What was the next step in your analysis?

A20. Most hospital data is captured on the ZIP Code level, which in many cases can be a too generalized collection of population. My model looks at Census Block Group-level data for this analysis. Census Block Groups, which are collections of Census Blocks, are smaller geographies than ZIP Codes, and allow differences in demographics within a ZIP Code to be more readily viewed and analyzed. This is particularly important when looking at ZIP Codes with large or irregular geographies, such as 20783 (Hyattsville), which stretches over 6 miles northeast from the Maryland/District of Columbia border southwest of Chillum to near Paint Branch Park above Hillandale.

Using the WAH patient ZIP Codes as a comparison, I selected the Census Block Groups that have their geographic center points, or centroids, within areas of Montgomery County, Prince George's County, and Howard County, Maryland, and within the District of Columbia. This resulting layer of 742 separate Census Blocks Groups was then used to make drive time comparisons from each census block group to area hospitals.

Q21. What is Hearing Exhibit No. MGH 10 which is reproduced below?

TABLE 3: Census Block Group Selection (Source: ESRI)



A21. It is a map which shows the selected Census Block Groups in green.

Q22. Why is only a small portion of the District of Columbia included?

A22. Only one zip code, 20011, is included in WAH's SHP-defined primary service area in 2009. Therefore, I included the census block groups from that zip code.

Q23. What did you do next?

A23. I performed drive time comparisons.

Q24. Please describe how you performed the drive time comparisons.

A24. Drive time proximity in minutes from each block group centroid was calculated to produce a detailed table of 742 point-to-point travel times to each of the 12 most likely hospital destinations for the population within each Block Group: the current WAH site in Takoma Park, the proposed WAH site on Plum Orchard Drive in White Oak/Fairland, MGH, Holy Cross Hospital (“HCH”), Shady Grove Adventist Hospital, Suburban Hospital, Laurel Regional Hospital (“LRH”), Doctor’s Community Hospital, Prince George’s Hospital Center (“PGHC”), and two District of Columbia hospitals, including Providence Hospital and Washington Hospital Center. For this analysis, the District of Columbia hospitals selected are assumed to represent all D.C.-based hospitals, since these two are the nearest to the focus area.

The drive time analysis is based the Metropolitan Washington Council of Governments (MWCOC) traffic model, which incorporates the effects of the ICC on regional travel patterns in 2030. The 2030 assumption for travel time is considered conservative, since it includes an additional 12 years of growth and traffic load into the projected drive times for the ICC and Montgomery County and Prince George’s County road network.

Q25. What is Hearing Exhibit No. MGH 11 which is reproduced below?

TABLE 4: Point-to-Point Travel Time Minutes and Ranking by Census Block Group FIPS Code Selection (Source: Kimley-Horn Associates and ESRI)

FIPS	Old_WAH	MGH	GRMN	HCH	SHADY	SUB	LRH	DOCS	WHC	PROV	PGH	Old_WAHrank	MGHrank	GRMNrank	HCHrank	SHADYrank	SUBrank	LRHrank	DOCSrank	WHCrank	PROVrank	PGHrank
240317006042	59.77	40.56	19.84	49.93	29.52	46.12	55.41	72.13	75.04	73.38	85.26	7	3	1	5	2	4	6	8	10	9	11
240317006043	58.27	41.37	17.73	43.44	32.41	44.62	56.22	70.94	73.55	71.89	83.77	7	3	1	5	2	4	6	8	10	9	11
240317006044	61.48	42.86	20.94	51.65	31.81	47.83	57.70	73.85	76.76	75.09	86.98	7	3	1	5	2	4	6	8	10	9	11
240317003081	51.12	34.22	11.10	41.28	26.28	37.47	49.06	63.48	65.36	63.69	76.62	7	3	1	5	2	4	6	8	10	9	11
240317003082	51.12	34.22	11.10	41.28	26.28	37.47	49.06	63.48	64.89	63.22	76.62	7	3	1	5	2	4	6	8	10	9	11
240317003092	45.46	28.56	4.92	35.63	20.62	31.81	43.41	57.82	60.74	59.07	70.96	7	3	1	5	2	4	6	8	10	9	11
240317003102	51.12	30.88	7.77	37.95	22.95	34.19	45.73	60.15	63.07	61.40	73.29	7	3	1	5	2	4	6	8	10	9	11
240317003101	50.35	33.44	9.80	40.51	25.51	36.70	48.29	62.71	65.63	63.96	75.85	7	3	1	5	2	4	6	8	10	9	11
240317003103	50.35	33.44	9.80	40.51	25.51	36.70	48.29	62.71	65.63	63.96	75.85	7	3	1	5	2	4	6	8	10	9	11
240317003061	56.27	39.36	15.73	46.43	31.43	42.62	54.21	68.63	71.54	69.88	81.77	7	3	1	5	2	4	6	8	10	9	11
240317003062	56.27	39.36	15.73	46.43	31.43	42.62	54.21	68.63	63.53	81.86	81.77	7	3	1	5	2	4	6	8	10	9	11
240317008151	46.76	29.85	7.36	36.92	21.92	33.11	44.70	59.12	62.03	60.37	72.25	7	3	1	5	2	4	6	8	10	9	11
240317008154	52.36	35.46	12.96	42.53	27.52	38.71	50.30	64.73	67.64	65.97	77.86	7	3	1	5	2	4	6	8	10	9	11
240317006092	52.35	30.45	15.89	31.83	21.25	36.01	45.30	62.03	67.63	65.96	75.16	7	3	1	4	2	5	6	8	10	9	11
240317006094	51.45	34.55	12.05	41.62	26.41	37.80	49.40	63.82	66.73	65.07	76.95	7	3	1	5	2	4	6	8	10	9	11
240317026022	8.65	25.73	41.25	6.83	39.21	25.73	29.45	28.70	22.96	21.29	33.23	2	5	11	1	10	5	8	7	4	3	9

FIPS	New_WAH	MGH	GRMN	HCH	SHADY	SUB	LRH	DOCS	WHC	PROV	PGH	New_WAHrank	MGHrank	GRMNrank	HCHrank	SHADYrank	SUBrank	LRHrank	DOCSrank	WHCrank	PROVrank	PGHrank
240317006042	54.18	40.56	19.84	49.93	29.52	46.12	55.41	72.13	75.04	73.98	85.26	6	3	1	5	2	4	7	8	10	9	11
240317006043	54.99	41.37	17.73	49.44	32.41	44.62	56.22	70.64	73.55	71.89	83.77	6	3	1	5	2	4	7	8	10	9	11
240317006044	56.47	42.86	20.94	51.85	31.81	47.83	57.70	73.85	76.76	75.09	86.98	6	3	1	5	2	4	7	8	10	9	11
240317003081	46.79	34.22	11.10	41.28	26.78	37.47	49.06	63.48	65.36	63.69	76.62	6	3	1	5	2	4	7	8	10	9	11
240317003082	46.32	34.22	11.10	41.28	26.78	37.47	49.06	63.48	64.89	63.22	76.62	6	3	1	5	2	4	7	9	10	8	11
240317003092	43.54	28.56	4.92	35.63	20.62	31.81	43.41	57.82	60.74	59.07	70.96	7	3	1	5	2	4	6	8	10	9	11
240317003102	43.54	30.88	7.77	37.95	22.95	34.19	45.73	60.15	63.07	61.40	73.29	6	3	1	5	2	4	7	8	10	9	11
240317003101	47.06	33.44	9.80	40.51	25.51	36.70	48.29	62.71	65.63	63.96	75.85	6	3	1	5	2	4	7	8	10	9	11
240317003103	47.06	33.44	9.80	40.51	25.51	36.70	48.29	62.71	65.63	63.96	75.85	6	3	1	5	2	4	7	8	10	9	11
240317003061	52.98	39.36	15.73	46.43	31.43	42.62	54.21	68.63	71.54	69.88	81.77	6	3	1	5	2	4	7	8	10	9	11
240317003062	44.96	39.36	15.73	46.43	31.43	42.62	54.21	68.63	63.53	61.86	81.77	5	3	1	6	7	4	7	10	9	8	11
240317008151	43.47	29.85	7.86	36.92	21.92	33.11	44.70	59.12	62.03	60.37	72.25	6	3	1	5	2	4	7	8	10	9	11
240317008154	49.07	35.46	12.96	42.53	27.52	38.71	50.30	64.73	67.64	65.97	77.86	6	3	1	5	2	4	7	8	10	9	11
240317006092	49.06	30.45	15.89	31.93	21.25	36.01	45.30	62.03	67.63	65.90	75.16	7	3	1	4	7	5	6	8	10	9	11
240317006094	48.17	34.55	12.03	41.67	26.41	37.80	49.40	63.82	66.73	65.07	76.95	6	3	1	5	2	4	7	8	10	9	11
240317026022	17.14	25.73	41.25	6.83	39.21	25.73	29.45	28.70	22.96	21.29	53.23	2	5	11	1	10	5	8	7	4	3	9

A25. These are charts showing two different scenarios of the resulting point-to-point travel time table for each block group centroid and hospital destination. The first scenario is where WAH remains in its current location, and the second is where WAH relocates as proposed to White Oak/Fairland area. The drive time estimates for each block group centroid to each hospital in both tables were ranked 1-11, with 1 being the lowest travel time in minutes and 11 being the highest travel time in minutes.

Q26. Please further describe the two scenarios shown on TABLE 4 above.

A26. Table 4 is an example from the data base of 742 census block groups. For each census block group, I have entered the drive time in minutes, based on data from MWCOG and compiled by Kimley-Horn Associates. The first table excerpt from the database shows the first phase of this portion of the analysis – assuming WAH remains in its current Takoma Park location. The second part is an excerpt from the table assuming WAH relocates as proposed to the White Oak / Fairland area. The right side of each table excerpt is the ranking of each hospital for each Census Block Group based on those drive times, e.g., which hospital location is closest to that Census Block Group, which is second closest, and so on.

Q27. Does Table 4 above show current drive times?

A27. No. The drive times shown on Table 4 reflect the expected road network and traffic in 2030. We did this in order to incorporate the impact of the ICC.

Q28. How, if at all, do you make use of the data shown on TABLE 4?

A28. The data and rankings allow me to map the first and second most proximate block groups to WAH for WAH's existing location in Takoma Park and its proposed relocation to the White Oak / Fairland area. As expected, WAH is currently most proximate to a unique collection of block groups near its current Takoma Park location. Should it relocate, that collection of block groups would shift in proximity to other hospitals, while the WAH White Oak / Fairland location would supplant other proximate hospitals and become the closest for a different collection block groups, with its own particular demographic makeup.

Q29. What are the results of this analysis?

A29. The results of this analysis describe:

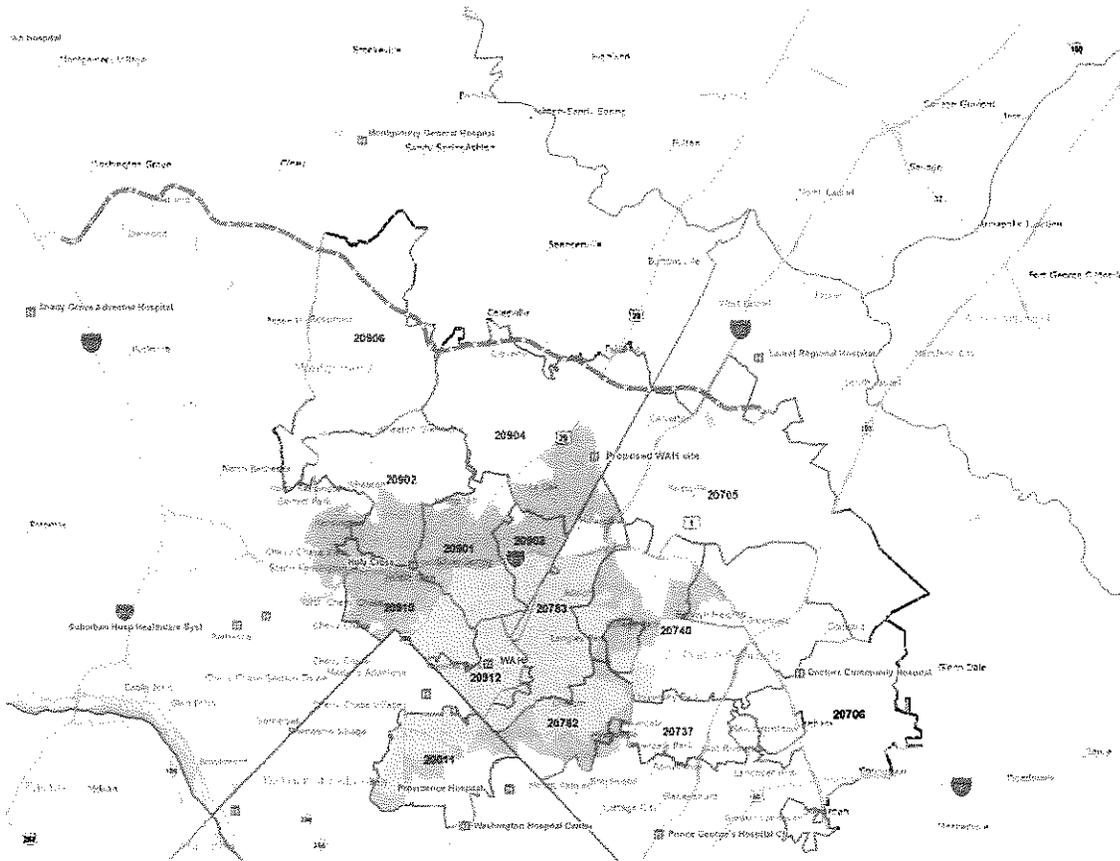
- the effect of the WAH relocation on the ease of access for its core proximate population – those block groups where WAH is currently the most proximate hospital.
- the increase in travel time for WAH's core population at its existing location compared to its proposed relocation to the White Oak / Fairland area.
- the hospital or hospitals that become the most likely new destinations for WAH's current core proximate population when seeking hospital care.
- that WAH's argument that its service area ZIP Codes are not expected to change significantly with the proposed relocation and that it expects to serve the same population it currently does, despite moving 7-8 miles away and north of the Capitol Beltway, is demonstrably incorrect.

Q30. What are the proximate block groups to WAH at its current location?

A30. Based on my analysis and drive time rankings, WAH's current Takoma Park location is the first or second most proximate hospital for 186 census block groups. Of these block groups, 107 are first most proximate to WAH's current Takoma Park location. Current estimates put this population at 156,502 (AGS, 2010).

Q31. What is the Hearing Exhibit No. MGH 12 which is reproduced below?

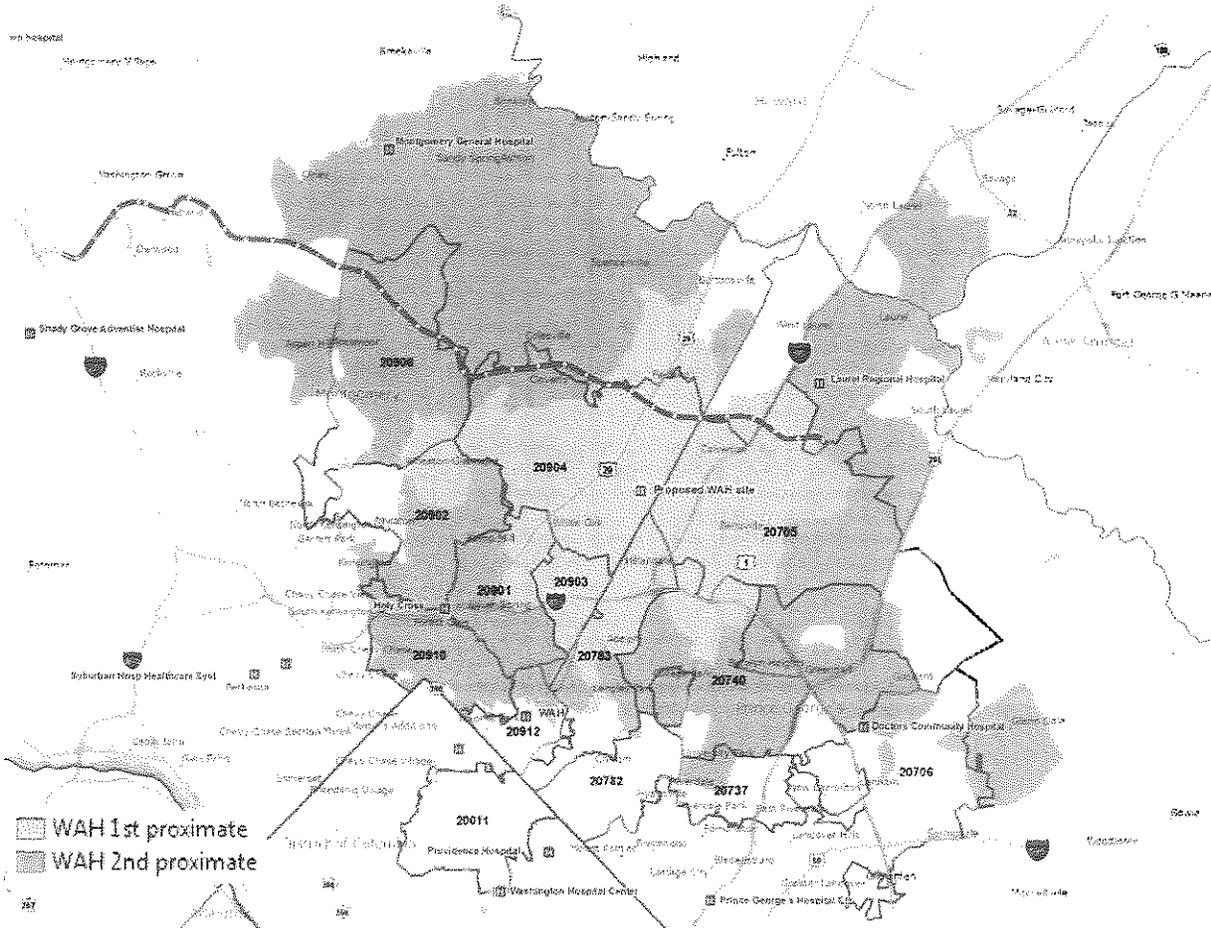
TABLE 5: Census Block Groups First and Second Most Proximate to Current WAH Location (Source: Kimley-Horn Associates and ESRI)



A31. It is a map on which WAH is 60% PSA ZIP Codes are outlined in grey for comparison to the first most proximate block groups, shaded in green. The blue area on Table 5 represents the population for whom WAH is the second closest hospital. This map demonstrates that the SHP defined Primary Service area encompasses a much broader geography than the first most proximate area, or even the first and second most proximate area. The primary service area concept – while a useful tool – does not attempt to measure patient utilization in the context of competing hospitals.

Q32. What is Hearing Exhibit No. MGH 13 which is reproduced below?

TABLE 6: Census Block Groups First and Second Most Proximate to Proposed WAH Relocation to the White Oak / Fairland Area (Source: Kimley-Horn Associates and ESRI)



A32. It is a map which shows in comparison the first and second most proximate census block groups, shaded in green and blue respectively, for the proposed WAH location, and the SHP-defined current primary service area outlined in gray.

Q33. What are the proximate block groups to WAH at its proposed relocation in the White Oak / Fairland area?

A33. Based on my analysis, WAH's proposed White Oak / Fairland location would be first in proximity to a collection of 74 Block Groups with a population estimated at 137,357 as shown in light green on TABLE 6.

Q34. Are the maps shown on Tables 5 and 6 the same scale?

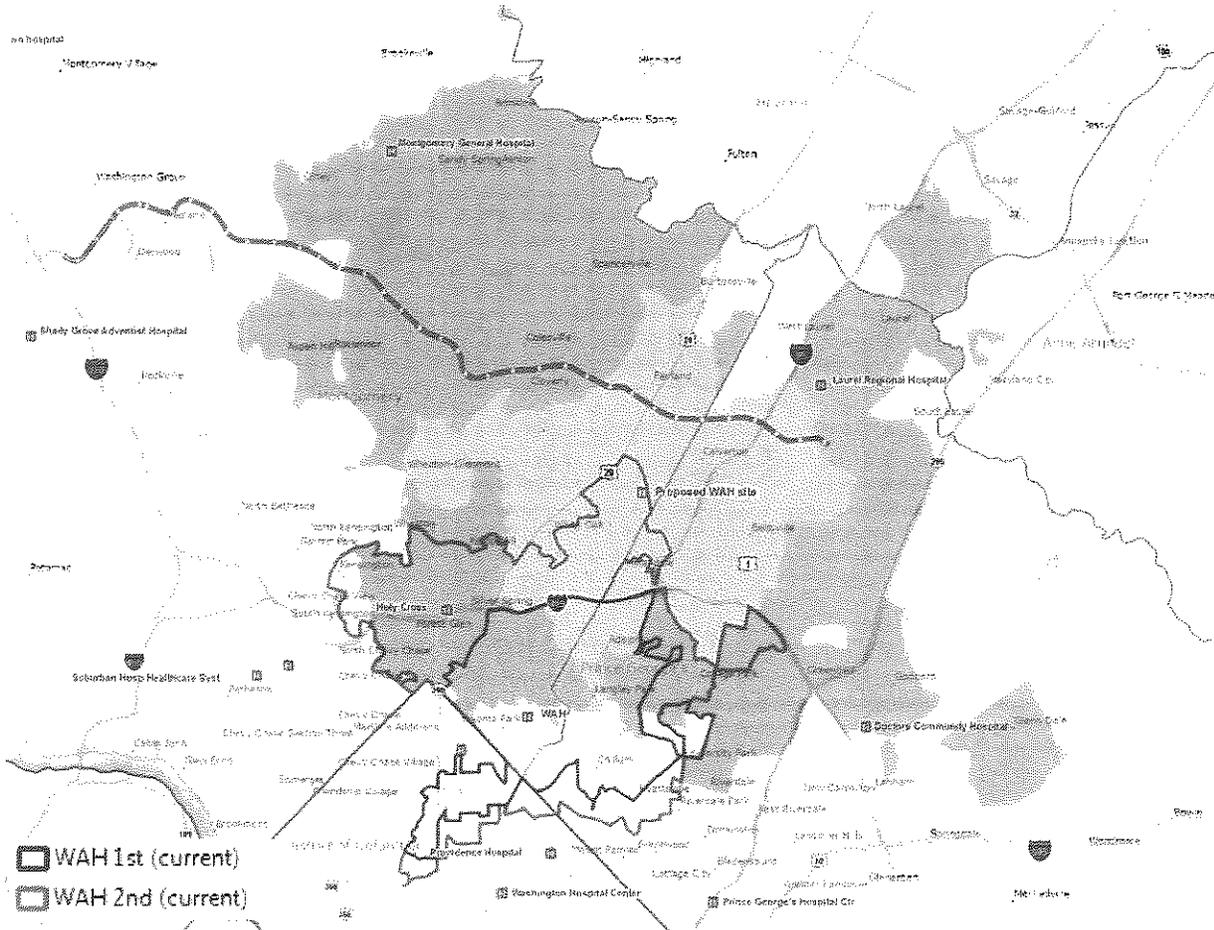
A34. Yes.

Q35. Please describe the comparison shown on Tables 5 and 6.

A35. What you see when looking at Table 6 compared with Table 5, is the dramatic change in proximity based on the different road network available to the proposed site in the White Oak / Fairland area. This analysis also shows (in green) the much larger area where the proposed WAH would be first most proximate hospital (in green) and particularly where it would be the second most proximate hospital (in blue). The ICC allows increased access to the proposed site for areas to the northwest and northeast. Areas south of the current WAH location, however, are beyond this boundary.

Q36. What is Hearing Exhibit No. MGH 14 which is reproduced below?

TABLE 7: Census Block Groups First and Second Most Proximate to the Proposed WAH location in the White Oak / Fairland Area with Current Overlay (Source: Kimley-Horn Associates and ESRI)



A36. This is a map showing the current proximity boundaries (outlined in blue and pink) and the proximity boundaries of the proposed location (shaded in green and blue). When the current WAH proximity boundaries from Table 5 are overlaid on this map in Table 6 of the proposed proximity areas, the gap in coverage for the previous core proximate geography (most proximate) is illustrated by the green shaded area South of I 495. Only 16% of the population, in 12 of 107 block groups, is closest in proximity to both the current and proposed WAH site (24,727 out of 156,502).

Q37. Please describe TABLE 7 in more detail.

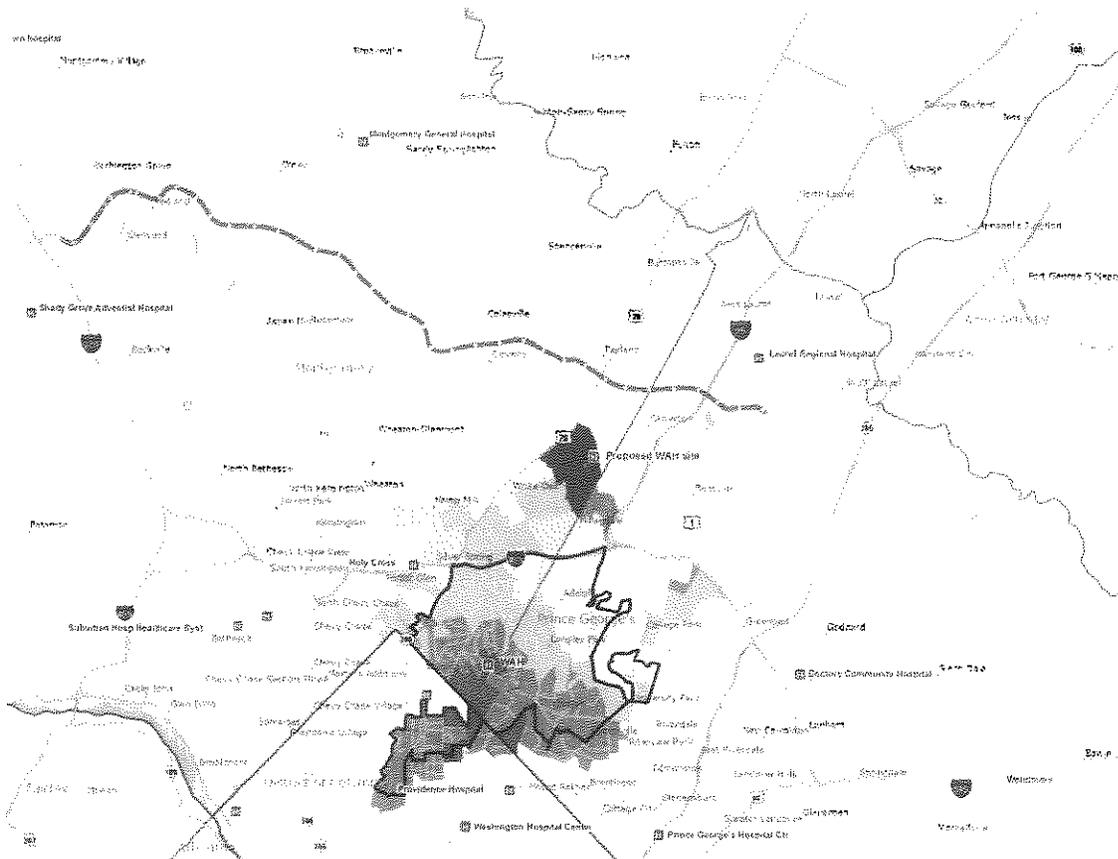
A37. The area outlined in blue represents, from TABLE 5, the census block groups for which the current WAH hospital is the closest, or first most proximate hospital. The area outlined in pink represents the census block groups for which the current WAH hospital is the second most proximate hospital. The green and blue shaded areas, from TABLE 6 are the census block groups for which the proposed WAH location is either the first or second most proximate hospital. The area inside the blue outline and shaded in green represents the census block groups for which the population will be the closest hospital both before and after the proposed move to the White Oak / Fairland area. Everyone else within that blue outline will undergo a shift in proximity because they will no longer have WAH as their closest hospital. This represents 131,775 people.

Q38. What is the impact on the travel times for WAH's current core proximate population to the proposed new location in the White Oak / Fairland area?

A38. Travel time to the proposed WAH site in the White Oak / Fairland area increases for this previously proximate population due to the relocation, with many populations around the current WAH site experiencing increases of 11 to 20 minutes, based on the MWCOG traffic model.

Q39. What is the Hearing Exhibit No. MGH 15 which is reproduced below?

TABLE 8: Travel Time Increase (Decrease) to Proposed WAH Location in the White Oak / Fairland Area from Current Most Proximate Census Block Groups (Source: Kimley-Horn Associates and ESRI)



A39. This map illustrates the difference in travel time minutes increase/(decrease) for each first and second proximate collection of block groups. As illustrated in an earlier map, the proposed WAH site in the White Oak / Fairland area would be the third or fourth closest facility for a large portion of this previously proximate population.

Q40. What implications, if any, are shown on TABLE 8?

A40. The map reproduced as Table 8 above demonstrates that not only is the area of the WAH's core proximate census block groups for whom travel times will be reduced smaller than the group that will experience longer travel times, but also that the longer travel times are almost entirely inside the Capitol Beltway.

Q41. Have you reviewed the prefiled testimony of Edward Y. Papazian, P.E.?

A41. Yes.

Q42. Do you agree with Mr. Papazian's analysis and conclusions?

A42. Yes.

3.

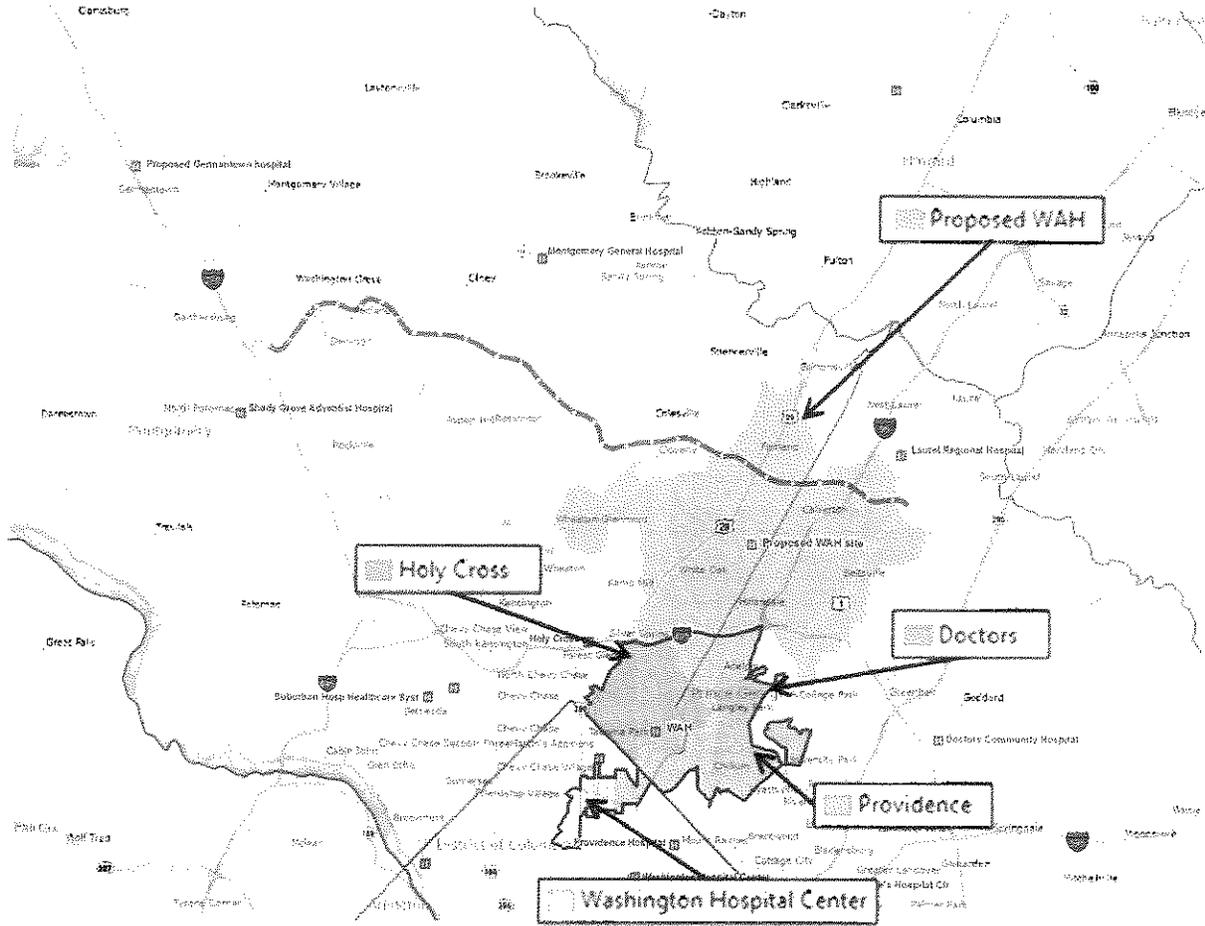
**THE IDENTIFICATION OF HOSPITALS THAT
WILL BECOME THE NEW DESTINATION FOR
WAH'S CURRENT CORE POPULATION WHEN IT IS LEFT BEHIND**

Q43. Based on the established relationship between proximity and hospital choice, what does the change in location likely mean for the core proximate population regarding hospital choice should WAH be allowed to relocate to its proposed location in the White Oak / Fairland area?

A43. Should WAH relocate to the White Oak / Fairland area, the new most proximate hospital for much of WAH's population would be divided among HCH in Silver Spring, Doctors Community, and the two District of Columbia hospitals – Providence and Washington Hospital Center.

Q44. What is the Hearing Exhibit No. MGH 16 which is reproduced below?

TABLE 9: New Most Proximate Hospital Destinations for WAH's Current Population and its Post-WAH Relocation to the White Oak / Fairland Area (Source: Kimley-Horn Associates and ESRI)



A44. This map illustrates which areas of WAH's core proximate population will end up with WHC as the closest hospital, or Providence, or Holy Cross or Doctors, should WAH relocate to the White Oak / Fairland area as proposed.

Q45. What is Hearing Exhibit No. MGH 17 which is reproduced below?

TABLE 10: Demographics of New Most Proximate Hospital Destinations for WAH's Current Population and its Post-WAH Relocation to the White Oak / Fairland Area (Source: Kimley Horn Associates and ESRI)

New Proximate Hospital	Pop.	Pct of total	Adj. MHHI	MHHI % of state	Pop +5	Abs +5	Pct +5	w/o HS diploma	w/o college degree
Holy Cross	74,045	47%	\$ 55,503	81%	82,633	8,588	12%	25%	60%
Doctors	7,257	5%	\$ 51,438	75%	7,986	729	10%	14%	51%
Providence	33,783	22%	\$ 63,215	93%	33,716	(67)	0%	20%	68%
Wash Hosp Center	16,690	11%	\$ 57,043	83%	16,849	159	1%	15%	61%
Proposed WAH	24,727	16%	\$ 56,384	83%	25,289	562	2%	28%	70%
	156,502	100%							

A45. This table shows the distributions of this population, along with demographic comparisons. This table shows that 16% percent of this population would be most proximate to the proposed WAH site in the White Oak / Fairland area, while 84% would be most proximate to other Maryland and DC hospitals, primarily HCH, and Providence Hospital.

4.

A DEMOGRAPHIC COMPARISON OF THE CORE PROXIMATE POPULATION IN THE VICINITY OF EXISTING WAH TO THE POPULATION IN THE VICINITY OF PROPOSED WAH

Q46. How does this core proximate population compare at the Census Block Group level in terms of income, population growth, educational attainment, and other socioeconomic factors to what will be WAH's new proximate population in the White Oak/Fairland area?

A46. Demographic data by Census Block Group show that the current WAH location is the first closest hospital for a larger number of people (156,502) in a faster-growing area (6.4% growth in five years, or 9,971 additional people), compared to the proposed site in the White Oak Fairland area. That is, 137,357 people and 3.4% growth in five years or 4,672 additional people.

The current WAH location also serves a population with an adjusted median household income that is only 84% of the state median. The proposed site in the White Oak / Fairland area

serves a population with an adjusted median household income which is well above the state median at 112%. The median household income for the State of Maryland was \$68,316 in 2010.

Additionally, educational attainment data for persons aged 25 and older show that the percentage of the population proximate to the current WAH location without a high school degree is just under 23%, compared to only 12.4% for persons most proximate to the proposed site in the White Oak / Fairland area.

Q47. What is the Hearing Exhibit No. MGH 18 (which is reproduced below)?

TABLE 11: Population-Adjusted Demographic Comparison between Current and Proposed WAH Proximate Populations (Source: Applied Geographic Solutions)

	Adj. MHHI	% of state	Pop.	Pop +5	Abs +5	Pct +5	% w/o HS diploma	% w/o college degree
Current WAH 1st proximate	\$ 57,282.62	84%	156,502	166,473	9,971	6.4%	22.9%	63.0%
Current WAH 1st & 2nd proximate	\$ 64,721.36	95%	271,960	287,783	15,823	5.8%	18.4%	58.5%
Proposed WAH 1st proximate	\$ 76,189.91	112%	137,357	142,029	4,672	3.4%	12.4%	54.0%
Proposed WAH 1st & 2nd proximate	\$ 77,420.80	113%	478,904	507,230	28,326	5.9%	12.6%	53.7%

Demographics Source: AGS (2010 base year)
State of Maryland Median Household Income (2010): \$68,316

A47. This table shows how WAH’s core proximate population at its current location in Takoma Park compares at the Census Block Group level in terms of income, population growth, educational attainment, and other socioeconomic factors to what will be WAH’s new proximate population in the White Oak/Fairland area.

Q48. What other demographic information is available regarding the Takoma Park area that may be relevant to this analysis?

A48. Although data on poverty rates are not available at the Census Block Group level, it is available by zip Code. The UDS Mapper tool (www.udsmapper.org), developed by the Robert Graham Center and funded by the U.S. Health Resources and Services Administration (HRSA), shows that the current WAH site is located in an area with a higher poverty rate than the proposed location in the White Oak / Fairland area. The areas coinciding with the current

WAH most proximate populations are designated as Medically Underserved Areas/Populations (MUA/Ps) and/or Health Professional Shortage Areas (HPSAs) by HRSA.

Q49. What are MUA/Ps?

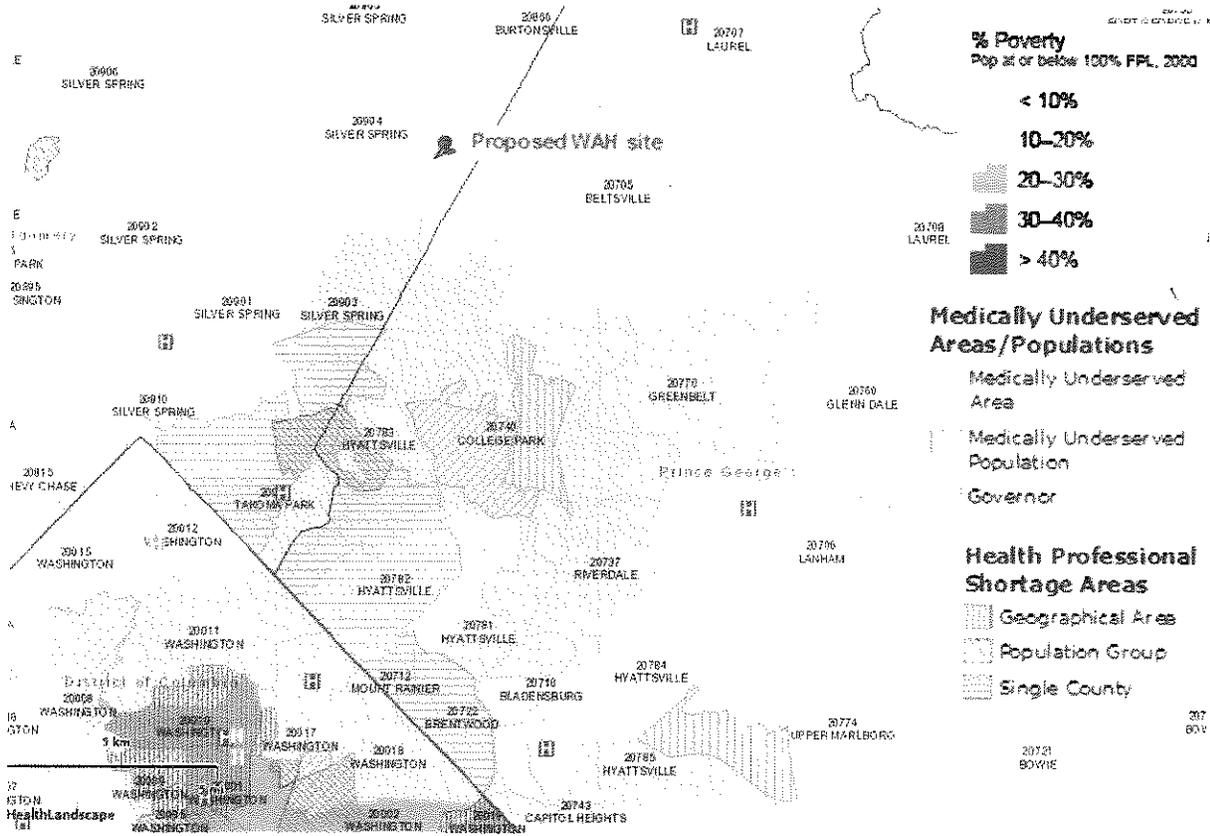
A49. MUA/Ps are geographic areas “in which residents have a shortage of personal health services, or Exceptional/Governor designated. Medically Underserved Populations (MUPs) may include groups of persons who face economic, cultural or linguistic barriers to health care.” (<http://bhpr.hrsa.gov/shortage/>).

Q50. What are HPSAs?

A50. HPSAs are areas “which may be designated as having a shortage of primary medical care, may be urban or rural areas, population groups, or medical or other public facilities.” (<http://bhpr.hrsa.gov/shortage/>).

Q51. What is Hearing Exhibit No. MGH 19 (which is reproduced below)?

TABLE 12: Medically Underserved Areas / Populations, Health Professional Shortage Areas and Poverty Levels (Source: HRSA)



A51. This map presents a complete picture of the area in terms of rates of poverty, Medically Underserved Areas/Populations, and Health Professional Shortage Areas.

5.

CONCLUSIONS

Q52. Based on your training and experience, do you have an opinion to a reasonable degree of professional certainty as to the nature and scope of the indigent and underserved population served by WAH at its current location?

A52. Yes.

Q53. What is that opinion?

A53. The population determined to be WAH's 'core proximate population' is medically and economically disadvantaged compared to other areas of Montgomery County and/or to the core proximate population for WAH at its proposed site in the White Oak / Fairland area. This population is also growing faster than the population that would be the core proximate population for WAH at its proposed site in the White Oak / Fairland area.

Q55. Based on your training and experience, do you have an opinion to a reasonable degree of professional certainty as to the effect of the proposed WAH relocation on the access to care for this population?

A54. Yes.

Q55. What is that opinion?

A55. A large percentage of this population would be worse off in terms of the availability of hospital services if WAH were allowed to abandon the Takoma Park area. If WAH relocates to the White Oak / Fairland area as it has proposed, only 16% of WAH's current core proximate population will still have WAH as their closest hospital.

VERIFICATION

I solemnly declare and affirm under the penalties of perjury that the facts set forth in the foregoing testimony are true and correct to the best of my knowledge, information, and belief.



Keith Bubblo

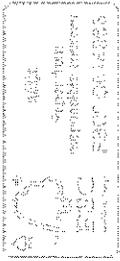


Exhibit 5: Additional Details of Proposed Thorpe Study

The proposed study involves obtaining the required data, with appropriate safeguards, in a manner that is permitted by privacy laws. Under 45 C.F.R. § 164.512(d), a regulation implementing the Health Insurance Portability and Accountability Act (“HIPAA”) (___ U.S.C. §§ ___), WAH is permitted to disclose protected patient health information to a health oversight agency, such as the Commission, for activities authorized by law, including civil or administrative audits, licensure or disciplinary actions, civil administrative or criminal proceedings or actions or other activities necessary for appropriate oversight of WAH, including a ruling on a CON application. In order to determine impact on the indigent and medically underserved population that is closest proximate to WAH, a study showing DRG, insurance status and distance and time to travel to the current WAH site compared to the future proposed site and future new closest hospital would be necessary.

The data requested from WAH should be limited only to the data determined to be necessary for this study in order to be compliant with the HIPAA standard found at 45 CFR 164.502(b)¹, 164.514(d)² and commonly referred to as the “minimum necessary” standard. This standard is based on the practice that protected health information should not be used or disclosed when it is not necessary to satisfy a particular purpose or carry out a specified function. Depending on the nature of WAH’s medical record keeping, these fields could conceivably expand to allow inclusion of the relevant data. The Commission should perform an initial review of the electronic medical record system to ascertain the exact fields and output necessary to produce the relevant data for the study.

¹ 45 CFR 164.502.

² 45 CFR 164.514(d).

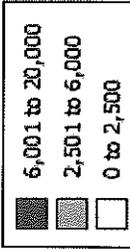
In conducting such a study, the Commission would need to request the following (or substantially similar) data elements from WAH:

Data Element	Purpose
Patient ID	To assist in calculating utilization by patient.
Patient Address: Street Address, City and Zip Code	To examine distribution of travel time to current and proposed location. To examine the concentration of the at-risk population in relation to the current and proposed site.
Insurance Type/Category	To focus on the at-risk or medically disadvantaged populations, i.e., Medicaid and uninsured, that use WAH, rather than the general population.
Date of Service, Admit and Discharge date (to determine Frequency of Use)	To examine current utilization among the uninsured and Medicaid patients to determine potential changes from the increase in travel times and reductions in use for those patients in close proximity to the current location; as well as reductions in travel time for those in close proximity to the proposed site.
Diagnosis-related group (DRG)	To examine the distribution of chronic medical conditions and need for frequent use and medical management. To determine what, if any risk of reduction to the types of care received based on literature on the effect of distance increases in distance and travel time on utilization.

Once the data has been requested from WAH, the Commission may choose to conduct the study itself or opt to authorize WAH or the Interested Parties to utilize a vendor to conduct the study. This is so because the Commission would be considered a “covered entity” under section 45 CFR 164.502³ and thus may redisclose the data to an outside vendor who may perform the study as long as an agreement protecting the information is in place.

³ 45 CFR 164.502.

Population Density by Zip Code

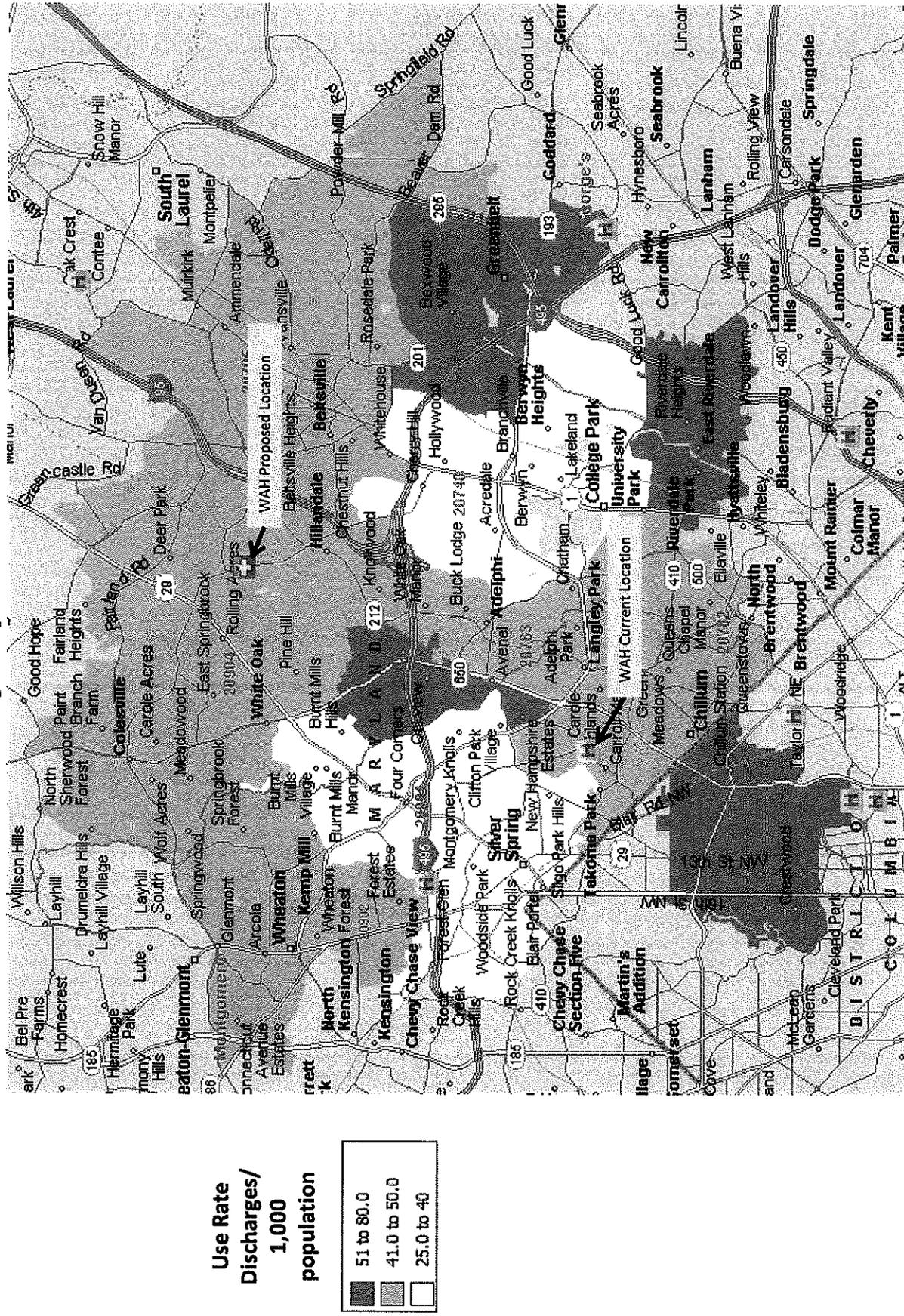


Source: Claritas CY 2013 data

Knowledge and Compassion **Focused on You**

MedStar Health

MSGA Patients 0-64 Use Rate by Zip Code



Source: Claritas CY 2013 and DCHA; includes all services except Behavioral, Normal Newborn, Rehab, and Obstetrics

Knowledge and Compassion Focused on You

MedStar Health

MSGA Patients 65+ Use Rate by Zip Code

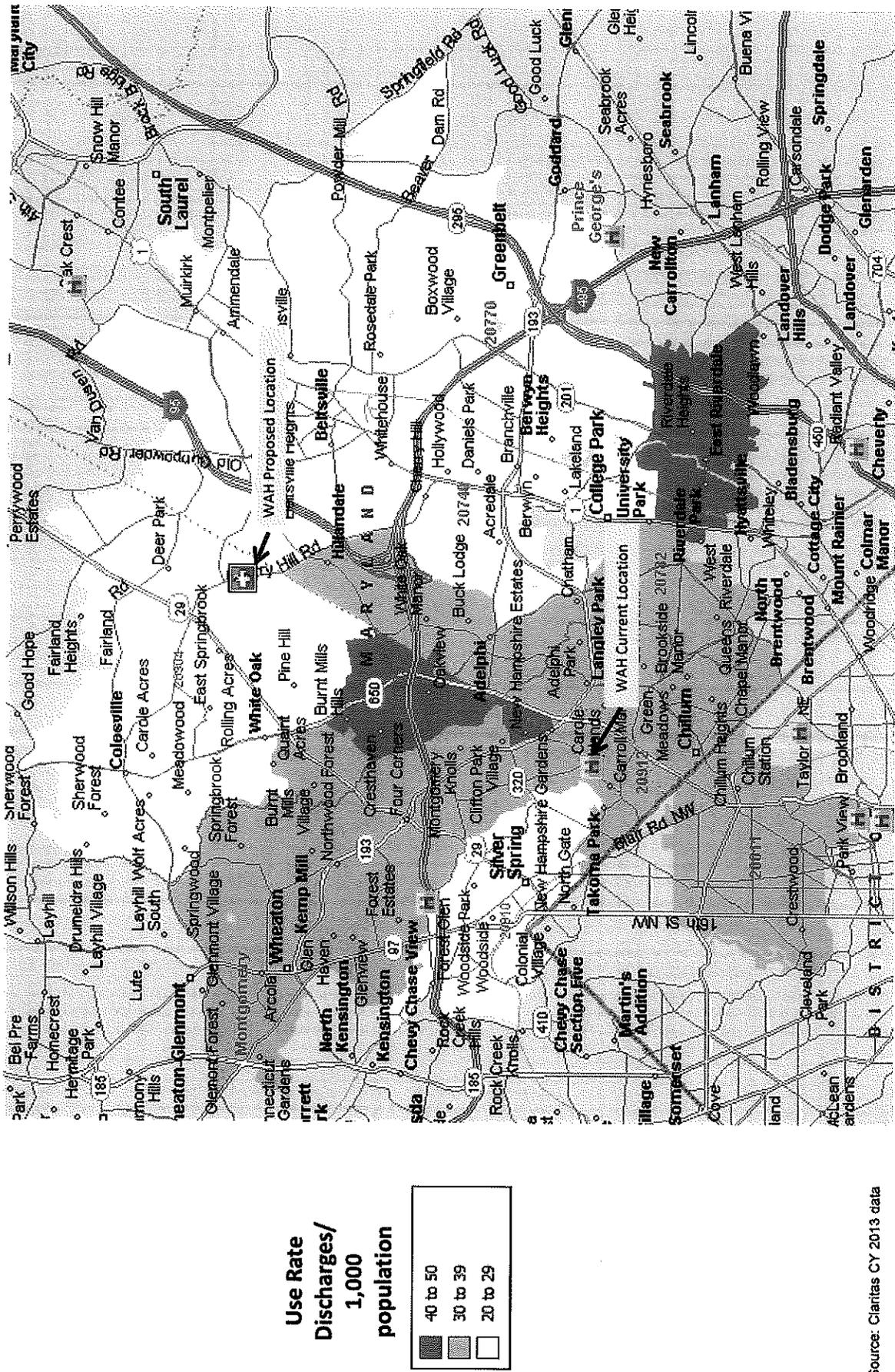


Source: Claritas CY 2013 and DCHA; includes all services except Behavioral, Normal Newborn, Rehab, and Obstetrics

Knowledge and Compassion Focused on You

MedStar Health

OB Patients' Use Rate by Zip Code



Source: Claritas CY 2013 data

Knowledge and Compassion Focused on You

MedStar Health

Community Need Index

Methodology and Source Notes

Overview

Not-for-profit and community-based health systems have long considered community need a core component of their mission of service to local communities. While specific initiatives designed to address health disparities vary across local communities (outreach to migrant farm workers, asthma programs for inner city children, etc), the need to prioritize and effectively distribute hospital resources is a common thread among all providers.

Given the increased transparency of hospital operations (quality report cards, financial disclosures, etc.), community benefit efforts need to become increasingly strategic and targeted in order to illustrate to a variety of audiences how specific programs have been designed and developed. While local community needs assessments will always play a central role in this process, they are often voluminous, difficult to communicate, and may lack necessary qualitative and statistical justification for choosing specific communities as having the “greatest need”.

Because of such challenges, Dignity Health and Truven Health jointly developed a Community Need Index (“CNI”) in 2004 to assist in the process of gathering vital socio-economic factors in the community. The CNI is strongly linked to variations in community healthcare needs and is a strong indicator of a community’s demand for various healthcare services.

Based on a wide array of demographic and economic statistics, the CNI provides a score for every populated ZIP code in the United States on a scale of 1.0 to 5.0. A score of 1.0 indicates a ZIP code with the least need, while a score of 5.0 represents a ZIP code with the most need. The CNI should be used as part of your larger community need assessment, and can help pinpoint specific areas that have greater need than others. The CNI should be shared with your community partners and used to justify grants or resource allocations for community initiatives.

Methodology

The CNI score is an average of five different barrier scores that measure various socio-economic indicators of each community using the 2014 source data. The five barriers are listed below along with the individual 2014 statistics that are analyzed for each barrier. These barriers, and the statistics that comprise them, were carefully chosen and tested individually by both Dignity Health and Truven Health:

1. **Income Barrier**

- Percentage of households below poverty line, with head of household age 65 or more
- Percentage of families with children under 18 below poverty line
- Percentage of single female-headed families with children under 18 below poverty line

2. Cultural Barrier

- Percentage of population that is minority (including Hispanic ethnicity)
- Percentage of population over age 5 that speaks English poorly or not at all

3. Education Barrier

- Percentage of population over 25 without a high school diploma

4. Insurance Barrier

- Percentage of population in the labor force, aged 16 or more, without employment
- Percentage of population without health insurance

5. Housing Barrier

- Percentage of households renting their home

Every populated ZIP code in the United States is assigned a barrier score of 1,2,3,4, or 5 depending upon the ZIP code national rank (quintile). A score of 1 represents the lowest rank nationally for the statistics listed, while a score of 5 indicates the highest rank nationally. For example, ZIP codes that score a 1 for the Education Barrier contain highly educated populations; ZIP codes with a score of 5 have a very small percentage of high school graduates.

For the two barriers with only one statistic each (education and housing), Truven Health used only the single statistic listed to calculate the barrier score. For the three barriers with more than one component statistic (income, cultural and insurance), Truven Health analyzed the variation and contribution of each statistics for its barrier; Truven Health then weighted each component statistic appropriately when calculating the barrier score.

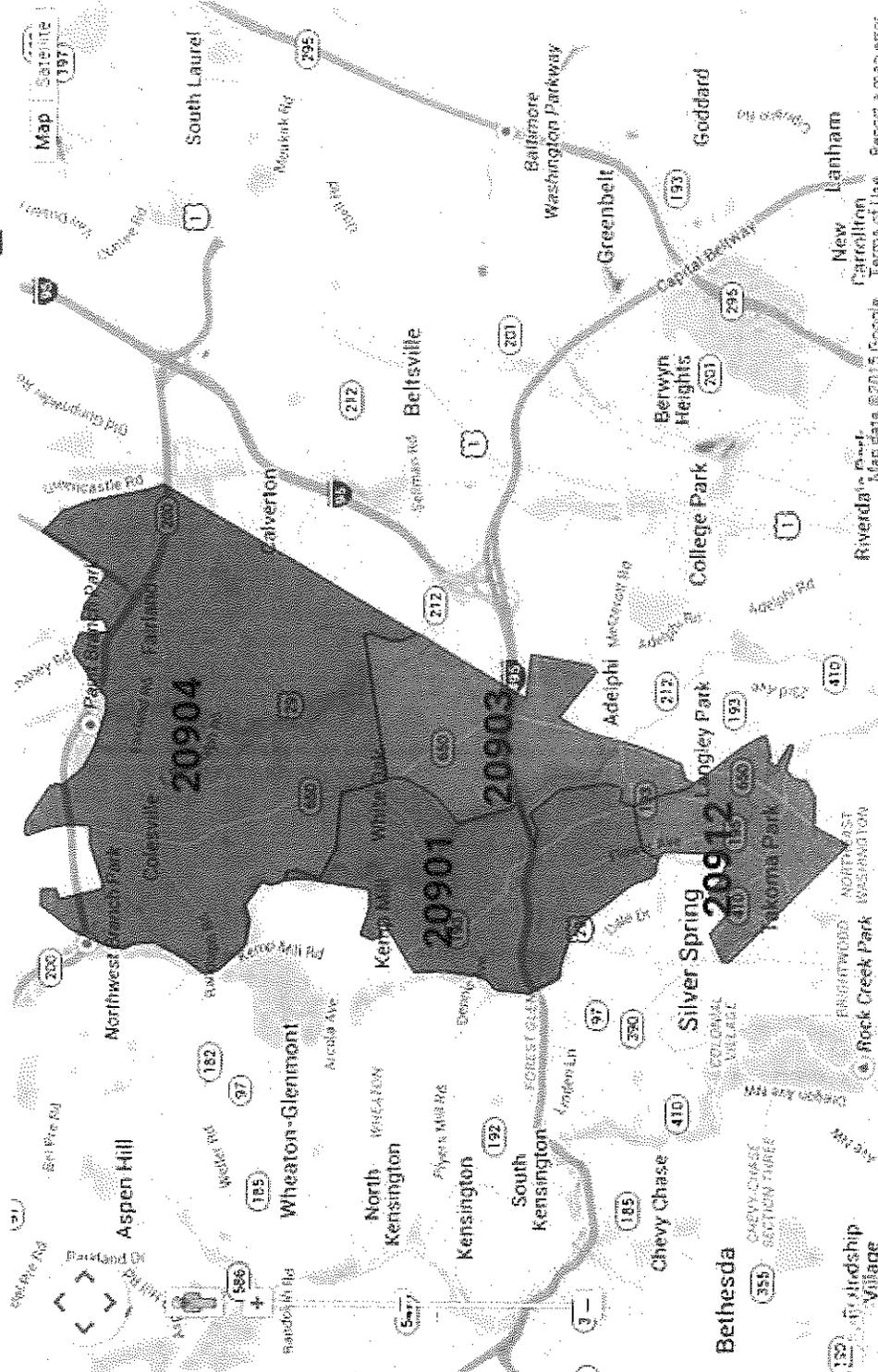
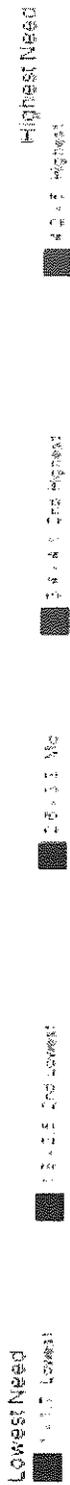
Once each ZIP code is assigned its barrier scores from 1 to 5, all five barrier scores for each ZIP code are averaged together to yield the CNI score. Each of the five barrier scores receives equal weight (20% each) in the CNI score. A score of 1.0 indicates a ZIP code with the least need, while a score of 5.0 represents a ZIP code with the most need.

Data Sources

- 2014 Demographic Data, The Nielsen Company
- 2014 Poverty Data, The Nielsen Company
- 2014 Insurance Coverage Estimates, Truven Health Analytics

Applications and Caveats

- CNI scores are not calculated for non-populated ZIP codes. These include such areas as national parks, public spaces, post office boxes and large unoccupied buildings.
- CNI scores for ZIP codes with small populations (especially less than 100 people) may be less accurate. This is due to the fact that the sample of respondents to the 2010 census is too small to provide accurate statistics for such ZIP codes. This issue is mitigated by either eliminating such ZIP codes from your analysis completely, or by making sure that low population ZIP codes are combined with other surrounding high population ZIP codes using the weighted average technique described above.



Mean(zipcode): 3.5 / Mean(person): 3.4
CNI Score Median: 3.5
CNI Score Mode: 3.2

Zip Code	CNI Score	Population	City	County	State
20901	3.2	37619	Silver Spring	Montgomery	Maryland
20903	4	22522	Silver Spring	Montgomery	Maryland
20904	3.2	57855	Colesville	Montgomery	Maryland
20912	3.8	25041	Takoma Park	Montgomery	Maryland

MEDIAN REPORT

Revenue Growth and Cash Flow Margins Hit All-Time Lows in 2013 US Not-for-Profit Hospital Medians

Balance sheet measures and debt coverage ratios remain stable despite weak performance

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Summary

Fiscal year 2013 US not-for-profit hospital medians reveal continued slowing revenue growth and weaker operating performance, declining to levels not seen since the recession.¹ In 2013, operating revenue growth dropped to an all-time low of 3.9% and was outpaced by expense growth for a second consecutive year, an unsustainable trend. This unfavorable relationship resulted in a second year of declines in both operating margins and operating cash flow margins (when calculated with bad debt as a revenue deduction). The operating cash flow margin reached an all-time low of 9.0%.

Important findings discussed in this report include²:

- » Revenue growth rate reached an all-time low, and expense growth outpaced revenue growth for a second consecutive year.
- » Profitability margins declined for a second consecutive year to levels not seen since the recession.
- » Inpatient admissions declined as outpatient services grew, although the rate of growth slowed compared to prior years, which indicates a decline in healthcare demand.
- » Exposure to Medicare increased, shifting away from commercial payors, another factor in the slower revenue growth.
- » Unrestricted absolute and relative liquidity measures grew as equity market returns were strong and hospitals spent less on capital than in prior years.

We expect continued financial weakening due to volume declines in a predominantly fee-for-service environment, reinforcing our negative outlook on business conditions in the not-for-profit hospital sector.

¹ The medians reflect audit year ends of December 31, 2013 and prior; therefore they do not incorporate the impact of the Affordable Care Act's (ACA) individual mandate, which went into effect January 1, 2014. We expect minimal impact from the ACA's individual mandate in the 2014 medians given the low enrollment levels.

² Starting on page 16, the medians are presented in three formats: by year for five years, 2009-2013 (Appendix 5), by broad rating category for 2013 (Appendix 6) and by alphanumeric rating category for 2013 (Appendix 7).

	2009	2010	2011	2012	2013
Key Ratios ^[4]					
Operating Margin	2.6%	2.5%	2.6%	2.5%	2.0%
Excess Margin	4.8%	4.9%	5.2%	5.3%	5.1%
Operating Cash Flow Margin	9.3%	9.3%	9.3%	9.5%	9.0%
Cash on Hand (Days)	148.8	162.8	172.4	187.8	197.6
Cash-to-Direct Debt	105.3%	113.6%	119.9%	125.9%	134.7%
Cash-to-Comprehensive Debt	77.6%	84.5%	89.8%	89.2%	99.9%
Maximum Annual Debt Service Coverage (x)	4.1	4.1	4.2	4.3	4.2
Annual Debt Service Coverage (x)	4.2	4.4	4.5	4.7	4.5
Debt-to-Cash Flow (x)	3.5	3.5	3.4	3.4	3.7
Debt-to-Total Operating Revenue	35.9%	36.2%	36.3%	38.0%	37.9%
Annual Operating Revenue Growth Rate	6.3%	4.4%	5.4%	5.1%	3.9%
Annual Operating Expense Growth Rate	6.1%	4.4%	5.1%	5.5%	4.3%
3 Year Operating Revenue CAGR	7.0%	6.1%	5.5%	5.1%	5.0%
3 Year Operating Expense CAGR	7.4%	6.2%	5.2%	5.1%	5.1%
Debt-to-Capitalization	41.1%	39.6%	39.4%	39.0%	35.4%
Current Ratio (x)	1.9	1.9	1.9	1.9	1.9
Cushion Ratio (x)	13.7	14.8	15.7	16.5	17.5
Return on Assets	4.3%	4.6%	4.6%	4.3%	4.0%
Accounts Receivable (Days)	46.0	44.5	45.1	50.1	49.8
Average Payment Period (Days)	58.4	57.8	59.3	64.7	63.4
Capital Spending Ratio (x)	1.3	1.1	1.2	1.2	1.2
Average Age of Plant (Years)	9.8	10.1	10.4	10.5	10.7
Monthly Liquidity to Demand Debt	231.6%	293.2%	333.0%	348.2%	385.2%
Annual Liquidity to Demand Debt	245.0%	337.5%	363.8%	397.8%	439.0%
Demand Debt as a % of Total Direct Debt	45.4%	37.8%	36.3%	34.3%	34.3%
Cash to Demand Debt	261.6%	342.3%	380.7%	421.2%	457.0%
Monthly Liquidity to Total Cash and Investments	100.0%	98.2%	97.8%	97.8%	98.2%
Patient Revenue Sources by Gross Revenue (%) ^[5]					
Medicare	42.6%	42.7%	43.5%	43.7%	44.4%
Medicaid	11.9%	12.6%	13.0%	13.1%	13.0%
Commercial	35.8%	35.0%	33.8%	33.3%	32.4%
Self-Pay & Other	7.2%	7.5%	7.7%	7.6%	7.7%

[1] Financial data are based on audited financial statements for 383 freestanding hospitals, single-state and multi-state healthcare systems. Ratings are as of 7/11/14.

[2] Utilization statistics are based on a smaller sample size where five years of consistent data are available.

[3] Combined Admissions and Observation Stays is a separately calculated median and does not equal the sum of median Admissions and median Observation Stays.

[4] Monthly and Annual Liquidity statistics are based on a smaller sample size where five years of consistent data are available.

[5] Payer Mix columns do not sum to 100% because each entry is a separately calculated median.

Issuer	Rating	Outlook
Lawrence Memorial Hospital	A1	Stable
Med-Map L.L.C. (guaranteed by Sisters of Charity of Leavenworth Health System)	Aa3	Negative
Rural Health Resources of Jackson County (guaranteed by Sisters of Charity of Leavenworth Health System)	Aa3	Negative
Salina Regional Health Center	A1	Stable
Sisters of Charity of Leavenworth Health System	Aa3	Negative
Stormont-Vail HealthCare	A2	Stable
KENTUCKY		
Appalachian Regional Healthcare	MIG 1	No Outlook
Baptist Healthcare System Obligated Group	A2	Stable
King's Daughters' Medical Center	A3	Negative
Murray-Calloway County Public Hospital Corporation	Baa3	Negative
Owensboro Medical Health System	Baa2	Stable
Pikeville Medical Center	A3	Stable
Pikeville Medical Center (Bond Anticipation Notes)	MIG 1	No Outlook
LOUISIANA		
East Jefferson General Hospital	Ba1	Negative
Franciscan Missionaries of Our Lady Health System, Inc.	A2	Stable
Lafayette General Medical Center	A3	Stable
Ochsner Clinic Foundation	Baa1	Stable
Ochsner Community Hospital (guaranteed by Ochsner Clinic Foundation)	Baa1	Stable
Terrebonne General Medical Center	A2	Stable
Touro Infirmary	Baa2	Stable
West Jefferson Medical Center	Baa2	Stable
Willis-Knighton Medical Center	A2	Stable
Woman's Hospital Foundation	A3	Stable
MAINE		
Eastern Maine Medical Center Obligated Group	Baa1	Negative
Maine Health & Higher Education Facilities Authority (Reserve Fund Resolution)	A1	Stable
MaineGeneral Medical Center	Ba1	Negative
MARYLAND		
Adventist HealthCare, Inc.	Baa2	Stable
Anne Arundel Health System	A3	Stable
Bon Secours Health System, Inc.	A3	Positive
Calvert Health System	A3	Stable
Carroll Hospital Center	A3	Stable
Doctors Community Hospital	Baa3	Negative
Frederick Memorial Hospital, Inc.	Baa1	Stable
Greater Baltimore Medical Center	A2	Stable
Johns Hopkins Health System	Aa3	Stable
LifeBridge Health	A2	Stable

WAH Primary Service Area Market Share

Hospital	FY12		FY13		FY14		FY15*		Market Share Change			
	Disch.	Share	Disch.	Share	Disch.	Share	Disch.	Share	FY13	FY14 vs. FY13	FY12	FY14 vs. FY12
Holy Cross	13,624	42.0%	13,590	43.0%	13,090	43.1%	13,668	44.4%	↑ 0.04	↑ 1.04	↑ 1.04	↑ 1.32
Washington Adventist	8,394	25.9%	7,861	24.9%	7,504	24.7%	7,452	24.2%	↓ -0.20	↓ -1.21	↓ -0.49	
Doctors Community Hospital	1,964	6.1%	1,769	5.6%	1,576	5.2%	1,404	4.6%	↓ -0.42	↓ -0.87	↓ -0.63	
Suburban Hospital Center	1,450	4.5%	1,319	4.2%	1,334	4.4%	1,512	4.9%	↑ 0.21	↓ -0.08	↑ 0.52	
Prince Georges Hospital Ctr	1,233	3.8%	1,154	3.7%	1,220	4.0%	1,278	4.2%	↑ 0.36	↑ 0.21	↑ 0.14	
Laurel Regional Hospital	1,171	3.6%	1,254	4.0%	1,111	3.7%	878	2.9%	↓ -0.31	↑ 0.04	↓ -0.80	
MedStar Montgomery	974	3.0%	904	2.9%	791	2.6%	884	2.9%	↓ -0.26	↓ -0.40	↑ 0.27	
Shady Grove Adventist	848	2.6%	885	2.8%	862	2.8%	832	2.7%	↑ 0.03	↑ 0.22	↓ -0.13	
University of Maryland	576	1.8%	596	1.9%	598	2.0%	452	1.5%	↑ 0.08	↑ 0.19	↓ -0.50	
Johns Hopkins	544	1.7%	562	1.8%	583	1.9%	594	1.9%	↑ 0.14	↑ 0.24	↑ 0.01	
Adventist Rehab Hospital	304	0.9%	290	0.9%	342	1.1%	360	1.2%	↑ 0.21	↑ 0.19	↑ 0.04	
Howard County General	247	0.8%	292	0.9%	281	0.9%	286	0.9%	↑ 0.00	↑ 0.16	↑ 0.00	
Anne Arundel Medical Center	213	0.7%	274	0.9%	245	0.8%	246	0.8%	↓ -0.06	↑ 0.15	↓ -0.01	
Other	862	2.7%	825	2.6%	846	2.8%	934	3.0%	↑ 0.17	↑ 0.12	↑ 0.25	
TOTAL	32,404	--	31,575	--	30,383	--	30,780	--	--	--	--	--

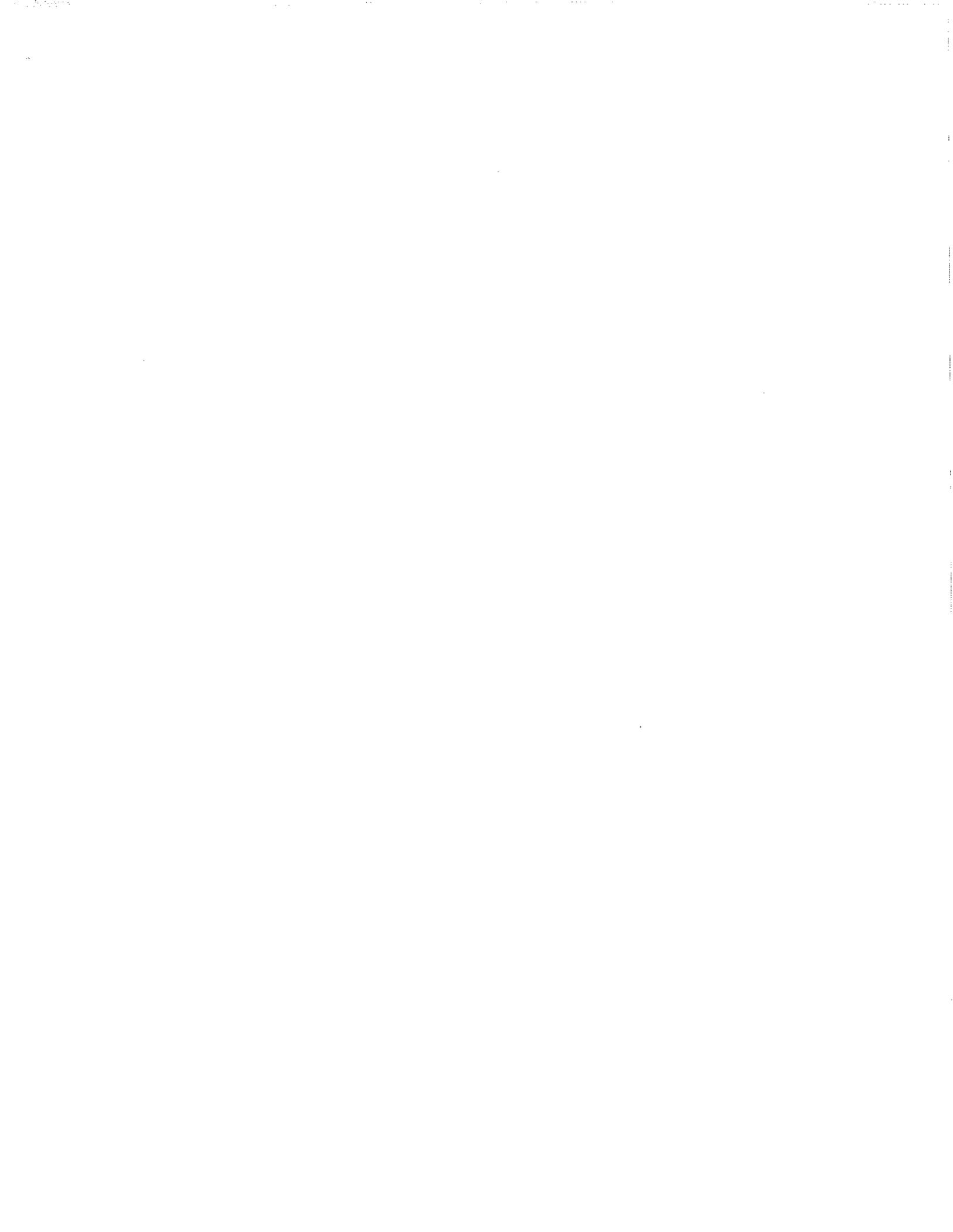
Notes: *FY15 annualized based on six months of available data.

WAH CY2013 60% Service Area: 20783, 20912, 20782, 20903, 20901, 20904, 20740, 20910, 20705, 20011, 20737, 20902, 20770

Source: PCA (HSCRC discharge data) accessed: 1.19.15 and 2.9.15 (Excludes MS-DRG 795 Normal Newborn)











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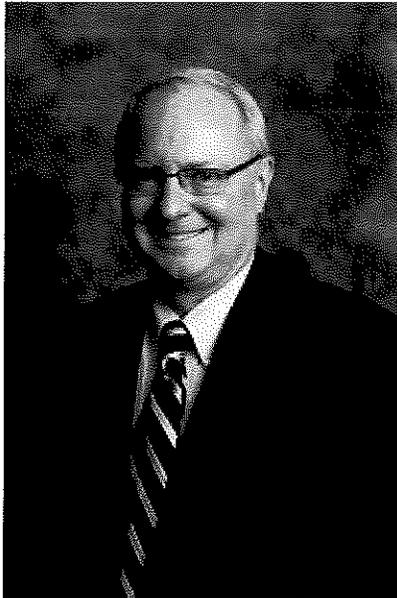


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ROLLINS
SCHOOL OF
PUBLIC
HEALTH

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Professor

Chair, Health Policy and Management



Kenneth E. Thorpe, Ph.D., is the Robert W. Woodruff Professor and Chair of the Department of Health Policy & Management, in the Rollins School of Public Health of Emory University, Atlanta, Georgia. He was the Vanselow Professor of Health Policy and Director, Institute for Health Services Research at Tulane University. He was previously Professor of Health Policy and Administration at the University of North Carolina at Chapel Hill; an Associate Professor and Director of the Program on Health Care Financing and Insurance at the Harvard University School of Public Health and Assistant Professor of Public Policy and Public Health at Columbia University. Dr. Thorpe has also held Visiting Faculty positions at Pepperdine University and Duke University. Dr. Thorpe was Deputy Assistant Secretary for Health Policy in the U.S. Department of Health and Human Services from 1993 to 1995. In this capacity, he coordinated all financial estimates and program impacts of President Clinton's health care reform proposals for the White House. He also directed the administration's estimation efforts in dealing with Congressional health care reform proposals during the 103rd and 104th sessions of Congress.

As an academic, he has testified before several committees in the U.S. Senate and House on health care reform and insurance issues. In 1991, Dr. Thorpe was awarded the Young Investigator Award presented to the most promising health services researcher in the country under age 40 by the Association for Health Services Research. He also received the Hettleman Award for academic and scholarly research at the University of North Carolina and was provided an "Up and Comers" award by Modern Healthcare. Dr. Thorpe was awarded the annual Excellence in Patient Care prize from the National Association of Chain Drug Stores in 2014. He also received the 2012 Champions for Healthy Living Award presented by the YMCA of the USA.

Dr. Thorpe has authored and co-authored over 120 articles, book chapters and books and is a frequent national presenter on issues of health care financing, insurance and health care reform at health care conferences, television and the media. He has worked with several groups (including the American College of Physicians, American Hospital Association, National Coalition on Health Care, Blue Cross and Blue Shield Association, Service Employees International Union, AHIP and the United Hospital Fund) and policymakers (including Senators Wellstone, Corzine, Bingaman, Snowe, Feinstein, Cassidy, Carper, Clinton, Obama and Kennedy) to develop and evaluate alternative approaches for providing health insurance to the uninsured. He serves as a reviewer on several health care journals.

Dr. Thorpe is chairman, Partnership to Fight Chronic Disease, an international coalition of over 80 groups focused on highlighting the key role that chronic disease plays in the growth in healthcare spending, and the high rates of morbidity and mortality. PFCD focuses as well on identifying best practice prevention and care coordination strategies and scaling them countrywide. He also serves as co-chair of the Partnership for the Future of Medicare, a non-partisan organization focused on identifying long-term reforms that would make the program more efficient and improve the quality of care provided to beneficiaries.

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