

## MASTER PLAN 2015 REPORT

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### CHAPTER 1 – INTRODUCTION

As M.D. Anderson Cancer Center (MDACC) embarks upon the implementation of its recently unveiled 2005 – 2010 strategic vision, it becomes evident that the physical environment is a pivotal element for supporting and enhancing the strategies and tactics outlined.

The Strategic Vision conveyed by John Mendelsohn, MD:

The 2005 – 2010 Strategic Vision, with seven new fundamental goals, is a pathway for us to follow in our four mission areas – patient care, research, education and prevention – as well as in our efforts to increase our collaborations outside of the institution, build and sustain our facilities and technical infrastructure, and recruit and retain the best people by creating a culture that encourages and rewards employees and volunteers.

*Goal #1. Enhance the excellence, value, safety and efficiency of our patient care.*

*Goal #2. Enhance the quality of existing research programs and develop priority programs for the future.*

*Goal #3. Enhance the quality and outcomes of our undergraduate and graduate degree-granting programs, and our post-doctoral training programs.*

*Goal #4. Expand research addressing risk assessment, prevention, and early detection of cancer and develop strategies to disseminate these findings.*

*Goal #5. Advance M.D. Anderson as an employer of choice.*

*Goal #6. Increase our mission-driven collaborations and outreach.*

*Goal #7. Safeguard and enhance our resources.*

Master Plan 2015 is the vehicle through which the physical facilities can respond to this vision. The Master Plan 2015 Report proactively identifies opportunities and strategies for best managing facility and space needs. The strategies for space management are realized through the balanced combination of re-use and renewal of existing facilities, construction of new facilities, new land acquisitions / exchanges, and/or strategic leases that are achievable within capital budget, infrastructure and time constraints.

Master Plan 2015 is not intended to be a static document. It is a living document, a baseline from which to evolve future facilities planning

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efforts and projects. Therefore, this document is anticipatory in nature, allowing MDACC to accommodate mid-course correction strategies, develop new entry opportunities, and provide sound exit scenarios.

Growth is a given, but rather than focus upon the unknown specifics in future cancer care delivery and research efforts, Master Plan 2015 focuses upon the identification of functional zones. Functional zones reinforce and enhance the interrelationships and adjacencies that promote efficiency, innovation, and collaboration.

Zoning the campus into broadly defined functional groups provides MDACC with the ability to define and establish infrastructure capacity, target sites for the logical placement of projects as they arise, accommodate incremental as well as major expansion, and identify facilities that should be phased out or converted to an alternate use.

Ultimately, the ability to bring new programs, services, and projects on line is directly tied to the financial viability of the institution. The correlation between program growth and facility capacity is evident. As an evolution of that precept, Master Plan 2015 illustrates how future growth should not be solely linked to physical building chassis, but how the physical assets and attributes of the campuses should be evaluated in terms of their contribution to realizing MDACC's 2005 - 2010 Strategic Vision for Future Achievement.

Due to the breadth of services and locations of MDACC, Master Plan 2015 focuses upon the development of its Houston Campus only. The Houston Campus is a part of the greater Texas Medical Center (TMC) campus and is broadly comprised of the areas occupied by the Main Hospital (also known as 1515 Holcombe) on the north, Fannin Boulevard on the west, El Paseo Street on the south, and the eastern edge follows along Brays Bayou, Harvin Boulevard, and Cambridge Street. The Houston Campus is also referred to as the North, Mid, and South Campuses of MDACC. Descriptions of each of these campuses can be found in Chapter 3.

It should be noted that the MDACC Smithville and Bastrop campuses have existing master plans and are not included in this report.

A synopsis of the remainder of the Master Plan 2015 Report follows:

### **Chapter 2 – Concept Development Criteria**

The master planning process is based upon a series of concept development criteria, which provide the structure for this report. This chapter underscores the importance of the methodology utilized to collect, assess, and categorize information and the process through which issues are evaluated and consensus obtained.

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### **Chapter 3 – Existing Conditions**

Recognizing that MDACC is a dynamic institution and change is inevitable and constant, it is important to document the existing conditions as of the date of this report. This snapshot view provides MDACC with a baseline of information from which the master plan framework evolves. Diagrams illustrating the Houston Campus, Property Ownership, Parking, and Existing Facilities are included.

### **Chapter 4 – Conceptual Site Framework**

This section presents a long-term, twenty to thirty year vision, for the physical development of the MDACC Houston Campus. Connectivity, Vistas / Open Spaces, Land Use, Parking, Circulation, and Building Density are discussed.

### **Chapter 5 – Conceptual Master Plan**

The development of the MDACC Houston Campus is organized around the ten year and twenty year planning horizons. This chapter discusses broad ranging issues such as which facilities MDACC should continue to invest in, where and how the next buildings should be sited, the operational and physical impact of short term decisions, the need to anticipate the unforeseen.

### **Chapter 6 – Next Steps**

This chapter focuses upon the key issues that influence the timing and contribute to the implementation of Master Plan 2015. Communication methodology, coordination with on-going initiatives, identification of additional studies, and an implementation process are discussed.

Included in this section are descriptions of the immediate studies requiring finalization

- Faculty Center II
- Library Study
- Infrastructure Capacity Study – Mid and South Campuses
- Mid Campus Development Plan
- South Campus Master Plan Coordination
- Coordination with Texas Medical Center Master Plan
- Campus Mobility Study
- Pharmacy Study
- Materials Management / Distribution Services Study

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- Laboratory Medicine / Pathology Study
- Demolition of Houston Main Building
- Administrative Support Building Program
- Expansion of Garage 10
- Vivarium Expansion

Additional studies required over the next two years include:

- Principal Investigator / Research Grants Productivity Study
- Inpatient Bed Assessment Study

### **Appendices A, B, C, and D –**

Documentation of the supporting material utilized.

### **Appendix E –**

A Glossary of Terms for the descriptors and acronyms used.

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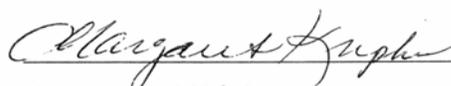
Approval:

**Dr. John Mendelsohn**  
 President

**Date**

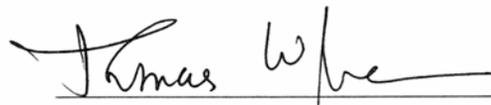
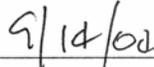
The University of Texas M.D. Anderson Cancer Center

**Dr. Margaret Kripke**

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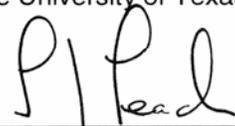
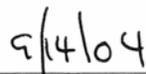
Executive Vice President & Chief Academic Officer  
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**Dr. Thomas Burke**

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**Mr. William Daigneau**

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### **CHAPTER 2 – CONCEPT DEVELOPMENT CRITERIA**

The level of acceptance of any development plan is based upon the shared vision and endorsement by senior leadership. Numerous planning work sessions (charrettes) were held with representatives from Patient Care, Research, Education, Prevention, and Capital Planning and Management. These charrettes and documents provided planning vital background information (both quantitative and qualitative) that was instrumental in establishing the concept development criteria for MDACC Houston Campus. To that end, the first step in this planning process is the establishment of criteria from which planning options can be reviewed against.

The planning process was based upon the establishment of overarching statements or Guiding Principles that shape the vision for the development of MDACC. This broad perspective framework is then utilized to inform and develop the detail statements. These detailed statements encompassed issues as varied as: program expansion, facility specific issues, campus development, employee-focus, etc. These issues were scrutinized and identified as Planning Parameters.

Due to the multiple on-going project initiatives and pressing facility needs, it became important to identify key projects and highest priorities. This exercise provided MDACC with a comprehensive list that was categorized to identify the Priorities / Givens.

As with any planning process, it is also important to circumspect issues that are speculative at this point in time, but will impact and influence the implementation of the Master Plan 2015. These issues are noted as Opportunities / Variables.

It should be noted that Master Plan 2015 planning occurred between November 2003 and August 2004.

The Master Plan 2015 builds upon the outcomes of previous planning studies, current initiatives, and the outcomes of the Redevelopment Plan effort. See Appendix A for a list of the planning studies referenced. Further, the Master Plan 2015 is shaped by the on-going discussions related to fiscal management, continual operations improvement, and the recently unveiled 2005-2010 Strategic Vision.

The Redevelopment planning effort focuses upon achieving the precepts highlighted in the 2005-2010 Strategic Vision through the immediate prospects presented by the spaces vacated through the completion of the Ambulatory Clinical Building (ACB), Cancer Prevention Building (CPB), the Basic Sciences Research Building (BSRB), and the South Campus Research Building Two (SCRB Two). Please refer to the Existing Facilities diagram in Chapter 3 – Existing

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Conditions for locations of the buildings referenced.

The following Guiding Principles apply to both the Master Plan 2015 and the Redevelopment Plan. The Planning Parameters, Priorities / Givens, and Opportunities / Variables statements have been annotated to reflect their impact on this Master Plan 2015 Report.

### GUIDING PRINCIPLES

Guiding Principles represent the foundation from which the planning efforts were derived. The following principles apply to the Master Plan 2015 planning efforts:

1. MDACC is a dynamic institution and planning efforts must reflect the ability to change course(s) mid-stream, to be flexible to accommodate rapid expansion (or contraction) of services, and fluid to allow multiple initiatives related to patient care, research, prevention, and education to occur simultaneously.
2. The “Big Six” clinical product lines (Prostate / GU, Breast, Leukemia, Thoracic, GI, Lymphoma) are and will continue to be drivers for the clinical redevelopment planning effort.
3. MDACC is a vibrant, creative research center. Consequently, planning efforts should strive to:
  - a. Create research communities centered around each unique research center.
  - b. Consolidate research programs to maximize research program interactions and bring departments together.
  - c. Accommodate research priorities for space assignments and growth projections provided in the Research Space Stacking Diagrams, see Appendix D.
4. Enhance the patient and family experience through expanded and improved amenities such as campus access / parking, building entries, wayfinding, green spaces, and retail services.
5. Increase staff efficiency, work satisfaction and support the MDACC initiative to be the employer of choice by focusing on the needs of the staff through:
  - a. Functional adjacencies that promote multi-disciplinary interaction and collaboration within and between research and patient care programs.
  - b. Value added staff amenities such as the development of a Campus Center; including an education center which may provide retail and training / learning services.

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- c. Improved research faculty and staff proximity to the clinic, hospital, and shared research core facilities.
  - d. Clinical adjacencies that enhance operational standards and improve efficiency.
  - e. The creation of a sense of community within each campus.
  - f. Create fitness and wellness center as employee amenity.
6. Programs and services are supported through the built environment. The planning efforts should focus upon highest and best use. This is best accomplished through proactive, anticipatory planning that:
- a. Maximizes the amount of patient care space on the North Campus within the Clark, Love, LeMaistre, Lutheran, and Alkek Buildings. Any service that does not provide direct patient care may, due to space limitations, be located within walking distance or a radius of several miles.
  - b. Minimizes the amount of leased space. Leased facilities should only be used for limited purposes. The goal is to have MDACC functions located in owned facilities rather than leased facilities.
  - c. Provides for exit strategies regarding the reuse or demolition of facilities.
  - d. Accommodates entrance strategies for new initiatives and programs.
  - e. Creates the next empty chair to allow for the next move.

### PLANNING PARAMETERS

Planning parameters are the constants that influence the implementation of any plan. The following addresses those issues that impact upon the physical and functional development of Master Plan 2015:

- 1. All planning and design efforts will build upon previous planning studies:
  - a. Current financial projections of the institution – the master plan needs to understand the short-term requirements while planning for the mid-term and long-term outcomes.
  - b. Evolving strategic initiatives – circumstances change; the planning effort should focus upon new relationships and adjacencies that will allow MDACC to re-invent itself in terms of improved efficiency or maintain its leadership role, increase patient base and/or revenue opportunities.

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2. Create design and functional flexibility within the Houston Campus and new facilities by:
  - a. Developing large, open floor plates, appropriate floor-to-floor heights, large structural bays, flexible mechanical and data infrastructure.
  - b. Maximizing building densities, building envelopes, and building square feet per regulatory factors.
3. Flexibility is reinforced through the clarity of the built environment, this is accomplished by:
  - a. Zoning each campus to allow for the logical development and location of new / expanded services.
  - b. Developing easily perceived circulation systems (vertical and horizontal), which enable movement throughout and between the buildings. Build upon the Access Pathway (Yellow Brick Road) concept.
  - c. Improving upon the clarity of the vehicular circulation: patient parking / access, staff parking, people mover, shuttle service, commuter vans, emergency traffic, etc. throughout and within each campus.
  - d. Providing for easy and timely staff movement between the North, Mid, and South Campuses.
4. While the built environment is important, identifying those intangible elements that support an employee-focused culture is essential; they include:
  - a. Creating a sense of community within each campus.
  - b. Continuing to develop the North Campus as the hub for patient care activities.
    - i. Consolidating services to improve operational efficiencies.
    - ii. Improving departmental adjacencies to minimize patient travel and increase staff interaction.
  - c. Achieving a critical mass of researchers for basic sciences and translational research at the appropriate campus.
    - i. Developing the infrastructure to support research on the North and South campuses.
    - ii. Respecting the South Campus for future basic science, translational, and commercial research initiatives.
    - iii. Maximizing land use, density and development on

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the Mid Campus for support functions and South Campus for research programs.

### PRIORITIES / GIVENS

Priorities establish precedence in time and the order of importance while Givens are inviolate conditions that will be realized. Together, the priorities and givens provide MDACC with a clearer understanding of the timeframes necessary for developing projects on the Houston Campus.

The timeframes identified are categorized as: Immediate (within the next 12 months), near term (1 – 3 years), short term (4 – 7 years), or mid term (8 – 10 years). Projects beyond the 10 year horizon were viewed as somewhat speculative and not included within the priority matrix. A copy of the Priorities and Givens matrix is included in Appendix B.

It should be reiterated that the timeframes below reflect the current thinking of MDACC and should be continually re-evaluated based upon changes in projected clinical growth, faculty growth, research initiatives, and financial capabilities.

#### Immediate (next 12 months)

These items are non-negotiable and reflect the initiatives underway to address current deficiencies. These initiatives have a greater impact upon the Redevelopment Plan, but do influence the disposition of facilities and how they are utilized as a part of the Master Plan.

1. Maximize number of inpatient beds in Lutheran Tower. MDACC will be at capacity for inpatient beds soon and measures need to be taken to expand the number of inpatient beds. This immediate need requires that Lutheran Tower will remain in use as an inpatient facility.
2. Minimize the reuse of the vacated Houston Main Building (HMB) spaces. There is approximately 121,000 square feet of administrative office space in HMB. HMB is slated to be demolished by 2008. This will impact the availability of space for the near term, but provides MDACC with the next empty chair for future development. This statement also supports the minimizing of future funds allocated to the upgrade of existing systems.
3. Reuse of vacated spaces in Clark / Love / LeMaistre. This statement reconfirms MDACC's commitment to its current facilities and reinforces its recognition for expansion of patient care related activities.

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4. Incorporate the Federal Emergency Management Agency (FEMA) initiatives 404 and 406. These initiatives extend the useful life of the facilities infrastructure and provide flood protection and mitigation controls reconfirming MDACC's commitment to its current facilities.
5. Implement Wayfinding Master Plan. This initiative will lend clarity to patients accessing services within the existing facilities as well as providing clear linkages to new facilities development throughout the Houston Campus. The ability to separate patient, staff, and service traffic will allow MDACC to create on-stage, off-stage venues which independently resonates patient-focused environment and staff-focused culture.
6. Conduct studies for Pharmacy / Materials Management / Distribution Services. These departments are currently undersized and an updated analysis of its space needs is required. Based upon the outcomes of these studies, the timeframe for the future development of these departments will vary.
7. Conduct utilization capacity studies for new Distributed Utility Plants to support the proposed development on South Campus.

### **Near Term (1-3 years)**

These additional projects have been identified by senior leadership as important to meeting the near term requirements of MDACC. The majority of these projects have a significant impact on the formulation of the Master Plan. The projects are listed in its order of importance (as ranked by senior leadership) to the current needs of MDACC. Projects that impact the Master Plan 2015 are annotated to indicate their benefits and / or limitations.

1. Emergency Center relocation to Lutheran allows for expansion as well as close proximity to inpatient functions.
2. South Campus Research Building Three (SCRB Three) – Experimental Diagnostics Imaging. The location of this building should be evaluated for its impact on the overall South Campus development.
3. Demolish Houston Main Building (HMB) and provide underground parking on HMB site, this should be evaluated against its impact on the capital budget. Additional parking spaces are needed by MDACC. The ability to coordinate the demolition of HMB with the construction of underground parking will allow potential savings to be realized in the construction of the parking facility.

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4. Continue redevelopment of Clark / Love / LeMaistre for outpatient programs. The renewal of the main hospital is expected to occur over several years. The ongoing commitment of these facilities for patient care use influence future development and adjacencies.
5. Accommodate faculty and staff projected growth to 2007 and redevelop Anderson and Gimbel as office space. This statement reinforces the previous planning efforts which identified Anderson and Gimbel as Category II, office use facilities. In the near-term Anderson and Gimbel will continue to be used, however these two facilities are the oldest on campus and their long term disposition should be evaluated further. The opportunities section below touches upon the possibilities available to MDACC.
6. Accommodate research lab support space in Jones and Bates-Freeman. As noted with Anderson and Gimbel above, Jones and Bates-Freeman are also the oldest research facilities on campus and their long term dispositions should be evaluated further.
7. Construct Faculty Center II. In order to accommodate the projected faculty and staff growth to 2007 and still provide opportunity for unforeseen needs, an additional faculty building is envisioned. Due to the requirement that staff and faculty be proximate to the areas they most closely interact with, the Master Plan 2015 Report presumes the proposed Faculty Center II will be located on the North Campus, immediately south of Faculty Center.
8. Construct Administrative Support Building (ASB). The precepts of minimizing the amount of leased space and the location of any service that does not provide direct patient care may, due to space limitations, be located within walking distance or a radius of several miles reinforces the need to investigate the best location for these support services.
9. Develop Super Corridor. The super corridor encapsulates the concept of having a defined and organized materials handling system. The materials management / distribution dock, pharmacy, and dietary services are an integral part of ensuring that services are provided in a seamless and efficient manner. The amount of space required by these departments on the North Campus, the Main Hospital in particular, requires further definition.
10. Vivarium Expansion at the Physical Plant Building (PPB) on South Campus. There is an immediate need for additional vivarium space on the South Campus. Due to timing, the option available is expansion of the existing PPB vivarium.

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11. Create additional staff parking. The philosophy of how much parking, where it should be located, visibility of and access to are important issues addressed within this Master Plan 2015 Report.
12. Create Training Center facilities in dispersed locations. This statement reflects MDACC's commitment to its staff and education. It further implies that no single facility is identified as an education / training center but rather that MDACC views education and training as an integrated core service.
13. The development of the infrastructure and roadway systems necessary to support the development of the Mid and South Campuses.
14. Extend Bertner Street extension from Braeswood to Old Spanish Trail.

### Short-Term (4 -7 years)

Proactive planning recognizes growth and the need for change, but does not dictate when and how it is accomplished. The following projects can be grouped into three major categories – projects that need to be completed to allow for prudent growth and fiscal management, enhance patient and staff expectations, and foster future initiatives.

1. Sustains growth and revenue:
  - a. Construct additional inpatient beds
  - b. Construct adequate vivarium space on South Campus
  - c. Expand Bastrop and Smithville expansion per existing master plans
  - d. Vacate lease spaces
2. Enhance Expectations:
  - a. Develop the Access Pathway (Yellow Brick Road)
  - b. Provide additional patient amenities in the Park
  - c. Construct centrally located Fitness Center
  - d. Develop roadway and infrastructure for Mid and South Campuses.
  - e. Maintain shuttle service between campuses.
  - f. Develop a people mover from Mid Campus to Faculty Center II / Faculty Center / ACB Bridge (Phase 1A) and

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from the Mid Campus to the South Campus (Phase 1B).

- g. Expand Rotary House
- 3. Fosters future initiatives:
  - a. Utilize the Mental Sciences Institute (MSI) site as the next empty chair
  - b. Construct SCRB Four – Experimental Therapeutics
  - c. Aggressive land acquisition on Mid Campus
  - d. Land exchanges with Texas Medical Center (TMC) or other TMC Institutions.

### Mid-Term (8-10 years)

The following are additional future initiatives which will more than likely occur within the 8 to 10 year planning horizon:

- 1. Construct Basic Sciences Research Building Two (BSRB Two) on MSI site.
- 2. Construct North Building on Legacy Site (for inpatient beds or outpatient services)
- 3. Construct additional administrative support buildings, parking, and continue to vacate leased spaces.

### OPPORTUNITIES / VARIABLES

Strategic initiatives continually evolve, circumstances change, and the elements as identified require circumspection for their appropriateness in the implementation of any plan. Opportunities are best defined as impromptu decision points. These can be as simple as taking a different perspective or converting a shortcoming into an advantage. Opportunities focus upon a different viewpoint, another way of looking at things, allowing MDACC to rejuvenate its facilities and expand its programs. Variables while not definitive or directly under MDACC's control will influence the Master Plan.

The following are identified and incorporated as potential issues in the Master Plan 2015 planning efforts. For ease of communication, these opportunities and variables are classified as: building related, site related, operations related. Where possible, timeframes for assessing these factors are included.

### Operations / Programs related issues

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These opportunities identify services that can be relocated off of the Main Building site to provide expansion capabilities within the existing facilities. Opportunities to enhance patient care, research, education, and prevention programs through the incorporation of related program elements or the distribution of services are also acknowledged.

1. 10 year planning horizon:
  - a. Additional facility for inpatient beds and / or outpatient clinic functions adjacent to ACB.
  - b. Reflect the needs of research based clinical trial within the patient care areas.
  - c. Incorporate Wellness Center program / focus within the centers.
  - d. Pharmacy, Laboratory Medicine relocated / developed in alternate locations.
  - e. Materials Management / Distribution Services handled from satellite facility and utilize cross docking.
  - f. Relocate Library to Faculty Center II.

### Building related issues

Building related issues focus upon the highest and best use potential of existing facilities. Resolution of these issues will impact the amount of funds MDACC will / should invest into these facilities for system upgrades. Opportunities for new construction on the Houston Campus are also identified.

1. 10 year planning horizon:
  - a. Convert Jones and Bates-Freeman to office use within 15 years; this is however, dependent upon the construction of new research facilities.
  - b. Garage 10 – the garage can be expanded on the north and south facades for additional parking and mix use services such as, energy management, or ancillary service departments.
  - c. Construct Basic Sciences Research Building Two (BSRB Two) on the Mental Sciences Institute (MSI) site.
  - d. Radiology Outpatient Center (ROC) site – the existing facility could be demolished and the site considered for mixed use development.
  - e. Develop Hotel on Mid Campus and / or South Campus.
2. 15+ year planning horizon:

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- a. Anderson, Gimbel, Jones, and Bates-Freeman: Do not extend useful life of these facilities beyond 15 years. These building sites should be re-assessed within the 20 year planning horizon, for demolition or reconstructed with new facilities for alternative uses, such as research or inpatient services.
- b. Lutheran: Within the 20 year horizon re-evaluate to determine continued use for inpatient beds, alternate re-use, or demolition for future building site.
- c. Chapel: Evaluate if this site is better utilized as a future building site.
- d. Alkek Vertical Expansion for additional inpatient beds. This option should be considered if additional or replacement inpatient beds are needed on the Main Hospital site.
- e. Demolition of Garage 5 to accommodate additional outpatient care growth
- f. Development of TMC shared Research Campus on the North Campus where K-Lot, Dental and MSI are currently located.

### Site / infrastructure related issues

Site / infrastructure related issues acknowledge that the land is one of MDACC's greatest assets and development of the property to its fullest potential needs to be recognized. The ultimate building density will impact the infrastructure systems (utilities, storm water management, roadways, etc) and needs to be addressed now.

1. 10 year planning horizon:
  - a. The density of the South Campus development plan should be considered beyond what is currently proposed.
  - b. The density of Mid Campus needs to be addressed
  - c. Thermal Energy Cooperative (TECO) plant to be developed on portion of Radiology Outpatient Center (ROC) site to support growth on North Campus.
  - d. St. Agnes Street will be extended / developed from Fannin Street to Cambridge Street.

While the above items have been categorized as guiding principles, planning parameters, priorities / givens, and opportunities / variables it needs to be stressed that all of these factors need to be considered collectively as any individual factor has repercussions and can affect the timing of and growth potential of future development opportunities.

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Chapter 5 – Conceptual Master Plan graphically illustrates the application of these key aspects of the concept criteria.

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### **CHAPTER 3 – EXISTING CONDITIONS**

The master plan development is based upon an understanding of the existing conditions that influence the campus development. Recognizing that M.D. Anderson Cancer Center (MDACC) is a dynamic institution and change is inevitable and constant, the following existing site assessment documents reflect the givens. This information is a snapshot of the conditions as they exist at this point in time. As circumstances change MDACC will need to re-asses the modifications and their impact on the longer term development.

The following factors influence the future master plan development framework. Detailed narratives for each follow.

1. Houston Campus
  - a. Definition of Houston Campus, its components
  - b. Physical boundaries of the campus
  - c. Assets and Limitations
2. Property Ownership and Leased Spaces
  - a. Current land holdings / parcels
  - b. Current square feet
  - c. Multi-institutional development parcels
3. Parking and Transit
  - a. Philosophy approach to parking
  - b. Current locations of parking areas
  - c. Number of parking spaces available
  - d. Current shuttle routes
4. Existing Facilities
  - a. Name of existing buildings
  - b. Age of construction
  - c. Number of stories
  - d. Current and proposed use

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### HOUSTON CAMPUS

The Houston Campus is broadly defined as the MDACC located within the greater TMC campus. The MDACC Houston Campus is comprised of the North, Mid, and South Campuses. These campuses are described as follows, with a graphic representation on the following page.

The **North Campus** is comprised of several sites: the north side of Holcombe Boulevard (aka North of Holcombe or Main Hospital) and the south side of Holcombe Boulevard, north of Brays Bayou. The western edge is Fannin Holcombe Building (FHB), includes; the Legacy site, the mid section identified by Faculty Center, and the eastern edge as the Radiology Outpatient Center (ROC) site.

The North of Holcombe site contains the original MDACC facilities. Until very recently, the majority of facility growth occurred on the North of Holcombe site. As a result, this site is very dense and opportunities for additional facility growth will require a more stringent enforcement of highest and best use and / or multi-institutional collaboration.

The current area owned by MDACC indicated by the green shaded area on the following diagram within the North Campus is 64 acres.

The **Mid Campus** is bordered by Brays Bayou to the north, Fannin Boulevard to the west, Old Spanish Trail to the south and the current Texas Medical Center Brown Lot to the east.

The Mid Campus is not yet developed and provides MDACC with the greatest potential. Its central location to the North and South Campuses provides an opportunity to locate functions that contribute to the synergy and connectivity of all three campuses.

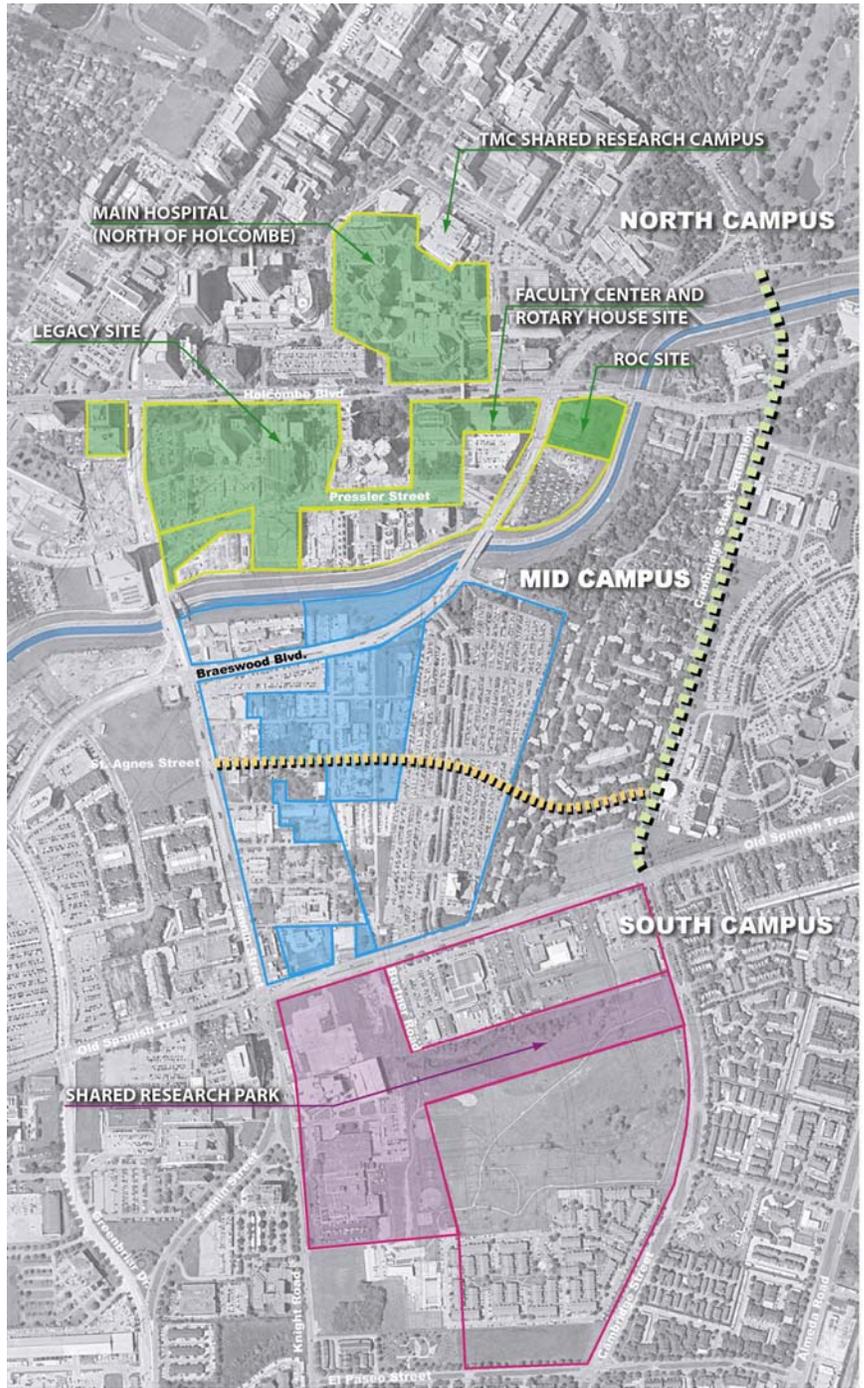
MDACC current land holdings are shown as the blue shaded areas on the following diagram.

The **South Campus** is bordered by Old Spanish Trail to the north, Fannin Boulevard / Knight Road to the west, El Paseo to the south and Cambridge Street to the east. The South Campus, as indicated by the purple shaded area on the following diagram to the right is approximately 55 acres, and is currently planned to accommodate approximately 3.2 million square feet of research and parking facilities.

The following diagram illustrates MDACC's current land ownership within the Greater Texas Medical Center Campus. It should be noted that boundaries of the TMC shared research park sites on the North and South Campus are included on this diagram.

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### HOUSTON CAMPUS



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### EXISTING FACILITIES ON HOUSTON CAMPUS

An understanding of the existing facilities is pivotal in determining useful life expectancy, building use / designation, functional adjacencies, etc.

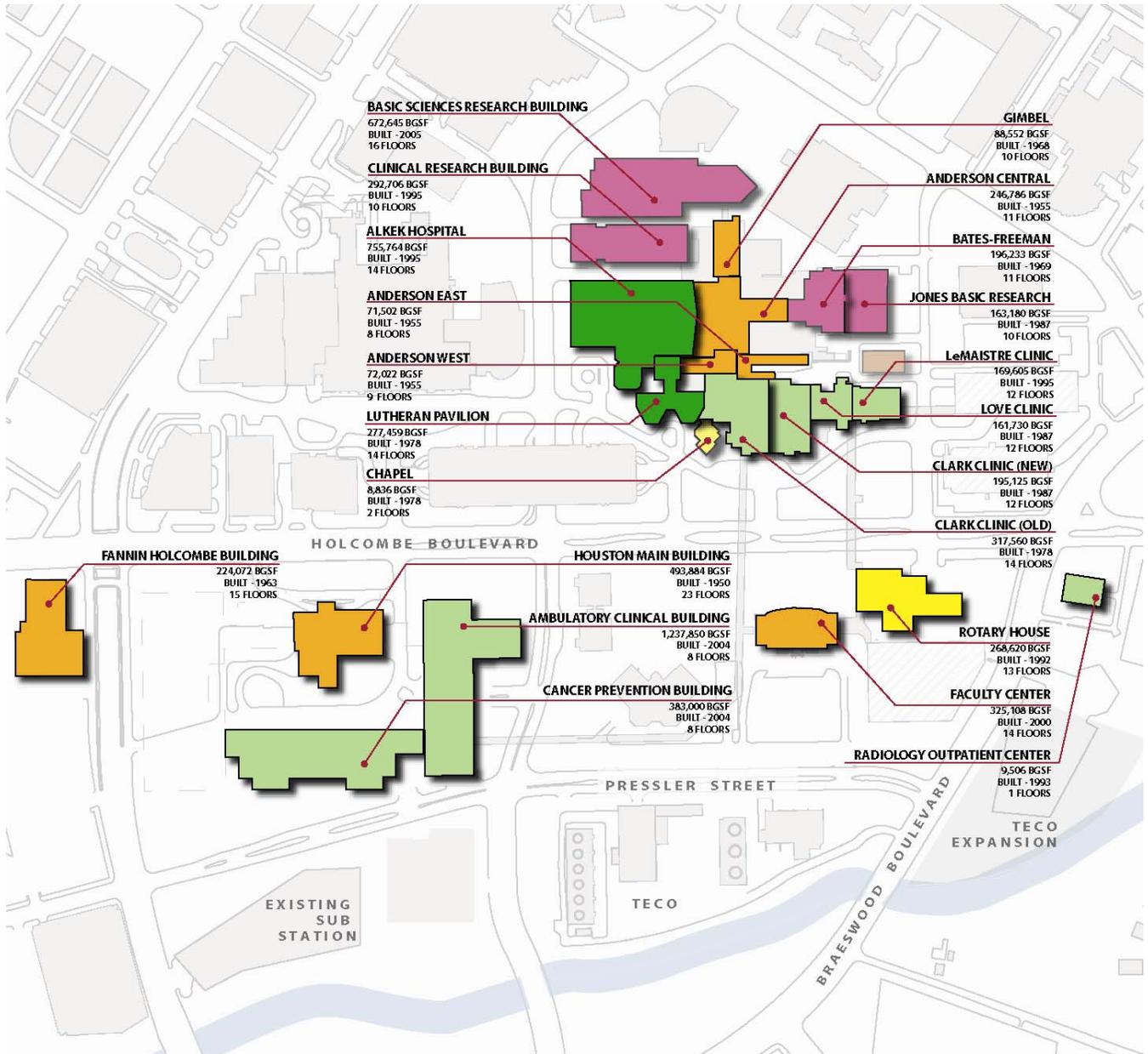
The following diagram graphically illustrates key information for the existing facilities on the North and South Campuses.

To better understand each building's primary function, the following color coding is used:

Research	
Offices	
Outpatient	
Inpatient	

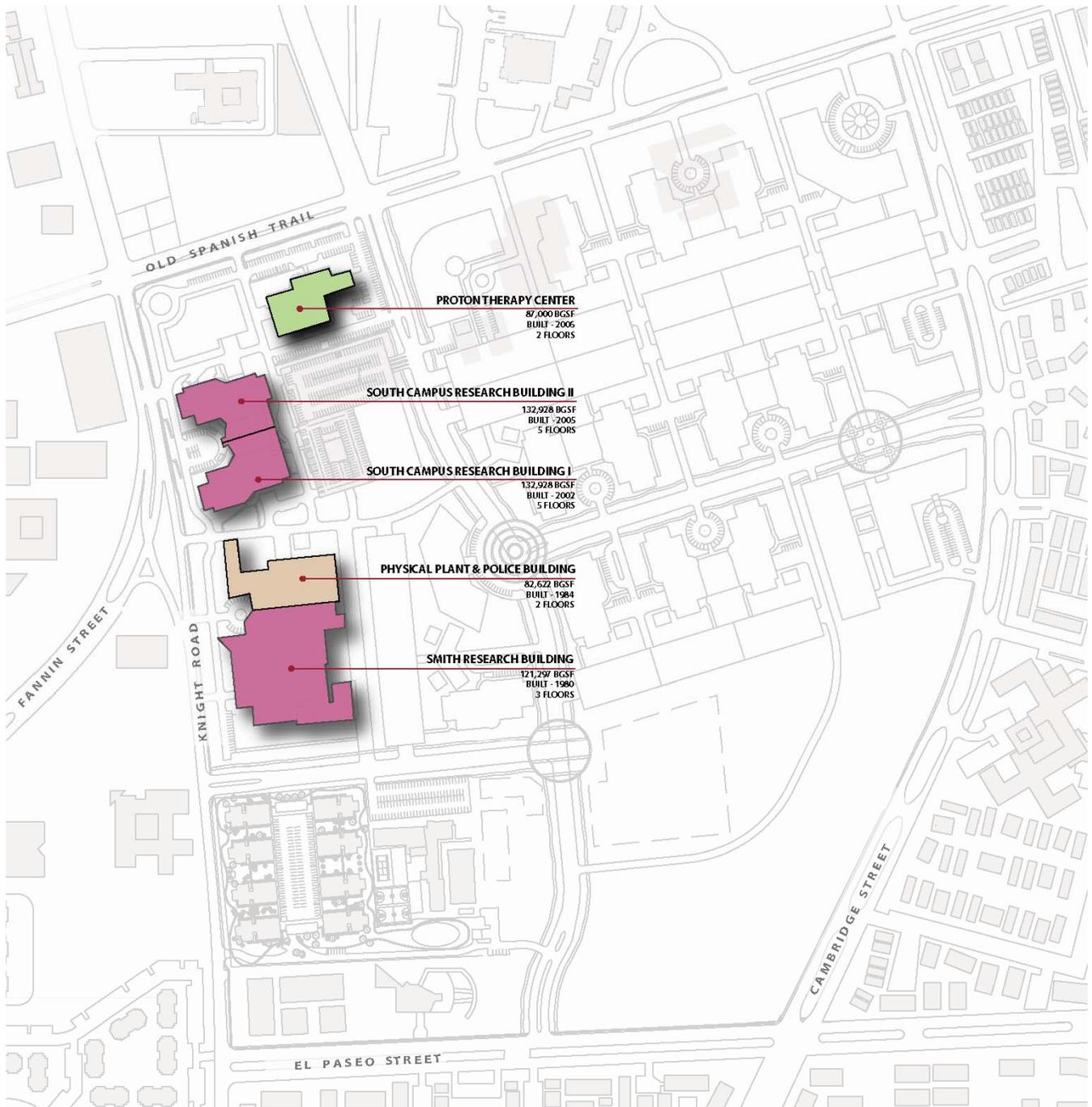
**EXISTING FACILITIES ON HOUSTON CAMPUS**

**NORTH CAMPUS FACILITIES**



From FM Space Database, August 2004

**SOUTH CAMPUS FACILITIES**



From FM Space Database, August 2004

### **PROPERTY OWNERSHIP & LEASED SPACES**

The following diagram illustrates the extent of the MDACC Houston Campus landholdings. The majority of the MDACC owned facilities are located on parcels 1, 2, 3, 4, and 5 on the North Campus and parcel 16 on the South Campus.

The North Campus occupies approximately 5,780,000 square feet of space and contains the current Patient Care, Research, Education, and Prevention nuclei for MDACC.

The South Campus is designated for translational and commercial research initiatives. The current MDACC facilities on the South Campus occupy approximately 371,000 square feet of space.

The majority of the leased spaces is primarily administrative support in nature and is dispersed within a two mile radius of the Houston Campus. Administrative support spaces comprise the majority of the off-site leases. Approximately 410,000 square feet of administrative support space is leased. Of which 187,000 square feet will expire by 2008.

**MASTER PLAN 2015 REPORT**

**LEGEND**

**MDA Owned Parcels**

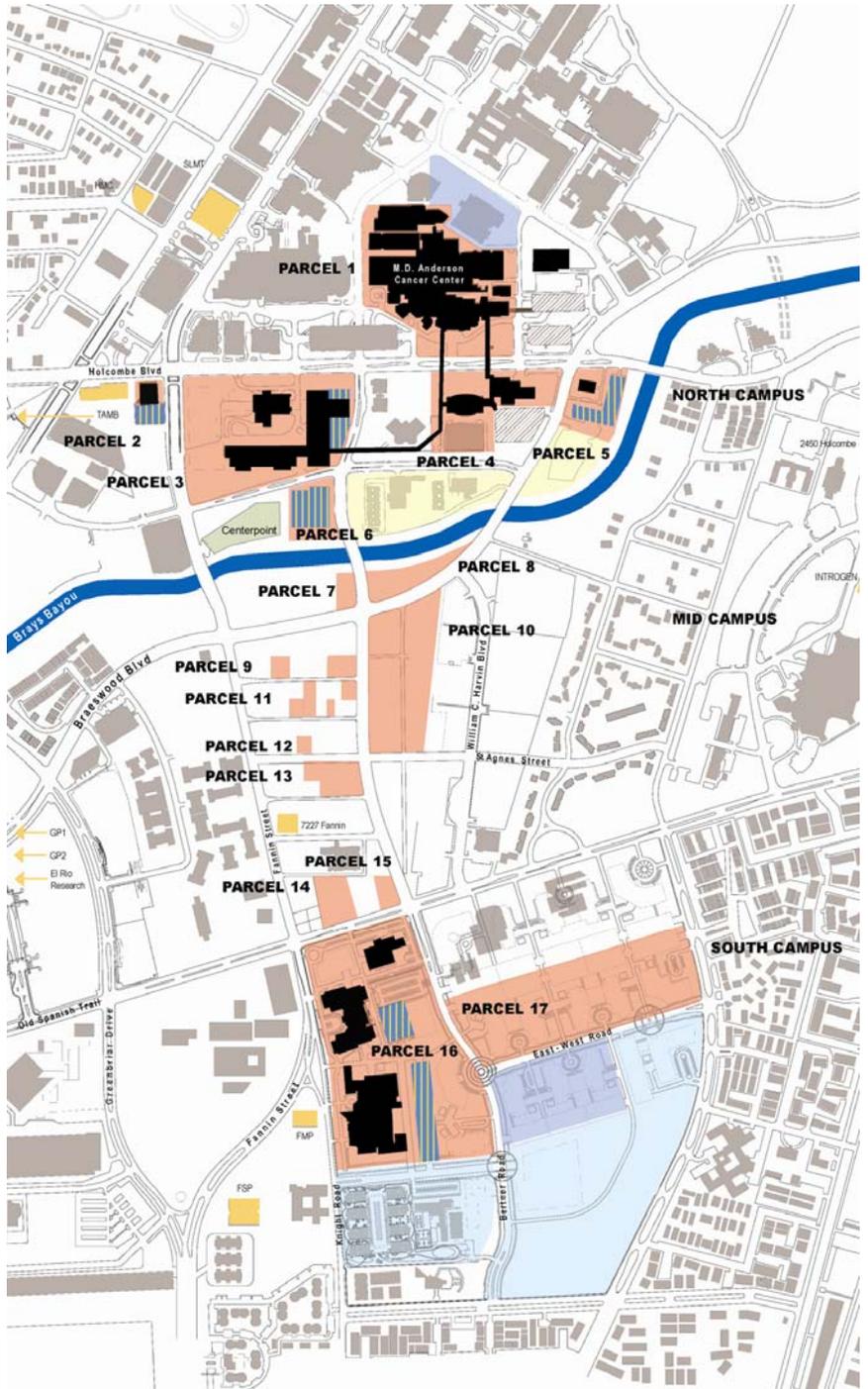
Parcel 1 -	736,394 sf
bldg foot print -	452,455 sf
Parcel 2 -	30,000 sf
bldg foot print -	153,731 sf
Parcel 3 -	810,250 sf
bldg foot print -	58643 sf
Parcel 4 -	331,000 sf
bldg foot print -	sf
Parcel 5 -	136,000 sf
bldg foot print -	58,996 sf
Parcel 6 -	121,800 sf
bldg foot print -	sf
Parcel 7 -	26,000 sf
bldg foot print -	sf
Parcel 8 -	100,000 sf
bldg foot print -	sf
Parcel 9 -	45,000 sf
bldg foot print -	sf
Parcel 10 -	418,500 sf
bldg foot print -	sf
Parcel 11 -	45,000 sf
bldg foot print -	sf
Parcel 12 -	11,000 sf
bldg foot print -	sf
Parcel 13 -	50,000 sf
bldg foot print -	sf
Parcel 14 -	67,000 sf
bldg foot print -	sf
Parcel 15 -	21,000 sf
bldg foot print -	381,009 sf
Parcel 16 -	1,500,000 sf
bldg foot print -	381,009 sf
Parcel 17 -	900,000 sf
bldg foot print -	sf

Grandtotal- 5,348,950 sf  
 (123 acres)

**KEY**

	MDA Facilities
	MDA Owned Land
	MDA Leased
	UT Research Park
	UT - HSC
	MDA Parking
	TECO
	CENTERPOINT

**PROPERTY OWNERSHIP & LEASED SPACES**



## MASTER PLAN 2015 REPORT

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### PARKING & TRANSIT

The majority of the parking garages and lots within the TMC are owned and operated by TMC. MDACC has access to the garages indicated by the solid blue and / or yellow shaded areas noted in the following diagram. The majority of the staff parks in Garages 2, 5, 10, and 17 and on the Brown Lot. In addition to these TMC controlled parking areas; MDACC staff has access to MDACC owned parking areas on the North Campus, and its constructed garages on the Legacy Site. These garages are shown as the blue / yellow striped areas on the following diagram.

MDACC utilizes the Texas Medical Center (TMC) parking ratio of 1.8 parking spaces per 1,000 assignable square feet. Based upon MDACC Campus Operations Parking Master Plan, approximately 68.5% of MDACC staff have purchased parking spaces – this equates to 11,423 spaces as of April 30, 2004. MDACC is projecting a shortfall of parking spaces to accommodate new staff requests by the summer of 2004.

Current patient and visitor parking needs are estimated at 2,199 spaces per day. Visitors have access to TMC controlled parking garages 2, 10 and 17. As MDACC continues to build new facilities, a philosophy of providing convenient, parking for patients and visitors is implemented. The recently constructed Ambulatory Clinical Building (ACB) and Cancer Prevention Building (CPB) facilities will provide 960 parking spaces for patients, as well as 1600 spaces for staff.

It should be noted that the current parking counts on the following diagram include provisions for the buildings currently under construction – ACB, CPB, Basic Sciences Research Building (BSRB).

**MASTER PLAN 2015 REPORT**

**LEGEND**

**PARKING AVAILABLE TO MDA**

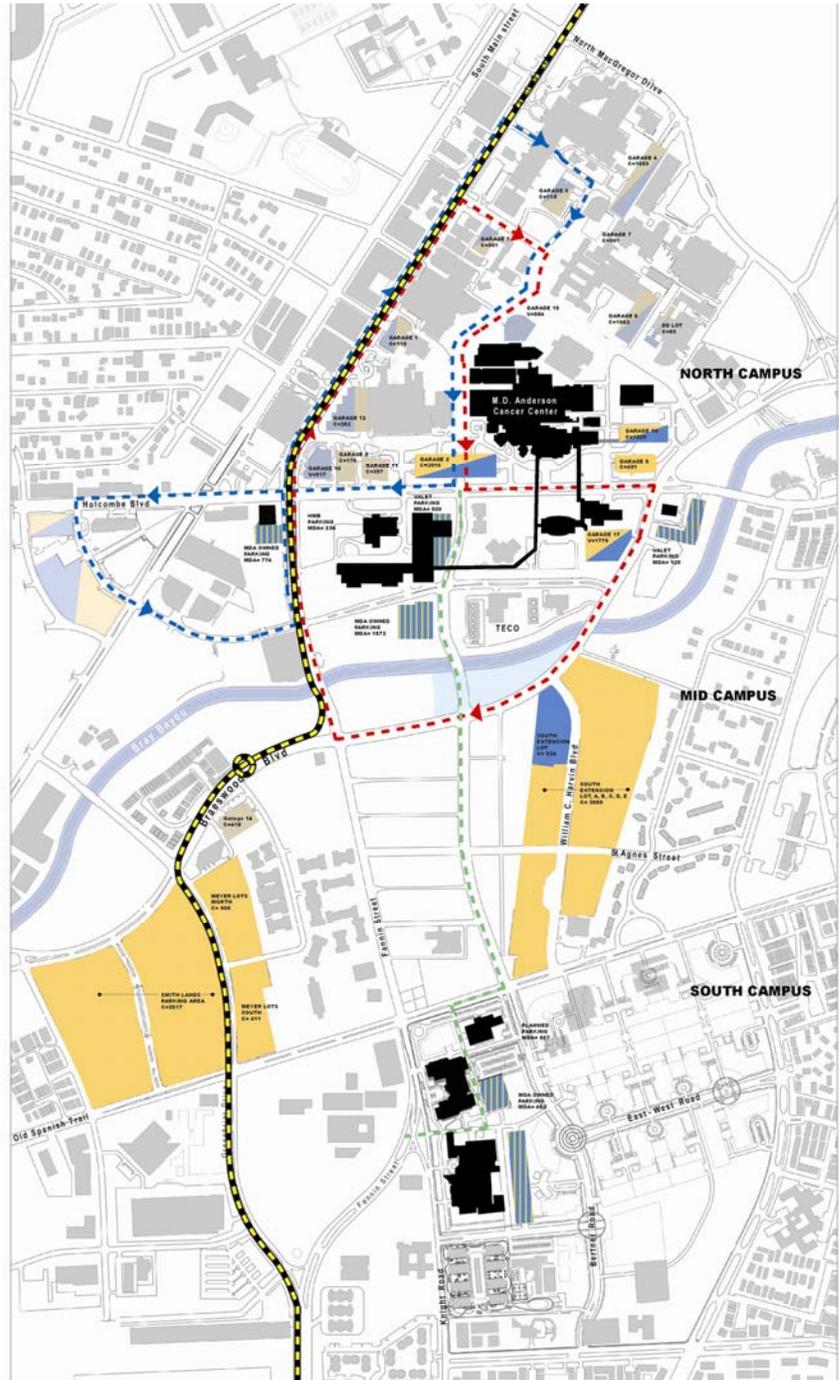
Garage 02	-- 2,016 (VC)
Garage 05	-- 491 (C)
Garage 10	-- 1,529 (VC)
Garage 17	-- 1,779 (C)
South Extension	-- 524 (V)
South Extension	-- 3,684 (C)
(2,600 MDA allocated)	
Smith Lands	-- 3,517 (C)
(600 MDA allocated)	
Meyer Lot North	-- 568 (C)
Meyer Lot South	-- 411 (C)
MDA Owned Lot	-- 4,751

Total : --19,270 sp.

**KEY**

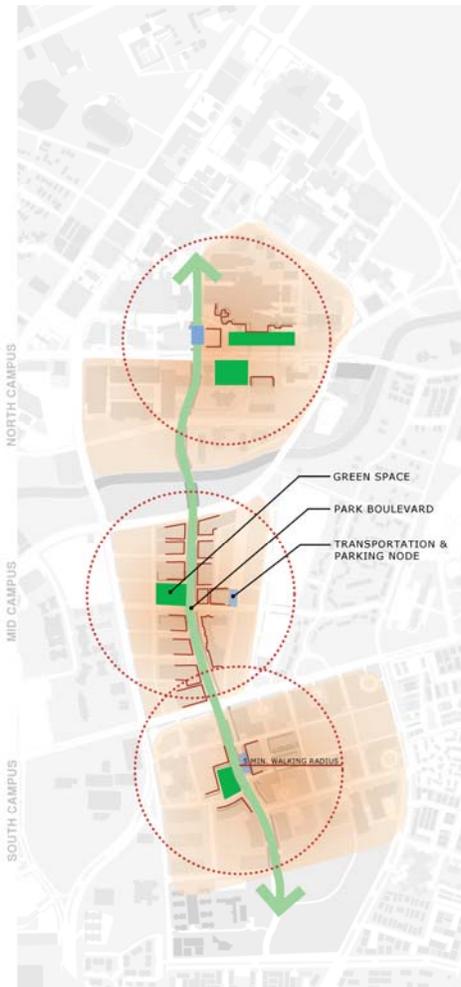
-  MDA Facilities
-  MDA Owned Parking
-  TMC Contracted Parking (C)
-  Visitor Parking (V)
-  Blue Shuttle Route
-  Red Shuttle Route
-  White Shuttle Route
-  Naomi Shuttle Route
-  Metro Rail Line

**PARKING & TRANSIT**



## MASTER PLAN 2015 REPORT

### NEIGHBORHOOD DIAGRAM



### CHAPTER 4 – CONCEPTUAL SITE FRAMEWORK

This section presents a 20 to 30 year vision, with ideas and guidelines for the development of the North, Mid and South Campuses.

Over this time period, it is anticipated that M.D. Anderson Cancer Center (MDACC) will pursue the prevention and treatment of the many forms and causes of cancer. With successes in these areas, it is possible that Research and Patient Care missions will broaden to include other disease areas and that MDACC will continue its evolution as a world-class research and patient care community.

To support evolving missions, MDACC needs to ensure that mechanisms are in place to allow for growth. The factors that promote sound growth options include land availability, land use, utility infrastructure, and circulation and parking. These elements need to be robust, well-planned, and flexible.

Further growth opportunities are realized through accommodating multiple uses for each building and effective linkages between buildings over time. It is important that the overall planning framework permit alternate growth and development scenarios allowing MDACC to adapt to changing economic and regulatory environments.

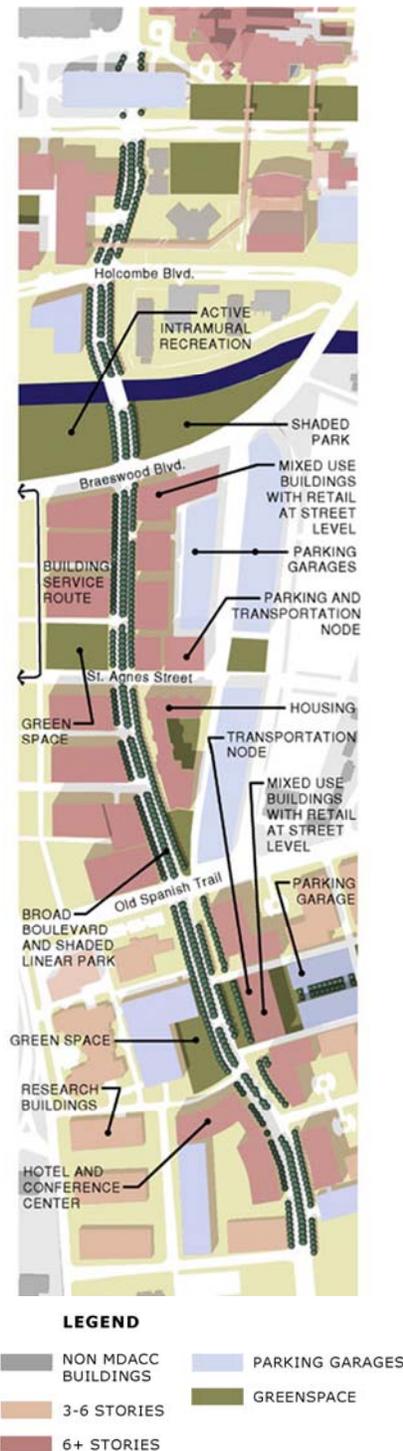
Underpinning this institutional and facility flexibility is the need for MDACC to continue reinforcing the strong and cohesive social community and institutional culture for its staff; a culture focused on quality and ability to adapt to change in support of evolving missions.

A development concept that links and integrates the three campuses can solidify MDACC's identity within the Texas Medical Center (TMC) and establish the physical environment within which this culture can flourish.

An important first step is the connective thread that weaves the three campuses and creates an exciting spatial and physical identity for all of MDACC. The neighborhood diagram to the left depicts the development of the Bertner extension as this thread, a linear Park Boulevard connecting the front door of the North Campus through Mid Campus to the heart of the South Campus.

## MASTER PLAN 2015 REPORT

### PARK BOULEVARD DIAGRAM



### PARK BOULEVARD

The Park Boulevard concept (illustrated in the diagram to the left) creates a vibrant, comfortably-scaled urban environment that unifies these campuses but also allows each to maintain its own identity and persona. The Park Boulevard links the three campuses with its wide street and shaded walkways. The Park Boulevard is the organizing element integrating passive/active and professional/social activities and functions. Passive / active is reinforced through the variety of outdoor spaces provided: fields for intramural recreation, park-like settings for informal lunches or quiet reading, and nature trails for jogging or bicycling. Outdoor seating, pocket parks, vibrant commercial functions on the ground floor will provide social interaction areas within the built environment. Campus identity is reinforced through the transportation nodes and central gathering places within each campus.

Implementation of The Park Boulevard concept enables MDACC to organize the Houston Campus and establish the tone for future development on the Mid and South Campuses. The four key principles underlying the proposed long-term recommendations are:

1. **Balanced Density Planning:** Densities similar to North Campus may eventually be needed throughout most of the Mid and South Campuses. The development framework should guide this planning effort.
2. **Campus Connections:** To encourage multi-campus interaction, provide a variety of major connective spaces, focused activity areas, and mixed use facilities on each campus.
3. **A Town Center for the MDACC Community:** In addition to the Mid Campus program, develop Mid Campus as a community resource with retail, restaurants, shops and other amenities that staff can utilize as they arrive in the morning, pass through during the day or as they depart in the evening. This will differentiate MDACC and help to create a cohesive community and culture.
4. **Campus Infrastructure:** The Park Boulevard concept becomes the driver for the development of the roadways and major utility routes.

With these general principles guiding a long-term development framework, specific aspects of the development concept are discussed in greater detail on the following pages:

**MASTER PLAN 2015 REPORT**

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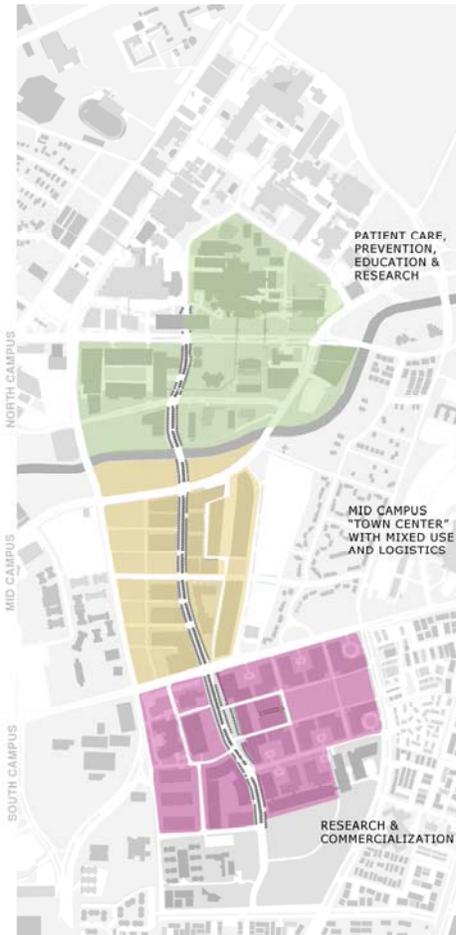
**LAND OWNERSHIP DIAGRAM**

**LAND OWNERSHIP**

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## MASTER PLAN 2015 REPORT

### LAND USE DIAGRAM



### LAND USE

North Campus land use will continue with its research and patient care focus with linkages to partner institutions in the TMC. Land located at the northern edge remains slated for development of additional research space both for MDACC and for research partnerships with Baylor College of Medicine and UT-HSC per the Memorandum of Understanding, dated November 10, 1998.

As discussed elsewhere in this report, all inpatient and closely-associated outpatient care will remain on the North Campus and over time, the older buildings will be demolished and replaced.

The Mid Campus should be viewed as a vibrant, mixed-use, urban environment. It should include retail, restaurants, commercial and housing uses as well as a variety of institutional uses and be comfortable, safe and active nearly 24 hours a day.

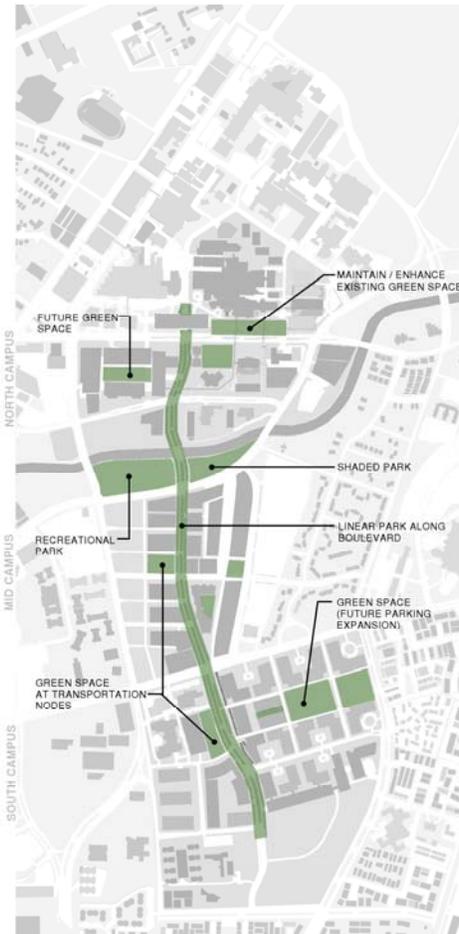
While it is recommended that MDACC acquire as much of the Mid Campus land as possible, it is recognized that several parcels are slated for multi-family housing and these may remain in private hands for the near-term. For the long-term, however, these properties should be acquired to give MDACC the flexibility and the control needed to implement a detailed development plan over time. While housing is desirable, MDACC may prefer to ground-lease the land to a housing developer who would develop and manage the housing under guidelines approved by MDACC.

Land use by MDACC in the South Campus should continue the mixed used theme from the Mid Campus – especially along the Park Boulevard where street-level retail, parking, and hotel functions create a town square environment bringing a vitality and identity to the entire research park. Land use on either side of the Park Boulevard will focus on both expanded academic research and on providing tenant space for commercial bio-pharmaceutical companies working in institutional partnerships or simply desiring research space in proximity to TMC intellectual resources. Service areas and central utility buildings should be located away from both the Park Boulevard and Town Square areas. Incorporating these within a centralized garage zone or phased structure would be a preferred solution.

The general approach to long-term land use is depicted in the adjacent diagram and is organized to support the Park Boulevard concept and to reinforce Fannin as a retail and commercial street.

## MASTER PLAN 2015 REPORT

### OPEN SPACE DIAGRAM



### OPEN SPACE

Open green space is at a premium today on the North Campus. The linear park along the south side of Holcombe should be maintained. The front yard of Clark/Love/LeMaistre and the courtyard of the completed Legacy Site development are valuable green-spaces that should be linked to the green Park Boulevard underpinning the notion of open green-space linking all three campuses. This can be initiated as a part of the planning for the new Bertner Bridge and street extension.

As the Mid and South Campuses are developed, it is essential that appropriate open space be integrated into the plan. Building upon Mid Campus as a Town Center, additional park space should be created along the Brays Bayou bounded by Fannin to the west and Braeswood to the south. These parks would flank both sides of the Bertner extension and would provide welcome relief for active staff recreational uses or in combination with trees and shaded areas for passive outdoor relaxation.

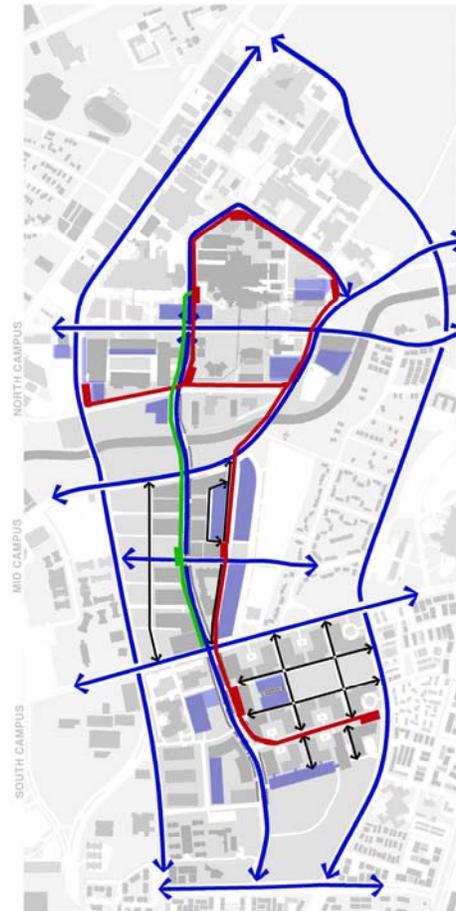
Due to the proximity of these proposed parks to Brays Bayou, creative below grade storm water management systems should be integrated to accommodate MDACC's Mid Campus development. This will provide MDACC with a dual use of its property, potentially enabling a higher and better use of its remaining Mid Campus properties.

Rather than take the suburban development view that each lot has its building footprint, roadways and green-space, it is recommended that a planned unit development approach be instituted for both the Mid and South Campuses. Appropriate setbacks should be defined along the Park Boulevard, green-spaces are defined for each campus, and the individual lots are treated ultimately with zero lot lines. This approach will define MDACC as a destination with a sense of place and purpose, rather than a collection of facilities.

As the linear park along the Park Boulevard terminates in the South Campus Town Square area, a connection to the adjacent recreational park areas and UT housing would be desirable. This connection of the MDACC open space could be further reinforced by extension of a proposed people mover system (see conceptual people mover study at the end of Chapter 5) reinforcing the linkage between the overall TMC North Campus, housing, and the South Campus.

## MASTER PLAN 2015 REPORT

### CIRCULATION AND PARKING



#### LEGEND

- PARKING
- AUTOMOBILE TRAFFIC
- PEOPLE MOVER
- ALTERNATE PEOPLE MOVER ROUTE
- SERVICE ROUTE

### CIRCULATION & PARKING

Ease of access to MDACC and movement within and among the campuses and buildings is important and challenging. Much discussion and thinking underlying the planning has been driven by considerations of circulation. The Bertner Street extension which has already been discussed, plus additional key concepts that exist today or are proposed for long-term planning include the following:

1. TMC Campus wide issues:
  - a. Currently, Holcombe Boulevard is one of the few east west thoroughfares through TMC creating major bottlenecks at Fannin and Braeswood Boulevard. Widening and extension of Cambridge Street from Old Spanish Trail to Braeswood Boulevard may help redirect some of this traffic.
  - b. Extension of St. Agnes Street from Fannin to Cambridge will provide a secondary route for accessing the Mid Campus development.
2. MDACC specific issues:
  - a. Patient parking convenient to treatment sites
  - b. Enclosed bridges connecting buildings
  - c. Shuttle service to buildings
  - d. People mover connecting campuses, major garages and surface lots
  - e. Major staff parking at Mid and South Campuses
  - f. Provide parking at buildings

A key consideration is the institution's commitment to providing parking for the majority of its staff. As staff and facilities continue to grow, the space needed for parking will provide an increasing challenge. The future disposition of parking needs to be coordinated with TMC, the other TMC institutions, and Metro rider-ship.

TMC utilizes an allocation for parking spaces is 1.8 spaces per 1,000 assignable square feet. As newer, mixed use facilities are developed this parking ratio should be evaluated for its appropriateness. It is not uncommon to provide up to 4 parking spaces (inclusive of staff and visitors) per 1,000 assignable square feet of built space for mixed use and patient care related facilities.

Access to parking garages is also a concern. To reinforce a vibrant, interactive urban environment, parking garages should be

## MASTER PLAN 2015 REPORT

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easily accessible, but not the predominant building element along the proposed Park Boulevard.

A proposed people mover links the North Campus to major parking facilities located east of the Park Boulevard in Mid Campus and then parallels the Park Boulevard as it enters South Campus. Stations should be provided at the Faculty Center Buildings, at the Mid-Campus Garage and at the South Campus. Extensions of the system and additional stations are possible throughout the TMC area.

## MASTER PLAN 2015 REPORT

### DENSITY DIAGRAM



### LEGEND



### DENSITY

Underlying the discussions above, is the possibility that, over time, the Mid and South Campuses will inevitably be driven towards an urban density similar to or exceeding the current North Campus density. This is a natural result of institutional or urban growth.

A central premise of the conceptual site framework planning recommendations is to establish a healthy urban density along the Park Boulevard as an initial condition of development rather than have density occur as the result of development cycles in which lower buildings are replaced by taller ones over several generations.

Ideally, if taller buildings are developed along the Park Boulevard, these buildings will establish the linear park, wide boulevard streetscape and a denser spine of first generation buildings.

There is a dual benefit to this. First, balancing a denser building fabric along the green Park Boulevard establishes an immediate MDACC identity and a healthy connection between the three campuses. Second, it preserves valuable land resources for the future.

The first achieves the objectives of image, cohesion and connection, while the second provides flexibility to allow for the alternate growth scenarios discussed at the beginning of this Chapter.

The adjacent density diagram presents a general recommendation regarding density planning – primarily for the Mid and South Campuses. The proposed density recommendations are in terms of the number of floors above grade. This, coupled with the earlier setback guidelines and open space recommendations, establishes an appropriate framework for thinking about density.

While speculative in nature, the premise of constructing taller buildings (up to 12 stories in height) along The Park Boulevard, and tapering along the edges to mid-rise facilities ( 4- 6 stories in height) provides MDACC with the opportunity to accommodate in the neighborhood of 4 to 6 million square feet of built space on the Mid Campus.

Likewise, as the building heights on the South Campus are similarly increased along The Park Boulevard per the diagram to the left, MDACC and UT-HSC has the ability to significantly increase the build out capacity to 9 million square feet. The University of Texas (UT) South Campus Master Plan envisions a campus of buildings that are 3 to 4 stories in height and total approximately 3.2 million square feet of built space. The purpose of increasing the building density on the South Campus is to conserve land for future requirements not envisioned at this time.

## **MASTER PLAN 2015 REPORT**

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While it is desirable to develop facilities directly along the Park Boulevard spine initially at their ultimate heights, the development of buildings located beyond the Park Boulevard can pass through several development stages with lower buildings giving way to taller ones over time. This tear-down approach is very costly over time but may satisfy short-term objectives.

### **JOINT PLANNING**

The physical intimacy and land limitations of the TMC Institutions, suggest a strong need for coordinated multi-institutional master planning.

In the course of this planning process, numerous cross-institutional issues arose that can be effectively addressed within the framework of a joint planning process. The complexities of joint planning are challenging but the future costs of lost opportunities, redundancies and the inefficiencies that result from uncoordinated growth, strongly argue for joint planning in the future. Once each institution has developed its own master plan framework, a coordinated planning process will be undertaken with TMC, TMC planners and consultants, and other TMC member institutions.

### **CONCLUSION**

The 20 to 30 year planning ideas and development guidelines outlined above, while simple in concept, are complex in their implementation - requiring constancy to the long-term vision. Significant discipline will be needed to elevate the prominence of long term goals over short term expediency. The effort will be worth it. The site framework concepts summarized here are intended to ensure a consistency of quality in the development and connectivity of the three campuses as they grow and evolve over the decades. In addition to reinforcing institutional identity and expressing a creative and caring culture, these physical planning ideas will result in a uniquely beautiful environment for great research and unsurpassed patient care, a hallmark of M. D. Anderson Cancer Center.

A three dimensional campus view is included on the following page. Please note that the other institutional buildings have been flattened to highlight the MDACC facilities.

**THREE DIMENSIONAL CAMPUS VIEW**



**LEGEND**

-  NON MDACC BUILDINGS
-  3-6 STORIES
-  6+ STORIES
-  PARKING GARAGES
-  GREENSPACE

## MASTER PLAN 2015 REPORT

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### CHAPTER 5 – CONCEPTUAL MASTER PLAN

The Master Plan 2015 for M.D. Anderson Cancer Center (MDACC) addresses the long term organization of the North, Mid, and South campuses that comprise the MDACC Houston Campus enterprise. Please refer to Chapter 3 – Existing Conditions for the site descriptions and locations of the individual facilities referenced below.

The Master Plan 2015 development is grounded in the reality of today's environment. MDACC is experiencing unprecedented growth – the question is how long can and should this growth be sustained on the Houston Campus. Based upon leadership direction, the rate of growth will decrease as the institution increases size and costs escalate. This planning document addresses how MDACC can best manage and develop some of its greatest assets, facilities and property.

The strategies for space management are realized through the balanced combination of renewal / demolition of existing facilities, expansion / new construction, new land acquisitions / exchanges, and/or strategic leases that are achievable within capital budget, infrastructure and time constraints.

This facilities strategy approach allows MDACC to allocate the appropriate resources required for the short term facility needs against the longer term vision for the institution, enhancing MDACC's decision making process.

Several options were reviewed, see Appendix C, and the following Conceptual Master Plan best reflects the objectives discussed in the previous chapters:

- The Master Plan 2015 is a living document.
- The master plan is flexible and will allow for multiple initiatives for Patient Care, Research, Education and Prevention, to occur independently, and if necessary, simultaneously.
- The Master Plan 2015 Report proactively identifies opportunities and strategies for best managing physical assets and space needs.
- The ability to optimize one's destiny is critical. While many factors will continue to push and pull at the clinical programs and research initiatives, the physical development of the Houston Campus should attempt to promote innovation and flexibility.
- The proposed master plan identifies the core users for each of the campuses. This framework allows MDACC to focus programs and capital resources in the proper location at the

## MASTER PLAN 2015 REPORT

### FUNCTIONAL USE DIAGRAM



#### LEGEND

<span style="color: green;">■</span>	IN-PATIENT CARE
<span style="color: lightgreen;">■</span>	OUT-PATIENT CARE
<span style="color: magenta;">■</span>	RESEARCH
<span style="color: pink;">■</span>	EDUCATION / TRAINING
<span style="color: orange;">■</span>	OFFICE
<span style="color: brown;">■</span>	LOGISTICS / CENTRAL PLANT
<span style="color: blue;">■</span>	PATIENT & RESEARCH SUPPORT
<span style="color: yellow;">■</span>	AMENITIES / MIXED USE
<span style="color: cyan;">■</span>	PARKING
<span style="color: grey;">■</span>	PRIVATE DEVELOPER HOUSING

proper time.

- While each of the campuses may have a different emphasis and flavor, the need to knit the three campuses into a single entity that allows for people and materials to flow smoothly from one campus to the other is critical. This can be accomplished with the creation of Town Centers that are linked along the Park Boulevard.
- The Master Plan 2015 anticipates both the short-term (less than 10 years) and long term (10 – 20 years) facility needs that respond to both the projected growth (clinical volume, research grants, and faculty) and financial projections of MDACC.
- The Master Plan 2015 is built upon the outcomes of the Redevelopment Plan.

Due to the need for MDACC to package program components and optimize the timing of the projects to be constructed, the construction cost implications of this conceptual master plan are not included as a part of this study.

### FUNCTIONAL USE

Organizing the campus into functional zones that respect multi-disciplinary adjacencies, promote collaboration, improve clinical efficiencies and promote patient convenience, allow MDACC to logically expand services, promote the objectives discussed previously and provide a framework for accommodating short term program requests.

The functional use diagram to the left indicates the proposed major uses for each of the campuses.

Building use on the **North Campus** remains focused on Patient Care, Research, Education, Prevention, and Ancillary Functions that need a close adjacency to the areas they support.

The North of Holcombe site is the densest area on the Houston Campus. Continued development of this site for inpatient, outpatient, and research will require stringent assessment of the existing the facilities and sites to maximize their highest and best use potential.

The Legacy Site will continue to expand patient care services. Demolition of the Houston Main Building (HMB) will provide MDACC with the space needed to accommodate this additional growth.

The development of the eastern portion of the North Campus will continue to accommodate services that require proximity to both the North of Holcombe and Legacy Sites. Expansion of faculty offices and

## MASTER PLAN 2015 REPORT

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the Rotary House is envisioned. Development of the Radiology Outpatient Center (ROC) site is not presumed for a particular use, but because of its prominent location, will more than likely be a multi-use facility.

The **Mid Campus** is not developed and services common to both the North and South should be located here. Directly adjacent to the Mid Campus TMC currently houses a significant amount of parking for the Texas Medical Center (TMC) institutions (Brown + 6). It is anticipated that the Mid Campus will continue to be utilized for parking.

The Mid Campus can be developed with a variety of building uses including: administrative, training and education, patient outreach, prevention, outpatient services, logistics and other ancillary functions as needed to alleviate the space shortage on the North Campus.

A major consideration for MDACC is the divestiture of lease spaces and the relocation off-site functions into MDACC buildings. The Mid Campus will be able to accommodate this objective.

Additionally, the centrality of the Mid Campus to the North and South Campuses and other TMC Institutions reinforces the Mid Campus setting as an active, mixed-use urban environment that incorporates retail, restaurants, commercial, and housing development.

The **South Campus** is designated for Research and associated uses including animal facilities. The research intended at the South Campus ranges from MDACC's Main Hospital research expansion for basic and translational research, UT-HSC research, TMC multi-institutional collaborations, and biotechnical and pharmaceutical companies wishing to lease / own space in proximity to researchers at the TMC institutions.

MDACC currently occupies two research buildings on the South Campus. The South Campus Research Building – Two (SCRB) with a conference center, and Proton Therapy Center are currently under construction.

To enhance the research park concept, a Hotel complex, office and education facilities, parking garages, and a major Utility Plant are envisioned for the South Campus.

## MASTER PLAN 2015 REPORT

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### GROWTH TRACKS

The implementation plan evolves around the four distinct functional groups: Research, Offices, Outpatient Care, and Inpatient Beds. The identification of these functional groups acknowledges the fact that MDACC is a dynamic organization and the growth rate for each of these functions is interrelated, yet at the same time independent of each other.

The following growth tracks build upon these functional relationships and present a logical path of expansion of MDACC's core services. The Master Plan 2015 utilizes these growth tracks as the foundation of the planning efforts.

The following colors are used to differentiate the functional groups:

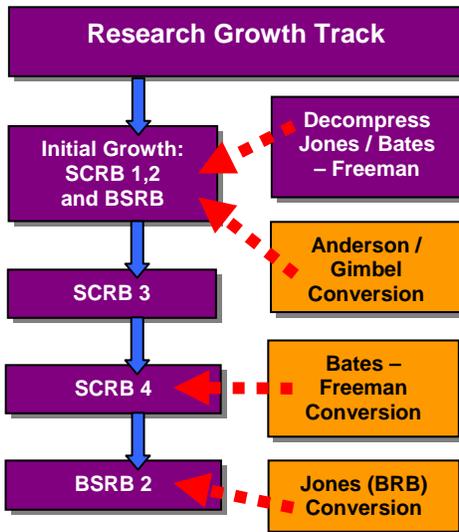
Research 

Offices 

Outpatient 

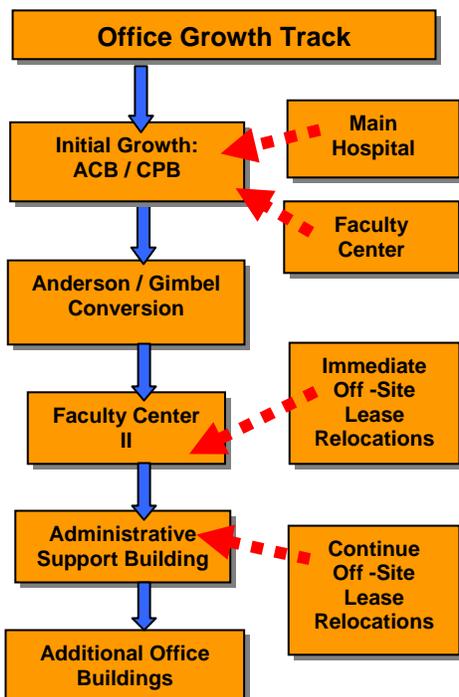
Inpatient 

## MASTER PLAN 2015 REPORT



### RESEARCH

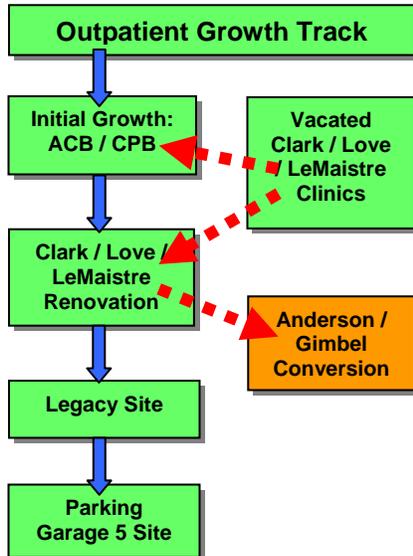
- ⇒ Initial growth accommodated with South Campus Research Building (SCRIB) One, Two, and Basic Sciences Research Building (BSRB).
- ⇒ South Campus Research Building Three (SCRIB 3) to accommodate Experimental Diagnostic Imaging.
- ⇒ South Campus Research Building Four (SCRIB 4), Experimental Therapeutics, to off-load functions in Bates–Freeman; this will allow for the final conversion of Bates–Freeman into offices.
- ⇒ BSRB Two to off-load function in Jones; this will allow for the conversion of Jones into office functions.
- ⇒ Potential exists for Bates–Freeman / Jones sites to be redeveloped for research in the 20 year plan.



### OFFICES

- ⇒ Initial growth accommodated through the conversion of Anderson and Gimbel.
- ⇒ Initial growth also accommodated through the construction of the Ambulatory Clinical Building (ACB) and the Cancer Prevention Building (CPB).
- ⇒ Further growth accommodated through the construction of Faculty Center II for additional faculty offices and the location of off-site administrative functions whose leases expire within 2- 3 years.
- ⇒ Construction of an Administrative Support Building (ASB) on mid-campus. The current administrative functions located offsite and temporarily relocated to Faculty Center II can be shifted here as necessary to reduce the cost of rental space and to provide additional faculty growth. Additional remaining leased spaces can be shed and relocated here.
- ⇒ Expansion of office needs will then parallel the growth projected through the ACB Grid and the Economic Forecast Model.

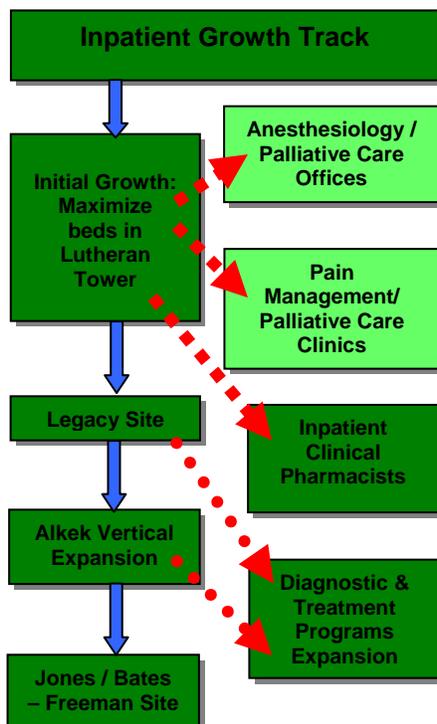
## MASTER PLAN 2015 REPORT



### PATIENT CARE – OUTPATIENT

- ⇒ Initial growth accommodated through the construction of the Ambulatory Clinical Building and Cancer Prevention Building.
- ⇒ Move non-clinic based services out of Clark / Love / LeMaistre and reassign the existing vacated clinic spaces within Clark / Love / LeMaistre for additional clinic expansion
- ⇒ Construction of new outpatient clinics on the Legacy Site.
- ⇒ Construction of new outpatient facility on Parking Garage 5 Site.

### PATIENT CARE – INPATIENT



- ⇒ Initial growth accommodated through maximizing the number of beds in Lutheran Tower (Anesthesiology, Pain Management and Palliative Care program and staff to be relocated)
- ⇒ If inpatient beds are needed in the next 10 years, construction of new inpatient beds would occur on the Legacy Site. An additional study would be required to assess which beds can be separated from the main complex without impacting operational efficiencies.
- ⇒ Depending upon the final location of the inpatient beds, there can be future bed expansion on the main hospital campus which could occur through:
  - Vertical expansion of Alkek for additional inpatient beds
  - Potential construction of new inpatient beds and diagnostic / treatment services on the Jones / Bates – Freeman site, if another research building is developed.
- ⇒ If and when the inpatient beds are eventually relocated from the Legacy Site to the North Campus, the Legacy Site facility can be converted into a day hospital, hospice care, or some other alternative clinical use.
- ⇒ If the inpatient beds are not relocated off of the Legacy Site, the need for services such as day hospital, hospice care on the Houston Campus needs to be addressed. If it is decided that these services are to be provided, the Mid Campus site should be considered. These services are primarily outpatient focused and the ability to create a non-institutional environment with adequate open space is important.

## MASTER PLAN 2015 REPORT

### CONCEPTUAL MASTER PLAN

The Master Plan 2015 reflects the long term vision for MDACC, but is tempered by the current needs and financial considerations. The Master Plan 2015 is best illustrated in terms of 10 year and 20 year planning horizons. The exact timing of the facilities to be constructed, expanded or demolished will vary depending upon the financial performance of the institution.

The intent of the 10 year plan is to position MDACC for the longer term. Smarter short term dollar investments into existing facilities, new or expanded programs that enhance the mission, critical adjacencies that improve performance are the goals of the 10 year plan.

#### 10 YEAR CONCEPTUAL PLAN

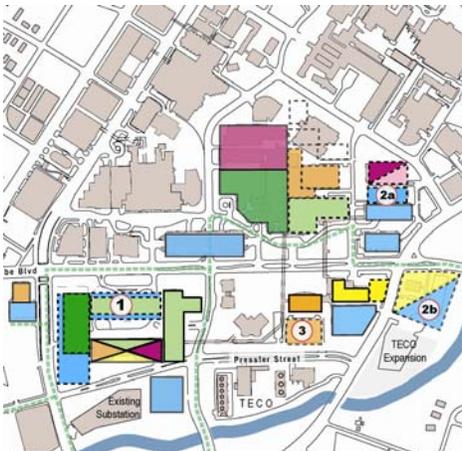
In general, the elements that should be considered during the 10 year horizon are:

##### North Campus

1. Demolition of Houston Main Building. Due to the age of the facility, the poor condition of the exterior façade and mechanical systems, code deficiencies, and the inefficiency of the floor plate, the recommendation is to proceed with the proposed demolition of this facility. As functions are decanted out of this building, concerted effort should be made not to relocate other occupants into the vacated space(s) unless for temporary purposes where a future location has been identified. Relocation of HMB Programs to Faculty Center II, Gimbel and Anderson allows for the demolition of HMB.
2. Parking – The current demand for staff parking will exceed capacity for parking by the summer of 2004. This need can be mitigated through the construction of additional parking. The areas identified for parking include:
  - a. Expansion of Garage 10 to the north
  - b. Development of a garage / mixed use facility on the Radiology Outpatient Center (ROC) site.

Parking for mixed use facility should be evaluated for appropriate future parking requirements.
3. Faculty Offices – Faculty office growth is tied to both clinic growth and recruitment opportunities. As the clinical programs continue to grow and require more space, the need to identify which core services need to remain directly adjacent to the patient care services and which services can be farther away need to be addressed. As a part of the 10 year plan, a Faculty Center II is envisioned.

#### 10 YEAR PLAN – NORTH CAMPUS

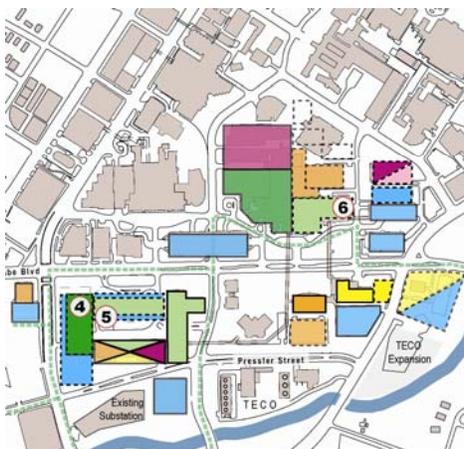


## MASTER PLAN 2015 REPORT

The Faculty Center II Building will be a 21-story building of approximately 729,000 building gross square feet. It will be completed and occupied by mid-2007. This timeframe may or may not coincide with the demolition of HMB.

Early occupancy of Faculty Center II (on two floors) to allow for the connection between the Faculty Center and Faculty Center II buildings. A portion of the 2nd and 3rd floors, currently occupied by the Division of Internal Medicine and Biostatistics, within the existing Faculty Center must be vacated to accommodate this connection.

4. Inpatient Beds – Based upon the economic growth forecast, MDACC will start to experience a shortage of beds beginning in 2007. Where these additional inpatient beds are located is important. The 2001 master plan recommended that additional beds be located on the North Campus, Legacy Site. The beds were to be Hematology related.



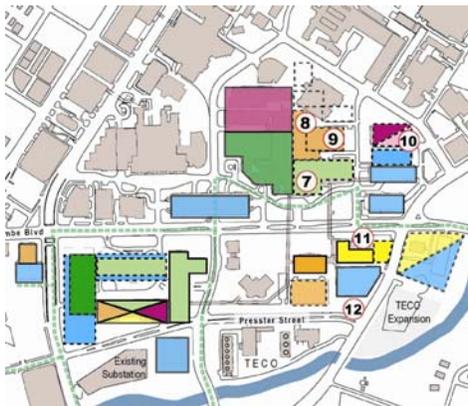
At this point in time, the Lutheran and Alkek Towers will be operating at maximum capacity. The inability to reshuffle beds off of the top floor of Alkek to allow for vertical expansion requires use of the Legacy Site within a 10 year period. As these additional patient beds are considered, the impact these beds have on Surgery, Pharmacy, Laboratory Medicine, Dietary, and Materials Management need to be assessed. Further, issues related to operating two hospitals, the ability to flex bed occupancy between the two facilities, etc. will still need to be addressed. To allow for the immediate expansion of inpatient beds in Lutheran, Anesthesia will be temporarily relocated to Faculty Center. Palliative Care offices relocate to Gimbel and Palliative Care clinical functions relocate to Old Clark to accommodate additional inpatient beds in Lutheran.

5. Outpatient services will continue to grow at MDACC and the ability to locate these services at a distant or suburban site is critical. A remote suburban site for diagnostic services or prevention should also be considered.

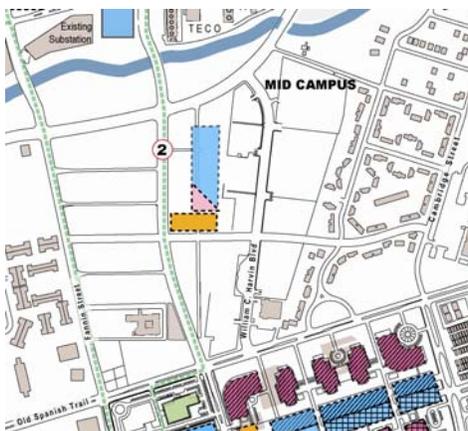
The 10 year plan builds upon the recent construction of the Ambulatory Clinical Building (ACB) and the Cancer Prevention Building (CPB) and expands outpatient services within the same area.

6. Expansion of Patient and Research Support
  - a. Expansion of Pathology / Laboratory Medicine – Pathology needs to remain and expand within the main building, but Laboratory Medicine can be relocated to Mid Campus.

## MASTER PLAN 2015 REPORT



### 10 YEAR PLAN – MIDCAMPUS



- b. Consider alternative offsite locations for Diagnostic Center Services and Prevention Services.
  - c. Expansion of Pharmacy – a core component of Pharmacy needs to remain within the main complex, but the remainder of the Pharmacy can be relocated to Mid Campus.
7. Kitchen / Dietary – The kitchen serving the inpatient beds should remain within the main building. If, inpatient beds are provided on both sides of Holcombe Boulevard, the location of the kitchen should be reassessed. Funds will need to be expended to maintain the kitchen in its existing location.
  8. Existing Facilities – Anderson, Gimbel, and Bates-Freeman are identified as category II (office reuse). Based upon the ongoing capital costs required to maintain and / or upgrade the Jones (BRB) to wet bench research standards, MDACC has agreed that Jones (BRB) should also be classified for eventual office use.
  9. Jones and Bates–Freeman should be renovated for a 10 – 15 year life span, and ultimately be converted to office use as soon as it is feasible.
  10. MSI site – the MSI site will become available to MDACC within the 10 year horizon. The need to maintain critical mass for the research component on the North Campus influences the decision to locate another research facility on this site.
  11. Rotary House expansion is driven by patient demand.
  12. To accommodate the movement of staff between the Mid and South campuses to the North Campus, a people mover with a transit station located at Garage 17, near the corner of Pressler and Braeswood Boulevard, is envisioned. See conceptual People Mover diagram located at the end of this chapter.

### Mid Campus

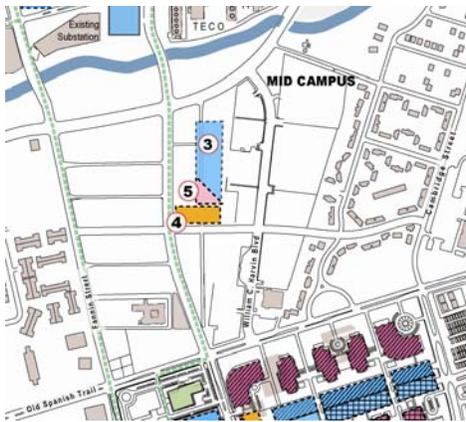
1. The location of facilities is based upon the parameters discussed in Chapter 4 – Conceptual Site Framework. The current area is not yet developed and the need to organize this campus for all of the current and future property owners is critical.
2. One of the key components to this organization is the Park Boulevard concept (the extension of Bertner Street from Braeswood to Old Spanish Trail).

The construction of a people mover between the North, Mid, and

## MASTER PLAN 2015 REPORT

South Campuses would allow all three campuses, as well as the other Texas Medical Center Institutions to be inter-connected. Please refer to the illustration at the end of this chapter for proposed people mover locations.

The Park Boulevard and people mover become strong organizing elements in the development of the mid campus. Buildings / entrances should be located along this Park Boulevard to reinforce the mid campus as integral and a connective fiber between all of the campuses.



3. Parking – The current demand for staff parking will exceed capacity for parking by the summer of 2004. Additional staff parking will also be needed to handle the new construction proposed for the North and Mid Campuses.

This need can be mitigated through the construction of additional parking on the Mid Campus. The location of this parking is critical to the longer term development of the Mid Campus. The proposed location for the parking structure is the eastern most edge of the site. This parking structure will be adjacent to the TMC Brown Lot creating a logical location for a transportation hub within the Mid Campus.

Access to this garage should not be located off of the Park Boulevard, but rather off of one of the major east west roads that bisect the site, such as St. Agnes.

The current allocation for parking spaces is 1.8 spaces per 1,000 assignable square feet. As newer, mixed use facilities are developed the parking ratios utilized should be evaluated for its appropriateness.

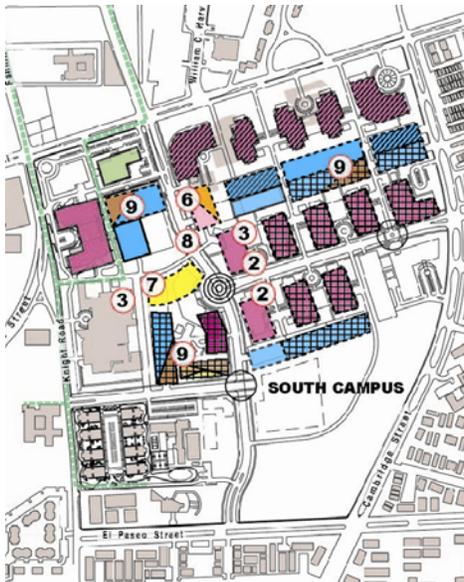
4. Administrative Offices – Early lease expirations will be temporarily housed within the proposed Faculty Center II Building. An Administrative Support Building (ASB) is proposed for the Mid Campus. The review of short and ultimate long term leases is still required.

The location of the ASB is determined by the property currently owned by MDACC. It is recommended that this facility be 6 to 12 stories in height and located along the Park Boulevard, initiating the development of this concept.

5. Additional Education/training facilities will also be needed within the 10 year planning horizon. Depending upon the timing for when these facilities are needed, opportunities exist to locate this center as a part of the proposed parking structure or ASB. Due to the desire to maximize land use, it is not recommended that a

## MASTER PLAN 2015 REPORT

### 10 YEAR PLAN – SOUTH CAMPUS



free-standing education / training facility be constructed on the Mid Campus.

#### South Campus

1. The location of facilities on the South Campus follows the framework established by the University of Texas (UT) South Campus Master Plan. The current UT South Campus Master Plan envisions the construction of low-rise (3 – 4 stories) research facilities on this campus.

This building height density may apply within the 10-year horizon, but as the campus becomes built out, MDACC should reassess this density to allow for higher and better utilization of the property.

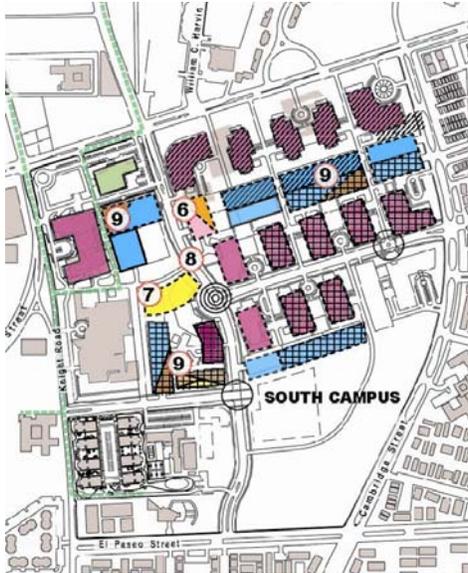
Utilizing the site organization set forth in the UT South Campus Master Plan and coordinating it against the discussion in Chapter 4 – Conceptual Site Framework, it is recommended that facilities flanking the Park Boulevard be reassessed in favor of facilities that are 6 to 12 stories in height.

2. South Campus Research Building Three (SCRB Three) – Experimental Diagnostic Imaging and SCRB Four on South Campus – Experimental Therapeutics will be constructed within the next five years.

Both SCRB Three and Four are envisioned to be low rise research facilities. The siting of both SCRB Three and Four is impacted by MDACC's predisposition toward the realization of the Park Boulevard concept within the initial phases of the South Campus development.

3. Access to expanded vivarium facilities in the Physical Plant Building (PPB) and /or future research building needs to be considered.
4. Research Facilities – The research buildings on South Campus are planned to be owned by a mix of MDACC, individual pharmaceutical companies, private investors, etc. Due to the entrepreneur nature of this development, the construction of additional facilities on the South Campus cannot be predicted at this time.
5. The UT South Campus Master Plan pre-supposes that each research facility would have access to its own parking garage. It is recommending that the placement of these garages take into account the impact the parking entrances / exits would have on the campus environment, in particular the open, green spaces and the pedestrian pathways.

## MASTER PLAN 2015 REPORT



6. To reinforce the employee focused culture and support the development of MDACC as a learning and mentoring institution, additional research related administrative and education / training facilities should be constructed on the South Campus.

Building upon the Park Boulevard concept, the planning team is recommending that this facility be located along the Bertner extension, and in a fairly central location on campus.

7. A hotel / mixed use facility should be constructed on the South Campus. This facility would activate the campus, assist in attracting other pharmaceutical companies or researchers, and create a stronger sense of community.
8. To the extent possible, the people mover should be co-located within the vicinity of the administrative / education and hotel / mixed use facilities.
9. Distributed Utility Plants – to service the long term South Campus development needs, a utility plant system will be constructed on this campus. The 10 year conceptual plan indicates locations near the intersection of Bertner and the newly created east west street due south of the Physical Plant Building, and within the parking adjacent to South Campus Research Building Two. These alternative locations will provide better delivery and service access and keeps as much of the site unencumbered as possible, maximizing the sizes and configuration of future research facilities.
10. Based upon the ultimate building height density utilized, the central plant and parking should be able to accommodate the potential of approximately 9 million square feet of space.

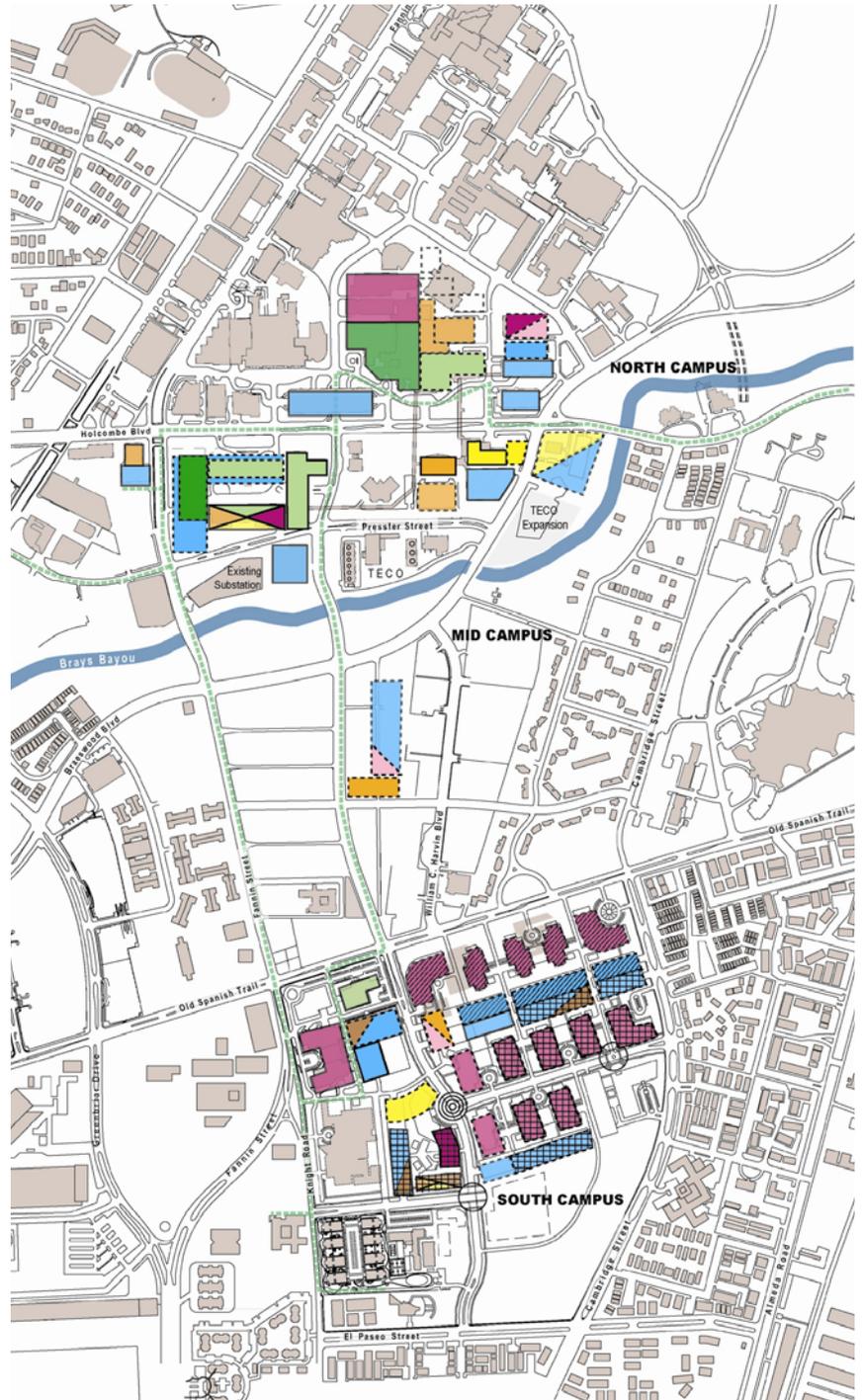
The following comprehensive diagram graphically illustrates the potential planning considerations for the Houston Campus within the 10 year planning horizon:

**MASTER PLAN 2015 REPORT**

**LEGEND**

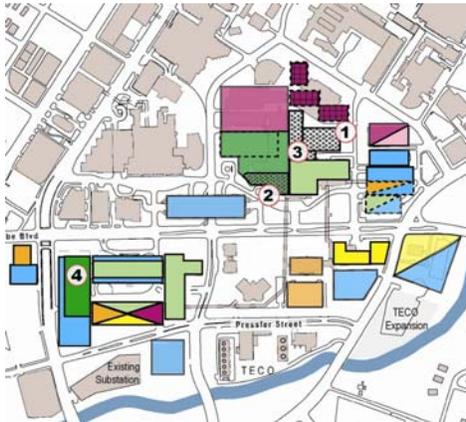
-  **Outlined color blocks** indicate potential projects under construction.
-  **Inpatient Care** – This includes the nursing units and the major diagnostic and treatment services supporting the inpatient beds.
-  **Outpatient Care** – This includes the outpatient clinical services.
-  **Research** – This includes basic science and translational research initiatives. Investigator offices that are integral to the research space are included within this functional zone.
-  **Office** – This includes both faculty offices and administrative offices. Offices required as integral to the patient care service are included within its respective area.
-  **Logistics** – This includes the materials management / warehousing / central plant.
-  **Ancillary** – This includes the Pharmacy, Lab Medicine / Clinical Lab. A portion of the Pharmacy as well as Pathology Medicine is intended to remain as a part of the inpatient care zone.
-  **Education / Training** – This includes the education, training and conferencing spaces
-  **Amenities / Mixed Use** – This includes the Rotary House, future hotel development, staff and / or patient amenities, and retail areas.
-  **Parking** – This includes parking developed by or used primarily by MDACC.
-  **Demolish / Alternative Use** – This identifies those facilities that should be demolished or converted to a lower use. The exact disposition of these facilities is not determined at this time.
-  **Future Construction** – Those facilities (primarily research) that have been identified through other master plans by MDACC.
-  **Future Shared Research Park** – Those facilities that have been identified through other master plans as being developed by both MDACC and other institutions.
-  Existing Shuttle

**10 YEAR PLAN**



## MASTER PLAN 2015 REPORT

### 20 YEAR PLAN – NORTH CAMPUS



### 20 YEAR PLAN

The 20 year plan focuses upon realization of the highest and best use aspects of campus planning. The reinforcement of defined functional zones, the increased utilization of the land through higher building densities, the delineation of strong circulation systems, the creation of focal points (either through the built environment or open spaces) are some of the features emphasized in the long-term development of the North, Mid, and South Campuses.

#### North Campus

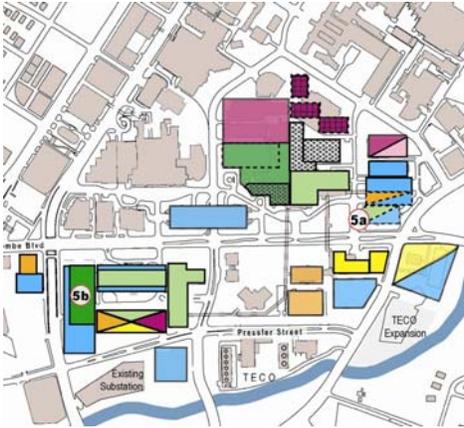
The North Campus will continue to remain the patient care and basic sciences research hub for MDACC. The ability to logically retool a dense urban environment into state-of-the-art facilities without disruption to existing services is mandated. As such, MDACC will need to scrutinize its existing facilities in a closer manner to determine which ones should continue to be maintained.

1. Jones and Bates – Freeman will have been completely converted to office use within fifteen years of the implementation of this master plan. At this time, the useful life of these facilities should once again be reassessed. At this point, it may be beneficial to demolish these facilities, and create the next empty chair on campus. This empty chair could then be utilized for either patient care or research expansion.
2. Lutheran Tower – During this period, the disposition of the Lutheran Tower should be investigated to determine highest and best use, including continued upgraded inpatient beds conversion for alternate use or demolition.

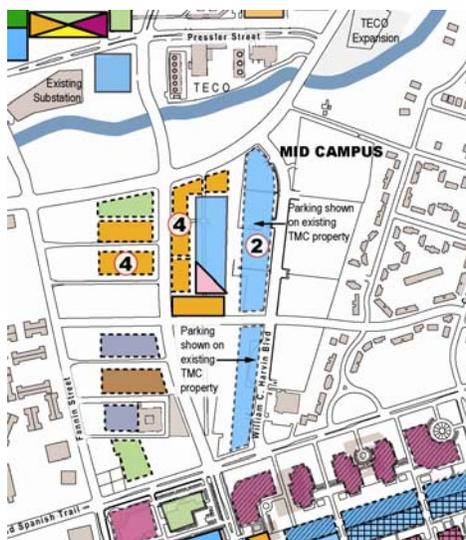
The construction of new /additional patient beds on the Legacy Site and/or the on the north of Holcombe site should allow MDACC to decant the Lutheran beds into newer facilities. Lutheran could be then converted to patient care support services, or demolished leaving an empty chair for future needs.

3. Anderson and Gimbel are the oldest facilities on campus and are also the umbilical that link a majority of the facilities. The goal should be to decant these buildings and provide for alternate connections, allowing for their demolition. This site can be used for the construction of new patient care facilities or research facilities.
4. Patient Beds – As the need for inpatient beds continue to grow (or contract), the performance criteria the inpatient beds on the Legacy Site should be measured against are:
  - a. On-going performance and impact on operations,

## MASTER PLAN 2015 REPORT



### 20 YEAR PLAN – MID CAMPUS



- b. Changes in length of stay / acuity,
- c. Shift in programmatic direction,
- d. Impact on the diagnostic and ancillary support services,
- e. Relationship of inpatient programs to research, etc.

These on-going evaluations will influence MDACC's decision as to whether additional inpatient beds are needed, and where would they best be located. The studies may indicate that the inpatient beds, currently located on the Legacy Site, should be converted into short stay beds – an outpatient hospital, hospice care, outpatient facilities or some other alternative clinical use.

5. Outpatient services will continue to grow. As the existing outpatient facilities (Clark / Love / LeMaistre, Ambulatory Clinical Building (ACB), and Cancer Prevention Building (CPB) exceed capacity, additional sites need to be identified that will allow the outpatient services to continue to ideally grow in place. The sites targeted for this future outpatient growth include:
  - a. Parking Garage 5 – demolition of existing garage for an outpatient facility with parking.
  - b. Legacy Site – potential conversion of Inpatient beds to outpatient use.
6. Parking - To the extent possible, MDACC envisions providing parking for visitors and/or patients within each of these new buildings. Parking for staff would be in an adjacent or remote area with easy access to a shuttle or people mover.

### Mid Campus

1. Campus Density – As outlined in Chapter 4 – Conceptual Site Framework, the overall density of the Mid Campus should be structured to create a strong urban environment that is responsive to the humanistic and functional needs of MDACC.

The ability to zone this campus for building locations, green spaces, view corridors, etc. will create a sense of order and community within a currently undefined site.

To the extent possible, the proposed buildings are situated to take advantage of the existing street system.

2. Parking – As with any urban environment, the issue of cars – how many spaces to provide, and where to locate these spaces is a concern. The ability to articulate a parking strategy that helps mitigate bottlenecks, is easily accessible to major shuttle or people mover routes, and does not become a determining factor in terms of building locations is key. To the extent possible, the 20 year conceptual plan envisions provisions for parking for

## MASTER PLAN 2015 REPORT

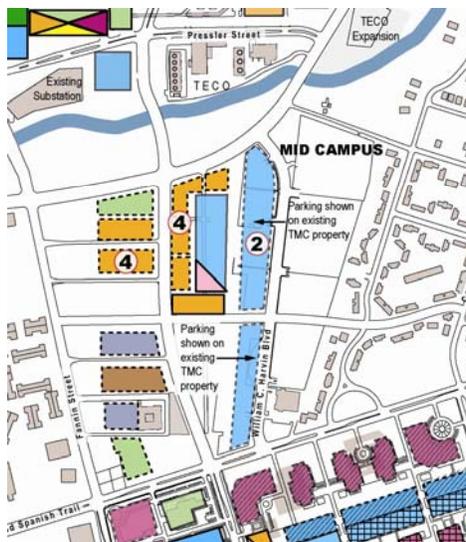
visitors and/or patients within each new building.

Parking for staff would be adjacent to the parking garage identified in the 10 year plan. The parking concept utilized is based upon the development of a central staff parking zone. Parking entrances / exits would be located off of major thoroughfares diminishing the amount of cars circulating throughout the campuses. By locating these garages within a reasonable distance to each other, the number of people mover stops can be reduced, reinforcing the vitality of the transportation hubs that may already exist.

The proposed long term location for staff parking is shown on a portion of the TMC Brown Lot. An overall strategy for parking ratios, parking garage heights, Metro rider-ship, shuttle service, people mover, etc. needs to occur with TMC and the TMC member institutions.

As noted in Chapter 4, the potential exists for MDACC to construct as much as 4 – 6 million square feet of space on Mid Campus. Based upon a parking ratio of 1.8 spaces per 1,000 square feet of assignable space, this translates into approximately 7,000 to 10,000 cars.

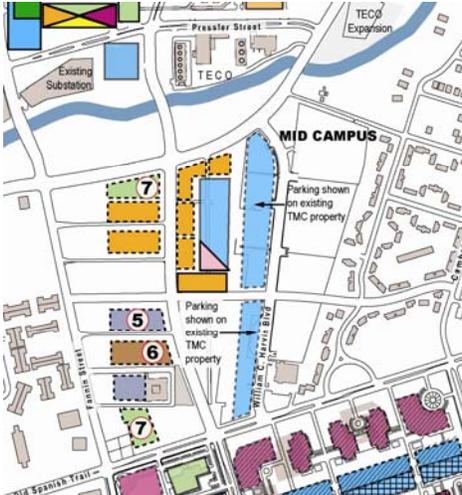
3. The number of cars located within Mid Campus, in addition to MDACC's requirement is phenomenal, placing a greater priority on the development of infrastructure systems capable of handling this amount of traffic.
4. Offices – The majority of office buildings anticipated for the Mid Campus will be administrative support services in nature. These buildings can and should have some mixed use component (retail, conferencing, amenities, etc.) within them to help activate the campus.



The primary building tenants will be MDACC staff. Locating these buildings closer to the staff parking garages would minimize travel distance for a vast majority of the employees. Recognizing that staff moves between all three campuses and frequently interact with staff in other buildings, these office buildings have been sited along the Park Boulevard.

The ultimate build out requirements for these facilities cannot be predicted at this time. The organization of these facilities on this campus is such that these facilities can be constructed in affordable increments that can grow in place. Due to current land ownership, MDACC will want to locate these buildings to the east of the Park Boulevard until additional properties on the west side of Bertner can be acquired.

## MASTER PLAN 2015 REPORT



5. Ancillary Services Building – as MDACC continues to expand its clinical programs, key support services such as Pharmacy and Laboratory Medicine will continue to demand additional space. These services have strong clinical ties, and at the same time, have active research initiatives. The location of the Mid Campus for these services will allow for easy access to both the clinical and research enterprises.

In addition, the relocation of Laboratory Medicine outside of the main Hospital will provide additional growth space for the clinical programs.

The expansion of Pharmacy on Mid Campus will consolidate current intravenous manufacturing services into a single location. The timing of the proposed Ancillary Services Building is dependent upon the departments urgency for additional space balanced against the financial considerations of the expansion. The proposed location is on current MDACC property, simplifying the timing of its construction. Further, the proposed site is accessible from St. Agnes and the Bertner Street extension, improving service and delivery capabilities to and from the campuses.

6. Logistics Warehouse – The ability to move materials into and around the institution in a discreet and timely manner are important. The current Materials Management/Distribution Services is ideally located and sized to handle the daily movement of goods, but does not provide adequate space for the warehousing of any significant inventory.

The Mid Campus location will provide MDACC with good external truck access, larger docking facilities, and easy movement of goods to both the North and South campuses.

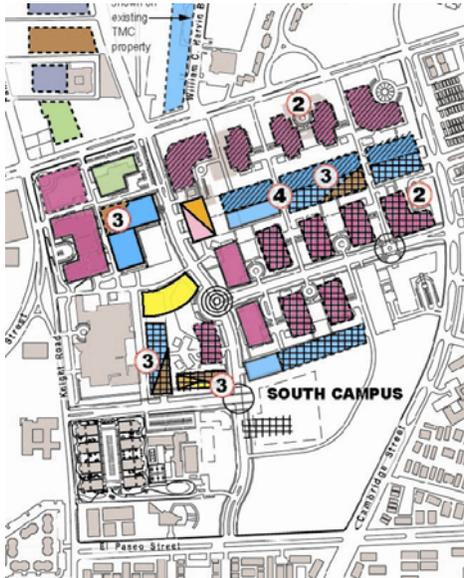
The location of the proposed Logistics Warehouse is not on property currently owned by MDACC; hence, an acquisition strategy will need to be put into place to acquire this property.

7. Outpatient services – while the majority of the outpatient clinical services are anticipated to be located on the North Campus, the 20 year conceptual plan includes provisions for potential additional outpatient care facilities located along Braeswood Boulevard and Old Spanish Trail.

The Braeswood site is a logical extension of the services offered on the Legacy Site. The outpatient service zone along Old Spanish Trail site can accommodate services that would benefit from a strong physical relationship to the Proton Therapy facility located directly across the street on the South Campus.

## MASTER PLAN 2015 REPORT

### 20 YEAR PLAN – SOUTH CAMPUS



### South Campus

1. As noted in the 10 year conceptual plan above, the ultimate density of the South Campus should be increased to provide MDACC with a highest and best use scenario for the development of this campus. As the initial buildings on this campus are sited and constructed, consideration should be given to developing taller structures along the Park Boulevard.
2. Research Facilities –The construction of additional facilities on the South Campus cannot be predicted at this time.
3. Distributed Utility Plants - as additional facilities are constructed, additional central plant capacity may be required. A potential location is within the proposed parking structures near Cambridge Street.
4. Should MDACC and UT elect to increase the density of South Campus from 3.2 million square feet to potentially 9 million square feet; the amount of parking will increase from 6,000 cars to potentially 16,000 cars.

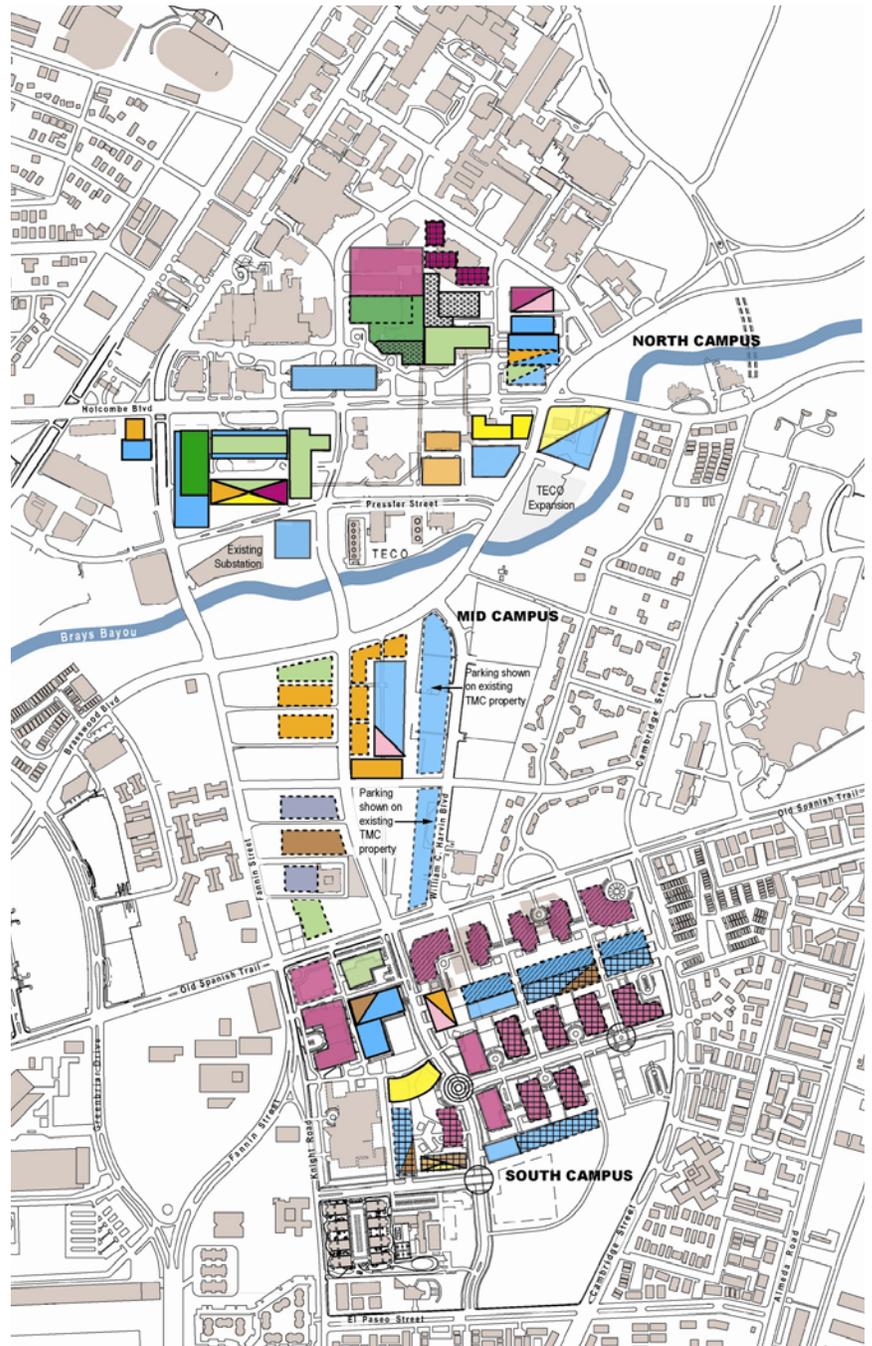
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**MASTER PLAN 2015 REPORT**

**LEGEND**

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**20 YEAR PLAN**

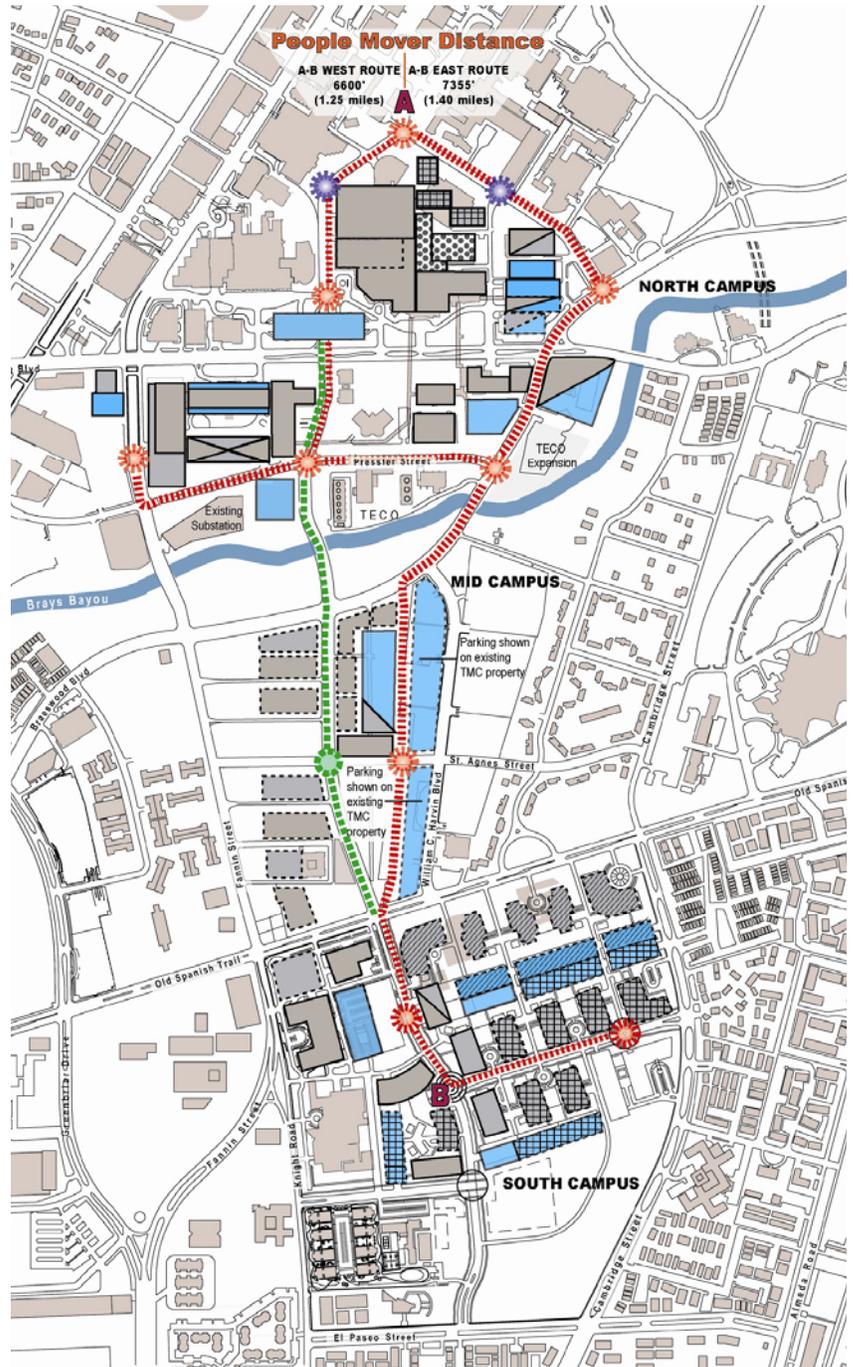


**MASTER PLAN 2015 REPORT**

**LEGEND**

-  People Mover
-  Alternate People Mover Route
-  Station
-  Optional Station

**CAMPUS MOBILITY STUDY – PROPOSED PEOPLE MOVER LOCATIONS**



## **MASTER PLAN 2015 REPORT**

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### **CHAPTER 6 – NEXT STEPS**

Master Plan 2015 will provide M.D. Anderson Cancer Center (MDACC) with a defined strategy for best managing the physical and space needs to support the institution's future achievement goals for Patient Care, Research, Education, and Prevention functions. The Master Plan 2015 Report recognizes and supports the development of the physical environment as a pivotal element for supporting and enhancing the strategies and tactics outlined.

The strategies for space management is realized through the balanced combination of re-use and renewal of existing facilities, construction, new land acquisitions / exchanges, and/or strategic leases that are achievable within capital budget, infrastructure and time constraints.

The master plan is intended to be proactive, yet anticipatory in nature, allowing MDACC to accommodate mid-course correction strategies, develop new entry opportunities, and provide sound exit scenarios.

This chapter will focus upon those key issues that contribute to the successful realization of Master Plan 2015:

- Communication Methodology
- Coordination with On-going Initiatives
- Studies Needed
- Implementation

#### **COMMUNICATION METHODOLOGY**

Master Plan 2015 needs to be communicated with the staff in a manner which conveys the underlying premise for its development and encourages positive feedback. The plan is a living document reflecting MDACC's current and projected growth needs. The plan is a roadmap for growth and allows for mid-course corrections as institutional goals, departmental needs or projections, or staff requirements change over time.

Conveying this message in a clear, concise, and timely manner is essential. Understanding and acceptance of Master Plan 2015 by all of MDACC staff is crucial to its success. The ability to actively engage all the staff will reinforce the vision, manage expectations, and create a platform from which actions can be measured. The Master Plan 2015 Report must capture the imagination of the staff and encourage and spark the creativity initiatives that promote growth and leadership.

The venue for how this message is initially communicated will influence

## MASTER PLAN 2015 REPORT

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its acceptance. The ability to engage the staff is instrumental. Some of the more successful forums for communication include Town Hall meetings, employee events, and interactive web broadcasts. Maximizing the opportunities presented within Master Plan 2015 is directly related to how comments are received and what is done with those comments. Actions do in fact speak louder than words. A mechanism for receiving, responding, and posting of suggestions and updates will ensure the staff that they are being listened to and promote the longevity of the facility renewal effort.

### COORDINATION WITH ON-GOING INITIATIVES

MDACC is a vibrant institution that continues to evolve and redefine operations, processes, and adjacencies. The following summarizes those initiatives that will impact the proposed 10 year concept plan and potentially influence the 20 year concept plan. The resolution of the following issues and studies need to be addressed within the next two years.

1. Construct Faculty Center II. The programming and design for this facility needs to be completed. The issues related to the partial relocation of Radiation Oncology offices and Medical Records to Faculty Center II will need to be confirmed prior to the program being finalized.
2. Library. As the library is relocated off of the Main Hospital site to Faculty Center II, the opportunities to address the definition and function of the library of the future need to be considered. The following questions should be addressed:
  - a. If a library is provided, who would access it routinely?
  - b. How often will clinicians and researchers need access to hard copy information? How much of the information utilized by investigators and clinicians will be electronic? Will hard copy journals, periodicals, books be required to be kept on site for daily or convenient access?
  - c. Should combined archive facilities be constructed? If this is required, space will need to be allocated on Mid Campus. The ability to integrate this archive facility with other TMC Institutions should be considered.
3. Infrastructure Capacity Study. The Conceptual site Framework, Chapter 4 and the Conceptual Master Plan, Chapter 5 provide guidelines regarding proposed building heights, assumed site build out capacities, and related parking requirements. An initial discussion and agreement upon the proposed maximum capacity of 4 to 6 million SF on the Mid Campus and 9 million SF on the

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South Campus, will allow MDACC to size the utilities, storm water management, and roadways to handle and / or anticipate in a phased manner the longer term needs for the Mid and South Campuses.

4. Mid Campus Development Plan encompasses issues related to the Bertner Street extension, land assembly and property acquisition. As MDACC continues these efforts, priorities should be established to tackle those issues affecting the overall site development. These issues are:
  - a. Establishment of setbacks for the Mid Campus. The planning team is proposing that the entire mid campus be considered as a planned development, providing MDACC with greater flexibility regarding property setbacks, building heights, and open space development.
  - b. Acquisition of properties along the proposed Bertner Street extension. This is critical for the development of the Park Boulevard concept and will also be a likely location for site utilities.
  - c. Traffic studies to understand the implications of:
    - i. Roadway capacity within the Mid Campus
    - ii. Ideal parking entrance and exit locations
    - iii. Impact on the major thoroughfares – Braeswood, Fannin, and Old Spanish Trail
  - d. Geo-technical investigation of the proposed sites for the Administrative Support Building, and Staff parking Garage.
5. Coordination with the University of Texas South Campus Master Plan. South Campus Research Buildings Three and Four will be constructed soon. The identification for their location should be determined now. These buildings are anticipated to be 3 to 4 stories in height. The Site Conceptual Framework in Chapter 4 proposes a higher number of stories for buildings (4 to 6 million SF on the Mid Campus and 9 million SF on the South Campus) flanking the Bertner Street Extension and the Park Boulevard.
6. TMC is in the process of updating its Master Plan. The Mid and South Campuses are included as a part of the TMC Master Plan. MDACC's Master Plan 2015 Report focuses upon the anticipated needs of MDACC but also recognizes that the institution is an integral part TMC. The direction of this Master Plan 2015 report will be shared with representatives from TMC to reinforce the collaborative planning efforts required to logically grow and position this innovative and forward thinking medical center complex into the future.

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7. The campus mobility study is currently underway. This study reviews alternative locations for a people mover system. The final location of the people mover will impact the master plan development. While it would be ideal, this study does not need to be completed within the next 6 months. If the study is not completed within the next 6 months, the site development / roadway systems will need to reserve space for the addition of this feature.

### STUDIES NEEDED

The Master Plan 2015 Report utilizes the outcomes of the Redevelopment Plan as its foundation for future growth. Several studies, that will need to be completed over the next several years, were identified. These studies listed below have been annotated to include those issues related to the master planning effort only:

1. Pharmacy. The Redevelopment Plan reflects the Pharmacy / Materials Management / Distribution Services concept updated in 2003 and the Pharmacy 2002 report. This report needs to be updated to reflect current expansion needs within the Main Hospital and future expansion needs on Mid Campus. Issues to consider are:
  - a. Identify the Pharmacy services that truly need to remain on-site.
  - b. Determine if the Mid Campus Pharmacy operation can include manufacturing capability or will this continue to be outsourced.
  - c. The impact of two hospitals on the Pharmacy operation – does it make sense to remain on the Main Hospital Complex if this occurs.
2. The Materials Management / Distribution Services study should be updated to reflect current expansion needs within the Main Hospital and future expansion needs on Mid Campus. Issues to consider are:
  - a. Discuss alternative purchasing, storing, and distribution systems.
  - b. Review the impact space requirements these systems will have on space within the individual departments.
  - c. Identify which services need to remain on the main hospital complex site.
  - d. Determine if the proposed Mid Campus services should be expanded to handle the entire Houston Campus.

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3. The Pathology Department facilities planning report was last updated in 2002. This report needs to address:
  - a. Laboratory Medicine – ascertain which services need to remain on the Main Hospital site and which services can be re-located to the Mid Campus
  - b. Determine the impact on clinical lab services when lab is on Mid Campus – turnaround time, transportation of specimens, distribution of results, etc.
  - c. Determine what type of satellite stat lab service will be required to remain in the Main Hospital.

Additional studies that will be required to be completed within this 4 to 6 month timeframe. These studies represent the high priority projects listed for implementation within the immediate (next 12 months) and near term (1 – 3 years) in Chapter 2, Concept Criteria Development.

1. Houston Main Building (HMB) Demolition
  - a. Identify and program for the near term of final relocation of the current occupants. There is approximately 121,000 square feet of administrative support space located in HMB.
  - b. Additional parking spaces are needed by MDACC. The ability to coordinate the demolition of HMB with the construction of underground parking will allow potential savings to be realized in the construction of the parking facility.
2. Administrative Support Building. The programming for this facility needs to begin. MDACC needs to identify the potential occupants and establish the criteria for who will be relocated into this facility. Issues to be considered are:
  - a. lease expirations
  - b. growth potential for others if space is vacated
  - c. growth needs
  - d. functional adjacencies
3. Expansion of Garage 10. Texas Medical Center (TMC) will be expanding Garage 10 to the north and south. MDACC will have an opportunity to program the facility requirements for departments locate into this expansion.
4. Vivarium Expansion at the Physical Plant Building (PPB) on South Campus. There is an immediate need for additional vivarium space on the South Campus. The programming for the

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vivarium expansion needs to be finalized.

In addition to the above studies, additional studies, not of an immediate nature, should be finalized over the next two years. These studies include.

1. Principal Investigator / Research Grants: Provide a comparative assessment that measures grant dollars and productivity against a principal investigator. The outcomes of this industry standard benchmark study will provide a criterion for how future space is allocated.
2. Inpatient Bed Assessment. As additional inpatient beds are required in 2007, where these additional inpatient beds are located is important. At this point in time, the Lutheran and Alkek Towers will be operating at maximum capacity. The inability to reshuffle beds off of the top floor of Alkek to allow for vertical expansion requires use of the Legacy Site within a 10 year period. As these additional patient beds are considered, the impact these beds have on Surgery, Anesthesiology Pharmacy, Laboratory Medicine, Dietary, Materials Management and Patient Services need to be assessed. Further, issues related to operating two hospitals, the ability to flex bed occupancy between the two facilities, what does this mean for the patient will still need to be addressed.

### IMPLEMENTATION

As individual projects are implemented, it will be important to understand the trigger points that influence the timing of any given project. The growth tracks outlined in Chapter 6 – Conceptual Master Plan, are the start of this process.

Project success is measured by project expectations, and these tend to be tied to scope, schedule, and cost. To that end, the scope of every project should address:

1. Phasing:
  - a. Develop the time frame for programming, design, and construction.
  - b. Project Prep needs to be done prior to the department being renovated or constructed.
  - c. Identify projects to be done simultaneously and projects to occur in a linear manner.
2. Cash Flow Impact:
  - a. Project Prep needs to be done prior to the department

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- being renovated or constructed.
  - b. Identify what the construction dollars cover – how are system wide issues resolved on an individual project basis.
  - c. Determine if projects need to be deferred or re-prioritized due to cash flow or revenue potential.
3. Growth beyond projected forecast:
- a. Determine the stop gap measures a department requires beyond what is included in the economic forecast model.
  - b. Identify new programs, new recruits to be factored into the planning process.

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### APPENDIX A – PLANNING STUDIES REFERENCED

Master Plan 2015 builds upon and incorporates the several previous planning efforts and documents commissioned by M.D. Anderson Cancer Center (MDACC). Summaries of these documents and planning efforts are provided below. Copies of the referenced studies are available through the office of Capital Planning and Management.

#### PLANNING RELATED STUDIES

FM Database, August, 2004

This database presents a listing of MDACC owned buildings and basic information about each building such as; square footage, number of levels and the year the building was constructed.

M.D. Anderson Cancer Center Interactive Wayfinding Training Tool, July 2004

This presentation educates employees, volunteers, and students regarding the tools used for navigating around the institution. The tools used will instrumental in how patients access the facilities.

Mid Campus Development Plan, June 2004

This in-progress report outlines the goals for the potential development of the Mid Campus. Included in this paper are exhibits related to Bertner Extension, Land Assembly, and Property Acquisition.

The University of Texas South Campus Master Plan, March 2004

This document provides a comprehensive study of a 116-acre property, located south of the Texas Medical Center, owned by the University of Texas System under the stewardship of M.D. Anderson Cancer Center and Health Science Center at Houston.

The study focuses upon the creation of a biomedical research campus that will attract private research entities and accommodate the goals established by each institution.

Master Plan for the Office of Public Affairs, April 2004

Outlines the additional space needs for this group

Anesthesiology Master Plan, 2004

Outlines the additional space needs for this group

ACB Grid, Updated February, 2004

Provides updated volume and growth percentages for all clinical services. This projection is utilized to update the economic forecast model which is expanded to include faculty and facilities growth

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projections.

Diagnostic Imaging Master Plan Update II, Draft January 2004

Update of DI's programmatic needs based upon the construction of ACB and CPB and the updated economic forecast model.

Executive Quarterly Report, June – August 2003

Update of current planning and construction projects.

Leadership Forum on Research Space, January 2003

Overview of the research objectives and redevelopment principles. Focus is upon the BSRB, CRB, Bates – Freeman, Jones (BRB), SCRB 1 and 2, Anderson and Gimbel and off-site lease spaces.

Campus Redevelopment Master Plan Overview, January 2003; Updated April 2003; Updated May 2003

This presentation highlights the concepts for the Yellow Brick Road, the Park, and the Super Corridor / Pharmacy / Central Distribution.

Pharmacy –

Campus Redevelopment 1<sup>st</sup> floor Anderson Central Pharmacy & Distribution Services, December 2002

Meeting notes, April 2002, June 2002, issues related to the increased space needs for Pharmacy

Pathology –

Meeting Notes, September 2002, updates to the July, 2000 document.

Campus Redevelopment Pathology Department, July, 2002

Presentation regarding Clinical Laboratory inter-departmental relationships.

Revised Status Quo Facility Planning Document, July 2000

Overview of all of the components within Pathology: Department of Hematopathology, Department of Laboratory Medicine, Department of Pathology, Allied Health Program, and Administration. Discussions on adjacencies and projected growth included.

Facilities Management Building Directory

This directory lists all owned and leased MDACC facilities.

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### South of Holcombe Master Plan

This study focused upon the development of the Legacy site beyond the recommendations outlined in the Facilities Master Plan 2000 report. This report explores alternate concepts for the Legacy Site, with an emphasis on the creation of a humanistic environment.

### Facilities Master Plan 2000, July 2001

This document is a five year update of the Facilities Master Plan for the University of Texas M.D. Anderson Cancer Plan. Recommendations for the construction of the Ambulatory Care Building and the Cancer Prevention Building are being implemented.

### Radiation Oncology Master Plan, 2000.

### Texas Medical Center, A 50 Year Master Plan, 1999

This report summarizes the vision for establishing the framework which guides institutional growth, improves the physical environment, strengthens the community, anticipates 21<sup>st</sup> century technologies and identifies future patient care, research, and education needs for the Texas Medical Center Campus.

### Diagnostic Imaging Master Plan, Administrative Review, August 31, 1999.

### Texas Medical Center Research Campus, November 1998

This proposal represents the joint efforts of Baylor College of Medicine, UT/Health Sciences Center and MDACC to develop the "K-Lot" into a Research Campus that offers an opportunity for developing a research community which collaborates on research activities, shares infrastructure and operational costs, avoids costly duplication of facilities and services, and provides competitive advantage over other research centers around the country.

## TRAFFIC RELATED STUDIES

### MDACC 2015 Master Plan Staff and Patient Parking Demand Estimates FY 2004-06, June 2004

### MDACC Institutional Parking Plan, April 2004

These papers outline current and projected parking needs for MDACC. In addition, the philosophy of how parking spaces are allocated is included.

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### Campus Mobility Studies –

#### Garage Site Alternatives, June 2004

This presentation evaluated various site options within the North and Mid Campuses for additional parking garage locations.

#### Mid Campus Garage Site Mobility Study, June 2004

This presentation focuses upon the transportation system options available to MDACC on the North and Mid Campuses. Emphasis is upon walking, bus, and people mover systems.

#### Transportation Master Plan for the Greater Texas Medical Center Area, October 2002

This study assesses and develops strategies to meet the mobility needs for the current and projected levels of development within the Greater Texas Medical Center.



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## APPENDIX B – PRIORITIES AND GIVENS MATRIX

The following matrix graphically illustrates the information contained in Chapter 2 – Concept Development Criteria. The categories and ranking of the items listed below was done in conjunction with M.D. Anderson Cancer Center senior leadership.

THE PRIORITIES and GIVENS	Immediate (1 - 12 months)	Near-term (1 - 3 years) Priorities, Please rank	Short-term (4 - 7 years) Priorities, Please rank	Mid-term (8 - 10 years)	Long-term (10 - 20 years) Priorities, Please rank	Evaluate against cost effectiveness	Construction start date	Comments
Emergency Center Relocation		2						safety issue at night
Maximize number of beds in Lutheran	1							
Additional Inpatient Beds			X				FY 09	
Maximize square feet for outpatient use in Clark / Love /LeMaistre						X		case by case basis
Re-adjust clinic size if necessary to minimize number of moves and to save funds and enhance patient safety						X		
Super Corridor / Pharmacy / Central Distribution		10						
The Yellow Brick Road			X					
Patient Amenities (The Park)			X					
Anderson / Gimbel redevelopment as office space		7a						
Implementation of Wayfinding Master Plan		6						
Incorporate FEMA endeavor		5						
Accommodate Research lab support space (open issue)								off set office to create more lab space
Upgrade of BRB (open issue)								how much is needed
Upgrade of Bates Freeman (open issue)								phased approach
Can the MSI site can be considered the next empty chair			X					
BSRB II				X				
SCRB III -Experimental Diagnostics Imaging		3					FY 05	
SCRB IV - Experimental Therapeutics			X				FY 05	
Vivaria at PPB	X							cost dependent
Vivaria at South Campus		11						cost dependent
Bastrop Expansion			X					
Smithville Expansion			X					
Houston Main Building will be demolished		4					FY 06	
No backfill of the vacated HMB spaces	X							
Build-out of parking on the demolished HMB site		4a					FY 07	TBD
Accommodate Faculty and Staff projected growth to 2007		7						look at Bio Math in CPB
Faculty Center Two- projected		8						build-out modest size
North Building on Legacy Site (Inpatient or Outpatient)				X				impact on site circulation
Vacate lease spaces				X				
Expanded, centrally located training center (low priority)						X		employer of choice amenity
Centrally located fitness center			X					create shell space FC II or AOB
Administrative Office Building		9						build in phases as lease
Rotary House expansion			X					
Training Center, dispersed		X						
Purchase Garage five (5) and/or ten (10)								
Create additional staff parking garage		12						revenue neutral
People Mover			X					
Bertner Street extension from North Campus through Mid Campus			X					

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### **APPENDIX C – CONCEPTUAL MASTER PLAN OPTIONS**

Based upon the information discussed in Chapter 2 – Concept Development Criteria, several master plan options were generated and reviewed with M. D. Anderson Cancer Center (MDACC). As a further reference, the description of the campuses referred to in the narrative below can be found in Chapter 3 – Existing Conditions.

The following are descriptions of the alternate options. Copies of these options are available through the office of Capital Planning and Management.

#### **SCHEME A – SPECIALTY HOSPITALS**

The highlights for this scheme include:

- Continued Research development on the North of Holcombe site.
- Discontinue the use of Lutheran Tower, Jones and Bates-Freeman building as inpatient and research facilities respectively.
- Development of a second inpatient hospital with additional outpatient services on the Legacy Site – this facility would be primarily Hematology focused.
- Parking, Education, Administration facilities on the Mid Campus,
- Development of a logistics warehouse for Materials Management on the Mid Campus
- Development of an Ancillary Facility for Laboratory Medicine, Pharmacy expansion, etc. on the Mid Campus.
- A people mover connecting the Mid Campus to the North Campus and South Campuses and with expansion capabilities to other Texas Medical Center Institutions.
- Basic, Translational, and Commercialization research initiatives on the South Campus.

This scheme addressed the needs of MDACC for the next 20 years. The issue of the ultimate size of the clinical enterprise still remains in question and the ability of Scheme A to accommodate all of the long term growth for MDACC was uncertain. The underlying planning concept for this scheme was integrated into the selected master plan option.

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### **SCHEME B – REPLACEMENT HOSPITAL**

The highlights of this scheme include:

- Mid Campus as the focal point for the majority of development: Replacement Hospital, Outpatient Services, Research (including Basic Sciences), Educational Facilities, Logistics Warehouse, Ancillary Facilities, Administrative Offices, and Parking.
- Continued expansion of outpatient and faculty offices on the Legacy Site.
- A people mover connecting the Mid Campus to the North Campus with expansion capabilities to the South Campus and other Texas Medical Center Institutions.
- Basic, Translational, and Commercialization research initiatives on the South Campus.
- Immediate decompression of the North of Holcombe facilities, with the potential phase out of these facilities.

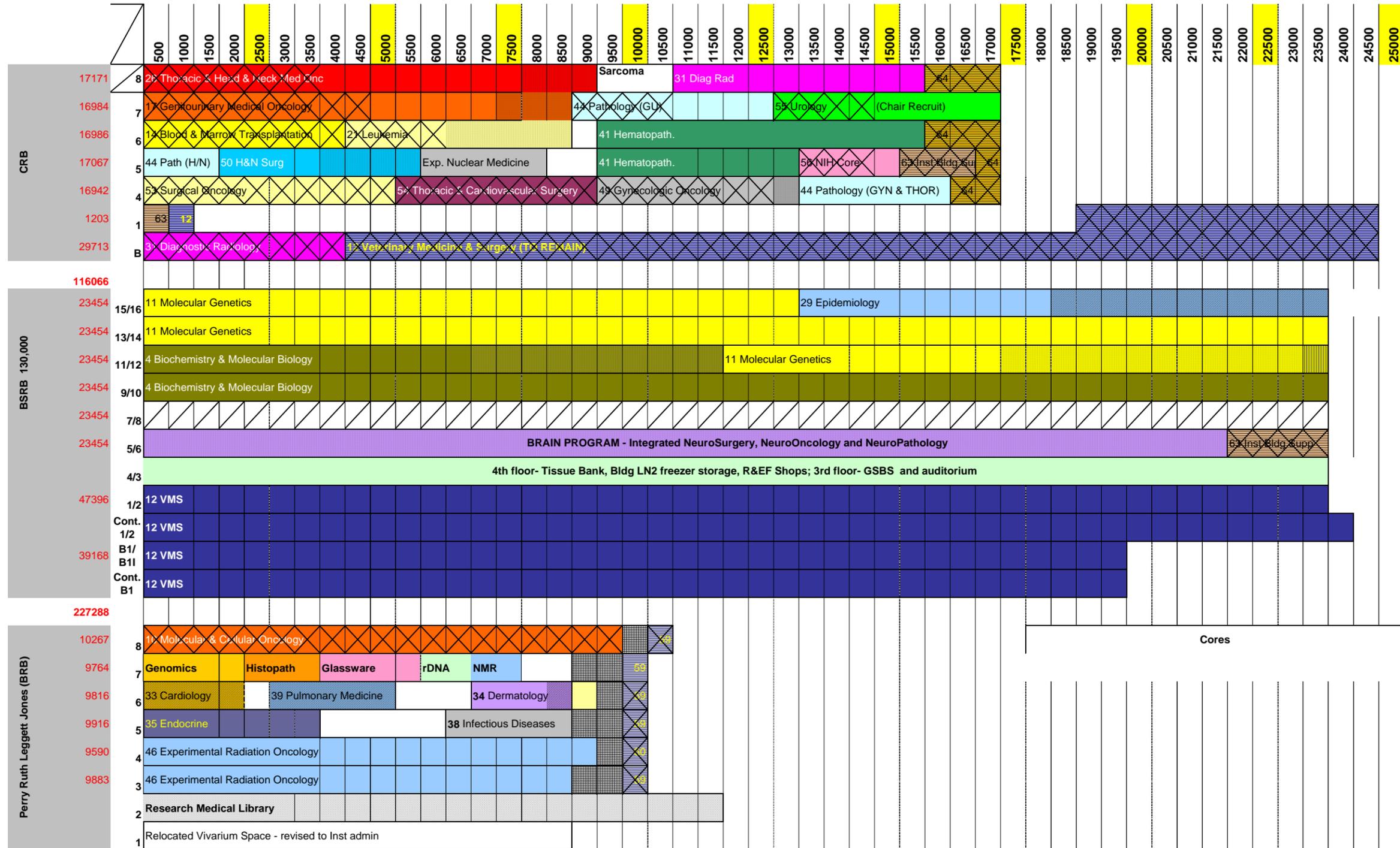
Scheme B illustrated what could potentially become a very long term vision for MDACC. The ability to rejuvenate oneself on a new site was intriguing, but at the same time, not within MDACC's purview at this time. The commitment to the North Campus, the recent investments – both in facilities and monies – preclude MDACC's taking action on this scheme at this time. The over-riding need to address the immediate and near term issues negate the implementation of this scheme.

### **PEOPLE MOVER STUDIES**

The proposed people mover needs to accommodate the movement of staff between the North, Mid, and South campuses in a convenient and to the extent possible, a direct manner. In addition, the people mover should be able to handle the movement of staff between the main hospital and the Legacy Site facilities. Based upon these assumptions, alternate routes for the people mover were reviewed. Copies of these alternate routes can be obtained from the office of Capital Planning and Management.

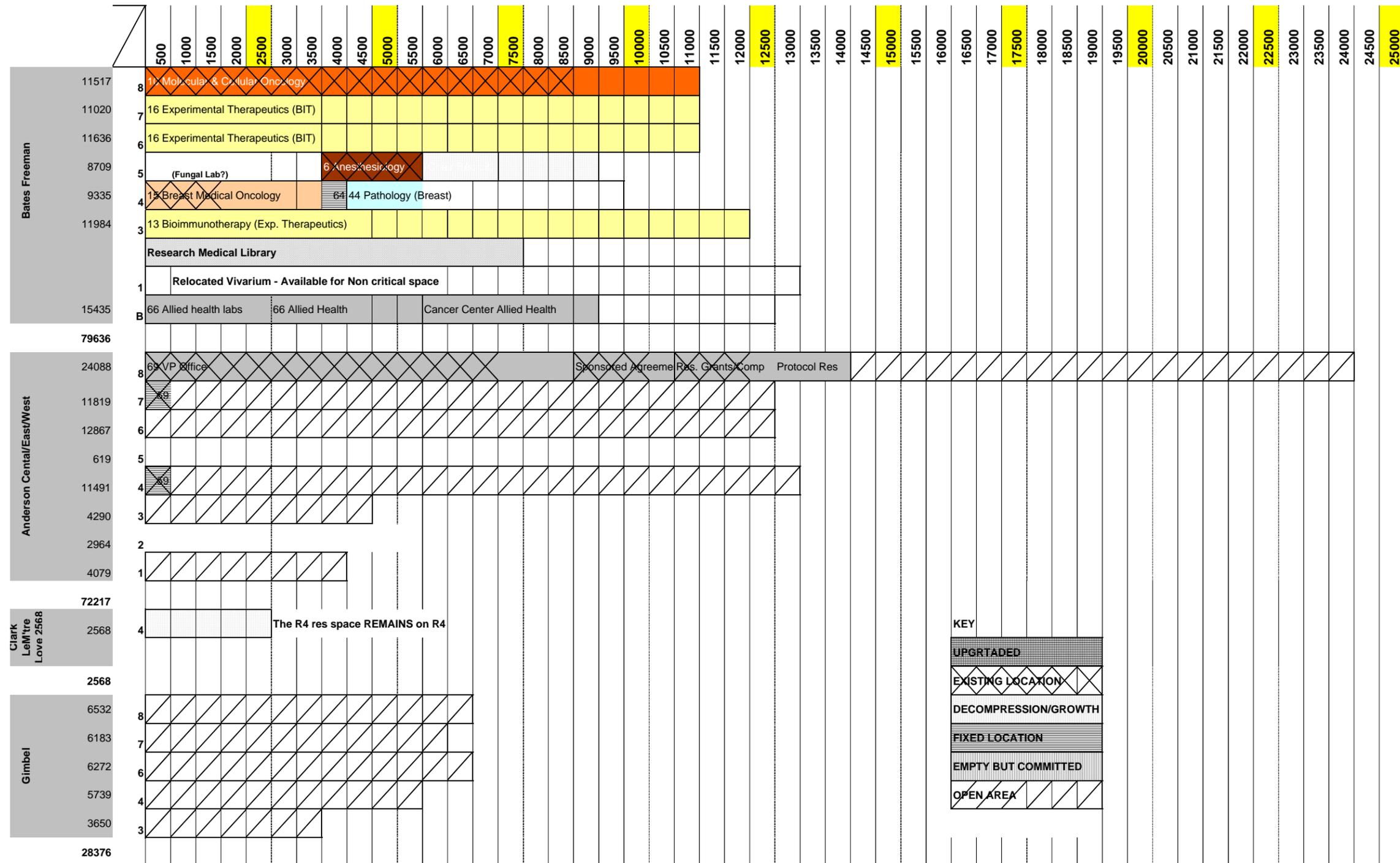
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**RESEARCH STACKING DIAGRAM**



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**RESEARCH STACKING DIAGRAM**

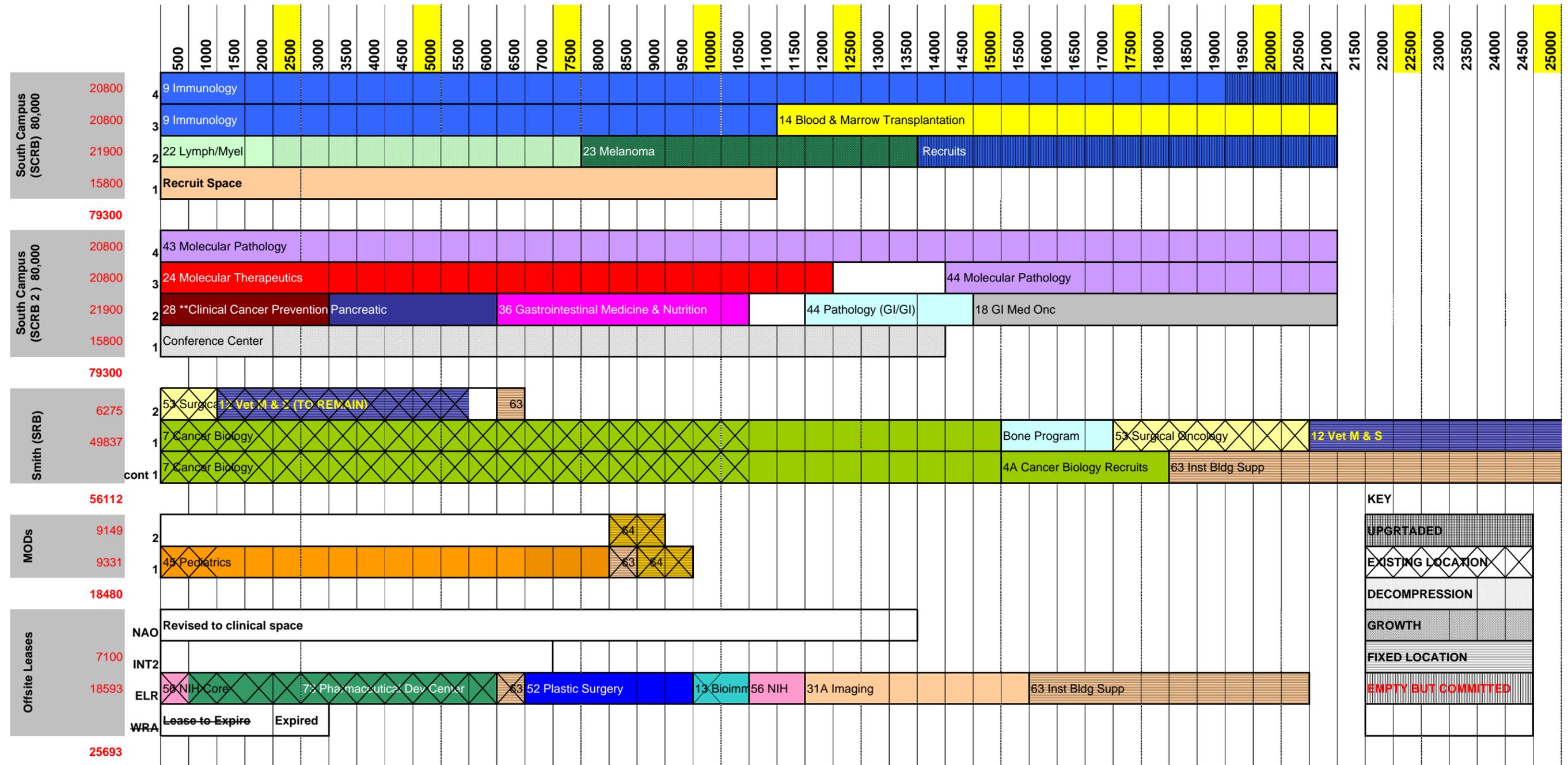


**KEY**

- UPGRADED
- EXISTING LOCATION
- DECOMPRESSION/GROWTH
- FIXED LOCATION
- EMPTY BUT COMMITTED
- OPEN AREA

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**OFF-CAMPUS RESEARCH SPACE STACKING DIAGRAM**



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### Appendix E - GLOSSARY OF TERMS

ACB	Ambulatory Clinical Building
ASB	Administrative Support Building
BRB	Basic Research Building; Percy and Ruth Leggett Jones Research Building
BSRB	Basic Sciences Research Building
CAO	Chief Academic Officer
CFO	Chief Financial Officer
CIO	Chief Information Officer
CIP	Capital Improvement Plan
COO	Chief Operating Officer
CPB	Cancer Prevention Building
CP&M	Capital Planning and Management
CRB	Clinical Research Building (or Tan Zone)
DGSF	Department Gross Square Feet
EC	Emergency Center
FBB	Fannin Bank Building
FEMA	Federal Emergency Management Agency
FHB	Fannin Holcombe Building
FMP	Fannin Medical Plaza
FOB	Fannin Office Building
FSC	Facilities Steering Committee
HMB	Houston Main Building
Houston Campus	The location for MDACC within the greater Texas Medical Center Campus. The Houston campus is defined by the North, South and Mid Campuses
HR	Human Resources
HSC-H	Health Science Center Houston
Jones	Percy and Ruth Leggett Jones Research Building (BRB)

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Legacy Site	Part of the North Campus, South of Holcombe and due East of Fannin. The Legacy Site consists of the ACB, CPB and HMB.
LTCP	Long Term Capital Plan
MDA	M.D. Anderson
MDACC	M.D. Anderson Cancer Center
MEP	Mechanical Electrical Plumbing
Mid Campus	The Mid Campus is bordered by Brays Bayou to the north, Fannin Boulevard to the west, Old Spanish Trail to the south and the current Texas Medical Center Brown Lot to the east.
MSI	Mental Sciences Institute
North Campus	The north campus is comprised of the main MDACC complex located to the north of Holcombe, and extends to Brays Bayou to the south and east, Fannin to the west
NSF	Net Square Feet
PPB	Physical Plant Building
Rad Onc	Radiation Oncology
ROC	Radiation Outpatient Center
SCRB	South Campus Research Building
SF	Square Feet
South Campus	The South Campus is bordered by Old Spanish trail to the North, Fannin Boulevard / Knight Road to the West, El Paseo to the South and Cambridge Street to the East.
SRB	Smith Research Building
TAMB	Texas A&M Building
Tan Zone	Clinical Research Building (CRB)
TECO	Thermal Energy Cooperative
TMC	Texas Medical Center
UT	University of Texas
UT-HSC	University of Texas Health Sciences Center