

Section 4

MASTER PLAN PROCESS AND ANALYSIS

PROCESS

The 2005 Long Beach Memorial Medical Center Master Plan of Land Uses (2005 Master Plan) was prepared through an interactive process involving the project management team for the Long Beach Memorial Medical Center (LBMMC) and the Miller Children's Hospital (MCH), the hospital leadership, and the strategic infrastructure study teams. The 2005 Master Plan builds on both the existing adopted 1999 Master Plan prepared by Bobrow/Thomas and Associates (BTA) and the Kaplan McLaughlin Diaz (KMD) strategic planning process for year 2030 initiated by the LBMMC in 2001 (Figure 4.01, *Conceptual Development Flowchart*).

The LBMMC and MCH retained the services of KMD to develop a 2030 visioning master plan to meet the requirements of the Office of Statewide Health Planning and Development (OSHPD). As part of the 2030 visioning process, LBMMC and MCH undertook extensive analysis of existing and anticipated trends for demographics and related health care requirements. This process included an evaluation of existing surrounding properties that would be potentially suitable for expanding the footprint of the existing LBMMC campus (Campus). The decision was made to work within the existing linear framework of the Campus. In addition, LBMMC and MCH evaluated long-term conceptual development options for the Campus and determined that better utilizing the existing 54-acre Campus would be the most cost-effective means of meeting existing and anticipated future demand for health care services.

As a result of the 2030 visioning process, LBMMC and MCH identified the need for reorganization of land uses within the Campus and additional capital improvements not anticipated by the adopted 1999 Master Plan. As a result, LBMMC and MCH determined to prepare this 2005 Master Plan to distill the relevant information resulting from the 2030 visioning process, which could guide reorganization of the Campus and funding, design, construction, and operation of capital improvements to be pursued to meet anticipated community needs for the year 2020 planning horizon. This 2005 Master Plan includes a recommended Master Plan of Land Uses developed to accommodate the capital improvements that could reasonably be expected to be funded and undertaken to meet the anticipated needs of the Long Beach community by year 2020. This 2005 Master Plan addresses a

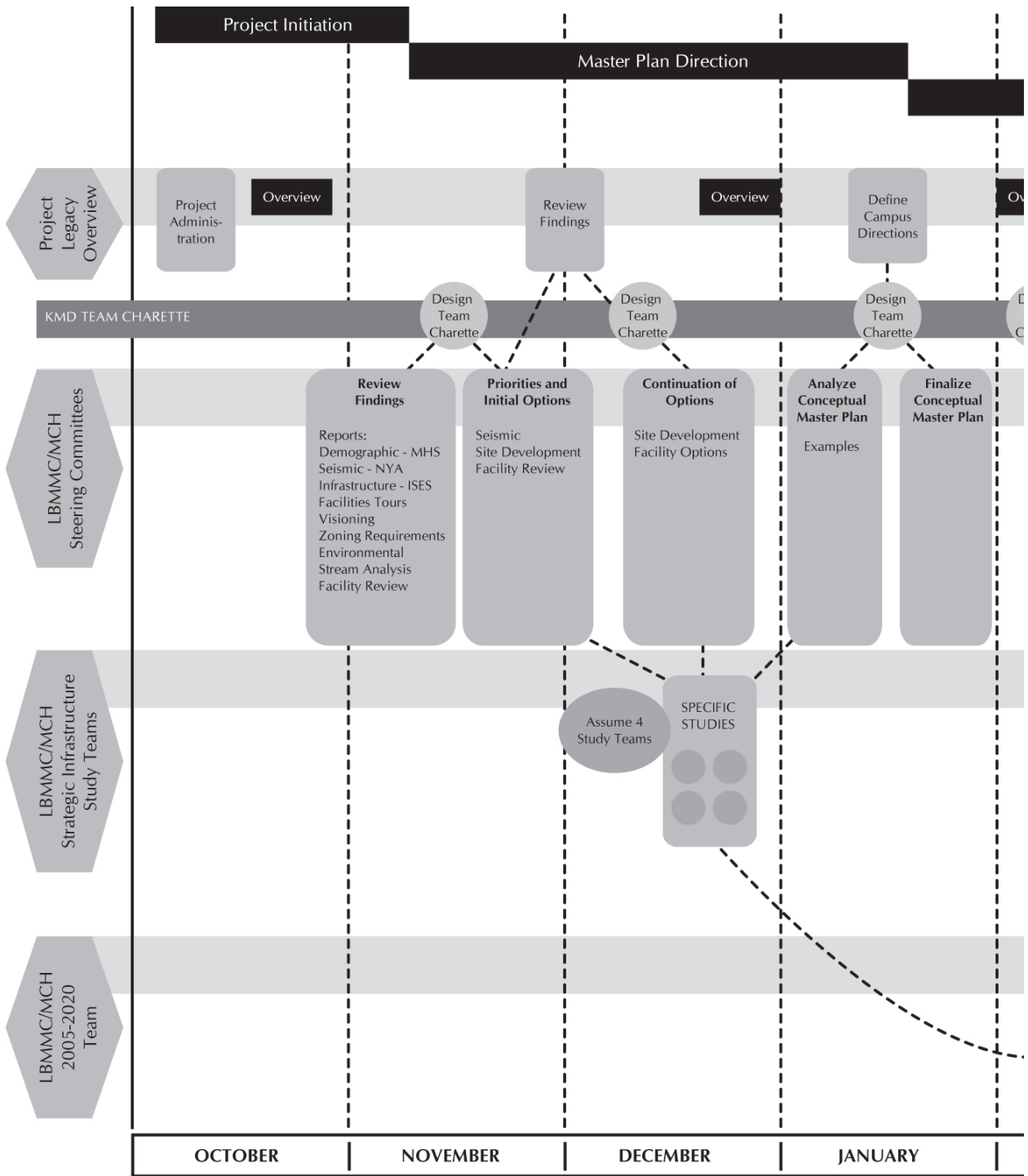
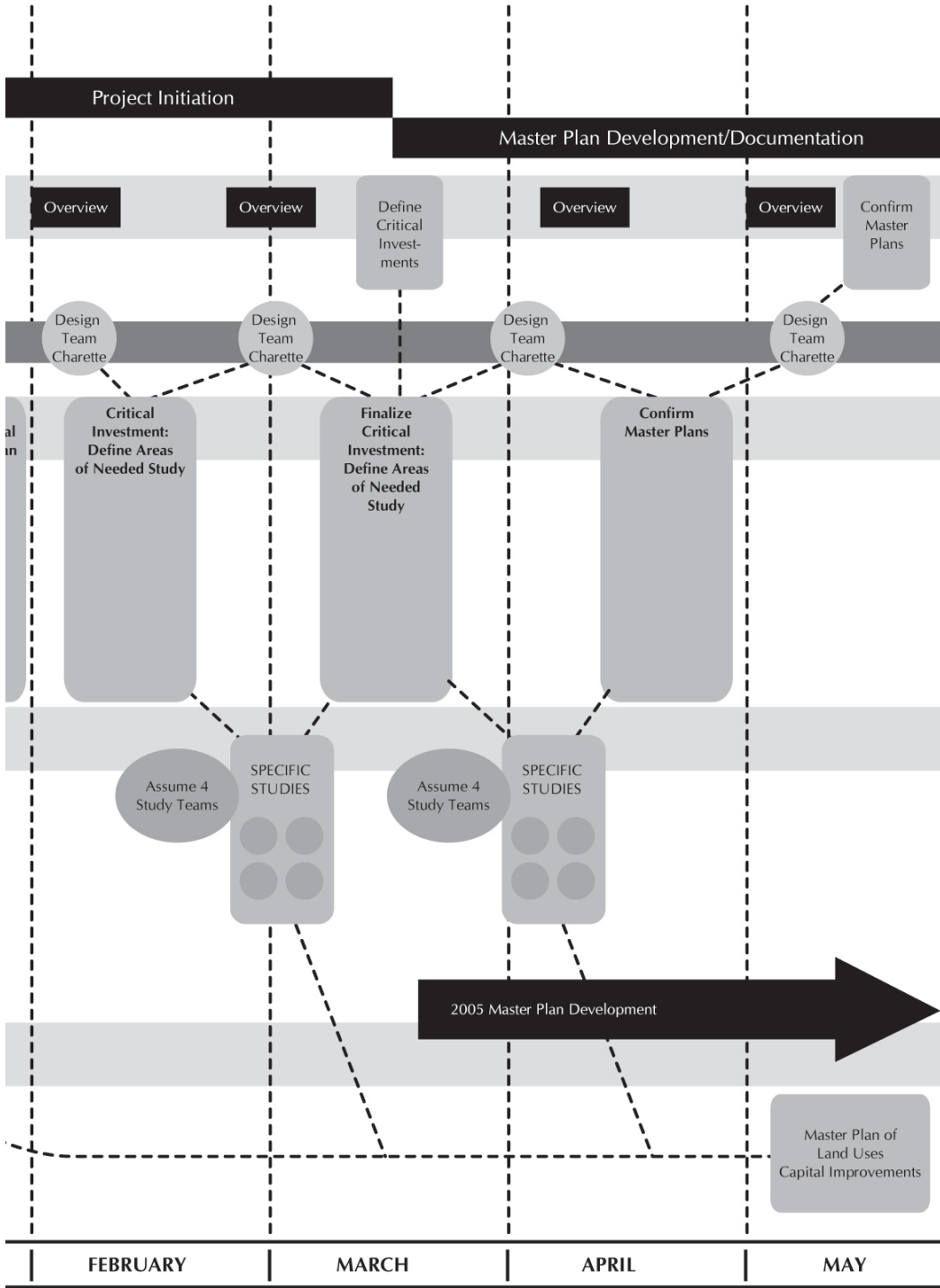


FIGURE 4.01 - Conceptual Development Flowchart





subset of 9 of the 13 goals, identified in the 1999 Master Plan, that remain to be accomplished.

The recommended 2005 Master Plan keeps all development to meet year 2020 needs on hospital-owned property. It sites the Todd Cancer Institute (TCI) at the northwest corner of the Campus, invigorating this corner of the Campus. MCH is expanded along Atlantic Avenue, allowing joint operation with the existing adjacent facilities. Adequate parking is contemplated in a series of new surface parking lots located within and immediately adjacent to the Campus, with possibly an on-site parking structure to accommodate the later phases of development.

TRENDS AFFECTING DEMAND FOR HEALTH CARE SERVICES

The LBMMC anticipates that the demand for outpatient cancer services provided by the current TCI, a programmatic element of LBMMC, will exceed population growth projections due to several key national and local demographic trends:

- Population of high-risk (over age 65) individuals for cancer in the Los Angeles–Long Beach primary metropolitan statistical area will increase from 12 percent to 16 percent between years 2000 and 2020.
- The overall five-year survival rate for cancer will increase from 63 percent in 1998 to 75 percent in 2010. Cancer patients will not undergo complete remission; instead, they will live longer and require ongoing medical care in the form of outpatient services.
- Between the years 2005 and 2010, 90 percent of all cancer care will be delivered in the outpatient setting.

The MCH experienced a 10-percent increase in the demand for pediatric inpatient and outpatient services between years 2001 and 2004. Several factors are expected to result in a

continued increase in demand at a rate of approximately 1 percent per year between 2005 and 2020.

- Anticipated annual population growth of the population under age 15
- Regional trend in closure of hospitals
- Need to absorb pediatric inpatient and outpatient services as a result of the closure of Martin Luther King trauma center

In addition, California Senate Bill 1953 (SB 1953) requires that all buildings used for inpatient care within general acute care hospitals in California meet designated standards within specified deadlines.

CONCEPTUAL DIAGRAMS

In discussing options for Master Plan development for the LBMMC and MCH, several conceptual models for the plan were developed to illustrate the advantages and disadvantages that each potential direction would present. In response to particular site limitations and constraints, two concepts were selected. Even though these were considered to be concepts best suited to the particular site, they were conceived as abstract diagrams that could be implemented under ideal conditions on a “green field” site in order to demonstrate the pure concept (Figure 4.02, *Conceptual Development Options*).

Open Square Development: Advantages to this development type are that it is focused on a central connecting point, minimizing travel distances and providing ease of expansion into an adjacent square. Disadvantages include difficulty in clearing the next square when space is unavailable.

Linear Development: Advantages to the linear development pattern are that it is easily appended and that it allows for a small condition under which disparate parts can be

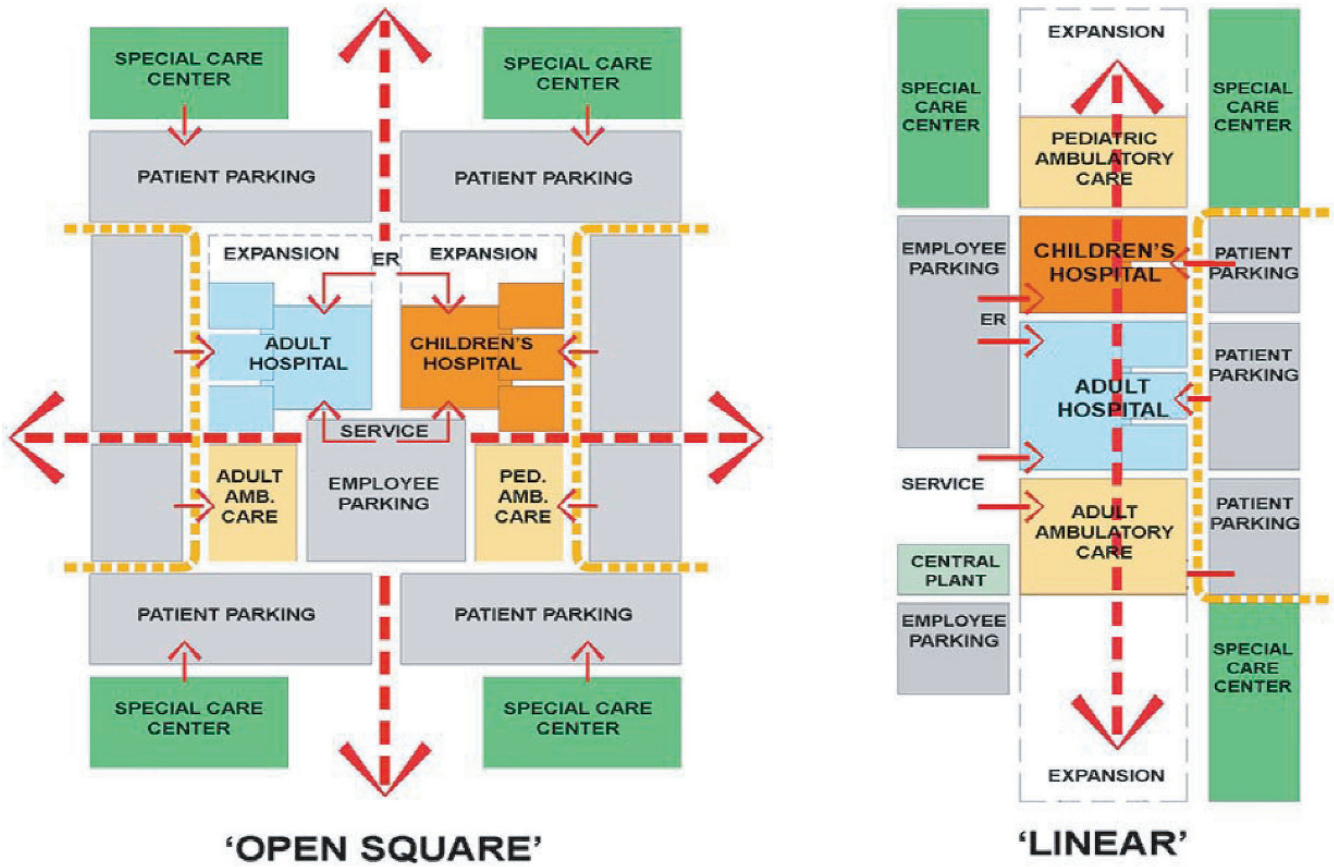


FIGURE 4.02 - Conceptual Development Options



connected. Disadvantages include increased travel distances and potential disruption due to building construction and reconstruction.

EFFECTIVE PROPERTY UTILIZATION

Several areas are available for development, located both to the north and south of the existing Campus. The potential uses on these sites range from hospital parking, medical office buildings, and hospital housing, to private residential developments.

The lot to the immediate south, currently used for hospital parking, is the site of a former landfill and will require remediation to accommodate development. These properties would be suitable for development of land uses that could be undertaken with the site conditions, such as parking and utility infrastructure, including development of a central plant building to support the MCH. The southernmost property is, in large part, owned by the hospital and available for development, but it is currently occupied by multiple structures. These buildings would need to be demolished to accommodate future development recommended by this 2005 Master Plan.

The sites to the immediate north are currently occupied by hospital-owned and non-hospital-owned buildings. These buildings and existing adjacent pedestrian and vehicular paths of travel need to be considered in establishing linkages to redevelopment of existing underutilized properties located south of Spring Street.

There are several non-hospital-owned properties located within the general footprint of hospital-owned properties within the City of Long Beach. In addition, there are several non-hospital-owned properties located between the existing Campus and other hospital-owned properties east of

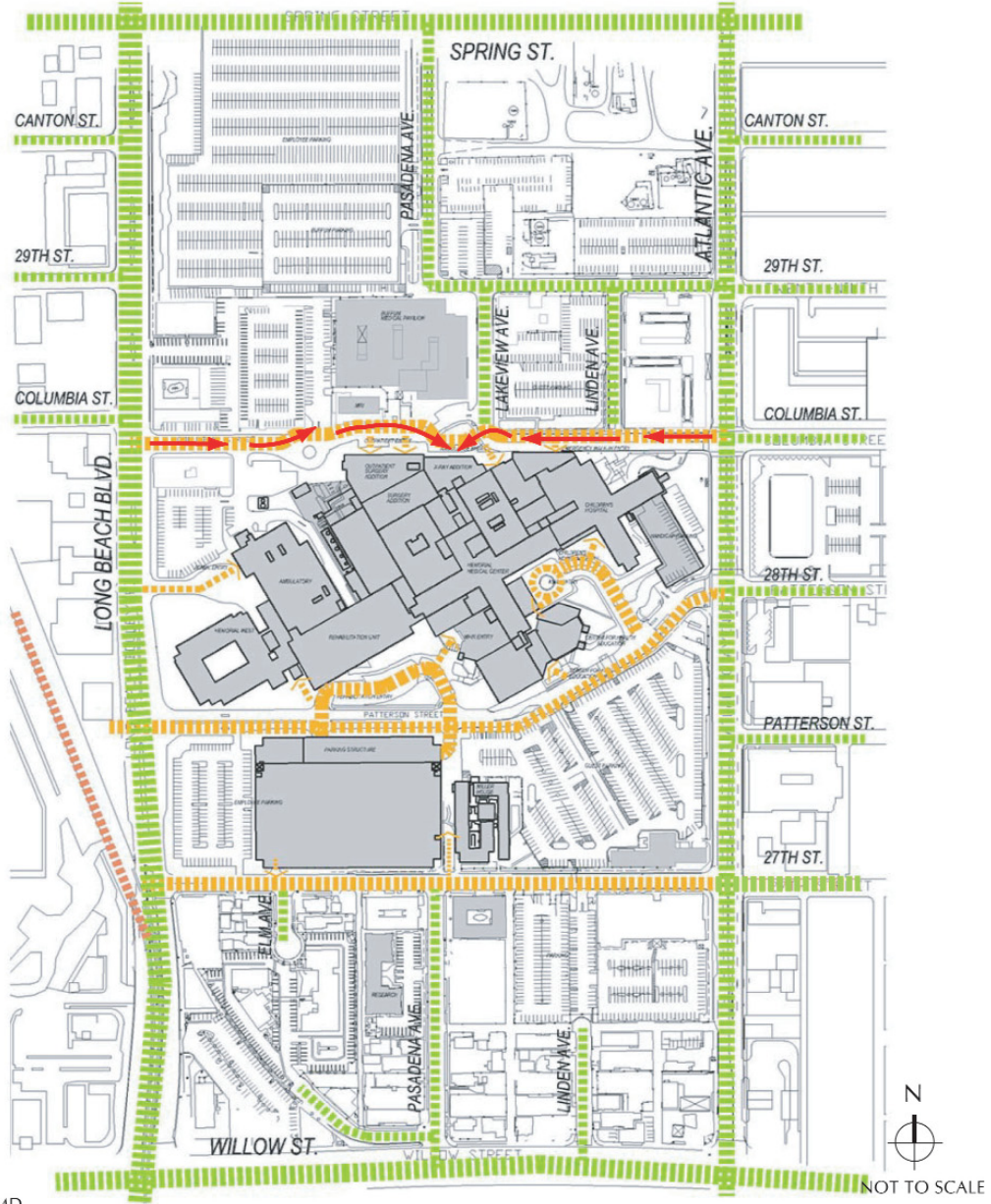
Atlantic Avenue in the City of Signal Hill. Although the LBMMC has determined that the development of existing underutilized hospital-owned properties is the most effective means of accommodating the year 2020 anticipated needs of the community for health care services, opportunities for amassing additional key properties will continue to be evaluated on a case-by-case basis.

ZONING

The expansion of the Planned Development (PD-29) District zoning that exists in the northwestern area of the Campus would provide the ideal location to construct a new building or buildings to accomplish multiple objectives of this Master Plan. The height limitations associated with the PD-29 District zoning allow for the development of an outpatient building of sufficient height to accommodate the existing gross floor area occupied by the programmatic functions of the TCI within the existing dispersed locations, as well as providing sufficient space to accommodate anticipated future demands.

CIRCULATION

The development of the Master Plan must be undertaken in a manner that recognizes the existing major circulation patterns and local circulation to and from existing hospital access points (Figure 4.03, *Circulation Patterns*). The 405 Freeway is several blocks to the north of the Campus and provides access to the two main arteries serving the LBMMC and MCH: Long Beach Boulevard and Atlantic Avenue. Columbia, 28th, and 27th Streets all provide secondary access to the Campus. Columbia Street is the main access to the emergency room and the surgery center, 28th Street is the main access to the main hospital and MCH entrances and drop offs, and 27th Street is the main entrance to the employee parking structure.



SOURCE: KMD

LEGEND

- General Traffic
- Campus Traffic

- Emergency Response Vehicles Route of Travel

FIGURE 4.03 - Circulation Patterns



All of these streets are major roads and should have sufficient capacity to accommodate new trips into and from the Campus.

Service vehicle access improvements should receive special attention to ensure that there will be no conflicts with patient traffic and pedestrians.

PARKING

Although there are 259 excess parking spaces available within the Campus, it is anticipated that an increase of more than 125 licensed beds or addition of more than 51,000 square feet or any comparable combination would require the development of additional parking.

Parking will be lost due to the demolition of the existing 86-car parking structure located immediately adjacent to the MCH, and the realignment of Patterson Street/Memorial Drive to the south would create an area of sufficient size to accommodate the construction of new structures for the projected need for inpatient and outpatient pediatric services. Additional parking will be lost to the footprint of the TCI.

There is insufficient space to accommodate the additional need for parking solely through the development of surface parking. However, landowners for adjacent properties to the northeast of the Campus have identified their intention to develop these properties as surface parking areas on an interim basis. The ability to enter into a five-year lease for surface parking with adjacent property owners would allow the LBMMC and MCH to prioritize funding for capital improvements to directly address the immediate need for expanded capacity for inpatient and outpatient services. City approvals to construct and operate Campus buildings will be contingent on LBMMC and MCH's ability to demonstrate the availability of long-term parking. It is anticipated that development of a parking structure within the Campus or a nearby property would be required to support the full build-out of the Campus anticipated by this Master Plan.

RECOMMENDATIONS

As part of the 1999 master planning process, the LBMMC management facilitated workshops that included the LBMMC administration, medical staff, users, and board members. The focus of these workshops was to develop lists of pressing LBMMC facility issues and prioritize them into a list of planning goals. Subsequent to that effort, the LBMMC retained KMD in 2003 to develop facilities strategies to meet SB 1953 mandates, as well as to modernize the existing LBMMC and MCH facilities to meet current and projected needs. The following recommendations are derived from these previous planning efforts and the site and building analysis.

Of the 13 issues identified in the 1999 Master Plan, 9 are relevant to the current master planning effort.

1. Customer Service/Patient Flow/Access
Make LBMMC more patient focused and patient friendly. The intent is to personalize service and make the entire hospital experience convenient to patients and their families.
2. Infrastructure
Enhance hospital operations, efficiency, and employee satisfaction and meet code requirements, including those mandated by SB 1953. Accomplish hospital improvement in a cost-effective manner.
3. Miller Children's Hospital
Enhance the operations, flow, and identity of the MCH, including licensing issues, inpatient units, impacted neonatal intensive care unit (NICU) facilities, inpatient overflow, and emergency flow.
4. Outpatient
Develop outpatient services, including continued reorientation of services to outpatient delivery. Consolidate outpatient functions into easily accessed locations, including outpatient surgery, diagnostic and testing areas, and outpatient clinics.



5. Community Image

Redefine and enhance the LBMMC's image in the local community. Consider the impact of changing community demographics and the LBMMC's role as a provider of community health education.

6. Amenities

Enhance the LBMMC's services and patient-focus through the provision and/or development of amenities, including accommodations for family members, wellness/fitness facilities, and a children's playground. Consider a hotel to support visiting family members.

7. Services

Provide support services that will enhance hospital operations and efficiency. Consider the location of the lab, transcription services, the location and flow of sterile processing, and the provision of 23-hour beds for observation and reduced patient admissions.

8. Master Plan

Provide the LBMMC with a clear plan that will allow for future growth and expansion, including the identification of opportunities to provide for more efficient and patient friendly use of space.

9. Tertiary Services

Identify and develop tertiary services to be provided at the LBMMC, in conjunction with its role in the community. Further define the role of oncology services, enhance surgical operating rooms, and create interventional service recovery areas.

DESIGN GUIDELINES

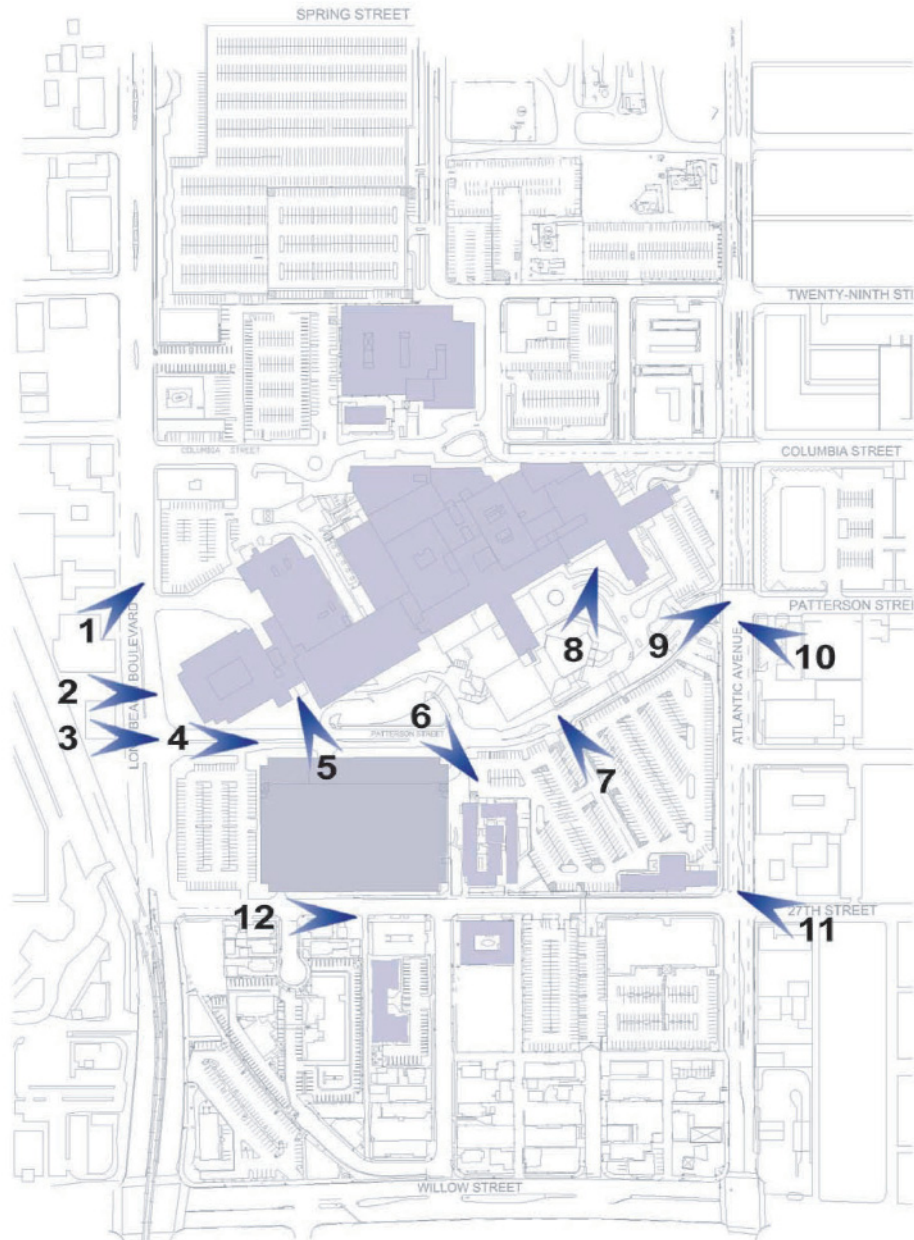
As part of the development of this Master Plan, photographic documentation of the existing facilities and public areas of the Campus was undertaken (Figure 4.04, *Site Photographs*). The LBMMC and MCH used the existing successful landscape treatments, lighting plans, and sign program as the basis for developing the Campus-wide design guidelines.



LEGEND

- 13. Long Beach Boulevard looking northeast
- 14. Administration building west elevation
- 15. Patterson Street entrance from Long Beach Boulevard
- 16. Patterson Street looking east
- 17. Administration building entry
- 18. Miller House north elevation
- 19. LBMCC from south parking lot
- 20. Entry to Miller Children's Hospital
- 21. Atlantic Avenue at Patterson Street
- 22. Memorial Drive entrance off Atlantic Avenue
- 23. Looking southwest across southeast corner of the Campus
- 24. Looking east along 27th Street

FIGURE 4.04 - Site Photographs





LEGEND

- 1. Atlantic Avenue looking northwest
- 2. View north across Spring Street
- 3. Campus entry from Spring Street
- 4. 29th Street looking southeast
- 5. 29th Street looking eastwest
- 6. Columbia Street looking east
- 7. Emergency access on Columbia Street
- 8. CT and MRI Center on Columbia Street
- 9. Columbia Street looking west
- 10. Columbia Street looking east
- 11. Administration Building northwest corner
- 12. Medical office building on (in the background) Long Beach Boulevard

FIGURE 4.04 - Site Photographs

