



## SECTION 4: MASTER PLAN





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### Future Land Use Plan

The first step in conceptualizing the future Medical District is to prepare a **20-year Future Land Use Plan** based on the previously conducted Market Assessment. The Land Use Plan establishes the recommended long-term land use development pattern on a block-by-block basis throughout the District. Input was used from the results of the existing land use inventory, the Medical District Commission and Advisory Council, analysis of neighboring areas' land use and development activity (the "extended area"), and successful Medical District's elsewhere. The land uses planned for the Mid-America Medical District include:

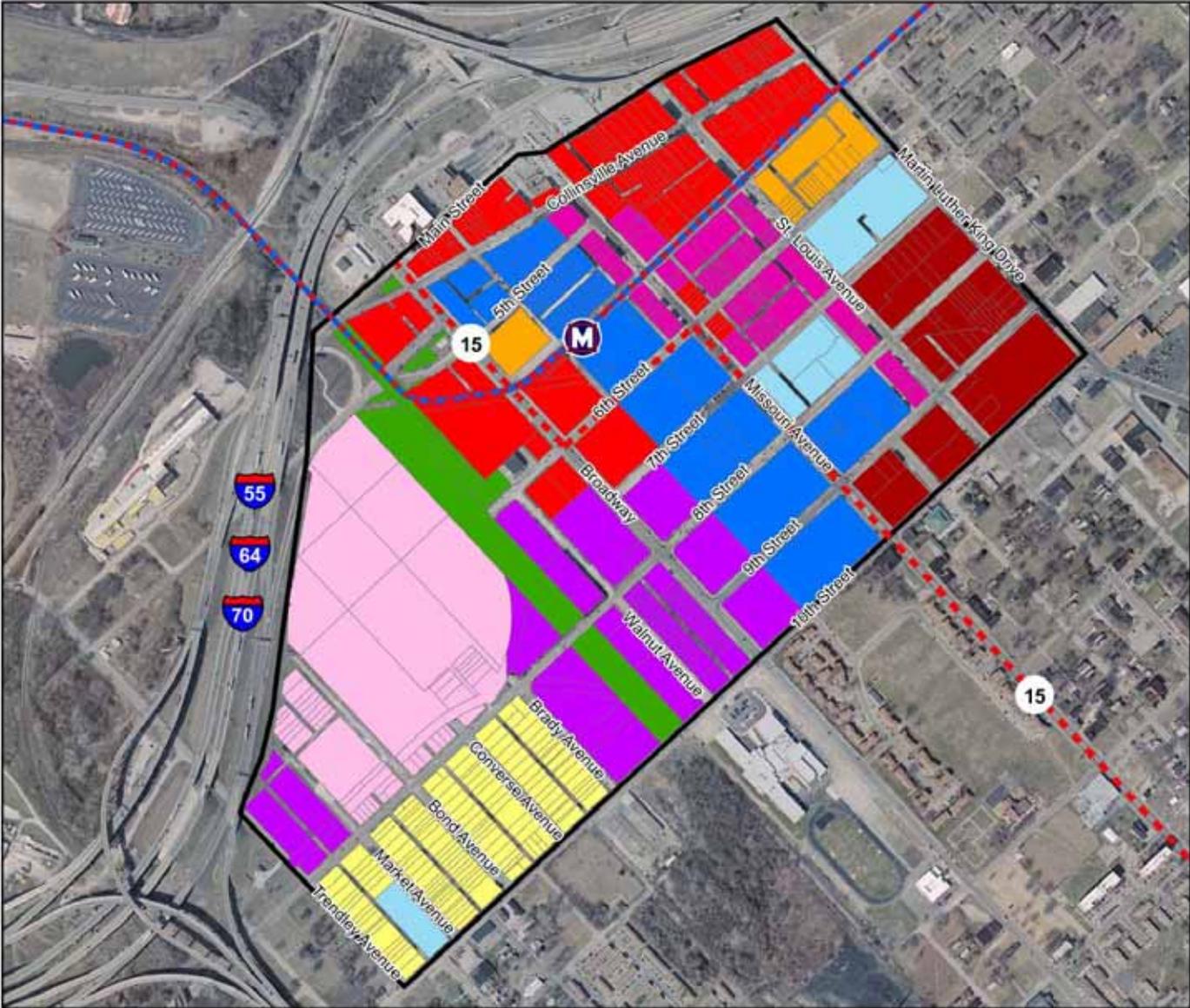
- Single and Multi-Family Residential
- Commercial (retail, restaurant, entertainment, hotel, etc.)
- Heavy Commercial (showroom, back office, light assembly, and storage functions)
- Medical (institutions, clinics, labs, offices)
- Educational (schools)
- Office (professional and administrative offices)
- Institutional (civic, religious, public administration, not-for-profit, utility)
- Government (Federal, State, County and City)
- Parks/Greenways

Key Future Land Use Plan organizing elements evolved as the plan was created. These organizing elements included the following:

- Medical uses should be concentrated around the primary existing medical facilities, including the former Hospital and the Windsor Medical Arts Building on Broadway.
- A strong organizing corridor, or pedestrian mall, for government uses exists between Missouri Avenue and Broadway, extending from the Kenneth Hall State Office Building on the northwest to the U.S. Post Office on the southeast.
- The East St. Louis Higher Education Campus (ESLHEC) forms a large educational campus in the western portion of the District.
- Commercial uses including retail, restaurants/eating and drinking places, banks, and mixed use retail/office buildings should be directed to Collinsville Avenue (the District's traditional commercial district, or Main Street), and secondarily to the north end of Broadway (potentially including such uses as commercial recreation and child care facilities).
- Future office development would likely serve government support functions (law, community and social services, public education) and business and personal services functions (computers, general business, finance, insurance, and real estate) and were located adjacent to these areas.

- The remaining future land uses typically followed existing locational trends, such as single family residential in the southwestern portion of the District, multi-family residential in the northeastern portion of the District (and just outside the District), and heavy commercial uses near Dr. Martin Luther King Drive and 10<sup>th</sup> Street.
- An ideal greenway corridor concept emerged along the abandoned rail corridor west of Broadway, effectively buffering the commercial and medical uses to the east from the educational and residential uses to the west.

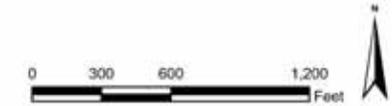
In addition to the Future Land Use Plan for property within the Medical District, it was prudent to understand the potential development of property surrounding the District. These outside uses would have a direct impact on both the location and the amount of similar or complementary uses inside the District. Through this process, a composite 20-year Future Land Use Plan was created for the Mid-America Medical District that was complemented by the surrounding **Extended Area Future Land Use Plan**. It also allowed for a more comprehensive picture of land use areas (especially residential and greenway) and the addition of a Life Science & Green Technology industrial component to the Master Plan.



**Legend**

**Land Use Categories**

- Single-Family Residential (1-4 units)
- Multi-Family Residential (5+ units)
- Commercial
- Heavy Commercial
- Medical
- Education
- Office
- Institutional
- Government
- Parks/Greenway
- Medical District Boundary



**Mid-America Medical District  
Master Plan**

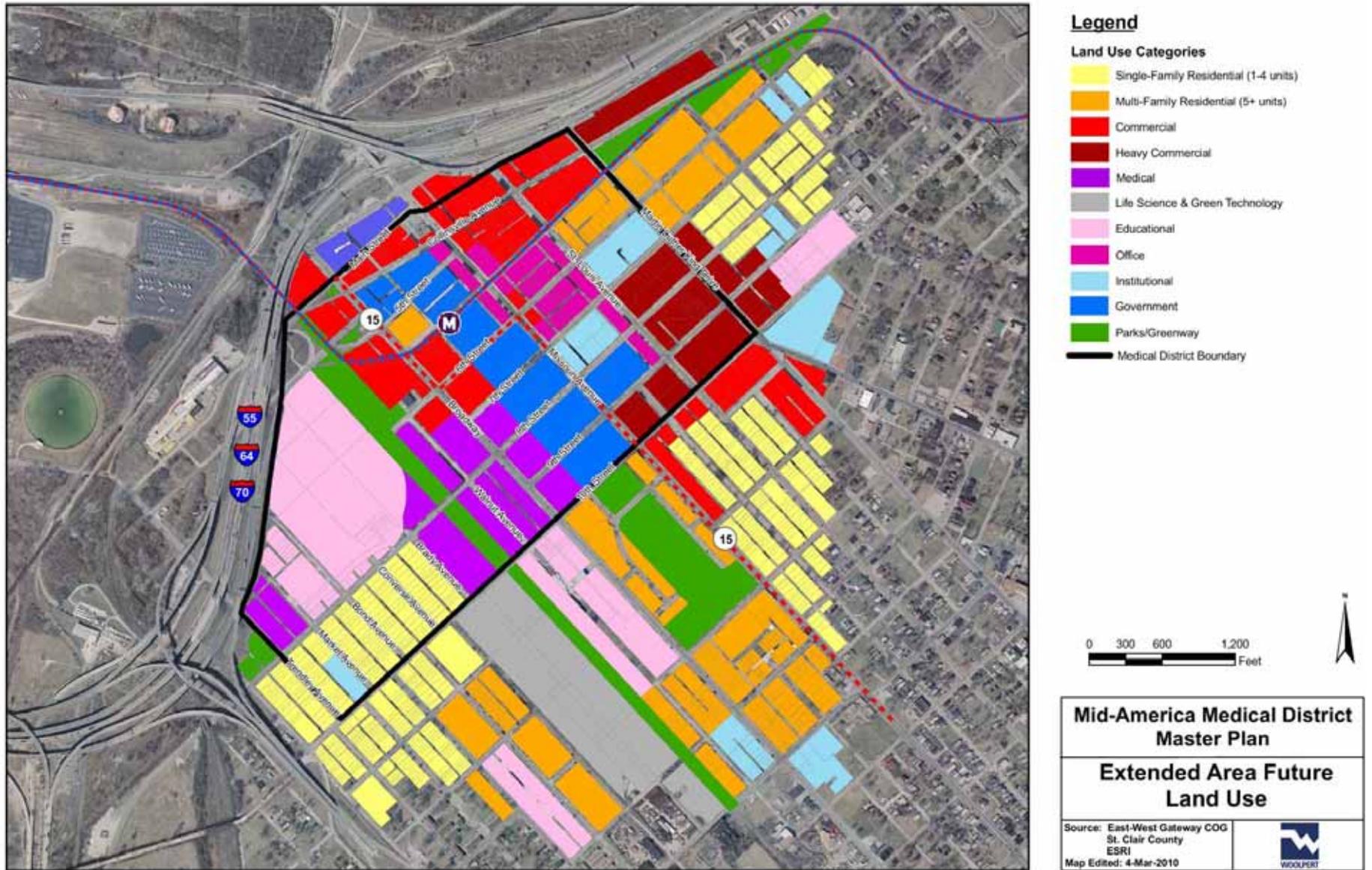
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**Future  
Land Use**

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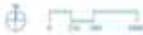
Source: East-West Gateway COG  
St. Clair County  
ESRI  
Map Edited: 25-Feb-2010







Site Plan - Proposed



**Mid-America Medical District Master Plan**  
East St. Louis, Illinois  
20 April 2010





View from South

### Aerial Renderings - Proposed



## Mid-America Medical District Master Plan

East St. Louis, Illinois  
20 April 2010





View from West

### Aerial Renderings - Proposed



## Mid-America Medical District Master Plan

East St. Louis, Illinois  
20 April 2010



## Circulation Plan

A Circulation (Transportation) Plan was prepared to identify recommended improvements or changes to the local and State transportation system serving the Medical District. Interstate 64/55/70 access, local street access, and mass transit (MetroLink/MetroBus) access were evaluated for their ability to effectively move people into, out of, and through the District. Improving access normally includes recommendations for configuration, function, and form of the transportation system.

Circulation improvements should be structured to reinforce regional connections, link district campuses, emphasize gateways, and complement the Urban Design Framework established for the District. Key components of the Circulation Plan include:

- Improve the landing area of the off-ramp from EB I-64/55/70 to 4<sup>th</sup> Street and the take-off area of the on-ramp to WB I-64/55/70 from Main Street. Construct signature gateway features and improved directional signage. Provide new landscaping on adjacent Right-of-Ways to create a sense of arrival at District boundaries.
- Consider future connections from the Medical District greenbelt to the Malcolm W. Martin Memorial Park through enhanced pedestrian and bicycle paths along 4<sup>th</sup> Street and Trendley Avenue. Utilize a combination of shared use paths, shared roadways, and designated bike lanes.
- Extend 6<sup>th</sup> Street to the ESLHEC to establish a linkage between the Education Campus and other campuses. 6<sup>th</sup> Street should be developed as a Landscaped Boulevard to establish a primary north-south circulation corridor through the District, building on its proximity to the MetroLink station at the center of the District.
- Modify Missouri Avenue to reinforce its function as a primary east-west circulation corridor through the District and its connection to the region to the east via Illinois Route 15. Create a Landscaped Boulevard with appropriate signage to direct visitors to internal campuses and destinations within the District. Construct signature gateway features at the intersection of Missouri Avenue and 10<sup>th</sup> Street to create a sense of arrival at District boundaries.

- Modify Broadway to reinforce its function as a primary east-west circulation corridor through the District and its connection to the region to the west via the Eads Bridge and I-64/55/70. Create a Landscaped Boulevard with appropriate signage to direct visitors to internal campuses and destinations within the District. Construct signature gateway features at the Broadway and 3<sup>rd</sup> Street and Broadway and 10<sup>th</sup> Street intersections to create a sense of arrival at District boundaries.
- Maintain the existing street grid throughout the remainder of the Medical District to provide for vehicular and pedestrian circulation as well as utility corridors.
- Create shared parking lots within District campuses to accommodate growth and reorganization within the District, reduce the requirements for on-street parking, and encourage pedestrian connections between campuses. Promote visitor awareness of parking areas through signage, paths and landscapes which direct them to the most appropriate lot for their destination.
- Work with Metro and regional traffic planners to evaluate bus stop locations to accommodate District campus reorganization and newly developed destinations. As the District becomes more fully developed, consider a local shuttle bus (bio-fuel or other alternative fuel) to provide local transportation within the District. This concept could be particularly beneficial to a senior population with limited access to transportation facilities.



*MetroLink and  
MetroBus Station*

- Promote pedestrian circulation within the District through pedestrian friendly, Americans with Disabilities Act (ADA) compliant walkways, paths, and trails. Replace MetroLink grade crossings as required to provide smooth, ADA accessible pedestrian crossings.
- Utilize a combination of shared use paths, shared roadways, and designated bike lanes to provide connections to District greenways, campuses, and regional bike routes.
- Provide uniform directional signage within the Medical District to direct visitors to major campuses and significant destinations. Provide way-finding signage on Interstates 64/55/70 and Illinois Route 15 to direct visitors to the District. Work with Metro to identify District signage in conjunction with the 5<sup>th</sup> & Missouri MetroLink Station.



*Interstate Highway System Converges at the Medical District*

## Capital Improvements Plan

The Capital Improvements Plan focuses on providing the proper physical setting for implementation of the Medical District Land Use Plan. System recommendations include maintenance or clearance of existing buildings and grounds, condition and capacity of public infrastructure including roads, water, sanitary sewer, and storm sewer systems, electric, gas, telecommunications, natural resource preservation needs, and man-made environmental or other built constraints to development. Key components of the capital improvements plan are provided below.

## Buildings and Grounds

The Medical District Situation Analysis established an initial condition rating for the buildings and properties located within the District based upon windshield surveys. This condition assessment did not include up-close inspections to evaluate the integrity of the building shell, structural framing, and building systems (HVAC, Plumbing and Electrical). Consequently, some buildings identified as good or fair condition may have significant structural or system deficiencies that were not evident. Selective building mothballing or demolition, underground utility removal, and lot clearance should be undertaken for areas designated as fair or poor condition. As specific properties are targeted for redevelopment, the District should require developers to perform due diligence in assessing the magnitude and cost of the renovation.

Minimum quality standards should be established in the District for vacant properties, and should include strict enforcement of existing zoning and building codes. Dumping should be prohibited and property owners should be required to maintain minimum exterior standards. The District should engage local property owners, institutions, and businesses in clean-up efforts to promote renewal within the District.

The Situation Analysis also identified a number of existing structures that make positive contributions to the District. Their continued presence should be encouraged and will help provide a valuable link to the historic past of East St. Louis.

## Roadways

Roadway improvements are generally related to physical upgrades of existing streets, curbs, gutters, and sidewalks, as well as the construction of landscaped boulevard sections and enhancement of the Collinsville Avenue business district streetscape.

- **Single Family Residential Zone (Trendley Avenue, Market Avenue, Bond Avenue, Converse Avenue, and Brady Avenue between 8<sup>th</sup> and 10<sup>th</sup> Streets)**—Construct new roadway pavement, curb and gutter, and public sidewalks throughout entire single family residential development. Provide curb cuts for new driveways and access to shared parking lots.
- **Walnut Avenue**—Construct new roadway pavement, curb and gutter from 8<sup>th</sup> St. to 10<sup>th</sup> St. Provide sidewalks and new curb cuts to residential properties on the south side and the new Medical Campus facilities on the north side.
- **Collinsville Avenue**—Construct select sidewalk and curb repairs to complement streetscaping established within this business district’s Urban Design framework. Provide new curb cuts for access to shared-use pocket parking lots.
- **6<sup>th</sup> Street**—Construct new pavement, curb and gutter, and public sidewalks from Dr. MLK Drive to Missouri Avenue. Mill and overlay existing pavement from Missouri Avenue to East Broadway. Remove and replace select curb and gutter and sidewalk sections as required for access to new facilities. Construct new 6<sup>th</sup> Street extension from East Broadway to the Higher Education Campus. New construction between St. Louis Avenue and the Higher Education Campus should be consistent with the Landscaped Boulevard streetscape established in the Urban Design framework.
- **7<sup>th</sup> Street**—Construct new pavement, curb and gutter, and public sidewalks from Dr. MLK Drive to Missouri Avenue. Modify existing curbs and sidewalks from Missouri Avenue to East Broadway to provide access to new facilities and shared parking lots.
- **8<sup>th</sup> Street**—Construct new pavement, curb and gutter, and public sidewalks from Dr. MLK Drive to Missouri Avenue. Construct select curb and gutter and sidewalk repairs between Missouri Avenue and East Broadway. Construct new curb cuts and infill existing curb cuts to address changes in access requirements. Construct new pavement, curb and gutter, and public sidewalks from East Broadway to Trendley Avenue.
- **9<sup>th</sup> Street**—Continue current program of curb and gutter replacement from Dr. MLK Drive to East Broadway. Construct new pavement and sidewalk improvements from Dr. MLK Drive to Missouri Avenue. Mill and overlay

existing pavement from Missouri Avenue to East Broadway. Construct new curb cuts and infill existing curb cuts to address changes in access requirements.

- **10<sup>th</sup> Street**—Construct new curb and gutter and sidewalks on 10<sup>th</sup> Street from Trendley Avenue to Dr. MLK Drive. Construct new curb cuts to accommodate new access requirements into Medical District facilities.
- **East Broadway**—Construct select pavement, curb and sidewalk improvements consistent with the Landscaped Boulevard streetscape established in the Urban Design framework.
- **Missouri Avenue**—Construct select pavement, curb and sidewalk improvements consistent with the Landscaped Boulevard streetscape established in the Urban Design framework.
- **St. Louis Avenue**—Construct new curb and gutter and sidewalks from Collinsville Avenue to 10<sup>th</sup> Street. Mill and overlay existing pavement.
- **Dr. Martin Luther King, Jr. Drive**—Construct new curb and gutter and sidewalks on Dr. MLK Drive from Collinsville Avenue to 10<sup>th</sup> Street. Construct new curb cuts to accommodate new access requirements into Medical District facilities.

## Water Utility

The reorganization of the Medical District into campuses or zones of similar land uses will be beneficial from a water utility perspective. Large water users will generally be grouped into specific geographic areas. Consequently, the ability to provide adequate capacity and redundancy in the water system will be economically achievable. All water system improvements should be coordinated and phased appropriately with ongoing roadway improvement projects. From a planning level perspective, several key improvements to the water system should be anticipated.

- **6<sup>th</sup> Street**—Construct a new 8-inch water main from Dr. MLK Drive to St. Louis Street. Coordinate construction of the new main with 6<sup>th</sup> Street roadway improvements in this area. This new main will replace an existing 4-inch and 6-inch water line and will provide additional capacity for the planned development of Multi-Family Residential units and Office facilities in this area.

- **8<sup>th</sup> Street**—Construct a new 10-inch water main from East Broadway to Market Avenue. This new main will provide additional capacity and redundant service to the planned Educational facilities north at the ESLHEC and the Medical facilities on Brady Avenue.
- **St. Louis Avenue**—Construct a new 8-inch water main from 8<sup>th</sup> Street to 10<sup>th</sup> Street. This main will replace an existing 6-inch water line and will provide additional capacity and redundancy for the planned Heavy Commercial facilities on the north side of St. Louis Street.
- **10<sup>th</sup> Street**—Construct a new 8-inch water main in 10<sup>th</sup> Street from Dr. MLK Drive to St. Louis Avenue. This main will replace an existing 6-inch water line and will provide additional capacity and redundancy for the planned Heavy Commercial facilities in this area.
- **Single Family Residential Zone (Trendley Avenue, Market Avenue, Bond Avenue, Converse Avenue, and Brady Avenue between 8<sup>th</sup> and 10<sup>th</sup> Streets)**—Construct new 6-inch water mains on these streets in conjunction with new roadway improvements. These improvements will provide increased water system capacity and service life for the planned Single-Family Residential development in this area.

## Sanitary Sewers

The Medical District lies within an area that is (or once was) fully developed. Consequently, there is an existing combined sewer system in place that provides storm and sanitary sewer service to all areas within the District boundaries. As-built records of the existing system were limited to base maps showing the size and approximate location of the sewers. In order to quantify the hydraulic capacity and physical condition of the sewer system, an extensive study of the system would be required, a process that fell beyond the scope of this Master Plan.

However, based upon discussions with representatives from the City of East St Louis Public Works Department, the Metro East Sanitary District, and site observations, several key conclusions can be drawn regarding the existing combined sewer system and its ability to meet the sanitary system requirements of the District.

- The City should establish a program to perform condition assessments of all of the sewers within the District. The assessment should include smoke testing,

high-pressure cleaning/vacuuming, and closed-circuit TV internal inspection of the sewers to identify problem areas. Initial investigations should be performed in those areas targeted for initial phases of redevelopment.

- Require condition assessments of the existing sewer system as part of any programmed street rehabilitation project. This will help identify problem sewers that may require open cuts for removal or replacement within the roadway Right-of-Way.
- Utilize trenchless technology for sewer rehabilitation projects whenever possible. This will help avoid open cut excavations that result in costly repairs for pavement and landscaping restoration. Trenchless technology should include cured-in-place pipe lining and pipe bursting.
- Due to the possibility of combined sewer surcharging and water backup potential, gravity sewer service to basements should be prohibited. This requirement should apply to all new construction as well as major rehabilitation projects.
- Require developers to construct and dedicate new public sanitary sewers in all areas undergoing extensive rehabilitation. An example of this requirement would be for the extensive single family residential development at the southwest corner of the District.

## Storm Sewers

The existing combined sewer system provides service to all areas within the Medical District boundaries. This system has been constructed and expanded over the course of many decades. During that time, the design standards may have been less demanding than current standards. Additionally, growth and development in the region has resulted in increasing storm water flows carried by major trunk sewers passing through the District.

Combined sewer systems have inherent environmental issues since high storm water flows require increased capacity at sewer treatment plants and pumping stations. With the ever increasing federal water quality requirements and restrictions on combined system overflows into regulated waterways, local sewer districts are faced with the challenges of increased treatment plant capacity or temporary storage of combined system runoff.

Completely separate storm and sanitary sewer systems within the Medical District are not economically achievable and would have implications reaching beyond District boundaries. However, it is reasonable to establish the following Storm Water Management policy for the District:

- **Policy:** Reduce the volume of storm runoff to be collected and transported by the sewer systems within the District.

Based upon discussions with representatives from the City of East St Louis Public Works Department, the Metro East Sanitary District, and site observations, there is a history of localized flooding and inadequate storm water drainage within the City of East St. Louis, including the Medical District. This condition is exacerbated by the extremely flat topography within the District, as it is difficult to prevent storm water from ponding in surface depressions and low points. A second Storm Water Management policy should be established for the District as follows:

- **Policy:** Improve and expand critical components of the storm sewer system to effectively collect and transport storm water runoff.

The policies above can be achieved through the implementation of the following Storm Water Management strategies.

- Require developers to provide storm water detention facilities for any increases in storm water runoff.
- Utilize permeable pavements in parking lots to reduce runoff.
- Develop shared retention ponds as water features within District greenways.
- Encourage the use of rain gardens in low density developments.
- Utilize storm water management systems as educational opportunities.
- As stated previously, perform condition assessments of all of the sewers within the District, including smoke testing, cleaning and vacuuming and TV inspection. Initial investigations should be performed in those areas targeted for initial phases of redevelopment.

- Require condition assessments of the existing sewer system as part of any programmed street rehabilitation project. This will help identify problem sewers that may require open cuts for removal or replacement within the roadway Right-of-Way.
- Replace or rehabilitate all curb inlets and connecting storm sewers during any curb and gutter or major street reconstruction project.
- Utilize trenchless technology for sewer rehabilitation projects whenever possible.
- Encourage site development and grading concepts that promote positive drainage using landforms and surface drainage features.

## Electric Utility

Ameren-IP provides electric power throughout the Medical District through a 35KV and 4KV distribution system. The presence of an electric substation within the District boundaries provides significant benefit for the potential growth and redevelopment of the District. Key components of the electric utility system strategy should include the following:

- Maintain the existing Ameren-IP Broadview Substation.
- Explore the possibility of systematic replacement of overhead electric distribution with underground distribution in areas undergoing significant redevelopment to improve service reliability and aesthetics within the District.

## Gas Utility

Ameren-CIPS generally provides natural gas throughout the District via a network of underground gas mains. However, there are a few isolated pockets within the District that will require the construction of gas main extensions if service is required for redevelopment. The cost of gas main extensions are typically borne by the developer. However, Ameren does provide some cost sharing by offsetting the cost of gas main construction with new revenue generated over a specific period of time. Key components of the gas distribution system strategy should include the following:

- Relocate existing gas mains that conflict with proposed redevelopment activities.
- Evaluate and upgrade existing gas mains as a part of any major street reconstruction project.
- Construct a new gas main in 10<sup>th</sup> Street from Walnut Avenue to Brady Avenue to provide increased capacity and system redundancy to support the development of the Medical Campus in this area.
- Construct a new gas main in 10<sup>th</sup> Street from Dr. MLK Drive to Missouri Avenue to provide increased capacity and system redundancy to support the development of the Commercial and Heavy Commercial facilities in this area.
- Provide access to broadband service to consumers residing in unserved areas of the country.
- Provide improved access to broadband service to consumers residing in underserved areas of the country.
- Provide broadband education, awareness, training, access, equipment, and support to: (i) schools, libraries, medical and healthcare providers, community colleges and other institutions of higher learning, and other community support organizations; (ii) organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband services by vulnerable populations (e.g., low-income, unemployed, aged); or (iii) job-creating strategic facilities located in state- or federally-designated economic development zones;

## Telecommunications System

The Medical District should provide an environment meeting the high technology needs of medical, educational, governmental, and community services organizations. Access to an advanced telecommunications network is essential to meeting those needs and will be critical to attracting and maintaining investment in the District.

Currently, AT&T and Charter Communications have provided some very limited information on their telecommunications facilities within the District. Detailed information on the location and expansion plans for telecommunication networks is kept confidential for security purposes and to protect business strategies between the numerous telecommunications companies. However, there are other opportunities available to evaluate the existing telecommunications network and its ability to support growth and redevelopment within the District.

The American Recovery and Reinvestment Act (ARRA) provided \$4.7 billion to the National Telecommunications and Information Administration (NTIA) to establish the Broadband Technology Opportunities Program (BTOP) to advance President Obama’s national broadband strategy. One third of the funding was distributed in the first round of funding last fiscal quarter. The remaining two thirds will be distributed in a second round of funding based upon evaluation of Grant Applications submitted by March 15<sup>th</sup>, 2010.

The Recovery Act establishes a national broadband service development and expansion program to promote five core purposes:

- Improve access to, and use of, broadband service by public safety agencies; and
- Stimulate the demand for broadband, economic growth, and job creation.

NTIA administers the Broadband Technology Opportunities Program (BTOP) within three project categories:

- **Comprehensive Community Infrastructure**—Projects to deploy new or improved broadband Internet facilities (e.g., laying new fiber-optic cables or upgrading wireless towers) and to connect “community anchor institutions” such as schools, libraries, hospitals, and public safety facilities. These networks help ensure sustainable community growth and provide the foundation for enhanced household and business broadband Internet services.
- **Public Computer Centers**—Projects to establish new public computer facilities or upgrade existing ones that provide broadband access to the general public or to specific vulnerable populations, such as low-income individuals, the unemployed, seniors, children, minorities, and people with disabilities.
- **Sustainable Broadband Adoption**—Projects that focus on increasing broadband Internet usage and adoption, including among vulnerable populations where broadband technology traditionally has been underutilized. Many projects include digital literacy training and outreach campaigns to increase the relevance of broadband in people’s everyday lives.

The Medical District should position itself to take advantage of BTOP funding opportunities to study the existing telecommunications network, and to develop a strategy for enhancing the telecommunications network within the District. Once those strategies have been developed, they should be implemented along with other utility service improvements within the District.

## Natural Environmental Constraints

The most significant natural environmental constraint facing the Medical District concerns the Mississippi Levee System in St. Clair County. The levee has been de-certified by the Federal Emergency Management Agency (FEMA). Consequently, the entire District is located in a Zone AR “Special Flood Hazard Area” formerly protected from the base flood (100-year) by this levee system. If the de-certification continues, the District will no longer be located within a flood protected zone, and property owners will be faced with sharply higher flood insurance rates. New construction will have to meet more strict requirements to raise the finished floor elevation of new structures above the base flood elevation. Additionally, funding for redevelopment will be severely hampered as banks and lending institutions will be reluctant to provide capital for redevelopment in a flood hazard area.

In June 2009 the Flood Prevention Districts for Madison, St. Clair and Monroe Counties formed the Southwestern Illinois Flood Prevention District Council. This Council is in charge of overseeing efforts to evaluate and improve the five levee systems that protect the Metro-East counties from flooding on the Mississippi River. Additionally, the three counties passed a ¼-cent sales tax to fund levee improvements.

FEMA has agreed to delay the publication of new flood insurance rate maps until early 2011, thereby providing an opportunity for the Council to evaluate the levee conditions and develop a strategy for repairs and funding. In June 2010 the Council selected a consulting team to submit conceptual design proposals for a design competition to bring the Metro-East Mississippi River levees up to FEMA certification standards.

Until such time that the issue of levee de-certification is resolved, the Medical District Commission should closely monitor the progress of the Southwestern Illinois Flood Prevention District Council. Their success will be critical to the long-term viability of investment in the Medical District.

## Man-Made Environmental Constraints

Based upon the information gathered during the Situation Analysis, there are numerous sites where further environmental investigation is necessary prior to any transaction or re-development. Federal, state and local laws make current and prior property owners potentially liable for the entire cost of cleaning up a contaminated site. Consequently, many financial institutions require an assessment of the property with regard to environmental laws before a property ownership transaction.

The prevailing standard for pre-acquisition environmental due diligence (also known as All Appropriate Inquiry, or “AAI”), is ASTM’s Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. This type of environmental report is the one required by lenders and is highly recommended prior to purchasing commercial or industrial real estate, or prior to starting new developments.

**Phase I Environmental Site Assessment (ESA) Services** should typically include:

- An on-site visual inspection of the property and surrounding properties to assess general land use and occupants of the area.
- A review of data regarding the local geology and hydrology.
- An assessment of current land use and practices of the property with particular attention given to assessing if any hazardous material or waste management activities have occurred at the site.
- An assessment of the historic land use and development of the property through an interpretation of fire insurance maps, city directories, and/or aerial photographs of the site and interviews with persons knowledgeable of the site history.
- A review of owner/operator provided documents and records.
- A review of local, state, tribal, and federal regulatory agency records maintained for the site.

- A written report of all findings including Recognized Environmental Concerns, recommendations, and conclusions.

Depending on the outcome of a Phase I ESA, a Phase II Site Assessment may be warranted. This process provides a more comprehensive and detailed review of a site and a facility to further evaluate suspected environmental impairments and the extent of surface and subsurface contamination. A Phase II Site Assessment can also be implemented without the Phase I ESA if known contamination exists on the property. A Phase II Site Assessment qualitatively confirms environmental contamination and liabilities and typically includes estimates of remediation costs. This information may be used in negotiating the terms and conditions in a particular property transaction.

**Phase II Site Assessment Services** can include the following:

- Collecting soil samples to screen for chemical or metal contamination. This sampling is conducted to establish the chemical makeup of the soil in order to determine if there are significant amounts of contaminants that will require remediation or monitoring, or create land use limitations.
- Sampling of groundwater and surface water. This testing is recommended when there is a significant potential for the existence of an environmental liability that can affect the value of a property. Environmental liabilities are costs associated with regulatory-mandated cleanup, disposal of regulated-waste and civil liability. Civil liability occurs when the contamination has migrated off-site or tenants sue over exposure to hazardous materials.
- Permanent monitoring wells located on the property.

## Priority Capital Improvements

Implementation of the Capital Improvements Plan will generally fall into one of two categories. Improvements will either be made as a result of a development project and its requirements for site preparation and improved infrastructure, or they will be made as part of a strategy to attract development by investing public dollars to enhance the District. Development-driven improvements will, of course, be made in coordination with the developer at the chosen site through a public-

private development agreement. On the other hand, public investment to attract developers will be more strategic in nature. That is to say, the improvements should be prioritized on a high, medium, and low system based on their relative cost and benefit to the District.

As part of the Master Plan, a cursory look at the recommended capital improvement projects based on their relative magnitude of cost and anticipated impact on the attractiveness of the District for investment suggested the followed prioritization of projects by category.

### Buildings and Grounds

#### High Priority:

1. **Building & Lot Mothballing, Demolition, and Clearance**—Of the 29 “blocks” identified in the Medical District, part or all of 16 blocks were categorized as being in Fair (Yellow) Overall Condition and 5 as being in Poor (Red) condition. Selective building mothballing or demolition (including asbestos removal), underground utility removal, and lot clearance should be undertaken for these identified areas, starting with the Poor condition (Red) blocks.

### Roadways and Circulation

#### High Priority:

1. **Gateway Features**—Construct primary gateway features at the intersection of Missouri Avenue and 10th Street, Broadway and 3rd Street, and EB 64/55/70 off-ramp at 4th Street to create a sense of arrival at District boundaries.
2. **Uniform Directional Signage**—Provide uniform directional signage within the Medical District to direct visitors to major campuses and other significant destinations. Provide way-finding signage on Interstates 64/55/70 and Illinois Route 15 to direct visitors to the District. Work with Metro to identify District signage in conjunction with the 5th & Missouri MetroLink Station.
3. **6th Street**—Construct new 6th Street extension (Landscaped Boulevard) from East Broadway to the Higher Education Campus.

**Medium Priority:**

4. **East Broadway**—Construct select pavement, curb and sidewalk improvements consistent with the Landscaped Boulevard streetscape established in the Urban Design framework.
5. **Collinsville Avenue**—Construct select sidewalk and curb repairs to complement streetscaping established within the Business District urban design framework.
6. **Missouri Avenue**—Construct select pavement, curb and sidewalk improvements consistent with the Landscaped Boulevard streetscape established in the Urban Design framework.
7. **8th Street**—Construct new pavement, curb and gutter, and public sidewalks from East Broadway to Trendley Avenue.
13. **8th Street**—Construct new pavement, curb and gutter, and public sidewalks from Dr. MLK Drive to Missouri Avenue. Construct select curb and gutter and sidewalk repairs between Missouri Avenue and East Broadway.
14. **9th Street**—Continue current program of curb and gutter replacement from Dr. MLK Drive to East Broadway. Construct new pavement and sidewalk improvements from Dr. MLK Drive to Missouri Avenue. Mill and overlay existing pavement from Missouri Avenue to East Broadway.
15. **10th Street**—Construct new curb and gutter and sidewalks on 10th Street from Dr. MLK Drive to Trendley Avenue.
16. **Single Family Residential Zone (Trendley Avenue, Market Street, Bond Avenue, Converse Avenue, and Brady Avenue between S. 8th and S. 10th Streets)**—Construct new roadway pavement, curb and gutter, and public sidewalks throughout entire single family residential development.

**Low Priority or Development-Driven:**

8. **Gateway Features**—Construct secondary gateways at Collinsville Avenue and Dr. MLK Drive, Dr. MLK Drive and 10th Street, Broadway and 10th Street, and Trendley and 8th Street.
9. **Dr. Martin Luther King, Jr. Drive**—Construct new curb and gutter and sidewalks on Dr. MLK Drive from Collinsville Avenue to 10th Street.
10. **St. Louis Avenue**—Construct new curb and gutter and sidewalks from Collinsville Avenue to 10th Street. Mill and overlay existing pavement.
11. **6th Street**—Construct new pavement, curb and gutter, and public sidewalks from Dr. MLK Drive to Missouri Avenue. Mill and overlay existing pavement from Missouri Avenue to East Broadway. Remove and replace select curb and gutter and sidewalk sections as required for access to new facilities. New construction between St. Louis Avenue and the Higher Education Campus should be consistent with the Landscaped Boulevard streetscape established in the Urban Design framework.
12. **7th Street**—Construct new pavement, curb and gutter, and public sidewalks from Dr. MLK Drive to Missouri Avenue.
17. **Walnut Avenue (Private Road)**—Construct new roadway pavement, curb and gutter, and public sidewalks from S. 8th Street to S. 10th Street.
18. **Connection to Malcolm W. Martin Memorial Park**—Connect the Medical District greenbelt to the Malcolm W. Martin Memorial Park through enhanced pedestrian and bicycle paths along 4th Street to Trendley Avenue and 10th Street to Trendley Avenue.
19. **ADA Compliant Pedestrian Routes**—Promote pedestrian circulation within the District through pedestrian friendly, Americans with Disabilities Act (ADA) compliant sidewalks, walkways, and trails. Replace MetroLink grade crossings as required to provide smooth, ADA accessible pedestrian crossings.
20. **Enhanced Bicycle Trail Network**—Utilize a combination of shared use paths, shared roadways, and designated bike lanes on roadways to provide connections between District greenways, campuses, and the regional bike trail system.

## Water Utility

### Medium Priority:

1. **Water Condition Assessments & Rehabilitation**—Perform condition assessments of all of the water lines within the District to identify and rehabilitate problem areas, starting with those areas targeted for initial phases of redevelopment and as part of any programmed street rehabilitation project.

### Low Priority or Development-Driven:

2. **6th Street**—Construct a new 8-inch water main from Dr. MLK Drive to St. Louis Street.
3. **8th Street**—Construct a new 10-inch water main from East Broadway to Market Street.
4. **St. Louis Avenue**—Construct a new 8-inch water main from 8th Street to 10th Street.
5. **10th Street**—Construct a new 8-inch water main in 10th Street from Dr. MLK Drive to St. Louis Avenue.
6. **Single Family Residential Zone (Trendley Avenue, Market Street, Bond Avenue, Converse Avenue, and Brady Avenue between 8th and 10th Streets)**—Construct new 6-inch water mains on these streets in conjunction with new roadway improvements.

## Sanitary & Storm Sewers

### Medium Priority:

1. **Sewer Condition Assessments & Rehabilitation**—Perform condition assessments of all of the sewers within the District to identify and rehabilitate problem areas, starting with those areas targeted for initial phases of redevelopment and as part of any programmed street rehabilitation project. Utilize trenchless technology for sewer rehabilitation projects whenever possible.

## Electric Utility

### Medium Priority:

1. **Substation Maintenance**—Maintain the existing AmerenIP Broadview Substation.

### Low Priority or Development-Driven:

2. **Underground System**—Begin systematic replacement of overhead electric distribution with underground distribution in areas undergoing significant redevelopment.

## Gas Utility

### Low Priority or Development-Driven:

1. **Gas Relocations & Upgrades**—Relocate existing gas mains that conflict with proposed redevelopment activities; evaluate and upgrade existing gas mains as a part of any major street reconstruction project.
2. **S. 10<sup>th</sup> Street**—Construct a new gas main in 10th Street from Walnut Avenue to Brady Avenue to provide increased capacity and system redundancy to support the development of the Medical Campus.
3. **N. 10<sup>th</sup> Street**—Construct a new gas main in 10th Street from Dr. MLK Drive to Missouri Avenue to provide increased capacity and system redundancy to support the development of the Commercial and Heavy Commercial facilities.

## Telecommunications System

### Medium Priority:

1. **Broadband Internet Facilities**—Study the existing telecommunications network and develop and implement a strategy for enhancing the network within the District, including projects to deploy new or improved broadband Internet facilities (e.g., laying new fiber-optic cables or upgrading wireless towers)

and to connect “community anchor institutions” such as education, medical, and government facilities.

### Man-Made Environmental Constraints

#### Low Priority or Development-Driven:

1. **Man-Made Environmental Constraints**—Records indicated the existence of 33 registered underground fuel storage tanks of which 9 were known to be leaking; 9 hazardous material generators; and one Brownfield site in the District. All of these sites should eventually be cleaned up, with early emphasis on the leaking tanks and other constraints within the Medical Campus in the District.

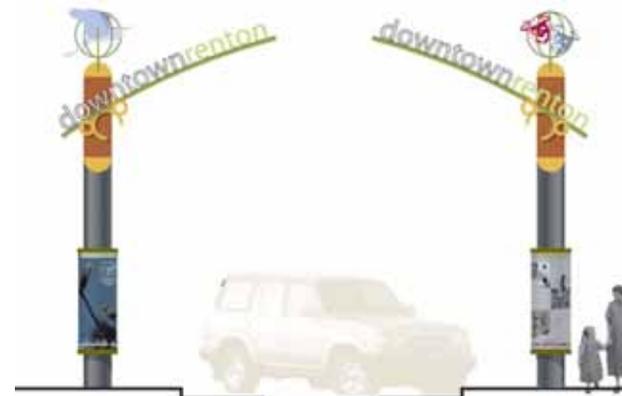
## Urban Design Plan

The Mid-America Medical District’s success will be partially reliant on its ability to attract and retain audiences with varying needs and motivations. A proven method to attract these varied audiences (e.g., health care providers and users; educators, researchers, and students; residents and visitors; developers and investors), interconnect the differing components of the District (e.g., medical, educational, commercial, residential) and keep stakeholders engaged in the continuous improvement of the area is through “urban design”. Urban design incorporates the scale and relationship of buildings, architectural identity and compatibility, District-defining identification features and landscape treatments, and great care in development of public interaction spaces.

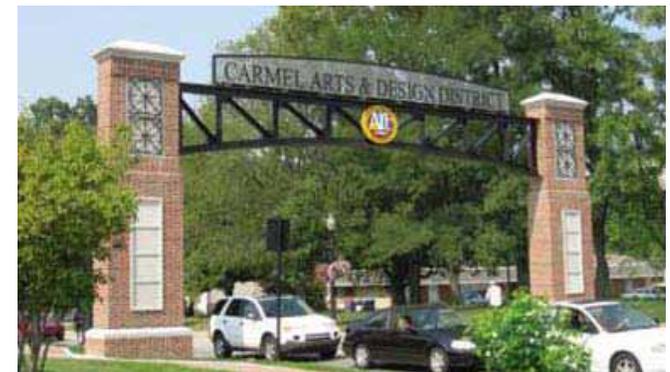
The urban design recommendations cover the overall District, as well as specific corridors and areas within the District. It proposes physical gateways and landmarks to define the District. It looks at the scale and relationship of buildings to each other and potential architectural and landscape guidelines for development of the “private realm”. It provides guidance on the development of the “public realm” including pedestrian-oriented streetscapes with trees, sidewalks, amenities and abundant lighting, and urban parks and greenway linkages. And it considers the view and impression one gets of the District from the heavily-traveled Interstates.

## District Defining Identification Gateways, Landmarks, and Signage

There are several locations that serve as prominent places where a physical gateway, or entrance landmark, to the Mid-America Medical District should be identified with permanent signage. The intersection of South 4<sup>th</sup> Street and Railroad Avenue on the western edge of the District is very visible for those exiting Interstate 64/55/70. Likewise, the intersection of Collinsville Avenue and Broadway is prominent for traffic coming from the Eads Bridge and the Casino Queen traveling east on Broadway. The intersection of Missouri Avenue and 10<sup>th</sup> Street is a primary gateway for traffic using Highway 15 through the District on the eastern edge of the District. Secondary locations would include Collinsville Avenue at Dr. MLK Drive, N. 10<sup>th</sup> Street at Dr. MLK Drive, Broadway at N. 10<sup>th</sup> Street, and Trendley at S. 8<sup>th</sup> Street.



*Examples of Potential Gateway Features*



Evenly spaced smaller signs could be featured throughout the District as reminders that you are still within the Mid-America Medical District. Also, banners could be used together with new street lighting as a colorful and inexpensive form of advertisement.

## Scale and Relationship of Buildings

**Medical Area**—Medical care and medical research buildings should generally be one to three stories and be located within 10 feet of the public sidewalk to encourage a more urban look and feel, and to increase density. Parking would be located off-street, internally to the buildings to reduce their visual prominence.

**Commercial Area**—The primary corridors for commercial use are Broadway and Collinsville Avenue. The commercial development on Broadway should be one to two stories tall with typically 10 to 25 foot side yard lot line setbacks. The commercial development should be set back from the sidewalk to allow for the creation of parking, landscaping, and public spaces for social interaction. On Collinsville Avenue, buildings should maintain the dense, urban, “Main Street” feel and character. Buildings should have zero lot lines and be located directly on the wide public sidewalk where seating for restaurants and shoppers could spill out onto. New infill commercial space should be approximately 60’ in depth for contemporary commercial bays. On street parallel parking should be supplemented with staff parking behind the buildings and larger open lots behind the north row of buildings facing 3<sup>rd</sup> Street and the Interstates.

**Residential Area**—The proposed residential area between Trendley and Brady Avenues and between 8<sup>th</sup> and 10<sup>th</sup> Streets is envisioned as a big-house concept of 3 to 4 units per house with approximately 1,000 square feet for each unit on the first level and 500 square feet each on a second floor. The houses would be set back from the public sidewalk 15 to 20 feet with large side yards and small rear yards to take advantage of a shared, centrally located, community park space.

## Architectural Identity and Compatibility

All new development should have a succinct and uniform architectural expression, without mixing styles or eras. The materials, colors, patterns, and elements should create a cohesive building form. Effort should be given to create three-dimensional interest, and avoid flat, blank walls for the passers-by. Where infill construction



*Examples of Proposed Architectural Styles and Compatibility*

occurs adjacent to existing structures, common consideration should be given to the streetscape, material palettes, and scale.

Materials should be durable and easily maintained. Some examples include brick, limestone, pre-cast concrete, metal panels, cement plank siding, and low reflectance glazing. Bright colors can be used to accent building facades and canopies to assist in creating identity for the place. The scale of fenestration (windows) should be proportional to the overall building form; upper story windows could be operable for loft style living above commercial properties. First level commercial should have larger areas of storefront glazing and be treated as appropriate with awnings and shading devices. The roof form, cornice detailing, and eaves should support the overall architectural expression of the building, and be appropriate to the scale of the existing surrounding context.

Mechanical equipment, dumpsters, utility services, etc., should be screened to avoid visual clutter in the public realm. Signage should be incorporated into the design of commercial buildings’ facades and canopies, or monument signs

constructed of materials similar to the buildings would be allowed with a maximum of four feet in height.

## Landscape Treatment

**Medical and Commercial Areas**—There should be at least one shade tree in a 9'x18' island for every 10 parking spaces to create shaded parking spaces and reduce the heat island effect. If medical or commercial office buildings are set back from the sidewalk 5 to 10 feet it might be appropriate to have tall grasses, low shrubs and bushes, flowers and other pedestrian height landscaping between the building and sidewalk.

**Government Area**—The intent is to create a green corridor or central exterior “mall” connecting a variety of federal, state and local government facilities. This mall would be designed to create interactive social space for federal, state, and local government employees and their customers. Shade trees could be planted around the perimeter with lower level plantings in the center so as to maintain visual continuity throughout the mall area.

**Residential Area**—There should be an effort to plant mid-size trees between the residences and the street to provide shade, visual interest, and character from the street, and create a scale more comfortable for humans. Berms and low, dense shrubs and bushes should be used to conceal the internal, off-street parking from the residences. In the community park, deciduous shade trees should be used to create comfortable, shaded park space for summer recreation. Tall grasses or low shrubs and bushes can be utilized to separate the potential plaza and fountain from the surrounding green space.

## Streetscape Treatment

**Collinsville Avenue**—Collinsville Avenue is seen as the typical downtown “Main Street” and should consist of either sidewalks directly to the road curb, or limited urban plantings that are limited to a 2 foot area between the road curb and the pedestrian sidewalk zone for tall grasses and flowers. Street furnishings such as benches, trash cans, bicycle racks, tree grates, etc., should be provided and be of durable metal with black finish.

**Landscaped Boulevards**—The primary collector streets in the Medical District such as Broadway, Missouri Avenue, and 6<sup>th</sup> Street should feature a landscaped

median with low level plantings. A mixture of low level plantings with urban appropriate trees should be utilized between the sidewalk and street curb to provide shade and separation from automobile traffic. Evenly spaced streetlights should be located on both sides of the road to enhance the streetscape.

## Public Interaction Spaces

A multi-block area roughly between Railroad Avenue and Walnut Avenue, where an old railroad line has been abandoned, could become a greenbelt or park for users from the medical, educational, and residential areas to interact and enjoy the outdoors. A portion of this greenbelt could be dedicated for baseball or softball fields, potentially located adjacent to a health and wellness facility on the corner of Broadway and 6<sup>th</sup> Street. The green space created by the new Government Mall plaza would also unify the District and connect commercial, medical, office and government users.

## External Views of the District

The Medical District is very prominently located with high speed views into the district from traffic on Interstate 64/55/70, as well as traffic coming to and from the Martin Luther King Bridge. Priority consideration should be given to revitalizing the parking and the back of the buildings located along the north side of Collinsville Avenue.



*Public Interaction Spaces at the Higher Education Campus*





Site Plan - Proposed



Mid-America Medical District Master Plan  
East St. Louis, Illinois  
20 April 2010





Single Family Residential - Site Plan



Mid-America Medical District Master Plan  
East St. Louis, Illinois  
20 April 2010





Medical District - Site Plan



Mid-America Medical District Master Plan  
East St. Louis, Illinois  
20 April 2010





### Government Mall - Site Plan



## Mid-America Medical District Master Plan

East St. Louis, Illinois  
20 April 2010



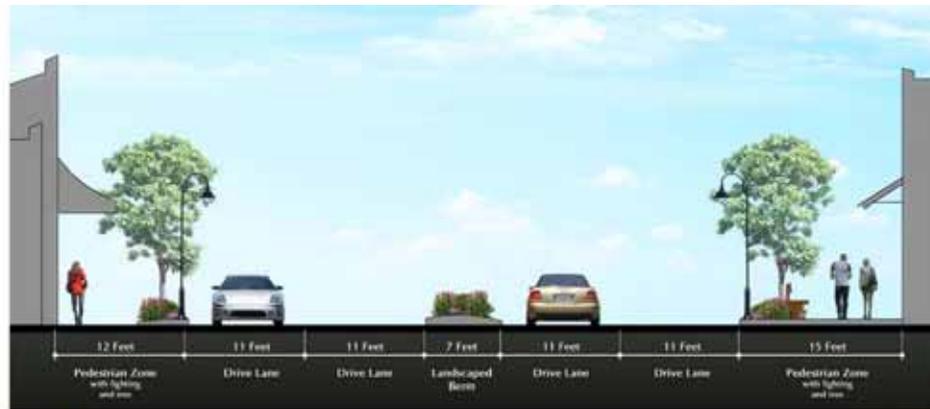


Collinsville Avenue - Site Plan

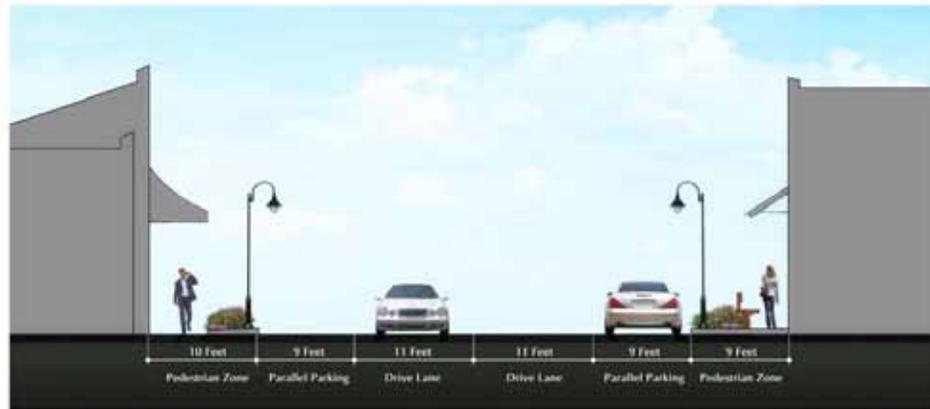


Mid-America Medical District Master Plan  
East St. Louis, Illinois  
20 April 2010





**Broadway**  
Proposed Character Section



**Collinsville Avenue**  
Proposed Character Section



## Community Development Plan

In order to be a real asset to the community of East St. Louis, the Mid-America Medical District Master Plan goes beyond the medical aspects of the plan to incorporate a vision for the residents and businesses of the Medical District and downtown East St. Louis.

### Common Traits of Highly Successful Downtowns

*“It is not the strongest of the species that survive, nor the most intelligent, but the ones most responsive to change.”—Charles Darwin*

The Mid-America Medical District Master Plan is, for many intents and purposes, a master plan for revitalization of downtown East St. Louis. It is useful, therefore, to highlight some common traits of highly successful downtowns, with lessons that are readily applied to the Medical District. The following list is adapted from research performed in 2004 and 2005 using eleven downtowns of medium and small cities.<sup>1</sup> It is a useful set of characteristics against which to measure future changes in the Medical District.

#### Common Traits of Highly Successful Downtowns

1. No single organizational model exists. Lessons should be learned from others, but the specific organizational model will be tailored to the city.
2. Multiple traffic generators are within short walking distances, thus encourage a mix of land and building uses.
3. Great downtowns are beloved by their citizenry.
4. Great downtowns are able to overcome political, economic, and public relations obstacles.
5. Great downtowns are walkable and have pedestrian scale.
6. Great downtowns have a commitment to mixed-use development.
7. There is broad public/private investment in the future of downtown.
8. Entertainment is the driving market segment, so sponsorship of public events that attract people and keep people downtown will promote interest in other investment.
9. There is a prevalence of strong, adjacent residential neighborhoods that are within walking distance of downtown.
10. Downtown housing is either prevalent or underway.
11. Colleges and universities help, but are not the sole answer.

<sup>1</sup> Gary Ferguson of the Ithaca, New York, Downtown Partnership. “Common Traits of Highly Successful Downtowns.” Parts one and two. *Downtown Idea Exchange*. Downtown Research & Development Center, New York, NY. November 1 and 15, 2005. The eleven cities of the research study are Ann Arbor, Michigan; Boulder, Colorado; Burlington, Vermont; Chapel Hill, North Carolina; Charlottesville, Virginia; Madison, Wisconsin; Northampton, Massachusetts; Portland, Maine; Providence, Rhode Island; State College, Pennsylvania; and Wooster, Ohio

## Applications to the Medical District

A key question is, therefore, “How can the master plan of the Mid-America Medical District be utilized to improve the quality of these various traits?” Reactions to the eleven traits suggest the following:

1. *No single organizational model exists*—While the Mid-America Medical District can and should learn from other models in similar locations, the approach adopted in East St. Louis will be distinctive to East St. Louis. Indeed, a model based, in part, on the characteristics of a Medical District will necessarily be different than other cities.
2. *Multiple traffic generators are within short walking distances*—The Medical District cannot be a single-purpose district. Visitors to and residents of the District will demand a variety of accessible activities, including health, wellness, and recreational services, as well as dining, retail, and jobs.
3. *Great downtowns are beloved by their citizenry*—Pride in the Medical District must be promoted and instilled internally to city residents. The District should be useful in re-establishing downtown as the city’s common gathering place. A key asset in this regard will be Collinsville Avenue with its urban character.
4. *Great downtowns are able to overcome obstacles*—This requires partnerships, shared resources, vision, and patience. The premise of the Medical District itself is the product of a shared vision and shared resources. This lesson needs to be extended throughout the District and downtown.
5. *Great downtowns are walkable and have pedestrian scale*—There must be interesting features that capture the attention of pedestrians while assuring personal safety. The variety of patrons and residents of Medical District institutions will help to attract a variety of businesses, public art, aesthetically pleasing streetscapes, and visual diversity.
6. *Great downtowns have a commitment to mixed-use development*—Developers and investors are urged to build for and attract a range of occupants, business-types, and institutional services. Virtually by definition, the Medical District is itself a form of a mixed-use development, so this theme can be applied more broadly, too.
7. *There is broad public/private investment in the future of downtown*—Partnerships are essential for the private, public, and non-profit realms. The Medical District can and must demonstrate that public/private investments can achieve immense results. The Commission should position itself as a liaison between private interests (developers, etc.) and the city.
8. *Entertainment is the driving market segment*—Revitalized downtowns increasingly serve as places for eating, drinking, and recreation rather than simply centers for retail merchandise. The Medical District can be a leader in attracting and sponsoring public events (fairs, concerts, art walks, “healthy foods” farmers market, etc.) that instill interest in the District which eventually will lead to a wide range of investments.
9. *There is a prevalence of strong, adjacent residential neighborhoods that are within walking distance of downtown*—Strengthening and improving nearby neighborhoods is essential for the success of the Medical District. Access to and from housing in the neighborhoods must be redesigned to encourage pedestrians into downtown.
10. *Downtown housing is either prevalent or underway*—The Medical District must add a substantial amount of housing in addition to improvements in adjacent neighborhoods. Such housing should appeal to the workforce and middle income, as well as affordable options, and be walking-distance neighborhoods.
11. *Colleges and Universities help, but are not the sole answer*—Many of the sampled cities are university towns, but the research found that universities are not automatic keys to downtown vitality. Nevertheless, institutions of higher education are already an anchor in the Medical District as an important employer, an attraction for regional visitors, and a source of well-trained labor for the entire metropolitan area.

With these kinds of metrics in mind, a strategic model for revitalization of downtown East St. Louis and the broader community that leverages the characteristics of its existing strengths can be designed. Such a model, however, must be unique to East St. Louis and must be supported by those who use or would use downtown and the Medical District more actively. A basis for strategic action customized for downtown East St. Louis emerged from this planning process with the following goals.

- **Safe & Attractive Downtown**—The Mid-America Medical District should become noted for its dynamic and diversified activities, safety, cleanliness, attractive new and historic buildings, engaging street-level visual effects, and well-maintained landscaping.
- **Mixed Use District**—The Mid-America Medical District should seek full occupancy of sound existing buildings and to-be-constructed new buildings for a wide range of purposes including health and wellness services, commercial activity, and housing.
- **Healthy Community**—Residents served by the facilities and services of the Mid-America Medical District should achieve health and wellness characteristics that are at least equivalent to averages for the State of Illinois.
- **Public/Private Partnership**—The Mid-America Medical District should engage private interests (developers, banks, brokers, and property owners) together with city, county and state interests in effective public/private partnerships to build the future in accordance with the master plan.
- **Employment Hub**—The Mid-America Medical District should be pivotal as one of many complementary employment and residential centers in Southwestern Illinois.
- **Expanded Tax Base**—The Mid-America Medical District should expand, reinforce, and diversify the non-residential tax base to relieve pressures on residential land uses in East St. Louis while assuring sufficient resources for community growth.
- **Complete Mobility**—The Mid-America Medical District should have an exemplary way-finding and parking network for multiple modes of movement including automobiles, other motorized vehicles, bicycles, pedestrians, the disabled, and other alternative means of transportation.
- **Professionally-Run**—The Mid-America Medical District should be managed in a coordinated, business-like manner, representing all related interests, in order to sustain interest in and attention to the aggressive implementation of the master plan over the next 20 years.
- **Consistent Approach**—The Mid-America Medical District should adopt policies, guidelines, and regulations to resist economic and related forces that would undermine or compromise the master plan.

