



Memphis: America's Aerotropolis™

2009
Highlights



Memphis: America's Aerotropolis
Where Runway, Road, Rail & River Merge

Memphis is known around the world for its logistical capabilities and the access to goods and people that it provides to the world. With the collaboration and support of public, private and civic leadership we have built on these strong existing capabilities to become "America's Aerotropolis."

We began this journey in 2006 with Dr. John Kasarda, Director of the Kenan Institute of Private Enterprise at the University of North Carolina in Chapel Hill. Dr. Kasarda identified Memphis International as a classic example of an "aerotropolis," a term he coined to mean a new type of urban form that puts a strong airport at its center and builds outward.

Memphis International Airport is the world's fastest, most agile airport and is the world's largest cargo airport, with more than 4 million tons a year. Add to this a location at the central crossroads of the U.S. Interstate highway system, six rail yards and the fourth-largest inland port in the country and you get connectivity unrivaled by any place in the world. This unique access to four strong modes lets businesses find their sweet spot: they can go for speed where needed and for lower cost and high sustainability where possible.

The Aerotropolis journey continues with results already showing in several key areas. One of our earliest efforts was cleaning house – improving curb appeal in the airport's surrounding areas. With the city's funding for more than 1,000 trees scheduled for planting in 2010 and collaboration with area associations to clean up litter and debris, we've made noticeable improvements to what helps make the first and last impressions of Memphis on visitors arriving by air.

Infrastructure improvements are underway and in the plans. We have created specific strategies for critical roadway improvements – from the Airways/I-240 interchange to the completion of I-69 and the Lamar/I-22 corridor.

We're not keeping our success a secret – if you are on Facebook or Twitter you'll find fans of America's Aerotropolis. Nine signs are in place in strategic areas leading to the airport proclaiming Memphis: America's Aerotropolis. We're partnering with other teams around the world – Aerotropolis Europe: Paris, France, and Asia's Aerotropolis: Guangzhou, China to put Memphis on the global map.

If you want more details about this exciting initiative, you can find them at www.memphischamber.com.

Stay tuned – you will be hearing more and more about our efforts. Memphis, Tennessee, is America's Aerotropolis.



2009 Key Accomplishments

- I-269 Construction –
Macon road to State Road 57 (\$54M)
- New Multi-Modal Mississippi River Bridge -
Environmental Impact Study (\$7M)
- Lamar/I-22 Corridor Study
- Aerotropolis/Clean Memphis Partnership
- Airways/I-240/Plough Boulevard Master Plan
- City of Memphis Plough Boulevard Landscaping
Implementation Project (\$1.6M)
- Aerotropolis Gateway Signage
- Aerotropolis Executive Summary Produced and
Distributed to Community Partners and Media

Milestone Details

Organizational Structure

Following the completion of the Memphis Aerotropolis Report by Dr. John Kasarda, Director of the Kenan Institute of Private Enterprise at the University of North Carolina at Chapel Hill, the Memphis Oversight Committee was reconfigured into the Memphis Aerotropolis Initiative Steering Committee to oversee implementation of the report recommendations.

The Steering Committee is active and is meeting on a regular quarterly schedule to guide the process. Tom Schmitt (Senior Vice President FedEx Services, and Chairman of the Greater Memphis Chamber) is the Steering Committee Chair.

The Aerotropolis Steering Committee has formed four work groups to lead the effort:

Work Group Chair

Transportation & Access	Julie Ellis
Corridor Development	Larry Jensen
Gateways & Beautification	Dr. Shirley Raines
Marketing & Branding	Arnold Perl

Chairs of each are Julie Ellis (Attorney with Butler Snow and formerly with FedEx), Larry Jensen (President and CEO of Commercial Advisors, a commercial and industrial real-estate company), Dr. Shirley Raines (President of the University of Memphis), and Arnold Perl (Attorney with Ford and Harrison and Chair of the Airport Authority).

Members of the work groups have been expanded to include regional officials from West Tennessee, North Mississippi and Eastern Arkansas as well as other subject matter experts for the respective work groups. Work Groups have regularly scheduled meetings before each Steering Committee meeting and provide written reports for review by the full steering committee.

The Work Groups are driving the agenda and developed action plans with priorities and measurable results for Year 1 and Years 2-5. The Steering Committee coordinates the Action Plans of the four Work Groups.

2009 Key Accomplishments

Transportation & Access Work Group

The major focus of the Transportation & Access Work Group is the coordination and integration of transportation modes between all modes of transportation. Other objectives include: reduction of current congestion; support Aerotropolis corridor priorities; support freight movements with infrastructure; support regional employment trip within the region; improve visitor perception and supports economic development. Accomplishments to date include the following:

New Multi-Modal Mississippi River Bridge Environmental Impact Study (EIS)

The Environmental Impact Study and selection of the location of a multi modal bridge over the Mississippi River was initiated. This project has national logistics and security implications. It will include a new designed rail bridge over the Mississippi River at Memphis and the second seismic retrofitted highway bridge for traffic. This will be the only multi-modal bridge in the Memphis region that will accommodate all modes of traffic as well as bicycles and pedestrians. TDOT has provided \$500,000 in matching funds for the study underway. In addition, Arkansas has committed \$500,000 and Mississippi \$250,000. This project is a priority for all three states. The EIS is anticipated to require 30 to 36 months to complete. The preferred alignment for the new bridge will be determined and a Preliminary Engineering Report will be completed.

Lamar /I-22 Corridor Study from State Line Road to I-240

This severely congested major logistics and freight corridor is located in Southeast Memphis, Tennessee and Mississippi. In addition to inadequate lane capacity, the geometry of the road leads to poor driving conditions. TDOT currently has authorized the consulting firm of Cambridge Systematics, Inc. and the University of Memphis to conduct a freight study on the Lamar Corridor. The preliminary report was completed in 2009 and the recommendations for the study area are being reviewed. The report was completed in 2009 and the recommendations for the study area are being reviewed. The study is anticipated to provide direction on several alternative solutions by June 2010.

- a. A new alignment for I-22;
- b. Major modifications including grade-separated interchanges for the exiting Lamar Avenue;
- c. A combination of alternatives "a" and "b" which would include new alignment for I-22 and grade separated interchanges for the existing alignment; and
- d. The use of parallel roads to create a greater connectivity among the industries along the Lamar corridor and relief for Lamar Avenue itself.

Another improvement for all alternatives is to install ITS and other operational changes. These changes are not considered sufficient unless accompanied by major changes in the road system. TDOT is currently undertaking a study by Cambridge Systematics, Inc. to determine the potential design of grade separated interchanges at Lamar Avenue and I-240 Drive. Once Cambridge issues its report in July 2010, a preferred solution will be identified. Further planning on the recommendation will be able to occur.

I-269 Construction - Macon Road to State Road 57

TDOT contracts for the final eight-mile segment of I-269 in Shelby County were let in November, 2009. This \$54 million project will complete the Shelby County portion of the outer expressway loop connection between I-69 near Millington, TN and I-69 near Tunica, MS. The construction is expected to be completed in FY2014. Right of Way acquisition for the remaining Mississippi portion of I-269 is nearing completion. Completion of the I-269 corridor was deemed essential for freight connectivity.

Important to note: the Aerotropolis T&A Work Group is mindful of Sustainable Shelby's noted concern regarding development along this corridor. The Work Group is actively supporting consideration of a "greenbelt" zoning recommendation to ensure the corridor does not impact the municipal densities.

Memphis Regional Freight Plan

This plan is the first of its kind in the Memphis Region and has been conducted by the consulting team of Global Insight (global economics and supply chain), Wilbur Smith (engineering), Design Nine (telecommunications) and the University of Memphis Engineering Department. Over sixty stakeholder organizations were interviewed as part of the process. The report complements the quadramodal aspects and recommendations of the Aerotropolis Initiative. The report reviews: Memphis in the Global Supply Chain; Memphis Freight Infrastructure Inventory; The Evaluation of Infrastructure; and Infrastructure Recommendations. Twenty-five recommendations are identified for the region. The University of Memphis has produced an online inventory of infrastructure mapping available at the University Intermodal Freight Transportation Institute FTP site.

(Instructions on how to access the files are located on the Greater Memphis Chamber web site. The final report has been completed and is also available through The Greater Memphis Chamber web site Memphischamber.com.)

Critical Aerotropolis Roadway Improvements

Additional critical roadway improvements have been identified and are in various stages of implementation. Transportation priorities were categorized into projects of a regional nature such as the completion of Interstate-69, and Airport City projects such as the Airways/I-240 interchange; Plough Boulevard/Winchester interchange; and the Holmes Road Interchange at I-55. Specific strategies have been developed to accelerate these critical Aerotropolis infrastructure projects.

Memphis Regional Rail Coordination Committee or Regional Rail Authority

Discussions have focused on the need for a planning and implementing an organization similar to the CREATE rail project in Chicago. The task would be to engage the five class-one railroads who serve the Memphis region in a coordinated planning and improvement effort. The results could be railroad system mapping and modeling that would provide assistance in preventing accidents and delays. The results could improve rail sharing and capital improvements that would aid all railroads and improve community traffic flow and efficiency. The group could assist with developing a long range rail plan and assist in finding new funding sources and grants. The scope of the project could include both freight and passenger rail planning.

Discussion of this opportunity will continue in 2010.

Airport City/Burlington Northern Santa Fe Rail Yard Tour

Members of the Aerotropolis Steering Committee; TDOT staff; other Work Group Chairmen; MPO staff and Chamber staff were invited to this mobile meeting of the T&A Work Group. The tour included a summary of airport projects including the new FAA tower, the reconstruction of runway 9-27, Memphis International's Ground Transportation Center, Cargo Central and the relocation and construction of the Tennessee Air National Guard facility. A review of key industries such as Medtronic and Mallory Alexander were discussed. The importance of improvements to the I-22/Lamar Corridor was examined as part of the tour of the new BNSF rail yard. The facility has 44,000 feet of track; 6,000 truck parking slots; and eight wide span cranes. The facility has a capacity of 1,000,000 container lifts per year. The facility is expected to generate about 500 truck movements each day. This new facility represents a \$500 million dollar investment in the heart of the Aerotropolis Airport City area.

Corridor Development Work Group

The clusters and corridors comprising the Memphis Aerotropolis were identified and adopted by the Steering Committee. The group defined three geographic areas for consideration: the Airport inside the fence of Memphis International Airport; the Airport City representing an area approximately a five minute drive from the airport; and the Aerotropolis which includes portions of the three state area and a thirty minute driving time.

Criteria were also developed to establish priority corridors for more intensive planning and execution of action plans. Criteria included such factors as current conditions, business and private sector leadership in the area, being designated a "target" area for local government, and potential anchor projects that can be leveraged for other corridor improvements.

Corridor 1: Airport West

The first corridor, Airport West, has an active development corporation formed in November, 2007, that is taking the leadership for the corridor. Corporate leadership is active and committed and includes FedEx, Medtronic, Smith Nephew, CB Richard Ellis, Belz Enterprises, Elvis Presley Enterprises, Pinnacle Airlines, First Tennessee Bank, Nonconah Corporate Center, and a group of transportation companies in the corridor.

The Airport West Area redevelopment is being coordinated by the Memphis Area Airport Development Corporation (MAADC). The area contains the FedEx Hub operations and airport property, the bioscience cluster of Medtronic and Smith Nephew, the major office cluster at Nonconah Corporate Center, and also Elvis Presley Enterprises' Graceland. The Market Feasibility Study project has been funded. Request For Qualifications to prepare the study were received and a Consultant was selected. The plan process will take place in 2010.

Corridor 2: Airways Boulevard

The second priority corridor, Airways Boulevard from North Parkway to Stateline Road, was selected as the gateway to the airport and the key corridor in the Airport City.

The Airways Corridor connects the airport to the Memphis Depot Business Park, major anchor redevelopment projects at the Memphis Fairgrounds, and a variety of educational institutions such as the University of Memphis, Christian Brothers University, Rhodes College, Memphis City Schools, and Shelby County Schools.

A "Condition Survey" for the corridor has been completed that determined visual issues and opportunities. Businesses and institutions are being identified as a first step in establishing private sector leadership in the corridor.

A "Conditions Inspection Program" using volunteers from the Rhodes College 'Rotaract Club' continued to operate into 2009. The group investigated code problems along Corridor 2, and submitted complaints to the appropriate governmental agency and then followed up with a resolution report. Conditions along the corridor have been reviewed and updated on a regular basis.

Aerotropolis/ Clean Memphis Partnership

The partnership established with “Clean Memphis,” a nonprofit dedicated to keeping the community clean of litter and debris, has resulted in many successful projects within the Airport City redevelopment area. There were two Memphis Airport Area Development Corporation clean-up projects that were well attended by neighborhood and business volunteers. The Airways Lamar Business Association hosted six clean-up events in 2009. Several organizations have agreed to assist with adopting roadway areas in the Airways/Alcy-Ball neighborhood. Memphis Athletic Ministries, Airways Middle School and the Alcy-Ball Neighborhood Association are involved in developing an ongoing clean up strategy for this area. The City Division of Community Enhancement, in association with Clean Memphis, has cleaned up dozens of vacant lots and demolished several vacant structures. In addition, MLGW has initiated the process of cutting back trees along Airways near Pecan Circle and the “Ramp it Up” project that was coordinated with the Corrections Division personnel is in full operation. The work crews are rotating through interstate intersections around the airport, including Airways, Elvis Presley, Millbranch and Brooks Road. The team is continuing to focus on the Aerotropolis Airport City area and will implement semiannual clean up campaign activities in each of the Aerotropolis corridors schedule as many as four annual clean up events throughout the Airport City study area. The Work Group is also initiating contacts with strategic businesses and industries to partner in improvement projects along identified corridors.

Gateway & Beautification Work Group

The Gateways and Beautification Work Group developed nomenclature to distinguish between a gateway, corridor, and entrance. This was helpful in selecting high priority gateways and corridors to determine Year 1 objectives. The group decided to start with the airport as the center and work out to create short term visual improvements in the heart of the Aerotropolis.

Airways/I-240/Plough Boulevard Master Plan

The Master Plan was completed by the consultant in early 2009. The implementation of the landscaping of the two mile long gateway to the Memphis region was established as the first priority by the Aerotropolis Steering Committee. Improvement to this gateway gives the opportunity to make the best impression on business visitors and tourists arriving and departing at Memphis International Airport. There are approximately 13 million vehicle trips each year on Plough Boulevard. The plan includes landscape planting and irrigation; Memphis welcome signs; street light replacement; public art enhancement; and improvements to the roadway. The implementation of the plan is scheduled in several phases over the next three to five years.

City of Memphis Plough Boulevard Landscaping Implementation Project

The first phase of implementation of the Plough Boulevard Master Plan was initiated by the Memphis City Council in October, 2009. A resolution for \$1,623,550 of funding for landscape planting; Memphis Welcome Signs; and Irrigation was approved. The project has been divided into three construction projects. The preliminary construction plans have been completed for the first project. This project along Winchester Road at the entrance to Memphis International Airport consists of more than 200 trees and associated irrigation. Construction is expected in early 2010. The remaining projects are expected to be constructed in the fall of 2010.

Airport City Gateways

The Gateway and Beautification Work Group initiated a study to identify additional entrance gateways leading to the Airport City and to the Airport. This study will lead to determination of entrance way structures and signage. Way finding opportunities, sign locations and design standards will be a major outcome of this planning effort. The Memphis Park Division will assist with maintenance and horticulture support for trees planted under this program.

Memphis Parks Division Improvement Program

Enhanced maintenance of the landscaped areas and turf areas on Plough Boulevard continue to be carried out by the Memphis Parks Division. Maintenance and litter control have been carried out with excellent results. The planting of 24 canopy trees in October, 2009 located at the north portion of Plough Boulevard became the first implementation of the Landscaping Project. In addition, the General Service Division repainted the Nonconnah Creek Bridge and replaced around 500 feet of damaged guard rails along Plough Boulevard. These improvements increased the visual enhancement of Plough Boulevard.

Tennessee Urban Forestry Grant

The Gateway and Beautification Work Group has formed a partnership with the Memphis City Beautiful Commission to develop funding of the improvements to the Plough Boulevard Master Landscaping Plan. This partnership paid dividends with the approval of a State of Tennessee urban forestry grant. The grant for \$45,000 is to assist in planting canopy trees in the Plough Boulevard Landscaping Project.

The Marketing/Branding Work Group worked to develop and trademark the Memphis: America's Aerotropolis logos and taglines. In addition to securing the Memphis trademark, the group assisted FedEx in securing aerotropolis-based logos for their Paris, France, and Ghaungzhou, China hubs, too.

The Marketing/Branding Group also developed presentation talking points to allow members of the Aerotropolis Committee to present a consistent message while delivering presentations. Numerous presentations were made throughout the year. Numerous presentations were given to the following organizations: University of Tennessee Retirees Association, DeSoto County Planning Commission, Visiting Estonian Delegation, Visiting Cal Tech Student Delegation, CCIM Meeting, Tunica County Casino Management Association, City Council Aero Update Presentation, Mississippi MPO Transportation Convention, Tennessee Air National Guard Luncheon, Memphis Speakers Club, Memphis City Beautiful Commission, Whitehaven Economic Development Corporation, Greater Memphis Chamber Membership Luncheon, CB Richard Ellis Brokers Staff Meeting, and County Commission Aero Update Presentation.

In 2009, the Memphis: America's Aerotropolis Executive Summary was released. Not only did the summary contain Dr. John Kasarda's report, but, it identified the concept and allowed the steering committee to turn the framework into action steps. The executive summary has been distributed to civic and community leaders, as well as to the media.

Memphis: America's Aerotropolis also went viral. The team created an Aerotropolis Facebook fan page and Twitter account with regular updates.

In addition, issues of HUB magazine were dedicated to the aerotropolis concept.

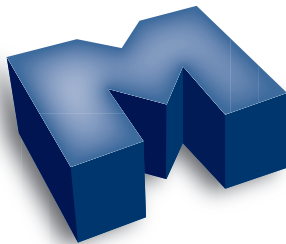
Memphis: America's Aerotropolis began to create a buzz with 44 media impressions during 2009. It was either featured or mentioned in both local and/or national media, including publications like: Crain's Cleveland Business, Travel & Leisure, Airport Business, Transportation Business Journal, Journal of Transportation, Milwaukee Business Journal, Light & Medium Truck, Memphis Flyer, The Commercial Appeal, Memphis Business Journal, and FOX 13.

Aerotropolis Gateway Signs



Memphis: America's Aerotropolis™

Working with the Aerotropolis Marketing and Branding Work Group, nine sign locations were identified for entrance ways leading to the Airport. Signs, using the Memphis: America's Aerotropolis logo, were manufactured by the City of Memphis Sign Shop. The signs will be installed in early 2010.



GREATER MEMPHIS CHAMBER

901-543-3500

www.memphischamber.com