

Travis County Commissioners Court Agenda Request

Voting Session **September 21, 2010**

I. A. Request made by:

Rodney Rhoades  Phone # 854-8679
Signature of Elected Official/Appointed Official/Executive Manager/County Attorney

B. Requested Text:

Receive presentation from the Broaddus and Associates Team regarding the Data Center Program for the Central Campus Needs Assessment and Master Plan and take appropriate action.

C. Approved by:

Signature of Commissioner(s) or County Judge

II. A. Backup memorandum and exhibits should be attached and submitted with this Agenda Request (Original and eight copies of agenda request and backup).

B. Please list all of the agencies or officials names and telephone numbers that might be affected or be involved with the request. Send a copy of this Agenda Request and backup to them:

- Honorable John K, Dietz, 250th District Court 854-9312
- Honorable Bob Perkins, 331st District Court 854-9443
- Honorable Lora Livingston, 261st District Court 854-9309
- Honorable Brenda Kennedy, 403rd District Court 854-9808
- Honorable Eric Shepperd, County Court-at-Law #2 854-9248
- Honorable David Crain, County Court-at-Law #3 854-9243
- Honorable Michael Denton 854-9896
- Honorable Guy Herman, Probate Court 854-9258
- Honorable Herb Evans, Justice of the Peace, Pct.5 854-9050
- Bruce Elfant, Constable Pct., 5 854-9100
- Debra Hale, Criminal Court Administration 854-9244
- Peg Liedtke, Civil Court Administration 854-9364
- Sheriff Greg Hamilton 854-9770
- Amalia Rodriguez-Mendoza, District Clerk 854-9737
- Dana DeBeauvior , County Clerk 854-9188
- Rosemary Lehmberg, District Attorney 854-9400
- David Escamilla, County Attorney 854-9415
- Dolores Ortega-Carter, Travis County Treasurer 854- 9365
- Susan Spataro, Travis County Auditor 854-9125
- Cyd Grimes, Travis County Purchasing Agent 854-9700
- Danny Hobby, Executive Manager Emergency Services 854-9367
- Roger Jefferies, Executive Manager Justice & Public Safety 854-4415
- Sherri Fleming, Executive Manager Health & Human

& Veterans' Services	854-4100
Joe Gieselman, Executive Manager Transportation	
& Natural Resources	854-9383
Roger El Khoury, Director Facilities Management Department	854-4579
Joe Harlow, Chief Technology Officer	854-9175
Deece Eckstein , Intergovernmental Relations Coordinator	854-9754
Steven Broberg, Director of Records Management	854-9575
Diane Blankenship , Director, Human Resources Management	854-9165
Rodney Rhoades, Executive Manager Planning & Budget	854-8679
Belinda Powell, Strategic Planning Manager	854-9106
Leslie Stricklan, AIA, Sr. Project Manager	854-4778

III. Required Authorizations: Please check if applicable:

- Planning and Budget Office (854-9106)
- Additional funding for any department or for any purpose
- Transfer of existing funds within or between any line item budget
- Grant
- Human Resources Department(854-9165)
- A change in your department's personnel (reclassifications, etc.)
- Purchasing Office (854-9700)
- Bid, Purchase Contract, Request for Proposal, Procurement
- County Attorney's Office (854-9415)
- Contract, Agreement, Policy & Procedure

AGENDA REQUEST DEADLINE: This Agenda Request complete with backup memorandum and exhibits should be submitted to the County Judge's Office no later than 5:00 PM on Tuesday for the following week's meeting. Late or incomplete request may be deferred to the next subsequent meeting.



PLANNING AND BUDGET OFFICE

TRAVIS COUNTY, TEXAS

314 W. 11th Street
P.O. Box 1748
Austin, Texas 78767

MEMORANDUM

September 21, 2010

TO: Members of the Commissioners Court

FROM: Belinda Powell, Strategic Planning Manager
Leslie Stricklan, AIA, Sr. Project Manager, Facilities Management Department

SUBJECT: **Receive presentation from the Broaddus and Associates team regarding the Data Center Program for the Central Campus Needs Assessment and Master Plan and take appropriate action.**

Summary and Recommendations:

Staff recommends approval of the program for the Primary Data Center for planning purposes and use in the development of scenarios for the Master Plan.

While programming work was completed for the Travis County data center, several operational issues needed to be addressed. The Information and Telecommunications Systems Department (ITS) director and senior data center staff has participated in the discussions related to the future objectives for the provision of data services for Travis County, just as other offices and departments did with the development of Program Planning Guides to inform their programming efforts with the Broaddus Team. As much of the delivery of IT services is based on the discussions with other offices and departments, the ITS data center program is designed to support the growth in technology, as well as to provide a higher level of redundancy for critical support systems, including cooling systems, power and connectivity to the campus cabling infrastructure. The redundancy is discussed in terms of “Tiers” by the IT industry, from I (lowest) to IV (highest) redundancy. Higher levels of redundancy in critical systems support better IT operations, with more reliable “uptime” and less chance for system outage or “downtime”. Currently the ITS data center critical systems are categorized at less than a Tier I, though ITS data center operations has been able to achieve better “uptime” than Tier I. The planning objective for the new data center will be to achieve a Tier III classification where physically and economically achievable.

The Needs Assessment and program analysis for the data center overall indicates that the current need is 10,700 Net Occupiable Square Feet (NOSF) growing to 14,700 NOSF by 2035. As a comparison, the data center currently occupies approximately 5,275 NOSF (including space in the adjacent ITS office suite which is being used for testing, staging, and storage). This reflects a 102% deficient in size related to current need. The computer room and equipment space, which is “heart” of the data center program, shows an even greater percentage deficit to current space need. Other issues related to the Tier level of the data center raise the expansion/relocation of the data center to a critical element for consideration in the phasing of the Master Plan development. The functional/operational assessment concluded that the existing Data Center location could not be adapted to meet the long term needs.

Additionally, staff recommends approval of the concept to site the primary data center on County owned property located in the central campus as an integral part of a the scenarios for the Central Campus Master Plan.

After the development of site analysis matrix for the relocation of the data center and the analysis of all County owned sites as well as twelve other sites by County staff in the fall of 2009, the County Data Center Team and the Broaddus Team are recommending that the data center remain in the Central Campus and be included in the massing and stacking for a new building proposed for block 126, the current USB site. The data center can not expand to the long-term area requirement at its current location. Additionally, if the Gault Building site is proposed to be redeveloped at some point in the future to support expansion of the Criminal Court System then the data center must relocate. As the Commissioners Court determined that the ITS Department will not be along term tenant of the 700 Lavaca site, relocation of the data center to an office building proposed for development on block 126 will allow ITS to consolidate all staff in that building when it is constructed and also achieve co-location with the data center.

Background:

Due to security issues and the discussion of potential failure issues for the current data center, the complete data center analysis is provided under separate cover for the Commissioners Court.

Fiscal Impact:

The fiscal impact of any construction, demolition, or renovation costs to meet these needs will be developed as Rough Order of Magnitude Costs (ROMs) for the Master Plan Scenarios that are under development. However some initial analysis for a stand alone data center building of 22,476 SF gross allows us to project \$13,700,000 total project cost as an initial outlay for the data center portion of a new building downtown, excluding additional structural costs to place the data center on an upper floor, and assuming the building is constructed on county owned land. This estimate includes a 10% construction cost contingency and a 10% Overall Owners project contingency. An additional \$3,000,000 to \$4,000,000 is projected for the IT data center new equipment and relocation costs. With approval to plan for the data center to occupy some portion of block 126 as part of a larger building, updated ROMs will be included in the Master Plan scenario concepts that will be presented on September 30, 2010. Costs will appear as an overall anticipated building project cost. For any further analysis, staff recommends hiring an IT consultant to work on the relocation planning and specific data center IT systems and building design requirements. This consultant would later become the County's IT expert on the team that will design the overall building for block 126 and also support the planning and execution of the transition from the existing to the new data center.

Attachments:

Presentation from Broaddus and Associates

COPY TO:

Honorable John K, Dietz, 250th District Court
Honorable Bob Perkins, 331st District Court
Honorable Lora Livingston, 261st District Court
Honorable Brenda Kennedy, 403rd District Court
Honorable Eric Shepperd, County Court-at-Law #2

Honorable David Crain, County Court-at-Law #3
Honorable Michael Denton
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Roger El Khoury, Director, Facilities Management Department
Joe Harlow, Chief Technology Officer, Information & Telecommunications Systems Department
Deece Eckstein, Intergovernmental Relations Coordinator
Steven Broberg, Director, Records Management & Communication Resources
Diane Blankenship, Director, Human Resources Management Department

TRAVIS COUNTY CENTRAL CAMPUS STUDY

FOR STRATEGIC NEEDS ANALYSIS & FACILITIES MASTER PLAN

DATA CENTER PROGRAM REVIEW – COMMISSIONERS COURT – SEPT. 21, 2010



**BROADDUS
& ASSOCIATES**
INNOVATIVE PROJECT MANAGEMENT AND PLANNING

RICCI GREENE ASSOCIATES
WIGINTON HOOKER JEFFRY
ARCHITECTS

DATA CENTER ASSESSMENT AND PROJECTIONS



EXISTING FACILITIES AND INFRASTRUCTURE

- Current Data Center at or beyond capacity
 - Extraordinary limitations on ability to grow
- Electrical and Mechanical systems stressed to limits
- Inadequate space to support staffing projections and requirements
- Considered both near and long term (2015-2025-2035)
- Confirmation County would need an alternate site

SITE SELECTION MATRIX

- Based upon industry Best Practices
- Provided a method for the County to analyze the potential sites
- Key criteria included:
 - Required separation from major highway corridors
 - At or above FEMA 100-year floodplain
 - Consideration of industrial issues related to chemicals
 - Fundamental size criteria for the Data Center and supporting areas
- Data Center 8000 SF + Support Areas

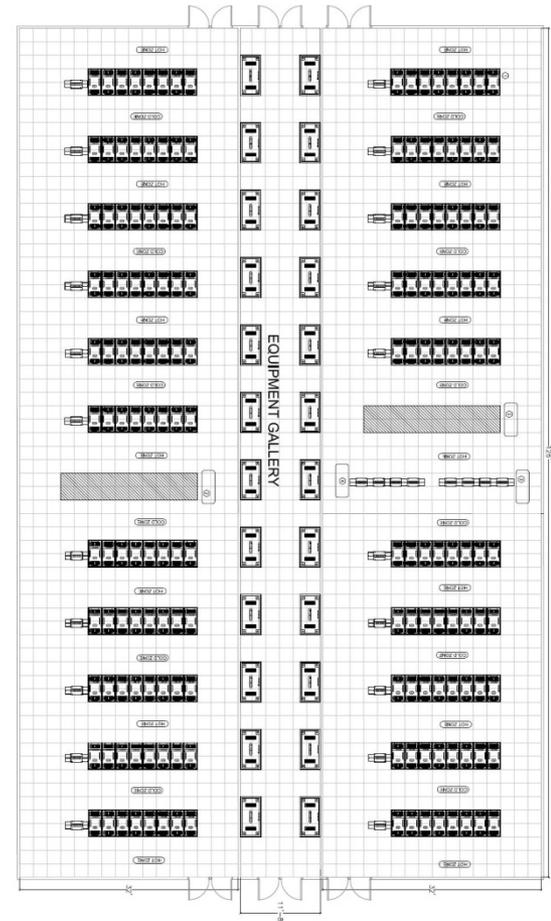
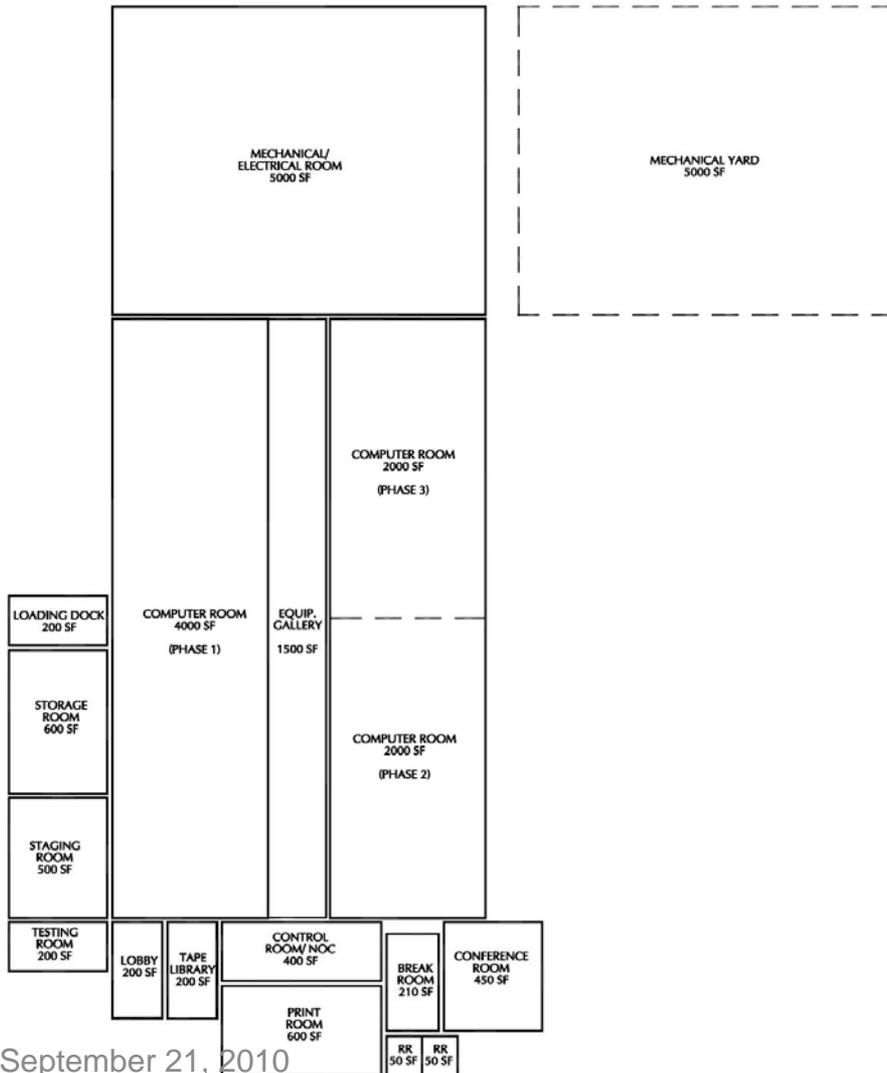
DATA CENTER PROGRAM

Space No. Component	Unit		Current Need		2015 Need			2025 Need			2035 Need		
	SF	Quan.	NSF	Staff	Quan.	NSF	Staff	Quan.	NSF	Staff	Quan.	NSF	Staff
<i>Support Space</i>													
35.01 Public Waiting /Lobby	200	1	200		1	200		1	200		1	200	
35.02 Conference Room ⁽¹⁾	450	1	450		1	450		1	450		1	450	
35.03 Break Room ⁽²⁾	210	1	210		1	210		1	210		1	210	
35.04 Control Room/ NOC ⁽³⁾	200	1	200		1	200		1.5	300		2	400	
35.05 Tape Library	200	1	200		1	200		1	200		1	200	
35.06 Testing Room	200	1	200		1	200		1	200		1	200	
35.07 Staging Room	500	1	500		1	500		1	500		1	500	
35.08 Storage Room	600	1	600		1	600		1	600		1	600	
35.09 Rest Rooms	50	2	100		2	100		2	100		2	100	
35.10 Print Room ⁽⁴⁾	600	1	600		1	600		1	600		1	600	
Sub-Total			3,260	0		3,260	0		3,360	0		3,460	
Total Net Square Feet / Total Staff			3,260	0		3,260	0		3,360	0		3,460	
x Department Circulation Factor			1.40			1.40			1.40			1.40	
Total Net Occupiable Square Feet			4,564			4,564			4,704			4,844	
35.11 Computer Room ⁽⁵⁾	4,000	1	4,000		1	4,000		1.5	6,000		2	8,000	
35.12 Equipment Gallery (CRACs) ⁽⁵⁾	1,500	1	1,500		1	1,500		1	1,500		1	1,500	
35.13 Loading Dock ⁽⁶⁾	200	1	200		1	200		1	200		1	200	
35.14 Mechanical/ Electrical Room ⁽⁶⁾⁽⁷⁾	5,000	1	5,000		1	5,000		1	5,000		1	5,000	
Sub-Total			10,700	0		10,700	0		12,700	0		14,700	
Total Net Occupiable Square Feet (NOSF)			15,264			15,264			17,404			19,544	
Building Grossing Factor (GSF) @1.15			1.15			1.15			1.15			1.15	
Total Gross Square Feet (GSF)			17,554			17,554			20,015			22,476	

DATA CENTER PROGRAM ELEMENTS

- Program suggests an incremental approach for building a modular Data Center with phases set for 2015, 2025 and 2035.
- Equipment Gallery houses the MEP Computer Room Air Conditioners and grows in modular fashion as well.
- Data Center Technical Requirements with SF calculations for each phase are included.
- Requirements mostly driven by power & cooling requirements.

FULL SITE SCHEMATIC



Computer Room Enlargement

ROUGH ORDER OF MAGNITUDE COSTS

ROUGH ORDER-OF-MAGNITUDE COST	2015	2025	2035
Capital Construction Cost <i>Site, Building, A&E Fees, & Bonding</i>	\$ 6,487,800		
Mechanical / Electrical Infrastructure <i>Data Center-Related Only</i>	\$ 3,528,711	\$ 422,564	\$ 171,481
Data Center Infrastructure <i>Materials Only; No Data Center Equipment Included</i>	\$ 2,351,159	\$ 1,175,579	\$ 1,175,579
FF&E <i>Furniture, Fixtures & Equipment</i>	\$ 77,850		
Owner Project Contingency (10%)	\$ 1,244,552	\$ 159,814	\$ 134,706
TOTAL CONCEPTUAL PROJECT COST	\$ 13,690,072	\$ 1,757,957	\$ 1,481,766