

BROWN & ROOT / ESPEY PADDEN

A Joint Venture

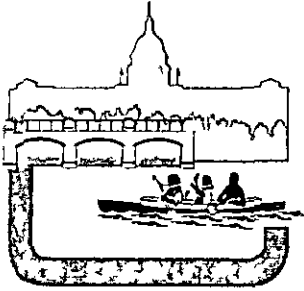
City of Austin
Watershed Engineering Division

Waller Creek Tunnel
C I P No 497-827-5000

**Construction and O&M
Cost Estimates Update**

October 6, 2006

Brown & Root/Espey Padden
3809 South 2nd, Suite B-300
Austin, Texas 78704
512-326-5659
713-753-3632



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City of Austin

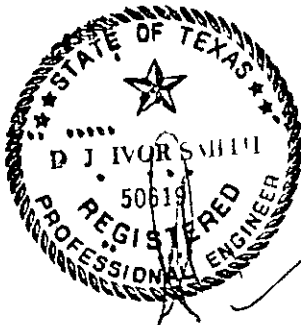
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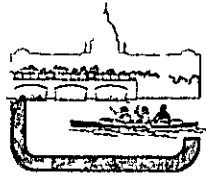
**Construction and O&M
Cost Estimates Update**

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October 6 2006

Mr Gary M Kosut P E
Watershed Engineering Division
City of Austin
One Texas Center
505 Barton Springs Road 12th Floor
Austin TX 78704

Subject Waller Creek Tunnel CIP Project No 4970 827 5000
Contract Addendum No 10
Updated Cost Estimates

Dear Mr Kosut

Please find enclosed four copies of our Final Report of the Updated Costs Estimates for the project The estimates are presented in June 2006 Dollars The estimates are for

- Inlet Structure in Waterloo Park just north of 12th Street
- Outlet Structure just west of Waller Creek at Town Lake (West Creek Outlet)
- Tunnel of 22 0 diameter following Sabine Street Alignment (with Intervening Storm Drain Connections)
- Tunnel of 15 6 diameter following Red River Street alignment (without Intervening Drain Connections)

Included in the estimates are various options that are available within these two basic alignment configurations The estimates include the equivalent year 2000 cost estimates for comparison purposes

The updated estimates now presented differ slightly from the Draft version that was handed to you on August 18 2006 as a result of completing our QC checks We have also now included the ROW Cost Estimates for the Intervening Storm Drain Connections

We hope that this report meets your needs and completes our assignment under Contract Addendum No 10 to your satisfaction If you have any questions please call me at 713 753 3632

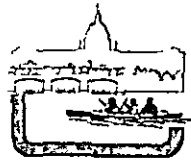
Very truly yours


Douglas Ivor Smith, P E
Project Manager

DIS/ES/os

c William H Espey Jr Ph D P E (2) – Espey Consultants Inc
Dorian French P E R P L S – Brown & Gay Engineers Inc
Nieves Alfaro, P E KBR

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City of Austin
Watershed Engineering Division

Waller Creek Tunnel
C I P No 497 827 5000

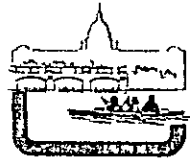
Construction and O&M Cost Estimates Update

October 6 2006

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TAB 1



Waller Creek Tunnel Project Supplemental Agreement No 10

Engineering, Construction and O&M Cost Estimates Updated to June 2006 Prices

BACKGROUND

The Preliminary Engineering Report (PER) for the Waller Creek Project was completed by the Joint Venture of Brown & Root / Espey Padden in April 2001. In that report, various tunnel alignment options, as well as inlet and outlet locations, were considered for the project. In general, the alignment options which proved the most economical at that time were:

- A Red River alignment with Inlet Works just north of Twelfth Street in Waterloo Park and Outlet Works just west of the confluence of Waller Creek and Town Lake, excluding storm drain connections.
- A Sabine Street alignment with similar locations for Inlet and Outlet Works, with storm drain connections to the proposed tunnel for four major storm drains currently discharging into Waller Creek.

Both alignments required a 22' 0" diameter tunnel to convey the 100 year design storm event. A Scope Reduction Cost Analysis completed in June 2000 considered an option of reducing the tunnel diameter to 15' 6". The smaller diameter alternative would convey only 55 percent of the 100 year storm and would preclude diversion of storm drain flows into the tunnel.

TECHNOLOGY CHANGES

Throughout the cost estimate update, the project team considered whether any recent technology changes might be considered that could impact the project in any way. None was identified.

The tunnel estimate performed in 2000 assumed the use of a tunnel boring machine (TBM) construction method with a single pass precast concrete liner. This assumption has been maintained in the updated cost estimate. The original PER noted that a roadheader excavation method and a cast in place tunnel liner could potentially prove to be a slightly more economical alternative to the TBM with segmental liner. This conclusion remains true in 2006, and national contractors with experience in what used to be called the New Austrian Tunneling Method (NATM) but now generally known as the Sequence Excavation Method (SEM) may offer a lower bid with this option. However, the difference in cost of the two methods is not considered to be within estimating accuracy.

ALIGNMENT AND LOCATION ASSUMPTIONS

The services assigned in the Contract Addendum #10 are to update the first Quarter 2000 cost estimates to June 2006 costs for both of the following tunnel configurations and alignments

- A 22.0 diameter tunnel generally aligned along Sabine Street with an option to provide storm drain connections to the tunnel and
- A 15.6 diameter tunnel aligned along Red River Street and excluding the storm drain connections

It is assumed that Inlet Works and Outlet Works will remain the same for both options. In both alignments an Intermediate Shaft has been included located approximately at Fifth Street, which would provide additional maintenance access to the tunnel for periodic inspection and cleaning. Some cost reduction may be achieved by omission of this shaft albeit at some decrease in efficiency for maintenance operations.

METHODOLOGY FOR THE UPDATED COST ESTIMATES

Since completion of the PER in 2000, no new engineering analysis has been undertaken for the current cost estimate update. A field reconnaissance was performed in June 2006 to ensure that any recent or current development activity along the right of way (ROW) required for the two alignment options was not likely to impact the project in any significant way. Field reconnaissance also established apparent availability of suitable right of way for the intermediate shaft. Current ROW costs for both tunnel alignment options and, in the case of the Sabine alignment, the estimated ROW costs for the storm drain connections were developed.

Recent bid tabulation data has been collected by the study team for relevant City of Austin projects. Bid tab analyses for recent TxDOT projects have also been obtained. Efforts were made to obtain meaningful bid tabulations from the private sector although these proved unsuccessful. Construction Cost Index (CCI) data as published by *Engineering News Record* have been reviewed. In addition, several national tunnel contractors were contacted for their opinion on the amount of escalation that they have experienced nationally. These various data sources have been used only as a very broad guide for reviewing results of the more detailed cost estimate update. Although cost estimating methods used for the Waller Creek estimate update do not depend to any significant degree on unit price history, it is nevertheless appropriate to compare the estimate with unit price experience in Austin. To the extent possible, this comparison has been made and confirms validity of the updated costs that have been developed.

Construction cost indices as published by *Engineering News Record* indicate that a 27 percent increase has occurred between first quarter 2000 and June 2006. Note that these indices are not specific to any geographic area and neither do they reflect the type of work being estimated. They are therefore considered an unreliable tool for this cost estimating process.

Of more relevance national tunneling contractors interviewed during this current cost update have indicated that a 35 percent increase in costs of tunnel work should be anticipated from 2000 to 2006. This evidence is anecdotal and does not reflect specific requirements of this project nor its location.

Inlet and Outlet Works

The original year 2000 Inlet and Outlet Works component of the estimate was reviewed for content and for assumptions to suit the current defined scope for the 2006 estimate update. Means Construction Estimate Prices (2006) have been used on the detailed estimate of quantities for the completed Inlet and Outlet works. For major equipment and fabricated products, product vendors and manufacturers were contacted and their current cost estimates were obtained for use in updating the cost estimate. Where vendors were not able to supply updated cost estimates for their respective equipment, prices were escalated by the default ENR CCI factor of 128 percent for general components and 200 percent for those components that have a high steel content. Some items in the cost estimate for the recirculation system that were originally included in the inlet structure estimate have been reallocated to the outlet structure.

Tunnel Estimates

For tunnels, the construction cost estimates originally prepared in 1999 were retrieved from project files and prepared for updating to current costs. Note that the most definitive and detailed cost estimate prepared for the original PER was performed on a Trinity Street alignment. Costs for other alignment options considered at that time were then derived by extrapolation from the Trinity Street estimate. Therefore, to develop the current Sabine Street and Red River Street tunnel construction cost estimates, the original Trinity Street estimate was revised. The revision reflects quantities and assumptions needed to suit the current tunnel configurations and alignments, using the same estimating methodology as was used in the 2000 definitive estimate. The estimating methodology included labor, materials, equipment, and subcontract elements.

Breaking the elements into labor, materials, equipment ownership and operation costs, and subcontracted elements, and then adjusting these to include G&A overhead, profit, and cost of bonds, provides a more reliable end result. The method used is especially beneficial in allowing local labor costs to be used, as well as local material costs. The use of reasonable construction schedule assumptions and likely productivity rates are key to the method.

Project staff with experience in tunnel construction estimating developed the current tunnel labor rates for Austin, local material supply costs, and equipment ownership rates. Muck haulage and disposal costs were similarly checked by local staff. In reviewing the project schedule, some very minor adjustments were made to duration of tunnel activities as a result of the new analysis. For the tunnel cost estimate update, a somewhat more conservative construction methodology has been applied to the Outlet Shaft construction to reflect recent experience in dealing with deep excavations in the vicinity of Town Lake.

Intervening Drainage

As presented in the original PER, the construction cost estimate for intervening drainage had been prepared on a conceptual level of design only; this component of the project still needs the benefit of a complete preliminary design to validate the conceptual system. In the current updated cost estimate for Intervening Drainage, based on the Sabine Street alignment only, the same original concepts have been

assumed. However in the latest estimate mechanical screens have been included as an option at the four Intervening Drainage locations. For the Third Street drainage connect to work hydraulically a parallel 1820 foot long 17 foot diameter tunnel must be constructed to connect with the outlet structure.

Intervening drainage connections are not proposed for use on the 15' 6" diameter tunnel along Red River Street.

CONSTRUCTION COST ESTIMATE FINDINGS

The estimate update summary based on 2006 prices with a comparison of the original 2000 estimated costs is shown in Table 1 – Project Cost summary.

The net combined construction cost for Inlet and Outlet works is now estimated to be \$34,910,000 in June 2006 dollars. The current cost represents an increase of approximately 58 percent over the 2000 estimate. Refer to Table 2.1 – Inlet Construction Cost Summary and Table 2.2 – Outlet Construction Cost Summary.

For tunnel works, the Sabine Street tunnel alignment with 22 foot diameter tunnel and intermediate shaft is estimated to have a construction cost of \$27,570,000 in June 2006 dollars. This represents a 47 percent increase over the 2000 estimate. The Red River Street alignment with a 15' 6" diameter tunnel and intermediate shaft is estimated to have a construction cost of \$20,198,000 in June 2006 dollars. The Red River alignment cost estimate represents an increase of 49 percent over the 2000 estimate. Refer to Table 3.1 – Tunnel Construction Cost Summary and Table 3.2 – Comparison of Tunnel Works Cost 2000 to 2006.

Intervening Drainage works are estimated to have a construction cost of \$19,543,000 in June 2006 dollars excluding mechanical screens. The inclusion of the mechanical screens increases the estimated cost by an additional \$13 million. Please note that the Intervening Drainage cost estimate was revised upward in 2003 but for consistency the original 2000 cost has been included. Refer to Table 4 – Intervening Drainage Construction Cost Summary.

OPERATION AND MAINTENANCE COST ESTIMATE

The original estimate of O&M cost for various segments of the project were based on a staffing plan and schedule of likely maintenance tasks. No changes to this plan and schedule were found necessary for this cost update study. Current labor cost trends within the City of Austin for administrative, operational, and maintenance personnel were reviewed. General and administrative labor costs have been adjusted to reflect the City of Austin's current holiday and vacation allowances of two weeks and 12 holidays rather than the three weeks and ten holidays applied in the year 2000 study. In addition to the City rates, data from the U.S. Department of Labor and Texas Water Utilities classified ads were also taken into account.

The average cost per kilowatt hour of electricity has increased from \$0.07 to \$0.09 based on figures provided by City of Austin staff. The \$0.02 increase in cost per Kwh results in a 29 percent increase in electricity cost at both the inlet and outlet structures compared to the year 2000 study. Gasoline and diesel

fuel costs were also adjusted to reflect current prices at the pump. Fuel costs related to the inlet structure are currently 124 percent higher than the original estimate. Materials and supplies for O&M were updated to reflect a wholesale price index of 4.9 percent per year. Outsourced work items were updated to reflect a core inflation rate of 3.8 percent per year. Total increase in O&M expenses for the inlet and outlet structure relative to the year 2000 study is 15 percent, which is a lower number than expected due to some downward adjustment of labor costs.

O&M costs for the Intervening Drainage are based on conceptual costs only.

DESIGN AND CONSTRUCTION SCHEDULE ASSUMPTIONS

As stated previously, the overall design and construction schedule for the complete works, as presented in the 2000 PER, was based on the Trinity Street alignment. This schedule has been reviewed and adjustments have been made to suit current chronology of the project. No other adjustments appear to be warranted. This updated schedule is included at Tab 5.

Schedule assumptions for the physical modeling component of the Inlet and Outlet works is considered appropriate for current project needs. The possible requirement for an Environmental Impact Statement (EIS) could adversely impact the schedule. The current consensus is that an EIS will not be required.

No original schedule was prepared for the 15.6 diameter tunnel on the Red River Street alignment as shown in the 2000 Cost Reduction Study. A small decrease in the TBM drive duration should be achievable compared to the larger 22 foot diameter tunnel; this time saving is estimated to be four weeks. This shorter drive time has been reflected in the cost estimate for the Red River option. The assumption is maintained that Inlet and Outlet works would not be impacted because of the smaller tunnel. Therefore, the schedule for these two components would be unaffected.

RIGHT OF WAY COSTS

In the previous study, a width of 45 feet was assumed for permanent easement taking. This study assumes a 50 foot permanent right of way (ROW) will be required for each of the Sabine Street or Red River Street alignment alternatives. This assumed width reflects current City of Austin easement requirements on recent wastewater tunnel projects. The ROW tables included at Tab 6 are exactly the same as those provided in the year 2000 study with exception of the alignment and land value updates. These tables provide data for required easements on public and private properties for each of the Sabine Street (Table 6.1) and Red River Street (Table 6.2) tunnel alignments. Drawings are provided in acetate pockets illustrating the Sabine Alignment Right of Way (Attachment 6.1) and the Red River Alignment Right of Way (Attachment 6.2). As in the prior study, the cost of private right of way for this cost update study is determined based on percentage of right of way area to total parcel area. The assumption for cost of subsurface right of way is still assumed to be 25 percent of the current Travis County Appraisal District (TCAD) appraised land value for the impacted percentage of any particular parcel. However, because below ground utility easements are sometimes acquired on a flat fee per parcel basis, the flat fee per parcel option is also shown for comparison.

The TCAD value option easement cost increased to \$439 000 from \$240 000 (=\$40 000+ \$200 000 for Intermediate Shaft) in 2000 for the Red River Street alignment and to \$702 000 from \$460 000 in 2000 for the Sabine Street alignment

The fee/parcel option easement cost increased to \$391 000 from \$217 000 in 2000 for the Red River Street alignment and to \$395 000 from \$212 000 in 2000 for the Sabine Street alignment

The conceptual ROW costs for the Intervening Drainage are expected to be \$122 000 which includes ROW to the 1820 foot long, 17 foot diameter tunnel. Additional right of way will be needed if mechanical screens are adopted for the intervening drainage. Refer to Table 6.3 – Intervening Drainage Right of Way Cost

ENGINEERING COSTS

Engineering costs are estimated according to industry experience and reflect the Client's current policies. The costs for engineering include the project engineering development to date (since 1999) and allowances for future engineering and special services such as modeling, geotechnical investigation, preparation of a GBR survey, archeological and historian services, public participation and EEO compliance services, materials testing, and final design. Assistance during bid evaluation and the provision of Construction Management Services are also included in the engineering estimate.

TAB 2

TABLE 2 1 INLET CONSTRUCTION COST SUMMARY

Inlet at 12th Street 100 Year Morning Glory with Mechanical Screen and Water Feature June 2006
WALLER CREEK TUNNEL PROJECT CITY OF AUSTIN June 2006 Cost Update

Item	Total Cost without Overhead and Profit	Overhead and Profit	Total Cost Including Overhead and Profit	Contingency	Total Cost Including Contingency and Overhead and Profit (Rounded Up to Nearest \$1000)
Concrete Morning Glory Inlet Structure	\$ 998,751	Variable	\$ 1,157,933	15%	\$ 1,332,000
Concrete Tunnel Recirculation and Water Feature Screens and Pump Station	\$ 2,165,538	Variable	\$ 2,653,581	15%	\$ 3,052,000
Concrete Stairs	\$ 13,382	Variable	\$ 17,430	15%	\$ 21,000
Weir	\$ 38,644	Variable	\$ 49,176	15%	\$ 57,000
Wall Anchors/Supports	\$ 213,000	15%	\$ 244,950	10%	\$ 270,000
Excavation and Foundation Anchors	\$ 1,271,279	Variable	\$ 1,508,887	15%	\$ 1,736,000
Inlet Water Control	\$ 461,143	15%	\$ 611,659	15%	\$ 704,000
Recirc Piping & Valves	\$ 4,185,678	15%	\$ 4,795,276	5%	\$ 5,036,000
Electrical	\$ 974,000	15%	\$ 1,121,000	5%	\$ 1,178,000
Instrumentation & Controls	\$ 1,101,600	15%	\$ 1,267,600	5%	\$ 1,331,000
Alternating Aluminum Stairs	\$ 59,000	15%	\$ 68,000	5%	\$ 72,000
Handrails	\$ 7,152	Variable	\$ 8,662	5%	\$ 10,000
Aluminum Catwalk Grating	\$ 123,144	Variable	\$ 141,615	5%	\$ 149,000
Screens (Mech)	\$ 4,058,000	15%	\$ 4,667,000	5%	\$ 4,901,000
Architectural / Landscaping / Parking Area	\$ 1,614,000		\$ 1,614,000	5%	\$ 1,695,000
Utility Relocations	\$ 50,000	15%	\$ 57,500	5%	\$ 61,000
TOTAL	\$ 17,334,310		\$ 19,984,269		\$ 21,605,000
Overhead & Profit included in base number		Rounded to \$21,610,000			

TABLE 1 PROJECT COST SUMMARY

WALLER CREEK TUNNEL PROJECT CITY OF AUSTIN June 2006 Cost Update

ITEM DESCRIPTION	January 2000 Estimate (Taken From 3/2001 Scope Reduction & Benefit Cost Analysis)		June 2006 Estimate			
	15.5 TUNNEL (with FULL WATER FEATURES) 55 / of 100 YEAR NO Future Intervening Storm Sewer Connections 12 th Street Morning Glory Inlet with Mechanical Screen RED RIVER Alignment 15.5 Diameter without Intermediate Shaft WEST CREEK Lagoon Outlet	22 TUNNEL (with FULL WATER FEATURES) 100 % of 100 YEAR WITH Intervening Storm Sewer Connections With Manual Screens 12 th Street Morning Glory Inlet with Mechanical Screen SABINE Alignment 22 Diameter with Intermediate Shaft WEST CREEK Lagoon Outlet	15.5 TUNNEL (with FULL WATER FEATURES) 55 / of 100 YEAR NO Future Intervening Storm Sewer Connections 12 th Street Morning Glory Inlet with Mechanical Screen RED RIVER Alignment 15.5 Diameter with Intermediate Shaft WEST CREEK Lagoon Outlet	22 TUNNEL (with FULL WATER FEATURES) 100 % of 100 YEAR WITH Future Intervening Storm Sewer Connection 12 th Street Morning Glory Inlet with Mechanical Screen SABINE Alignment 22 Diameter with Intermediate Shaft WEST CREEK Lagoon Outlet	22 TUNNEL (with FULL WATER FEATURES) 100 / of 100 YEAR WITH Intervening Storm Sewer Connections With Manual Screens 12 th Street Morning Glory Inlet with Mechanical Screen SABINE Alignment 22 Diameter with Intermediate Shaft WEST CREEK Lagoon Outlet	22 TUNNEL (with FULL WATER FEATURES) 100 % of 100 YEAR WITH Intervening Storm Sewer Connections With Mechanical Screens 12 th Street Morning Glory Inlet with Mechanical Screen SABINE Alignment 22 Diameter with Intermediate Shaft WEST CREEK Lagoon Outlet
TUNNEL PROJECT						
Inlet	\$ 14 310 000	\$ 14 310 000	\$ 21 605 000	\$ 21 605 000	\$ 21 605 000	\$ 21 605 000
Tunnel	\$ 12 740 000	\$ 18 738 000	\$ 20 198 000	\$ 27 566 000	\$ 27 566 000	\$ 27 566 000
Outlet	\$ 7 777 000	\$ 7 777 000	\$ 13 300 000	\$ 13 300 000	\$ 13 300 000	\$ 13 300 000
Total Construction Cost	\$ 34 827 000	\$ 40 825 000	\$ 55 103 000	\$ 62 471 000	\$ 62 471 000	\$ 62 471 000
Right-of Way	\$ 40 000	\$ 459 000	\$ 440 000	\$ 702 000	\$ 702 000	\$ 702 000
Preliminary Engineering Engineering Design Modeling Geotechnical Engineering & Testing & Construction Management Inspection Small Bid Pkgs	\$ 10 999 000	\$ 11 506 000	\$ 17 543 000	\$ 18 910 000	\$ 18 910 000	\$ 18 910 000
PROJECT COST	\$ 45 866 000	\$ 52 790 000	\$ 73 086 000	\$ 82 083 000	\$ 82 083 000	\$ 82 083 000
Annual O&M Cost	\$ 1 403 000	\$ 1 395 000	\$ 1 587 000	\$ 1 599 000	\$ 1 599 000	\$ 1 599 000
INTERVENING STORM SEWER CONNECTIONS						
Construction Cost		\$ 7 880 000			\$ 19 543 000	\$ 32 260 000
Engineering Testing & CM		\$ 1 580 000			\$ 6 092 000	\$ 8 700 000
Right-of Way					\$ 122 000	\$ 730 000
PROJECT COST		\$ 9 460 000			\$ 25 757 000	\$ 41 690 000
Annual O&M Cost		\$ 79 000			\$ 1 001 000	\$ 1 033 000
OVERALL TUNNEL PROJECT PLUS STORM SEWERS						
Construction Cost		\$ 48 705 000			\$ 82 014 000	\$ 94 731 000
Engineering Testing & CM		\$ 13 086 000			\$ 25 002 000	\$ 27 610 000
Right-of Way (Tunnel)		\$ 459 000			\$ 824 000	\$ 1 432 000
PROJECT COST		\$ 62 250 000			\$ 107 840 000	\$ 123 773 000
Annual O&M Cost		\$ 1 474 000			\$ 2 600 000	\$ 2 632 000

TABLE 2.2 OUTLET CONSTRUCTION COST SUMMARY

- Outlet at West Creek - 100 Year Lagoon with Wier - June, 2006

WALLER CREEK TUNNEL PROJECT CITY OF AUSTIN - June 2006 Cost Update

Item	Total Cost without Overhead and Profit	Overhead and Profit	Total Cost Including Overhead and Profit	Construction Contingency	Total Cost Including Contingency and Overhead and Profit
Concrete	\$ 1 680 954	Variable	\$ 1 966 958	15%	\$ 2 263 000
Concrete Stairs	\$ 5 956	Variable	\$ 7 716	15%	\$ 9 000
Concrete Weir	\$ 90 742	Variable	\$ 109 814	15%	\$ 127 000
Shaft	\$ 338 804	Variable	\$ 410 339	10%	\$ 452 000
Slurry Wall & Cofferdam	\$ 922 715	Variable	\$ 1 105 766	10%	\$ 1 217 000
Excavation	\$ 460 857	Variable	\$ 553 811	10%	\$ 610 000
Outlet Water Control	\$ 667 120	Variable	\$ 887 024	15%	\$ 1 021 000
Pumps	\$ 265 289	15%	\$ 305 083	10%	\$ 336 000
Dewatering Piping & Valves	\$ 508 456	15%	\$ 584 724	10%	\$ 644 000
Recirc Piping & Valves	\$ 401 676	15%	\$ 461 933	5%	\$ 486 000
Electrical	\$ 201 570	15%	\$ 231 806	5%	\$ 244 000
Instrumentation & Controls	\$ 67 190	15%	\$ 77 269	5%	\$ 82 000
Alternating Stairs	\$ 59 000	15%	\$ 68 000	5%	\$ 72 000
Aluminum Catwalk Grating	\$ 229 098	Variable	\$ 259 675	5%	\$ 273 000
Access Prevention Screens	\$ 178 643	Variable	\$ 245 795	5%	\$ 259 000
Recirculation Screens	\$ 11 478	15%	\$ 13 200	15%	\$ 16 000
Air Backwash System	\$ 23 914	15%	\$ 22 000	15%	\$ 26 000
Architectural	\$ 3 750 000	15%	\$ 4 343 000	5%	\$ 4 561 000
Utility Relocations	\$ 458 205		\$ 458 205	5%	\$ 482 000
Access Road & Parking	\$ 103 500	10%	\$ 113 850	5%	\$ 120 000
TOTAL	\$ 10,425,167		\$ 12,225,967	8.78%	\$ 13,300,000

10/6/2006

06 2006 WCT Est Update O&M LCCA Inlet Outlet Tunnel SS 10 05 2006 DFOutlet Constr Cost Summary

TAB 3

TABLE 3 1 TUNNEL CONSTRUCTION COST SUMMARY

Tunnel Sabine Street and Red River Alignments 100 Year 22 Feet Diameter TBM with Segmental Liner June 2006
WALLER CREEK TUNNEL PROJECT CITY OF AUSTIN June 2006 Cost Update

Brought Forward	SABINE TUNNEL						RED RIVER TUNNEL					
	Labor with Burden & Benefits	Permanent Material	Construction Material	Equipment Ownership	Equipment Operation	Subcontract	Labor with Burden & Benefits	Permanent Material	Construction Material	Equipment Ownership	Equipment Operation	Subcontract
Activity 1 Indirects and overhead	\$ 1,570,574	\$	\$ 493,500	\$ 714,550	\$ 176,650	\$ 705,400	\$ 1,570,574	\$	\$ 465,450	\$ 695,260	\$ 167,893	\$ 699,590
Activity 2 Mobilize and prepare site	included						included					
Activity 3 Sink outlet shaft	\$ 108,299	\$	\$ 575,740	\$ 73,096	\$ 18,274	\$ 196,230	\$ 108,299	\$	\$ 573,068	\$ 73,096	\$ 18,274	\$ 196,230
Activity 4 Prepare intermediate shaft site	included						included					
Activity 5 Starter chamber	\$ 124,317	\$	\$ 262,512	\$ 119,031	\$ 43,919	\$ 21,555	\$ 124,317	\$	\$ 262,512	\$ 97,476	\$ 43,919	\$ 12,519
Activity 6 Intermediate shaft and adit	\$ 169,954	\$	\$ 48,887	\$ 110,820	\$ 27,705	\$ 18,941	\$ 169,954	\$	\$ 48,887	\$ 120,055	\$ 27,705	\$ 18,941
Activity 7 Rehab and Deliver TBM	included						included					
Activity 8 Erect TBM	\$ 56,473	\$	\$ 60,000	\$ 19,200	\$ 4,800	\$ 57,500	\$ 56,473	\$	\$ 60,000	\$ 19,200	\$ 4,800	\$ 57,500
Activities 9, 10 TBM Drive	\$ 1,046,432	\$ 8,446,080	\$ 33,782	\$ 3,735,466	\$ 879,242	\$ 581,646	\$ 913,176	\$ 4,742,067	\$ 33,677	\$ 2,532,829	\$ 578,584	\$ 301,305
Activity 11 Sink inlet shaft	\$ 104,427	\$	\$ 200,561	\$ 67,720	\$ 16,930	\$ 30,870	\$ 104,427	\$	\$ 200,582	\$ 67,720	\$ 16,930	\$ 17,145
Activity 12 Dismantle TBM	\$ 48,785	\$	\$ 12,000	\$ 14,200	\$ 3,550	\$ 57,500	\$ 48,785	\$	\$ 3,000	\$ 14,200	\$ 3,550	\$ 37,500
Activities 13, 14 Clean out and mortar joints	\$ 181,748	\$ 3,480	\$	\$ 71,070	\$ 17,768	\$	\$ 109,052	\$ 3,480	\$	\$ 55,993	\$ 17,768	\$
Activities 20 Intermediate shaft finishes	\$ 167,458	\$ 217,950	\$ 35,000	\$ 69,700	\$ 17,425	\$	\$ 167,458	\$ 217,950	\$ 35,000	\$ 69,700	\$ 17,425	\$
Activity 25 Clear sites	included						included					
Sub Total	\$ 3,578,467	\$ 8,667,510	\$ 1,721,982	\$ 4,994,853	\$ 1,206,263	\$ 1,669,641	\$ 3,372,515	\$ 4,963,497	\$ 1,682,176	\$ 3,745,529	\$ 896,848	\$ 1,340,729
ENR CCI Factor	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Adjusted to June 2006 Dollars	\$ 3,578,467	\$ 8,667,510	\$ 1,721,982	\$ 4,994,853	\$ 1,206,263	\$ 1,669,641	\$ 3,372,515	\$ 4,963,497	\$ 1,682,176	\$ 3,745,529	\$ 896,848	\$ 1,340,729
Total Indirects and Activities						\$ 21,838,716						\$ 16,001,294
G and A	4 50 /					\$ 982,743	4 50 %					\$ 720,059
Allow for Profit	8 00 %					\$ 1,747,098	8 00 /					\$ 1,280,104
Allow for possible Liquidated Damages	0 25 /					\$ 54,597	0 25 %					\$ 40,004
Cost of Money	0 00 %					\$	0 00 %					\$
Add Bid Bond	0 50 %					\$ 109,194	0 50 %					\$ 80,007
Add Performance Bond	1 50 %					\$ 327,581	1 50 %					\$ 240,020
TOTAL COST ESTIMATE						\$ 25,059,929						\$ 18,361,488
Add Contingency	10 00 %					\$ 2,505,993	10 00 %					\$ 1,836,149
					GRAND TOTAL	\$ 27,565,922					GRAND TOTAL	\$ 20,197,637

TABLE 3 2 COMPARISON OF TUNNELING WORKS COST
2000 to 2006

Sabine Alignment Tunnel Estimate Summary and Comparison					Red River Alignment Tunnel Estimate Summary and Comparison				
Estimate Base		2006	2000		Estimate Base		2006	2000	
Based on Final Estimate of		\$27 565 922	\$18 737 502	Percent Increase	Based on Final Estimate of		\$20 197 637	\$12 740 000	w/o intermediate shaft Percent Increase
Tunnel	87 49%	\$24 116 473	\$17 230 039	39 97%	Tunnel	87 49%	\$17 670 215	\$11 995 500	47 31%
Outlet Shaft	5 33%	\$1 468 591	\$653 883	124 60%	Outlet Shaft	5 33%	\$1 076 041	\$653 883	64 56%
Inlet Shaft	2 32%	\$638 607	\$348 303	83 35%	Inlet Shaft	2 32%	\$467 909	\$348 303	34 34%
Intermed Shaft *	4 87%	\$1 342 252	\$505 277	165 65%	Intermed Shaft *	4 87%	\$983 472	\$523 111	88 00%
Total	100 00%	\$27 565 922	\$18 737 502	47 12%	Total	100 00%	\$20 197 637	\$13 520 797	49 38%

Original 2000 Estimate \$18 737 502
Industry experience % Increase 35%
Total 2006 estimate derived from this \$25 295 628

Note that in 2000 etimate the Intermediate Shaft cost did not include shaft finishes These were inadvertently included in the tunnel costs This explains the apparent large increase in the cost of this component between 2000 and 2006

Original 2000 Estimate \$13 520 797
Industry experience % Increase 35%
Total 2006 estimate derived from this \$18 253 076

Note that in 2000 etimate the Intermediate Shaft cost did not include shaft finishes These were inadvertently included in the tunnel costs This explains the apparent large increase in the cost of this component between 2000 and 2006

TAB 4

TABLE 4 INTERVENING DRAINAGE CONSTRUCTION COST SUMMARY**Intervening Storm Sewer 12th to Town Lake - 100 Year, 22 Feet Diameter TBM June 2006****WALLER CREEK TUNNEL PROJECT CITY OF AUSTIN June 2006 Cost Update**

INTERVENING STORM SEWER WITH MECHANICAL SCREENS					
Item	Total Cost without Overhead and Profit	Overhead and Profit	Total Cost Including Overhead and Profit	Conceptual Level Estimate Construction Contingency	Total Cost Including Contingency and Overhead and Profit
Concrete	\$ 6,620,916	Varies	\$ 8 096 375	15%	\$ 9 311,000
Excavation	\$ 3 283 545	Varies	\$ 3,874,346	15%	\$ 4,456 000
Tide Flex Valves	\$924 000	10%	\$1,016,400	5%	\$ 1,068,000
Mechanical Screens	\$7,228,964	10%	\$7,951,860	5%	\$ 8 350,000
Tunnels and Shafts	\$ 7,494,743	10%	\$ 8,244,217	10%	\$ 9,069 000
TOTAL	\$ 25 552 168		\$ 29 183 199		\$ 32 254 000

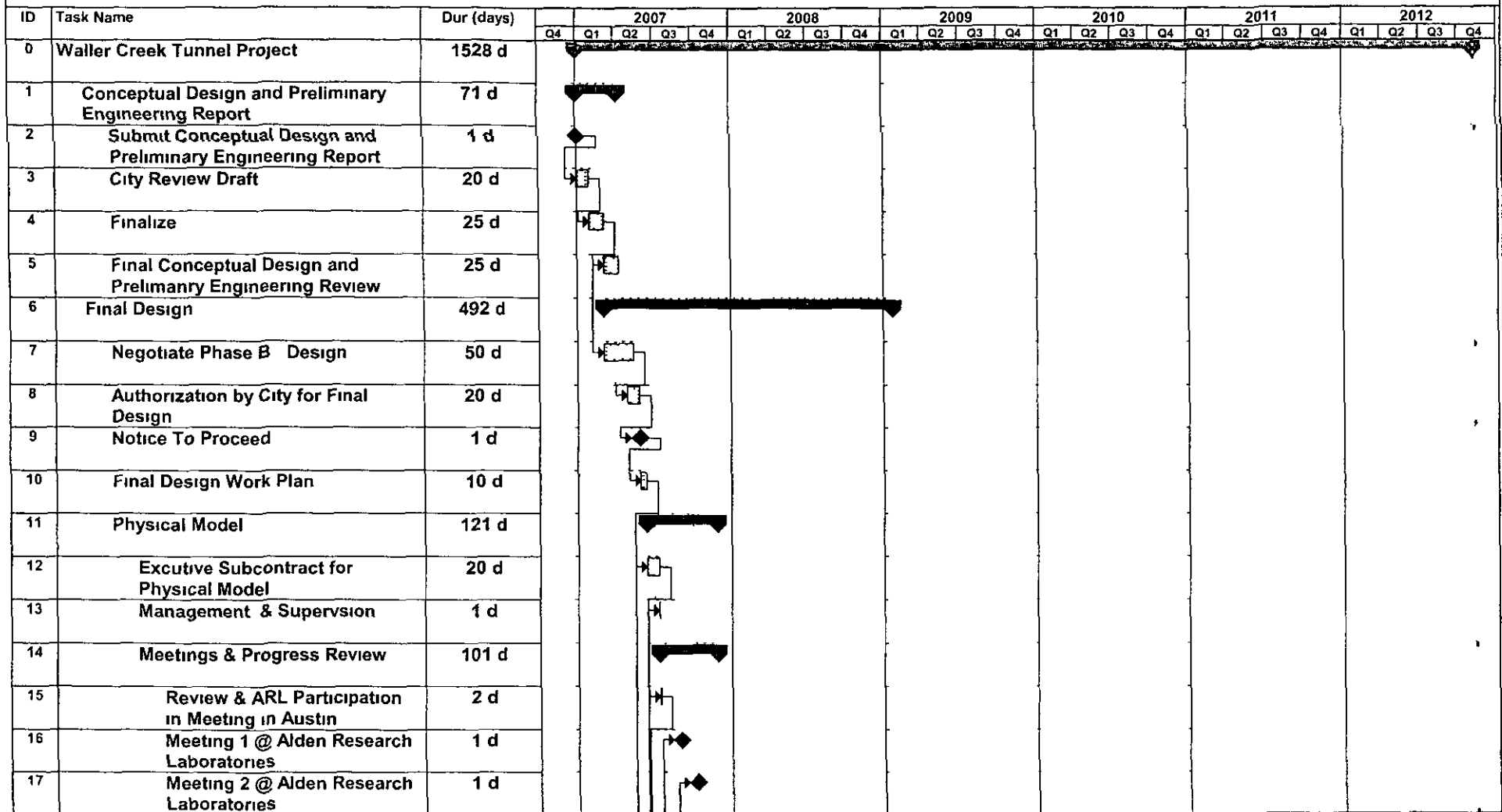
INTERVENING STORM SEWER WITH MANUAL SCREENS					
Item	Total Cost without Overhead and Profit	Overhead and Profit	Total Cost Including Overhead and Profit	Conceptual Level Estimate Construction Contingency	Total Cost Including Contingency and Overhead and Profit
Concrete	\$ 3,880,963	Varies	\$ 4 775,011	15%	\$ 5 492,000
Excavation	\$ 2,782,108	Varies	\$ 3 282,687	15%	\$ 3 776,000
Tide Flex Valves	\$924,000	10%	\$1,016,400	5%	\$ 1 068,000
Manual Screens	\$100,000	15%	\$115 000	20%	\$ 138 000
Tunnels and Shafts	\$ 7,494,743	10%	\$ 8,244,217	10%	\$ 9 069,000
TOTAL	\$ 15 181 814		\$ 17 433 315		\$ 19 543 000

10/6/2006

06 2006 WCT Est Update O&M LCCA Inlet Outlet Tunnel SS 10 05 2006 DFISS Constr Cost Summary

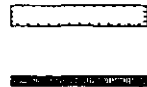
TAB 5

WALLER CREEK TUNNEL PROJECT DESIGN AND CONSTRUCTION SCHEDULE

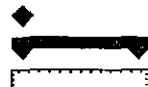


Project Wall Creek Tunnel Project
Date: 8/18/06

Task
Split
Progress



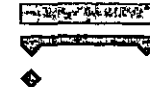
Milestone
Summary
Roll Up Task



Roll Up Split
Roll Up Milestone
Roll Up Progress



External Tasks
Project Summary
External Milestone






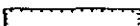


External Milestone
Deadline



WALLER CREEK TUNNEL PROJECT DESIGN AND CONSTRUCTION SCHEDULE

ID	Task Name	Dur (days)	2007					2008					2009					2010					2011					2012				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
18	Meeting 3 @ Alden Research Laboratories	1 d																														
19	Task 1 Inlet Structure Model Study	85 d																														
20	Design & Construction of Inlet Structure & Waterloo	40 d																														
21	Inlet Model Testing and Derivation of Modifications	30 d																														
22	Report Preparation	15 d																														
23	Task 2 Outlet Structure Model Study	70 d																														
24	Outlet Structure Model Design & Construction	35 d																														
25	Outlet Model Testing and Derivation of Modifications	20 d																														
26	Report Preparation	15 d																														
27	Computer Modeling	15 d																														
28	Final Presentation of Results of Modeling	5 d																														
29	Detail Design	365 d																														
30	Geotechnical	125 d																														
31	Scope & Define Geotechnical Program	20 d																														
32	Geotechnical Field Investigation	50 d																														
33	Laboratory Tests	40 d																														
34	Report for Design Needs	40 d																														
35	Rock Mech Testing	56 d																														

Project Waller Creek Tunnel Project
Date Fri 8/18/06

Task  Milestone 
Split  Summary 
Progress  Roll Up Task 

Roll Up Split

Roll Up Milestone

Roll Up Progress

External Tasks

Project Summary

External Milestone

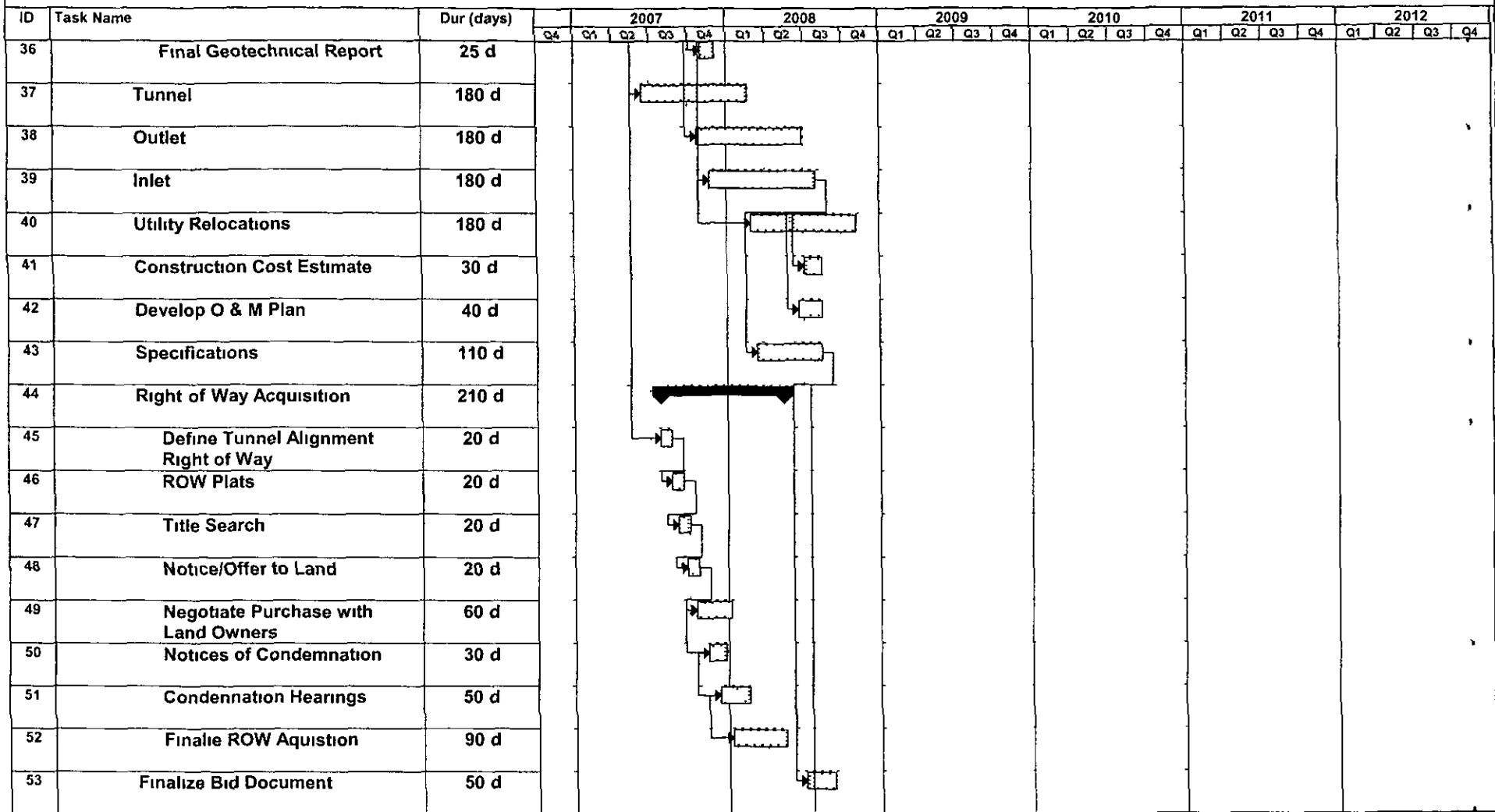
External Milestone

Deadline

Brown & Root / Espey Padden
A Joint Venture



WALLER CREEK TUNNEL PROJECT DESIGN AND CONSTRUCTION SCHEDULE



Project Wall Creek Tunnel Project
Date Fri 8/18/06

Task

Split

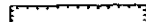
Progress



Milestone

Summary

Rolled Up Task



Rolled Up Split

Rolled Up Milestone

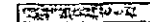
Rolled Up Progress



External Tasks

Project Summary

External Milestone

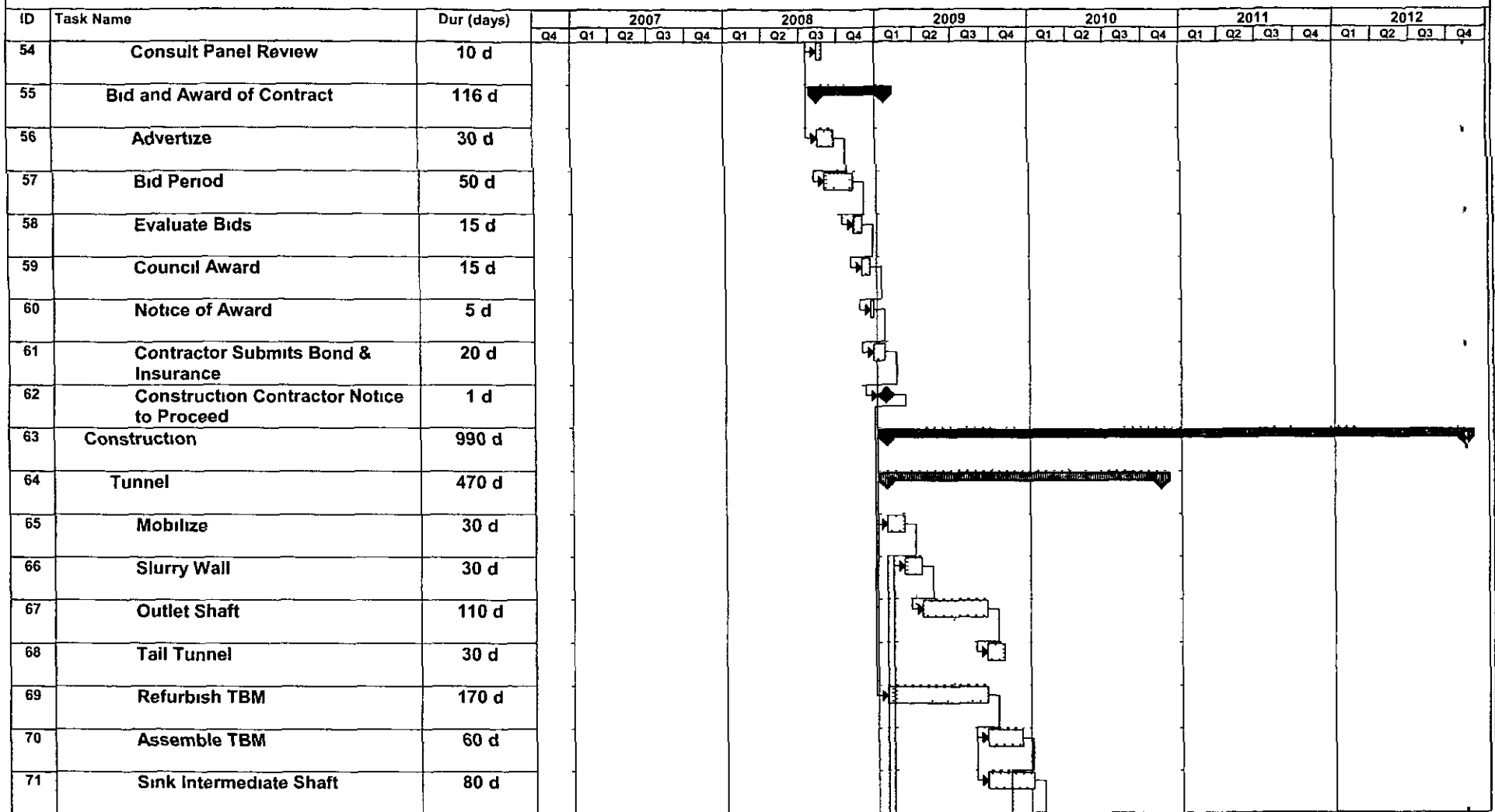


External Milestone

Detail

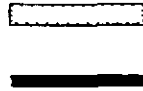


WALLER CREEK TUNNEL PROJECT DESIGN AND CONSTRUCTION SCHEDULE

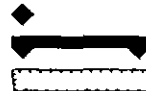


Proj ct: Waller Creek Tunnel Proj t
Date: Fri 8/18/06

Task
Split
Progress



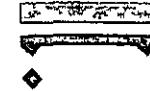
Milest
Summary
Rolled Up Task



Rolled Up Split
Rolled Up Milestone
Rolled Up Progress



External Tasks
Project Summary
External Milestone

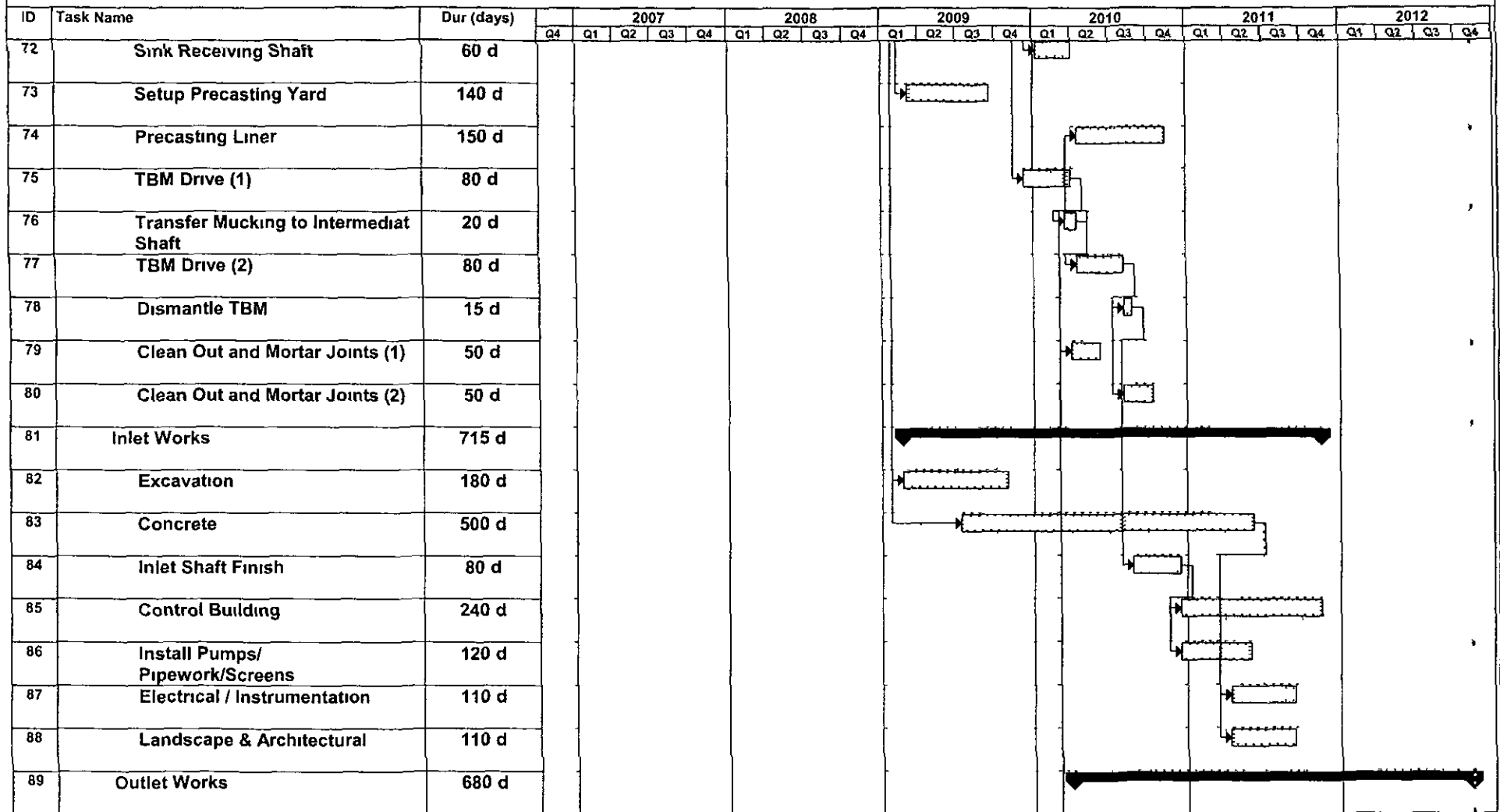


External Milestone
Deadline

Brown & Root / Espey Padden
A Joint Venture

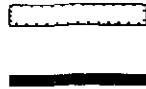


WALLER CREEK TUNNEL PROJECT DESIGN AND CONSTRUCTION SCHEDULE

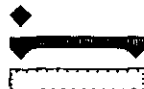


Project Waller Creek Tunnel Project
Date: 8/18/06

Task
Split
Progress



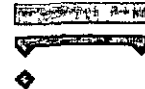
Milestone
Summary
Rolled Up Task



Rolled Up Split
Rolled Up Milestone
Rolled Up Progress



External Tasks
Project Summary
External Milestone



External Milestone
Deadline

Brown & Root / Espey Padden
A Joint Venture



WALLER CREEK TUNNEL PROJECT DESIGN AND CONSTRUCTION SCHEDULE

ID	Task Name	Dur (days)	2007					2008					2009					2010					2011					2012				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
90	Excavation	70 d																														
91	Concrete	350 d																														
92	Control Building	240 d																														
93	Pumps / Pipework/ Screens	130 d																														
94	Electrical / Instrumentation	130 d																														
95	Architect / Landscaping	130 d																														

Project: Wall Creek Tunnel Project
Date: Fri 8/18/06

Task

Split

Progress

Milestone

Summary

Roll Up Task

Roll Up Split

Roll Up Milestone

Roll Up Progress

External Tasks

Project Summary

External Milestone

External Milestone

Deadline

Brown & Root / Espey Padden
A Joint Venture



TAB 6

TABLE 6 1 SABINE ALIGNMENT RIGHT OF WAY

WALLER CREEK TUNNEL PROJECT CITY OF AUSTIN June 2006 Cost Update

Exhibit ID	Ref ID 2	Owner	(SF)	OPTION 1	OPTION 2				
				Value for \$2 000 Fee/Parcel Option	Land Only TCAD Value	TCAD Total Parcel Area	ROW Taking Area	Ratio ROW Taking Area/Total Parcel Area	Taking Area Ratio x Total TCAD Value
				\$	\$	(acres)	(acres)		\$
Intermediate Shaft									
32	2060416010000	City of	8 411	\$151 398	\$151 398	0 19	0 19	1 00	\$151 398
33	2060416020000	Stein	9 303	\$229 923	\$229 923	0 21	0 21	1 00	\$229 923
Private									
4	2040406010000	Lorenz	2 978	\$2 000	\$556 803	0 27	0 07	0 25	\$140 882
5	2040406100000	Lorenzco	324	\$2 000	\$306 398	0 46	0 01	0 02	\$4 990
7	2040406080000	Twin Oaks	3 700	\$2 000	\$1 132 370	0 64	0 08	0 13	\$150 007
8	2040406040000	Red River	3 017	\$2 000	\$265 955	0 17	0 07	0 41	\$110 236
9	2040406030000	Red River	3 668	\$2 000	\$378 672	0 20	0 08	0 43	\$162 604
10	2040406090000	Lorenzco	2 948	\$2 000	\$363 693	0 21	0 07	0 32	\$115 829
15	2040412040000	Waller	14 500	\$2 000	\$3 123 574	1 74	0 33	0 19	\$598 116
23	2060414040000	GS Red	5 630	\$2 000	\$366 749	0 25	0 13	0 51	\$186 547
Public									
1	2030204010000	City of	37 289			28 69	0 86	0 03	\$0
2	2030206050000	Housing	393			1 33	0 01	0 01	\$0
3	2030306260000	City of	12 220			0 86	0 28	0 33	\$0
16	2040413050000	City of	7 141			0 62	0 16	0 27	\$0
17	2040413040000	City of	3 228			0 28	0 07	0 27	\$0
18	2080506170000	City of	14 954			1 00	0 34	0 34	\$0
19	2080517070000	City of	45 519			4 48	1 04	0 23	\$0
20	2060412050000	City of	13 791			2 74	0 32	0 12	\$0
21	2060413150000	City of	6 856			1 59	0 16	0 10	\$0
22	2060413180000	City of	6 467			0 18	0 15	0 83	\$0
24	2060414130000	City of	5 837			0 61	0 13	0 22	\$0
25	2080513020000	City of	15 045			1 22	0 35	0 28	\$0
26	2030306270000	City of	74			0 65	0 00	0 00	\$0
29	2060419090000	City of	1 286			1 32	0 03	0 02	\$0

Total 17 714 SF
 Total 31 135 SF
 Total 170 100 SF
 Total 218 949 SF

Fee/Parcel Option	TCAD Value Option
\$381 321 Intermediate	\$381 321 Intermediate
\$14 000 Private	\$320 666 Private
\$0 Public	\$0 Public
\$395 321 Combined	\$701 987 Combined

10/6/2006

06 2006 WCT Est Update O&M LCCA Inlet Outlet Tunnel SS 10 05 2006 DFSabine Align Tunnel ROW



TABLE 6 2 RED RIVER ALIGNMENT RIGHT OF WAY

WALLER CREEK TUNNEL PROJECT CITY OF AUSTIN June 2006 Cost Update

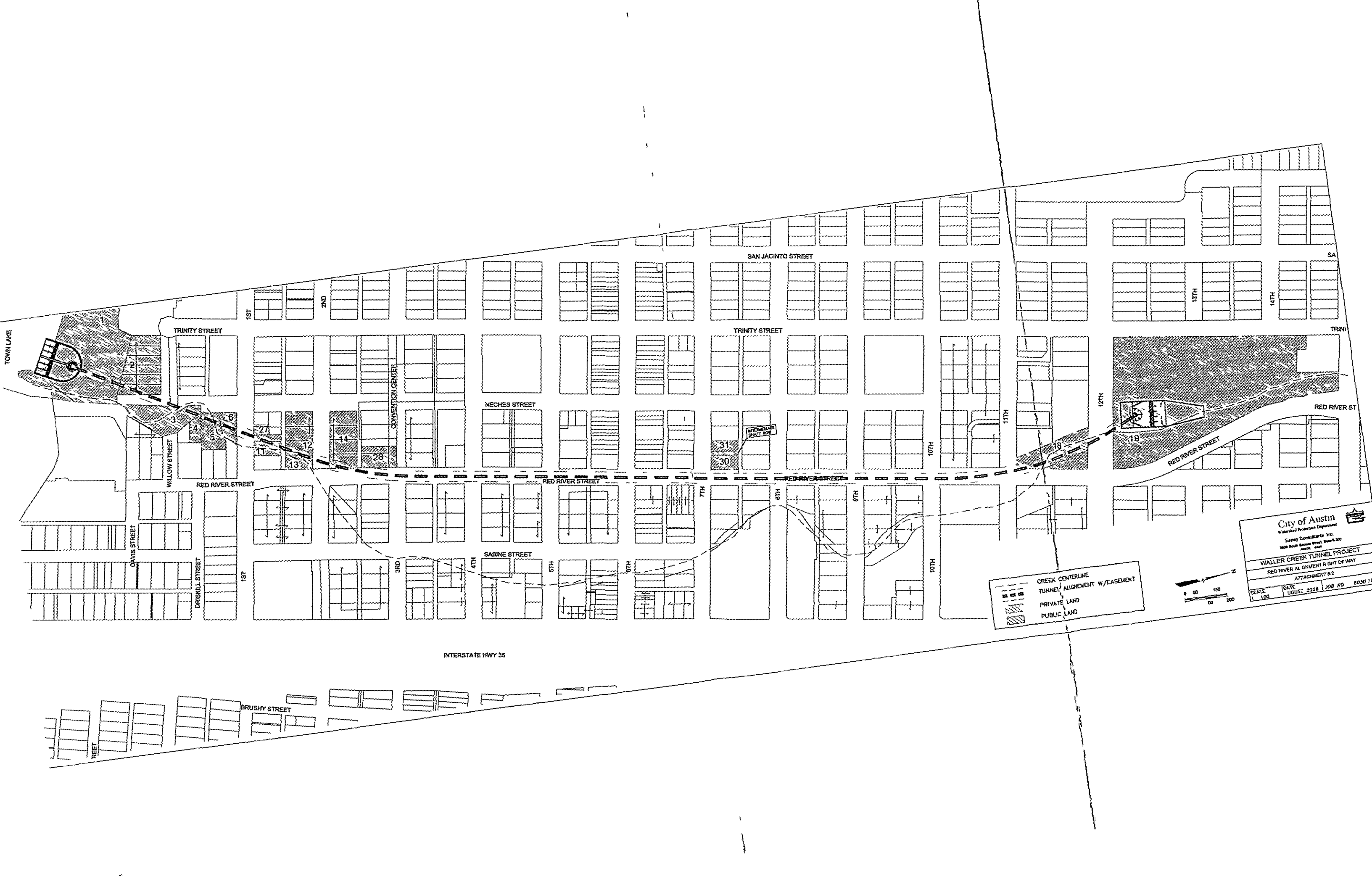
Exhibit ID	Ref ID 2	Owner	(SF)	OPTION 1	OPTION 2				
				Value for \$2 000 Fee/Parcel Option	Land Only TCAD Value	TCAD Total Parcel Area	ROW Taking Area	Ratio ROW Taking Area/Total Parcel Area	Taking Area Ratio x Total TCAD Value
				\$	\$	(acres)	(acres)		\$
Intermediate Shaft									
30	02060407080000	Salvation	8 832	\$288 666	\$288 666	0 20	0 20	1 00	\$288 666
31	02060407130000	Salvation	2 944	\$96 221	\$96 221	0 07	0 07	1 00	\$96 221
Private									
4	2040406010000	Lorenz Perry	783	\$2 000	\$556 803	0 27	0 02	0 07	\$37 042
5	2010406100000	Lorenzco	4 844	\$2 000	\$306 398	0 46	0 11	0 24	\$74 606
6	2040406070000	Rick Triplett	4 009	\$2 000	\$380 028	0 33	0 09	0 28	\$105 827
Public									
1	2030204010000	City of	36 169			28 69	0 83	0 03	\$0
2	2030206050000	Housing	6 558			1 33	0 15	0 11	\$0
3	2030306260000	City of	5 883			0 86	0 14	0 16	\$0
11	2040407070000	City of	6 408			0 28	0 15	0 52	\$0
12	2040407040000	City of	4 259			0 20	0 10	0 48	\$0
13	2040407050000	City of	2 693			0 20	0 06	0 30	\$0
14	2040408100000	City of	3 925			1 29	0 09	0 07	\$0
18	2080506170000	City of	16 334			1 00	0 37	0 38	\$0
19	2080517020000	City of	45 871			4 48	1 05	0 23	\$0
27	2040407080000	City of	411			0 08	0 01	0 12	\$0
28	2040408110000	City of	212			0 30	0 00	0 02	\$0

Total 11 776 SF
Total 9 636 SF
Total 128,723 SF
Total 150 135 SF

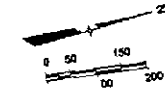
Fee/Parcel Option	TCAD Value Option
\$384 887 Intermediate	\$384 887 Intermediate
\$6 000 Private	\$54 369 Private
\$0 Public	\$0 Public
\$390 887 Combined	\$439 256 Combined

10/6/2006

06-2006 WCT Cost Update - O&M- LCCA-Inlet-Outlet-Tunnel-SS 10-05-2006 DFRcd River Alignment ROW



CREEK CENTERLINE
TUNNEL ALIGNMENT W/EASEMENT
PRIVATE LAND
PUBLIC LAND



City of Austin
Waller Creek Tunnel Project
Easement Consultants: Y&J
1000 South Lamar Street, Suite 6-300
Austin, Texas 78704

WALLER CREEK TUNNEL PROJECT
RED RIVER ALIGNMENT RIGHT OF WAY
ATTACHMENT 8-2

SCALE	DATE	JOB NO.
1" = 100'	AUGUST 2008	60301

TABLE 6.3 INTERVENING DRAINAGE RIGHT-OF WAY COST

WALLER CREEK TUNNEL PROJECT CITY OF AUSTIN June 2006 Cost Update

Exhibit ID	Ref ID 2	Owner	(SF)	OPTION 1	OPTION 2					
				Value for \$2 000 Fee/Parcel Option	Land Only ICAD Value	TCAD Total Parcel Area	ROW Taking Area	Ratio ROW Taking Area/Total Parcel Area	Taking Area Ratio x Total ICAD Value	Cost of ICAD value
				\$	\$	(acres)	(acres)		\$	\$
Private										Cost @ Assumed 25 / of ICAD
4	2040406010000	Lorenz Perry	1 489	\$2 000	\$556 803	0.27	0.03	0.13	\$70 441	\$17 610
5	2040406100000	Lorenzco Inc	162	\$2 000	\$306 398	0.46	0.00	0.01	\$2 495	\$624
7	2040406080000	Iwin Oaks Associates LTD	2 220	\$2 000	\$1 132 370	0.64	0.05	0.08	\$90 004	\$22 501
8	2040406040000	Red River One LTD	1 206	\$2 000	\$265 955	0.17	0.03	0.17	\$44 065	\$11 016
9	2040406030000	Red River One LTD	1 467	\$2 000	\$378 672	0.20	0.03	0.17	\$65 033	\$16 258
10	2040406090000	Lorenzco Inc	884	\$2 000	\$363 693	0.21	0.02	0.10	\$34 733	\$8 683
15	2010412040000	Waller Creek Eleven LTD	4 350	\$2 000	\$3 123 574	1.74	0.10	0.06	\$179 435	\$44 859
Public										
1	2030204010000	City of Austin	18 644			28.69	0.43	0.01	\$0	\$0
2	2030206050000	Housing Authority of Austin	197			1.33	0.00	0.00	\$0	\$0
3	2030306260000	City of Austin	6 110			0.86	0.14	0.16	\$0	\$0
26	2030306270000	City of Austin	37			0.65	0.00	0.00	\$0	\$0
16	2040413050000	City of Austin	3 570			0.62	0.08	0.13	\$0	\$0
17	2040413040000	City of Austin	1 614			0.28	0.04	0.13	\$0	\$0

Total Private 11 778 SF
Total Public 30 172 SF
Total 41 950 SF

Fee/Parcel Option	ICAD Value Option
\$14 000 Private	\$121 551 Private
\$0 Public	\$0 Public
\$14 000 Combined Total	\$121 551 Combined Total

Economic Analysis for City of Austin

This 2006 update of the economic analysis done by Brown & Root / Espey Padden (KBR) analyzes the redevelopment potential in the Lower Waller Creek Corridor assuming implementation of the Waller Creek tunnel project. The estimate of the redevelopment potential for the study area includes estimated property values, absorption rates and tax revenues in an effort to provide the City of Austin with a projection of the economic benefits of the project to the community.

Study Area

The study area identified in the map included in this preliminary financing plan is as follows:

Starting at the southeast corner of Waterloo Park (12th St at Red River St), the boundary follows Red River St south to 3rd St. At this point the boundary continues west two blocks along 3rd St to Trinity St, it then turns south along Trinity St and follows this line until it reaches Town Lake's northern shoreline. The southern boundary is made up of Town Lake's northern shoreline east of that line to Cummings St, where it follows Cummings St east to East Ave. The eastern boundary is made up of East Ave north of Cummings St and the south bound access road of IH 35 from East Ave north to 11th St, it turns west for 1 block on 11th Ave and then north again for 1 block on Sabine St. The northern boundary is along 12th St between Sabine St and Red River St.

Property Descriptions

This study evaluates the revenue projections which would result from a Tax Increment Financing (TIF) zone. A TIF zone or district is used to collect the tax revenues that result from public improvements, in this case the Waller Creek Tunnel project, that generate an increase in land values, new construction or development in the defined area. These tax revenues are intended to pay for the public improvements such as the proposed tunnel within the TIF zone. The TIF zone is defined in this study to determine the revenue projections for the development scenario.

In this study 224 individual property tax parcels have been combined into 28 city blocks for analyses. The majority of the properties are currently affected by the Waller Creek floodplain. The existing floodplain impacts the development potential of each of the blocks.

Economic Assumptions

An earlier version of this study was done in 2003. The economic analysis assumptions used in that study and continued in this update were developed by the project team with

input by a local architectural firm, Graeber Simmons & Cowan, AIA, experienced with commercial property and other development within the Waller Creek neighborhood. Mr. Vance Powell III, MAI, SRPA, SRA, a local commercial real estate appraiser experienced in downtown Austin development, prepared appraised value estimates and tax revenues for the various project scenarios. Additionally, input from stakeholder meetings on the economic assumptions was obtained.

The 2006 update to this economic analysis used the firm of CDS Market Research, an economic development analysis consultant, to provide current estimated absorption rates for office, retail, hotel, and residential development. Mr. Steve Spillette led this effort for CDS Market Research – his 2006 update is included in this preliminary financing plan as Exhibit A. Further, the KBR economic analysis model and absorption rates proposed by Spillette were also reviewed by Capitol Market Research. Capitol Market Research offered different absorption rates for different property types (office, retail, residential, and hotel properties), however, this difference did not result in significantly different revenue streams, which were based on the City of Austin and Travis County current tax rates. This update considers the changes in zoning that have occurred in the study area in the since the 2003 update.

Development Assumptions

The total gross buildable area (GBA) is used in this study to estimate the tax revenues produced by the potential new development in the reclaimed floodplain area resulting from the tunnel diversions. The total GBA is an indication of the amount of building square footage that can be constructed or reconstructed on the land considering all limitations for zoning, Capitol View Corridor, sixty foot creek centerline setback, historic park and other on-going development activities.

The total land area capable of being developed within the 100-year floodplain along lower Waller Creek was estimated under existing conditions and assuming implementation of the Waller Creek Tunnel. However, changes in developable land area alone are not indicative of the potential for increased tax revenue to the community because the changes do not reflect the enhancement provided by contiguous land and its increased viability for development after implementation of the Waller Creek Tunnel project. A better indication of the potential tax revenue to the City can be found in considering the building area changes created by the tunnel project. To that end, the total amount of building area was summarized and the absorption rate for each property type was estimated.

Existing data on tax values, land area and building restrictions were used to develop future scenarios for land usage and development density. The improvement scenario assumptions were jointly arrived at by the project team, engineers, architect and appraiser in a series of brain storming meetings. Input was solicited and received through stakeholder meetings and data requests from individual property owners in the area. The project team developed future land usage estimates based on surrounding area development types. The gross buildable area estimates are based on height and other building restrictions which would apply to each property. Improvement scenarios to

property consisted of office, retail hotel and residential development and were based on absorption rates and other assumptions shown in later sections. An update on absorption rates for 2006 for the improvement scenario was done by CDS Spillette. The assumptions for the development types were made by the project team using the development limitations stated above and existing data on the development densities in the Austin MSA and the Austin Central Business District. Construction cost values resulting from development were inflated at 3% per year. The net value of improvements only includes those estimated values above what presently exists along the watershed.

In the 2003 Economic Analysis, land values for each block were based upon a Price per Gross Buildable Area (in square feet) (PR/GBA) and then compared to the base value, (Tax Value May/June 2003). If the projected land value was relatively close to or exceeded the base value then the estimated construction cost to improve the property was added for a total property value. If the land value based upon the projected building area did not exceed the base value, it was determined that it was not economically feasible to redevelop the subject property and that the current use of the property would continue in the future. For this 2006 update the PR/GBA was simply scaled up by a factor of 2.1 from the previous 2003 estimates. This factor corresponds to gross assessed property value increase for the study area. Some of this increase is the result of including the appraised value of tax exempt land on the tax rolls; however, these tax exempt lands were not used in our revenues projections. The land values for each block were based upon the scaled up PR/GBA and then compared to the base value, (taxable value as of December 2006). This approach now takes into account the changes in zoning, e.g. in the Rainey Street area, that have occurred in the study area since the 2003 analysis, which may influence the GBA for many land parcels and in turn influence PR/GBA.

Within the study area twelve blocks were not considered in the revenue projections because they are either owned by a governmental entity or they are currently fully developed and duplication of their existing improvements could not be repeated under current ordinances. Revenues from all reasonable sources to fund the construction cost of the Waller Creek Tunnel Project were then estimated for a 40 year time period in which they are anticipated to incur. The issuance and sale of bonds to finance the funding shortfall were assumed to lag three years behind initiation of design.

Only increases in City and County ad valorem tax revenues were projected for the payment of debt services and operation and maintenance cost for the tunnel project. Again, only increases above the existing tax revenue stream were considered.

The cost of the tunnel was developed using a 5% bond rate and a 3% percent inflation rate on operation and maintenance cost.

Existing Tax Values

Since a significant portion of the blocks are directly affected by flooding, the first step in the analysis was to examine the existing properties and compile Travis County Appraisal District property tax records. The assessed values as of December 2006 are the base values for this updated analysis and from which the increase in tax revenues are

determined when considering project benefits (note that the gross assessed values for the study area TIF have more than doubled since the 2003 Economic analysis)

Creek-side Development Scenario

This scenario estimates the tax revenues produced with the tunnel in place assuming 100% of maximum development density considered to be the most likely development scenario in the study area using the update 2006 development absorption rates. It is the consultants' opinion that this scenario is what eventually will happen and would achieve a development density of approximately 100% of maximum development.

Proposed Tax Increment Financing (TIF) Methodology For the Waller Creek Project

Life of the TIF

The City proposes to form the TIF as soon as all the required steps have been taken to establish it. This will most likely be some time in the summer of 2007.

The TIF would remain in place until the end of fiscal year 2028, however, the County's participation will be only for 20 years, and the County will not pay property tax into the TIF until fiscal year 2009.

The Travis Central Appraisal District (TCAD) values property as of January 1 of each year. Both the City's and the County's fiscal years lag TCAD's tax years by one year. For example, the property taxes that are being collected in the current fiscal year 2007 will be based on TCAD's valuation of property as of January 1, 2006.

Based on that, following is the proposed timetable for establishing the TIF and for the County's participation in it:

- The TIF will be formed in 2007 with the TIF base valuation dated January 1, 2007.
- January 1, 2008 will be the first date for which the TIF-captured appraised value will be recorded. The captured appraised value is the increment in assessed value that generates the tax increment that will be used to finance the Waller Creek tunnel project.
- Fiscal year 2009 will be the first year in which both the City and the County pay their associated tax increment into the TIF fund that will be established.
- For a period of 20 years, fiscal years 2009 through 2028, the County will pay 50% of its tax increment into the TIF fund based on the methodology described below.

Interlocal Agreement regarding Tax Increment

The County will pay up to 50% of its tax increment using its total tax rate, as described below, for 20 fiscal years beginning in 2009, with the last year of payment into the TIF being fiscal year 2028.

The County's 50% contribution and City's 100% contribution will be applied based on an annual level debt service approach plus actual operations and maintenance expense – the sum of annual level debt service and the O&M expense will be the annual costs.

The level debt service amounts will be determined as follows:

The actual amount to be financed will be total design and construction costs less the amount of Waller Creek venue bonds on hand (approximately 27.3 million)

Level debt service will be calculated by taking the amount to be financed and determining annual level debt service requirements for 30 years on that amount using the average actual interest rate paid when the bonds are issued

Operations and maintenance of the tunnel will be the actual direct costs incurred on the basis of generally accepted accounting principles each year to operate and maintain the tunnel once it has commenced operations

The County will pay its 50% tax increment until such point as all cumulative costs have been paid, at which point any excess can be returned. See attached example where this occurs in 2025. At the point at which the cumulative deficit has been amortized, the annual excess (\$3,230,887 in the example) will be shared pro rata between the City and the County based on their respective tax rates.

Waller Creek Tunnel Project

Estimated TIF Cost/Revenue Pro Forma with Level Debt Service

April 2 2007

Estimated cost of tunnel	\$ 123 690 000
Venue bond proceeds on hand	\$ (27 300 000)
Difference	\$ 96 390 000
Inflated cost of tunnel amount to be financed	\$ 105 000 000
30 year level annual debt service on amt to be financed	\$6 794 213

Fiscal Yr	City Property Tax @ 100%	County Property Tax @ 50%	Annual Level Debt Service	Annual Operations & Maintenance	Annual (Deficit)/Surplus	Cumulative (Deficit)/Surplus
2009	\$409 371	\$223 190	\$0	\$0	\$632 561	\$632 561
2010	\$432 808	\$235 967	\$0	\$0	\$668 776	\$1 301 336
2011	\$1 083 920	\$590 954	\$0	\$0	\$1 674 874	\$2 976 211
2012	\$1 768 046	\$963 941	\$6 794 213	\$0	(\$4 062 226)	(\$1 086 016)
2013	\$2 207 684	\$1 203 632	\$6 794 213	\$0	(\$3 382 897)	(\$4 468 912)
2014	\$2 683 444	\$1 463 017	\$6 794 213	\$0	(\$2 647 753)	(\$7 116 665)
2015	\$3 308 169	\$1 803 617	\$6 794 213	\$0	(\$1 682 427)	(\$8 799 092)
2016	\$3 898 465	\$2 125 447	\$6 794 213	\$3 240 000	(\$4 010 301)	(\$12 809 394)
2017	\$4 594 031	\$2 504 671	\$6 794 213	\$3 340 000	(\$3 035 512)	(\$15 844 905)
2018	\$5 369 559	\$2 927 490	\$6 794 213	\$3 440 000	(\$1 937 165)	(\$17 782 070)
2019	\$6 096 084	\$3 323 592	\$6 794 213	\$3 540 000	(\$914 537)	(\$18 696 607)
2020	\$6 878 094	\$3 749 945	\$6 794 213	\$3 650 000	\$183 825	(\$18 512 782)
2021	\$7 719 280	\$4 208 561	\$6 794 213	\$3 760 000	\$1 373 628	(\$17 139 154)
2022	\$8 755 480	\$4 773 497	\$6 794 213	\$3 870 000	\$2 864 764	(\$14 274 390)
2023	\$9 744 769	\$5 312 860	\$6 794 213	\$3 990 000	\$4 273 416	(\$10 000 974)
2024	\$10 807 131	\$5 892 060	\$6 794 213	\$4 110 000	\$5 794 979	(\$4 205 995)
2025	\$11 947 374	\$6 513 722	\$6 794 213	\$4 230 000	\$7 436 882	\$3 230 887
2026	\$13 139 725	\$7 163 794	\$6 794 213	\$4 360 000	\$9 149 306	\$12 380 193
2027	\$14 170 316	\$7 725 673	\$6 794 213	\$4 490 000	\$10 611 776	\$22 991 968
2028	\$15 269 862	\$8 325 147	\$6 794 213	\$4 620 000	\$12 180 796	\$35 172 765
20 Yr Totals	\$130 283 612	\$71 030 776	\$115 501 623	\$50 640 000	\$35 172 765	
2029	\$16 157 009	\$0	\$6 794 213	\$4 760 000	\$4 602 796	\$39 775 561
2030	\$16 832 690	\$0	\$6 794 213	\$4 900 000	\$5 138 477	\$44 914 038
2031	\$17 087 394	\$0	\$6 794 213	\$5 050 000	\$5 243 181	\$50 157 219
2032	\$17 335 997	\$0	\$6 794 213	\$5 200 000	\$5 341 784	\$55 499 003
2033	\$17 599 008	\$0	\$6 794 213	\$5 360 000	\$5 444 795	\$60 943 798
2034	\$17 832 848	\$0	\$6 794 213	\$5 520 000	\$5 518 635	\$66 462 433
2035	\$18 327 221	\$0	\$6 794 213	\$5 680 000	\$5 853 008	\$72 315 441
2036	\$18 589 351	\$0	\$6 794 213	\$5 850 000	\$5 945 138	\$78 260 578
2037	\$18 866 575	\$0	\$6 794 213	\$6 030 000	\$6 042 362	\$84 302 940
2038	\$19 159 779	\$0	\$6 794 213	\$6 210 000	\$6 155 566	\$90 458 506
30 Yr Totals	\$308 071 485	\$71 030 776	\$183 443 755	\$105 200 000	\$90 458 506	



MEMORANDUM

TO Mr. John Stephens City of Austin

FROM Steve Spillette Spillette Consulting
Arlene Fisher CDS Market Research

DATE August 21 2006

RE Update of Waller Creek Study Area projections

CDS | Spillette is pleased to present this memorandum report with our updated projections of development in the Waller Creek Study Area. There has been a great deal of economic and real estate development activity since our previous report from the spring of 2004, and we have made some changes to our original projections.

The report starts with an Executive Summary that relates the quantitative results of our updated research and analysis. It presents both development quantities for the four relevant land uses (office, retail, residential, and hotel) and our findings regarding property value inputs for the financial model.

If you have any questions about our conclusions or need further information, please don't hesitate to contact me.

EXECUTIVE SUMMARY

CDS | Spillette reviewed economic and market conditions affecting the Austin region Downtown and the Waller Creek Study Area. Based upon our findings, we are issuing the following updated projections for supportable development within the Study Area starting in 2008. A detailed discussion of our findings follows this Executive Summary. Tables summarizing updated data are included at the end of this memorandum report.

Projected Supportable Study Area Development by Land Use, 2008 - 2015

Land Use	2008	2009	2010	2011	2012	2013	2014	2015
Office (sq ft)	0	75 000 125 000	75 000 125 000	75 000 125 000	75 000 125 000	75 000 125 000	150 000 200 000	150 000 200 000
Retail (sq ft) <i>either / or</i>								
Creekside ¹	50 000 75 000	50 000 75 000	50 000 75 000	50 000 75 000	100 000 125 000	100 000 125 000	100 000 125 000	100 000 125 000
Top of Bank ²	30 000	30 000	30 000	30 000	60 000 85 000	60 000 85 000	60 000 85 000	60 000 85 000
Residential (units)								
Apartments	0	75	75	75	75	75	75	75
Condominiums	192	0	50	50	50	50	50	50
Hotel (rooms) <i>either / or</i>								
Creekside	254	0	0	0	250	0	0	250
Top of bank	254	0	0	0	250	0	0	0

¹ Total development capped at 600 000 square feet

² Total development capped at 400 000 square feet

We have also consulted with the Travis County Appraisal District to estimate property valuations for the various land uses covered in this study that can be input into the financial model for the flood tunnel project. These values are summarized as follows:

Projected Appraised Property Values by Land Use

Land Use	Unit Value
Office	\$230 / sq ft
Retail	\$195 / sq ft
Apartments	\$150 000 / unit
Condominiums	\$525 000 / unit
Hotel	\$65 000 / room

Note: Values are for developed improvements only. Projections do not include any increase in land value that may arise from development activity.

A detailed discussion of the methodology and research for these value projections is not included in this report. We would be happy to answer any questions regarding our conclusions on this topic, however.

ECONOMY AND POPULATION

The Austin economy has picked up significantly since our original report in the spring of 2004. **Table 1** summarizes the Texas Workforce Commission's historical employment data through 2005. The job losses from the 2001-2002 tech bust have been largely regained as the recovery quickened its pace in 2004 and 2005. From year-end 2003, nonfarm industries have added over 20,000 jobs and the region's total employment is now higher than in 2000. Although manufacturing employment has continued to recede, other sectors which had been hard-hit as of the end of 2003, such as Information / Telecommunications and Professional and Business Services, have rebounded. The Government sector has weakened slightly since 2003.

The Dallas Fed reports that Austin's economic recovery – now truly an expansion – is continuing into 2006. Even Manufacturing employment has begun to rise. While the region is considered a more expensive environment compared to the rest of Texas, it is much lower-cost relative to other high-tech centers on the East and West Coasts, leading to many business relocations. Job growth, plus general migration to Austin from more expensive residential markets, is fueling strong growth in housing and retail activity as well.

The estimated populations of Austin and Travis County are surging accordingly, returning to the growth rates witnessed in the 1990s. **Table 2** gives Bureau of Census July 1 population estimates for the City of Austin and Travis County. Since the 2001-02 contraction that slowed population growth, the City and County have added population at faster rates with each successive year. From 2004 to 2005, the City and County are estimated to have added over 9,000 residents and 19,000 residents respectively.

The Capital Area Metropolitan Planning Organization (CAMPO) which provide baseline employment and population projections for our previous study has not published an update to its earlier data. Therefore any adjustments to land use development projections will be the result of changing current market conditions or data from other sources.

While in 2004 the region was just beginning its recovery and the rate of future growth was uncertain, today Austin's economy would be considered strong. This positive development would tend to boost the prospects for the four land uses studied originally, depending on the extent to which Downtown Austin and the Waller Creek Study Area participate in the growth.

OFFICE

Citywide Trends

In 2004 the Austin office market was just emerging from its nadir in 2003. Since then total occupied space has risen to surpass the high point achieved in 2002. **Table 3** chronicles office market statistics for Austin. The occupancy rate for the overall market climbed to 84 percent in 2005 up from a 2003 low of 80 percent. In 2004 and 2005 nearly 1.8 million square feet have been absorbed in the market. Lease rates, which had fallen below \$20 per square foot, are once again rising as well, with market-wide average lease rates of around \$21 per square foot and a Class A average of over \$23 per square foot. It should be noted that occupancy and rental rates are still far below their historical highs achieved in 2000. Local consultant Charles Heimsath of Capitol Markets Research reports that absorption was quite strong in the latter of 2005, but has been nearly nonexistent in 2006 at the citywide level.

The inventory of sublease space, which had been a serious hindrance on the market in 2004, has shrunk considerably since then. **Table 4** provides sublease statistics for 2004 and 2005 Austin submarkets. At the end of 2003, the sublease inventory was estimated at approximately 1.4 million square feet. By 2005, this had declined to less than 700,000 square feet, well over half of which was located in northwest Austin. Downtown had approximately 87,000 square feet of sublease space available, with an average lease term of 20 months, a relatively short time frame compared to other submarkets.

There is new office construction occurring to take advantage of the improving conditions. Six buildings are underway, four of which are in the southwest part of Austin, long one of the City's premier office markets. The new construction will add about 600,000 square feet of space to citywide inventory.

Downtown Trends

Although Downtown has a relatively low sublease factor, it remains one of Austin's most troubled office submarkets. **Table 5** gives office market statistics for Downtown. Despite an economic downturn and falling demand, additional inventory was added to the Downtown market from 2003 to 2004. The most significant addition was the Frost Bank building, containing 524,000 square feet of space. Total inventory Downtown now stands at approximately 8.5 million square feet. The Whole Foods headquarters building added more space as well, though it is primarily single-tenant. In addition, there have been tenant consolidations and a relocation of some local government space into the new City Hall. Absorption totaled approximately 266,000 square feet in 2004, but stagnated in 2005 with negative absorption of about 20,000 square feet.

As a result, the Downtown overall occupancy rate remained just 77 percent at the end of 2005, dropping to 76 percent after sublease space is taken into account. In 2006,

according to Charles Heimsath an additional 185 000 square feet has been absorbed bringing occupancy to about 80 percent Downtown has captured 19.4 percent of citywide absorption over the last 15 years Recently creative firms such as ad agencies have been noted for moving into Downtown indicating that the area may be taking on a higher profile as a business location Still suburban Austin continues to be viewed as a preferred location Southwest Austin is particularly favored with new office development already planned in response to vacancy rates that are much lower than Downtown's

Lease rates in Downtown however have risen likely as a result of relatively high rents in the Frost Bank building Class A rates averaged nearly \$26 per square foot well above the citywide average of approximately \$23

New Downtown Development and Infrastructure

The weak Downtown office market has not eliminated plans for development of as much as 400 000 square feet of additional inventory The most significant project planned is at 5th Street and Congress Avenue The project proposed by developer Tom Stacy would contain 300 000 square feet of office space along with several other uses It is projected to start construction in the second quarter of 2007 but is reportedly contingent upon obtaining a development partner for a proposed hotel component in the project Other uses would include retail condominiums and a health club

New multi-tenant office construction scheduled to begin in the 4th quarter of 2006 includes an 80 000 square foot building near 11th Street and Lavaca close to the State Capitol The nine-story building will have 2 000 square feet of ground floor retail and three floors of parking The Texas Auto Dealers Association will be taking 8 000 square feet moving from a 7 600 square foot sublease in the Frost Bank building The primary anchor tenant (that is presently confidential) has preleased 50 000 square feet There is currently 20 000 square feet remaining uncommitted

A mixed use development Gables Park Plaza will be a large high-density residential / mixed-use project at West 3rd Street and Lamar Boulevard The development which will contain 20 000 square feet of office use is scheduled to start construction in the first quarter 2007 and be complete in 2009

A summary of planned and proposed office projects is shown in **Table 6**

Apart from additions to office supply another factor potentially affecting the Downtown market is the planned commuter rail system to the northern suburbs to open in 2008 Tenant representation brokers reportedly view this development as a positive though it remains to be seen how much of an accessibility benefit the market will perceive A significant shortcoming of the system is that it will not penetrate into the heart of Downtown but will instead terminate near the Convention Center A streetcar circulator (initially operated as bus) is planned to distribute commuters from the terminal station but it will require an election for full implementation so there is some uncertainty Still

the perception of a viable transportation alternative to the heavily congested freeway and thoroughfare system will likely have some benefit to the Downtown office market. The Convention Center station may actually make Waller Creek Study Area properties more attractive for office development.

Downtown and Waller Creek Study Area Projections

Downtown Following the methodology used in the last study, an updated estimate of downtown employment (shown fully in **Table 7**) gives the following total of prime sources of office occupants by industry:

Finance / insurance / real estate	5,580
Business services	10,087
Legal services	6,197
Government	30,353
Transportation / communication / utilities (50 percent)	5,467
Health services (50 percent)	870
Educational services (50 percent)	<u>2,525</u>
Total	61,079

This represents a significant increase of 10,636 jobs over the 2004 estimate used in the previous study. The current estimate of occupied office space Downtown is as follows (all amounts in square feet):

Direct occupancy year end 2005	6,531,493
Less: sublease inventory	(86,532)
Plus: 2006 absorption	<u>185,000</u>
Total occupied space	6,629,961

Dividing occupied space by estimated office employment gives a figure of 109 square feet per employee. To achieve a 90 percent occupancy rate of existing inventory (7,670,050 square feet), Downtown would need to add 1,040,089 square feet of occupied space, driven by approximately 9,500 additional office-oriented jobs. At the present rate of estimated employment growth, hitting the 90 percent target for existing inventory will take another two years (2008). This could of course be impacted by additions to or subtractions from current inventory. The 5th and Congress project could push the timing back another 6 months to 1 year, making 2009 a more likely time frame.

Waller Creek Study Area In our previous study, it was concluded that 2008 would probably be too early for new office construction Downtown, unless there was a sudden return to aggressive employment growth. Such growth does actually appear to be occurring, but Downtown still has a large amount of available inventory to absorb.

The Study Area remains removed from most of the discussion of new office projects Downtown. However, implementation of commuter rail will likely raise the visibility of the southern portion of the Study Area as an office location. Our current projections

confirm the time frame from the previous study of 2009 as the earliest new office development in the Study Area. However, due to the strong economic growth now in evidence and the positive impact of commuter rail, we would increase the projected annual development / absorption rate to 75 000 to 125 000 square feet for years 2009 – 2013 (previously 50 000 to 100 000 square feet annually) rising to 150 000 to 200 000 square feet from 2014 onward.

RETAIL

The Austin area's retail landscape continues to evolve rapidly. The population growth of the region has enticed major retail developers and stores that had not previously had a strong presence in Austin. Neiman Marcus will enter the Austin market at the Domain, a lifestyle / urban mixed-use project in North Austin. Town center developments with lifestyle retail are under development in Round Rock and Bee Cave as well. Closer to the central Austin, the Triangle project has brought urban mixed-use to the Lamar corridor.

Regional Market Conditions

Driven by population expansion and resumption of job growth, Austin's retail market continues to be healthy despite additions of new inventory. **Tables 8a and 8b** give retail market conditions for greater Austin. Through 2005, occupancy rates for larger (non mall, multi tenant) shopping centers remained in the mid-90 percent range despite inventory expansion of over 638 000 square feet since 2003, and rents continue to increase. Over 700 000 square feet of space was absorbed by tenants during this time. Retail developments of 50 000 to 100,000 square feet in size have suffered a drop in overall occupancy, reportedly due to tenant relocations to newer centers. These properties constitute a much smaller share of total retail space, however, than the larger centers.

Downtown Market

The Downtown retail market is undergoing a substantial makeover. **Tables 9a and 9b** give retail statistics for Central Austin. Significant absorption has occurred since 2003, and larger developments are nearly completely occupied. Lease rates in established properties remain above the regional market average.

Other substantial new multi tenant inventory, not included in the table, has been added since 2003 in the Market District and 2nd Street District projects within the actual CBD. These are summarized in **Table 10**.

- The Market District, by Schlosser Development, is now the dominant comparison goods retail area in Downtown. The new 85 000 square-foot Whole Foods flagship store is a highly successful major attraction that anchors the area. The most recent component is the 6th and Lamar block, where BookPeople is located.

and where REI and Anthropologie will open in late 2006. A new project, Shoal Creek Walk, would contain 250,000 to 300,000 square feet of mixed use space including retail. Originally planned to begin construction in 2006, it has been delayed.

- The 2nd Street District has successfully opened its initial phase including the retail component of the AMLI building with 41,759 square feet. The current tenant mix features apparel, home furnishings and accessories, and dining. When complete, the 2nd Street District will total approximately 200,000 square feet of retail area. According to the leasing agent, tenants are being carefully recruited and restaurant orientation is selective, promoting independent operators or limited specialty chains. As the District is being built out, space is being leased. The typical tenant size ranges from 1,500 to 5,500 square feet. One 9,000 square foot section was being reserved for a larger user, but may be available in the near future to multiple tenants. The second AMLI building is currently under construction offering an additional 40,000 square feet of retail area that will be ready for occupancy in 2007. Asking base lease rates are relatively high at \$24.00 per square foot per year plus triple net expenses. Initially the developer made deals available to tenants as an incentive to attract them to an area considered by many as yet untested and therefore subject of higher risk. Many of the original contracts are (or will) expire in the near future. As the District becomes more established, leases turnover, and subsequent phases are built, rental rates are anticipated to increase even higher.

In our opinion, there is a likelihood of tenant turnover (perhaps several rounds thereof) as incentives expire. Even if 2nd Street is generally successful, the high lease rates are typically very difficult for independent local retail businesses to endure. The addition of planned music and cultural venues nearby will add to foot traffic and general visibility. This will have the effect of luring national chain retail tenants that can afford the higher rates.

Closer to the Waller Creek Study Area, at Third and Trinity, a group of restaurants have assembled over the last few years. A complementary new addition is Houlihan's. Until very recently there was one 6,500 square foot space available. According to the listing broker, this section was recently leased to a specialty type of restaurant.

The clear trend emerging regarding Downtown retail is the concentration of activity west of Congress. Congress Avenue itself is receiving attention from government and civic groups so that it can be rejuvenated. A recent study by Economics Research Associates (completed for the City of Austin and the Downtown Austin Alliance (DAA)) identified East 6th Street as having the unique retail potential for edgy, comparison goods. As a result of the study, the DAA is beginning an initiative. This is an advantage for the Waller Creek Study corridor as E 6th travels through this sector. E 6th however will require substantial repositioning from its current orientation as a college-oriented, downscale bar and nightclub area.

These trends are evident in the plans for the most significant new retail projects that represent potential additions to inventory over the next few years. **Table 11** summarizes these projects. In addition, there are numerous residential developments proposed around Downtown that will offer 8 000 to 15 000 square feet apiece of ground floor retail. The most definite additions will be the next phase of the 2nd Street District with 40 000 square feet of space and The Monarch condominiums with a more modest 9 000 square feet. Proposed expansions include 30 000 square feet of Market District retail and 103 500 square feet for 2nd Street. Also proposed but not definite include 40 000 square feet of shopping center space on the ground floor of the Gables Park Plaza and 100 000 square feet in the mixed use 5th and Congress. In addition, the Seaholm Power Plant renovation proposes 60 000 square feet of either cultural or retail space. Discussions with representatives of the City of Austin, however, reported it is too early in the initial stages of the plan to estimate the retail component. If all proposed additions to retail inventory come to fruition, more than 500 000 square feet of major retail space plus additional increments of ground floor space in mixed-use projects could be developed in the short to middle term.

Retail Sales Trends and Potential Demand Downtown

With the additional retail space that has been developed over the last few years plus a recovery of economic activity, retail sales in Downtown have demonstrated remarkable growth. The State Comptroller's data in **Table 12** illustrate this growth. For the categories for which data was available since 2001, taxable retail sales grew 48 percent in just four years. Eating and Drinking Places continue to be the strongest category, but Miscellaneous Retail (covering a wide variety of specialty goods) has nearly tripled in volume. Meanwhile, Travis County overall showed ample growth as well, increasing total taxable retail sales by 8 percent during the same period.

Using updated data for retail sales and required sales per square foot for typical retail stores, the analysis of supportable square footage in a five-mile radius of 6th Street and Congress Avenue was again performed. The results were similar to the 2004 study. At the upper end of required sales per square foot, which is likely to be typical of new Downtown retail space because of the high lease rates charged, a total 4.1 million square feet of space could be supported. There is still 6.2 million square feet in large shopping centers within that radius, plus additional new retail such as The Triangle.

Thus, our earlier projection of about 1.5 million additional square feet of retail space by 2010, less the 2nd Street District and Market District expansions, would continue to hold, resulting in a net increment of 1 million square feet. Other planned and proposed additions, including those summarized in **Table 11** and miscellaneous space added on the ground floor of mixed use projects, could easily total 150 000 square feet, leaving potential for another 850 000 square feet in Downtown by 2010. This would translate into annual absorption of 200 000 to 220 000 square feet.

Waller Creek Study Area Projections

Based on development and economic activity since 2004 it is our opinion that our previous conclusions regarding additional retail demand from office workers and out of town visitors still stand although tourism appears to be increasing Travel surveys from 2004 indicate that spending per visitor has risen since the previous survey in 2002 though the recent rise in fuel prices might have a negative impact on visitor spending if traveling by car Regardless office worker demand and visitor demand for additional retail space are anticipated to be incremental amounts in the eastern portion of Downtown We are inclined to boost their impact slightly given increased projected office demand in the Study Area

We also reiterate our opinion of the impact of doing creekside development along Waller Creek Successful implementation of this scenario will require a level of municipal or other public control coordination and funding which is not available along the creek now The more continuous the environment the better the development and retail activity results

To conclude we generally stand by our projections of retail development from the 2004 study although the timing needs to be adjusted and a slight further adjustment will be made for an improved economy and more projected office space in the Study Area Here then are our projections

2008 to 2011

- Creekside scenario - 50,000 to 75 000 square feet of new retail developed per year assuming the flood tunnel improvements were completed by 2008
- Non- creekside scenario we are projecting 30 000 square feet per year

These near term projections are somewhat dependent upon Schlosser Development s plans for Shoal Creek Walk If the company does move ahead with that project and it includes a substantial amount of retail space (50 000 square feet or more) it could shift some activity away from the Waller Creek Study Area These projections are inclusive of retail space that could happen in the proposed Red River (Constellation) project at Red River and Cesar Chavez next to Waller Creek

2012 and beyond

- Creekside – 100 000 to 125 000 square feet per year with total development still capped at 600 000 square feet
- Non- creekside – 60 000 to 85 000 square feet per year with total development capped at 400 000 square feet

RESIDENTIAL

The most remarkable development activity in Downtown Austin over the last two years has been multifamily residential. Downtown has experienced practically an explosion of planned and proposed projects including several high-rise concepts that have little precedent in Texas let alone Austin. Downtown's positive image in the marketplace fostered by investments, policies, and programs of the public sector in conjunction with the efforts of the private sector has created a magnet for developers seeking to capitalize on the trend toward urban living.

The current Mayor Will Wynn has set a goal of 25,000 Downtown residents. There is some debate about whether this is achievable given the supply of developable land and various regulatory constraints such as the Capitol View Corridors. However, the key impact in the short to medium term is that the City's policies are encouraging additional residential development.

Austin Multifamily Development Activity

For the twelve months ending July 2006, over 7,600 multifamily units were under construction in the Austin area, as shown in **Table 14**. The Table shows that approximately 6,000 units were submitted for approval during this period. This activity represents a major increase from preceding years. The Real Estate Center at Texas A&M University reports that permitting activity has steadily risen since bottoming out in 2003 when fewer than 2,500 units were permitted. In 2005, over 5,000 units were permitted. Still, the current activity is less than what the area experienced during the 1999 to 2001 boom when approximately 8,000 units were being permitted annually which proved to be excessive.

Austin Apartment Market Conditions

Occupancies and rental rates for Austin apartments have improved since our previous report. As detailed in **Table 15**, Class A occupancy has reached approximately 91 percent, compared to our previous report's data of 89 percent as of January 2004. Class A average rental rates have increased substantially to \$0.94 per square foot, our previous study reported \$0.86 per square foot.

Two and three bedroom units have slightly increased their share of the market since 2004. **Table 16** shows Austin apartment market statistics for different unit plans. The share of one bedroom units has decreased to approximately 54 percent from 56 percent in 2004, while the share of two bedroom units has increased to 38 percent from 37 percent. Average unit sizes have remained relatively unchanged.

Downtown Market Conditions

The Downtown market has been impacted by the addition of new inventory, particularly at the Class A level. **Table 17** lists the current inventory of Downtown area apartment properties. Two properties, 404 Rio Grande and AMLI Downtown's first phase, opened in 2004 and added 359 Class A units to the market. Accordingly, occupancies have yet to fully recover. **Table 18** gives a comparative look at conditions in the Central submarket (which includes Downtown plus some surrounding areas) compared to Travis County and the metropolitan area overall. Class A occupancy stood at approximately 79 percent as of the second quarter of 2006, much lower than the county or metro area average. Average Class A rents in the Central submarket remain much higher than the average for the region, however - \$1.49 per square foot per month for Class A. This is about the same as our 2004 figure (\$1.48 per square foot).

Over time, the Central submarket has shown relatively stagnant performance compared to area-wide averages over the last few years, as shown in **Table 19**. While occupancy and rents have improved for the region overall (all classes of quality), the Central submarket has suffered a decline in the occupancy rate since 2004, though it improved slightly from late 2005 to mid-2006. During this period, the region's occupancy overall was steadily improving. The same is true of rents: the Central submarket's rents (including all classes) have declined from \$1.09 per square foot per month in late 2004 to \$1.03 per square foot per month in mid-2006. Meanwhile, the region's average rents improved substantially from \$0.81 to \$0.88, still much lower than the Central submarket. Clearly, the urban core market in Austin is behaving differently from other submarkets.

A tally of current unit plans among Downtown-area properties (**Table 20**) reveals a shift toward one bedroom units. The current share of one bedroom units is approximately 44 percent, up from 42 percent in 2004. A total of 151 one bedroom units have been added to the Downtown area market. A representative of the AMLI property was quoted in an *Austin American Statesman* December 8, 2005 article that smaller one bedroom units had been the more popular plan in that property.

CDS | Spillette also updated information on the most recently built or renovated Downtown apartment properties shown in **Table 21**. Most of these properties would qualify as Class A. Interestingly, they show much higher occupancies than the Central submarket overall, indicating that demand for Downtown properties is much higher than demand for near-Downtown locations. (There could also be influence in the Central submarket statistics from properties catering to University of Texas students that is much less present at Downtown-specific properties.) The AMLI project, perhaps the most relevant project in terms of an example of the type of urban rental development anticipated in the future, was almost fully occupied at 98 percent. It also carried the highest rents (by far) at over \$2.00 per square foot per month. The Gables of West Avenue, another property in the heart of Downtown, was also almost full (and at a higher occupancy than in 2004), though rents were considerably lower. Though a limited sample, these two properties indicate strong current demand for rental living in the Downtown core, especially in an active mixed-use environment.

Future Downtown Apartment Supply

Since our 2004 study, numerous apartment projects have been announced for Downtown. **Table 22** summarizes the projects known at this time. A total of 786 rental units are currently under construction, including one 124-unit project in the Waller Creek Study Area, Red River Flats, to be completed in 2007. The Robertson Hill development, with 283 units, will be complete during the first half of 2007 and is immediately across IH 35 from the Study Area.

Another 882 units are proposed under current development plans. In addition, there are at least three other projects that have been announced but are uncertain as to timing and likelihood of their offering rental or for-sale product.

The projects are a mix of mid-rise and high-rise. Mid-rise, if wood frame, has considerably lower construction costs, meaning pro forma rents can be lower. High-rise product will necessarily require top-of-market rents. The AMLI tower under construction will offer rents in excess of \$2.00 per square foot per month, which would match or exceed the rents in its existing Downtown property. As noted above, the high rental rates have so far not deterred occupancy, and newer Downtown apartment properties are not reporting concessions or rent abatements. It is our opinion that top-of-market rents stand a much better chance of market feasibility in the portions of Downtown west of Congress Avenue.

Downtown Condominium Market

A rash of condominium projects have been announced for Downtown since 2004. At that time, the Nokonah and Plaza Lofts were the most recently completed urban condominium projects. Since then, the Five Fifty-Five (Hilton condominiums) and Austin City Lofts have been added to Downtown's condominium inventory. The market for newer urban condominiums remains fairly singular to Downtown, though upcoming mixed use projects elsewhere in Austin and in the suburbs may include some condominium product.

Rising construction costs and general upward price pressure means that new condominiums continued to be priced at the upper end of the Austin housing market. According to data from the Real Estate Center at Texas A&M university, in 2005, just 16.2 percent of all home resales in the Austin area were above \$300,000. Table 23 gives a representative sample of recent listings from the Multiple Listing Service for recently constructed or converted Downtown condominiums. Generally, only one bedroom units were priced under \$400,000, and prices per square foot were well over \$300. Thus, new Downtown condominium units are competing on price with much larger single family detached homes.

Projects that are currently in the new unit sales process do appear to be doing well at the present time. The Milago on Town Lake, which is within the Waller Creek Study Area, has sold out of its 240 units. The Shore, which has started construction and is projected to be completed in 2008, is reportedly approximately 80 percent committed on its 192 units, though it is uncertain how many commitments will convert into actual sales. In the relatively small 6th and Brushy project, only one unit remains unsold.

Table 24 summarizes the Downtown condominium projects that are under construction or proposed. A total of 882 units are under construction, about half of which will be in the 360 high-rise. It appears that the majority of units in these projects will range in price from \$300,000 to \$500,000, though there will be some that fall above and below this range. Only the Milago and The Shore have offered units below \$200,000. Units in other upcoming projects priced below \$300,000 are likely to be small one bedroom or studio units, especially as construction cost increases over the last two years have substantially decreased the ability of developers to bring larger units to market at more affordable prices.

Particularly noteworthy are two projects planned for the Waller Creek Study Area. The most significant is the Red River project by Constellation, currently designed to include a 30-story condominium tower. The project is actively supporting improvements to the Waller Creek channel that help create creekside development. As the project plans are still in the initial stages, the total unit number has not been disclosed, though it would be reasonable to speculate in the vicinity of 200 units, based on other development proposals Downtown. The 303 Urban Village project, close to the Study Area, could add another 95 units. Throughout Downtown, there are 1,101 mid-rise and high-rise condominium units proposed, not including the Red River project. Thus, if all

projects come to fruition approximately 2 000 units would be brought to market from 2006 to 2009

We have serious doubts that all the announced projects will actually end up proceeding as planned. While Downtown Austin is showing strong appeal to what heretofore had been an underserved market for dense urban living, the market for relatively small, high-priced condominium units is likely thin, especially in a mid-size city. In contrast, small-lot single family (patio homes) and townhomes would likely have considerable success in central Austin because they can offer greater square footage at a much lower construction cost. They also typically have lower association / maintenance fees, a factor which further decreases condominium affordability.

Demand Projections

While initial residential projects for both rental and for-sale product appear to have been successful Downtown, we caution against assuming that initial absorption levels will carry forward indefinitely. It is likely that current built and under construction projects are satisfying pent-up demand, and it is possible there could be a slow down after this demand is satisfied.

Apartments The Red River Flats project will add 124 rental units to the Study Area in 2007, and the Robertson Hill project in close proximity (though just outside the Study Area) will add another 283 for a total of about 400 units on the eastern edge of Downtown. Several hundred more units will be added elsewhere in Downtown during 2007 and 2008. Despite strong occupancies in other recently built Downtown rental projects, we would recommend not assuming substantial demand for new apartment development in the Study Area until at least 2009 and possibly 2010. The 98 San Jacinto project, which is close to the Study Area, could have an impact as well.

Once Downtown is truly established as a successful residential neighborhood, which it does appear it is on its way to becoming, demand should stabilize after the initial fluctuations that are likely to occur over the next two or three years. Based on currently planned and proposed projects both within and outside the Study Area and general trends seen in the Downtown rental market, we are now projecting an increase in average apartment development from the figure of 50 apartment units from our previous study to an adjusted figure 75 units per year starting in 2009.

Condominiums The Milago and The Shore have brought hundreds of condominium units into the Study Area market. The Red River (Constellation) project could possibly add an estimated 200 more residential units. With construction costs continuing to trend upward at a fast pace, it is possible that projected unit prices in proposed future projects will have to be increased even further to achieve financial feasibility, thereby dampening demand and/or extending sell out. On the other hand, a greater Downtown population creates more urban liveliness and begets more demand. So, opposing forces are at work in Downtown and the Study Area.

In light of construction cost trends and untested depth of market we feel that a conservative outlook is prudent even with the thousands of units recently planned and proposed that would appear to indicate a deep untapped market. There is also the possibility a portion of the high rise apartment inventory will convert to for sale condominiums. We will project that either the Red River project will come online in 2010 or one or more projects with an equivalent number of units enter the market with similar timing. Our projection remains at an average of 50 condominium units per year starting in 2010 in addition to The Shore's 192 units.

HOTEL

At the time of the previous report (spring 2004) the Austin hotel market through late 2003 had been in questionable health due to the lingering impacts of the economic downturn of 2001-02. Area average hotel occupancies were under 60 percent and average daily rates had dropped considerably from their zenith around year 2000. Fortunately the Austin hotel market has clearly entered a recovery mode and Downtown is becoming more established as a preferred lodging destination.

Current Austin Hotel Market Conditions

Table 25 summarizes key hotel market statistics for the Austin area. Strong recovery had begun by 2005 obviously related to the regional economy's resurgence. By the first half of 2006 average room rates were exceeding the 2000 peak and occupancies were exceeding 70 percent.

Downtown Hotel Market

Downtown Austin remains a distinct hotel submarket in the region and one that is increasingly prominent. **Table 26** summarizes current market conditions in Downtown. By the first half of 2006 average room rates were in excess of \$120 per night and greater than the regional average by more than \$30 similar to the economic boom days of 2000. Estimated revenue per available room (RevPAR) which declined to relatively dismal levels from 2001-2003 is once again over \$90 per night. Occupancy rates also exceed the regional average at nearly 76 percent for the first half of 2006. This indicates the Downtown market is currently in good health.

Downtown Hotel Supply

The Downtown market's return to health was in question at the time of our previous study because of the impending addition of 800 rooms at the Hilton Convention Center. The market statistics indicate that these rooms have been digested and demand has surged sufficiently to compensate. The market will receive another test when the Courtyard by Marriott and Residence Inn open within two months. As shown in **Table 27** these additional 440 rooms will bring the Downtown room stock to 5,162 rooms.

Table 27 also lists planned and proposed hotel projects in Downtown. Since 2004 seven projects that may contain a hotel component have been announced. The most significant and in our estimation the most likely is the White Lodging Services Corporation's Marriott complex to be located at Brazos and 2nd Street on the east side of Congress Avenue. A ground lease reportedly was executed for the land. This project alone will add 1,000 rooms to Downtown under three different Marriott brands. The Marriott Convention Center will have 650 rooms, thereby significantly adding to the ability of the Convention Center to book larger groups. The Renaissance will add 200 rooms to the upscale leisure and business class room stock, and the Springhill Suites will contribute 150 mid-priced suites.

Two hotels are being considered within the Waller Creek Study Area. One is the 254-room Kimpton Hotel, an upscale boutique brand, to be associated with The Shore condominium project in the Rainey Street area. It is currently projected to open in 2008, though a deal between Kimpton and the developer is reportedly not yet finalized. The other proposed development, the Red River project at Red River and Cesar Chavez, is still in its initial planning stages. The 30-story hotel tower would complement a twin condominium tower. No flag has been announced for this project, which is currently projected to be complete in 2010.

Other potentially significant future lodging projects within Downtown include a possible W Hotel on Block 21 along 2nd Street, the 5th and Congress project by Tom Stacy, and a high-rise hotel on the Hixon Properties site at 3rd and Congress. One other project worth noting (not included in the table) is a planned meetings-oriented hotel with 300 rooms associated with the University of Texas campus just north of Downtown. It will be at the southwest corner of campus and is expected to be finished in May 2008.

Table 28 summarizes hotel rooms by age of construction. Nearly a third of existing rooms have been constructed in the last seven years. As the projected new properties come online, in comparison, the older lodging facilities will be perceived as dated and have a less competitive edge. Substantial renovation will be required to maintain a relative market share, especially if they are relatively generic in orientation.

Convention Outlook

Convention Center activity obviously impacts demand for hotel rooms in the Waller Creek Study Area. **Table 29** lists the projected group events and attendance booked by the Austin Convention and Visitors Bureau. Since 2004, when the Convention Center expansion was brand new, the Bureau has recorded significantly more information about anticipated group meeting and lodging demand. While commitments or tentative commitments of more than 3 years in the future will necessarily be spotty, the outlook appears to be positive. For example, the year 2008 currently shows nearly 42,000 roomnights definitely committed and another nearly 91,000 tentatively committed for Convention Center events. The recent announcement of the Marriott complex may enable Austin to boost future convention business bookings. The added hotel rooms provided by Marriott will accommodate larger groups in one central area and provide

Austin the ability to attract convention business previously unavailable due to Downtown's limited block room stock ~

Demand Projections

The upturn in Austin's economy improving conditions in Downtown's hotel market positive convention business outlook and generally increased vibrancy of Downtown lead us to be more optimistic about overall Downtown lodging demand. This is tempered however by the volume of proposed hotel development particularly the Marriott complex on 2nd Street. Just the proposed projects for which room counts have been reported total over 1,200 units. Furthermore the market will still need to adjust to the two Marriott properties that are opening this fall. It should be noted that 1,440 rooms will be added between the two Marriott sites all east of Congress Avenue. The Kimpton and Red River projects could add hundreds more rooms within the Study Area by 2010 if both come to fruition as currently planned. Also the dominant area of developing vibrancy (especially retail) continues to be west of Congress. This will make hotel development west of the Convention Center more attractive.

For these reasons we are being conservative in our current projections for the Study Area. We do find it likely that between the Kimpton and Red River proposals, some new rooms will be added to the Study Area prior to 2011. We project the Kimpton will open its 254 rooms by 2009. The massive influx of new Downtown hotel rooms at that time (the Marriott complex in particular) should delay further hotel development in the Study Area until at least 2012. We are projecting another 250 rooms in the Study Area in 2012 possibly at the Red River site. Development of the creekside scenario will encourage this. As we stated in our previous study if the Waller Creek channel truly achieves a riverwalk ambience we would expect another potential 250 rooms by 2015. Absent the creekside scenario we would cap the hotel stock in the Study Area at the 2012 total.

TABLE 1
HISTORICAL EMPLOYMENT TRENDS BY CATEGORY, AUSTIN REGION
1990 – 2005

Industry Category	End of Year Estimates										Change		
	1990	1995	2000	2001	2002	2003	2004	2005	1990 1995	1995 2000	2000 2005		
Total Nonfarm	402 900	534 000	690 100	666 200	665 300	672 400	667 400	693 300	131 100	156 100	3 200		
Natural Resources and Mining	1 200	1 200	1 600	1 800	1 800	1 800	37 700	40 100	0	400	38 500		
Construction	12 200	26 300	39 900	37 400	36 600	37 000	21 700	22 500	14 100	13 600	(17 400)		
Manufacturing	49 200	68 500	85 300	69 600	61 300	58 900	57 400	57 200	19 300	16 800	(28 100)		
Machinery	3 400	4 200	5 400	5 300	4 100	3 900	3 700	3 700	800	1 200	(1 700)		
Computer and Electronic Product Manuf	26 000	39 100	49 600	38 500	32 700	30 700	29 900	30 100	13 100	10 500	(19 500)		
Wholesale Trade	12 400	19 600	36 900	34 500	34 000	33 900	35 400	37 400	7 200	17 300	500		
Retail Trade	44 700	59 400	74 400	72 700	71 800	72 300	69 100	72 700	14 700	15 000	(1 700)		
Transportation Warehousing and Utilities	6 100	9 800	11 200	11 400	11 300	11 200	11 000	11 500	3 700	1 400	300		
Information / Telecommunications	10 600	14 600	25 300	23 000	21 900	20 400	25,400	26 600	4 000	10 700	1 300		
Finance and Insurance	18 300	21 500	25 500	26 000	27 000	27 900	28,400	28 700	3 200	4 000	3 200		
Professional and Business Services	38 600	62 300	95 800	88 800	87 300	86 900	89 100	93 900	23 700	33 500	(1 900)		
Prof Scientific and Technical Svcs	20 500	27 800	48 100	44 600	42 600	41 300	44 400	46 800	7 300	20 300	(1 300)		
Admin and Support and Waste Mgmt	16 100	31 600	44 400	40 000	40 700	40 900	40 800	43 000	15 500	12 800	(1 400)		
Educational and Health Services	37 500	49 800	63 500	63 700	67 200	69 700	68 400	71 600	12 300	13 700	8 100		
Leisure and Hospitality	35 400	47 400	61 100	60 400	62 500	65 300	67 100	69 600	12 000	13 700	8 500		
Other Services	15 300	18 700	22 600	22 900	24 800	25 400	26 000	26 800	3 400	3 900	4 200		
Government	114 900	126 500	136 700	143 100	147 000	151 000	145 800	149 900	11 600	10 200	13 200		
Federal	12 900	9 800	9 000	9 600	10 100	10,600	10 300	10 200	3 100	-800	1 200		
State	59 400	64 600	65 100	66 900	68,300	69 700	66 800	69 400	5 200	500	4 300		
Local	42 600	52 100	62 600	66 600	68 600	70 700	68 700	70 300	9 500	10 500	7 700		

Source Texas Workforce Commission

TABLE 2
BUREAU OF CENSUS POPULATION ESTIMATES

Area	2000 Census	July 1 Bureau of Census Estimates				
		2001	2002	2003	2004	2005
City of Austin	656 562	673 448	670 931	672 618	680 748	690 252
Travis County	812 280	842 547	845 598	854 029	868 873	888 185

Source U S Bureau of the Census

TABLE 3
CITY OF AUSTIN
OFFICE MARKET TRENDS
1996-2005

Year	Inventory (SF)	Occ %	Occupied SF	Net Absorption	Lease Rates (\$/SqFt/Yr)	
					Class A	All
1996	20 831 531	92%	19 188 395	1 209 897	*	\$17 39
1997	21 957 964	94%	20 549 178	1 360 783	*	\$19 07
1998	22 481 916	95%	21 415 194	866 016	*	\$21 72
1999	25 750 035	91%	23 403 115	1 987 921	*	\$23 65
2000	28 155 671	97%	27 325 872	3 922 757	*	\$27 83
2001	31 475 422	87%	27 239 724	86 148	*	\$25 15
2002	33 293 572	84%	27 975 216	735 492	*	\$21 42
2003	33 469 282	80%	26 775 426	1 199 790	\$20 82	\$19 16
2004	34 313 956	82%	28 217 414	1 101 614	\$21 35	\$19 50
2005	34 384 923	84%	28 959 445	689 087	\$23 21	\$21 11
Average		89%		1 058,763		

Range provided only

Source The Source Office Market 2004 2005 NAI Commercial Industrial Properties

Note Survey includes office buildings 20 000 square feet or over that are not entirely owner occupied

TABLE 4
AUSTIN SUBLEASE MARKET
2005

Sector	Sublease Sq Ft	Average Rental Rate	Average Term (Months)	Sublease Vacancy	Effective Market Vacancy
Downtown	86 532	\$17 26	20	1%	24%
North	20 996	\$19 91	85	1%	19%
Northwest	445 902	\$22 21	85	3%	16%
Northeast	10 673	\$20 50	11	1%	24%
South	22 094	\$14 15	107	2%	17%
Southwest	97 550	\$18 57	41	2%	10%
Southeast	10 802	\$18 22	18	5%	27%
City Wide Total	694 549	\$20 67	69	2%	18%

2004

Sector	Sublease Sq Ft	Average Rental Rate	Average Term (Months)	Sublease Vacancy	Effective Market Vacancy
Downtown	143 392	\$15 05	23	2%	25%
North	14 080	\$12 52	26	1%	20%
Northwest	324 763	\$15 06	30	2%	20%
Northeast	10 673	\$20 50	23	1%	15%
South	35 363	\$16 19	39	3%	30%
Southwest	343 293	\$15 56	39	6%	15%
Southeast	13 930	\$16 21	21	6%	25%
City Wide Total	885 494	\$15 44	26	3%	20%

Source The Source Office Market 2004 2005 NAI Commercial Industrial Properties

TABLE 5
DOWNTOWN AUSTIN
OFFICE MARKET TRENDS
1996 - 2005

Year	Inventory (SF)	Occ %	Occupied SF	Net Absorption	Lease Rates (\$/SqFt/Yr)	
					Class A	All
1996	6 908 593	86%	5 969 586	125 108		\$17 49
1997	6 910 318	90%	6 244 872	275 286		\$18 80
1998	6 880 395	95%	6 536 375	291 503	*	\$22 64
1999	6 957 280	96%	6 854 003	317 628		\$25 97
2000	7 061 339	97%	6 859 689	5 686	*	\$32 66
2001	7 428 064	87%	6 484 177	375 512	*	\$28 14
2002	7 834 643	82%	6 422 639	61 538		\$24 20
2003	7 870 806	78%	6 139 229	283 410	\$22 64	\$21 18
2004	8 539 470	77%	6 544 953	266 348	\$23 75	\$21 74
2005	8 522 278	77%	6 531 493	19 672	\$25 80	\$23 58
Average		87%		54,143		

Range provided only

Source The Source Office Market 2004 2005 NAI Commercial Industrial Properties

Note Survey includes office buildings 20 000 SF or over that are not entirely owner occupied

TABLE 6

PLANNED OR PROPOSED AUSTIN DOWNTOWN OFFICE PROJECTS

Complex	Location	Start Date	Completion Date	Total Sq Ft
Texas Auto Dealers Assoc	1108 Lavaca St	4 th Q 06	2008	80 000
Gables Park Plaza	W 3 rd and Lamar	2007	2009	20 000
5 th and Congress	5 th and Congress	2 nd Quarter 2007	Unknown	300 000
Total				400 000

Source: Downtown Austin Emerging Projects 7/06 CDS Market Research

TABLE 7

DOWNTOWN AUSTIN EMPLOYMENT PROFILE
One-Mile Radius from 6th Street at Congress Avenue

Industry Category	Number of Businesses	Employees	
		Number	Share
Agriculture	29	168	0.19%
Mining	22	112	0.13%
Construction	130	1,378	1.55%
Manufacturing	130	2,118	2.38%
Wholesale trade	110	1,584	1.78%
Retail trade	88	814	0.91%
Transportation / communication / public utilities	674	10,934	12.27%
Finance / insurance / real estate	582	5,580	6.26%
Services	3,077	36,075	40.48%
Business services	836	10,087	11.32%
Health services	151	1,739	1.95%
Legal services	995	6,197	6.95%
Education services	73	5,050	5.67%
Government	680	30,353	34.06%
Total	5,522	89,116	100.00%

Source: Claritas Inc. 2006 estimates

TABLES 8a AND 8b
RETAIL MARKET OVERVIEW
MULTI-TENANT RETAIL CENTERS, GREATER AUSTIN*

8a Occupancy and Lease Rates

Year	In Centers 50,000 to 100,000 Square Feet				In Centers Larger than 100 000 Square Feet			
	Total Sq Ft	Occupied Sq Ft	Percent Occupied	Avg Mo Rate	Total Sq Ft	Total Occupied	Total % Occupied	Avg Mo Rate
2002	3 451 181	3 238 569	94%	\$1 41	13 728 289	13 022 195	95%	\$1 64
2003	3 528 531	3 248 640	92%	\$1 43	14 285 788	13 381 273	94%	\$1 66
2004	3 777 870	3 467 123	92%	\$1 45	14 841 715	14 014 337	94%	\$1 75
2005	3 839 291	3 328 995	87%	\$1 41	14 924 300	14 101 160	94%	\$1 82

8b Occupancy and Annual Absorption

Year	In Centers 50 000 to 100 000 Square Feet				In Centers Larger than 100 000 Square Feet			
	Total Sq Ft	Occupied Sq Ft	Percent Occupied	Absorption	Total Sq Ft	Total Occupied	Total % Occupied	Absorption
2002	3 451 181	3 238 569	94%	12 454	13 728 289	13 022 195	95%	382 117
2003	3 528 531	3 248 640	92%	10 071	14 285 788	13 381 273	94%	359 078
2004	3 777 870	3 467 123	92%	218 483	14 841 715	14 014 337	94%	633 064
2005	3 839 291	3 328 995	87%	138 128	14 924 300	14 101 160	94%	86 823

This data considers only centers which are 50 000 sq ft or larger in the Austin area Cedar Park Pflugerville and Round Rock
This data does not include regional malls or free standing/owner occupied stores

Source NAI Commercial Industrial Properties Company

TABLES 9a and 9b
RETAIL MARKET OVERVIEW
MULTI-TENANT RETAIL CENTERS, CENTRAL SUBMARKET¹

9a Occupancy and Lease Rates

Year	In Centers 50,000 to 100,000 Square Feet				In Centers Larger than 100,000 Square Feet			
	Total Sq Ft	Occupied Sq Ft	Percent Occupied	Avg Mo Rate	Total Sq Ft	Total Occupied	Total % Occupied	Avg Mo Rate
2002	62 895	51 126	81%	\$1 92	530 668	530 668	100%	\$2 06
2003	62 895	54 252	86%	\$2 46	530 668	515 201	97%	\$2 11
2004	62 895	53 685	85%	\$2 54	530 668	519 360	98%	\$2 30
2005	62 895	55 895	89%	\$1 08 ²	530 668	526 468	99%	\$2 30

9b Occupancy and Absorption

Year	In Centers 50,000 to 100,000 Square Feet				In Centers Larger than 100,000 Square Feet			
	Total Sq Ft	Occupied Sq Ft	Percent Occupied	Absorption	Total Sq Ft	Total Occupied	Total % Occupied	Absorption
2002	62 895	51 126	81%	6 769	530 668	530 668	100%	5 456
2003	62 895	54 252	86%	3 126	530 668	515 201	97%	15 467
2004	62 895	53 685	85%	567	530 668	519 360	98%	4 159
2005	62 895	55 895	89%	2 210	530 668	526 468	99%	7 108

¹ This data considers only centers which are 50,000 sq. ft. or larger in the Central Submarket including the CBD.
² Market rents indicate proportionately small retail space leased; rate reflects initial incentives.

Source: NAI Commercial Industrial Properties Company

**TABLE 10
NEW DOWNTOWN RETAIL
AS OF AUGUST 2006**

Area	Start Date	Square Footage	Occ %	\$/SF	Expenses	Anchors/Other
Second Street Retail District AML Space	2005	41 759 +	100%	\$24	NNN (\$9 00 psf)	Signed but all tenants have not occupied Second Street District to eventually total 188 000 to 300 000 sf (what is available)
			61%	\$24		Note leasing broker indicated 9 000 sf on hold for large tenant Will release for smaller users
			84%	\$24		Project still in lease up phase est occupancy
Austin Market District 601 N Lamar (Lamar and 6th)	1999 Renovated 2005 2006 TI complete 4th Q 2006	70 000 105 000	100%	\$17 \$32	NNN	Office Max Furniture Max Starbucks
			100%			Book People REI (22 870 sf) Anthropologie (14 000 sf) Teo REI Anthropologie
			100%			Whole Foods Grocery Corporate HQ is 202 127 sf Grocery component 85 000 SF
Whole Foods 500 Blk Lamar	2004 Subtotal	85 000 260 000	100%	\$17 \$32	NNN	
Other 210 212 Trinity Street (restaurants)	2006	15 000	100%	\$28	NNN	Restaurant Houlihans and new specialty (fondue) restaurant TI allowance is \$15 psf NNN is \$6 00 psf CAM not incl

Source Emerging Projects July 2006 discussions with the City of Austin Owners and Leasing Agents

TABLE 11
DOWNTOWN PLANNED AND FUTURE RETAIL AS OF AUGUST 2006

Project	Est. Const Start	Completion	Square Footage	Anchors/Other
Planned or UC				
Second Street Retail AMLI Block 22	2006	2008	40 000	Second Street District
The Monarch W 5th and West Ave	2006	4th Q 2007	9 000	Ground floor retail 350 condos ultra luxury overlooks Shoal Creek
Proposed Future				
Austin Market District Lamar and 6th Shoal Creek Walk	2007 Future	2007 Unknown	30 000 Unknown	Expansion of existing retail Future Market District expansion Currently on hold
Gables Park Plaza W 3 rd and Bowie	2007	2009	40 000	Mixed use development combination condominiums apartments office and retail
2nd Street Retail Block 21 Other	Early 2007 2007	2008/09 Ongoing	+/- 27 000 76 566	32 story high rise with 225 luxury hotel 125 condos entertainment / civic Remaining space estimated for Second Street Retail
5th & Congress	Early 2007	Unknown	100 000	47 story mixed use development 900 000 sf incl 185 residential condos parking office residential
Marrriott Hotel Complex E Second and Congress	2nd Q 2007	2nd Q 2008	Unknown	Recently announced hotel complex with ground floor retail component will be minimal according to White Lodging Svcs
Seaholm Power Plant Third and San Antonio	2008 +	Unknown	+/- 30 000	7 8 acre Power Plant to be remediated and renovated to a high quality mixed use attraction 60 000 sf (as per Web) is estimated to be cultural and/or retail Frank Evans (City of Austin) indicated the project is too far out to project the amount of retail allocation

Note In addition many high rise condominium projects are projecting 8 000 to 15 000 square feet of ground floor retail area when constructed
Source Emerging Projects July 2006 Discussions with the City of Austin Owners and Leasing Agents

TABLE 12

**TAXABLE RETAIL SALES TRENDS
DOWNTOWN AND TRAVIS COUNTY, 2001 - 2005**

Store Category	Taxable Sales					Change 2001 2005	
	2001	2002	2003	2004	2005	Amount	Percent
ZIP Code 78701 (Downtown)							
General merchandise	NA	\$856 720	\$1 024 138	\$2 095 688	\$2 477 332	NA	NA
Apparel and accessory stores	1 615 586	1 380 878	1 693 780	1 850 744	2 365 585	749 999	46%
Home furnishings and equipment	9 787 036	5 717 130	5 104 049	6 382 592	7 754 153	(2 032 883)	21%
Eating and drinking places	117 422 671	116 984 665	119 648 565	126 230 022	132 970 569	15 547 898	13%
Miscellaneous retail	35 228 020	33 755 176	32 338 578	96 857 214	104 392 886	69 164 866	196%
Other categories	11 176 311	19 749 736	11 324 603	11 541 827	11 566 543	390 232	3%
Total	\$175 453 667	\$178 444 305	\$171 133 713	\$244 958 087	\$261 527 068	\$83 820 112	48%
Travis County							
General merchandise	\$939 542 633	\$906 992 510	\$937 406 933	\$986 258 207	\$1 049 490 963	\$109 948 330	12%
Apparel and accessory stores	557 660 387	535 837 682	568 558 251	623 702 722	618 901 800	61 241 413	11%
Home furnishings and equipment	972 784 748	941 136 516	945 162 004	954 511 848	991 413 071	18 628 323	2%
Eating and drinking places	1 333 677 542	1 315 376 022	1 354 568 020	1 451 200 632	1 514 937 837	181 260 295	14%
Miscellaneous retail	1 427 718 167	1 284 237 247	1 326 056 252	1 368 046 677	1 501 362 900	73 644 733	5%
Other categories	\$1 718 698 804	\$1 649 237 448	\$1 594 625 656	\$1 673 110 651	\$1 812 013 745	\$93 314 941	5%
Total	\$6 950 082 281	\$6 632 817 425	\$6 726 377 116	\$7 056 830 737	\$7 488 120 316	\$538 038 035	8%

Source State of Texas Office of the Comptroller

TABLE 13

**ANALYSIS OF RESIDENT DEMAND FOR RETAIL SPACE
5-MILE RADIUS FROM W 6TH STREET AND S CONGRESS AVENUE**

2010 Projections for 5 Mile Radius							
Retail Category	Households	Avg Sales/ Household	Potential Sales	Top Ten Percent		Median	
				Required Sales / Sq Ft	Supportable Sq Ft	Required Sales / Sq Ft	Supportable Sq Ft
General merchandise	113 592	\$3 094	\$351 422 559	\$201	1 748 371	\$137	2 565 128
Apparel and accessory stores	113 592	\$1 824	\$207 239 568	\$417	496 977	\$208	996 344
Home furnishings and equipment	113 592	\$2 923	\$331 975 148	\$793	418 632	\$180	1 844 306
Eating and drinking places	113 592	\$4 466	\$507 277 671	\$682	743 809	\$350	1 449 365
Miscellaneous retail	113 592	\$4 426	\$502 732 096	\$700	718 189	\$300	1 675 774
				Total	4 125 978	Total	8 530 917

Determined by taking Travis County taxable retail sales in the subject categories in 2005 and dividing by 2005 Census household estimates

Source Downtown Austin Alliance Caritas Inc and the Urban Land Institute Dollars and Cents of Shopping Centers 2002 and 2004,
CDS/Spillette

TABLE 14

**AUSTIN AREA MULTIFAMILY CONSTRUCTION SUMMARY,
JULY 2005 JULY 2006**

Status	# Units
Submitted	6 050
Approved	2 953
Under Construction	7 644
Net Units Added (past 12 months)	1 826
Units Absorbed (past 12 months)	2 253

Source Austin Investor Interests

TABLE 15

**AUSTIN APARTMENT MARKET SUMMARY
JULY 2006**

Category	# of Units	Market Share	Avg \$/sq ft	Avg Occ %
Class A	32 071	26 96%	\$0 94	90 97%
Class B	39 902	33 54%	\$0 89	94 21%
Class C	47 025	39 51%	\$0 83	92 66%
Overall MSA Total	118 998	100%	\$0 81	88 1%

Source Austin Investor Interests

TABLE 16

AUSTIN APARTMENT UNIT MIX SUMMARY
JULY 2006

Floor Plan	Share of Market	Quantity	Average Rent / Mo	Avg Rent / Sq Ft	Avg Size
Efficiency	3 16%	3 758	\$475	\$1 11	428
1 Bedroom	54 13%	64 408	\$644	\$0 93	689
2 Bedroom	38 10%	45 340	\$851	\$0 85	1 007
3 Bedroom	4 29%	5 104	\$1 198	\$0 90	1 334
4 Bedroom	0 32%	379	\$1 535	\$0 88	1 752
5 Bedroom	0 01%	9	\$1 260	\$0 73	1 738

Source Austin Investor Interests

TABLE 17**DOWNTOWN APARTMENT SUMMARY – EXISTING INVENTORY
AS OF JULY 2006**

	Development	Address	Total Units	Year Built	Renovated	# of Stories
1	Park Terrace	516 Dawson Rd	65	1961	2001	2
2	Riverside Place	300 E Riverside Dr	145	1962		3
3	The Breakers	1500 S Lamar Blvd	204	1963	1999	2
4	2020	2020 S Congress Ave	103	1964		3
5	Cascade I & II	1221 Algarita Ave	198	1968		2 & 3
6	The Willows	600 S 1 st St #112	94	1969		2 & 3
7	Oak Creek Village	2324 Wilson St	176	1970		2
8	Congress Square	500 S Congress	114	1972		2 & 3
9	Brook at Travis Heights	1824 S IH 35	188	1972		2 & 3
10	Timbercreek	614 S 1 st St	198	1972		3
11	Stoneridge	1500 S Lamar Blvd	137	1973		2
12	Riverside Square	222 E Riverside Dr	100	1974		2 & 3
13	Townhollow	1200 Treadwell St	77	1983		3
14	The Tuscany	1301 W Lynn St	31	1986		3
15	Gables of Town Lakes	2600 Lake Austin Blvd	256	1996		2 & 3
16	Statehouse on Congress	1221 S Congress Ave	287	1996		3
17	Gables of West Avenue	300 West Avenue	239	2000		4
18	1007 Congress	1007 S Congress Ave	253	2001		3
19	404 Rio Grande	701 W 5 th	139	2004		4
20	AMLI Downtown	201 Lavaca St	220	2004		7
Total			3 224			

Source CDS Market Research

TABLE 18
APARTMENT OCCUPANCY & RENTAL RATES
AS OF 2nd QUARTER 2006

Area	Class A		Class B		Class C		Total All Classes		Quarterly Change		Annual Change	
	Occ %	Rent	Occ %	Rent	Occ %	Rent	Occ %	Rent	Occ %	Rent	Occ %	Rent
Central	78 73%	\$1 49	91 66%	\$1 31	93 29%	\$0 46	90 94%	\$1 15	3 28%	\$0 01	59%	\$0 07
Travis Co	91 26%	\$0 97	94 35%	\$0 92	92 43%	\$0 84	92 83%	\$0 90	0 44%	\$0 02	1 70%	\$0 07
Austin MSA	90 97%	\$0 94	94 21%	\$0 89	92 49%	\$0 83	92 66%	\$0 88	0 56%	\$0 01	1 53%	\$0 06

Source Austin Investor Interests

TABLE 19
HISTORICAL RENT AND OCCUPANCY
CENTRAL SUBMARKET, TRAVIS COUNTY AND AUSTIN MSA
4TH Q 2002 – 2ND Q 2006

Year	4 TH Q 02	4 TH Q 03	4 TH Q 04	4 TH Q 05	2 ND Q 06
OCCUPANCY					
Central	92 62%	92 31%	94 84%	90 35%	90 94%
Travis County	89 48%	89 33%	90 55%	91 13%	92 83%
Austin MSA	88 43%	89 02%	90 45%	91 13%	92 66%
RENT / SQ FT / MONTH					
Central	\$1 08	\$1 10	\$1 09	\$0 96	\$1 03
Travis County	\$0 87	\$0 82	\$0 81	\$0 83	\$0 90
Austin MSA	\$0 86	\$0 81	\$0 81	\$0 82	\$0 88

Source Austin Investor Interests Apartment Trends Report

TABLE 20

DOWNTOWN APARTMENT OVERVIEW BY FLOOR PLAN (SELECTED UNITS)

Development	Eff	1/1	2/1	2/1 5	2/2	3/2	3/3	3+BR	Total Units
2020	60	27	16	0	0	0	0	0	103
Alexan Congress	0	117	0	0	104	32	0	0	253
AMLI Downtown	0	187	0	0	33	0	0	0	220
Cascade I & II	14	83	18	0	32	0	0	15	162
Congress Square	0	73	41	0	0	0	0	0	114
Gables of Town Lakes	0	123	36	0	92	0	1	0	252
Gables of West Avenue	34	162	0	0	43	0	0	0	239
Littlefield Quarters	0	0	24	0	0	0	0	0	24
Oak Creek Village	0	48	60	0	0	52	0	16	176
Park Terrace	0	38	27	0	0	0	0	0	65
Riverside Place	18	48	14	0	47	18	0	0	145
Riverside Square	9	75	0	16	0	0	0	0	100
Statehouse on Congress	0	171	32	0	69	15	0	0	287
Stoneridge	64	40	33	0	0	0	0	0	137
The Breakers	32	100	36	0	28	6	0	0	202
The Brook in Travis Heights	0	96	48	0	30	14	0	0	188
The Tuscany	0	17	0	1	13	0	0	0	31
The Willows	0	64	30	0	0	0	0	0	94
Timbercreek	12	74	60	4	36	6	0	6	198
Towers of Town Lake	0	0	0	0	11	0	0	1	12
Townhollow	21	29	27	0	0	0	0	0	77
Totals	264	1,572	502	21	538	143	1	38	3 079
Average SF per floor plan	451	693	844	981	1 074	1,207	1 203	1,234	801
Total SF per floor plan	119,064	1 089 396	423,688	20 601	577 812	172 601	1 203	46 892	2 451 257
Floor plan share of total	4 86%	44 44%	17 28%	0 84%	23 57%	7 04%	0 05%	1 91%	100%

Source Capital Market Research and CDS Market Research

TABLE 21

DOWNTOWN AUSTIN APARTMENT RENT SURVEY

No	Unit Type	No of Units	Occ %	Size (SF)	Base Rent / Month	\$/SF/ Mo	Free Rent	Other
1	Alexan Congress 1 BR/1 BA 2 BR/2 BA 3 BR/2 BA Subtotal	115 106 32 253	N/A N/A N/A 94%	756 1 108 2 044 1 066	\$1 149 \$1 466 \$2 044 \$1 395	\$1 52 \$1 32 \$1 00 \$1 31	N N N	
2	AMLI Downtown 1 BR/1 BA 2 BR/2 BA Subtotal	187 33 220	N/A N/A 98%	872 1 474 962	\$1 788 \$3 250 \$2 007	\$2 05 \$2 21 \$2 09	N N	
3	Breakers The Efficiency 1 BR/1 BA 2 BR/1 BA 2 BR/2 BA 3 BR/2 BA Subtotal	32 100 36 28 6 202	N/A N/A N/A N/A N/A 97%	480 662 803 858 1 088 698	\$560 \$700 \$775 \$820 \$1 100 \$720	\$1 17 \$1 06 \$0 97 \$0 96 \$1 01 \$1 03	Y Y Y Y Y	\$99 For first month rent on any unit if you sign a 12 month lease
4	Gables of Town Lake 1 BR/1 BA 2 BR/1 BA 2 BR/2 BA 2 BR/2 5 BA Subtotal	120 36 77 19 252	98% 94% 97% 94% 96%	658 907 1 121 1 418 892	\$1 186 \$1 405 \$1 617 \$2 020 \$1,412	\$1 80 \$1 55 \$1 44 \$1 42 \$1 58	N N N N	

(continued on next page)

TABLE 21

DOWNTOWN AUSTIN APARTMENT RENT SURVEY (continued)

No	Unit Type	No of Units	Occ %	Size (SF)	Base Rent / Month	\$/SF/ Mo	Free Rent	Other
5	Gables of West Avenue							
	Efficiency	33	90%	646	\$1 186	\$1 84	N	
	1 BR/1 BA	163	98%	1 032	\$1 405	\$1 36	N	
	2 BR/2 BA	42	98%	1 243	\$1 617	\$1 30	N	
	3 BR/3 BA	1	100%	2 103	\$2 020	\$0 96	N	
	Subtotal	239	97%	1 020	\$1 415	\$1 39		
6	Statehouse on Congress							
	1 BR/1 BA	171	100%	773	\$1 184	\$1 53	N	
	2 BR/2 BA	101	100%	1 082	\$1 560	\$1 44	N	
	3 BR/2 BA	15	100%	1 351	\$2 046	\$1 51	N	
	Subtotal	287	100%	912	\$1,361	\$1 49		

TABLE 22

FUTURE ADDITIONS TO DOWNTOWN APARTMENT SUPPLY

Project Name	Location	Completion	Stories	Units	Price Range	Developer / Other
UNDER CONSTRUCTION						
High Rise						
AMLI Tower	W 2nd St	2008	18	231	\$1 57 \$2 13 +	AMLI
Monarch The	Shoal Creek	2007	29	305	NA	ZOM USA
<i>Subtotal</i>				536		
Mid Rise						
Robertson Hill	San Marcos and 11 th	2007	4	283	NA	Martin Fein Interests
Red River Flats	Red River	2007	4	124	NA	Greystar Real Estate Partners LLC
Goodwill Site	W 3rd and Lamar	2007	5	126	NA	Phoenix Property
<i>Subtotal</i>				533		
Under construction total				1 069		
PROPOSED						
High Rise						
101 Colorado	Congress and Colorado	2009 2010	36	258	NA	Met Life
98 San Jacinto	1 st and San Jacinto	2009 (est)	NA	220		Construction starts Q2 2007
<i>Subtotal</i>				468		
Mid Rise						
1426 Toomey Rd	S Lamar		NA	100	NA	John Wooley
Gables Park Plaza	W 3rd and Bowie		NA	314	NA	Gables Residential
<i>Subtotal</i>				414		
Proposed total				882		
POTENTIAL FUTURE						
Neches Oak Tower	10th and Neches	NA	8	NA	NA	Stephen Soward & Associates
Lofts on Shoal Creek	W 6th and West Ave	NA	Mid Rise	NA	NA	Armbrust & Brown LLP

Source Emerging Projects Downtown Austin Alliance and CDS | Spillette

TABLE 23

MLS LISTINGS – RECENTLY BUILT / CONVERTED DOWNTOWN CONDOMINIUMS

Building Name	Address	Year Built	BR	BA	Size (SF)	Price	\$/SF
Milago	54 Rainey	2006	2	2	1 168	\$390 000	\$333 90
Milago	54 Rainey	2006	1	1	891	\$364 900	\$409 54
Milago	54 Rainey	2006	1	1	891	\$335 000	\$375 98
Milago	54 Rainey	2006	1	1	865	\$329 000	\$380 35
Milago	54 Rainey	2006	1	1	852	\$309 900	\$363 73
Five Fifty Five	555 E 5th	2005	2	2 5	3 927	\$2 695 000	\$686 27
Five Fifty Five	555 E 5th	2005	2	2 5	3 141	\$1 950 000	\$620 82
Five Fifty Five	555 E 5th	2005	2	2 5	2 841	\$1 595 000	\$561 42
Five Fifty Five	555 E 5th	2005	2	2	2 117	\$1 050 000	\$495 98
Five Fifty Five	555 E 5th	2005	2	2	1 617	\$895 000	\$553 49
Five Fifty Five	555 E 5th	2005	2	2	1 358	\$795 000	\$585 42
Five Fifty Five	555 E 5th	2005	1	1	1 106	\$395 000	\$357 14
Austin City Lofts	800 W 5th	2003	2	2	1 506	\$650 000	\$431 61
Nokonah	901 W 9th	2001	2	2 5	1 611	\$925 000	\$574 18
Nokonah	901 W 9th	2001	1	1	933	\$364 900	\$391 10
Avenue Lofts	400 E 5th	1999	1	1 5	1 395	\$449 900	\$322 51
Avenue Lofts	401 E 5th	1999	0	1	782	\$265 000	\$338 87
Brown Building Lofts	710 Colorado	1940	2	2	2 029	\$1 060 000	\$522 42
Brown Building Lofts	710 Colorado	1940	1	1	638	\$275 000	\$431 03

Source CDS | Spillette

FUTURE ADDITIONS TO DOWNTOWN CONDOMINIUM SUPPLY

Project Name	Location	Completion	Stories	Units	Price Range	Developer / Other
UNDER CONSTRUCTION						
High Rise						
Milago on Town Lake	Rainey Street	2006	13	240	\$170K \$700K	Fairfield Residential sold out (+/- 80% committed) 12 units reserved for ann HH income \$40 000 and under
The Shore	Davis and Red River	2008	22	192	\$145K \$1 3M	
360	Nueces and 3 rd	2008 09	44	432	\$200K \$300K+	Novare Group Holdings
<i>Subtotal</i>				864		
Mid Rise						
Six+Brushy	603 Brushy	2006	4	18	\$180K \$375K	Complete 12/06 1 unit left
Under construction total				882		
PROPOSED						
High Rise						
Brazos Place	800 Brazos	2007	14	80	\$200K \$400K	Pomeroy Investment Corp proposed renovation
5th and Congress	E 5th and Congress	2008+	47	100	\$300K \$600K	Tom Stacy & Associates
200 Congress	E 2nd and Congress	+/- 2009	48	250	\$400K +	Benchmark Land Development Inc
Spring	W 3rd and Bowie	+/- 2009	36	220	\$200K \$400K	Zenith Partners
Gables Park Plaza	W 3rd and Bowie	2009	15	100	NA	Gables Residential
Block 21	2 nd and Guadalupe	2009	1	100	NA	
98 San Jacinto	1 st and San Jacinto	+/- 2009	High rise	80	NA	Construction starts Q2 2007
<i>Subtotal</i>				930		
(Continued on next page)						

TABLE 24

FUTURE ADDITIONS TO DOWNTOWN CONDOMINIUM SUPPLY (continued)

Project Name	Location	Completion	Stories	Units	Price Range	Developer / Other
PROPOSED (continued)						
Mid Rise						
La Vista on Lavaca	1707 Lavaca	10/07	8	16	\$250K \$1M	Guerrero McDonald
721 Congress	E 8th and Congress	2007	6	16	NA	Sinclair Black proposed renovation
303 Urban Village	E 11 and Trinity	2008	7	95	\$300K \$400K	Olive Grove Partners Ltd
Red River	Red River at Cesar Chavez	2010	30	NA	\$350K \$2M	Constellation Property Group
Presidio at Judges Hill	MLK Blvd and West Ave	2006	5	44	\$350K \$450K	Stonehill PRM Realty
<i>Subtotal</i>				171		
Proposed total				1,101+		
POTENTIAL FUTURE						
Neches Oak Tower	10th and Neches	NA	8	NA	NA	Stephen Soward & Associates
Lofts on Shoal Creek	W 6th and West Ave	NA	Mid Rise	NA	NA	Armbrust & Brown LLP

Source Emerging Projects Downtown Austin Alliance and CDS | Spillette

TABLE 25
AUSTIN REGION HOTEL TRENDS 1997 – YTD 2006

Year	Number of Rooms	Average Rate	Average Occupancy	Est Revenue Per Avail Room
1997	17 875	\$74 87	69 6%	\$52 11
1998	19 052	\$78 36	67 4%	\$52 81
1999	20 518	\$84 25	73 2%	\$61 67
2000	21 445	\$90 34	74 9%	\$67 66
2001	23 952	\$81 98	62 1%	\$50 91
2002	25 373	\$78 28	56 8%	\$44 46
2003	25 373	\$76 66	56 3%	\$43 16
2004 ¹	N/A	N/A	N/A	NA
2005	25 704	\$81 80	67 3%	\$55 05
2006 ²	25 704	\$92 10	71 5%	\$65 85

¹ Information not available

² 2006 Data through month of June

Sources Smith Travel Research Austin Hotel Motel Association and CDS | Spillette

TABLE 26
DOWNTOWN HOTEL TRENDS 1997 – YTD 2006

Year	Number of Rooms	Average Rate	Average Occupancy	Est Revenue Per Avail Room
1997	4 629	\$93 50	73 6%	\$68 82
1998	4 910	\$89 81	69 7%	\$62 60
1999	7 751	\$122 31	72 3%	\$88 43
2000	8 214	\$130 48	77 7%	\$101 38
2001	3 718	\$94 43	62 9%	\$59 40
2002	8 812	\$99 25	62 0%	\$61 53
2003	6 866	\$99 20	63 0%	\$62 49
2004 ¹	N/A	N/A	N/A	NA
2005	6 750	\$110 66	72 8%	\$80 56
2006 ²	6 750	\$123 48	75 8%	\$93 60

¹ Information not available

² 2006 Data through month of June

Sources Smith Travel Research Austin Hotel Motel Association and CDS | Spillette

TABLE 27
DOWNTOWN AUSTIN HOTELS

Name	Address	Year Built	No of Rooms	No of Stories
Driskill Hotel	604 Brazos	1886	188	12
Inter Continental Stephen F	700 Congress	1924	189	16
La Quinta Inn at the Capitol	300 E 11th	1965	145	4
Radisson Hotel on Town Lake	111 E Cesar Chavez	1968	413	12
Hyatt Regency Austin	208 Barton Springs (78704)	1972	446	17
Super 8 Central	1201 N IH 35 (78702)	1984	60	2
Crowne Plaza Hotel	500 N IH 35	1985	254	18
Omni Hotel Austin	700 San Jacinto	1985	375	20
Embassy Suites Hotel Town Lake	300 S Congress (78704)	1986	262	9
Marriott at the Capitol	701 E 11th	1986	365	16
Doubletree Guest Suites	303 W 15th	1987	189	15
Four Seasons Hotel	98 San Jacinto	1994	102	9
Club Hotel/Doubletree	1617 N IL 35 (78702)	1997	152	6
Homestead Village	507 S First (78704)	1998	139	3
Extended Stay America	601 Guadalupe	2002	101	4
Hampton Inn & Suites	200 San Jacinto	2002	222	16
Holiday Inn Town Lake	20 N IH 35	1973	320	14
Holiday Inn Town Lake	20 N IH 35	1984		11
Hilton convention Center Hotel	555 E 5th Street	2003	800	31
Residence Inn/Courtyard by Marriott	North of 4th between Trinity and San Jacinto	2006 ¹	440	16
Total/Median			5 162	13
Proposed				
Kimpton Hotel	Red River at Davis (Town Lake)	2008	254	9
Marriott Convention Center	NWC of Brazos / E 2 nd St	2009	650	26
Renaissance Hotel	NWC of Brazos / E 2 nd St	2009	200	11
Springhill Suites by Marriott	NWC of Brazos / E 2 nd St	2009	150	15
5 th and Congress	NEC 5 th and Congress	2008+	NA	NA
Hixon Properties	NWC of Congress / W 3rd St	NA	NA	NA
Red River (Constellation)	Red River / Cesar Chavez	2010	NA	30
W Hotel Block 21	Guadalupe / W 2nd St	2011	225	32 ²
Seaholm Power Plant redev	Cesar Chavez to 3 rd St / West Ave	NA	NA	NA
Total/Median			1 479+	15

Previous number includes total rooms for both towers

¹ Opening October 1st

Tower would include other uses total hotel floors unknown

TABLE 28

HISTORICAL CONSTRUCTION SUMMARY – DOWNTOWN AUSTIN

Date	Number of Rooms Constructed	Share of Total
Prior to 1979	1 701	33%
1980 1989	1 505	29%
1990 1999	393	8%
2000 2006	1 563	30%
Totals	5 162	100%

TABLE 29

**HISTORICAL AND PROJECTED DATA FOR
CONVENTION CENTER ROOM NIGHTS AS OF AUGUST 2006**

Definite Room Nights and Attendance Convention Center			
Year	Attendance	Room Nights	# of Events
2018	6 000	5 290	1
2017	0	0	0
2016	0	0	0
2015	3 000	4 931	1
2014	0	0	0
2013	6 000	5 290	1
2012	4 450	7 320	3
2011	0	0	0
2010	16 350	9 030	4
2009	33 100	33 120	11
2008	72 250	41 664	13
2007	113 650	66 523	23
2006	218 848	150 941	54
2005	181 740	149 220	56
2004	241 750	190 220	51
2003	144 800	147 648	47
2002	204 400	91 989	41
2001	121 200	107 131	38
2000	268 250	141 788	51
1999	237 905	96 787	45
1998	232 250	110 605	41
1997	67 350	72 906	34
1996	33 621	31 520	16

(continued on next page)

TABLE 29 (continued)

Definite Room Nights – All Business (A B and C)*			
Year	Attendance	Room Nights	# of Events
2018	6 000	5 290	1
2017	0	0	0
2016	0	0	0
2015	3 000	4 931	1
2014	0	0	0
2013	7 200	6 952	2
2012	4 450	7 320	3
2011	1 200	1 662	1
2010	16 350	9 030	4
2009	41 175	46 475	19
2008	78 625	53 043	22
2007	150 950	125 273	82
2006	349 378	268 884	256
2005	524 725	354 332	555
2004	638 078	386 768	465
2003	579 598	283 240	441
2002	591 649	219 491	455
2001	429 567	219 291	405
2000	413 268	226 356	363
1999	330 601	161 990	289
1998	334 625	187 828	245
1997	124 939	127 135	176
1996	45 803	63 303	89

(continued on next page)

TABLE 29 (continued)

Tentative Room Nights and Attendance Convention Center			
Year	Attendance	Room Nights	# of Events
2014	22 000	14 240	2
2013	10 000	12 320	1
2012	30 000	26 151	4
2011	10 000	12 320	1
2010	54 000	40 070	6
2009	32 600	44 378	15
2008	56 500	90 812	22
2007	68 200	56 581	17
2006	36 800	18 778	8

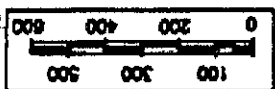
Notes

- A Citywide convention center (or for another city facility) business generated
- B That business generated that books peak room nights over 100 rooms and uses one or more hotels or motels This category does not use the Convention Center facilities
- C Any business generated by the Austin Convention and Visitors Bureau that books less than 99 rooms

Source Austin Convention Center and Visitors Bureau



TIF Area



TIF District Boundaries