

Jack D. Hedge, P.E.
Senior Civil Design Engineer
Tel: 214.653.6420
Fax: 214.653.6445
Cell: 214.435.3883
Email: jhedge@dallascounty.org

**DALLAS COUNTY
PUBLIC Works
Department
411 Elm St.; 4th Floor
Dallas, TX 75202**

*Received at Town Hall
as*

Fax

To: **JIM PIERCE, City of
Addison**

From: Jack D. Hedge *JDA*

Fax: 972.450.7001

Pages: 5, incl. cover

Tel:

Date: 09 April 2002

CC:

Urgent For Review Please Comment Please Reply Please Recycle

● Comments: JIM : We are taking a last look at the various cities' candidate projects for the MCIP program. We have used your cost estimates to this point. We will appreciate it if you will examine the 4 attached Project Recap. sheets and fill in the missing values; for SUE, Inflation, Materials Testing, etc. . The values shown came from your submission. We are trying to wrap up in the next few days so we can proceed with the entire program. Your help is appreciated. Please call if there are questions.

addisonrecap4.wd1

4-17-02

Called Jack Hedge and requested we stick with the cost estimates the County generated 11-2-01

JDA

1 Jack D. Hedge, P.E. Pg. / of / Pages Date: 12-10-01

MCIP Project #: 2 ; Street: KELLER SPGS / ADDISON RD INTER.

RECAP:

RR Crossing:	\$
Grading & Paving:	\$
Drainage:	\$
Bridges(s):	\$
Signals:	\$
Lighting:	\$
<hr/>	
Sub-Total:	\$
Contingencies: (%)	\$
<hr/>	
Sub-Total:	\$ 173,000.-
SUE @ %	\$
Design @ % ENGR. COMPLETE	\$ UPDATE: 3,000.-
Prelim. (1%) + Constr. Materials Tests(1%)	\$
<hr/>	
Sub-Total:	\$
Inflation- yr. @3%/yr.	\$
ROW	\$ 72,000.-
<hr/>	
Sub-Total:	\$
Project Delivery Expense: 10%	\$
<hr/>	
Grand Total:	\$ 248,000.-

BID IN LATE 1999

Jack D. Hedge, P.E.

Pr. / Of / Pages

Date: 12.10.01

MCIP Project #: 7 ; Street: BELT LINE RD SIGNAL UPGRADE

RECAP:

RR Crossing:	\$
Grading & Paving:	\$
Drainage:	\$
Bridges(s):	\$
Signals:	\$
Lighting:	\$

Sub-Total: \$

Contingencies: (%) \$

Sub-Total: \$ 610,000.-

SUE @ % \$

Design @ % \$ 90,000.-

Prelim. (1%) + Constr. Materials Tests(1%) \$

Sub-Total: \$

Inflation- yr. @3%/yr. \$

ROW \$

Sub-Total: \$

Project Delivery Expense: 10% \$

Grand Total: \$ 700,000.-

EST. BY PARSONS TRANS. GP.

Jack D. Hedge, P.E.

Pg. / of / Pages

Date: 12-10-01

MCIP Project #: 58 ; Street: DALLAS PENNY: SB TON B U-TURN

RECAP: C.O. ADDISON

RR Crossing: \$

Grading & Paving: \$

Drainage: \$

Bridges(s): \$

Signals: \$

Lighting: \$

Sub-Total: \$

Contingencies: (%) \$

Sub-Total: \$ 660,000.-

SUE @ % \$

Design @ % \$ 90,000.-

Prelim. (1%) + Constr. Materials Tests(1%) \$

Sub-Total: \$

Inflation- yr. @3%/yr. \$

ROW \$

Sub-Total: \$

Project Delivery Expense: 10% \$

Grand Total: \$ 750,000.-

EST BY PARSONS TRANS GP.

MCIP prelim est recap.wdl

Jack D. Hedge, P.E.

Pg. 1 of 1 Pages

Date: 12.10.01

MCIP Project #: 57 ; Street: BELT LINE / DALLAS PARKWAY INTERCHANGE

RECAP: C.D. ADDISON

RR Crossing:	\$
Grading & Paving:	\$
Drainage:	\$
Bridges(s):	\$
Signals:	\$
Lighting:	\$

Sub-Total: \$

Contingencies: (%) \$

Sub-Total: \$ 2,060,000.⁰⁰

SUE @ % \$

Design @ % \$ 240,000.-

Prelim. (1%) + Constr. Materials Tests(1%) \$

Sub-Total: \$

Inflation- yr. @3%/yr. \$

ROW \$ 170,000.-

Sub-Total: \$

Project Delivery Expense: 10% \$

Grand Total: \$ 2,500,000.-

EST BY BARTON-ASCHMAN

Jim Pierce

From: Edith Ngwa [ENgwa@dallascounty.org]
Sent: Friday, November 02, 2001 3:36 PM
To: jcosby@airmail.net; Jim.sparks@cedarhilltx.com; Jpierce@ci.addison.tx.us; Kbolton@ci.desoto.tx.us; Dschwartz@ci.duncanville.tx.us; Rwunderlich@ci.garland.tx.us; rlarkins@ci.grand-prairie.tx.us; Mdadgostar@ci.highland-park.tx.us; Jcline@ci.irving.tx.us; rberry@ci.mesquite.tx.us; Jspeer@ci.university-park.tx.us; Randy.walhood@cityofcarrollton.com; batkinson@cityofsachse.com; cityadministrator@cockrell-hill.tx.us; Walter_ragsdale@cor.gov; Ahendrix@pbw.ci.dallas.tx.us; cityofhutchins@prodigy.net
Cc: IRodriguez@dallascounty.org; JHedge@dallascounty.org
Subject: MCIP Project Cost Estimates



MCIP Project Cost
Estimation M...

Good Day All!

During our 2001 MCIP kick-off meeting earlier this year, we projected that the final selection of projects will take place on or around October 31st. However, due to some discrepancies between the project cost estimates you submitted and those that our staff came up with, we have decided to move that date to December 30th while we attempt to resolve these discrepancies.

P

Please find attached our project cost estimate methodology. We will be faxing out to you detailed cost estimate break-downs for each individual project by the end of the work day today. Please contact our Senior Design Engineer, Jack Hedge (214-653-6420), as soon as possible if you wish to set up a meeting to discuss these new estimates. If we do not hear from you by November 15, 2001, we'll proceed to use the new estimates in our final project evaluation and selection.

Thanks in advance for cooperation!

Edith B. Ngwa, Ph.D
Senior Transportation Planner
Dallas County Public Works
411 Elm Street, Suite # 400
Dallas, TX 75202

214-653-7151

3-6-02 Selections not made yet - Commissioners are still trying to decide. Maybe by the end of March.

FACSIMILE TRANSMISSION COVER SHEET

DATE: November 2, 2001

SENT BY: Iscla Rodriguez
DALLAS COUNTY PUBLIC WORKS DEPARTMENT
411 ELM STREET, 4TH FLOOR
DALLAS, TEXAS 75202
Phone: 214-653-6417
Fax: 214-653-6416

TO: Jim Pierce P.E., Assistant Director - Public Works

COMPANY: City of Addison

FAX NUMBER: 972-450-2834

PHONE NO.: 972-450-2879

NO. OF PAGES (Inc. Cover Sheet): _____

COMMENTS: _____

Please Review Attached documents and contact Jack Hedge if you

have any questions about the cost estimate. (214) 653 - 6420

Also, check your email for a message from Edith Ngwa, our Senior

Transportation Planner for more information.

Please call 214-653-6417 if there are any difficulties or problems in the transmission of this fax.

Dallas County MCIP Project Cost Estimates

City

Addison

MCIP #	Project Location	District	City's Estimated Total Project Cost	County's Estimated Total Project Cost
1	Belt Line Road Signal Up-grade	1	\$700,000.00	\$1,128,204.00
58	Dallas parkway SB to NB U-turn	1	\$750,000.00	\$945,649.10
2	Keller Springs/Addison Road Intersection	1	\$248,000.00	\$477,219.60
57	Belt Line/Dallas Parkway Single Point Urban Interchange	1	\$2,500,000.00	\$4,167,143.20

11-01-02



DALLAS COUNTY
PUBLIC WORKS

Dallas County MCIP Project Cost Estimation Methodology

Pavement and Drainage ¹	_____
+ Bridge ²	_____
+ Traffic Signals ³	_____
+ Street Lighting ⁴	_____
+ RR Crossing ⁵	_____
= Subtotal (ST1)	_____
+ Inflation (3%/yr ST1 for 6yrs)	_____
+ Materials (2% ST1)	_____
= Construction Cost Total	_____
+ Design cost ⁶	_____
+ ROW cost	_____
+ SUE and Utility costs ⁷	_____
= Subtotal (ST2)	_____
+ Project Delivery cost(10% ST2)	_____
 = Total Project Cost	 _____

¹ Includes pavement, subgrade, and storm drainage improvements. Bike lanes (two 5ft lanes), sidewalks, and handicap ramps are added if requested on application.

² Bridge cost estimate is \$50/sq.ft.

³ Traffic Signal roadway reconfiguration is \$110,000 for a 6x6 lane intersection; \$99,000 for a 6x4 lane intersection; \$88,000 for a 6x2 lane intersection. Estimates are for NEW traffic signals.

⁴ Street Lighting is \$3,520 per light per 200ft.

⁵ Railroad crossing is \$161,100 for a 4 lane divided roadway (15ft median); and \$246,300 for a 6 lane divided roadway (50ft median)

⁶ Design cost:

\$ 0 – 1 million =	11%	of construction cost
\$ 1 – 5 million =	9.5%	of construction cost
\$ 5 – 25million =	7%	of construction cost

⁷ SUE is @ 0 – 2% of construction cost, depending on the number of utilities. Utility cost as stated on application is added

MCIP #	1	City	Addison	Length	1.7	miles	Proposed Through Lanes	3
Project Location	Belt Line Road Signal Up-grade							
Beginning	Marsh Lane							
Ending:	Dallas Parkway (Quorum Drive)							

City Estimate:

Construction Cost	\$610,000.00
Design Cost	\$90,000.00
ROW Cost	\$0.00
Utility Cost	\$0.00
Total Project	\$700,000.00
Cost to City	\$560,000.00

County Estimate(DC):

Paving and Drainage	\$0.00
Bridge Cost DC	\$0.00
Lighting Cost DC:	\$0.00
Signal Cost DC:	\$770,000.00
Rail Road Cost DC:	\$0.00
Subtotal:	\$770,000.00
Inflation (3% for 6 years)	\$138,600.00
Materials (2%)	\$15,400.00
Construction Total	\$924,000.00
Design Cost DC:	\$101,640.00
ROW Cost DC:	\$0.00
SUE and Utility Costs DC:	\$0.00
Sub Total:	\$1,025,640.00
Project Delivery Cost DC:	\$102,564.00
Total Project Cost DC:	\$1,128,204.00

Comments Regarding Cost by City:

This cost estimate was prepared by Parsons Transportation Group in January 2000.

Comments Regarding Cost by County:

Traffic signal upgrades. SUE is 0% and design is 11% of construction cost.

MCIP #	2	City	Addison	Length	0.17	miles	Proposed Through Lanes	3
Project Location	Keller Springs/Addison Road Intersection							
Beginning	Keller Springs Road at Addison Road			Ending:	900 Feet East of Addison Road			

City Estimate:

Construction Cost	\$173,000.00
Design Cost	\$3,000.00
ROW Cost	\$72,000.00
Utility Cost	\$5.00

Total Project	\$248,000.00
Cost to City	\$198,400.00

County Estimate(DC):

Paving and Drainage	\$192,030.00
Bridge Cost DC	\$0.00
Lighting Cost DC:	\$0.00
Signal Cost DC:	\$15,750.00
Rail Road Cost DC:	\$0.00
Subtotal:	\$207,780.00
Inflation (3% for 6 years)	\$37,400.40
Materials (2%)	\$4,155.60
Construction Total	\$249,336.00
Design Cost DC:	\$3,000.00
ROW Cost DC:	\$181,500.00
SUE and Utility Costs DC:	\$0.00
Sub Total:	\$433,836.00
Project Delivery Cost DC:	\$43,383.60

Total Project Cost DC:	\$477,219.60
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Comments Regarding Cost by City:

This project was bid in late 1999 but was never awarded because of lack of right-of-way. The total amount bid was \$147,560. The bid price has been adjusted upward by 6% for inflation, and 5% has been added to that for contingencies. Engineering costs are for re-bidding the project and bid phase services. Right-of-way cost figured at \$8.00/square foot for 9000 square feet.

Comments Regarding Cost by County:

No SUE and design is a flat \$3000 to rebid the project. Contingency is 5% that is added to the construction items. The paving and drainage is based on Addison's bid that were received in 1999 with 2 years of inflation.

MCIP #	57	City	Addison	Length	0	miles	Proposed Through Lanes	Belt Line -3, Dallas Pkwy - 3
Project Location	Belt Line/Dallas Parkway Single Point Urban Interchange							
Beginning	Belt Line Road At Dallas Parkway			Ending:	Belt Line Road At Dallas Parkway			

City Estimate:

Construction Cost	\$2,060,000.00
Design Cost	\$240,000.00
ROW Cost	\$170,000.00
Utility Cost	\$30,000.00

Total Project	\$2,500,000.00
Cost to City	\$2,000,000.00

Comments Regarding Cost by City:

A project cost estimate was prepared by Barton Aschman, based upon schematic design, in October 1997. The cost estimate was revised to present day as shown above.

County Estimate(DC):

Paving and Drainage	\$1,062,160.00
Bridge Cost DC	\$1,062,160.00
Lighting Cost DC:	\$31,680.00
Signal Cost DC:	\$110,000.00
Rail Road Cost DC:	\$0.00
Subtotal:	\$2,266,000.00
Inflation (3% for 6 years)	\$407,880.00
Materials (2%)	\$45,320.00
Construction Total	\$2,719,200.00
Design Cost DC:	\$258,324.00
ROW Cost DC:	\$740,000.00
SUE and Utility Costs DC:	\$70,788.00
Sub Total:	\$3,788,312.00
Project Delivery Cost DC:	\$378,831.20
Total Project Cost DC:	\$4,167,143.20

Comments Regarding Cost by County:

SUE is 1.5% and design is 11% of construction cost. Assumed that consultant's construction cost is correct without contingency cost. New sidewalks and bridge widening.

MCIP #	58	City	Addison	Length	0	miles	Proposed Through Lanes	A-3, DP-3
Project Location	Dallas parkway SB to NB U-turn							
Beginning	Dallas Parkway at Arapaho Road							Ending: Same (intersection)

City Estimate:

Construction Cost	\$660,000.00
Design Cost	\$90,000.00
ROW Cost	\$0.00
Utility Cost	\$0.00
Total Project Cost to City	\$750,000.00

County Estimate(DC):

Paving and Drainage	\$266,800.00
Bridge Cost DC	\$348,000.00
Lighting Cost DC:	\$0.00
Signal Cost DC:	\$22,000.00
Rail Road Cost DC:	\$0.00
Subtotal:	\$636,800.00
Inflation (3% for 6 years)	\$114,624.00
Materials (2%)	\$12,736.00
Construction Total	\$764,160.00
Design Cost DC:	\$84,058.00
ROW Cost DC:	\$0.00
SUE and Utility Costs DC:	\$11,463.00
Sub Total:	\$859,681.00
Project Delivery Cost DC:	\$85,968.10
Total Project Cost DC:	\$945,649.10

Comments Regarding Cost by City:

A cost estimate, based upon schematic design, was prepared by parsons Transportation Group in April 1999.

Comments Regarding Cost by County:


SUE=1.5% Design is 11% Added inflation and other cost to Parson's estimate. Traffic signal is upgraded.

HP LaserJet 3100
Printer/Fax/Copier/Scanner

SEND CONFIRMATION REPORT for
Town of Addison
972 450 2810
Aug-21-01 3:58PM

Job	Start Time	Usage	Phone Number or ID	Type	Pages	Mode	Status
950	8/21 3:58PM	0'35"	92146536416.....	Send.....	2/ 2	EC 96	Completed.....

Total 0'35" Pages Sent: 2 Pages Printed: 0

HP LaserJet 3200se 

TOWN LASERJET 3200
9724502837
AUG-13-2001 17:39

Fax Call Report

Job	Date	Time	Type	Identification	Duration	Pages	Result
533	8/13/2001	17:38:21	Send	92146536416	0:51	1	OK

TOWN OF
ADDISON **PUBLIC WORKS**

To: Edith Ngwa From: Jim Pierce, P.E.
Company: Dallas County Asst. Public Works Dir.
Phone: 972/450-2879
FAX #: 214-653-6416 FAX: 972/450-2817
jlpierce@addison.tx.us

Date: 8-13-01 16801 Westgrove
P.O. Box 9018
Addison, TX 75001-9010

of pages (including cover): 1

Re: S.B. to N.B. Return on Dallas Pkwy @ Arapahoe Rd

Original in mail For your report FYI Call me

Comments:
Posted Speed and Dimensional
Spec are the same for this
project

[Signature]

Resent
both
Faxes

HP LaserJet 3200se



TOALASERJET 3200
9724502837
AUG-13-2001 17:39

Fax Call Report

Job	Date	Time	Type	Identification	Duration	Pages	Result
533	8/13/2001	17:38:21	Send	92146536416	0:51	1	OK

TOWN OF

ADDISON

PUBLIC WORKS

To: Edith Ngwa

From: Jim Pierce, P.E.

Company: Dallas County

Asst. Public Wks. Dir.

Phone: 972/450-2879

FAX #: 214-653-6416

FAX: 972/450-2837

jpierce@cl.addison.tx.us

Date: 8-13-01

16801 Westgrove

P.O. Box 9010

Addison, TX 75001-9010

of pages (including cover): 1

Re: S.B. to N.B. U-Turn on Dallas Pky @ Arapaho Rd

Original in mail Per your request FYI Call me

Comments:

Posted Speed and Operational
Speed are the same for this
project.

HP LaserJet 3200se



TOALASERJET 3200
9724502837
AUG-10-2001 08:21

Fax Call Report

Job	Date	Time	Type	Identification	Duration	Pages	Result
496	8/10/2001	08:20:30	Send	92146536416	0:50	1	OK

TOWN OF
ADDISON

PUBLIC WORKS

To: Edith Ngwa

From: Jim Pierce, P.E.
Asst. Public Wks. Dir.
Phone: 972/450-2879
FAX: 972/450-2837
jpierce@ci.addison.tx.us

Company: Dallas County

FAX #: 214-653-6416

Date: 8-10-01

16801 Westgrove
P.O. Box 9010
Addison, TX 75001-9010

of pages (including cover): 1

Re: Dallas Co. MCIP - Belt Line @ Dallas Parkway

Original in mail Per your request FYI Call me

Comments:

Posted Speed = 40 mph

Operational Speed = 29 mph

Hope this helps!

Jim Pierce

Jim Pierce

From: Edith Ngwa [ENgwa@dallascounty.org]
Sent: Thursday, August 09, 2001 3:06 PM
To: Jpierce@ci.addison.tx.us
Subject: Speed rating for intersection projects

Jim:

Last year to correct the problem of intersection projects scoring no points under the Speed Delay Rating, we had agreed to use the posted and operational speeds for the intersecting road with the higher speed. After talking to you, I went back to our MCIP application and realized that we had not edited the data entry space for operational and posted speeds as we were supposed to, to reflect this change. Which explains why you didn't provide this information. I'll appreciate it if you'll submit the posted and operational speeds for both the Beltline@Dallas Pkwy and the Dallas Pkwy@ Arapaho projects so we can determine the Speed Delay Rating for these projects.

Thanks!

Edith Ngwa
Senior Transportation Planner
Dallas County Public Works



DALLAS COUNTY
PUBLIC WORKS

July 31, 2001

TO: Dallas County Cities

FROM: Don Cranford
Assistant Director, Dallas County Public Works Department

RE: Major Capital Improvement Program: Preliminary Evaluation Results

The Dallas County Public Works Department has completed a preliminary evaluation of all projects submitted under the 2001 Major Capital Improvement Program (MCIP). Please find attached, the evaluation results for the projects submitted by your city. As the results indicate, projects were scored on 10 technical criteria, a local cost participation multiplier, and 3 special case scenarios as outlined in our evaluation methodology paper: "Evaluation Methodology to Score and Rank Candidate Thoroughfare System Improvements." This paper was presented during our 2001 MCIP Kick-Off meeting held at the Dallas County Commissioners Courtroom on January 31, 2001, and is available, upon request, for your review. For quick reference, the evaluation criteria as abbreviated on the attached table are as follows:

FC:	Functional Classification Rating
SD:	Speed Delay Rating
TV:	Traffic Volume Rating
TVG:	Traffic Volume Growth Rating
TD:	Travel Desire Rating
BC:	Benefit Cost Ratio Rating
AR:	Accident Rating
AQ:	Air Quality/ Energy Conservation Rating
IMSM:	Intermodal / Multimodal / Social Mobility Rating
SDR:	Sustainable Development / Redevelopment / Smart Growth Rating
MULT:	Local Cost Participation Multiplier
Sc1:	Special Case # 1
Sc2:	Special Case # 2
Sc3:	Special Case # 3

All ten criteria carried equal weight (10pts) in our evaluation. Please note that if a project scored no points for a given criteria, one of the following three scenarios is possible:

- 1) the project did not qualify for points (for example, proposed new roads do not qualify for accident rating points); or

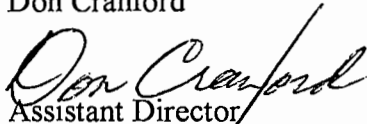
- 2) the data necessary for determining a score was not made available to us (for example, projects for which we received no accident, posted and operational speed data, scored zero points for accident and speed delay ratings as appropriate): or,
- 3) the project simply recorded no benefit for the criteria in question.

We strongly encourage you to review these results carefully and contact Edith Ngwa, Ph.D, Senior Transportation Planner, if you would like further clarification on the scoring and evaluation methodology, or would like to provide data you omitted in the original project application.

The deadline for responding to this request is **August 16, 2001**. If we do not hear from you by this deadline, we will assume you agree with our assessment of your project(s) and proceed to use this information for our final evaluation and ranking of all projects by August 30, 2001. These final evaluation results would be presented in a similar format as the preliminary results with the exception of the addition of adjusted (for inflation and contingencies) project cost estimates.

Thank You.

Sincerely,
Don Cranford



Assistant Director
Dallas County Public Works Department
411 Elm Street, Ste 400
Dallas, Texas 75202
(214) 653-7151

CC: Donald Holzwarth
Edith Ngwa
MCIP files

Major Capital Improvement Project Ranking by District and by City

ID	Dist	Project Location		Length (Miles)			Percent Match	Project Description									
		Beginning	Ending	Traffic Volume	Travel Desire	Benefit Cost											
Type		Functional Class	Speed Delay	Traffic Volume Growth	Accident Rate	Air Quality	IMSM	SDR	Multiplier	Total	sc1	sc2	sc3				
1		Belt Line Road Signal Up-grade			1.7			80		Retiming the existing 17 year old coordinated Signal System along Belt Line Road from Marsh Lane to Quorum Drive.							
Addison		Marsh Lane		Dallas Parkway													
SIG	Project Score:	10	10	4	10	0	0	4	0	0	0	0	1.8	68			
57		Belt Line @ Dallas Parkway			0			80		The project will allow the simultaneous operation of left turn lanes for east/west traffic and for north/south traffic.							
Addison		Belt Line Road At Dallas Parkway		Belt Line Road At Dallas Parkway													
INT	Project Score:	10	0	4	8	4	0	0	0	10	0	0	1.8	65			
2		Keller Springs @ Addison Road			0.17			80		Add 1 thru lane to relief traffic back-up conditions for those vehicles traveling eastbound through the Addison Airport Tunnel.							
Addison		Keller Springs Road at Addison Road		900 Feet East of Addison Road													
WID	Project Score:	3	1	0	4	10	0	4	0	0	0	0	1.8	40			

FACSIMILE COVER PAGE



FROM: Edith Ngwa
 TO: Jim Pierce
 OF: Town of Addison
 FAX #: (972) 450-2834
 PHONE #: _____

DATE/TIME: 7/31/01

FAX # (214) 653-6416 PHONE # (214) 653-6176

TOTAL NUMBER OF PAGES INCLUDING COVER _____

COMMENTS: _____

Dallas County MCIP Preliminary Evaluation Results.

*****IF YOU DO NOT RECEIVE ALL OF THE PAGES, PLEASE CALL THE NUMBER BELOW.**



DALLAS COUNTY
PUBLIC WORKS

July 31, 2001

TO: Dallas County Cities

FROM: Don Cranford
 Assistant Director, Dallas County Public Works Department

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Sc1:	Special Case # 1
Sc2:	Special Case # 2
Sc3:	Special Case # 3

All ten criteria carried equal weight (10pts) in our evaluation. Please note that if a project scored no points for a given criteria, one of the following three scenarios is possible:

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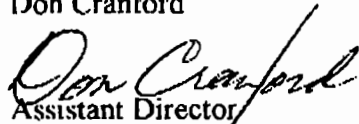
- 2) the data necessary for determining a score was not made available to us (for example, projects for which we received no accident, posted and operational speed data, scored zero points for accident and speed delay ratings as appropriate); or,
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Thank You.

Sincerely,
Don Cranford



Assistant Director
Dallas County Public Works Department
411 Elm Street, Ste 400
Dallas, Texas 75202
(214) 653-7151

CC: Donald Holzwarth
Edith Ngwa
MCIP files

Major Capital Improvement Project Ranking by District and by City

ID	Dist	Project Location		Length (Miles)	Percent Match	Project Description															
		Beginning	Ending				Type	Functional Class	Speed Delay	Traffic Volume	Traffic Volume Growth	Travel Desire	Benefit Cost	Accident Rate	Air Quality	IMSM	SDR	Multiplier	Total	sc1	sc2
1	1	Belt Line Road Signal Up-grade		1.7	80	Retiming the existing 17 year old coordinated Signal System along Belt Line Road from Marsh Lane to Quorum Drive.	Addison	Marsh Lane	Dallas Parkway												
SIG	Project Score:		10	10	4		10	0	0	4	0	0	0	1.8	58	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57	1	Belt Line @ Dallas Parkway		0	80	The project will allow the simultaneous operation of left turn lanes for east/west traffic and for north/south traffic.	Addison	Belt Line Road At Dallas Parkway	Belt Line Road At Dallas Parkway												
INT	Project Score:		10	0	4		8	4	0	0	0	10	0	1.8	65	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
2	1	Keller Springs @ Addison Road		0.17	80	Add 1 thru lane to relief traffic back-up conditions for those vehicles traveling eastbound through the Addison Airport Tunnel.	Addison	Keller Springs Road at Addison Road	900 Feet East of Addison Road												
WID	Project Score:		3	1	0		4	10	0	4	0	0	0	1.8	40	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			



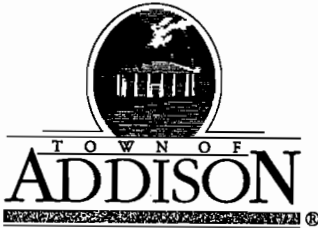
Posted speed
vs operation speed
on Belt Line.

40
28-30 mph

Tuesday, July 31, 2001

ID	Dist	Project Location		Length (Miles)	Percent Match						Project Description					
		Beginning	Ending		SDR	Multiplier	Total	sc1	sc2	sc3						
Type		Functional Class	Speed Delay	Traffic Volume	Traffic Volume Growth	Travel Desire	Benefit Cost	Accident Rate	Air Quality	IMSM	SDR	Multiplier	Total	sc1	sc2	sc3
58	1	Dallas Pkw. SB to NB U-turn		0	80						The project consists of the removal of a portion of existing concrete mono curb along inside curb lines of southbound and northbound Dallas Parkway.					
		Addison	Dallas Parkway at Arapaho Road		Same (intersection)											
INT	Project Score:		7	0	0	4	0	0	0	0	0	1.8	20	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tuesday, July 31, 2001



PUBLIC WORKS DEPARTMENT

Post Office Box 9010 Addison, Texas 75001-9010

(972) 450-2871

16801 Westgrove

April 25, 2001

Mr. Donald L Holzwarth, P.E.
Dallas County Director of Public Works
411 Elm Street, 4th Floor
Dallas, TX 75202

Re: 2001 Call For Projects

Dear Mr. Holzwarth:

The Town of Addison is pleased to submit the following Application Information for five projects, in response to your 2001 Call For Projects.

Belt Line Road/Dallas Parkway Single Point Urban Interchange

Southbound to Northbound U-turn on Dallas Parkway at Arapaho Road

Keller Springs/Addison Road Intersection

Signals Upgrade and Re-timing, Belt Line Rd. from Quorum Dr. to Marsh Lane

The Town Council passed a resolution authorizing filing the applications at their meeting on April 25, 2001. A copy of the resolution will be forwarded as soon as it is signed by the Mayor.

We appreciate the opportunity to submit these applications. If you have any questions, please contact Jim Pierce, P.E., Assistant City Engineer at 972-450-2879.

Very truly yours,

Michael E. Murphy, P.E.
Acting Director of Public Works

Cc: Chris Terry, Assistant City Manager
→ Jim Pierce, P.E., Assistant City Engineer

Attachments

Item #R3 - Presentation and discussion of the Addison Public Safety Radio Evaluation Report.

Attachments:

1. Memo from Don Franklin, Chief of Police
2. Radio System Evaluation Report

Item #R4 - Consideration of a Resolution authorizing the City Manager to enter into an agreement for professional services in the amount \$251,864.00 with DAL-TECH Engineering for surveying services relating to the Addison Airport Boundary Survey.

Attachments:

1. Memo from Steve Chutchian, Assistant City Engineer
2. Agreement for Professional Services

Administrative Recommendation:

Administration recommends approval.

Passed

Adjourn Meeting

Posted 5:00 p.m.
April 18, 2001
Carmen Moran
City Secretary

**THE TOWN OF ADDISON IS ACCESSIBLE TO PERSONS
WITH DISABILITIES. PLEASE CALL (972) 450-2819 AT LEAST
48 HOURS IN ADVANCE IF YOU NEED ASSISTANCE.**

Capacity Analysis Worksheet

Roadway

Created by: Michael H. Schrader, P.E.
Created for: Metroplan, Little Rock, Ark

Corridor Identification Information

Facility name= University Avenue
 Corridor limits= 12th to 19th
 Corridor length (Miles) 0.47
 Type of facility= p (E=Expwy/Pkwy, P=Prin. Arterial, M=Minor Arterial, C=Collector)
 Capacity per lane= 8000 vehicles per day [vpd]
 {unadjusted} 800 vehicles per hour [vph]
 # of thru lanes= 4
 # of signals (in corr.) 1

Adjustment Factors (per lane)

Typical Lane Width (9'-12')=	10.5 feet	-600 vpd
Lat. dist. to nearest obstruction=	0 feet	-802 vpd
One Way Street? (YES or NO)	no	0 vpd
Raised Median? (YES or NO)	yes	0 vpd
Left Turn Bays? (YES or NO)	yes	0 vpd
avg.# of signals per mile =	2.13	-1440 vpd
Total adjustments (per lane)		-2842 vpd

.....
 Total Facility Capacity Adjustments -11,368 vpd

Adjusted Facility Design Capacity (all lanes)	=	20,632 vpd
	=	2,063 vph

RESERVE CAPACITY COMPUTATION

Existing traffic volume (vpd) 36,166

Reserve Capacity	-15534 vpd
-------------------------	-------------------

VOLUME/CAPACITY Ratio and Rating

V/C Ratio=	1.753
V/C Quality Rating	100
V/C Quality Index	F

ACCIDENT Rate and Rating

# of Accidents =	59.66667	Year =	avg
Accident Rate	9.610	Accidents per MVM	
Acc. Quality Rating	10		
Acc. Quality Index	A		

Total Quality Rating =	110
Total Quality Index=	C

TQI Legend

TQ Rating	2 - 39	40 - 79	80 - 119	120 - 159	160 - 199	200 +
TQ Index	A	B	C	D	E	F

April 12, 2001

MEMORANDUM

To: Chris Terry, Assistant City Manager
Through: Michael Murphy, P.E., Acting Director of Public Works
From: Jim Pierce, P.E., Assistant City Engineer
Subject: 2001 Dallas County Call For Projects

Dallas County Public Works is soliciting nominations from cities for projects to be funded through the Dallas County Major Capital Improvement Fund Thoroughfare Program. In lieu of a traditional bond program, Dallas County has created the Major Capital Improvement Fund, a "pay-as-you-go" funding mechanism for financing infrastructure improvements. The County anticipates an annual call for projects.

Under this new funding mechanism, approximately \$15 million dollars will be available in both FY 2004 and 2005, with \$20 million being available annually in FY 2006 and beyond. The County is currently seeking nominations for projects to be funded for construction in FY 2005. \$3.75 million will be available for funding in our District in 2005. Applications are due at Dallas County for this call on April 27, 2001.

Each project's score is multiplied by a factor that gives credit to local cost participation. For example, if an applicant pledges a local match of 50%, the multiplier is 1.50. An 80% local match gives the project the highest multiplier possible.

The Town was successful in receiving grants for two projects last year – Belt Line Road/Dallas Parkway Single Point Urban Interchange (SPUI), and Signals Upgrade and Re-Timing, Midway Road from Spring Valley to Dooley Road.

Staff has selected four projects to be submitted to the County under this program this year. Three of the four projects were submitted last year and are being resubmitted this year. The new project being submitted this year is the Keller Springs/Addison Road Intersection. All projects are being submitted with an 80% local share as follows:

Belt Line Road/Dallas Parkway Single Point Urban Interchange

Town Share - \$2,000,000 County Share - \$500,000

Southbound to Northbound U-turn on Dallas Parkway at Arapaho Road

Town Share - \$600,000 County Share - \$150,000

Signals Upgrade and Re-timing, Belt Line Rd. from Quorum Dr. to Marsh Lane

Town Share - \$560,000 County Share - \$140,000

Keller Springs/Addison Road Intersection

Town Share - \$198,400 County Share - \$49,600

Staff recommends Council authorize the City Manager to submit applications for the projects listed above to Dallas County for their 2001 Call for Projects.

SUR
Back-up

PROJECT COST INFORMATION

Total Project Cost: \$248,000
 Right-of-way Cost: \$72,000
 Engineering/Design Cost: \$3,000
 Utility Cost: 0
 Construction Cost: \$173,000

Local Cost Contribution:
 in percent of total cost: 80%

Supporting Comments Regarding Cost:

{Use this section to justify project cost estimate.}
 This project was bid in late 1999 but was never awarded because of lack of Right-of-way. The total amount bid was \$147,560. The bid price has been adjusted upward by 6% for inflation, and 5% has been added to that for contingencies. Engineering Costs are for rebidding the project and bid phase services. Right-of-way cost figured at \$8.00/square foot for 9000 square feet.

↓ Dmt Type

Bid Price:

$$147,560 \times 1.06 = 156,414$$

$$5\% - 15,641$$

$$\$172,055 \quad \text{say } \$173,000$$

ROW Cost:

$$5940 \text{ ft}^2 - \text{Tract 1}$$

$$3002 \text{ ft}^2 - \text{Tract 2}$$

$$8942 \text{ ft}^2 \text{ Total} \quad \$5-8/\text{ft (Pat.)}$$

$$9000 \times 8.00/\text{ft}^2 = \$72,000$$

Engr. Rebid	12 hrs	=	1200	
Pre Bid conf	3 "		300	
Receive & Tab bids	4		400	
Questions & Rec'd Award	5		500	
			<hr style="width: 20%; margin-left: 0;"/>	
			2400	say \$3000

Jim Pierce

To: Edith Ngwa
Subject: RE: 2001 Dallas Co. Call for Projects

Edith: Thank you. Yes, we are going to re-submit that project. Jim.

-----Original Message-----

From: Edith Ngwa [mailto:ENgwa@dallascounty.org]
Sent: Tuesday, April 10, 2001 9:44 AM
To: jpierce@ci.addison.tx.us
Subject: 2001 Dallas Co. Call for Projects

Mr Pierce:

Is the Town of Addison planning to resubmit the BeltLine Road/ Dallas Parkway Intersection project for this year's MCIP program. I wanted to remind you that projects not selected in a previous year can be resubmitted for funding. I read the article about the project on the March 30th issue of the Dallas Morning news and wanted to remind you of this possibility.

Thanks.

Edith B. Ngwa, Ph.D
Senior Transportation Planner
Dallas County Public Works Department
411 Elm Street
Dallas, TX 75202
(214) 653-6522

>>> <jpierce@ci.addison.tx.us> 03/30 9:03 AM >>>

Edith: Can you send me an electronic copy of the Project Risk Analysis/Assessment Sheet and the Application/Project/Cost Information Form?

Thanks,

Jim Pierce, P.E.
Assistant Public Works Director
PO Box 9010
Addison, TX 75001-9010
972-450-2879

Jim Pierce

From: Edith Ngwa [ENgwa@dallascounty.org]
Sent: Friday, April 06, 2001 2:33 PM
To: jpierce@ci.addison.tx.us
Subject: Re: Dallas County 2001 Call for Projects

Mr. Pierce:

The County is looking at a total of \$20 Million. Although this amount is a significant increase from last year's \$15million, it is still considerably small when divided up equally (\$5million each) amongst all 4 districts. The funds will be available as the project progresses through the phases starting from 2002/03 when funding for the design phase becomes available.

I hope I adequately answered your questions. If you have additional questions, do not hesitate to call me.

Thanks!

Edith B. Ngwa, Ph.D
Senior Transportation Planner
Dallas County Public Works
411 Elm Street, Ste 400
Dallas, TX 75202
(214) 653-6522

>>> <jpierce@ci.addison.tx.us> 04/06 1:19 PM >>>

Edith: Several questions:

1. When will funds be available for the projects approved in this call?
2. What amount will be available county wide?
3. How much money will be available in District 1?

Thanks,

Jim Pierce, P.E.
Assistant Public Works Director
PO Box 9010
Addison, TX 75001-9010
972-450-2879

Arpaio Accidents 3-13-00

City of Dallas

Addison

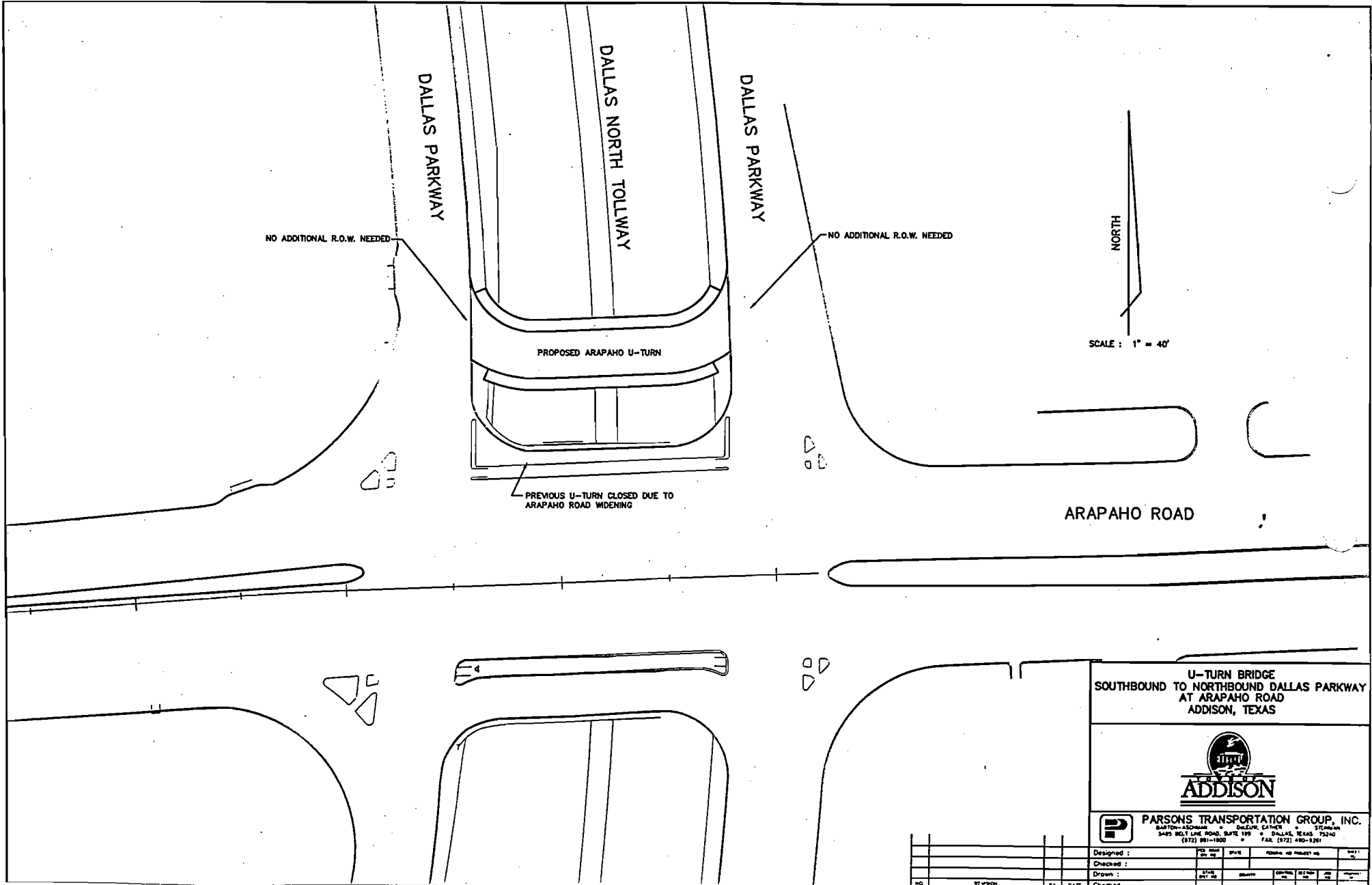
97 - 3
98 - 2
99 - 4

9

97 - 3
98 - 0
99 - 1

4

13 total accidents



U-TURN BRIDGE
 SOUTHBOUND TO NORTHBOUND DALLAS PARKWAY
 AT ARAPAHO ROAD
 ADDISON, TEXAS



PARSONS TRANSPORTATION GROUP, INC.
 3495 BELT LINE ROAD, SUITE 199 • DALLAS, TEXAS 75240
 (972) 991-1900 • FAX: (972) 990-9261

NO	REVISION	BY	DATE	CHECKED

Designed : _____
 Checked : _____
 Drawn : _____

DALLAS

COLLIN COUNTY
DALLAS COUNTY

CARROLLTON

DALLAS

DALLAS

FARMERS
BRANCH

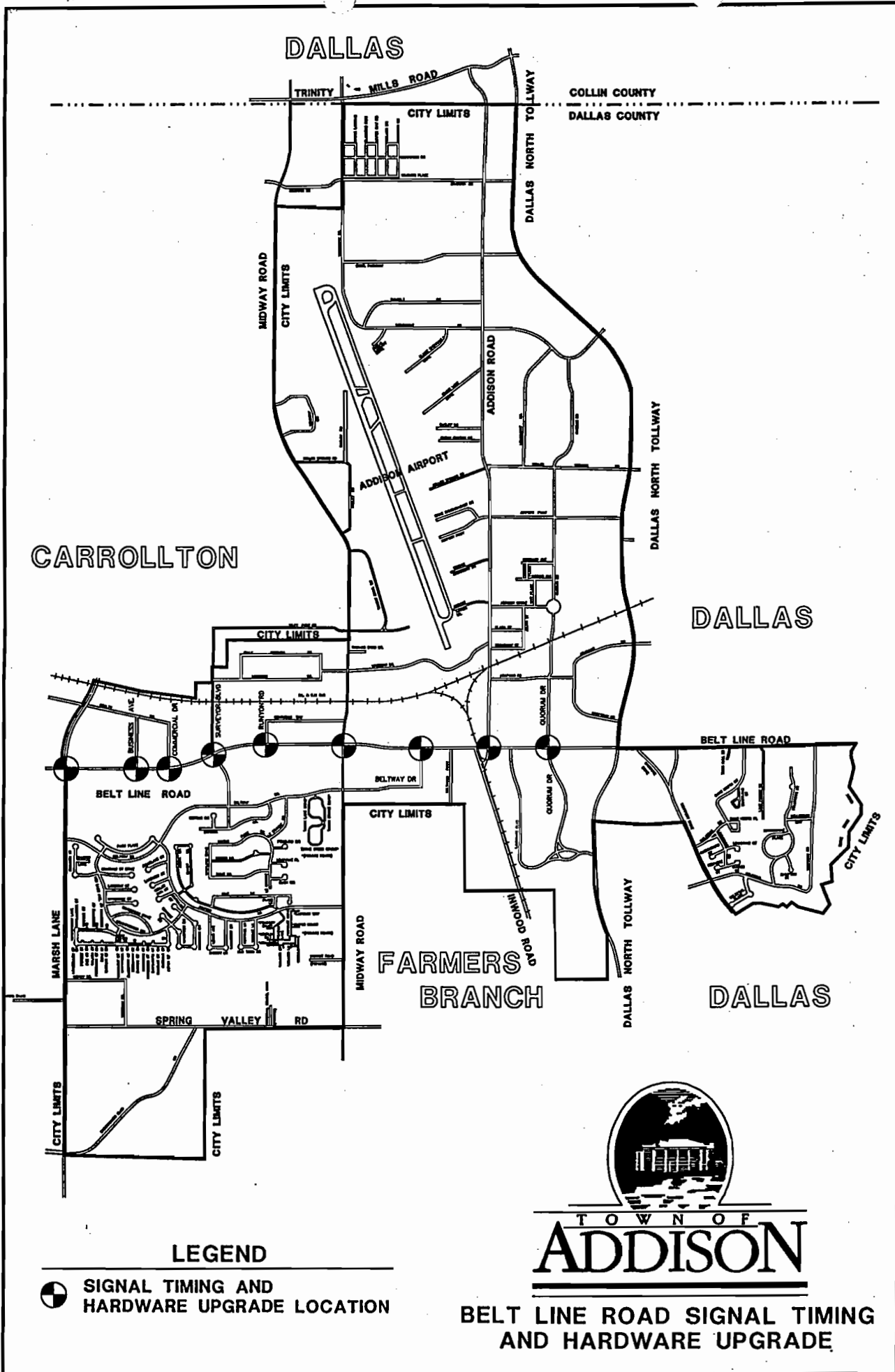
LEGEND

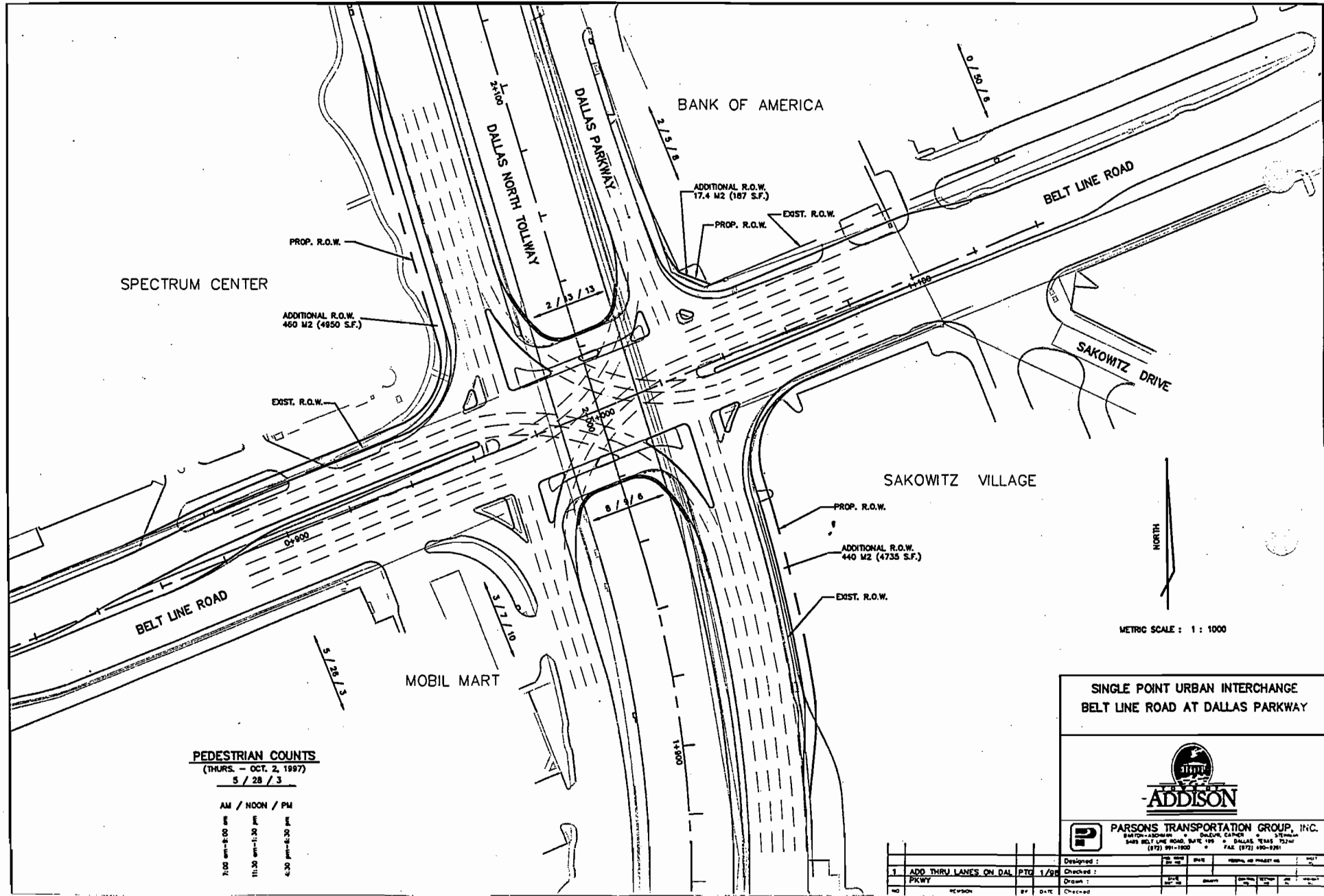
● SIGNAL TIMING AND
HARDWARE UPGRADE LOCATION



TOWN OF
ADDISON

**BELT LINE ROAD SIGNAL TIMING
AND HARDWARE UPGRADE**





PEDESTRIAN COUNTS
 (THURS. - OCT. 2, 1997)
 5 / 28 / 3

AM / NOON / PM		
8	11	4
7:00 am-8:00	11:30 am-1:30	4:30 pm-6:30

**SINGLE POINT URBAN INTERCHANGE
 BELT LINE ROAD AT DALLAS PARKWAY**



PARSONS TRANSPORTATION GROUP, INC.
 5405 BELT LINE ROAD, SUITE 195 • DALLAS, TEXAS 75247
 (972) 991-1000 • FAX (972) 490-8291

1	ADD THRU LANES ON DAL	PTG	1/98	Designed :	DATE	BY	CHECKED	DATE	BY
	PKWY			Checked :	DATE	BY	CHECKED	DATE	BY
				Drawn :	DATE	BY	CHECKED	DATE	BY

COST ESTIMATE

ADDISON - SPUI :BELT LINE ROAD AND DALLAS NORTH TOLLWAY

October 15, 1997

ITEM-NBR	DESCRIPTION	UNITS	UNIT COST	QUANTITY	COST
100-5002	PREP R.O.W.	KM	\$50,000.00	0.5	\$25,000.00
104-5001	REMOV CONC (PAV)	M2	\$11.43	1000	\$11,430.00
104-5005	REMOV CONC (MEDIAN)	M2	\$20.00	750	\$15,000.00
104-5009	REMOV CONC (SDWLK)	M2	\$12.00	100	\$1,200.00
104-5011	REMOV CONC (DRIVEWAY)	M2	\$11.00	200	\$2,200.00
104-5013	REMOV CONC (CURB&GUTTER)	M	\$4.72	1500	\$7,080.00
260-5010	LIME TREAT SUBGR (DC) (200 MM)	M2	\$1.65	2500	\$4,125.00
360-5011	CONC CURB (TY II) (MONO)	M	\$6.56	1500	\$9,840.00
360-5017	CONC PAV (CPCD) (200MM)	M2	\$27.81	2000	\$55,620.00
416-0506	DRILL SHAFT (36 IN)	LF	\$77.49	400	\$30,996.00
420-0551	CL C CONC (PARAPET WALL)	CY	\$882.86	105	\$92,700.30
420-5014	CL C CONC BENT	M3	\$395.00	150	\$59,250.00
422-5001	REINF CONC SLAB	M2	\$71.79	1000	\$71,790.00
423-5007	RET WALL	M2	\$375.00	200	\$75,000.00
450-0695	RAIL (TY C411)	M	\$209.98	200	\$41,996.00
464-5005	RC PIPE (CL III) (600MM)	M	\$124.32	30	\$3,729.60
465-0741	INLET (COMPL) (TY II) (10')	EA	\$2,400.00	3	\$7,200.00
496-0502	REMOV INLET	EA	\$572.00	3	\$1,716.00
5004-5001	TEMP SED FNC	M	\$1.00	2000	\$2,000.00
5004-5003	TEMP SED FNC (REMOV)	M	\$1.00	2000	\$2,000.00
500-5001	MOBILIZATION	LS	\$75,000.00	1	\$75,000.00
502-5001	BARRICADE, SIGNS, TRAFF	MO	\$4,000.00	12	\$48,000.00
530-5001	DRVWY'S (Conc)(150mm)	M2	\$30.08	200	\$6,016.00
531-5002	CONCRETE SIDEWALK	M2	\$19.27	150	\$2,890.50
531-5004	SIDEWALK RAMP (TY 4)	EA	\$463.00	16	\$7,408.00
536-5002	CONC MEDIAN	M2	\$40.00	800	\$32,000.00
610	RDWY ILL ASSEM	EA	\$2,120.00	6	\$12,720.00
649-5003	FND LG RDS D SIGN SUPPORT	EA	\$292.35	20	\$5,847.00
650	OVERHEAD SIGN SUPPORT	EA	\$28,200.00	1	\$28,200.00
662-0542	WZPM (CLB)	EA	\$2.30	500	\$1,150.00
662-0543	WZPM (CLB)	EA	\$2.33	200	\$466.00
662-0581	WZPM (TAB)	EA	\$6.83	1500	\$10,245.00
662-0582	WZPM (TAB)	EA	\$1.00	750	\$750.00
666-0517	REFL	EA	\$99.48	24	\$2,387.52

ITEM-NBR	DESCRIPTION	UNITS	UNIT COST	QUANTITY	COST
666-0549	REFL	EA	\$35.45	24	\$850.80
666-5012	REFL	M	\$12.50	75	\$937.50
666-5013	REFL	RA	\$89.02	24	\$2,136.48
666-5036	REFL	M	\$1.24	150	\$186.00
666-5041	REFL	M	\$2.50	250	\$625.00
666-5044	REFL	M	\$8.63	75	\$647.25
666-5045	REFL	EA	\$36.32	24	\$871.68
666-5201	REFL	M	\$0.67	150	\$100.50
666-5209	REFL	M	\$7.76	250	\$1,940.00
672-0504	RPM (CLA)	EA	\$6.43	160	\$1,028.80
672-0507	RPM (CLB)	EA	\$2.43	360	\$874.80
672-5016	RPM BTN	EA	\$2.88	370	\$1,065.60
678-5001	PAV SURV & PREP	M	\$0.13	150	\$19.50
678-5004	PAV SURV & PREP	M	\$2.72	250	\$680.00
678-5006	PAV SURV & PREP	M	\$5.73	75	\$429.75
678-5007	PAV SURV & PREP	EA	\$31.70	24	\$760.80
678-5008	PAV SURV & PREP	EA	\$40.00	24	\$960.00
686	SIGNAL SYSTEM	LS	\$125,000.00	1	\$125,000.00
	LANDSCAPE	LS	\$75,000.00	1	\$75,000.00
	UTIL RELOC	LS	\$175,000.00	1	\$175,000.00
SUBTOTAL					\$1,142,067.38
CONTINGENCY AND ENGINEERING					\$342,620.21
RIGHT-OF-WAY					\$540,000.00
TOTAL					\$2,024,687.59

February 15, 2000

MEMORANDUM

To: Chris Terry, Assistant City Manager
Through: Michael Murphy, P.E., Acting Director of Public Works
From: Jim Pierce, P.E., Assistant City Engineer
Subject: 2000 Dallas County Call For Projects

Dallas County Public Works is soliciting nominations from cities for projects to be funded through the Dallas County Major Capital Improvement Fund Thoroughfare Program. In lieu of a traditional bond program, Dallas County has created the Major Capital Improvement Fund, a "pay-as-you-go" funding mechanism for financing infrastructure improvements. The County anticipates an annual call for projects.

Under this new funding mechanism, approximately \$15 million dollars will be available in both FY 2004 and 2005, with \$20 million being available annually in FY 2006 and beyond. The County is currently seeking nominations for projects to be funded for construction in FY 2004. \$3.75 million will be available for funding in our District in 2004. Applications are due at Dallas County for this call on March 13, 2000.

The County will evaluate the projects submitted using complicated formulas to assign points in the following categories:

- Roadway Functional Classification Rating (10 points)
- Speed Delay Rating (10 points)
- Traffic Volume Rating (10 points)
- Traffic Volume Growth Rating (10 points)
- Travel Desire Rating (10 points)
- Benefit-Cost Ratio (10 points)
- Accident Rate Rating (10 points)
- Air Quality/Energy Conservation Rating (10 points)
- Sustainable Development/Redevelopment/"Smart Growth" Rating (10 points)
- Intermodal/Multimodal/Social Mobility Rating (10 points)

Each project's score is multiplied by a factor that gives credit to local cost participation. For example, if an applicant pledges a local match of 50%, the multiplier is 1.50.

Staff has selected five projects to be submitted to the County under this program (with % local share and cost distribution shown):

- Belt Line Road/Dallas Parkway Single Point Urban Interchange (75%)
Town Share - \$1, 875,000 County Share - \$625,000
- Southbound to Northbound U-turn on Dallas Parkway at Arapaho Road (75%)
Town Share - \$562,500 County Share - \$187,500
- Arapaho Road, Phase III, Surveyor Boulevard to Addison Road (90%)
Town Share - \$12,895,300 County Share - \$1,432,800
- Signals Upgrade and Re-timing, Belt Line Rd. from Quorum Dr. to Marsh Lane (50%)
Town Share - \$350,000 County Share - \$350,000
- Signals Upgrade and Re-timing, Midway Rd. from Spring Valley to Dooley Rd (50%)
Town Share - \$196,000 County Share - \$196,000

Draft copies of the 2000 Dallas County Call For Projects Applications are attached. They will be finalized once accident data is received from the City Of Dallas Police Department for the Belt Line Road and Arapaho Road intersections with Dallas Parkway. (These intersections are in the City Of Dallas).

Staff recommends Council authorize the City Manager to submit applications for the projects listed above to Dallas County for their 2000 Call for Projects.

A QUICK GUIDE TO THE CAPACITY ANALYSIS WORKSHEET, VERSIONS 3.2 AND 4.0

WHAT'S NEW IN VERSION 3.2

1. *New signal penalty equation.* The signal penalty equation used in all versions including 3.1 was a simple linear approximation of the signal tables used in a 1988 Florida DOT methodology for determining Level of Service, as well as other studies pertaining to signals and capacity. In Version 3.2, the linear equation is abandoned for a series a ranges the same as the ranges of each of the Florida DOT tables. Thus, the new methodology is a much closer approximation of the Florida tables.

It should be noted that the linear penalty, 4.5% of capacity per signal per mile, tended to underpenalize low signal frequency facilities and overpenalize high signal frequency facilities. The methodology employed in Version 4.0 corrects this deficiency.

2. All other aspects of Version 3.2 are fundamentally the same as Version 3.1.

WHAT'S NEW IN VERSION 4.0

1. *New signal penalty equation.* The signal penalty equation used in all versions including 3.1 was a simple linear approximation of the signal tables used in a 1988 Florida DOT methodology for determining Level of Service, as well as other studies pertaining to signals and capacity. In Version 4.0, the linear equation is abandoned for a series a ranges the same as the ranges of each of the Florida DOT tables. Thus, the new methodology is a much closer approximation of the Florida tables.

It should be noted that the linear penalty, 4.5% of capacity per signal per mile, tended to underpenalize low signal frequency facilities and overpenalize high signal frequency facilities. The methodology employed in Version 4.0 corrects this deficiency.

2. *Elimination of inverse ratings.* In all versions prior to 4.0, the ratings provided for V/C, Accidents, and Total Quality, were inverse ratings, that is, the lower the rating, the better. In 4.0, ratings are direct, meaning that the higher the rating, the better the performance.
3. *Elimination of ratings indexes.* In 4.0, the ratings index letters for all three ratings have been eliminated.
4. *Change of Total Quality Rating scale.* In 4.0, the Total Quality Rating scale has been changed to 0-100.

SYNOPSIS OF SPREADSHEET METHODOLOGY

This spreadsheet is an amalgamation of several different methodologies to evaluate capacity on a non-freeway facility. Users familiar with the Highway Capacity Manual know that for a particular facility, there are several different ways to evaluate Level of Service, yielding different, but correct results. For example, a multilane facility with signals could be evaluated under the signalized intersection method, the arterial method, or the multilane facility method, depending on the preference of the evaluator, with each method yielding a different value. In some cases, a facility that yields a low LOS using one method may yield a high LOS using a different method. The dilemma, then, is which value to use, as both are "correct." The purpose of this spreadsheet, then, is to attempt to take into account all of the various methods of evaluation in one simple method. It should be noted, however, that, for the sake of simplicity, not every single factor affecting capacity, such as the percentage of heavy vehicles or grades, has been included. However, those that will provide a quick snapshot of the operation of the facility -- signal frequency, presence of medians and left-turn bays, one-way operation, lane width, accident rate, and lateral distance to the nearest obstruction--have.

DATA ENTRY REQUIREMENTS

1. *Basic identification.* This consists of the facility name and limits, including the length of the corridor in miles.
2. *Facility type.* As this spreadsheet was intended for non-freeway facilities, the user is given the choice of four types of functionally classified non-freeway facilities. NOTE: As capacity on local streets should not be of concern, evaluation of a local street is not given as an option.

The values given for each facility type are very general "rule-of-thumb" values assigned to the TRANPLAN models for Springfield, Illinois, and Little Rock, Arkansas.

3. *Number of lanes.* The number of through lanes. Does not include auxiliary lanes such as turn lanes or accel/decel lanes
4. *Number of signals.* The number of signals in the corridor, including signals at the termini if the facility being analyzed would have the right-of-way if the terminal intersection were unsignalized.
5. *Typical lane width.* As the narrowest lane will dictate the capacity of the facility, if the lanes are of varying width, the narrowest width should be used.

6. *Lateral distance to nearest obstruction.* The minimum distance to any obstruction in the corridor, either in the median or on the side, should be used. Note that curbed inlets and non-mountable barrier curbs are obstructions.
7. *One-way operation.* One-way facilities are assigned a 20% bonus.
8. *Raised median.* A YES should be encoded if the facility has a raised median of any width, or a flush median, either paved or turf, at least 10' in width. Note that if the raised median has a non-mountable curb, and that curb is less than 6 feet from the marked driving surface, then the lateral distance penalty applies.
9. *Left Turn Bay.* A marked or delineated left turn storage area. NOTE: Flush paved medians do not, in and of themselves, constitute a left turn bay.

SPREADSHEET COMPUTATIONS

1. *Unadjusted capacity.* Derived from TRANPLAN models.
 - Expressway/Parkway = 8000 vehicles per day per lane (vpdpl)
 - Principal Arterial = 7000 vpdpl
 - Minor Arterial = 6000 vpdpl
 - Collector = 5000 vpdpl
2. *Peak Hour Volume = 10% of unadjusted capacity.* This value is a general "rule of thumb" used by traffic engineers for calculating peak hour volumes.
3. *Lane width penalty = 5% per foot below 12 feet.* This value is a linear approximation of the values given in the Highway Capacity Manual.
4. *Lateral clearance penalty = 1.67% per foot less than 6 feet.* This value is a linear approximation of the values given in the Highway Capacity Manual.
5. *One-Way Operation.* A 20% bonus is given for one-way streets.
6. *Raised Medians.* A 5% penalty is given for facilities without medians.
7. *Left-turn Bays.* a 15% penalty is given for facilities without left turn bays.
8. *Signal penalty.* For Version 3.1 or earlier, a 4.5% penalty is assigned for each signal per mile. For Version 4.0, the penalty is either 0%, 18%, 37%, or 39%, depending on signal frequency.

Corridor Identification Information

Facility name= University Avenue
 Corridor limits= 12th to 19th
 Corridor length (Miles) 0.47
 Type of facility= p (E=Expwy/Pkwy, P=Prin. Arterial, M=Minor Arterial, C=Collector)
 Capacity per lane= 800 vehicles per day [vpd] <---(from TRANPLAN models)
 {unadjusted} 800 vehicles per hour [vph] <---(Rule of Thumb-10% of ADT)
 # of thru lanes= 4
 # of signals (in corr.) 1

Adjustment Factors (per lane)

Typical Lane Width (9'-12')= 10.5 feet -600 vpd <---(from HCM)
 Lat. dist. to nearest obstruction= 0 feet -802 vpd <---(from HCM)
 One Way Street? (YES or NO) no 0 vpd <---(from FDOT study)
 Raised Median? (YES or NO) yes 0 vpd <---(from FDOT study)
 Left Turn Bays? (YES or NO) yes 0 vpd <---(from FDOT study)
 avg.# of signals per mile = 2.13 -1440 vpd <---(from FDOT study)

Total adjustments (per lane)	-2842 vpd
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Total Facility Capacity Adjustments	-11,368 vpd
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Adjusted Facility Design Capacity (all lanes)	=	20,632 vpd
	=	2,063 vph

RESERVE CAPACITY COMPUTATION

Existing traffic volume (vpd) 36,166

Reserve Capacity	-15534 vpd
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VOLUME/CAPACITY Ratio and Rating

ACCIDENT Rate and Rating

V/C Ratio= 1.753	# of Accidents = 59.66667 Year = avg
V/C Quality Rating 100 (V/C *100)	Accident Rate 9.610 Accidents per MVM
V/C Quality Index F	Acc. Quality Rating 10 <--- (INT (Acc. Rate))
	Acc. Quality Index A

(V/C and Accident Quality Ratings range from 1 to 100, with 1 being the best)

Total Quality Rating = 110	<---(Sum of V/C and Accident Quality Ratings)
Total Quality Index = C	

(Ranges of index letters reflect the quintiles of the range of rating values)

TQI Legend						
TQ Rating	2 - 39	40 - 79	80 - 119	120 - 159	160 - 199	200 +
TQ Index	A	B	C	D	E	F

Corridor Identification Information

Facility name= W Markham Street
 Corridor limits= Woodrow to Jackson
 Corridor length (Miles) 1.288
 Type of facility= m (E=Expwy/Pkwy, P=Prin. Arterial, M=Minor Arterial, C=Collector)
 Capacity per lane= 6000 vehicles per day [vpd] <---(from TRANPLAN models)
 {unadjusted} 600 vehicles per hour [vph <---(Rule of Thumb-10% of ADT)
 # of thru lanes= 4
 # of signals (in corr.) 5

Adjustment Factors (per lane)

Typical Lane Width (9'-12')= 11.5 feet -150 vpd <---(from HCM)
 Lat. dist. to nearest obstruction= 6 feet 0 vpd <---(from HCM)
 One Way Street? (YES or NO) no 0 vpd <---(from FDOT study)
 Raised Median? (YES or NO) no -300 vpd <---(from FDOT study)
 Left Turn Bays? (YES or NO) no -900 vpd <---(from FDOT study)
 avg.# of signals per mile = 3.88 -2220 vpd <---(from FDOT study)

Total adjustments (per lane)	-3570 vpd
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Total Facility Capacity Adjustments	-14,280 vpd
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Adjusted Facility Design Capacity (all lanes)	= 9,720 vpd
	= 972 vph

RESERVE CAPACITY COMPUTATION

Existing traffic volume (vpd) 14,000

Reserve Capacity	-4280 vpd
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VOLUME/CAPACITY Ratio and Rating

V/C Ratio= 1.440
 V/C Quality Rating 0
 (V.Q.R. = 100 - (V/C * 100), to zero sig figs)

ACCIDENT Rate and Rating

of Accidents = 59.6667 Year = avg
 Accident Rate 9.059 Accidents per MVM
 Acc. Quality Rating 91
 (A.Q.R. = 100 - Acc Rate, rounded to zero sig figs)

(Both the V.Q.R. and A.Q.R. have a range from 0 to 100, with 0 the worst rating)
 Total Quality Rating = 45 (T.Q.R. = Avg. of the V.Q.R. and A.Q.R., to zero sig figs)

(The T.Q.R. has a range from 0 to 100, with 0 being the worst rating)



DALLAS COUNTY PUBLIC WORKS

Dear Dallas County Partner:

Welcome to the Dallas County Major Capital Improvement Program (MCIP) Application Process. In this diskette / package, you will find four documents and/or forms that will be of use to you as you go through the process of selecting and submitting potential thoroughfare projects for Dallas County Major Capital Improvement funding.

The documents /forms contained in this application file / package are as follows:

- I. Capacity Spreadsheet
- II. Quickcap
- III. RISK ANALYSIS sheet
- IV. MCIP Application

You are NOT required to turn in (I) and (II) above, however, you do need to turn in (III) and (IV).

FORM(S) YOU ARE NOT REQUIRED TO TURN IN TO DALLAS COUNTY:

- I) The Capacity Spreadsheet (I): This spreadsheet is provided as a tool to assist you in determining the overall operational quality of potential projects to be submitted for MCIP funding. It requires that you input raw data (existing traffic volume, project length, number of accidents, etc. etc.) in the appropriate cells of the spreadsheet and the spreadsheet automatically calculates the current operational capacity of the roadway. The operational capacity (Total Quality Rating) is rated on a scale of 0-100. The lower the score (closer to zero), the lower the operational quality of the roadway, and therefore the greater the need for the proposed improvement. We recommend that you use this spreadsheet program as a preliminary evaluation tool to narrow down the potential number of projects you submit for Dallas County funding.
- II) Quickcap (II.) is your instruction guide on how to use the Capacity Spreadsheet (I.).

It is up to you whether you choose to use item (I) above. It is a scientific roadway operational analysis tool that may or may not be needed by your city in deciding which projects are of greater need for improvement and therefore should be submitted for improvement. We will not be collecting any information from (I).

FORMS TO BE TURNED IN TO DALLAS COUNTY:

- III) The RISK ANALYSIS sheet (III) and
- IV) The MCIP Application (IV) are the two forms that are required for submittal. The MCIP application (IV) is the actual application form for proposed improvement funding while the risk analysis sheet is a supplement to the application form and a new addition to this year's application process. The latter is a written request for your overall physical assessment (ROW, utilities, and other structural issues) of the project being submitted. These two forms (paper or electronic copy), should be completed and mailed to:

Edith Ngwa, Ph.D
Senior Transportation Planner
Dallas County
411 Elm Street, 4th Floor
Dallas, TX 75202

You may also email the application forms to engwa@dallascounty.org or fax to 214-653-6416.

The deadline for application submittal is April 27, 2001 at 4pm.

If you have any questions on the application process, you may contact Edith Ngwa at 214-653-6522 or Isela Rodriguez at 214-653-6417.

We look forward to working with you on Dallas County 2001 MCIP Call for Projects!

SPUI
(not approved)

2000 Dallas County Call For Projects

APPLICATION INFORMATION

Submitting Agency: Town of Addison
Contact Person: Jim Pierce, P.E., Assistant City Engineer
Address: P.O. Box 9010 Addison TX 75001-9010
Telephone: 972/450-2879 Facsimile: 972/450-2834
e-mail address: jpierce@ci.addison.tx.us

PROJECT INFORMATION

Location: Belt Line Road MAPSCO: 14D
Beginning: Dallas Parkway (Dallas North Tollway) Project Length: 0.00
Ending: N/A (Intersection) Avg. Posted Speed: N/A
Avg. Operating Speed: N/A
Functional Classification: F Traffic Volume: 58,103 - Belt Line Rd.
31,804 - Dallas Pkwy.
Traffic Volume Source: Count 8/99
of Correctable Accidents: - 22
(over past 3 years)

Existing
Through lanes - Belt Line - 3, Dallas Pkwy - 3
Left turn lanes - Belt Line - 1, Dallas Pkwy - 1
Right turn lanes - Belt Line - 1, Dallas Pkwy - 1
Sidewalks - Belt Line - S, Dallas Pkwy - 0
Bicycle lanes - Belt Line - 0, Dallas Pkwy - 0

Proposed
Belt Line - 3, Dallas Pkwy - 3
Belt Line - 2, Dallas Pkwy - 2
Belt Line - 1, Dallas Pkwy - 1
Belt Line - Y, Dallas Pkwy - Y
Belt Line - 0, Dallas Pkwy - 0

Description of Proposed Improvement(s):

The project will allow the simultaneous operation of left turn lanes for east/west traffic and for north/south traffic. Efficiency of the intersection will be improved by 15 to 20%. The project consists of the removal of existing pavement, medians and bridge parapet walls, installation of concrete drill shafts and cantilever bridge bents, reconstruction of existing retaining walls, construction of additional bridge deck and parapet walls, construction of right-turn lanes, construction of dual left-turn lanes and installation of new traffic signals. Traffic signals will be timed with other signals on Belt Line Road which are covered by another project. Associated work includes traffic control during construction, pavement markings and signing. Even though this project is located in the City of Dallas, Addison is willing to fund the project as it will improve traffic flow on Belt Line Road within the Town. It will also benefit the Dallas North Tollway by improving traffic flow on Dallas Parkway. DART busses will benefit from this project as well. This project is an example of regional cooperation where one Town is willing to fund a project of regional significance (see attached drawing). The two projects that were approved for funding under TEA-21, on Belt Line Road west of Dallas Parkway, underscore the need for this project. For this intersection, we have had 112 accidents over the past 3 years. We estimate with this project, accidents will be reduced by 20%. This is our number 1 priority project for this program.

PROJECT COST INFORMATION

Total Project Cost: \$2,500,000
Right-of-way Cost: \$ 170,000
Engineering/Design Cost: \$ 240,000
Utility Cost: \$ 30,000
Construction Cost: \$2,060,000

Local Cost Contribution: \$
in percent of total cost 75 %

FAX TRANSMISSION

NO. OF PAGES (INCLUDING THIS PAGE) *15* DATE *4/23/99*

**T
O**

NAME *Mr. Jim Pierce*

FIRM *Town of Addison*

ADDRESS


PHONE NUMBER

FAX NUMBER *(972) 450-2837*

**F
R
O
M**

NAME *Ron Young*

PARSONS TRANSPORTATION GROUP INC.
 Barton-Aschman • De Leuw, Cather • Steinman
 5485 Belt Line Road, Suite 199
 Dallas, Texas 75240-7607
 Phone (972) 991-1900
 Fax (972) 490-9261



PROJECT NUMBER

- Jim:*
Here are the:
- *Project Descriptions*
 - *Add'l information for Forms*
 - *Updated Estimates*

For the Signal Timing Project the estimate is

<i>Engineering / Timing Plan</i>	<i>\$75,000</i>
<i>Hardware / Installation</i>	<u><i>825,000</i></u>
	<i>\$900,000</i>

I have the ~~8~~ 11" x 17" exhibits for the U-Turn and the SPUI. I will get them to you Monday.

COST ESTIMATE

ADDISON - SPUI :BELT LINE ROAD AND DALLAS NORTH TOLLWAY

April 14, 1999

ITEM-NBR	DESCRIPTION	UNITS	UNIT COST	QUANTITY	COST
100-5002	PREP R.O.W.	KM	\$50,000.00	1	\$50,000.00
104-5001	REMOV CONC (PAV)	M2	\$20.00	1500	\$30,000.00
104-5005	REMOV CONC (MEDIAN)	M2	\$20.00	600	\$12,000.00
104-5009	REMOV CONC (SDWLK)	M2	\$12.00	200	\$2,400.00
104-5011	REMOV CONC (DRIVEWAY)	M2	\$11.00	300	\$3,300.00
104-5013	REMOV CONC (CURB&GUTTER)	M	\$4.72	1500	\$7,080.00
260-5010	LIME TREAT SUBGR (DC) (200 MM)	M2	\$2.60	2500	\$6,500.00
360-5011	CONC CURB (TY II) (MONO)	M	\$10.00	1500	\$15,000.00
360-5017	CONC PAV (CPCD) (200MM)	M2	\$41.00	2500	\$102,500.00
416-0506	DRILL SHAFT (36 IN)	LF	\$83.00	600	\$49,800.00
420-0551	CL C CONC (PARAPET WALL)	CY	\$882.86	125	\$110,357.50
420-5014	CL C CONC BENT	M3	\$880.00	225	\$198,000.00
422-5001	REINF CONC SLAB	M2	\$95.00	1200	\$114,000.00
423-5007	RET WALL	M2	\$375.00	300	\$112,500.00
450-0695	RAIL (TY C411)	M	\$209.98	200	\$41,996.00
464-5005	RC PIPE (CL III) (600MM)	M	\$124.32	60	\$7,459.20
465-0741	INLET (COMPL) (TY II) (10')	EA	\$2,400.00	4	\$9,600.00
496-0502	REMOV INLET	EA	\$1,200.00	3	\$3,600.00
5004-5001	TEMP SED FNC	M	\$6.00	4000	\$24,000.00
5004-5003	TEMP SED FNC (REMOV)	M	\$5.00	4000	\$20,000.00
500-5001	MOBILIZATION	LS	\$150,000.00	1	\$150,000.00
502-5001	BARRICADE, SIGNS, TRAFF	MO	\$5,000.00	12	\$60,000.00
530-5001	DRVWY'S (Conc)(150mm)	M2	\$36.00	200	\$7,200.00
531-5002	CONCRETE SIDEWALK	M2	\$28.00	300	\$8,400.00
531-5004	SIDEWALK RAMP (TY 4)	EA	\$463.00	16	\$7,408.00
536-5002	CONC MEDIAN	M2	\$40.00	1000	\$40,000.00
610	RDWY ILL ASSEM	EA	\$2,120.00	6	\$12,720.00
649-5003	FND LG RDS D SIGN SUPPORT	EA	\$350.00	20	\$7,000.00
650	OVERHEAD SIGN SUPPORT	EA	\$30,200.00	1	\$30,200.00
662-0542	WZPM (CLB)	EA	\$4.00	500	\$2,000.00
662-0543	WZPM (CLB)	EA	\$4.00	200	\$800.00
662-0581	WZPM (TAB)	EA	\$6.83	1500	\$10,245.00
662-0582	WZPM (TAB)	EA	\$1.00	750	\$750.00
666-0517	REFL	EA	\$115.00	24	\$2,760.00

ITEM-NBR	DESCRIPTION	UNITS	UNIT COST	QUANTITY	COST
666-0549	REFL	EA	\$40.00	24	\$960.00
666-5012	REFL	M	\$17.00	75	\$1,275.00
666-5013	REFL	RA	\$150.00	24	\$3,600.00
666-5036	REFL	M	\$1.24	150	\$186.00
666-5041	REFL	M	\$6.00	250	\$1,500.00
666-5044	REFL	M	\$10.00	75	\$750.00
666-5045	REFL	EA	\$60.00	24	\$1,440.00
666-5201	REFL	M	\$1.50	150	\$225.00
666-5209	REFL	M	\$7.76	250	\$1,940.00
672-0504	RPM (CLA)	EA	\$8.60	160	\$1,376.00
672-0507	RPM (CLB)	EA	\$4.00	360	\$1,440.00
672-5016	RPM BTN	EA	\$3.20	370	\$1,184.00
678-5001	PAV SURV & PREP	M	\$1.00	150	\$150.00
678-5004	PAV SURV & PREP	M	\$2.72	250	\$680.00
678-5006	PAV SURV & PREP	M	\$5.73	75	\$429.75
678-5007	PAV SURV & PREP	EA	\$31.70	24	\$760.80
678-5008	PAV SURV & PREP	EA	\$40.00	24	\$960.00
686	SIGNAL SYSTEM	LS	\$175,000.00	1	\$175,000.00
	LANDSCAPE	LS	\$75,000.00	1	\$75,000.00
	UTIL RELOC	LS	\$250,000.00	1	\$175,000.00
	SUBTOTAL				\$1,703,432.25
	CONTINGENCY				\$356,698.71
	ENGINEERING/SURVEY/GEOTECH				\$240,000.00
	RIGHT-OF-WAY				\$135,000.00
	TOTAL				\$2,435,130.96

