

Invitation. Please share with other potentially interested parties.

To complete the work plan of the 5178 project and to generate stakeholder interest in the upcoming implementation phase of the "Measuring Access to Transit Services" project, the Center for Transportation Research is hosting a workshop on Friday, September 8th, from 10 - 12.

This project developed from research project # 7-4938 "Development of an Urban Accessibility Index: Formulations, Aggregation, and Application." While the original project focused on measuring urban access from the perspective of the driving commuter, the 5178 project measures accessibility to transit services from a transit user's perspective.

In this application, the TransCAD-based measuring access tool synthesizes census and transit service information to pinpoint areas where a transit system needs improvement or where service expansion should be considered. The workshop will include workstations for TransCAD practitioners and is also appropriate for transit agency and MPO staff with general interest in the principles of measuring transit access. For more information about this project, please see the attached PowerPoint and/or contact Paul Moon.

RSVP:

Paul Moon

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directions to CTR:

<http://www.utexas.edu/research/ctr/contact/direx.html>

Measuring Access to Public Transportation Services

Research Project 0-5178
conducted for



PC - Karen Dunlap, AICP, TxDOT

PD - Paul Moon, TxDOT

PI - Dr. Chandra Bhat, UT

May 2006

5178 - RESEARCH OBJECTIVES

Transit service delivery modeling and assessment

- ❖ Review & synthesize literature & state-of-the-practice
- ❖ Formulate transit accessibility measures
- ❖ Develop transit network in TransCAD (compatible with ArcGIS)
- ❖ Apply the measures in urban areas as a proof of concept

5178 - Target Areas

- ❖ Dallas-Fort Worth
- ❖ Austin
- ❖ San Antonio
- ❖ El Paso
- ❖ Hidalgo County
- ❖ Corpus Christi

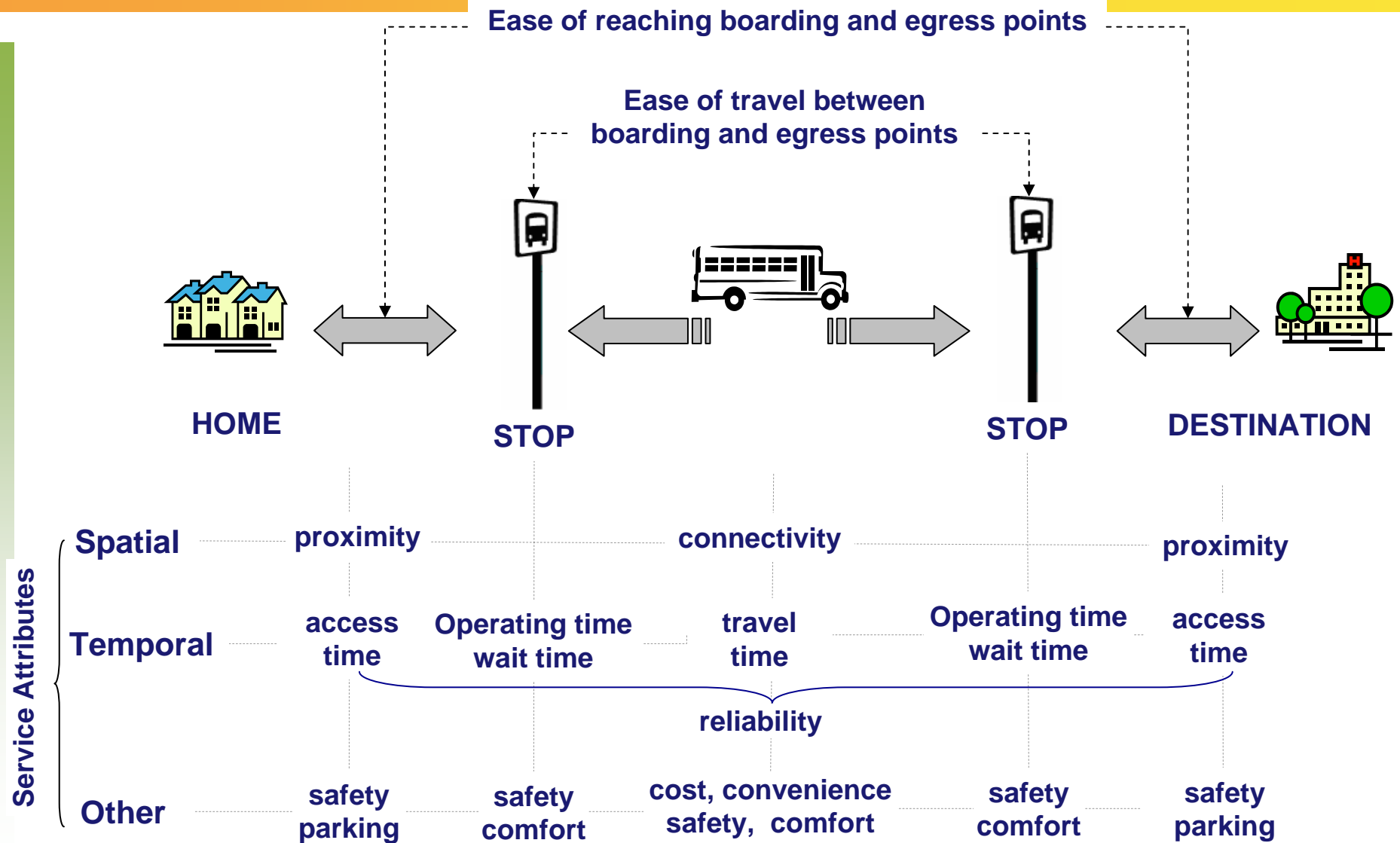
DFW is working model. Other areas interested in using the tool may attend workshop and may acquire tool for post-project use.

RECOMMENDATIONS BASED ON LITERATURE REVIEW

Development of a comprehensive measure that:

- ❖ Captures both Supply and Demand
- ❖ Captures the differential characteristics and needs of different user groups
- ❖ Captures Local Accessibility, Network Accessibility, and Level of Comfort, Safety, and Security
- ❖ Captures both Spatial and Temporal dimensions
- ❖ Allows for aggregation across various spatial units, time periods, and user groups

CONCEPTUAL FRAMEWORK



TRANSIT NETWORK FOR DALLAS / FORT WORTH

TransCAD

File Edit Map Dataview Selection Matrix Layout Tools Procedures Transit Window Help

transit map.map - RDWY Link

Transit Path Results

Summary Variables		Link Variables		
Variable	Value	Variable	Mode	Value
Generalized Cost	\$26.329	Length	Local FWTA	0.00
Fare	\$1.600	Length	Local DART	5.21
In-Vehicle Time	19.152(min.)	Length	Express FWTA 1	0.00
Initial Wait Time	15.000(min.)	Length	Express FWTA 2	0.00
Transfer Wait Time	7.500(min.)	Length	Express FWTA 3	0.00
Transfer Time	0.000(min.)	Length	Express DART	2.94
Access Time	5.633(min.)	Length	Light Rail	0.00
Egress Time	9.032(min.)	Length	Commuter Rail	0.00
Dwelling Time	12.500(min.)	PKTIME_*	Local FWTA	0.00
In-Vehicle Cost	\$3.830	PKTIME_*	Local DART	11.73
Initial Wait Cost	\$6.000	PKTIME_*	Express FWTA 1	0.00
Transfer Wait Cost	\$3.000	PKTIMEF *	Express FWTA 2	0.00

Directions

1. Walk for 0.282 Miles.
2. Board Route 5152 at SPRING VALLEY RD & PLANO RD for 14 stops.
Get off at WALNUT ST & 5TH ST.
3. Board Route 745 at WALNUT ST & 5TH ST for 11 stops.
Get off at KINGSLEY RD & 1ST ST.
4. Walk for 0.452 Miles.

Save Path Close

Transit Shortest Path Toolbox

Color: Multiple Nodes:

Method: Shortest Path

Map scale: 1 Inch = 1.6697 Miles (1:105,792)

Network: c:\...is 05-27-05\transit network 1.tnw

5178 – Next Steps

- ❖ Demonstration - measuring the accessibility of the Dallas system (Austin, Riverside Complex, Classroom E, 1:30)
- ❖ Build data sets for other areas
- ❖ Workshops for interested users – TBA September

5178 – Next Steps

Contact

Paul Moon

about the demonstration and
upcoming workshops:

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