

Station Evaluation Summary

Prepared by Wallace Roberts & Todd LLC



10/31/2005

★ Preferred Site Location

Loop 12 Station

Total Points



70

Key Positive Issues:

Potential Master Plan Development suggests a strong economic development potential for the larger property surrounding the station area.

Key Negative Issues:

Current landuse and density does not merit a station at this time. Station will need to be deferred, development is contingent upon future Master Plan development.

University of Dallas Station

Total Points



84

Key Positive Issues:

Station site layout is configured to encourage Master Plan Development or open land parcels and promotes connectivity to the University of Dallas. Station site layout also works well with potential Bush Library concept.

Key Negative Issues:

Due to physical constraints, access is limited with vertical circulation issues; Design requires underpass between LRT Platform and Bus Transfer Facilities.

S. Las Colinas Station: Option A

Total Points



77 / 85

Key Positive Issues:

Station site layout is configured to encourage development and possible connectivity to a future Regional Rail station at the BNSF right of way as well as a terminal transfer point to the APT system; Site could also engage the Campion Trail. Transfer Facilities spatial needs and turning movements are easily accommodated.

Key Negative Issues:

Station will need to be deferred, development is contingent upon future Regional Rail system and station implementation along the BNSF right of way.

S. Las Colinas Station: Option B

Total Points

59

Key Positive Issues:

Station Site is located within close proximity to an existing APT Station via a walkway. Station location is also within the Las Colinas Urban Center close to both office and multi-family residential landuses.

Key Negative Issues:

Due to physical constraints between two intersections, this station would violate two DART design criteria and would impact access to the fire station and post office.

Lake Carolyn Station: Option A

Total Points

★ 75

Key Positive Issues:

Station is configured to allow for direct pedestrian access to an existing APT Station and is located in higher density and central to the Las Colinas Urban Center.

Key Negative Issues:

Median Station configuration will need to address patron access issues:
All access with the exception of the APT transfer will need to cross Lake Carolyn Pkwy.
Bus Transfer will need to reconfigure existing Lake Carolyn Pkwy.

Lake Carolyn Station: Option B

Total Points

62

Key Positive Issues:

Station is located in planned multi-use residential environment and is within close proximity to the Campion Trail system.

Key Negative Issues:

Station site location is too distant to an existing APT Station which could provide connectivity to the greater Las Colinas Urban Center.
All access with the exception of the APT transfer will need to cross Lake Carolyn Pkwy.
Bus Transfer will need to reconfigure existing Lake Carolyn Pkwy.

N. Las Colinas Station: Option A1 (At Grade 348)

Total Points

56

Key Positive Issues:

Station is located central to future master plan development between Northwest Hwy. (Spur 348) and future Lake Carolyn Parkway; Good ridership projected.

Key Negative Issues:

Physical constraints limits uses of developable land surrounding the station and alignment; May require circuitous access to the station area.

N. Las Colinas Station: Option A2 (Elevated 348)

Total Points

86

Key Positive Issues:

Station and alignment are located closer to an elevated Northwest Hwy (Spur 348); Parking Facilities are located below the elevated structure; Site Layout offers less physical constraints to developable property adjacent to station.
An elevated Spur 348 allows for station access north of freeway.
Good ridership projected.

Key Negative Issues:

Access is limited to eastbound frontage road.
Requires significant changes to Northwest Highway (Spur 348).

N. Las Colinas Station: Option A2+ (Elevated 348)

Total Points



89

Key Positive Issues:

Station and alignment are located closer to an elevated Northwest Hwy (Spur 348); Parking Facilities are located below the elevated structure; Site Layout offers less physical constraints to developable property adjacent to station; An elevated Spur 348 allows for station access north of freeway. New Access Road allows for direct access from Lake Carolyn Pkwy and suggests development frontage. Good ridership projected.

Key Negative Issues:

Requires significant changes to Northwest Highway (Spur 348).

N. Las Colinas Station: Option B (Median)

Total Points

49

Key Positive Issues:

Good ridership projected.
Median LRT Platform consistent with Lake Carolyn station concept.

Key Negative Issues:

Due to high Bus Transfer and parking needs, projections for the median option would require significant frontage and spatial needs from adjacent developable land. The projected transfer activity would also have patron access issues crossing Lake Carolyn Pkwy. to access median station.

N. Las Colinas Station: Option C (Aerial Platform)

Total Points

63

Key Positive Issues:

LRT Aerial Platform would allow for vertical circulation on both sides of the future Las Colinas Blvd. and allow for pedestrian access at the intersection under Northwest Hwy. (Spur 348).
Good ridership projected.

Key Negative Issues:

Parking facilities and Bus Transfer would facilitate valuable property owned by the City of Irving and may limit future development plans.

Carpenter Ranch Station

Total Points



67

Key Positive Issues:

Station is located adjacent to Master Plan residential development and hotels; Station is also located in close proximity to near by trails along Meadow Creek.

Key Negative Issues:

Physical constraints for parking facilities and bus transfer, some vehicular circulation movements will have to mid block along Meadow Creek Dr.

North Lake College Station

Total Points



85

Key Positive Issues:

Destination and origin Station that serves College and neighborhood well,
Good ridership projected with increasing student enrollment projections.
Site Design layout favors pedestrian access between college and neighborhood
and reconfigures Brangus Dr, to access both MacArthur Blvd. and Walnut Hill Ln..

Key Negative Issues:

Potential impacts due to residential adjacency, design sensitivity required.
Design reroutes Brangus Dr. eliminating some vehicular circulation into neighborhood.

Belt Line Road Station

Total Points



79

Key Positive Issues:

Multiple uses for transportation, serving as a terminus station for commuters;
Future D / FW Terminus will act as destination. However site has good
potential for development. Site is unrestrained for spatial needs and can
accommodate bus & shuttle transfer and parking requirements.
Site Layout is configured to encourage development parcels fronting
Belt Line Road and S.H.. 161 Frontage Road.

Key Negative Issues:

Terrain and drainage issues will need to be addressed; Physical constraints for
tail track operations and road crossings at Valley View Ln. and Belt Line Road.

DART Northwest Corridor- Irving Line
Alignment and Station Site Evaluation

Prepared by Wallace Roberts & Todd LLC



First and Second Tier

10/31/2005

Loop 12

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	TBD; Future station to be implemented as development warrants.	3	
	Station Spacing	Close to U of D Station but, with physical barrier (Loop 12).	3	
	Geometric Requirements	Appears to meet requirements; Station layout tied to site development; At-grade side platform.	3	
	LRT Operations	A little close to next station; Design avoids unnecessary crossings.	3	
	Constructability / Cost	To avoid high retrofit cost, station infrastructure to be constructed early for future station; Site layout tied to site development.	2	
Station/ Program	Parking Access / Egress	No parking	3	
	Fixed Route Bus Access / Egress	Little bus interface anticipated; Bus access to be designed as warrants. Access may be a challenge pending site development.	2	
	Local Traffic Impacts	Area to be master planned; Unnecessary crossing to be avoided.	3	
	Parking Accommodation	No parking	5	+
	Mode/Operational Adjacency (Bus/Rail)	Little bus interface anticipated; Bus access to be designed as warrants. Access may be a challenge pending site development.	3	
	Pedestrian / Bicycle Accessibility	Area to be master planned; Pedestrian access could be maximized.	4	
Environmental	Neighborhood Compatibility	Area to be master planned; Fits well with conceptual options. Existing land use does not support station.	3	
	Neighborhood Plan Compatibility	Area to be master planned; Fits well with conceptual options.	5	+
	Environmental Compatibility - Physical*	None anticipated, within 500 year flood plain.	3	
	Environmental Compatibility - Indirect **	None anticipated	3	
	Cultural/Historic Compatibility	None anticipated	3	
Real Estate	Displacement of Businesses	Alignment being designed to keep existing business (1) active until redevelopment occurs; Station not warranted until redevelopment.	4	
	Displacement of Residences	No displacements	5	+
	Economic Development Influence	Very strong economic development potential; Deferred station contingent on site development.	5	+
	Property Availability	Landowner active participant in process.	5	+
	Total		70	

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

Significantly Negative	1
Moderately Negative	2
Neutral	3
Moderately Positive	4
Significantly Positive	5

Critical Factors:

Positive	+
Negative	-
Fatal Flaw	FF

* Flood plain, wetlands, parklands, hazmat etc.

** Noise sensitive receptors, visual impact

DART Northwest Corridor-Irving Line
Alignment and Station Site Evaluation

Prepared by Wallace Roberts & Todd LLC



First and Second Tier

10/31/2005

University of Dallas

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	Very strong ridership projected.	5	+
	Station Spacing	First station on line; Approximately 1 mile to next station.	5	+
	Geometric Requirements	TxDOT accommodating alignment and station; Vertical circulation challenges.	3	
	LRT Operations	Tangent line section with no grade crossings	5	+
	Constructability / Cost	Complex construction issues: Vertical circulation, retaining walls and separate bus facility increase construction cost	2	
Station/ Program	Parking Access / Egress	No parking; Primarily a destination station	5	+
	Fixed Route Bus Access / Egress	Good bus access provided on adjacent parcel with access being required.	4	
	Local Traffic Impacts	Being designed with and complimentary to highway and roadway improvements.	5	+
	Parking Accommodation	No Parking; Primarily a destination station	5	+
	Mode/Operational Adjacency (Bus/Rail)	New pedestrian underpass, but vertical circulation required; Design makes best of physical constraints situation	2	
	Pedestrian / Bicycle Accessibility	Good pedestrian interface to University of Dallas, Bus Transfer, TOD and proposed Campion Trail.	4	
Environmental	Neighborhood Compatibility	Serves University and potential development sites; Situated within existing TXDOT ROW	5	+
	Neighborhood Plan Compatibility	Fits TxDOT physical constraints, University of Dallas and City of Irving plans; Bush Library concept fits well with station.	5	+
	Environmental Compatibility - Physical*	None anticipated	3	
	Environmental Compatibility - Indirect **	None anticipated	3	
	Cultural/Historic Compatibility	None anticipated	3	
Real Estate	Displacement of Businesses	No displacements	5	+
	Displacement of Residences	No displacements	5	+
	Economic Development Influence	High economic development potential with University of Dallas density; Bush Library concept fits well with station.	5	+
	Property Availability	Landowner active participant in process.	5	+
	Total		84	

Possible Points 100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

- Significantly Negative 1
- Moderately Negative 2
- Neutral 3
- Moderately Positive 4
- Significantly Positive 5

Critical Factors:

- Positive +
- Negative -
- Fatal Flaw FF

* Flood plain, wetlands, parklands, hazmat etc.

** Noise sensitive receptors

DART Northwest Corridor - Irving Line
Alignment and Station Site Evaluation

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First and Second Tier

10/31/2005

S. Las Colinas: Option A

	Evaluation Criteria	Notes	LRT Only		+ Multi-Modal	
			Ranking		Ranking	
Alignment	Ridership	Good ridership projected + Potential increased ridership w/ direct Regional Rail & APT	4		5	+
	Station Spacing	5000' distance from University of Dallas Station (LRT) 5000' from Option A	5	+	5	+
	Geometric Requirements	Meets all requirements for an At Grade Side Platform Station	5	+	5	+
	LRT Operations	Meets design criteria	5	+	5	+
	Constructability / Cost	At grade station and alignment; Will require street reconfiguration for Teleport Blvd.; Grading issues	2		2	
Station/ Program	Parking Access / Egress	No parking but new infrastructure required for auto access Teleport Blvd. will need to be reconfigured.	4		4	
	Fixed Route Bus Access / Egress	Good bus access is achieved with Bus Transfer turnaround Some one-way routing, (Frontage Road along S.H. 114)	4		4	
	Local Traffic Impacts	Station access / infrastructure may improve local connectivity Some station access from one-way frontage	4		4	
	Parking Accommodation	No parking; Site could accommodate some parking	5	+	5	+
	Mode/Operational Adjacency (Bus/Rail)	Good bus interface; + Potential Regional Rail & APT connection; True multi-modal station.	4		5	+
	Pedestrian / Bicycle Accessibility	Require crosswalks; limited ped destinations; good Campion Trail + Multi-modal station will generate more pedestrian activity	4		5	+
	Neighborhood Compatibility	LRT at Urban Center fringe with physical barriers & little activity + Potential for multi-modal station to be community focal point	3		5	+
Environmental	Neighborhood Plan Compatibility	Plan Assumes Regional Rail & APT, does not support existing landuse. + Multi-modal station represent fruition of plan	3		5	+
	Environmental Compatibility - Physical*	None anticipated	3		3	
	Environmental Compatibility - Indirect **	None anticipated	3		3	
	Cultural/Historic Compatibility	None anticipated	3		3	
Real Estate	Displacement of Businesses	1 Business potentially , may impact operational access to existing Sub Station.	4		4	
	Displacement of Residences	No displacements	5	+	5	+
	Economic Development Influence	Urban Center fringe area ; Physical barriers; Limited T.O D. + Potential increases with added modes	2		3	
	Property Availability	Property already required for alignment.	5	+	5	+
	Total			77		85

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

- Significantly Negative 1
- Moderately Negative 2
- Neutral 3
- Moderately Positive 4
- Significantly Positive 5

Critical Factors:

- Positive +
- Negative -
- Fatal Flaw FF

* Flood plain, wetlands, parklands, hazmat etc.

** Noise sensitive receptors

+ Multi-modal Station (LRT, Commuter Rail, APT)



S. Las Colinas: Option B

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	Good ridership projected; No connectivity to Regional Rail; Nearby APT connection via ped.	4	
	Station Spacing	6000' distance from University of Dallas Station 2500' distance from Lake Carolyn Option B	3	
	Geometric Requirements	Violates 2 DART Criteria Standards (Potential fatal flaw) (Distance from spiral / distance from intersection).	1	-
	LRT Operations	Between 2 streets undesirable; Not a smooth transition out of station; operational safety in question.	2	
	Constructability / Cost	At grade station and alignment; Std. station canopy design may be impacted by APT guideway above.	2	
Station/ Program	Parking Access / Egress	No parking, however auto access to station less than optimal.	4	
	Fixed Route Bus Access / Egress	Less than optimal buses perpendicular to station along adjacent roads; limited space for bus transfer area.	2	
	Local Traffic Impacts	Removes Teleport Blvd. between Riverside and Las Colinas Blvd. terminates existing road between Post Office and Fire Station.	3	
	Parking Accommodation	No Parking	5	+
	Mode/Operational Adjacency (Bus/Rail)	Limited Area for bus bays not directly adjacent to station; Pedestrian access to APT station; Too far from BNSF / proposed Regional Rail.	2	
	Pedestrian / Bicycle Accessibility	Pedestrian access is limited, access to APT Station will require new construction adjacent to guideway.	3	
Environmental	Neighborhood Compatibility	High activity in tight space may overflow station to impact community.	2	
	Neighborhood Plan Compatibility	Tight fit to meet goal for APT interface; Does not meet long range Regional Rail Plan goal.	2	
	Environmental Compatibility - Physical*	None anticipated; Within 500 year floodplain	3	
	Environmental Compatibility - Indirect **	None anticipated	3	
	Cultural/Historic Compatibility	None anticipated	3	
Real Estate	Displacement of Businesses	Impact to fire station access and post office access; Fire Station building design will need to be reconfigured for operations.	4	
	Displacement of Residences	No displacements	5	+
	Economic Development Influence	Could develop general area but facilities space requirements may potential development sites.	3	
	Property Availability	Partial takes of Post Office & Fire Station	3	
	Total		59	

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

- Significantly Negative 1
- Moderately Negative 2
- Neutral 3
- Moderately Positive 4
- Significantly Positive 5

Critical Factors:

- Positive
- Negative
- Fatal Flaw

+
-
FF

* Flood plain, wetlands, parklands, hazmat etc.

** Noise sensitive receptors



Lake Carolyn: Option A

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	Direct connectivity to APT station; Acceptable ridership if S. Las Colinas deferred	2	
	Station Spacing	5000' from S. Las Colinas Opt. A; 3000' from N. Las Colinas Opt. A	4	
	Geometric Requirements	At grade center platform station; Limited to inside median of Lake Carolyn Pkwy	3	
	LRT Operations	Median running but meets requirements.	3	
	Constructability / Cost	Requires reconfiguration of Lake Carolyn Pkwy; Vertical circulation & pedestrian ext. to modified APT guideway / station	2	
Station/ Program	Parking Access / Egress	No parking, however auto access to station less than optimal.	4	
	Fixed Route Bus Access / Egress	Limited bus activity planned; one-way traffic patterns Bus transfer on Lake Carolyn Parkway only.	3	
	Local Traffic Impacts	Median running alignment affects left turning movements; Vertical access to APT eliminates some ped. traffic crossing street.	3	
	Parking Accommodation	No parking	5	+
	Mode/Operational Adjacency (Bus/Rail)	Configured to provide linkage to APT Station, provided by extending walkway from station; Vertical circulation and APT guideway	5	+
	Pedestrian / Bicycle Accessibility	Mid block crossings; Access to APT improves ped movement; Potential to expand ped links to existing and new developments	4	
Environmental	Neighborhood Compatibility	Adjacent to multi-family and office; Better access to higher densities; Potential to serve Williams Square	5	+
	Neighborhood Plan Compatibility	Designed for neighborhood plan with APT connectivity; Central to Las Colinas Urban Center.	5	+
	Environmental Compatibility - Physical*	None anticipated; Within 500 year floodplain	3	
	Environmental Compatibility - Indirect **	Residential adjacency issues	2	
	Cultural/Historic Compatibility	None anticipated	2	
Real Estate	Displacement of Businesses	No displacements	5	+
	Displacement of Residences	No displacements	5	+
	Economic Development Influence	Adjacency to proposed multi-family & office and direct linkage to APT should have a larger positive impact to the area.	5	+
	Property Availability	Uses public ROW	5	+
	Total		75	

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

- Significantly Negative 1
- Moderately Negative 2
- Neutral 3
- Moderately Positive 4
- Significantly Positive 5

Critical Factors:

- Positive +
- Negative -
- Fatal Flaw FF

* Flood plain, wetlands, parklands, hazmat etc.
 ** Noise sensitive receptors



Lake Carolyn: Option B

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	Does not have direct connectivity to APT; Has very low ridership	0	FF
	Station Spacing	2000' Distance from S. Las Colinas Opt. B; 4500' from N. Las Colinas	3	
	Geometric Requirements	At Grade Center Platform Station Limited to inside median of Lake Carolyn Pkwy	3	
	LRT Operations	Median running but meets requirements	3	
	Constructability / Cost	Requires reconfiguration of Lake Carolyn Pkwy.	2	
Station/ Program	Parking Access / Egress	No parking, however auto access to station less than optimal.	4	
	Fixed Route Bus Access / Egress	Limited bus activity planned; one-way traffic patterns.	3	
	Local Traffic Impacts	Median running alignment affects left turning movements; All passengers must cross traffic.	2	
	Parking Accommodation	No parking	3	
	Mode/Operational Adjacency (Bus/Rail)	Limited bus interface across street, 1500' away from APT Station.	2	
	Pedestrian / Bicycle Accessibility	Adds mid block pedestrian crossings; Limited destinations; Limited connectivity to developed Las Colinas	2	
Environmental	Neighborhood Compatibility	Adjacent to Multi-Family Medium Density	4	
	Neighborhood Plan Compatibility	Designed for neighborhood plan; Does not interface with APT	4	
	Environmental Compatibility - Physical*	None anticipated; Within 500 year floodplain;	3	
	Environmental Compatibility - Indirect **	Residential adjacency issues California Crossing nearby, no impact anticipated	2	
	Cultural/Historic Compatibility	None anticipated	3	
Real Estate	Displacement of Businesses	No displacements	5	+
	Displacement of Residences	No displacements	5	+
	Economic Development Influence	Adjacent to multi-family (central to proposed multi- family development)	4	
	Property Availability	Uses public ROW	5	+
	Total		62	

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

- Significantly Negative
- Moderately Negative
- Neutral
- Moderately Positive
- Significantly Positive

- 1
- 2
- 3
- 4
- 5

Critical Factors:

- Positive
- Negative
- Fatal Flaw

- +
-
- FF

* Flood plain, wetlands, parklands, hazmat etc.
 ** Noise sensitive receptors



N. Las Colinas: Option A1 (At-Grade Spur 348)

	Evaluation Criteria	Notes	Ranking		
Alignment	Ridership	Very good ridership projected.	5	+	
	Station Spacing	3000' distance from Lake Carolyn; 5000' distance from Carpenter Ranch Station	4		
	Geometric Requirements	At grade side platform station	5		
	LRT Operations	Requires additional at-grade crossings.	2		
	Constructability / Cost	Requires new significant infrastructure for station access; Minor change to Spur 348.	2		
Station/ Program	Parking Access / Egress	At-grade Spur 348 configuration makes access problematic; Circuitous circulation with one way movements.	2		
	Fixed Route Bus Access / Egress	At-grade Spur 348 configuration makes access problematic; Circuitous circulation with LRT crossing.	2		
	Local Traffic Impacts	At-grade Spur 348 configuration complicates local traffic.	2		
	Parking Accommodation	At-grade Spur 348 configuration limits and constrains parking options; Extensive use of developable land.	2		
	Mode/Operational Adjacency (Bus/Rail)	At-grade Spur 348 configuration makes access problematic; Buses can be adjacent to platform.	3		
	Pedestrian / Bicycle Accessibility	At-grade Spur 348 configuration makes access problematic Pedestrian access to property north of Spur 348 unlikely.	1		-
	Neighborhood Compatibility	Platform will service limited with at-grade Spur 348; LRT at fringe of development with physical constraints.	1		-
Environmental	Neighborhood Plan Compatibility	At-grade Spur configuration not in City of Irving plans; Potentially relocates Lake Carolyn Parkway, allowing for development spatial	2		
	Environmental Compatibility - Physical*	No Impact anticipated; Within 500 year floodplain	3		
	Environmental Compatibility - Indirect **	None anticipated	3		
	Cultural/Historic Compatibility	None anticipated	3		
	Displacement of Businesses	No displacements	5		+
Real Estate	Displacement of Residences	No displacements	5	+	
	Economic Development Influence	Can have influence on development; Physical constraints limits potential uses of developable land area.	2		
	Property Availability	TBD; but requires more land than other options; May require relocation of Lake Carolyn Parkway	2		
	Total		56		

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

- Significantly Negative 1
- Moderately Negative 2
- Neutral 3
- Moderately Positive 4
- Significantly Positive 5

Critical Factors:

- Positive
- Negative
- Fatal Flaw

- +
-
- FF

* Flood plain, wetlands, parklands, hazmat etc.
 ** Noise sensitive receptors



N. Las Colinas: Option A2 (Elevated Spur 348)

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	Very good ridership projected.	5	+
	Station Spacing	3000' distance from Lake Carolyn; 5000' distance from Carpenter Ranch Station	4	
	Geometric Requirements	At grade side platform station	5	+
	LRT Operations	No apparent impediment to operations	5	+
	Constructability / Cost	Requires significant new infrastructure for station access; Significant changes to Spur 348	2	
Station/ Program	Parking Access / Egress	Elevated Spur 348 configuration improves access by all modes; Complex facilities layout optimizes access	4	
	Fixed Route Bus Access / Egress	Elevated Spur 348 configuration improves access by all modes; Complex facilities layout optimizes access	4	
	Local Traffic Impacts	Elevated Spur 348 configuration improves local traffic; Significant changes to Spur 348	5	+
	Parking Accommodation	Elevated Spur 348 configuration allows parking under structure	5	+
	Mode/Operational Adjacency (Bus/Rail)	Meets criteria	5	+
	Pedestrian / Bicycle Accessibility	Elevated Spur 348 configuration improves local traffic; Optimizes ped access	5	+
	Neighborhood Compatibility	Elevated Spur 348 configuration serves greater neighborhood	5	+
Environmental	Neighborhood Plan Compatibility	Elevated Spur 348 configuration in City's plan and allow for expansion of Urban Center	5	+
	Environmental Compatibility - Physical*	None anticipated; Within 500 year floodplain	3	
	Environmental Compatibility - Indirect **	None anticipated	3	
	Cultural/Historic Compatibility	None anticipated	3	
Real Estate	Displacement of Businesses	No displacements	5	+
	Displacement of Residences	No displacements	5	+
	Economic Development Influence	High potential for station to influence economic development on both sides of Spur 348; Maximizes developable land.	4	
	Property Availability	Unknown; Elevated Spur 348 minimizes property acquisition.	4	
	Total		86	

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

- Significantly Negative
- Moderately Negative
- Neutral
- Moderately Positive
- Significantly Positive

- 1
- 2
- 3
- 4
- 5

Critical Factors:

- Positive
- Negative
- Fatal Flaw

- +
-
- FF

* Flood plain, wetlands, parklands, hazmat etc.

** Noise sensitive receptors



N. Las Colinas: Option A2+ (Elevated Spur 348 & Access Street)

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	Very good ridership projected.	5	+
	Station Spacing	3000' distance from Lake Carolyn; 5000' distance from Carpenter Ranch Station	4	
	Geometric Requirements	At grade side platform station	5	+
	LRT Operations	No apparent impediment to operations	5	+
	Constructability / Cost	Requires significant new infrastructure for station access; Significant changes to Spur 348	2	
Station/ Program	Parking Access / Egress	Elevated Spur 348 & perpendicular access street configuration improves access by all modes; Access street also links to property north of Spur	5	+
	Fixed Route Bus Access / Egress	Elevated Spur 348 configuration improves access by all modes; Complex facilities layout optimizes access with two access points.	5	+
	Local Traffic Impacts	Elevated Spur 348 configuration improves local traffic; Significant changes to Spur 348; Access street improves (North / South	5	+
	Parking Accommodation	Elevated Spur 348 configuration allows parking under structure	5	+
	Mode/Operational Adjacency (Bus/Rail)	Meets criteria	5	+
	Pedestrian / Bicycle Accessibility	Optimizes pedestrian / bike access with signalized crosswalk at access street intersection to north of Spur 348; Improves local traffic	5	+
	Neighborhood Compatibility	Elevated Spur 348 configuration serves greater neighborhood	5	+
Environmental	Neighborhood Plan Compatibility	Elevated Spur 348 configuration in City's plan and allow for expansion of Urban Center	5	+
	Environmental Compatibility - Physical*	None anticipated; Within 500 year floodplain	3	
	Environmental Compatibility - Indirect **	None anticipated	3	
	Cultural/Historic Compatibility	None anticipated	3	
	Real Estate	Displacement of Businesses	No displacements	5
Displacement of Residences		No displacements	5	+
Economic Development Influence		High potential for station to influence economic development on both sides of Spur 348; Maximizes developable land and suggests	5	+
Property Availability		Unknown; Elevated Spur 348 minimizes property acquisition	4	
	Total		89	

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

- Significantly Negative 1
- Moderately Negative 2
- Neutral 3
- Moderately Positive 4
- Significantly Positive 5

Critical Factors:

- Positive +
- Negative -
- Fatal Flaw FF

* Flood plain, wetlands, parklands, hazmat etc.
 ** Noise sensitive receptors



N. Las Colinas: Option B (Lake Carolyn Median)

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	Very good ridership projected.	5	+
	Station Spacing	2500' distance from Lake Carolyn Opt. A; 5500' distance from Carpenter Ranch Station	3	
	Geometric Requirements	At grade center platform Station in Lake Carolyn Pkwy median, Significant bus activity across roadway.	2	
	LRT Operations	At grade center platform station in Lake Carolyn Pkwy median,	3	
	Constructability / Cost	At grade center platform station; Major transfer station requiring bus and auto interface.	3	
Station/ Program	Parking Access / Egress	Parking uses developable land across parkway from station.	2	-
	Fixed Route Bus Access / Egress	Major transfer station with complicated interface across roadway; mid block pedestrian crosswalks; Limited bus access.	1	
	Local Traffic Impacts	Median running alignment limits local access; Bus and pedestrian interface will most likely conflict with local traffic.	1	
	Parking Accommodation	Parking spatial needs will require valuable developable property.	2	
	Mode/Operational Adjacency (Bus/Rail)	Major transfer station across busy parkway; Too much transfer activity for median running station.	1	
	Pedestrian / Bicycle Accessibility	Pedestrian crosswalks to median station will need to be implemented at mid block crossings; perhaps with additional traffic signalization.	2	
Environmental	Neighborhood Compatibility	Station requirements dominates local landscape and hinders development.	1	-
	Neighborhood Plan Compatibility	Dominant station infrastructure not suited to development plans; Frontage use & median configuration limits property access.	1	
	Environmental Compatibility - Physical*	No Impact anticipated; Within 500 year floodplain	3	
	Environmental Compatibility - Indirect **	No Impact anticipated	3	
	Cultural/Historic Compatibility	No Impact anticipated	3	
Real Estate	Displacement of Businesses	No displacements	5	+
	Displacement of Residences	No displacements	5	
	Economic Development Influence	Dominant station infrastructure not suited to development plans; Median Station needs hinders development.	1	
	Property Availability	TBD; but median alignment and station infrastructure intrudes into developable property.	2	
	Total		49	

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

- Significantly Negative 1
- Moderately Negative 2
- Neutral 3
- Moderately Positive 4
- Significantly Positive 5

Critical Factors:

- Positive +
- Negative -
- Fatal Flaw FF

* Flood plain, wetlands, parklands, hazmat etc.

** Noise sensitive receptors



N. Las Colinas: Option C (Aerial LRT Platform)

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	Very good ridership projected.	5	+
	Station Spacing	4000' distance from Lake Carolyn Opt. A; 4000' distance from Carpenter Ranch Station	3	
	Geometric Requirements	Elevated structure / station over future Las Colinas Blvd.	2	
	LRT Operations	On elevated structure over future Las Colinas Blvd; Vertical circulation issues.	2	
	Constructability / Cost	Elevated structure / station; Atypical design;	2	
Station/ Program	Parking Access / Egress	Parking assumes use of city property west of Las Colinas Blvd; Somewhat limited access.	3	
	Fixed Route Bus Access / Egress	Bus access / egress limited to future Las Colinas Blvd. and City property for circulation.	3	
	Local Traffic Impacts	TBD; additional analysis required, grade separation is a plus. Somewhat circuitous access for proposed managed lanes on Spur 348.	3	
	Parking Accommodation	Parking assumes use of city property west of Las Colinas Blvd; Uses valuable property.	2	
	Mode/Operational Adjacency (Bus/Rail)	Bus access limited to future Las Colinas Blvd frontage; Vertical circulation issues.	3	
	Pedestrian / Bicycle Accessibility	LRT station location may allow for pedestrian crossings under Spur 348 @ future Las Colinas Blvd; Complicated intersection for pedestrians.	2	
	Environmental	Neighborhood Compatibility	High transportation uses; Station improves access to area.	4
Neighborhood Plan Compatibility		Requires use of developable land, improves access (Site designated for convention center)	3	
Environmental Compatibility - Physical*		None anticipated; Within 500 year floodplain	3	
Environmental Compatibility - Indirect **		None anticipated	3	
Cultural/Historic Compatibility		None anticipated	3	
Real Estate	Displacement of Businesses	No displacements	5	+
	Displacement of Residences	No displacements	5	
	Economic Development Influence	Alignment maximizes developable land; can influence land on both sides of spur plus Irving Convention Center site.	4	
	Property Availability	Utilizes City of Irving land; Maximizes developable land.	3	
	Total		63	

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

- Significantly Negative 1
- Moderately Negative 2
- Neutral 3
- Moderately Positive 4
- Significantly Positive 5

Critical Factors:

- Positive
- Negative
- Fatal Flaw

+
-
FF

* Flood plain, wetlands, parklands, hazmat etc.

** Noise sensitive receptors

DART Northwest Corridor-Irving Line
Alignment and Station Site Evaluation

Prepared by Wallace Roberts & Todd LLC



First and Second Tier

10/31/2005

Carpenter Ranch

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	Moderate ridership.	3	
	Station Spacing	Very desirable spacing from N. Las Colinas & North Lake College	5	+
	Geometric Requirements	Design complicated by stormwater detention ponds; At-grade side platform	3	
	LRT Operations	At-grade side platform, Slow curve coming out of station; Close to street intersection	3	
	Constructability / Cost	Complex terrain; May require retaining wall and some structure.	2	
Station/ Program	Parking Access / Egress	Limited parking; may require new median cuts.	2	
	Fixed Route Bus Access / Egress	Utilizes existing roadways; Bus access may be limited to eastbound	2	
	Local Traffic Impacts	Mid block crossing may complicate traffic flow.	2	
	Parking Accommodation	Tight fit to meet demand.	3	
	Mode/Operational Adjacency (Bus/Rail)	Limited area for bus activity; Difficult bus turning.	2	
	Pedestrian / Bicycle Accessibility	Working with property to maximize access; Nearby trails.	5	+
Environmental	Neighborhood Compatibility	Mixed use development being designed adjacent to station; Medium density.	4	
	Neighborhood Plan Compatibility	Mixed use development being designed adjacent to station; Medium density	4	
	Environmental Compatibility - Physical*	None anticipated	3	
	Environmental Compatibility - Indirect **	Potential hotel & residential adjacency issues	2	
	Cultural/Historic Compatibility	Carpenter Homestead but no anticipated impact	3	
Real Estate	Displacement of Businesses	No displacements	5	+
	Displacement of Residences	No displacements	5	+
	Economic Development Influence	Mixed use development being planned around station	4	
	Property Availability	Property owner an active participant in process	5	+
	Total		67	

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

- Significantly Negative 1
- Moderately Negative 2
- Neutral 3
- Moderately Positive 4
- Significantly Positive 5

Critical Factors:

- Positive +
- Negative -
- Fatal Flaw FF

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** Noise sensitive receptors

DART Northwest Corridor- Irving Line
Alignment and Station Site Evaluation

Prepared by Wallace Roberts & Todd LLC



First and Second Tier

10/31/2005

North Lake College

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	Very good ridership as both origin and destination. Variety of ridership profile within proximity of station.	5	+
	Station Spacing	Optimal spacing	5	+
	Geometric Requirements	At-grade side platform	5	+
	LRT Operations	No nearby crossings; Good visibility.	5	+
	Constructability / Cost	Station requires rerouting of Brangus Dr.; Grading issues.	2	
Station/ Program	Parking Access / Egress	Site can meet parking demand with rerouted Brangus Dr.	4	
	Fixed Route Bus Access / Egress	Bus access via reconfigured Brangus Dr. with tie to both MacArthur Blvd. and Walnut Hill Ln.	4	
	Local Traffic Impacts	Concept reroutes Brangus Dr., eliminating some local circulation resulting in overall improvement to local circulation.	4	
	Parking Accommodation	Site can meet parking demand with rerouted Brangus Dr.	4	
	Mode/Operational Adjacency (Bus/Rail)	Bus access directly adjacent to platform.	5	+
	Pedestrian / Bicycle Accessibility	Designs conceive pedestrian linkage to single family and multifamily housing as well as to college.	5	+
Environmental	Neighborhood Compatibility	Both and origin & destination station serving neighborhood & college.	5	+
	Neighborhood Plan Compatibility	Station works well with increased enrollment projections; Variety of land uses works well for origin and destination station.	5	+
	Environmental Compatibility - Physical*	None Anticipated	3	
	Environmental Compatibility - Indirect **	Potential impacts due to residential adjacency to be considered; Design sensitivity required.	2	
	Cultural/Historic Compatibility	None anticipated	3	
Real Estate	Displacement of Businesses	No displacements	5	+
	Displacement of Residences	No displacements	5	+
	Economic Development Influence	Little change in land uses anticipated except for a few vacant parcels; Station adjacency tends to increase residential property values.	4	
	Property Availability	Station area within transit ROW and North Lake College property.	5	+
	Total		85	

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

Significantly Negative	1
Moderately Negative	2
Neutral	3
Moderately Positive	4
Significantly Positive	5

Critical Factors:

Positive	+
Negative	-
Fatal Flaw	FF

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** Noise sensitive receptors

DART Northwest Corridor-Irving Line
Alignment and Station Site Evaluation

Prepared by Wallace Roberts & Todd LLC



First and Second Tier

10/31/2005

Belt Line Road

	Evaluation Criteria	Notes	Ranking	
Alignment	Ridership	Good ridership with highway access; temporary terminus to D/FW	4	
	Station Spacing	Terminus station, 7000 feet from next inbound station.	5	+
	Geometric Requirements	Complex design: grade separations , tail track, N &S Options, terrain, drainage issues to be addressed.	2	
	LRT Operations	Must accommodate tail track and future rail expansion and serves as a temporary terminus until rail line extension to D/FW Airport is	2	
	Constructability / Cost	Complex design: grade Separations , tail track, N &S Options, terrain, drainage issues to be addressed.	2	
Station/ Program	Parking Access / Egress	Large, versatile site with highway frontage and local streets.	4	
	Fixed Route Bus Access / Egress	Large, versatile site with highway frontage and local streets.	4	
	Local Traffic Impacts	Would minimally impact lightly traveled Valley View Ln.	4	
	Parking Accommodation	Large versatile site, spatial limitations due only to environmental constraints.	5	+
	Mode/Operational Adjacency (Bus/Rail)	Site design can easily accommodate interface.	5	+
	Pedestrian / Bicycle Accessibility	Isolated site with little pedestrian activity if any.	2	
Environmental	Neighborhood Compatibility	Many transportation uses; high potential for compatible development. D/FW Airport property may further develop in proximity.	5	+
	Neighborhood Plan Compatibility	Working with DFW Airport in station area development; Subject to FAA constraints.	5	+
	Environmental Compatibility - Physical*	Terrain and drainage challenges, but large, versatile site.	3	
	Environmental Compatibility - Indirect **	None anticipated; Site lighting design will need to be sensitive so that it does not visually interfere with runway lighting operations.	3	
	Cultural/Historic Compatibility	None anticipated	3	
Real Estate	Displacement of Businesses	No displacements	5	+
	Displacement of Residences	No displacements	5	+
	Economic Development Influence	High potential for TOD working with DFW Airport; Subject to FAA constraints.	5	+
	Property Availability	Property owned by DFW Airport an active participant in process.	5	+
	Total		78	

Possible Points

100

Ranking Categories:

Alternative with highest numeric ranking indicates most preferred site. Highest score = 100

Significantly Negative	1
Moderately Negative	2
Neutral	3
Moderately Positive	4
Significantly Positive	5

Critical Factors:

Positive	+
Negative	-
Fatal Flaw	FF

* Flood plain, wetlands, parklands, hazmat etc.

** Noise sensitive receptors