



# TRANSIT CONCEPT FOR 2050: ESTIMATED CAPITAL, OPERATIONS & MAINTENANCE COSTS



## TECHNICAL MEMORANDUM DECEMBER 2007

Hillsborough County  
Metropolitan Planning  
Organization  
County Center, 18<sup>th</sup> Floor  
Tampa, Florida 33602  
813-272-5940  
[www.hillsboroughmpo.org](http://www.hillsboroughmpo.org)

Prepared by:  
PB  
5404 West Cypress Street, Suite  
300  
Tampa, Florida 33607  
813-289-5300

## TABLE OF CONTENTS

---

Background	3
Capital Cost Assumptions and Approach	3
Standard Cost Categories	5
Capital Cost Summary	7
Operations and Maintenance Cost Assumptions and Approach	7
Alignment, Service Characteristics, and Operating Details	8
Estimated O&M Annual Cost	10
O&M Cost Summary	13
APPENDIX A	15
Detailed Capital Cost Estimates	15
Preferred LRT – 102 pages	15
Preferred CR – 45 pages	15
APPENDIX B	16
Mapbook Preferred Transit System Plan– 48 pages	16

## BACKGROUND

In November 2006, the Hillsborough Metropolitan Planning Organization (MPO) commenced the MPO Transit Study to assess transit service needs in Hillsborough County in the context of mobility, economic vitality and overall quality of life. Through an iterative process of public visioning and values workshops, stakeholder meetings, technical committee review, and local government oversight, the MPO advanced a series of three conceptual rail transit scenarios along with a grid of Bus Rapid Transit (BRT) and complimentary bus support service.

The three conceptual rail transit scenarios consisted of:

- **Concept A – Tampa Rail:** Concept A revisited the Tampa Rail project as described in the December 2002 Final EIS.
- **Concept B – Light Rail:** Concept B included Concept A with light rail extensions to serve other geographic areas of Hillsborough County such as Southshore, the Airport, New Tampa, and Brandon.
- **Concept C – Commuter Rail:** Concept C consisted of traditional diesel locomotive driven commuter coaches serving areas north to the Polk County line, west to Pinellas County, east to Plant City, and along the Southshore to the Manatee County line.

After further public and stakeholder review as well as input from County technical and leadership committees a **Preferred Transit System Plan** (Transit Concept for 2050) was developed incorporating fixed rail transit components (light rail, commuter rail and regional rail) as well as a complimentary bus system.

The purpose of this technical memorandum is to document the approach, assumptions, and estimated capital and operating costs for the rail elements of the **Transit Concept for 2050**. Complimentary bus service including BRT, local, express and non fixed route bus systems are not addressed in this memorandum.

## CAPITAL COST ASSUMPTIONS AND APPROACH

The capital cost estimate prepared for the Hillsborough MPO Transit System Plan is first and foremost, a planning level estimate. Planning level estimates are based on broad and geographically homogeneous data regarding alignment, grade, and transit system elements. At the planning level, specific information regarding physical conditions, engineering design, and environmental constraints are unknown or in some cases assumed. The planning level

approach for transportation is also referred to as a systems level of analysis. The transportation emphasis at the planning or systems level addresses broad goals of mobility, connectivity, land use, environmental sensitivity, and community input. The following critical project analyses and investigations have not been developed for this planning level of system plan development:

- Engineering design,
- Geotechnical analysis,
- Geometrically rectified survey and mapping,
- Environmental assessment (exception - Tampa Rail Final EIS, Dec 2002),
- Property appraisal,
- Legal review,
- Construction peer review.

Conceptual alignments on aerial based photo images (GIS shape files) were received from Renaissance Planning Group (RPG) and were adjusted by PB Americas (PB). The conceptual alignments consisted of **Concept A** - Tampa Rail, **Concept B** - Tampa Rail with extensions, and **Concept C** - Commuter Rail. PB used planning and engineering judgment to re-align the conceptual locations provided by RPG.

The consequences of this exercise resulted in alignment shifts which provided the following benefits:

- Place the light rail and commuter rail alignments within or adjacent to existing roadway and/or freight rail alignments,
- Eliminate or avoid major commercial and institutional structures,
- Facilitate more economical water body crossings,
- Minimize or avoid major residential takings, park facilities, and natural resource features.

Quantities were computed for the adjusted rail alignments utilizing GIS techniques. Stations were counted from those locations provided by RPG. Stream, river, and bay crossings were computed and special situations such as elevated crossings and vehicle maintenance facilities were factored in. Unit costs were determined utilizing PB's nationwide library of transit cost categories. Unit costs were also localized to consider Tampa conditions. The capital cost estimating professional in charge of the effort is stationed in Orlando. Thus, ready access to local bid data was considered in the determination of unit costs.

## STANDARD COST CATEGORIES

Each of the transit lines was broken down into logical segments. To the extent possible, the segments reflected homogenous land use, terrain, and construction conditions. Unit costs were assigned to the quantities within each segment and compiled to determine segment costs. Segments were then assembled to determine transit line costs for each major **Concept (A, B & C)**. Segments were compiled and identified in a Map Book which illustrated the alignment and stations locations on an aerial image. Spreadsheets were developed using the Federal Transit Administration's (FTA) Standard Cost Categories of transit cost elements. The FTA Standard Cost Categories are common practice in developing capital costs for FTA funding applications; also know as a Full funding Grant Agreement (FFGA). Major cost categories include;

Cost Category 10, Guideway and Track

Cost Category 20, Stations, Stops, Terminals, and Intermodal Facilities

Cost Category 30, Support Facilities; Yards, Shops, and Administrative Buildings

Cost Category 40, Sitework and Special Conditions

Cost Category 50, Systems; Train Control, Signals, Power, Communications, Fare Collection

Cost Category 60, Right of Way (ROW), Land, Existing Improvements

Cost Category 70, Vehicles

Cost Category 80, Professional Services

Cost Category 90, Unallocated Contingency

Unit costs were applied to each of the estimated quantities of cost categories listed above to arrive at a base cost. To account for lack of precision in development of the quantities and the unit costs, a contingency is allocated to the base cost in the amount of 15% to 30% depending upon the complexity of the cost category or uncertainty regarding the location and field conditions associated with the cost category elements. Totals were calculated for all elements within each transit alternative to arrive at an estimated Construction Cost Subtotal.

Cost Category 60 elements, Right of Way (ROW) and property acquisition costs, include not only property and easements, but the process of property acquisition which includes appraisal services, property negotiations, transfer and realtor fees, taxes, legal, and potential condemnation fees. At the systems planning

stage, ROW is estimated using rail route foot unit cost allowances differentiated into three alignment categories; at-grade, aerial, and underground. A contingency of 50% was added to acknowledge the higher level of uncertainty and unknowns typically associated with property valuation for projects at this stage of evaluation.

Light rail and commuter rail vehicle requirements (Cost Category 70) are actually determined from the product of estimated transit ridership and a more detailed train operations and performance plan. This is generally not available at the systems planning level. For Light Rail technology, a rule of thumb of 2 vehicles per rail mile was applied to calculate the number of LRT vehicles to include in the estimate. A factor of 20% was also included to account for spare vehicles, a standard industry practice. For commuter rail technology, a rule of thumb of 0.5 vehicles per rail mile was applied to calculate the number of coach car vehicles, including the same allowance of 20% for spare cars. In addition a factor of 50% of the coach car quantity was included as an allowance for cab cars, as well as a factor of 50% for diesel locomotives. Typically a start up commuter rail train set includes a locomotive, one or more coach cars, and a cab coach. Each of these units in the train set has a different cost. No attempt has been made to distinguish between single level and bi-level commuter rail coaches.

Cost Category 80, Professional Services are commonly called soft costs. The term soft cost is actually a misnomer as Professional Services are often the hardest costs to estimate, particularly at the systems planning level. Soft costs can be significant project cost elements. They include professional engineering, architectural, and planning services for design and project development. Additional soft costs are identified as project management, construction management, insurance, legal, surveys, testing, and start up. These costs are factored as a percentage of construction costs and range individually from 1% to 8% of construction. Soft cost can be found in the standard cost category 80, Professional Services.

Cost Category 90, Unallocated Contingency, accounts for project uncertainty and risk at the early systems planning level of development. It is calculated at 10% of Construction, ROW, and Professional Services.

In summary, total estimated project cost consist of Construction costs (Guideways, Stations, Support Facilities, Sitework, and Systems), ROW costs, Vehicle Costs, Professional Services, and Unallocated Contingency. All costs reflect mid-calendar year 2007 cost. No attempt has been made to account for actual year of expenditure and the impact of inflation upon a projected build year. It is important to account for and acknowledge the actual year of

expenditure as the planning level estimate for 2007 is just a preliminary estimate and considerably more information and time will pass before a more precise estimate can be advanced.

After further public and stakeholder review as well as input from County technical and leadership committees a Preferred Transit System Plan was developed incorporating fixed rail transit components (light rail, commuter rail, and regional rail) as well as a complimentary bus system. Similar to the A, B and C Concept validation effort, RPG generated alignment and station GIS shape files were reviewed and adjusted by PB for to:

- Accommodate or avoid cultural, community and environmental features,
- Enhance ridership
- Avoid conflicts with existing freight rail lines,
- Consolidate facilities
- Reduce construction or ROW costs

## CAPITAL COST SUMMARY

A summary of 2007 Capital Costs for **Transit Concept for 2050** is provided in Table 1.

**Table 1: 2007 Rail Transit Capital Cost Summary**

<b>Transit Alternative</b>	<b>Length (Miles)</b>	<b># Stations</b>	<b># Revenue Vehicles</b>	<b>Capital Costs \$ Billions</b>	<b>Cost Per Mile \$ Millions</b>
Preferred-LRT	60.8	51	147	\$3.831	\$63.00
Preferred – Commuter Rail	91.6	16	112	\$2.331	\$25.44

## OPERATIONS AND MAINTENANCE COST ASSUMPTIONS AND APPROACH

Operations and maintenance (O&M) costs include a wide range of ongoing and re-occurring costs which are necessary to maintain daily operation of a transit system. O&M costs typically include labor, labor fringe benefits (overhead), power, fuel, train & non-train maintenance, special services, materials, supplies, casualty and liability insurance, and general administration. As re-occurring expenses O&M costs are offsetting charges against revenue, thus affecting the agency's income statement. Capital costs are assets and are reflected in the agency's balance sheet.

Similar to the Capital Cost exercise, the O&M cost estimate prepared for the Hillsborough MPO Transit System Plan is a planning level estimate. Planning level estimates for O&M are based on estimated operating scenarios and a sampling of representative transit systems. At the planning level, specific information regarding train performance and operations, schedules, dispatching protocol, and stringline analyses of two way train constraints are unknown. As the Preferred Transit System Plan has been developed with a horizon year of 2050, O&M costs were projected to year 2050 as well.

### **ALIGNMENT, SERVICE CHARACTERISTICS, AND OPERATING DETAILS**

In estimating the O&M costs for the proposed LRT routes in 2050, the following three alignments were used:

- Blue Line: starting at West Park Village station and terminating at Brandon Blvd station
- Red Line: starting in St. Petersburg, Florida and terminating at I-75/Bruce B Downs Blvd station
- Green Line: starting at Interbay Blvd station and terminating at North Blvd in Tampa downtown

The following four lines were used for the commuter rail operating scenario in 2050:

- I-4 Corridor: starting at the Downtown Tampa (Marion St) station and terminating at Plant City station
- Purple Line: starting at the Downtown Tampa (Marion St) station and terminating at Plant City station
- Orange Line: starting at the Downtown Tampa (Marion St) station and terminating at Tamiami Trail station
- Red Line: starting at the Downtown Tampa (Marion St) station and terminating at Land O' Lakes Blvd station

Table 2 provides the basis for the lengths, peak/off-peak travel times, and speeds used.



**Table 2: Service Characteristics and Operating Assumptions**

		Length (miles)	Dir Route Miles	AM and PM Peak Headway	Midday Off-Peak Headway	Evening Off-Peak Headway	Weekend Off-Peak Headway	Average Speed	Cycle Travel Time
				6am to 9am & 3pm to 6pm	9am to 4pm	7pm to 1am	6am to 1am		
<b>LRT</b>	Blue Line	27.85	55.70	10 min	12 min	15 min	15 min	15 mph	223 min
	Red Line	31.65	63.31	10 min	12 min	15 min	15 min	15 mph	253 min
	Green Line	7.81	15.61	10 min	12 min	15 min	15 min	15 mph	62 min
<b>CR</b>	I-40	26.09	52.18	30 min				30 mph	104 min
	Purple	26.37	52.74	30 min	60 min		60 min	30 mph	105 min
	Orange	29.49	58.99	30 min				30 mph	118 min
	Red/Pink	17.56	35.12	30 min	60 min		60 min	30 mph	70 min

These assumptions were derived from the Technical Memorandum entitled “Service Characteristics for Proposed Transit Corridors” dated July 9, 2007 prepared by PB. Since the service characteristics were created before the final alternative alignments were established, headways, and speeds were re-estimated to determine operating needs. Cycle travel times are planning level estimates calculated by dividing cycle travel distance by average speed.

Given the service characteristics, peak vehicles, annual revenue miles, and annual revenue hours were estimated as illustrated in Table 3: Estimates of Vehicle Miles, Vehicle Hours, and Peak Vehicles.

**Table 3: Estimates of Vehicle Miles, Vehicle Hours, and Peak Vehicles**

Service Characteristic	Light Rail			Commuter Rail			
	Blue Line	Red Line	Green Line	I-4	Purple	Orange	Red
<b>Total Annual Vehicles-Miles</b>	1,821,207	2,069,918	510,525	159,667	371,581	180,507	247,417
<b>Total Annual Vehicle-Hours</b>	123,405	140,590	39,520	6,120	13,870	6,120	12,340
<b>Peak Vehicles Required</b>	23	26	7	4	4	4	3

## ESTIMATED O&M ANNUAL COST

Two models were used to estimate annual O&M costs: one model approximates Light Rail Transit operation and another model simulates Commuter Rail operation.

### Light Rail Model

FTA data maintained in the National Transit Database was used to determine cost and efficiency characteristics for the LRT model. Some additional costs from Broward County Transit (BCT) were used. Cost characteristics for 16 LRT operations in the U.S. in 2004 were analyzed to estimate annual cost factors for peak vehicles, annual revenue miles, annual revenue hours, and directional route miles. The table below demonstrates the model used for the calculation of O&M costs. The numbers listed below are in 2004 dollars. The O&M estimates in the last section of this memo are converted to 2007 dollars. An additional 2% was added on for taxes and other miscellaneous expenses.

**Table 4: Light Rail O&M Unit Costs**

<b>Vehicle Operations</b>		
Labor - Admin. & Scheduling	\$31.15	Vehicle Hours
Labor - Operator Wages & Fringes	\$36.71	Vehicle Hours
Propulsion Power - demand	\$6,247.13	Peak Vehicles
Propulsion Power - energy	\$0.68	Vehicle Miles

<b>Maintenance</b>		
Labor - Train Maintenance	\$2.52	Vehicle Miles
Labor - Non Train Maintenance	\$39,797.20	Dir Rte Miles
Services	\$111,114.50	Peak Vehicles
Materials and Supplies	\$1.38	Vehicle Miles

<b>Other</b>		
Casualty and Liability	\$6.32	Vehicle Hours
Labor - General Administration	\$31,733.83	Peak Vehicles

Commuter Rail Model

The Commuter Rail O&M cost model is based on the Light Rail model because it is expected that many of the cost characteristics would be similar. The labor costs associated with vehicle operations (including administration, scheduling, operator wages, and fringes) are assumed to be similar between LRT and Commuter Rail operations. This would mean staffing plans for Commuter Rail operations very similar to what would be used in an LRT environment. Specifically, this means one person operating the vehicle during normal operations. Larger Commuter Rail systems with train set consists of 3 or more coaches can carry additional staff (conductor), but it is unlikely that this would occur in Hillsborough until the system matured in the later years of the planning horizon.

Propulsion costs for Commuter Rail operations are expected to differ from LRT, and the unit cost is specific to Commuter Rail. Regarding maintenance costs, the only line item that is adjusted is the non-vehicle maintenance labor costs, which

are suspected to be lower for Commuter Rail operations because of the lack of a catenary system to maintain. This difference between Commuter Rail and LRT operations could also mean lower vehicle maintenance costs and lower maintenance materials and supplies, although these numbers are not adjusted in the model. Other costs (namely insurance and general administrative costs) are assumed to be similar, regardless of Commuter Rail or LRT mode.

Below, Table 5: Commuter Rail O&M Unit Costs, demonstrates the CR model used for the calculation of O&M costs. The numbers below are in 2006 dollars and the O&M estimates in the last section of this memo are converted to 2007 dollars. An additional 5% was added on for taxes and other miscellaneous expenses.

**Table 5: Commuter Rail O&M Unit Costs**

<b>Vehicle Operations</b>		
Labor - Admin. & Scheduling	\$10.79	Vehicle hours
Labor - Operator Wages & Fringes	\$41.34	Vehicle hours
Propulsion Power	\$2.38	Vehicle miles

<b>Maintenance</b>		
Labor - Train Maintenance	\$2.29	Vehicle miles
Labor - Non Train Maintenance	\$73,294.00	Dir Rte Miles
Services	\$55,872.00	Peak vehicles
Materials and Supplies	\$2.19	Vehicle miles

<b>Other</b>		
Casualty and Liability	\$6.81	Vehicle hours
Labor - General Administration	\$43,223.00	Peak vehicles

**O&M COST SUMMARY**

Cost of annual operating and maintenance of the LRT and CR network are expected be \$91 million in 2007 dollars as illustrated in Table 6.

**Table 6: 2007 O&M Costs for Commuter and Light Rail Transit**

		<b>Total O&amp;M Cost (2007 Dollars)</b>
<b>Light Rail</b>	Blue Line	\$26,065,000
	Red Line	\$29,629,000
	Green Line	\$7,812,000
<b>Commuter Rail</b>	I-4	\$6,358,000
	Purple	\$8,546,000
	Orange	\$7,078,000
	Red	\$5,933,000
<b>Total</b>		<b>\$91,421,000</b>

**Table 7: Summary of Capital and Operational Cost for the Preferred Transit System, By Revenue Line**  
**Unless Designated Otherwise, Costs Are Expressed as \$ Millions**

Category #	Description	LRT Blue	LRT Red	LRT Green	LRT Totals	CR Magenta	CR Purple	CR Orange	CR I-4 Red	CR Totals	LRT&CR Totals
	Length(miles)	23	30	8	61	16	26	26	26	94	155
	# of Stations	20	23	8	51	3	2	6	5	16	67
	# of Rev. Vehicles	55	72	19	147	19	31	31	31	112	259
10	Guideway & Track	\$310	\$493	\$54	\$857	\$69	\$128	\$154	\$305	\$656	\$1,512
20	Stations, Stops, Terminals	\$132	\$81	\$29	\$242	\$5	\$5	\$11	\$11	\$33	\$275
30	Yard, Shops, Buildings	\$105	\$137	\$36	\$278	\$24	\$39	\$39	\$39	\$141	\$419
40	Sitework, Special Conditions	\$98	\$172	\$21	\$290	\$37	\$54	\$60	\$58	\$209	\$500
50	Systems Control, Signals & Communications	\$145	\$182	\$50	\$377	\$23	\$38	\$38	\$24	\$124	\$501
	<b>Construction Cost Totals (Category 10-50)</b>	<b>\$790</b>	<b>\$1,064</b>	<b>\$190</b>	<b>\$2,044</b>	<b>\$158</b>	<b>\$265</b>	<b>\$301</b>	<b>\$438</b>	<b>\$1,162</b>	<b>\$3,206</b>
60	ROW, Land	\$86	\$92	\$25	\$202	\$50	\$83	\$96	\$75	\$304	\$507
70	Vehicles	\$219	\$286	\$76	\$582	\$48	\$78	\$78	\$75	\$280	\$862
80	Professional Services	\$308	\$297	\$49	\$654	\$43	\$72	\$129	\$128	\$372	\$1,026
90	Unallocated Contingency	\$194	\$132	\$23	\$348	\$23	\$38	\$83	\$68	\$212	\$560
	<b>Project Capital Cost Totals (Category 10-90)</b>	<b>\$1,597</b>	<b>\$1,871</b>	<b>\$363</b>	<b>\$3,831</b>	<b>\$322</b>	<b>\$537</b>	<b>\$688</b>	<b>\$784</b>	<b>\$2,331</b>	<b>\$6,162</b>
	Capital Cost Per Mile (\$Millions)	\$69.44	\$62.36	\$45.32	\$62.80	\$20.13	\$20.67	\$26.46	\$30.14	\$24.80	\$39.75
	Annual O&M Costs Per Mile (\$ Millions)	\$1.13	\$0.99	\$0.98	\$1.04	\$0.37	\$0.33	\$0.27	\$0.24	\$0.30	\$1.34

## **APPENDIX A**

### **DETAILED CAPITAL COST ESTIMATES**

**PREFERRED LRT – 102 PAGES**

**PREFERRED CR – 45 PAGES**

Hillsborough County MPO Transit Study  
System Planning  
Light Rail Transit  
Capital Cost Estimate  
(2007 Dollars in Millions)

Description	Alternative Total
Length (Mile):	60.8
Number of Stations:	51
Number of Revenue Vehicles:	147
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>	<b>\$856.55</b>
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>	<b>\$242.10</b>
<b>30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS</b>	<b>\$277.95</b>
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>	<b>\$290.39</b>
<b>50 SYSTEMS</b>	<b>\$376.75</b>
<b>Construction Subtotal (Sum Categories 10 - 50)</b>	<b>\$2,043.74</b>
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>	<b>\$202.43</b>
<b>70 VEHICLES</b>	<b>\$582.12</b>
<b>80 PROFESSIONAL SERVICES</b>	<b>\$654.00</b>
<b>90 UNALLOCATED CONTINGENCY</b>	<b>\$348.23</b>
<b>Total Project Cost</b>	<b>\$3,830.51</b>



System Planning

Light Rail Transit

Capital Cost Estimate

(2007 Dollars in Millions)

CAT No.	Description	LR-Airport		LR-Brandon Ext		LR-Cypress St.	LR-Downtown			LR-1275		LR-Mac Dill AFB		LR-NE Ext	LR-North		LR-Tampa Bay	LR-University		LR-Westchase			LR-Ybor City	Maintenance Facility	Vehicles	Alternative Total	
		LR-01	LR-02	LR-03	LR-04	LR-05	LR-06	LR-07	LR-08	LR-09	LR-10	LR-11	LR-12	LR-13	LR-14	LR-15	LR-16	LR-17	LR-18	LR-19	LR-20	LR-21	LR-22				LR-23
	Length (Mile):	1.1	0.9	1.9	1.5	5.9	0.7	0.5	0.4	0.4	2.5	1.0	7.1	0.7	4.6	5.3	2.7	8.0	3.3	1.2	0.8	1.0	3.1	4.4	1.7		60.8
	Number of Stations:	0	1	2	1	6	1	2	1	1	2	1	8	0	4	5	2	0	3	1	1	1	2	4	2		51
	Number of Revenue Vehicles:																									147	147
<b>10</b>	<b>GUIDEWAY &amp; TRACK ELEMENTS</b>																										
10.01	Guideway: At-grade exclusive right-of-way	\$3.21	\$2.65	\$5.79	\$4.42	\$16.61	\$0.00	\$0.00	\$0.00	\$0.62	\$6.77	\$2.57	\$21.07	\$1.89	\$0.00	\$15.51	\$8.13	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$7.39	\$13.03	\$5.02		\$114.69
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3.03	\$0.81	\$2.01	\$0.97	\$0.00	\$0.00	\$0.00	\$21.33	\$0.00	\$0.00	\$0.00	\$0.00	\$15.06	\$5.50	\$0.00	\$0.00	\$2.45	\$0.00	\$0.00		\$51.16
10.03	Guideway: At-grade in mixed traffic	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
10.04	Guideway: Aerial structure	\$0.78	\$0.00	\$0.00	\$0.00	\$6.24	\$0.00	\$8.13	\$0.00	\$0.00	\$8.58	\$5.72	\$0.00	\$3.12	\$0.00	\$1.17	\$0.00	\$138.39	\$0.00	\$0.00	\$20.74	\$0.00	\$0.78	\$0.39	\$0.00		\$194.03
10.05	Guideway: Built-up fill	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
10.06	Guideway: Underground cut & cover	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.29	\$111.45	\$0.00	\$0.00	\$0.00		\$112.75
10.07	Guideway: Underground tunnel	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
10.08	Guideway: Retained cut or fill	\$0.00	\$0.00	\$0.00	\$0.00	\$3.33	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$102.05	\$0.00	\$0.00	\$7.07	\$0.00	\$5.20	\$0.00	\$0.00		\$120.15
10.09	Track: Direct fixation	\$0.09	\$0.00	\$0.00	\$0.00	\$0.75	\$0.00	\$1.02	\$0.00	\$0.00	\$1.12	\$0.75	\$0.00	\$0.37	\$0.00	\$0.14	\$0.00	\$16.67	\$0.00	\$0.00	\$3.13	\$4.96	\$0.56	\$0.05	\$0.00		\$29.61
10.10	Track: Embedded	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3.91	\$1.05	\$2.59	\$1.25	\$0.00	\$0.00	\$0.00	\$27.47	\$0.00	\$0.00	\$0.00	\$0.00	\$19.40	\$7.08	\$0.00	\$0.00	\$3.16	\$0.00	\$0.00		\$65.89
10.11	Track: Ballasted	\$3.15	\$2.60	\$5.68	\$4.34	\$16.74	\$0.00	\$0.33	\$0.00	\$0.61	\$6.64	\$2.52	\$20.68	\$1.85	\$0.00	\$15.22	\$7.98	\$13.54	\$0.00	\$0.00	\$0.39	\$0.00	\$7.25	\$12.79	\$4.92		\$127.25
10.12	Track: Special (switches, turnouts)	\$0.49	\$0.39	\$0.85	\$0.65	\$2.62	\$0.59	\$0.36	\$0.39	\$0.28	\$1.16	\$0.49	\$3.10	\$0.33	\$4.12	\$2.30	\$1.20	\$4.53	\$2.91	\$1.06	\$0.53	\$0.74	\$1.64	\$1.93	\$0.74		\$33.41
10.13	Track: Vibration and noise dampening	\$0.19	\$0.16	\$0.34	\$0.26	\$1.00	\$0.00	\$0.02	\$0.00	\$0.04	\$0.40	\$0.15	\$1.24	\$0.11	\$0.00	\$0.91	\$0.48	\$0.81	\$0.00	\$0.00	\$0.02	\$0.00	\$0.44	\$0.77	\$0.30		\$7.63
	<b>Subtotal Category 10</b>	<b>\$7.91</b>	<b>\$5.80</b>	<b>\$12.67</b>	<b>\$9.67</b>	<b>\$47.29</b>	<b>\$7.53</b>	<b>\$14.22</b>	<b>\$4.98</b>	<b>\$3.76</b>	<b>\$24.66</b>	<b>\$12.20</b>	<b>\$46.09</b>	<b>\$7.68</b>	<b>\$52.91</b>	<b>\$35.27</b>	<b>\$17.79</b>	<b>\$276.00</b>	<b>\$37.37</b>	<b>\$13.64</b>	<b>\$33.17</b>	<b>\$117.16</b>	<b>\$28.87</b>	<b>\$28.95</b>	<b>\$10.97</b>		<b>\$856.55</b>
<b>20</b>	<b>STATIONS, STOPS, TERMINALS, INTERMODAL</b>																										
20.01	At-grade station, stop, shelter, mall, terminal, platform	\$0.00	\$3.60	\$7.20	\$3.60	\$21.60	\$3.60	\$7.20	\$3.60	\$3.60	\$7.20	\$3.60	\$28.80	\$0.00	\$14.40	\$18.00	\$7.20	\$0.00	\$10.80	\$3.60	\$3.60	\$0.00	\$7.20	\$14.40	\$7.20		\$180.00
20.02	Aerial station, stop, shelter, mall, terminal, platform	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
20.03	Underground station, stop, shelter, mall, terminal, platform	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$58.50	\$0.00	\$0.00	\$0.00		\$58.50
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
20.05	Joint development	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
20.06	Automobile parking multi-story structure	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
20.07	Elevators, escalators	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.02	\$1.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.56	\$0.00	\$0.00	\$0.00		\$3.60
	<b>Subtotal Category 20</b>	<b>\$0.00</b>	<b>\$3.60</b>	<b>\$7.20</b>	<b>\$3.60</b>	<b>\$21.60</b>	<b>\$3.60</b>	<b>\$7.20</b>	<b>\$3.60</b>	<b>\$3.60</b>	<b>\$8.22</b>	<b>\$4.62</b>	<b>\$28.80</b>	<b>\$0.00</b>	<b>\$14.40</b>	<b>\$18.00</b>	<b>\$7.20</b>	<b>\$0.00</b>	<b>\$10.80</b>	<b>\$3.60</b>	<b>\$3.60</b>	<b>\$60.06</b>	<b>\$7.20</b>	<b>\$14.40</b>	<b>\$7.20</b>		<b>\$242.10</b>

System Planning

Light Rail Transit

Capital Cost Estimate

(2007 Dollars in Millions)

CAT No.	Description	LR-Airport	LR-02	LR-03	LR-04	LR-05	LR-06	LR-07	LR-08	LR-09	LR-10	LR-11	LR-12	LR-13	LR-14	LR-15	LR-16	LR-17	LR-18	LR-19	LR-20	LR-21	LR-22	LR-23	LR-24	Maintenance Facility	Vehicles	Alternative Total
		Airport Sta to George Bean Parkway	George Bean Parkway to Trask St along Spruce St.	Downtown to CL Rail (east of Acline St)	East of Acline to CSX main line & Yard	East of CSX mainline & Yard to Kingsway	Spruce St to Cypress St along Trask St	N Boulevard to N Tampa St.	N N Tampa St. to N Marion St/ E Polk Ave	N Marion/ E Polk to N Nebraska Ave	Armenia Ave to West Shore Dr.	N Boulevard to Armenia Ave.	N Boulevard/ Tampa Prep Pl to Mac Dill AFB	E Polk/ N Marion to N Boulevard/ Tampa Prep Pl	Bruce B Downs/ 37th to Pebble Creek (east of I-75)	CSX N/S split to Busch Blvd	Busch Blvd. to 30th St.	West Shore Dr to St. Pete	30th St to Maple Dr to Fletcher/ 31st (Univ)	E Fletcher/ 31st St to N 37th St	Airport to at grade section	Airport (north) to Hillsborough	Hillsborough to CSX	On CSX to west of Sheldon	Nebraska Ave. to CSX N/S split			
<b>30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS</b>																												
30.01	Administration Building: Office, sales, storage, revenue counting																										\$0.00	\$0.00
30.02	Light Maintenance Facility																										\$0.00	\$0.00
30.03	Heavy Maintenance Facility																										\$275.63	\$275.63
30.04	Storage or Maintenance of Way Building																										\$0.00	\$0.00
30.05	Yard and Yard Track																										\$2.32	\$2.32
	<b>Subtotal Category 30</b>																										\$277.95	\$277.95
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>																												
40.01	Demolition, Clearing, Earthwork	\$0.23	\$0.18	\$0.40	\$0.31	\$1.26	\$0.23	\$0.17	\$0.15	\$0.11	\$0.55	\$0.23	\$1.46	\$0.16	\$1.58	\$1.09	\$0.56	\$2.76	\$1.12	\$0.41	\$0.27	\$0.62	\$0.73	\$0.91	\$0.35		\$15.83	
40.02	Site Utilities, Utility Relocation	\$1.08	\$0.86	\$1.87	\$1.43	\$6.08	\$1.53	\$1.16	\$1.01	\$0.69	\$2.72	\$1.18	\$6.82	\$0.79	\$10.77	\$5.09	\$2.63	\$18.75	\$7.61	\$2.78	\$1.81	\$3.95	\$3.89	\$4.24	\$1.62		\$90.38	
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	\$0.15	\$0.12	\$0.27	\$0.20	\$0.81	\$0.09	\$0.07	\$0.06	\$0.06	\$0.34	\$0.14	\$0.97	\$0.10	\$0.63	\$0.72	\$0.38	\$1.10	\$0.45	\$0.16	\$0.11	\$0.14	\$0.43	\$0.60	\$0.23		\$8.34	
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks	\$0.38	\$0.31	\$0.67	\$0.51	\$2.02	\$0.23	\$0.17	\$0.15	\$0.14	\$0.86	\$0.35	\$2.44	\$0.24	\$1.58	\$1.80	\$0.94	\$2.76	\$1.12	\$0.41	\$0.26	\$0.35	\$1.07	\$1.51	\$0.58		\$20.85	
40.05	Site structures including retaining walls, sound walls	\$0.06	\$0.05	\$0.11	\$0.08	\$0.32	\$0.00	\$0.01	\$0.00	\$0.01	\$0.13	\$0.05	\$0.39	\$0.03	\$0.00	\$0.29	\$0.15	\$0.26	\$0.00	\$0.01	\$0.00	\$0.01	\$0.00	\$0.14	\$0.24	\$0.09		\$2.40
40.06	Pedestrian / bike access and accommodation, landscaping	\$0.16	\$0.16	\$0.34	\$0.24	\$1.13	\$0.18	\$0.28	\$0.13	\$0.11	\$2.59	\$1.28	\$1.26	\$0.13	\$1.17	\$0.91	\$0.44	\$3.78	\$0.83	\$0.30	\$0.46	\$1.94	\$0.61	\$0.75	\$0.30		\$19.49	
40.07	Automobile, bus, van accessways including roads, parking lots	\$0.00	\$0.52	\$0.52	\$0.52	\$11.44	\$14.88	\$0.93	\$2.28	\$1.10	\$0.00	\$0.00	\$5.20	\$0.00	\$34.77	\$1.56	\$3.12	\$0.00	\$21.90	\$7.83	\$0.52	\$0.52	\$4.90	\$7.28	\$0.00		\$119.79	
40.08	Temporary Facilities and other indirect costs during construction	\$0.10	\$0.11	\$0.20	\$0.16	\$1.11	\$0.82	\$0.13	\$0.18	\$0.11	\$0.35	\$0.16	\$0.89	\$0.07	\$2.43	\$0.55	\$0.40	\$1.41	\$1.59	\$0.57	\$0.17	\$0.36	\$0.57	\$0.75	\$0.15		\$13.32	
	<b>Subtotal Category 40</b>	<b>\$2.15</b>	<b>\$2.30</b>	<b>\$4.38</b>	<b>\$3.45</b>	<b>\$24.16</b>	<b>\$17.96</b>	<b>\$2.93</b>	<b>\$3.97</b>	<b>\$2.34</b>	<b>\$7.53</b>	<b>\$3.38</b>	<b>\$19.43</b>	<b>\$1.52</b>	<b>\$52.95</b>	<b>\$12.00</b>	<b>\$8.62</b>	<b>\$30.83</b>	<b>\$34.61</b>	<b>\$12.46</b>	<b>\$3.61</b>	<b>\$7.87</b>	<b>\$12.34</b>	<b>\$16.27</b>	<b>\$3.33</b>		<b>\$290.39</b>	
<b>50 SYSTEMS</b>																												
50.01	Train control and signals	\$1.74	\$1.41	\$3.08	\$2.35	\$9.31	\$1.04	\$0.79	\$0.69	\$0.66	\$3.95	\$1.60	\$11.20	\$1.12	\$7.29	\$8.29	\$4.32	\$12.69	\$5.15	\$1.88	\$1.21	\$1.59	\$4.94	\$6.94	\$2.67		\$95.91	
50.02	Traffic signals and crossing protection	\$0.86	\$0.58	\$1.44	\$1.15	\$4.31	\$0.52	\$0.17	\$0.35	\$0.46	\$1.73	\$0.58	\$5.46	\$0.58	\$4.14	\$4.03	\$2.01	\$0.00	\$2.93	\$1.04	\$0.00	\$0.00	\$2.53	\$3.45	\$1.15		\$39.45	
50.03	Traction power supply: substations	\$2.99	\$1.50	\$2.99	\$2.99	\$8.97	\$1.50	\$1.50	\$1.50	\$1.50	\$4.49	\$2.99	\$11.96	\$1.50	\$7.48	\$8.97	\$4.49	\$13.46	\$5.98	\$2.99	\$1.50	\$2.99	\$5.98	\$7.48	\$2.99		\$110.63	
50.04	Traction power distribution: catenary and third rail	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	
50.05	Communications	\$1.60	\$1.88	\$3.99	\$2.74	\$12.04	\$1.53	\$1.88	\$1.21	\$1.18	\$4.80	\$2.06	\$14.94	\$1.04	\$9.03	\$10.53	\$5.14	\$11.71	\$6.48	\$2.31	\$1.70	\$2.05	\$5.71	\$8.71	\$3.61		\$117.86	
50.06	Fare collection system and equipment	\$0.00	\$0.25	\$0.51	\$0.25	\$1.52	\$0.25	\$0.51	\$0.25	\$0.25	\$0.51	\$0.25	\$2.02	\$0.00	\$1.01	\$1.27	\$0.51	\$0.00	\$0.76	\$0.25	\$0.25	\$0.25	\$0.51	\$1.01	\$0.51		\$12.90	
50.07	Central Control	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	
	<b>Subtotal Category 50</b>	<b>\$7.19</b>	<b>\$5.61</b>	<b>\$12.00</b>	<b>\$9.49</b>	<b>\$36.15</b>	<b>\$4.83</b>	<b>\$4.84</b>	<b>\$3.99</b>	<b>\$4.05</b>	<b>\$15.47</b>	<b>\$7.48</b>	<b>\$45.59</b>	<b>\$4.23</b>	<b>\$28.94</b>	<b>\$33.08</b>	<b>\$16.47</b>	<b>\$37.85</b>	<b>\$21.29</b>	<b>\$8.47</b>	<b>\$4.66</b>	<b>\$6.88</b>	<b>\$19.67</b>	<b>\$27.59</b>	<b>\$10.92</b>		<b>\$376.75</b>	
	<b>Subtotal Construction Costs</b>	<b>\$17.26</b>	<b>\$17.31</b>	<b>\$36.25</b>	<b>\$26.21</b>	<b>\$129.20</b>	<b>\$33.93</b>	<b>\$29.18</b>	<b>\$16.53</b>	<b>\$13.75</b>	<b>\$55.88</b>	<b>\$27.68</b>	<b>\$139.91</b>	<b>\$13.44</b>	<b>\$149.20</b>	<b>\$98.35</b>	<b>\$50.09</b>	<b>\$344.68</b>	<b>\$104.07</b>	<b>\$38.16</b>	<b>\$45.03</b>	<b>\$191.97</b>	<b>\$68.08</b>	<b>\$87.21</b>	<b>\$32.43</b>	<b>\$277.95</b>	<b>\$2,043.74</b>	

Hillsborough County MPO Transit Study  
System Planning  
Light Rail Transit  
Capital Cost Estimate  
(2007 Dollars in Millions)

Preferred LRT

CAT No.	Description	LR-Airport		LR-Brandon Ext		LR-Cypress St.	LR-Downtown			LR-1275		LR-Mac Dill AFB		LR-NE Ext	LR-North		LR-Tampa Bay	LR-University		LR-Westchase		LR-Ybor City		Maintenance Facility	Vehicles	Alternative Total			
		LR-01 Airport Sta to George Bean Parkway	LR-02 George Bean Parkway to Trask St along Spruce St.	LR-03 Downtown to CL Rail (east of Acline St)	LR-04 East of Acline to CSX main line & Yard	LR-05 East of CSX mainline & Yard to Kingsway	LR-06 Spruce St to Cypress St along Trask St	LR-07 N Boulevard to N Tampa St.	LR-08 N Tampa St. to N Marion St/ E Polk St.	LR-09 N Marion/ E Polk to N Nebraska Ave	LR-10 Armenia Ave to West Shore Dr.	LR-11 N Boulevard to Armenia Ave.	LR-12 N Boulevard/ Tampa Prep Pl to Mac Dill AFB	LR-13 E Polk/ N Marion to N Boulevard/ Tampa Prep Pl	LR-14 Bruce B Downs/ 37th to Pebble Creek (east of I-75)	LR-15 CSX N/S split to Busch Blvd	LR-16 Busch Blvd. to 30th St.	LR-17 West Shore Dr to St. Pete	LR-18 30th St to Maple Dr to Fletcher/ 31st (Univ)	LR-19 E Fletcher/ 31st St to N 37th St	LR-20 Airport to at grade section	LR-21 Airport (north) to Hillsborough	LR-22 Hillsborough to CSX				LR-23 On CSX to west of Sheldon	LR-24 Nebraska Ave. to CSX N/S split	
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>																													
60.01	Purchase or lease of real estate	\$3.47	\$2.83	\$6.18	\$4.72	\$18.55	\$2.08	\$1.41	\$1.38	\$1.33	\$7.76	\$3.10	\$22.48	\$2.20	\$14.62	\$16.62	\$8.68	\$22.77	\$10.33	\$3.77	\$1.99	\$2.00	\$9.91	\$13.92	\$5.35	\$15.00	\$202.43		
<b>Subtotal Right-of-Way</b>		<b>\$3.47</b>	<b>\$2.83</b>	<b>\$6.18</b>	<b>\$4.72</b>	<b>\$18.55</b>	<b>\$2.08</b>	<b>\$1.41</b>	<b>\$1.38</b>	<b>\$1.33</b>	<b>\$7.76</b>	<b>\$3.10</b>	<b>\$22.48</b>	<b>\$2.20</b>	<b>\$14.62</b>	<b>\$16.62</b>	<b>\$8.68</b>	<b>\$22.77</b>	<b>\$10.33</b>	<b>\$3.77</b>	<b>\$1.99</b>	<b>\$2.00</b>	<b>\$9.91</b>	<b>\$13.92</b>	<b>\$5.35</b>	<b>\$15.00</b>	<b>\$202.43</b>		
<b>70 VEHICLES</b>																													
70.01	Streetcar																									\$582.12	\$582.12		
<b>Subtotal Vehicles</b>																											<b>\$582.12</b>	<b>\$582.12</b>	
<b>80 PROFESSIONAL SERVICES</b>																													
80.01	Preliminary Engineering	4.0%	\$0.69	\$0.69	\$1.45	\$1.05	\$5.17	\$1.36	\$1.17	\$0.66	\$2.24	\$1.11	\$5.60	\$0.54	\$5.97	\$3.93	\$2.00	\$13.79	\$4.16	\$1.53	\$1.80	\$7.68	\$2.72	\$3.49	\$1.30	\$11.12	\$81.75		
80.02	Final Design	6.0%	\$1.04	\$1.04	\$2.17	\$1.57	\$7.75	\$2.04	\$1.75	\$0.99	\$3.35	\$1.66	\$8.39	\$0.81	\$8.95	\$5.90	\$3.01	\$20.68	\$6.24	\$2.29	\$2.70	\$11.52	\$4.08	\$5.23	\$1.95	\$16.68	\$122.62		
80.03	Project Management for Design and Construction	5.0%	\$0.86	\$0.87	\$1.81	\$1.31	\$6.46	\$1.70	\$1.46	\$0.83	\$2.79	\$1.38	\$7.00	\$0.67	\$7.46	\$4.92	\$2.50	\$17.23	\$5.20	\$1.91	\$2.25	\$9.60	\$3.40	\$4.36	\$1.62	\$13.90	\$102.19		
80.04	Construction Administration & Management	8.0%	\$1.38	\$1.38	\$2.90	\$2.10	\$10.34	\$2.71	\$2.33	\$1.32	\$4.47	\$2.21	\$11.19	\$1.07	\$11.94	\$7.87	\$4.01	\$27.57	\$8.33	\$3.05	\$3.60	\$15.36	\$5.45	\$6.98	\$2.59	\$22.24	\$163.50		
80.05	Insurance	2.0%	\$0.35	\$0.35	\$0.72	\$0.52	\$2.58	\$0.68	\$0.58	\$0.33	\$0.27	\$1.12	\$0.55	\$0.27	\$2.98	\$1.97	\$1.00	\$6.89	\$2.08	\$0.76	\$0.90	\$3.84	\$1.36	\$1.74	\$0.65	\$5.56	\$40.87		
80.06	Legal; Permits; Review Fees by other agencies, cities, etc.	3.0%	\$0.52	\$0.52	\$1.09	\$0.79	\$3.88	\$1.02	\$0.88	\$0.50	\$1.68	\$0.83	\$4.20	\$0.40	\$4.48	\$2.95	\$1.50	\$10.34	\$3.12	\$1.14	\$1.35	\$5.76	\$2.04	\$2.62	\$0.97	\$8.34	\$61.31		
80.07	Surveys, Testing, Investigation, Inspection	3.0%	\$0.52	\$0.52	\$1.09	\$0.79	\$3.88	\$1.02	\$0.88	\$0.50	\$1.68	\$0.83	\$4.20	\$0.40	\$4.48	\$2.95	\$1.50	\$10.34	\$3.12	\$1.14	\$1.35	\$5.76	\$2.04	\$2.62	\$0.97	\$8.34	\$61.31		
80.08	Start up	1.0%	\$0.17	\$0.17	\$0.36	\$0.26	\$1.29	\$0.34	\$0.29	\$0.17	\$0.56	\$0.28	\$1.40	\$0.13	\$1.49	\$0.98	\$0.50	\$3.45	\$1.04	\$0.38	\$0.45	\$1.92	\$0.68	\$0.87	\$0.32	\$2.78	\$20.44		
<b>Subtotal Professional Services</b>		<b>LS</b>	<b>\$5.52</b>	<b>\$5.54</b>	<b>\$11.60</b>	<b>\$8.39</b>	<b>\$41.34</b>	<b>\$10.86</b>	<b>\$9.34</b>	<b>\$5.29</b>	<b>\$4.40</b>	<b>\$17.88</b>	<b>\$8.86</b>	<b>\$44.77</b>	<b>\$4.30</b>	<b>\$47.74</b>	<b>\$31.47</b>	<b>\$110.30</b>	<b>\$33.30</b>	<b>\$12.21</b>	<b>\$14.41</b>	<b>\$61.43</b>	<b>\$21.78</b>	<b>\$27.91</b>	<b>\$10.38</b>	<b>\$88.94</b>	<b>\$0.00</b>	<b>\$654.00</b>	
<b>90 UNALLOCATED CONTINGENCY</b>																													
		10.0%	\$2.62	\$2.57	\$5.40	\$3.93	\$18.91	\$4.69	\$3.99	\$2.32	\$1.95	\$8.15	\$3.96	\$20.72	\$1.99	\$21.16	\$14.64	\$7.48	\$47.77	\$14.77	\$5.41	\$6.14	\$25.54	\$9.98	\$12.90	\$4.82	\$38.19	\$58.21	\$348.23
<b>Project Total</b>			<b>\$28.87</b>	<b>\$28.24</b>	<b>\$59.43</b>	<b>\$43.25</b>	<b>\$208.00</b>	<b>\$51.55</b>	<b>\$43.92</b>	<b>\$25.52</b>	<b>\$21.42</b>	<b>\$89.67</b>	<b>\$43.60</b>	<b>\$227.88</b>	<b>\$21.93</b>	<b>\$232.73</b>	<b>\$161.08</b>	<b>\$82.27</b>	<b>\$525.52</b>	<b>\$162.47</b>	<b>\$59.56</b>	<b>\$67.58</b>	<b>\$280.94</b>	<b>\$109.74</b>	<b>\$141.94</b>	<b>\$52.98</b>	<b>\$420.08</b>	<b>\$640.33</b>	<b>\$3,830.51</b>

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Airport  
 Airport Sta to George Bean Parkway

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTG	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	5,708	RF	\$450	\$2,568,506	25%	\$3,210,633
			Element Total	5,708	RF		\$2,568,506		\$3,210,633
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	100	RF	\$6,000	\$600,000	30%	\$780,000
			Element Total	100	RF		\$600,000		\$780,000
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	100	RF	\$810	\$81,000	15%	\$93,150
			Element Total	100	RF		\$81,000		\$93,150
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	5,708	RF	\$480	\$2,739,740	15%	\$3,150,701
			Element Total	5,708	RF		\$2,739,740		\$3,150,701

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Airport  
 Airport Sta to George Bean Parkway

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$423,111	15%	\$486,578
			Element Total	1	LS		\$423,111		\$486,578
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$164,384	15%	\$189,042
			Element Total	1	LS		\$164,384		\$189,042
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	0	EA	\$3,000,000	\$0	20%	\$0
			Element Total	0	EA		\$0		\$0
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	5,708	RF	\$30	\$171,234	30%	\$222,604
			Demolition Allowance - Median	100	RF	\$50	\$5,000	30%	\$6,500
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	5,808	RF		\$176,234		\$229,104
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	5,708	RF	\$140	\$799,091	30%	\$1,038,818
			Utility Relocation Allowance - Median	100	RF	\$340	\$34,000	30%	\$44,200
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	5,808	RF		\$833,091		\$1,083,018
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	5,808	RF	\$20	\$116,156	30%	\$151,003
			Element Total	1	LS		\$116,156		\$151,003

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Airport  
 Airport Sta to George Bean Parkway

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	5,808	RF	\$50	\$290,390	30%	\$377,506
			Element Total	1	LS		\$290,390		\$377,506
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	571	RF	\$80	\$45,662	30%	\$59,361
			Element Total	1	LS		\$45,662		\$59,361
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	5,708	RF	\$15	\$85,617	30%	\$111,302
			Landscaping Allowance - Median	100	RF	\$25	\$2,500	30%	\$3,250
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$31,685	30%	\$41,191
			Element Total	1	LS		\$119,802		\$155,743
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$0		\$0
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$79,067	25%	\$98,833
			Element Total	1	LS		\$79,067		\$98,833
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Signal System	0	RF	\$240	\$0	15%	\$0
	Double Track		Signal System	5,808	RF	\$260	\$1,510,026	15%	\$1,736,530
			Element Total	5,808	RF		\$1,510,026		\$1,736,530
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	3	EA	\$250,000	\$750,000	15%	\$862,500
			Element Total	3	EA		\$750,000		\$862,500
50.03	Traction power supply: substations		Traction Power, Substation	2	EA	\$1,300,000	\$2,600,000	15%	\$2,990,000
			Element Total	2	EA		\$2,600,000		\$2,990,000
50.04	Traction power distribution: catenary and third rail		OCS System - Standard	0	RF	\$240	\$0	15%	\$0
	Double Track		OCS System - Standard	5,808	RF	\$260	\$1,510,026	15%	\$1,736,530
			Element Total	5,808	RF		\$0		\$0
50.05	Communications		Communication, Line	5,808	RF	\$240	\$1,393,870	15%	\$1,602,950
			Communication, Station	0	EA	\$500,000	\$0	15%	\$0
			Element Total	1	LS		\$1,393,870		\$1,602,950
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	0	EA	\$220,000	\$0	15%	\$0
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Airport  
 Airport Sta to George Bean Parkway

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	5,708	RF	\$400	\$2,283,116	50%	\$3,424,675
			Right of Way Allowance - Aerial	100	RF	\$300	\$30,000	50%	\$45,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	5,808	RF		\$2,313,116		\$3,469,675

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Airport  
 George Bean Parkway to Trask St along Spruce St.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTG	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
			Single Track	0	RF	\$350	\$0	25%	\$0
			Double Track	4,711	RF	\$450	\$2,120,134	25%	\$2,650,167
			Element Total	4,711	RF		\$2,120,134		\$2,650,167
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
			Single Track	0	RF	\$440	\$0	25%	\$0
			Single Track	0	RF	\$580	\$0	25%	\$0
			Double Track	0	RF	\$530	\$0	25%	\$0
			Double Track	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
			Single Track	0	RF	\$560	\$0	25%	\$0
			Double Track	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
			Single Track	0	RF	\$8,200	\$0	30%	\$0
			Single Track	0	RF	\$4,600	\$0	30%	\$0
			Single Track	0	RF	\$5,000	\$0	30%	\$0
			Double Track	0	RF	\$12,200	\$0	30%	\$0
			Double Track	0	RF	\$5,500	\$0	30%	\$0
			Double Track	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05 Guideway: Built-up fill									
			Single Track	0	RF	\$480	\$0	25%	\$0
			Double Track	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
			Single Track	0	RF	\$10,000	\$0	35%	\$0
			Double Track	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
			Single Track	0	RF	\$12,000	\$0	35%	\$0
			Double Track	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
			Single Track	0	RF	\$6,800	\$0	30%	\$0
			Single Track	0	RF	\$2,800	\$0	30%	\$0
			Double Track	0	RF	\$8,000	\$0	30%	\$0
			Double Track	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
			Single Track	0	RF	\$405	\$0	15%	\$0
			Double Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10 Track: Embedded									
			Single Track	0	RF	\$490	\$0	15%	\$0
			Double Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
			Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	4,711	RF	\$480	\$2,261,476	15%	\$2,600,697
			Element Total	4,711	RF		\$2,261,476		\$2,600,697



**Hillsborough County MPO Transit Study  
System Planning  
LR-Airport  
George Bean Parkway to Trask St along Spruce St.**

**TRANSIT MODE: LRT**

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$339,221	15%	\$390,105
			Element Total	1	LS		\$339,221		\$390,105
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$135,689	15%	\$156,042
			Element Total	1	LS		\$135,689		\$156,042
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	1	EA	\$3,000,000	\$3,000,000	20%	\$3,600,000
			Element Total	1	EA		\$3,000,000		\$3,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	4,711	RF	\$30	\$141,342	30%	\$183,745
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	4,711	RF		\$141,342		\$183,745
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	4,711	RF	\$140	\$659,597	30%	\$857,476
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	4,711	RF		\$659,597		\$857,476
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	4,711	RF	\$20	\$94,228	30%	\$122,497
			Element Total	1	LS		\$94,228		\$122,497

**Hillsborough County MPO Transit Study  
System Planning  
LR-Airport  
George Bean Parkway to Trask St along Spruce St.**

**TRANSIT MODE: LRT**

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	4,711	RF	\$50	\$235,570	30%	\$306,242
			Element Total	1	LS		\$235,570		\$306,242
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	471	RF	\$80	\$37,691	30%	\$48,999
			Element Total	1	LS		\$37,691		\$48,999
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	4,711	RF	\$15	\$70,671	30%	\$91,872
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$51,201	30%	\$66,562
			Element Total	1	LS		\$121,872		\$158,434
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	100	STL	\$4,000	\$400,000	30%	\$520,000
			Element Total	1	LS		\$400,000		\$520,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$84,515	25%	\$105,644
			Element Total	1	LS		\$84,515		\$105,644
<b>50 SYSTEMS</b>									
50.01	Train control and signals		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	4,711	RF	\$260	\$1,224,966	15%	\$1,408,711
			Element Total	4,711	RF		\$1,224,966		\$1,408,711
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	2	EA	\$250,000	\$500,000	15%	\$575,000
			Element Total	2	EA		\$500,000		\$575,000
50.03	Traction power supply: substations		Traction Power, Substation	1	EA	\$1,300,000	\$1,300,000	15%	\$1,495,000
			Element Total	1	EA		\$1,300,000		\$1,495,000
50.04	Traction power distribution: catenary and third rail		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	4,711	RF	\$260	\$1,224,966	15%	\$1,408,711
			Element Total	4,711	RF		\$0		\$0
50.05	Communications		Communication, Line	4,711	RF	\$240	\$1,130,738	15%	\$1,300,349
			Communication, Station	1	EA	\$500,000	\$500,000	15%	\$575,000
			Element Total	1	LS		\$1,630,738		\$1,875,349
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	1	EA	\$220,000	\$220,000	15%	\$253,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$220,000		\$253,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Airport  
 George Bean Parkway to Trask St along Spruce St.

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTCY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	4,711	RF	\$400	\$1,884,563	50%	\$2,826,845
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	4,711	RF		\$1,884,563		\$2,826,845

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 Downtown to CL Rail (east of Acline St)

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	10,295	RF	\$450	\$4,632,828	25%	\$5,791,035
			Element Total	10,295	RF		\$4,632,828		\$5,791,035
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	10,295	RF	\$480	\$4,941,683	15%	\$5,682,936
			Element Total	10,295	RF		\$4,941,683		\$5,682,936

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 Downtown to CL Rail (east of Acline St)

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$741,253	15%	\$852,440
			Element Total	1	LS		\$741,253		\$852,440
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$296,501	15%	\$340,976
			Element Total	1	LS		\$296,501		\$340,976
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	2	EA	\$3,000,000	\$6,000,000	20%	\$7,200,000
			Element Total	2	EA		\$6,000,000		\$7,200,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	10,295	RF	\$30	\$308,855	30%	\$401,512
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	10,295	RF		\$308,855		\$401,512
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	10,295	RF	\$140	\$1,441,324	30%	\$1,873,722
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	10,295	RF		\$1,441,324		\$1,873,722
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	10,295	RF	\$20	\$205,903	30%	\$267,675
			Element Total	1	LS		\$205,903		\$267,675

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 Downtown to CL Rail (east of Acline St)

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	10,295	RF	\$50	\$514,759	30%	\$669,186
			Element Total	1	LS		\$514,759		\$669,186
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	1,030	RF	\$80	\$82,361	30%	\$107,070
			Element Total	1	LS		\$82,361		\$107,070
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	10,295	RF	\$15	\$154,428	30%	\$200,756
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$106,328	30%	\$138,227
			Element Total	1	LS		\$260,756		\$338,983
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	100	STL	\$4,000	\$400,000	30%	\$520,000
			Element Total	1	LS		\$400,000		\$520,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$160,698	25%	\$200,872
			Element Total	1	LS		\$160,698		\$200,872
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	10,295	RF	\$260	\$2,676,745	15%	\$3,078,257
			Element Total	10,295	RF		\$2,676,745		\$3,078,257
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	5	EA	\$250,000	\$1,250,000	15%	\$1,437,500
			Element Total	5	EA		\$1,250,000		\$1,437,500
50.03	Traction power supply: substations		Traction Power, Substation	2	EA	\$1,300,000	\$2,600,000	15%	\$2,990,000
			Element Total	2	EA		\$2,600,000		\$2,990,000
50.04	Traction power distribution: catenary and third rail		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	10,295	RF	\$260	\$2,676,745	15%	\$3,078,257
			Element Total	10,295	RF		\$0		\$0
50.05	Communications		Communication, Line	10,295	RF	\$240	\$2,470,842	15%	\$2,841,468
			Communication, Station	2	EA	\$500,000	\$1,000,000	15%	\$1,150,000
			Element Total	1	LS		\$3,470,842		\$3,991,468
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	2	EA	\$220,000	\$440,000	15%	\$506,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$440,000		\$506,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 Downtown to CL Rail (east of Acline St)

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	10,295	RF	\$400	\$4,118,070	50%	\$6,177,104
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	10,295	RF		\$4,118,070		\$6,177,104

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 East of Acline to CSX main line & Yard

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	7,861	RF	\$450	\$3,537,334	25%	\$4,421,667
			Element Total	7,861	RF		\$3,537,334		\$4,421,667
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	7,861	RF	\$480	\$3,773,156	15%	\$4,339,130
			Element Total	7,861	RF		\$3,773,156		\$4,339,130



Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 East of Acline to CSX main line & Yard

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$565,973	15%	\$650,869
			Element Total	1	LS		\$565,973		\$650,869
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$226,389	15%	\$260,348
			Element Total	1	LS		\$226,389		\$260,348
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	1	EA	\$3,000,000	\$3,000,000	20%	\$3,600,000
			Element Total	1	EA		\$3,000,000		\$3,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	7,861	RF	\$30	\$235,822	30%	\$306,569
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	7,861	RF		\$235,822		\$306,569
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	7,861	RF	\$140	\$1,100,504	30%	\$1,430,655
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	7,861	RF		\$1,100,504		\$1,430,655
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	7,861	RF	\$20	\$157,215	30%	\$204,379
			Element Total	1	LS		\$157,215		\$204,379

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 East of Acline to CSX main line & Yard

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	7,861	RF	\$50	\$393,037	30%	\$510,948
			Element Total	1	LS		\$393,037		\$510,948
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	786	RF	\$80	\$62,886	30%	\$81,752
			Element Total	1	LS		\$62,886		\$81,752
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	7,861	RF	\$15	\$117,911	30%	\$153,284
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$65,373	30%	\$84,985
			Element Total	1	LS		\$183,284		\$238,270
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	100	STL	\$4,000	\$400,000	30%	\$520,000
			Element Total	1	LS		\$400,000		\$520,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$126,637	25%	\$158,297
			Element Total	1	LS		\$126,637		\$158,297
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Signal System	0	RF	\$240	\$0	15%	\$0
	Single Track		Signal System	7,861	RF	\$260	\$2,043,793	15%	\$2,350,362
	Double Track		Element Total	7,861	RF		\$2,043,793		\$2,350,362
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	4	EA	\$250,000	\$1,000,000	15%	\$1,150,000
			Element Total	4	EA		\$1,000,000		\$1,150,000
50.03	Traction power supply: substations		Traction Power, Substation	2	EA	\$1,300,000	\$2,600,000	15%	\$2,990,000
			Element Total	2	EA		\$2,600,000		\$2,990,000
50.04	Traction power distribution: catenary and third rail		OCS System - Standard	0	RF	\$240	\$0	15%	\$0
	Single Track		OCS System - Standard	7,861	RF	\$260	\$2,043,793	15%	\$2,350,362
	Double Track		Element Total	7,861	RF		\$0		\$0
50.05	Communications		Communication, Line	7,861	RF	\$240	\$1,886,578	15%	\$2,169,565
			Communication, Station	1	EA	\$500,000	\$500,000	15%	\$575,000
			Element Total	1	LS		\$2,386,578		\$2,744,565
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	1	EA	\$220,000	\$220,000	15%	\$253,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$220,000		\$253,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 East of Acline to CSX main line & Yard

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTCY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	7,861	RF	\$400	\$3,144,297	50%	\$4,716,445
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	7,861	RF		\$3,144,297		\$4,716,445

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 East of CSX mainline & Yard to Kingsway

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	29,525	RF	\$450	\$13,286,164	25%	\$16,607,705
			Element Total	29,525	RF		\$13,286,164		\$16,607,705
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	800	RF	\$6,000	\$4,800,000	30%	\$6,240,000
			Element Total	800	RF		\$4,800,000		\$6,240,000
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	800	RF	\$3,200	\$2,560,000	30%	\$3,328,000
			Element Total	800	RF		\$2,560,000		\$3,328,000
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	800	RF	\$810	\$648,000	15%	\$745,200
			Element Total	800	RF		\$648,000		\$745,200
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	30,325	RF	\$480	\$14,555,908	15%	\$16,739,294
			Element Total	30,325	RF		\$14,555,908		\$16,739,294

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 East of CSX mainline & Yard to Kingsway

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$2,280,586	15%	\$2,622,674
			Element Total	1	LS		\$2,280,586		\$2,622,674
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$873,354	15%	\$1,004,358
			Element Total	1	LS		\$873,354		\$1,004,358
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	6	EA	\$3,000,000	\$18,000,000	20%	\$21,600,000
			Element Total	6	EA		\$18,000,000		\$21,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	29,525	RF	\$30	\$885,744	30%	\$1,151,468
			Demolition Allowance - Median	1,600	RF	\$50	\$80,000	30%	\$104,000
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	31,125	RF		\$965,744		\$1,255,468
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	29,525	RF	\$140	\$4,133,473	30%	\$5,373,515
			Utility Relocation Allowance - Median	1,600	RF	\$340	\$544,000	30%	\$707,200
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	31,125	RF		\$4,677,473		\$6,080,715
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	31,125	RF	\$20	\$622,496	30%	\$809,245
			Element Total	1	LS		\$622,496		\$809,245

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 East of CSX mainline & Yard to Kingsway

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	31,125	RF	\$50	\$1,556,240	30%	\$2,023,113
			Element Total	1	LS		\$1,556,240		\$2,023,113
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	3,032	RF	\$80	\$242,598	30%	\$315,378
			Element Total	1	LS		\$242,598		\$315,378
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	29,525	RF	\$15	\$442,872	30%	\$575,734
			Landscaping Allowance - Median	1,600	RF	\$25	\$40,000	30%	\$52,000
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$386,462	30%	\$502,400
			Element Total	1	LS		\$869,334		\$1,130,134
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	2,200	STL	\$4,000	\$8,800,000	30%	\$11,440,000
			Element Total	1	LS		\$8,800,000		\$11,440,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$886,694	25%	\$1,108,368
			Element Total	1	LS		\$886,694		\$1,108,368
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	31,125	RF	\$260	\$8,092,450	15%	\$9,306,318
			Element Total	31,125	RF		\$8,092,450		\$9,306,318
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	15	EA	\$250,000	\$3,750,000	15%	\$4,312,500
			Element Total	15	EA		\$3,750,000		\$4,312,500
50.03	Traction power supply: substations		Traction Power, Substation	6	EA	\$1,300,000	\$7,800,000	15%	\$8,970,000
			Element Total	6	EA		\$7,800,000		\$8,970,000
50.04	Traction power distribution: catenary and third rail		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	31,125	RF	\$260	\$8,092,450	15%	\$9,306,318
			Element Total	31,125	RF		\$0		\$0
50.05	Communications		Communication, Line	31,125	RF	\$240	\$7,469,954	15%	\$8,590,447
			Communication, Station	6	EA	\$500,000	\$3,000,000	15%	\$3,450,000
			Element Total	1	LS		\$10,469,954		\$12,040,447
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	6	EA	\$220,000	\$1,320,000	15%	\$1,518,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$1,320,000		\$1,518,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Brandon Ext  
 East of CSX mainline & Yard to Kingsway

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
BEGIN	END								
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	30,325	RF	\$400	\$12,129,923	50%	\$18,194,885
			Right of Way Allowance - Aerial	800	RF	\$300	\$240,000	50%	\$360,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	31,125	RF		\$12,369,923		\$18,554,885

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Cypress St.  
 Spruce St to Cypress St along Trask St

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTG	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	0	RF	\$450	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	3,468	RF	\$700	\$2,427,835	25%	\$3,034,793
			Element Total	3,468	RF		\$2,427,835		\$3,034,793
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	3,468	RF	\$980	\$3,398,968	15%	\$3,908,814
			Element Total	3,468	RF		\$3,398,968		\$3,908,814
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0



Hillsborough County MPO Transit Study  
 System Planning  
 LR-Cypress St.  
 Spruce St to Cypress St along Trask St

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$509,845	15%	\$586,322
			Element Total	1	LS		\$509,845		\$586,322
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	1	EA	\$3,000,000	\$3,000,000	20%	\$3,600,000
			Element Total	1	EA		\$3,000,000		\$3,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	0	RF	\$30	\$0	30%	\$0
			Demolition Allowance - Median	3,468	RF	\$50	\$173,417	30%	\$225,442
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	3,468	RF		\$173,417		\$225,442
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	0	RF	\$140	\$0	30%	\$0
			Utility Relocation Allowance - Median	3,468	RF	\$340	\$1,179,234	30%	\$1,533,004
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	3,468	RF		\$1,179,234		\$1,533,004
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	3,468	RF	\$20	\$69,367	30%	\$90,177
			Element Total	1	LS		\$69,367		\$90,177

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Cypress St.  
 Spruce St to Cypress St along Trask St

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	3,468	RF	\$50	\$173,417	30%	\$225,442
			Element Total	1	LS		\$173,417		\$225,442
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	0	RF	\$80	\$0	30%	\$0
			Element Total	1	LS		\$0		\$0
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	0	RF	\$15	\$0	30%	\$0
			Landscaping Allowance - Median	3,468	RF	\$25	\$86,708	30%	\$112,721
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$54,278	30%	\$70,562
			Element Total	1	LS		\$140,987		\$183,283
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	3	EA	\$50,000	\$150,000	30%	\$195,000
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	83,240	SF	\$30	\$2,497,201	30%	\$3,246,362
			Parking Lots	2,200	STL	\$4,000	\$8,800,000	30%	\$11,440,000
			Element Total	1	LS		\$11,447,201		\$14,881,362
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$659,181	25%	\$823,976
			Element Total	1	LS		\$659,181		\$823,976
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Signal System	0	RF	\$240	\$0	15%	\$0
	Double Track		Signal System	3,468	RF	\$260	\$901,767	15%	\$1,037,032
			Element Total	3,468	RF		\$901,767		\$1,037,032
50.02	Traffic signals and crossing protection		Traffic Signal	3	EA	\$150,000	\$450,000	15%	\$517,500
			Crossing Protection	0	EA	\$250,000	\$0	15%	\$0
			Element Total	3	EA		\$450,000		\$517,500
50.03	Traction power supply: substations		Traction Power, Substation	1	EA	\$1,300,000	\$1,300,000	15%	\$1,495,000
			Element Total	1	EA		\$1,300,000		\$1,495,000
50.04	Traction power distribution: catenary and third rail		OCS System - Standard	0	RF	\$240	\$0	15%	\$0
	Double Track		OCS System - Standard	3,468	RF	\$260	\$901,767	15%	\$1,037,032
			Element Total	3,468	RF		\$0		\$0
50.05	Communications		Communication, Line	3,468	RF	\$240	\$832,400	15%	\$957,260
			Communication, Station	1	EA	\$500,000	\$500,000	15%	\$575,000
			Element Total	1	LS		\$1,332,400		\$1,532,260
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	1	EA	\$220,000	\$220,000	15%	\$253,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$220,000		\$253,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Cypress St.  
 Spruce St to Cypress St along Trask St

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>									
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	3,468	RF	\$400	\$1,387,334	50%	\$2,081,001
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	3,468	RF		\$1,387,334		\$2,081,001

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Boulevard to N Tampa St.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	0	RF	\$450	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	929	RF	\$700	\$650,432	25%	\$813,040
			Element Total	929	RF		\$650,432		\$813,040
10.03	Guideway: At-grade in mixed traffic								
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	700	RF	\$5,500	\$3,850,000	30%	\$5,005,000
	Double Track		Aerial - Direct Fixation Over Water	400	RF	\$6,000	\$2,400,000	30%	\$3,120,000
			Element Total	1,100	RF		\$6,250,000		\$8,125,000
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	600	RF	\$3,200	\$1,920,000	30%	\$2,496,000
			Element Total	600	RF		\$1,920,000		\$2,496,000
10.09	Track: Direct fixation								
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	1,100	RF	\$810	\$891,000	15%	\$1,024,650
			Element Total	1,100	RF		\$891,000		\$1,024,650
10.10	Track: Embedded								
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	929	RF	\$980	\$910,605	15%	\$1,047,196
			Element Total	929	RF		\$910,605		\$1,047,196
10.11	Track: Ballasted								
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	600	RF	\$480	\$288,000	15%	\$331,200
			Element Total	600	RF		\$288,000		\$331,200

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Boulevard to N Tampa St.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$313,441	15%	\$360,457
			Element Total	1	LS		\$313,441		\$360,457
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$17,280	15%	\$19,872
			Element Total	1	LS		\$17,280		\$19,872
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	2	EA	\$3,000,000	\$6,000,000	20%	\$7,200,000
			Element Total	2	EA		\$6,000,000		\$7,200,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	0	RF	\$30	\$0	30%	\$0
			Demolition Allowance - Median	2,629	RF	\$50	\$131,459	30%	\$170,897
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	2,629	RF		\$131,459		\$170,897
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	0	RF	\$140	\$0	30%	\$0
			Utility Relocation Allowance - Median	2,629	RF	\$340	\$893,924	30%	\$1,162,101
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	2,629	RF		\$893,924		\$1,162,101
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	2,629	RF	\$20	\$52,584	30%	\$68,359
			Element Total	1	LS		\$52,584		\$68,359

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Boulevard to N Tampa St.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	2,629	RF	\$50	\$131,459	30%	\$170,897
			Element Total	1	LS		\$131,459		\$170,897
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	60	RF	\$80	\$4,800	30%	\$6,240
			Element Total	1	LS		\$4,800		\$6,240
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	0	RF	\$15	\$0	30%	\$0
			Landscaping Allowance - Median	2,629	RF	\$25	\$65,730	30%	\$85,449
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$148,204	30%	\$192,666
			Element Total	1	LS		\$213,934		\$278,114
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	1	EA	\$50,000	\$50,000	30%	\$65,000
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	22,301	SF	\$30	\$669,016	30%	\$869,721
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$719,016		\$934,721
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$107,359	25%	\$134,199
			Element Total	1	LS		\$107,359		\$134,199
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	2,629	RF	\$260	\$683,589	15%	\$786,127
			Element Total	2,629	RF		\$683,589		\$786,127
50.02	Traffic signals and crossing protection		Traffic Signal	1	EA	\$150,000	\$150,000	15%	\$172,500
			Crossing Protection	0	EA	\$250,000	\$0	15%	\$0
			Element Total	1	EA		\$150,000		\$172,500
50.03	Traction power supply: substations		Traction Power, Substation	1	EA	\$1,300,000	\$1,300,000	15%	\$1,495,000
			Element Total	1	EA		\$1,300,000		\$1,495,000
50.04	Traction power distribution: catenary and third rail		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	2,629	RF	\$260	\$683,589	15%	\$786,127
			Element Total	2,629	RF		\$0		\$0
50.05	Communications		Communication, Line	2,629	RF	\$240	\$631,005	15%	\$725,656
			Communication, Station	2	EA	\$500,000	\$1,000,000	15%	\$1,150,000
			Element Total	1	LS		\$1,631,005		\$1,875,656
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	2	EA	\$220,000	\$440,000	15%	\$506,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$440,000		\$506,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Boulevard to N Tampa St.

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	1,529	RF	\$400	\$611,676	50%	\$917,513
			Right of Way Allowance - Aerial	1,100	RF	\$300	\$330,000	50%	\$495,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	2,629	RF		\$941,676		\$1,412,513

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Tampa St. to N Marion St./ E Polk St.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	0	RF	\$450	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	2,294	RF	\$700	\$1,605,964	25%	\$2,007,455
			Element Total	2,294	RF		\$1,605,964		\$2,007,455
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	2,294	RF	\$980	\$2,248,349	15%	\$2,585,602
			Element Total	2,294	RF		\$2,248,349		\$2,585,602
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0



Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Tampa St. to N Marion St./ E Polk St.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$337,252	15%	\$387,840
			Element Total	1	LS		\$337,252		\$387,840
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	1	EA	\$3,000,000	\$3,000,000	20%	\$3,600,000
			Element Total	1	EA		\$3,000,000		\$3,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	0	RF	\$30	\$0	30%	\$0
			Demolition Allowance - Median	2,294	RF	\$50	\$114,712	30%	\$149,125
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	2,294	RF		\$114,712		\$149,125
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	0	RF	\$140	\$0	30%	\$0
			Utility Relocation Allowance - Median	2,294	RF	\$340	\$780,040	30%	\$1,014,051
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	2,294	RF		\$780,040		\$1,014,051
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	2,294	RF	\$20	\$45,885	30%	\$59,650
			Element Total	1	LS		\$45,885		\$59,650

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Tampa St. to N Marion St./ E Polk St.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	2,294	RF	\$50	\$114,712	30%	\$149,125
			Element Total	1	LS		\$114,712		\$149,125
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	0	RF	\$80	\$0	30%	\$0
			Element Total	1	LS		\$0		\$0
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	0	RF	\$15	\$0	30%	\$0
			Landscaping Allowance - Median	2,294	RF	\$25	\$57,356	30%	\$74,563
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$46,060	30%	\$59,878
			Element Total	1	LS		\$103,415		\$134,440
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	2	EA	\$50,000	\$100,000	30%	\$130,000
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	55,062	SF	\$30	\$1,651,849	30%	\$2,147,403
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$1,751,849		\$2,277,403
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$145,531	25%	\$181,913
			Element Total	1	LS		\$145,531		\$181,913
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Signal System	0	RF	\$240	\$0	15%	\$0
	Double Track		Signal System	2,294	RF	\$260	\$596,501	15%	\$685,976
			Element Total	2,294	RF		\$596,501		\$685,976
50.02	Traffic signals and crossing protection		Traffic Signal	2	EA	\$150,000	\$300,000	15%	\$345,000
			Crossing Protection	0	EA	\$250,000	\$0	15%	\$0
			Element Total	2	EA		\$300,000		\$345,000
50.03	Traction power supply: substations		Traction Power, Substation	1	EA	\$1,300,000	\$1,300,000	15%	\$1,495,000
			Element Total	1	EA		\$1,300,000		\$1,495,000
50.04	Traction power distribution: catenary and third rail		OCS System - Standard	0	RF	\$240	\$0	15%	\$0
	Double Track		OCS System - Standard	2,294	RF	\$260	\$596,501	15%	\$685,976
			Element Total	2,294	RF		\$0		\$0
50.05	Communications		Communication, Line	2,294	RF	\$240	\$550,616	15%	\$633,209
			Communication, Station	1	EA	\$500,000	\$500,000	15%	\$575,000
			Element Total	1	LS		\$1,050,616		\$1,208,209
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	1	EA	\$220,000	\$220,000	15%	\$253,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$220,000		\$253,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Tampa St. to N Marion St./ E Polk St.

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	2,294	RF	\$400	\$917,694	50%	\$1,376,540
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	2,294	RF		\$917,694		\$1,376,540

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Marion/ E Polk to N Nebraska Ave

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTG	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	1,105	RF	\$450	\$497,127	25%	\$621,409
			Element Total	1,105	RF		\$497,127		\$621,409
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	1,105	RF	\$700	\$773,309	25%	\$966,637
			Element Total	1,105	RF		\$773,309		\$966,637
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	1,105	RF	\$980	\$1,082,633	15%	\$1,245,028
			Element Total	1,105	RF		\$1,082,633		\$1,245,028
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	1,105	RF	\$480	\$530,269	15%	\$609,810
			Element Total	1,105	RF		\$530,269		\$609,810

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Marion/ E Polk to N Nebraska Ave

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$241,935	15%	\$278,226
			Element Total	1	LS		\$241,935		\$278,226
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$31,816	15%	\$36,589
			Element Total	1	LS		\$31,816		\$36,589
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	1	EA	\$3,000,000	\$3,000,000	20%	\$3,600,000
			Element Total	1	EA		\$3,000,000		\$3,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	1,105	RF	\$30	\$33,142	30%	\$43,084
			Demolition Allowance - Median	1,105	RF	\$50	\$55,236	30%	\$71,807
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	2,209	RF		\$88,378		\$114,892
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	1,105	RF	\$140	\$154,662	30%	\$201,060
			Utility Relocation Allowance - Median	1,105	RF	\$340	\$375,607	30%	\$488,290
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	2,209	RF		\$530,269		\$689,350
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	2,209	RF	\$20	\$44,189	30%	\$57,446
			Element Total	1	LS		\$44,189		\$57,446

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Marion/ E Polk to N Nebraska Ave

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	2,209	RF	\$50	\$110,473	30%	\$143,615
			Element Total	1	LS		\$110,473		\$143,615
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	110	RF	\$80	\$8,838	30%	\$11,489
			Element Total	1	LS		\$8,838		\$11,489
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	1,105	RF	\$15	\$16,571	30%	\$21,542
			Landscaping Allowance - Median	1,105	RF	\$25	\$27,618	30%	\$35,904
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$42,704	30%	\$55,516
			Element Total	1	LS		\$86,893		\$112,962
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	1	EA	\$50,000	\$50,000	30%	\$65,000
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	26,513	SF	\$30	\$795,404	30%	\$1,034,025
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$845,404		\$1,099,025
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$85,722	25%	\$107,153
			Element Total	1	LS		\$85,722		\$107,153
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	2,209	RF	\$260	\$574,458	15%	\$660,627
			Element Total	2,209	RF		\$574,458		\$660,627
50.02	Traffic signals and crossing protection		Traffic Signal	1	EA	\$150,000	\$150,000	15%	\$172,500
			Crossing Protection	1	EA	\$250,000	\$250,000	15%	\$287,500
			Element Total	2	EA		\$400,000		\$460,000
50.03	Traction power supply: substations		Traction Power, Substation	1	EA	\$1,300,000	\$1,300,000	15%	\$1,495,000
			Element Total	1	EA		\$1,300,000		\$1,495,000
50.04	Traction power distribution: catenary and third rail		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	2,209	RF	\$260	\$574,458	15%	\$660,627
			Element Total	2,209	RF		\$0		\$0
50.05	Communications		Communication, Line	2,209	RF	\$240	\$530,269	15%	\$609,810
			Communication, Station	1	EA	\$500,000	\$500,000	15%	\$575,000
			Element Total	1	LS		\$1,030,269		\$1,184,810
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	1	EA	\$220,000	\$220,000	15%	\$253,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$220,000		\$253,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Downtown  
 N Marion/ E Polk to N Nebraska Ave

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	2,209	RF	\$400	\$883,782	50%	\$1,325,673
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	2,209	RF		\$883,782		\$1,325,673

Hillsborough County MPO Transit Study  
 System Planning  
 LR-I275  
 Armenia Ave to West Shore Dr.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	12,027	RF	\$450	\$5,412,111	25%	\$6,765,139
			Element Total	12,027	RF		\$5,412,111		\$6,765,139
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	1,200	RF	\$5,500	\$6,600,000	30%	\$8,580,000
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	1,200	RF		\$6,600,000		\$8,580,000
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	1,200	RF	\$810	\$972,000	15%	\$1,117,800
			Element Total	1,200	RF		\$972,000		\$1,117,800
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	12,027	RF	\$480	\$5,772,919	15%	\$6,638,856
			Element Total	12,027	RF		\$5,772,919		\$6,638,856



Hillsborough County MPO Transit Study  
 System Planning  
 LR-I275  
 Armenia Ave to West Shore Dr.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$1,011,738	15%	\$1,163,498
			Element Total	1	LS		\$1,011,738		\$1,163,498
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$346,375	15%	\$398,331
			Element Total	1	LS		\$346,375		\$398,331
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	2	EA	\$3,000,000	\$6,000,000	20%	\$7,200,000
			Element Total	2	EA		\$6,000,000		\$7,200,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	2	EA	\$200,000	\$400,000	20%	\$480,000
			Escalator	1	EA	\$450,000	\$450,000	20%	\$540,000
			Element Total	1	LS		\$850,000		\$1,020,000
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	12,027	RF	\$30	\$360,807	30%	\$469,050
			Demolition Allowance - Median	1,200	RF	\$50	\$60,000	30%	\$78,000
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	13,227	RF		\$420,807		\$547,050
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	12,027	RF	\$140	\$1,683,768	30%	\$2,188,898
			Utility Relocation Allowance - Median	1,200	RF	\$340	\$408,000	30%	\$530,400
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	13,227	RF		\$2,091,768		\$2,719,298
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	13,227	RF	\$20	\$264,538	30%	\$343,900
			Element Total	1	LS		\$264,538		\$343,900

Hillsborough County MPO Transit Study  
 System Planning  
 LR-I275  
 Armenia Ave to West Shore Dr.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	13,227	RF	\$50	\$661,346	30%	\$859,749
			Element Total	1	LS		\$661,346		\$859,749
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	1,203	RF	\$80	\$96,215	30%	\$125,080
			Element Total	1	LS		\$96,215		\$125,080
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	12,027	RF	\$15	\$180,404	30%	\$234,525
			Landscaping Allowance - Median	1,200	RF	\$25	\$30,000	30%	\$39,000
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	2	EA	\$800,000	\$1,600,000	30%	\$2,080,000
			Artwork (1% of Guideway & Stations)	1%			\$180,121	30%	\$234,157
			Element Total	1	LS		\$1,990,525		\$2,587,682
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$0		\$0
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$276,260	25%	\$345,325
			Element Total	1	LS		\$276,260		\$345,325
<b>50 SYSTEMS</b>									
50.01	Train control and signals		Single Track Signal System	0	RF	\$240	\$0	15%	\$0
			Double Track Signal System	13,227	RF	\$260	\$3,438,998	15%	\$3,954,847
			Element Total	13,227	RF		\$3,438,998		\$3,954,847
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	6	EA	\$250,000	\$1,500,000	15%	\$1,725,000
			Element Total	6	EA		\$1,500,000		\$1,725,000
50.03	Traction power supply: substations		Traction Power, Substation	3	EA	\$1,300,000	\$3,900,000	15%	\$4,485,000
			Element Total	3	EA		\$3,900,000		\$4,485,000
50.04	Traction power distribution: catenary and third rail		Single Track OCS System - Standard	0	RF	\$240	\$0	15%	\$0
			Double Track OCS System - Standard	13,227	RF	\$260	\$3,438,998	15%	\$3,954,847
			Element Total	13,227	RF		\$0		\$0
50.05	Communications		Communication, Line	13,227	RF	\$240	\$3,174,459	15%	\$3,650,628
			Communication, Station	2	EA	\$500,000	\$1,000,000	15%	\$1,150,000
			Element Total	1	LS		\$4,174,459		\$4,800,628
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	2	EA	\$220,000	\$440,000	15%	\$506,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$440,000		\$506,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-1275  
 Armenia Ave to West Shore Dr.

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTCY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	12,027	RF	\$400	\$4,810,766	50%	\$7,216,148
			Right of Way Allowance - Aerial	1,200	RF	\$300	\$360,000	50%	\$540,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	13,227	RF		\$5,170,766		\$7,756,148

Hillsborough County MPO Transit Study  
 System Planning  
 LR-I275  
 N Boulevard to Armenia Ave.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	4,566	RF	\$450	\$2,054,921	25%	\$2,568,651
			Element Total	4,566	RF		\$2,054,921		\$2,568,651
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	800	RF	\$5,500	\$4,400,000	30%	\$5,720,000
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	800	RF		\$4,400,000		\$5,720,000
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	800	RF	\$810	\$648,000	15%	\$745,200
			Element Total	800	RF		\$648,000		\$745,200
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	4,566	RF	\$480	\$2,191,916	15%	\$2,520,703
			Element Total	4,566	RF		\$2,191,916		\$2,520,703

Hillsborough County MPO Transit Study  
 System Planning  
 LR-I275  
 N Boulevard to Armenia Ave.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$425,987	15%	\$489,885
			Element Total	1	LS		\$425,987		\$489,885
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$131,515	15%	\$151,242
			Element Total	1	LS		\$131,515		\$151,242
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	1	EA	\$3,000,000	\$3,000,000	20%	\$3,600,000
			Element Total	1	EA		\$3,000,000		\$3,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	2	EA	\$200,000	\$400,000	20%	\$480,000
			Escalator	1	EA	\$450,000	\$450,000	20%	\$540,000
			Element Total	1	LS		\$850,000		\$1,020,000
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	4,566	RF	\$30	\$136,995	30%	\$178,093
			Demolition Allowance - Median	800	RF	\$50	\$40,000	30%	\$52,000
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	5,366	RF		\$176,995		\$230,093
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	4,566	RF	\$140	\$639,309	30%	\$831,101
			Utility Relocation Allowance - Median	800	RF	\$340	\$272,000	30%	\$353,600
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	5,366	RF		\$911,309		\$1,184,701
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	5,366	RF	\$20	\$107,330	30%	\$139,529
			Element Total	1	LS		\$107,330		\$139,529

Hillsborough County MPO Transit Study  
 System Planning  
 LR-I275  
 N Boulevard to Armenia Ave.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	5,366	RF	\$50	\$268,325	30%	\$348,822
			Element Total	1	LS		\$268,325		\$348,822
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	457	RF	\$80	\$36,532	30%	\$47,492
			Element Total	1	LS		\$36,532		\$47,492
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	4,566	RF	\$15	\$68,497	30%	\$89,047
			Landscaping Allowance - Median	800	RF	\$25	\$20,000	30%	\$26,000
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	1	EA	\$800,000	\$800,000	30%	\$1,040,000
			Artwork (1% of Guideway & Stations)	1%			\$94,549	30%	\$122,914
			Element Total	1	LS		\$983,047		\$1,277,961
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$0		\$0
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$124,177	25%	\$155,221
			Element Total	1	LS		\$124,177		\$155,221
<b>50 SYSTEMS</b>									
50.01	Train control and signals		Single Track Signal System	0	RF	\$240	\$0	15%	\$0
			Double Track Signal System	5,366	RF	\$260	\$1,395,288	15%	\$1,604,581
			Element Total	5,366	RF		\$1,395,288		\$1,604,581
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	2	EA	\$250,000	\$500,000	15%	\$575,000
			Element Total	2	EA		\$500,000		\$575,000
50.03	Traction power supply: substations		Traction Power, Substation	2	EA	\$1,300,000	\$2,600,000	15%	\$2,990,000
			Element Total	2	EA		\$2,600,000		\$2,990,000
50.04	Traction power distribution: catenary and third rail		Single Track OCS System - Standard	0	RF	\$240	\$0	15%	\$0
			Double Track OCS System - Standard	5,366	RF	\$260	\$1,395,288	15%	\$1,604,581
			Element Total	5,366	RF		\$0		\$0
50.05	Communications		Communication, Line	5,366	RF	\$240	\$1,287,958	15%	\$1,481,152
			Communication, Station	1	EA	\$500,000	\$500,000	15%	\$575,000
			Element Total	1	LS		\$1,787,958		\$2,056,152
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	1	EA	\$220,000	\$220,000	15%	\$253,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$220,000		\$253,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-I275  
 N Boulevard to Armenia Ave.

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	4,566	RF	\$400	\$1,826,597	50%	\$2,739,895
			Right of Way Allowance - Aerial	800	RF	\$300	\$240,000	50%	\$360,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	5,366	RF		\$2,066,597		\$3,099,895

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Mac Dill AFB  
 N Boulevard/ Tampa Prep PI to Mac Dill AFB

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTG	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	37,463	RF	\$450	\$16,858,268	25%	\$21,072,834
			Element Total	37,463	RF		\$16,858,268		\$21,072,834
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	37,463	RF	\$480	\$17,982,152	15%	\$20,679,475
			Element Total	37,463	RF		\$17,982,152		\$20,679,475



**Hillsborough County MPO Transit Study  
System Planning  
LR-Mac Dill AFB  
N Boulevard/ Tampa Prep PI to Mac Dill AFB**

**TRANSIT MODE: LRT**

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$2,697,323	15%	\$3,101,921
			Element Total	1	LS		\$2,697,323		\$3,101,921
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$1,078,929	15%	\$1,240,768
			Element Total	1	LS		\$1,078,929		\$1,240,768
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	8	EA	\$3,000,000	\$24,000,000	20%	\$28,800,000
			Element Total	8	EA		\$24,000,000		\$28,800,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	37,463	RF	\$30	\$1,123,885	30%	\$1,461,050
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	37,463	RF		\$1,123,885		\$1,461,050
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	37,463	RF	\$140	\$5,244,794	30%	\$6,818,233
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	37,463	RF		\$5,244,794		\$6,818,233
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	37,463	RF	\$20	\$749,256	30%	\$974,033
			Element Total	1	LS		\$749,256		\$974,033

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Mac Dill AFB  
 N Boulevard/ Tampa Prep PI to Mac Dill AFB

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	37,463	RF	\$50	\$1,873,141	30%	\$2,435,083
			Element Total	1	LS		\$1,873,141		\$2,435,083
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	3,746	RF	\$80	\$299,703	30%	\$389,613
			Element Total	1	LS		\$299,703		\$389,613
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	37,463	RF	\$15	\$561,942	30%	\$730,525
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$408,583	30%	\$531,157
			Element Total	1	LS		\$970,525		\$1,261,682
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	1,000	STL	\$4,000	\$4,000,000	30%	\$5,200,000
			Element Total	1	LS		\$4,000,000		\$5,200,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$713,065	25%	\$891,331
			Element Total	1	LS		\$713,065		\$891,331
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Signal System	0	RF	\$240	\$0	15%	\$0
	Double Track		Signal System	37,463	RF	\$260	\$9,740,332	15%	\$11,201,382
			Element Total	37,463	RF		\$9,740,332		\$11,201,382
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	19	EA	\$250,000	\$4,750,000	15%	\$5,462,500
			Element Total	19	EA		\$4,750,000		\$5,462,500
50.03	Traction power supply: substations		Traction Power, Substation	8	EA	\$1,300,000	\$10,400,000	15%	\$11,960,000
			Element Total	8	EA		\$10,400,000		\$11,960,000
50.04	Traction power distribution: catenary and third rail		OCS System - Standard	0	RF	\$240	\$0	15%	\$0
	Double Track		OCS System - Standard	37,463	RF	\$260	\$9,740,332	15%	\$11,201,382
			Element Total	37,463	RF		\$0		\$0
50.05	Communications		Communication, Line	37,463	RF	\$240	\$8,991,076	15%	\$10,339,737
			Communication, Station	8	EA	\$500,000	\$4,000,000	15%	\$4,600,000
			Element Total	1	LS		\$12,991,076		\$14,939,737
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	8	EA	\$220,000	\$1,760,000	15%	\$2,024,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$1,760,000		\$2,024,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Mac Dill AFB  
 N Boulevard/ Tampa Prep PI to Mac Dill AFB

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	37,463	RF	\$400	\$14,985,127	50%	\$22,477,690
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	37,463	RF		\$14,985,127		\$22,477,690

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Mac Dill AFB  
 E Polk/ N Marion to N Boulevard/ Tampa Prep PI

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	3,360	RF	\$450	\$1,512,128	25%	\$1,890,160
			Element Total	3,360	RF		\$1,512,128		\$1,890,160
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	400	RF	\$6,000	\$2,400,000	30%	\$3,120,000
			Element Total	400	RF		\$2,400,000		\$3,120,000
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	400	RF	\$810	\$324,000	15%	\$372,600
			Element Total	400	RF		\$324,000		\$372,600
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	3,360	RF	\$480	\$1,612,937	15%	\$1,854,877
			Element Total	3,360	RF		\$1,612,937		\$1,854,877

Hillsborough County MPO Transit Study  
System Planning  
LR-Mac Dill AFB

E Polk/ N Marion to N Boulevard/ Tampa Prep PI

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$290,540	15%	\$334,122
			Element Total	1	LS		\$290,540		\$334,122
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$96,776	15%	\$111,293
			Element Total	1	LS		\$96,776		\$111,293
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	0	EA	\$3,000,000	\$0	20%	\$0
			Element Total	0	EA		\$0		\$0
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	3,360	RF	\$30	\$100,809	30%	\$131,051
			Demolition Allowance - Median	400	RF	\$50	\$20,000	30%	\$26,000
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	3,760	RF		\$120,809		\$157,051
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	3,360	RF	\$140	\$470,440	30%	\$611,572
			Utility Relocation Allowance - Median	400	RF	\$340	\$136,000	30%	\$176,800
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	3,760	RF		\$606,440		\$788,372
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	3,760	RF	\$20	\$75,206	30%	\$97,767
			Element Total	1	LS		\$75,206		\$97,767

Hillsborough County MPO Transit Study  
System Planning  
LR-Mac Dill AFB

E Polk/ N Marion to N Boulevard/ Tampa Prep PI

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST	
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	3,760	RF	\$50	\$188,014	30%	\$244,418	
			Element Total	1	LS		\$188,014		\$244,418	
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	336	RF	\$80	\$26,882	30%	\$34,947	
			Element Total	1	LS		\$26,882		\$34,947	
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	3,360	RF	\$15	\$50,404	30%	\$65,526	
			Landscaping Allowance - Median	400	RF	\$25	\$10,000	30%	\$13,000	
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0	
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0	
			Artwork (1% of Guideway & Stations)	1%			\$39,121	30%	\$50,858	
			Element Total	1	LS		\$99,526		\$129,383	
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0	
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0	
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0	
			Element Total	1	LS		\$0		\$0	
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$55,844	25%	\$69,805	
			Element Total	1	LS		\$55,844		\$69,805	
<b>50</b>	<b>SYSTEMS</b>									
50.01	Train control and signals		Single Track	Signal System	0	RF	\$240	\$0	15%	\$0
			Double Track	Signal System	3,760	RF	\$260	\$977,674	15%	\$1,124,325
			Element Total		3,760	RF		\$977,674		\$1,124,325
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0	
			Crossing Protection	2	EA	\$250,000	\$500,000	15%	\$575,000	
			Element Total	2	EA		\$500,000		\$575,000	
50.03	Traction power supply: substations		Traction Power, Substation	1	EA	\$1,300,000	\$1,300,000	15%	\$1,495,000	
			Element Total	1	EA		\$1,300,000		\$1,495,000	
50.04	Traction power distribution: catenary and third rail		Single Track	OCS System - Standard	0	RF	\$240	\$0	15%	\$0
			Double Track	OCS System - Standard	3,760	RF	\$260	\$977,674	15%	\$1,124,325
			Element Total		3,760	RF		\$0		\$0
50.05	Communications		Communication, Line	3,760	RF	\$240	\$902,468	15%	\$1,037,838	
			Communication, Station	0	EA	\$500,000	\$0	15%	\$0	
			Element Total	1	LS		\$902,468		\$1,037,838	
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	0	EA	\$220,000	\$0	15%	\$0	
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0	
			Element Total	1	LS		\$0		\$0	
50.07	Central Control		N/A							
			Element Total	1	LS		\$0		\$0	

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Mac Dill AFB  
 E Polk/ N Marion to N Boulevard/ Tampa Prep PI

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	3,360	RF	\$400	\$1,344,114	50%	\$2,016,171
			Right of Way Allowance - Aerial	400	RF	\$300	\$120,000	50%	\$180,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	3,760	RF		\$1,464,114		\$2,196,171

Hillsborough County MPO Transit Study  
 System Planning  
 LR-NE Ext  
 Bruce B Downs/ 37th to Pebble Creek (east of I-75)

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTG	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	0	RF	\$450	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	24,373	RF	\$700	\$17,061,041	25%	\$21,326,301
			Element Total	24,373	RF		\$17,061,041		\$21,326,301
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	24,373	RF	\$980	\$23,885,457	15%	\$27,468,276
			Element Total	24,373	RF		\$23,885,457		\$27,468,276
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0



**Hillsborough County MPO Transit Study  
System Planning  
LR-NE Ext  
Bruce B Downs/ 37th to Pebble Creek (east of I-75)**

**TRANSIT MODE: LRT**

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$3,582,819	15%	\$4,120,241
			Element Total	1	LS		\$3,582,819		\$4,120,241
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	4	EA	\$3,000,000	\$12,000,000	20%	\$14,400,000
			Element Total	4	EA		\$12,000,000		\$14,400,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	0	RF	\$30	\$0	30%	\$0
			Demolition Allowance - Median	24,373	RF	\$50	\$1,218,646	30%	\$1,584,240
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	24,373	RF		\$1,218,646		\$1,584,240
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	0	RF	\$140	\$0	30%	\$0
			Utility Relocation Allowance - Median	24,373	RF	\$340	\$8,286,791	30%	\$10,772,829
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	24,373	RF		\$8,286,791		\$10,772,829
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	24,373	RF	\$20	\$487,458	30%	\$633,696
			Element Total	1	LS		\$487,458		\$633,696

**Hillsborough County MPO Transit Study  
System Planning  
LR-NE Ext  
Bruce B Downs/ 37th to Pebble Creek (east of I-75)**

**TRANSIT MODE: LRT**

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	24,373	RF	\$50	\$1,218,646	30%	\$1,584,240
			Element Total	1	LS		\$1,218,646		\$1,584,240
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	0	RF	\$80	\$0	30%	\$0
			Element Total	1	LS		\$0		\$0
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	0	RF	\$15	\$0	30%	\$0
			Landscaping Allowance - Median	24,373	RF	\$25	\$609,323	30%	\$792,120
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$290,610	30%	\$377,794
			Element Total	1	LS		\$899,933		\$1,169,913
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	24	EA	\$50,000	\$1,200,000	30%	\$1,560,000
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	584,950	SF	\$30	\$17,548,499	30%	\$22,813,049
			Parking Lots	2,000	STL	\$4,000	\$8,000,000	30%	\$10,400,000
			Element Total	1	LS		\$26,748,499		\$34,773,049
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$1,942,999	25%	\$2,428,748
			Element Total	1	LS		\$1,942,999		\$2,428,748
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	24,373	RF	\$260	\$6,336,958	15%	\$7,287,502
			Element Total	24,373	RF		\$6,336,958		\$7,287,502
50.02	Traffic signals and crossing protection		Traffic Signal	24	EA	\$150,000	\$3,600,000	15%	\$4,140,000
			Crossing Protection	0	EA	\$250,000	\$0	15%	\$0
			Element Total	24	EA		\$3,600,000		\$4,140,000
50.03	Traction power supply: substations		Traction Power, Substation	5	EA	\$1,300,000	\$6,500,000	15%	\$7,475,000
			Element Total	5	EA		\$6,500,000		\$7,475,000
50.04	Traction power distribution: catenary and third rail		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	24,373	RF	\$260	\$6,336,958	15%	\$7,287,502
			Element Total	24,373	RF		\$0		\$0
50.05	Communications		Communication, Line	24,373	RF	\$240	\$5,849,500	15%	\$6,726,925
			Communication, Station	4	EA	\$500,000	\$2,000,000	15%	\$2,300,000
			Element Total	1	LS		\$7,849,500		\$9,026,925
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	4	EA	\$220,000	\$880,000	15%	\$1,012,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$880,000		\$1,012,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-NE Ext  
 Bruce B Downs/ 37th to Pebble Creek (east of I-75)

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	24,373	RF	\$400	\$9,749,166	50%	\$14,623,749
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	24,373	RF		\$9,749,166		\$14,623,749

Hillsborough County MPO Transit Study  
 System Planning  
 LR-North  
 CSX N/S split to Busch Blvd

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	27,581	RF	\$450	\$12,411,668	25%	\$15,514,586
			Element Total	27,581	RF		\$12,411,668		\$15,514,586
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	150	RF	\$6,000	\$900,000	30%	\$1,170,000
			Element Total	150	RF		\$900,000		\$1,170,000
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	150	RF	\$810	\$121,500	15%	\$139,725
			Element Total	150	RF		\$121,500		\$139,725
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	27,581	RF	\$480	\$13,239,113	15%	\$15,224,980
			Element Total	27,581	RF		\$13,239,113		\$15,224,980

Hillsborough County MPO Transit Study  
 System Planning  
 LR-North  
 CSX N/S split to Busch Blvd

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$2,004,092	15%	\$2,304,706
			Element Total	1	LS		\$2,004,092		\$2,304,706
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$794,347	15%	\$913,499
			Element Total	1	LS		\$794,347		\$913,499
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	5	EA	\$3,000,000	\$15,000,000	20%	\$18,000,000
			Element Total	5	EA		\$15,000,000		\$18,000,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	27,581	RF	\$30	\$827,445	30%	\$1,075,678
			Demolition Allowance - Median	150	RF	\$50	\$7,500	30%	\$9,750
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	27,731	RF		\$834,945		\$1,085,428
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	27,581	RF	\$140	\$3,861,408	30%	\$5,019,830
			Utility Relocation Allowance - Median	150	RF	\$340	\$51,000	30%	\$66,300
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	27,731	RF		\$3,912,408		\$5,086,130
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	27,731	RF	\$20	\$554,630	30%	\$721,019
			Element Total	1	LS		\$554,630		\$721,019

Hillsborough County MPO Transit Study  
 System Planning  
 LR-North  
 CSX N/S split to Busch Blvd

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	27,731	RF	\$50	\$1,386,574	30%	\$1,802,547
			Element Total	1	LS		\$1,386,574		\$1,802,547
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	2,758	RF	\$80	\$220,652	30%	\$286,847
			Element Total	1	LS		\$220,652		\$286,847
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	27,581	RF	\$15	\$413,722	30%	\$537,839
			Landscaping Allowance - Median	150	RF	\$25	\$3,750	30%	\$4,875
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$283,117	30%	\$368,052
			Element Total	1	LS		\$700,589		\$910,766
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	300	STL	\$4,000	\$1,200,000	30%	\$1,560,000
			Element Total	1	LS		\$1,200,000		\$1,560,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$440,490	25%	\$550,612
			Element Total	1	LS		\$440,490		\$550,612
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	27,731	RF	\$260	\$7,210,186	15%	\$8,291,714
			Element Total	27,731	RF		\$7,210,186		\$8,291,714
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	14	EA	\$250,000	\$3,500,000	15%	\$4,025,000
			Element Total	14	EA		\$3,500,000		\$4,025,000
50.03	Traction power supply: substations		Traction Power, Substation	6	EA	\$1,300,000	\$7,800,000	15%	\$8,970,000
			Element Total	6	EA		\$7,800,000		\$8,970,000
50.04	Traction power distribution: catenary and third rail		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	27,731	RF	\$260	\$7,210,186	15%	\$8,291,714
			Element Total	27,731	RF		\$0		\$0
50.05	Communications		Communication, Line	27,731	RF	\$240	\$6,655,557	15%	\$7,653,890
			Communication, Station	5	EA	\$500,000	\$2,500,000	15%	\$2,875,000
			Element Total	1	LS		\$9,155,557		\$10,528,890
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	5	EA	\$220,000	\$1,100,000	15%	\$1,265,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$1,100,000		\$1,265,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-North  
 CSX N/S split to Busch Blvd

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	27,581	RF	\$400	\$11,032,594	50%	\$16,548,891
			Right of Way Allowance - Aerial	150	RF	\$300	\$45,000	50%	\$67,500
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	27,731	RF		\$11,077,594		\$16,616,391

**Hillsborough County MPO Transit Study  
System Planning  
LR-North  
Busch Blvd. to 30th St.**

**TRANSIT MODE: LRT**

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	14,462	RF	\$450	\$6,507,977	25%	\$8,134,971
			Element Total	14,462	RF		\$6,507,977		\$8,134,971
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	14,462	RF	\$480	\$6,941,842	15%	\$7,983,118
			Element Total	14,462	RF		\$6,941,842		\$7,983,118



Hillsborough County MPO Transit Study  
 System Planning  
 LR-North  
 Busch Blvd. to 30th St.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$1,041,276	15%	\$1,197,468
			Element Total	1	LS		\$1,041,276		\$1,197,468
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$416,511	15%	\$478,987
			Element Total	1	LS		\$416,511		\$478,987
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	2	EA	\$3,000,000	\$6,000,000	20%	\$7,200,000
			Element Total	2	EA		\$6,000,000		\$7,200,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	14,462	RF	\$30	\$433,865	30%	\$564,025
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	14,462	RF		\$433,865		\$564,025
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	14,462	RF	\$140	\$2,024,704	30%	\$2,632,115
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	14,462	RF		\$2,024,704		\$2,632,115
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	14,462	RF	\$20	\$289,243	30%	\$376,016
			Element Total	1	LS		\$289,243		\$376,016

Hillsborough County MPO Transit Study  
 System Planning  
 LR-North  
 Busch Blvd. to 30th St.

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTG Y	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	14,462	RF	\$50	\$723,109	30%	\$940,041
			Element Total	1	LS		\$723,109		\$940,041
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	1,446	RF	\$80	\$115,697	30%	\$150,407
			Element Total	1	LS		\$115,697		\$150,407
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	14,462	RF	\$15	\$216,933	30%	\$282,012
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$125,080	30%	\$162,604
			Element Total	1	LS		\$342,012		\$444,616
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	600	STL	\$4,000	\$2,400,000	30%	\$3,120,000
			Element Total	1	LS		\$2,400,000		\$3,120,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$316,432	25%	\$395,539
			Element Total	1	LS		\$316,432		\$395,539
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Signal System	0	RF	\$240	\$0	15%	\$0
	Double Track		Signal System	14,462	RF	\$260	\$3,760,164	15%	\$4,324,189
			Element Total	14,462	RF		\$3,760,164		\$4,324,189
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	7	EA	\$250,000	\$1,750,000	15%	\$2,012,500
			Element Total	7	EA		\$1,750,000		\$2,012,500
50.03	Traction power supply: substations		Traction Power, Substation	3	EA	\$1,300,000	\$3,900,000	15%	\$4,485,000
			Element Total	3	EA		\$3,900,000		\$4,485,000
50.04	Traction power distribution: catenary and third rail		OCS System - Standard	0	RF	\$240	\$0	15%	\$0
	Double Track		OCS System - Standard	14,462	RF	\$260	\$3,760,164	15%	\$4,324,189
			Element Total	14,462	RF		\$0		\$0
50.05	Communications		Communication, Line	14,462	RF	\$240	\$3,470,921	15%	\$3,991,559
			Communication, Station	2	EA	\$500,000	\$1,000,000	15%	\$1,150,000
			Element Total	1	LS		\$4,470,921		\$5,141,559
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	2	EA	\$220,000	\$440,000	15%	\$506,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$440,000		\$506,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-North  
 Busch Blvd. to 30th St.

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	14,462	RF	\$400	\$5,784,868	50%	\$8,677,302
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	14,462	RF		\$5,784,868		\$8,677,302

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Tampa Bay  
 West Shore Dr to St. Pete

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	0	RF	\$450	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	1,900	RF	\$5,500	\$10,450,000	30%	\$13,585,000
	Double Track		Aerial - Direct Fixation Over Water	16,000	RF	\$6,000	\$96,000,000	30%	\$124,800,000
			Element Total	17,900	RF		\$106,450,000		\$138,385,000
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	24,532	RF	\$3,200	\$78,501,299	30%	\$102,051,688
			Element Total	24,532	RF		\$78,501,299		\$102,051,688
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	17,900	RF	\$810	\$14,499,000	15%	\$16,673,850
			Element Total	17,900	RF		\$14,499,000		\$16,673,850
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	24,532	RF	\$480	\$11,775,195	15%	\$13,541,474
			Element Total	24,532	RF		\$11,775,195		\$13,541,474

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Tampa Bay  
 West Shore Dr to St. Pete

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$3,941,129	15%	\$4,532,299
			Element Total	1	LS		\$3,941,129		\$4,532,299
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$706,512	15%	\$812,488
			Element Total	1	LS		\$706,512		\$812,488
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	0	EA	\$3,000,000	\$0	20%	\$0
			Element Total	0	EA		\$0		\$0
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	0	RF	\$30	\$0	30%	\$0
			Demolition Allowance - Median	42,432	RF	\$50	\$2,121,583	30%	\$2,758,058
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	42,432	RF		\$2,121,583		\$2,758,058
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	0	RF	\$140	\$0	30%	\$0
			Utility Relocation Allowance - Median	42,432	RF	\$340	\$14,426,763	30%	\$18,754,792
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	42,432	RF		\$14,426,763		\$18,754,792
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	42,432	RF	\$20	\$848,633	30%	\$1,103,223
			Element Total	1	LS		\$848,633		\$1,103,223

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Tampa Bay  
 West Shore Dr to St. Pete

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	42,432	RF	\$50	\$2,121,583	30%	\$2,758,058
			Element Total	1	LS		\$2,121,583		\$2,758,058
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	2,453	RF	\$80	\$196,253	30%	\$255,129
			Element Total	1	LS		\$196,253		\$255,129
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	0	RF	\$15	\$0	30%	\$0
			Landscaping Allowance - Median	42,432	RF	\$25	\$1,060,791	30%	\$1,379,029
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$1,849,513	30%	\$2,404,367
			Element Total	1	LS		\$2,910,304		\$3,783,396
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$0		\$0
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$1,131,256	25%	\$1,414,070
			Element Total	1	LS		\$1,131,256		\$1,414,070
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	42,432	RF	\$260	\$11,032,231	15%	\$12,687,065
			Element Total	42,432	RF		\$11,032,231		\$12,687,065
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	0	EA	\$250,000	\$0	15%	\$0
			Element Total	0	EA		\$0		\$0
50.03	Traction power supply: substations		Traction Power, Substation	9	EA	\$1,300,000	\$11,700,000	15%	\$13,455,000
			Element Total	9	EA		\$11,700,000		\$13,455,000
50.04	Traction power distribution: catenary and third rail		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	42,432	RF	\$260	\$11,032,231	15%	\$12,687,065
			Element Total	42,432	RF		\$0		\$0
50.05	Communications		Communication, Line	42,432	RF	\$240	\$10,183,597	15%	\$11,711,137
			Communication, Station	0	EA	\$500,000	\$0	15%	\$0
			Element Total	1	LS		\$10,183,597		\$11,711,137
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	0	EA	\$220,000	\$0	15%	\$0
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Tampa Bay  
 West Shore Dr to St. Pete

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	24,532	RF	\$400	\$9,812,662	50%	\$14,718,993
			Right of Way Allowance - Aerial	17,900	RF	\$300	\$5,370,000	50%	\$8,055,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	42,432	RF		\$15,182,662		\$22,773,993

Hillsborough County MPO Transit Study  
 System Planning  
 LR-University  
 30th St to Maple Dr to Fletcher/ 31st (Univ)

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTG	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	0	RF	\$450	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	17,212	RF	\$700	\$12,048,380	25%	\$15,060,475
			Element Total	17,212	RF		\$12,048,380		\$15,060,475
10.03	Guideway: At-grade in mixed traffic								
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	17,212	RF	\$980	\$16,867,732	15%	\$19,397,891
			Element Total	17,212	RF		\$16,867,732		\$19,397,891
10.11	Track: Ballasted								
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0



Hillsborough County MPO Transit Study  
 System Planning  
 LR-University  
 30th St to Maple Dr to Fletcher/ 31st (Univ)

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$2,530,160	15%	\$2,909,684
			Element Total	1	LS		\$2,530,160		\$2,909,684
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	3	EA	\$3,000,000	\$9,000,000	20%	\$10,800,000
			Element Total	3	EA		\$9,000,000		\$10,800,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	0	RF	\$30	\$0	30%	\$0
			Demolition Allowance - Median	17,212	RF	\$50	\$860,599	30%	\$1,118,778
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	17,212	RF		\$860,599		\$1,118,778
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	0	RF	\$140	\$0	30%	\$0
			Utility Relocation Allowance - Median	17,212	RF	\$340	\$5,852,070	30%	\$7,607,691
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	17,212	RF		\$5,852,070		\$7,607,691
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	17,212	RF	\$20	\$344,239	30%	\$447,511
			Element Total	1	LS		\$344,239		\$447,511

Hillsborough County MPO Transit Study  
 System Planning  
 LR-University  
 30th St to Maple Dr to Fletcher/ 31st (Univ)

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	17,212	RF	\$50	\$860,599	30%	\$1,118,778
			Element Total	1	LS		\$860,599		\$1,118,778
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	0	RF	\$80	\$0	30%	\$0
			Element Total	1	LS		\$0		\$0
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	0	RF	\$15	\$0	30%	\$0
			Landscaping Allowance - Median	17,212	RF	\$25	\$430,299	30%	\$559,389
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$210,484	30%	\$273,629
			Element Total	1	LS		\$640,783		\$833,018
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	17	EA	\$50,000	\$850,000	30%	\$1,105,000
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	413,087	SF	\$30	\$12,392,619	30%	\$16,110,405
			Parking Lots	900	STL	\$4,000	\$3,600,000	30%	\$4,680,000
			Element Total	1	LS		\$16,842,619		\$21,895,405
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$1,270,045	25%	\$1,587,557
			Element Total	1	LS		\$1,270,045		\$1,587,557
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Signal System	0	RF	\$240	\$0	15%	\$0
	Double Track		Signal System	17,212	RF	\$260	\$4,475,112	15%	\$5,146,379
			Element Total	17,212	RF		\$4,475,112		\$5,146,379
50.02	Traffic signals and crossing protection		Traffic Signal	17	EA	\$150,000	\$2,550,000	15%	\$2,932,500
			Crossing Protection	0	EA	\$250,000	\$0	15%	\$0
			Element Total	17	EA		\$2,550,000		\$2,932,500
50.03	Traction power supply: substations		Traction Power, Substation	4	EA	\$1,300,000	\$5,200,000	15%	\$5,980,000
			Element Total	4	EA		\$5,200,000		\$5,980,000
50.04	Traction power distribution: catenary and third rail		OCS System - Standard	0	RF	\$240	\$0	15%	\$0
	Double Track		OCS System - Standard	17,212	RF	\$260	\$4,475,112	15%	\$5,146,379
			Element Total	17,212	RF		\$0		\$0
50.05	Communications		Communication, Line	17,212	RF	\$240	\$4,130,873	15%	\$4,750,504
			Communication, Station	3	EA	\$500,000	\$1,500,000	15%	\$1,725,000
			Element Total	1	LS		\$5,630,873		\$6,475,504
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	3	EA	\$220,000	\$660,000	15%	\$759,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$660,000		\$759,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-University  
 30th St to Maple Dr to Fletcher/ 31st (Univ)

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTCY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	17,212	RF	\$400	\$6,884,788	50%	\$10,327,183
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	17,212	RF		\$6,884,788		\$10,327,183

Hillsborough County MPO Transit Study  
 System Planning  
 LR-University  
 E Fletcher/ 31st St to N 37th St

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	0	RF	\$450	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	6,282	RF	\$700	\$4,397,740	25%	\$5,497,176
			Element Total	6,282	RF		\$4,397,740		\$5,497,176
10.03	Guideway: At-grade in mixed traffic								
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	6,282	RF	\$980	\$6,156,837	15%	\$7,080,362
			Element Total	6,282	RF		\$6,156,837		\$7,080,362
10.11	Track: Ballasted								
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-University  
 E Fletcher/ 31st St to N 37th St

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$923,526	15%	\$1,062,054
			Element Total	1	LS		\$923,526		\$1,062,054
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	1	EA	\$3,000,000	\$3,000,000	20%	\$3,600,000
			Element Total	1	EA		\$3,000,000		\$3,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	0	RF	\$30	\$0	30%	\$0
			Demolition Allowance - Median	6,282	RF	\$50	\$314,124	30%	\$408,362
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	6,282	RF		\$314,124		\$408,362
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	0	RF	\$140	\$0	30%	\$0
			Utility Relocation Allowance - Median	6,282	RF	\$340	\$2,136,045	30%	\$2,776,859
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	6,282	RF		\$2,136,045		\$2,776,859
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	6,282	RF	\$20	\$125,650	30%	\$163,345
			Element Total	1	LS		\$125,650		\$163,345

Hillsborough County MPO Transit Study  
 System Planning  
 LR-University  
 E Fletcher/ 31st St to N 37th St

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	6,282	RF	\$50	\$314,124	30%	\$408,362
			Element Total	1	LS		\$314,124		\$408,362
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	0	RF	\$80	\$0	30%	\$0
			Element Total	1	LS		\$0		\$0
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	0	RF	\$15	\$0	30%	\$0
			Landscaping Allowance - Median	6,282	RF	\$25	\$157,062	30%	\$204,181
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$73,977	30%	\$96,171
			Element Total	1	LS		\$231,040		\$300,351
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	6	EA	\$50,000	\$300,000	30%	\$390,000
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	150,780	SF	\$30	\$4,523,390	30%	\$5,880,407
			Parking Lots	300	STL	\$4,000	\$1,200,000	30%	\$1,560,000
			Element Total	1	LS		\$6,023,390		\$7,830,407
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$457,219	25%	\$571,523
			Element Total	1	LS		\$457,219		\$571,523
<b>50 SYSTEMS</b>									
50.01	Train control and signals		Single Track Signal System	0	RF	\$240	\$0	15%	\$0
			Double Track Signal System	6,282	RF	\$260	\$1,633,446	15%	\$1,878,463
			Element Total	6,282	RF		\$1,633,446		\$1,878,463
50.02	Traffic signals and crossing protection		Traffic Signal	6	EA	\$150,000	\$900,000	15%	\$1,035,000
			Crossing Protection	0	EA	\$250,000	\$0	15%	\$0
			Element Total	6	EA		\$900,000		\$1,035,000
50.03	Traction power supply: substations		Traction Power, Substation	2	EA	\$1,300,000	\$2,600,000	15%	\$2,990,000
			Element Total	2	EA		\$2,600,000		\$2,990,000
50.04	Traction power distribution: catenary and third rail		Single Track OCS System - Standard	0	RF	\$240	\$0	15%	\$0
			Double Track OCS System - Standard	6,282	RF	\$260	\$1,633,446	15%	\$1,878,463
			Element Total	6,282	RF		\$0		\$0
50.05	Communications		Communication, Line	6,282	RF	\$240	\$1,507,797	15%	\$1,733,966
			Communication, Station	1	EA	\$500,000	\$500,000	15%	\$575,000
			Element Total	1	LS		\$2,007,797		\$2,308,966
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	1	EA	\$220,000	\$220,000	15%	\$253,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$220,000		\$253,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-University  
 E Fletcher/ 31st St to N 37th St

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	6,282	RF	\$400	\$2,512,995	50%	\$3,769,492
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	6,282	RF		\$2,512,995		\$3,769,492

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Airport to at grade section

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	0	RF	\$450	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	2,900	RF	\$5,500	\$15,950,000	30%	\$20,735,000
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	2,900	RF		\$15,950,000		\$20,735,000
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	62	RF	\$15,500	\$957,675	35%	\$1,292,862
			Element Total	62	RF		\$957,675		\$1,292,862
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	400	RF	\$8,000	\$3,200,000	30%	\$4,160,000
	Double Track		Retained Fill - Ballasted	700	RF	\$3,200	\$2,240,000	30%	\$2,912,000
			Element Total	1,100	RF		\$5,440,000		\$7,072,000
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	3,362	RF	\$810	\$2,723,046	15%	\$3,131,503
			Element Total	3,362	RF		\$2,723,046		\$3,131,503
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	700	RF	\$480	\$336,000	15%	\$386,400
			Element Total	700	RF		\$336,000		\$386,400



Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Airport to at grade section

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$458,857	15%	\$527,685
			Element Total	1	LS		\$458,857		\$527,685
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$20,160	15%	\$23,184
			Element Total	1	LS		\$20,160		\$23,184
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	1	EA	\$3,000,000	\$3,000,000	20%	\$3,600,000
			Element Total	1	EA		\$3,000,000		\$3,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	0	RF	\$30	\$0	30%	\$0
			Demolition Allowance - Median	4,000	RF	\$50	\$200,000	30%	\$260,000
			Demolition Allowance - High	62	RF	\$90	\$5,561	30%	\$7,229
			Element Total	4,062	RF		\$205,561		\$267,229
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	0	RF	\$140	\$0	30%	\$0
			Utility Relocation Allowance - Median	4,000	RF	\$340	\$1,360,000	30%	\$1,768,000
			Utility Relocation Allowance - High	62	RF	\$570	\$35,218	30%	\$45,783
			Element Total	4,062	RF		\$1,395,218		\$1,813,783
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	4,062	RF	\$20	\$81,236	30%	\$105,606
			Element Total	1	LS		\$81,236		\$105,606

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Airport to at grade section

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	4,062	RF	\$50	\$203,089	30%	\$264,016
			Element Total	1	LS		\$203,089		\$264,016
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	70	RF	\$80	\$5,600	30%	\$7,280
			Element Total	1	LS		\$5,600		\$7,280
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	0	RF	\$15	\$0	30%	\$0
			Landscaping Allowance - Median	4,000	RF	\$25	\$100,000	30%	\$130,000
			Landscaping Allowance - High	62	RF	\$40	\$2,471	30%	\$3,213
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$253,477	30%	\$329,520
			Element Total	1	LS		\$355,948		\$462,733
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	100	STL	\$4,000	\$400,000	30%	\$520,000
			Element Total	1	LS		\$400,000		\$520,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$132,333	25%	\$165,416
			Element Total	1	LS		\$132,333		\$165,416
<b>50 SYSTEMS</b>									
50.01	Train control and signals		Single Track Signal System	0	RF	\$240	\$0	15%	\$0
			Double Track Signal System	4,062	RF	\$260	\$1,056,064	15%	\$1,214,474
			Element Total	4,062	RF		\$1,056,064		\$1,214,474
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	0	EA	\$250,000	\$0	15%	\$0
			Element Total	0	EA		\$0		\$0
50.03	Traction power supply: substations		Traction Power, Substation	1	EA	\$1,300,000	\$1,300,000	15%	\$1,495,000
			Element Total	1	EA		\$1,300,000		\$1,495,000
50.04	Traction power distribution: catenary and third rail		Single Track OCS System - Standard	0	RF	\$240	\$0	15%	\$0
			Double Track OCS System - Standard	4,062	RF	\$260	\$1,056,064	15%	\$1,214,474
			Element Total	4,062	RF		\$0		\$0
50.05	Communications		Communication, Line	4,062	RF	\$240	\$974,829	15%	\$1,121,053
			Communication, Station	1	EA	\$500,000	\$500,000	15%	\$575,000
			Element Total	1	LS		\$1,474,829		\$1,696,053
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	1	EA	\$220,000	\$220,000	15%	\$253,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$220,000		\$253,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Airport to at grade section

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	1,100	RF	\$400	\$440,000	50%	\$660,000
			Right of Way Allowance - Aerial	2,900	RF	\$300	\$870,000	50%	\$1,305,000
			Right of Way Allowance - Underground	62	RF	\$250	\$15,446	50%	\$23,170
			Element Total	4,062	RF		\$1,325,446		\$1,988,170

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Airport (north) to Hillsborough

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	0	RF	\$450	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	5,326	RF	\$15,500	\$82,557,986	35%	\$111,453,282
			Element Total	5,326	RF		\$82,557,986		\$111,453,282
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	5,326	RF	\$810	\$4,314,321	15%	\$4,961,469
			Element Total	5,326	RF		\$4,314,321		\$4,961,469
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Airport (north) to Hillsborough

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$647,148	15%	\$744,220
			Element Total	1	LS		\$647,148		\$744,220
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	0	EA	\$3,000,000	\$0	20%	\$0
			Element Total	0	EA		\$0		\$0
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	1	EA	\$45,000,000	\$45,000,000	30%	\$58,500,000
			Element Total	1	EA		\$45,000,000		\$58,500,000
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	2	EA	\$200,000	\$400,000	20%	\$480,000
			Escalator	2	EA	\$450,000	\$900,000	20%	\$1,080,000
			Element Total	1	LS		\$1,300,000		\$1,560,000
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	0	RF	\$30	\$0	30%	\$0
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	5,326	RF	\$90	\$479,369	30%	\$623,180
			Element Total	5,326	RF		\$479,369		\$623,180
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	0	RF	\$140	\$0	30%	\$0
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	5,326	RF	\$570	\$3,036,003	30%	\$3,946,804
			Element Total	5,326	RF		\$3,036,003		\$3,946,804
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	5,326	RF	\$20	\$106,526	30%	\$138,484
			Element Total	1	LS		\$106,526		\$138,484

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Airport (north) to Hillsborough

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	5,326	RF	\$50	\$266,316	30%	\$346,211
			Element Total	1	LS		\$266,316		\$346,211
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	0	RF	\$80	\$0	30%	\$0
			Element Total	1	LS		\$0		\$0
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	0	RF	\$15	\$0	30%	\$0
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	5,326	RF	\$40	\$213,053	30%	\$276,969
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$1,275,580	30%	\$1,658,254
			Element Total	1	LS		\$1,488,633		\$1,935,223
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	100	STL	\$4,000	\$400,000	30%	\$520,000
			Element Total	1	LS		\$400,000		\$520,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$288,842	25%	\$361,053
			Element Total	1	LS		\$288,842		\$361,053
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	5,326	RF	\$260	\$1,384,844	15%	\$1,592,570
			Element Total	5,326	RF		\$1,384,844		\$1,592,570
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	0	EA	\$250,000	\$0	15%	\$0
			Element Total	0	EA		\$0		\$0
50.03	Traction power supply: substations		Traction Power, Substation	2	EA	\$1,300,000	\$2,600,000	15%	\$2,990,000
			Element Total	2	EA		\$2,600,000		\$2,990,000
50.04	Traction power distribution: catenary and third rail		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	5,326	RF	\$260	\$1,384,844	15%	\$1,592,570
			Element Total	5,326	RF		\$0		\$0
50.05	Communications		Communication, Line	5,326	RF	\$240	\$1,278,317	15%	\$1,470,065
			Communication, Station	1	EA	\$500,000	\$500,000	15%	\$575,000
			Element Total	1	LS		\$1,778,317		\$2,045,065
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	1	EA	\$220,000	\$220,000	15%	\$253,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$220,000		\$253,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Airport (north) to Hillsborough

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	0	RF	\$400	\$0	50%	\$0
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	5,326	RF	\$250	\$1,331,580	50%	\$1,997,371
			Element Total	5,326	RF		\$1,331,580		\$1,997,371

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Hillsborough to CSX

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	13,137	RF	\$450	\$5,911,439	25%	\$7,389,299
			Element Total	13,137	RF		\$5,911,439		\$7,389,299
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	2,800	RF	\$700	\$1,960,000	25%	\$2,450,000
			Element Total	2,800	RF		\$1,960,000		\$2,450,000
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	100	RF	\$6,000	\$600,000	30%	\$780,000
			Element Total	100	RF		\$600,000		\$780,000
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	500	RF	\$8,000	\$4,000,000	30%	\$5,200,000
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	500	RF		\$4,000,000		\$5,200,000
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	600	RF	\$810	\$486,000	15%	\$558,900
			Element Total	600	RF		\$486,000		\$558,900
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	2,800	RF	\$980	\$2,744,000	15%	\$3,155,600
			Element Total	2,800	RF		\$2,744,000		\$3,155,600
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	13,137	RF	\$480	\$6,305,535	15%	\$7,251,366
			Element Total	13,137	RF		\$6,305,535		\$7,251,366



Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Hillsborough to CSX

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$1,430,330	15%	\$1,644,880
			Element Total	1	LS		\$1,430,330		\$1,644,880
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$378,332	15%	\$435,082
			Element Total	1	LS		\$378,332		\$435,082
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	2	EA	\$3,000,000	\$6,000,000	20%	\$7,200,000
			Element Total	2	EA		\$6,000,000		\$7,200,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	13,137	RF	\$30	\$394,096	30%	\$512,325
			Demolition Allowance - Median	3,400	RF	\$50	\$170,000	30%	\$221,000
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	16,537	RF		\$564,096		\$733,325
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	13,137	RF	\$140	\$1,839,114	30%	\$2,390,849
			Utility Relocation Allowance - Median	3,400	RF	\$340	\$1,156,000	30%	\$1,502,800
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	16,537	RF		\$2,995,114		\$3,893,649
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	16,537	RF	\$20	\$330,731	30%	\$429,950
			Element Total	1	LS		\$330,731		\$429,950

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Hillsborough to CSX

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	16,537	RF	\$50	\$826,827	30%	\$1,074,875
			Element Total	1	LS		\$826,827		\$1,074,875
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	1,314	RF	\$80	\$105,092	30%	\$136,620
			Element Total	1	LS		\$105,092		\$136,620
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	13,137	RF	\$15	\$197,048	30%	\$256,162
			Landscaping Allowance - Median	3,400	RF	\$25	\$85,000	30%	\$110,500
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$184,714	30%	\$240,129
			Element Total	1	LS		\$466,762		\$606,791
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	3	EA	\$50,000	\$150,000	30%	\$195,000
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	67,200	SF	\$30	\$2,016,000	30%	\$2,620,800
			Parking Lots	400	STL	\$4,000	\$1,600,000	30%	\$2,080,000
			Element Total	1	LS		\$3,766,000		\$4,895,800
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$452,731	25%	\$565,914
			Element Total	1	LS		\$452,731		\$565,914
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	16,537	RF	\$260	\$4,299,498	15%	\$4,944,423
			Element Total	16,537	RF		\$4,299,498		\$4,944,423
50.02	Traffic signals and crossing protection		Traffic Signal	3	EA	\$150,000	\$450,000	15%	\$517,500
			Crossing Protection	7	EA	\$250,000	\$1,750,000	15%	\$2,012,500
			Element Total	10	EA		\$2,200,000		\$2,530,000
50.03	Traction power supply: substations		Traction Power, Substation	4	EA	\$1,300,000	\$5,200,000	15%	\$5,980,000
			Element Total	4	EA		\$5,200,000		\$5,980,000
50.04	Traction power distribution: catenary and third rail		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	16,537	RF	\$260	\$4,299,498	15%	\$4,944,423
			Element Total	16,537	RF		\$0		\$0
50.05	Communications		Communication, Line	16,537	RF	\$240	\$3,968,768	15%	\$4,564,083
			Communication, Station	2	EA	\$500,000	\$1,000,000	15%	\$1,150,000
			Element Total	1	LS		\$4,968,768		\$5,714,083
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	2	EA	\$220,000	\$440,000	15%	\$506,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$440,000		\$506,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 Hillsborough to CSX

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	16,437	RF	\$400	\$6,574,613	50%	\$9,861,919
			Right of Way Allowance - Aerial	100	RF	\$300	\$30,000	50%	\$45,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	16,537	RF		\$6,604,613		\$9,906,919

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 On CSX to west of Sheldon

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01 Guideway: At-grade exclusive right-of-way									
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	23,167	RF	\$450	\$10,425,311	25%	\$13,031,639
			Element Total	23,167	RF		\$10,425,311		\$13,031,639
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)									
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03 Guideway: At-grade in mixed traffic									
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04 Guideway: Aerial structure									
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	50	RF	\$6,000	\$300,000	30%	\$390,000
			Element Total	50	RF		\$300,000		\$390,000
10.05 Guideway: Built-up fill									
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06 Guideway: Underground cut & cover									
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07 Guideway: Underground tunnel									
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08 Guideway: Retained cut or fill									
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09 Track: Direct fixation									
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	50	RF	\$810	\$40,500	15%	\$46,575
			Element Total	50	RF		\$40,500		\$46,575
10.10 Track: Embedded									
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11 Track: Ballasted									
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	23,167	RF	\$480	\$11,120,332	15%	\$12,788,382
			Element Total	23,167	RF		\$11,120,332		\$12,788,382

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 On CSX to west of Sheldon

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$1,674,125	15%	\$1,925,244
			Element Total	1	LS		\$1,674,125		\$1,925,244
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$667,220	15%	\$767,303
			Element Total	1	LS		\$667,220		\$767,303
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	4	EA	\$3,000,000	\$12,000,000	20%	\$14,400,000
			Element Total	4	EA		\$12,000,000		\$14,400,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	23,167	RF	\$30	\$695,021	30%	\$903,527
			Demolition Allowance - Median	50	RF	\$50	\$2,500	30%	\$3,250
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	23,217	RF		\$697,521		\$906,777
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	23,167	RF	\$140	\$3,243,430	30%	\$4,216,459
			Utility Relocation Allowance - Median	50	RF	\$340	\$17,000	30%	\$22,100
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	23,217	RF		\$3,260,430		\$4,238,559
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	23,217	RF	\$20	\$464,347	30%	\$603,651
			Element Total	1	LS		\$464,347		\$603,651

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 On CSX to west of Sheldon

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	23,217	RF	\$50	\$1,160,868	30%	\$1,509,128
			Element Total	1	LS		\$1,160,868		\$1,509,128
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	2,317	RF	\$80	\$185,339	30%	\$240,941
			Element Total	1	LS		\$185,339		\$240,941
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	23,167	RF	\$15	\$347,510	30%	\$451,763
			Landscaping Allowance - Median	50	RF	\$25	\$1,250	30%	\$1,625
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$227,253	30%	\$295,429
			Element Total	1	LS		\$576,013		\$748,818
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	1,400	STL	\$4,000	\$5,600,000	30%	\$7,280,000
			Element Total	1	LS		\$5,600,000		\$7,280,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$597,226	25%	\$746,532
			Element Total	1	LS		\$597,226		\$746,532
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	23,217	RF	\$260	\$6,036,513	15%	\$6,941,990
			Element Total	23,217	RF		\$6,036,513		\$6,941,990
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	12	EA	\$250,000	\$3,000,000	15%	\$3,450,000
			Element Total	12	EA		\$3,000,000		\$3,450,000
50.03	Traction power supply: substations		Traction Power, Substation	5	EA	\$1,300,000	\$6,500,000	15%	\$7,475,000
			Element Total	5	EA		\$6,500,000		\$7,475,000
50.04	Traction power distribution: catenary and third rail		Single Track	0	RF	\$240	\$0	15%	\$0
			Double Track	23,217	RF	\$260	\$6,036,513	15%	\$6,941,990
			Element Total	23,217	RF		\$0		\$0
50.05	Communications		Communication, Line	23,217	RF	\$240	\$5,572,166	15%	\$6,407,991
			Communication, Station	4	EA	\$500,000	\$2,000,000	15%	\$2,300,000
			Element Total	1	LS		\$7,572,166		\$8,707,991
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	4	EA	\$220,000	\$880,000	15%	\$1,012,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$880,000		\$1,012,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Westchase  
 On CSX to west of Sheldon

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	23,167	RF	\$400	\$9,266,943	50%	\$13,900,415
			Right of Way Allowance - Aerial	50	RF	\$300	\$15,000	50%	\$22,500
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	23,217	RF		\$9,281,943		\$13,922,915

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Ybor City  
 Nebraska Ave. to CSX N/S split

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	0	RF	\$350	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	8,919	RF	\$450	\$4,013,641	25%	\$5,017,052
			Element Total	8,919	RF		\$4,013,641		\$5,017,052
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
	Single Track		At Grade - Ballasted, In-Street	0	RF	\$440	\$0	25%	\$0
	Single Track		At Grade - Embedded, In-Street	0	RF	\$580	\$0	25%	\$0
	Double Track		At Grade - Ballasted, In-Street	0	RF	\$530	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$700	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
	Single Track		At Grade - Embedded, In-Street	0	RF	\$560	\$0	25%	\$0
	Double Track		At Grade - Embedded, In-Street	0	RF	\$680	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Bridge - Ballasted	0	RF	\$8,200	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation	0	RF	\$4,600	\$0	30%	\$0
	Single Track		Aerial - Direct Fixation Over Water	0	RF	\$5,000	\$0	30%	\$0
	Double Track		Bridge - Ballasted	0	RF	\$12,200	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation	0	RF	\$5,500	\$0	30%	\$0
	Double Track		Aerial - Direct Fixation Over Water	0	RF	\$6,000	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$480	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$600	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
	Single Track		Subway - Direct Fixation	0	RF	\$10,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$15,500	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
	Single Track		Subway - Direct Fixation	0	RF	\$12,000	\$0	35%	\$0
	Double Track		Subway - Direct Fixation	0	RF	\$20,000	\$0	35%	\$0
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Direct Fixation	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Direct Fixation	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
	Single Track		Direct Fixation Track	0	RF	\$405	\$0	15%	\$0
	Double Track		Direct Fixation Track	0	RF	\$810	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
	Single Track		Embedded Track	0	RF	\$490	\$0	15%	\$0
	Double Track		Embedded Track	0	RF	\$980	\$0	15%	\$0
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
	Double Track		Ballasted Track	8,919	RF	\$480	\$4,281,217	15%	\$4,923,400
			Element Total	8,919	RF		\$4,281,217		\$4,923,400



Hillsborough County MPO Transit Study  
 System Planning  
 LR-Ybor City  
 Nebraska Ave. to CSX N/S split

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
10.12	Track: Special (switches, turnouts)		Special Trackwork (15% of Track Cost)	15%			\$642,183	15%	\$738,510
			Element Total	1	LS		\$642,183		\$738,510
10.13	Track: Vibration and noise dampening		Vibration Allowance (6% of Ballasted Track Cost)	6%			\$256,873	15%	\$295,404
			Element Total	1	LS		\$256,873		\$295,404
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$2,000,000	\$0	20%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$3,500,000	\$0	20%	\$0
			Center Platform Station	2	EA	\$3,000,000	\$6,000,000	20%	\$7,200,000
			Element Total	2	EA		\$6,000,000		\$7,200,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$12,000,000	\$0	25%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$18,000,000	\$0	25%	\$0
			Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		Side Platform Station - 1 Platform	0	EA	\$28,000,000	\$0	30%	\$0
			Side Platform Station - 2 Platforms	0	EA	\$52,000,000	\$0	30%	\$0
			Center Platform Station	0	EA	\$45,000,000	\$0	30%	\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	8,919	RF	\$30	\$267,576	30%	\$347,849
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	8,919	RF		\$267,576		\$347,849
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	8,919	RF	\$140	\$1,248,688	30%	\$1,623,295
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	8,919	RF		\$1,248,688		\$1,623,295
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	8,919	RF	\$20	\$178,384	30%	\$231,899
			Element Total	1	LS		\$178,384		\$231,899

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Ybor City  
 Nebraska Ave. to CSX N/S split

TRANSIT MODE: LRT

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Environmental Mitigation Allowance	8,919	RF	\$50	\$445,960	30%	\$579,748
			Element Total	1	LS		\$445,960		\$579,748
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	892	RF	\$80	\$71,354	30%	\$92,760
			Element Total	1	LS		\$71,354		\$92,760
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	8,919	RF	\$15	\$133,788	30%	\$173,924
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$100,136	30%	\$130,177
			Element Total	1	LS		\$233,924		\$304,102
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Roadway Modifications Allow. - AC Paving (incl. Curb & Sidewalk)	0	SF	\$30	\$0	30%	\$0
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$0		\$0
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$122,294	25%	\$152,868
			Element Total	1	LS		\$122,294		\$152,868
<b>50</b>	<b>SYSTEMS</b>								
50.01	Train control and signals		Signal System	0	RF	\$240	\$0	15%	\$0
	Single Track		Signal System	8,919	RF	\$260	\$2,318,993	15%	\$2,666,842
	Double Track		Element Total	8,919	RF		\$2,318,993		\$2,666,842
50.02	Traffic signals and crossing protection		Traffic Signal	0	EA	\$150,000	\$0	15%	\$0
			Crossing Protection	4	EA	\$250,000	\$1,000,000	15%	\$1,150,000
			Element Total	4	EA		\$1,000,000		\$1,150,000
50.03	Traction power supply: substations		Traction Power, Substation	2	EA	\$1,300,000	\$2,600,000	15%	\$2,990,000
			Element Total	2	EA		\$2,600,000		\$2,990,000
50.04	Traction power distribution: catenary and third rail		OCS System - Standard	0	RF	\$240	\$0	15%	\$0
	Single Track		OCS System - Standard	8,919	RF	\$260	\$2,318,993	15%	\$2,666,842
	Double Track		Element Total	8,919	RF		\$0		\$0
50.05	Communications		Communication, Line	8,919	RF	\$240	\$2,140,609	15%	\$2,461,700
			Communication, Station	2	EA	\$500,000	\$1,000,000	15%	\$1,150,000
			Element Total	1	LS		\$3,140,609		\$3,611,700
50.06	Fare collection system and equipment		Fare Collection - 1 Platform	2	EA	\$220,000	\$440,000	15%	\$506,000
			Fare Collection - 2 Platform	0	EA	\$400,000	\$0	15%	\$0
			Element Total	1	LS		\$440,000		\$506,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 LR-Ybor City  
 Nebraska Ave. to CSX N/S split

TRANSIT MODE: LRT

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	8,919	RF	\$400	\$3,567,681	50%	\$5,351,522
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	8,919	RF		\$3,567,681		\$5,351,522

**Hillsborough County MPO Transit Study  
System Planning  
SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS**

**TRANSIT MODE: LRT**

STATIONING		DESCRIPTION	COST		UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
BEGIN	END		ID	QTY					
<b>30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS</b>									
30.01 Administration Building: Office, sales, storage, revenue counting		N/A							
		Element Total		1	LS		\$0		\$0
30.02 Light Maintenance Facility		N/A							
		Element Total		1	LS		\$0		\$0
30.03 Heavy Maintenance Facility		Maintenance Facility (per vehicle)		147	EA	\$1,500,000	\$220,500,000	25%	\$275,625,000
		Element Total		1	LS		\$220,500,000		\$275,625,000
30.04 Storage or Maintenance of Way Building		N/A							
		Element Total		1	LS		\$0		\$0
30.05 Yard and Yard Track									
Yard		Yard Track		1,000	RF	\$240	\$240,000	15%	\$276,000
Yard		Signal System, Single Track		1,000	RF	\$240	\$240,000	15%	\$276,000
Yard		OCS System Standard, Single Track		1,000	RF	\$240	\$240,000	15%	\$276,000
Yard		Traction Power, Substation		1	EA	\$1,300,000	\$1,300,000	15%	\$1,495,000
		Element Total		1	LS		\$2,020,000		\$2,323,000
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>									
60.01 Purchase or lease of real estate		Right of Way Allowance		20	AC	\$500,000	\$10,000,000	50%	\$15,000,000
		Element Total		1	LS		\$10,000,000		\$15,000,000

Hillsborough County MPO Transit Study  
 System Planning  
 VEHICLES

TRANSIT MODE: LRT

STATIONING		DESCRIPTION	COST		UNIT		BASE COST	ALLCTD CONTGY	TOTAL COST
BEGIN	END		ID	QTY	UNIT	COST			
<b>70 VEHICLES</b>									
70.01 Light Rail									
		Light Rail Vehicle		147	EA	\$3,600,000	\$529,200,000	10%	\$582,120,000

**Hillsborough County MPO Transit Study**  
**System Planning**  
**Commuter Rail Transit**  
**Capital Cost Estimate**  
**(2007 Dollars in Millions)**

Description	Commuter Rail Subtotal	Regional Commuter Rail Subtotal	Commuter Rail Total
Length (Mile):	67.8	23.9	91.6
Number of Stations:	12	4	16
Number of Revenue Vehicles:	82	30	112
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>	<b>\$350.63</b>	<b>\$305.26</b>	<b>\$655.89</b>
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>	<b>\$21.60</b>	<b>\$11.28</b>	<b>\$32.88</b>
<b>30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS</b>	<b>\$140.55</b>	<b>\$0.00</b>	<b>\$140.55</b>
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>	<b>\$150.92</b>	<b>\$58.48</b>	<b>\$209.40</b>
<b>50 SYSTEMS</b>	<b>\$99.57</b>	<b>\$24.20</b>	<b>\$123.77</b>
<b>Construction Subtotal (Sum Categories 10 - 50)</b>	<b>\$763.28</b>	<b>\$399.22</b>	<b>\$1,162.49</b>
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>	<b>\$229.15</b>	<b>\$74.89</b>	<b>\$304.03</b>
<b>70 VEHICLES</b>	<b>\$205.21</b>	<b>\$75.08</b>	<b>\$280.28</b>
<b>80 PROFESSIONAL SERVICES</b>	<b>\$244.25</b>	<b>\$127.75</b>	<b>\$372.00</b>
<b>90 UNALLOCATED CONTINGENCY</b>	<b>\$144.19</b>	<b>\$67.69</b>	<b>\$211.88</b>
<b>Total Project Cost</b>	<b>\$1,586.07</b>	<b>\$744.62</b>	<b>\$2,330.68</b>

Hillsborough County MPO Transit Study

Preferred CR

System Planning  
Commuter Rail Transit  
Capital Cost Estimate  
(2007 Dollars in Millions)

CAT No.	Description	Segment	CR-Dwtn North				CR-Dwtn West		CR-East			CR-Sarasota		Maintenance Facility	Vehicles	Alternative Total
		Section	CR-01 County line/ Hwy 54 to Hwy275	CR-02 Hwy275 to Hwy580/ CL Railroad	CR-03 Between CR-East/ CR-Dwtn West and CR-14 East	CR-04 CR-14 East to S of Busch Blvd	CR-05 West of Channelside Dr to NJefferson/ E Polk St	CR-06 Downtown to west of Channelside Dr	CR-07 Downtown to CL Rail (east of Acline St)	CR-08 CL Rail (east of Acline St) to I75/ LRT Sta	CR-09 I75/ LRT Sta to US98 at CL	CR-11 CL Rail (east of Acline St) to Big Bend/ LRT Sta	CR-12 Big Bend/ LRT Sta to Sarasota/ Countyline			
	Length (Mile):		5.9	4.6	0.3	4.8	0.6	1.3	1.9	4.5	18.1	11.6	14.1			67.8
	Number of Stations:		2	1	0	0	1	0	0	0	2	4	2			12
	Number of Revenue Vehicles:														82	82
<b>10</b>	<b>GUIDEWAY &amp; TRACK ELEMENTS</b>															
10.01	Guideway: At-grade exclusive right-of-way		\$9.73	\$7.61	\$0.55	\$7.97	\$0.98	\$2.14	\$3.09	\$7.15	\$29.90	\$18.48	\$23.12			\$110.72
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
10.03	Guideway: At-grade in mixed traffic		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
10.04	Guideway: Aerial structure		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.38	\$0.00	\$30.94	\$10.83			\$54.15
10.05	Guideway: Built-up fill		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
10.06	Guideway: Underground cut & cover		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
10.07	Guideway: Underground tunnel		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
10.08	Guideway: Retained cut or fill		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
10.09	Track: Direct fixation		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
10.10	Track: Embedded		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
10.11	Track: Ballasted		\$15.39	\$12.04	\$0.86	\$12.60	\$1.56	\$3.39	\$4.90	\$11.70	\$47.31	\$30.24	\$36.93			\$176.93
10.12	Track: Special (switches, turnouts)		\$0.77	\$0.60	\$0.04	\$0.63	\$0.08	\$0.17	\$0.24	\$0.59	\$2.37	\$1.51	\$1.85			\$8.85
10.13	Track: Vibration and noise dampening		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
	<b>Subtotal Category 10</b>		<b>\$25.89</b>	<b>\$20.25</b>	<b>\$1.45</b>	<b>\$21.20</b>	<b>\$2.62</b>	<b>\$5.70</b>	<b>\$8.23</b>	<b>\$31.81</b>	<b>\$79.58</b>	<b>\$81.17</b>	<b>\$72.73</b>			<b>\$350.63</b>
<b>20</b>	<b>STATIONS, STOPS, TERMINALS, INTERMODAL</b>															
20.01	At-grade station, stop, shelter, mall, terminal, platform		\$3.60	\$1.80	\$0.00	\$0.00	\$1.80	\$0.00	\$0.00	\$0.00	\$3.60	\$7.20	\$3.60			\$21.60
20.02	Aerial station, stop, shelter, mall, terminal, platform		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
20.03	Underground station, stop, shelter, mall, terminal, platform		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
20.05	Joint development		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
20.06	Automobile parking multi-story structure		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
20.07	Elevators, escalators		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
	<b>Subtotal Category 20</b>		<b>\$3.60</b>	<b>\$1.80</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$1.80</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$3.60</b>	<b>\$7.20</b>	<b>\$3.60</b>			<b>\$21.60</b>
<b>30</b>	<b>SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS</b>															
30.01	Administration Building: Office, sales, storage, revenue counting													\$0.00		\$0.00
30.02	Light Maintenance Facility													\$0.00		\$0.00
30.03	Heavy Maintenance Facility													\$140.00		\$140.00
30.04	Storage or Maintenance of Way Building													\$0.00		\$0.00
30.05	Yard and Yard Track													\$0.55		\$0.55
	<b>Subtotal Category 30</b>													<b>\$140.55</b>		<b>\$140.55</b>

Hillsborough County MPO Transit Study

Preferred CR

System Planning  
Commuter Rail Transit  
Capital Cost Estimate  
(2007 Dollars in Millions)

CAT No.	Description	Segment	CR-Dwtn North				CR-Dwtn West		CR-East			CR-Sarasota		Maintenance Facility	Vehicles	Alternative Total
		Section	CR-01 County line/ Hwy 54 to Hwy275	CR-02 Hwy275 to Hwy580/ CL Railroad	CR-03 Between CR-East/ CR-Dwtn West and CR-14 East	CR-04 CR-14 East to S of Busch Blvd	CR-05 West of Channelside Dr to NJefferson/ E Polk St	CR-06 Downtown to west of Channelside Dr	CR-07 Downtown to CL Rail (east of Acline St)	CR-08 CL Rail (east of Acline St) to I75/ LRT Sta	CR-09 I75/ LRT Sta to US98 at CL	CR-11 CL Rail (east of Acline St) to Big Bend/ LRT Sta	CR-12 Big Bend/ LRT Sta to Sarasota/ Countyline			
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>																
40.01	Demolition, Clearing, Earthwork		\$1.21	\$0.95	\$0.07	\$0.99	\$0.12	\$0.27	\$0.39	\$0.94	\$3.73	\$2.44	\$2.93			\$14.04
40.02	Site Utilities, Utility Relocation		\$5.67	\$4.43	\$0.32	\$4.64	\$0.57	\$1.25	\$1.80	\$4.51	\$17.41	\$11.65	\$13.77			\$66.03
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		\$0.81	\$0.63	\$0.05	\$0.66	\$0.08	\$0.18	\$0.26	\$0.62	\$2.49	\$1.59	\$1.94			\$9.30
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		\$0.61	\$0.47	\$0.03	\$0.50	\$0.06	\$0.13	\$0.19	\$0.46	\$1.87	\$1.19	\$1.46			\$6.98
40.05	Site structures including retaining walls, sound walls		\$0.32	\$0.25	\$0.02	\$0.27	\$0.03	\$0.07	\$0.10	\$0.25	\$1.00	\$0.64	\$0.78			\$3.72
40.06	Pedestrian / bike access and accommodation, landscaping		\$0.75	\$0.57	\$0.04	\$0.58	\$0.09	\$0.16	\$0.23	\$0.67	\$2.22	\$1.80	\$1.85			\$8.95
40.07	Automobile, bus, van accessways including roads, parking lots		\$6.24	\$3.38	\$0.07	\$0.85	\$0.13	\$0.20	\$0.33	\$0.72	\$8.32	\$7.15	\$7.61			\$34.97
40.08	Temporary Facilities and other indirect costs during construction		\$0.75	\$0.51	\$0.03	\$0.41	\$0.05	\$0.11	\$0.16	\$0.39	\$1.78	\$1.27	\$1.46			\$6.92
	<b>Subtotal Category 40</b>		<b>\$16.36</b>	<b>\$11.21</b>	<b>\$0.62</b>	<b>\$8.89</b>	<b>\$1.15</b>	<b>\$2.36</b>	<b>\$3.45</b>	<b>\$8.56</b>	<b>\$38.81</b>	<b>\$27.72</b>	<b>\$31.80</b>			<b>\$150.92</b>
<b>50 SYSTEMS</b>																
50.01	Train control and signals		\$5.01	\$3.92	\$0.28	\$4.10	\$0.51	\$1.10	\$1.59	\$3.81	\$15.40	\$9.84	\$12.02			\$57.60
50.02	Traffic signals and crossing protection		\$2.76	\$2.07	\$0.17	\$2.24	\$0.35	\$0.52	\$0.86	\$1.90	\$8.28	\$5.18	\$6.38			\$30.71
50.03	Traction power supply: substations		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
50.04	Traction power distribution: catenary and third rail		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
50.05	Communications		\$0.88	\$0.64	\$0.04	\$0.59	\$0.15	\$0.16	\$0.23	\$0.54	\$2.36	\$1.73	\$1.88			\$9.20
50.06	Fare collection system and equipment		\$0.35	\$0.17	\$0.00	\$0.00	\$0.17	\$0.00	\$0.00	\$0.00	\$0.35	\$0.69	\$0.35			\$2.07
50.07	Central Control		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00
	<b>Subtotal Category 50</b>		<b>\$8.99</b>	<b>\$6.80</b>	<b>\$0.49</b>	<b>\$6.93</b>	<b>\$1.18</b>	<b>\$1.78</b>	<b>\$2.68</b>	<b>\$6.25</b>	<b>\$26.39</b>	<b>\$17.44</b>	<b>\$20.63</b>			<b>\$99.57</b>
	<b>Subtotal Construction Costs</b>		<b>\$54.85</b>	<b>\$40.07</b>	<b>\$2.56</b>	<b>\$37.02</b>	<b>\$6.74</b>	<b>\$9.83</b>	<b>\$14.37</b>	<b>\$46.62</b>	<b>\$148.38</b>	<b>\$133.54</b>	<b>\$128.75</b>	<b>\$140.55</b>		<b>\$763.28</b>
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>																
60.01	Purchase or lease of real estate		\$18.68	\$14.61	\$1.05	\$15.29	\$1.89	\$4.11	\$5.94	\$14.08	\$57.41	\$36.39	\$44.71	\$15.00		\$229.15
	<b>Subtotal Right-of-Way</b>		<b>\$18.68</b>	<b>\$14.61</b>	<b>\$1.05</b>	<b>\$15.29</b>	<b>\$1.89</b>	<b>\$4.11</b>	<b>\$5.94</b>	<b>\$14.08</b>	<b>\$57.41</b>	<b>\$36.39</b>	<b>\$44.71</b>	<b>\$15.00</b>		<b>\$229.15</b>



Hillsborough County MPO Transit Study

Preferred CR

System Planning  
Commuter Rail Transit  
Capital Cost Estimate  
(2007 Dollars in Millions)

CAT No.	Description	Segment	CR-Dwtn North				CR-Dwtn West		CR-East			CR-Sarasota		Maintenance Facility	Vehicles	Alternative Total
		Section	CR-01 County line/ Hwy 54 to Hwy275	CR-02 Hwy275 to Hwy580/ CL Railroad	CR-03 Between CR-East/ CR-Dwtn West and CR-14 East	CR-04 CR-14 East to S of Busch Blvd	CR-05 West of Channelside Dr to NJefferson/ E Polk St	CR-06 Downtown to west of Channelside Dr	CR-07 Downtown to CL Rail (east of Acline St)	CR-08 CL Rail (east of Acline St) to I75/ LRT Sta	CR-09 I75/ LRT Sta to US98 at CL	CR-11 CL Rail (east of Acline St) to Big Bend/ LRT Sta	CR-12 Big Bend/ LRT Sta to Sarasota/ Countyline			
<b>70</b>	<b>VEHICLES</b>															
70.01	Commuter Rail Vehicles														\$205.21	\$205.21
	<b>Subtotal Vehicles</b>														<b>\$205.21</b>	<b>\$205.21</b>
<b>80</b>	<b>PROFESSIONAL SERVICES</b>															
80.01	Preliminary Engineering	4.0%	\$2.19	\$1.60	\$0.10	\$1.48	\$0.27	\$0.39	\$0.57	\$1.86	\$5.94	\$5.34	\$5.15	\$5.62		\$30.53
80.02	Final Design	6.0%	\$3.29	\$2.40	\$0.15	\$2.22	\$0.40	\$0.59	\$0.86	\$2.80	\$8.90	\$8.01	\$7.73	\$8.43		\$45.80
80.03	Project Management for Design and Construction	5.0%	\$2.74	\$2.00	\$0.13	\$1.85	\$0.34	\$0.49	\$0.72	\$2.33	\$7.42	\$6.68	\$6.44	\$7.03		\$38.16
80.04	Construction Administration & Management	8.0%	\$4.39	\$3.21	\$0.20	\$2.96	\$0.54	\$0.79	\$1.15	\$3.73	\$11.87	\$10.68	\$10.30	\$11.24		\$61.06
80.05	Insurance	2.0%	\$1.10	\$0.80	\$0.05	\$0.74	\$0.13	\$0.20	\$0.29	\$0.93	\$2.97	\$2.67	\$2.58	\$2.81		\$15.27
80.06	Legal; Permits; Review Fees by other agencies, cities, etc.	3.0%	\$1.65	\$1.20	\$0.08	\$1.11	\$0.20	\$0.30	\$0.43	\$1.40	\$4.45	\$4.01	\$3.86	\$4.22		\$22.90
80.07	Surveys, Testing, Investigation, Inspection	3.0%	\$1.65	\$1.20	\$0.08	\$1.11	\$0.20	\$0.30	\$0.43	\$1.40	\$4.45	\$4.01	\$3.86	\$4.22		\$22.90
80.08	Start up	1.0%	\$0.55	\$0.40	\$0.03	\$0.37	\$0.07	\$0.10	\$0.14	\$0.47	\$1.48	\$1.34	\$1.29	\$1.41		\$7.63
	<b>Subtotal Professional Services</b>	<b>LS</b>	<b>\$17.55</b>	<b>\$12.82</b>	<b>\$0.82</b>	<b>\$11.85</b>	<b>\$2.16</b>	<b>\$3.15</b>	<b>\$4.60</b>	<b>\$14.92</b>	<b>\$47.48</b>	<b>\$42.73</b>	<b>\$41.20</b>	<b>\$44.98</b>	<b>\$0.00</b>	<b>\$244.25</b>
<b>90</b>	<b>UNALLOCATED CONTINGENCY</b>	10.0%	\$9.11	\$6.75	\$0.44	\$6.42	\$1.08	\$1.71	\$2.49	\$7.56	\$25.33	\$21.27	\$21.47	\$20.05	\$20.52	\$144.19
	<b>Project Total</b>		<b>\$100.18</b>	<b>\$74.25</b>	<b>\$4.87</b>	<b>\$70.58</b>	<b>\$11.87</b>	<b>\$18.80</b>	<b>\$27.39</b>	<b>\$83.18</b>	<b>\$278.60</b>	<b>\$233.92</b>	<b>\$236.13</b>	<b>\$220.58</b>	<b>\$225.73</b>	<b>\$1,586.07</b>

**Hillsborough County MPO Transit Study**  
**System Planning**  
**Commuter Rail Transit**  
**Capital Cost Estimate**  
**(2007 Dollars in Millions)**

Preferred CR

CAT No.	Description	Segment	Vehicles	Alternative Total
		Section		
		CR-14 East		
		CR-10		
		CR-Dwtn toward east to N County Line Rd		
	Length (Mile):	23.9		23.9
	Number of Stations:	4		4
	Number of Revenue Vehicles:		30	30
<b>10</b>	<b>GUIDEWAY &amp; TRACK ELEMENTS</b>			
10.01	Guideway: At-grade exclusive right-of-way	\$136.36		\$136.36
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)	\$0.00		\$0.00
10.03	Guideway: At-grade in mixed traffic	\$0.00		\$0.00
10.04	Guideway: Aerial structure	\$95.86		\$95.86
10.05	Guideway: Built-up fill	\$0.00		\$0.00
10.06	Guideway: Underground cut & cover	\$0.00		\$0.00
10.07	Guideway: Underground tunnel	\$0.00		\$0.00
10.08	Guideway: Retained cut or fill	\$0.00		\$0.00
10.09	Track: Direct fixation	\$0.00		\$0.00
10.10	Track: Embedded	\$0.00		\$0.00
10.11	Track: Ballasted	\$69.56		\$69.56
10.12	Track: Special (switches, turnouts)	\$3.48		\$3.48
10.13	Track: Vibration and noise dampening	\$0.00		\$0.00
	<b>Subtotal Category 10</b>	<b>\$305.26</b>		<b>\$305.26</b>
<b>20</b>	<b>STATIONS, STOPS, TERMINALS, INTERMODAL</b>			
20.01	At-grade station, stop, shelter, mall, terminal, platform	\$7.20		\$7.20
20.02	Aerial station, stop, shelter, mall, terminal, platform	\$0.00		\$0.00
20.03	Underground station, stop, shelter, mall, terminal, platform	\$0.00		\$0.00
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.	\$0.00		\$0.00
20.05	Joint development	\$0.00		\$0.00
20.06	Automobile parking multi-story structure	\$0.00		\$0.00
20.07	Elevators, escalators	\$4.08		\$4.08
	<b>Subtotal Category 20</b>	<b>\$11.28</b>		<b>\$11.28</b>

Hillsborough County MPO Transit Study  
System Planning  
Commuter Rail Transit  
Capital Cost Estimate  
(2007 Dollars in Millions)

Preferred CR

CAT No.	Description	Segment	Vehicles	Alternative Total
		CR-I4 East Section CR-10 CR-Dwtn toward east to N County Line Rd		
<b>30</b>	<b>SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS</b>			
30.01	Administration Building: Office, sales, storage, revenue counting			\$0.00
30.02	Light Maintenance Facility			\$0.00
30.03	Heavy Maintenance Facility			\$0.00
30.04	Storage or Maintenance of Way Building			\$0.00
30.05	Yard and Yard Track			\$0.00
	<b>Subtotal Category 30</b>			<b>\$0.00</b>
<b>40</b>	<b>SITWORK &amp; SPECIAL CONDITIONS</b>			
40.01	Demolition, Clearing, Earthwork	\$5.04		\$5.04
40.02	Site Utilities, Utility Relocation	\$24.18		\$24.18
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	\$3.28		\$3.28
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks	\$2.46		\$2.46
40.05	Site structures including retaining walls, sound walls	\$1.31		\$1.31
40.06	Pedestrian / bike access and accommodation, landscaping	\$9.13		\$9.13
40.07	Automobile, bus, van accessways including roads, parking lots	\$10.40		\$10.40
40.08	Temporary Facilities and other indirect costs during construction	\$2.68		\$2.68
	<b>Subtotal Category 40</b>	<b>\$58.48</b>		<b>\$58.48</b>
<b>50</b>	<b>SYSTEMS</b>			
50.01	Train control and signals	\$20.29		\$20.29
50.02	Traffic signals and crossing protection	\$0.00		\$0.00
50.03	Traction power supply: substations	\$0.00		\$0.00
50.04	Traction power distribution: catenary and third rail	\$0.00		\$0.00
50.05	Communications	\$3.22		\$3.22
50.06	Fare collection system and equipment	\$0.69		\$0.69
50.07	Central Control	\$0.00		\$0.00
	<b>Subtotal Category 50</b>	<b>\$24.20</b>		<b>\$24.20</b>
<b>Subtotal Construction Costs</b>		<b>\$399.22</b>		<b>\$399.22</b>

**Hillsborough County MPO Transit Study**  
**System Planning**  
**Commuter Rail Transit**  
**Capital Cost Estimate**  
**(2007 Dollars in Millions)**

Preferred CR

CAT No.	Description	Segment	Vehicles	Alternative Total
		Section		
		CR-I4 East		
		CR-10		
		CR-Dwtn toward east to N County Line Rd		
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>			
60.01	Purchase or lease of real estate		\$74.89	\$74.89
	<b>Subtotal Right-of-Way</b>		<b>\$74.89</b>	<b>\$74.89</b>
<b>70</b>	<b>VEHICLES</b>			
70.01	Commuter Rail Vehicles		\$75.08	\$75.08
	<b>Subtotal Vehicles</b>		<b>\$75.08</b>	<b>\$75.08</b>
<b>80</b>	<b>PROFESSIONAL SERVICES</b>			
80.01	Preliminary Engineering	4.0%	\$15.97	\$15.97
80.02	Final Design	6.0%	\$23.95	\$23.95
80.03	Project Management for Design and Construction	5.0%	\$19.96	\$19.96
80.04	Construction Administration & Management	8.0%	\$31.94	\$31.94
80.05	Insurance	2.0%	\$7.98	\$7.98
80.06	Legal; Permits; Review Fees by other agencies, cities, etc.	3.0%	\$11.98	\$11.98
80.07	Surveys, Testing, Investigation, Inspection	3.0%	\$11.98	\$11.98
80.08	Start up	1.0%	\$3.99	\$3.99
	<b>Subtotal Professional Services</b>	<b>LS</b>	<b>\$127.75</b>	<b>\$0.00</b>
<b>90</b>	<b>UNALLOCATED CONTINGENCY</b>	10.0%	\$60.19	\$67.69
<b>Project Total</b>			<b>\$662.04</b>	<b>\$82.58</b>
				<b>\$744.62</b>

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn North  
 County line/ Hwy 54 to Hwy275

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	31,132	RF	\$250	\$7,783,000	25%	\$9,728,750
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
			Element Total	31,132	RF		\$7,783,000		\$9,728,750
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	0	RF	\$11,900	\$0	30%	\$0
	Double Track		Aerial - Ballasted	0	RF	\$15,200	\$0	30%	\$0
	Double Track		Aerial - Ballasted Over Water	0	RF	\$16,500	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	31,132	RF	\$240	\$7,471,680	15%	\$8,592,432
			Ballasted Track - Refurbish Existing	31,132	RF	\$190	\$5,915,080	15%	\$6,802,342
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	31,132	RF		\$13,386,760		\$15,394,774
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$669,338	15%	\$769,739
			Element Total	1	LS		\$669,338		\$769,739
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 CR-DwtN North  
 County line/ Hwy 54 to Hwy275

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	2	EA	\$1,500,000	\$3,000,000	20%	\$3,600,000
			Element Total	2	EA		\$3,000,000		\$3,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A	1	LS		\$0		\$0
20.05	Joint development		N/A	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	31,132	RF	\$30	\$933,960	30%	\$1,214,148
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	31,132	RF		\$933,960		\$1,214,148
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	31,132	RF	\$140	\$4,358,480	30%	\$5,666,024
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	31,132	RF		\$4,358,480		\$5,666,024
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	31,132	RF	\$20	\$622,640	30%	\$809,432
			Element Total	1	LS		\$622,640		\$809,432
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	31,132	RF	\$15	\$466,980	30%	\$607,074
			Element Total	1	LS		\$466,980		\$607,074
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	3,113	RF	\$80	\$249,056	30%	\$323,773
			Element Total	1	LS		\$249,056		\$323,773
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	31,132	RF	\$15	\$466,980	30%	\$607,074
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrain Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$107,830	30%	\$140,179
			Element Total	1	LS		\$574,810		\$747,253

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn North  
 County line/ Hwy 54 to Hwy275

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.07			Automobile, bus, van accessways including roads, parking lots						
			Roadway Modifications Allow. - Full						
			Intersection	16	EA	\$50,000	\$800,000	30%	\$1,040,000
			Parking Lots	1,000	STL	\$4,000	\$4,000,000	30%	\$5,200,000
			Element Total	1	LS		\$4,800,000		\$6,240,000
40.08			Temporary Facilities and other indirect costs during construction						
			Temporary Facilities (5% of Category 40)	5.0%			\$600,296	25%	\$750,370
			Element Total	1	LS		\$600,296		\$750,370
<b>50 SYSTEMS</b>									
50.01			Train control and signals						
			Signal System	31,132	RF	\$140	\$4,358,480	15%	\$5,012,252
			Element Total	31,132	RF		\$4,358,480		\$5,012,252
50.02			Traffic signals and crossing protection						
			Crossing Protection	16	EA	\$150,000	\$2,400,000	15%	\$2,760,000
			Element Total	16	EA		\$2,400,000		\$2,760,000
50.03			Traction power supply: substations						
			N/A						
			Element Total	0	EA		\$0		\$0
50.04			Traction power distribution: catenary and third rail						
			N/A						
			Element Total	0	RF		\$0		\$0
50.05			Communications						
			Passenger Information System, Fiber Optic	31,132	RF	\$20	\$622,640	15%	\$716,036
			Passenger Information System, Station	2	EA	\$70,000	\$140,000	15%	\$161,000
			Element Total	1	LS		\$762,640		\$877,036
50.06			Fare collection system and equipment						
			Fare Collection	2	EA	\$150,000	\$300,000	15%	\$345,000
			Element Total	1	LS		\$300,000		\$345,000
50.07			Central Control						
			N/A						
			Element Total	1	LS		\$0		\$0
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>									
60.01			Purchase or lease of real estate						
			Right of Way Allowance - At Grade	31,132	RF	\$400	\$12,452,800	50%	\$18,679,200
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	31,132	RF		\$12,452,800		\$18,679,200

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn North  
 Hwy275 to Hwy580/ CL Railroad

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	24,351	RF	\$250	\$6,087,750	25%	\$7,609,688
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
			Element Total	24,351	RF		\$6,087,750		\$7,609,688
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	0	RF	\$11,900	\$0	30%	\$0
	Double Track		Aerial - Ballasted	0	RF	\$15,200	\$0	30%	\$0
	Double Track		Aerial - Ballasted Over Water	0	RF	\$16,500	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	24,351	RF	\$240	\$5,844,240	15%	\$6,720,876
			Ballasted Track - Refurbish Existing	24,351	RF	\$190	\$4,626,690	15%	\$5,320,694
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	24,351	RF		\$10,470,930		\$12,041,570
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$523,547	15%	\$602,078
			Element Total	1	LS		\$523,547		\$602,078
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0



Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn North  
 Hwy275 to Hwy580/ CL Railroad

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	1	EA	\$1,500,000	\$1,500,000	20%	\$1,800,000
			Element Total	1	EA		\$1,500,000		\$1,800,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station		EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A						\$0
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						\$0
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						\$0
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	24,351	RF	\$30	\$730,530	30%	\$949,689
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	24,351	RF		\$730,530		\$949,689
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	24,351	RF	\$140	\$3,409,140	30%	\$4,431,882
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	24,351	RF		\$3,409,140		\$4,431,882
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	24,351	RF	\$20	\$487,020	30%	\$633,126
			Element Total	1	LS		\$487,020		\$633,126
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	24,351	RF	\$15	\$365,265	30%	\$474,845
			Element Total	1	LS		\$365,265		\$474,845
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	2,435	RF	\$80	\$194,808	30%	\$253,250
			Element Total	1	LS		\$194,808		\$253,250
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	24,351	RF	\$15	\$365,265	30%	\$474,845
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrain Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$75,878	30%	\$98,641
			Element Total	1	LS		\$441,143		\$573,485

**Hillsborough County MPO Transit Study**  
**System Planning**  
**CR-DwtN North**  
**Hwy275 to Hwy580/ CL Railroad**

**TRANSIT MODE: Commuter Rail**

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONGY	TOTAL COST
	BEGIN	END							
40.07			Automobile, bus, van accessways including roads, parking lots						
			Roadway Modifications Allow. - Full						
			Intersection	12	EA	\$50,000	\$600,000	30%	\$780,000
			Parking Lots	500	STL	\$4,000	\$2,000,000	30%	\$2,600,000
			Element Total	1	LS		\$2,600,000		\$3,380,000
40.08			Temporary Facilities and other indirect costs during construction						
			Temporary Facilities (5% of Category 40)	5.0%			\$411,395	25%	\$514,244
			Element Total	1	LS		\$411,395		\$514,244
<b>50</b>	<b>SYSTEMS</b>								
50.01			Train control and signals						
			Signal System	24,351	RF	\$140	\$3,409,140	15%	\$3,920,511
			Element Total	24,351	RF		\$3,409,140		\$3,920,511
50.02			Traffic signals and crossing protection						
			Crossing Protection	12	EA	\$150,000	\$1,800,000	15%	\$2,070,000
			Element Total	12	EA		\$1,800,000		\$2,070,000
50.03			Traction power supply: substations						
			N/A						
			Element Total	0	EA		\$0		\$0
50.04			Traction power distribution: catenary and third rail						
			N/A						
			Element Total	0	RF		\$0		\$0
50.05			Communications						
			Passenger Information System, Fiber Optic	24,351	RF	\$20	\$487,020	15%	\$560,073
			Passenger Information System, Station	1	EA	\$70,000	\$70,000	15%	\$80,500
			Element Total	1	LS		\$557,020		\$640,573
50.06			Fare collection system and equipment						
			Fare Collection	1	EA	\$150,000	\$150,000	15%	\$172,500
			Element Total	1	LS		\$150,000		\$172,500
50.07			Central Control						
			N/A						
			Element Total	1	LS		\$0		\$0
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01			Purchase or lease of real estate						
			Right of Way Allowance - At Grade	24,351	RF	\$400	\$9,740,400	50%	\$14,610,600
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	24,351	RF		\$9,740,400		\$14,610,600

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn North  
 Between CR-East/ CR-Dwtn West and CR-14 East

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	1,744	RF	\$250	\$436,000	25%	\$545,000
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
			Element Total	1,744	RF		\$436,000		\$545,000
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	0	RF	\$11,900	\$0	30%	\$0
	Double Track		Aerial - Ballasted	0	RF	\$15,200	\$0	30%	\$0
	Double Track		Aerial - Ballasted Over Water	0	RF	\$16,500	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	1,744	RF	\$240	\$418,560	15%	\$481,344
			Ballasted Track - Refurbish Existing	1,744	RF	\$190	\$331,360	15%	\$381,064
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	1,744	RF		\$749,920		\$862,408
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$37,496	15%	\$43,120
			Element Total	1	LS		\$37,496		\$43,120
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
System Planning  
CR-Dwtn North

Between CR-East/ CR-Dwtn West and CR-14 East

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$1,500,000	\$0	20%	\$0
			Element Total	0	EA		\$0		\$0
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A						
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	1,744	RF	\$30	\$52,320	30%	\$68,016
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	1,744	RF		\$52,320		\$68,016
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	1,744	RF	\$140	\$244,160	30%	\$317,408
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	1,744	RF		\$244,160		\$317,408
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	1,744	RF	\$20	\$34,880	30%	\$45,344
			Element Total	1	LS		\$34,880		\$45,344
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	1,744	RF	\$15	\$26,160	30%	\$34,008
			Element Total	1	LS		\$26,160		\$34,008
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	174	RF	\$80	\$13,952	30%	\$18,138
			Element Total	1	LS		\$13,952		\$18,138
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	1,744	RF	\$15	\$26,160	30%	\$34,008
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrain Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$4,360	30%	\$5,668
			Element Total	1	LS		\$30,520		\$39,676

**Hillsborough County MPO Transit Study**  
**System Planning**  
**CR-Dwtn North**  
**Between CR-East/ CR-Dwtn West and CR-14 East**

**TRANSIT MODE: Commuter Rail**

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONGY	TOTAL COST
40.07			Automobile, bus, van accessways including roads, parking lots						
			Roadway Modifications Allow. - Full						
			Intersection	1	EA	\$50,000	\$50,000	30%	\$65,000
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$50,000		\$65,000
40.08			Temporary Facilities and other indirect costs during construction						
			Temporary Facilities (5% of Category 40)	5.0%			\$22,600	25%	\$28,250
			Element Total	1	LS		\$22,600		\$28,250
<b>50</b>			<b>SYSTEMS</b>						
50.01			Train control and signals						
			Signal System	1,744	RF	\$140	\$244,160	15%	\$280,784
			Element Total	1,744	RF		\$244,160		\$280,784
50.02			Traffic signals and crossing protection						
			Crossing Protection	1	EA	\$150,000	\$150,000	15%	\$172,500
			Element Total	1	EA		\$150,000		\$172,500
50.03			Traction power supply: substations						
			N/A						
			Element Total	0	EA		\$0		\$0
50.04			Traction power distribution: catenary and third rail						
			N/A						
			Element Total	0	RF		\$0		\$0
50.05			Communications						
			Passenger Information System, Fiber Optic	1,744	RF	\$20	\$34,880	15%	\$40,112
			Passenger Information System, Station	0	EA	\$70,000	\$0	15%	\$0
			Element Total	1	LS		\$34,880		\$40,112
50.06			Fare collection system and equipment						
			Fare Collection	0	EA	\$150,000	\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
50.07			Central Control						
			N/A						
			Element Total	1	LS		\$0		\$0
<b>60</b>			<b>ROW, LAND, EXISTING IMPROVEMENTS</b>						
60.01			Purchase or lease of real estate						
			Right of Way Allowance - At Grade	1,744	RF	\$400	\$697,600	50%	\$1,046,400
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	1,744	RF		\$697,600		\$1,046,400

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn North  
 CR-I4 East to S of Busch Blvd

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	25,488	RF	\$250	\$6,372,000	25%	\$7,965,000
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
			Element Total	25,488	RF		\$6,372,000		\$7,965,000
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	0	RF	\$11,900	\$0	30%	\$0
	Double Track		Aerial - Ballasted	0	RF	\$15,200	\$0	30%	\$0
	Double Track		Aerial - Ballasted Over Water	0	RF	\$16,500	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	25,488	RF	\$240	\$6,117,120	15%	\$7,034,688
			Ballasted Track - Refurbish Existing	25,488	RF	\$190	\$4,842,720	15%	\$5,569,128
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	25,488	RF		\$10,959,840		\$12,603,816
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$547,992	15%	\$630,191
			Element Total	1	LS		\$547,992		\$630,191
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn North  
 CR-I4 East to S of Busch Blvd

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$1,500,000	\$0	20%	\$0
			Element Total	0	EA		\$0		\$0
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A						
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	25,488	RF	\$30	\$764,640	30%	\$994,032
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	25,488	RF		\$764,640		\$994,032
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	25,488	RF	\$140	\$3,568,320	30%	\$4,638,816
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	25,488	RF		\$3,568,320		\$4,638,816
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	25,488	RF	\$20	\$509,760	30%	\$662,688
			Element Total	1	LS		\$509,760		\$662,688
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	25,488	RF	\$15	\$382,320	30%	\$497,016
			Element Total	1	LS		\$382,320		\$497,016
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	2,549	RF	\$80	\$203,904	30%	\$265,075
			Element Total	1	LS		\$203,904		\$265,075
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	25,488	RF	\$15	\$382,320	30%	\$497,016
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrain Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$63,720	30%	\$82,836
			Element Total	1	LS		\$446,040		\$579,852

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn North  
 CR-I4 East to S of Busch Blvd

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONGY	TOTAL COST
40.07			Automobile, bus, van accessways including roads, parking lots						
			Roadway Modifications Allow. - Full						
			Intersection	13	EA	\$50,000	\$650,000	30%	\$845,000
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$650,000		\$845,000
40.08			Temporary Facilities and other indirect costs during construction						
			Temporary Facilities (5% of Category 40)	5.0%			\$326,249	25%	\$407,812
			Element Total	1	LS		\$326,249		\$407,812
<b>50</b>			<b>SYSTEMS</b>						
50.01			Train control and signals						
			Signal System	25,488	RF	\$140	\$3,568,320	15%	\$4,103,568
			Element Total	25,488	RF		\$3,568,320		\$4,103,568
50.02			Traffic signals and crossing protection						
			Crossing Protection	13	EA	\$150,000	\$1,950,000	15%	\$2,242,500
			Element Total	13	EA		\$1,950,000		\$2,242,500
50.03			Traction power supply: substations						
			N/A						
			Element Total	0	EA		\$0		\$0
50.04			Traction power distribution: catenary and third rail						
			N/A						
			Element Total	0	RF		\$0		\$0
50.05			Communications						
			Passenger Information System, Fiber Optic	25,488	RF	\$20	\$509,760	15%	\$586,224
			Passenger Information System, Station	0	EA	\$70,000	\$0	15%	\$0
			Element Total	1	LS		\$509,760		\$586,224
50.06			Fare collection system and equipment						
			Fare Collection	0	EA	\$150,000	\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
50.07			Central Control						
			N/A						
			Element Total	1	LS		\$0		\$0
<b>60</b>			<b>ROW, LAND, EXISTING IMPROVEMENTS</b>						
60.01			Purchase or lease of real estate						
			Right of Way Allowance - At Grade	25,488	RF	\$400	\$10,195,200	50%	\$15,292,800
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	25,488	RF		\$10,195,200		\$15,292,800



Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn West  
 West of Channelside Dr to NJefferson/ E Polk St

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	3,148	RF	\$250	\$787,000	25%	\$983,750
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
			Element Total	3,148	RF		\$787,000		\$983,750
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	0	RF	\$11,900	\$0	30%	\$0
	Double Track		Aerial - Ballasted	0	RF	\$15,200	\$0	30%	\$0
	Double Track		Aerial - Ballasted Over Water	0	RF	\$16,500	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	3,148	RF	\$240	\$755,520	15%	\$868,848
			Ballasted Track - Refurbish Existing	3,148	RF	\$190	\$598,120	15%	\$687,838
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	3,148	RF		\$1,353,640		\$1,556,686
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$67,682	15%	\$77,834
			Element Total	1	LS		\$67,682		\$77,834
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn West  
 West of Channelside Dr to NJefferson/ E Polk St

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	1	EA	\$1,500,000	\$1,500,000	20%	\$1,800,000
			Element Total	1	EA		\$1,500,000		\$1,800,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A						
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	3,148	RF	\$30	\$94,440	30%	\$122,772
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	3,148	RF		\$94,440		\$122,772
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	3,148	RF	\$140	\$440,720	30%	\$572,936
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	3,148	RF		\$440,720		\$572,936
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	3,148	RF	\$20	\$62,960	30%	\$81,848
			Element Total	1	LS		\$62,960		\$81,848
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	3,148	RF	\$15	\$47,220	30%	\$61,386
			Element Total	1	LS		\$47,220		\$61,386
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	315	RF	\$80	\$25,184	30%	\$32,739
			Element Total	1	LS		\$25,184		\$32,739
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	3,148	RF	\$15	\$47,220	30%	\$61,386
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrain Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$22,870	30%	\$29,731
			Element Total	1	LS		\$70,090		\$91,117

Hillsborough County MPO Transit Study  
System Planning  
CR-Dwtn West

West of Channelside Dr to NJefferson/ E Polk St

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTG	TOTAL COST
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full						
			Intersection	2	EA	\$50,000	\$100,000	30%	\$130,000
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$100,000		\$130,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$42,031	25%	\$52,538
			Element Total	1	LS		\$42,031		\$52,538
<b>50 SYSTEMS</b>									
50.01	Train control and signals		Signal System	3,148	RF	\$140	\$440,720	15%	\$506,828
			Element Total	3,148	RF		\$440,720		\$506,828
50.02	Traffic signals and crossing protection		Crossing Protection	2	EA	\$150,000	\$300,000	15%	\$345,000
			Element Total	2	EA		\$300,000		\$345,000
50.03	Traction power supply: substations		N/A				\$0		\$0
			Element Total	0	EA		\$0		\$0
50.04	Traction power distribution: catenary and third rail		N/A				\$0		\$0
			Element Total	0	RF		\$0		\$0
50.05	Communications		Passenger Information System, Fiber Optic	3,148	RF	\$20	\$62,960	15%	\$72,404
			Passenger Information System, Station	1	EA	\$70,000	\$70,000	15%	\$80,500
			Element Total	1	LS		\$132,960		\$152,904
50.06	Fare collection system and equipment		Fare Collection	1	EA	\$150,000	\$150,000	15%	\$172,500
			Element Total	1	LS		\$150,000		\$172,500
50.07	Central Control		N/A				\$0		\$0
			Element Total	1	LS		\$0		\$0
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>									
60.01	Purchase or lease of real estate		Right of Way Allowance - At Grade	3,148	RF	\$400	\$1,259,200	50%	\$1,888,800
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	3,148	RF		\$1,259,200		\$1,888,800

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn West  
 Downtown to west of Channelside Dr

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	6,852	RF	\$250	\$1,713,000	25%	\$2,141,250
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
			Element Total	6,852	RF		\$1,713,000		\$2,141,250
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	0	RF	\$11,900	\$0	30%	\$0
	Double Track		Aerial - Ballasted	0	RF	\$15,200	\$0	30%	\$0
	Double Track		Aerial - Ballasted Over Water	0	RF	\$16,500	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	6,852	RF	\$240	\$1,644,480	15%	\$1,891,152
			Ballasted Track - Refurbish Existing	6,852	RF	\$190	\$1,301,880	15%	\$1,497,162
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	6,852	RF		\$2,946,360		\$3,388,314
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$147,318	15%	\$169,416
			Element Total	1	LS		\$147,318		\$169,416
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Dwtn West  
 Downtown to west of Channelside Dr

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$1,500,000	\$0	20%	\$0
			Element Total	0	EA		\$0		\$0
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A						
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	6,852	RF	\$30	\$205,560	30%	\$267,228
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	6,852	RF		\$205,560		\$267,228
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	6,852	RF	\$140	\$959,280	30%	\$1,247,064
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	6,852	RF		\$959,280		\$1,247,064
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	6,852	RF	\$20	\$137,040	30%	\$178,152
			Element Total	1	LS		\$137,040		\$178,152
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	6,852	RF	\$15	\$102,780	30%	\$133,614
			Element Total	1	LS		\$102,780		\$133,614
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	685	RF	\$80	\$54,816	30%	\$71,261
			Element Total	1	LS		\$54,816		\$71,261
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	6,852	RF	\$15	\$102,780	30%	\$133,614
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrain Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$17,130	30%	\$22,269
			Element Total	1	LS		\$119,910		\$155,883

**Hillsborough County MPO Transit Study  
System Planning  
CR-Dwtn West  
Downtown to west of Channelside Dr**

**TRANSIT MODE: Commuter Rail**

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONGY	TOTAL COST
	BEGIN	END							
40.07			Automobile, bus, van accessways including roads, parking lots						
			Roadway Modifications Allow. - Full						
			Intersection	3	EA	\$50,000	\$150,000	30%	\$195,000
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$150,000		\$195,000
40.08			Temporary Facilities and other indirect costs during construction						
			Temporary Facilities (5% of Category 40)	5.0%			\$86,469	25%	\$108,087
			Element Total	1	LS		\$86,469		\$108,087
<b>50</b>	<b>SYSTEMS</b>								
50.01			Train control and signals						
			Signal System	6,852	RF	\$140	\$959,280	15%	\$1,103,172
			Element Total	6,852	RF		\$959,280		\$1,103,172
50.02			Traffic signals and crossing protection						
			Crossing Protection	3	EA	\$150,000	\$450,000	15%	\$517,500
			Element Total	3	EA		\$450,000		\$517,500
50.03			Traction power supply: substations						
			N/A						
			Element Total	0	EA		\$0		\$0
50.04			Traction power distribution: catenary and third rail						
			N/A						
			Element Total	0	RF		\$0		\$0
50.05			Communications						
			Passenger Information System, Fiber Optic	6,852	RF	\$20	\$137,040	15%	\$157,596
			Passenger Information System, Station	0	EA	\$70,000	\$0	15%	\$0
			Element Total	1	LS		\$137,040		\$157,596
50.06			Fare collection system and equipment						
			Fare Collection	0	EA	\$150,000	\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
50.07			Central Control						
			N/A						
			Element Total	1	LS		\$0		\$0
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01			Purchase or lease of real estate						
			Right of Way Allowance - At Grade	6,852	RF	\$400	\$2,740,800	50%	\$4,111,200
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	6,852	RF		\$2,740,800		\$4,111,200

Hillsborough County MPO Transit Study  
System Planning  
CR-East  
Downtown to CL Rail (east of Acline St)

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
	BEGIN	END							
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	9,899	RF	\$250	\$2,474,750	25%	\$3,093,438
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
			Element Total	9,899	RF		\$2,474,750		\$3,093,438
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	0	RF	\$11,900	\$0	30%	\$0
	Double Track		Aerial - Ballasted	0	RF	\$15,200	\$0	30%	\$0
	Double Track		Aerial - Ballasted Over Water	0	RF	\$16,500	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	9,899	RF	\$240	\$2,375,760	15%	\$2,732,124
			Ballasted Track - Refurbish Existing	9,899	RF	\$190	\$1,880,810	15%	\$2,162,932
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	9,899	RF		\$4,256,570		\$4,895,056
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$212,829	15%	\$244,753
			Element Total	1	LS		\$212,829		\$244,753
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 CR-East  
 Downtown to CL Rail (east of Acline St)

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$1,500,000	\$0	20%	\$0
			Element Total	0	EA		\$0		\$0
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A						
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	9,899	RF	\$30	\$296,970	30%	\$386,061
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	9,899	RF		\$296,970		\$386,061
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	9,899	RF	\$140	\$1,385,860	30%	\$1,801,618
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	9,899	RF		\$1,385,860		\$1,801,618
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	9,899	RF	\$20	\$197,980	30%	\$257,374
			Element Total	1	LS		\$197,980		\$257,374
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	9,899	RF	\$15	\$148,485	30%	\$193,031
			Element Total	1	LS		\$148,485		\$193,031
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	990	RF	\$80	\$79,192	30%	\$102,950
			Element Total	1	LS		\$79,192		\$102,950
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	9,899	RF	\$15	\$148,485	30%	\$193,031
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrain Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$24,748	30%	\$32,172
			Element Total	1	LS		\$173,233		\$225,202



**Hillsborough County MPO Transit Study  
System Planning  
CR-East  
Downtown to CL Rail (east of Acline St)**

**TRANSIT MODE: Commuter Rail**

CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONGY	TOTAL COST
	BEGIN	END							
40.07			Automobile, bus, van accessways including roads, parking lots						
			Roadway Modifications Allow. - Full						
			Intersection	5	EA	\$50,000	\$250,000	30%	\$325,000
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$250,000		\$325,000
40.08			Temporary Facilities and other indirect costs during construction						
			Temporary Facilities (5% of Category 40)	5.0%			\$126,586	25%	\$158,232
			Element Total	1	LS		\$126,586		\$158,232
<b>50</b>	<b>SYSTEMS</b>								
50.01			Train control and signals						
			Signal System	9,899	RF	\$140	\$1,385,860	15%	\$1,593,739
			Element Total	9,899	RF		\$1,385,860		\$1,593,739
50.02			Traffic signals and crossing protection						
			Crossing Protection	5	EA	\$150,000	\$750,000	15%	\$862,500
			Element Total	5	EA		\$750,000		\$862,500
50.03			Traction power supply: substations						
			N/A						
			Element Total	0	EA		\$0		\$0
50.04			Traction power distribution: catenary and third rail						
			N/A						
			Element Total	0	RF		\$0		\$0
50.05			Communications						
			Passenger Information System, Fiber Optic	9,899	RF	\$20	\$197,980	15%	\$227,677
			Passenger Information System, Station	0	EA	\$70,000	\$0	15%	\$0
			Element Total	1	LS		\$197,980		\$227,677
50.06			Fare collection system and equipment						
			Fare Collection	0	EA	\$150,000	\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
50.07			Central Control						
			N/A						
			Element Total	1	LS		\$0		\$0
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01			Purchase or lease of real estate						
			Right of Way Allowance - At Grade	9,899	RF	\$400	\$3,959,600	50%	\$5,939,400
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	9,899	RF		\$3,959,600		\$5,939,400

Hillsborough County MPO Transit Study  
 System Planning  
 CR-East  
 CL Rail (east of Acline St) to I75/ LRT Sta

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	22,864	RF	\$250	\$5,716,000	25%	\$7,145,000
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
			Element Total	22,864	RF		\$5,716,000		\$7,145,000
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	800	RF	\$11,900	\$9,520,000	30%	\$12,376,000
	Double Track		Aerial - Ballasted	0	RF	\$15,200	\$0	30%	\$0
	Double Track		Aerial - Ballasted Over Water	0	RF	\$16,500	\$0	30%	\$0
			Element Total	800	RF		\$9,520,000		\$12,376,000
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	23,664	RF	\$240	\$5,679,360	15%	\$6,531,264
			Ballasted Track - Refurbish Existing	23,664	RF	\$190	\$4,496,160	15%	\$5,170,584
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	23,664	RF		\$10,175,520		\$11,701,848
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$508,776	15%	\$585,092
			Element Total	1	LS		\$508,776		\$585,092
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 CR-East  
 CL Rail (east of Acline St) to I75/ LRT Sta

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$1,500,000	\$0	20%	\$0
			Element Total	0	EA		\$0		\$0
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A						
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	22,864	RF	\$30	\$685,920	30%	\$891,696
			Demolition Allowance - Median	800	RF	\$50	\$40,000	30%	\$52,000
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	23,664	RF		\$725,920		\$943,696
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	22,864	RF	\$140	\$3,200,960	30%	\$4,161,248
			Utility Relocation Allowance - Median	800	RF	\$340	\$272,000	30%	\$353,600
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	23,664	RF		\$3,472,960		\$4,514,848
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	23,664	RF	\$20	\$473,280	30%	\$615,264
			Element Total	1	LS		\$473,280		\$615,264
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	23,664	RF	\$15	\$354,960	30%	\$461,448
			Element Total	1	LS		\$354,960		\$461,448
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	2,366	RF	\$80	\$189,312	30%	\$246,106
			Element Total	1	LS		\$189,312		\$246,106
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	22,864	RF	\$15	\$342,960	30%	\$445,848
			Landscaping Allowance - Median	800	RF	\$25	\$20,000	30%	\$26,000
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrain Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$152,360	30%	\$198,068
			Element Total	1	LS		\$515,320		\$669,916

**Hillsborough County MPO Transit Study  
System Planning  
CR-East  
CL Rail (east of Acline St) to I75/ LRT Sta**

**TRANSIT MODE: Commuter Rail**

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
40.07			Automobile, bus, van accessways including roads, parking lots						
			Roadway Modifications Allow. - Full						
			Intersection	11	EA	\$50,000	\$550,000	30%	\$715,000
			Parking Lots	0	STL	\$4,000	\$0	30%	\$0
			Element Total	1	LS		\$550,000		\$715,000
40.08			Temporary Facilities and other indirect costs during construction						
			Temporary Facilities (5% of Category 40)	5.0%			\$314,088	25%	\$392,610
			Element Total	1	LS		\$314,088		\$392,610
<b>50</b>			<b>SYSTEMS</b>						
50.01			Train control and signals						
			Signal System	23,664	RF	\$140	\$3,312,960	15%	\$3,809,904
			Element Total	23,664	RF		\$3,312,960		\$3,809,904
50.02			Traffic signals and crossing protection						
			Crossing Protection	11	EA	\$150,000	\$1,650,000	15%	\$1,897,500
			Element Total	11	EA		\$1,650,000		\$1,897,500
50.03			Traction power supply: substations						
			N/A						
			Element Total	0	EA		\$0		\$0
50.04			Traction power distribution: catenary and third rail						
			N/A						
			Element Total	0	RF		\$0		\$0
50.05			Communications						
			Passenger Information System, Fiber Optic	23,664	RF	\$20	\$473,280	15%	\$544,272
			Passenger Information System, Station	0	EA	\$70,000	\$0	15%	\$0
			Element Total	1	LS		\$473,280		\$544,272
50.06			Fare collection system and equipment						
			Fare Collection	0	EA	\$150,000	\$0	15%	\$0
			Element Total	1	LS		\$0		\$0
50.07			Central Control						
			N/A						
			Element Total	1	LS		\$0		\$0
<b>60</b>			<b>ROW, LAND, EXISTING IMPROVEMENTS</b>						
60.01			Purchase or lease of real estate						
			Right of Way Allowance - At Grade	22,864	RF	\$400	\$9,145,600	50%	\$13,718,400
			Right of Way Allowance - Aerial	800	RF	\$300	\$240,000	50%	\$360,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	23,664	RF		\$9,385,600		\$14,078,400

Hillsborough County MPO Transit Study  
System Planning  
CR-East  
I75/ LRT Sta to US98 at CL

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	95,680	RF	\$250	\$23,920,000	25%	\$29,900,000
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
			Element Total	95,680	RF		\$23,920,000		\$29,900,000
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	0	RF	\$11,900	\$0	30%	\$0
	Double Track		Aerial - Ballasted	0	RF	\$15,200	\$0	30%	\$0
	Double Track		Aerial - Ballasted Over Water	0	RF	\$16,500	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	95,680	RF	\$240	\$22,963,200	15%	\$26,407,680
			Ballasted Track - Refurbish Existing	95,680	RF	\$190	\$18,179,200	15%	\$20,906,080
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	95,680	RF		\$41,142,400		\$47,313,760
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$2,057,120	15%	\$2,365,688
			Element Total	1	LS		\$2,057,120		\$2,365,688
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 CR-East  
 I75/ LRT Sta to US98 at CL

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	2	EA	\$1,500,000	\$3,000,000	20%	\$3,600,000
			Element Total	2	EA		\$3,000,000		\$3,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A						
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	95,680	RF	\$30	\$2,870,400	30%	\$3,731,520
			Demolition Allowance - Median	0	RF	\$50	\$0	30%	\$0
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	95,680	RF		\$2,870,400		\$3,731,520
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	95,680	RF	\$140	\$13,395,200	30%	\$17,413,760
			Utility Relocation Allowance - Median	0	RF	\$340	\$0	30%	\$0
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	95,680	RF		\$13,395,200		\$17,413,760
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	95,680	RF	\$20	\$1,913,600	30%	\$2,487,680
			Element Total	1	LS		\$1,913,600		\$2,487,680
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	95,680	RF	\$15	\$1,435,200	30%	\$1,865,760
			Element Total	1	LS		\$1,435,200		\$1,865,760
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	9,568	RF	\$80	\$765,440	30%	\$995,072
			Element Total	1	LS		\$765,440		\$995,072
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	95,680	RF	\$15	\$1,435,200	30%	\$1,865,760
			Landscaping Allowance - Median	0	RF	\$25	\$0	30%	\$0
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrain Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$269,200	30%	\$349,960
			Element Total	1	LS		\$1,704,400		\$2,215,720

Hillsborough County MPO Transit Study  
 System Planning  
 CR-East  
 I75/ LRT Sta to US98 at CL

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
40.07			Automobile, bus, van accessways including roads, parking lots						
			Roadway Modifications Allow. - Full						
			Intersection	48	EA	\$50,000	\$2,400,000	30%	\$3,120,000
			Parking Lots	1,000	STL	\$4,000	\$4,000,000	30%	\$5,200,000
			Element Total	1	LS		\$6,400,000		\$8,320,000
40.08			Temporary Facilities and other indirect costs during construction						
			Temporary Facilities (5% of Category 40)	5.0%			\$1,424,212	25%	\$1,780,265
			Element Total	1	LS		\$1,424,212		\$1,780,265
<b>50 SYSTEMS</b>									
50.01			Train control and signals						
			Signal System	95,680	RF	\$140	\$13,395,200	15%	\$15,404,480
			Element Total	95,680	RF		\$13,395,200		\$15,404,480
50.02			Traffic signals and crossing protection						
			Crossing Protection	48	EA	\$150,000	\$7,200,000	15%	\$8,280,000
			Element Total	48	EA		\$7,200,000		\$8,280,000
50.03			Traction power supply: substations						
			N/A						
			Element Total	0	EA		\$0		\$0
50.04			Traction power distribution: catenary and third rail						
			N/A						
			Element Total	0	RF		\$0		\$0
50.05			Communications						
			Passenger Information System, Fiber Optic	95,680	RF	\$20	\$1,913,600	15%	\$2,200,640
			Passenger Information System, Station	2	EA	\$70,000	\$140,000	15%	\$161,000
			Element Total	1	LS		\$2,053,600		\$2,361,640
50.06			Fare collection system and equipment						
			Fare Collection	2	EA	\$150,000	\$300,000	15%	\$345,000
			Element Total	1	LS		\$300,000		\$345,000
50.07			Central Control						
			N/A						
			Element Total	1	LS		\$0		\$0
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>									
60.01			Purchase or lease of real estate						
			Right of Way Allowance - At Grade	95,680	RF	\$400	\$38,272,000	50%	\$57,408,000
			Right of Way Allowance - Aerial	0	RF	\$300	\$0	50%	\$0
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	95,680	RF		\$38,272,000		\$57,408,000

Hillsborough County MPO Transit Study  
 System Planning  
 CR-14 East  
 CR-Dwtn toward east to N County Line Rd

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	0	RF	\$250	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Highway Median	121,209	RF	\$900	\$109,088,100	25%	\$136,360,125
			Element Total	121,209	RF		\$109,088,100		\$136,360,125
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	0	RF	\$11,900	\$0	30%	\$0
	Double Track		Aerial - Ballasted	4,200	RF	\$15,200	\$63,840,000	30%	\$82,992,000
	Double Track		Aerial - Ballasted Over Water	600	RF	\$16,500	\$9,900,000	30%	\$12,870,000
			Element Total	4,800	RF		\$73,740,000		\$95,862,000
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	0	RF	\$240	\$0	15%	\$0
			Ballasted Track - Refurbish Existing	0	RF	\$190	\$0	15%	\$0
	Double Track		Ballasted Track	126,009	RF	\$480	\$60,484,320	15%	\$69,556,968
			Element Total	126,009	RF		\$60,484,320		\$69,556,968
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$3,024,216	15%	\$3,477,848
			Element Total	1	LS		\$3,024,216		\$3,477,848
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0



Hillsborough County MPO Transit Study  
 System Planning  
 CR-14 East  
 CR-Dwtn toward east to N County Line Rd

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTG	TOTAL COST
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	4	EA	\$1,500,000	\$6,000,000	20%	\$7,200,000
			Element Total	4	EA		\$6,000,000		\$7,200,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A						
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	8	EA	\$200,000	\$1,600,000	20%	\$1,920,000
			Escalator	4	EA	\$450,000	\$1,800,000	20%	\$2,160,000
			Element Total	1	LS		\$3,400,000		\$4,080,000
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	121,209	RF	\$30	\$3,636,270	30%	\$4,727,151
			Demolition Allowance - Median	4,800	RF	\$50	\$240,000	30%	\$312,000
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	126,009	RF		\$3,876,270		\$5,039,151
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	121,209	RF	\$140	\$16,969,260	30%	\$22,060,038
			Utility Relocation Allowance - Median	4,800	RF	\$340	\$1,632,000	30%	\$2,121,600
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	126,009	RF		\$18,601,260		\$24,181,638
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	126,009	RF	\$20	\$2,520,180	30%	\$3,276,234
			Element Total	1	LS		\$2,520,180		\$3,276,234
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	126,009	RF	\$15	\$1,890,135	30%	\$2,457,176
			Element Total	1	LS		\$1,890,135		\$2,457,176
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	12,601	RF	\$80	\$1,008,072	30%	\$1,310,494
			Element Total	1	LS		\$1,008,072		\$1,310,494
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	121,209	RF	\$15	\$1,818,135	30%	\$2,363,576
			Landscaping Allowance - Median	4,800	RF	\$25	\$120,000	30%	\$156,000
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrian Overpasses	4	EA	\$800,000	\$3,200,000	30%	\$4,160,000
			Artwork (1% of Guideway & Stations)	1%			\$1,888,281	30%	\$2,454,765

Hillsborough County MPO Transit Study  
 System Planning  
 CR-14 East  
 CR-Dwtn toward east to N County Line Rd

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
			Element Total	1	LS		\$7,026,416		\$9,134,341
40.07	Automobile, bus, van accessways including roads, parking lots								
			Roadway Modifications Allow. - Full Intersection	0	EA	\$50,000	\$0	30%	\$0
			Parking Lots	2,000	STL	\$4,000	\$8,000,000	30%	\$10,400,000
			Element Total	1	LS		\$8,000,000		\$10,400,000
40.08	Temporary Facilities and other indirect costs during construction								
			Temporary Facilities (5% of Category 40)	5.0%			\$2,146,117	25%	\$2,682,646
			Element Total	1	LS		\$2,146,117		\$2,682,646
<b>50 SYSTEMS</b>									
50.01	Train control and signals								
			Signal System	126,009	RF	\$140	\$17,641,260	15%	\$20,287,449
			Element Total	126,009	RF		\$17,641,260		\$20,287,449
50.02	Traffic signals and crossing protection								
			Crossing Protection	0	EA	\$150,000	\$0	15%	\$0
			Element Total	0	EA		\$0		\$0
50.03	Traction power supply: substations								
			N/A						
			Element Total	0	EA		\$0		\$0
50.04	Traction power distribution: catenary and third rail								
			N/A						
			Element Total	0	RF		\$0		\$0
50.05	Communications								
			Passenger Information System, Fiber Optic	126,009	RF	\$20	\$2,520,180	15%	\$2,898,207
			Passenger Information System, Station	4	EA	\$70,000	\$280,000	15%	\$322,000
			Element Total	1	LS		\$2,800,180		\$3,220,207
50.06	Fare collection system and equipment								
			Fare Collection	4	EA	\$150,000	\$600,000	15%	\$690,000
			Element Total	1	LS		\$600,000		\$690,000
50.07	Central Control								
			N/A						
			Element Total	1	LS		\$0		\$0
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>									
60.01	Purchase or lease of real estate								
			Right of Way Allowance - At Grade	121,209	RF	\$400	\$48,483,600	50%	\$72,725,400
			Right of Way Allowance - Aerial	4,800	RF	\$300	\$1,440,000	50%	\$2,160,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	126,009	RF		\$49,923,600		\$74,885,400

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Sarasota  
 CL Rail (east of Acline St) to Big Bend/ LRT Sta

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	59,148	RF	\$250	\$14,787,000	25%	\$18,483,750
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
			Element Total	59,148	RF		\$14,787,000		\$18,483,750
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	2,000	RF	\$11,900	\$23,800,000	30%	\$30,940,000
	Double Track		Aerial - Ballasted	0	RF	\$15,200	\$0	30%	\$0
	Double Track		Aerial - Ballasted Over Water	0	RF	\$16,500	\$0	30%	\$0
			Element Total	2,000	RF		\$23,800,000		\$30,940,000
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	61,148	RF	\$240	\$14,675,520	15%	\$16,876,848
			Ballasted Track - Refurbish Existing	61,148	RF	\$190	\$11,618,120	15%	\$13,360,838
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	61,148	RF		\$26,293,640		\$30,237,686
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$1,314,682	15%	\$1,511,884
			Element Total	1	LS		\$1,314,682		\$1,511,884
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study									
System Planning									
CR-Sarasota									
CL Rail (east of Acline St) to Big Bend/ LRT Sta									
TRANSIT MODE: Commuter Rail									
CAT NO.	STATIONING		DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
	BEGIN	END							
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	4	EA	\$1,500,000	\$6,000,000	20%	\$7,200,000
			Element Total	4	EA		\$6,000,000		\$7,200,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A						
			Element Total	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A						
			Element Total	1	LS		\$0		\$0
20.05	Joint development		N/A						
			Element Total	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	59,148	RF	\$30	\$1,774,440	30%	\$2,306,772
			Demolition Allowance - Median	2,000	RF	\$50	\$100,000	30%	\$130,000
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	61,148	RF		\$1,874,440		\$2,436,772
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	59,148	RF	\$140	\$8,280,720	30%	\$10,764,936
			Utility Relocation Allowance - Median	2,000	RF	\$340	\$680,000	30%	\$884,000
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	61,148	RF		\$8,960,720		\$11,648,936
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	61,148	RF	\$20	\$1,222,960	30%	\$1,589,848
			Element Total	1	LS		\$1,222,960		\$1,589,848
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	61,148	RF	\$15	\$917,220	30%	\$1,192,386
			Element Total	1	LS		\$917,220		\$1,192,386
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	6,115	RF	\$80	\$489,184	30%	\$635,939
			Element Total	1	LS		\$489,184		\$635,939
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	59,148	RF	\$15	\$887,220	30%	\$1,153,386
			Landscaping Allowance - Median	2,000	RF	\$25	\$50,000	30%	\$65,000
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrain Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$445,870	30%	\$579,631
			Element Total	1	LS		\$1,383,090		\$1,798,017

**Hillsborough County MPO Transit Study  
System Planning  
CR-Sarasota  
CL Rail (east of Acline St) to Big Bend/ LRT Sta**

**TRANSIT MODE: Commuter Rail**

CAT NO.	STATIONING BEGIN	END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONGY	TOTAL COST
40.07	Automobile, bus, van accessways including roads, parking lots		Roadway Modifications Allow. - Full						
			Intersection	30	EA	\$50,000	\$1,500,000	30%	\$1,950,000
			Parking Lots	1,000	STL	\$4,000	\$4,000,000	30%	\$5,200,000
			Element Total	1	LS		\$5,500,000		\$7,150,000
40.08	Temporary Facilities and other indirect costs during construction		Temporary Facilities (5% of Category 40)	5.0%			\$1,017,381	25%	\$1,271,726
			Element Total	1	LS		\$1,017,381		\$1,271,726
<b>50 SYSTEMS</b>									
50.01	Train control and signals		Signal System	61,148	RF	\$140	\$8,560,720	15%	\$9,844,828
			Element Total	61,148	RF		\$8,560,720		\$9,844,828
50.02	Traffic signals and crossing protection		Crossing Protection	30	EA	\$150,000	\$4,500,000	15%	\$5,175,000
			Element Total	30	EA		\$4,500,000		\$5,175,000
50.03	Traction power supply: substations		N/A						
			Element Total	0	EA		\$0		\$0
50.04	Traction power distribution: catenary and third rail		N/A						
			Element Total	0	RF		\$0		\$0
50.05	Communications		Passenger Information System, Fiber Optic	61,148	RF	\$20	\$1,222,960	15%	\$1,406,404
			Passenger Information System, Station	4	EA	\$70,000	\$280,000	15%	\$322,000
			Element Total	1	LS		\$1,502,960		\$1,728,404
50.06	Fare collection system and equipment		Fare Collection	4	EA	\$150,000	\$600,000	15%	\$690,000
			Element Total	1	LS		\$600,000		\$690,000
50.07	Central Control		N/A						
			Element Total	1	LS		\$0		\$0
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>									
60.01	Purchase or lease of real estate		Right of Way Allowance - At Grade	59,148	RF	\$400	\$23,659,200	50%	\$35,488,800
			Right of Way Allowance - Aerial	2,000	RF	\$300	\$600,000	50%	\$900,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	61,148	RF		\$24,259,200		\$36,388,800

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Sarasota  
 Big Bend/ LRT Sta to Sarasota/ Countyline

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
<b>10 GUIDEWAY &amp; TRACK ELEMENTS</b>									
10.01	Guideway: At-grade exclusive right-of-way								
	Single Track		At Grade - Ballasted, Open	73,984	RF	\$250	\$18,496,000	25%	\$23,120,000
	Double Track		At Grade - Ballasted, Open	0	RF	\$420	\$0	25%	\$0
			Element Total	73,984	RF		\$18,496,000		\$23,120,000
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic)								
			N/A						
			Element Total	0	RF		\$0		\$0
10.03	Guideway: At-grade in mixed traffic								
			N/A						
			Element Total	0	RF		\$0		\$0
10.04	Guideway: Aerial structure								
	Single Track		Aerial - Ballasted	0	RF	\$11,000	\$0	30%	\$0
	Single Track		Aerial - Ballasted Over Water	700	RF	\$11,900	\$8,330,000	30%	\$10,829,000
	Double Track		Aerial - Ballasted	0	RF	\$15,200	\$0	30%	\$0
	Double Track		Aerial - Ballasted Over Water	0	RF	\$16,500	\$0	30%	\$0
			Element Total	700	RF		\$8,330,000		\$10,829,000
10.05	Guideway: Built-up fill								
	Single Track		At Grade - Ballasted, Built-up	0	RF	\$440	\$0	25%	\$0
	Double Track		At Grade - Ballasted, Built-up	0	RF	\$740	\$0	25%	\$0
			Element Total	0	RF		\$0		\$0
10.06	Guideway: Underground cut & cover								
			N/A						
			Element Total	0	RF		\$0		\$0
10.07	Guideway: Underground tunnel								
			N/A						
			Element Total	0	RF		\$0		\$0
10.08	Guideway: Retained cut or fill								
	Single Track		Retained Cut - Ballasted	0	RF	\$6,800	\$0	30%	\$0
	Single Track		Retained Fill - Ballasted	0	RF	\$2,800	\$0	30%	\$0
	Double Track		Retained Cut - Ballasted	0	RF	\$8,000	\$0	30%	\$0
	Double Track		Retained Fill - Ballasted	0	RF	\$3,200	\$0	30%	\$0
			Element Total	0	RF		\$0		\$0
10.09	Track: Direct fixation								
			N/A						
			Element Total	0	RF		\$0		\$0
10.10	Track: Embedded								
			N/A						
			Element Total	0	RF		\$0		\$0
10.11	Track: Ballasted								
	Single Track		Ballasted Track	74,684	RF	\$240	\$17,924,160	15%	\$20,612,784
			Ballasted Track - Refurbish Existing	74,684	RF	\$190	\$14,189,960	15%	\$16,318,454
	Double Track		Ballasted Track	0	RF	\$480	\$0	15%	\$0
			Element Total	74,684	RF		\$32,114,120		\$36,931,238
10.12	Track: Special (switches, turnouts)								
			Special Trackwork (5% of Track Cost)	5%			\$1,605,706	15%	\$1,846,562
			Element Total	1	LS		\$1,605,706		\$1,846,562
10.13	Track: Vibration and noise dampening								
			N/A						
			Element Total	1	LS		\$0		\$0

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Sarasota  
 Big Bend/ LRT Sta to Sarasota/ Countyline

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTRY	TOTAL COST
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL</b>									
20.01	At-grade station, stop, shelter, mall, terminal, platform		Center Platform Station	2	EA	\$1,500,000	\$3,000,000	20%	\$3,600,000
			Element Total	2	EA		\$3,000,000		\$3,600,000
20.02	Aerial station, stop, shelter, mall, terminal, platform		Center Platform Station	0	EA	\$15,000,000	\$0	25%	\$0
			Element Total	0	EA		\$0		\$0
20.03	Underground station, stop, shelter, mall, terminal, platform		N/A	0	EA		\$0		\$0
20.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.		N/A	1	LS		\$0		\$0
20.05	Joint development		N/A	1	LS		\$0		\$0
20.06	Automobile parking multi-story structure		Parking Garage	0	STL	\$12,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
20.07	Elevators, escalators		Eleavator	0	EA	\$200,000	\$0	20%	\$0
			Escalator	0	EA	\$450,000	\$0	20%	\$0
			Element Total	1	LS		\$0		\$0
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>									
40.01	Demolition, Clearing, Earthwork		Demolition Allowance - Low	73,984	RF	\$30	\$2,219,520	30%	\$2,885,376
			Demolition Allowance - Median	700	RF	\$50	\$35,000	30%	\$45,500
			Demolition Allowance - High	0	RF	\$90	\$0	30%	\$0
			Element Total	74,684	RF		\$2,254,520		\$2,930,876
40.02	Site Utilities, Utility Relocation		Utility Relocation Allowance - Low	73,984	RF	\$140	\$10,357,760	30%	\$13,465,088
			Utility Relocation Allowance - Median	700	RF	\$340	\$238,000	30%	\$309,400
			Utility Relocation Allowance - High	0	RF	\$570	\$0	30%	\$0
			Element Total	74,684	RF		\$10,595,760		\$13,774,488
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		Hazardous Material Removal Allowance	74,684	RF	\$20	\$1,493,680	30%	\$1,941,784
			Element Total	1	LS		\$1,493,680		\$1,941,784
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks		Enviromental Mitigation Allowance	74,684	RF	\$15	\$1,120,260	30%	\$1,456,338
			Element Total	1	LS		\$1,120,260		\$1,456,338
40.05	Site structures including retaining walls, sound walls		Retaining & Sound Wall Allowance (10% of Ballasted Track Length)	7,468	RF	\$80	\$597,472	30%	\$776,714
			Element Total	1	LS		\$597,472		\$776,714
40.06	Pedestrian / bike access and accommodation, landscaping		Landscaping Allowance - Low	73,984	RF	\$15	\$1,109,760	30%	\$1,442,688
			Landscaping Allowance - Median	700	RF	\$25	\$17,500	30%	\$22,750
			Landscaping Allowance - High	0	RF	\$40	\$0	30%	\$0
			Pedestrain Overpasses	0	EA	\$800,000	\$0	30%	\$0
			Artwork (1% of Guideway & Stations)	1%			\$298,260	30%	\$387,738
			Element Total	1	LS		\$1,425,520		\$1,853,176

Hillsborough County MPO Transit Study  
 System Planning  
 CR-Sarasota  
 Big Bend/ LRT Sta to Sarasota/ Countyline

TRANSIT MODE: Commuter Rail

CAT NO.	STATIONING BEGIN	STATIONING END	DESCRIPTION	QTY	UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
40.07			Automobile, bus, van accessways including roads, parking lots						
			Roadway Modifications Allow. - Full						
			Intersection	37	EA	\$50,000	\$1,850,000	30%	\$2,405,000
			Parking Lots	1,000	STL	\$4,000	\$4,000,000	30%	\$5,200,000
			Element Total	1	LS		\$5,850,000		\$7,605,000
40.08			Temporary Facilities and other indirect costs during construction						
			Temporary Facilities (5% of Category 40)	5.0%			\$1,166,861	25%	\$1,458,576
			Element Total	1	LS		\$1,166,861		\$1,458,576
<b>50 SYSTEMS</b>									
50.01			Train control and signals						
			Signal System	74,684	RF	\$140	\$10,455,760	15%	\$12,024,124
			Element Total	74,684	RF		\$10,455,760		\$12,024,124
50.02			Traffic signals and crossing protection						
			Crossing Protection	37	EA	\$150,000	\$5,550,000	15%	\$6,382,500
			Element Total	37	EA		\$5,550,000		\$6,382,500
50.03			Traction power supply: substations						
			N/A						
			Element Total	0	EA		\$0		\$0
50.04			Traction power distribution: catenary and third rail						
			N/A						
			Element Total	0	RF		\$0		\$0
50.05			Communications						
			Passenger Information System, Fiber Optic	74,684	RF	\$20	\$1,493,680	15%	\$1,717,732
			Passenger Information System, Station	2	EA	\$70,000	\$140,000	15%	\$161,000
			Element Total	1	LS		\$1,633,680		\$1,878,732
50.06			Fare collection system and equipment						
			Fare Collection	2	EA	\$150,000	\$300,000	15%	\$345,000
			Element Total	1	LS		\$300,000		\$345,000
50.07			Central Control						
			N/A						
			Element Total	1	LS		\$0		\$0
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>									
60.01			Purchase or lease of real estate						
			Right of Way Allowance - At Grade	73,984	RF	\$400	\$29,593,600	50%	\$44,390,400
			Right of Way Allowance - Aerial	700	RF	\$300	\$210,000	50%	\$315,000
			Right of Way Allowance - Underground	0	RF	\$250	\$0	50%	\$0
			Element Total	74,684	RF		\$29,803,600		\$44,705,400



**Hillsborough County MPO Transit Study  
System Planning  
SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS**

**TRANSIT MODE: Commuter Rail**

STATIONING		DESCRIPTION	COST		UNIT	BASE COST	ALLCTD CONTGY	TOTAL COST
BEGIN	END		ID	QTY				
<b>30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS</b>								
30.01 Administration Building: Office, sales, storage, revenue counting		N/A						
		Element Total		1	LS	\$0		\$0
30.02 Light Maintenance Facility		N/A						
		Element Total		1	LS	\$0		\$0
30.03 Heavy Maintenance Facility		Maintenance Facility (per vehicle)		112	EA	\$1,000,000	25%	\$140,000,000
		Element Total		1	LS	\$112,000,000		\$140,000,000
30.04 Storage or Maintenance of Way Building		N/A						
		Element Total		1	LS	\$0		\$0
30.05 Yard and Yard Track								
Yard		Yard Track		1,000	RF	\$240	15%	\$276,000
Yard		Signal System, Single Track		1,000	RF	\$240	15%	\$276,000
		Element Total		1	LS	\$480,000		\$552,000
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>								
60.01 Purchase or lease of real estate		Right of Way Allowance		20	AC	\$500,000	50%	\$15,000,000
		Element Total		1	LS	\$10,000,000		\$15,000,000

Hillsborough County MPO Transit Study  
System Planning  
VEHICLES

TRANSIT MODE: Commuter Rail

STATIONING		DESCRIPTION	COST		UNIT	UNIT COST	BASE COST	ALLCTD CONTGY	TOTAL COST
BEGIN	END		ID	QTY					
<b>70 VEHICLES</b>									
70.01 Light Rail									
Commuter Rail		Diesel Locomotive	VH10	21	EA	\$2,500,000	\$51,250,000	10%	\$56,375,000
		Commuter Coach Car	VH11	41	EA	\$2,100,000	\$86,100,000	10%	\$94,710,000
		Commuter Cab Car	VH12	21	EA	\$2,400,000	\$49,200,000	10%	\$54,120,000
		Element Total		82	EA		\$186,550,000		\$205,205,000
Regional Commuter Rail		Diesel Locomotive	VH10	8	EA	\$2,500,000	\$18,750,000	10%	\$20,625,000
		Commuter Coach Car	VH11	15	EA	\$2,100,000	\$31,500,000	10%	\$34,650,000
		Commuter Cab Car	VH12	8	EA	\$2,400,000	\$18,000,000	10%	\$19,800,000
		Element Total		30	EA		\$68,250,000		\$75,075,000
		Total		112	EA				

Hillsborough County MPO Transit Study  
 System Planning  
 VEHICLES

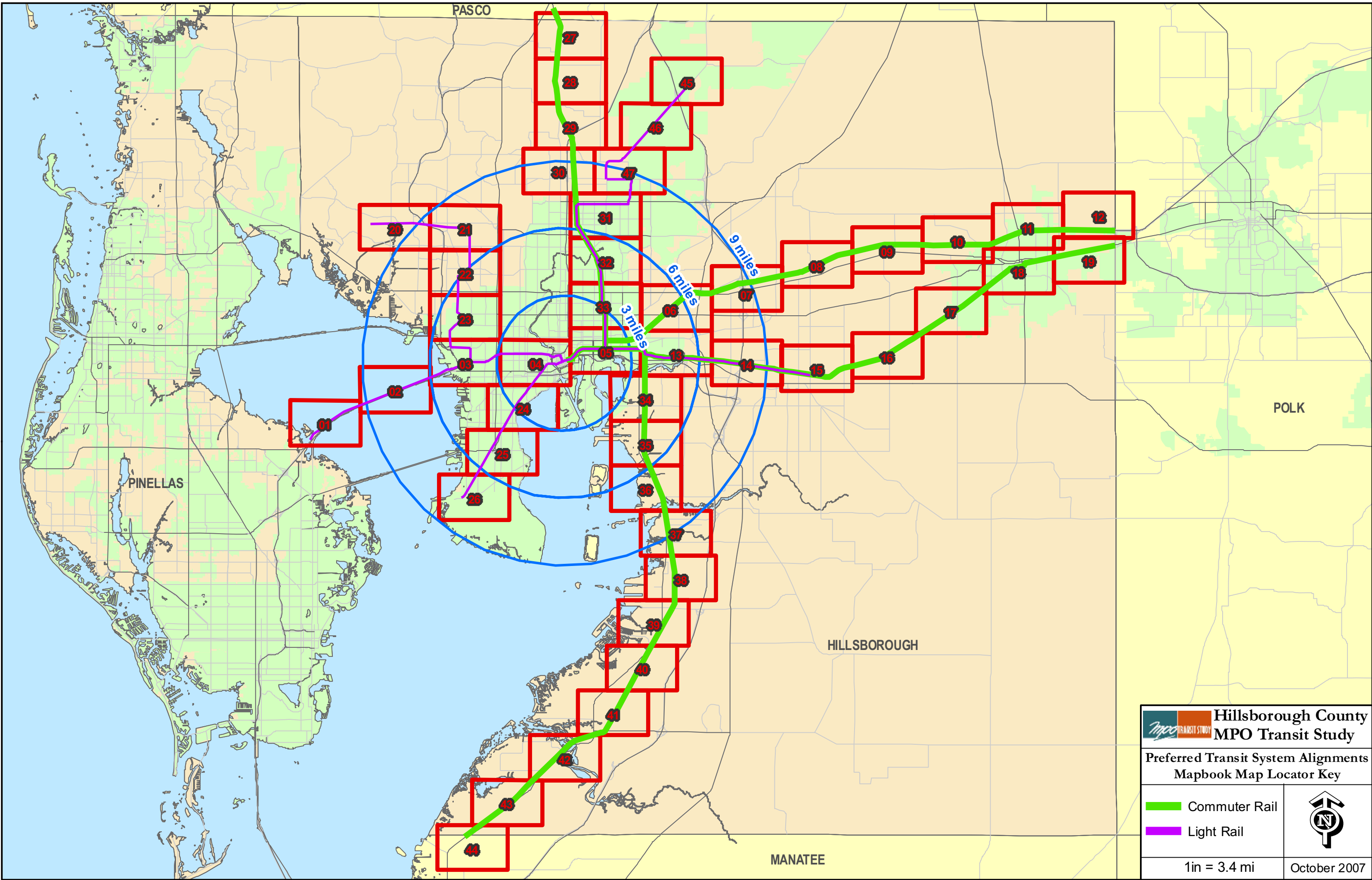
TRANSIT MODE: LRT

STATIONING		DESCRIPTION	COST		UNIT		BASE COST	ALLCTD CONTGY	TOTAL COST
BEGIN	END		ID	QTY	UNIT	COST			
<b>70 VEHICLES</b>									
70.01 Light Rail									
		Light Rail Vehicle		147	EA	\$3,600,000	\$529,200,000	10%	\$582,120,000

## **APPENDIX B**

### **Mapbooks**

**MAPBOOK PREFERRED TRANSIT SYSTEM PLAN– 48 PAGES**



**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments  
Mapbook Map Locator Key**

- █ Commuter Rail
- █ Light Rail



1in = 3.4 mi


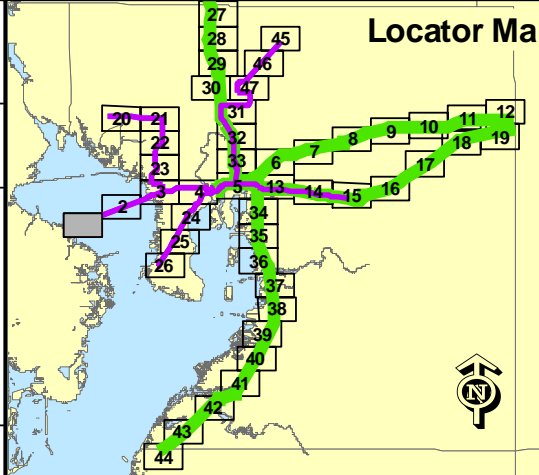





October 2007



Old Tampa Bay

LR-Tampa Bay  
Westshore Blvd to St. Pete


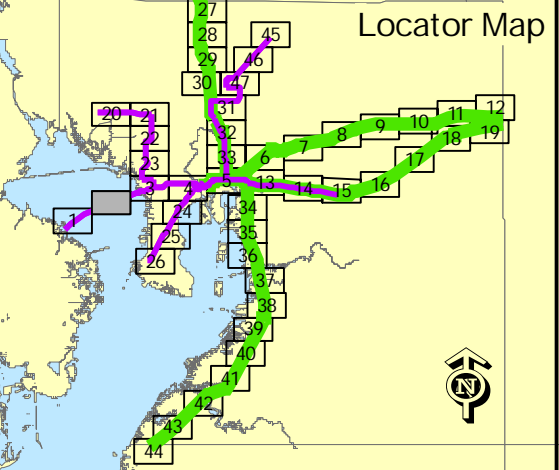







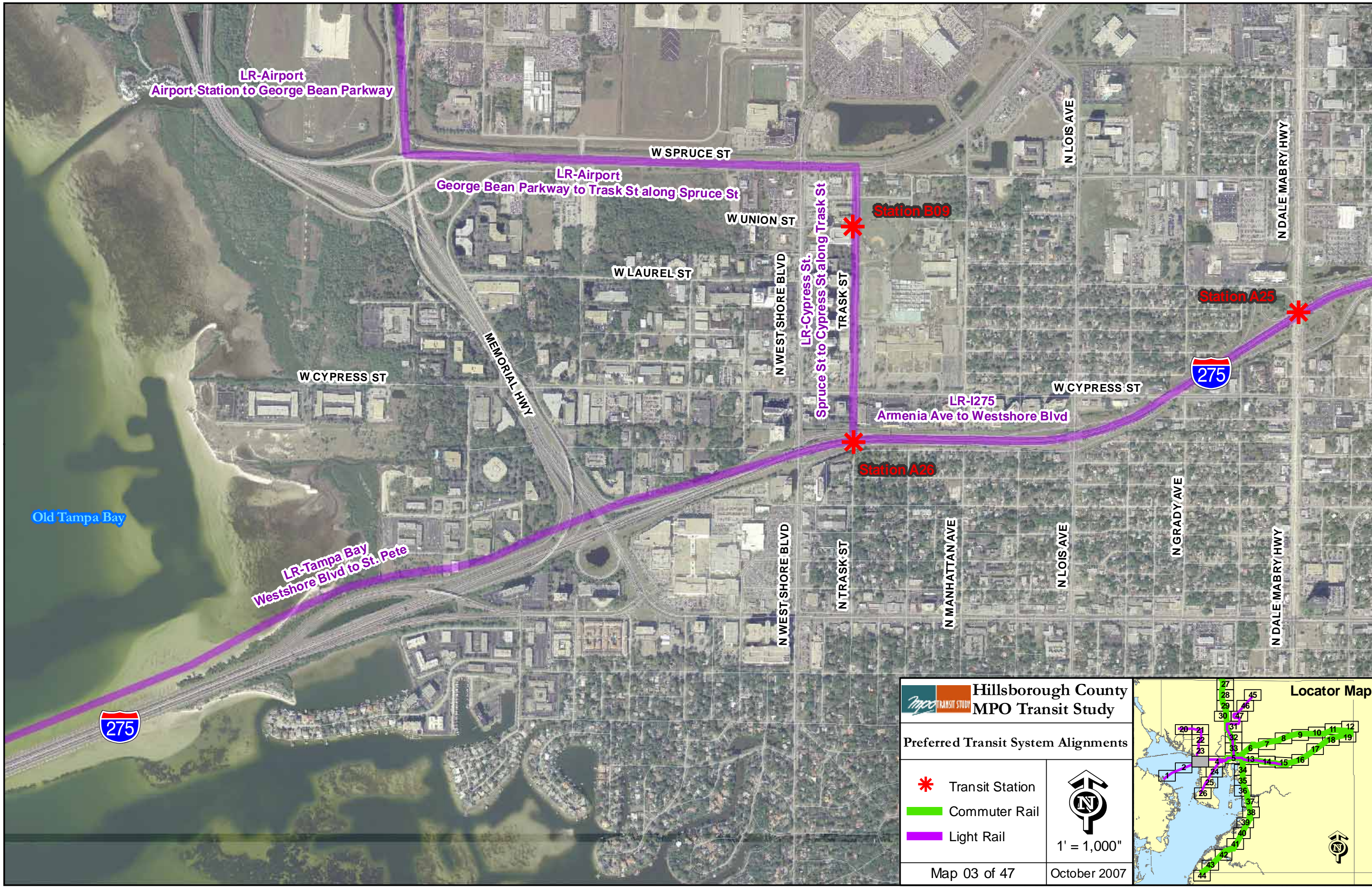
 <b>Hillsborough County MPO Transit Study</b>		<b>Locator Map</b> 
<b>Preferred Transit System Alignments</b>		
 Transit Station	 1' = 1,000" 	
 Commuter Rail		
 Light Rail		
Map 01 of 47	October 2007	

Old Tampa Bay

LR-Tampa Bay  
Westshore Blvd to St. Pete



 <b>Hillsborough County MPO Transit Study</b>		
<b>Preferred Transit System Alignments</b>		
 Transit Station	 1' = 1,000"	
 Commuter Rail		
 Light Rail		
Map 02 of 47		October 2007



LR-Airport  
Airport Station to George Bean Parkway

LR-Airport  
George Bean Parkway to Trask St along Spruce St

LR-Cypress St.  
Spruce St to Cypress St along Trask St

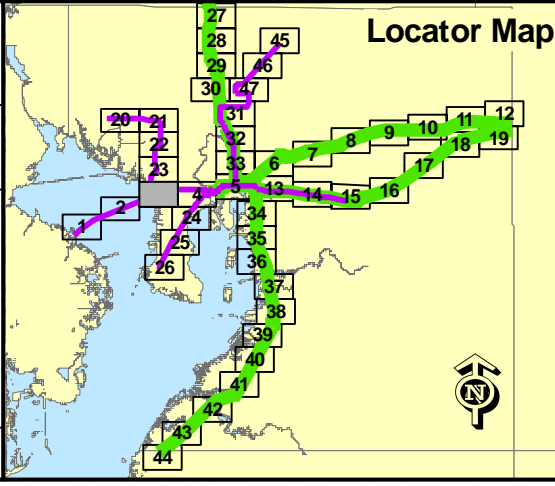
LR-I275  
Armenia Ave to Westshore Blvd

LR-Tampa Bay  
Westshore Blvd to St. Pete

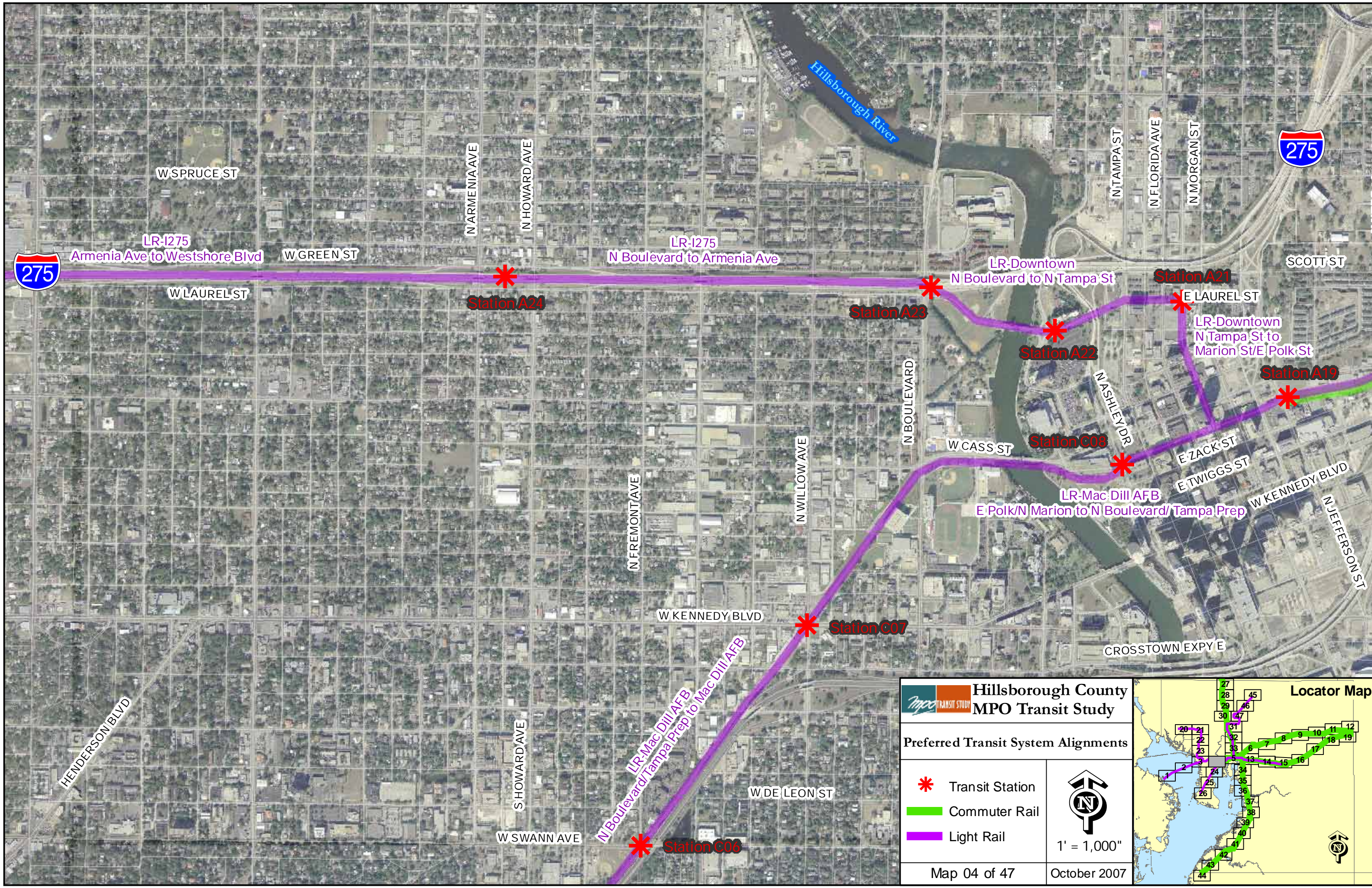
Hillsborough County  
MPO Transit Study

Preferred Transit System Alignments

- \* Transit Station
- Commuter Rail
- Light Rail





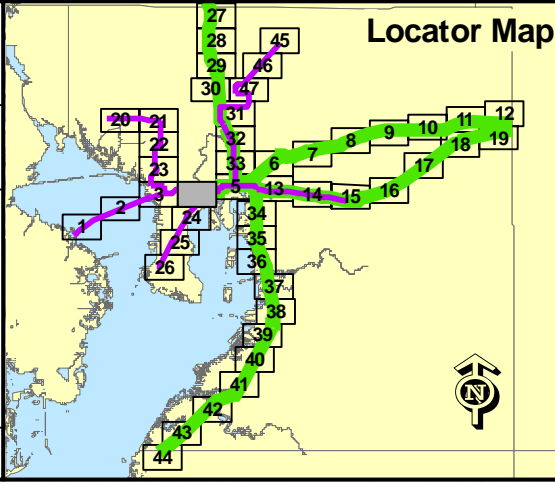


**Hillsborough County  
MPO Transit Study**

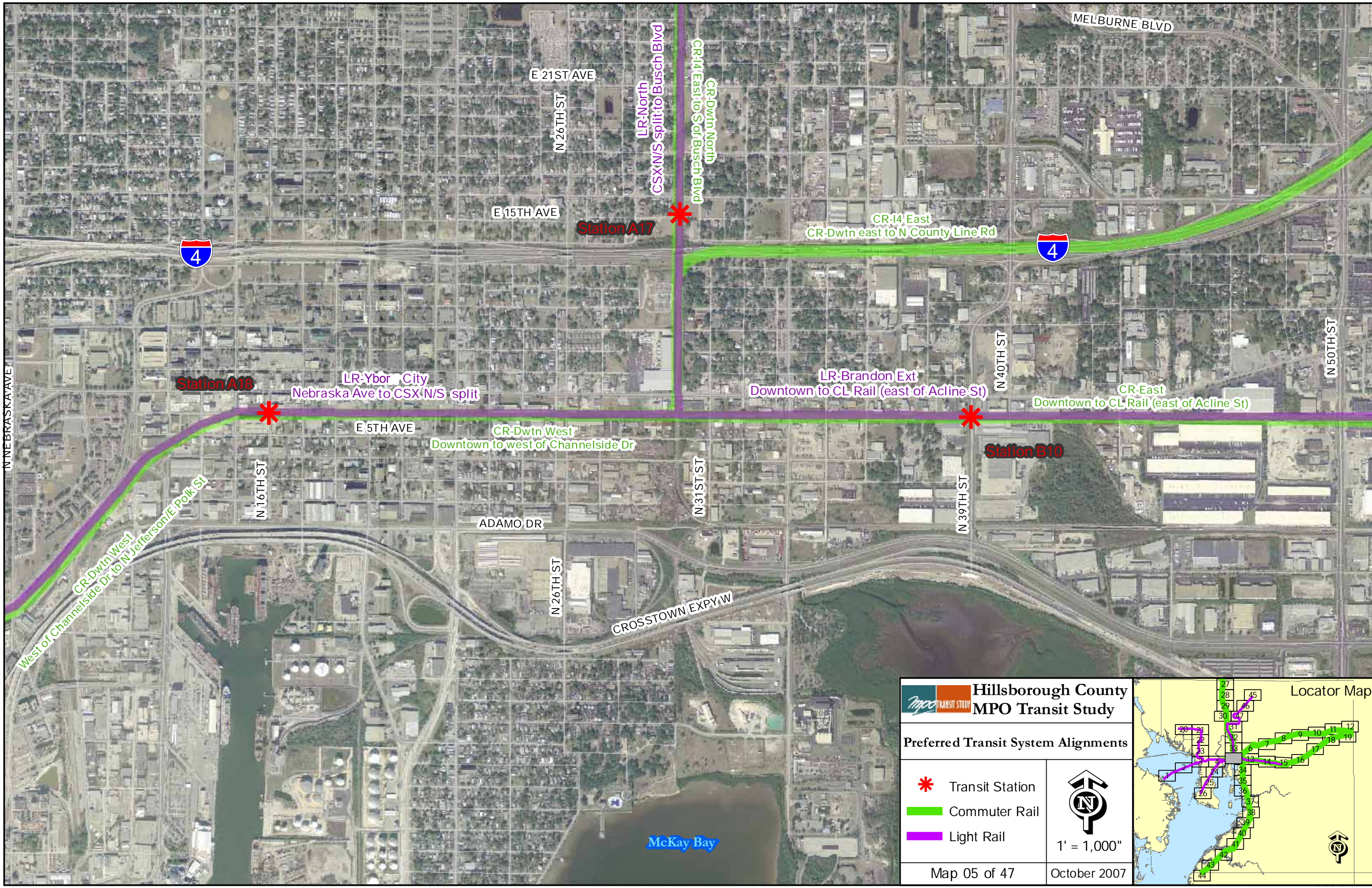
- Preferred Transit System Alignments**
- \* Transit Station
  - Commuter Rail
  - Light Rail



1" = 1,000"





**Locator Map**

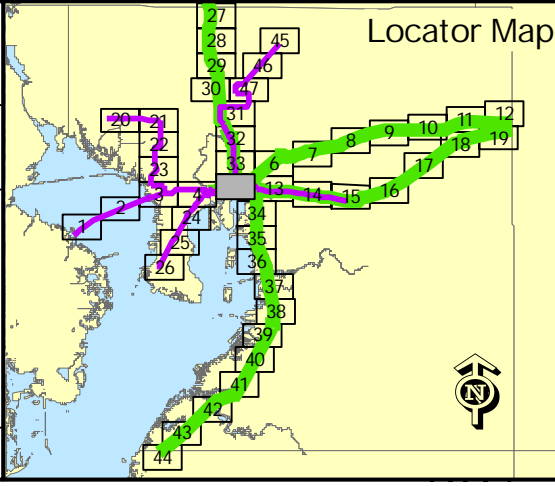


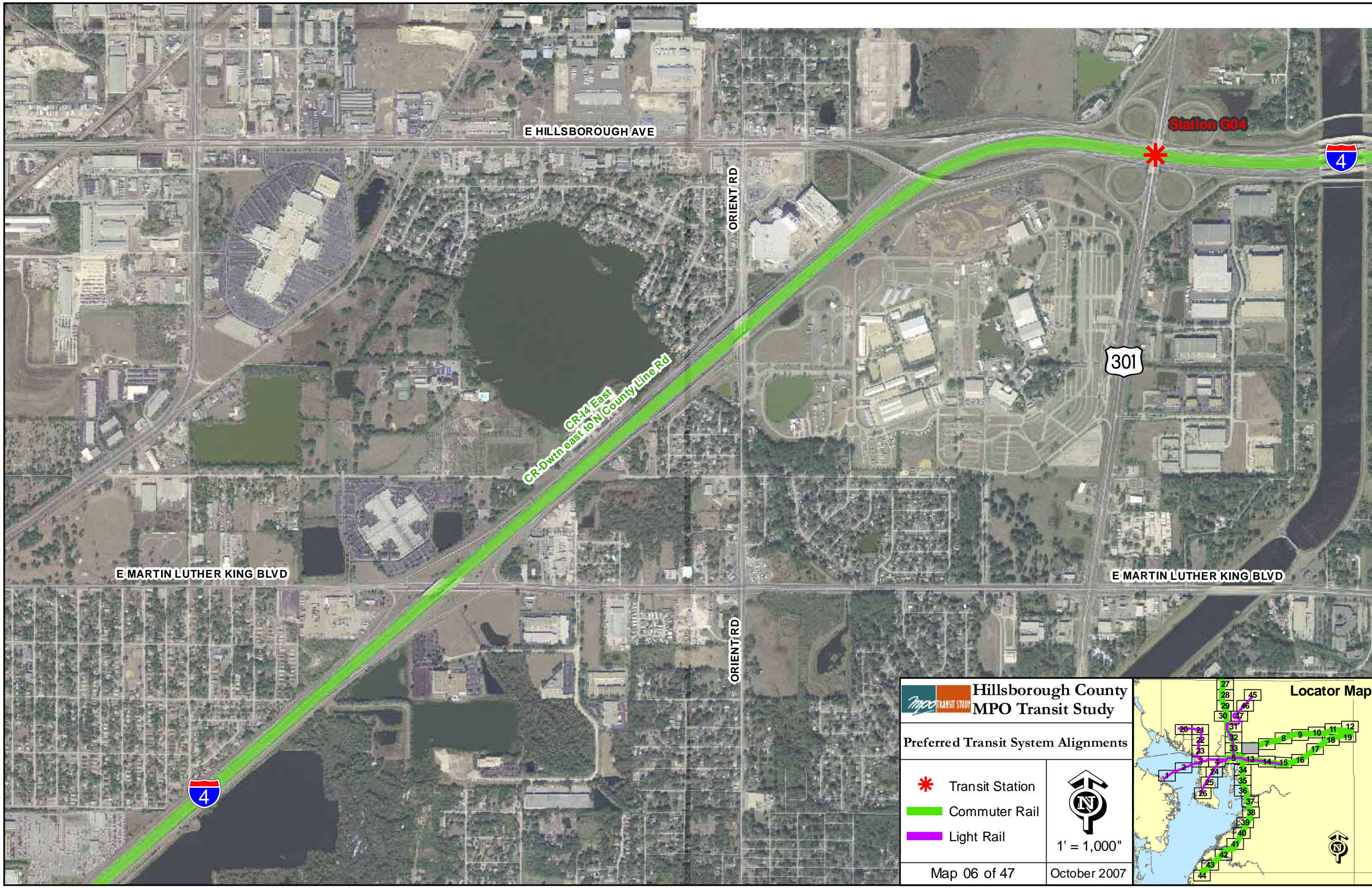
**Hillsborough County MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail

  
1' = 1,000"





E HILLSBOROUGH AVE

Station G04



ORIENT RD

301

CR-14 East  
CR-D with east to N County Line Rd

E MARTIN LUTHER KING BLVD




E MARTIN LUTHER KING BLVD

ORIENT RD



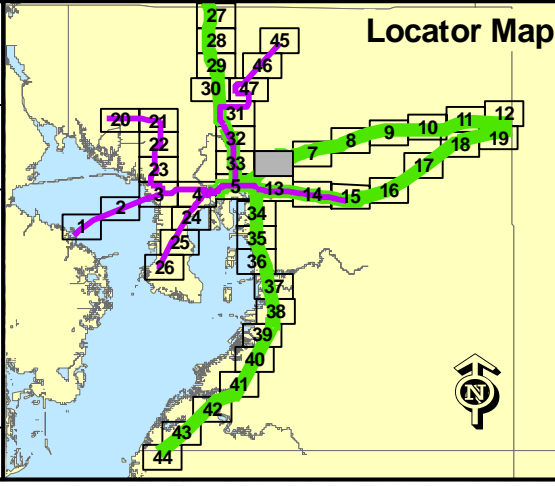
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

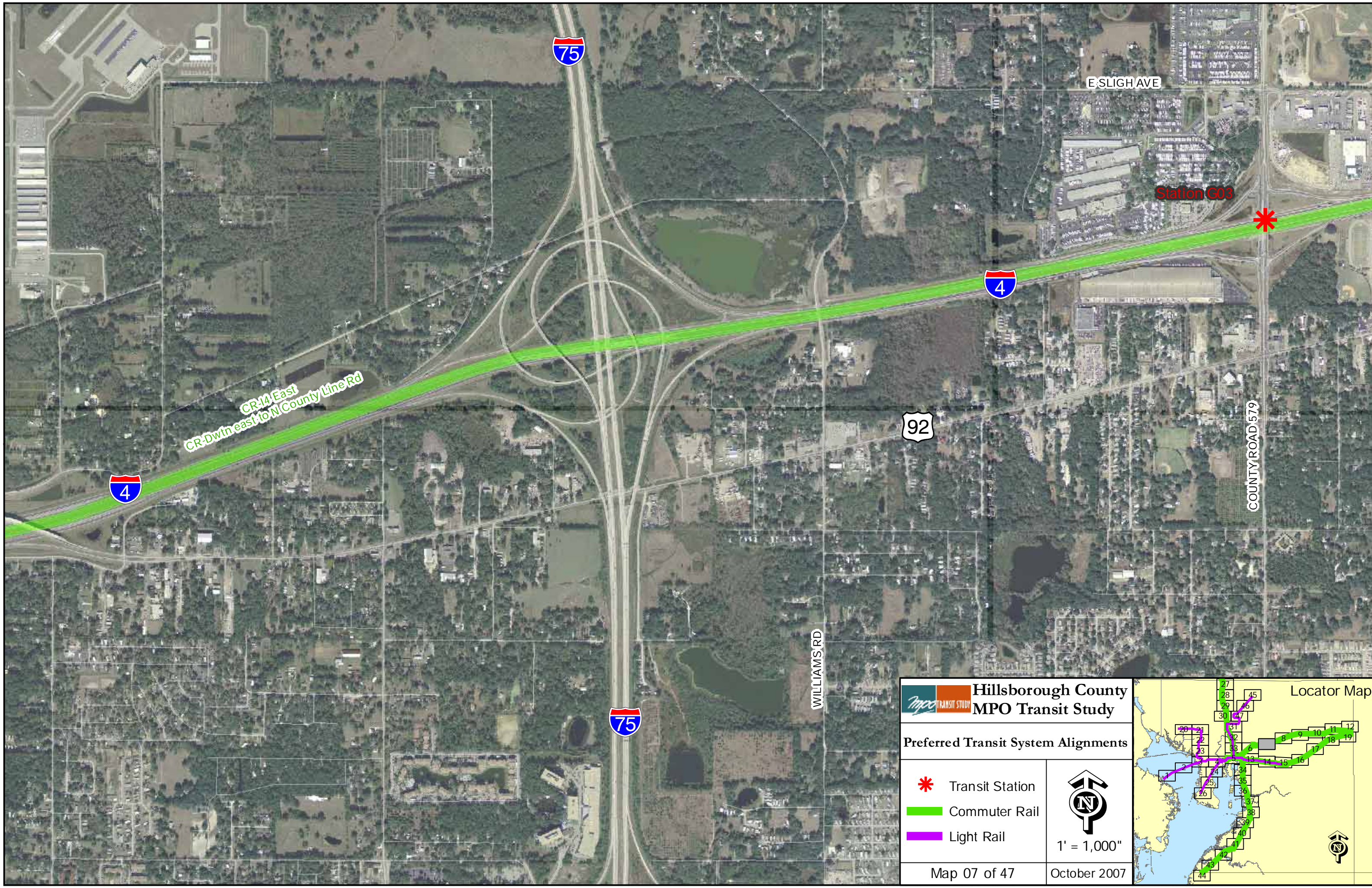
-  Transit Station
-  Commuter Rail
-  Light Rail



1" = 1,000"



**Locator Map**



CR-14 East  
CR-Dwtn east to N County Line Rd

E SLIGH AVE




Station G03

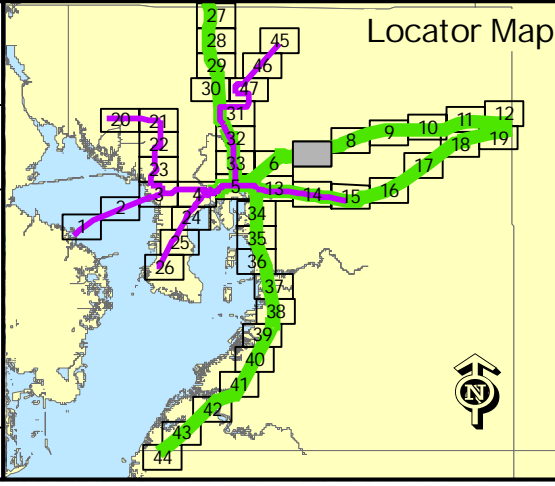
COUNTY ROAD 579

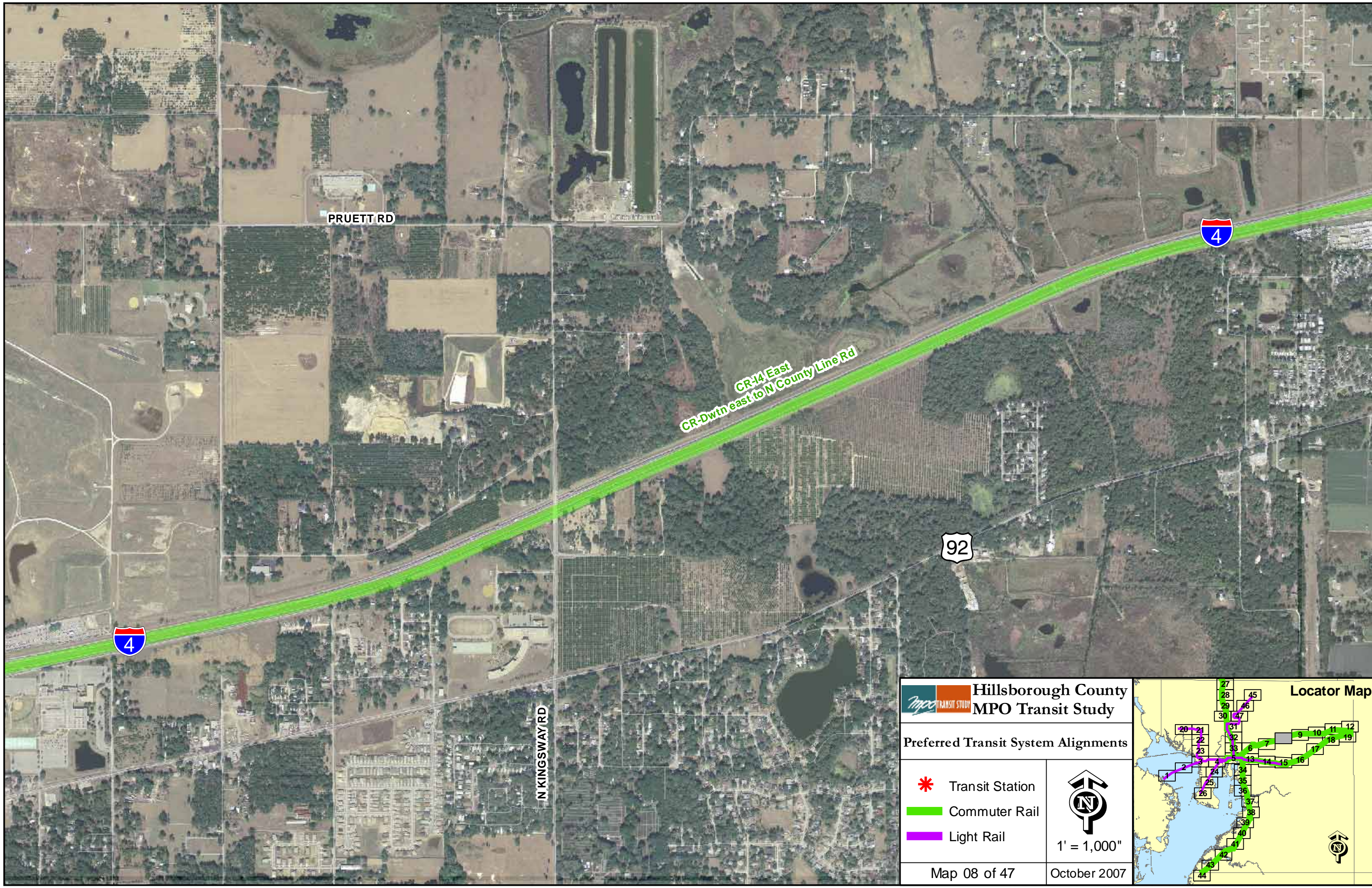
WILLIAMS RD

**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail





PRUETT RD




CR-14 East  
CR-Dwtn east to N County Line Rd

92

N KINGSWAY RD

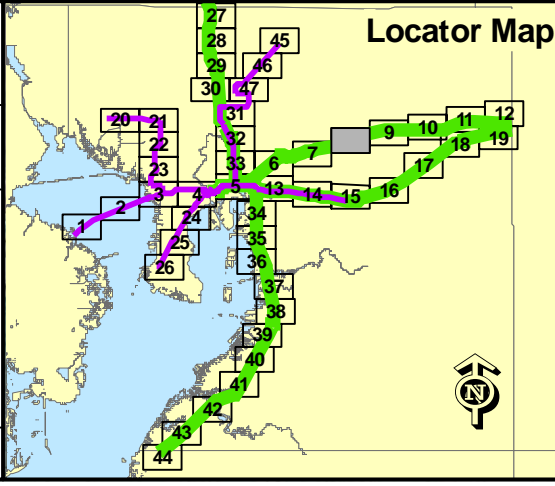
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

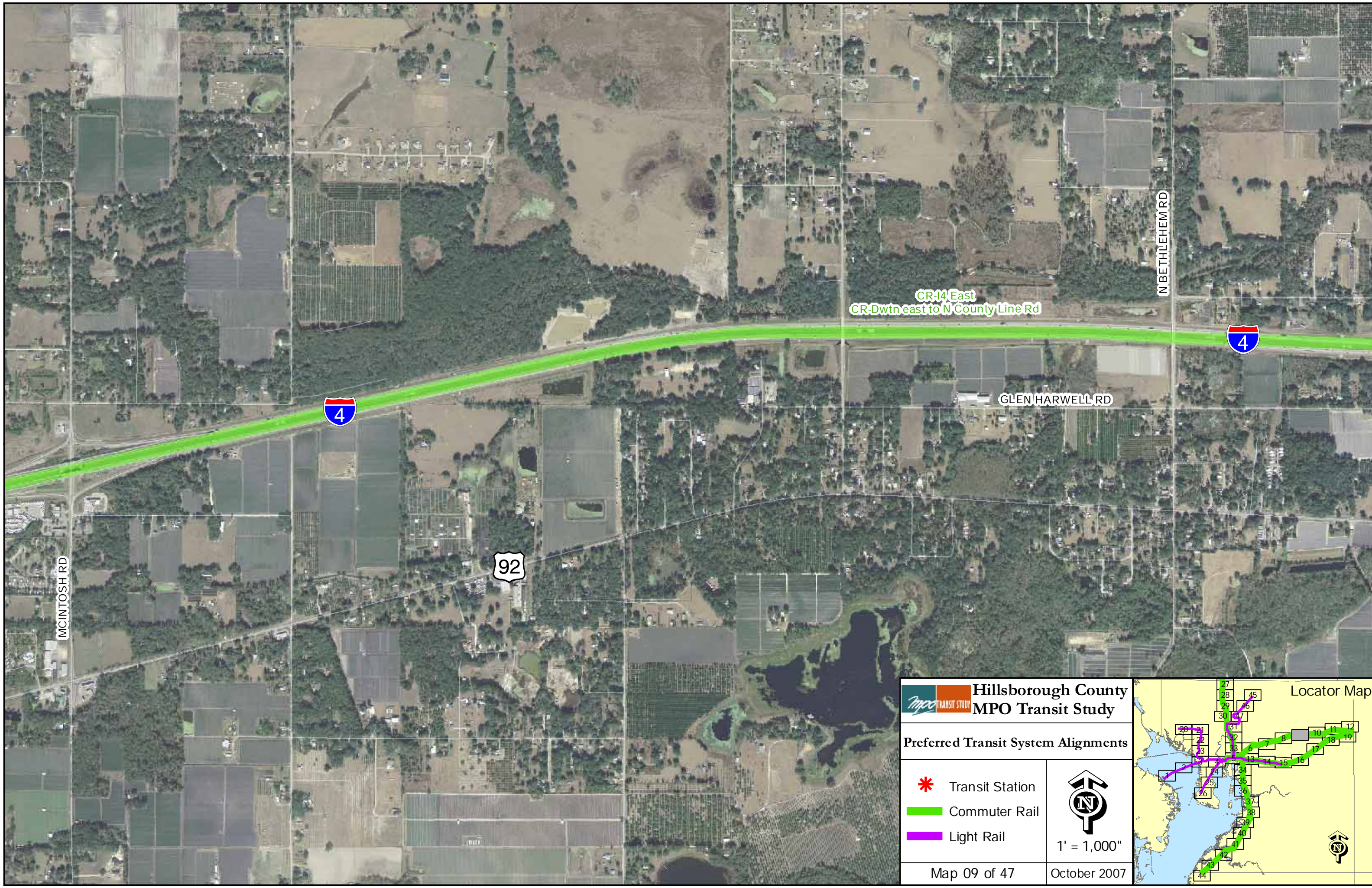
-  Transit Station
-  Commuter Rail
-  Light Rail



1' = 1,000"



**Locator Map**



CR-14 East  
CR-Dwtn east to N County Line Rd




GLEN HARWELL RD

N BETHLEHEM RD

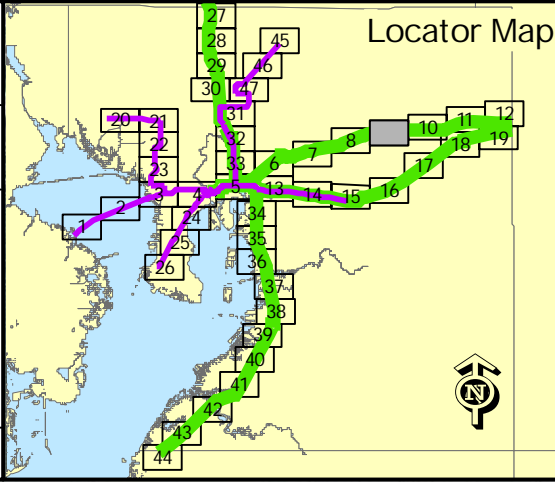
MCINTOSH RD

**Hillsborough County  
MPO Transit Study**

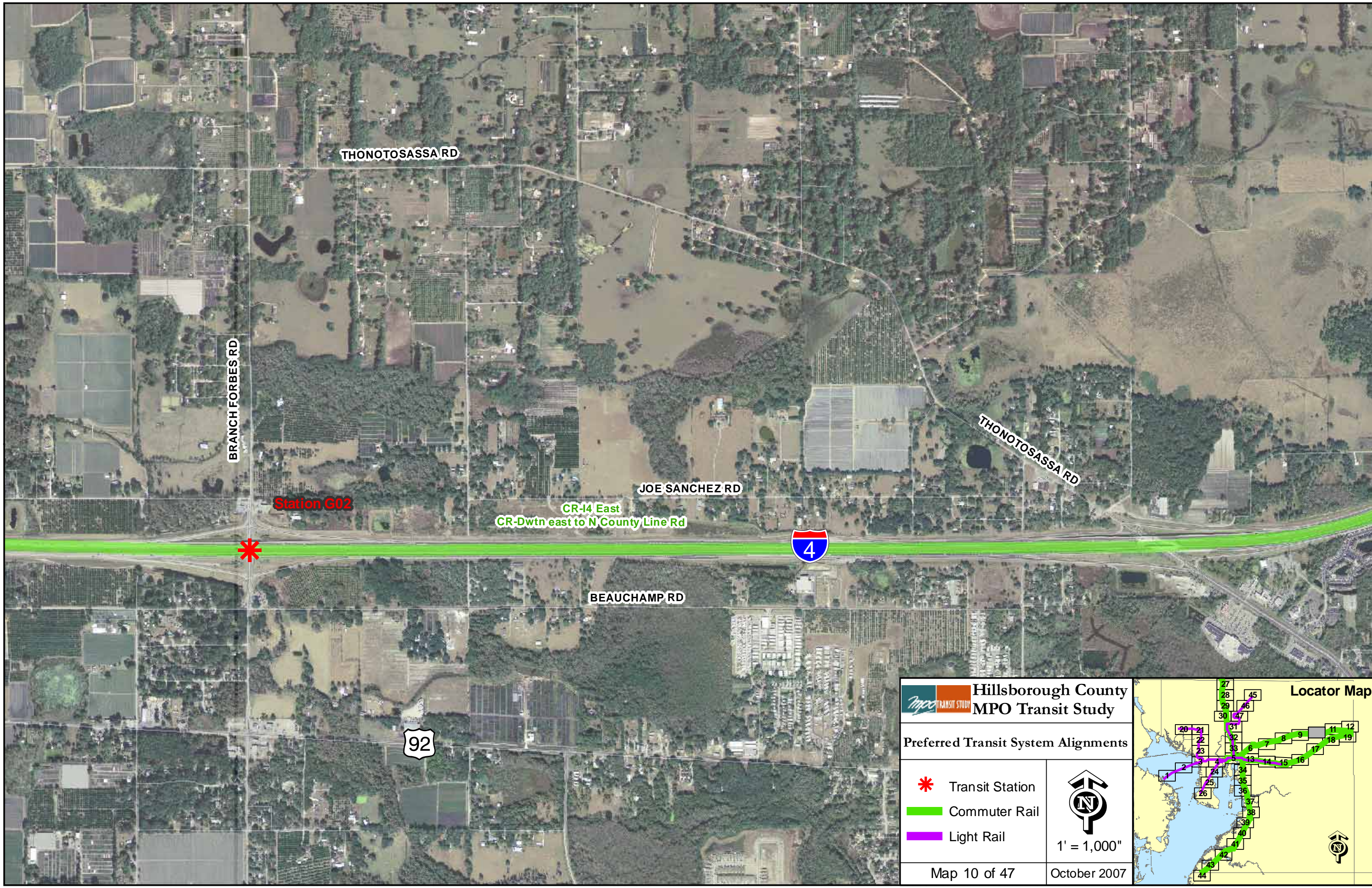
**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail

  
1' = 1,000"



Locator Map



THONOTOSASSA RD

BRANCH FORBES RD

Station G02

CR-14 East  
CR-Dwtm east to N County Line Rd

JOE SANCHEZ RD

THONOTOSASSA RD




BEAUCHAMP RD

92

4

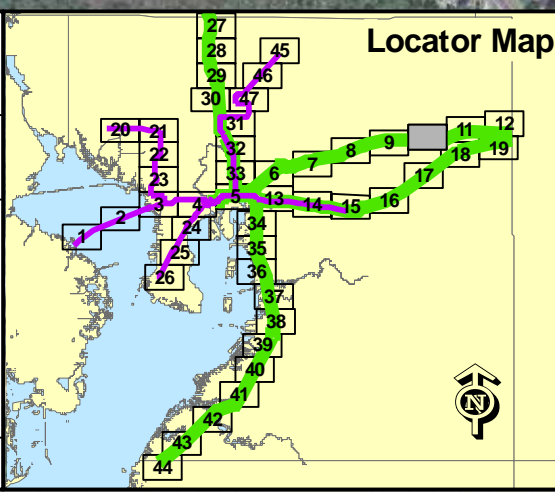
**Hillsborough County  
MPO Transit Study**

Preferred Transit System Alignments

-  Transit Station
-  Commuter Rail
-  Light Rail



1' = 1,000"



Locator Map

W.SAM ALLEN RD

PAUL BUCHMAN HWY

N WILDER RD

N PARK RD

CR-14 East  
CR-Dwtn east to N County Line Rd

Station G01






N SHANNON AVE

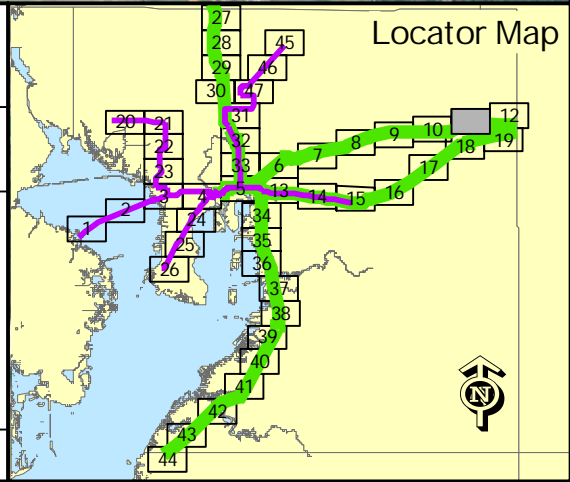
N WHEELER ST

**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**




-  Transit Station
-  Commuter Rail
-  Light Rail

  
1' = 1,000"





Preferred Transit System Alignments

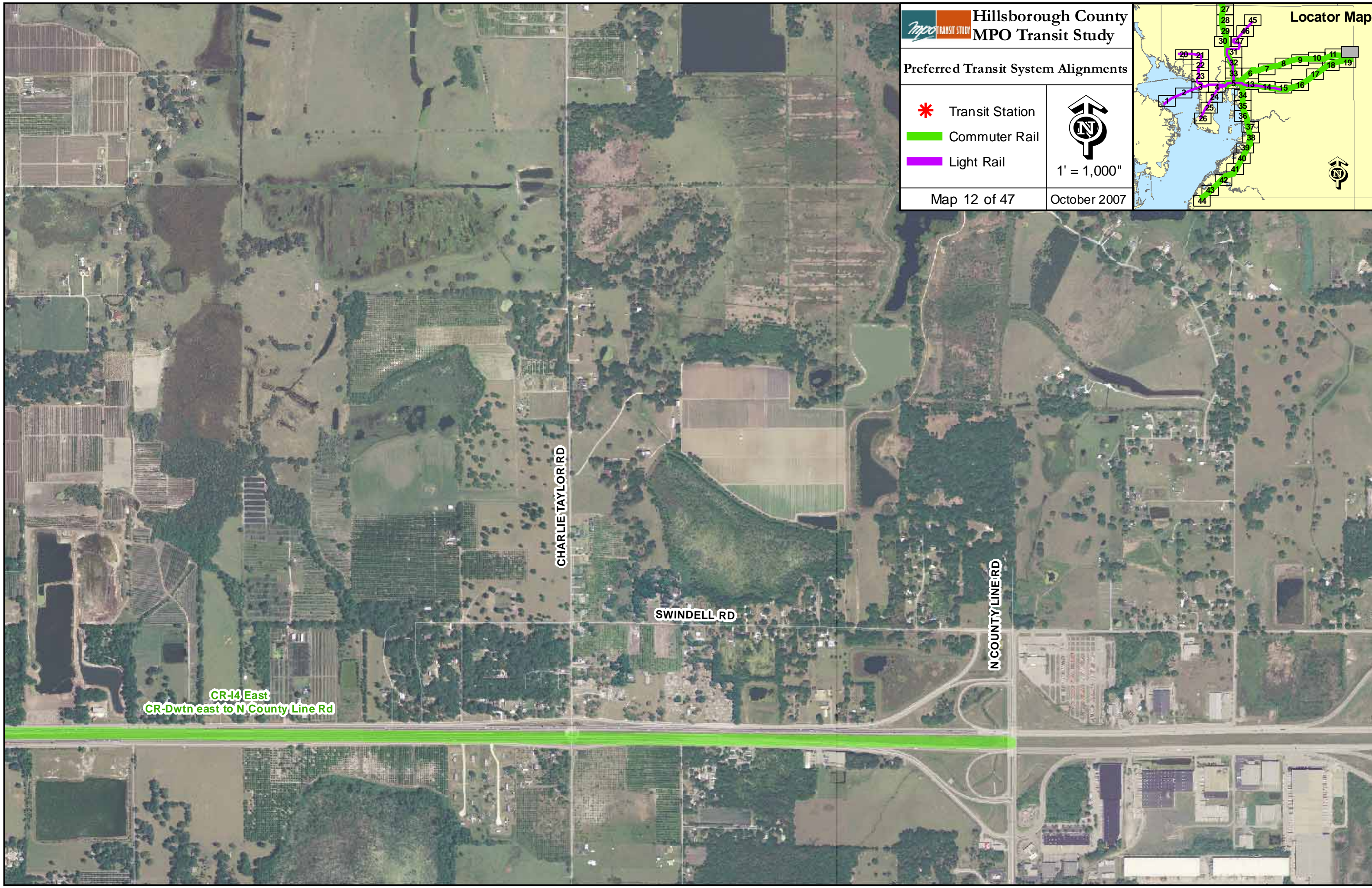
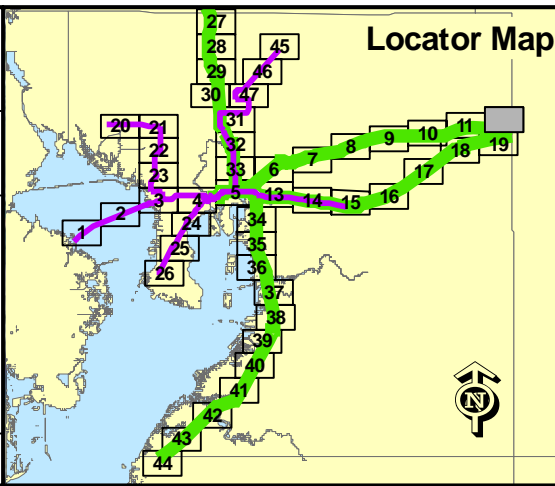
-  Transit Station
-  Commuter Rail
-  Light Rail

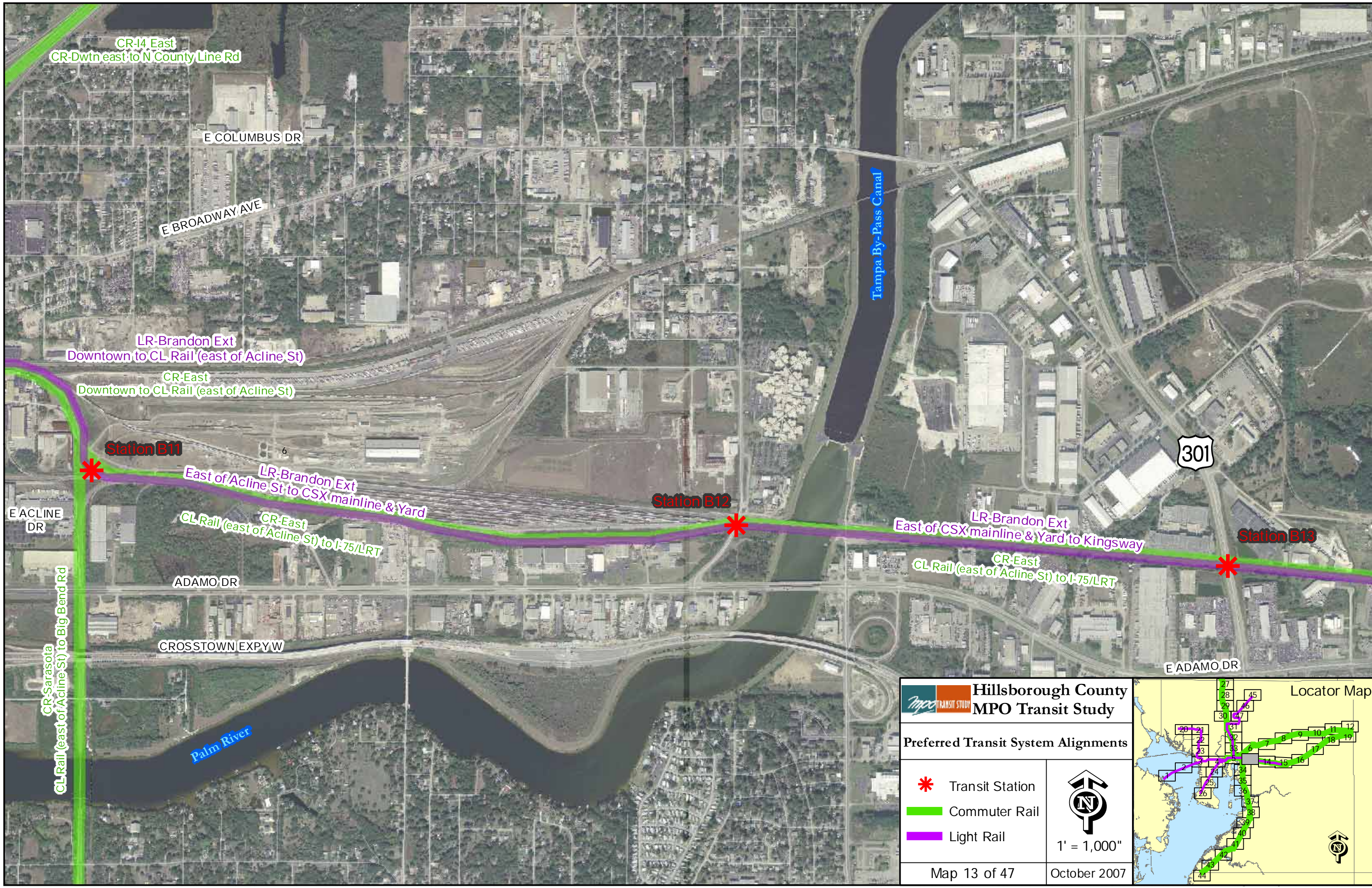


1' = 1,000"

Map 12 of 47

October 2007





CR-14 East  
CR-Dwth east to N County Line Rd

E COLUMBUS DR

E BROADWAY AVE

LR-Brandon Ext  
Downtown to CL Rail (east of Acline St)

CR-East  
Downtown to CL Rail (east of Acline St)

Station B11

LR-Brandon Ext  
East of Acline St to CSX mainline & Yard

CR-East  
CL Rail (east of Acline St) to I-75/LRT

Station B12

LR-Brandon Ext  
East of CSX mainline & Yard to Kingsway

CR-East  
CL Rail (east of Acline St) to I-75/LRT

Station B13

E ACLINE DR

ADAMO DR

CROSTOWN EXPY W

E ADAMO DR

CR-Sarasota  
CL Rail (east of Acline St) to Big Bend Rd




Palm River

Tampa By-Pass Canal

301

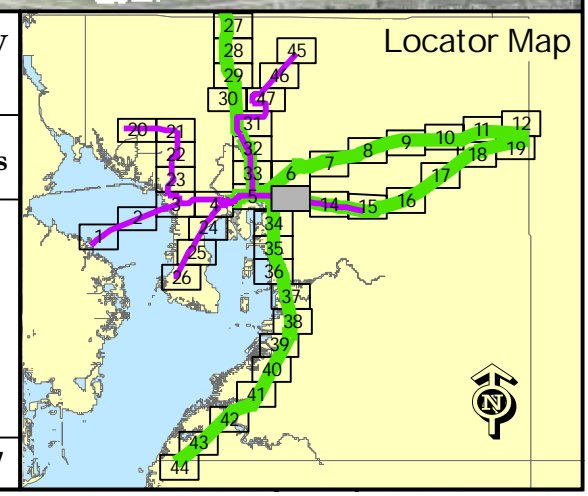
**Hillsborough County  
MPO Transit Study**

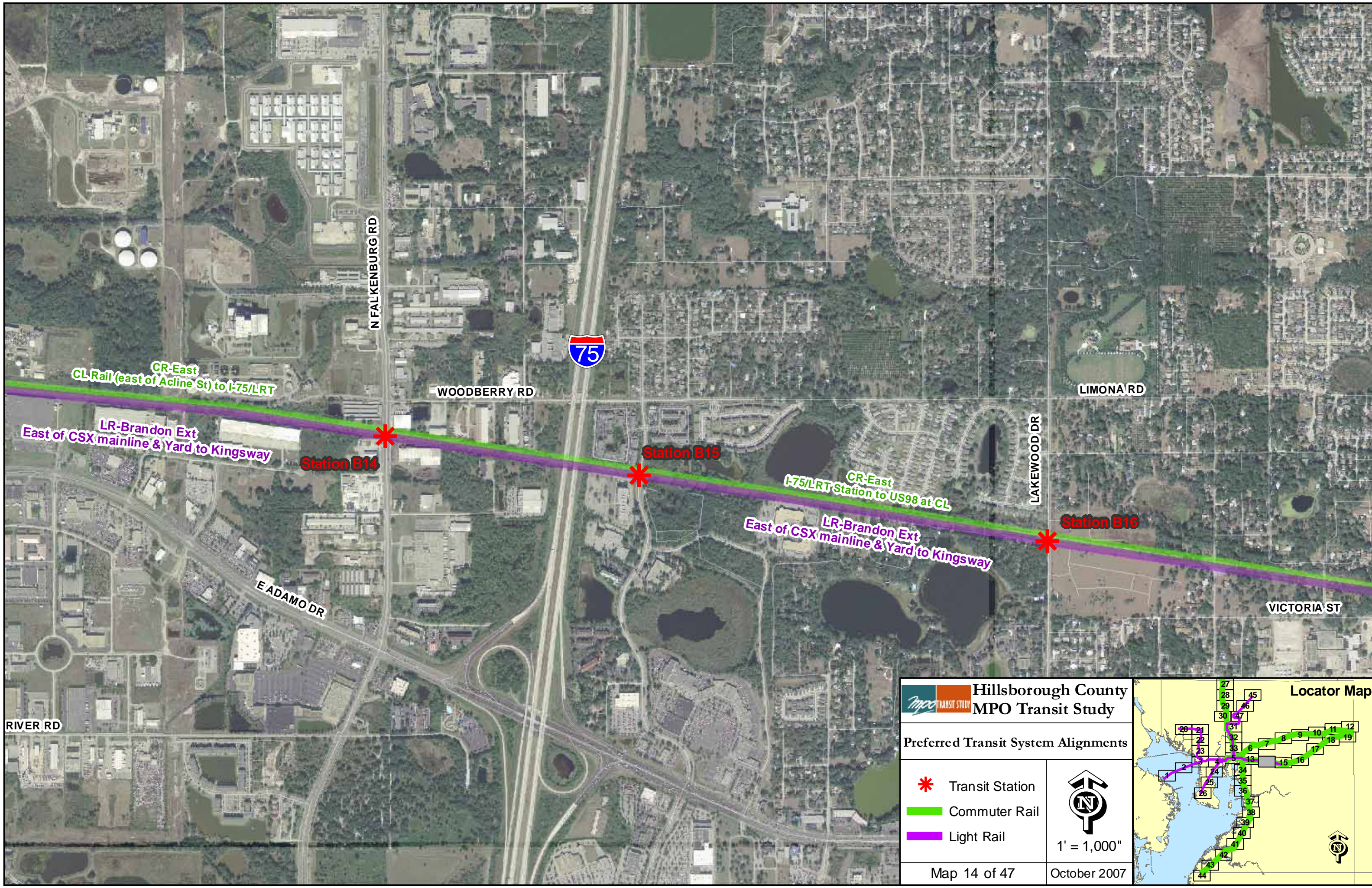
**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail



1" = 1,000"





N FALKENBURG RD



WOODBERRY RD

LIMONA RD

LAKWOOD DR

Station B14

Station B15

Station B16

VICTORIA ST

RIVER RD

E ADAMO DR

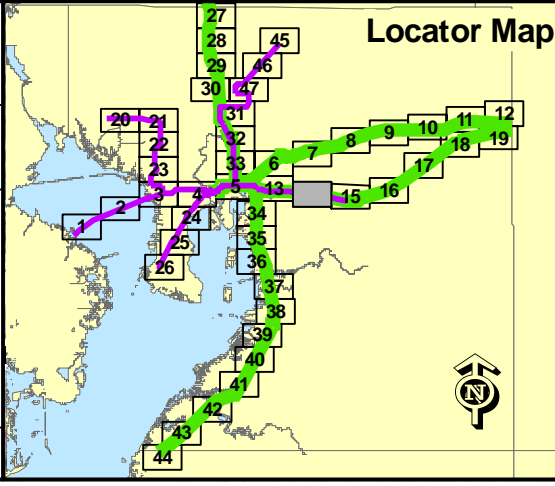
**Hillsborough County  
MPO Transit Study**

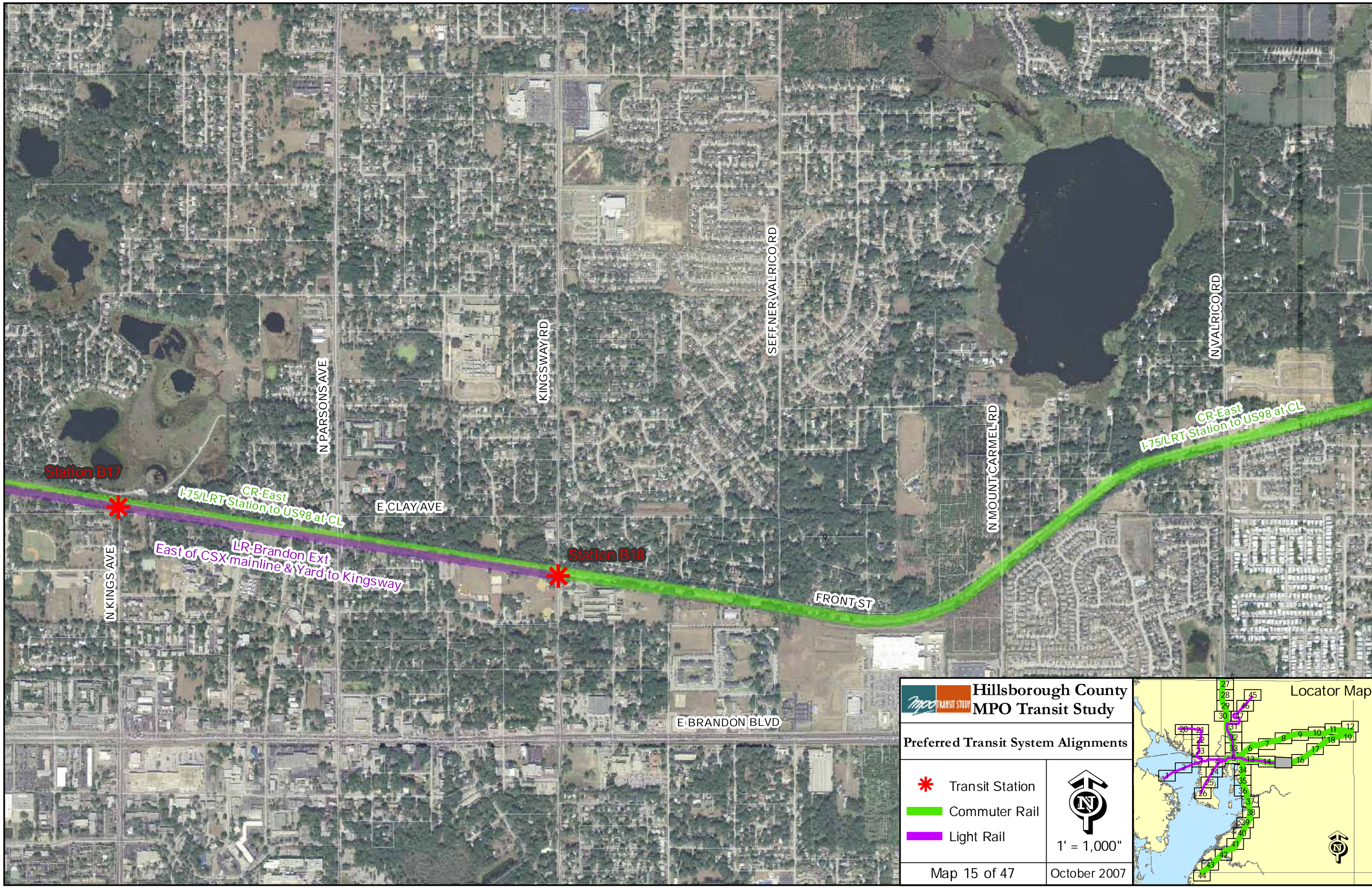
Preferred Transit System Alignments

- Transit Station
- Commuter Rail
- Light Rail






1" = 1,000"



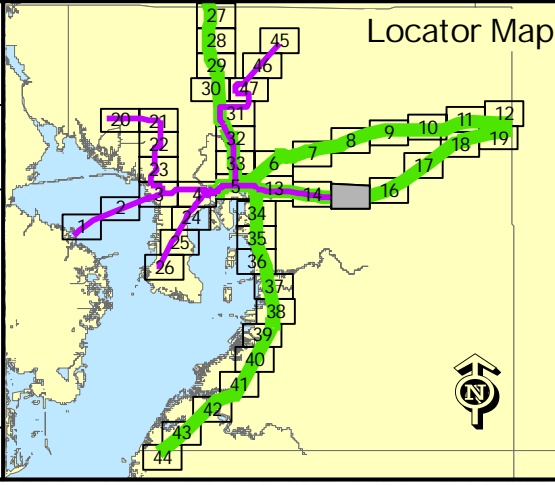


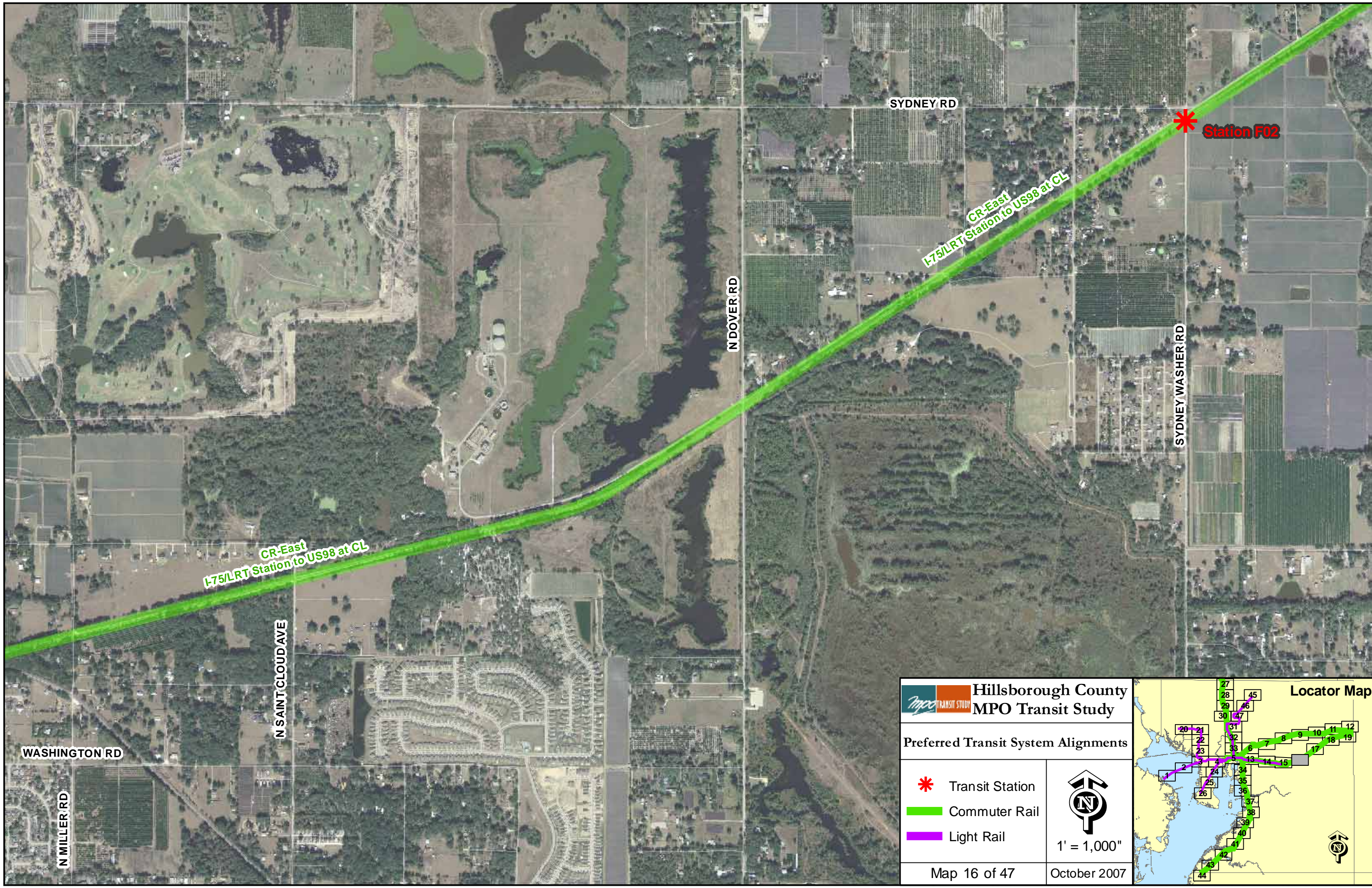
**Hillsborough County MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail




  
1' = 1,000"



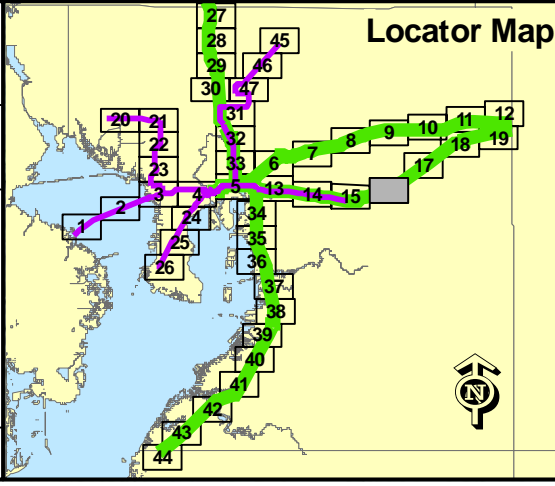


**Hillsborough County  
MPO Transit Study**

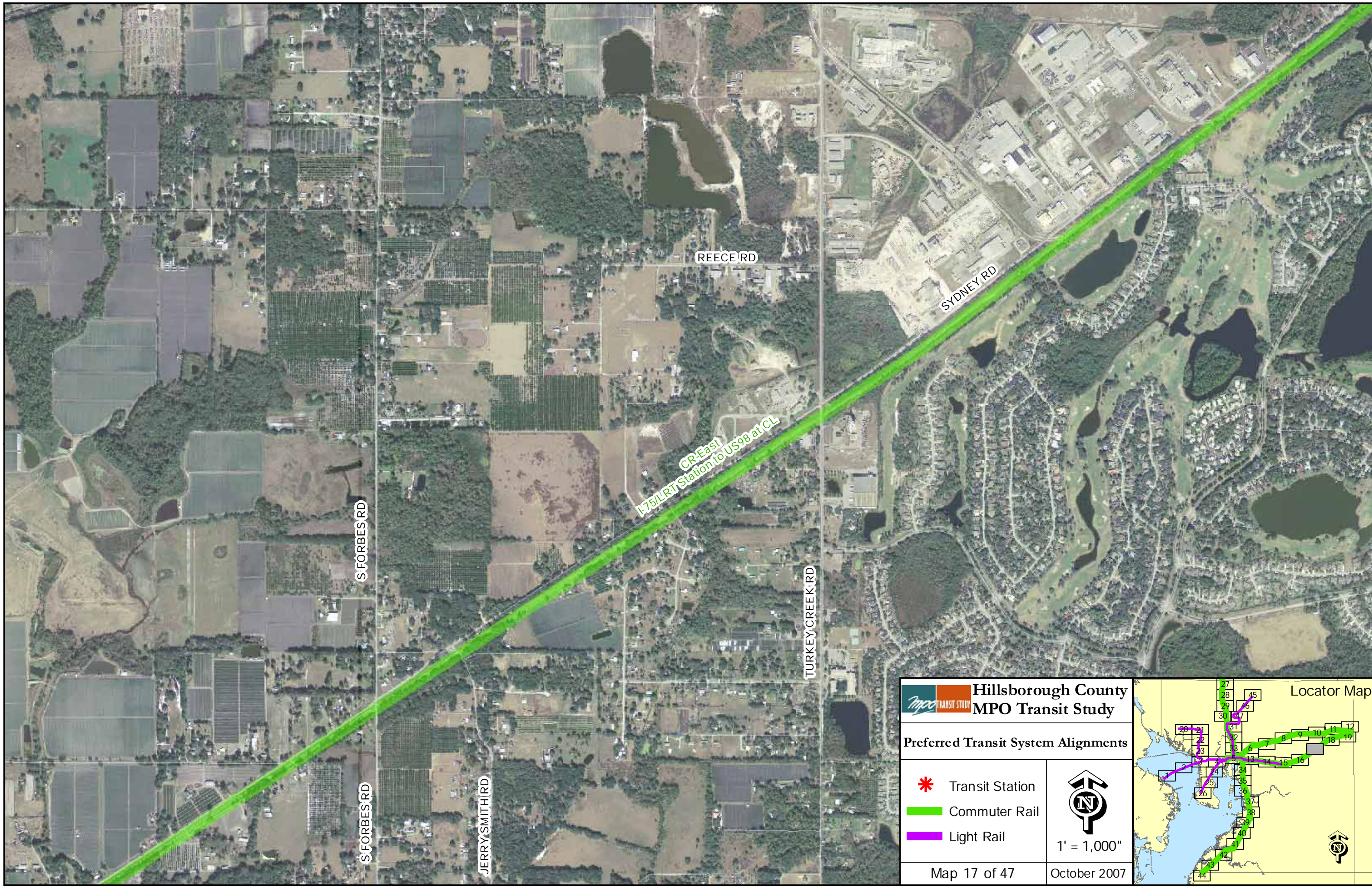
Preferred Transit System Alignments

-  Transit Station
-  Commuter Rail
-  Light Rail

  
1' = 1,000"



**Locator Map**



REECE RD

SYDNEY RD

CR-East  
I-75/LRT Station to US98 at CL

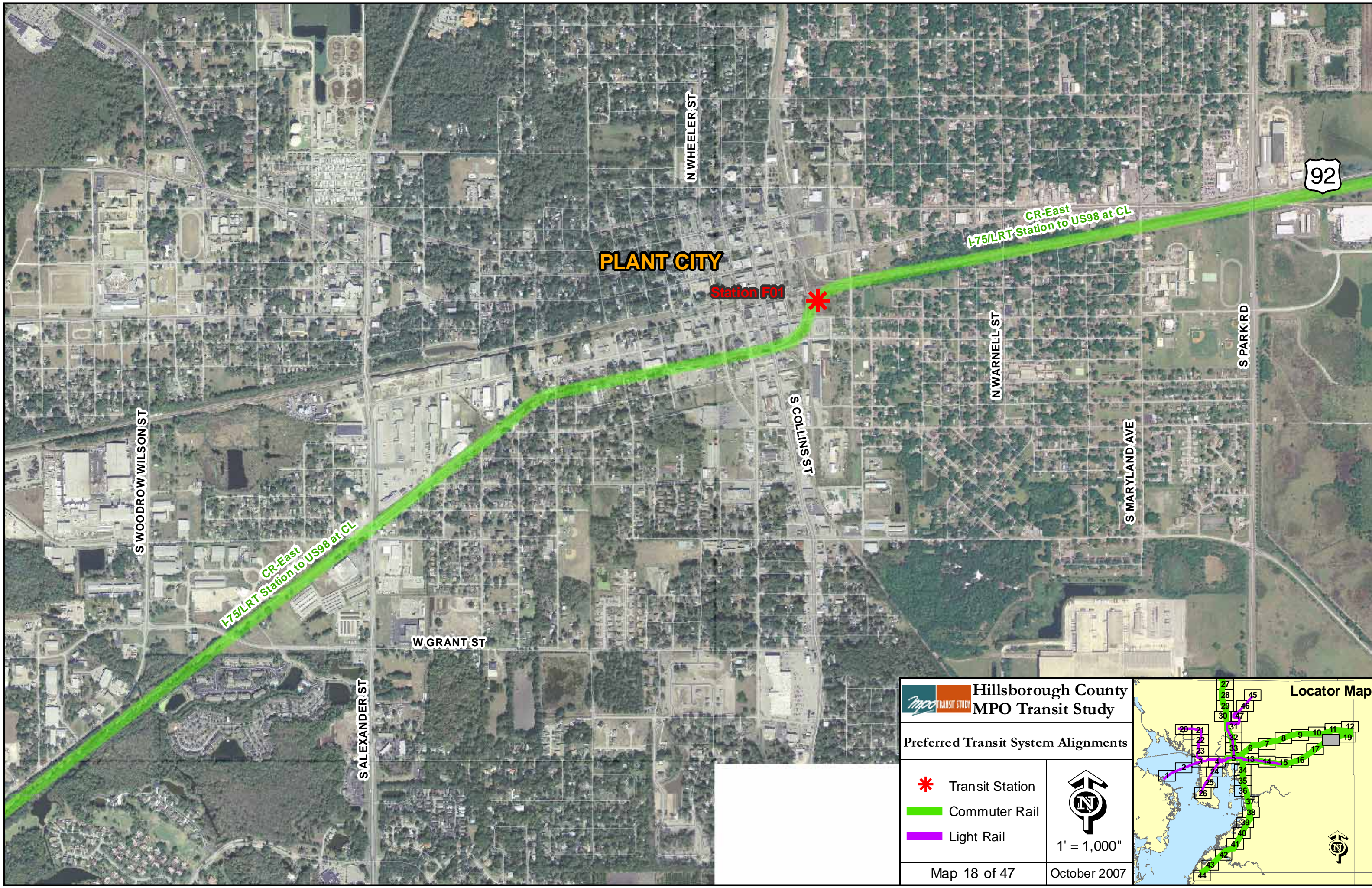
S FORBES RD

TURKEY CREEK RD

S FORBES RD




JERRY SMITH RD

<b>Hillsborough County MPO Transit Study</b>		<b>Locator Map</b> 
<b>Preferred Transit System Alignments</b>		
Transit Station	Commuter Rail	 1" = 1,000" 
Light Rail		
Map 17 of 47		October 2007

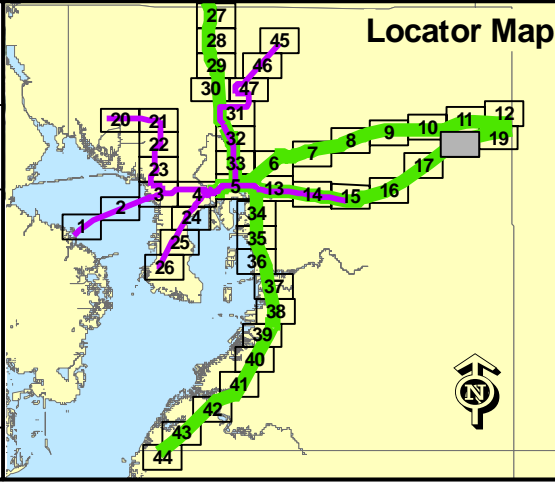


**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail

  
1" = 1,000"





CR-East  
I-75/LRT Station to US98 at CL




92

SWIGGINS RD

SCOUNTYLINE RD

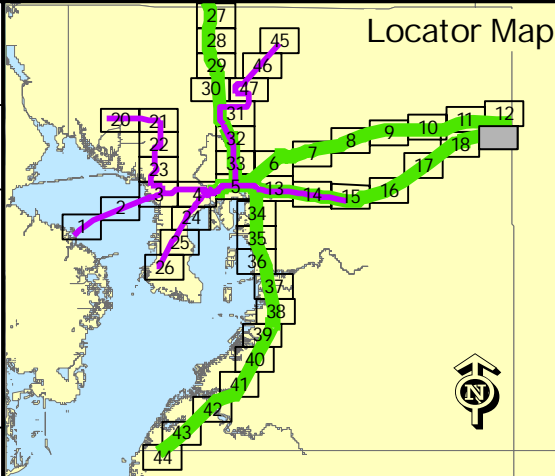
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail

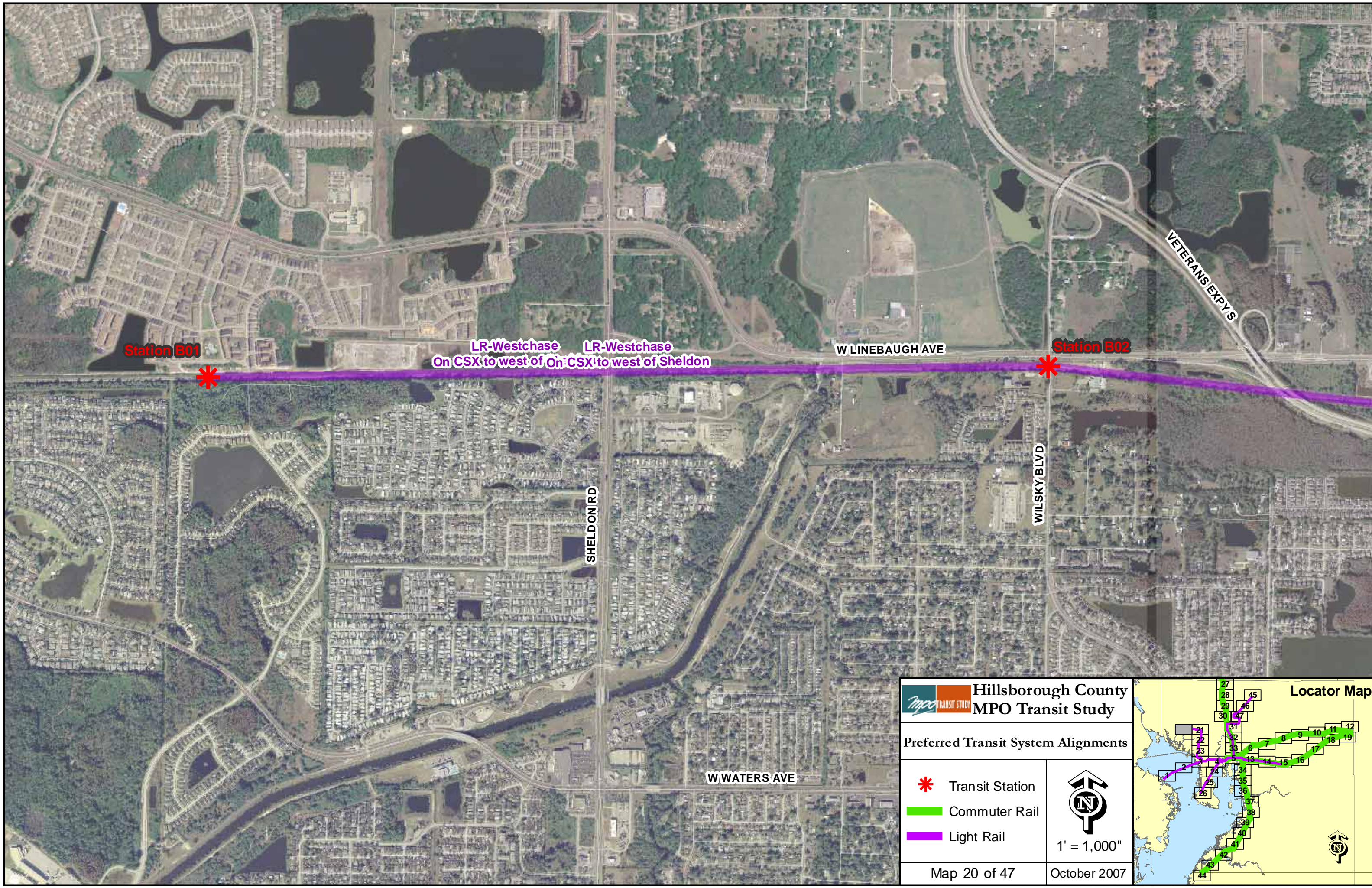


1' = 1,000"






Locator Map




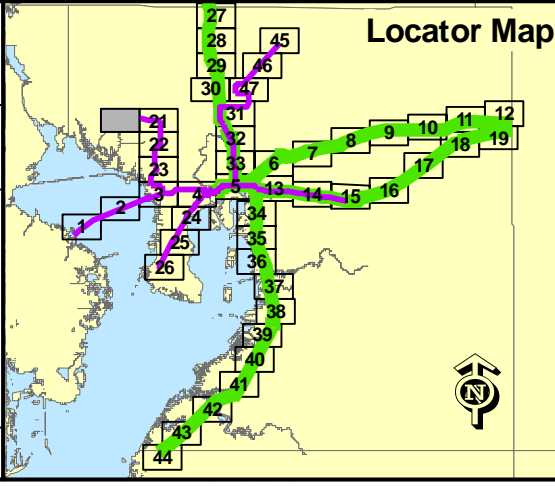


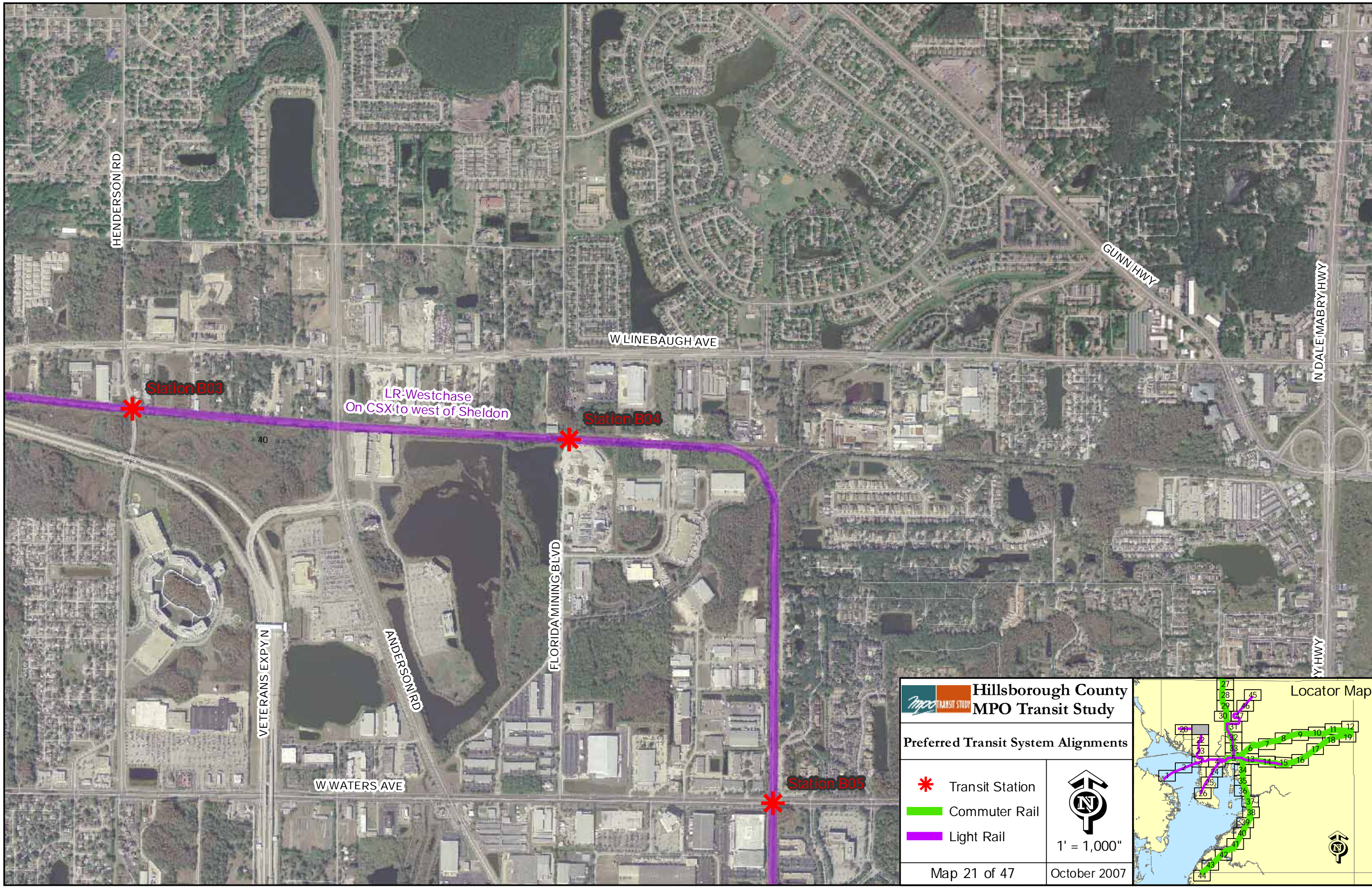
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail




  
1' = 1,000"




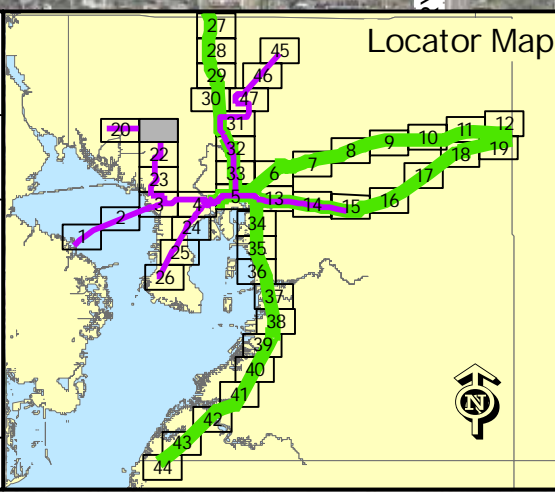


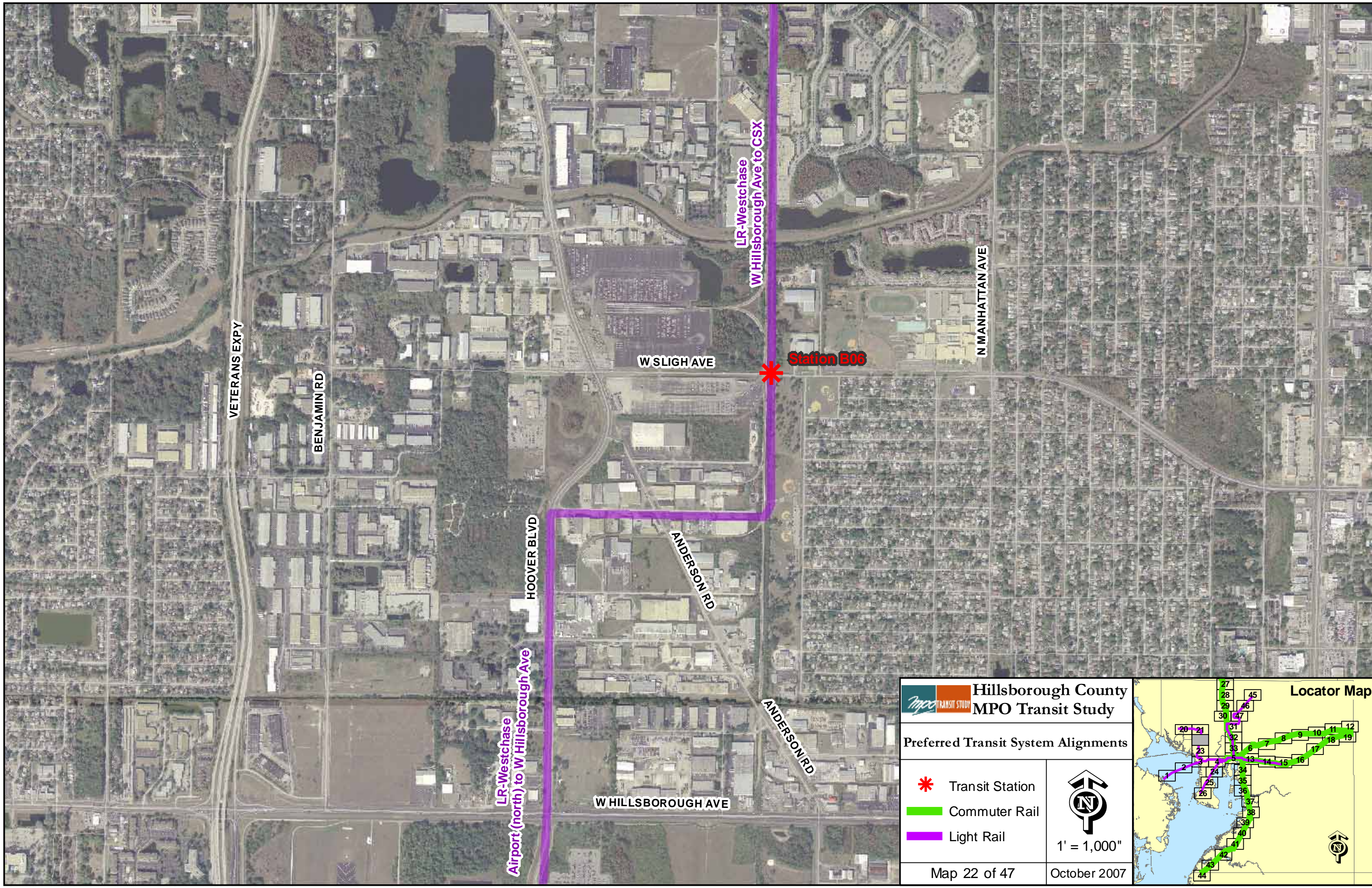
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail

  
1" = 1,000"





VETERANS EXPY

BENJAMIN RD

LR-Westchase  
Airport (north) to W Hillsborough Ave

HOOVER BLVD

W HILLSBOROUGH AVE

W SLIGH AVE

LR-Westchase  
W Hillsborough Ave to CSX

Station B06




N MANHATTAN AVE

ANDERSON RD

ANDERSON RD

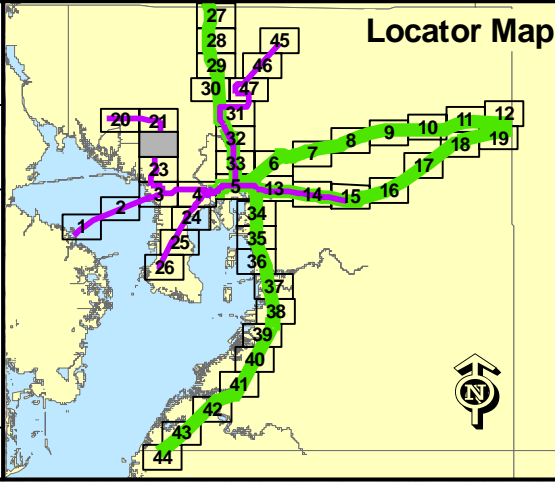
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

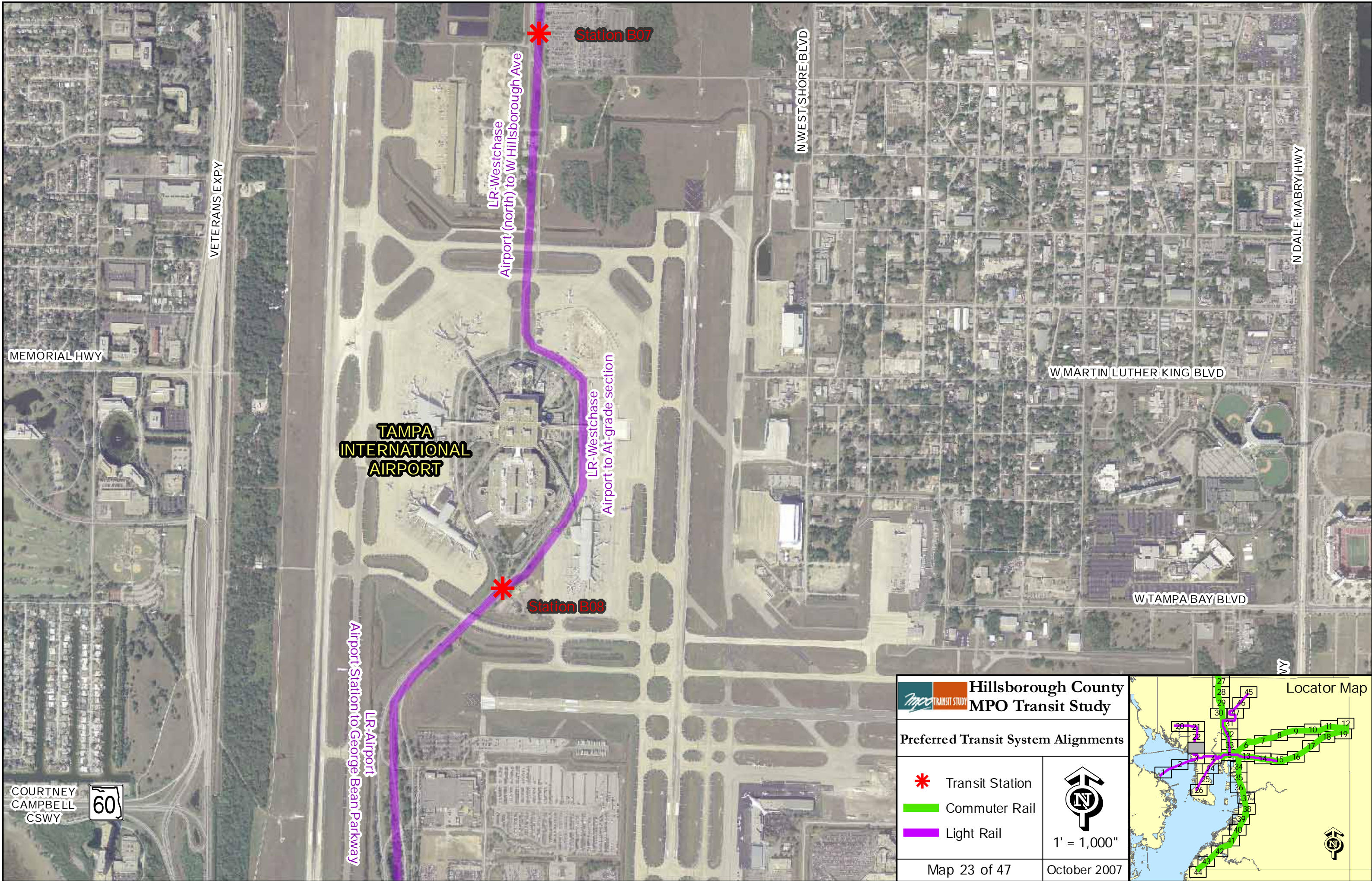
-  Transit Station
-  Commuter Rail
-  Light Rail



1' = 1,000"



**Locator Map**



MEMORIAL HWY

VETERANS EXPY

**TAMPA  
INTERNATIONAL  
AIRPORT**

LR-Westchase  
Airport (north) to W Hillsborough Ave

**Station B07**

N WEST SHORE BLVD

N DALE MABRY HWY

W MARTIN LUTHER KING BLVD

LR-Westchase  
Airport to AI-grade section

\*

**Station B08**

WTAMPA BAY BLVD

LR-Airport  
Airport Station to George Bean Parkway

COURTNEY  
CAMPBELL  
CSWY



**Hillsborough County  
MPO Transit Study**

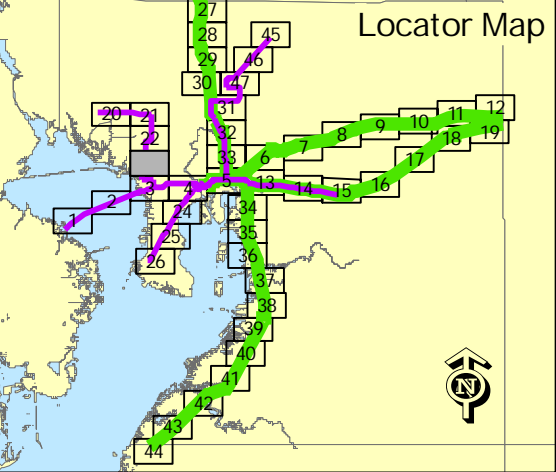
Preferred Transit System Alignments

- \* Transit Station
- Commuter Rail
- Light Rail

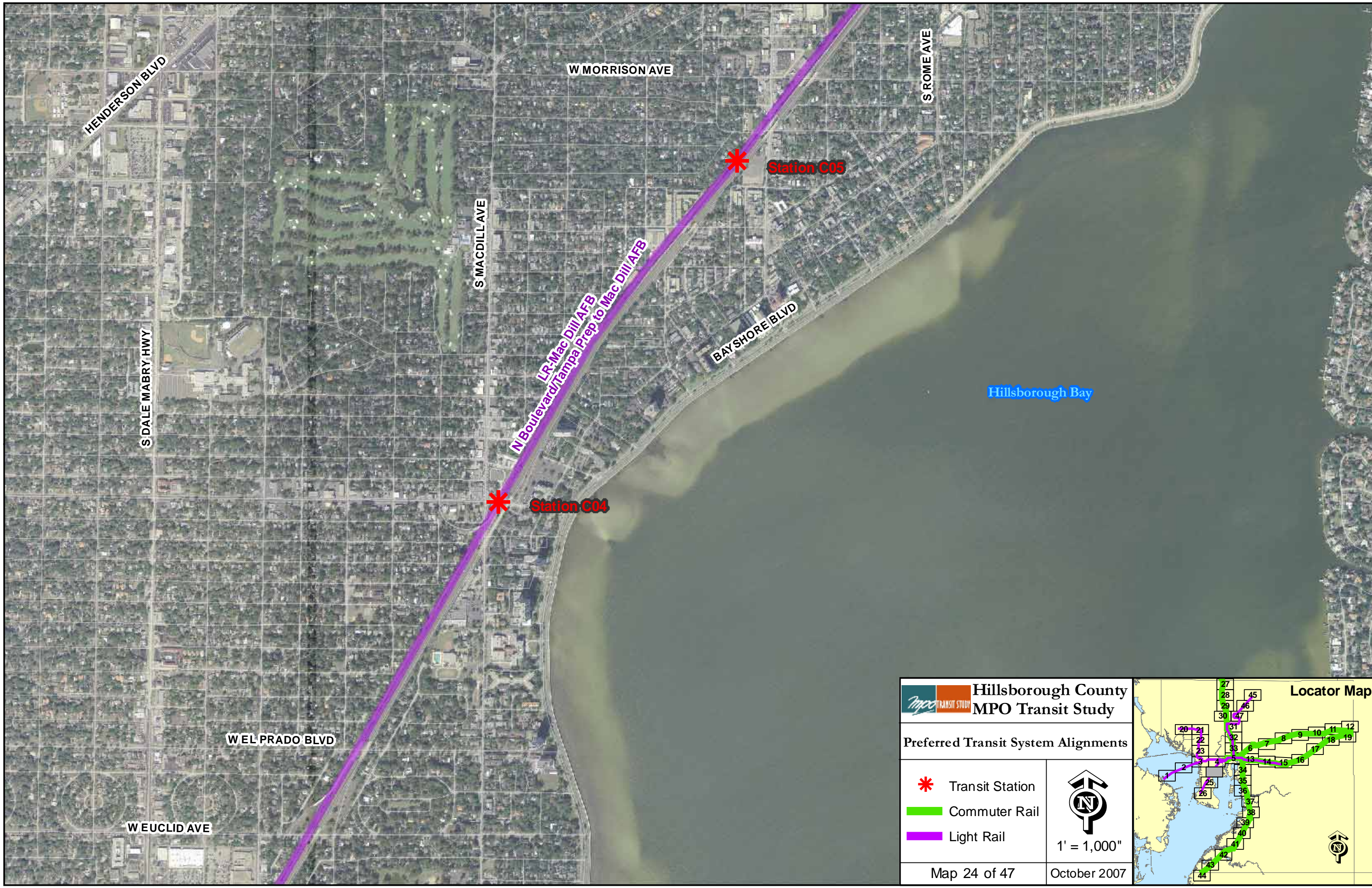
1" = 1,000"

Map 23 of 47

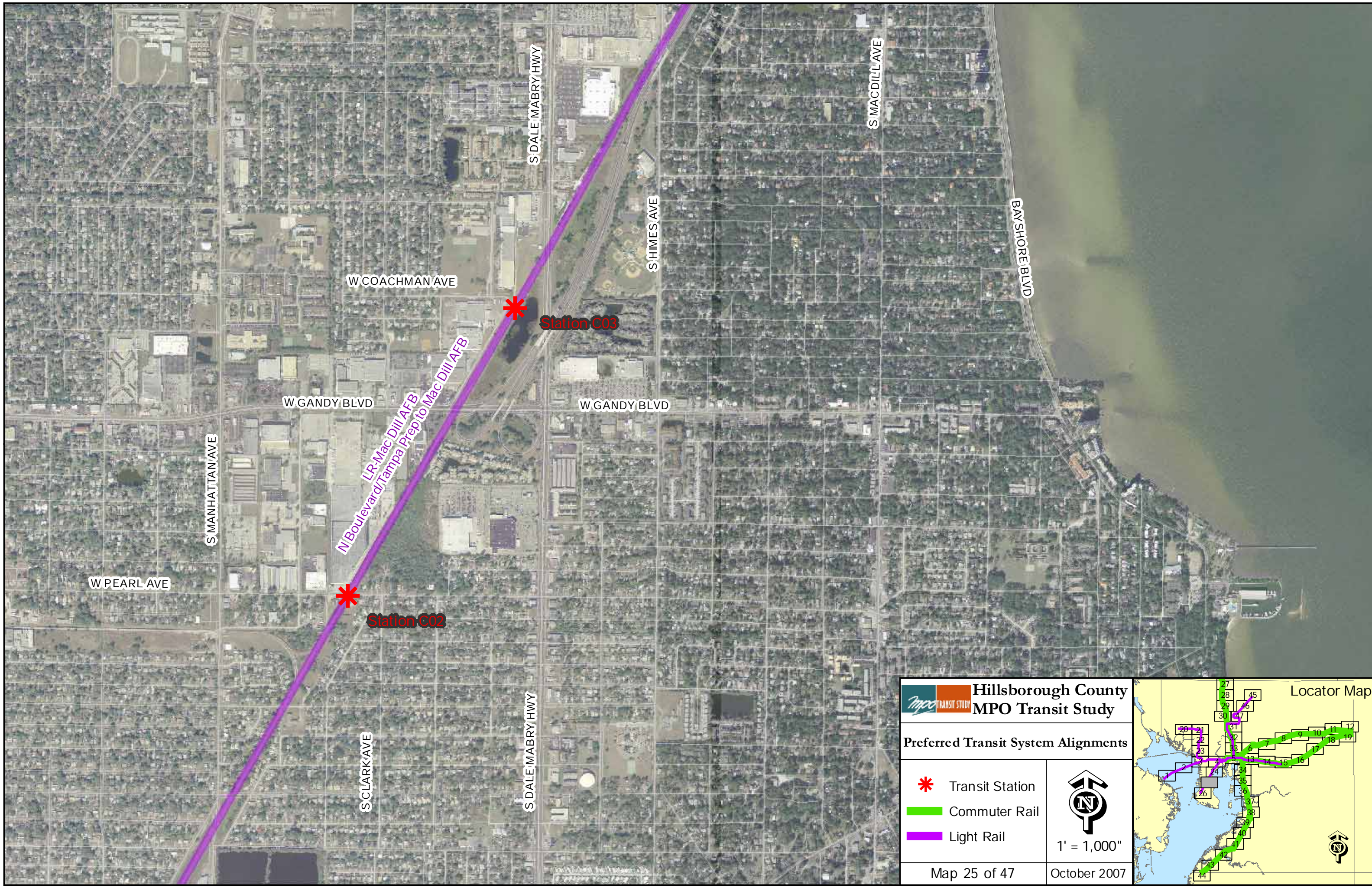
October 2007



Locator Map






<b>Hillsborough County MPO Transit Study</b>		<b>Locator Map</b> 
<b>Preferred Transit System Alignments</b>		
Transit Station	 1' = 1,000"	
Commuter Rail Light Rail		
Map 24 of 47		October 2007

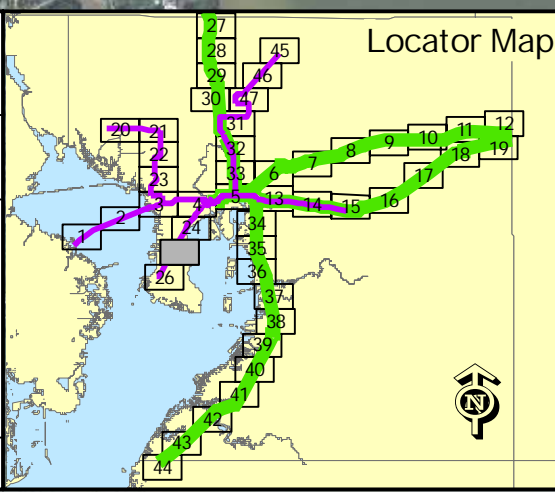


**Hillsborough County MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail

  
1' = 1,000"



Locator Map



Old Tampa Bay

S WEST SHORE BLVD

LR-Mac Dill AFB  
N Boulevard/Tampa Prep to Mac Dill AFB

S MANHATTAN AVE

INTERBAY BLVD

W PRESCOTT ST

NORTH BOUNDARY BLVD

ARD

W LOUGHMAN ST

WINGRAHAM ST

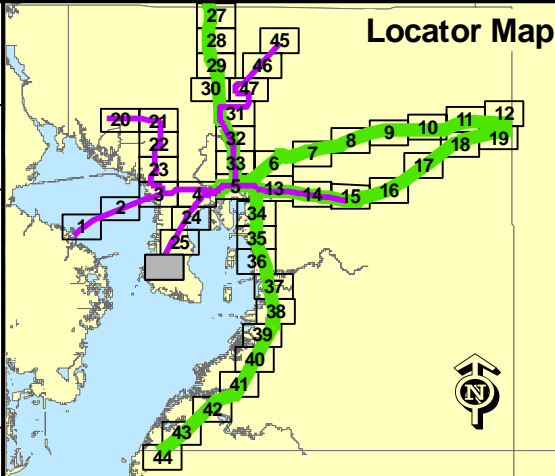
Station C01

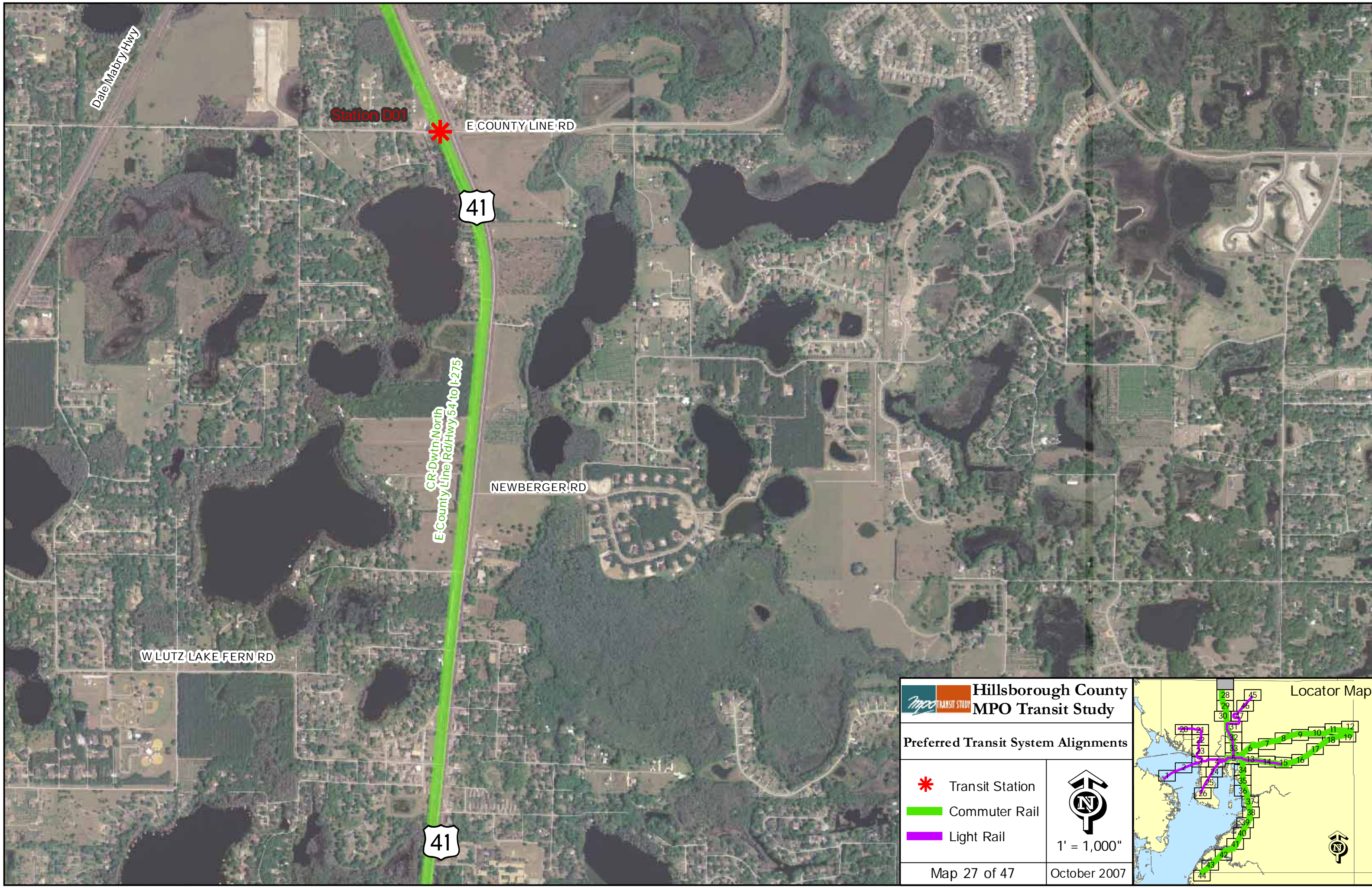
Hillsborough County  
MPO Transit Study

Preferred Transit System Alignments

- \* Transit Station
- Commuter Rail
- Light Rail

1' = 1,000"





Dale Mabry Hwy

Station D01



E COUNTY LINE RD



CR-Dwtn North  
E County Line Rd/Hwy 54 to I-275

NEWBERGER RD

W LUTZ LAKE FERN RD



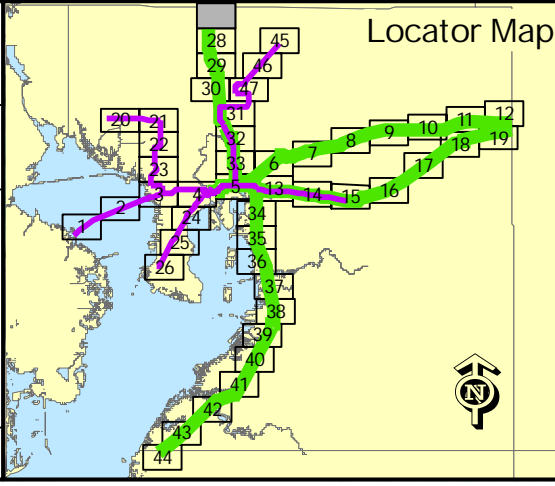
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

- Transit Station
- Commuter Rail
- Light Rail

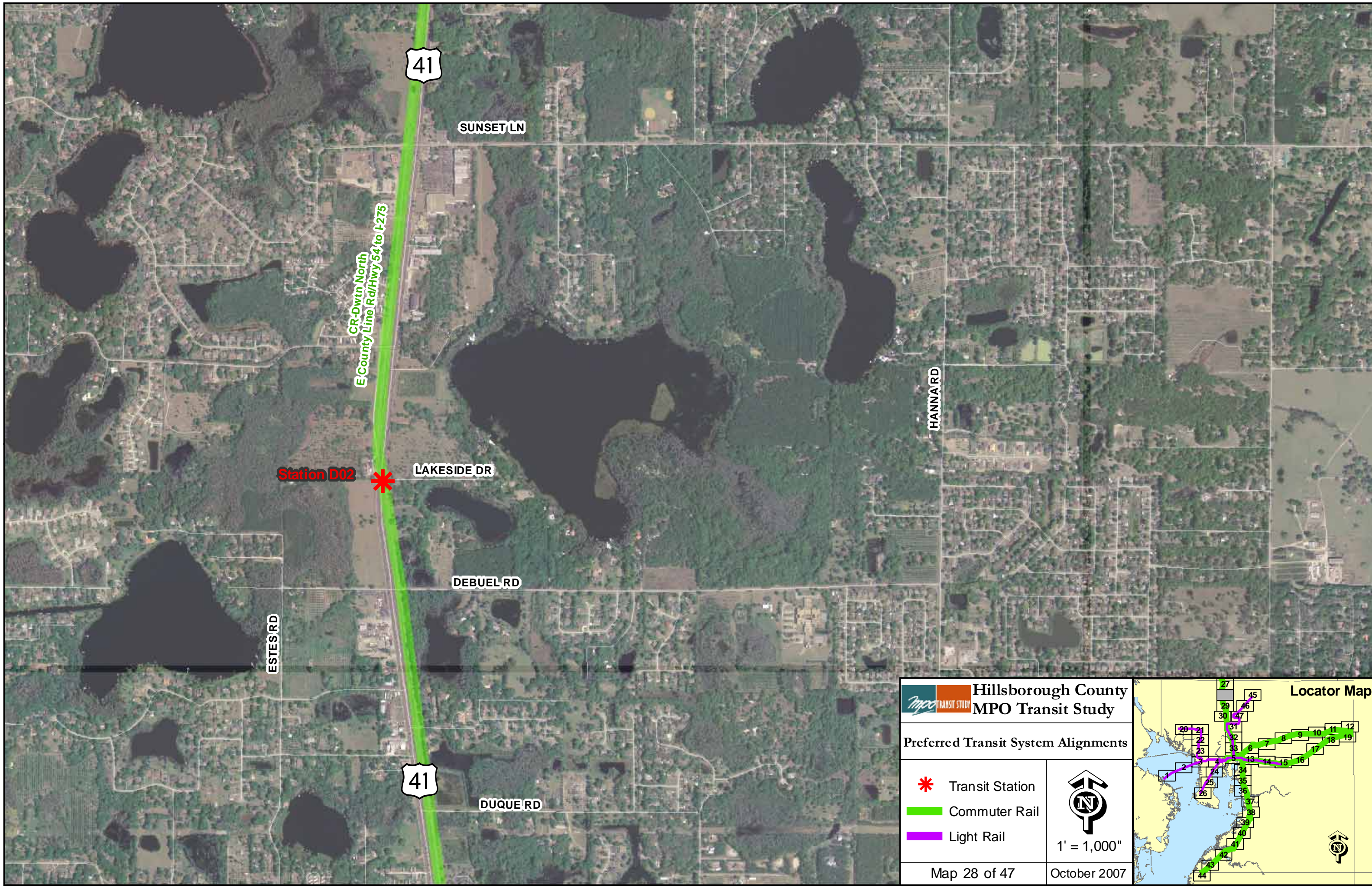


1" = 1,000"



Locator Map





CR-Dwtn North  
E County Line Rd/Hwy 54 to I-275

Station D02

LAKESIDE DR

DEBUEL RD

DUQUE RD

41

SUNSET LN

HANNA RD

ESTES RD

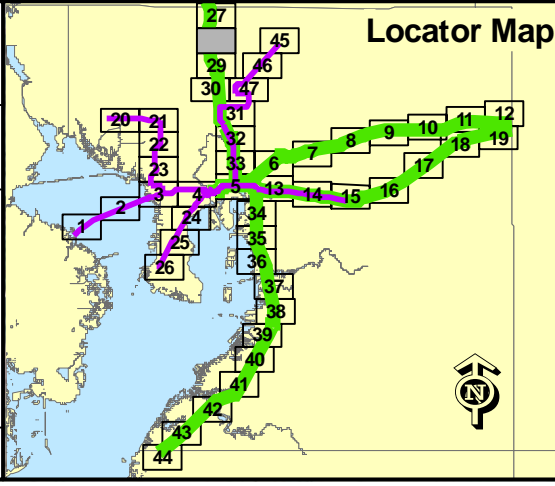
41

**Hillsborough County  
MPO Transit Study**

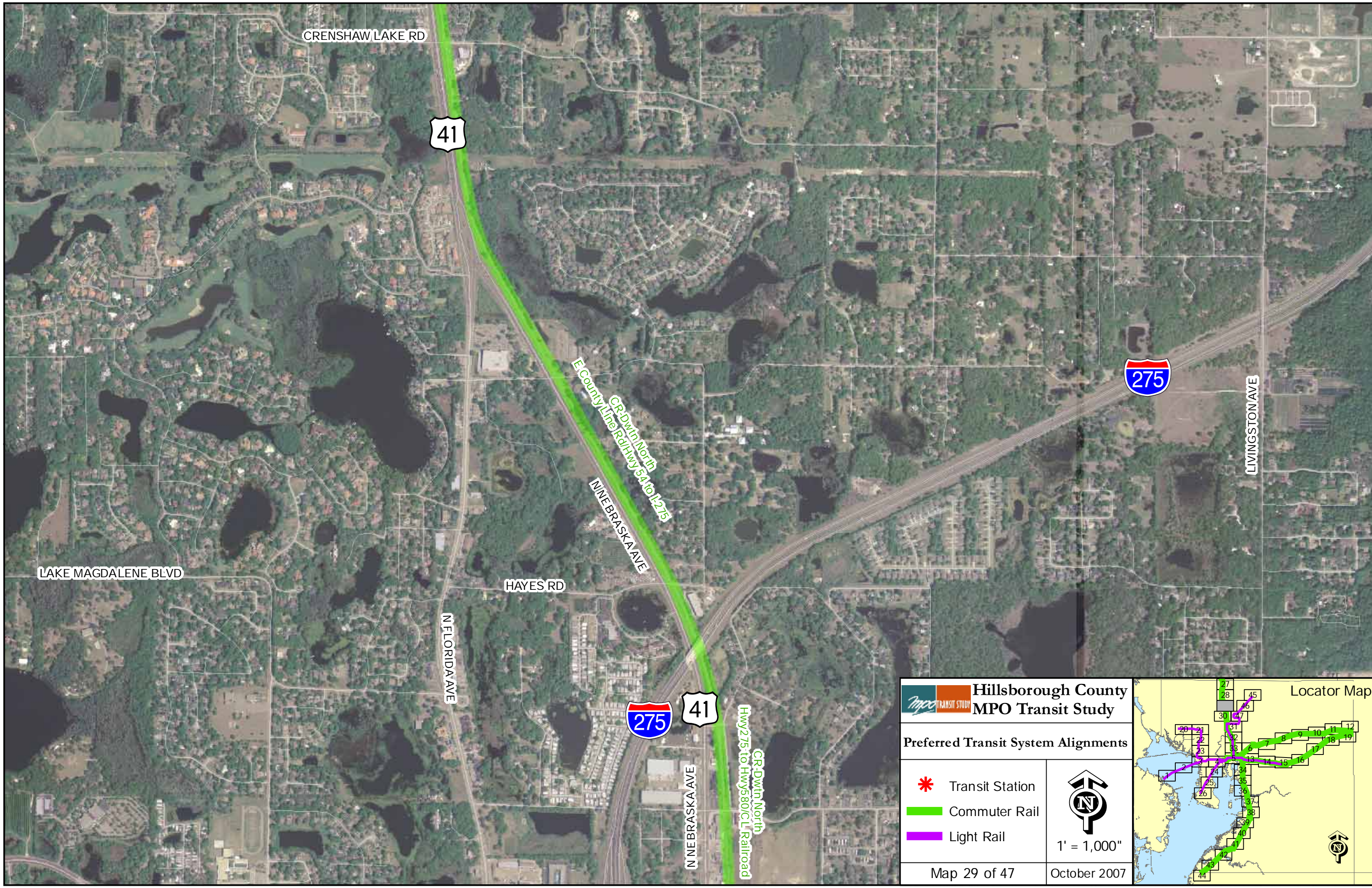
Preferred Transit System Alignments

- \* Transit Station
- Commuter Rail
- Light Rail

North Arrow  
1" = 1,000"



Locator Map



CRENSHAW LAKE RD



LIVINGSTON AVE

LAKE MAGDALENE BLVD

HAYES RD

N FLORIDA AVE



N NEBRASKA AVE

E County Line Rd/Hwy 54 to I-275  
CR-D with North  
Hwy 275 to Hwy 580/C.L. Railroad

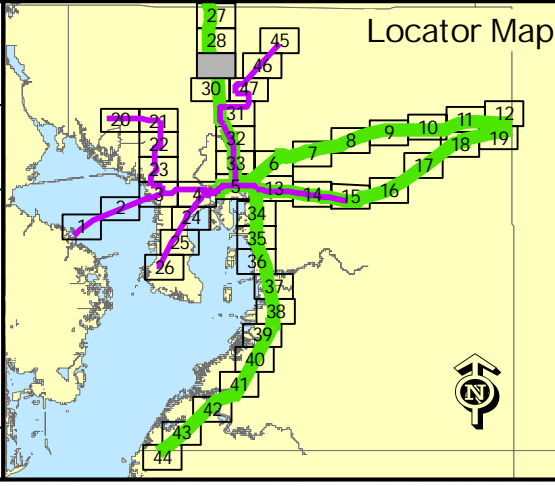
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

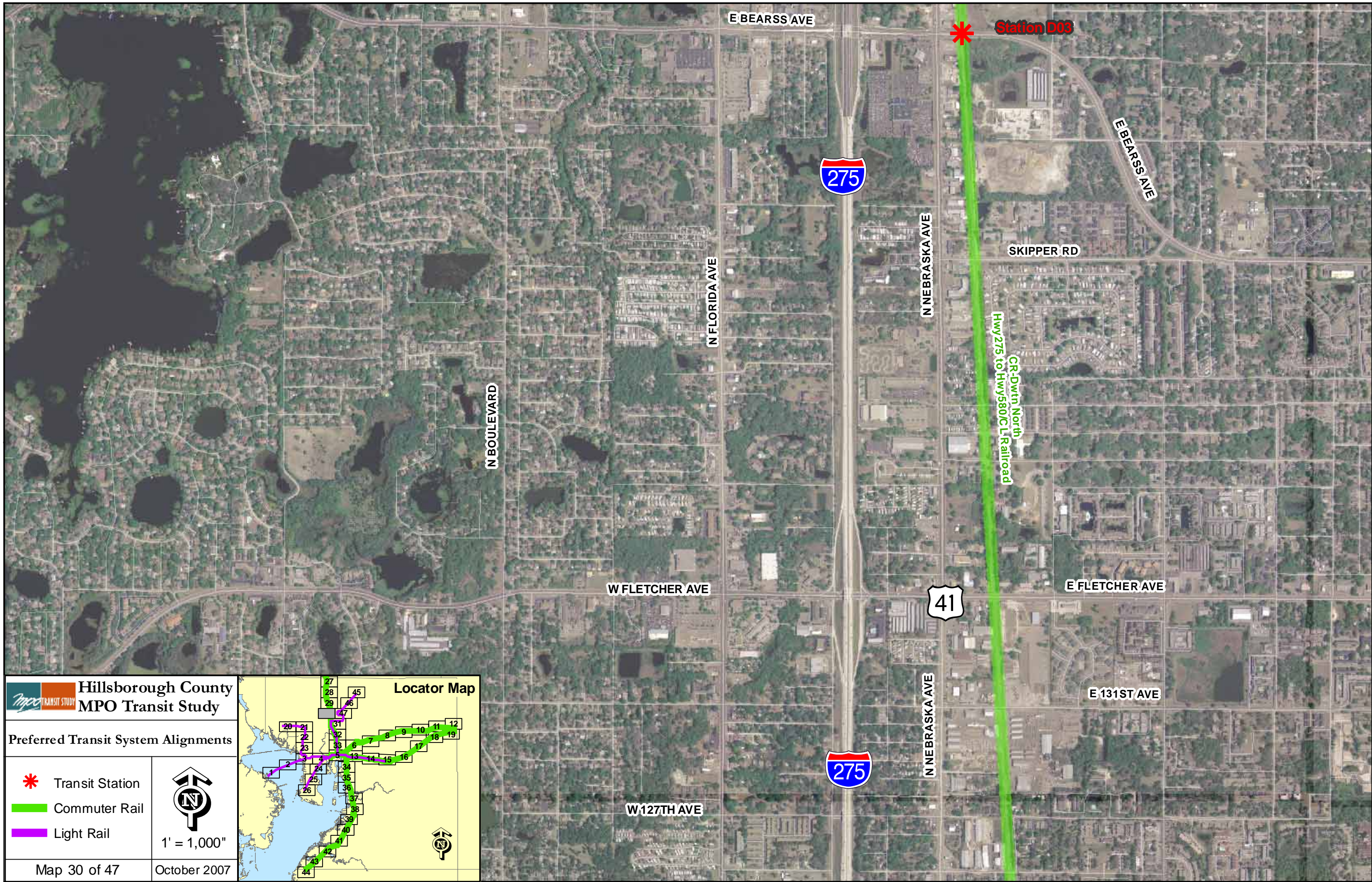
- Transit Station
- Commuter Rail
- Light Rail



1' = 1,000"







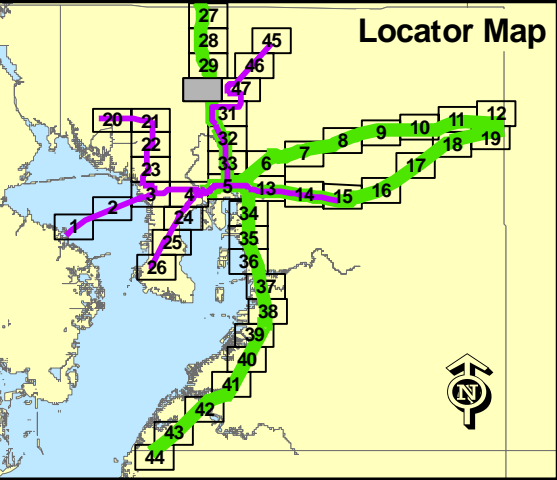
Locator Map

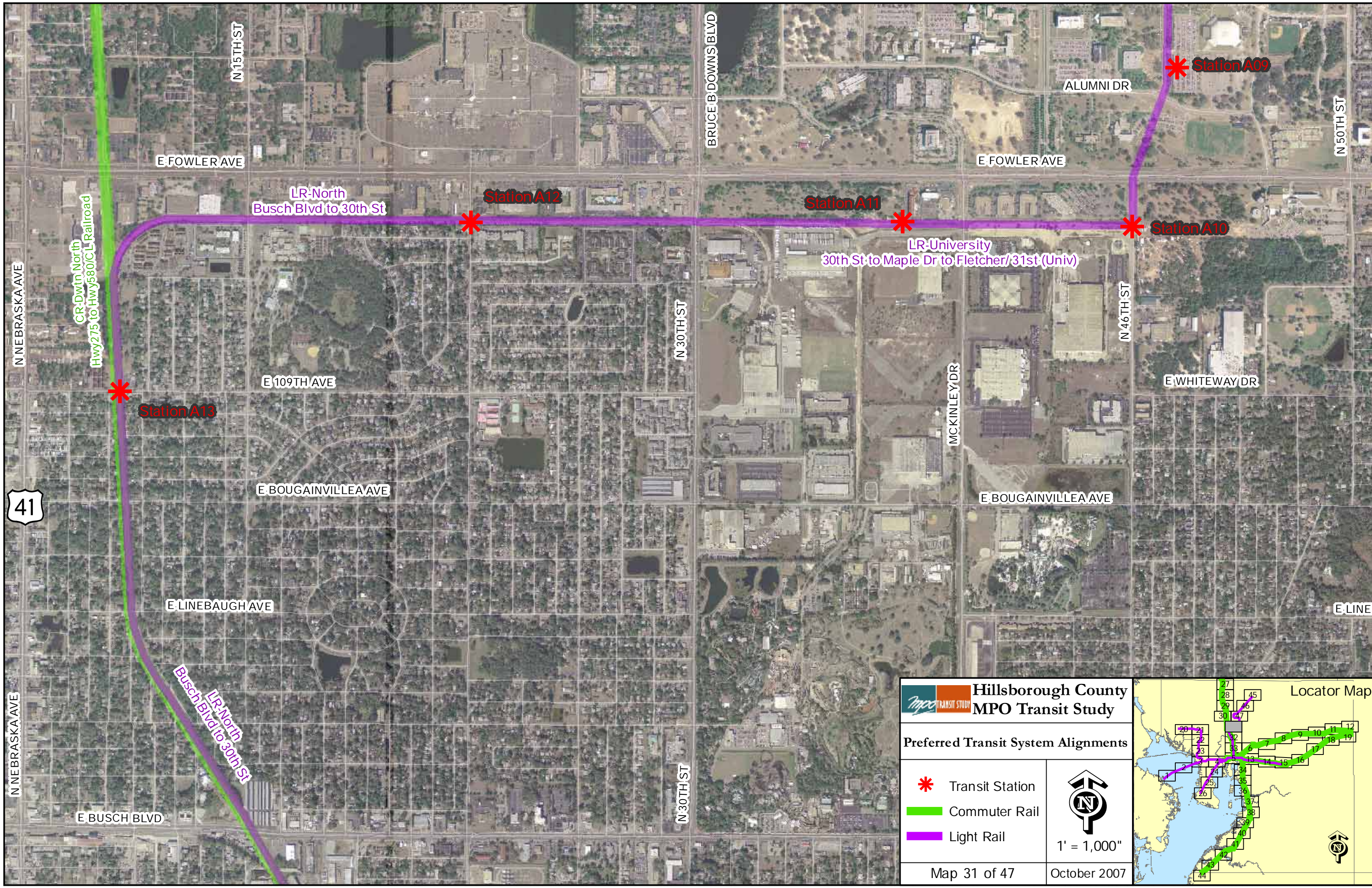


**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
  -  Commuter Rail
  -  Light Rail
-   
1' = 1,000"





41




CR-Dwtn North  
Hwy 275 to Hwy 580/CL Railroad

LR-North  
Busch Blvd to 30th St

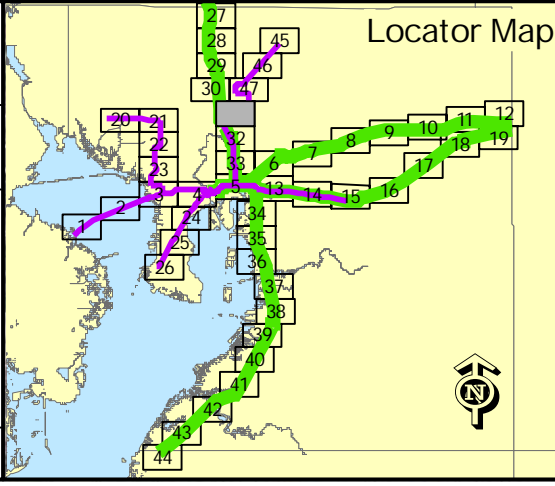
LR-University  
30th St to Maple Dr to Fletcher/31st (Univ)

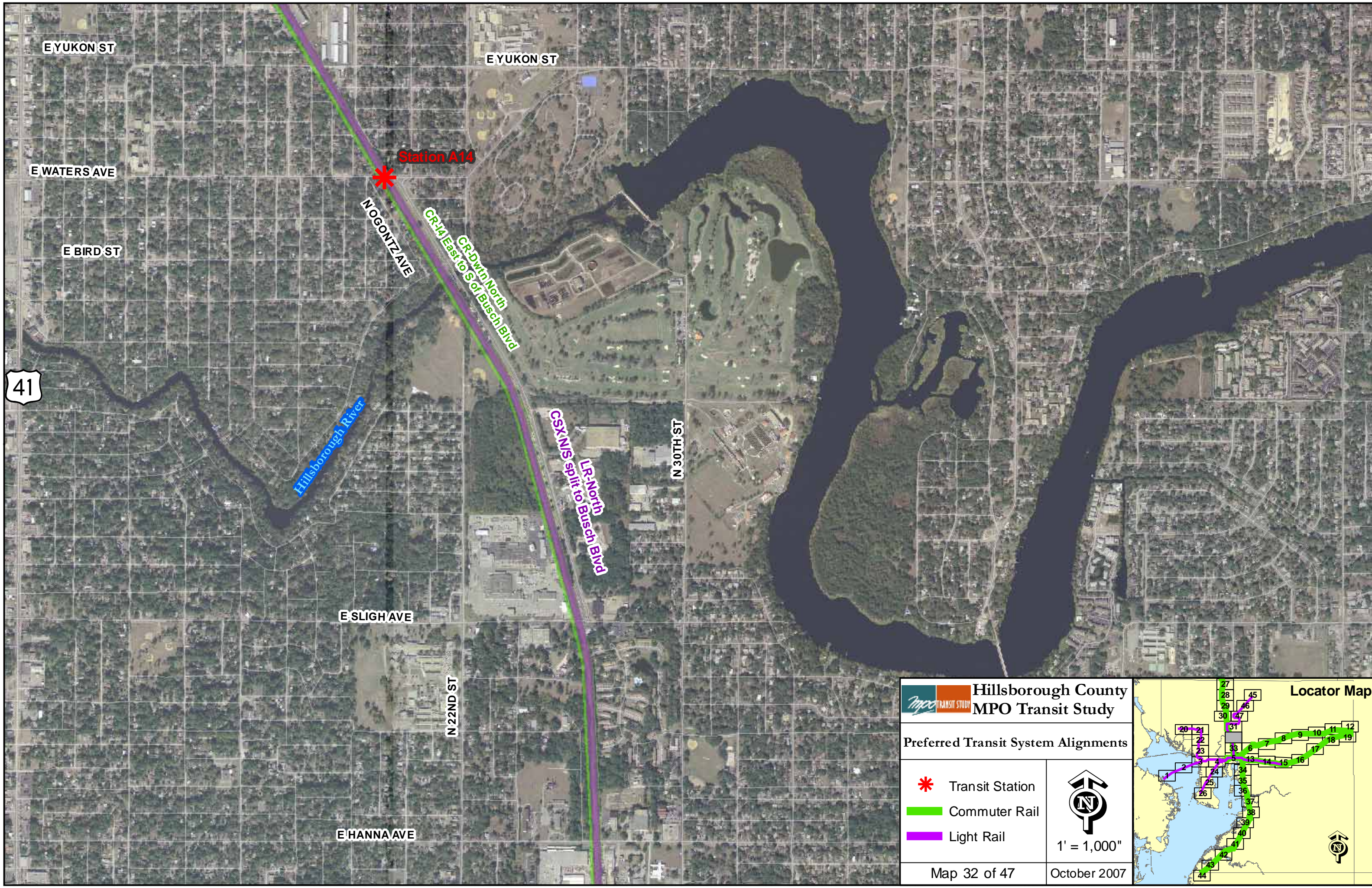
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail

  
1" = 1,000"





E YUKON ST

E YUKON ST

E WATERS AVE

Station A14

E BIRD ST

N GONTZ AVE

CR 14 East to S of Busch Blvd  
CR D with North

41

Hillsborough River

CSX N/S split to I-77 to North  
L-R North Busch Blvd

N 30TH ST




E SLIGH AVE

N 22ND ST

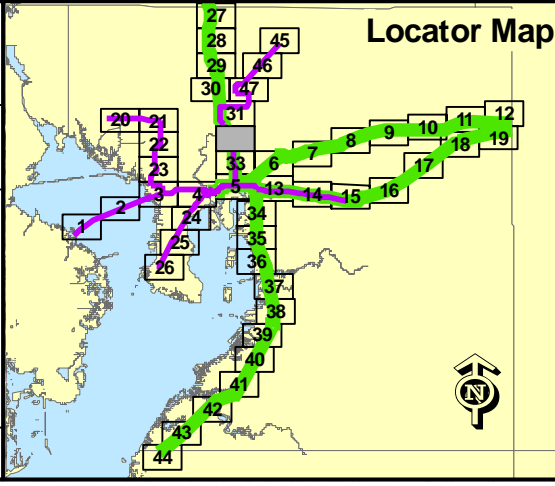
E HANNA AVE

**Hillsborough County MPO Transit Study**

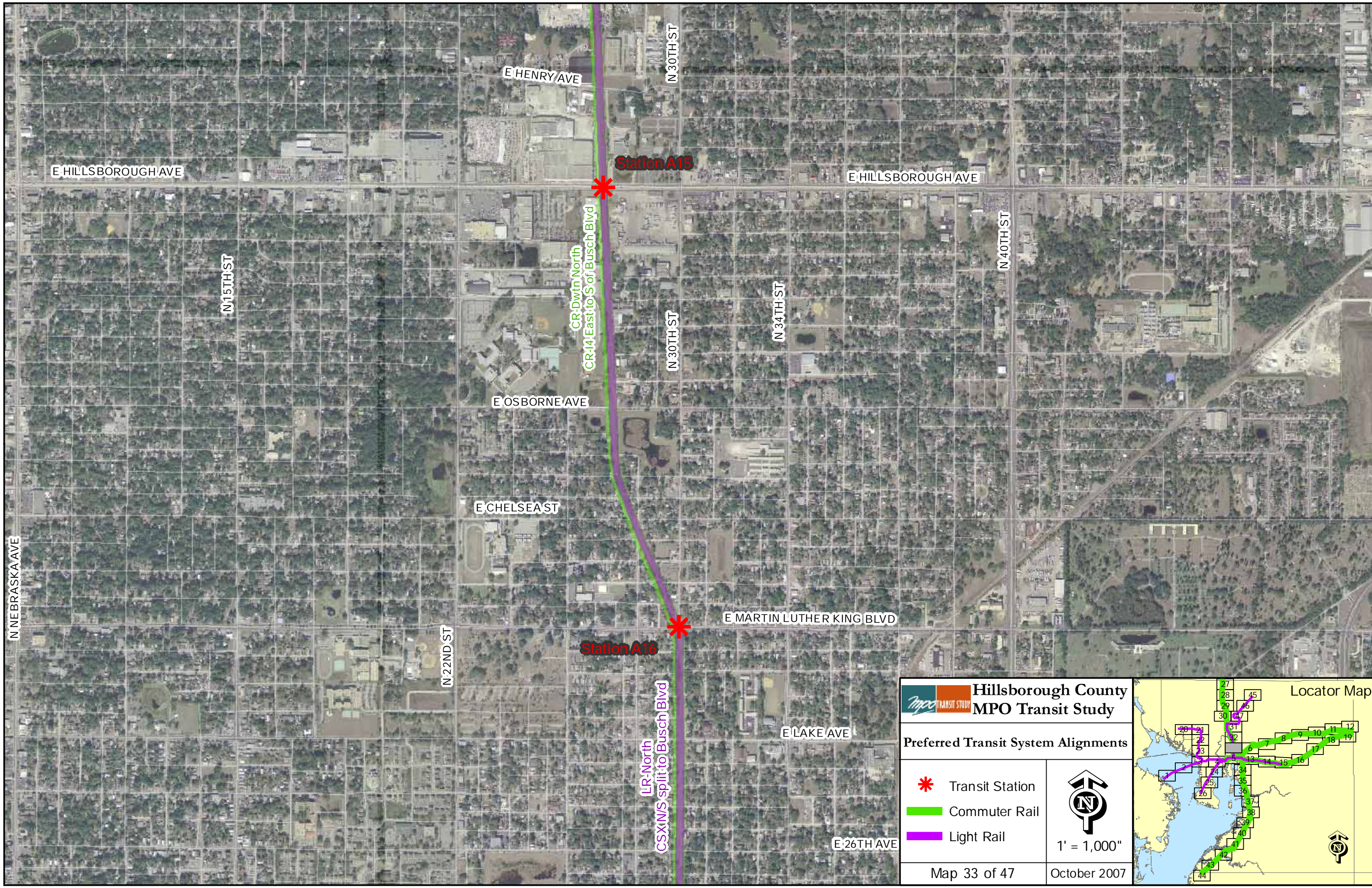
Preferred Transit System Alignments

-  Transit Station
-  Commuter Rail
-  Light Rail




  
1" = 1,000"

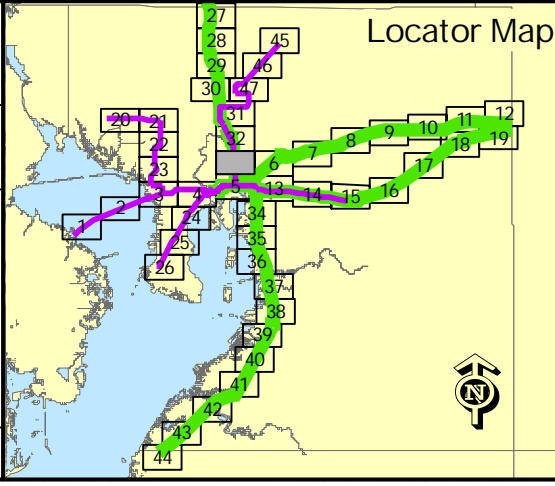


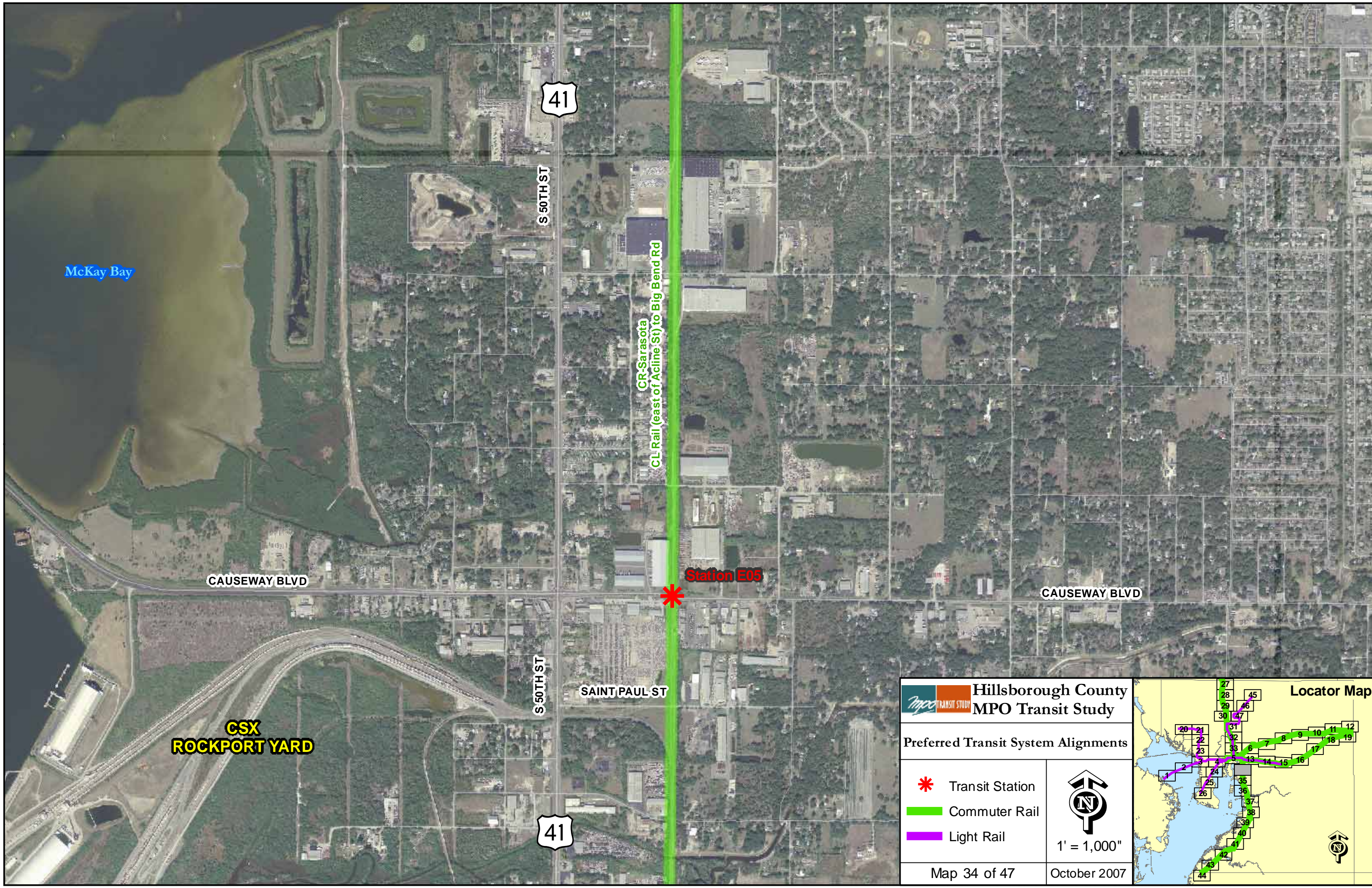
Locator Map



**Hillsborough County MPO Transit Study**

- Preferred Transit System Alignments**
-  Transit Station
  -  Commuter Rail
  -  Light Rail





McKay Bay

41

S 50TH ST

CR-Sarasota  
CL Rail (east of Acline St) to Big Bend Rd

CAUSEWAY BLVD

Station E05

CAUSEWAY BLVD

S 50TH ST




SAINT PAUL ST

**CSX  
ROCKPORT YARD**

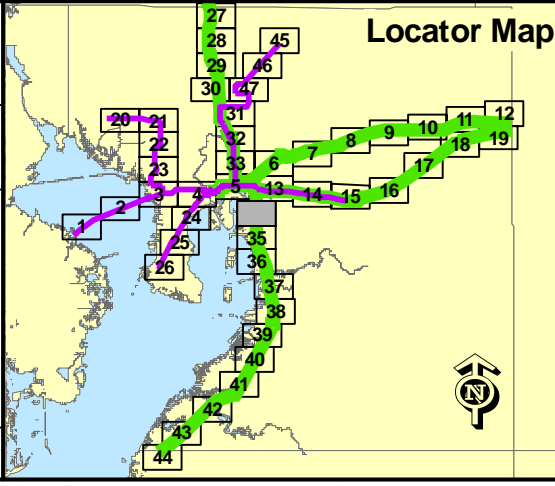
41

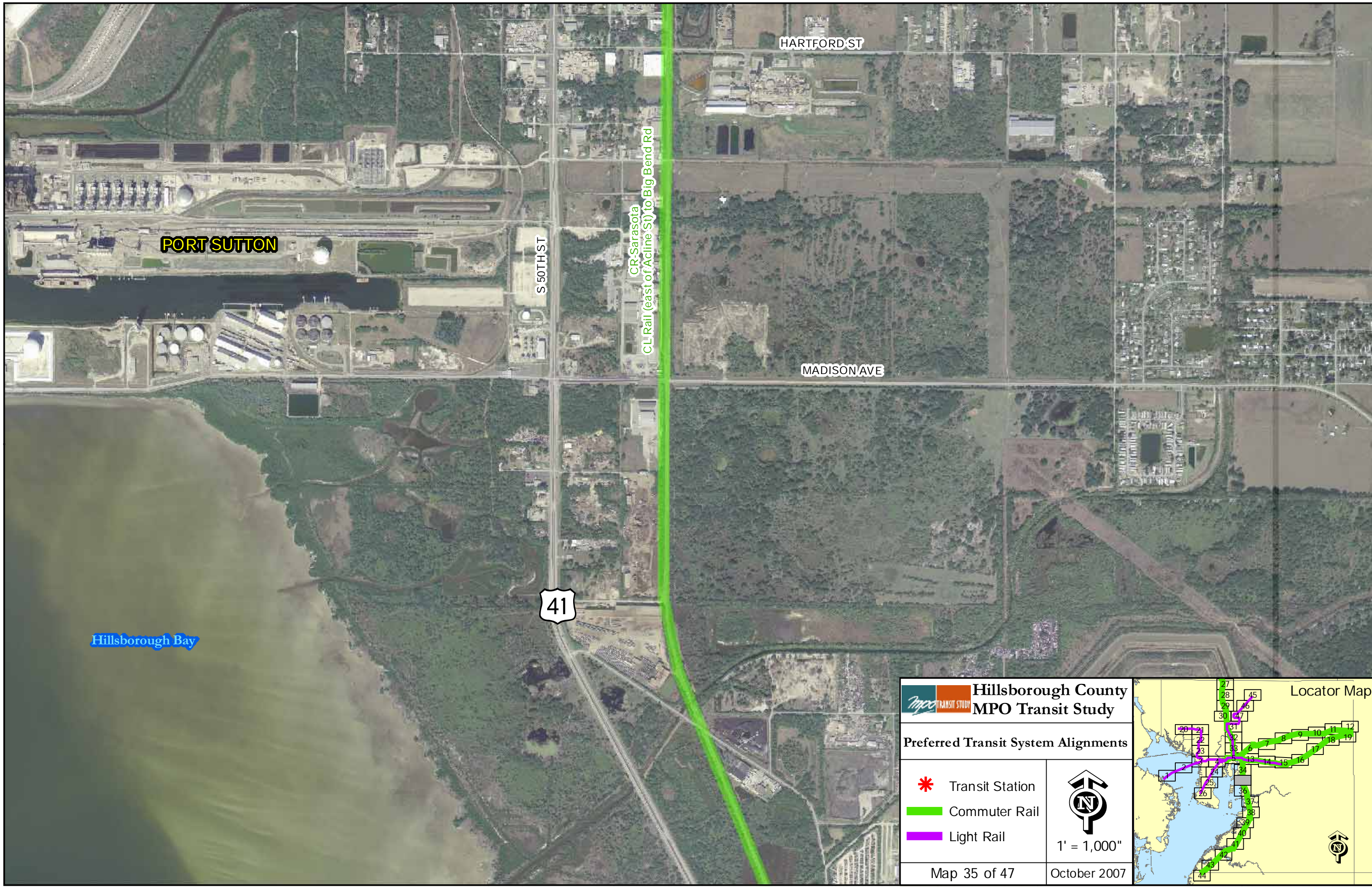
**Hillsborough County  
MPO Transit Study**

Preferred Transit System Alignments

-  Transit Station
-  Commuter Rail
-  Light Rail

  
1" = 1,000"





**PORT SUTTON**

HARTFORD ST

S 50TH ST

CR-Sarasota  
CLL Rail (east of Acline St) to Big Bend Rd




MADISON AVE

41

Hillsborough Bay

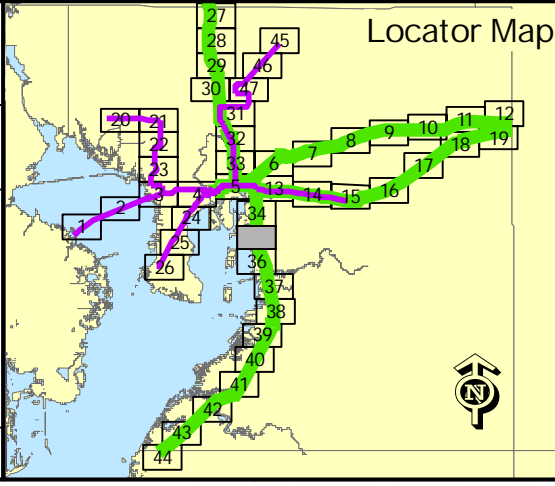
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail



1' = 1,000"





Hillsborough Bay




CL Rail (east of Acline St) to Big Bend Rd  
CR Sarasota

41

RIVERVIEW DR

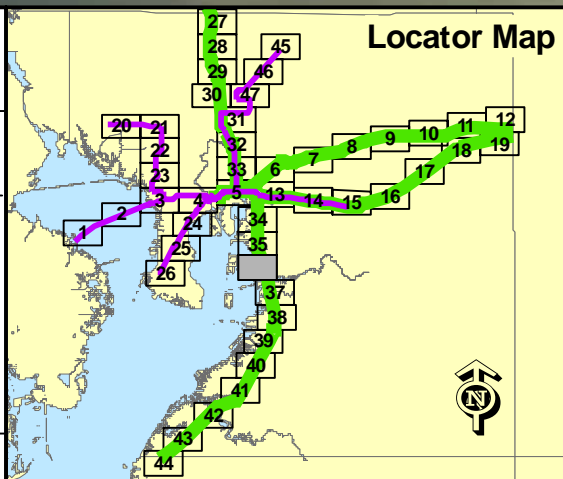
**Hillsborough County**  
**MPO Transit Study**

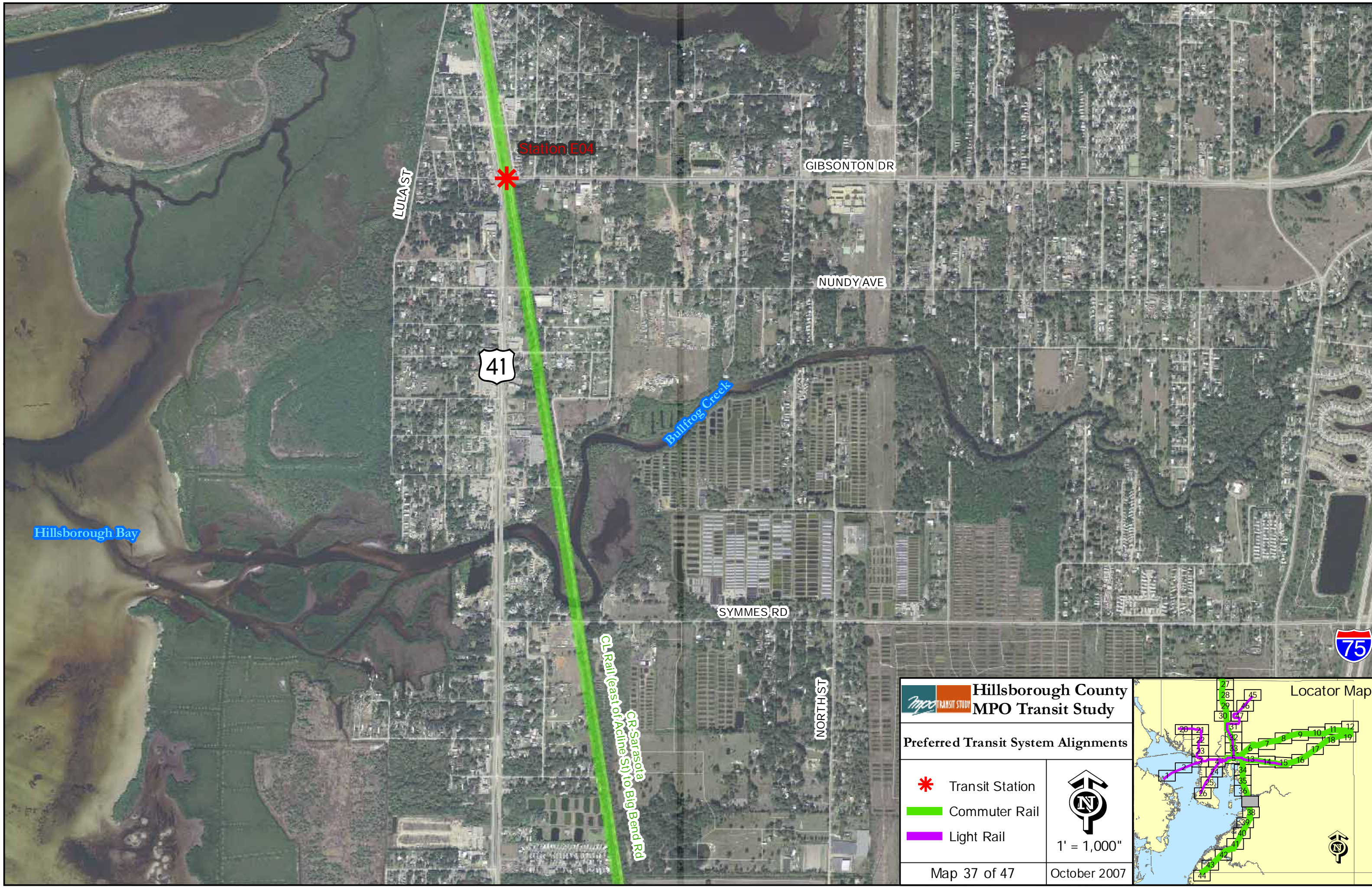
**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail



1' = 1,000"





Station E04

LULA ST

GIBSONTON DR

NUNDY AVE

41

Bullfrog Creek

Hillsborough Bay

SYMMES RD




QL Rail (east of Adline St) to Big Bend Rd  
CR Sarasota

NORTH ST



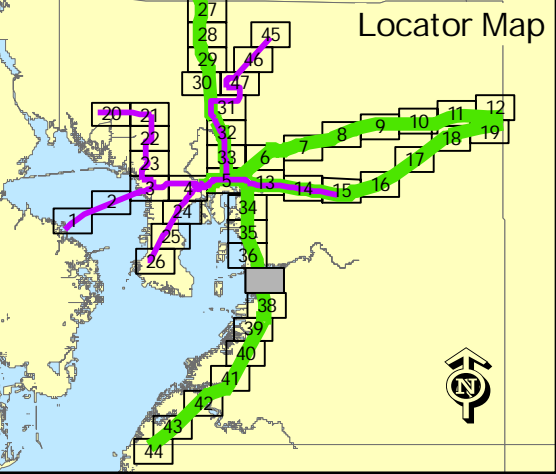
**Hillsborough County MPO Transit Study**

**Preferred Transit System Alignments**

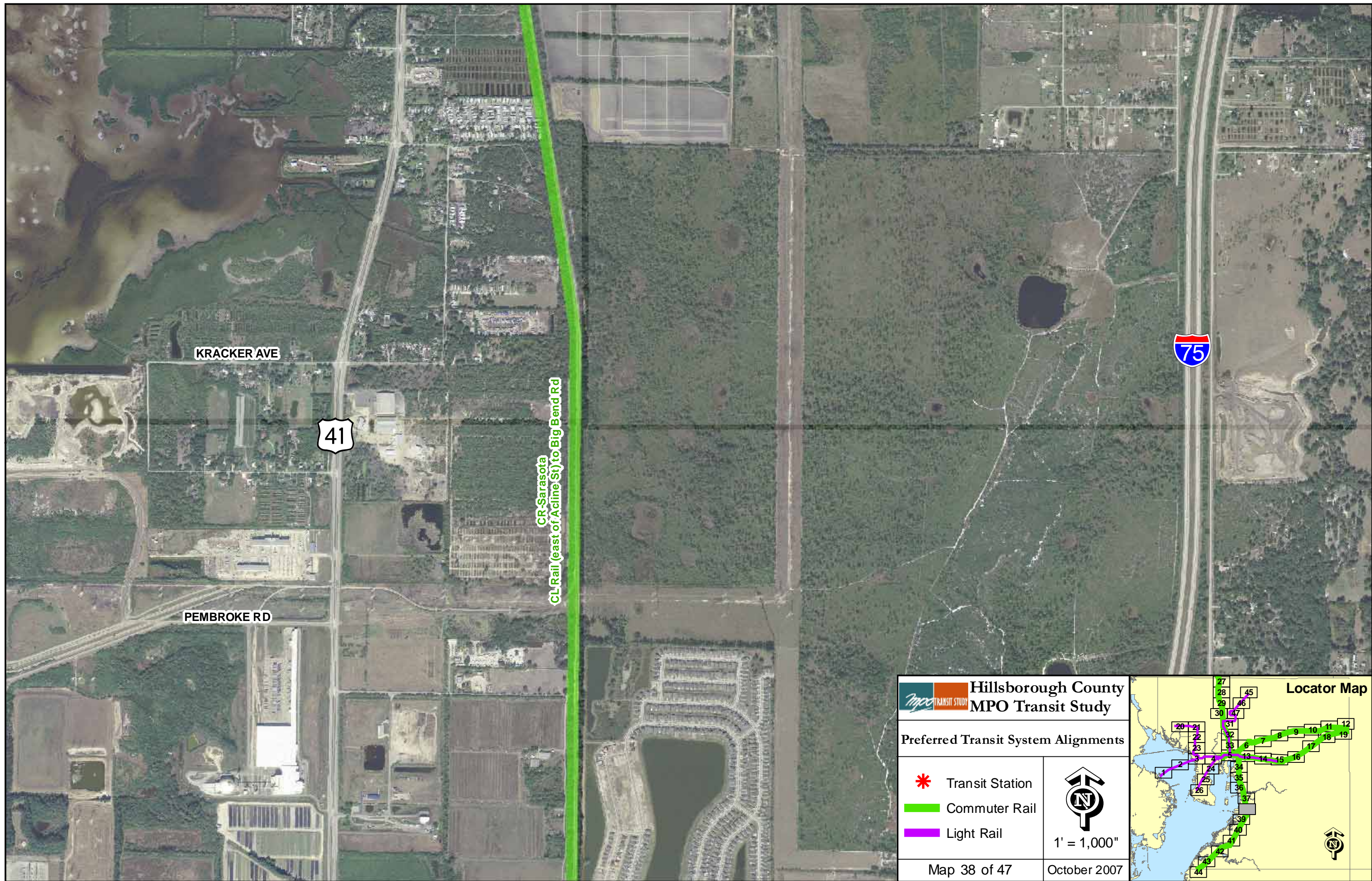
-  Transit Station
-  Commuter Rail
-  Light Rail



1' = 1,000"



Locator Map



KRACKER AVE

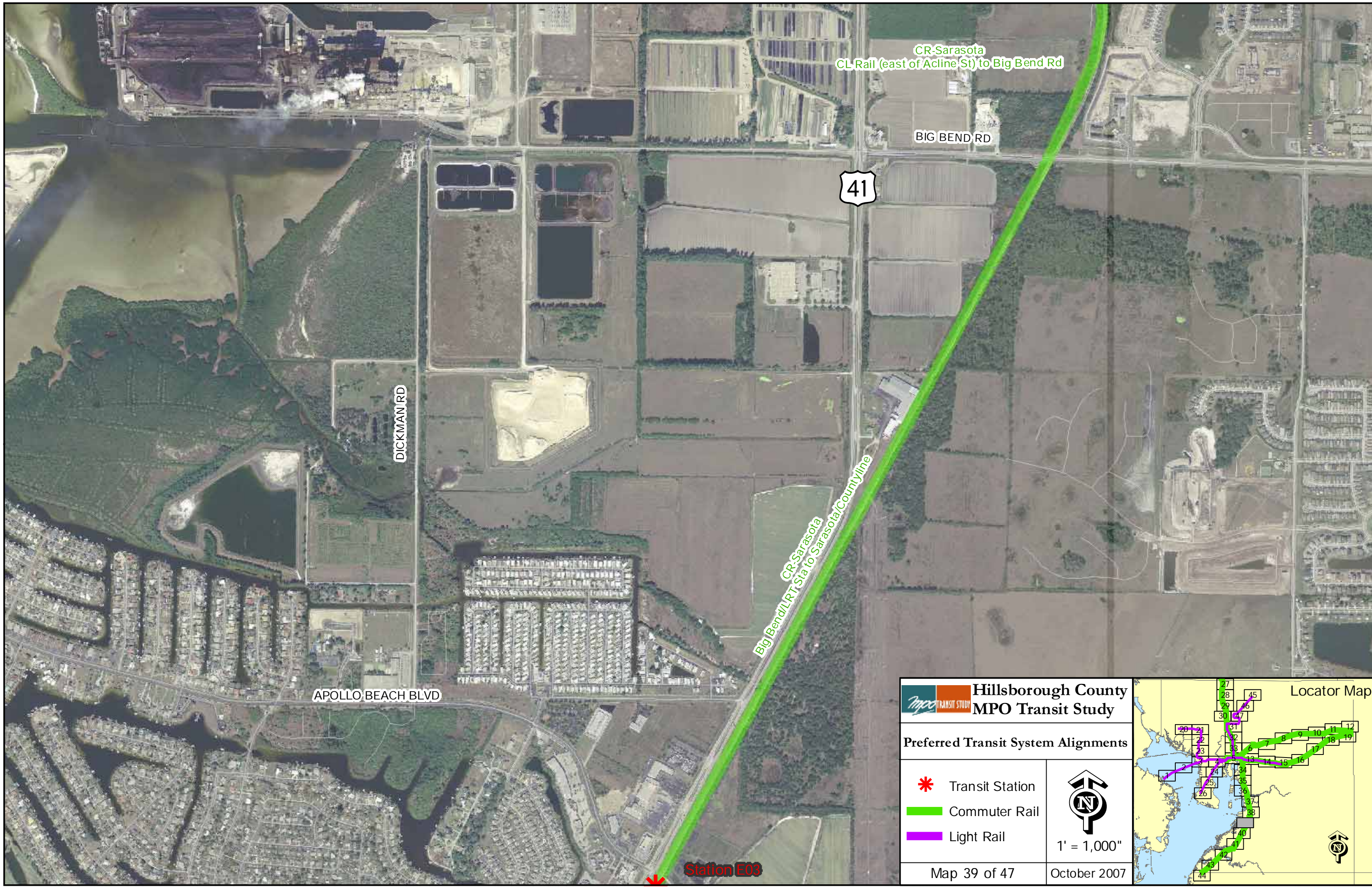
41

PEMBROKE RD

CR-Sarasota  
CL-Rail (east of Acline St) to Big Bend Rd

75

<b>Hillsborough County MPO Transit Study</b>		<b>Locator Map</b> 
<b>Preferred Transit System Alignments</b>		
Transit Station	 1' = 1,000" October 2007	
Commuter Rail		
Light Rail		
Map 38 of 47		



CR-Sarasota  
CL Rail (east of Acline St) to Big Bend Rd

BIG BEND RD

41

DICKMAN RD




APOLLO BEACH BLVD

CR-Sarasota  
Big Bend/LRT Sta to Sarasota/Countyline

Station E03

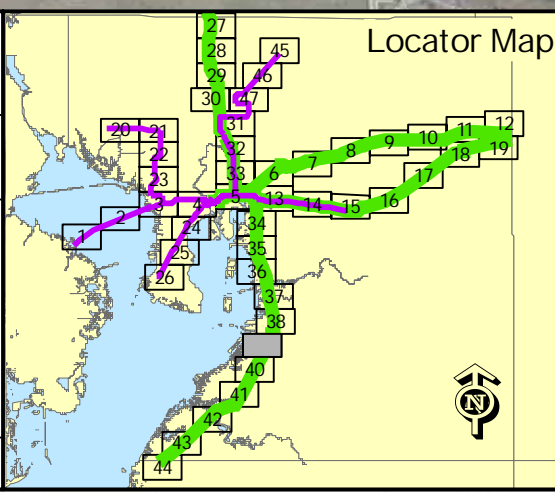
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

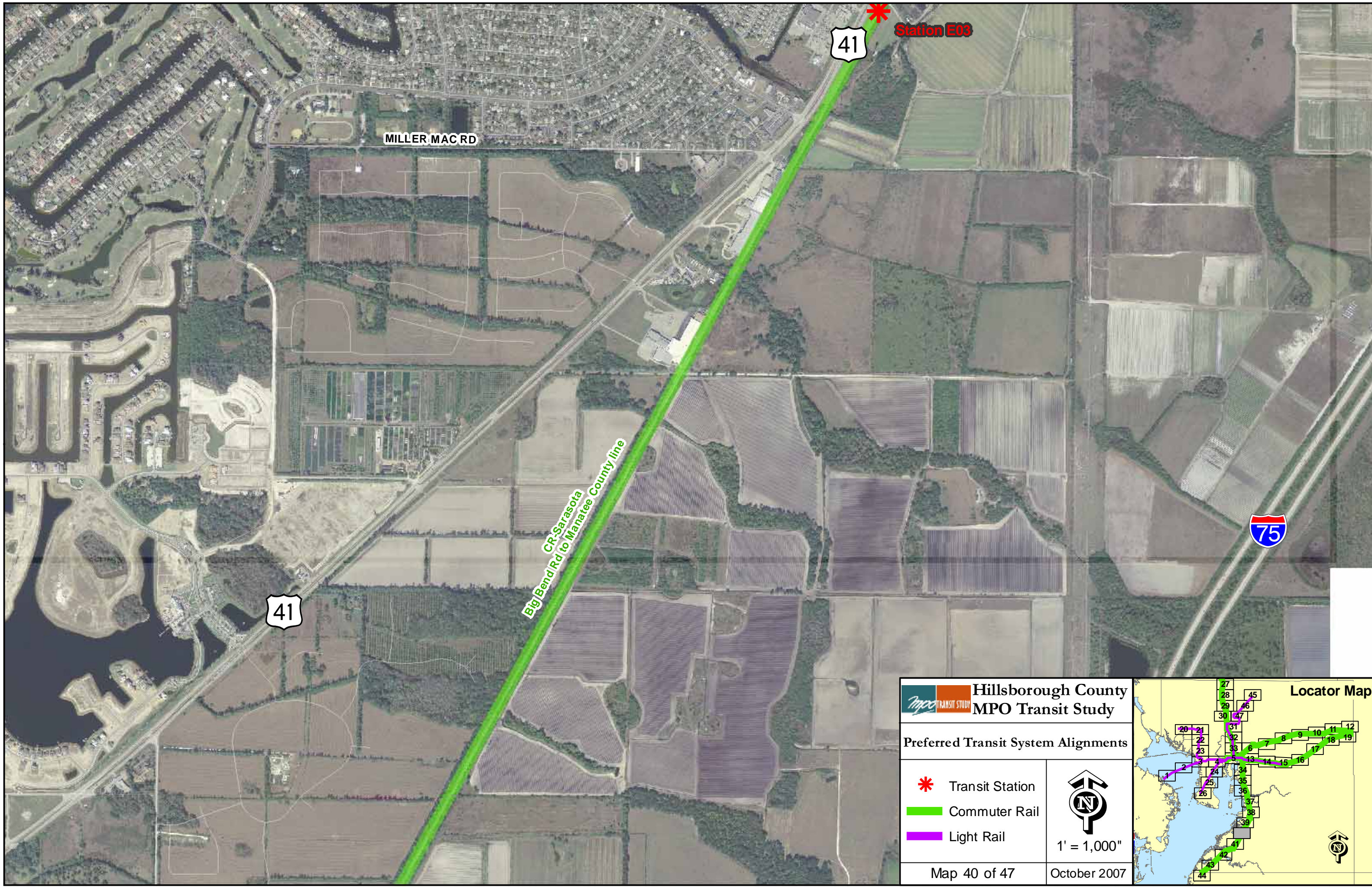
-  Transit Station
-  Commuter Rail
-  Light Rail



1' = 1,000"






Locator Map

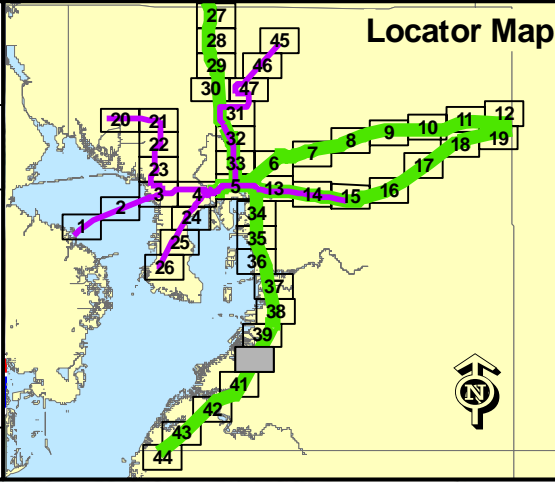


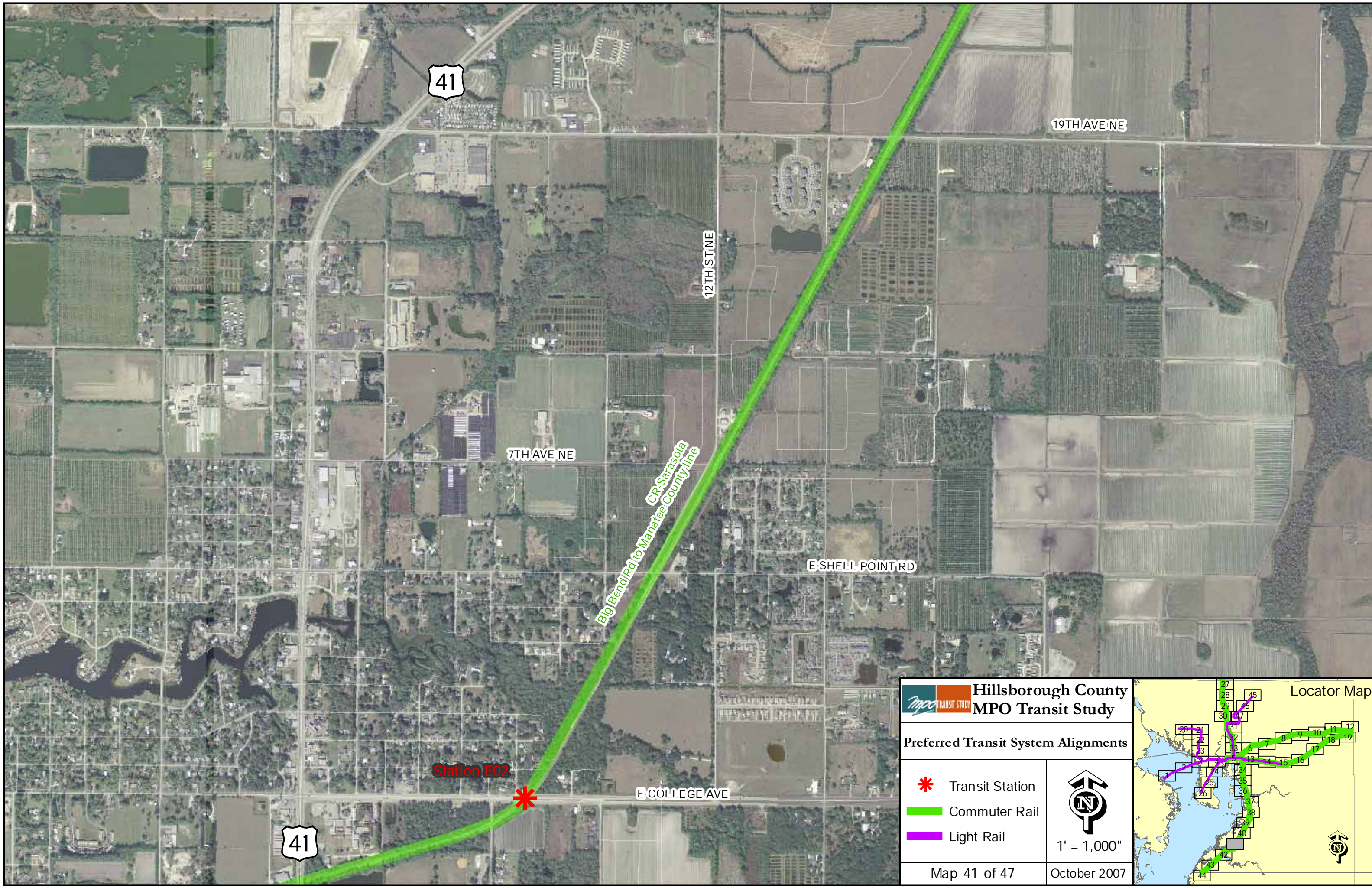
**Hillsborough County MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail

  
1" = 1,000"





41

19TH AVE NE

12TH ST NE

7TH AVE NE

CR-Sarasota  
Big Bend Rd to Manatee County line

E SHELL POINT RD




Station E02

E COLLEGE AVE

41

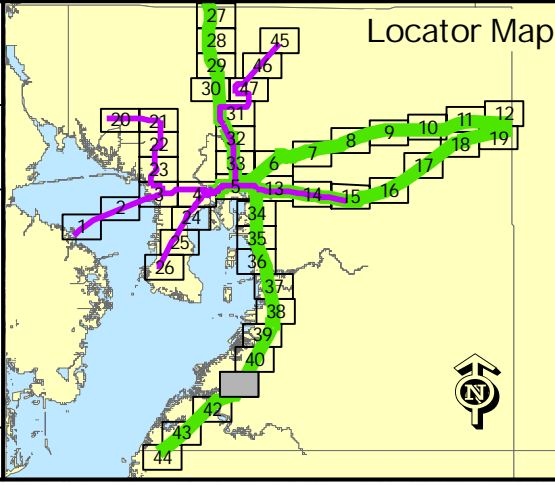
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail



1' = 1,000"



Locator Map



COCKROACH BAY RD

41

STEPHENS RD

GULF CITY RD

CR-Sarasota  
Big Bend Rd to Manatee County line

CHANEY DR

Manatee River

7TH ST SW




41

14TH AVE SE

21ST AVE SE

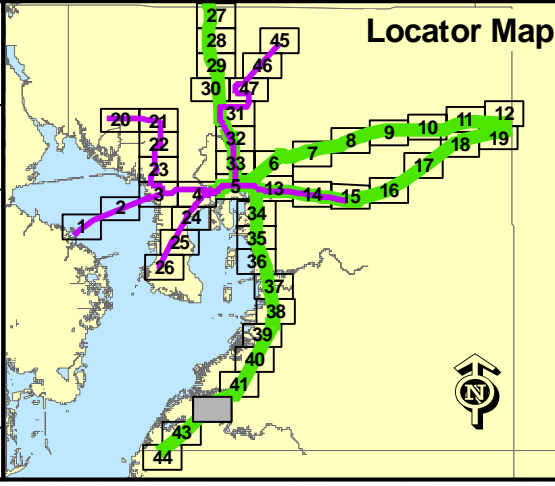
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

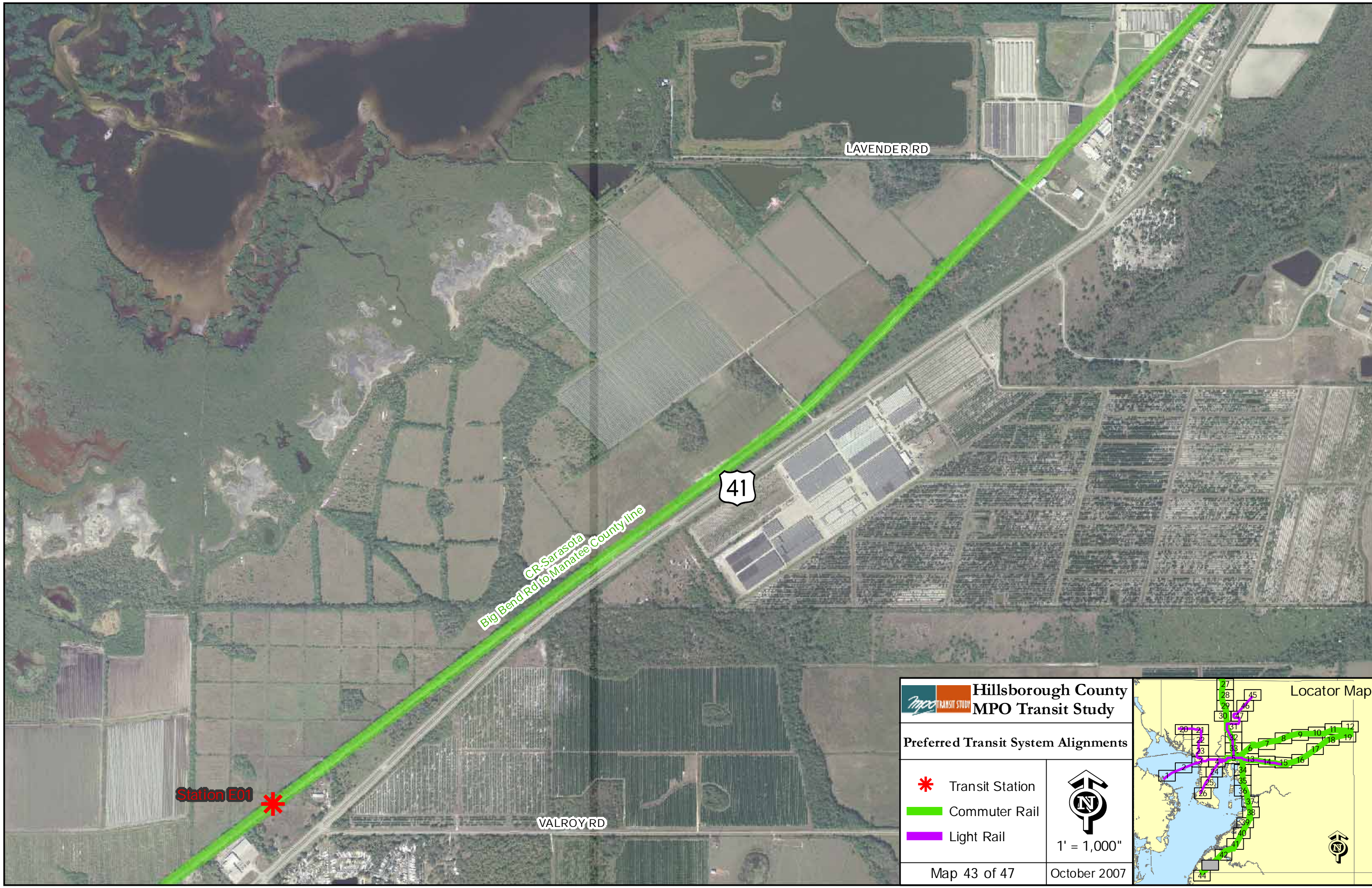
-  Transit Station
-  Commuter Rail
-  Light Rail



1" = 1,000"







**Locator Map**

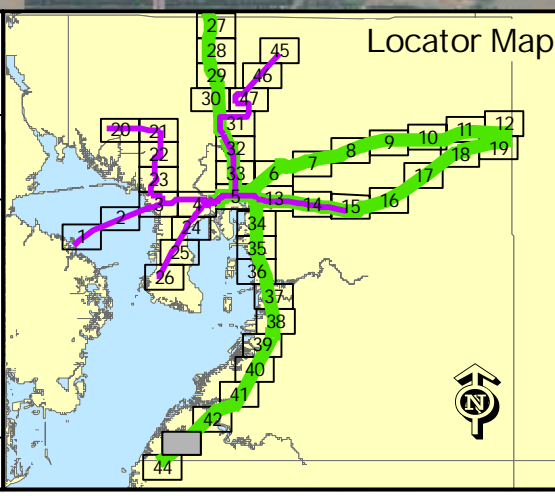


**Hillsborough County MPO Transit Study**

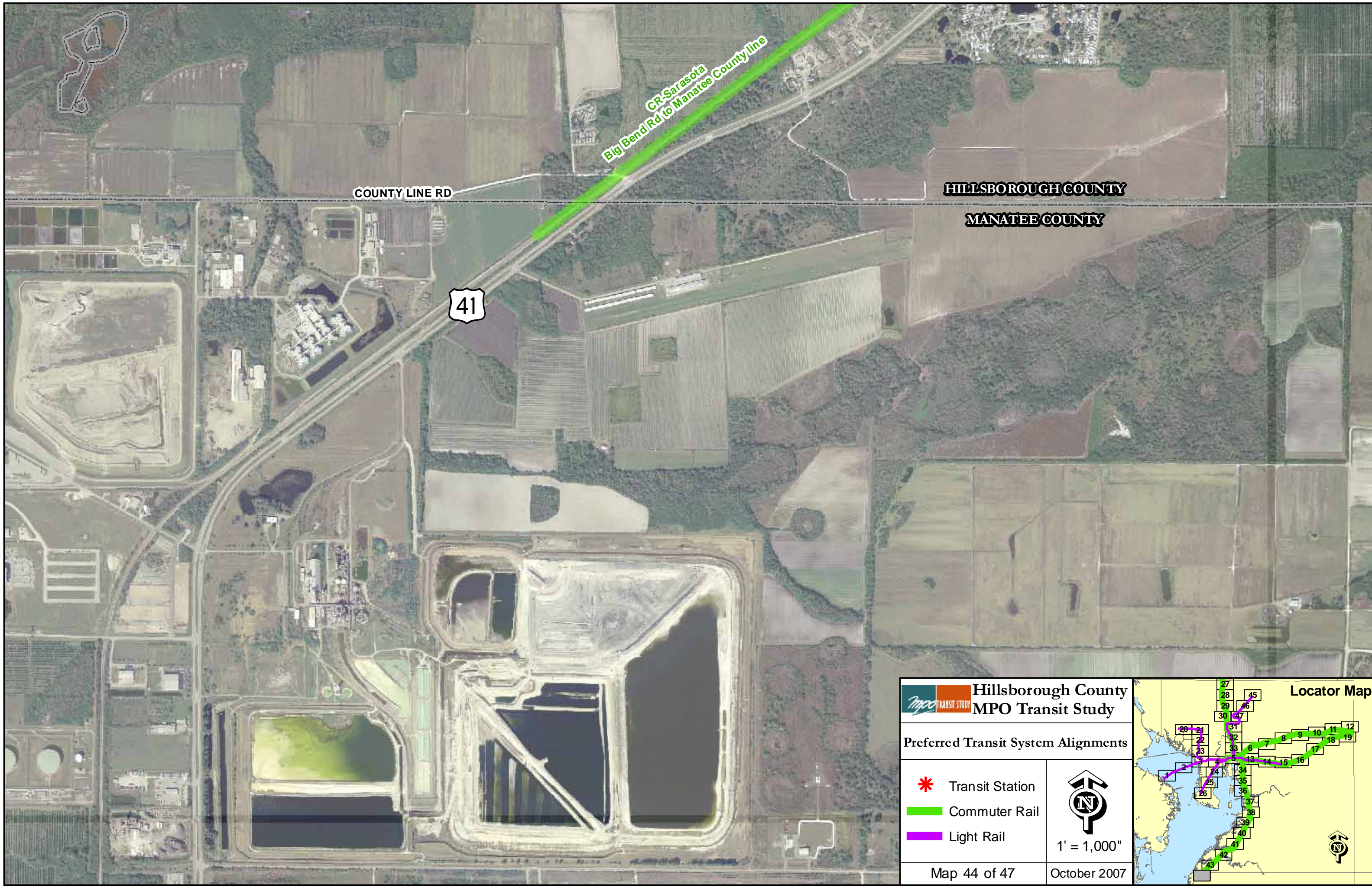
**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail

  
1' = 1,000"







COUNTY LINE RD

CR-Sarasota  
Big Bend Rd to Manatee County line




HILLSBOROUGH COUNTY

MANATEE COUNTY

41

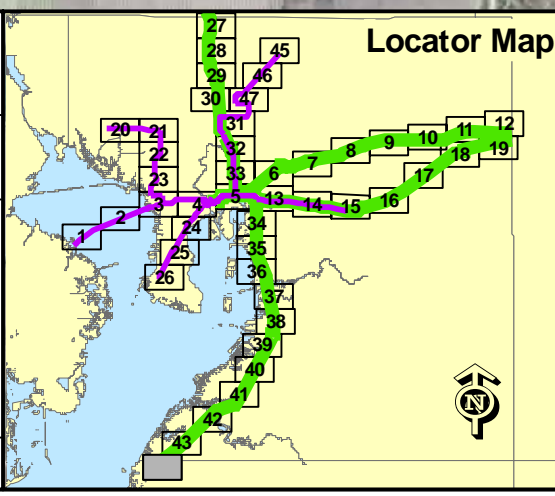
**Hillsborough County  
MPO Transit Study**

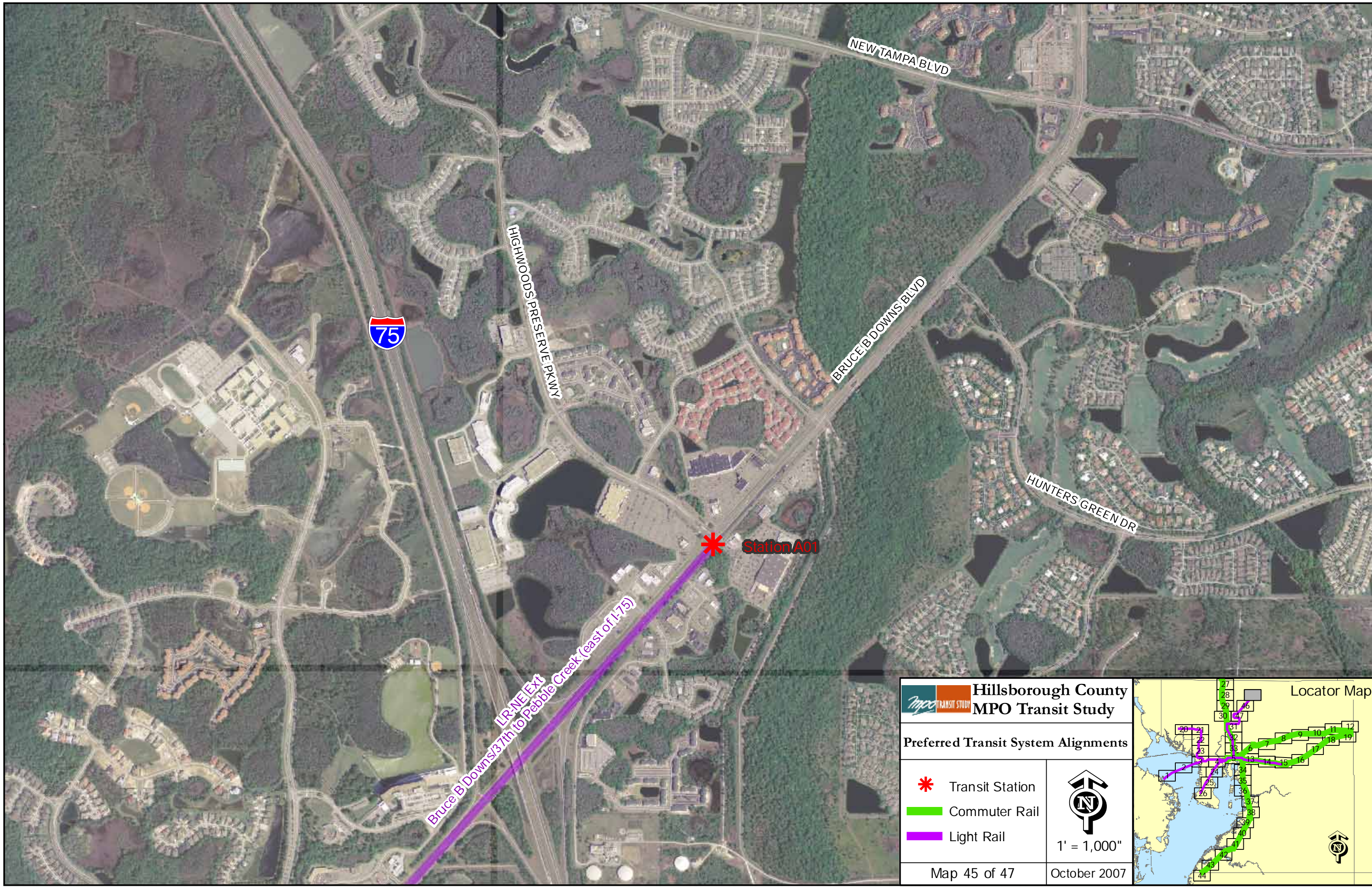
Preferred Transit System Alignments

-  Transit Station
-  Commuter Rail
-  Light Rail






1" = 1,000"



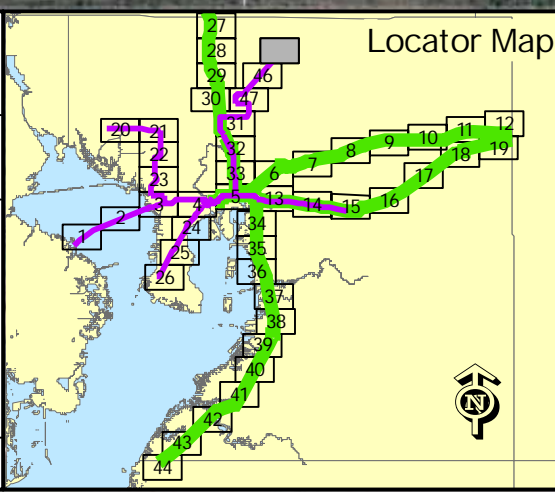


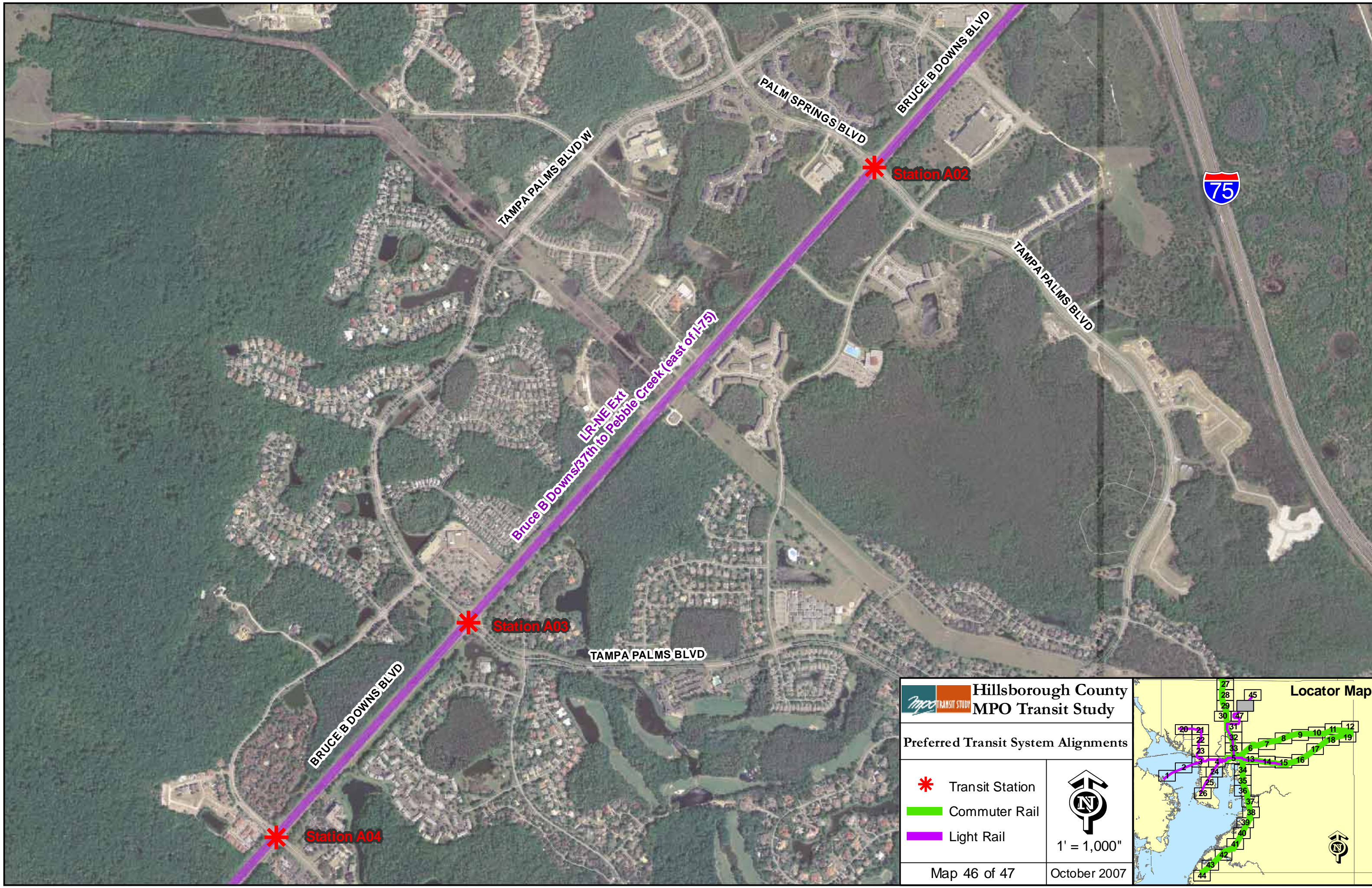
**Hillsborough County MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail

  
1' = 1,000"





TAMPA PALMS BLVD W

PALM SPRINGS BLVD

BRUCE B DOWNS BLVD



TAMPA PALMS BLVD

LR-NE Ext  
Bruce B Downs/37th to Pebble Creek (east of I-75)

**\* Station A03**

TAMPA PALMS BLVD

BRUCE B DOWNS BLVD

**\* Station A04**

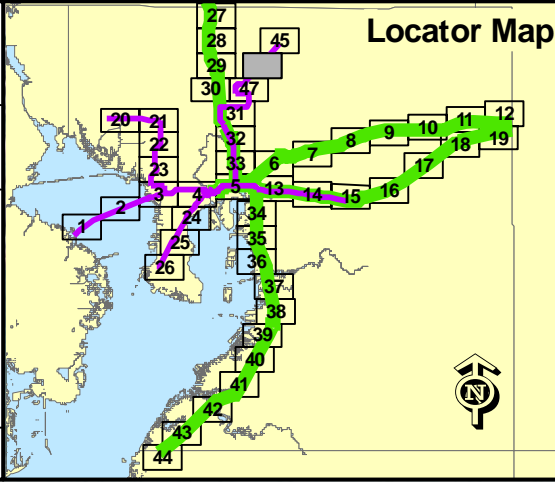
**Hillsborough County  
MPO Transit Study**

Preferred Transit System Alignments

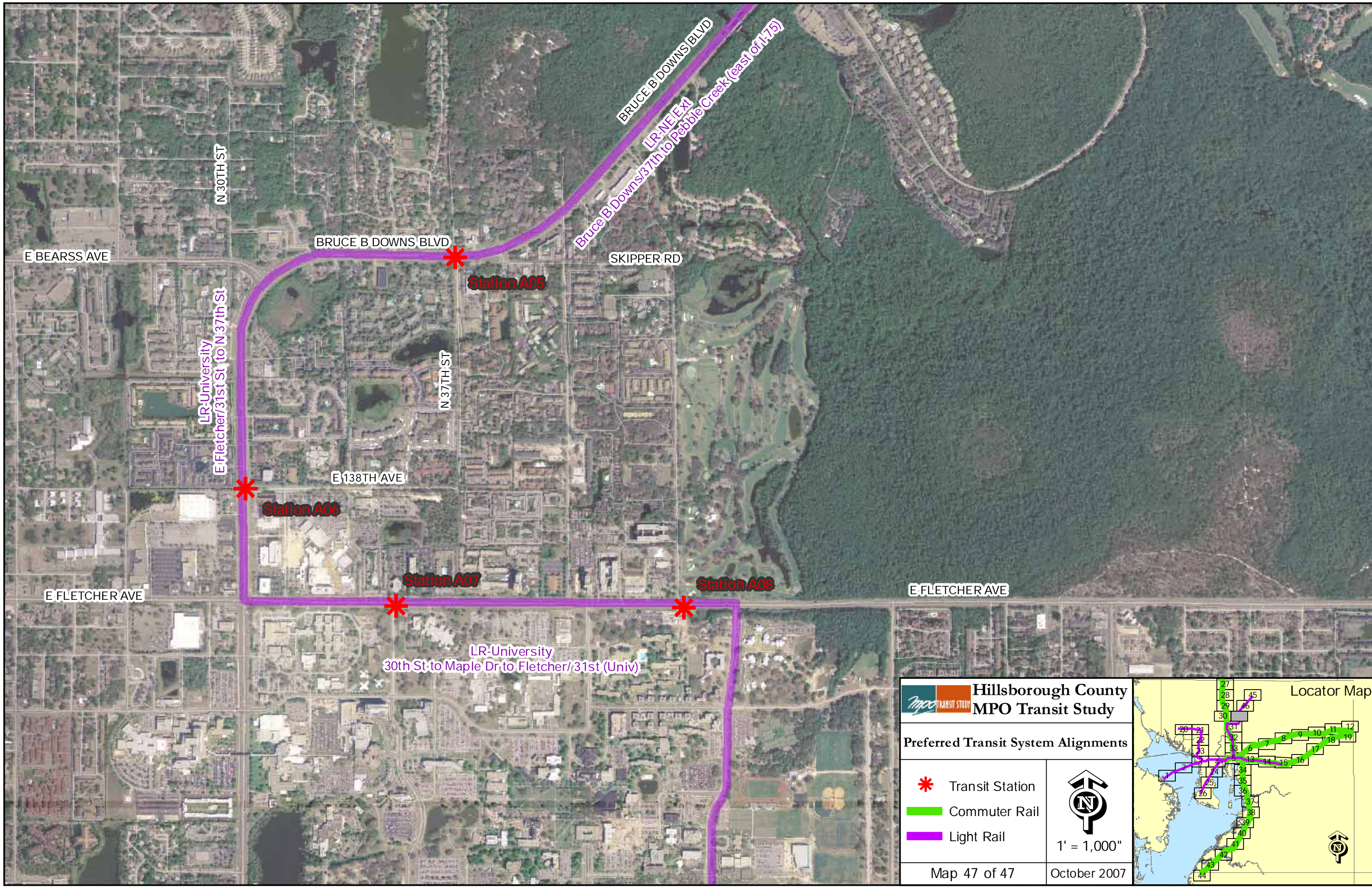
- \*** Transit Station
- Commuter Rail
- Light Rail



1" = 1,000"



**Locator Map**



E BEARSS AVE

N 30TH ST

BRUCE B DOWNS BLVD

SKIPPER RD

Station A05

LR-University  
E Fletcher/31st St to N 37th St

N 37TH ST

E 138TH AVE

Station A06

Station A07

Station A08

E FLETCHER AVE




E FLETCHER AVE

LR-University  
30th St to Maple Dr to Fletcher/31st (Univ)

BRUCE B DOWNS BLVD  
LR-NE Ext  
Bruce B Downs/37th to Pebble Creek (east of I-75)

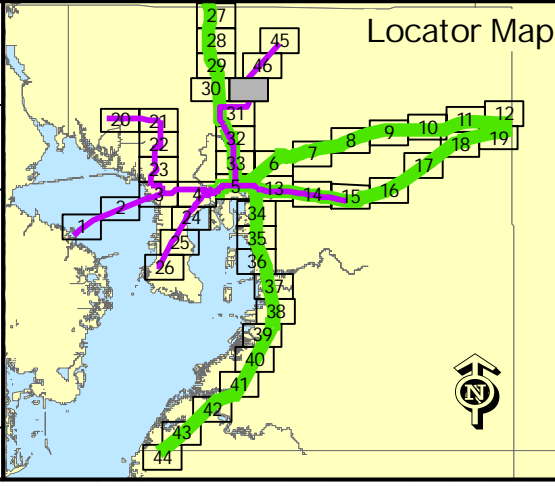
**Hillsborough County  
MPO Transit Study**

**Preferred Transit System Alignments**

-  Transit Station
-  Commuter Rail
-  Light Rail



1" = 1,000"



Locator Map