



TAMPA INTERSTATE STUDY: URBAN CORE AREA ECONOMIC AND FISCAL ANALYSIS

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Tampa Bay Regional Planning Council



TAMPA BAY REGIONAL PLANNING COUNCIL (TBRPC)

Established in 1962

Economic Development, Emergency Preparedness, Risk Management,
Environmental Planning, GIS, and Decision Support

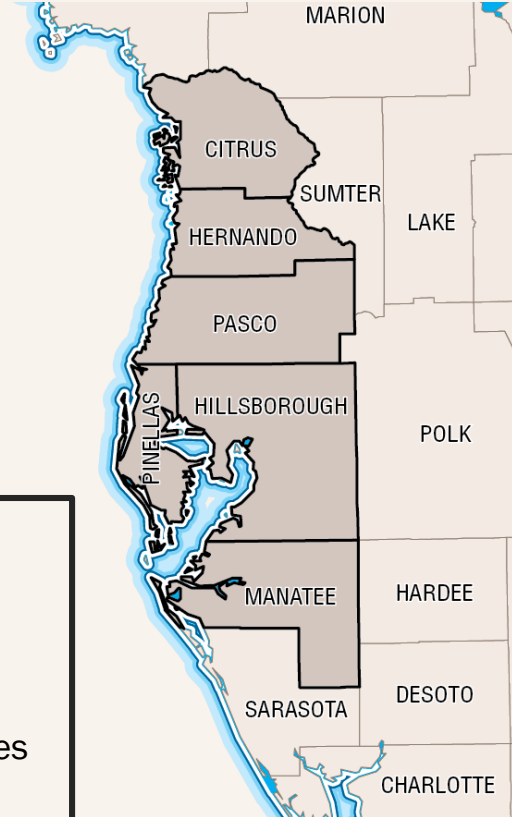
Economic Analysis Program

- +400 economic impact studies since 1999

We do not take a position on projects.

Instead, we are focused on a “just-the-facts” approach

- Six Counties
- 21 Municipalities
- 13 Gubernatorial Appointees
- 3 Ex-Officios
- 5,000 Square Miles
- 3.4 Million People



ECONOMIC IMPACT STUDIES

Environmental impacts

Sea Level Rise, Infrastructure Resilience and Valuation of Estuarine Services

Business Development Support

Firm relocations, Exports, Base studies, Industry studies, Supply Chains

Transportation Investment

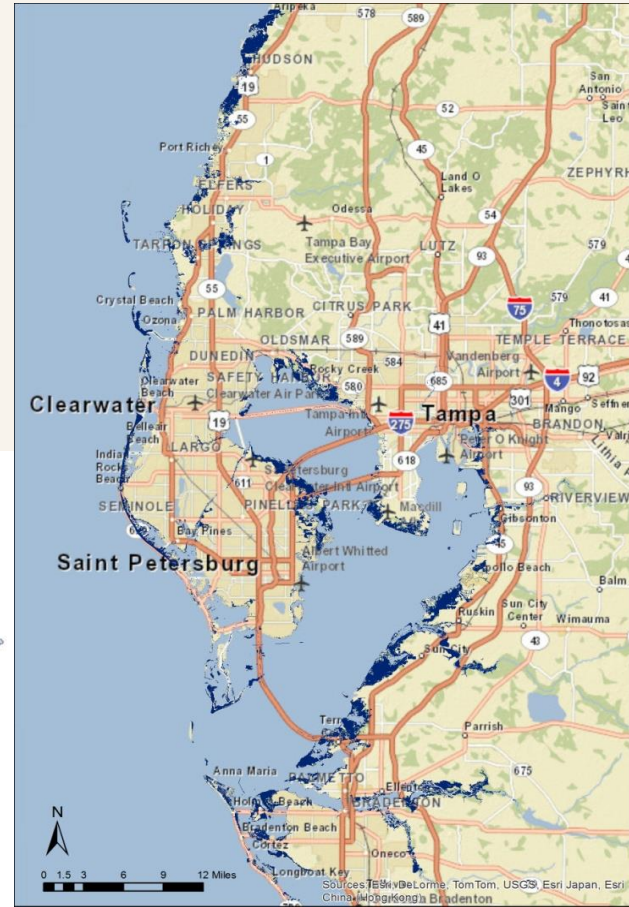
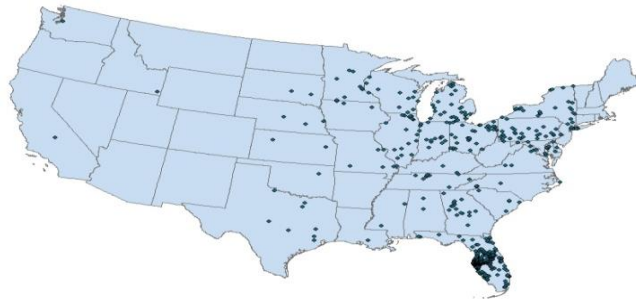
Coast to Coast Trail, Tampa Bay Next

Special Event impacts

Festivals and hurricanes



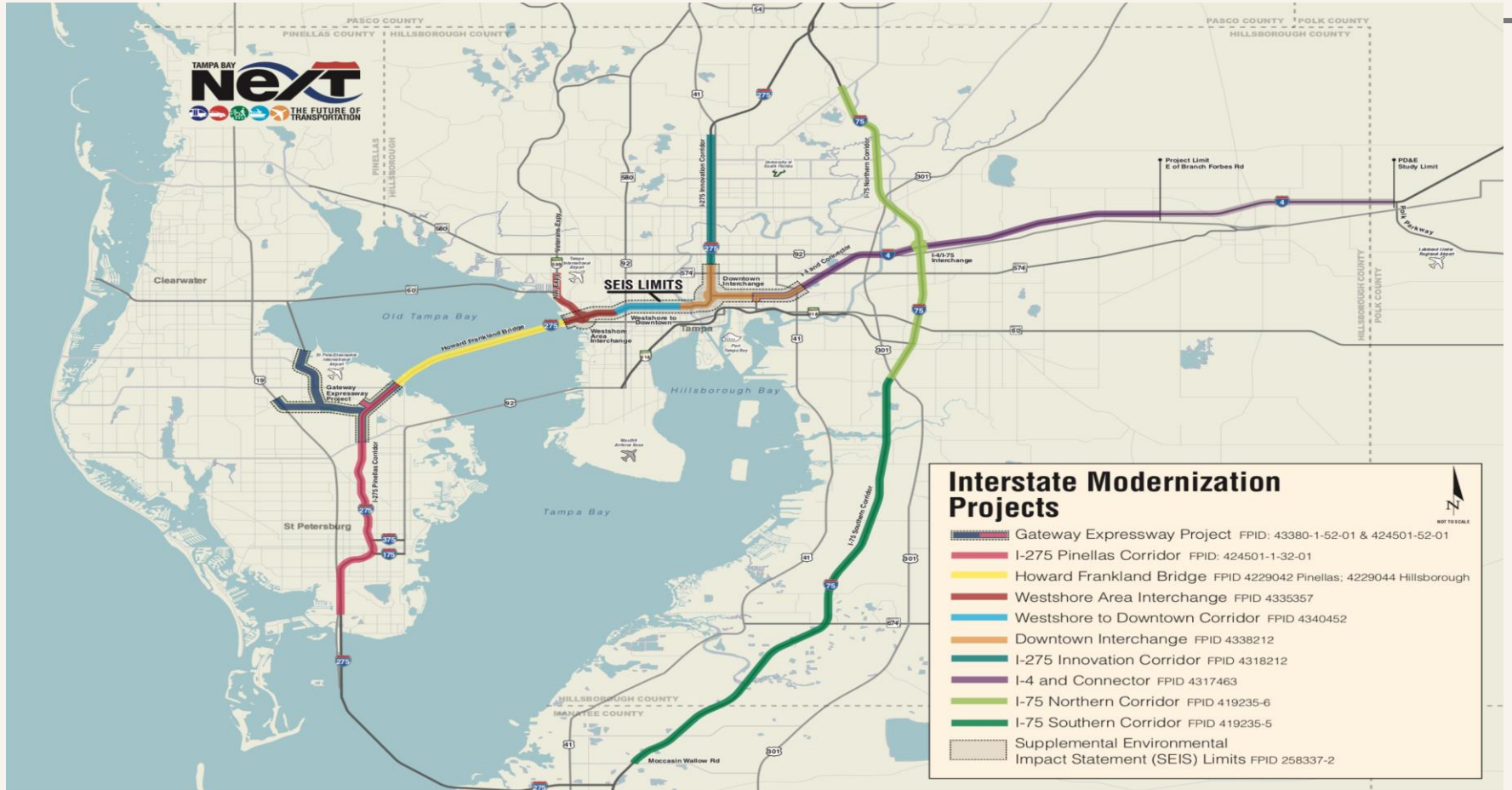
Where are Sampled Strawberry Festival Customers from? By Home Zip Codes



STUDY BACKGROUND I: MOST HIGHWAY FACILITIES ALREADY EXCEED DESIGN CAPACITY

Regional Network Trips	Trips	Vehicle Miles Traveled (VMT)	Vehicle Hours Traveled (VHT)	Average Speed (MPH)
Year 2006	4,324,962	43,695,389	1,424,927	30.67
Year 2035 No Further Action	7,057,463	74,716,754	2,885,654	25.89
Year 2035 Non-Tolled Express Lanes	7,057,463	74,996,105	2,788,831	26.89
Year 2035 Tolled Express Lanes	7,057,463	75,393,835	2,768,213	27.24

STUDY BACKGROUND II: TAMPA AREA INTERSTATE MODERNIZATION



DOWNTOWN INTERCHANGE RECONSTRUCTION CONCERNS

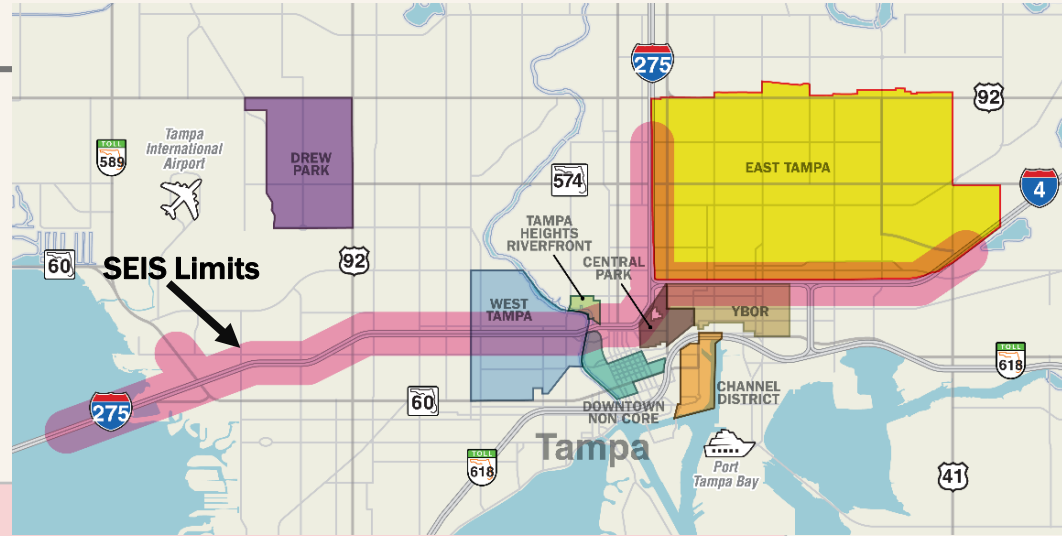
- City of Tampa Community Redevelopment Agency Board requested impact study in 2016 to evaluate the proposed full reconstruction of the Downtown Interchange on CRAs.
- CRA concerns included impacts to:
 - Access to Community Amenities
 - Water Works Park
 - Parking
 - Vacancy Rates
 - Property Values
 - CRA TIF Revenue



SOCIO-CULTURAL EFFECTS AND ECONOMIC ANALYSIS OF CRAs

STUDY BOUNDARIES

Economic analysis for CRAs is part of a larger SEIS Socio-Cultural Effects (SCE) impact analysis.



Socio-Cultural Effects (SCE)

Social	Economic	Land Use	Mobility	Aesthetics	Relocation
<ul style="list-style-type: none"> Demographics Community Cohesion Safety Community Goals/ Quality of Life Special Community Designations 	<ul style="list-style-type: none"> Business & Employment Tax Base Traffic Patterns Business Access Special Needs Patrons 	<ul style="list-style-type: none"> Land Use-Urban Form Plan Consistency Growth Trends & Issues Focal Points 	<ul style="list-style-type: none"> Mobility Choices Accessibility Connectivity Traffic Circulation Public Parking 	<ul style="list-style-type: none"> Noise/Vibration Viewshed Compatibility 	<ul style="list-style-type: none"> Residential Non-Residential Public Facilities

TBRPC USED REMI TRANSIGHT:

1. With Regional Travel Demand Model output

Forecast countywide impacts of construction and system performance

2. Combining balance of arterial/highway traffic routing and land use

Develop a 'narrative' of likely sub-area economic impacts

3. Modeling property value impacts from construction with statistical techniques

Create project alternative fiscal impact forecast for CRAs

1. With Regional Travel Demand Model output

Forecast countywide impacts of construction and system performance

IMPACTS OF CONGESTION ON COMMUTERS AND GOODS MOVEMENT



Commuters Pay More

Results in loss of time at work and with family.



Changes in Work Shifts

Cause additional shifts or cutbacks in production schedules.



Increased Travel Time

Longer travel time for transit riders
Increase in delivery costs.



Increased Inventory Costs

Increases in inventory safety stocks.



More Delivery Vehicles

Needed to maintain and grow distribution markets. Higher vehicle costs, more drivers, new routes.

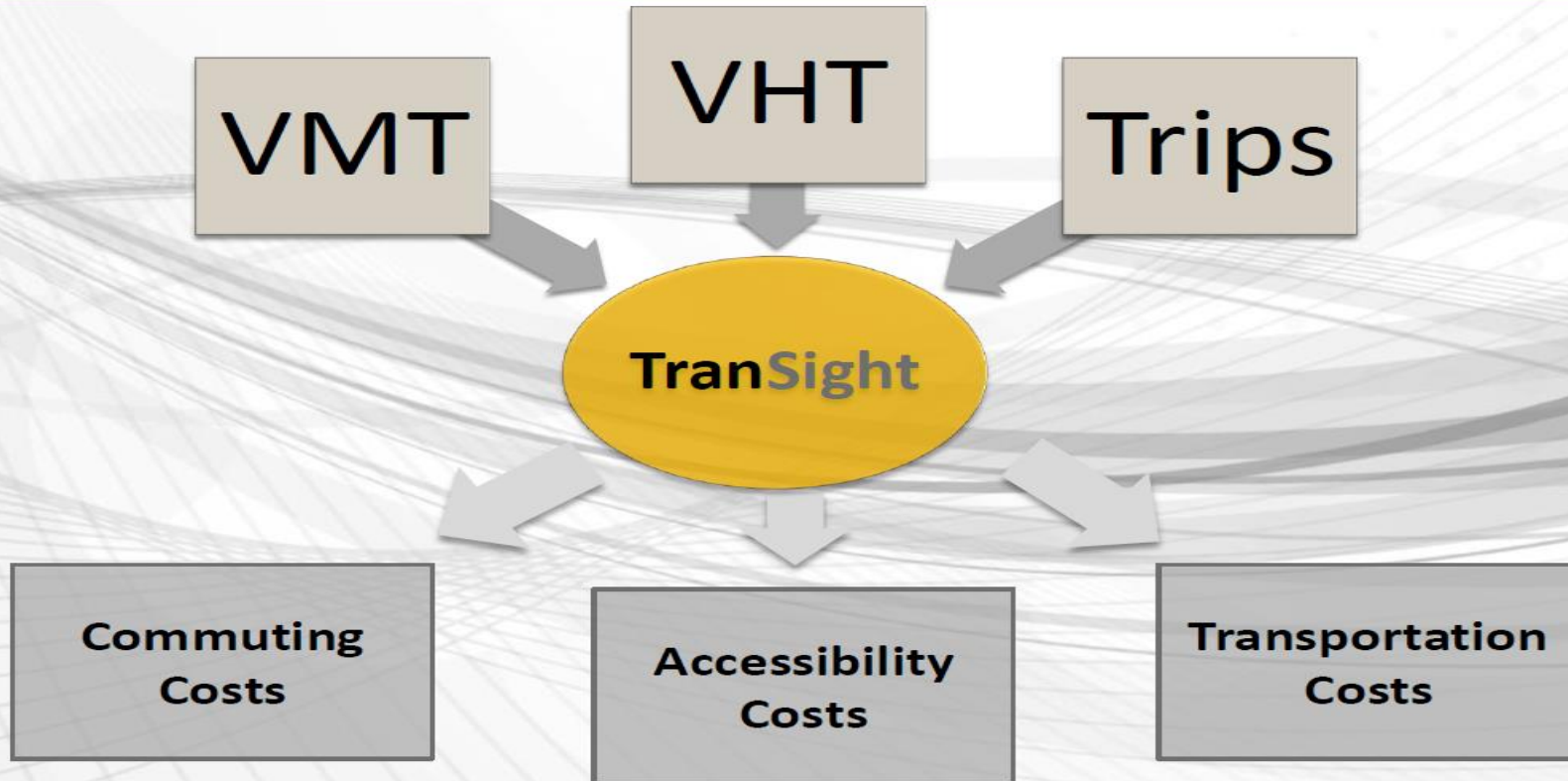


Fewer Afternoon Deliveries

Forces restocking restrictions, forcing businesses to adjust operating hours.

Source: Weisbrod, Glen, Don Vary and George Treyz. 2003. "Measuring the Economic Costs of Urban Traffic Congestion to Business." Transportation Research Record #1839.

Integration with TranSight



COUNTYWIDE IMPACT STUDY SCENARIOS

TBRPC analyzed 3 scenarios and analyzed the economic and community impacts of each.

3 Scenarios



No Further Action



Construction & Non-Tolled Express Lanes



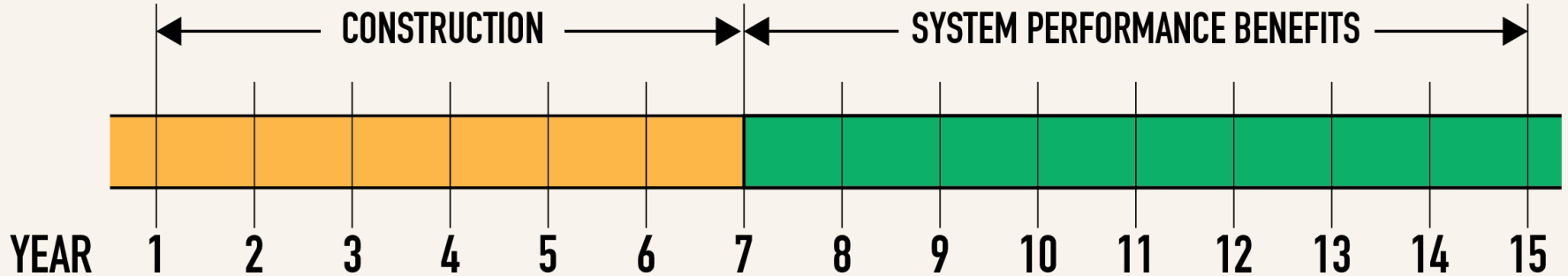
Construction & Tolled Express Lanes

Community Impacts



Economic Impacts

PROJECT SCHEDULE



Economic Impacts measured by

**Total
Employment**
Direct & Indirect

**Employment
by Industry**
Construction &
Manufacturing

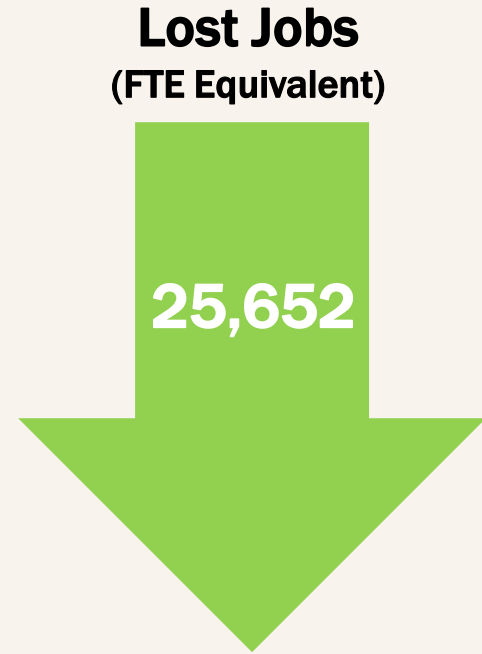
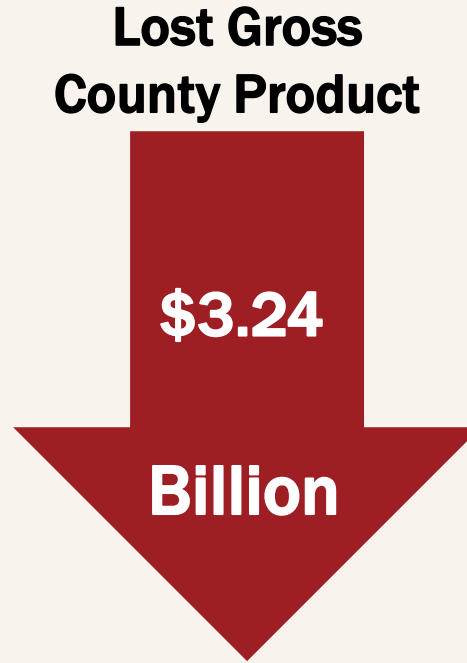
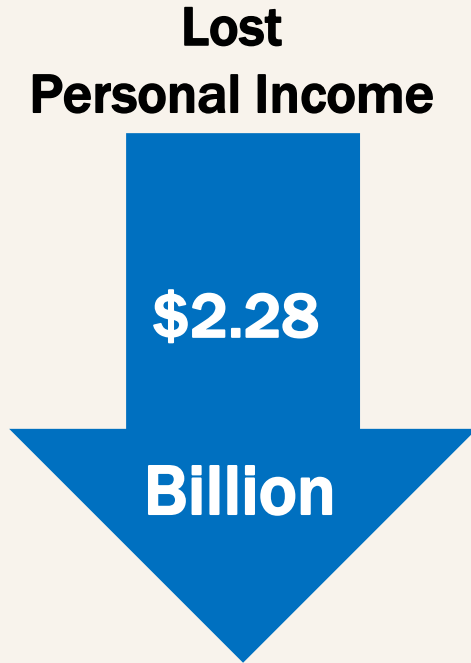
**Employment
by Occupation**

**Personal
Income**

**Gross
County
Product**

THE COST OF NO FURTHER ACTION: ANNUAL AVERAGES

Annual average impact of no further action over 20 years



Source: TBRPC 2018

AVERAGE ANNUAL CONSTRUCTION IMPACTS

\$2.65B Construction Project **➔** **4,110** Jobs



2,595

Construction



109

**Administrative
Support Services**



37

**Truck
Transportation**



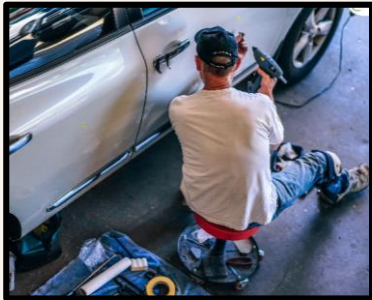
97

Wholesale

Source: TBRPC 2018,
TranSight 2.0

AVERAGE ANNUAL INDIRECT CONSTRUCTION IMPACTS

1,515 Indirect Jobs



11

**Fabricated Metal
Manufacturing**



47

Health Care



127

**Food Service/
Accommodations**



260

Retail Trade

Source: TBRPC 2018, TranSight 2.0

COUNTYWIDE SUMMARY ECONOMIC IMPACTS

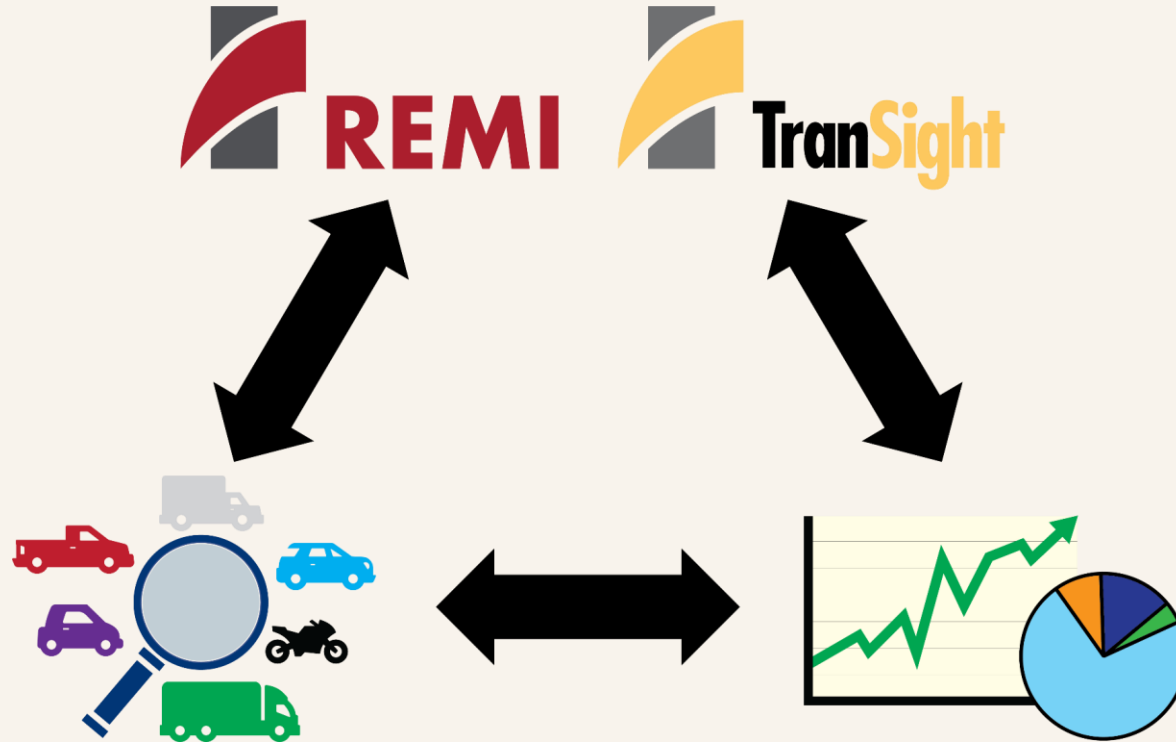
Hillsborough County	Yearly Average		
	No Further Action (-15.6%)	Non Tolled Express Lanes	Tolled Express Lanes
Population	-28,763	10,897	11,724
Labor Force	-17,846	6,795	11,117
Total Employment	-25,652	9,757	12,413
Gross County Product (\$Mil)	-\$3,243	\$1,283	\$1,634
Personal Income (\$Mil)	-\$2,280	\$638	\$803

Source: TBRPC Transight Model
TBRPC, 2017

2. Combining balance of arterial/highway traffic routing and land use

Develop a 'narrative' of likely sub-area economic impacts

'NARRATIVE' OF LIKELY SUB-AREA ECONOMIC IMPACTS

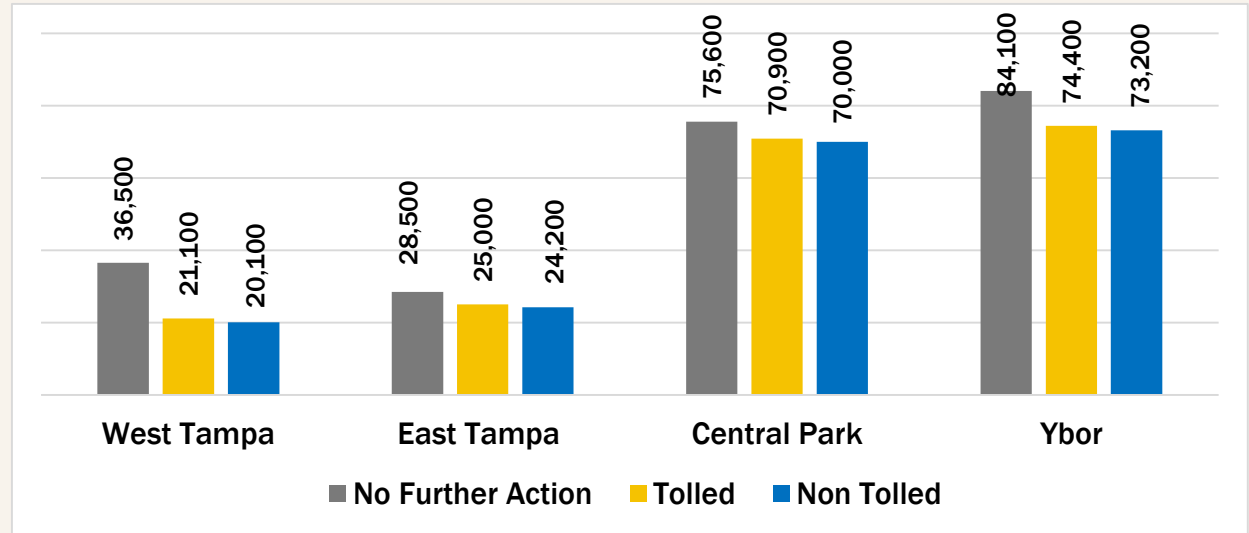


COMBINING TRAVEL MODEL WITH LITERATURE FINDINGS

Some industries are sensitive to traffic volume changes, others are not.

Manufacturing industries likely to face pressure to move from downtown, finance less so.

Commercial and MF values increase with volume but SF declines.



AADTs

3. Modeling property value impacts from construction with statistical techniques

Create project alternative fiscal impact forecast for CRAs

CREATE ALTERNATIVE CRA FISCAL IMPACT FORECAST

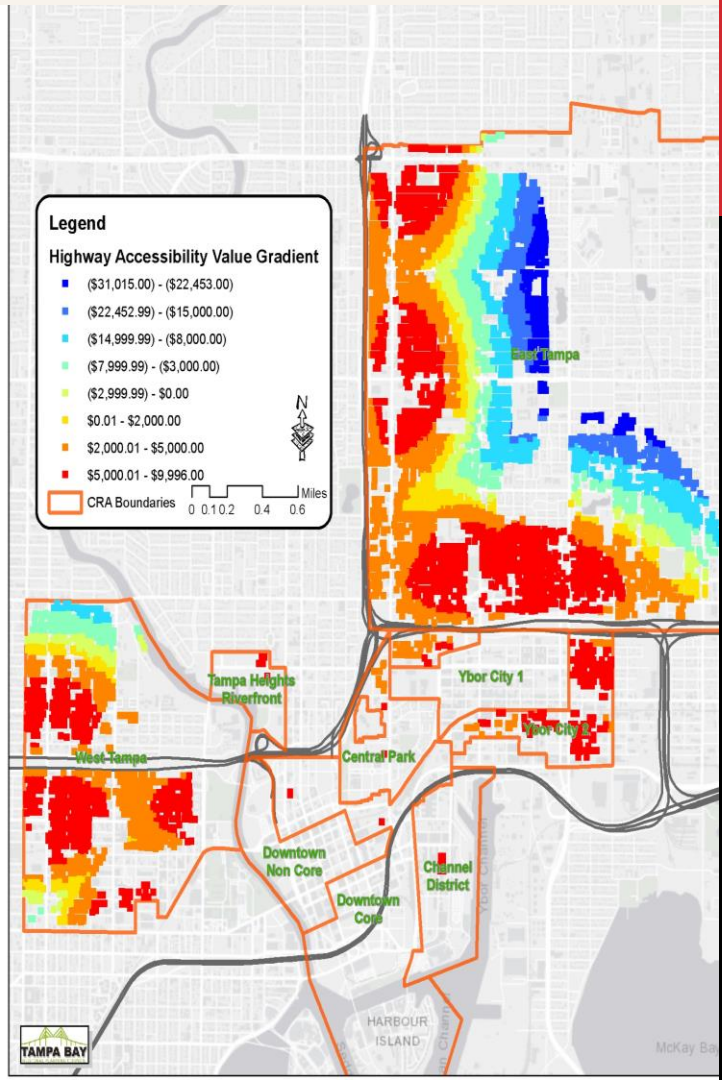
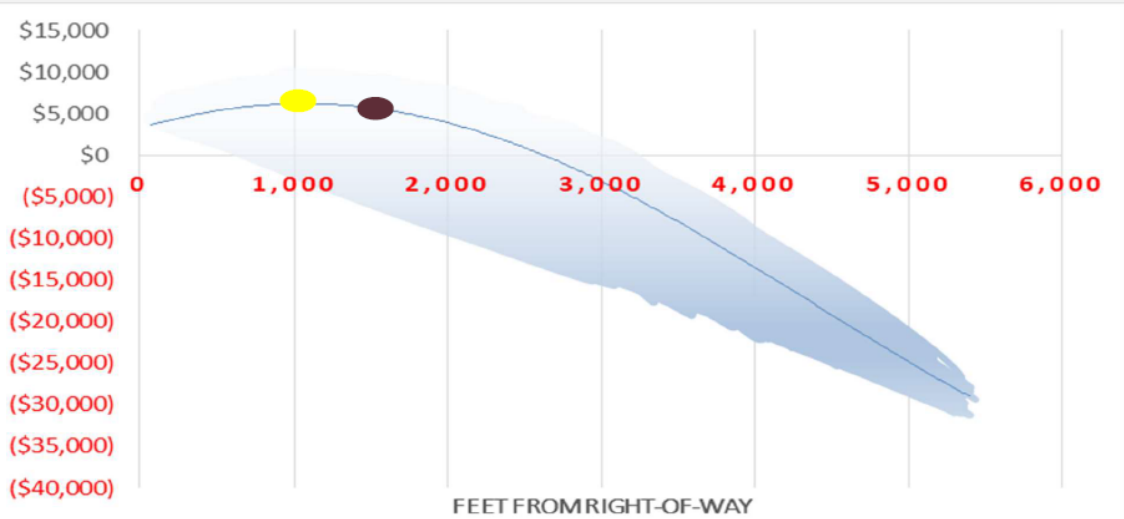
Construction impacts property values:

- Before and During ROW acquisition (cash value removed from tax rolls)
- During construction (nuisance impacts depress property values by 2.64% per year of construction)
- Economic stimulus impacts on property values (Elasticity estimates: historical TranSight control GCP regressed onto CRA property value trends)
- Impacts of highway realignment on property values (hedonic price model)

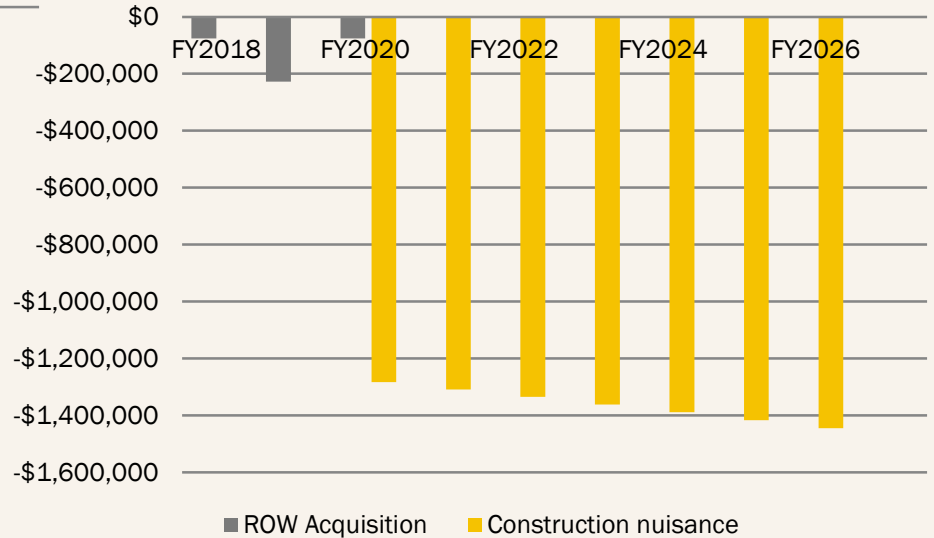
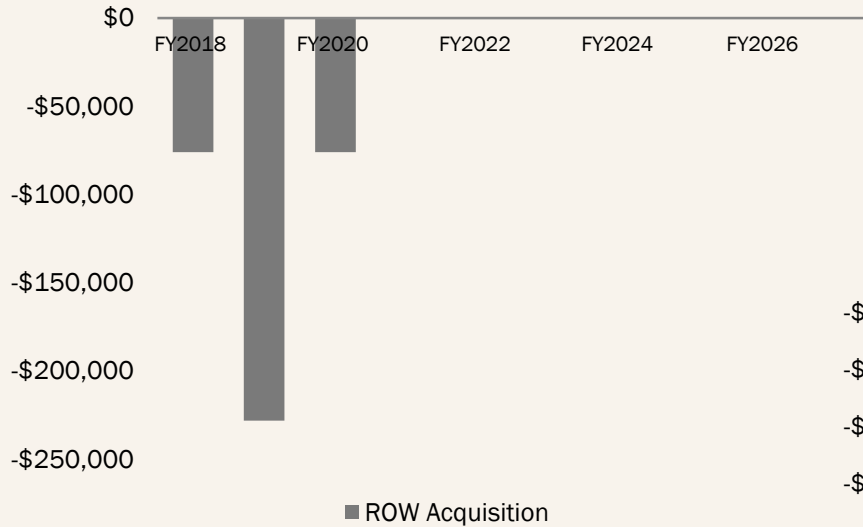
HIGHWAY REALIGNMENT IMPACTS ON PROPERTY VALUES

Heat map depicts how highway access amenity value varies by distance to ROW and Access points.

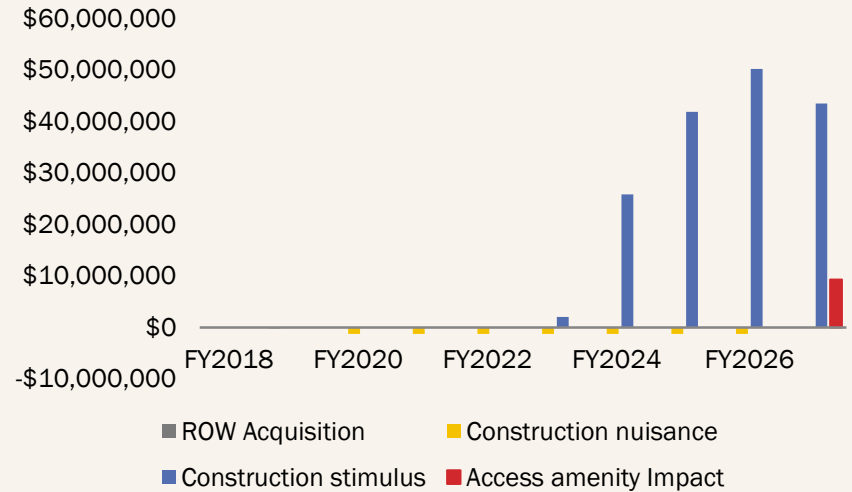
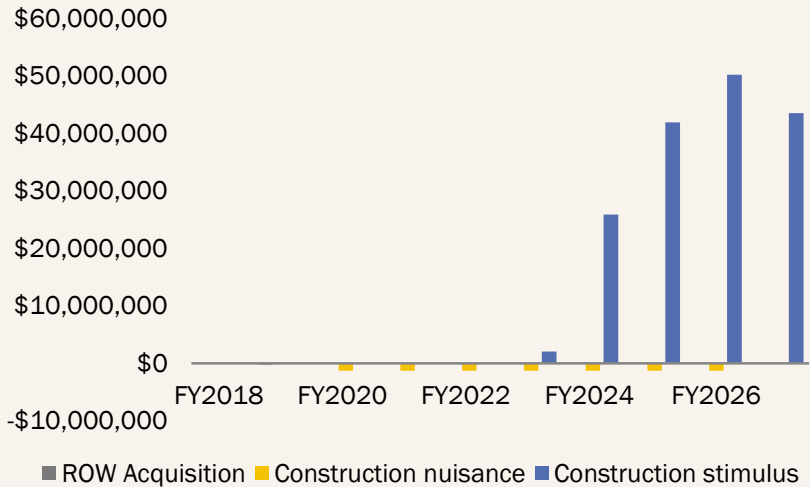
Predicted amenity value scatterplot shows change in value by distance to ROW



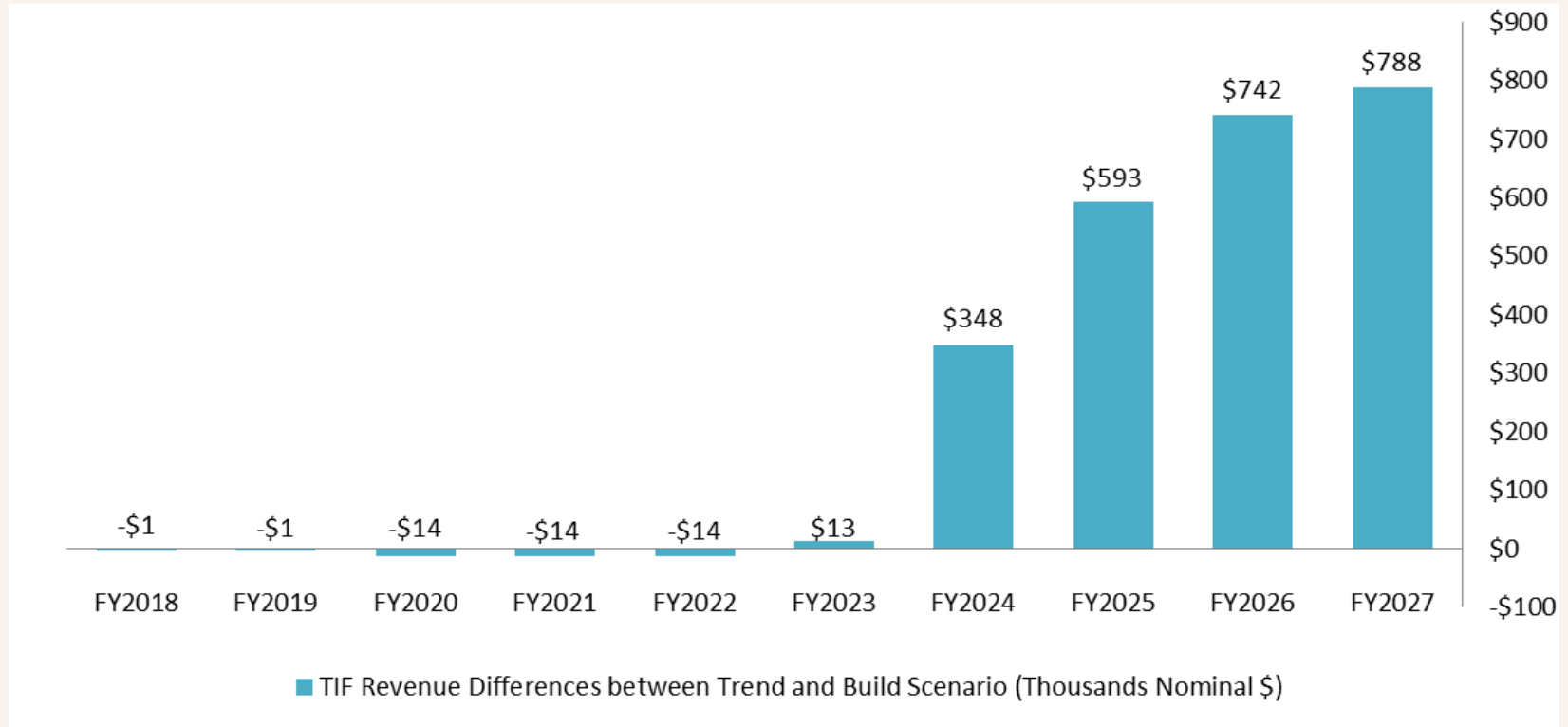
PROJECT IMPACTS ON BASELINE PROPERTY VALUES (I)



PROJECT IMPACTS ON BASELINE PROPERTY VALUES (II)



NET CONSTRUCTION TIF REVENUE IMPACTS OVER TREND REVENUE



THE BIG PICTURE: HILLSBOROUGH COUNTY AND CRAS

Community & Countywide Impacts

No Further Action



Doing nothing has a cost



Fewer jobs per year



Increased traffic on arterial roadways impacts adjacent single family properties



Potential increase in value to some commercial and multifamily properties

Construction and System Performance



Modest net-positive property value growth in CRAs



Gains in TIF Revenue in a growing economy



Overall, positive impacts to jobs, economy, and property values



Some impacts to highway adjacent properties



SOME (SLIGHTY OFF-TOPIC) FINAL TAKE-AWAY POINTS

- Construction as stimulus is powerful with impacted communities.
- MPOs should use TranSight to think through how control totals and TAZ data are allocated.

QUESTIONS?

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