

# High Capacity Transit Task Force: Economic Impact Analysis Breakout Session

HCT Task Force  
September 29, 2017

Phoenix  
Infrastructure Group



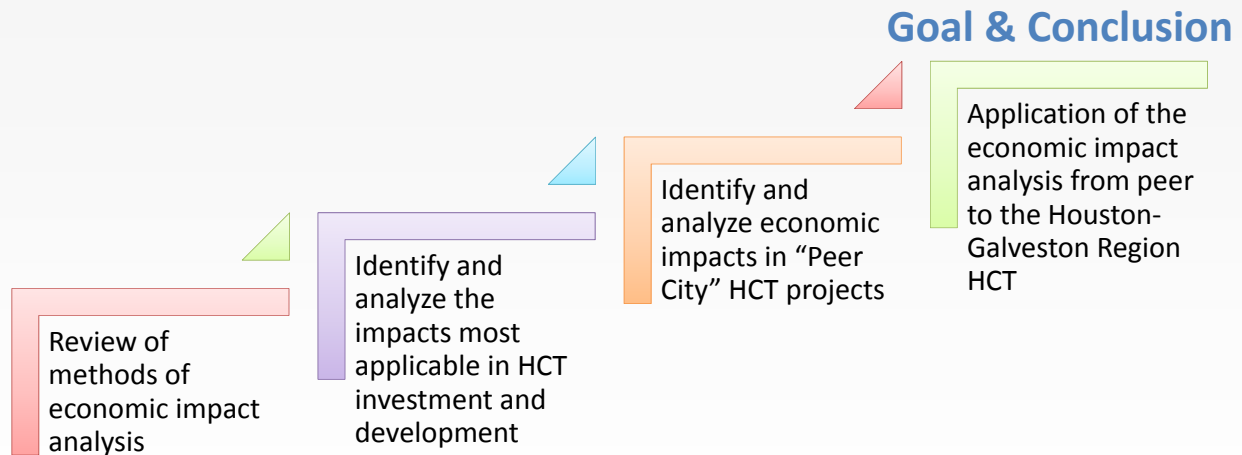
## Introductory Briefing

- Economic analysis overview
- Peer region review
- Economic Impact analysis workgroup session
  - Purpose
  - Approach
  - Meeting Schedule
  - Deliverables



## Introduction: Outline of the Discussion

This breakout session will present the group with the following process towards the goal of developing potential economic impact solutions for the H-GAC region:



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## Introduction: Why Measure Economic Impact?

Economic effects and impact must be measured, analyzed, and promoted to justify or nullify the development of similar projects.

Provide a "Go" or "No Go" roadmap for specific projects or program initiatives

Predetermine effects of specific programs or specific projects

Coordinate project and program initiatives with the current environment

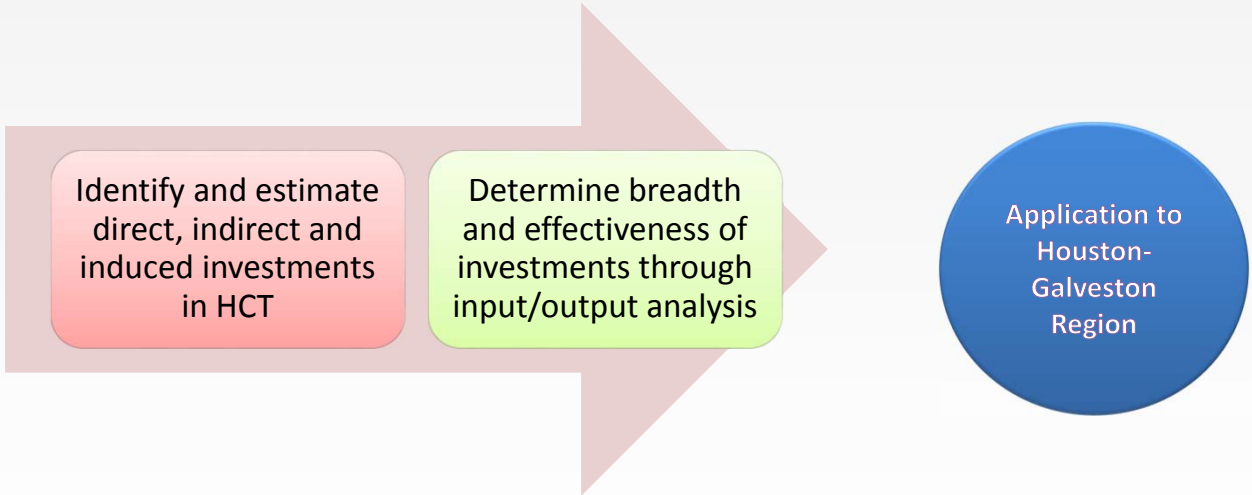
Measure project and program performance and execution over an extended period

Utilize data of impact to promote projects and policy to the public stakeholders

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## Introduction: How is Economic Impact Measured?



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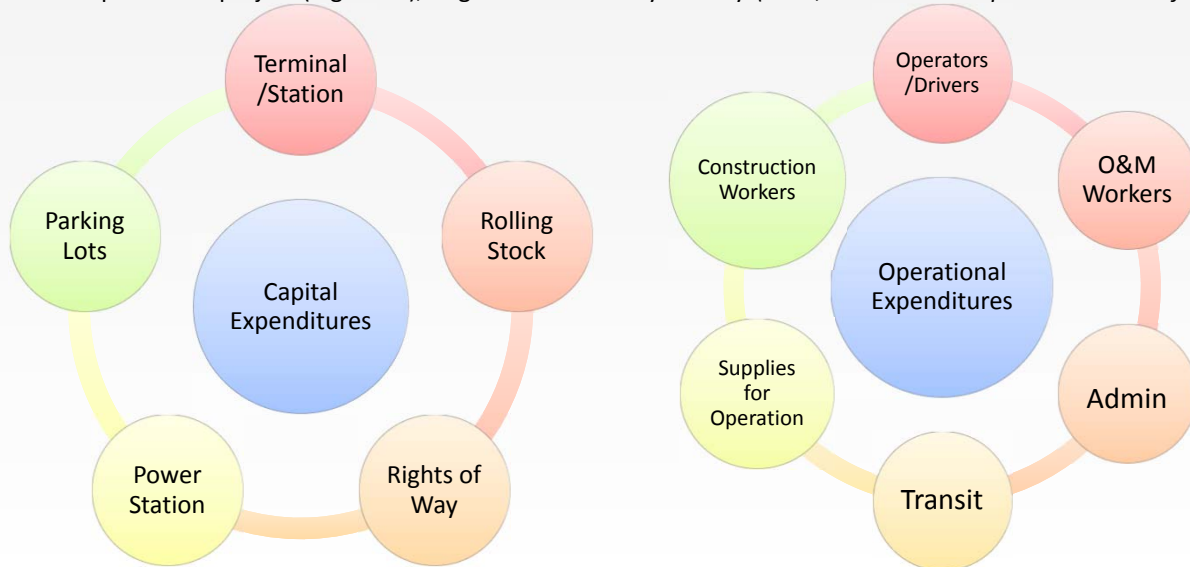
## Estimation of Direct, Indirect and Induced Investments



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## Direct Investments

Indirect investments are immediate capital and operational expenditures tied directly and immediately to the project. The source of the capital is the project (e.g. fares), or government entity directly. *(Note, some not all expenditures identified):*



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## Indirect and Induced Investment Effects of Expenditures

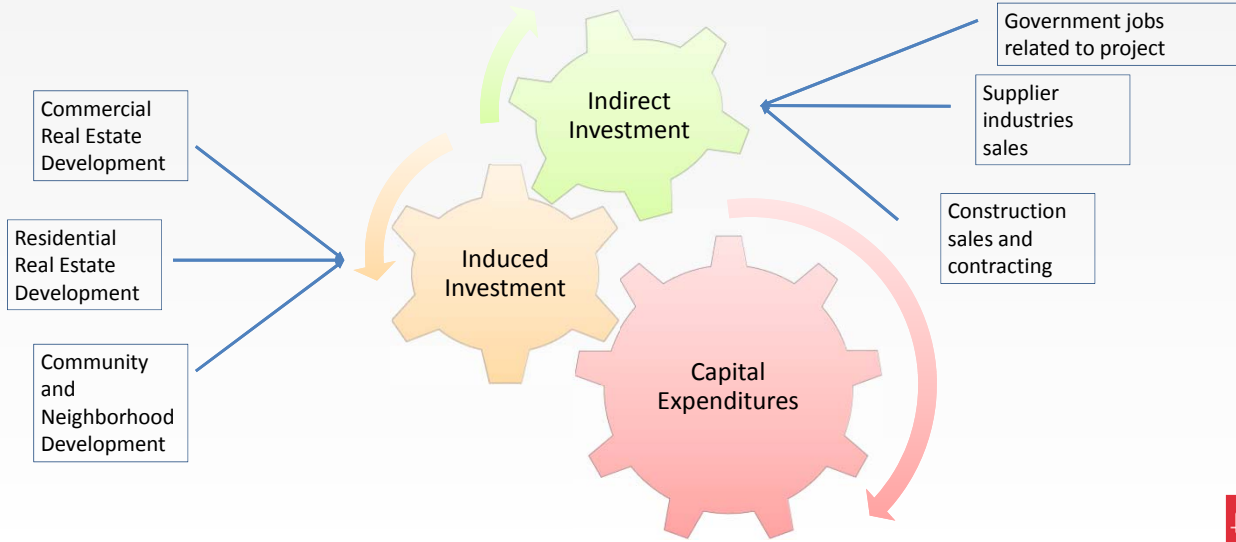
Induced/Indirect investments are subsequent expenditures tied directly and immediately to previous capital expenditures:

- *Indirect Investment* includes development and purchases of products related to capital investments (e.g. locally purchased fuel and contractor materials for terminal construction)
- *Induced Investment* includes residual investment following the result of capital investment (e.g. commercial and residential transit-oriented development)

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## Indirect and Induced Investment Effects of Expenditures (Continued)

Empirically, Induced/Indirect investments are significant subsequent investments that can be identified (*Note, some not all expenditures identified*):



## Improvement Impacts

## Travel Improvements

In assessing the economic impact for an HCT project, improvement in passenger travel and mobility is a critical factor that must be analyzed comprehensively. These improvement factors can be analyzed with data:

### Travel Time Savings

- Time savings due to improved services that road reduces congestion

### Reliability Improvements

- Reliability on travel for public transportation travelers due to road decongestion

### Travel Cost Savings

- Change in travel cost for current public transportation passengers due to new fare structures and decreased automobile usage

### Safety Improvements

- Accident reductions due to passengers moving from road to transit

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## Business Access Improvements

Improvement in access directly effects economic productivity and efficiency:

- **Mobility and Market Access:** Benefits for business from being accessible to a diverse set of customers and employees due to expanded HCT
- **Spatial Agglomeration Economies:** Increased access to similar and complimentary business and business activities due to expanded HCT; clustering resulting in higher productivity, efficiency and ultimately growth (e.g. Texas Medical Center)

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## Other Improvements

### Real Estate/Land:

The capitalization of increased access, mobility and potential for commercial clustering around the HCT development.

### Environmental:

Reduction of carbon footprint due to decreased vehicle utilization and CO2 emissions

### Quality of Life/Optionality:

The ability for citizens to have additional, reliable options for travel improves quality of life dynamics

## Additional Factors to Consider in Determining Impact

Mix of Jobs Indirectly Created

Mix between Capital and Operations Investments

Tax Revenue from Sales, Property Business and Income Generation

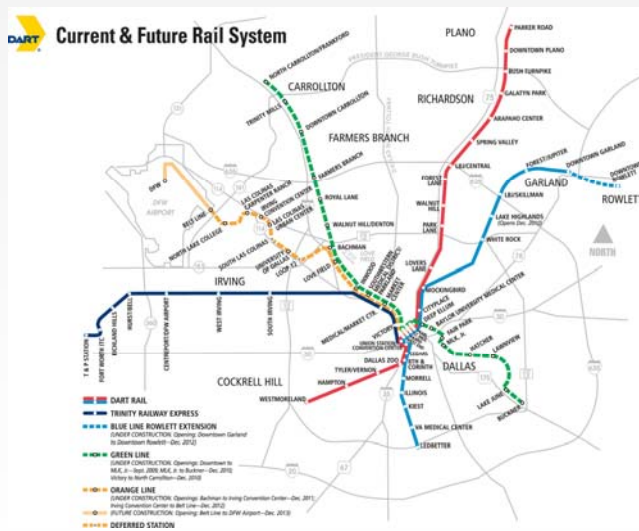
Cost Savings vs. Productivity (at individual, business, household and community levels)

Congestion Reduction Benefits

# Peer City Case Studies

## Dallas Metropolitan Area – Dallas Area Rapid Transit

Contracted agreement to design, build, operate, finance and maintain 16-mile light rail system connecting two counties



### Background Information

- 2016 Estimated MSA Population: 7,233,323
- 2010 Census MSA Density: 634 persons/square mile
- DART (Light Rail) – first section opened 1996
- TRE & DCTA A-Train (Commuter Rail)
- Streetcars: heritage (McKinney Ave Trolley) and modern (Dallas Streetcar)
- Las Colinas People-mover (Automated Guideway Transit)

### Transit Features

- Date Opened: 1996
- Route Length: 83.8 miles
- Four Lines (Red, Orange, Blue, Green)
- 39 stations currently



## Dallas Metropolitan Area – Dallas Area Rapid Transit

### What economic impacts were realized from cities?

- Return on Investment of \$6 Billion in existing development
- Increased accessibility
- Development of commercial clusters
- Real property value enhancement

### Who benefitted?

- Passengers have been provided with options in transportation
- Businesses within developed clusters

### Were there any shortcomings? What were they?

- Overall congestion goals have not been realized in the Dallas region

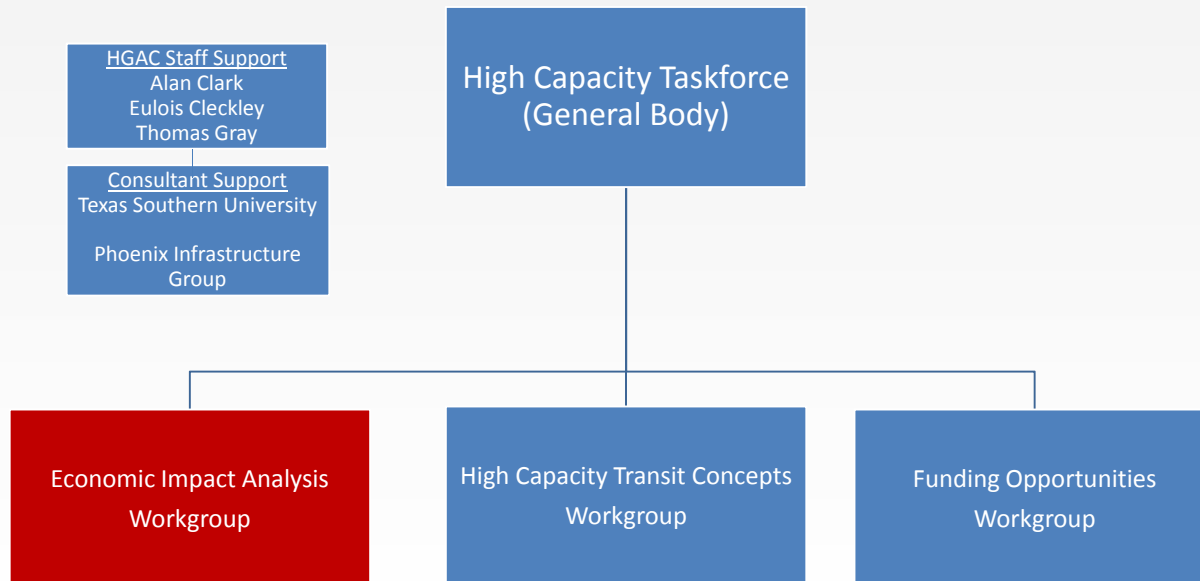
## Economic Impact Workgroup Breakout Session

## Economic Analysis Workgroup Breakout Session Agenda

- Purpose of Workgroup
- Workgroup Approach
- Key Topics to be Investigated First
- Meeting Schedule(s)
- Deliverables



## Taskforce Structure



## **Purpose of Economic Impact Analysis Workgroup**

- Develop approach to analysis economic impacts of HCT
- Evaluate how the Houston region can realize economic benefits from HCT
- Inform other workgroups of analysis



## **Workgroup Approach to Economic Impact Analysis- Activities and Assignments**

- October and November:
    - Research and analysis of peer cities
    - Catalog and assess economic impact possibilities
    - Evaluate implications of economic impact
- \*Phase One Deliverable



## Workgroup Approach to Economic Impact Analysis- Activities and Assignments

- February, March April
  - Develop analytical methods for economic analysis
  - Apply methods to Houston-Galveston region
  - Identify economic impacts for investment in HCT
- \*Phase Two Deliverable



## Key Deliverables

- Peer region assessment and case studies (HGAC staff)
  - July-September 2017
- **Report on economic impact of HCT (workgroup)**
  - **Phase One: July-October 2017**
  - **Phase Two: February 2018-April 2018**
- Report on HCT service concepts (workgroup)
  - November 2017-February 2018
- Report on funding and governance (workgroup)
  - Phase One: July-October 2017
  - Phase Two: February- April 2018
- Final report and recommendations (HGAC Staff)
  - May-August 2018



# Timeline

Activity	Jul-17	Aug-17	*Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18
Peer region assessment and case studies				★										
Economic impact analysis			★	★				★		★				
HCT service concepts			★	★		★		★						
Funding and governance			★	★				★			★			
Corridor focus groups										★	★		★	
Final report and recommendations														★

★ Full Taskforce Meeting

★ Deliverable/Outcome

★ Work Group Meeting

\*Taskforce workshop scheduled for September 29th

