

# **INTRODUCING TREDAIR**

**The economic impact tool for small airports**

**May 23, 2017**

# Agenda

- **Purpose and Background**
- **How TREDAIR Works**
- **Demonstration**
- **Questions and Answers**

# Why TREDAIR?

**EDR GROUP** ABOUT US OUR EXPERTISE SERVICES LIBRARY Search

## Economic evaluation & analysis services to support planning & policy decision-making

*We support planning and decision-making for public and private infrastructure-related projects, programs and policies.*

We address three issues that must be considered to evaluate the success of a project or the "business case" for an investment:

1. Does it accomplish its strategic (economic, social or environmental) goals?
2. Is it an efficient use of funds in terms of return on investment?
3. Is it feasible and effective in terms of financing and operation?

**OUR ECONOMIC EXPERTISE**

- Transportation
- Energy & Environment
- Economic Growth Strategy
- Urban Development
- Software

**SERVICES**

- economic impact analysis
- Benefit-Cost Analysis
- Finance Analysis
- Multiple Criteria Analysis
- Program Evaluation
- Guidebooks & Guidance Tools
- Scenario Planning

**TRENDING TOPICS**

- Connectivity & Accessibility
- Environment and Green Technologies
- Prioritization
- Energy Resource Portfolios
- Smart Growth & Cluster Development
- Sustainability & Resiliency
- Multimodal Vision Plans

**LATEST NEWS**

- "Strategic Transportation Investments For Economic Development: Making The Connection Work For You"
- Lynchburg News & Advance Article Features take group study on impact of region's Transportation System
- Practices For Evaluating The Economic Impacts And Benefits Of Transit (TRB Synthesis 128)
- High-Speed Rail Work Featured In APTA Newsletter
- Now Available: Presentations From TRB Annual Meeting 2017

## ACRP 03-31, Aligning Community Expectations with Airport Roles

## ACRP Report 132, The Role of U.S. Airports in the National Economy

**TREDIS** Products Free Tools Success Stories Resources About TREDIS

### Active transportation options - bicycle and pedestrian

#### Transportation Planning Economics

The TREDIS Suite provides Benefit-Cost Analysis, Economic Impact Analysis, and Financial Impact Analysis for transportation planning and shows their implications. It is available for any county, state or province in the United States, Canada, or Australia, and can also be applied in other countries.

**Key Capabilities**

- BCA: Benefit-Cost Analysis**  
Assess societal benefits and efficiency of investments, including wide economic benefits.
- EIA: Economic Impact Analysis**  
Assess impacts on jobs and income growth via a dynamic regional economic model.
- FIA: Financial Impact Analysis**  
Assess the revenue and public-private partnership, and impacts of toll and fee policies.
- Freight and Trade Module**  
Assess commodity flow and trade impacts and the public-private implications.

# What Does TREDAIR Do / Not Do?



## TREDAIR - Assess Role:

- In the Local Economy
- As a Job Center
- As a Gateway for Visitors

Designed to be simple and affordable, TREDAIR cannot be used to answer economic questions unique to an airport.

Studies may be required to properly investigate those questions.

# Who Can TREDAIR Best Help?



## Airport Classification

Large Hub

Medium Hub

Small Hub

Non-Hub Primary

**National\***

**Regional**

**Local**

**Basic**

**Unclassified**

**Non-NPIAS**

Non-Primary  
Airports

\* Case by Case Assessment

# Sources of Data for Using TREDAIR



Sources	TREDAIR Analysis Segment	Sources
<ul style="list-style-type: none"><li>• Airport Records</li><li>• Airport Manager</li><li>• Ask Tenant Contacts</li></ul>	<b>On-Airport</b>	Conduct Tenant Survey
<ul style="list-style-type: none"><li>• Talk to Fixed Base Operator (FBO)</li><li>• Visitors Bureau / Tourism</li><li>• Last Statewide Study</li></ul>	<b>Visitor Spending</b>	Conduct GA Survey (Pilot & Passengers)



# What Does TREDAIR Do?

## Estimates the economic impacts of an airport

- Capital & Operational Spending
- Visitor Spending
- On-Airport Tenants

## Reports:

Jobs, Labor Income, Value-Added, & Business Sales



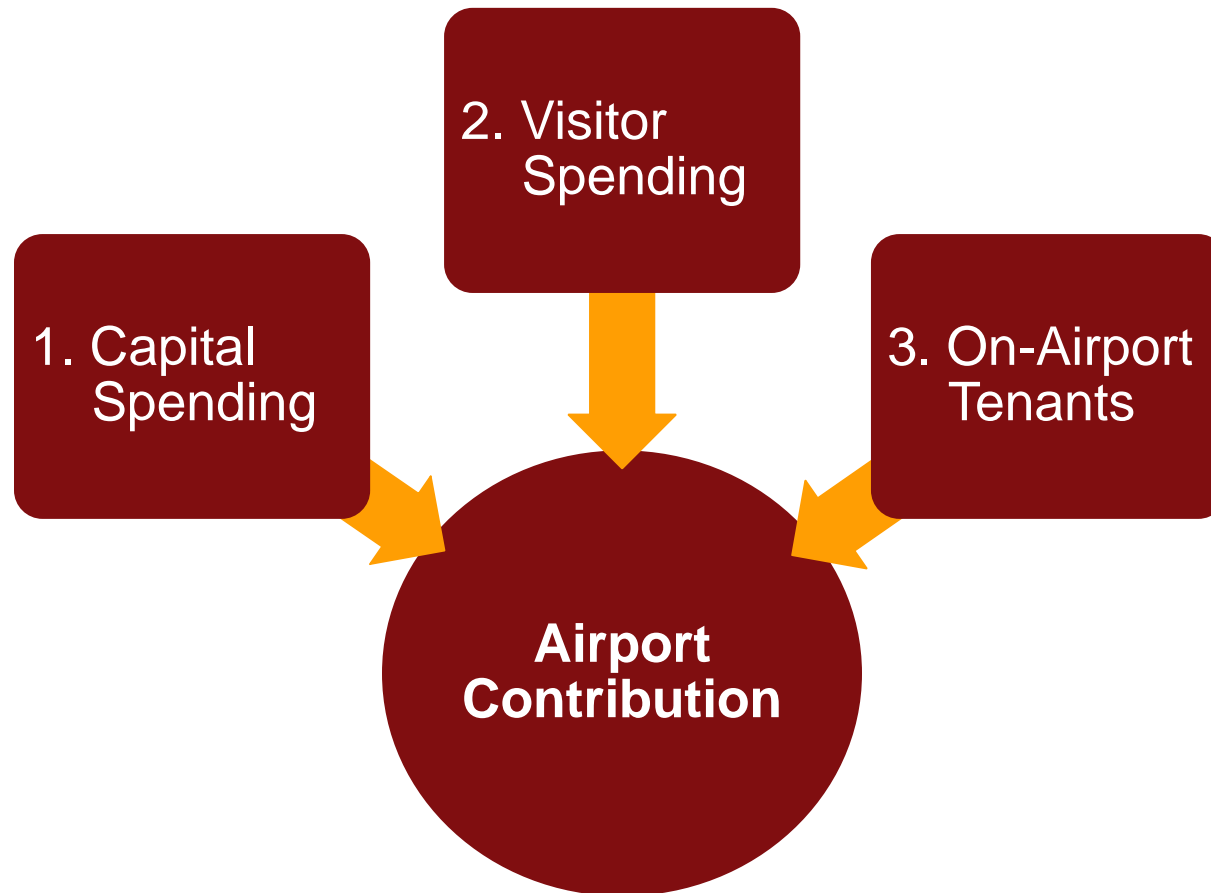
# How is TREDAIR useful for Small Airports?

## Results provided by TREDAIR

- Demonstrates economic contribution to community
- Builds support for airport
- Assesses strategic, planning & funding decisions



# Sources of Economic Contribution



- **Current Operations**
- **Future Operations based on Airport Master Plan**

# 1. Capital & Operational Spending

## Capital Construction

- Taxiway, Runway, & Terminal

## Other Capital Expenses

- Not Typical in airport budget
- One-Time Projects

## Operational

- Operate & Maintain airport

Common Sources of Information: Airport Master Plan, Operational & Capital Budgets

## 2. Visitors

### Commercial

- Enplanements
- Percent Visitors

### General Aviation

- Operations
- Percent Transient
- Average People Per Operation

### Common Sources of Information

- Airport Data / Airport Management
- Terminal Area Forecasts - FAA

## 2. Visitor Spending

Lodging

Food & Beverage

Local Transportation

Retail

**+** Entertainment

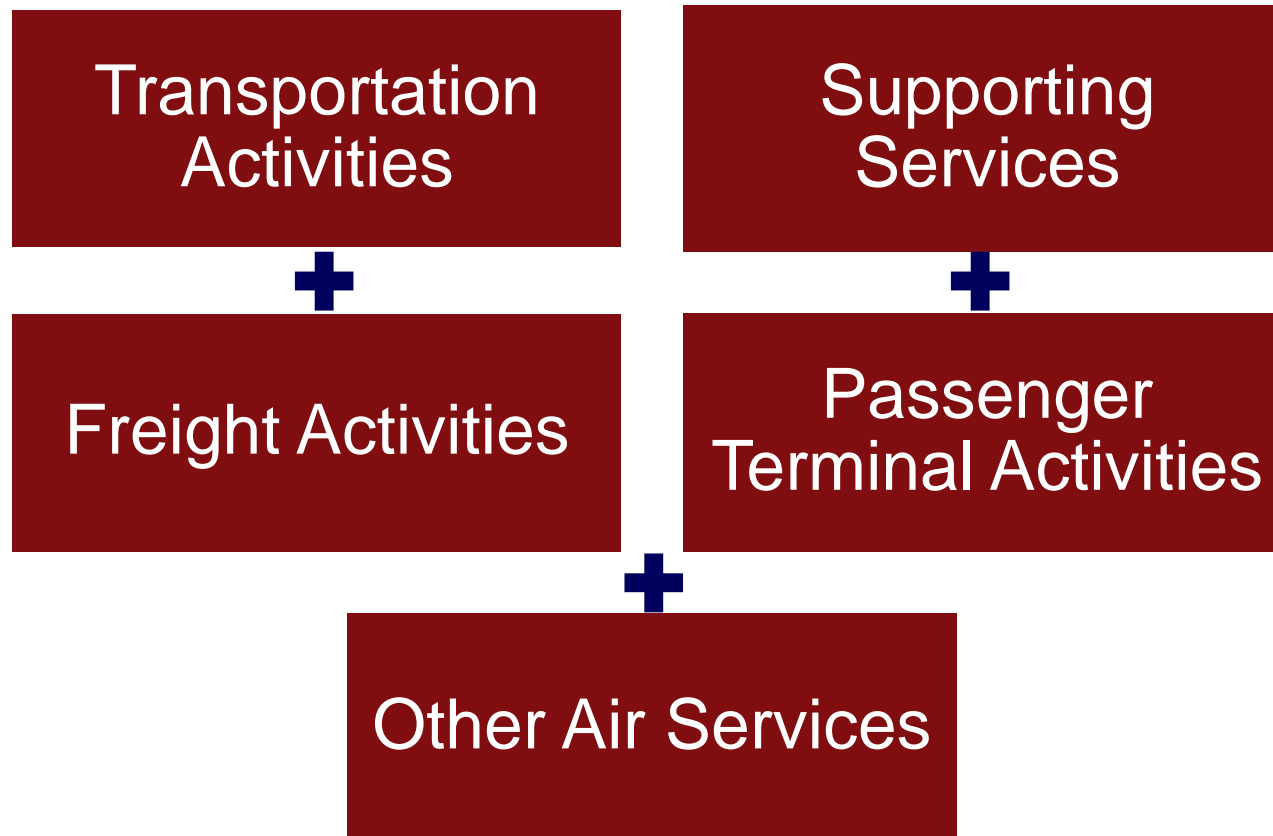
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**Total Visitor Spending**

Common Sources of Information:

State / Local Tourism Bureaus, University Research Centers

### 3. On-Airport Employment (On-Site)



Common Sources of Information: Airport Administration

# Economic Impacts

## Economic Impacts of Investments

### Business Sales (Output)



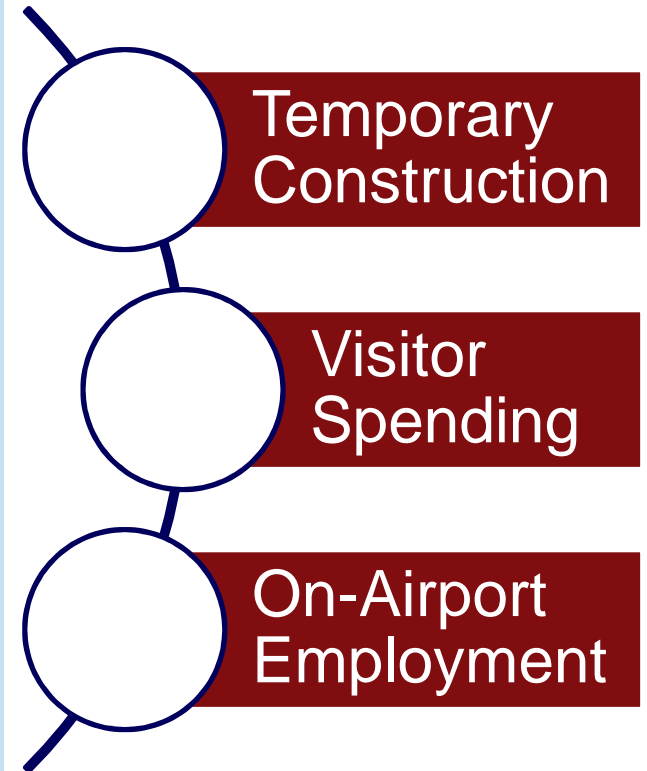
**Profits &  
Taxes**

**Labor  
Income**

**Cost of  
Purchased  
Goods and  
Services**

**Value  
Added**

**Jobs**



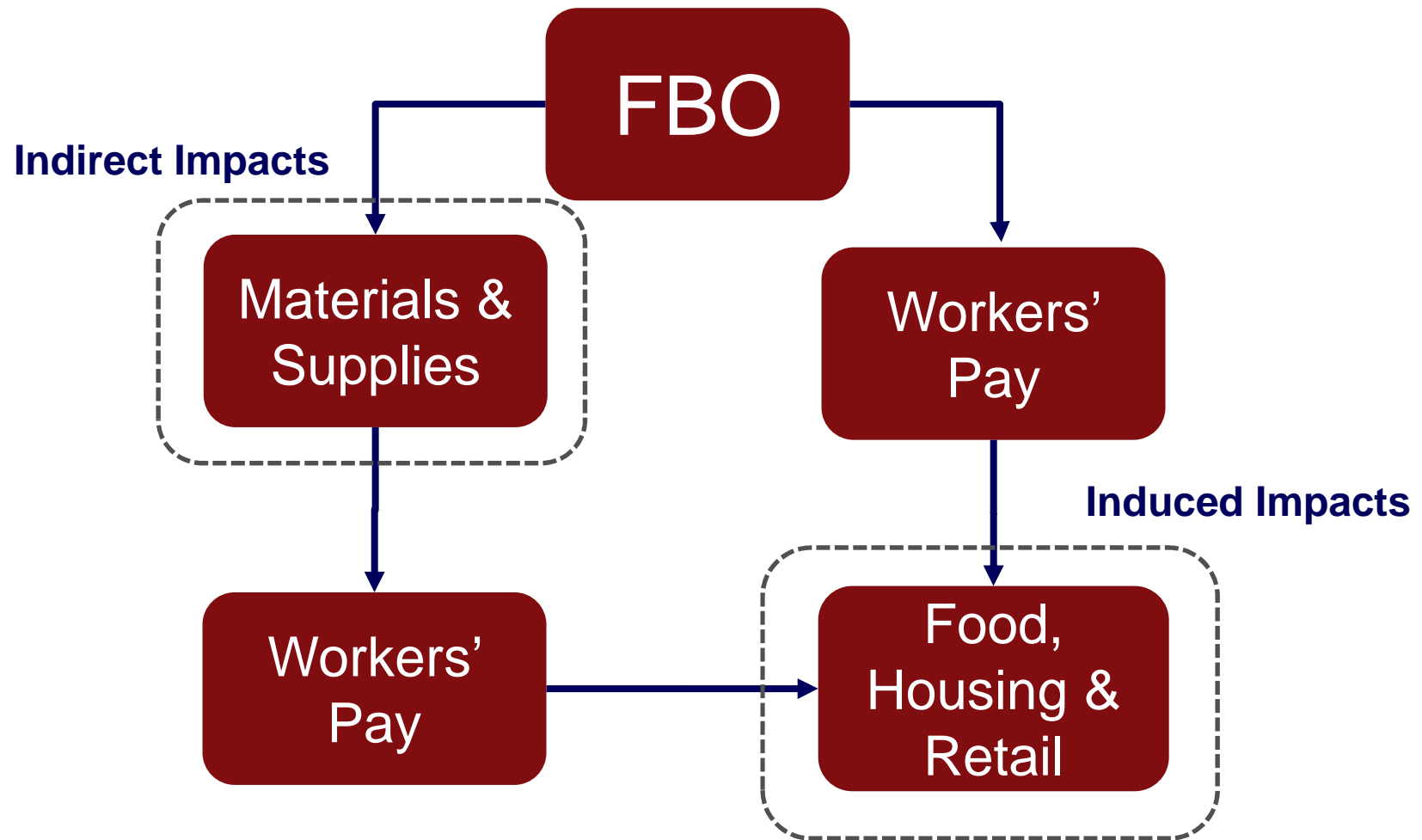
**Temporary  
Construction**

**Visitor  
Spending**

**On-Airport  
Employment**

Icons created by Wilson Joseph for the Noun Project

# Indirect & Induced Impacts



**TREDAIR**

# Live Demonstration



# Analysis Page

**TREDAIR**

**ANALYSIS** SPENDING EMPLOYMENT RESULTS

CREATE NEW ANALYSIS

**Current Contract:** TREDAIR Test

**Current Analysis:** TREDAIR Example

**Analysis Notes:**

**Region:** San Joaquin County, CA

ANALYSIS PROPERTIES

DELETE ANALYSIS

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# Capital, Operations, & Visitor Spending

**TREDAIR**

ANALYSIS **SPENDING** EMPLOYMENT RESULTS

	Capital	Operational
Airport Annual Budget	\$2,000,000	\$250,000
Other On-Airport Capital Expenditures	\$500,000	

**COMMERCIAL**

# Enplanements (people)	0
% Visitors	0

**GENERAL AVIATION**

# Operations	100,000
% Transient operations	50
Average # of people per operation	4

**Visitor Spending**  Detail  Total

**COMMERCIAL**

Lodging \$ per trip	\$0
Restaurant/bar \$ per trip	\$0
Local transportation \$ per trip	\$0
Retail \$ per trip	\$0
Entertainment \$ per trip	\$0
<b>Total spending \$ per trip</b>	<b>\$0</b>

**GENERAL AVIATION**

Lodging \$ per trip	\$35
Restaurant/bar \$ per trip	\$55
Local transportation \$ per trip	\$42
Retail \$ per trip	\$39
Entertainment \$ per trip	\$13
<b>Total spending \$ per trip</b>	<b>\$184</b>

# On-Airport Employment

**TREDAIR**

ANALYSIS SPENDING **EMPLOYMENT** RESULTS

Expand All

Collapse All

SAVE

## Onsite Transportation Activities (Hide Details..)

Activity	Employment
Airline Companies	20
Airport Terminal Facilities & Administration	4
Car Rental	0
Charter Services other than FBO	0
FBO	4
Rental of Aviation Equipment	0
Repair of Aviation Equipment	4
Sale of Aviation Equipment	0

## Onsite Supporting Services (Show Details..)

## Onsite Freight Activities (Show Details..)

## Onsite Passenger Terminal Activities (Show Details..)

## Other Air Services (Show Details..)

# Summary Results

### Economic Impact by Industry

Economic Impacts Summary

Jobs by Sector (On - Airport)


Jobs by Sector (Temporary Construction)

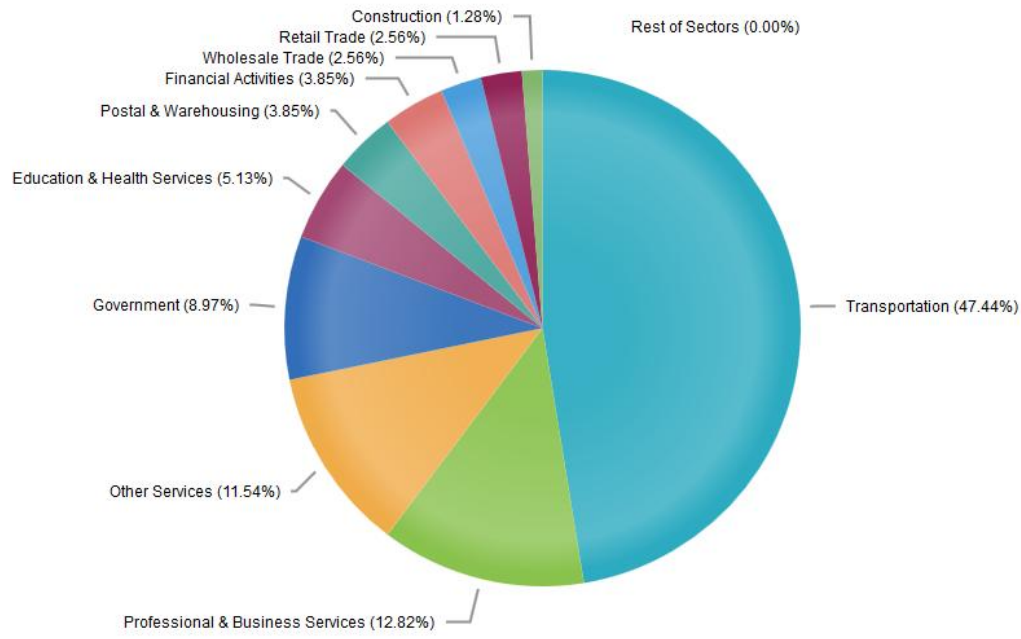
Jobs by Sector (Visitor)

### Economic Impacts Summary

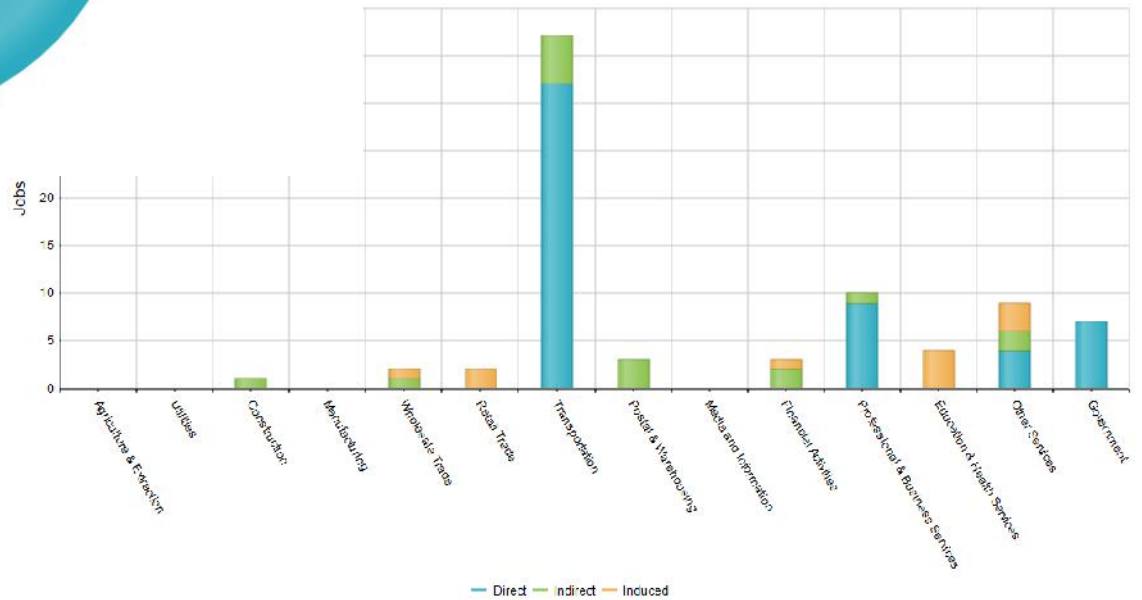
Impact Type	Jobs	Labor Income (\$M)	Value Added (\$M)	Output (\$M)
<b>Direct Effect</b>	<b>262</b>	<b>12.355</b>	<b>18.508</b>	<b>30.436</b>
On - Airport	52	4.273	7.045	12.276
Temporary Construction	13	0.901	1.200	2.341
Visitor Spending	197	7.181	10.263	15.819
<b>Indirect (Supplier) Effect</b>	<b>34</b>	<b>4.051</b>	<b>6.388</b>	<b>11.397</b>
On - Airport	15	1.599	2.520	5.020
Temporary Construction	0	0.305	0.506	0.882
Visitor Spending	19	2.147	3.362	5.496
<b>Induced (Income Responding) Effect</b>	<b>34</b>	<b>3.877</b>	<b>6.760</b>	<b>10.591</b>
On - Airport	11	1.387	2.419	3.790
Temporary Construction	0	0.285	0.497	0.778
Visitor Spending	23	2.205	3.844	6.023
<b>Total Effect</b>	<b>330</b>	<b>20.283</b>	<b>31.655</b>	<b>52.424</b>
On - Airport	78	7.259	11.984	21.085
Temporary Construction	13	1.491	2.203	4.001
Visitor Spending	239	11.533	17.469	27.338

# Data Charts

Jobs by Sector (On - Airport) 



Jobs by Sector (On - Airport) 



# Inputs To Estimate Future Impacts

Capital and O&M	2016	2036
Airport Annual Budget	\$2,000,000	\$2,500,000
Other Capital Expenditures	\$500,000	\$750,000
Operational	\$250,000	\$500,000
<b>Total</b>	<b>\$2,750,000</b>	<b>\$3,750,000</b>

Visitor Spending (GA)	2016	2036
# of Operations	100,000	134,686
% Transient Operations	0.5	0.5
Avg. # People per Operation	4	4
<b>Total Visitors</b>	<b>100,000</b>	<b>134,686</b>

Annual Growth Rate: 1.50%

	2016	2036
Spending Per Trip	\$184	\$184
<b>Total Visitor Spending</b>	<b>\$18,416,000</b>	<b>\$24,804,000</b>

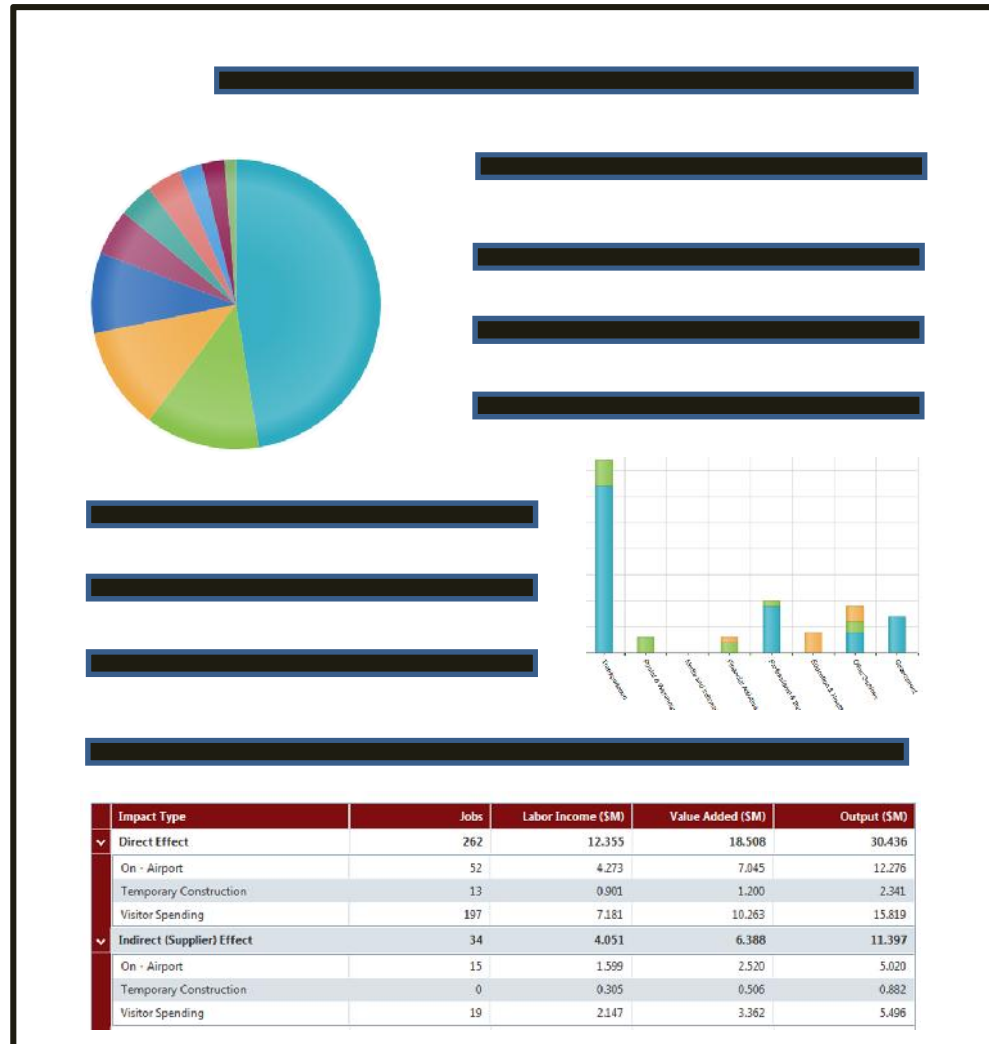
Airport Activity	2016 Employment	2036 Employment
Airline Companies	20	23
Terminal Facilities & Admin.	4	5
FBO	4	5
Repair of Aviation Equipment	4	5
Building Maintenance	2	2
Federal Gov't (non-military)	5	6
Public Safety (Police, Fire)	2	2
Security/TSA	7	8
On-Site Restaurant/Bar	4	5
<b>Total</b>	<b>52</b>	<b>60</b>

Annual Growth Rate: 0.75%

# Impact Comparison: 2016 - 2036

Impact Type	Jobs		Labor Income (\$M)		Value Added (\$M)		Output (\$M)	
	2016	2036	2016	2036	2016	2036	2016	2036
On - Airport	78	93	\$7.3	\$8.5	\$12.0	\$14.0	\$21.1	\$24.7
Temporary Construction	13	17	\$1.5	\$1.9	\$2.2	\$2.9	\$4.0	\$5.2
Visitor Spending	239	330	\$11.5	\$15.5	\$17.5	\$23.5	\$27.3	\$36.8
<b>Total Effect</b>	<b>330</b>	<b>440</b>	<b>\$20.3</b>	<b>\$26.0</b>	<b>\$31.7</b>	<b>\$40.4</b>	<b>\$52.4</b>	<b>\$66.7</b>
Difference	110		\$5.7		\$8.8		\$14.3	

# Communicating Economic Value of an Airport





# TREDIS vs. TREDAIR

## TREDIS Capabilities:

- Adjust Industry Production: Jobs & Labor Income
- More Industry Detail – 536 Sectors
- Access to TREDIS Suite of Reports (Occupation, Taxes, etc.)



# TREDAIR

*The economic impact tool for small airports*

## For More Information...

**TREDIS Software Group**  
155 Federal Street, Suite 600  
Boston, MA 02110  
(617) 303-0424

[www.tredis.com](http://www.tredis.com)  
info@tredis.com  
sales@tredis.com