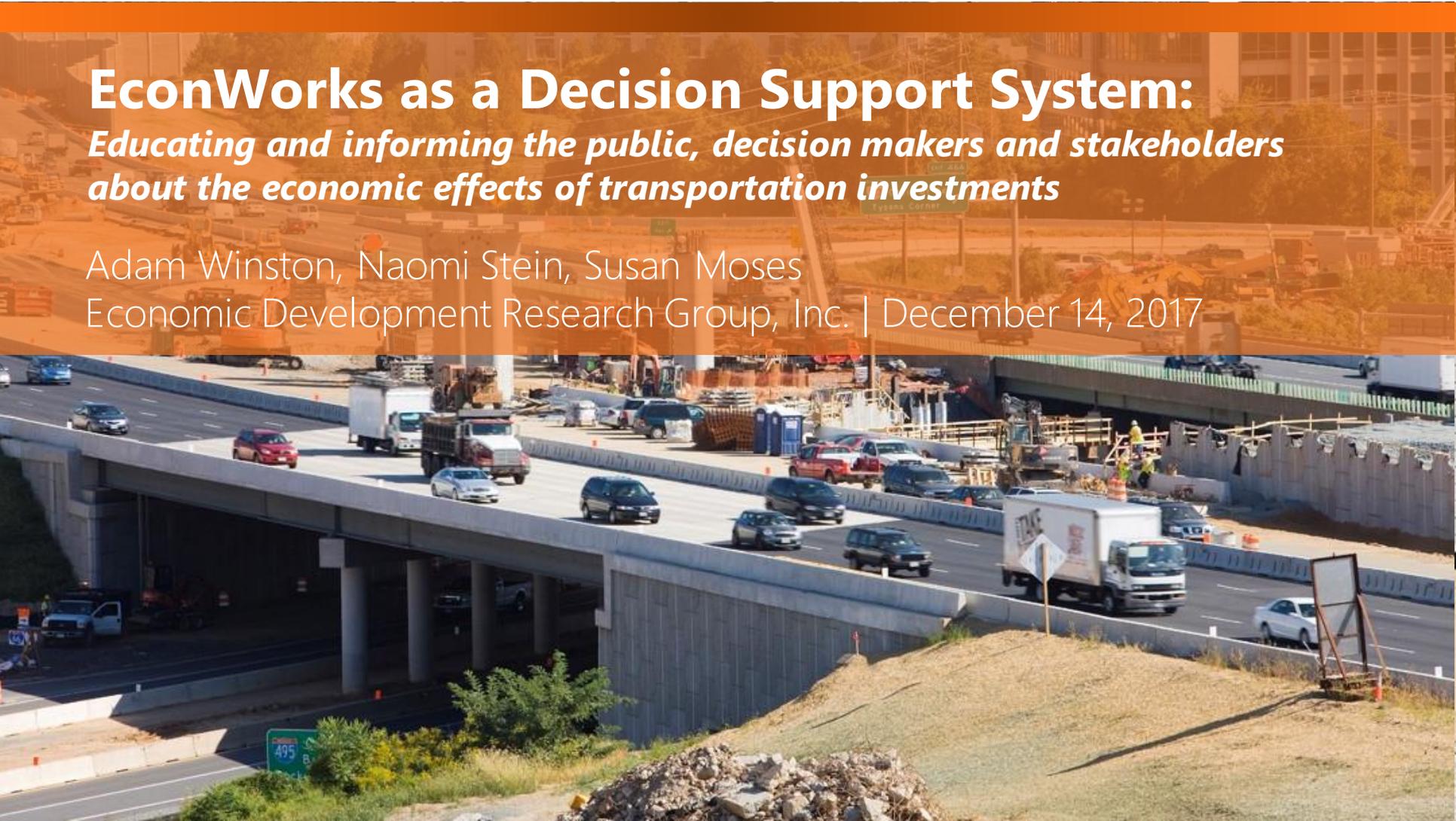


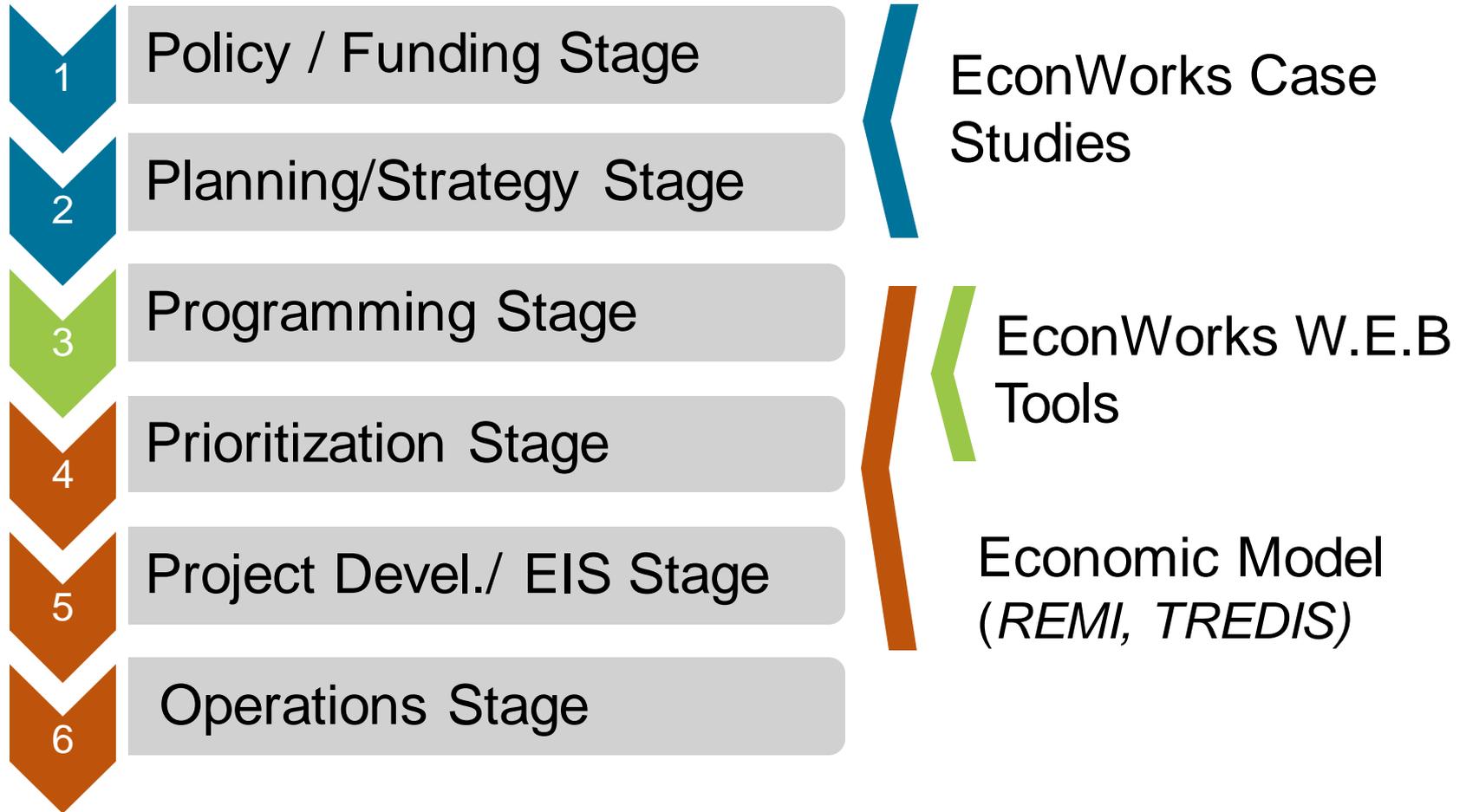


# **EconWorks as a Decision Support System:** *Educating and informing the public, decision makers and stakeholders about the economic effects of transportation investments*

Adam Winston, Naomi Stein, Susan Moses  
Economic Development Research Group, Inc. | December 14, 2017



- **EconWorks and the Planning Process**
- **EconWorks and Decision-making Support**
  - Review & Refine to Maximize Project Performance
  - Making the Case for Partnerships
  - Communicating with the Public
- **Questions**
- **Review of EconWorks Webinar Series**

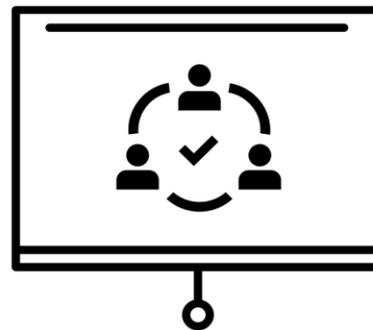
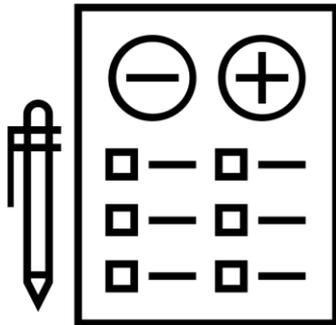


Ref: SHRP2 Collaborative Decision-Making Framework

Review &  
Refine to  
Maximize  
Project  
Performance

Making the  
Case for  
Partnerships

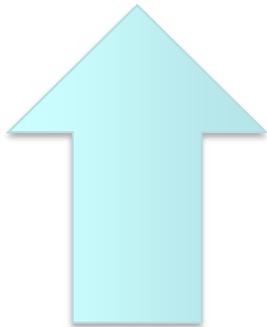
Communicate  
with the Public

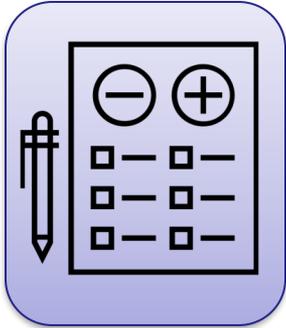


Review &  
Refine to  
Maximize  
Project  
Performance

Making the  
Case for  
Partnerships

Communicate  
with the Public





Business representatives from multiple locations within your district have identified the need for a new interchange to support local economic development...

...but in this constrained funding environment, funds must go as far as possible.

***How might you review & refine project concepts so that those with the most potential can advance into more detailed planning?***

# From the Headlines...

## Reconfiguring I-90/495 junction will improve safety, boost **economic** ...

Milford Daily News - Nov 17, 2017

Reconfiguring the troublesome **interchange** for the first time since the 1960s will boost safety, improve **traffic** flow at the junction and surrounding routes – including the **interchange** of I-495 and Rte. 9 – and be a boon for **economic development**. Several important developments going up nearby are primed ...



## Proposed I-29 exit hopes to prove **economic development**

Sioux City Journal - Nov 14, 2017

SIOUX CITY | Based on a traffic model, a new Interstate 29 **interchange** between Sergeant Bluff and Port Neal could not be justified, officials said. But if the proposed ramps can be shown to boost **economic development** in rural Woodbury County the \$20 million project could still move forward, county supervisors heard ...



## This 272-acre project could transform I-40 **interchange**, ease Orange ...

Durham Herald Sun - Nov 13, 2017

The Hillsborough EDD is one of three **economic development** districts created over 20 years ago to bring businesses and jobs to the county's **highway** corridors; the others border Alamance and Durham counties. However, there has been little interest from developers, in part because the districts lacked ...



## New report says I-84 **interchange** would boost **economy**, UDOT ...

Standard-Examiner - Nov 10, 2017

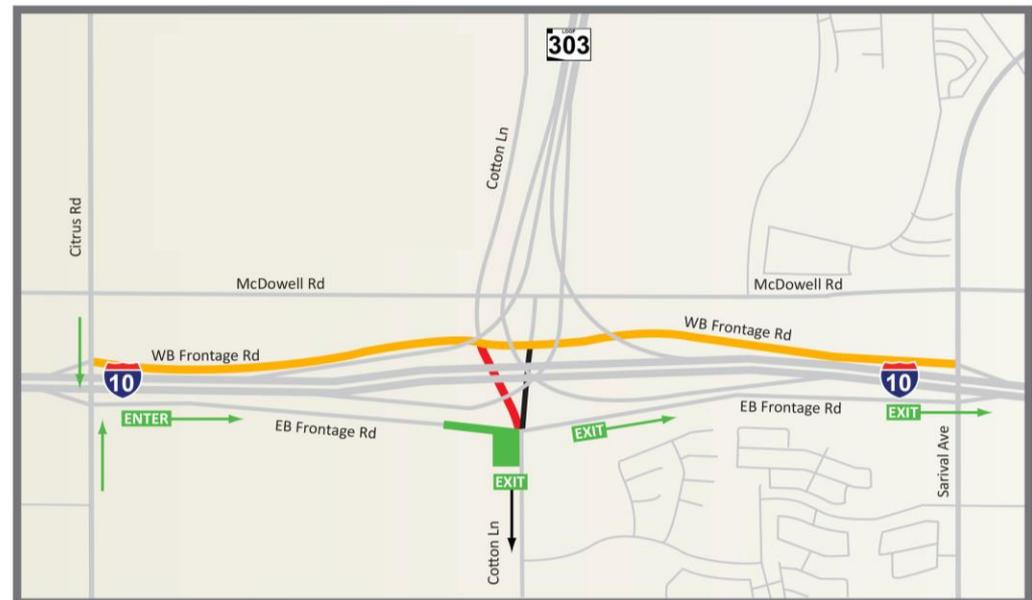
A proposal is in place to **develop** an Interstate 84 **interchange** at this site, S.R. 167 and Old **Highway** Road in Mountain Green. ... GREEN — A new report says speeding up a project to build a full **interchange** on Interstate 84 in Mountain Green would help pump millions of dollars into the **economy**.

# Illustrative Example

To illustrate, let's build our search from a real project...

## Interstate 10/Loop 303

- Location: Maricopa County, AZ – Suburbs of Phoenix
- Urban/Class Level: Metro
- AADT: ~100-150,000
- Cost: \$134 M



# Case Study Search



## Welcome to EconWorks

EconWorks is a collection of web-based tools designed to help planners incorporate economic analysis into early project decision making. EconWorks includes:

**Case Study Search:** a library of case studies, searchable by project attributes, to demonstrate the economic impacts of transportation investments in other communities.

**Assess My Project:** A web-based tool that estimates the economic impact of potential projects based on parameters defined by users.

**Analysis Tools:** Downloadable

Take a survey!

Tools
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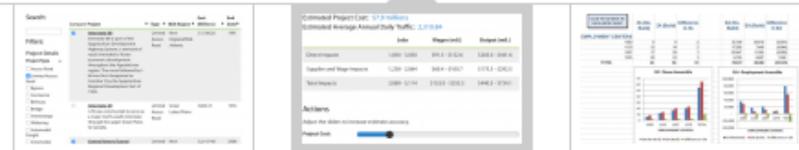
Case Study Search
Assess My Project
Analysis Tools
Economic Analysis Training
Research Reports
2017 Webinar Series

	7.9 millions		
	Daily Traffic: 2,310.84		
	<b>Jobs</b>	<b>Wages (mil.)</b>	<b>Output (mil.)</b>
D	1,830 - 3,050	\$91.5 - \$152.6	\$265.0 - \$441.6
S	1,238 - 2,064	\$60.4 - \$100.7	\$175.5 - \$292.5
<b>Total Impacts</b>	<b>3,069 - 5,114</b>	<b>\$152.0 - \$253.3</b>	<b>\$440.5 - \$734.1</b>

**Actions**  
Adjust the sliders to increase estimate accuracy.

**Project Cost:**

Assess My Project Interactive Online Tool



- Interchange
- Metro
- Similar volumes, but not too restrictive

## Project Type

- Access Road
- Limited Access Road
- Bypass
- Connector
- Beltway
- Bridge
- Interchange
- Widening
- Freight Terminal
- Station
- Service Improvement
- Line Extension
- New Line

## Geographic

Region 

Length 

Daily Use 



75000 - 150000

(AADT or Weekday Riders)

Topography 

Urban/Class Level 

- Rural
- Mixed
- Metro
- Core

# Similar Projects in the Database

Key Words:

3 Results Found

[VIEW ALL CASES](#)

Filters:

Project Details

Project Flags ▼

Project Type ▼

Access Road

Limited Access Road

Project	Type	Mode	BEA Region	Cost (Millions)	End Date	Length	AADT
<a href="#">I-435 &amp; Nall/Roe Ave. Interchange</a>	Interchange	Highway	Great Lakes / Plains	\$68.38	1997	0.00	80,278
<a href="#">Interchanges in Major Urban Areas - Bloomington, MN</a>	Interchange	Highway	Great Lakes / Plains	\$263.90	1991	0.00	147,000
<a href="#">I-95 and Route 128 Peabody</a>	Interchange	Highway	New England/Mid-Atlantic	\$77.93	1988	1.50	86,100

# Case 1: I-435 & Nall/Roe Ave.

## Project: I-435 & Nall/Roe Ave. Interchange

[PRINT CASE STUDY](#)

### Description:

The Nall/Roe Avenue Interchange, built specifically to keep Sprint office jobs in the Kansas City area, provides east-west access from Interstate 435 to Nall Avenue, which previously bridged Interstate 435, and reconfigures the interchange with Roe Avenue. The project also included widening I-435 from 6 lanes to 8 lanes to accommodate traffic growth.

### Costs

**Project Year of Expenditure (YOE):** N/A

**Actual Cost (YOE \$):** 48,400,000

**Planned Cost (YOE \$):** 48,400,000

**Actual Cost (curr \$):** 68,377,068

# Case 1: I-435 & Nall/Roe Ave.

## County Impacts for: Johnson

NOTE: All impact dollar values are in 2013\$

Measure	Direct	Indirect	Total
Jobs	14000.00	9520.00	23520.00
Income (in \$M's)	766.67	521.34	1288.01
Output (in \$M's)	2323.33	1579.86	3903.19

 Direct impact: 14,000 jobs

## Insights from narrative:

### 1.0 Synopsis

In the mid 1990's, Sprint planned to consolidate several Kansas City area offices and move their operations to another state. To retain Sprint, the state committed to build a \$48 million interchange in Overland Park, a community in the southwestern Kansas City suburbs, if the company would locate its operations at an existing business park. With a projected 14,000 employees planned to work at the Sprint facility, additional roadway capacity was needed to accommodate increased traffic volumes. Total job growth in the vicinity of the Nall Avenue interchange has now reached over 17,500 jobs, including the Overland Park convention center and several medical offices. Development also is occurring on the North side of I-435, due to the increased access provided by the new interchange.

---

### 2.2 Community Character & Project Context

Overland Park in Johnson County, Kansas is the second largest city in Kansas. With a 2000 population of 149,080, the city has grown at an average rate of 9% per year since 1990. It is an affluent commuter area that ranked 9th in CNN/Money Magazine's "100 Best Cities to Live in the United States." Overland Park is the metro areas' prime suburban corporate campus location, considered equal in status to downtown Kansas City. Known for high-tech, engineering, and retail business sectors, it is one of the metropolitan area's largest employment centers. In 1999, residential property values averaged \$160,101 compared to the U.S. average of \$83,500 for the same year. Over 26 million square feet of office space (half of the total metropolitan area stock) is located in Overland Park. The city offers one of the lowest property taxes in the Kansas City area (because budgets are financed through sales tax) and is generous with tax abatements to local businesses.



Project addressed a specific private sector need  
Builds on an existing business cluster

## Insights from narrative:

### 5.0 Non-Transportation Factors

Overland Park has attracted corporate headquarters for many years. It offers a well-educated work force and very good public schools, both of which attract corporations to the area. The community also offers tax incentives to businesses willing to locate in Overland Park. Although the interchange facilitated the location of the Sprint Headquarters to Overland Park, the incentives, amenities, and character of community also influenced business location decisions and associated economic impacts.



Build on other assets/supporting factors:  
Educated workforce & quality schools  
Tax incentives

## Key Factors Contributing to Economic Development:

### ✓ **Business Climate:**

- ✓ Tax incentives to businesses willing to locate in Overland Park
- ✓ Targeting specific rather than theoretical business needs – direct engagement with business community

### ✓ **Other Contributing Factors:**

- ✓ Leverage positive dynamics of business clusters
- ✓ Location also competitive along other site selection criteria – e.g. quality workforce & schools

# Similar Projects in the Database

Key Words:

3 Results Found

[VIEW ALL CASES](#)

Filters:

Project Details

Project Flags ▼

Project Type ▼

- Access Road
- Limited Access Road

Project	Type	Mode	BEA Region	Cost (Millions)	End Date	Length	AADT
<a href="#">I-435 &amp; Nall/Roe Ave. Interchange</a>	Interchange	Highway	Great Lakes / Plains	\$68.38	1997	0.00	80,278
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# Case 2: I-95 & Route 128 Peabody

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[FAQ](#)

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[Home](#)

## Project: I-95 and Route 128 Peabody

[PRINT CASE STUDY](#)

### Description:

Construction of an interchange between US 1/I-95/MA 128 at Peabody, Massachusetts. Project included a direct connection between i-95 and MA 128, realignment of MA 128 north of the interchange, and a second interchange from MA 128 at Centennial Drive and Forest Street in Peabody.

### Costs

**Project Year of Expenditure (YOE):** 1987

**Actual Cost (YOE \$):** 38,000,000

**Planned Cost (YOE \$):** N/A

**Actual Cost (curr \$):** 77,925,757

# Case 2: I-95 & Route 128 Peabody

## County Impacts for: Essex

NOTE: All impact dollar values are in 2013\$

Measure	Direct	Indirect	Total
Jobs	3100.00	2077.00	5177.00
Income (in \$M's)	174.58	116.97	291.55
Output (in \$M's)	493.61	330.72	824.33

 Direct impact: 3,100 jobs

## Insights from narrative:

### 1.0 Synopsis

In 1984, the Federal Highway Administration approved plans for the completion of an interchange between Route 128 and Interstate-95 in Peabody, Massachusetts. The project included a six-lane section of I-95 on new alignment, and the realignment of MA 128 through a new semi-directional T interchange, as well as the creation of a new interchange at Centennial Drive and Forest Street in Peabody. The project was built and opened to traffic in 1988. It is responsible for an estimate 3,100 direct jobs.



### 2.1 Location & Transportation Connections

The Route 128/I-95/US Route 1 interchange project is located in the City of Peabody, Essex County, Massachusetts approximately 15 miles north of Boston and the Logan International Airport. The project completes a link between I-95/MA Route 128 south, MA Route 128 north (to Gloucester), and US Route 1 (north-south), and was part of the completion of Interstate 95, which runs from Florida to Maine along the eastern seaboard. The project included a major interchange connecting these routes, as well as the realignment of MA Route 128 northeast of the interchange, upgrading the road to freeway standards with three lanes in each direction through Peabody to Beverly, and providing a new interchange at Centennial Drive/Forest Street in Peabody. The realignment of Route 128 and the interchange at Centennial Drive/Forest Street opened up approximately 650 acres of land for commercial and industrial development, helping Peabody compete for business with communities farther south along Route 128.



Project created substantially increment in access on a major new corridor

## Insights from narrative:

### 4.2 Demographic, Economic & Land Use Impacts

The interchange has had dramatic impacts on the economic vitality of the City of Peabody. Before the project was built, employment in the City was declining. The unemployment rate exceeded the rate for the Boston metropolitan area. In the 1970s, the City had planned an industrial park on land east of Route 1 and south of Route 128, taking land for the park by eminent domain, but had not been able to attract tenants.

In the mid-1980s, the City commissioned a market study to evaluate the potential impacts of the interchange on a 648 acre area adjacent to the interchange, and Routes 1 and 128. The existing uses on this land at the time of the study included 105 acres of residential, 24 acres general business, 20 acres of office, 14 acres of trailer park, 20 acres of private recreation land, 32 acres of light industrial uses, a 75 acre landfill, and 358 acres of undeveloped land. The study identified several characteristics that made this land particularly competitive for new light industrial and office development, including the large size of available parcels, the new visibility of the site provided by the interchange and highway improvements, the availability of Urban Development Action Grant funding for the site, and the proximity of the site to highway and airport access. The study estimated that, over a 21 year period, the area could absorb 650,000 square feet of office space, 1.7 million square feet of research and development and light industrial space, and 300,000 square feet of distribution space.



Large parcels conducive to development  
Urban Development Grant funding  
Proximity to airport

# Case 2: I-95 & Route 128 Peabody

## Insights from narrative:

To accommodate the projected development and ensure that the business park developed in a controlled and cohesive manner, the City created a Designated Development District for a 900 acre area. This allowed the City to better address site-specific development and environmental issues, create a unified and predictable development review and approval process, and institute design guidelines to provide some control over the appearance of buildings constructed in the park. The design guidelines addressed landscaping requirements, density, parking, and performance standards. To further encourage development, the City established the Centennial Industrial Park (now the Centennial Business Park) on 320 acres in the southeast quadrant of the interchange, and included an additional 600 acres just north of Centennial Business Park and Route 128 within the Designated Development District.

While much of the business growth in the vicinity of the interchange can be attributed to the improved access provided by the interchange and realignment of Route 128, some other factors also played a role in attracting new business to the area. Peabody Mayor Peter Torigian, who served the city for over 20 years strongly promoted economic development and worked to create a pro-business climate in the City. He adopted a goal of transforming the City from a manufacturing center to a high technology center, and worked closely with businesses to offer incentives for those who would locate in Peabody.

In the 1970s, the City recognized that the area that is now Centennial Business Park should be targeted for commercial and industrial development. The City began acquiring over 600 acres of land which would be rezoned for industrial uses. The City invested more than \$2.5 million for infrastructure improvements, using federal Urban Development Action Grants (no longer in existence) to help fund development of the park. The City also adopted design guidelines to ensure that Centennial Park would be developed as a quality facility that could compete with other locations along Route 128.



Designated Development District created predictability  
in development review & approval process  
Strong champion - Mayor  
Centennial Park – supportive infrastructure & zoning

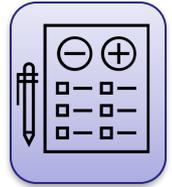
## Key Factors Contributing to Economic Development:

- ✓ **Land Use Policies:** Appropriate zoning, commitment to predictable permitting
- ✓ **Infrastructure:** City invested more than \$2.5 M in infrastructure for Centennial Business Park
- ✓ **Other Contributing Factors:**
  - ✓ Value of the connection – connecting into a key corridor
  - ✓ Available land is attractive for target type of development (in this case: large parcels)
  - ✓ Location also competitive along other site selection criteria – e.g. airport access

# Illustrative Example

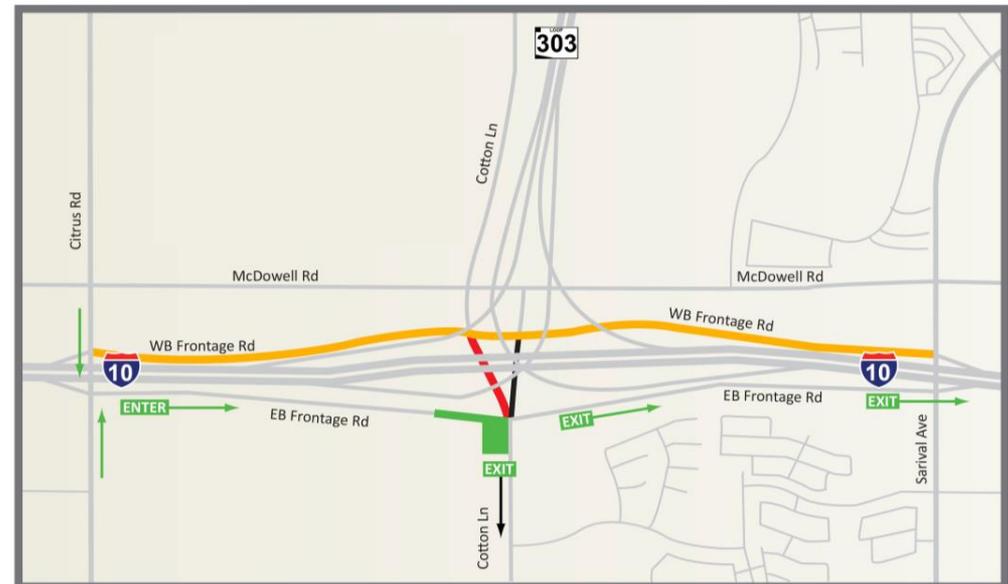
Let's return to our example...

...how would we apply case insights to review & refine the project?



## Interstate 10/Loop 303

- Location: Maricopa County, AZ – Suburbs of Phoenix
- Urban/Class Level: Metro
- AADT: ~100-150,000
- Cost: \$134 M



## Locally-supportive policies and actions

### **Land Use Policies:**

- Appropriate zoning
- Commitment to predictable permitting

### **Business Climate:**

- Tax incentives
- Direct engagement with business needs

### **Supportive Infrastructure**

## Contextual factors

- Leverage positive dynamics of business cluster
- Quality workforce & schools
- Interchange with corridor that plays a key connectivity role
- Good airport access
- Large parcels of developable land

## Locally-supportive policies and actions

- Land Use Policies:**
  - Appropriate Zoning
  - Commitment to Predictable Permitting
- Business Climate:**
  - Tax incentives
  - Direct engagement with business needs
- Supportive Infrastructure**

## Contextual factors

- Leverage positive dynamics of business cluster
- Quality workforce & schools
- Interchange with corridor that plays a key connectivity role
- Good airport access
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## Locally-supportive policies and actions

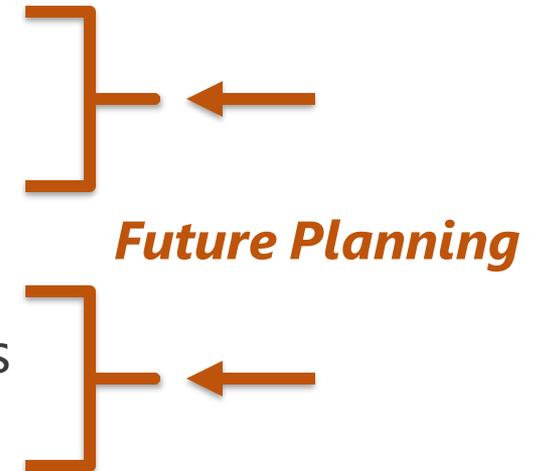
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- Commitment to Predictable Permitting

### Business Climate:

- Tax incentives
- Direct engagement with business needs

### Supportive Infrastructure



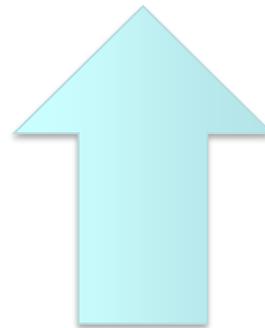
## Contextual factors

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Review &  
Refine to  
Maximize  
Project  
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Making the  
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Communicate  
with the Public





## Partnerships enable:

- Shared vision
- Understanding of roles and responsibilities.
- Effective coordination and cooperation

This applies to all cases. Examples will focus on transit projects across multiple agencies and municipalities.

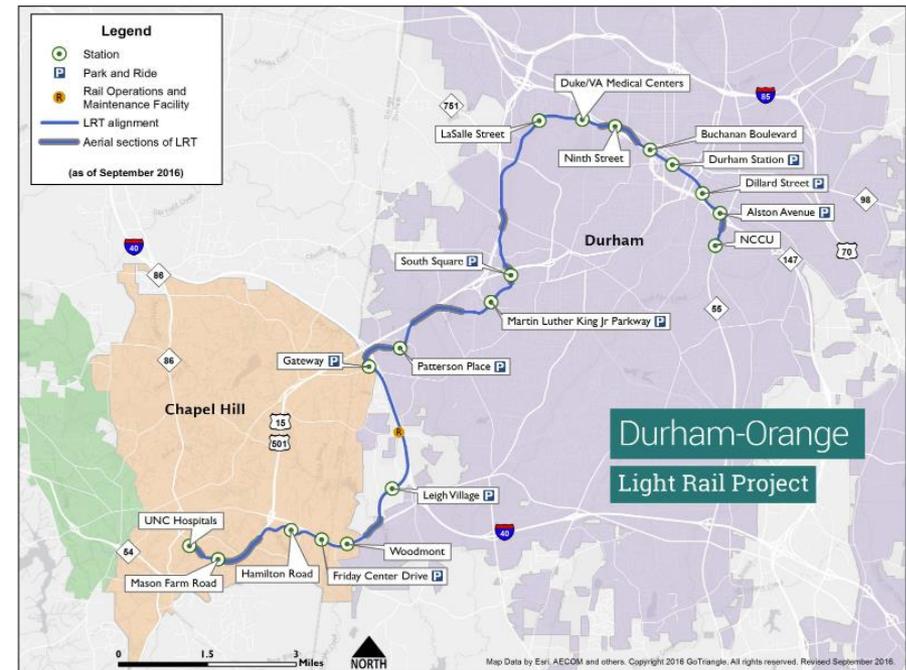
***What strategic partnerships should be established to ensure successful project planning and outcomes?***

## Durham and Orange County Light Rail

- Location: Durham and Chapel Hill, NC
- Urban/Class Level: Metro
- Expected Daily Ridership: 26,000
- Cost: \$2.5 Billion

### Project Characteristics

- 17.7 miles
- 18 Stations
- Connected to major universities, medical facilities, & top employers



## Insert Web Page

This app allows you to insert secure web pages starting with `https://` into the slide deck. Non-secure web pages are not supported for security reasons.

Please enter the URL below.

<code>https://</code>	<code>bing.com</code>
-----------------------	-----------------------

Note: Many popular websites allow secure access. Please click on the preview button to ensure the web page is accessible.

# EconWorks – Case Search Filter

## Filters:

### Project Details

#### Project Flags

#### Project Type

- Access Road
- Limited Access Road
- Bypass
- Connector
- Beltway
- Bridge
- Interchange
- Widening
- Freight Terminal
- Station
- Service Improvement
- Line Extension
- New Line

#### Project Mode

#### Motivation

### Geographic

#### Region

- New England/Mid-Atlantic
- International
- Great Lakes / Plains
- Southwest
- Southeast
- Rocky Mountain / Far West

<input type="checkbox"/>	<p><u><a href="#">Valley Metro Rail (Phase 1)</a></u></p> <p>The Valley Metro Rail is a 26.3-mile light rail line in the Phoenix Metropolitan Area, Arizona. The first phase of the project (the focus of this case) includes the initial 20-mile light rail line with 28 stations from Downtown Phoenix to Mesa. Construction began in early 2005 and service started in December 2008. The Valley Metro Rail is developed and operated by Valley Metro Regional Public Transportation Authority.</p>	New Line	Light Rail	Southwest	\$1,551.98	2008
<input type="checkbox"/>	<p><u><a href="#">Sunset Transit Center (Portland, OR)</a></u></p> <p>The Sunset Transit center is on the Westside Max corridor in the Portland, Oregon area, and includes the transit station, light rail transit, bus stops and shelters, a 628 space park-and-ride garage, and a station access road. Highway improvements were made to help funnel traffic to the transit stations along the corridor and to reduce congestion.</p>	Station	Light Rail	Rocky Mountain / Far West	\$159.94	2004

## Project: Sunset Transit Center (Portland, OR)

### 5.0 Non-Transportation Factors

The Portland region is a national leader in sustainable development policies. The state of Oregon requires consistency between land use plans and transportation plans, and has a tradition of regional land use planning. The state has also adopted regional growth boundaries around metropolitan areas which force development into urban areas and prevent development of areas outside the boundaries. The Portland region adopted a 2040 Growth Concept, which outlines areas planned for growth, and the region invested in the Max Westside Extension in support of this growth concept. Because the Portland region has provided transit in growth corridors and has adopted policies to encourage development in these corridors, Tri-Met is ranked as the 13th largest transit market while being only the 29th largest population center.

Tri-Met has a long tradition of station area planning, and began station planning for the Westside MAX line several years in advance of the Sunset Transit Center's opening. The transit potential of the entire corridor, and to build interest among the community, Tri-Met spent a combined total of over \$4 million on station area planning.

Tri-Met also worked with the cities of Beaverton and Hillsboro to encourage transit-oriented development (see <http://www.complanning.com/2011/05/03/land-use-zoning-for-transit-oriented-development/>). The zoning was adopted in two phases. The first phase resulted in the corridor that prohibited some auto-oriented uses and allowed for transit-oriented development. The second phase, in 1997, phase two was implemented, with each jurisdiction incompatible with transit, such as automobile sales showrooms. The zoning allows for mixed use development, an increase in density, and a density provision. The density provision has actually stymied housing development for higher density housing has not yet materialized. The zoning was adopted by Washington County for the Peter J. Vessis Transit Center.

The biggest factor limiting the impact of the transit center development has not yet reached the suburban areas of Washington County. Transit-oriented development must be developed at higher densities than is typical in a suburban area, and once the market can support such a development.

## Project: Valley Metro Rail (Phase 1)

### 5.0 Non-Transportation Factors

Phoenix city planners played an important role in the economic success of the Valley Metro light rail line. City planners received local community support and worked in collaboration with planners in the suburban cities of Tempe and Mesa to develop a modern transit-oriented metro area. Their efforts were enabled by legislative funding that designated a portion of the sales tax revenues for transit investments. Most of the project area was already urbanized therefore, no major infrastructure improvements were required to support economic development.

Each city implemented its own land use policy to support economic development adjacent to light rail stations. The cities of Phoenix and Tempe developed special land-use and zoning plans such as overlay district zoning (or TOD zoning) to support transit-oriented development. The City of Phoenix started its TOD plans even before the construction of the light rail broke ground. The city implemented TOD zoning for parcels near some of its future stations around 2003, and the City of Tempe started the TOD plans in 2005.

In 2012, the City of Phoenix started the Reinvent PHX project in collaboration with the U.S. Department of Housing & Urban Development, Arizona State University, Vitalyst Health Foundation and many other organizations. Reinvent PHX is the comprehensive planning effort behind the creation of the five-year TOD policy action plans for the Gateway, Eastlake-Garfield, Midtown, Uptown and Solano TOD districts located along the light rail system. This comprehensive initiative encouraged many new developments and provided a positive business incentive for more investments along the light rail, especially in Downtown Phoenix.

The City of Mesa also created a bike sharing plan for its stations, and the City of Tempe specified an overlay zone along the light rail that covered most of the non-residential property within the station areas. To support the transit oriented developments, these zones provide density bonus for residential developments that take part in affordable housing program.

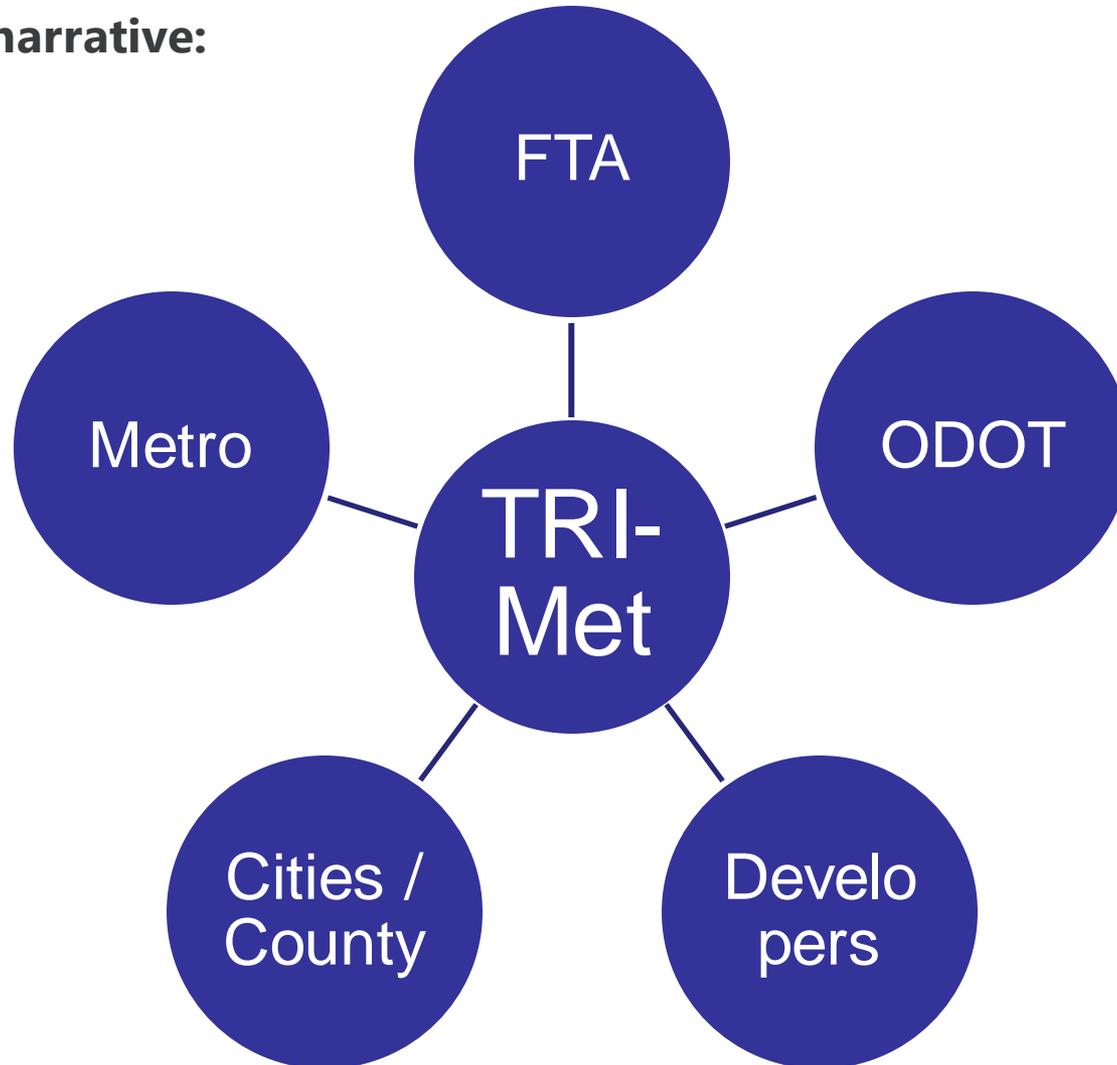
# Partnership Example (Case 1)

## Sunset Transit Center

- Location: Westside Max corridor- Suburbs of Portland, OR
- Urban/Class Level: Metro
- Daily Ridership: 3,314
- Cost: \$160 Million



Insights from narrative:



- **Developers:** Early meetings to identify market potential and build interest
- **FTA:** To secure federal funding, signed legal agreement with local jurisdictions to adopt zoning for high density neighborhood development
- **ODOT:** Coordinated station area planning in the Westside Corridor (\$4M)
- **Metro:** Agreed to adopt Plan 2040 to support development in the corridor.
- **Cities/County:** Met with cities of Beaverton and Hillsboro and Washington County to adopt zoning ordinances to encourage TOD.

- **Development around Sunset Transit Center**

- 506 apartments, 290,000 sq. feet of office space, and 170,000 sq. ft of retail space.
- 1,585 jobs attributed to project

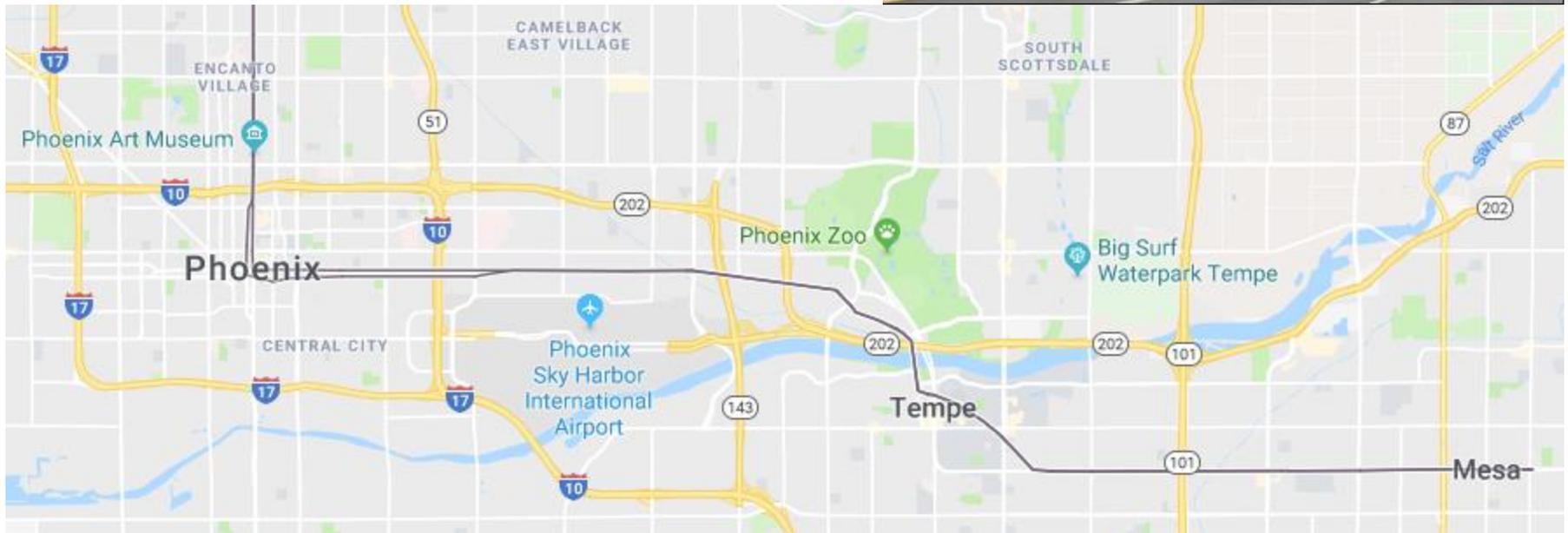
## What did we learn? **Land-Use**

- Zoning critical to create dense, mixed-use communities
- Inter-agency (ODOT, Metro, Cities, & County) coordinated planning is key to adopt zoning to support T.O.D.
- Limiting Factor: Market for denser / urban development not yet reached suburban areas of Washington County.

# Partnership Example (Case 2)

## Valley Metro Rail

- Location: Phoenix, Mesa, & Tempe
- Urban/Class Level: Metro
- Daily Ridership: 41,845
- Cost: \$1.5 Billion



## Insights from narrative:

### System Consolidation

- Several City wide systems combined - Valley Metro (1993)

### Transit 2000 Plan

- Sales Tax Rev. Increase to support Plan
- Planning coordination: Phoenix, Mesa, & Tempe
- TOD Zoning around each station by each city

### Reinvent Phoenix

- Comprehensive planning effort to create 5-year TOD policy action plan
- Collaboration between agencies, ASU, businesses, and other organizations.

- **More than \$1.5 Billion in Public and Private Investment**
- **60 residential and mixed-use projects including:**
  - Education, healthcare, medical, office, commercial, retail, & hotel
- **16,305 jobs attributed to project**

## **What did we learn? – Land Use**

- Collaboration in planning, funding, & zoning is critical with participating municipalities.
- Long-term comprehensive planning with other organizations needed to incentivize more TOD investments
- 7 transit extension projects in planning/development stage for Phoenix, Tempe, & Mesa from 2019-2030

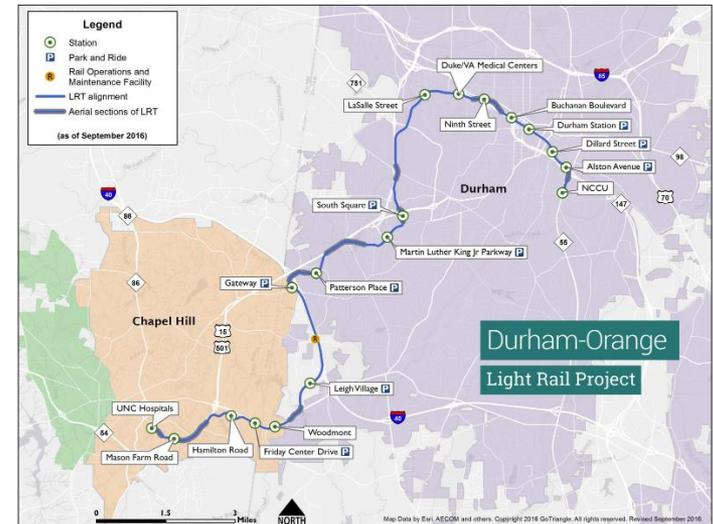
## How does this project stack up?

**FTA Favorable Rating:** Local Finance, Justification, & Engineering Readiness  
**Funding & Community Collaborative:**

- Universities, Health Care, Gov., & Private Sector
- Identify land, monetary, & in-kind donations

## Recommendations From (EconWorks)

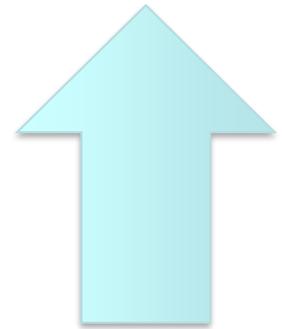
- **Partnerships enable:**
  - Collaborative Inter-Agency planning
  - Consistency in zoning (overlay districts) to support TOD & density requirements
  - Inclusion of Gov. agencies, universities, foundations, businesses, advocacy groups, & other organizations.



Review &  
Refine to  
Maximize  
Project  
Performance

Making the  
Case for  
Partnerships

Communicating  
with the Public



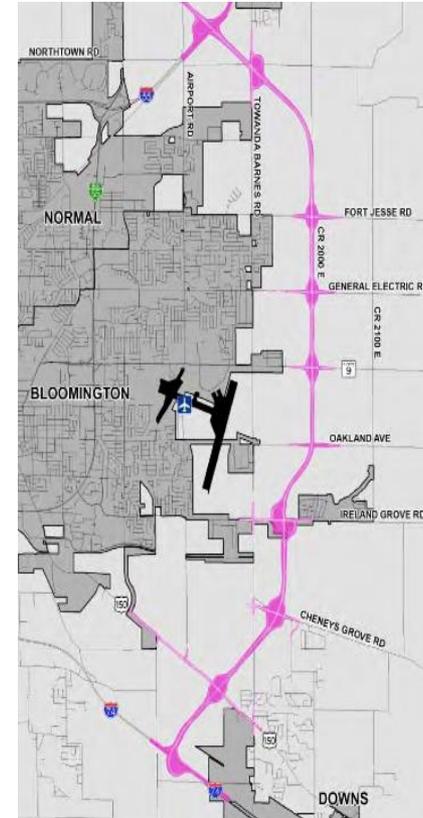
**The bypass project you designed to relieve congestion on local roads has raised questions about economic development objectives and impacts on existing businesses.**

**In particular, local officials want assurances that new jobs will be created in key locations, and downtown businesses are concerned about loss of sales due to reduced traffic.**

***How can you use Econworks to address these concerns at a public meeting?***

## East Side Highway

- Location: Bloomington- Normal MSA  
McLean County, IL
- Project Type: Bypass
- Urban/Class Level: Metro
- Population: 169,572
- Distress Level: 1.19
- Region: Great Lakes/Midwest
- Length: 12 Miles



## **Purpose**

Improve local and regional mobility and access, and accommodate growth on east side of Bloomington and Normal

## **Needs**

- Inability of existing network to accommodate projected future traffic in the area
- Provide access for forecasted growth

**We will now go to Econworks live to use these tools to explore the economic impacts of the East Side Highway**

- **Assess My Project**
- **Case Study Search**

# Using Assess My Project

## Assess My Project

### Characteristics

Estimated Project Cost: **\$85 million**

Estimated Average Annual Daily Traffic: **43,701**

### Project Type

- Access Road
- Limited Access Road
- Bypass
- Connector
- Beltway
- Bridge
- Interchange
- Widening
- Freight Terminal
- Station
- Service Improvement
- Line Extension
- New Line

### Region

- New England/Mid-Atlantic
- International
- Great Lakes / Plains

	Jobs	Wages (mil.)	Output (mil.)
Direct Impacts	1,384 - 2,306	\$65 - \$108	\$206 - \$343
Supplier and Wage Impacts	795 - 1,324	\$38 - \$63	\$117 - \$195
Total Impacts	2,178 - 3,630	\$102 - \$171	\$323 - \$538

### Actions

Move the sliders to adjust for higher or lower levels of project cost, traffic and community factors applicable in your case. You will then see shifts in the likely range of economic impacts.



# Refining your Project – Positive Actions

- Access Road
- Limited Access Road
- Bypass
- Connector
- Beltway
- Bridge
- Interchange
- Widening
- Freight Terminal
- Station
- Service Improvement
- Line Extension
- New Line

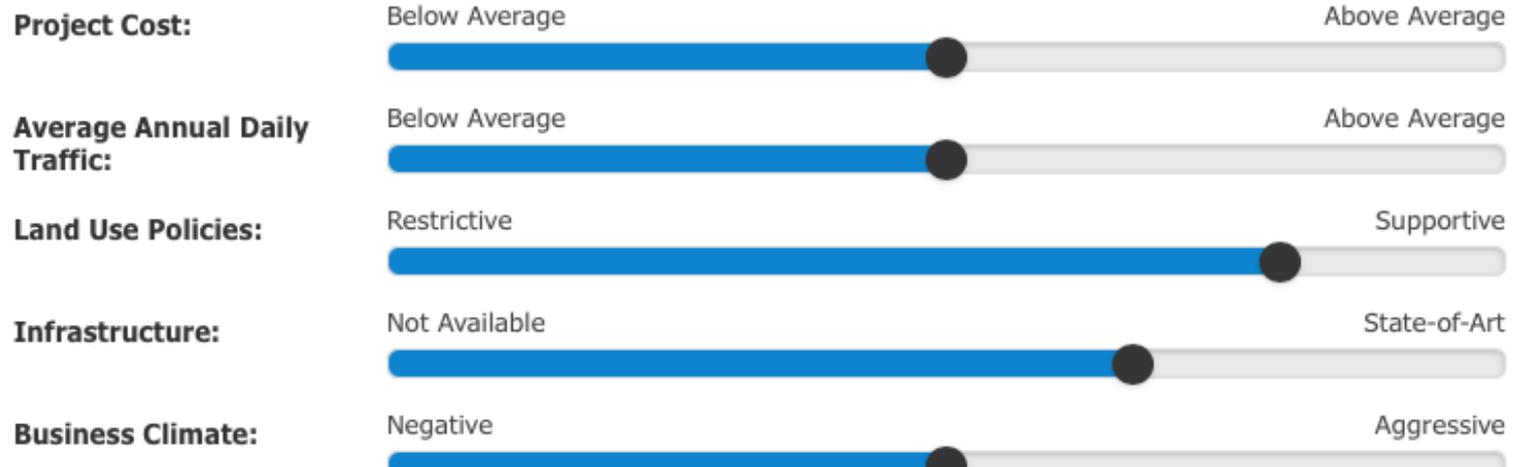
## Region

- New England/Mid-Atlantic
- International
- Great Lakes / Plains
- Southwest

	Jobs	Wages (mil.)	Output (mil.)
Direct Impacts	2,508 - 4,180	\$117 - \$196	\$373 - \$622
Supplier and Wage Impacts	1,440 - 2,400	\$68 - \$114	\$212 - \$353
<b>Total Impacts</b>	<b>3,948 - 6,580</b>	<b>\$186 - \$309</b>	<b>\$585 - \$976</b>

## Actions

Move the sliders to adjust for higher or lower levels of project cost, traffic and community factors applicable in your case. You will then see shifts in the likely range of economic impacts.



# Refining your Project – Negative Actions

Direct Impacts	270 - 450	\$13 - \$21	\$40 - \$67
Supplier and Wage Impacts	155 - 258	\$7 - \$12	\$23 - \$38
Total Impacts	425 - 708	\$20 - \$33	\$63 - \$105

## Actions

Move the sliders to adjust for higher or lower levels of project cost, traffic and community factors applicable in your case. You will then see shifts in the likely range of economic impacts.

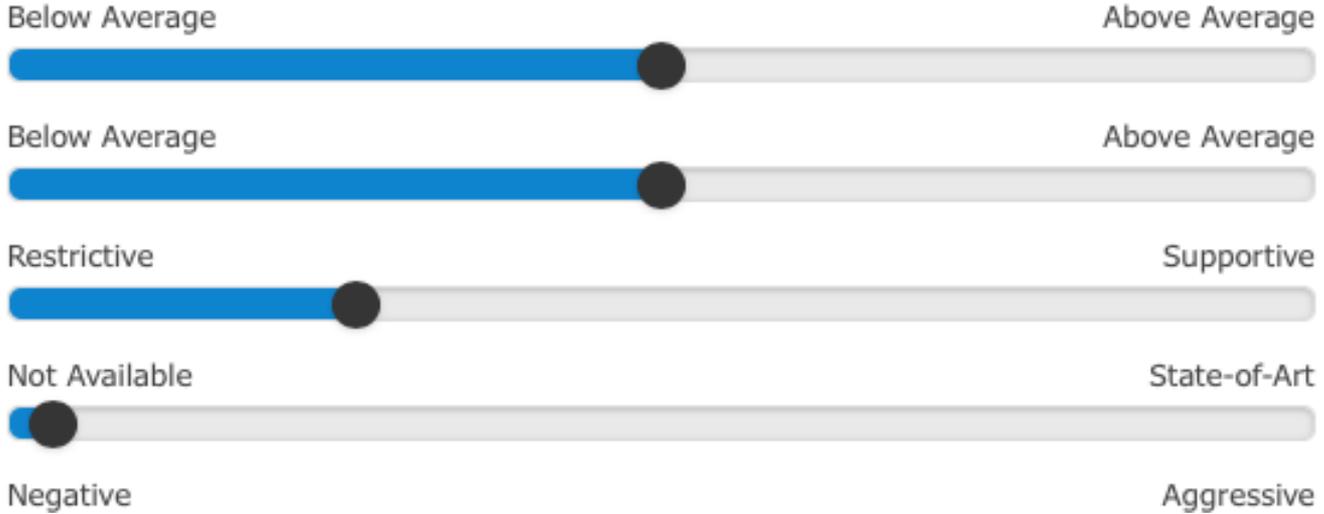
**Project Cost:** Below Average Above Average

**Average Annual Daily Traffic:** Below Average Above Average

**Land Use Policies:** Restrictive Supportive

**Infrastructure:** Not Available State-of-Art

**Business Climate:** Negative Aggressive



## With Supporting Land Use Regulations & Infrastructure

Jobs	Wages (\$M's)	Output (\$M's)
3,948-6,580	\$186-309	\$585-976

## Without Supporting Land Use Regulations & Infrastructure

Jobs	Wages (\$M's)	Output (\$M's)
425-708	\$20-33	\$63-105

# Reviewing Similar Cases

- Widening
- Freight Terminal
- Station
- Service Improvement
- Line Extension
- New Line

## Region

- New England/Mid-Atlantic
- International
- Great Lakes / Plains
- Southwest
- Southeast
- Rocky Mountain / Far West

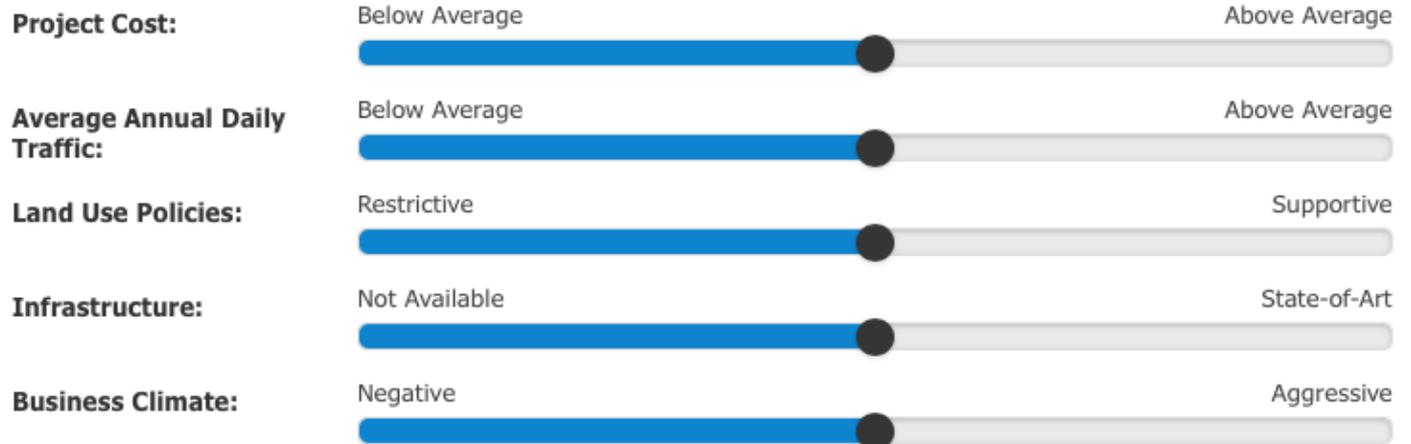
## Urban/Class Level

- Rural
- Mixed
- Metro
- Core

## Economic

## ACTIONS

Move the sliders to adjust for higher or lower levels of project cost, traffic and community factors applicable in your case. You will then see shifts in the likely range of economic impacts.



If a case study closely matches your selected characteristics, it will display below:

<input type="checkbox"/> Project	Type	BEA Region	Cost (Millions)	Length	AADT
<u>Verona Bypass</u> Bypass around Verona, WI in metro Madison.	Bypass	Great Lakes / Plains	\$42.38	2.70	47,010

An orange arrow points to the Cost column of the first row.

## 4.2 Demographic, Economic & Land Use Impacts

The Verona Bypass is widely regarded to have had profound impacts on the growth and development of the city of Verona since 1995. Before the project, development had been sprawling in an east-west pattern along Highway 151 and Highway 69, and to the north, toward the Madison city limits. After the bypass was built, development began to fill in more evenly in the area south of the city centre. Improved access to new greenfield commercial and housing sites on the city's south side spurred new development in this area, which had been farmland before the bypass was built.

In 1998, Wisconsin DOT conducted a study of the impacts of the Verona bypass as part of a larger study to evaluate and compare the impacts of a series of bypasses that were built around rural small Wisconsin towns during the 1980's and early 1990's. This study found that, compared to other bypassed communities in the state, downtown Verona had the sharpest reduction in traffic (-60%). The study found, however, that the Verona bypass had little impact on retailing in the city, aside from the loss of a few traffic-serving businesses like gas stations and fast food restaurants. Three years after the bypass was completed, there were not yet any discernible economic or real estate development impacts. The study also found no evidence of any positive impacts on catalyzing new commercial development during the first three years after the bypass was completed.

Between 1997 and 2008, the city of Verona annexed 888 acres in the southern part of the city, mainly for commercial and industrial development. These developments have resulted in the addition of over 1.8 million square feet of retail, industrial, and office space with over 4,000 new jobs at locations within 0.5 mile of the four bypass exits. The improved access to these sites that the bypass provided is considered to have been a critical factor in attracting this development. The most significant of these projects is the \$300 million 140-acre EPIC systems campus, which expanded from its former headquarters in Madison to the new Verona campus, completed in 2005. The bypass is considered to have been critical in EPIC's decision to select Verona for their headquarters.

Blaine's Farm and Fleet, a box retailer serving the rural northern Midwest, located a store at the east end of the bypass. Two privately developed industrial parks have been founded near the bypass exits. Two existing firms have expanded, adding hundreds of jobs. Further development of a 20-acre box retailing plaza is planned.

By removing congestion and heavy commercial vehicle traffic downtown, the bypass has supported the current trend toward redevelopment of older commercial and residential buildings and vacant lots to new retail and service uses. Assessed values downtown have risen by \$27.5 million since 1996. In total, over 4,000 jobs have been created by firms taking sites for new and expanded operations in the bypass corridor. The four-lane access and high traffic counts on the bypass are considered to be fundamental to these investments.

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## 5.0 Non-Transportation Factors

A number of non-transportation factors have driven development in the Verona bypass corridor. Foremost is its location in the growing Madison Metropolitan area, which has grown on the strength of its highly educated workforce and start-up tech firms that it spawns.

Epic Systems, which relocated 3,300 jobs to the vicinity of the bypass from Madison, is a textbook example of how a small tech start-up, nurtured in the shadow of UW-Madison, has grown to become a leader in its field. High-speed access via the bypass was critical in Epic's choice of Verona, but of equal weight were the availability of both a 140 acre site and the attractive TIF package that the city gave them for site improvements. Since this firm moved from Dane county and considered only sites within the region in its relocation decisions, this investment cannot be considered as additional to the region.

Likewise, the Blaine's box retail outlet, which requires high visibility sites with high traffic counts, would likely have located elsewhere within its Dane County market area if the bypass exit site had not been available, so this cannot be regarded as additional. All of the rest of the investments have been partly induced by TIF, the bypass was just one of the decision factors.

- **The project changed development patterns by directing development to the south of the city after the City annexed over 800 acres of land. Impacts took time to occur.**
- **Traffic downtown decreased by 60%**
- **Over 4,000 jobs created within .5 miles of the bypass, of which 300 are directly attributed to the project.**
- **Property values in downtown increased.**
- **Some auto-oriented retailers suffered in downtown, but new uses have replaced them.**

## 4.0 Project Impacts

### 4.1 Transportation Impacts

Interviews with several local business leaders helped to understand their view of the benefit of the bypass to their businesses. One trucking company stated that the bypass saved them about 10 minutes per trailer, saving the company an estimated \$1,500 per day. An industrial manufacturing company cited time savings and convenience as the principal reasons for expanding their facility near the bypass. A cabinet manufacturer mentioned that a delivery trip to Wichita that previously took three hours now takes 2.5 hours, has reduced shipping costs which is important given the new trucker in-service rules.

### 4.2 Demographic, Economic & Land Use Impacts

The removal of commercial traffic from downtown led to a resurgence in economic activity. In 2006, Parsons was named a Great American Main Street Award winner by the National Trust for Historic Preservation for its successful efforts in revitalizing its downtown area through historic preservation. Parsons was one of only five cities to receive the 2006 award.

The minimal loss of local businesses has been offset by new business that has located north of Parsons near the bypass, creating a cluster of business activity and development on land previously devoted to agriculture.

In 2007, neighboring Coffeyville had a major flood which redirected travelers to Parsons. However, since the flood, the number of hotel visitors has not declined which has been attributed to the increase in business activity and commerce according to the tourism department for the City of Parsons. Hotel tax collections have increased 25% since 2008 indicating that visitors are increasingly choosing Parsons as their destination. Hotels in the area are increasing their focus on the traveling customer and revenues have increased by 22%.

New development has quickly concentrated around the bypass because of its ease of access and time savings. Several businesses have located in Parsons as a direct result of the bypass. The types of businesses that have located to the bypass area include manufacturing, medical, industrial, retail, transportation, financial and hospitality.

The average annual net job gain before construction (1999) was 126 jobs per year. After construction (2004), the average annual net job gain was 418 jobs per year. Overall, the number of jobs added in Parsons due to the bypass is estimated to be 1,400.

# Case Study Search Results

RESET FILTERS

13 Results Found

## Filters:

### Project Details

Project Flags

Project Type

- Access Road
- Limited Access Road
- Bypass
- Connector
- Beltway
- Bridge
- Interchange
- Widening
- Freight Terminal
- Station
- Service Improvement
- Line Extension
- New Line

Project Mode

<input type="checkbox"/>	<u><a href="#">Bennington Bypass, VT 279</a></u> The Bennington Bypass, also known as VT 279, provides an alternative route around the center of Bennington, Vermont which saves time primarily for winter ski tourists.	Bypass	Highway	New England/Mid-Atlantic	\$31.12	2004
<input type="checkbox"/>	<u><a href="#">Mercer Co. KY, US-127 Bypass</a></u> The Mercer County Bypass provides an alternative route east of Harrodsburg, while simultaneously opening-up new land for housing, retail and industry development to serve the future growth.	Bypass	Highway	Southeast	\$23.38	2001
<input type="checkbox"/>	<u><a href="#">Georgetown Bypass</a></u> The Georgetown Bypass provides an alternative route south of the congested city branching from US-460 two miles west of the city center and reconnects to US-460 1.5 miles west of the city center. It is also known as the US-460 Bypass and McClelland Circle.	Bypass	Highway	Southeast	\$39.40	1994



## 4.2 Demographic, Economic & Land Use Impacts

With little development along the eastern bypass, no notable land-use changes have yet occurred because of the project. Conversely, the pre-bypass development west of town has continued. A primary reason commercial development has been constrained along the inner-east bypass is due to the lack of corresponding water and sewer facilities. The County and City have partnered to expand water and sewer facilities for a portion (roughly a quarter) of the eastern bypass length, which will serve a major new restaurant/theatre complex that is nearing completion.

Comparative bypass facilities built with appropriate water/sewer facilities include Jessamine County in Nicholasville, KY and another in Danville, VA. Both of these apparently have witnessed notable development. For these reasons, development is anticipated to occur rapidly as the water and sewer facilities are developed along the inner-eastern bypass.

Moreover, the future inner-west bypass continues to be viewed as essential to address western city congestion associated with the trains and to access the hospital. As this inner bypass is completed, development opportunities created by the ability to move from one side of the city to the other are anticipated.

## 5.0 Non-Transportation Factors

The lack of sufficient sewer and water infrastructure has prevented residential, commercial and industrial development from occurring along the Mercer County Bypass. Until this infrastructure is in place, the bypass is not likely to have measurable economic development impacts.

Title	Date
<b>EconWorks Products:</b> <i>What They Are and How They Can Be Used</i>	<b>Th April 20</b> 2:00-3:30 PM EST
<b>Economic Impact Analysis Tools:</b> <i>Using case studies for project and program assessment</i>	<b>Th June 15</b> 2:00-3:30 PM EST
<b>Wider Economic Benefit Tools – Part 1:</b> <i>Using WEB tools to assess changes in market access in a Benefit Cost Analysis (BCA)</i>	<b>Th August 17</b> 2:00-3:30 PM EST
<b>Wider Economic Benefit Tools – Part 2:</b> <i>Using WEB tools to assess changes in reliability and connectivity in a Benefit Cost Analysis (BCA)</i>	<b>Th October 19</b> 2:00-3:30 PM EST
<b>EconWorks as a Decision Support System:</b> <i>Educating and informing the public, decision makers and stakeholders about the economic effects of transportation</i>	<b>Th December 14</b> 2:00-3:30 PM EST

For further information, please explore!

<https://planningtools.transportation.org/13/econworks.html>



Questions?

