Achieving Results Through Integrated Land Use/ Transportation Planning:

A Corridor-Based Approach

Tom Klevan, Southwestern Pennsylvania Commission Steve Deck, AICP – WSP Parsons Brinckerhoff, Inc.

# PennDOT's "Catalyst Team":

Aligning Planning, Program Development, and Project Delivery with Long-Term Land Use and Community Visions

# Why Integrated Corridor Planning?

- Optimal and practical integration of transportation and land use issues
- Can improve connection between LRTP & municipal plans
- More direct connection between improvement design and local planning/regulation
- May enhance relationships between Planning Partners, PennDOT & municipalities

# Route 65 Pilot Project:



### **Route 65 Pilot Project:** Bike/Ped Facilities



## Route 65 Pilot Project: Traffic Congestion



### Route 65 Pilot Project: Transit Facilities



### Route 222 Pilot Project:



## Route 222 Pilot Project: Agricultural Easements



# Route 222 Pilot Project: Zoning – Future Land Use

🔒 Route 222 Corridor

#### 🗄 📚 🔡 💷



# **Route 222 Pilot Project:** Trip Generation Potential



## Route 222 Pilot Project: Access Management





### **Overview of Pilot Projects:**

#### Route 65 Challenges/Goals

- 21-mile corridor & 19 municipalities in 2 counties
- Roadway highly constricted by development & topography
- 26 traffic signals in 15 municipalities
- Nearly half of the municipalities lack a comprehensive plan – a consistent plan is the goal
- Enhancing bike/ped facilities in dense corridor is critical
- Increasing transit use is key

#### Route 222 Challenges/Goals

- 8-mile corridor with 3 municipalities in 2 counties
- Planned widening with potential for development impacts
- Potential I-78 interchange could affect travel characteristics
- Variable development types and controls along corridor
- Matching proposed improvements and development patterns is key
- Managing access is critical



# What is an Operations and Safety Assessment?

- SPC's OSA's are a hybrid between traditional corridor study and the Road Safety Audit process
- Regionally significant/high growth corridors
- Holistic approach without a lot of computer analyses or modeling that looks at How the traffic operations environment and safety elements interact within a given traffic corridor
- Identified improvements are geared toward both short term and long term alternatives that can be incorporated into the LRTP, TIP, and maintenance activities

### **The OSA Process – Three Phases**

### Phase 1: Pre-Assessment

### •LRTP Level 1 Candidate Forms•Maps and data:

- •Aerial imagery of study area
- •Land uses
- •Proposed projects
- •Traffic Data
- •Traffic signals/ITS elements
- •Rail crossings
- •Transit routes
- •Bike routes/pedestrian facilities
- •Crash diagrams
- •Travel time data
- •Transportation/planning studies



### The OSA Process – Three Phases

### Phase 2: Field Assessment

Start-up meeting with roadway owners
Key stakeholder interviews
Operations and Safety field review
Operations and Safety Planning discussions
Preliminary Findings Presentation

Mobility Goal	Objective Areas
Mitigate Recurring Congestion	Bottlenecks
	Traffic Signals
	Travel Demand Management
	Parking Management
Maintain Mobility During Planned Events	Work Zones
	Special Events
	Traveler Information
Minimize the Impact of Unplanned Events	Traffic Detection and Surveillance
	Incident Management
	Road Weather Management
	Detour Routes
Provide an Efficient Multimodal Transportation System	Freight
	Transit
	Pedestrian and Bicycle
	Ridesharing/Carpools & Vanpools

Safety Goals Reduce the number and rate of: •Crashes •Fatalities •Serious Injuries

### The OSA Process – Three Phases

### Phase 3: Post Assessment

- Draft Report for team and roadway owners to review
- Final report including an implementation plan with:
  - •Potential projects, programs
  - •Funding resources
  - •Lead agency for each suggested improvement





State Routes 68/528 Operations and Safety Assessment



SR 68/SR 528 from U.S. 19 to SR 356

Butler Township, Connoquenessing Borough, Connoquenessing Township, Evans City Borough, Forward Township, Jackson Township

> Butler County August 2015

### SHARED LONG-TERM VISIONS OF THE CORRIDOR

- 1. Safe, well connected, multimodal accommodations (public transportation, bicyclists and pedestrians) ,in appropriate locations, along the Route 68 Corridor as well as roads connecting to the corridor
- 2. Safe multimodal access from residential areas to activity centers (shopping, schools, recreational, and community facilities),
- 3. Inclusion of turn lanes at key signalized intersections and/or a continuous left turn lane, in the eastern portion of the corridor
- 4. Traffic signal synchronization,
- 5. Establishing access management areas,
- 6. Continued management of increased freight traffic (truck and rail) due to natural gas production activities,
- 7. Promote responsible, complementary development patterns, and
- 8. Maximize the capacity of existing infrastructure.

### **Benefits of Integrated Corridor Planning:**

### **More Effective Planning:**

- Focused transportation and land use integrated planning in areas of greatest need
- Increased municipal input and support for long-term transportation improvements
- Incorporates land use planning into MPO/RPO long-range transportation plans (LRTP)
- Improves integration between planned land use patterns and transportation facility needs
- Leads to the most cost-effective, integrated solutions to transportation system needs with local government support

### **Benefits of Integrated Corridor Planning:**

### **Lower Project Costs:**

- Improves likelihood of privately funded transportation improvements through the SALDO process
- Matches SALDO right-of-way (ROW) requirements to actual needs
- May increase use of Act 209 transportation impact fees
- Improves coordination with local water, sewer, and other infrastructure planning

### **Benefits of Integrated Corridor Planning:**

### **More Efficient Transportation System:**

- Can improve local roadway connectivity to better distribute traffic
- Local access management regulation can improve safety, congestion, and integration with the PennDOT HOP process
- Provides for more consistent operations & maintenance across jurisdictional and municipal boundaries
- Better opportunity to integrate non-highway solutions such as rail passenger, transit, rail freight, bike/pedestrian, etc.

### **Discussion Topic 1:**

**Evaluation of Proposed Corridor-Based Approach** 

## **Key Implementation Issues:**

- Funding Integrated Corridor Planning
- Establishing Corridor Boundaries Which Corridors and Defining their Limits
- Working Across MPO/RPO and District Boundaries
- Addressing Different MPO/RPO and District Capacity
- Securing Multimodal Commitment
- Integrating with LRTPs
- Integrating with LPN System
- Funding/Policies for Municipal Cooperation

## Addressing Municipal Cooperation:

#### **Anticipated Implementation Activities:**

- Multimunicipal comprehensive planning
- Corridor-specific planning
- SALDO modifications
- Zoning modifications
- Access management regulation
- Connectivity regulation
- Enhanced transit service (i.e. transit friendly land use)
- Improved bicycle/pedestrian facilities

# Implementation Best Practices:

#### <u>Programs:</u>

- Transportation and Community Development Initiative (TCDI) DVRPC
- Smart Growth Transportation Lancaster County
- Regional Connections Grant HATS
- Livability Through Smart Transportation SPC

#### **<u>Eligibility:</u>**

- All programs provide funds to municipal and county governments
- Some restrict municipal eligibility to those within urbanized boundaries
- LCPC extends eligibility to transportation service providers and non-profits
- HATS requires a signed MOU demonstrating support for regional growth management

## **Discussion Topic 2:**

How do we Ensure Effective Implementation?