Learning Outcomes

- Identify land use strategies and solutions that can be incorporated into multimodal transportation corridor plans
- Identify land use stakeholders and describe methods for involving these stakeholders in transportation corridor planning efforts
- Describe the tools available for implementing land use strategies at a corridor level
- Describe the benefits of specific corridor strategies
Lesson 6: Corridor Planning

- 6.1 Corridor Planning Overview
- 6.2 Strategies
- 6.3 Planning Process and Methods
- 6.4 Implementation
- 6.5 Case Studies
How it All Fits Together

Regional Visioning

Land Use
- Local Comprehensive Plan
  - Public Facility Plans
  - Area/Neighborhood Plans
  - Zoning/Development Regulations and Guidelines
  - Development Review and Permitting
  - Project Implementation

Transportation
- Long-Range Transportation Plan
  - Corridor and Area Plans
    - Project Programming
      - Project Development
      - Project Implementation
What is a Corridor?

“A broad geographic band … connecting population and employment centers… served by various transportation modes… within which person and freight, travel, land use, topography, environment and other characteristics are evaluated.”

- Vermont Agency of Transportation
What makes a Corridor ‘Smart’?

- A corridor that ‘multi-tasks’
- A corridor that balances demands for mobility, economic viability, environmental quality and livability
- A corridor that integrates land use and transportation dynamics
- A corridor that provides transportation choices, that recognize the range of social and economic groups and their needs
- A place that is attractive, inviting and environmentally friendly
Range of Scales

Local
City and County of Denver

Regional
DRCOG

Statewide/interregional
Colorado DOT
Range of Contexts

Urban

Mature Suburban

Rural/Small Town

Emerging Suburban
Range of Functions

Main Streets

Passing Through the Countryside

Linking Communities Together
Range of Purposes

New Corridor

Omro, WI

Expansion

Kentucky Transportation Cabinet

Redevelopment

Preservation
Purpose of a Corridor Plan?

- Establish a vision for transportation and land use
  - **Long-term**: Anticipate and address problems *before* they occur
  - **Short-term**: React to and manage problems
- Evaluate full range of strategies
- Identify specific projects, strategies and actions for more detailed analysis and implementation
Traditional Corridor Planning

- Examines transportation systems within corridor and identifies improvements to meet long-term needs
- Conducted between the long-range transportation plan and project development
- Heavily influenced by safety and mobility needs
- Led by engineers
Smart Corridor Planning

- Multi-discipline; incorporates transportation planning, land use planning, landscape and urban design
- Fully integrates land use and transportation planning activities and stakeholders
- Is sustainable over the long term by creating streetscapes and transportation mode options
- Recognizes that corridors create communities and places for social interaction
Why Plan at the Corridor Level?

- Zoning/Land Use
- Economic Development
- Access Management
- Natural Resources
- Roadway Capacity
- Pedestrian/Bicycle
- Roadway Operations
- Public Transportation
- Rail
- Safety
Key Players

- State DOTs and Transit Agencies
- MPOs
- County & Municipal Staff
- Elected Officials
- Redevelopment Authorities
- Civic Associations
- Special Improvement Districts
- Developers
Traditionally, commerce was conducted on Main Streets.

Today, corridors must transform to remain competitive.

Mixed-use corridors have built-in advantages to ensure economic success.
Getting the Right Mix

- A mix of residential and offices uses creates a captive market for retail

Source: www.pedbikeimages.org/ Dan Burden
Multi-Modal Settings

- Provide stronger market support for office and mixed-use development than auto access alone

Source: www.pedbikeimages.org/ Dan Burden
Infill Opportunities

- Infilling vacant and underused properties with new uses can stimulate revitalization
Regaining Economic Competitiveness

- Improve the appearance of the streetscape
- Strengthen safety and maintenance
- Attract new businesses
- Promote area to potential customers
Economic Success

- Recognize and build upon a corridor’s distinct assets
Return on Investment

- More community assets
- More tax revenue
- Improved real estate performance
Case Study

Baltimore Avenue Corridor Revitalization Plan
Philadelphia and Delaware County, Pennsylvania
Project Location
Baltimore Pike is now struggling to define its identity and restore its economic viability.

Corridor varies from highly urban setting to Main Street inner-ring suburb to post-war shopping center.
Plan Purpose

- To enhance future livability and promote economic redevelopment along Baltimore Avenue by preserving community character and improving accessibility
Elements of Plan

- Corridor-wide traffic, transit and streetscape recommendations
- Focused site plans for six priority areas – catalysts for future reinvestment
- Sequenced implementation strategy
Priority Area Conceptual Design

Lifestyle Center

Intersection Reconfiguration
Intersection Reconfiguration

Case Study
Priority Area Visualization

- Proposed
Follow through Actions

Case Study

Street Tree Planting
Community Wayfinding
New Businesses

Developers’ Fair
Adaptive Reuse
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Range of Strategies

- Land use
- Minor operational improvements
- Alternative mode improvements, TDM
- Access management
- Local street networks
- Road widening, grade separation, bypass
- Fixed-guideway transit
Land Use Strategies

- Clustering of development – location, density, diversity, design
- Building and site design
- Parking management
- Access management
- Land preservation/development rights
- Corridor preservation/right-of-way acquisition
Transportation Strategies

- Roadway and intersection design
- Traffic operations
- Provision for transit, pedestrian, and bicycle treatments
- Parallel/alternative facilities, routes
- Local street networks
- Transit services and TDM
- Freight operations and intermodal
Consider New Approaches

- **Issue**: Traffic delays at signalized intersections

- **Conventional solution**: Condemn adjacent buildings and widen intersections to add travel and turning lanes

- **Smart Transportation Solutions**:
  - Improve surrounding roadway network so motorists have more options
  - Provide transit-friendly land use mix so travelers have more options
Exercise: Corridor Planning

▶ Divide into groups

▶ Each focus on one corridor context
  ✓ Urban
  ✓ Developing suburban
  ✓ Rural/small town

▶ What are some of the issues/concerns associated with this corridor?

▶ Which strategies would you apply to address these issues?
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Process and Methods for Coordination at Local Level

- State enabling legislation for interjurisdictional cooperation
- State comment on local plans/zoning
- Coordination with other State/regional agencies to provide planning assistance for access control
- Project-by-project and MPO meetings
- Regular meetings with city officials
- Work together on land development permits/agreements

Source: Vanka, Handy, and Kockelman
Corridor Planning and Analysis Tools

- Land use forecasting models
- Traffic forecasting models
- Traffic operations and simulation models
- Sketch-plan impact analysis tools
- GIS data overlays
- Visualization techniques
- Market analysis
Related “Subarea” Planning Efforts

- Downtowns/ business districts
- Neighborhoods
- Activity centers
- Transit station areas
- Interchange areas
Case Study

Interchange Planning
Black Horse, New Jersey
Conceptual Design Plan

Source: McCormick Taylor/Glatting Jackson
Street Typologies

Source: McCormick Taylor/Glatting Jackson
Planned-in Transit

Source: American Planning Association
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Implementation Tools:

Land Use

- Amend local comprehensive plans and zoning
- Corridor zoning overlays
- Parking standards and management plans
- Design review process
- Driveway/access permitting
- Impact review and mitigation requirements
- Purchase or transfer of development rights
Implementation Tools: Transportation

- More detailed study/plan – access management, streetscape, transit, intersection study, etc.
- Project implementation
  - Capital projects
  - Traffic operations
  - Programs and services – transit, TDM, etc.
- Revise design standards/guidelines
- Change functional class or ownership
Implementation Process Considerations

- Key implementation plan elements (roles & responsibilities, timeframe, funding)
- Implementation oversight committee and monitoring
- Endorsement/adoptions of plan by key agencies
- Inter-agency review
- Intergovernmental agreements
- Ongoing education and outreach
Potential Funding Sources for Implementation

- Federal and State transportation funds
- Municipal budgets
- Developer fees, contributions, and built roads
- Special assessment districts
- Tax-increment finance (TIF) revenues
- Parking fees
- Joint development
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Case Study

Transit Corridor Planning
Eugene, Oregon
Franklin EmX Bus Rapid Transit

- Preferred transit strategy determined by regional transportation planning process
- Cost effective solution
- System the community can grow with

Source: Lane Transit District
Corridor Objectives

- Be competitive with auto
- No increase in auto travel time
- No impact to street trees
- Minimize displacements
- Enhance pedestrian/bicycle facilities
- Enhance corridor and improve landscaping
- Gain approval from all jurisdictions
- 100% Exclusive right-of-way

Source: Lane Transit District
Runningway Configurations

- Median, One-way lane – curb separated
- Median, Bi-directional lane – curb separated
- Median, Bi-directional – no barrier
- Curb side, Bi-directional – no barrier
- Curb side, One-way lane - no barrier
- Mixed traffic operation

Source: Lane Transit District
## Emulates a Light Rail System

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<td>Unique Identity</td>
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Source: Lane Transit District
Cost Effective Solution

- Cost is $6 million per mile (versus $50 million for light rail)
- Lower operating costs per rider than regular bus

Source: Lane Transit District
Transit Lanes

Source: Lane Transit District
Additional NHI Training

NHI-142050
Introduction to Context Sensitive Solutions

NHI-139001
Integrating Freight in the Transportation Planning Process
Characteristics and Planning of Bus Rapid Transit (BRT)
List three examples of land use strategies to improve transportation conditions in a corridor

List three land use tools (i.e., a regulation or process) for implementing a corridor plan’s recommendations

List two methods for interagency coordination in a corridor planning process

List the key elements that should be addressed in a corridor implementation plan.