LAWRENCE COUNTY NON-MOTORIZED STUDY

KYOVA Interstate Planning Commission
LAWRENCE COUNTY TRANSPORTATION STUDIES

Varies Studies of Transportation Issues in Lawrence County and Ironton

- **Tasks:**
  1. Truck Mobility Study – Address issues with opening of the new Ironton-Russell bridge
  2. Lawrence County and City of Ironton Bicycle/Pedestrian Plan
  3. Park Avenue Traffic Study – Develop short and long term improvements to improve safety and corridor operations for Park Avenue from 6th Street to US 52 ramps
  4. Ironton Sidewalk Assessment – Assess for ADA compliance
LAWRENCE COUNTY TRANSPORTATION STUDIES
PROCESS AND SCHEDULE

- Process for the studies:
  - Review and document current and future conditions analysis
    - December 2016 – April 2017
  - Conducted traffic and safety analyses
    - April 2017-May 2017
  - Develop recommended improvements
    - May 2017-June 2017
  - Obtain public input
    - Stakeholder and Public Involvement - July 2017
  - Finalize recommended improvements and cost estimates
    - August - September 2017
    - Stakeholder meeting – September 2017
  - Develop a strategic plan for implementation
    - October 2017
Existing conditions

- Trucks to US 52 via 3rd Street,
  - Turns are ok
- Trucks to US 52 via Park Street use 2nd Street or 4th Street
  - Turns at 4th/Park and 2nd/Park have conflicts

Evaluated intersections

- 2nd/Jefferson
- 4th/Jefferson - No issues
- 2nd/Park
- 4th/Park
CONFLICTS OF TRUCKS TURNING FROM 2ND STREET TO PARK AVENUE
PROPOSED IMPROVEMENT FOR TRUCKS TURNING FROM 2ND STREET TO PARK AVENUE:

MOVE STOP BAR BACK AND SHIFT LANES AND SIDEWALK RIGHT ON PARK AVENUE

SHIFT LANES LEFT ON 2ND STREET
TRUCKS TURNING FROM 4TH STREET TO PARK AVENUE:

TRUCKS CURRENTLY NEED TO BE IN THE FAR LEFT LANE TO MAKE TURN
PROPOSED IMPROVEMENT FOR TRUCKS TURNING FROM 4TH STREET TO PARK AVENUE:

ADJUST SIDEWALK AND PARKING LOT TO MAKE RIGHT TURN FROM RIGHT LANE
Currently backs up to 120 ft. for the through/right lane coming from the new bridge.

Revised lanes will reduce through traffic back up by 50 ft. by removing right turns into a separate lane.
PROPOSED REVISION TO 2ND STREET
LAWRENCE COUNTY AND IRONTON BICYCLE/PEDESTRIAN PLAN

- Documented Existing conditions
  - Field work
  - Base mapping
  - Gaps
    - Stakeholder contacts
- Identification of Gaps
- Survey conducted
- Benchmarking
- Recommendations
- Public Involvement
- Master Plan
Walking Environment: Pedestrian facilities are lacking on most roadways in the study area, but sidewalks do exist in some parts of more urban areas, such as in the City of Ironton and the villages of Proctorville and Coal Run. Ironton has a robust sidewalk network, especially in the downtown area around Park Avenue. Residential neighborhoods east of Downtown also feature sidewalks.

Bicycling Environment: There are no signed and marked bicycle facilities within the study area.

Survey Results: In April and May 2017 a public survey was distributed to stakeholders in Lawrence County.
**Lawrence County Bicycle & Pedestrian Plan | Recommended Facilities**

The facility treatments shown here represent a sampling of some of the tools that are used to create safe and convenient multimodal networks in rural areas. Facility types are divided into three categories:

1. **Mixed Traffic Facilities**
   - Mixed traffic facilities do not separate different types of users; rather, all users share the same space and yield as necessary to accommodate other traffic. These facilities offer little protection for pedestrians and bicyclists from motor vehicles, and are generally appropriate on low-speed, low-volume roads.

2. **Visually Separated Facilities**
   - Visually separated facilities are directly adjacent to the motor vehicle travel area. Bicyclists, pedestrians, and motorists share use by pedestrians and/or area. Since facilities, such as bicyclists, are cycle tracks and side paths, designated with pavement on both sides of the roadway markings and sign there, while others, such facilities are physically separated. These as-use shared paths, create facilities are best utilized on a distinct network for non-moderately busy roads with motorized users. These facilities are generally much safer, narrowing the potential for conflict with motor vehicles.

3. **Physically Separated Facilities**
   - Physically separated facilities completely remove the motor vehicle travel area. Bicyclists, pedestrians, and motorized users share use by pedestrians and/or area. Some facilities, such as bicyclists, are cycle tracks and side paths, designated with pavement on both sides of the roadway markings and sign there, while others, such facilities are physically separated. These as-use shared paths, create facilities are best utilized on a distinct network for non-moderately busy roads with motorized users. These facilities are generally much safer, narrowing the potential for conflict with motor vehicles.

**YIELD ROADWAY/SHARED STREET**
- Less costly to build and/or maintain than fully paved cross streets.
- Connects local residential areas to destinations on the network.
- Limits impervious surface area and minimizes stormwater runoff.
- Maintains aesthetics of narrow roads and undivided road edges.
- Encourages slow travel speed when narrower than 20 ft.
- Can support a larger free flow capacity when located within wide unimproved residential areas.
- Requires on-street or on-street parking property shares.
- Low maintenance needs over time.

**BICYCLE BOULEVARD**
- Increases comfort for people bicycling by reducing motor vehicle operating speeds and volumes.
- Connects local residential roads to commercial corridors and community services such as schools.
- Improves conditions for pedestrians when implemented with sidewalks and enhanced pedestrian crossings.
- May reduce the incidence of severe injuries through reduced travel speeds.
- Improves the quality of life for residents through calmer traffic and safer crossings.
- Less visually impactful than separated facilities.

**ADVOCACY SHOULDER**
- Provides a delineated but nonexclusive space available for biking on a roadway otherwise two lanes and designated shoulders.
- Decreases potential impacts to visual or natural resources through efficient use of existing space.
- Functions well within a rural and small town traffic and land use context.
- May function as an interim measure where plans include shoulder widening in the future.
- Supports the natural environment through reduced paved surface requirements.

**PAVED SHOULDER**
- Provides a safe surface for the roadway for pedestrians and bicyclists when sidewalks are not provided.
- Reduces potential “stuck in motor vehicle” crashes.
- Can reduce “bicyclist struck by turning” crashes, which represent a significant portion of such crashes.
- Provides advantages for all roadway users, by creating space for bicyclists, pedestrians, and motor vehicles.

**BIKE LANE**
- Provides additional separation distance between the sidewalk motor vehicle travel area. A sidewalk is present.
- Connects and complements bicyclway networks through built-up areas.
- Provides a designated space on the roadway suitable for many bicyclists within built-up areas or small communities.
- Can support school access by bicycle when configured as a wide lane on low-speed urban streets.
- Provides additional visual cues to that they should expect bicyclists on the roadway. This can be particularly useful when transitioning from a built-up area to a highway context.

**CYCLE TRACK**
- Deallocates and protects space for bicyclists in order to improve perceived comfort and safety.
- Eliminates risk and fear of collisions with overtaking motor traffic.
- Reduces risk of collision compared to a bike lane and eliminates the risk of a stoned bicyclist being run over by a motor vehicle.
- Prevents illegal parking or illegal bike lane.
- Low implementation cost by making use of existing pavement and drainage and by using existing lane as a shared lane.
- Accommodates bicyclists of all confidence levels.

**SHARED USE PATH/SIDEWALK**
- Promotes multi-modal facilities for users of all ages and abilities.
- Provides a separate space for walking and bicycling on low-speed urban roads.
- Supports the mode through increased awareness to reduce conflicts with motor traffic.
- Reduces the potential for sidewalk use by reducing sidewalk use.
- Supports natural environment by reducing lateral surface requirements.

**SIDEWALK**
- Provides a dedicated place within the public right-of-way for pedestrians to safely travel and connect pedestrian facilities on sidewalks.
- Pave with “walking along roadway” guidelines.
- May include bike lanes.[1] Added bike lanes on high-speed roads and in volumes.

Application: sidewalks are recommended for all streets in urban areas of Lawrence County.
Concept Routes
The table to the right lists the draft bicycle and pedestrian routes for the Lawrence County for Iron Mountain. The routes are preliminary at this stage. Consideration for additional routes will be done following additional consultation and feedback.

County Wide Concept Map

Study Area Concept Map

- Rural Road/Bicycle/Pedestrian
- Bicycle/Pedestrian
- Bicycle On-Street
- Bicycle/Pedestrian Off-Street
- Study Area
- Sidewalk Area

Please note in time, pending results of a more detailed study urbanized areas, sidewalks are recommended as part of the Iron Mountain Concept Plan. The map as shaded areas, not routes. Where existing bicycle/pedestrian network; "N" routes bicycle facilities are specifically recommended designate new bicycle/pedestrian network in urbanized areas, missing sidewalks should facilities.
Develop short and long term improvements to improve safety and corridor operations for vehicles, bicycles, and pedestrians

- Conducted Traffic counts
- Crash Analysis completed
- Signal Warrant Analysis completed
- Capacity Analysis completed
- Conceptual Improvements developed
Traffic signals warranted at 6th, 8th, 9th street, and US 52 ramp intersections

Crash rates are greater than the statewide average

Side streets currently operate with a delay (up to 1.2 minutes)

Projected to have a delay of up to 13 minutes
PARK AVENUE CONCEPTS

LEGEND
- Resurfacing Area
- Existing Sidewalk
- Proposed Sidewalk
- Existing Curb Ramp
- Proposed Curb Ramp
- Existing Traffic Signal
- Proposed Traffic Signal

CONCEPTUAL IMPROVEMENTS
PARK AVENUE CORRIDOR

FIGURE 1 OF 4
Examples of Wayfinding Signs that may be applied to Park Avenue

- **VDS1**: Vehicular Directional Signage for State Routes
  - Scale: 3/8" = 1'-0"
  - Sign Types: VDS1 and VDS2

- **VDC1**: Vehicular Directional Signage for City Routes
  - Scale: 3/8" = 1'-0"
  - Sign Type: VDC1 and VDC2

- **PKG1**: Public Parking Signage
  - Scale: 3/8" = 1'-0"
  - Sign Type: PKG1 and PKG2

Note: This is a double sided sign shown with 4" cap height letters. The messages are not on both sides. The back is to be painted black with an optional applied vinyl logo.
Assessing the current condition of curb ramps and sidewalks in Ironton Central Business District

- Mobile LIDAR Mapping – completed
  - Collected width, curb ramps, detectable warnings
  - Processed into Microstation(CAD) file
- Currently Identifying deficiencies
- Prioritize sidewalk and curb ramp segments
- Developing a plan for costs and implementation
Monthly progress meeting with ILCAO, County Eng., LEDC, KYOVA, ODOT

STIP/TIP Public Involvement

Public Involvement and Stakeholder meetings in July 2017

Stakeholder meeting in September 2017

ANY QUESTIONS?

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