

TRAFFIC FLOW STUDY





Study Background

KYOVA Interstate Planning Commission and the City of Ironton in cooperation with the Ohio Department of Transportation (ODOT) initiated a comprehensive traffic study to accurately depict the flow of traffic within the City of Ironton. This comprehensive study evaluated the traffic and the signalized and un-signalized intersections.

The City of Ironton developed the existing signal timing plans in the early 1980s using data from the mid 1970s. The City completed the last major signal improvement update in early 1985.

This study evaluated the following issues:

- •An existing signal system based on outdated traffic data;
- Outdated existing signal hardware;
- •A need to plan for future connections;
- •Traffic flow at non-signalized intersections;
- •A desire to reduce emissions;
- Access to schools; and
- Truck routes.

Goals and Objectives:

- •Maximize traffic flow within the City of Ironton
 - -Reduction in emissions
 - -Upgrade signal equipment and timing
 - -Identify unwarranted signals
 - -Develop a transportation inventory of Ironton
- Meet traffic demands
 - -Provide traffic counts and projections
 - -Develop capacity analyses
 - -Address traffic patterns of new growth
 - -Provide recommendations for improvements
- •Blueprint for the future of Ironton's transportation system
 - Develop a short, immediate, and long range plan for transportation improvements
 - -Identify funding sources
- •Increase the quality of life through transportation improvements
 - -Coordinate with new transit service
- Maximize downtown parking

Process Steps

- Signal Equipment Inventory
- Traffic Flow Assessment
- Existing and Future System
- Signal System Analysis









Upgrade Signal, Poles, and Lights

Phase 1

Park Ave. (SR93) & 6th St.

Park Ave. (SR93) & 5th St.

Park Ave. (SR93) & 4th St.

Park Ave. (SR93) & 3rd St.

2nd St. & Adams St.

3rd St. & Adams St.

Central Signal System

Phase 2

Park Ave. (SR93) & 2nd St.

2nd St. & Vernon St.

3rd St. & Vernon St.

3rd St. & Quincy St.

3rd St. & Spruce St.

3rd St. & Oak St.

3rd St. & Kemp St.

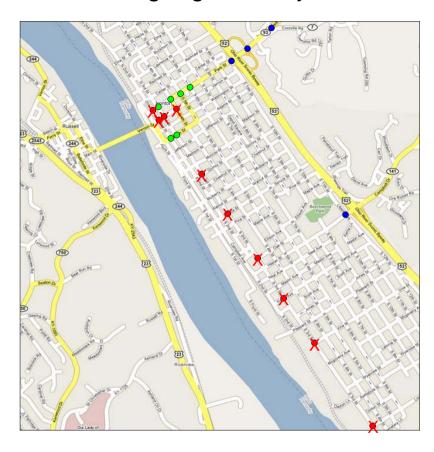
3rd St. & Vine St.

3rd St. & Lorain St.

4th St. & Vernon



Existing Signal Analyses



Phase 1 Upgrade

Phase 2









HISTORIC TRAFFIC DATA—2030 PROJECTIONS (12/08 Ohio DOT)

Intersection	1975 ADT	1994 & 1998 ADT	2008 ADT	% Growth 1975 to 2008/Yr.	% Growth 2005 to 2030	% Growth 2005 to 2030 per Yr.
Park Ave. North of 9th St.	13590	19734	15230	.4		
Park Ave. North of 3rd St.	8020	7139	3620	-1.7	21%	0.8%
2nd St. West of Park St.	4510	6905	6030	1.0	25%	1.0%
2nd St. East of Vernon St.	not available	7187	7040	2	12%	0.4%
3rd St. West of Adams St.	4510	6162	4320	1	35%	1.4%
Ironton-Russell Bridge	5000	11900	11560	4.0		









SHORT TERM (0-5 years) PROJECTS:

- •Improve ADA access at six intersections
- •Replace signal poles and field equipment at six intersections
- •Replace Signal heads (LED) and associated hardware (signal cable, conduit, controller boxes) for six intersections
- Purchase signal optimization software (and training)
- •Implement optimized timings
- •Implement intersection count program every 3 yrs.
- •Install central system signal control
- Asses Phase 2 of Signal System
- •Improve curb radius at 7 intersections

Turning Radii Improvements

There are seven intersections with quadrants that have existing turning radii that do not meet current ODOT standards for semi-tractor trailers 50 foot in length, with an 8.5 foot trailer width, and a 70 foot articulating angle.

- •Liberty and Pine Streets northwest quadrant
- •9th and Spruce Streets southwest quadrant
- •3rd and Lorain Streets northeast and southeast quadrants
- •3rd and Jefferson Streets southwest quadrant
- •2nd and Jefferson Streets northeast quadrant
- •2nd Street and Park Avenue southeast quadrant
- •2nd and Adams Street southwest quadrant

Short Term (1 to 5 Year) Implementation Schedule

Priority	Alternatives	Estimated Cost (\$1,000s)	Funding Source	Maximize Traffic Flow	Meet Traffic Demands	Increase Quality of Life
1	Delaware St. Improvements	\$500	KYOVA	Н	Н	Н
2	New Coordinated Signals and Curb Ramps	\$1,000	KYOVA	Н	н	н
3	Improve Curb Radius	\$200	City/KYOVA	Н	Н	I
4	Develop Downtown Parking Lots		City/KYOVA	М	M	Н

Long Term (> 5 Years) Implementation Schedule

1	Raise 2 nd Street Bridge	\$5,000	City/KYOVA	М	М	М	
---	-------------------------------------	---------	------------	---	---	---	--

