

**Technical Planning Committee Meeting Agenda, March 16, 2011  
Missouri State University Plaster Student Union Room 317 (Third Floor)**

**Call to Order ..... 1:30 PM**

**I.     Administration**

**A. Introductions**

**B. Approval of the Technical Planning Committee Meeting Agenda  
(1 minute/Brock)**

**TECHNICAL PLANNING COMMITTEE ACTION REQUESTED TO APPROVE  
THE AGENDA**

**C. Approval of the January 19, 2011 Meeting Minutes..... Tab 1  
(1 minute/Brock)**

**TECHNICAL PLANNING COMMITTEE ACTION REQUESTED TO APPROVE  
THE MEETING MINUTES**

**D. Public Comment Period for All Agenda Items  
(5 minutes/Brock)**

Individuals requesting to speak are asked to state their name and organization (if any) they represent before making comments. Individuals and organizations have up to five minutes to address the Technical Planning Committee.

**E. Executive Director's Report  
(3 minutes/Edwards)**

Sara Edwards will provide a review of Ozarks Transportation Organization (OTO) staff activities since the January 19, 2011 Technical Planning Committee meeting.

**F. Bicycle and Pedestrian Committee Report  
(3 minutes/Longpine)**

Staff will provide a review of BPAC's current activities.

**II.    New Business**

**A. Amendment Number Three to the FY 2011-2014 Transportation Improvement  
Program ..... Tab 2  
(2 minutes/Edwards)**

There is one change proposed to the FY 2011-2014 Transportation Improvement Program. Please see attached materials for more information.

**TECHNICAL COMMITTEE ACTION REQUESTED TO RECOMMEND  
APPROVAL OF TIP AMENDMENT NUMBER THREE TO THE BOARD OF  
DIRECTORS.**

**B. Administrative Modification Number Four to the FY 2011-2014 Transportation Improvement Program ..... Tab 3**  
(2 minutes/Edwards)

There are two changes that have been approved by staff to the FY 2011-2014 Transportation Improvement Program. Please see attached materials for more information.

**NO ACTION REQUIRED – INFORMATIONAL ONLY**

**C. OTO Long Range Transportation Plan (LRTP) Update**  
(5 minutes/Longpine)

Staff will provide an update to the Technical Planning Committee regarding the LRTP.

**NO ACTION REQUIRED – INFORMATIONAL ONLY**

**D. Major Thoroughfare Plan Amendments ..... Tab 4**  
(15 minutes/Edwards)

The Major Thoroughfare Plan Subcommittee has recommended several changes to the Major Thoroughfare Plan. Staff is requesting the full Technical Committee comment on the proposal before the public hearings this spring. This request has been revised since the prior meeting.

**TECHNICAL COMMITTEE REQUESTED TO REVIEW AND COMMENT  
ON THE PROPOSED AMENDMENTS TO THE MAJOR THOROUGHFARE  
PLAN**

**E. FY 2012 Unified Planning Work Program ..... Tab 5**  
(10 minutes/Edwards)

The proposed FY 2012 work program and budget is attached for review. (Materials Attached)

**TECHNICAL COMMITTEE ACTION REQUESTED TO RECOMMEND  
THE FY 2012 UPWP TO THE BOARD OF DIRECTORS**

**F. Federal Functional Classification Change Application ..... Tab 6**  
(5 minutes/Edwards)

The Federal Highway Administration has a federal functional classification system which is one criterion from which eligibility for federal funding is determined. OTO is required to have a process to request amendments to the federal functional classification. OTO is proposing the attached application serve as the process by which changes are requested.

**TECHNICAL COMMITTEE ACTION REQUESTED TO RECOMMEND  
APPROVAL OF THE FEDERAL FUNCTIONAL CLASSIFICATION  
CHANGE APPLICATION**

**G. Federal Functional Classification Change for Farm Road 103/Hunt Road ..... Tab 7**  
(2 minutes/Edwards)

The City of Willard is requesting a Federal Functional Classification Map Change for Hunt Road/Farm Road 103. The request is to reclassify the roadway as a collector.

**TECHNICAL COMMITTEE ACTION REQUESTED TO RECOMMEND  
APPROVAL OF THE FEDERAL FUNCTIONAL CLASSIFICATION MAP  
CHANGE FOR HUNT ROAD/FARM ROAD 103 TO A COLLECTOR**

**H. Safe Routes To School Applications ..... Tab 8  
(5 minutes/Edwards)**

There are two applications planned for submission for Safe Routes to School grant funding. Please see attached materials for more information.

**TECHNICAL COMMITTEE ACTION REQUESTED TO SUPPORT THE  
APPLICATIONS**

**III. Other Business**

**A. Technical Planning Committee Member Announcements**

(5 minutes/Technical Planning Committee Members)

Members are encouraged to announce transportation events being scheduled that may be of interest to OTO Technical Planning Committee members.

**B. Transportation Issues For Technical Planning Committee Member Review**

(5 minutes/Technical Planning Committee Members)

Members are encouraged to raise transportation issues or concerns they have for future agenda items or later in-depth discussion by the OTO Technical Planning Committee.

**IV. Adjournment**

Targeted for 2:45 P.M. The next Technical Planning Committee meeting is scheduled for Wednesday, May 18, 2011 at 1:30 PM in the Missouri State University Plaster Student Union.

Attachments and Enclosure:

Pc: Lou Lapaglia, OTO Chair, Christian County Presiding Commissioner  
Phil Broyles, City of Springfield Mayor's Designee  
David Rauch, Senator McCaskill's Office  
Dan Wadlington, Senator Blunt's Office  
Matt Baker, Congressman Long's Office  
Area News Media

Si usted necesita la ayuda de un traductor del idioma español, por favor comuníquese con la Sharon Davis al teléfono (417) 836-5442, cuando menos 48 horas antes de la junta.

Persons who require special accommodations under the Americans with Disabilities Act or persons who require interpreter services (free of charge) should contact Sharon Davis at (417) 836-5442 at least 24 hours ahead of the meeting.

If you need relay services please call the following numbers: 711 - Nationwide relay service; 1-800-735-2966 - Missouri TTY service; 1-800-735-0135 - Missouri voice carry-over service.

OTO fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. For more information or to obtain a Title VI Complaint Form, see [www.ozarkstransportation.org](http://www.ozarkstransportation.org) or call (417) 836-5442.

# TAB 1

## **MEETING MINUTES**

Attached for Technical Planning Committee member review are the minutes from the January 19, 2011 Technical Planning Committee meeting. Please review these minutes prior to the meeting and note any corrections that need to be made. The Chair will ask during the meeting if any Technical Committee member has any amendments to the attached minutes.

**TECHNICAL COMMITTEE ACTION REQUESTED:** To make any necessary corrections to the minutes and then approve the minutes for public review.

**OZARKS TRANSPORTATION ORGANIZATION  
TECHNICAL PLANNING COMMITTEE MEETING MINUTES  
January 19, 2011**

The Technical Planning Committee of the Ozarks Transportation Organization met at its scheduled time of 1:30 p.m. in the MSU Plaster Student Union in Room 317.

The following members were present:

Mr. Bob Atchley, Christian County	Mr. Rick Hess, City of Battlefield
Mr. David Brock, City of Republic	Mr. David Hutchison, City of Springfield
Mr. Steve Childers, City of Ozark	Mr. Joel Keller, Greene Co. Hwy Dept.
Mr. Don Clark, Missouri State University	Mr. Larry Martin, City of Ozark
Mr. King Coltrin, City of Strafford	Mr. Duffy Mooney, Greene Co. Hwy Dept
Mr. Martin Gugel, City of Springfield	Mr. Dan Smith, Greene Co. Hwy Dept.
Mr. Jason Haynes, City of Springfield	Mr. Terry Whaley, Ozarks Greenway

(a) Denotes alternate given voting privileges as a substitute for voting members not present

The following members were not present:

Mr. Mokhtee Ahmad, FTA	Ms. Diane May, SMCOG
Mr. Rick Artman, Greene Co. Hwy Dept.	Mr. Bradley McMahon, FHWA
Mr. Brian Bingle, City of Nixa	Mr. Ken Morris, Greene Co. Planning
Mr. David Bishop, R-12 Schools	Ms. Ann Razer, City of Springfield (a)
Mr. Larry Combs, MSU (a)	Mr. Bill Robinett, MoDOT
Mr. Travis Cossey, City of Nixa	Mr. Ralph Rognstad, City of Springfield
Ms. Carol Cruise, City Utilities	Mr. Mark Roy, Airport (a)
Mr. Ron Effland, MoDOT (a)	Mr. Mark Schenkelberg, FAA
Ms. Diane Gallion, City Utilities (a)	Mr. Shawn Schroeder, Airport
Mr. Mile Giles, City of Springfield (a)	Mr. Mike Tettamble, Jr., O & S Trucking
Mr. Kevin Lambeth, City of Battlefield	Mr. Dan Watts, SMCOG
Mr. Pat Lloyd, City of Willard	

Others present were: Stacy Burks, Senator Roy Blunt's Office; Mr. Carl Carlson, Olsson Associates; Tom Dancey, CJW; Robin McDevitt, Ms. Megan Hammer, Senator McCaskill's Office; Matt Baker, Congressman Billy Long's Office; Mr. Derick Barnes, Laborers Local 663; Hollie Elliott, Ryan Mooney, Springfield Chamber; Dawne Gardner, Jenni Jones, Frank Miller, MoDOT; Sara Edwards, Natasha Longpine, Sharon Davis, Chris Stueve, Ozarks Transportation Organization

**I. Administration**

**A. Introductions**

Mr. David Brock called the meeting to order at 1:38 p.m. and asked for introductions from those attending. Mr. Ryan Mooney introduced Ms. Hollie Elliott, Economic Development Coordinator, Springfield Chamber of Commerce. Ms. Stacy Burks advised everyone of her new position with Senator Roy Blunt.

**B. Approval of the Technical Planning Committee Meeting Agenda**

Mr. Rick Hess made a motion to accept the Technical Planning Committee meeting agenda as presented and was seconded by Ms. Jenni Jones. The motion passed unanimously.

**C. Approval of the November 17, 2010 Regular Meeting and December 2, 2010 Electronic Meeting Minutes**

Mr. Martin Gugel made a motion to approve the November 17, 2010 and December 2, 2010 electronic meeting minutes as presented and was seconded by Mr. Atchley. The motion passed unanimously.

**D. Public Comment Period for All Agenda Items**

None.

**E. Interim Executive Director's Report**

Ms. Edwards advised the Technical Committee of the Highway Bill extension until March 4, 2011. Ms. Edwards discussed the upcoming Safe Routes To School Infrastructure Grants, in the amount of \$1.6 Million, which is open from February 1, 2011 until April 15, 2011. Ms. Dawne Gardener, MoDOT, is providing a workshop from Noon until 2:00 p.m on Tuesday, January 25, 2011 to assist anyone applying for this grant. The workshop will show how to apply for a grant and answer any questions regarding the program or potential infrastructure projects. Safe Routes to School Infrastructure projects include the planning, design, and construction of infrastructure related projects that will substantially improve the ability of students to walk and bicycle to school, including sidewalk improvements, traffic calming and speed reduction improvements, pedestrian and bicycle crossing improvements, on-street bicycle facilities, off-street bicycle and pedestrian facilities, secure bicycle parking facilities, traffic diversion improvements in the vicinity of schools. Ms. Edwards advised the Technical Committee of the 2010 OTO audit completed by Cinda Rodgers, CPA. She stated the audit went very well without any material findings. Ms. Edwards stated a Railroad Report has been released showing a detailed outline of Congress' High Speed Rail Plan through 2050. It is the first time Springfield has appeared on a National map showing a passenger rail system in place. Ms. Edwards stated OTO staff has been working on updating the Long Range Transportation Plan. She has been working on the Community Focus Report for City of Springfield. Ms. Edwards advised the Committee that OTO participated in the Multicultural Festival getting public input on the Long Range Plan. She also advised the Committee that EPA has delayed any news on the new ozone standards until July 2011.

**F. Bicycle and Pedestrian Committee Report**

Ms. Longpine stated the BPAC has been working on the Long Range Transportation Plan focusing on bicycle and pedestrian activities for the plan. The committee is trying to refine a process to create prioritization criteria and project submissions concerning the LRTP. During the process, BPAC will establish an ongoing list of bike/ped projects for additional funding in the future.

## **II. New Business**

### **A. Amendment Number Two to the FY 2011-2014 Transportation Improvement Program**

Ms. Edwards stated there are four changes proposed to the FY 2011-2014 Transportation Improvement Program. The City of Springfield requested an amendment to increase the funding amount for the Boonville Phase II Streetscape Project. The City of Ozark and MoDOT requested a revision to the Third Street Improvement Project to add final design, right-of-way and construction funds. The City of Ozark will utilize STP-Urban Funding and MoDOT will utilize statewide cost share funding. MoDOT requested to add a project to the TIP for pavement improvements on West Chestnut Expressway in Springfield from Haseltine Road to College Street. MoDOT requested to modify a project to accelerate and expand pavement treatment on I-44 from Glenstone to US 65. Mr. Steve Childers made a motion to approve Amendment Number Two to the FY 2011-2014 TIP and was seconded by Mr. Dan Smith. The motion carried unanimously.

### **B. Administrative Modification Number Three to the FY 2011-2014 Transportation Improvement Program**

Ms. Edwards stated staff made one change proposed by MoDOT to move funds on the Route M Pavement Improvement project from FY2012 and FY2013 to FY2011.

### **C. OTO Long Range Transportation Plan (LRTP) Update**

Ms. Longpine provided a LRTP update to the Technical Planning Committee. The LRTP Subcommittee and OTO staff has been working together to develop the Long Range Transportation Plan. The Long Range Transportation Plan draft that was distributed includes goals and objectives, the Roadway Prioritization Criteria and Glossary, a list/corresponding map of Projects. The LRTP Subcommittee based the prioritization criteria upon the goals for the LRTP. Those goals are based on the SAFTEA-LU Planning Factors and the results of public involvement. The subcommittee will take the scores, once final, and review them for any irregularities, make any essential prioritization adjustments, and will rank the projects by High, Medium, and Vision, within fiscal constraints for the next 24 years. The next scheduled LRTP Subcommittee Meeting is on Tuesday, January 25, 2011 at 2:30 p.m. located at the MoDOT office in Springfield.

### **D. Major Thoroughfare Plan Amendments**

Ms. Edwards stated the Major Thoroughfare Plan Subcommittee recommended several changes to the Major Thoroughfare Plan for the City of Battlefield, City of Ozark, City of Republic and the City of Springfield. Greene County did not submit any proposed amendments, but plan to review with the cities within this year and will recommend further amendments if necessary. These changes will go before the public in a series of public hearing slated for the spring. After public comments, OTO staff will review the LRTP and MTP with the Technical Planning Committee in order to make a recommendation to the Board of Directors.

### **E. FY 2012 Unified Planning Work Program Subcommittee**

Ms. Edwards requested the Technical Planning Committee appoint a subcommittee to prepare the FY 2012 Unified Planning Work Program. The UPWP addresses the activities, including plans and programs, the MPO will undertake during the fiscal year. Work tasks will include administration, corridor planning, ridesharing, transportation and



transit planning, and special studies. The UPWP also outlines the working budget of OTO. The Technical Planning Committee appointed Jenni Jones, Joel Keller, Larry Martin, Carol Cruise and David Brock to serve on the FY 2012 Unified Planning Work Program Subcommittee.

### **III. Other Business**

#### **A. Technical Planning Committee Member Announcements**

Ms. Edwards stated the Missouri Chamber is hosting the 2011 Transportation Conference on Thursday, January 27, 2011 at the Capitol Plaza Hotel, 415 West McCarty Street, in Jefferson City from 8:30 a.m. until 3:00 p.m. Mr. Ryan Mooney stated the Springfield Chamber is hosting a Salute to Missouri Legislators on Wednesday, January 26, 2011 from 4:30 p.m. until 6:30 p.m. at the same location.

#### **B. Transportation Issues For Technical Planning Committee Member Review**

None.

### **IV. Adjournment**

Mr. David Brock adjourned the meeting at 2:31 p.m.

# TAB 2

## **TECHNICAL COMMITTEE AGENDA 03/16/11; ITEM II.A.**

### **Amendment Number Three to the FY 2011-2014 Transportation Improvement Program**

#### **Ozarks Transportation Organization (Springfield, MO Area MPO)**

#### **AGENDA DESCRIPTION:**

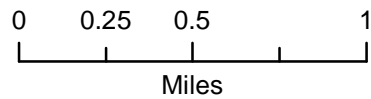
There is one item included as part of TIP Amendment Number Three to the FY 2011-2014 Transportation Improvement Program.

MoDOT and the City of Springfield are requesting to modify a sidewalk project on Kearney Street/Route 744 to include pedestrian improvements from Kansas Expressway to Glenstone Avenue. Please see the attached TIP pages for more information.

MoDOT District 8 was awarded statewide transportation funds to address ADA and pedestrian issues along Kearney Street, which was already slated for pavement improvements in FY 2012. The current scoping project to address ADA issues at the Summit/Kearney intersection was expanded to include the entire length of the resurfacing project.

#### **TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:**

To make a recommendation to the Board of Directors on approving Amendment Number Three to the FY 2011-2014 TIP. If recommended for approval, include the following: That staff prepare a press release pursuant to the MPO's public involvement process so that a 15-day public review period for the list can be conducted and comments received prior to the April 21st Board of Directors meeting.



## Amendment #3 2011-2014 TIP



PROGRAMMED IMPROVEMENTS  
-Enhancements-

ORIGINAL

ENHANCEMENTS CITY OF SPRINGFIELD									
Funding									
			2011	2012	2013	2014	TOTALS		
Project Title:	SCOPING FOR ADA IMPROVEMENTS AT RTE. 744 AND SUMMIT AVE	ENG	\$ -	\$ -	\$ -	\$ -	\$ -		
MoDOT #	8P2236	MoDOT	\$ 3,000	\$ -	\$ -	\$ -	\$ 3,000		
TIP #	EN1101	Local	\$ -	\$ -	\$ -	\$ -	\$ -		
Description:	Scoping for pedestrian improvements and ADA accommodations at the intersection of Kearney Street (Route 744) and Summit Avenue.	Other	\$ -	\$ -	\$ -	\$ -	\$ -		
		ROW	\$ -	\$ -	\$ -	\$ -	\$ -		
		FHWA( )	\$ -	\$ -	\$ -	\$ -	\$ -		
Federal Source Agency	FHWA	MoDOT	\$ -	\$ -	\$ -	\$ -	\$ -		
Federal Funding Category	NHS	Local	\$ -	\$ -	\$ -	\$ -	\$ -		
MoDOT Funding Category	Major Projects and Emerging Needs	Other	\$ -	\$ -	\$ -	\$ -	\$ -		
Work or Fund Category	Scoping	CON	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Project Cost	\$1,000 - \$300,000	TOTAL	\$ -	\$ -	\$ -	\$ -	\$ -		
Advanced Construction.			\$ 3,000	\$ -	\$ -	\$ -	\$ 3,000		

PROPOSED

CITY OF SPRINGFIELD									
Funding									
			2011	2012	2013	2014	TOTALS		
Project Title:	RTE. 744 (KEARNEY STREET) PEDESTRIAN IMPROVEMENTS	ENG	\$ -	\$ 119,200	\$ -	\$ -	\$ 119,200		
MoDOT #	8S2251	MoDOT	\$ 3,000	\$ 29,800	\$ -	\$ -	\$ 32,800		
TIP #		Local	\$ -	\$ -	\$ -	\$ -	\$ -		
Description:	Provide continuous sidewalk on Kearney Street from Rte. 13 (Kansas Expressway) to Loop 44 (Glenstone Avenue).	Other	\$ -	\$ -	\$ -	\$ -	\$ -		
		ROW	\$ -	\$ -	\$ -	\$ -	\$ -		
		FHWA( )	\$ -	\$ -	\$ -	\$ -	\$ -		
Federal Source Agency	FHWA	MoDOT	\$ -	\$ 414,800	\$ -	\$ -	\$ 414,800		
Federal Funding Category	Enhancement	Local	\$ -	\$ 216,100	\$ -	\$ -	\$ 216,100		
MoDOT Funding Category	Major Projects and Emerging Needs	Other	\$ -	\$ 216,100	\$ -	\$ -	\$ 216,100		
Work or Fund Category	Construction	CON	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Project Cost	\$ 999,000	TOTAL	\$ -	\$ -	\$ -	\$ -	\$ -		
Source of Local Funds: City of Springfield 1/8 Cent Transportation Sales Tax, MoDOT Major Projects and Emerging Needs Funds balance SFY 2012, Statewide Transportation Enhancement Funds 2010-2011.			\$ 3,000	\$ 996,000	\$ -	\$ -	\$ 999,000		

Fiscal Constraint Statement

Engineering costs to be paid for by statewide enhancement funds and the MoDOT District 8 operations budget. Construction costs to be paid for with statewide transportation enhancement funds from the 2010-2011 extension of SAFETEA-LU, by existing balance of MoDOT District 8 Major Projects and Emerging Needs funds. Non-federal match provided and City of Springfield 1/8 Cent Transportation Sales tax funds.

**FINANCIAL SUMMARY**  
- Enhancements -

YEARLY SUMMARY  
FY2011

PROJECT	Federal Funding Source					MoDOT	Local		Other	TOTAL
	Enhancement	SRTS	RTP	STP-U	STP					
EN0606	\$ 195,200						\$ 62,800			\$ 258,000
EN0707	\$ 227,916						\$ 65,584			\$ 293,500
EN0711	\$ 291,036						\$ 77,364			\$ 368,400
EN0802	\$ 480,000						\$ 120,000			\$ 600,000
EN0808	\$ 489,600						\$ 122,400			\$ 612,000
EN0809	\$ 58,000			\$ 106,000		\$ 296,000				\$ 460,000
EN0817	\$ 364,800						\$ 91,200			\$ 456,000
EN0818	\$ 268,800						\$ 67,200			\$ 336,000
EN0906	\$ 73,000						\$ 18,250			\$ 91,250
EN1002				\$ 50,000			\$ 12,500			\$ 62,500
EN1006		\$ 20,812								\$ 20,812
EN1008		\$ 7,700								\$ 7,700
EN1101						\$ 3,000				\$ 3,000
EN1102						\$ 3,000				\$ 3,000
EN1103				\$ 16,800			\$ 4,000			\$ 20,800
EN1104				\$ 8,000			\$ 2,000			\$ 10,000
EN1105				\$ 2,000			\$ 400			\$ 2,400
EN1106	\$ 119,840						\$ 29,960			\$ 149,800
EN1107	\$ 25,078						\$ 6,269			\$ 31,347
EN1108	\$ 147,232						\$ 36,808			\$ 184,040
EN1109	\$ 353,395						\$ 88,349			\$ 441,744
EN1110	\$ 256,000						\$ 60,000	\$ 4,000		\$ 320,000
EN1111	\$ 200,000						\$ 47,500	\$ 2,500		\$ 250,000
EN1112	\$ 100,000						\$ 25,000			\$ 125,000
EN1113	\$ 216,000						\$ 54,000			\$ 270,000
EN1114	\$ 199,967						\$ 24,992	\$ 25,000		\$ 249,959
TOTAL	\$ 4,065,864	\$ 28,512	\$ -	\$ 182,800	\$ -	\$ 302,000	\$ 1,016,576	\$ 31,500	\$ -	\$ 5,627,252

FY2012

PROJECT	Federal Funding Source					MoDOT	Local		Other	TOTAL
	Enhancement	SRTS	RTP	STP-U	STP					
EN1101	\$ 534,000					\$ 245,900	\$ 216,100			\$ 996,000
EN1102						\$ 537,000				\$ 537,000
TOTAL	\$ 534,000	\$ -	\$ -	\$ -	\$ -	\$ 782,900	\$ 216,100	\$ -	\$ -	\$ 1,533,000

FY2014

PROJECT	Federal Funding Source					MoDOT	Local		Other	TOTAL
	Enhancement	SRTS	RTP	STP-U	STP					
EN0809					\$ 361,600	\$ (361,600)				\$ -
TOTAL	\$ -	\$ -	\$ -	\$ -	\$ 361,600	\$ (361,600)	\$ -	\$ -	\$ -	\$ -

**FINANCIAL SUMMARY**  
- Enhancements -

FY2015

PROJECT	Federal Funding Source						MoDOT	Local	Other	TOTAL
	Enhancement	SRTS	RTP	STP-U	STP					
EN1102					\$ 428,000	\$ (428,000)				\$ -
TOTAL	\$ -	\$ -	\$ -	\$ -	\$ 428,000	\$ (428,000)	\$ -	\$ -	\$ -	\$ -

	Federal Funding Source					MoDOT	Local	Other	TOTAL
	Enhancement	SRTS	RTP	STP-U	STP				
TOTAL PROGRAM	\$ 4,599,864	\$ 28,512	-	182,800.00	\$ 789,600	\$ 295,300	\$ 1,232,676	\$ 31,500	\$ 7,160,252

**FINANCIAL SUMMARY**  
-Enhancements-

**FINANCIAL CONSTRAINTS**

		Funding Source						
	Enhancement	SRTS	RTP	STP-U	MoDOT	Local	Other	TOTAL
<b>PRIOR YEAR</b>								
Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
2011								
Funds Anticipated	\$ 4,065,864	\$ 28,512	\$ -	\$ 182,800	\$ 302,000	\$ 1,016,576	\$ 31,500	5,627,252
Funds Programmed	\$ (4,065,864)	\$ (28,512)	\$ -	\$ (182,800)	\$ (302,000)	\$ (1,016,576)	\$ (31,500)	\$ (5,627,252)
Running Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
2012								
Funds Anticipated	\$ 534,000	\$ -	\$ -	\$ -	\$ 782,900	\$ 216,100	\$ -	1,533,000
Funds Programmed	\$ (534,000)	\$ -	\$ -	\$ -	\$ (782,900)	\$ (216,100)	\$ -	\$ (1,533,000)
Running Balance	\$ -	\$0	\$0	\$0	\$0	\$0	\$0	0
2014								
Funds Anticipated	\$ -			\$ 361,600	\$ (361,600)			0
Funds Programmed	\$ -			\$ (361,600)	\$ 361,600			0
Running Balance	\$ -	\$0	\$0	\$0	\$0	\$0	\$0	0
2015								
Funds Anticipated	\$ -	\$ -	\$ -	\$ 428,000	\$ (428,000)	\$ -	\$ -	0
Funds Programmed	\$ -	\$ -	\$ -	\$ (428,000)	\$ 428,000	\$ -	\$ -	0
Running Balance	\$ -	\$0	\$0	\$0	\$0	\$0	\$0	0



# TAB 3

**TECHNICAL PLANNING COMMITTEE AGENDA 03/16/11; ITEM II.B.**

**Administrative Modification Number Four to the FY 2011-2014 Transportation Improvement Program**

**Ozarks Transportation Organization  
(Metropolitan Planning Organization)**

**AGENDA DESCRIPTION:**

Staff has made two administrative changes to the FY 2011-2014 Transportation Improvement Program. These changes, known as Administrative Modification Number 4, are listed below:

**Revision: Minor Changes to funding sources between federal funding categories.**

Chestnut Expressway Pavement Improvement – funding source changed from Surface Transportation Program (STP) to STP and Enhancement funding. Statewide Enhancement funds were awarded to the project.

**Revision: Minor Changes in a project's programmed amount less than 15%.**

ATMS Deployment Phase II – total project cost increased by less than 2%. The City of Springfield is utilizing an additional \$29,000 in local funds.

**TECHNICAL COMMITTEE ACTION REQUESTED:**

**NO ACTION REQUIRED – INFORMATIONAL ONLY**

**PROGRAMMED IMPROVEMENTS**

-Roadways-

**ORIGINAL**

CITY OF SPRINGFIELD		Funding	2011	2012	2013	2014	TOTALS	
Project Title:	CHESTNUT EXPRESSWAY PAVEMENT IMPROVEMENTS	ENG	FHWA(STP)	\$ -	\$ -	\$ -	\$ 50,400	\$ 50,400
MoDOT #	8P0881C		MoDOT	\$ 83,000	\$ -	\$ -	\$ (50,400)	\$ 32,600
TIP #	SP1103		Local	\$ -	\$ -	\$ -	\$ -	\$ -
			Other	\$ -	\$ -	\$ -	\$ -	\$ -
Description:	Pavement improvements on Chestnut Expressway from Kansas Expressway (Route 13) to Glenstone Avenue.	ROW	FHWA(____)	\$ -	\$ -	\$ -	\$ -	\$ -
			MoDOT	\$ -	\$ -	\$ -	\$ -	\$ -
			Local	\$ -	\$ -	\$ -	\$ -	\$ -
			Other	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Source Agency	FHWA	CON	FHWA(STP)	\$ -	\$ -	\$ -	\$ 733,600	\$ 733,600
Federal Funding Category	STP		MoDOT	\$ 917,000	\$ -	\$ -	\$ (733,600)	\$ 183,400
MoDOT Funding Category	Taking Care of the System		Local	\$ -	\$ -	\$ -	\$ -	\$ -
Work or Fund Category	Construction		Other	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Cost	\$1,001,000	TOTAL						
Advanced Construction- Planned conversion 2014.			TOTAL	\$ 1,000,000	\$ -	\$ -	\$ -	\$ 1,000,000

**MODIFIED**

CITY OF SPRINGFIELD		Funding	2011	2012	2013	2014	TOTALS	
Project Title:	CHESTNUT EXPRESSWAY PAVEMENT IMPROVEMENT	PE	FHWA(STP)	\$ -	\$ -	\$ -	\$ 50,400	\$ 50,400
MoDOT #	8P0881C		MoDOT	\$ 83,000	\$ -	\$ -	\$ (50,400)	\$ 32,600
TIP #	SP1103		Local	\$ -	\$ -	\$ -	\$ -	\$ -
Description:	Pavement improvements on Chestnut Expressway from Kansas Expressway to Glenstone Ave.	ROW	Other	\$ -	\$ -	\$ -	\$ -	\$ -
			FHWA(____)	\$ -	\$ -	\$ -	\$ -	\$ -
			MoDOT	\$ -	\$ -	\$ -	\$ -	\$ -
			Local	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Source Agency	FHWA	CON	Other	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Funding Category	FHWA(MISC)		\$ -	\$ -	\$ -	\$ 733,600	\$ 733,600	
MoDOT Funding Category	MoDOT		\$ 917,000	\$ -	\$ -	\$ (733,600)	\$ 183,400	
Work or Fund Category	Taking Care of the System		Local	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Cost	Construction		Other	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 1,001,000								
Advanced Construction. \$227,000 Statewide Transportation Enhancement Funds and \$557,000 STP funds.			TOTAL	\$ 1,000,000	\$ -	\$ -	\$ -	\$ 1,000,000

**PROGRAMMED IMPROVEMENTS**

-Roadways-

**ORIGINAL**

MPO AREA-WIDE OPERATIONS AND MAINTENANCE		Funding	2011	2012	2013	2014	TOTALS	
Project Title:	ATMS DEPLOYMENT PHASE II	ENG	FHWA(STP)	\$ -	\$ -	\$ -	\$ 74,000	\$ 74,000
MoDOT #	8Q0830B		MoDOT	\$ 94,000	\$ -	\$ -	\$ (74,000)	\$ 20,000
TIP #	MO0908		Local	\$ 161,000	\$ -	\$ -	\$ -	\$ 161,000
			Other	\$ -	\$ -	\$ -	\$ -	\$ -
Description:	Phase II of field device deployment of the Intelligent Transportation System on various routes in the OTO area.	ROW	FHWA(____)	\$ -	\$ -	\$ -	\$ -	\$ -
			MoDOT	\$ -	\$ -	\$ -	\$ -	\$ -
			Local	\$ -	\$ -	\$ -	\$ -	\$ -
			Other	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Source Agency	FHWA	CON	FHWA(STP)	\$ -	\$ -	\$ -	\$ 1,082,400	\$ 1,082,400
Federal Funding Category	STP		MoDOT	\$ 1,353,000	\$ -	\$ -	\$ (1,082,400)	\$ 270,600
MoDOT Funding Category	Taking Care of the System		Local	\$ -	\$ -	\$ -	\$ -	\$ -
Work or Fund Category	Construction		Other	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Cost	\$1,609,000	TOTAL						
Source of Local Funds: City of Springfield 1/8 Cent Transportation Sales Tax			TOTAL	\$ 1,608,000	\$ -	\$ -	\$ -	\$ 1,608,000

**MODIFIED**

MPO AREA-WIDE OPERATIONS AND MAINTENANCE		Funding	2011	2012	2013	2014	TOTALS	
Project Title:	ATMS DEPLOYMENT PHASE II	ENG	FHWA(STP)	\$ -	\$ -	\$ -	\$ 74,000	\$ 74,000
MoDOT #	8Q0830B		MoDOT	\$ 94,000	\$ -	\$ -	\$ (74,000)	\$ 20,000
TIP #	MO0908		Local	\$ 190,000	\$ -	\$ -	\$ -	\$ 190,000
			Other	\$ -	\$ -	\$ -	\$ -	\$ -
Description:	Phase II of field device deployment of the Intelligent Transportation System on various routes in the OTO area.	ROW	FHWA(____)	\$ -	\$ -	\$ -	\$ -	\$ -
			MoDOT	\$ -	\$ -	\$ -	\$ -	\$ -
			Local	\$ -	\$ -	\$ -	\$ -	\$ -
			Other	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Source Agency	FHWA	CON	FHWA(STP)	\$ -	\$ -	\$ -	\$ 1,082,400	\$ 1,082,400
Federal Funding Category	STP		MoDOT	\$ 1,353,000	\$ -	\$ -	\$ (1,082,400)	\$ 270,600
MoDOT Funding Category	Taking Care of the System		Local	\$ -	\$ -	\$ -	\$ -	\$ -
Work or Fund Category	Construction		Other	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Cost	\$1,637,000	TOTAL						
Source of Local Funds: City of Springfield 1/8 Cent Transportation Sales Tax			TOTAL	\$ 1,637,000	\$ -	\$ -	\$ -	\$ 1,637,000

# TAB 4

## **TECHNICAL COMMITTEE AGENDA 03/16/11; ITEM II.D.**

### **Major Thoroughfare Plan Amendments**

#### **Ozarks Transportation Organization (Metropolitan Planning Organization)**

#### **AGENDA DESCRIPTION:**

The following pages contain a listing of Major Thoroughfare Plan amendments that are proposed for adoption with the 2011 Long Range Transportation Plan Update.

The Ozarks Transportation Organization Major Thoroughfare Plan Subcommittee held a series of public meetings to discuss and review proposed updates to the OTO Major Thoroughfare Plan. The Subcommittee finished the discussion and review process on December 6, 2010 and unanimously recommended the proposal for adoption.

Each set of changes is listed by the requesting party. The first page in each set is a list of the changes requested. This is followed by a map of the existing plan and a map of the proposed plan.

Greene County did not submit any proposed amendments at this time but intends to review the plan with the cities in Greene County within the year and make a recommendation for further amendments if needed.

#### **The City of Republic has revised the request to remove some potential conflicts with the Greene County current plan until there can be further review.**

OTO is planning to hold a series of public meetings during the spring to get input on this proposal as well as the entire OTO Long Range Transportation Plan. Once OTO has solicited public comment, the entire Long Range Transportation Plan including the Major Thoroughfare Plan will be placed on a Technical Committee agenda in order to make a recommendation to the Board of Directors.

#### **TECHNICAL COMMITTEE ACTION REQUESTED:**

No Action Required

Staff is requesting that Technical Committee review and comment on the proposal prior to the public review.

# **Proposed Updates to the Ozarks Transportation Organization Major Thoroughfare Plan**

## **CITY OF BATTLEFIELD**

B1. Add a Future Collector between Farm Road 115 and the 90-degree curve in Farm Road 190 located approximately 0.75 miles west of Route FF; this Future Collector represents a westward extension of the portion of Farm Road 190 that runs west from and perpendicular to Route FF.

B2. Reclassify the Future Secondary Arterial between the intersection of Route FF and Farm Road 190 and Farm Road 131 as a Future Collector; this Future Collector represents an eastward extension of Farm Road 190.

## **BATTLEFIELD ROAD/FR 187/FR 164 - CITIZEN REQUEST**

C1. Reclassify Battlefield Road between Blackman Road and Farm Road 187: Primary Arterial to Secondary Arterial.

C2. Reclassify Farm Road 187 between Battlefield Road and Farm Road 164: Primary Arterial to Secondary Arterial.

C3. Reclassify Farm Road 164 between Farm Road 187 and White Oak Drive: Primary Arterial to Secondary Arterial.

## **MoDOT**

M1. Reclassify the Future Freeway between the intersection of Route FF and Blue Springs Road and a point on Rosedale Drive approximately 0.45 miles west of Gregg Road as a Future Expressway; this Future Expressway represents a southward extension of Route FF.

M2. Reclassify Rosedale Road between the southern terminus of the Future Expressway referenced in #1 (a point approximately 0.45 miles west of Gregg Road) and Route 160: Freeway to Expressway.

## **City of Ozark**

O1. Reclassify Southernview between Bluesky and Melton/Willow: Local Street to Collector.

O2. Reclassify Bluestem between Future Secondary Arterial and Route NN: Collector to Secondary Arterial.

O3. Reclassify Garton between Future Secondary Arterial and Route NN: Local Street to Secondary Arterial.

O4. Reclassify North/Longview between Cheyenne and 20<sup>th</sup> Street: Primary Arterial to Secondary Arterial.

O5. Reclassify Future Primary Arterial between 20<sup>th</sup> Street and Route NN: Future Collector to Future Secondary Arterial. This Future Primary Arterial represents an eastward extension of Longview.

O6. Extend Future Collector south of Route NN to Sunset; this Future Collector would intersect Route NN between 2<sup>nd</sup> Street and 9<sup>th</sup> Avenue and Sunset between 3<sup>rd</sup> Street and Sunrise Court.

O7. Reclassify Sunset between 3<sup>rd</sup> Street and Future Collector proposed in #6: Local Street to Collector.

O8. Remove Future Collector running west from the 90-degree curve in Pheasant located approximately ½ mile south of the intersection of Pheasant and Route NN.

O9. Reclassify 12<sup>th</sup> Street between Parkview and Jackson/MO 14: Local Street to Collector.

- O10. Add Future Collector between Future Collector running west from Route NN (near the intersection of Route NN and Stonehill) and the intersection of 12<sup>th</sup> Street and Parkview; this Future Collector represents a northward extension of 12<sup>th</sup> Street.
- O11. Reclassify Bluff Street between Future Collector proposed in #10 and Route NN: Local Street to Collector.
- O12. Reclassify Greenbridge between Riverside and Hawkins/Smyrna: Collector to Primary Arterial.
- O13. Add Future Primary Arterial between Route NN and Riverside; this Future Primary Arterial represents a westward extension of Greenbridge.
- O14. Remove Future Collector running south from Greenbridge between 10<sup>th</sup> Street and Nottingham Drive.
- O15. Remove Future Primary Arterial between Greenbridge and McCracken.
- O16. Reclassify Hawkins from Collector to Primary Arterial between Greenbridge/Smyrna and the 90-degree curve in Hawkins located approximately 0.62 miles south of Greenbridge/Smyrna.
- O17. Add Future Primary Arterial between Hawkins and McCracken; this Future Primary Arterial represents a southward extension of Hawkins from the 90-degree curve in Hawkins located approximately 0.62 miles south of Greenbridge/Smyrna.
- O18. Remove Future Collector between McCracken and Hartley; this Future Collector would have intersected McCracken between Ridge Park and Brighton and Hartley between Salers and Route JJ.
- O19. Reclassify Route JJ between MO 125 and MO 14: Primary Arterial to Secondary Arterial.
- O20. Reclassify Sandstone between MO 14 and Summit/MPO Southern Boundary: Collector to Secondary Arterial.
- O21. Reclassify Route W between MO 14 and MPO Southern Boundary: Secondary Arterial to Primary Arterial.
- O22. Reclassify 22<sup>nd</sup> Avenue south of South Street/MO 14: Local Street to Collector.
- O23. Reclassify 22<sup>nd</sup> Avenue north of Warren: Local Street to Collector.
- O24. Add Future Collector between the segments of 22<sup>nd</sup> Avenue referenced in #22 and #23; this Future Collector would complete 22<sup>nd</sup> Avenue between South Street/MO 14 and Warren.
- O25. Reclassify 14<sup>th</sup> Avenue between South Street/MO 14 and Warren: Local Street to Collector.
- O26. Reclassify Church Street between 9<sup>th</sup> Street and 3<sup>rd</sup> Street: Local Street to Collector.
- O27. Add Future Primary Arterial between already approved Future Primary Arterial running south from the intersection of Jackson/MO 14 and 9<sup>th</sup> Street to the intersection of Oak Street and 11<sup>th</sup> Street; this Future Primary Arterial would run south to the intersection of Church Street and 9<sup>th</sup> Street and then southwest to the intersection of Oak Street and 11<sup>th</sup> Street.
- O28. Reclassify Selmore Road between South Street/MO 14 and Minnesota/MPO Southern Boundary: Secondary Arterial to Primary Arterial.
- O29. Reclassify the north/south segment of Camelot Drive: Local Street to Collector.



O30. Add Future Collector between the intersection of South Street and 9<sup>th</sup> Street and the north/south segment of Camelot Drive.

O31. Reclassify the Future Collector between the intersection of South Street and 17<sup>th</sup> Street and the MPO Southern Boundary as a Future Primary Arterial.

O32. Modify alignment of the Future Primary Arterial referenced in #31.

O33. Reclassify 19<sup>th</sup> Street south of South Street from Local Street to Collector.

O34. Add Future Collector between the southern terminus of 19<sup>th</sup> Street and the MPO Southern Boundary.

O35. Reclassify Riverdale between Route F and Cave Hollow: Collector to Secondary Arterial.

## City of Republic

R1. Add a Future Secondary Arterial between the western terminus of Carnahan Street (approximately 0.50 miles west of Route MM) and the intersection of Route MM and Farm Road 148; this Future Secondary Arterial represents a westward extension of Farm Road 148.

R2. Add a Future Collector between a point on Route MM approximately 788 feet south of Carnahan Street and a point approximately 0.50 miles east of Route MM.

R3. Reclassify Farm Road 156 between Farm Road 97 and Route MM: Collector to Secondary Arterial.

R4. Reclassify York Avenue between Sawyer Road and Benton Street: Local Street to Collector.

R5. Add a Future Collector between the intersection of Pacific Avenue and Orr Street and the intersection of Route MM and Farm Road 160. This Future Collector represents a westward extension of Orr Street and would cross the BNSF Railway at a point approximately 220 feet south of Haile Street, intersect the Future Collector referenced in #7 at a point approximately 910 feet east of Route MM, and intersect the Future Local Street referenced in #6 at a point approximately 510 feet east of Route MM.

R6. Add a Future Local Street between the southern terminus of Atlantic Avenue (approximately 285 feet south of Benton Street) and the Future Collector referenced in #5. This Future Local Street represents a southward extension of Atlantic Avenue.

R7. Add a Future Collector between the intersection of York Avenue and Benton Street and the Future Collector referenced in #5. This Future Collector represents a southward extension of York Avenue.

R8. Add a Future Collector between a point approximately 1335 feet north of Orr Street and the northwestern terminus of the Future Collector referenced in #16; this Future Collector would run parallel to the BNSF Railroad and would intersect Orr Street at a point approximately 400 feet east of Pacific Avenue.

R9. Reclassify Orr Street east of Commercial Avenue: Local Street to Collector.

R10. Add a Future Collector between the eastern terminus of Orr Street and a point on Farm Road 107 approximately 485 feet south of Route 413/Route 60; this Future Collector would intersect the Future Collector referenced in #15 at a point approximately 580 feet north of Route 413/Route 60, and Route 413/Route 60 at a point approximately 250 feet west of Farm Road 107.

R11. Add a Future Collector between the intersection of Farm Road 156 and Farm Road 107 and a point on Maple Leaf Lane approximately 697 feet north of Route 413. This Future Collector would extend Farm Road 107 to the south by approximately 0.25 miles before turning east for approximately 0.60 miles to Maple Leaf Lane.

R12. Realign the Future Primary Arterial that would connect the eastern terminus of Farm Road 164 (approximately 0.38 miles east of Farm Road 89) and the northern terminus of Route ZZ; this Future Primary Arterial represents an eastward extension of Farm Road 164 and a northward extension of Route ZZ.

R13. Add a Future Collector between the Future Collector referenced in #21 and Farm Road 103; this Future Collector would intersect the Future Collector referenced in #8 at a point approximately 0.25 northeast of its southwestern terminus, the Future Collector referenced in #15 at a point approximately 0.22 miles northeast of its southwestern terminus, Route 413/Route 60 at a point approximately 398 feet west of Farm Road 103, and Farm Road 103 at a point approximately 730 feet south of Route 413/Route 60.

R14. Add a Future Local Street between Commercial Avenue and the Future Collector referenced in #15. This Future Local Street would intersect Commercial Avenue at a point approximately 0.25 miles north of Farm Road 164 and the Future Collector referenced in #15 at a point approximately 467 feet east of Commercial Avenue.

R15. Add a Future Collector between a point approximately 1175 feet northeast of the Future Collector referenced in #10 and the southeastern terminus of the Future Collector referenced in #16; this Future Collector would run parallel to Route 60/Route 413.

R16. Add a Future Collector between the southwestern terminus of the Future Collector referenced in #8 and the southwestern terminus of the Future Collector referenced in #15.

R17. Remove the Future Collector between a point on Route 60/Route 413 approximately 0.26 miles west of Farm Road 107 and the intersection of Farm Road 164 and Farm Road 107.

R18. Reclassify Farm Road 107 between Route 60 and Farm Road 164: Local Street to Collector.

R19. Reclassify Farm Road 89 between Farm Road 164 and Farm Road 168: Local Street to Collector.

R20. Add a Future Collector between the intersection of Rhine Circle and Lake Drive and a point on Farm Road 103 approximately 0.47 miles north of Route M. This Future Collector would intersect Farm Road 170 at a point approximately 585 feet east of Route 60, the Future Local Street referenced in #21 at a point approximately 0.20 miles west of Route M, Route M at a point approximately 0.27 miles east of Route 60, Farm Road 101 at a point approximately 0.17 miles north of Route M, and the Future Primary Arterial referenced in #12 at a point approximately 0.20 miles east of Farm Road 101.

R21. Add a Future Local Street between the intersection of Route M and Old Stone Avenue and the Future Collector referenced in #20. This Future Local Street would intersect the Future Collector referenced in #20 a point approximately 0.21 miles west of Route M and would make a 90-degree north-to-east or west-to-south turn at a point approximately 635 feet west of the intersection of Route M and Old Stone Avenue.

R22. Remove the Future Collector between the intersection of Farm Road 170 and Farm Road 75 and the western terminus (at Farm Road 81) of the Future Collector referenced in #24; this Future Collector would extend Farm Road 75 south by approximately 0.26 miles before turning east for approximately 0.50 miles to the western terminus (at Farm Road 81) of the Future Collector referenced in #24.

R23. Remove the Future Collector between the Future Collector referenced in #22 and the intersection of Municipal Drive and West Avenue; this Future Collector represents a northward extension of West Avenue.

R24. Remove the Future Collector between the eastern terminus (at Farm Road 81) of the Future Collector referenced in #22 and the intersection of Farm Road 172 and Farm Road 85; this Future Collector represents a westward extension of Farm Road 172.

R25. Reclassify Republic Commons Drive between Hamilton Street and Republic Commons Drive's northeastern terminus (approximately 0.19 miles northeast of Hamilton Street): Local Street to Collector.

R26. Add a Future Collector between the northeastern terminus of Republic Commons Drive and the intersection of Oakwood Avenue and Farm Road 174.

R27. Reclassify Hamilton Street between Route 60/Route 413 and Oakwood Avenue: Secondary Arterial to Collector.

R28. Remove the Future Secondary Arterial between the intersection of Hamilton Street and Denver Avenue and the intersection of Oakwood Avenue and Farm Road 174.

R29. Reclassify Hamilton Street between Oakwood Avenue and Madison Avenue: Local Street to Collector.

R30. Reclassify Madison Avenue between Hamilton Street and Timber Oak Street: Local Street to Collector.

R31. Reclassify Timber Oak Street between Madison Avenue and the eastern terminus of Timber Oak Street (approximately 173 feet east of Parkwood Avenue): Local Street to Collector.

R32. Reclassify West Avenue between Municipal Drive and Hines Street: Collector to Local Street.

R33. Add a Future Local Street between a point on Route 174 approximately 893 feet west of Route 60 and a point on Hillside Avenue approximately 310 feet north of Hines Street.

R34. Reclassify Lynn Avenue between Freedom Street and Hines Street: Local Street to Secondary Arterial.

R35. Reclassify Oakwood Avenue between Hines Street and Kentwood Street: Local Street to Secondary Arterial.

R36. Add a Future Local Street between the intersection of Hines Street and Hillside Avenue and a point on Harrison Street approximately 631 feet west of Route 60/Route 413.

R37. Add a Future Local Street between a point on Alexander Avenue approximately 105 feet south of Hines Street and the intersection of Elm Street and Peach Tree Lane. This Future Local Street would intersect Logan Street at a point approximately 362 feet east of Route 60/Route 413, Lee Street at a point approximately 352 feet east of Route 60/Route 413, and Harrison Street at a point approximately 330 feet east of Route 60/Route 413.

R38. Remove the Future Collector between a point on Farm Road 174 approximately 0.50 miles west of Farm Road 67 and a point on Farm Road 194 approximately 0.25 miles west of Farm Road 67. This Future Collector would also intersect Farm Road 178 at a point approximately 0.50 miles west of Farm Road 67, Route 174 at a point approximately 0.50 miles west of Farm Road 67, and Farm Road 188 at a point approximately 0.50 miles west of Farm Road 67.

R39. Reclassify Forest Lane between Ventura Avenue and Eagan Street: Local Street to Collector.

R40. Reclassify Eagan Street between Forest Lane and West Avenue: Local Street to Collector.

R41. Add a Future Local Street between a point on Elm Street approximately 412 feet west of Route 60/Route 413 and the intersection of Fountain Avenue and Mill Street.

R42. Add a Future Collector between the intersection of Rosewood Street and Linwood Avenue and the intersection of Route 60/Route 413 and Morningside Avenue. This Future Collector would allow motorists to bypass the intersection of Rosewood Street and Morningside Avenue.

R43. Reclassify Morningside Avenue between Route 60/Route 413 and Rosewood Street: Collector to Local Street.

R44. Reclassify Rosewood Street between Morningside Avenue and Linwood Avenue: Collector to Local Street.

R45. Reclassify Pinewood Avenue between Rosewood Street (west) and Rosewood Street (east): Collector to Local Street.

R46. Reclassify Rosewood Street between Pinewood Avenue and Basswood Avenue: Collector to Local Street.

R47. Reclassify Basswood Avenue between Elm Street and Miller Road/Farm Road 186: Collector to Local Street.

R48. Reclassify Colorado Avenue between Route 60/Route 413 and Frisco Boulevard: Local Street to Collector.

R49. Realign the Future Collector between a point on Miller Road approximately 468 feet west of West Avenue and the intersection of Colorado Avenue and Frisco Boulevard.

R50. Reclassify Frisco Boulevard between Illinois Avenue and Frisco Boulevard's southwestern terminus (approximately 685 feet southwest of Illinois Avenue): Local Street to Collector.

R51. Remove the Future Secondary Arterial between the intersection of Kansas Avenue and Farm Road 188 and a point on Farm Road 194 approximately 300 feet east of Lenape Road. This Future Secondary Arterial would also intersect Route 60/Route 413 at a point approximately 1,000 feet west of Illinois Avenue, the Future Collector referenced in #88 at a point approximately 400 feet west of the western terminus of Frisco Boulevard, the western terminus of Melody Lane, and the western terminus of Christine Lane.

R52. Reclassify Farm Road 194 between Lenape Road and Farm Road 75/Beal Road (possible scribing error): Local Street to Primary Arterial.

R53. Reclassify Grace Street between Main Street/Route P and Grace Street's eastern terminus (approximately 840 feet east of Fountain Avenue): Local Street to Collector.

R54. Remove the Future Collector between Route P and Farm Road 89; this Future Collector would intersect Route P between Halsey Street and Grace Street and would intersect Farm Road 89 at a point approximately 289 feet south of Grace Street.

R55. Add a Future Collector between the eastern terminus of Grace Street east of Fountain Avenue (approximately 850 feet east of Fountain Avenue) and the western terminus of Grace Street west of Joshua Lane (approximately 570 feet west of Joshua Lane); this Future Collector would complete Grace Street between Route P and Farm Road 89.

R56. Reclassify Grace Street between Lynn Avenue/Farm Road 89 and Grace Street's western terminus (approximately 570 feet west of Joshua Lane): Local Street to Collector.

R57. Remove the Future Collector between the intersection of Miller Road and Conroy Avenue, and a point on Farm Road 194 approximately 0.50 miles east of Route P.

R58. Remove the Future Collector between Farm Road 89 and the Future Secondary Arterial referenced in #60; this Future Collector would intersect Farm Road 89 at a point approximately 289 feet south of Grace Street and the Future Secondary Arterial referenced in #60 at a point approximately 0.50 miles north of Farm Road 194.

R59. Remove the Future Collector between a point on Miller Road approximately 0.23 miles west of Basswood Avenue and a point on Farm Road 194 approximately 0.50 miles east of Farm Road 89.

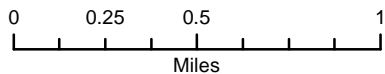
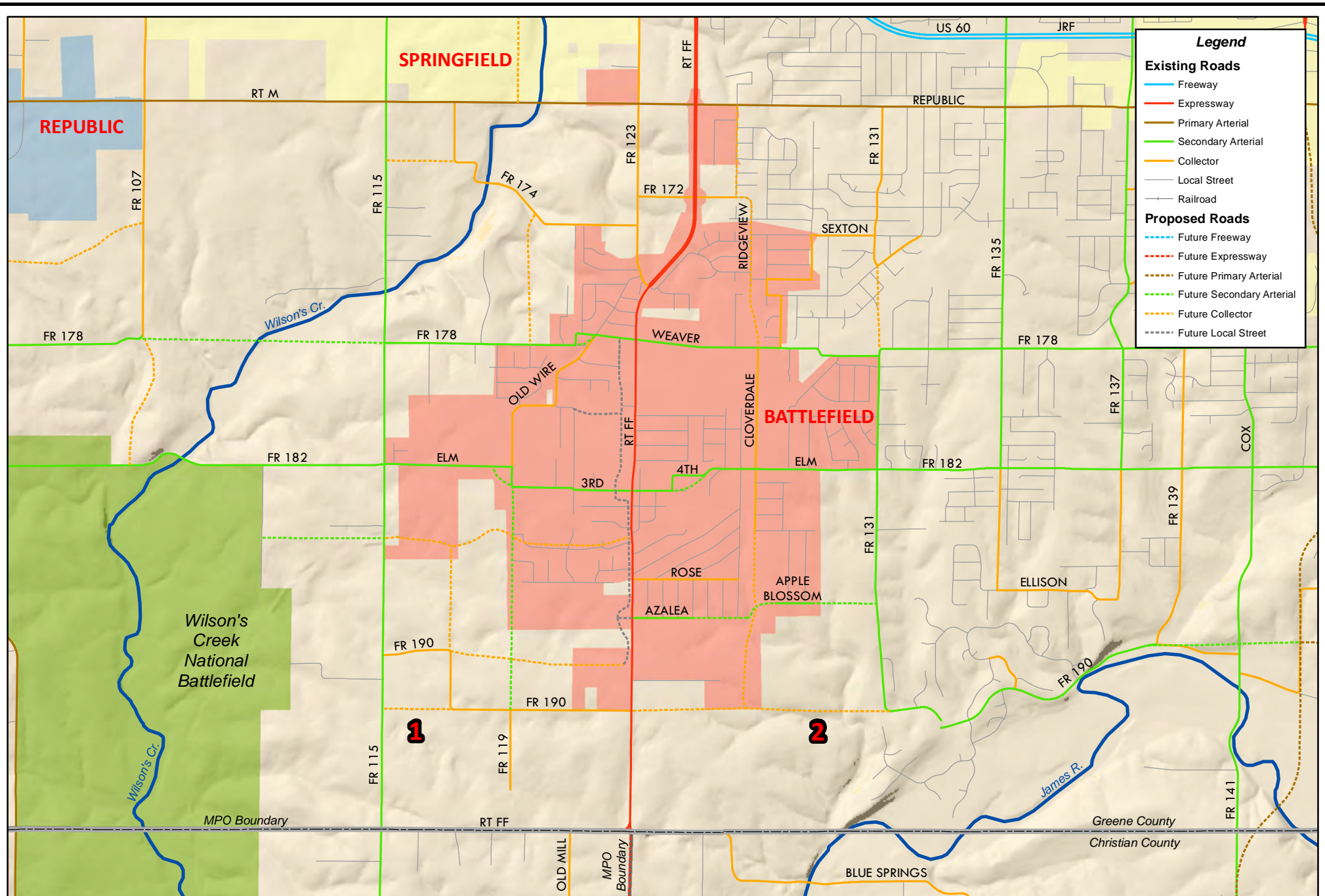
R60. Realign the Future Secondary Arterial between the intersection of Farm Road 186/Miller Road and Farm Road 97 and the intersection of Farm Road 194 and Gardenia Lane; this Future Secondary Arterial, which represents a southward extension of Farm Road 97, would intersect the Future Collector referenced in #105 at a point approximately 0.47 miles north of Farm Road 194.

## CITY OF SPRINGFIELD

S1. Reclassify the future street between the intersection of Southwood Road and Evans Road/Farm Road 188 and the future East-West Arterial in far southern Greene County: Future Secondary Arterial to Future Collector. This Future Collector represents a southward extension of Southwood Road.

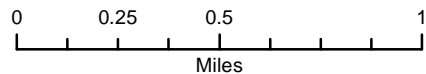
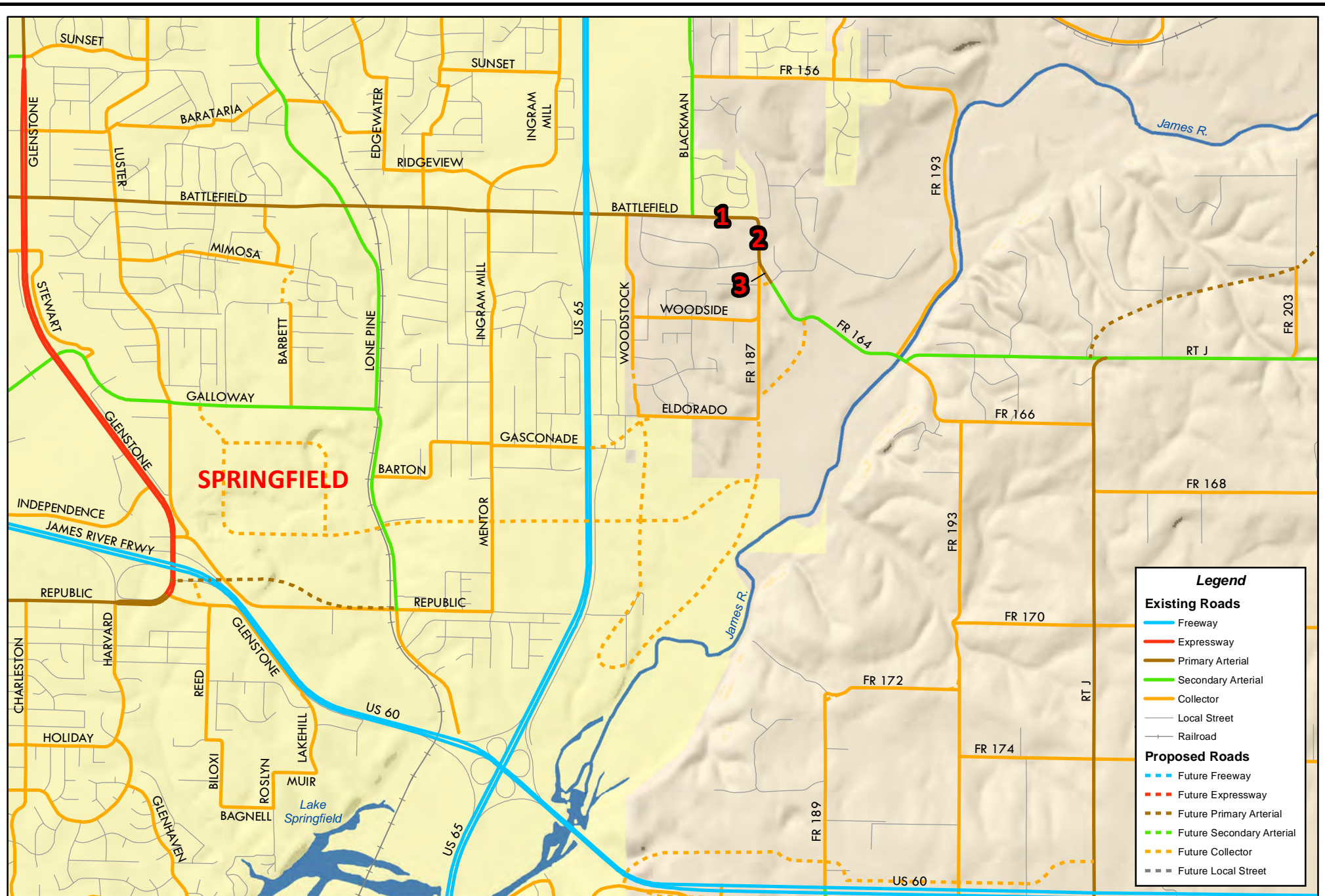






# Major Thoroughfare Plan Battlefield - Proposed



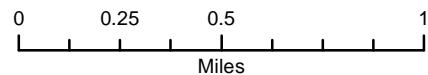
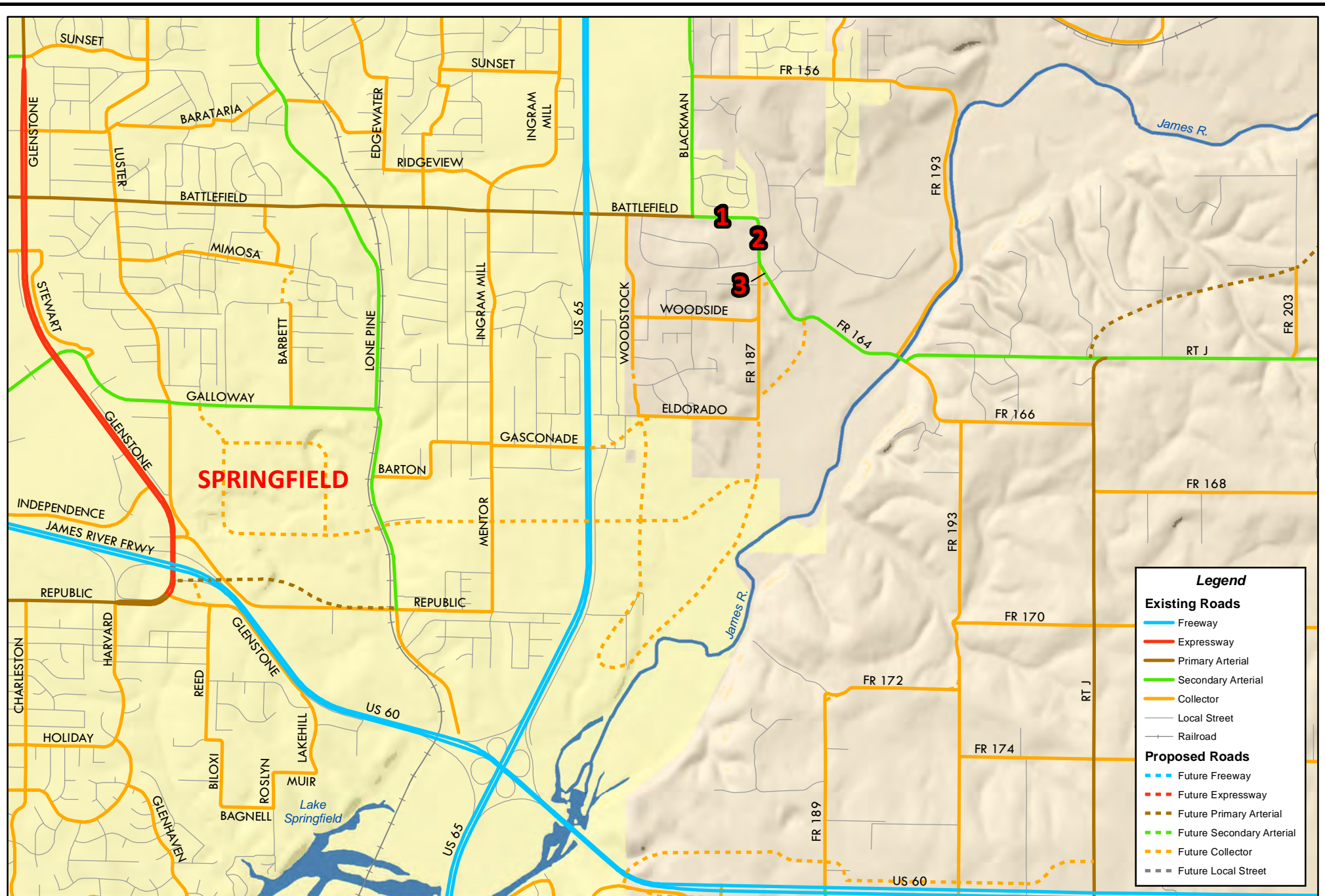


# Major Thoroughfare Plan

## Battlefield/FR 187/FR 164 - Existing

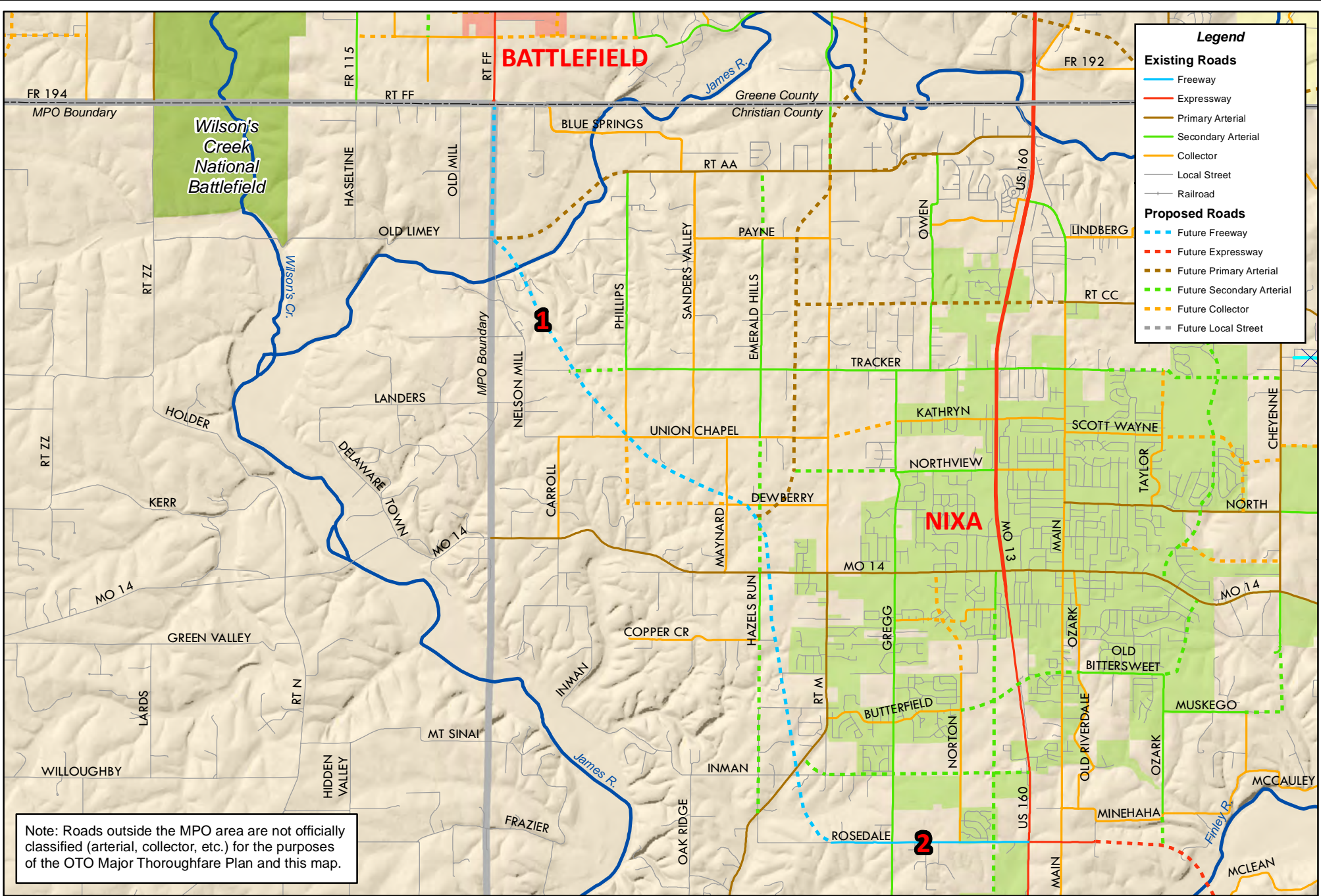






# Major Thoroughfare Plan Battlefield/FR 187/FR 164 - Proposed

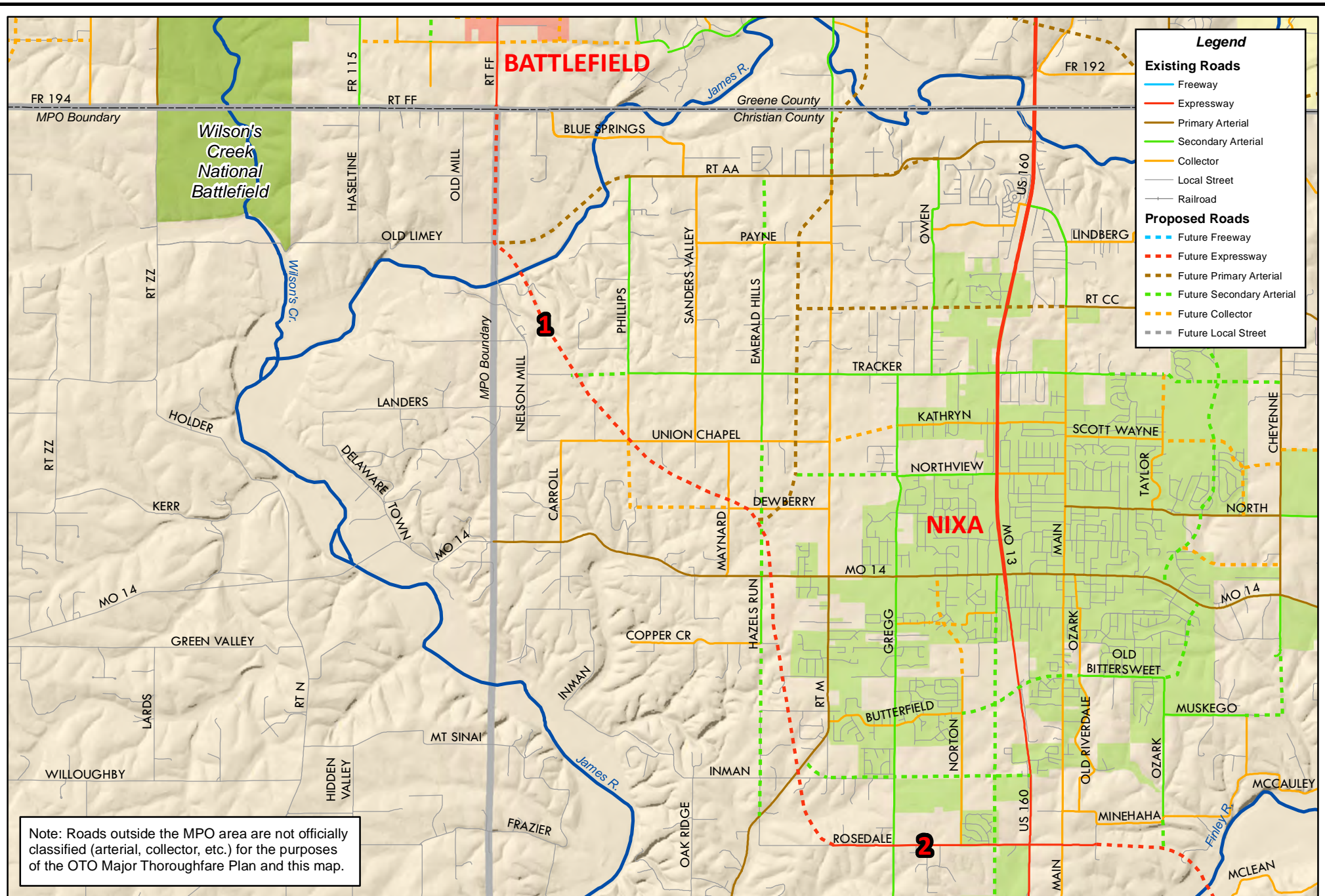




# Major Thoroughfare Plan MoDOT - Existing



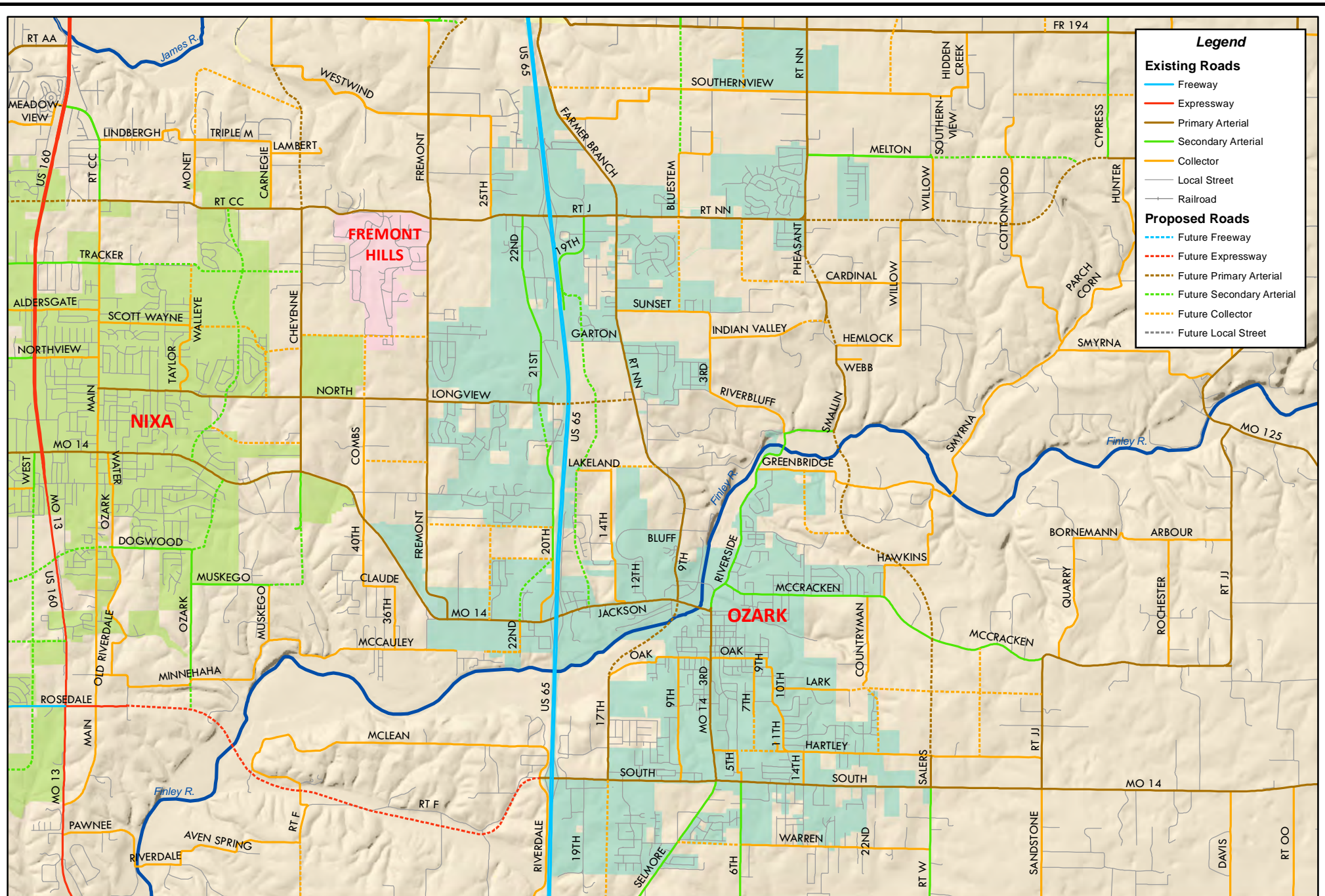




# Major Thoroughfare Plan MoDOT - Proposed







# Major Thoroughfare Plan Ozark - Existing

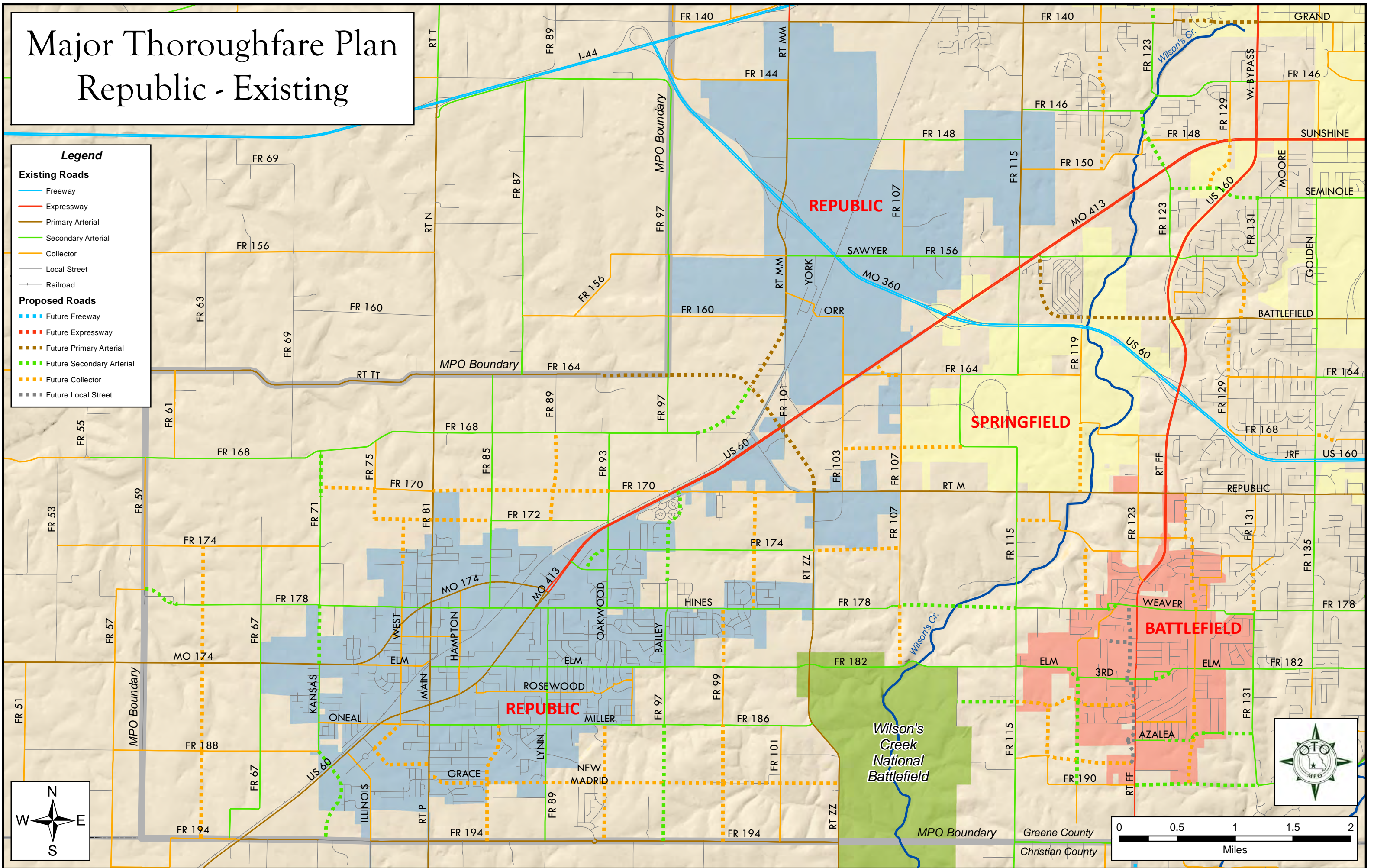






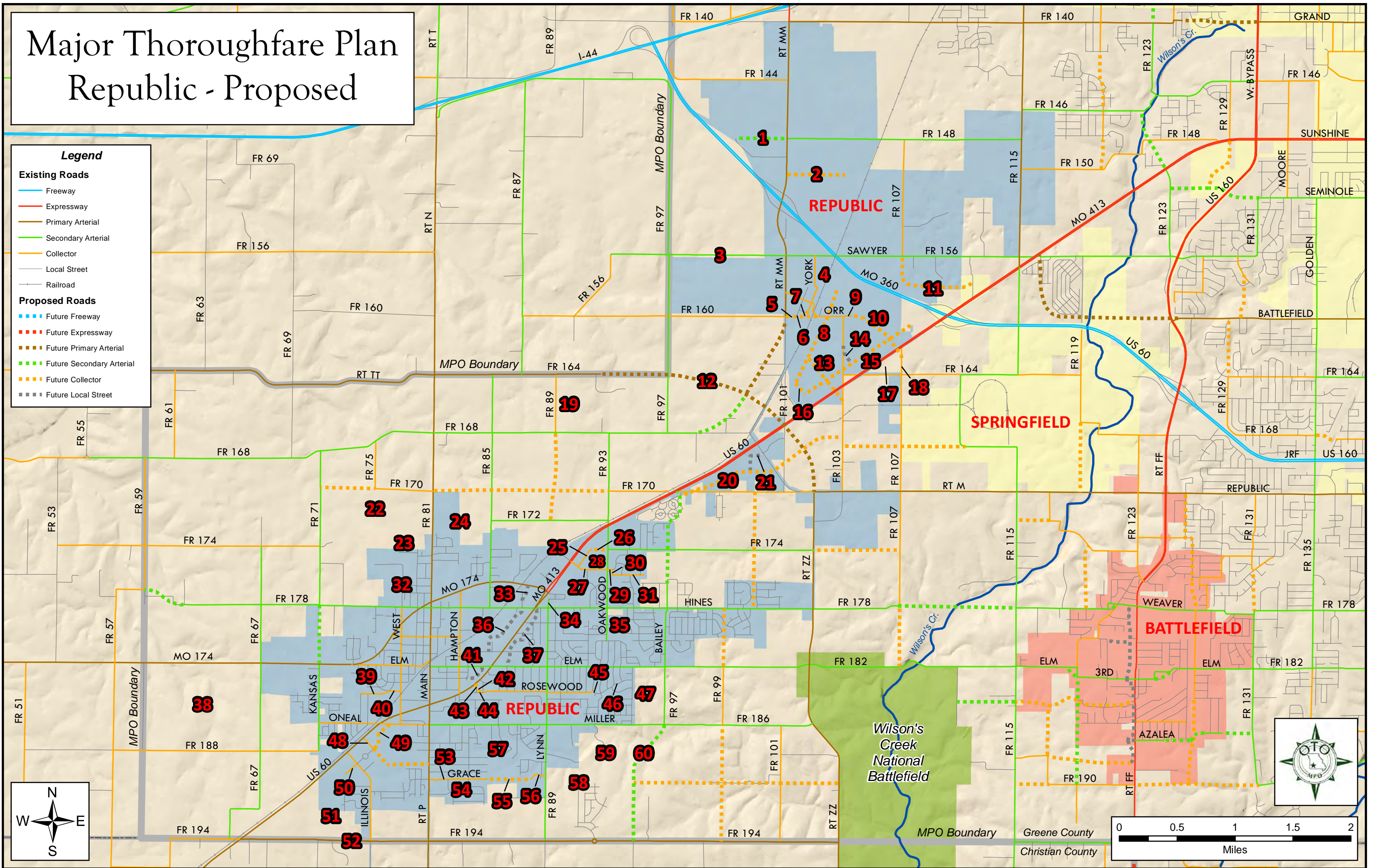


# Major Thoroughfare Plan Republic - Existing

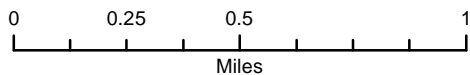
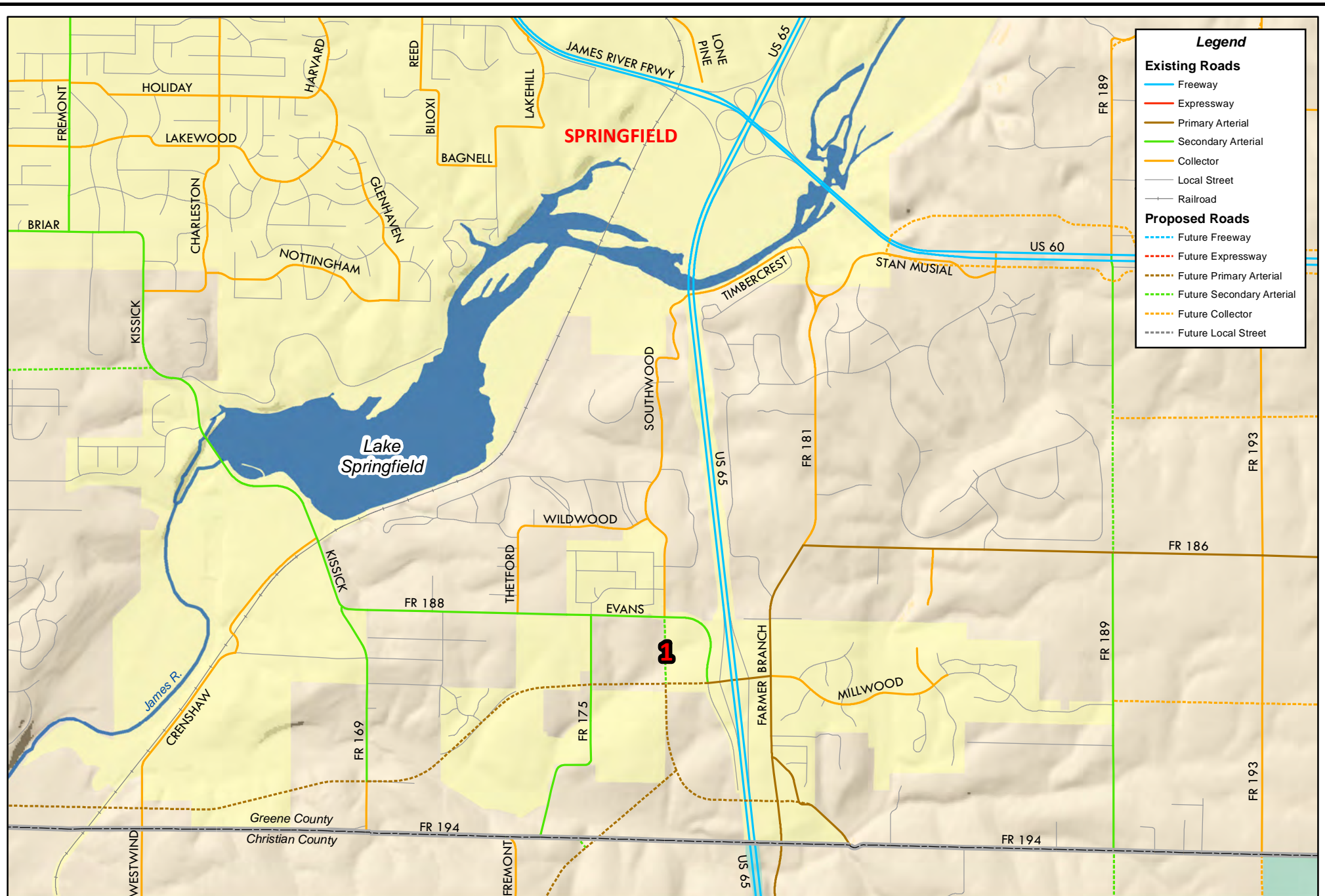




# Major Thoroughfare Plan Republic - Proposed



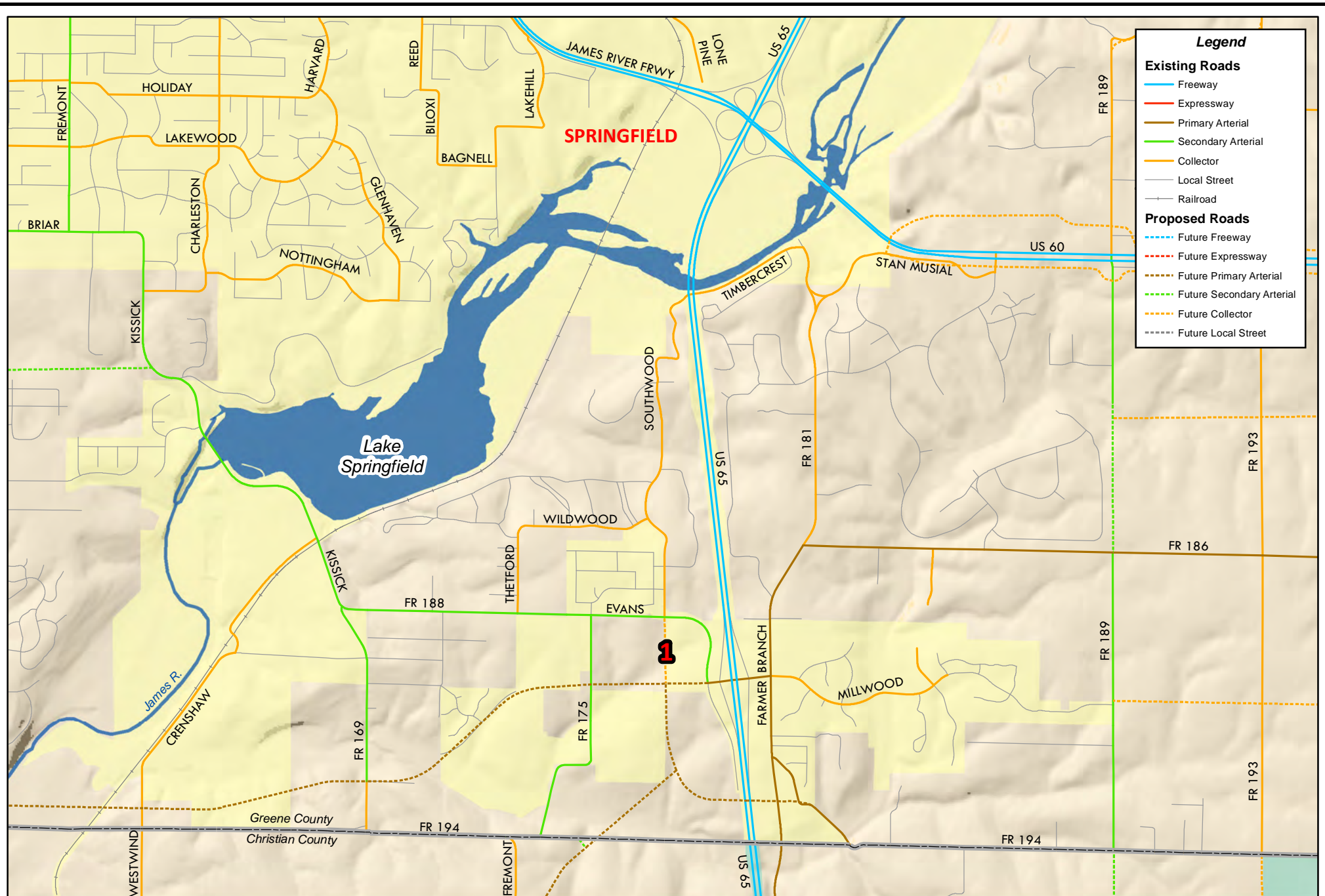




# Major Thoroughfare Plan Springfield - Existing







# Major Thoroughfare Plan Springfield - Proposed

# TAB 5

## **TECHNICAL PLANNING COMMITTEE AGENDA 03/16/11; ITEM ILE.**

### **FY 2012 Unified Planning Work Program (UPWP)**

#### **Ozarks Transportation Organization (Metropolitan Planning Organization)**

#### **AGENDA DESCRIPTION:**

OTO is required on an annual basis to prepare a Unified Planning Work Program (UPWP), which includes plans and programs the MPO will undertake during the fiscal year. The UPWP is programmed into the following tasks:

Task 010 – OTO General Administration

Task 020 – OTO Committee Support

Task 030 – General Planning and Plan Implementation (Long Range Plan, Air Quality, Demographics, GIS)

Task 040 – Transportation Improvement Program

Task 050 – Rideshare and Commuter Choice Program

Task 060 – Transit Planning (Route Study, Coordination Plan)

Task 070 – Special Studies and Related Projects

The UPWP contains the proposed budget for FY 2012. The budget is based on the federal funds available and the local 20 percent match. The OTO portion of the budget for FY 2012 is shown below:

Ozarks Transportation Organization	FY 2011	FY 2012
Consolidated FHWA/FTA PL Funds	\$582,995.09	\$590,992.70
Local Jurisdiction Match Funds	\$103,319.79	\$104,771.17
In-Kind Match, Direct Cost, Donated	\$ 28,429.00	\$ 28,977.00
City Utilities Match Funds	\$ 14,000.00	\$ 14,000.00
Total OTO Revenue	\$728,743.87	\$738,740.87

The total UPWP budget also includes FTA 5307 Transit Funds going directly to City Utilities in the amount of \$113,641. The total budget amount for FY 2012 UPWP is \$852,381.87.

OTO developed a financial plan to utilize In-Kind Match, Direct Cost, and Donated City Utilities Match Funds. These additional match sources allow OTO to maintain an operating fund balance.

The UPWP Subcommittee met via email and recommended the Draft FY 2012 UPWP to the Technical Planning Committee.

#### **TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:**

That a member of the Technical Planning Committee make a recommendation to the Board of Directors to approve the FY 2012 UPWP.



**OZARKS TRANSPORTATION ORGANIZATION  
METROPOLITAN PLANNING ORGANIZATION (MPO)  
UNIFIED PLANNING WORK PROGRAM  
FISCAL YEAR 2012  
(July 1, 2011 – June 30, 2012)**

Ozarks Transportation Organization  
117 Park Central Square, Suite 107  
Springfield, Missouri 65806

APPROVED BY OTO BOARD OF DIRECTORS:

APPROVED BY ONE DOT:

## **Contents**

Introduction .....	2
Task 010 – OTO General Administration .....	3
Task 020- OTO Committee Support .....	5
Task 030 – General Planning and Plan Implementation .....	7
Task 040 – Transportation Improvement Program.....	9
Task 050 – Rideshare and Commuter Choice Program.....	10
Task 060 – Transit Planning.....	12
Task 070 – Special Studies and Related Projects .....	15
Financial Expenditure Summary .....	17
MPO Boundary Map .....	18
OTO Organization Chart .....	19

## **Appendix A**

Budget Summary.....	20
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## **Introduction**

The Unified Planning Work Program (UPWP) is a description of the proposed activities of the Ozarks Transportation Organization during Fiscal Year 2012 (July 2011 - June 2012). The program is prepared annually and serves as a basis for requesting federal planning funds from the U. S. Department of Transportation. All tasks are to be completed by OTO staff unless otherwise identified.

It also serves as a management tool for scheduling, budgeting, and monitoring the planning activities of the participating agencies. This document was prepared by staff from the Ozarks Transportation Organization, OTO (Springfield Area Metropolitan Planning Organization, MPO) with assistance from various agencies, including the Missouri Department of Transportation, the Federal Highway Administration, the Federal Transit Administration, City Utilities Transit Department, Missouri State University Transportation Department and members of the OTO Technical Planning Committee consisting of representatives from each of the nine OTO jurisdictions.

Ozarks Transportation Organization's Public Participation Plan may be found at:

<http://www.ozarkstransportation.org/Documents/PPP12172009.pdf>

The planning factors used as a basis for the creation of the UPWP are:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
- Increase the safety of the transportation system for motorized and non-motorized users
- Increase the security of the transportation system for motorized and non-motorized users
- Increase the accessibility and mobility of people and freight
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize the preservation of the existing transportation system

## **Task 010 - OTO General Administration**

Conduct daily administrative activities including accounting, payroll, maintenance of equipment, software and personnel needed for federally required regional transportation planning activities.

### **Work Elements:**

- **Financial Management (July to June).** (Estimated Cost \$40,000) Preparation of quarterly progress reports, payment requests, and year end reports to MoDOT. Maintenance of OTO accounts and budget and reporting to Board of Directors. Responsible Agency: OTO
- **FY 2013 Unified Planning Work Program Preparation (January-June).** (Estimated Cost \$7,548) Responsible Agency: OTO
- **Training (July to June).** (Estimated Cost \$20,000) Training and development of OTO Staff and OTO members through educational programs that are related to OTO work committees. Responsible Agency: OTO

Training could include the following:

- Transportation Research Board (TRB) Conferences
  - Census Bureau Training (New Census & Am. Comm. Survey)
  - ESRI/ArcInfo User's Conference
  - Association for Commuter Transportation Conference
  - Institute for Transportation Engineers Conferences including meetings of the Missouri Valley Section and Ozarks Chapter
  - ITE Web Seminars
  - National American Planning Association Conference
  - Missouri Chapter, American Planning Association Conference and Activities
  - Midwest Transportation Planning Conference
  - Small to Mid-Sized Communities Planning Tools Conference
  - Geographic Information Systems (GIS) Advanced Training (ESRI's ARC Product)
  - Bicycle/Pedestrian Professional Training
  - Provide Other OTO Member Training Sessions, as needed and appropriate
  - Missouri Association of Procurement Professional Training
  - GFOA Institute Training
- **General Administration and Contract Management (July-June).** (Estimated Cost \$26,000) Coordinate contract negotiations and Memorandum of Understandings. Responsible Agency: OTO
  - **Electronic Support for OTO Operations (July-June).** (Estimated Cost \$20,000) Maintain and update website. Software upgrades and maintenance contracts. Responsible Agency: OTO
  - **Disadvantaged Business Compliance (July-June).** (Estimated Cost \$2,000) Meet federal and state reporting requirements with regard to DBEs and meet MoDOT established DBE goals. Responsible Agency: OTO
  - **Title VI Compliance (July-June).** (Estimated Cost \$1,000). Accept and process complaint forms and review all projects for Title VI compliance. Meet federal and state reporting requirements. Responsible Agency: OTO

### **End Product(s) for FY 2012**

- Completed quarterly and end-of-year reports for FHWA and FTA grant fund accounts provided to MoDOT
- Completion of the 2013 Unified Planning Work Program
- Attendance of OTO Staff and OTO members at the various training programs
- Monthly updates of website
- Financial Reporting to Board of Directors
- Calculate dues and send out statements

- DBE reporting
- Title VI reporting and complaint tracking

#### **Tasks Completed in FY 2011**

- Completed quarterly and year end reports to MoDOT for ONEDOT approval (Completed June 2011)
- Completed the FY 2012 UPWP (Completed April 2011)
- Staff attended numerous conferences and training (Completed June 2011)
- Dues calculated and mailed statements for July 2011(Completed February 2011)
- Website maintenance (Completed June 2011)
- Completed DBE reporting (Completed June 2011)

#### *Task 010 – OTO General Administration Funding Sources*

Local Match Funds	\$ 23,310	20%
Federal CPG Funds	\$ 93,238	80%
<b>Total Funds</b>	<b>\$116,548</b>	



## **Task 020 - OTO Committee Support**

Support various committees of the OTO and participate in various community committees directly relating to regional transportation planning activities.

### **Work Elements:**

- **OTO Committee Support (July-June).** (Estimated Cost \$70,500) Conduct and staff all Technical Planning Committee, Bicycle and Pedestrian Advisory Committee, Local Coordinating Board for Transit, and Board of Directors meetings. Respond to individual committee requests. Facilitate and administer any OTO subcommittees formed during the Fiscal Year. Responsible Agency: OTO
- **Community Committee Participation (July-June).** (Estimated Cost \$10,000) Participate in various community committees directly related to transportation. Responsible Agency: OTO  
Committees include:
  - The Springfield Area Chamber of Commerce Transportation Committee
  - The Southwest Missouri Council of Governments Board and Technical Committee
  - Missouri Public Transit Association
  - MoDOT Blueprint for Safety
  - Ozarks Clean Air Alliance and Clean Air Action Plan Committee
  - Ozark Greenways Technical Committee
  - Ozark Greenways Sustainable Transportation Advocacy Resource Team (STAR Team)
  - SeniorLink Transportation Committee
  - Missouri Safe Routes to School Network
  - Ozark Safe Routes to School Committee
  - Local Safe Routes to School
  - Childhood Obesity Action Group and Healthy Living Alliance
  - Other Committees as needed
- **OTO Policy and Administrative Documents (July-June).** (Estimated Cost \$4,100) Process Amendments to bylaws, policy documents, and administrative staff support consistent with the OTO growth. Conduct an annual review of the OTO Public Involvement Policy and make any needed revisions, consistent with federal guidelines. Responsible Agency: OTO
- **Member Attendance at OTO Meetings (July – June)** (In-kind Services \$8,000). OTO member jurisdictions time spent at OTO meetings. Responsible Agencies: OTO and member jurisdictions

### **End Product(s) for FY 2012**

- Conduct meetings and prepare agendas and meeting minutes for OTO Committees and Board.
- Attendance of OTO Staff and OTO members at various community committees
- Revisions to By-Laws, Memorandum of Understanding, Inter-local Agreements and the Public Involvement Policy as needed.

### **Tasks Completed in FY 2011**

- Conducted Technical Committee Meetings, Bicycle and Pedestrian Committee Meetings, UPWP Subcommittee Meetings, Local Coordinating Board for Transit Meetings, and Board of Directors meetings.
- Documented meeting attendance for in-kind reporting
- Updated the OTO Public Participation Plan, Limited English Proficiency Plan, and Memorandum of Understanding.
- Staff Participated in multiple community committees

*Task 020 – OTO Committee Support Funding Sources*

Local Match Funds	\$10,520	10.8%
In-kind Services	\$ 8,000	9.2%
Federal CPG Funds	\$74,080	80%
<b>Total Funds</b>	<b>\$92,600</b>	

### **Task 030 – OTO General Planning and Plan Implementation**

This task addresses general planning activities including the update to the OTO Long-Range Transportation Plan (LRTP), approval of the functional classification map, the Congestion Management Process (CMP), the Bicycle and Pedestrian Plan as well as the implementation of related plans, and policies. Currently, the Ozarks Transportation Organization's LRTP and CMP are compliant with the requirements of SAFETEA-LU.

#### **Work Elements:**

- **Amendments to the OTO Journey Long-Range Transportation Plan 2030 to 2035 (July- June)** (Estimated Cost \$15,000) Process amendments to the Long Range Plan including Major Thoroughfare Plan. Responsible Agency: OTO
- **OTO Travel Demand Model Runs (July-June)** (Estimated Cost \$10,000) *(Consultant Contract Needed)* Model Runs on an as needed basis. Responsible Agency: OTO
- **Continuation of the Congestion Management Process (July-June)**. (Estimated Cost \$15,000) On-going implementation of selected strategies and coordination of data collection efforts. Responsible Agency: OTO
- **Bicycle and Pedestrian Plan Implementation (July-June)**. (Estimated Cost \$15,000) The Bicycle and Pedestrian Advisory Committee will continue the coordination and monitoring of the implementation of the OTO Area-Wide Bicycle and Pedestrian Plan. Responsible Agency: OTO
- **Geographic Information Systems (GIS) (July-June)**. (Estimated Cost \$25,000) Continue developing the Geographic Information System (GIS) and work on inputting data into the system that will support the Transportation Planning efforts. Responsible Agency: OTO
- **Air Quality Planning (July-June)**. (Estimated Cost \$20,000) Staff serves on the Ozarks Clean Air Alliance along with Springfield Greene-County Health Department, which is implementing the first regional Clean Air Action Plan in hopes to preempt designation as a non-attainment area for ozone. Staff will also coordinate the OTO fleet subcommittee to begin discussions on the use of new technologies and fuels in the OTO area that can improve air quality. Responsible Agency: OTO
- **Demographics and Future Projections (July-June)**. (Estimated Cost \$20,000) Continue to analyze growth and make growth projections for use in transportation decision making by collecting development data and compiling into a demographic report. Responsible Agency: OTO
- **Mapping and Graphics Support for OTO Operations (July-June)** (Estimated Cost \$10,000) Responsible Agency: OTO

#### **End Product(s) for FY 2012**

- Amendments to the Long-Range Transportation Plan
- Implementation of Bicycle and Pedestrian Plan
- Model runs as requested
- Continued monitoring of attainment status
- Demographic Report
- Selection of Enhancement and Safe Route to School Projects

#### **Tasks Completed in FY 2011**

- Long Range Transportation Plan Update
- Major Thoroughfare Plan amended
- Maintenance of GIS system layers
- Selection of Enhancement and Safe Route to School Projects
- Bicycle and Pedestrian Plan Implementation Status Report
- Staff participation in Statewide Passenger Rail Study Group

*Task 030 – General Planning and Plan Implementation Funding Sources*

Local Match Funds	\$ 26,000	20%
Federal CPG Funds	\$ 104,000	80%
<b>Total Funds</b>	<b>\$ 130,000</b>	

## Task 040 – OTO Transportation Improvement Program

Prepare a four-year program for anticipated transportation improvements and amendments as needed.

### Work Elements

- **Complete the 2012-2015 Transportation Improvement Program (TIP) (July-August).** (Estimated Cost \$5,000) TIP should be on the July Technical Planning Committee Agenda and the August Board of Directors Agenda. Responsible Agency: OTO
- **Begin the 2013-2016 Transportation Improvement Program (TIP) (March-June).** (Estimated Cost \$75,142)  
Responsible Agency: OTO
  - Conduct the Public Involvement Process for the TIP (March-August).
  - Work with the TIP Subcommittees (June).
  - Complete Draft document
- **Coordinate, Advertise, and Submit all TIP Amendments (July-June).** (Estimated Cost \$8,500) Responsible Agency: OTO
- **Complete the Annual Listing of Obligated Projects (October-December)** (Estimated Cost \$1,500) Responsible Agency: OTO
- **TIP Software (June- December)** (Estimated Cost \$25,000) (*Consultant Contract Needed*) Purchase software to make an online searchable database for projects. Responsible Agency: OTO

### End Product(s) for FY 2012

- TIP amendments, as needed.
- Adopted FY 2012-2015 Transportation Improvement Program
- Draft of the FY 2013-2016 Transportation Improvement Program
- Annual Listing of Obligated Projects
- Online searchable database of TIP projects

### Tasks Completed in FY 2011

- Adopted FY 2011-2014 Transportation Improvement Program
- Draft of the FY 2012-2015 Transportation Improvement Program
- Amended the FY 2011-2014 TIP numerous times
- Annual Listing of Obligated Projects

### Task 040 - Transportation Improvement Program Funding Sources

Local Match Funds	\$ 23,028	20%
Federal CPG Funds	\$ 92,114	80%
<b>Total Funds</b>	<b>\$115,142</b>	

## **Task 050 – OTO Rideshare and Commuter Choice**

The Congestion Management Process recommends a revised rideshare program that focuses on employer-based strategies and employer targeting through such national initiatives as Commuter Choice.

### **Work Elements**

- **Ride-Share and Commuter Choice Advertising (July-June).** (City Utility Donated Services \$5,000)  
OTO will promote and advertise the Rideshare and Commuter Choice Program through utilizing bus wraps on the City Utilities buses. Responsible Agency: OTO
- **Continued deployment of OzarksCommute.com rideshare/commuter choice program (July -June).**(Estimated Cost \$19,000) *Consultant Contract.* Responsible Agency: OTO
  - Maintain capability to match riders and drivers in response to requests for shared rides (ongoing).
  - Promote rideshare program.
  - Monthly maintenance of rideshare program (\$750/Month)
- **Continued deployment of rideshare/commuter choice program (July-June).** (Estimated Cost \$17,000) Responsible Agency: OTO
  - Work with Springfield Area Chamber of Commerce to select and meet with target employers.
  - Provide on-site technical assistance to employers who agree to participate.
  - Conduct on-site transportation fairs at targeted employers.
  - Serve as transportation ambassadors to employees.
  - Maintain records and prepare reports on quarterly rideshare status. (ongoing)
  - Publicizing the rideshare program. Includes bus wraps, banners, and other marketing material for public events. (ongoing)

### **End Products for FY 2012**

- Continued coordination of rideshare requests.
- Use web-based software to track commuter choices.
- Commuter Choice program for major employers.
- Purchase of marketing materials for use in association with Commuter Choice program.
- Work with targeted major employers to develop Commuter Choice programs.
- Completion of quarterly and annual rideshare program reports.

### **Tasks Completed in FY 2011**

- Continued coordination of rideshare requests.
- Use web-based software to track commuter choices.
- Purchase of marketing materials for use in association with Commuter Choice program.
- Worked with targeted major employers to develop Commuter Choice programs.
- Completion of quarterly and annual rideshare program reports.
- Advertised and promoted ride-match website

*Task 050 - Rideshare and Commuter Choice Program Funding Sources*

Local Match Funds	\$ 3,200	7.78%
CU Donated Services	\$ 5,000	12.22%
Federal CPG Funds	\$32,800	80 %
<b>Total Funds</b>	<b>\$41,000</b>	

## Task 060- OTO and City Utilities Transit Planning

Prepare plans to provide efficient and cost-effective transit service for transit users.

### Work Elements

- **Operational Planning (July-June).** (Estimated Cost \$40,000) Responsible Agencies: OTO and City Utilities
  - OTO Staff shall support operational planning functions including, surveys and analysis of headway and schedules, and development of proposed changes in transit services.
  - Route Analysis
  - City Utilities Transit grant submittal and tracking.
  - City Utilities and OTO development of information for certification reviews.
  - City Utilities Transit collection and analysis of data required for the National Transit Data Base Report. Occasionally OTO Staff provide information toward this report, such as the data from the National Transit Database bus survey.
  - City Utilities Transit and OTO will conduct marketing and customer service programs.
  - CU Transit studies about management, operations, capital requirements and economic feasibility.
  - CU Transit participation in Ozarks Transportation Organization committees and related public hearings.
  - CU Transit collection of data required to implement the requirements of the Americans with Disabilities Act and non-discriminatory practices. (FTA Line Item Code 44.24.00)
  - The Local Coordinating Board for Transit will review the Transit Coordination Plan and make recommendation to the OTO Board of Directors for any necessary amendments.
- **ADA Accessibility (July-June).** (Estimated Cost \$5,000) Responsible Agency: OTO and City Utilities
  - OTO Staff to work with City Utilities Transit staff on transportation improvements at bus stops (i.e. bus turnouts).
  - CU Transit retains contract management for ADA projects with OTO staff assistance as requested.
  - OTO Staff and City Utilities Transit staff to work together on efforts to provide curb cuts and sidewalk accessibility at bus stops and shelters around Springfield, on an annual basis. (FTA Line Item Code 44.24.00)
- **Transit Fixed Route Analysis (June-October)** (Estimated Cost \$140,000) *Consultant Contract Needed.* Analysis of the current fixed route system in order to recommend the most appropriate route structure of the current system as well as system expansion given budget restrictions. This will look at alternatives to the hub and spoke system within the City of Springfield to analyze a possible system modification and the budget ramifications of a modification. This was a recommendation in the Transit Development Plan for City Utilities Transit to consider a change in the route structure it currently uses within the City of Springfield. Responsible Agency: OTO and City Utilities
- **Service Planning (July-June).** (Estimated Cost \$31,000) Responsible Agencies: OTO and City Utilities
  - Per the recommendations of the Transit Coordination Plan, use recommended project selection criteria for selection of human service agency transit projects.
  - OTO Staff collection of data from paratransit operations as required.
  - OTO Staffing of the Local Coordinating Board for Transit
  - CU Transit development of route and schedule alternatives to make services more efficient and cost-effective within current hub and spoke system operating within the City of Springfield. (FTA Line Item Code 44.23.01)
  - OTO Staff and City Utilities Transit participation in special transit studies.
  - As part of the TIP process, a competitive selection process will be conducted for selection of 5307, 5310, 5316 (JARC), 5317 (New Freedom) projects.
- **Financial Planning (July-June).** (Estimated Cost \$22,000) Responsible Agency: City Utilities
  - CU Transit analysis of transit system performance by adopted policies to achieve effective utilization of available resources.
  - CU Transit preparation of long and short-range financial and capital plans.
  - CU Transit will identify possible cost-saving techniques and opportunities.



- CU Transit, with potential assistance from OTO Staff, will identify potential revenue from non-federal sources to meet future operating deficit and capital costs. (FTA Line Item Code 44.26.84)
- **Competitive Contract Planning (July-June).** (Estimated Cost \$9,207) Responsible Agencies: OTO, City Utilities and Missouri State University
  - CU Transit will study opportunities for transit cost reduction through the use of third-party and private sector providers.
  - Missouri State University will continue to monitor costs of their third-party private sector transit contractor.
  - CU Transit and OTO Staff will study potential coordination of private sector transportation with the existing and potential public sector providers to minimize unserved populace.
  - OTO Staff to maintain a list of operators developed in the transit coordination plan for use by City Utilities (CU) and other transit providers in the development of transit plans.
  - OTO Staff to cooperate with MSU, CU, and their consultants in the evaluation of existing services.
- **Safety, Security and Drug and Alcohol Control Planning (July-June).** (Estimated Cost \$20,000) Responsible Agencies: OTO, City Utilities and Missouri State University
  - CU and Missouri State University have adopted policies of drug-free awareness programs to inform their employees on the dangers of drug abuse. (FTA Line Item Code 44.26.82) Funding is intended to assist in the development of a drug and alcohol awareness program in an effort to provide a drug and alcohol-free working environment for the employees at CU, and MSU transit. In particular, special studies addressing critical transportation and related drug and alcohol issues may need to be completed.
  - The OTO, CU and MSU will review existing plans and procedures for maintaining security on existing transit facilities and take steps to mitigate any identified shortcomings.
- **Transit Coordination Plan Update (February-June).** (Estimated Cost \$10,000) Responsible Agencies: OTO, City Utilities and Human Services Transit Providers. Update of the existing Transit Coordination Plan

#### **End Products for FY 2012**

- Transit agency coordination (OTO Staff)
- Project rankings and allocations in the 2013-2016 TIP related to transit, and various new ADA accessible bus shelters and stops. (OTO staff)
- Special Studies. (OTO Staff, CU, and possible consultant services as necessary)
- On Board Bus Surveys (OTO Staff, CU)
- Quarterly reporting to National Transit Database (CU)

#### **Tasks Completed in FY 2011**

- Project rankings and allocations in the 2012-2015 TIP related to transit, and various new ADA accessible bus shelters and stops
- On-Board bus surveys
- Quarterly reporting to National Transit Database

*Task 060 Transit Planning Funding Sources*

Local Match Funds	\$ 18,713	6.75%
CU Match Funds	\$ 36,728	13.25%
Total Local Funds	\$ 55,441	20%
Federal CPG Funds	\$ 130,853	47.20%
FTA 5307 Funds	\$ 90,913	32.80%
Total Federal Funds	\$221,766	80%
<b>Total Task 060 Funds</b>	<b>\$277,207</b>	

## Task 070 – OTO and MoDOT Special Studies and Projects

Conduct special transportation studies as requested by the OTO Board of Directors, subject to funding availability. Priority for these studies shall be given to those projects that address recommendations and implementation strategies from the Long-Range Transportation Plan.

### Work Elements (July-June)

- **MoDOT Transportation Studies and Data Collection (Direct Cost Services \$15,977)** Responsible Agency: MoDOT (District 8 staff). OTO would work with MoDOT to conduct a Traffic Count Program to provide hourly and daily volumes for use in the Congestion Management Process, Long Range Transportation Plan and Travel Demand Model. Transportation Studies would be conducted to provide accident data for use in the Congestion Management System. Speed Studies would be conducted to analyze signal progression to meet requirements of Congestion Management System. Miscellaneous studies to analyze congestion along essential corridors would also be a billable activity under this task.

#### Source of Eligible MoDOT Match

MoDOT Position	Yearly Salary	Yearly Fringe	Yearly Total	Yearly % Time	OTO Eligible
Senior Traffic Studies Specialist	\$52,500	\$26,394	\$78,894	7.00%	\$5,523
Intermediate Traffic Studies Specialist	\$49,600	\$22,003	\$71,603	14.60%	\$10,454
					\$15,977

**Continued Coordination with entities that are implementing Intelligent Transportation Systems. (July-June)** (Estimated Cost \$11,908) Coordination with the Traffic Management Center in Springfield and with City Utilities transit as needed. Responsible Agency: OTO

**Studies of Parking, Land Use, and Traffic Circulation. (July-June)** (Estimated Cost \$20,000) Studies that are requested by member jurisdictions to look at traffic, parking or land use. Responsible Agency: OTO

**Other Special Studies in accordance with the Adopted Long-Range Transportation Plan. (July-June)** (Estimated Cost \$12,000) Studies relating to projects in the Long Range Transportation Plan. Responsible Agency: OTO

**Travel Time Runs and Traffic Counts (February-April)** (Estimated Cost \$20,000). Data collection efforts to support the OTO planning products, signal timing and transportation decision making. (*Consultant Contract Needed*) Responsible Agency: OTO

### End Products for FY 2012

- Preparation of special requests, such as:
  - Memos
  - Public information requests
  - Parking & land use circulation studies
  - Other projects as needed, subject to OTO Staff availability and expertise.
  - Annual traffic counts within the OTO area for MoDOT roadways
  - Annual crash data
  - Speed Studies
  - ITS Coordination

### **Tasks Completed in FY 2011**

- Traffic counts within the OTO area for MoDOT roadways
- Crash Data
- Speed Studies
- ITS Coordination

### *Task 070- Special Studies and Related Projects Funding Sources*

Local Match Funds	0%
MoDOT Direct Costs	\$15,977 20%
Federal CPG Funds	\$63,908 80%
<b>Total Funds</b>	<b>\$79,885</b>

## Financial Expenditure Summary

		<b>LOCAL</b>			<b>FEDERAL</b>			
				<u>MoDOT</u>				
		<u>OTO</u>	<u>CU</u>	<u>Direct</u>	<u>In Kind</u>	<u>CPG</u>	<u>5307</u>	<u>TOTAL</u>
				<u>Costs</u>	<u>Services</u>			<u>%</u>
Task	10	\$23,310				\$93,238		\$116,548 15.71%
Task	20	\$10,520			\$8,000	\$74,080		\$92,600 12.54%
Task	30	\$26,000				\$104,000		\$130,000 17.61%
Task	40	\$23,028				\$92,114		\$115,142 15.60%
Task	50	\$3,200			\$5,000	\$32,800		\$41,000 5.55%
Task	60	\$18,713	\$36,728			\$130,853	\$90,913	\$277,207 22.16%
Task	70			\$15,977		\$63,908		\$79,885 10.82%
<b>TOTAL</b>		<b>\$104,771</b>	<b>\$36,728</b>	<b>\$15,977</b>	<b>\$13,000</b>	<b>\$590,993</b>	<b>\$90,913</b>	<b>\$852,382 100%</b>

Remaining CPG Funds Balance available from Prior Years UPWP \$ 1,067,636.15

FY 2012 Estimated CPG Funds allocation\* \$ 472,378.00

TOTAL Estimated CPG Funds Available for FY 2012 UPWP \$ 1,540,014.15

**TOTAL CPG Funds Programmed for FY 2012 \$ 590,993.00**

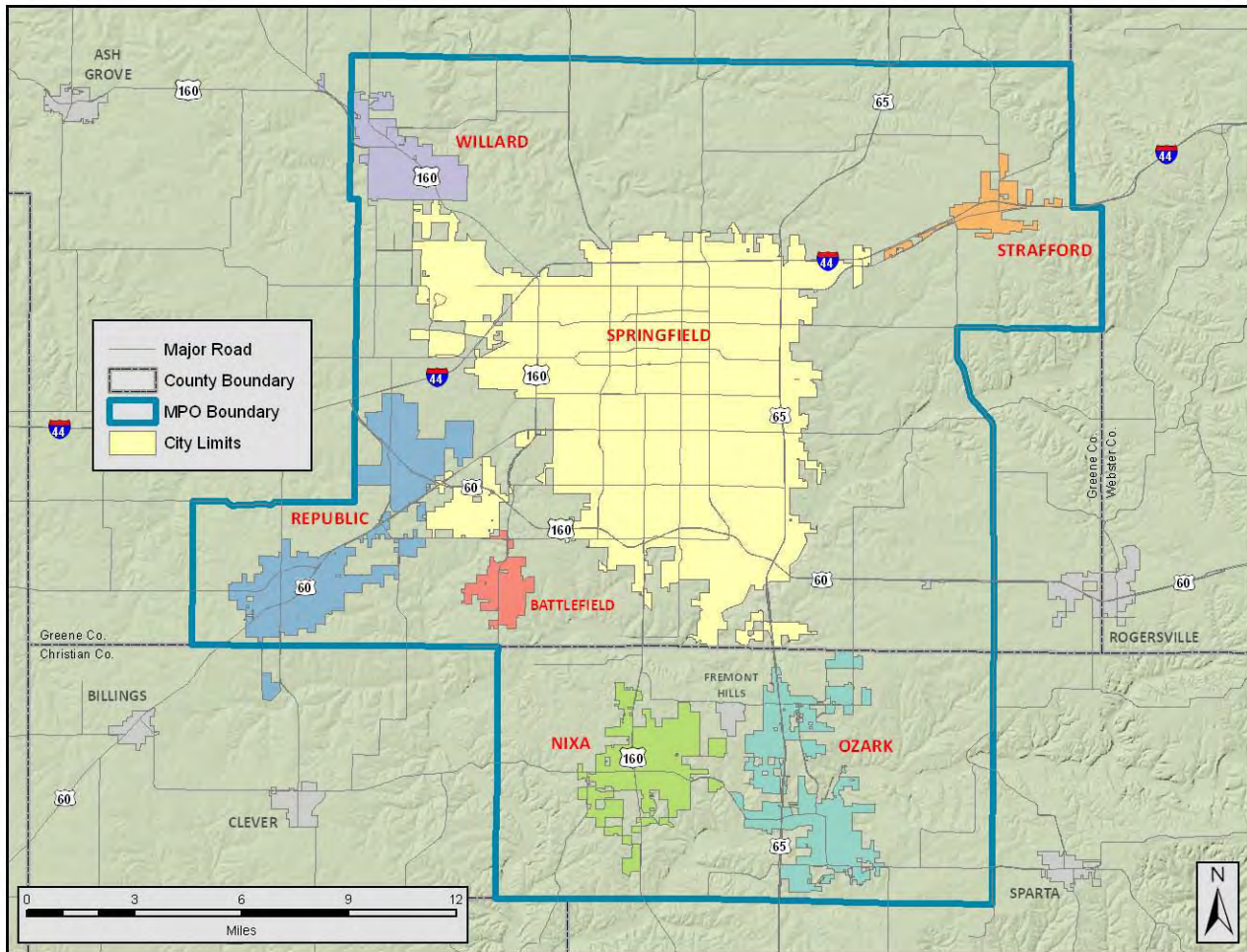
Remaining Unprogrammed Balance \$ 949,021.15

\*The TOTAL Estimated CPG Funds Available for FY 2012 UPWP is an estimated figure based on an estimate for the FY 2010 allocation.

It is expected that additional funds will be added to the Remaining Unprogrammed Balance resulting from FY 2011 budget savings.

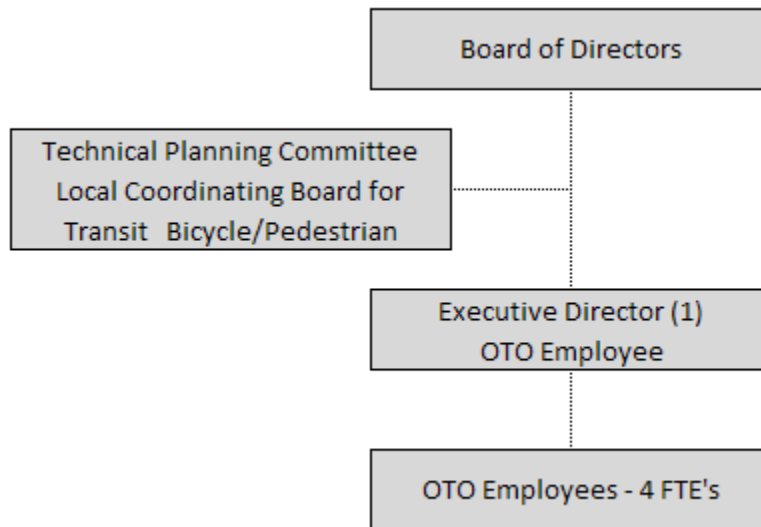
# *OZARKS TRANSPORTATION ORGANIZATION*

## *BOUNDARY MAP*



## Ozarks Transportation Organization

### Organization Chart



Board and Committee membership composition may be found at:  
<http://www.ozarkstransportation.org/Documents/OTOBBy-Laws10162008.pdf>

## APPENDIX A

FY 2012 Budget  
July 1, 2011- June 30, 2012

### Estimated Expenditures

*OTO Budget utilizing Consolidated Planning Grant Funds*

<i>Cost Category</i>	<i>Budgeted Amount</i>
Salaries & Fringe	\$ 351,012.87
Spfld Contract for Staff and Services	\$ -
TIP Software	\$ 25,000.00
Rideshare Software/ Materials	\$ 20,000.00
Publications	\$ 1,000.00
Office Supplies/Furniture	\$ 10,500.00
Mapping	\$ -
Training	\$ 5,800.00
Travel	\$ 14,501.00
Dues	\$ 4,200.00
Postage	\$ 4,000.00
Telephone/Internet	\$ 4,500.00
Advertising	\$ 5,380.00
Printing	\$ 21,000.00
Food	\$ 4,000.00
Computer Upgrades	\$ 4,000.00
Software	\$ 2,000.00
GIS Licenses	\$ 6,000.00
Rent	\$ 14,000.00
Mileage	\$ 2,000.00
Copy Machine Lease	\$ 3,750.00
Parking	\$ 500.00
Aerial Photos	\$ -
Travel Model Consultant	\$ 10,000.00
Liability Insurance	\$ 1,100.00
Legal Fees	\$ 4,000.00
Payroll Services	\$ 2,500.00
Audit	\$ 4,750.00
Infill Costs	\$ -
Accounting Services	\$ 6,000.00
Equipment Repair	\$ 500.00
Workers Comp	\$ 1,400.00
Web Hosting	\$ 550.00
Data Storage/ Backup	\$ 2,000.00
IT Maintenance Contract	\$ 10,000.00
Mobile Data Plans	\$ 1,620.00
Fixed Route Transit Analysis	\$ 140,000.00
Board of Directors Insurance	\$ 2,200.00
Travel Time Runs and Traffic Counts	\$ 20,000.00
Statewide Passenger Rail Study (OTO portion)	\$ -
<b>Total OTO Expenditures</b>	<b>\$ 709,763.87</b>
In-Kind Match, Direct Cost, Donated	
Member Attendance at Meetings	\$ 8,000.00
Direct Cost - MoDOT Salaries	\$ 15,977.00
Donated Ride Share Advertising	\$ 5,000.00
<b>TOTAL OTO Budget</b>	<b>\$ 738,740.87</b>
CU Transit Salaries*	\$ 113,641.00
<b>TOTAL EXPENDITURES</b>	<b>\$ 852,381.87</b>

Notes \* Cost includes federal and required 20% matching funds.



### Estimated Revenues

	FY 2012
<i>Ozarks Transportation Organization</i>	
Consolidated FHWA/FTA PL Funds**	\$ 590,992.70
Local Jurisdiction Match Funds	\$ 104,771.17
In-Kind Match, Direct Cost, Donated	\$ 28,977.00
City Utilities Match Funds	\$ 14,000.00
Total OTO Revenue	<b>\$ 738,740.87</b>
 <i>City Utilities Transit Planning</i>	
FTA 5307	\$ 90,912.80
City Utilities Local Match	\$ 22,728.20
Total CU Revenue	<b>\$ 113,641.00</b>
 <b>TOTAL REVENUE</b>	 <b>\$ 852,381.87</b>

Notes \* Cost includes federal and required 20% matching funds.

\*\*\* In the event that In-Kind Match/Direct Cost/Donated is not available, local jurisdictions match funds will be utilized

### Anticipated Consultant Useage

TIP Software	\$ 25,000.00
Rideshare Software/ Materials	\$ 20,000.00
Travel Model Consultant	\$ 10,000.00
Audit	\$ 4,750.00
Accounting Services	\$ 6,000.00
Data Storage/ Backup	\$ 2,000.00
IT Maintenance Contract	\$ 10,000.00
Fixed Route Transit Analysis	\$ 140,000.00
Travel Time Runs and Traffic Counts	\$ 20,000.00
 <b>TOTAL</b>	 <b>\$ 237,750.00</b>

# BUDGET COMPARISON

FY 2012 Budget  
July 1, 2011- June 30, 2012  
Estimated Expenditures

<i>Cost Category</i>	<i>Budgeted FY 2010</i>	<i>Expended FY 2010</i>	<i>Budgeted FY 2011</i>	<i>Proposed FY 2012</i>	<i>Difference Budgeted FY 2011 and FY 2012</i>
Salaries & Fringe	\$ 346,121.77	\$ 311,983.15	\$ 351,012.87	\$ 351,012.87	\$ -
Spfld Contract for Staff and Services	\$ 47,000.00	\$ 37,000.00	\$ -	\$ -	\$ -
TIP Software	\$ 25,000.00	\$ -	\$ 25,000.00	\$ 25,000.00	\$ -
Rideshare Software/ Materials	\$ 24,000.00	\$ 11,986.47	\$ 15,000.00	\$ 20,000.00	\$ 5,000.00
Publications	\$ 1,000.00	\$ 245.30	\$ 1,000.00	\$ 1,000.00	\$ -
Office Supplies/Furniture	\$ 9,000.00	\$ 4,934.44	\$ 10,500.00	\$ 10,500.00	\$ -
Mapping	\$ 2,000.00	\$ -	\$ -	\$ -	\$ -
Training	\$ 6,000.00	\$ 5,077.00	\$ 5,800.00	\$ 5,800.00	\$ -
Travel	\$ 14,501.00	\$ 8,029.16	\$ 14,501.00	\$ 14,501.00	\$ -
Dues	\$ 3,000.00	\$ 3,789.03	\$ 3,700.00	\$ 4,200.00	\$ 500.00
Postage	\$ 3,000.00	\$ 2,609.60	\$ 4,000.00	\$ 4,000.00	\$ -
Telephone/Internet	\$ 5,799.45	\$ 4,049.44	\$ 4,500.00	\$ 4,500.00	\$ -
Advertising	\$ 1,000.00	\$ 2,721.07	\$ 5,380.00	\$ 5,380.00	\$ -
Printing	\$ 15,000.00	\$ 5,211.64	\$ 21,000.00	\$ 21,000.00	\$ -
Food	\$ 2,500.00	\$ 3,053.29	\$ 3,000.00	\$ 4,000.00	\$ 1,000.00
Computer Upgrades	\$ 4,000.00	\$ 3,683.49	\$ 4,000.00	\$ 4,000.00	\$ -
Software	\$ 5,000.00	\$ 742.89	\$ 5,000.00	\$ 2,000.00	\$ (3,000.00)
GIS Licenses	\$ 3,841.45	\$ 11,683.29	\$ 8,000.00	\$ 6,000.00	\$ (2,000.00)
Rent	\$ 11,000.00	\$ 12,961.00	\$ 11,964.00	\$ 14,000.00	\$ 2,036.00
Mileage	\$ 2,000.00	\$ 586.77	\$ 2,000.00	\$ 2,000.00	\$ -
Copy Machine Lease	\$ 2,500.00	\$ 2,650.08	\$ 2,650.00	\$ 3,750.00	\$ 1,100.00
Parking	\$ 3,000.00	\$ 39.00	\$ 3,000.00	\$ 500.00	\$ (2,500.00)
Aerial Photos	\$ 14,333.33	\$ -	\$ -	\$ -	\$ -
Travel Model Consultant	\$ 10,000.00	\$ 4,200.00	\$ 50,000.00	\$ 10,000.00	\$ (40,000.00)
Liability Insurance	\$ 1,000.00	\$ 964.00	\$ 1,000.00	\$ 1,100.00	\$ 100.00
Legal Fees	\$ 4,000.00	\$ -	\$ 4,000.00	\$ 4,000.00	\$ -
Payroll Services	\$ 2,000.00	\$ 1,814.75	\$ 2,000.00	\$ 2,500.00	\$ 500.00
Audit	\$ 6,000.00	\$ -	\$ 7,000.00	\$ 4,750.00	\$ (2,250.00)
Infill Costs	\$ 1,375.00	\$ 1,375.00	\$ 1,375.00	\$ -	\$ (1,375.00)
Accounting Services	\$ 6,000.00	\$ 3,500.00	\$ 6,000.00	\$ 6,000.00	\$ -
Equipment Repair	\$ 500.00	\$ -	\$ 500.00	\$ 500.00	\$ -
Workers Comp	\$ 1,112.00	\$ 1,165.00	\$ 1,112.00	\$ 1,400.00	\$ 288.00
Web Hosting	\$ 450.00	\$ 509.98	\$ 500.00	\$ 550.00	\$ 50.00
Data Storage/ Backup	\$ 693.00	\$ 933.90	\$ 1,200.00	\$ 2,000.00	\$ 800.00
IT Maintenance Contract	\$ 10,000.00	\$ 9,480.00	\$ 10,000.00	\$ 10,000.00	\$ -
Mobile Data Plans	\$ 1,620.00	\$ 1,225.50	\$ 1,620.00	\$ 1,620.00	\$ -
Fixed Route Transit Analysis			\$ 70,000.00	\$ 140,000.00	\$ 70,000.00
Board of Directors Insurance			\$ 3,000.00	\$ 2,200.00	\$ (800.00)
Travel Time Runs and Traffic Counts			\$ 20,000.00	\$ 20,000.00	\$ -
Statewide Passenger Rail Study (OTO portion)			\$ 20,000.00	\$ -	\$ (20,000.00)
<b>TOTAL</b>	<b>\$ 595,347.00</b>	<b>\$ 458,204.24</b>	<b>\$ 700,314.87</b>	<b>\$ 709,763.87</b>	<b>\$ 9,449.00</b>

# BUDGET COMPARISON

FY 2012 Budget  
July 1, 2011- June 30, 2012  
Estimated Expenditures Continued

	<i>FY 2010</i>	<i>FY 2011</i>	<i>FY 2012</i>	
Total OTO Expenditures	\$ 595,347.00	\$ 700,314.87	\$ 709,763.87	\$ 9,449.00
In-Kind Match, Direct Cost, Donated				
Member Attendance at Meetings	\$ 8,000.00	\$ 8,000.00	\$ 8,000.00	\$ -
Direct Cost - MoDOT Salaries	\$ 15,429.00	\$ 15,977.00	\$ 15,977.00	\$ -
Donated Ride Share Advertising	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ -
<b>TOTAL</b>	<b>623,776.00</b>	<b>729,291.87</b>	<b>738,740.87</b>	<b>9,449.00</b>

## FTA 5307 Funds

<i>Cost Category</i>	<i>FY 2010</i>	<i>FY 2011</i>	<i>FY 2012</i>	
CU Transit Salaries	\$ 106,600.00	\$ 109,798.00	\$ 113,641.00	\$ 3,843.00
<b>TOTAL</b>	<b>106,600.00</b>	<b>109,798.00</b>	<b>113,641.00</b>	<b>3,843.00</b>

**TOTAL EXPENDITURES** \$ 730,376.00 \$ 839,089.87 \$ 852,381.87 \$ 13,292.00

Notes \* Cost includes federal and required 20% matching funds.

## Estimated Revenues

<i>Ozarks Transportation Organization</i>	<i>FY 2010</i>	<i>FY 2011</i>	<i>FY 2012</i>	
Consolidated FHWA/FTA PL Funds**	\$ 499,019.00	\$ 582,995.09	\$ 590,992.70	\$ 7,997.61
Local Jurisdiction Match Funds	\$ 96,328.00	\$ 103,319.78	\$ 104,771.17	\$ 1,451.39
In-Kind Match, Direct Cost, Donated	\$ 28,429.00	\$ 28,429.00	\$ 28,977.00	
City Utilities Match Funds		\$ 14,000.00	\$ 14,000.00	\$ -
Total OTO Revenue	<b>\$ 623,776.00</b>	<b>\$ 728,743.87</b>	<b>\$ 738,740.87</b>	<b>\$ 9,997.00</b>

<i>City Utilities Transit Planning</i>	<i>FY 2010</i>	<i>FY 2011</i>	<i>FY 2012</i>	
5307	\$ 85,280.00	\$ 87,838.00	\$ 90,912.80	\$ 3,074.80
City Utilities Match	\$ 21,320.00	\$ 21,960.00	\$ 22,728.20	\$ 768.20
Total CU Revenue	<b>\$ 106,600.00</b>	<b>\$ 109,798.00</b>	<b>\$ 113,641.00</b>	<b>\$ 3,843.00</b>

**TOTAL REVENUE** \$ 730,376.00 \$ 838,541.87 \$ 852,381.87 \$ 13,840.00

Notes \* Cost includes federal and required 20% matching funds.

\*\*\* In the event that In-Kind Match/Direct Cost/Donated is not available, local jurisdictions match funds will be utilized

# TAB 6

## **TECHNICAL COMMITTEE AGENDA 03/16/11; ITEM II.F.**

### **Federal Functional Classification Change Application**

#### **Ozarks Transportation Organization (Springfield, MO Area MPO)**

#### **AGENDA DESCRIPTION:**

Pursuant to §470.105.b listed below, the State of Missouri, in conjunction with OTO, must maintain a functional classification map. This map is different from the Major Thoroughfare Plan which is part of the Long Range Transportation Plan. The Federal Functional Classification System designates Federal Aid Highways, i.e. those eligible for federal funding. Please see the attached map and FHWA Functional Classification Guidelines for additional information.

As part of the 2009 Planning Certification Review, it was recommended that OTO should take ownership of the functional classification process for the Springfield metropolitan planning area (i.e., OTO Board review and approve all changes).

The attached application is intended to serve as the process for changes to the Federal Aid Functional Classification.

#### **§470.105 Urban area boundaries and highway functional classification.**

##### *b. Highway Functional Classification.*

1. (1) The State transportation agency shall have the primary responsibility for developing and updating a statewide highway functional classification in rural and urban areas to determine functional usage of the existing roads and streets. Guidance criteria and procedures are provided in the FHWA publication "Highway Functional Classification -- Concepts, Criteria and Procedures." The State shall cooperate with responsible local officials, or appropriate Federal agency in the case of areas under Federal jurisdiction, in developing and updating the functional classification.
2. The results of the functional classification shall be mapped and submitted to the Federal Highway Administration (FHWA) for approval and when approved shall serve as the official record for Federal-aid highways and the basis for designation of the National Highway System.

#### **§470.103 Definitions.**

*Cooperation* means that the parties involved in carrying out the planning, programming and management systems processes work together to achieve a common goal or objective.

*Federal-aid highways* means highways on the Federal-aid highway systems and all other public roads not classified as local roads or rural minor collectors.

*Responsible local officials* means --

1. In urbanized areas, principal elected officials of general purpose local governments acting through the Metropolitan Planning Organization designated by the Governor, or
2. In rural areas and urban areas not within any urbanized area, principal elected officials of general purpose local governments.

**TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:**

To make a recommendation to the Board of Directors on approving the attached application as the process for amending the Federal Functional Classification of a roadway within the OTO planning area.



117 Park Central Square, Suite 107, Springfield, MO 65806  
Phone 417.836.5442 Fax 417.836.6013

## Application Federal Functional Classification Change

### Instructions

Please use this form to submit a reclassification request for an existing roadway or to classify a planned roadway. To better process your application; please fill out the form completely. Upon completion, save the document and email it to [staff@ozarkstransportation.org](mailto:staff@ozarkstransportation.org) or fax it to (417) 862-6013. After receiving the request, OTO will reply with an e-mail notice of the approximate time frame of review and pending approval.

### Application Information

Date: February 15, 2011

### Contact Information

Name: Randall Brown  
Title: Director of Development  
Agency: City of Willard  
Street Address: 224 W. Jackson  
  
City/State/Zip: Willard, MO 65781  
Email: [develop@cityofwillard.org](mailto:develop@cityofwillard.org)  
Phone: 417-742-3033  
Fax: 417-742-3080

### Roadway Data

Roadway Name: Farm Road 103  
Termini of Roadway  
    From: EE  
    To: 160  
Length (miles): 3.5 miles  
Number of Lanes: 2  
Lane Width: Unknown  
Traffic Volume (AADT):

Is the roadway existing or a future road? If a future road, describe how the project is committed to locally (provide documentation) and state the anticipated date for the start of construction.

Existing

### Classification Change

Type of Area	Rural
Current Classification	Local
Requested Classification:	Collector

### Justification

Explain why the roadway classification should be revised.

[Click **here** and type explanation]

Are there any new developments (residential or commercial) or changes in land usage that will alter the demand on this roadway?

[Click **here** and type answer and explanation]

Will this roadway provide direct access to any points of activity: business parks, industries, shopping centers, etc?

[Click **here** and type answer and explanation]

Is the demand on this roadway changing or is the existing demand inconsistent with its current classification?

[Click **here** and type answer and explanation]

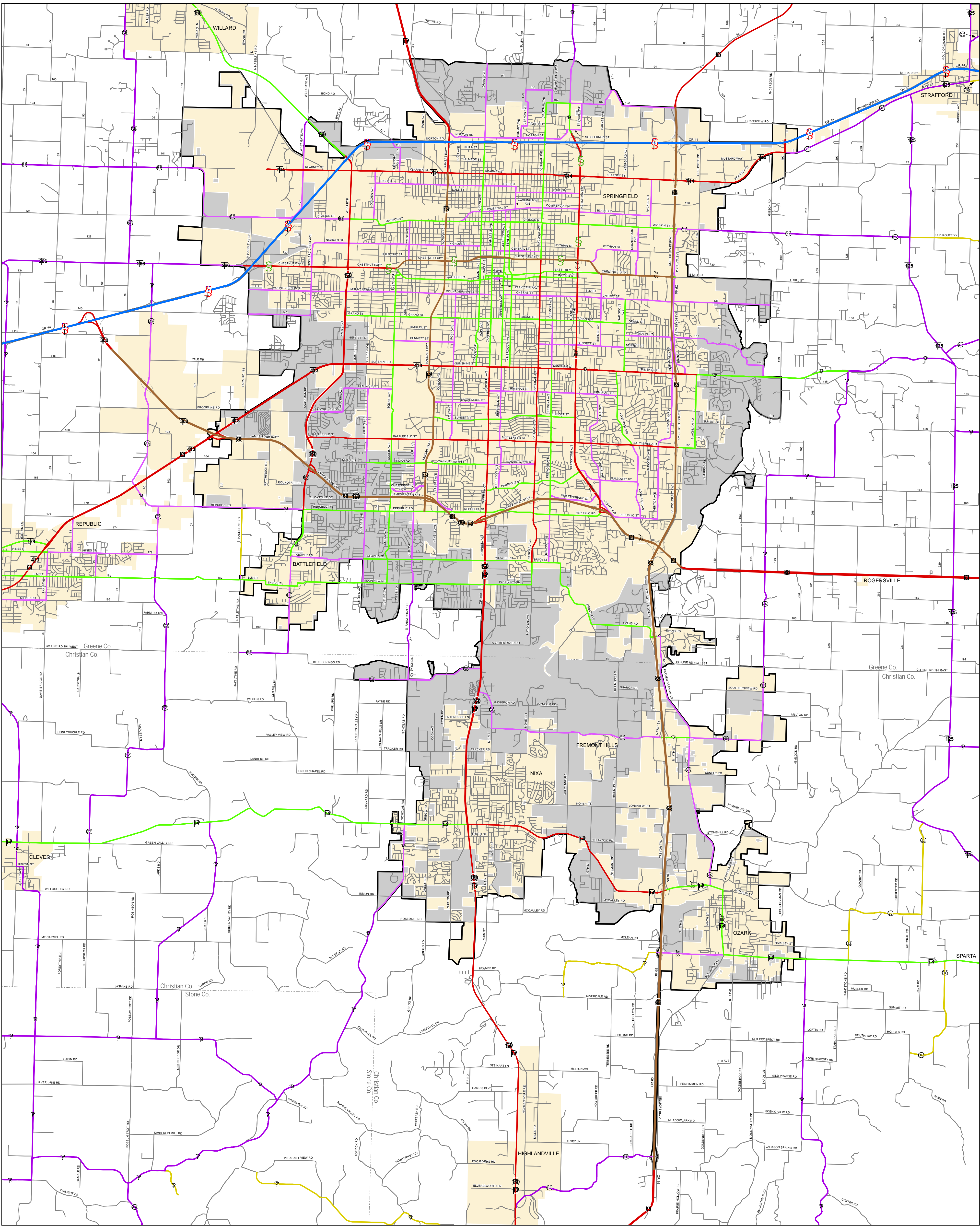
Additional information you would like to include.

[Click **here** and type additional information]

Functional Reclassification Process (minimum timeframe is 4 months)

1. **Application.** Applications are accepted at any time for a functional classification change. However, it will not be placed on the Technical Committee Agenda unless received at least two weeks prior to the meeting date. A general call for applications will be made annually in October.
2. **Technical Committee.** The request will be heard at the next available Technical Committee meeting. The Technical Committee will hear the item and make recommendation to the Board of Directors. The Technical Committee may decide to table the item until a future meeting.
3. **Board of Directors.** After a recommendation is made by the Technical Committee, the Board will approve or deny the request. If the request is approved, it will be forwarded to MoDOT and FHWA.
4. **FHWA.** FHWA requires a minimum of 45 days to review the request. A notice of determination will be given to OTO. OTO will forward the notice to the requesting agency





FUNCTIONAL CLASS		Approx. Mileage*	% of Total	% Guidelines
<b>Principal Arterial</b>				
Interstate		12.701		
Other Freeway and Expressway		46.814		
Other Principal Arterial		75.681		
<b>Principal Arterial Sub-Total</b>		<b>135.196</b>	<b>9.36</b>	<b>5-10</b>
<b>Minor Arterial</b>				
		89.645		
<b>All Arterial Sub-Total</b>		<b>224.841</b>	<b>15.57</b>	<b>15-25</b>
Collector		123.454	8.55	5-10
Local		1095.440	75.88	65-80
<b>Total Urban</b>		<b>1443.735</b>		

\*Only East and South directions used in mileage estimates. Estimates include proposed mileage.

CITY

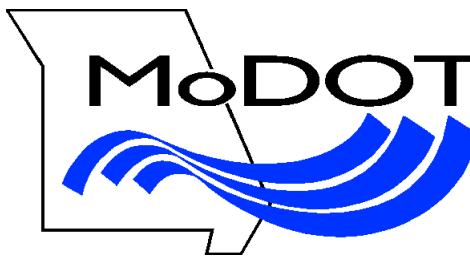
URBAN AREA

# Functional Classification System

SPRINGFIELD

Christian County  
Greene County

Missouri



Transportation Planning  
2217 St. Mary's Blvd.  
Jefferson City, MO 65109  
Phone (573) 751-5100  
Fax (573) 526-8052

Approved May 7, 2008



# **FHWA Functional Classification Guidelines**

## **Concepts, Criteria and Procedures**

### **SECTION I - INTRODUCTION**

This reference manual includes sections on (1) concepts of functional highway classification and functional system characteristics and (2) suggested procedures for functional highway classification in rural, small urban and urbanized areas. The material herein is adapted from two previous FHWA manuals concerned with functional highway classification. The relationship of this manual to these previous documents is discussed below.

Two nationwide studies of functional highway classification were conducted during the period 1969-1971. The first of these, using criteria and procedures specified in the 1968 National Highway Functional Classification Study Manual, called for the functional classification of existing (1968) highways. The second study was carried out in accordance with procedures specified in the National Highway- Functional Classification and Needs Study Manual (1970 to 1990) . This latter study used the same functional classes and basic functional criteria as the first study, but provided for the classification to be based on projected 1990 facilities and usage.

The Federal-Aid Highway Act of 1973 required the use of functional highway classification to update and modify the Federal-aid highway systems by July 1, 1976. This legislative requirement is still effective today. Also a number of States have adapted the functional classes and criteria from these studies for their own purposes. For both these reasons, a need has developed for a republication of the functional classification concepts and criteria that were expressed in the aforementioned manuals, without the reference to specific study requirements that pertained in those manuals.

The functional classes and their characteristics defined in this manual are, for the most part, identical to those in the predecessor manuals. Text has been reworded only to the extent necessary for consistency and clarity and to delete reference to the original studies. The discussion of functional classification concepts is taken intact from the earlier of the two manuals.

Also included herein is a discussion of suggested classification procedures for rural, small urban and urbanized areas, which derives from the predecessor manuals, relying largely, in fact, on their original wording. This approach therefore provides first, a description of suggested procedures for classifying an existing network, followed by procedural suggestions for developing an updated or "future year" classification.

Procedures for functional classification in urbanized areas should be developed within the framework of the continuing, comprehensive, and cooperative planning process carried out pursuant to Section 134 of Title 23, U.S. Code.

## Section II - Concepts, Definitions, and System Characteristics

### THE CONCEPT OF FUNCTIONAL CLASSIFICATION

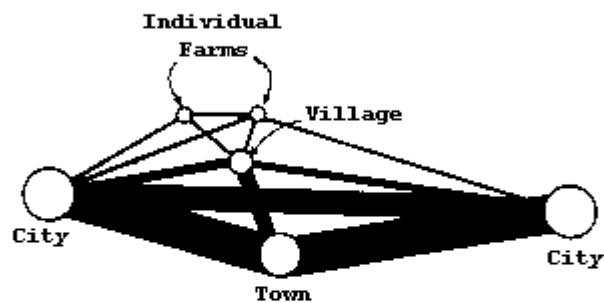
Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Basic to this process is the recognition that individual roads and streets do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. It becomes necessary then to determine how this travel can be channelized within the network in a logical and efficient manner. Functional classification defines the nature of this channelization process by defining the part that any particular road or street should play in serving the flow of trips through a highway network.

A schematic illustration of this basic idea is provided in Figure II-1. In the upper diagram, lines of travel desire are shown as straight lines connecting trip origins and destinations. Relative widths of lines indicate relative amounts of travel desire.

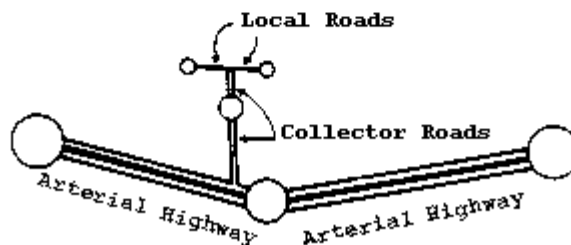
Relative sizes of circles indicate relative trip generating or attracting power of the places shown. Since it is impractical to provide direct-line connections for every desire line, trips must be channelized on a limited road network in a logical and efficient manner. This can be done as shown in the lower diagram of Figure II-1. Note that the heavy travel movements are directly served or nearly so; and that the lesser ones are channeled into somewhat indirect paths. The facilities shown in the diagram have been labeled local, collector and arterial; terms which are descriptive of their functional relationships. Note particularly that this hierarchy of functional types relates directly to the hierarchy of travel distances which they serve.

A more complete (though still schematic) illustration of a functionally classified rural network is shown in Figure II-2. Since the cities and larger towns generate and attract a large proportion of the relatively longer trips, the arterial highways generally provide direct service for such travel. The intermediate functional category, the collectors, serves small towns directly, connects them to the arterial network, and collects traffic from the bottom-level system of local roads, which serves individual farms and other rural land uses.

**Figure II-1**  
**Channelization of Trips**



**(A) Desire Lines of Travel**



**(B) Road Network provided**

Figure II-2

### Schematic Illustration of a Functionally Classified Rural Highway Network

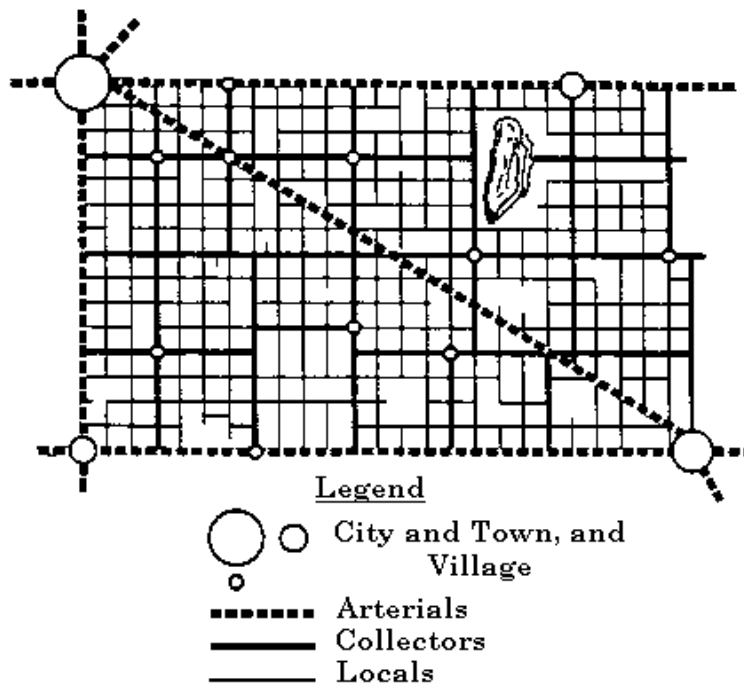
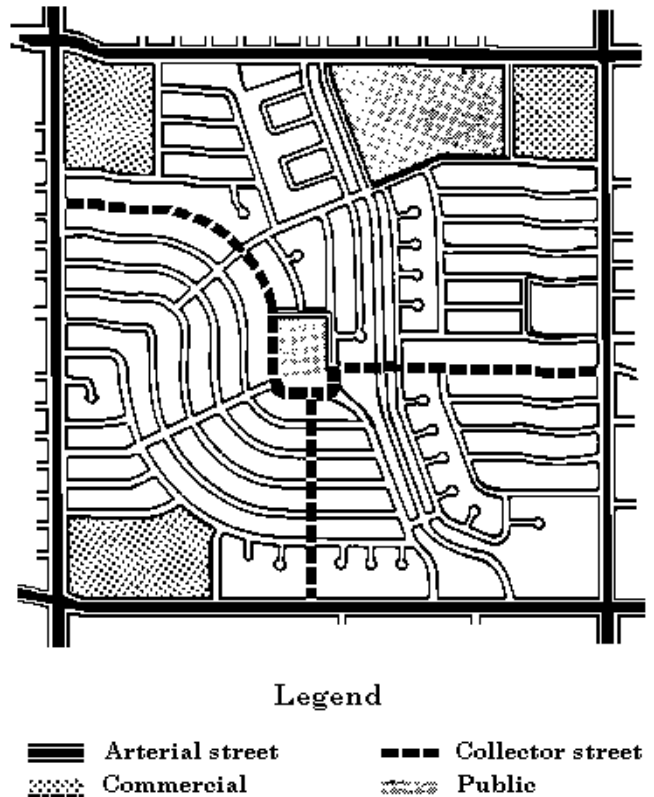


Figure II-3

### Schematic of a Portion of an Urban Street Network



Although the above example has a rural setting, the same basic concepts apply in urban areas as well. A similar hierarchy of systems can be defined; however, because of the high intensity of land use and travel throughout an urban area, specific travel generation centers are more difficult to identify. In urban areas additional considerations, such as spacing, become more important in defining a logical and efficient network. A schematic illustration of a functionally classified urban street network is shown in Figure II-3.

Allied to the idea of traffic channelization is the dual role the highway network plays in providing (1) access to property, and (2) travel mobility. Access is a fixed requirement, necessary at both ends of any trip. Mobility, along the path of such trips, can be provided at varying levels, usually referred to as "level of service." It can incorporate a wide range of elements (e.g., riding comfort and freedom from speed changes) but the most basic is operating speed or trip travel time.

It was pointed out in the discussion of Figure II-1 that the concept of traffic channelization leads logically not only to a functional hierarchy of systems, but also to a parallel hierarchy of relative travel distances served by those systems. This hierarchy of travel distances can be related logically to a desirable functional specialization in meeting the access and mobility requirements. Local facilities emphasize the land access function. Arterials emphasize a high level of mobility for through movement. Collectors offer a compromise between both functions. This is illustrated conceptually in Figure II-4.

Functional classification can be applied in planning highway system development, determining the jurisdictional responsibility for particular systems, and in fiscal planning. These applications of functional classification are discussed in "A Guide for Functional Highway Classification."<sup>1</sup>

#### AREA DEFINITIONS

Urban and rural areas have fundamentally different characteristics as to density and types of land use, density of street and highway networks, nature of travel patterns, and the way in which all these elements are related in the definitions of highway function. Consequently, this manual provides for separate classification of urban and rural functional systems.

Experience has shown that extensions of rural arterial and collector routes provide an adequate arterial street network in places of less than 5,000 population. Hence urban classifications as discussed herein are considered in the context of places of 5,000 population or more.

Urban areas are defined in Federal-aid highway law (Section 101 of Title 23, U.S. Code) as follows:

"The term 'urban area' means an urbanized area or, in the case of an urbanized area encompassing more than one State, that part of the urbanized area in each such State, or an urban place as designated by the Bureau of the Census having a population of five thousand or more and not within any urbanized area, within boundaries to be fixed by responsible State and local officials in cooperation with each other, subject to approval by the Secretary. Such boundaries shall, as a minimum, encompass the entire urban place designated by the Bureau of the Census."

For clarity and simplicity this reference manual will use the following terminology, which is consistent with the above definition.

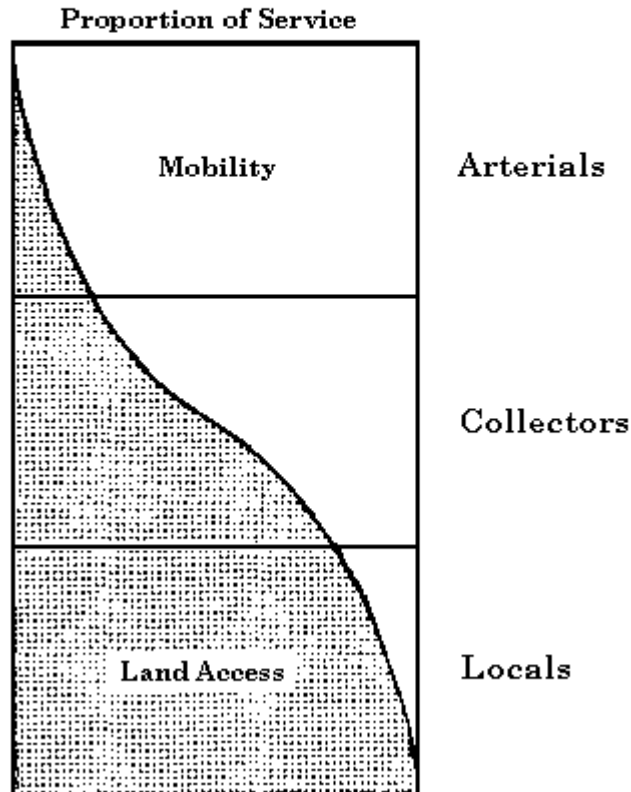
Small urban areas are those urban places, as designated by the Bureau of the Census having a population of five thousand (5,000) or more and not within any urbanized area.

Urbanized areas are designated as such by the Bureau of the Census.

Rural areas comprise the areas outside the boundaries of small urban and urbanized areas, as defined above.

Figure II-4

#### Relationship of functionally Classified Systems in Serving Traffic Mobility and Land Access



## FUNCTIONAL SYSTEM CHARACTERISTICS

The following pages are devoted to separate descriptions of the characteristics of the basic functional systems and their subsystems for (1) rural areas, (2) urbanized areas, and (3) small urban areas. The primary functional categories used for each of the three area types are presented in Table II-1.

**Table II-1 -- The Hierarchy of functional systems**

Rural areas	Urbanized areas	Small Urban areas
Principal arterials	Principal arterials	Principal arterials
Minor arterial roads	Minor arterial streets	Minor arterial streets
Collector roads	Collector streets	Collector streets
Local roads	Local streets	Local streets

Since there is a wide variation in the characteristics and magnitude of service provided by each of these basic functional systems, further stratification of routes in these systems is prescribed to insure greater adaptability for subsequent use. In rural areas, routes on the principal arterial system are subclassified as Interstate and other principal arterials; and routes on the collector road system are subclassified as major collector roads and minor collector roads. In urbanized and small urban areas, the routes on the principal arterial system are subclassified as Interstate, other freeways and expressways, and other principal arterials.

### Functional Systems for Rural Areas

Rural roads consist of those facilities that are outside of small urban and urbanized areas, as previously defined. They are classified into four major systems: Principal arterials, minor arterial roads, major and minor collector roads, and local roads.

#### Rural principal arterial system

The rural principal arterial system consists of a connected rural network of continuous routes having the following characteristics:

1. Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel.
2. Serve <sup>2</sup> all, or virtually all, urban areas of 50,000 and over population and a large majority of those with population of 25,000 and over.
3. Provide an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate otherwise (e.g., international boundary connections and connections to coastal cities).

In the more densely populated States, this system of highway may not include all heavily traveled routes which are multi-lane facilities. It is likely, however, that in the majority of States the principal arterial system will include all existing rural freeways.

The principal arterial system is stratified into the following two subsystems:

*Interstate System.*--The Interstate System consists of all presently designated routes of the Interstate System.

*Other principal arterials.*--This system consists of all nonInterstate principal arterials.

#### Rural minor arterial road system

The rural minor arterial road system should, in conjunction with the principal arterial system, form a rural network having the following characteristics:

1. Link cities and larger towns<sup>3</sup> (and other traffic generators, such as major resort areas, that are capable of attracting travel over similarly long distances) and form an integrated network providing interstate and intercounty service.
2. Be spaced at such intervals, consistent with population density, so that all developed areas of the State are within a reasonable distance of an arterial highway.
3. Provide (because of the two characteristics defined immediately above) service to corridors with trip lengths and travel density greater than those predominantly served by rural collector or local systems. Minor arterials therefore constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to-through movement.

### Rural collector road system

The rural collector routes generally serve travel of primarily intracounty rather than statewide importance and constitute those routes on which (regardless of traffic volume) predominant travel distances are shorter than on arterial routes. Consequently, more moderate speeds may be typical, on the average.

In order to define more clearly the characteristics of rural collectors, this system should be subclassified according to the following criteria:

*Major collector roads.*--These routes should: (1) Provide service to any county seat not on an arterial route, to the larger towns not directly served by the higher systems, and to other traffic generators of equivalent intracounty importance, such as consolidated schools, shipping points, county parks, important mining and agricultural areas, etc. ; (2) link these places with nearby larger towns or cities, or with routes of higher classification; and (3) serve the more important intracounty travel corridors.

*Minor collector roads.*--These routes should: (1) Be spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road; (2) provide service to the remaining smaller communities; and (3) link the locally important traffic generators with their rural hinterland.

### Rural local road system

The rural local road system should have the following characteristics: (1) Serve primarily to provide access to adjacent land; and (2) provide service to travel over relatively short distances as compared to collectors or other higher systems. Local roads will, of course, constitute the rural mileage not classified as part of the principal arterial, minor arterial, or collector systems.

### Extent of rural systems

The systems criteria above have been expressed primarily in qualitative, rather than quantitative terms. Because of varying geographic conditions (population density, spacing and size of cities, density and pattern of road network) it is not feasible to define uniform nationwide criteria on size of population centers, on trip length and traffic volume, or on spacing of routes, that would apply to all systems in all States. The results of classification studies conducted in many States throughout the country do, however, show considerable consistency in the relative extent of each system, expressed as a percentage of total rural road mileage.

Systems developed using the criteria herein are generally expected,

**Table II-2 -- Guidelines on extent of rural functional systems**

System	Range (percent)	
	VMT	Miles
Principal arterial system	30-55	2-4
Principal arterial plus minor arterial road system	45-75	6-12*
Collector road system	20-35	20-25
Local road system	5-20	65-75

\* With most states falling in the 7-10 percent range.

in all States except Alaska and Hawaii, to fall within the percentage ranges shown in Table 11-2. The higher values in Table 11-2 would apply to States which have a less extensive total road network than is typical of States of similar population density. In States having a more extensive total network, the lower values would be expected to apply. The range of percentages for rural collectors is for the total mileage of both major and minor collector roads, and applies to the statewide rural mileage totals; the percentage in any particular

county may vary considerably from the statewide average. Areas having an extensive grid pattern of roads will usually have a lesser percentage of collectors than areas wherein geographic conditions have imposed a restricted or less regular pattern of road development.

### **Functional Systems in Urbanized Areas**

The four functional systems for urbanized areas are urban principal arterials, minor arterial streets, collector streets, and local streets. The differences in the nature and intensity of development between rural and urban areas cause these systems to have characteristics that are somewhat different from the correspondingly named rural systems.

#### **Urban principal arterial system**

In every urban environment there exists a system of streets and highways which can be identified as unusually significant to the area in which it lies in terms of the nature and composition of travel it serves. In smaller urban areas (under 50,000) these facilities may be very limited in number and extent and their importance may be primarily derived from the service provided to travel passing through the area. In larger urban areas their importance also derives from service to rural oriented traffic, but equally or even more important, from service for major movements within these urbanized areas.

This system of streets and highways is the urban principal arterial system and should serve the major centers of activity of a metropolitan area, the highest traffic volume corridors, and the longest trip desires; and should carry a high proportion of the total urban area travel on a minimum of mileage. The system should be integrated, both internally and between major rural connections.

The principal arterial system should carry the major portion of trips entering and leaving the urban area, as well as the majority of through movements desiring to bypass the central city. In addition, significant intra-area travel, such as between central business districts and outlying residential areas .. between major inner city communities, or between major suburban centers should be served by this system. Frequently the principal arterial system will carry important intraurban as well as intercity bus routes. Finally, this system in small urban and urbanized areas should provide continuity for all rural arterials which intercept the urban boundary.

Because of the nature of the travel served by the principal arterial system, almost all fully and partially controlled access facilities will be part of this functional system. However, this system is not restricted to controlled access routes. In order to preserve the identification of controlled access facilities, the principal arterial system is stratified as follows: (1) Interstate, (2) other freeways and expressways, and (3) other principal arterials (with no control of access).

The spacing of urban principal arterials will be closely related to the trip-end density characteristics of particular portions of the urban areas. While no firm spacing rule can be established which will apply in all, or even most circumstances, the spacing of principal arterials (in larger urban areas) may vary from less than one mile in the highly developed central business areas to five miles or more in the sparsely developed urban fringes.

For principal arterials, the concept of service to abutting land should be subordinate to the provision of travel service to major traffic movements. It should be noted that only facilities within the "other principal arterial" system are capable of providing any direct access to adjacent land, and such service should be purely incidental to the primary functional responsibility of this system.

#### **Urban minor arterial street system**

The minor arterial street system should interconnect with and augment the urban principal arterial system and provide service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials. This system also distributes travel to geographic areas smaller than those identified with the higher system.

The minor arterial street system includes all arterials not classified as a principal and contains facilities that place more emphasis on land access than the higher system, and offer a lower level of traffic mobility. Such facilities may carry local bus routes and provide intra-community continuity, but ideally should not penetrate identifiable neighborhoods. This system should include urban connections to rural collector roads where such connections have not been classified as urban principal arterials.



The spacing of minor arterial streets may vary from 1/8 - 1/2 mile in the central business district to 2 - 3 miles in the suburban fringes, but should normally be not more than 1 mile in fully developed areas.

#### Urban collector street system

The collector street system provides both land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. Conversely, the collector street also collects traffic from local streets in residential neighborhoods and channels it into the arterial system. In the central business district, and in other areas of like development and traffic density, the collector system may include the street grid which forms a logical entity for traffic circulation.

#### Urban local street system

The local street system comprises all facilities not on one of the higher systems. It serves primarily to provide direct access to abutting land and access to the higher order systems. It offers the lowest level of mobility and usually contains no bus routes. Service to through, traffic movement usually is deliberately discouraged.

#### Extent of mileage and travel on urban systems

Table II-3 contains guideline ranges of travel volume (VMT) and mileage of each of the four functional systems for urbanized areas. Systems developed for each area using the criteria herein will usually fall within the percentage ranges shown.

Functional System for Small Urban Areas		Table II-3 -- Guidelines on extent of urban functional systems	
<p>The systems and their characteristics listed for urbanized areas are also generally applicable to small urban areas. The basic difference is that, by nature of their size, many small urban areas will not generate internal travel warranting urban principal arterial service.</p> <p>Thus the principal arterial system for small urban areas will largely consist of extensions of rural arterial into and through the areas. In many instances, these extensions will be located so as to relieve critical sections of the street system while providing efficient movement of travel around (e.g., bypasses) and through the area. The larger urban areas within this population group, particularly those above 25,000 population, may have major activity centers which warrant principal arterial service in addition to that provided by extensions of rural arterials.</p>	System	Range (percent)	
		VMT	Miles
	Principal arterial system	40-65	5-10
	Principal arterial plus minor arterial street systems	65-80	15-25
	Collector street system	5-10	5-10
	Local street system	10-30	65-80

The characteristics for the minor arterial street systems, collector street systems, and local street systems in small urban areas are similar to those for urbanized areas.

#### Special Urban-Rural Identification

The criteria in this section define urban and rural streets and highways according to their functional character. To assure continuity of the rural arterial systems through urban areas, it is desirable to doubly identify (as indicated below) the urban arterials which form connecting links of the rural arterials. The term "connecting links" means those urban routings which will provide rural-to-rural continuity for the rural arterial systems. A connecting link may traverse the urban area from one boundary to another, or may simply connect to another previously delineated connecting link. (The mileage of any connecting link should not be included more than once.) The necessary continuity may be provided by loop or bypass routes. It is recommended that the identification be made after both the urban and rural functional classifications have been accomplished.

As specified in the systems characteristics in this section, connecting links for the rural principal and minor arterial systems will be on the urban principal arterial system (continuity for the rural Interstate will, of course, be provided by urban Interstate). Connecting links for rural principal arterials should be identified

prior to selecting those for minor arterials. The routing of the connecting link for a rural principal arterial should normally be fairly direct, while that for a rural minor arterial may involve some indirection of travel.

The following categories are to be used in identifying these connecting links on the urban principal arterial system:

1. Other freeways and expressways:

- Connecting links of non-Interstate rural principal arterials
- Connecting links of rural minor arterials
- Other urban principal arterials:
- Connecting links of other rural principal arterials
- Connecting links of rural minor arterials

**Classification Criteria for Alaska, Hawaii, and Puerto Rico**

The classification of rural and urban systems in Alaska, Hawaii, and Puerto Rico can generally be consistent with the functional system characteristics described in the preceding sections. However, there may be roads on small islands or in other areas that are isolated from the remaining parts of the State or Commonwealth, and none of these roads may meet the criteria for classification as arterial because of the absence of long-distance, through trips. Conversely, there may be undeveloped areas that have very few miles of collector and local roads. Thus, because of the considerably different geographic conditions existing in these areas as compared to the other 48 States, the systems extent for the rural functional classes may vary from that shown in Table II-2. The systems extent for the urban functional classes should be fairly consistent with that shown in Table II-3.

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**Footnotes**

1. *A Guide for Functional Highway Classification*, prepared by a joint subcommittee of the American Association of State Highway Officials, the National Association of Counties, and the National Association of County Engineers (1964).  
(Originally footnote 1 on page II-5).
2. The term "serve" is difficult to define on a national basis since it varies according to the size of the urban area, the functional system under consideration, and the effects of natural barriers where they exist. As a guide the rural principal arterial system may be considered to "serve" an urban area if the system either penetrates the urban boundary, or comes within 10 miles of the center of the place and is within 20 minutes travel time (offpeak periods) of the center of the place via a minor arterial highway. The rural minor arterial road system "serves" an urban area if the system either penetrates or comes within 2 miles of the urban boundary.  
(Originally footnote 1 on page II-9).
3. The definition of a "large" town, in terms of population, cannot be arbitrarily determined in such a way as will fit all States. It can be determined in a given State during the classification process by building the system "from the top down," in terms of size of places served, and evaluating successive system increments on a diminishing returns basis, in terms of population service or traffic service. This is discussed in greater detail in Section III.  
(Originally footnote 2 on page II-9).

### **SECTION III - SUGGESTED PROCEDURES FOR RURAL, SMALL URBAN AREA AND URBANIZED AREA CLASSIFICATION**

This section suggests procedures for classifying all roads and streets into functional systems for rural, small urban and urbanized areas, based on the most logical use of the existing facilities <sup>1</sup> to serve present travel. Separate procedures are presented for rural, small urban and urbanized areas. In addition, for each of these areas, procedures are given for a functional classification of existing conditions. Also, for each of those areas, procedures are given for a functional classification based on projected facilities and usage for some "future year."

While the basic concepts and functional criteria for the development of a "future year" functional classification plan are the same as those for a functional classification of existing facilities, it will differ in two basic respects: (1) It should be based on projected "future year" population, land use and travel; and (2) it will include, in addition to existing facilities, such projected totally new facilities as will be needed to serve "future year" land use and travel. Some of this new mileage will consist of new streets in expanding urban areas.

Beltways and bypasses in smaller cities will constitute another major category of new mileage. In addition, some new routes may be needed to serve planned and committed new recreational areas or new towns. A final category of additional, though in one sense not "new," facilities will be those representing relocation of existing facilities, in cases where adequate standards cannot be provided on the original location, or where an existing routing is excessively circuitous.

In developing a "future year" classification, consideration should be given to the impact of foreseeable developments in other modes of transportation. On statewide systems, especially in heavily traveled intercity corridors, the influence of highspeed rail service and improved air service can be estimated through travel forecasts to the extent they are quantifiable. Such influences will probably have more impact on the needed capacity of highway facilities than on the actual system configuration.

#### **"Future Year" - Functional Classification**

When a functional classification is made based on a "future year," a projection of population should be made.

As was pointed out in Section II, the identification of population centers is essential in the functional classification concept. When a "future year" functional classification is made, population estimates for that "future year" should be prepared for all areas that are expected to be urban as well as for the remaining rural subareas.

Each populated place presently containing less than 5,000 persons and not included within the delimited boundary of a "future year" urbanized area, should be examined to determine whether its anticipated population growth to the "future year" will result in its classification as a small urban area. In addition, certain presently rural areas (i.e., suburban development, new towns, etc.) should be examined to determine those which will qualify as small urban areas due to expected population increases by the "future year."

The base for a "future year" population should be the most recent Decennial Census. As applicable, the total State regional and national "future year" populations should be given consideration when estimating populations of the individual urbanized and small urban areas in order that the estimates will be reasonable and consistent. Consequently, in making "future year" urban estimates, it will be necessary to develop them coincidentally with and in relation to the total "future year" State population projections and the projections for the remaining rural population (including those places from 2, 500 to 4,999 population).

A considerable amount of population data is available in the States through the urban transportation studies, from previous functional classification studies (see page I-1) , and from agencies preparing current population estimates for the various States.

Because of the variety of kinds of population forecasts and sources of forecasting advice and assistance that are available to the States, no single forecasting procedure is suggested in this manual. Of foremost importance in any procedure is the maintenance of a sound overall perspective. Specifically, the aggregate

of individual place projections must stand the test of reasonableness in terms implied overall trends for urbanized areas, for small urban areas by size group, and for rural area density.

To assure reasonable distribution of total projected population by the above categories an iterative approach with feedback tests is necessary, particularly, in some States, when a very large proportion of the total population growth will occur in urbanized areas. Proportionally small variances in forecasts for these places can have a disproportionate effect on residual values applicable to small urban places and rural areas. Hence a stepdown residual forecasting procedure without feedback should be avoided.

## **CLASSIFICATION PROCEDURES FOR RURAL SYSTEMS**

Rural classification procedures apply to those areas outside of urbanized or small urban area boundaries, although many rural routes particularly arterials, continue into or through the latter areas.

### **Identifying and Ranking Population Centers and Other Travel Generators**

The procedure for rural functional classification, as outlined in this subsection, initially involves connecting traffic generators in such a manner as to logically channelize the trips on the road network. Since most trips begin or end in a city or town, population centers are the primary traffic generators considered. However, since travel is also generated by recreation areas, such as National parks, ski resorts, lakes, and beaches, that have little resident population, instructions are included here for comparing the importance of these areas to that of a city or town.

The population of a place generally reflects its capacity for generating and attracting travel. Socio-economic factors, such as trade, employment, etc., may also indicate the importance of a place in relation to intercity travel. Urban areas of similar population and economic activity (and consequently travel generation and attraction) should be identified and service provided to them by routes of the same statewide functional system.

Ranking of population centers, usually on the basis of population is an initial step in the classification process. Available socio-economic data (e.g., sales tax receipts, retail trade, employment, etc.) may be used along with population in this ranking if the State feels that such factors are significant for the area under study. Each urban area should be treated as one center, even if several jurisdictional units are involved and even if part of the population is in an adjoining State.

Since this ranking process is one of the means of determining the population centers for which service by a particular functional system is to be provided, all places thought qualified for service by the major collector road or any higher system should be ranked.

Major travel generators other than cities, such as recreation areas (National and State parks, State fairgrounds, ski resorts, lakes, beaches, etc.) and military installations should be treated separately during the ranking process because of their unique, predominant land activity. Usual trip generation yardsticks, such as population, employment, and related factors which measure the socio-economic status of the area and its population, are not applicable to such generators because of their atypical travel generation potential. For example, National parks and State fairgrounds contain little or no resident population and, in general, contain no commercial or industrial activity other than facilities to serve tourists. Hence, these centers require that other data be employed during the ranking process.

For purposes of functional classification, the annual number of visitors to such a recreation area can be equated to an urban area's population as shown in Figure III-1. The recreation area can then be grouped with population centers of similar trip generation potential, and service provided by the same functional system.

FIGURE III-1

VISITATION VS. EQUIVALENT POPULATION  
FOR RANKING RECREATION GENERATORS

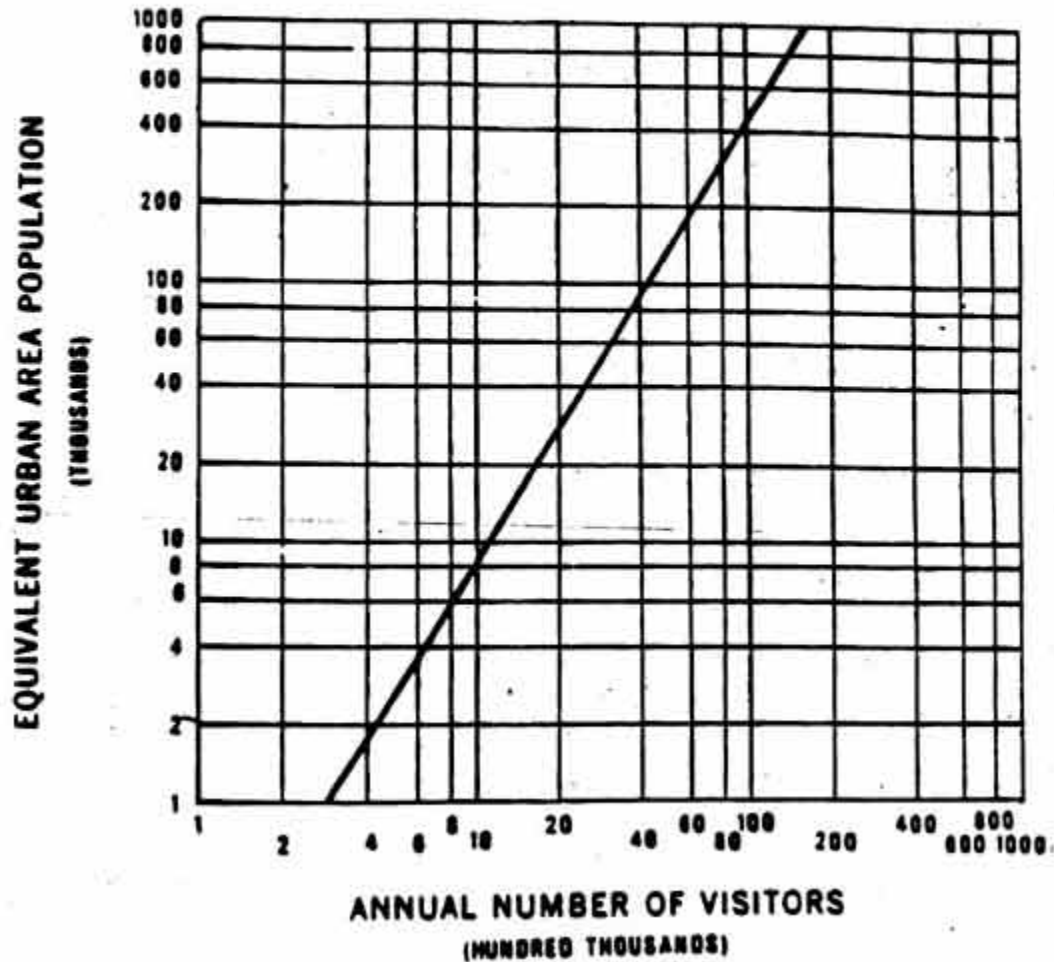


Figure III-1 - Visitation VS. Equivalent Population For Ranking Recreation Generators

Where several recreation areas are located close together and can be served by only one possible route, such as on a coastal peninsula or in a mountainous area, the equivalent populations may be combined in ranking the area.

Visitation data for recreation areas administered by the State and Federal Governments should be available from the Bureau of Outdoor Recreation liaison officer in each State.

The importance of recreation and other generators can be inferred from traffic flow data if there are no other data available for ranking purposes.

**Classification of Rural Systems**

As stated earlier, the procedure for rural functional system classification initially involves connecting traffic generators in such a manner as to logically channelize the trips on the road networks. The preceding discussion explains procedures for ranking population and other centers of traffic generation. These

procedures do not eliminate judgment from the classification process, but when used as a guide they do help to apply judgment in a sound and orderly fashion.

### Rural principal and minor arterial systems

The procedures for functional classification of rural roads into the principal arterial and minor arterial systems are described in the following enumerated steps:

1. One of the initial steps in the classification of rural routes is the preparation of road network maps. Maximum use should be made of existing maps although reference to administrative or jurisdictional systems should not be considered in the classification process.
2. Rank travel generators as described in the immediately preceding pages. Plot generators graphically, in order to ranking, and divide into groups, with centers of similar rank in each grouping, as illustrated in Figure 111-2. While no hard and fast rules apply, six to eight groupings will usually be typical. Too many are better than too few, particularly toward the lower end of the scale. This ranking and grouping will aid in determining which centers qualify for minor arterial service or major collector service, and which will be adequately served by minor collector roads.
3. Identify pertinent travel generators in adjoining States. Judgement should be used in selecting the centers to be included. Larger out-of-State generators have traffic attraction relationships over a considerable distance while smaller out-of-State generators may be of influence only when close to the State boundary. Fit these selected out-of-State generators into the appropriate size group determined for the in-State generators in Step 2 above.

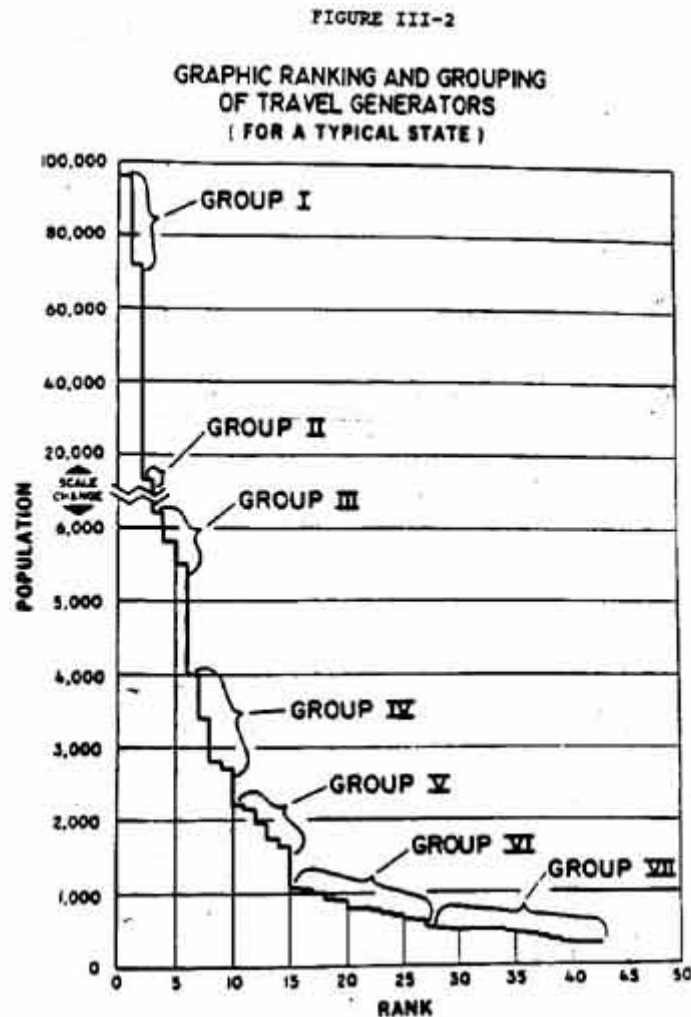


Figure III-3 - Visitation VS. Equivalent Population For Ranking Recreation Generators

4. Develop a map symbol (for example, a simple open or lightly shaded circle) for each size group of travel generators, with the size of the map symbol indicating the population range of centers in the group. Plot the generators on a statewide map. A tracing overlay superimposed on the statewide road map is recommended. The few pertinent out-of-State generators which may fall outside the State map can be dealt with by plotting them on a regional map. Once the appropriate routings to the out-of-State generators have been selected, they can be shown on the statewide map by placing arrows at the State line.
  5. Delineate urbanized area boundaries on the statewide map as accurately as practicable. (Subsequent accurate mileage determinations will probably require reference to large-scale maps, particularly when measuring mileages within urban limits.)
  6. Delineate all presently designated routes of the Interstate highway system.
  7. Select the remaining rural principal arterial routes and, following that, the rural minor arterial routes, in a general sequence that will "work down from the top" to reflect a gradation of the following route characteristics, considered in combination: (a) Size of travel generators connected; (b) predominant travel distances served; and (c) size of tributary area or "travel shed" served. The term "in sequence" does not mean an exact numerical ranking of routes since in many cases several routes may be deemed nearly equal in the above characteristics.
- The size of the travel generators being connected has been visually symbolized on the map. The predominant travel distance and size of the tributary area or "travel shed" can be inferred visually from the size of centers served, their spacing and orientation, and the size and shape of traffic flow bands of traffic maps.
  - Judgment must be exercised in determining which, among all possible connections, should be made, especially when dealing with medium-sized and smaller centers. It will be helpful to keep in mind that this procedure is based on an indirect and inferential approach to the traffic attraction between centers. Therefore, the traffic flow map will help to indicate which, of all possible connections, is the most significant for the level or size of center being considered. When medium and small-sized centers are under consideration, a connection with the nearest larger center is usually more significant than a connection with a center of equal size. Where alternatives are equal in terms of mileage, the most heavily traveled and the better improved route should normally be selected.
  - The termini for the routes being added to each system should be selected so that a continuous system is always maintained (i.e., each route is connected to routes of the same or higher level system).
  - Determine the total length of the rural principal arterial system in accordance with the system characteristics and the guide on system mileage extent in Section II, page II-11.
  - Determine the lower size limit of population centers to be served as a group by the minor arterial system. In the criteria for this system, the diminishing returns concept is mentioned. This means that in adding routes to a system, a point is reached at which the rate of increase in mileage begins to exceed markedly the rate of increase of highway service, indicating that the lower limit of the system under consideration has been determined. Figure 111-3, on which cumulative system mileage has been plotted against cumulative service as measured by vehicle-miles of travel, is an illustration of this concept.
  - The concept illustrated in Figure 111-3 can be applied during the classification process by visual evaluation of the system map in conjunction with basic data on traffic flow and population. The following considerations, used in conjunction, should apply. First, as indicated in Section II, page 11-11, a combined mileage of rural principal arterial and minor arterial classes of between 7 and 10 percent of total rural mileage is the normal maximum extent. Considering this as the limit being approached, then: (1) Would adding routes to serve a next group of smaller generators result in adding a considerable mileage of routes carrying, as a group, substantially less traffic than routes already added? (2) Is the radius of traffic attraction of this next group of smaller generators, as implied by their size, their distance from larger generators, or by traffic flow data, substantially less than that of places already served? If the answer to either question is yes, then a logical lower limit of the minor arterial system has been reached, as far as service travel generators is concerned.

FIGURE III-3

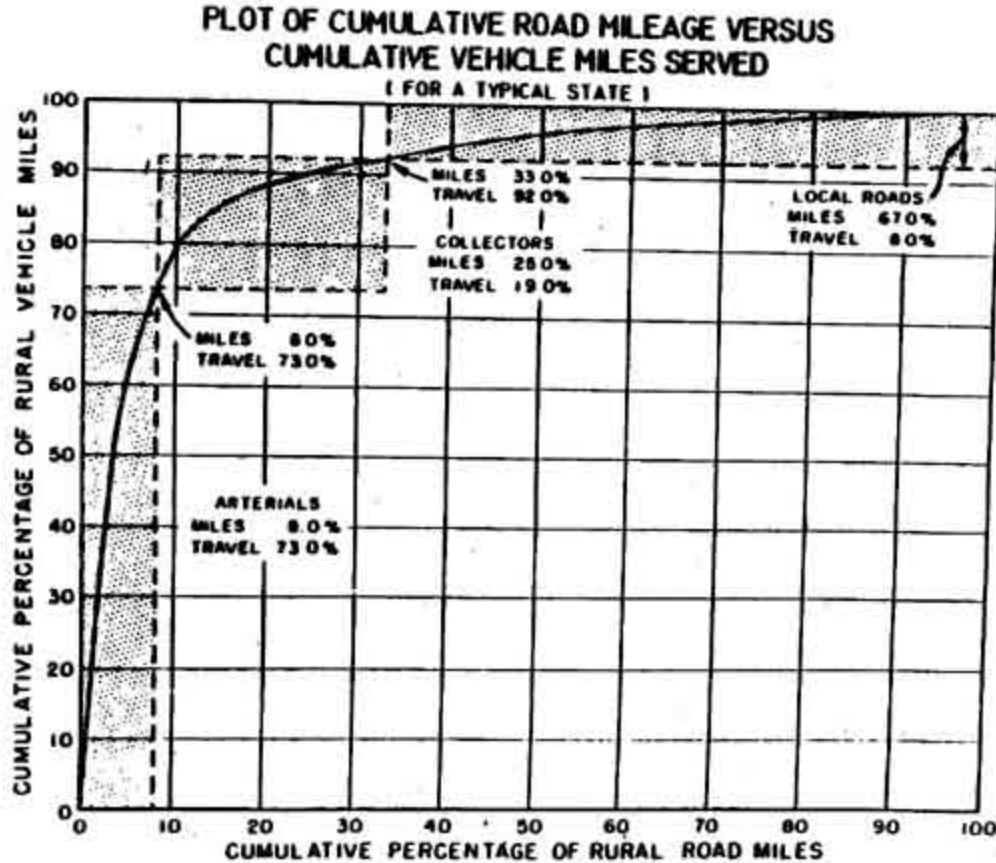


Figure III-3 - Plot of Cumulative Road Mileage Versus Cumulative Vehicle Miles Served

8. Add such other routes to the minor arterial system as are required by the defined system characteristics. Such routes will include:
  - a. (Service to corridor movements with trip lengths and volumes equivalent to those of routes already added, as determined from traffic flow maps.
  - b. Service to all areas of the State, with spacing of routes at reasonably consistent intervals, as tempered by consideration of population density.
  - c. Such additions as are clearly needed for adequate statewide continuity (but only where significant travel patterns serve to justify them).
9. Inclusion in the system of additional alternative routes is a problem that will occasionally arise. In most cases a single connection between two centers is all that is needed. Some instances where alternative routes may have to be considered are:
  - a. Where two apparently alternative routes are separated by geographic barriers and each is needed for minor arterial service to some qualified intermediate center or for connection to another intersected minor arterial route.
  - b. Where one major facility is a parkway from which commercial vehicles are excluded.
  - c. Where the total traffic volume cannot practicably be handled by one facility.
  - d. Where one facility is a toll road.

**"future year" Classifications:**

Studies conducted over the years have indicated a large degree of stability in the routes and corridor locations of arterial systems. To a considerable extent, centers of the lower size range of places served by these systems (especially minor arterial) are not undergoing great or rapid change. Furthermore, considering mere growth, per se; if all centers were growing in proportion, without causing significant shifts in travel linkages, such growth would not affect the functional relationships in the road network. There will,



however, be instances where smaller cities and towns, due to unique circumstances of location or activity, will be anticipated to undergo substantial growth. The same will apply, probably in greater degree, to other travel generators, especially recreation centers. These rapidly expanding generators will be of principal interest in reviewing the updated ranking of generators.

Generators other than population centers should be involved in the ranking of generators. Both in regard to population projections and in projecting these other generators, statewide and regional development agencies should be contacted to obtain information on development trends, available socio-economic forecasts, and statewide and regional development plans.

Visitation forecasts for important recreation centers should be obtained, or made if not available. Projections of visits should be reviewed to assure that individual forecasts are realistic in terms of use potential and that projected statewide totals reflect a growth rate consistent with overall travel growth. Figure III-1, page 111-5 may be used to obtain equivalent population to use in the ranking process.

### **Rural collector system**

The step-by-step procedure just described for laying out the rural principal arterial and minor arterial systems can be extended in a qualitative sense, to the development of the rural collector system. However, precise quantitative data as to size of traffic generators and amount of traffic movement are usually not available to the same degree at the collector level. Also, population density and distribution and basic road patterns vary widely at this level. Accordingly, the procedure as described here is somewhat more generalized than that described for the higher systems. In any case, it should be borne in mind that what is being laid out is the backbone network of traffic circulation at the county or local level.

Before selecting any routes for the rural collector system a preliminary visual and mental assessment of the entire local picture should be made, considering the following:

1. Location of population centers (including county seats) not already served by the higher systems.
2. Location of important local traffic generators other than population centers: consolidated schools, shipping points, county parks, etc. Aerial photographs, where available, should prove helpful in locating these local traffic generators.
3. Location of any heavier-than-average corridor movements within the county, from traffic flow data.
4. Location of existing freeway interchanges or important river crossings that may be key location controls with regard to the collector system.
5. Rural population and land-use distribution within the county as regards uniform or nonuniform density of development.

**Selection of major collector routes.** --In many instances, selection of a few major collector routes can be made and shown on the statewide map which has been used to delineate the arterial systems. This is a practical matter of working with whatever map offers the most convenient scale. Completion of the collector classification, however, should be done on maps of county scale, preferably those of the county highway planning series. A mosaic of maps of the county being classified and the bordering counties will be helpful in determining the function of routes crossing the county line. The designated principal arterial and minor arterial systems and any collector routes already designated on the statewide map should be transferred to the county map before any additional routes are selected. The major collector routes should then be selected to accomplish the following:

1. Connect the county seats and the larger population centers not served by the higher systems with such systems and/or directly with nearby larger population centers served by those higher systems.
2. Link the more important local traffic generators with nearby population centers or with this or a higher system.
3. Serve corridor movements with traffic volumes and trip lengths comparable to those of major collector routes already selected.

**Selection of minor collector routes.** --The routes selected up to this point serve to connect population centers and other traffic generators of like magnitude. However, there will be many areas with clustered residents at considerable distance from the previously selected systems. Within reasonable economic limits, minor collector or "spacer" routes should be designated to serve these areas, interconnect the small communities, and link the locally important traffic generators with their rural hinterland.

These "spacer" routes should be selected so as to provide approximately equal distance between arterial or collector routes for equal rural population densities so that equitable service is provided to all rural areas of the State. The approximate population density within each area bounded by major collector or arterial routes can be determined, either from census data or by an approximate house count from the county highway map, and the existing spacing of routes already selected can be measured. Areas with poor service can then be identified by comparing those data with a table of desirable collector spacing (miles between routes) versus population density (people per square mile) and additional routes selected and added to the collector system where necessary.

**Future year classification.** --In most counties there should be a substantial degree of stability over time in the extent and location of rural collector routes. There will, of course, be changes brought about by (a) change urban-in-fact boundaries, (b) reclassification of arterials superseded by relocations; even in counties where the rural environment remains little changed, and, (c) reclassification of roads presently functioning as collectors to local classification due to the normal diversion and increased channelization of traffic on to one facility following a highway improvement.

Probable changes in land use which would significantly affect the classification plan should be forecast wherever possible. Such changes are most predictable where substantial recreation developments are being planned or where other changes in basic economic activity can be firmly projected, including some assurance as to probable activity sites. Plans and forecasts of State and local agencies should be sought out where available. It is not suggested here, however, that all local plans be uncritically accepted. They should be compared with overall State forecasts for reasonableness.

#### **Local rural roads**

The remaining rural mileage not otherwise classified as principal arterial, minor arterial, or collector should be assigned to the rural local road system.

For future year classifications there will generally be a reduction in rural local mileage brought about by changed urban boundaries. There may be some growth of rural local mileage, particularly for projected recreation, industrial and rural residential developments.

### **CLASSIFICATION PROCEDURES FOR SMALL URBAN AREAS**

This subsection includes the procedures for developing functionally classified street and highway systems in small urban areas. The systems so developed should be consistent with the system characteristics discussed in Section II.

#### **Determine and map the urban area boundary**

The boundary delimiting the area that is urban-in-fact, should be plotted on an existing map of the small urban area. Existing land-use maps or recent aerial photographs may be used to help in locating this boundary. Where neither of these are available, the division line between urban and rural development can be determined through aerial or ground reconnaissance; or officials of the town under study may help to locate this line from their knowledge of local development.

#### **Prepare road network map**

The street and highway network should be updated on the map used in selecting the urban boundary by adding any facilities open to traffic that are not shown on the original map. New routes can be sketched on the map in their approximate location.

#### **Identify and map land service characteristics**

Major traffic generators, land use patterns, and the points at which rural arterial and collector routes intercept the urban boundary should be identified and shown on the map of the area. Recent aerial photographs should prove very useful in identifying the major traffic generators and land use patterns.

#### **Classify the highway and street network**

Classify the highway and street network in accordance with the system characteristics discussed in Section II, and in relation to the land service characteristics described above. In accordance with logical system continuity considerations, select first the principal arterial system, followed by minor arterials, and finally collectors.

As a first step in this process, the Interstate System should be identified on the map. Next, any sections of other freeways or expressways should be delineated. Additional routes should then be selected to provide continuity through the urban area for the routes already identified and for all other rural principal and minor arterials intercepting the urban boundary. In urban areas under 25,000 population, the principal arterial system will probably consist wholly of routes such as the ones selected above. In those small urban areas over 25,000 population, however, there may exist urban activity centers of regional importance. Where these centers do exist, routes should be added to the principal arterial system so that adequate service is provided.

Next, minor arterial streets should be designated to serve the remaining urban activity centers and to provide adequate areawide circulation. The reasonableness of route spacing should be considered, using the guidelines shown below in Table III-1.

Table III-1--Arterial spacing guidelines	
Area type	Arterial spacing
Central business district	1/8-1/2 mile
Urban (central city except CBD)	1/2-1 mile
Suburban	1-2 miles

Finally, the collector streets should be selected, based on the systems characteristics discussed in Section II, and delineated on the map of the urban area. Remaining streets, of course, will form the local street system.

**"Future Year" Classifications.** --A functional classification for "future year" system plans in small urban areas can be developed as follows:

1. Develop, in general concept, the pattern of future land uses in presently undeveloped areas within and around the city. Assumptions must be made (realistically) regarding major new commercial, industrial, institutional, and recreational developments as well as residential development. In the absence of a "future year" land use plan, guidance must come from the pattern of land use in the present urban area (particularly from recent growth, if any),, for local knowledge of any development proposals, from the pattern of existing road network, from the effect, of other transportation facilities, and from an examination of the terrain conditions in the area.
2. considering the above and the urban boundary criteria discussed on page 11-7, delimit the "future year" urban area boundary.
3. Using the latest available functional classification as a base, delineate the principal arterial and minor arterial street networks within the future year urban area boundary. Included in these networks will be projected new facilities based on the land use plan or the assumption developed in (a) above.
4. Evaluate (for reasonableness) the extent of the projected mileage of new facilities developed in (c). Miles of arterials per square mile of area should be comparable to the rate in areas presently developed to a similar land use intensity. This miles-per-square-mile rate for facilities in the area of future urbanization should logically not be higher than the corresponding rate for the present urban area, since the latter includes the densely developed areas of the city.
5. Projecting proposed locations for future collector and local streets in presently undeveloped areas may, in many cases, be impracticable. However, statistical estimates of future collector and local street mileage may be desired, particularly as a basic for projecting maintenance requirements. Statistical indices, such as a street-miles-per-square-mile rate, may be developed, based on existing developments at dwelling unit or population densities similar to that projected for the new area.
6. Evaluate the adequacy of the overall classification plan to serve anticipated future year travel. The following questions, among others, should be considered: Does the pattern of principal arterials (if any) plus minor arterial streets provide adequate continuity for citywide movement? Can anticipated future year capacity requirements be met within developable rights-of-way of the designated network or should additional arterials (oneway couplets, for example) be designated? Would such added arterials, in regard to their impact on the immediate environment, be representative of

- realistic proposals that might be implemented to satisfy local demand? Has the distinction between arterial and collector streets been properly and consistently defined?
7. Develop the further subclassifications within the principal arterial street classes required to provide connecting links for the rural principal arterial and minor arterial systems as described on page 11-15.

## Footnotes

1. Note: Two special cases should be treated in the following manner: One-way streets should be classified individually, and their mileage and travel accumulated on an individual basis, not in pairs. Frontage roads should be classified independently of the controlled-access facility on which they abut. The classification of frontage roads, based upon the criteria presented in this manual should normally be in the collector or local category. Original is footnote 1 on page III-1.

## SECTION III - SUGGESTED PROCEDURES FOR RURAL, SMALL URBAN AREA AND URBANIZED AREA CLASSIFICATION - CONTINUED

### Introduction

This subsection of the manual presents a procedure which can be used to develop functionally classified street and highway systems in urbanized areas. No such procedure can be used mechanically or without judgment. Rather, it is intended to serve as a guide, and if proper application is made of the definitions and criteria, the resultant systems will be fully appropriate for this nationwide study and should provide an excellent base for local transportation planning.

It should be mentioned at the outset that the procedures presented in this section are suggested as a logical approach to urban functional classification. They are designed to conform with the needs and capabilities of most of the urbanized areas. For those areas in which all of the procedures outlined here cannot be followed, the suggested methods may still be adhered to as closely as available data permit.

Listed below are the basic steps which comprise the suggested procedure for functional classification in urbanized areas (each step is discussed in the following text):

- A. Determine and map the urbanized area boundary.
- B. Map the road network.
- C. Perform a preliminary classification of the total arterial system.
- D. Classify the final arterial system.
- E. Classify the principal and minor arterial street systems.
- F. Substratify the principal arterial system.
- G. Classify collector and local streets.

### Classification Procedures for Urbanized Areas

- A. **Determine and map the urbanized area boundary**  
The definition of urban area is given on page 11-7. Federalaid urban area boundaries are established in accordance with Volume 4, Chapter 6, Section 3 of the Federal-Aid Highway Program Manual.
- B. **Map the road network**  
A base map should be prepared containing the street and highway network within the urbanized area. In most urbanized areas, preparation of such a map will simply involve updating existing maps.
- C. **Perform preliminary classification of the total arterial system**  
The preliminary classification is directed toward establishing a tentative division between arterials and all other streets and highways, based upon all available criteria. Where the choice between arterial and collector is borderline or unclear, the facility should be included in the preliminary arterial system. Resolution will come with more detailed analysis in the final arterial system classification when additional criteria may be applied.

Functional system criteria are related to trips served, areas served, and characteristics of the facilities themselves. Within this basic framework, specific measures can be identified as being particularly applicable in assigning facilities to predefined functional classes. For urban functional classification, the criteria measures deemed most useful include service to urban activity centers, system continuity, land use considerations, route spacing, trip length, traffic volume, and control of access. Naturally, none of these can be applied independently, or to the exclusion of all others, in developing functional systems. It is hoped that as many of these as are feasible will be considered in arriving at a logical functional classification. The application of these criteria in classifying a preliminary arterial system is described below.

**1. Service to urban activity centers**

The greater the importance of an urban activity center, in terms of the nature and quantity of travel generated, the wider is its range of trip attraction and, therefore, the greater its need to be served by a higher type system. Some urban activity centers may be evaluated for relative importance by quantitative measures of size and intensity of use, such as number of employees, trip-end density, and the like. In determining the hierarchy of trip generation centers, it may be helpful to consider them in groups arranged according to such measures. These can be plotted from high to low, in the manner shown in Figure 111-4. Such an analysis may be useful in identifying the trip generators that should be served by each functional system. Typically, there are comparatively few very large generators in an urbanized area and these should be served by the principal arterial system.

Where urban activity centers of social and economic importance to the area cannot be weighed quantitatively, they should be identified, subjectively ranked, and appropriately served by the principal or minor arterial system as warranted. Subjective comparison of the relative importance of these centers to those of the first type may be helpful.

Centers appropriately served by arterials should generally include traffic generators of regional or community importance. These consist of the business districts of the central city as well as those of satellite communities, shopping centers, recreational facilities which serve larger than purely local areas, transportation terminals, industrial centers, large high-density residential developments, and the like. These travel generators may be considered to be served by arterials if such a facility passes within one-quarter to one mile of the limits of the activity center, depending upon the type of arterial and the size of the generator. All trip generators which warrant arterial service should be located on a suitable map or overlay, identified according to relative importance.

FIGURE III-4

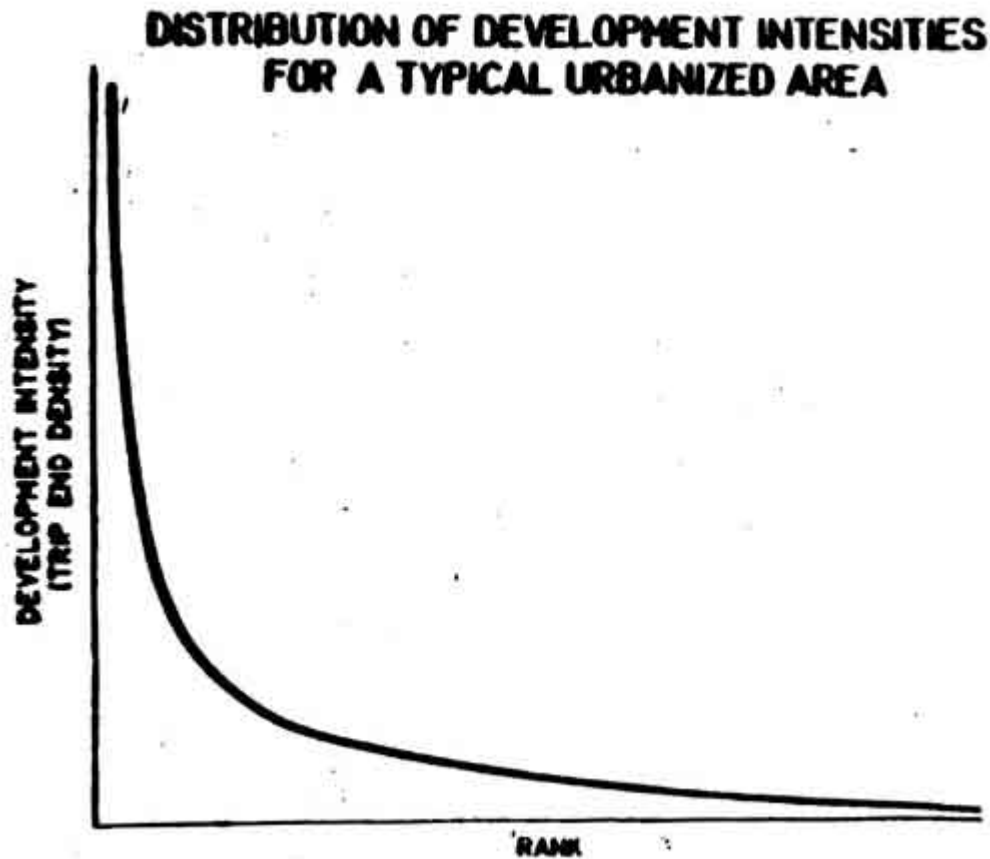


Figure III-4. Distribution of Development Intensities For A Typical Urbanized Area

2. **System Continuity**

The arterial system should be completely integrated, with stub ends occurring only at the urban area boundary (in which case they connect with a rural arterial or a rural collector) or in areas having unusual topographic features, such as sea coasts.

In rare instances, system continuity should not be an absolute constraint for the functional classification of systems. Exceptions could be permitted where long-distance trips end at major centers, such as airports.

3. **Land-use considerations**

Land use is a primary consideration in functional classification, for the mosaic of existing land use largely governs overall travel patterns, travel density, and street spacing.

The transportation system is a major structural element of the community. It serves as a circulatory system providing travel mobility, but it serves equally as a skeletal system providing a relatively permanent framework which delineates and influences the pattern of land development, and within which residential neighborhoods and other land uses may develop and function. The preservation of neighborhoods, the stabilization of desirable land uses, and the encouragement of orderly development are among the basic considerations in the development of functional street systems.

The concept of streets as a land use is also important in functional classification. In the same manner that industrial activities usually make undesirable neighbors for residential districts, but

make suitable neighbors for railroads, so must streets and traffic be viewed in terms of their impact upon as well as service to adjacent land uses. The classification of streets into functional types recognizes this and encompasses, at one extreme, local streets which furnish access to abutting land and discourage through-traffic movement, and at the other extreme, arterials which furnish a primary service to through travel and avoid penetrating identifiable neighborhoods where possible. Establishment of functional street systems and unification of these systems into a balanced network are basic to comprehensive urban planning and must be concurrently accomplished as an integral component of urban planning procedures.

Using suitable overlays on the base transportation network, maps should be prepared which identify all sizeable areas of similar land-use characteristics, such as industrial, commercial, institutional, open space, or residential. Maps such as this are readily available in most urbanized areas in a-form requiring little or no additional work.

#### 4. **Spacing between routes**

The geometric configuration of highway and street systems must be related to the spatial distribution of the activities to be served and to the density of traffic generated. Generally, the more intense the development, the closer the spacing required. In the less dense suburban portions of an urbanized area, neighborhoods tend to be larger than in the more dense central cities. These less dense areas will not require the same close spacing of facilities to serve traffic as the areas closer to the central business district (CBD).

Based upon these considerations Table 111-2 presents a general indication of desirable arterial spacing according to type of area. In addition, Figure 111-5 provides a measure of theoretical arterial spacing required to serve travel to varying intensities. It is recognized that neither the spacing guidelines included in the table nor the theoretical spacing reflected by the curves in Figure 111-5 will apply universally to the spacing of existing arterials. However, they may prove particularly useful in borderline cases where other criteria cannot fully indicate the appropriate functional class of a particular facility.

Table 111-2 -- Arterial spacing guidelines	
Area type	Arterial spacing
Central business district	1/8-1/2 mile
Urban (central city except CBD)	1/2-1 mile
Suburban	1-2 miles
Lowest density development	2-3 miles

**Figure III-5. - Visitation VS. Minimum Theoretical Arterial Spacing Required to Accommodate Arterial Travel Demand at Route Capacity (Illustration scanned)**

**5. Average trip length**

A basic assumption in assigning facilities to logical functional groupings is that higher order systems should generally serve the longest trips. Figure 111-6 illustrates a characteristic high-to-low ordering of average trip lengths on segments of a highway network in a large urban area. - Only comparatively few miles of urban streets and highways serve trips of any great length; a somewhat greater mileage serves trips of moderate length; and a substantial mileage serves comparatively short trips. The approximate break points between these triplength groupings can suggest possible ranges of average trip length for each of the functional system.

A quantitative measure of average trip length on a facility can be obtained if desired via the traffic assignment process. However, it is also possible to apply this criterion in a generalized way without the benefit of quantitative measurements. This requires a knowledge of the nature of travel served by individual roads.

Facilities which serve relatively long trips (including trips passing through the urban area, trips between the suburbs and central city, trips between outlying communities, and long trips occurring within the central city) are likely to be functioning as arterials and should be considered for inclusion in the preliminary arterial system.

An exception in application of the average trip length criterion lies in the existence of outlying minor routes which, by virtue of their distance from the metropolitan center, may carry an unusually high proportion of long trips; indeed, longer average trip lengths than on some principal arterials located closer to the center of the metropolitan area. Consequently, it is necessary to consider trip length within the basic framework of other criteria that reflect the other characteristics of a facility as well as the type of area the facility is in.

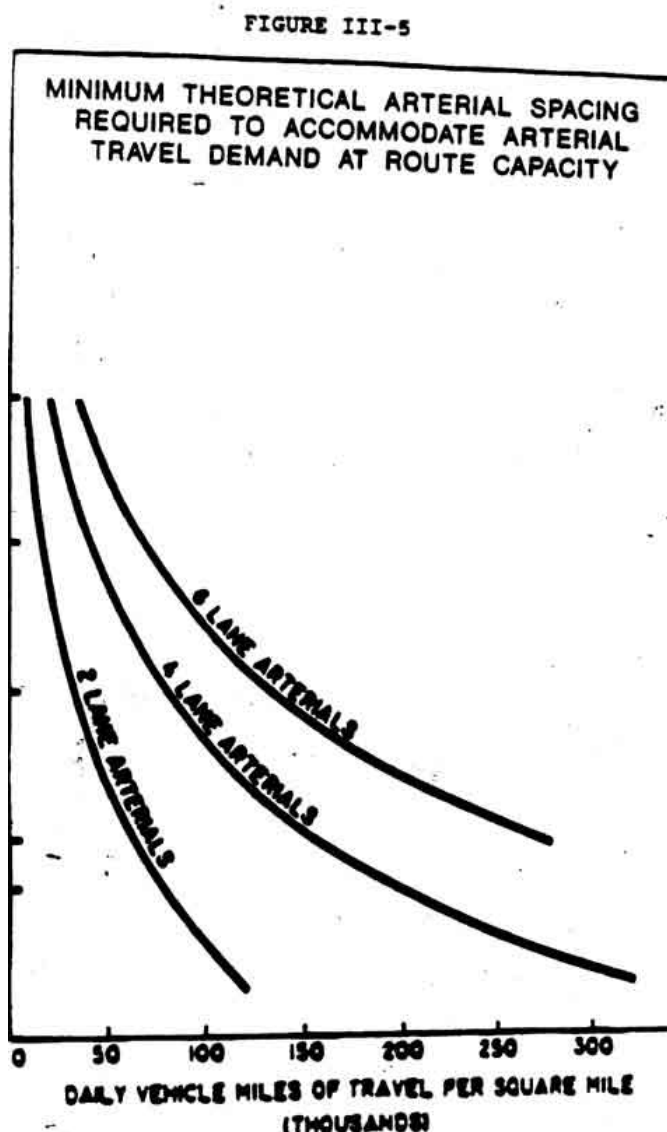
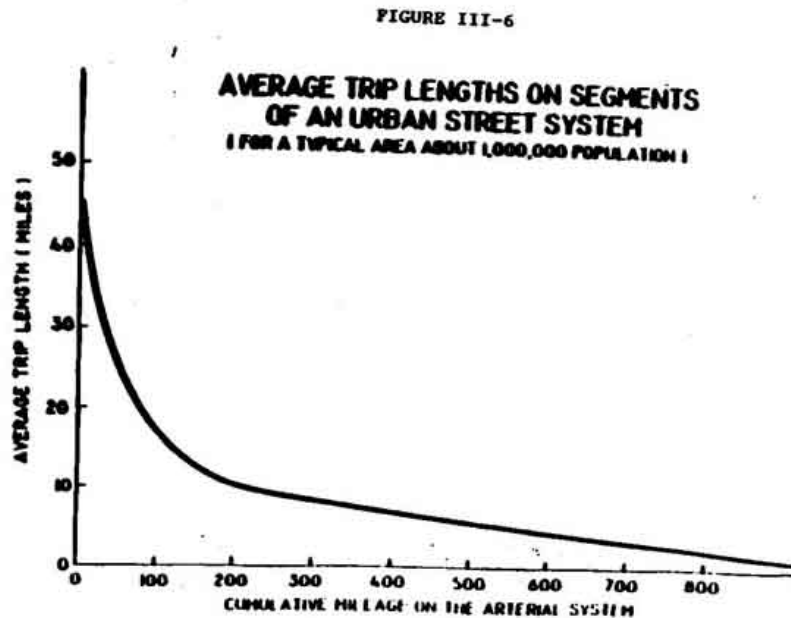




Figure III-6. - Average Trip Lengths on Segments of an Urban Street System



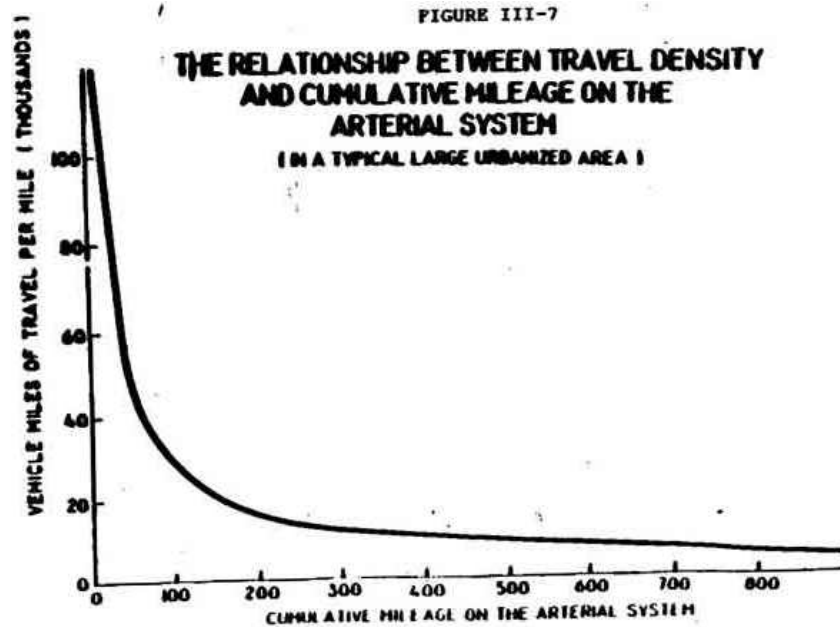
#### Traffic volume

In functional classification, the routes with the highest traffic volumes are likely to be included in the highest type systems, although this is by no means a firm rule. To assist in developing specific volume criteria for an individual urban area, it is suggested that a list of volumes on individual route segments be plotted (from high to low) against the mileage of routes included as illustrated by Figure 111-7. Notice that there are usually relatively few miles of the system that carry high volumes and a modest mileage carrying moderate volumes, but that most mileage comprises low-volume routes.

Most high-volume streets and highways in an urban area function as arterials. But there are exceptions, notable in intensely developed areas where high-volume facilities function as collectors, serving traffic movements between local streets and arterials, or providing a high degree of direct access service to abutting property. For example, some roads which border on large traffic generators may carry proportionately high volumes of traffic while functioning as collectors.

To use the volume criterion as an aid in establishing a preliminary arterial system, it is desirable to have traffic volume data on all segments that probably will be classified as arterials and on all or most facilities which will eventually comprise the "upper" portion of the next lower functional class of roads. This is necessary for determining the approximate volume range in which the break between arterials and collectors occurs (considering the exceptions noted above), as exemplified by the curve in Figure 111-7. Traffic volume flow raps as well as a rank order distribution of road segments based upon volume can also assist in the analysis.

It is not intended that traffic counts be made specifically for this analysis. Rather, it is hoped that extensive use will be made of the most recent data already available.



**Figure III-7. - The Relationship Between Travel Density and Cumulative Mileage on the Arterial System**  
(Illustration scanned)

**7. Control of access**

Control of access is perhaps the easiest criterion to apply, since facilities with full or partial control of access will almost always be in the arterial class. It may therefore be advantageous to delineate these facilities at the very outset, thereby providing for a convenient starting point in defining a preliminary system of arterials.

**8. Vehicle-miles of travel and mileage**

The extent of vehicle-miles of travel and system mileage to be included in the preliminary arterial system classification should be on the high side of the values entered in Table 11-3. This will be the natural outcome of including in this system all facilities about which serious question remains as to whether they are arterials or collectors. It is logical to include such facilities initially in order that they may be subjected to the more stringent analyses described in step D.

FIGURE III-8

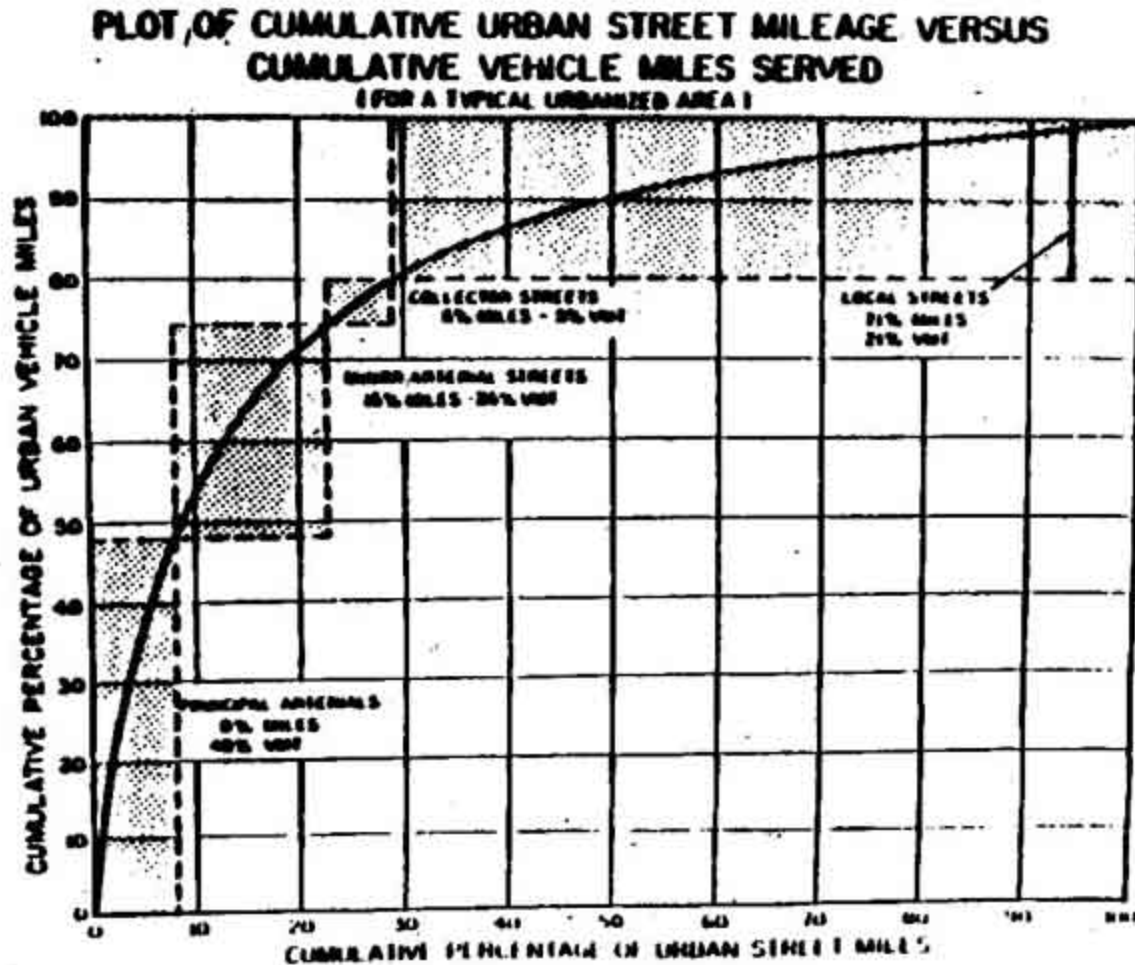


Figure III-8. - Plot of Cumulative Urban Street Mileage Versus Cumulative Vehicle Miles Served (Illustration scanned)

#### Classify the final arterial system

The result of the preceding phase of the urban functional classification procedure should be a first approximation of an arterial system. At this point a reevaluation of the preliminary system is undertaken in order to define a final system of arterials.

The procedure used to determine the final arterial system will be highly dependent upon individual study circumstances. In cases where the preliminary arterial system is judged to be adequate, with relatively few facilities in question as to whether they logically function as arterials or collectors, this phase in the analysis may only involve a refinement of the application of the criteria described in step 'C'. In cases where there are numerous questions regarding the proper functional classification of facilities (arterials versus collectors), professional judgment and vision will be appropriate after considering all criteria and guidelines.

#### Classify the principal and minor arterial street systems

Step 'C' and 'D' were directed toward establishing the total system of arterials in the urban area. The next step is to identify an integrated system of principal arterials, with all remaining arterials designated as minor arterial streets. The principal arterial system, as defined earlier, comprises three categories of facilities: Interstate highways, other freeways and expressways, and other principal arterials. Since the first two of

these categories consist of readily identifiable "facilities, the primary task described in this step entails the identification of the split between "other" principal arterials and minor arterial streets.

The criteria used in step 'C' for the designation of a total arterial system can be reapplied here to assist in this differentiation between "other" principal and minor arterial streets, as described below.

**1. Service to urban activity centers (traffic generators)**

In step C-1., all major generators which warrant arterial service were identified and mapped. A breakdown is now required to distinguish between those centers that should be served by the principal arterial system and those that require at least minor arterial street service. A principal arterial is considered to be offering service to a center when direct access is not further than about one-half to one mile from the facility, while for a minor arterial street, the suggested maximum range is from one-quarter to one-half mile.

As mentioned previously, the rank ordering of traffic generators by quantitative and/or subjective criteria can assist in the allocation of functional responsibility. Generally, centers of regional significance should have principal arterial service, and community oriented centers usually should have at least minor arterial street service. The following list can serve as a guide in determining the generators to be served by the principal arterial system:

- a. Business districts of the central city(s) as well as those of larger satellite cities located within the urban area.
- b. Important air, rail, bus, and truck freight terminals.
- c. Regional retail shopping centers (those usually containing at least one major department store and generally selling goods, apparel and furniture, as opposed to convenience type of shopping goods).
- d. Large colleges, hospital complexes, military bases, and other institutional facilities.
- e. Major industrial and commercial centers.
- f. Important recreation areas such as regional parks, beaches, stadiums, and fairgrounds.

**2. System continuity**

The "building" of functional systems beginning with the principal arterial system should form, at the conclusion of each functional system addition, an integrated, continuous network throughout the area. Thus, the principal arterial system will be an integrated system which is continuous throughout the urbanized area (except as noted on page 111-15) and which also provides for statewide continuity of the rural arterial systems. The combined principal and minor arterial street systems will also form an integrated system. Likewise, when collectors, and finally locals, are added to the higher order systems the combinations at each stage are to be integrated systems. It should be understood that the minor arterials, collectors, and locals need not be integrated systems by themselves, but only in combination with the previously designated higher order system.

**3. Land use considerations**

Arterials can serve as buffers between incompatible land uses, and conversely, should avoid penetration of residential neighborhoods. Similarly, the configuration of the arterial system as a whole has a significant impact on land development policies and practices, although the magnitude of such impact is probably correlated with the relative significance of the arterial. In the extreme, controlled-access facilities serve best in separating land uses and generally have the most noticeable impact on land use.

A pertinent land use consideration in the classification process is that of the degree of access to abutting land. The land access function of principal arterials is entirely subordinate to their primary function of carrying traffic not destined to land adjacent to the facility. Minor arterial streets, on the other hand, have a slightly more important land access function, though even for this class of facilities this is a secondary consideration.

**4. Spacing between routes**

It is difficult to define spacing criteria to assist in separating principal from minor arterials, since this factor has less bearing upon the differences that mark these two classes of roads than some of the other measures described in this section. In an ideal sense, spacing between principal arterials should be greater than spacing between minor arterial streets. Normally, minor arterial streets will be located between principal arterials.

In the larger urbanized areas, the spacing of principal arterials may vary from less than one mile in the highly developed central business area to five miles or more in the sparsely developed suburban fringes. However, the nature of the land development pattern, and the associated travel patterns, in most urban areas will preclude the unqualified application of such an idealized rule.

5. **Average trip length**

Principal arterials should, as a general rule, serve trips which are significantly longer than those that are carried on the minor arterial street system. A qualitative (subjective) measure of trip lengths served by facilities is possible from a knowledge of the existing street and highway system and the routes generally used for long trips.

6. **Traffic volume**

The traffic volume criterion can be used here in a fashion similar to the procedure described in step C-6. However, a note of caution is warranted since the division between principal and minor arterials will be less subject to decision according to the amount of traffic carried on a facility than the split between all arterials and collectors. Because traffic volumes in the outlying portions of an urbanized area are generally lower than in the more densely populated central areas, the volume on a minor arterial street in the central city may be greater than the volume on a principal arterial in a suburban area. Thus, the volume of traffic carried by a facility should not be the controlling criterion in determining the proper system classification for a street, although it may be an important consideration.

7. **Control of access**

The access-control criterion is perhaps the most straight-forward to apply. Almost all facilities with full or partial control of access will fall within the principal arterial category. Partial access control is defined, for the purposes of this study, as the exercise of police power to limit access to a highway from abutting land to specified and controlled points. In a few instances such facilities may be determined to be functioning as minor arterial streets.

8. **Vehicle-miles of travel and mileage**

Upon completing the functional classification of arterials into the two basic categories, principals and minors, the cumulative vehicle-miles of travel carried by each class of facility in terms of cumulative mileage should be determined. These values should be compared with the general guidelines presented in Table 11-3. While exceptions are to be expected in a number of urban areas, an attempt should be made to describe the reasons for them where they do occur. If no substantive causes can be identified, consideration ought to be given to a re-examination of the functional classification as performed to this point.

A typical plot for an urbanized area of cumulative urban street mileage versus cumulative vehicle miles served is shown in Figure 11-8.

9. **Substratify the principal arterial system**

Completion of step 'E' should produce a finalized breakdown between arterials and other facilities, as well as a stratification of arterials into principals and minors. The principal arterial system should be further divided into the three subcategories of Interstate highways, other freeways and expressways<sup>1</sup>, and other principal arterials. (Those facilities which are currently providing continuity between completed portions of the Interstate System should be designated as either other freeways and expressways or other principal arterials, as the case may warrant.)

At this point in the development of a functionally classified system connecting links should be identified to provide continuity for rural arterials which intercept the urban area boundary.

10. **Classify collector and local streets**

With the designation of the arterial system, the remaining streets in the urban area will comprise those facilities which function as collectors and locals. It will be necessary to shift the scale of the analysis at this point in order to identify these classes of roads in terms of the individual streets which are in each functional category, the total amount of travel occurring on these classes of streets, and the total mileage they represent. Pertinent steps in the procedures described above, and the definitions and criteria presented earlier, should be applied to the fullest extent possible.

The basic consideration here is that collector streets, which may have a relatively important land access function, serve primarily to funnel traffic between local streets, where the land access function is dominant, and the arterial system, where service to through traffic is of primary

importance. In order to bridge this gap between locals and arterials, collectors must, and do, penetrate identifiable neighborhoods.

With the identification of collector streets, all remaining facilities which have not been designated as arterials or collectors will necessarily fall within the local category. The extent of the collectors and locals, as measured by cumulative vehicle-miles of travel and mileage, should be computed with the generalized values presented in Table 111-3. Where significant differences exist, they should be noted and discussed.

### **"Future Year" Classifications**

A functional classification for "future Year" system plans in urbanized areas can be developed as follows:

1. Develop, in general concept, the pattern of future land uses in presently undeveloped areas within and around the city. Assumptions must be made (realistically) regarding major new commercial, industrial, institutional, and recreational developments as well as residential development. In the absence of a "future year" land use plan, guidance must come from the pattern of land use in the present urban area (particularly from recent growth, if any), from local knowledge of and development proposals, from the pattern of existing road network, from the effect of other transportation facilities, and from an examination of the terrain conditions in the area.
2. Considering the above and the urban boundary criteria discussed on page 11-7, delimit the "future year" urban area boundary.
3. Using the latest available functional classification as a base, delineate the principal arterial and minor arterial street networks within the future year urban area boundary. Included in these networks will be projected new facilities based on the land use plan or the assumption developed in (1) above and future systems plans developed by the urban planning process.
4. Evaluate (for reasonableness) the extent of the projected mileage of new facilities developed in (3). Miles of arterials per square mile of area should be comparable to the rate in areas presently developed to a similar land use intensity. This miles-per-square-mile rate for facilities in the area of future urbanization should logically not be higher than the corresponding rate for the present urban area, since the latter includes the densely developed areas of the city. Attention should be given to providing an adequate limited access system for area mobility. In addition, consideration should be given to providing good intermodal connectivity.
5. Projecting proposed locations for future collector and local streets in presently undeveloped areas may, in many cases, be impracticable. However, statistical estimates of future collector and local street mileage may be desired, particularly as a basis for projecting maintenance requirements. Statistical indices, such as a street-miles-per-square-mile rate, may be developed, based on existing developments at dwelling unit or population densities similar to that projected for the new area.
6. Evaluate the adequacy of the overall classification plan to serve anticipated future year travel. The following questions, among others, should be considered: Does the pattern of principal arterials plus minor arterial streets provide adequate continuity for areawide movement? Are there sufficient limited access facilities to provide the proper channelization of trips? Does the proposed functional classification adequately support the intermodal transportation plan? Can anticipated future year capacity requirements be met within developable rights-of-way of the designated network or should additional arterials (one-way couplets, for example) be designated? Would such added arterials, in regard to their impact on the immediate environment, be representative of realistic proposals that might be implemented to satisfy local demand? Has the distinction between arterial and collector streets been properly and consistently defined?
7. Develop the further subclassifications within the principal arterial street classes required to provide connecting links for the rural principal arterial and minor arterial systems as described on page 11-15.

## Footnotes

2. The designation of expressways should be in accordance with the American Association of State Highway and Transportation Officials (AASHTO) definition. Original is footnote 1 on page III-32.

## Attachment 3

### ADDENDUM

#### Highway Functional Classification - Concepts, Criteria and Procedures

This addendum supplements the manual, ***Highway Functional Classification - Concepts, Criteria and Procedures***, March 1989, to provide more flexibility for classifying routes that cross urban boundaries and to provide specific criteria for including future or proposed routes.

#### Routes Crossing Urban/Rural Boundaries

The Manual provides for rural routes (other than principal arterials) to be upgraded to a higher classification level when they cross an urban boundary. Although the principle is sound, rigid application has presented difficulties for some states. Accordingly, this addendum to the guidelines is intended to provide greater flexibility for deciding on an appropriate place for changing the functional classification when rural routes cross an urban boundary, taking into account changes in traffic conditions, the degree of urban development and other factors. Instead of automatically upgrading the functional classification of a rural route that crosses an urban boundary, the rural classification may be continued inside the urban boundary until there is a more logical and acceptable place for a change.

#### Future Routes

The manual discusses procedures for conducting a functional classification based on projected facilities and usage for some "future year"; however, the manual does not provide criteria for including future or proposed routes into a functional classification of existing facilities. Because the functional classification will support the designation of the National Highway System which is expected to include some future routes, this addendum establishes criteria for determining which future routes should be included in the functional classification of existing routes. Future routes should be functionally classified with the existing system if they are included in an approved short range improvement program and there is a good probability that the route will be under construction in the reasonably near future (up to 6 years). Where applicable, the same classification should be given to the future route and to the existing route that it will replace *until the future route is constructed*.



# TAB 7

## **TECHNICAL COMMITTEE AGENDA 03/16/11; ITEM II.G.**

### **Federal Functional Classification Change for Farm Road 103/Hunt Road**

**Ozarks Transportation Organization  
(Springfield, MO Area MPO)**

#### **AGENDA DESCRIPTION:**

The OTO Technical Committee is charged with recommending all Federal Functional Classification Changes to the OTO Board of Directors. The recommendation of OTO is forwarded to the Federal Highway Administration for consideration.

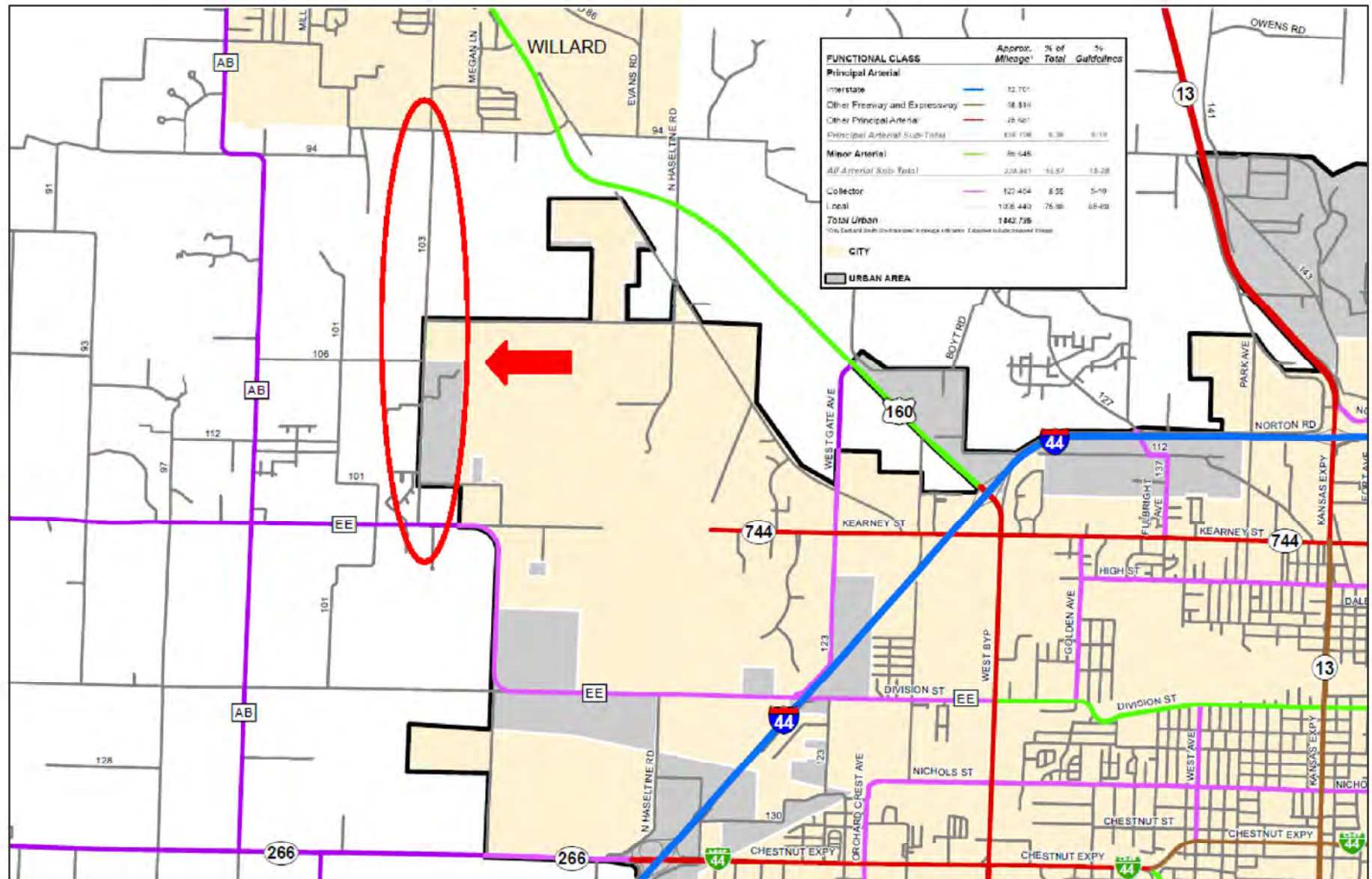
The City of Willard is requesting to change the federal classification of Farm Road 103/Hunt Road from local to collector from EE (Division) to US 160.

The primary need for this change results from an increase in traffic due to the new Airport Terminal access. Additional traffic is also being generated by population growth in the area.

#### **TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:**

To recommend to the Board of Directors that OTO recommend Farm Road 103/Hunt Road be reclassified to a collector on the Federal Aid System, contingent upon final approval of the federal functional classification change application.

# Farm Road 103 Functional Classification Change





117 Park Central Square, Suite 107, Springfield, MO 65806  
Phone 417.836.5442 Fax 417.836.6013

## Application Federal Functional Classification Change

### Instructions

Please use this form to submit a reclassification request for an existing roadway or to classify a planned roadway. To better process your application; please fill out the form completely. Upon completion, save the document and email it to [staff@ozarkstransportation.org](mailto:staff@ozarkstransportation.org) or fax it to (417) 862-6013. After receiving the request, OTO will reply with an e-mail notice of the approximate time frame of review and pending approval.

### Application Information

Date: February 15, 2011

### Contact Information

Name: Randall Brown  
Title: Director of Development  
Agency: City of Willard  
Street Address: 224 W. Jackson  
  
City/State/Zip: Willard, MO 65781  
Email: [develop@cityofwillard.org](mailto:develop@cityofwillard.org)  
Phone: 417-742-3033  
Fax: 417-742-3080

### Roadway Data

Roadway Name: Farm Road 103  
Termini of Roadway  
    From: EE  
    To: 160  
Length (miles): 3.5 miles  
Number of Lanes: 2  
Lane Width: Unknown  
Traffic Volume (AADT):

Is the roadway existing or a future road? If a future road, describe how the project is committed to locally (provide documentation) and state the anticipated date for the start of construction.

Existing

### Classification Change

Type of Area	Rural/ Urban
Current Classification	Local
Requested Classification:	Collector

### Justification

Explain why the roadway classification should be revised.

This roadway provides both land access service and traffic circulation within residential neighborhoods, commercial and industrial areas, as well as the Airport. It collects traffic from local streets in residential neighborhoods and channels it into the arterial system. In the central business district, and in other areas of like development and traffic density. This Roadway provides a direct connection between a minor arterial (160) and a collector (EE).

Are there any new developments (residential or commercial) or changes in land usage that will alter the demand on this roadway?

The access to the airport has changed and EE now serves as direct access to the Airport. Farm Road 103 did not connect to the former airport access. The City of Willard has annexed this entire roadway.

Will this roadway provide direct access to any points of activity: business parks, industries, shopping centers, etc?

No direct access, however the road is within a mile of the airport and is used for indirect access to Conco Quarries and McDonalds Restaurant, Future Plans include a school to be constructed on FR 103, north of FR 94. School currently owns land and city owns land for a future park.

Is the demand on this roadway changing or is the existing demand inconsistent with its current classification?

Demand has changed with the construction of the new Airport terminal. Willard's population has increased by over 2000 people between 2000 and 2010 and the population of Greene County has increased by nearly 15 percent in the last decade.

Additional information you would like to include.

Future plans include sidewalks along the entire corridor and there are plans to improve the intersection of Hunt road and Highway 160

Functional Reclassification Process (minimum timeframe is 4 months)

- 1. Application.** Applications are accepted at any time for a functional classification change. However, it will not be placed on the Technical Committee Agenda unless received at least two weeks prior to the meeting date. A general call for applications will be made annually in October.

2. **Technical Committee.** The request will be heard at the next available Technical Committee meeting. The Technical Committee will hear the item and make recommendation to the Board of Directors. The Technical Committee may decide to table the item until a future meeting.
3. **Board of Directors.** After a recommendation is made by the Technical Committee, the Board will approve or deny the request. If the request is approved, it will be forwarded to MoDOT and FHWA.
4. **FHWA.** FHWA requires a minimum of 45 days to review the request. A notice of determination will be given to OTO. OTO will forward the notice to the requesting agency

# TAB 8



## **TECHNICAL COMMITTEE AGENDA 03/16/11; ITEM II.H.**

### **Safe Routes to School Applications**

#### **Ozarks Transportation Organization (Springfield, MO Area MPO)**

#### **AGENDA DESCRIPTION:**

OTO is required to sign all Safe Routes to School applications. The current grant cycle opened on February 1, 2011 and will close on April 15, 2011. There is funding available for infrastructure projects. Safe Routes to School Infrastructure projects include the planning, design, and construction of infrastructure related projects that will substantially improve the ability of students to walk and bicycle to school, including

- sidewalk improvements
- traffic calming and speed reduction improvements
- pedestrian and bicycle crossing improvements
- on-street bicycle facilities
- off-street bicycle and pedestrian facilities
- secure bicycle parking facilities
- traffic diversion improvements in the vicinity of schools

Greene County is planning to submit two applications as follows:

- **Harrison Elem School Trail Connections:** A project designed to make two bicycle/pedestrian trail connections to neighborhoods located on the east side of Harrison School. One connection is proposed from the end of the right of way of Sexton St. Sexton St abuts the northeast corner of the Harrison campus; the trail will be constructed to connect to the school via the existing school park trail system. The second connection to the school is proposed along a vacated street from Glenn Ave. to the eastern boundary of the school property, then constructing trail through the school park to connect to the existing trail system.
- **Carver Middle School Trail Connections:** A project designed to make three connections to the South Creek Trail. One connection from the trail itself to the Carver Middle School Building and parking lot, and two additional neighborhood connections to the trail to subdivisions located to the north and the east of the school.

#### **TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:**

The Technical Planning Committee is requested to make a motion in support of the applications and agree to recommend project placement in the Transportation Improvement Program if awarded.