

**STARK COUNTY AREA TRANSPORTATION STUDY**  
**TRANSPORTATION IMPROVEMENT PROGRAM 1997-2000**  
**STARK COUNTY, OHIO**

**Final, May 1996**

prepared by

**Stark County Area Transportation Study**  
**201 Third Street NE, Suite 201**  
**Canton, Ohio 44702**

**The contents of this document represent cooperative efforts involving the following agencies: US Department of Transportation, Federal Highway Administration, Federal Transit Administration, Ohio Department of Transportation, Stark County Area Transportation Study, and the Stark Area Regional Transit Authority. Funding for the preparation of this document was provided by the US Department of Transportation, Federal Highway Administration, Federal Transportation Administration, Ohio Department of Transportation, Stark County, and the cities of Alliance, Canton, Louisville, Massillon, and North Canton.**

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# I. INTRODUCTION

The Transportation Improvement Program is the schedule of highway and transit improvements recommended for implementation within the next four years. It is, therefore, the end product of the transportation planning process. A general outline of this process is displayed in Figure 1.

## TIP DEVELOPMENT

As shown by Figure 1, the TIP originates from two elements -- The Short Range Plan element and the Long Range Plan element. The Short Range Plan element includes transportation system management projects which are low capital projects to achieve efficient management of the existing transportation system. The Long Range Plan includes major improvements to the transportation system requiring large capital investments and long lead times for implementation.

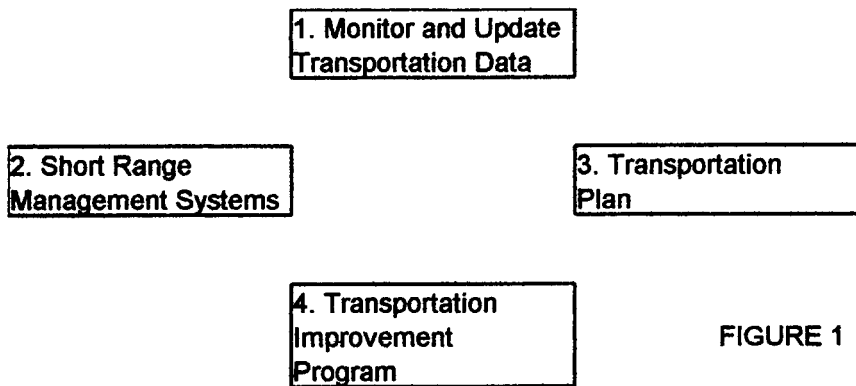


FIGURE 1

The procedure for developing the TIP is as follows. SCATS updates the previous year's TIP to reflect the current status of each project. SCATS then contacts the appropriate officials from the municipalities, county, state and the Stark Area Regional Transit Authority to develop the draft TIP. The projects on the past year's TIP and the Transportation Plan are reviewed with each political unit. New transportation projects added to the TIP are generally drawn from the short and long range elements by local officials. System preservation projects generally originate from each agencies planning procedures. The proposed additions to the TIP are reviewed for consistency with the SCATS Transportation Plan. A fiscal analysis of the TIP is made to determine funding availability and project priorities adjusted to stay within fiscal constraints. An air quality conformity analysis must be conducted on the entire TIP comparing the emissions for the TIP build scenario with the no-build transportation system. The draft TIP is reviewed with the CAC Transportation Committee and approved for submission to ODOT by the SCATS Policy Committee. SCATS then transmits the draft document to ODOT and FTA. Figure 2 documents this procedure.

The project selection is actually conducted over the long term with each political unit. The political unit continually assesses its transportation needs and discusses them with SCATS. Policy Committee will try to fulfill each area's needs, but before funding a project, sufficient funding must be available. Other factors considered in programming projects include the length of time required for the preliminary engineering and right-of-way acquisition phases and the availability of funds by

funding category. Also important is whether or not local support exists for a project. Finally, SCATS must consider the priority rating the implementing agency assigns to the project.

## PUBLIC INVOLVEMENT

The Federal planning regulations call for a formal public involvement process. The following paragraphs describe the SCATS Public Involvement Process as it relates to the TIP.

During its drafting, information on the SCATS TIP was presented to members of the CAC Transportation Committee, the SCATS Policy Committee, and the RPC at their regularly scheduled meetings. The CAC and SCATS Policy Committee annually establish a schedule for review of the TIP. (See Figure 2 for the FY 1997-2000 SCATS TIP).

Figure 2 - TIP Development Schedule

October 1995	ODOT District Office reviews prospective TIP projects with SCATS Policy Committee and project sponsors:
November 1995	SCATS TAC and Policy Committee Prioritizes local funded TIP projects and develops fiscally constrained draft highway program.
February 1996	ODOT releases Major/New Construction Project Lists. District submits Bridge and Resurfacing projects to SCATS
March 1996	Development of draft TIP and financial analysis by SCATS. Conformity Analysis data sent to Tech Services. Draft TIP is sent to ODOT Bureau of Planning. Review by Bureaus of Planning, Programming, Urban Transportation and Public Transportation of STIP/TIP. Air Quality Conformity analysis made by ODOT. ODOT Central Office completes STIP/TIP review and financial analysis
April 1	Final draft TIPs due to all 12 ODOT Districts and all 16 MPO's for public involvement period. Legal notices of availability of STIP/TIPs published in newspapers.
April 4	Press release regarding public availability of draft TIP.
April 8-May 22	STIP/TIP public availability period.
April 18	Public Meeting on Transportation Plan, TIP and Conformity Determination
May 28	SCATS Policy Committee approves Final TIP along with resolution affirming conformity between SIP, Plan and TIP.

The development of the SCATS TIP is coordinated with the State Transportation Improvement Program and the SCATS utilizes the STIP public involvement procedures which provide for review of the complete package of all the MPO TIP's and the STIP in each ODOT District and each MPO. Advertisement of the availability of the draft document package for public review appeared at least one week before the period of availability began. A news release on the availability of the draft SCATS TIP was issued by the SCRPC Public Relations office. A public meeting was held April 18, 1996 to review the STIP/TIP during the comment period. The ODOT District 4 Design and Planning Engineer, Stark Area RTA Director and SCATS staff were at

the meeting to discuss the STIP, TIP, Conformity Report and Plan. Copies of these documents were available for review at the SCATS office. The TIP and STIP were also available at the 12 ODOT District Offices, the other MPO offices and at area libraries (see list below) during the comment period. No comments were received during the comment period.

SCATS will provide opportunities for public review of major amendments to the TIP, such as change in design concept or scope of project on a major transportation corridor. Also considered major are amendments affecting the TIP fiscal constraint or air quality conformity determination. SCATS will review, on an annual basis, the effectiveness of the TIP Public involvement Process.

Copies of the TIP document were placed in the following local libraries:

- Stark County District Library
- Louisville Library
- Massillon Library
- North Canton Public Library
- Rodman Public Library
- Stark County Regional Planning Commission Library

SUMMARY

The TIP report is divided into five sections. The first section is this introduction. In section II, highway projects are presented in a series of tables and on a map displaying the location of projects. Recommended transit projects are presented in a series of tables in section III. Section IV outlines revenues and costs of the highway and transit improvements. The Appendix includes documentation of privatization efforts by Stark Area RTA. Following this is a Financial Capacity Analysis Summary. The last section of the Appendix documents the conformity of the TIP with the Clean Air Act Amendments of 1990.

## II. HIGHWAY PROJECTS

This section of the TIP details highway improvements. It includes a status report on the previous TIP, a description of compliance with the MIS and SOV analysis requirements and a listing of the current TIP projects.

### STATUS OF PREVIOUS TIP PROJECTS AND CHANGES IN PRIORITIES

The status of projects from previous TIP's must be monitored. Table 1 shows the status of these projects. The current TIP reflects major changes in project priorities in response to fiscal constraints and new procedures by ODOT to prioritize its projects. In 1995 and 1996 ODOT developed a new procedure to prioritize its major new construction projects. This process resulted in projects on I-77 between US30 in Canton and I-277 in Akron moving up on the priority list. A new project to widen US62/SR21 at the intermodal facility also was added to the TIP. ODOT also gave each District an allocation for bridge projects, multi-lane resurfacing and other maintenance projects. Districts then prioritized projects in each category and developed fiscally constrained programs. The SCATS priorities also were revised in response to fiscal constraints by the TAC and Policy Committees.

**Table 1 Status of Previous TIP Projects**

PID#	COUNTY ROUTE SECTION	LENGTH IN MILES	TYPE WORK	PHASE	FY 95-98 TIP PHASE	FY 96-99 TIP PHASE	FY 97-00 TIP PHASE	REMARKS
4213	STA-Applegrove Street	1.62	Widening Relocation	R	1996	1997	1997	
				C	1997	1998	1999	
14490	STA-Canton CBD Signals	0.00	Traffic Signalization	C	1996	1996	1997	
15196	STA-Stark Intermodal	0.00	Intermodal Facility	P		1996		Sold 7/6/95
				R		1996		
				C		1996		
4003	STA-Louisville Bikeway	4.41	Bikeway	R	1995	1997	1996	
				C	1995	1998	1997	
9527	STA-16th St	0.47	Widen, relocate RR grade seperation	R	1997	2000+	2001	
				C	1999+	2000+	2001	
4090	STA-TR 3	0.28	Bridge Replacement	C	1995	1996	1997	
11110	STA-SR 21- 8.98	0.20	New Ramps.	C	1996	1999	1999	
12479	STA-SR 21-10.24	2.15	Resurfacing	P	N/A	1996	1996	
				C	1998	1998	1999	
13455	STA-US 30- 0.00	4.59	Resurfacing	C	1998	2000+	2001+	
8933	STA-US 30-17.21	3.17	New Location	R	1998	1998	1997	
				C	1999+	1999	1997	
10748	STA-US 30-18.35	13.50	Environmental	P	N/A	N/A	N/A	PE Obligated
	COL-US 30- 0.00	24.40	Doc Phase					
9568	STA-CR 31/CR 62	0.50	Improve Intersection	C	1997	1997	1998	

Table 1 Status of Previous TIP Projects

PID#	COUNTY ROUTE SECTION	LENGTH IN MILES	TYPE WORK	PHASE	FY 95-98 TIP PHASE	FY 96-99 TIP PHASE	FY 97-00 TIP PHASE	REMARKS
12677	STA-CR 31	5.18	Resurfacing	C	1995	1996	1997	
8831	STA-SR 44-13.08	0.05	Bridge Replacement	R C	N/A 1998	N/A 1998	1999 1999	
12678	STA-CR 62	4.80	Resurfacing	C	1995	1997	1997	
10628	STA-US 62-21.51	1.91	Resurfacing	C	1995	1996	N/A	Sold 8/24/95
12874	STA-US 62-21.51	0.21	Bridge Replacement	P C	1995 N/A	N/A N/A	1997 2000	
13065	STA-US 62-23.95	0.09	Bridge decks	P	1995	N/A	N/A	Not Funded in TIP Period
12365	STA-US 62-34.87	1.46	Add Turn Lane	C	1997	1997	1998	
4089	STA-US62F-39.18 MAH-US62F- 0.00	1.12 4.36	New 4-lane Freeway	R C	1998 1999+	2000+ 2000+	2001+ 2001+	Not Funded in TIP Period
13834	STA-US62J-37.02	0.14	Bridge Rehab	P	1995	N/A	N/A	Not Funded in TIP Period
13833	STA-US62J-37.53	0.14	Bridge Rehab	P	1995	N/A	N/A	Not Funded in TIP Period
15961	STA-US62F-34.83	0.15	Bridge Rehab Resurfacing	C	1995	1998	1997	Old PID 8003 & 11250 combined
9363	STA-CR 66	2.80	Resurfacing.	C	1996	1996	1997	Project split into 2 construction in 1997 & 2001
14830	STA-CR 66	3.49	Resurfacing.	C	N/A	2000+	2001	
12836	STA-IR 77- 3.69	0.04	Bridge Repair	P C	1995 N/A	N/A N/A	1998 2000	
10769	STA-IR 77- 9.40	3.36	Widen to Six Lanes	R C	1998 1999+	2000+ 2000+	2000 2001+	
13975	STA-IR 77-12.74 SUM-IR 77- 0.00	5.80 0.53	Resurfacing	P C	1995 1999+	N/A 1997		In FY 96 Project revised to drop additional lanes
????	STA-IR 77-12.74 SUM-IR 77- 0.00	5.80 0.53	Widen to Six Lanes	P C	1995 1999+	N/A N/A	1997 2001+	Original project revived for FY 97 TIP
10533	STA-IR 77-17.92	0.25	Bridge Replacement	R C	N/A 1997	1997 1998	1999 1999	
4120	STA-SR 93-18.15	0.04	Bridge Replacement	P C	1995 1997	N/A 1997	N/A 1997	PE Obligated FY 95
4276	STA-CR 98- 0.00	1.72	Widening New Location	R C	1995 1995	1996 1997	N/A 1997	R/W Obligated FY 96
9807	STA-CR101	1.01	Widening.	C	1997	1999	2000	
4339	STA-CR112	0.42	Bridge Elimination	C	1995	1997	1997	
4112	STA-SR153- 1.24	0.01	Bridge Replacement	C	1995	1997	N/A	Project sold 6/30/95
7605	STA-SR153- 2.28	1.06	Widen to 36'.Resurface	C	1995	1997	1998	
13071	STA-SR172-13.80	0.05	Bridge Replace	P	1995	N/A	N/A	Not Funded in TIP Period
13072	STA-SR172-15.57	0.06	Bridge Replace	P	1995	N/A	N/A	Not Funded in TIP Period
11892	STA-SR212- 1.07	0.13	Bridge Rehab	P	1995	N/A	N/A	Not Funded in TIP Period
4344	STA-CR228 STA-Whipple Ave	1.20 0.30	Widening. Resurfacing.	R C	1995 1996	2000+ 2000+	1999 2000	
9573	STA-SR236-5.45/CR228	0.60	Improve Intersection	C	1997	1998	1998	
4081	STA-SR297- 1.12	0.98	Reconstruction	R C	1995 1996	1999 2000+	1997 1998	
12507	STA-SR619- 0.51	3.13	Widen to 4 lanes.	P R	1995 1998	1999 2000+	2000 2001+	

These changes affect the status of many projects included in previous TIPs. Several projects originally programmed for FY 96 have been delayed to FY 97 or beyond. Principle reasons for the delay are lack of funds or , changes in priorities and delays in



plan preparation, review and approval. No Transportation Control Measures (TCM's) were required for air quality attainment or maintenance in Stark County and therefore no required TCM's were implemented in FY 96.

### CMS/MIS STATUS

Major regional highway projects in the Transportation Plan include the extension of US 30 to SR 11, the completion of US 62 from the City of Alliance to Salem and two projects to widen I-77 to six lanes from US 30 north to the Summit County line. The I-77 projects are programmed in the TIP. The US30 and US62 are in the preliminary development phase but are not scheduled for additional phases during the FY 1997-2000 TIP period. These major regional projects will require Major Investment Studies to examine alternatives and plan implementation of measures to reduce demand.

Major widening projects on Applegrove, Everhard, and Whipple Avenue are included in the TIP along with many bridge replacements and resurfacing projects. Federal planning regulations require that in TMA's new single occupancy vehicle (SOV) capacity enhancing projects not be programmed unless the result from a Congestion Management System (CMS). Prior to implementation of the CMS on October 1, 1997, an interim CMS SOV analysis is acceptable.

The following Table shows the MIS/CMS status of each SOV capacity enhancing project.

**Table 2 MIS/CMS Status**

PID#	SECTION	WORK	Constr Year	CMS Status
4213	STA-Applegrove St	Widening Relocation.	1999	Exempt, NEPA clearance
9527	STA-16th St	Widen, relocate RR grade Sep	2001+	SOV Analysis needed, but project not included in FY 97-00 TIP
11110	STA-SR 21- 8.98	New Ramps.	1998	SOV Analysis Needed
8933	STA-US 30-17.21	New Location	1997	CMS Analysis approved 4/19/95
10748	STA-US 30-18.35 COL-US 30-0.00	New Location	2001+	MIS needed, but project not included in FY 97-00 TIP
4089	STA-US62F-39.18 MAH-US62F-0.00	New 4-lane Freeway	2001+	MIS process begun, but project not included in FY 97-00 TIP
10769	STA-IR 77- 9.40	Widen to 6 lanes	2001+	MIS process begun, but project not included in FY 97-00 TIP
	STA-IR 77-12.74 SUM-IR 77-0.00	Widen to 6 lanes	'2001+	MIS process begun. but project not included in FY 97-00 TIP
4276	STA-CR 98- 0.00	Widening	1997	Exempt, NEPA clearance
9807	STA-CR101	Widening.	2000	SOV Analysis Needed
7605	STA-SR153- 2.28	Widen to 36'.	1997	Exempt, SOV lanes not added.
4344	STA-CR228 STA-Whipple	Widening.	2000	Exempt, NEPA clearance
4081	STA-SR297- 1.12	Reconstruction	1998	Exempt, NEPA clearance
12507	STA-SR619- 0.51	Widen to 4 lanes	2001+	SOV Analysis needed, but project not included in FY 97-00 TIP
6256	STA-SR687- 3.45	Widen to 5 Lanes	2001+	SOV Analysis needed, but project not included in FY 97-00 TIP
10917	STA-SR687- 4.70	Widening	2001+	SOV Analysis needed, but project not included in FY 97-00 TIP

## FY 1997 - 2000 TIP PROJECTS

The FY 1997 - 2000 TIP includes 47 individually listed projects plus blanket items. All projects have been reviewed by the SCATS Policy Committee and found to be consistent with the Transportation Plan. The State Implementation Plan (SIP) for air quality does not include any TCM's for the SCATS area. As demonstrated in the fiscal constraint section, projects in the first two years of the TIP are limited to funds available. The following Table 3 shows each proposed project, the total cost and a listing of funding by project phase and source of funds, the year each phase of the project is scheduled to begin, the type of work to be done, the agency responsible for implementation and the air quality status of each project. The listing shows for informational purposes only project phases scheduled for FY 2001 and beyond. The total capital costs by year of all TIP projects is shown at the bottom of the table. Also shown for informational purposes is the ODOT District 4 Maintenance Program in Table 3a. A map (Figure 3) shows the location of all projects on the TIP.

Section 450.216(c) of the Statewide Planning Regulations permits any project listed in the first three years of the STIP to be eligible for authorization in any of the first three years of the STIP, subject to project selection requirements. The project selection requirements recognize projects listed in the first year of an approved TIP as an "agreed to" list of projects for subsequent scheduling and implementation. Projects in the second and third years of the STIP may be advanced into the first year following appropriate project selection activities. Because the SCATS TIP is part of the STIP this provision applies also to the TIP. In Ohio, ODOT and the MPOs have agreed to expedited project selection that permit any project listed in the first three years of the STIP to be eligible for authorization at any time within the life of the STIP. To ensure coordination with local priorities, a letter of concurrence must be obtained from the MPO.

# Table 3 - SCATS FY 1997-2000 TIP Highway Project Listing

## KEY TO TIP CODES

**PID#** - Project IDentification number from ODOT's project management system.

**County - Route - Section** - Official project designation used by ODOT. Section numbers expressed as hundredths (xx.xx) are the mileage from the South or West county line. Those expressed as thousandths are the new metric designations and represent the kilometers from the South or West county line.

### PHASE

**P** - Preliminary Engineering  
**R** - Right of Way Acquisition  
**C** - Construction

**FY** - ODOT Fiscal Year for each Phase. ODOT Fiscal Years begin on July 1. FY 97 begins July 1, 1996

**FUNDING SOURCES** - Funding sources are indicated by the following codes. Each funding code is followed by an **S**, **M**, or **C** indicating source of federal funds. (State, MPO and County, respectively)

### Funding Codes

**BR** - Bridge Replacement funds  
**IM** - Interstate Maintenance funds  
**MA** - Minimum Allocation funds  
**NH** - National Highway System funds  
**STP** - Surface Transportation Program funds  
**G** - Suffix indicating 100% federal funds for signal systems and certain safety projects  
**DPR** - Demonstration Project  
**CMAQ** - Congestion Management / Air Quality funds  
**Issue2** - State Issue 2 funds  
**State** - ODOT Non-federal funds  
**Local** - Local funds

### COST BY PHASE

The cost (in thousands of dollars) of each phase of a project to be funded during the TIP period is listed by funding type. An X in the first column indicates the phase was obligated in a fiscal year prior to this TIP.

Table 3 - SCATS FY 1997 - 2000 TIP

Co-Rte-Sect PID# Map #	Length in Miles	DESCRIPTION Location & Termini Type of work	TOTAL COST (000)	P H A S E	Federal Fund Type	Funding by Phase FISCAL YEAR				For Info only 2001+	Project Sponsor	Air Quality Status
						1997	1998	1999	2000			
STA-Applegrove	1.62	N Canton. I-77 at Wayview to 1150'	5,649	R	STP-M	300					N Canton	Capacity Change
Street		E of Main St.		R	L Match	75						
4213		Widening & Relocation		C	STP-M			4,000				
1				C	L Match			1,000				
STA-Canton CBD	0.00	Purchase of signal controllers, pedestrian signals, central controllers at 54 CBD intersections.	1,019	C	CMAQ-M	1,019					Canton	No Analysis - Exempt
Signals							(assume obligation of federal funds in FFY 96)					
14490												
2												
STA-Canton 30	0.00	Signal Equipment at 30 locations	640	C	CMAQ-M				640		Canton	No Analysis - Exempt
Signals												
15315												
3												
STA-Canton 94	0.00	Signal Equipment at 94 locations	1,125	C	STP-M					1,125	Canton	No Analysis - Exempt
Signals												
4												
STA-Louisville	4.41	Louisville. Various city streets from California & Howard to Edmar & Hazel. Bikeway	267	R	STP-S						Louisville	No Analysis - Exempt
Bikeway				C	STP-S	263						
4003												
5												
STA-Millersburg		Massillon - Resurfacing	110	C	State	110					ODOT	No Analysis - Exempt
15732												
6												
STA-N Market St		Minerva Enhancement Project Streetscaping	543	C	STP-S L Match	407 136					Minerva	No Analysis - Exempt
16384												
37												
STA-O&E Canal	0.80	Canal Fulton. CBD and adjacent canal lands. Pedestrian Walk & Bridges Walk &	284	C	STP-S L Match		227				Canal Fulton	No Analysis - Exempt
14778							56					
7												
STA-16th St	0.47	Massillon. Walnut SE to Oak Ave	7,170	R	STP-M				500		Massillon	Capacity Change



**Table 3 - SCATS FY 1997 - 2000 TIP**

Co-Rte-Sect PID# Map #	Length in Miles	DESCRIPTION Location & Termini Type of work	TOTAL COST (000)	P H A S E	Federal Fund Type	Funding by Phase FISCAL YEAR				For Info only 2001+	Project Sponsor	Air Quality Status
						1997	1998	1999	2000			
STA-CR 31	0.50	State St and Market Ave intersection	475	C	STP-C		360				County	No Analysis -
STA-CR 62		Improve profile, turn lanes and signal.		C	L Match		95					Exempt
9568												
16												
STA-CR 31	5.18	State St from Co Line to Middlebranch.	650	C	STP-C	520					County	No Analysis -
12677		Resurfacing		C	L Match	130						Exempt
17												
STA-SR 44-13.08	0.08	Replace and widen bridge over East	430	R	State			20			ODOT	No Analysis -
8831		Branch of Nimishillen Creek.		C	BR-S			288				Exempt
18				C	State			72				
STA-CR 62	4.80	From SR 43 to SR 619	190	C	STP-C	152					County	No Analysis -
12678		Resurfacing		C	L Match	38						Exempt
19												
STA-US 62-16.222	1.52	From Marland Ave to US 30.	3800	P	State	500					ODOT	Capacity Change
16280		Stark Intermodal Facility		C	NH-S		2,640					
20		Widening		C	State		660					
STA-US 62-21.51	0.33	Canton. 0.51 Miles west of Cleveland Ave.	9542	P	NH-S	694					ODOT	No Analysis -
12874		Bridges over B&O and Harrison		P	State	173						Exempt
21		Bridge Replacement		R	State				10			
				C	NH-S				6,932			
				C	State				1,733			
STA-US62-23.42	1.14	SR43 to Columbus Rd	500	C	State	500					ODOT	No Analysis -
15201		Resurfacing										Exempt
22												
STA-US 62-30.43	0.15	1.11 miles East of SR 44. Easton St	1,330	R	State			15			ODOT	No Analysis -
11305		Bridge over US 62.		C	STP-S				928			Exempt
23		Bridge Rehabilitation		C	State				232			
STA-US 62-34.87	1.46	Alliance. Freshley to Western.	4,000	C	STP-M		3,200				Alliance	No Analysis -

Table 3 - SCATS FY 1997 - 2000 TIP

Co-Rte-Sect PID# Map #	Length in Miles	DESCRIPTION Location & Termini Type of work	TOTAL COST (000)	P H A S E	Federal Fund Type	Funding by Phase FISCAL YEAR				For Info only 2001+	Project Sponsor	Air Quality Status
						1997	1998	1999	2000			
12365 24		Add turn lane, storm sewers, curbs, traffic control, signals, lighting, resurfacing, landscaping		C	L Match		800					Exempt
STA-US62F-34.83 15961 25	4.34	From SR 173 to US 62F end. Resurfacing Bridges over SR 183 and SR 619. Bridge Rehabilitation (Combines PID 11250 & 8003)	10,920	C	NH-S State	8,536 7,234					ODOT	No Analysis - Exempt
STA-US62F-39.18 MAH-US62F- 0.00 4089 26	1.12 4.36	W of SR 225 interchange to 0.42 mi E of 12th Street in Mahoning County. New 4-lane Freeway	29,300	P R C	State NH-S State NH-S State				2,000 1,600 400 20,240 5,060		ODOT	New Facility
STA-CR 66 part 1 9363 28	2.80	(Cleveland Ave) Orion Street to Wright Rd. Resurfacing.	ERR	P C C	STP-M STP-M L Match	5,080 1,270					County	No Analysis - Exempt
STA-CR 66 part 2 14830 29	3.49	(Cleveland Ave) Wright Road to Summit Co Line. Resurfacing.	6,840	C	STP-M L Match				4,735 738		County	No Analysis - Exempt
STA-IR 77- 3.69 12836 30	0.04	1.49 miles N of Downing Street Over Binker St. Bridge Rehabilitation	1,010	P C C	State IM-S State	86					ODOT	No Analysis - Exempt
STA-IR 77- 9.40 10769 31	3.36	Canton. 0.14 mi N of US 30 to Orchard Park Road. Widen to 6 lanes Major Upgrade	50,000	R R C C C	NH-S State IM-S NH-S State				8,000 2,000 9,200 22,800 8,000		ODOT	Capacity Change
STA-IR 77-12.74	5.80	US 62 to Akron-Canton airport.	5,500	C	IM-S	4,400						No Analysis -

Table 3 - SCATS FY 1997 - 2000 TIP

Co-Rte-Sect PID# Map #	Length in Miles	DESCRIPTION Location & Termini Type of work	TOTAL COST (000)	P H A S E	Federal Fund Type	Funding by Phase FISCAL YEAR				For Info only 2001+	Project Sponsor	Air Quality Status
						1997	1998	1999	2000			
SUM-IR 77- 0.00 13975 32a	0.53	Resurfacing		C	State	1,100						Exempt
STA-IR 77-12.74	5.80	US 62 to Akron-Canton airport.	30,000	P	NH-S	2,400					ODOT	Capacity Change
SUM-IR 77- 0.00 32b	0.53	Widen to Six Lanes Resurfacing, berms and bridge repair.		P C C	State NH-S State	600				24,000 6,000		
STA-IR 77-17.92 10533 33	0.25	Rehab 268' bridge Shuffle Dr over I-77. raise, widen & replace deck. 1991 bridge program	1,235	R C C	State IM-S State			20 990 110			ODOT	No Analysis - Exempt
STA-SR 93-17.25 11601 34	0.47	0.40 mile South of Canal Fulton over SR 21. Bridge Rehabilitation	1,255	C C	STP-S State			904 226			ODOT	No Analysis - Exempt
STA-SR 93-18.845 STA-SR 93-28.404 STA-SR93-30.319 16178 35	8.93	Canal Fulton SR 172 to Summit Co Line Resurfacing Replace 14' Bridge over Tuscarawas River	1230	C	State	1,230					ODOT	No Analysis - Exempt
STA-SR 93-18.15 4120 36	0.04	Canal Fulton. Bridge over Tuscarawas River. (83 Bridge Program) Bridge Replacement	2,066	C C	BR-S State	1,593 398					ODOT	No Analysis - Exempt
STA-CR 98- 0.00 4276 38	1.72	Hills & Dales Rd to SR 687. (Everhard RD) Widening & Relocation	5,095	C C	STP-M L Match	3,500 875					County	Capacity Change & New Facility
STA-CR101 9807 39	1.01	Dressler. Widen to 5 lanes, signalize intersections.	1,500	C C	STP-M L Match				1,200 300		County	Capacity Change
STA-CR112	0.42	(Georgetown Rd) 0.02 mi W of TR179	530	C	BR-S	530					County	No Analysis -



Table 3 - SCATS FY 1997 - 2000 TIP

Co-Rte-Sect PID# Map #	Length in Miles	DESCRIPTION Location & Termini Type of work	TOTAL COST (000)	P H A S E	Federal Fund Type	Funding by Phase FISCAL YEAR				For Info only 2001+	Project Sponsor	Air Quality Status
						1997	1998	1999	2000			
4339		at Aban'd Conrail RR.									Exempt	
40		Bridge Elimination										
STA-SR153- 2.28	1.06	Canton. From Eastview to Canton ECL.	1,270	C	STP-M		1,016			Canton	No Analysis -	
7605		Widen to 36' and Resurface.		C	State		256				Exempt	
41												
STA-CR228	1.20	N Canton. (Portage St) 0.2 W of I-77	2,200	R	STP-M			100		County	Capacity Change	
STA-Whipple Ave	0.30	to Pittsburg. (Whipple) Portage to		R	L Match			25				
4344		Batton.		C	STP-M				1,416			
42		Widening and Resurfacing.		C	L Match				354			
STA-SR236-5.45	0.60	Improve intersection with Portage St.	600	C	STP-C		480			County	No Analysis -	
STA-CR228		Add turn lanes, profile change and		C	State		120				Exempt	
9573		install signal.										
43												
STA-SR297- 1.12	0.98	Canton (Whipple Rd) 7th St SW to	3,835	R	STP-S	804				ODOT	Capacity Change	
4081		11th St NW.		R	State	201						
44		Widening and Resurfacing.		C	STP-S		2,072					
				C	State		518					
STA-SR619- 0.51	3.13	Hartville. From CR-66 (Cleveland	11,000	P	STP-M			400		ODOT	Capacity Change	
12507		Avenue) to SR 43 North.		P	State			100				
45		Widening and Resurfacing.		R	STP-M				1,344			
				R	State				336			
				C	STP-M				8,800			
				C	State				2,200			
STA-SR687- 3.45	2.18	East from 1.29 Miles E of SR 241	5,335	R	STP-S				1,080	ODOT	Capacity Change	
6256		(Brunnerdale to Everhard)		R	State				120			
46		Widening and Resurfacing.		C	STP-S				3,600			
				C	State				400			
STA-SR687- 4.70	1.72	Everhard to Hills & Dales.	6,000	P	STP-S				800	ODOT	Capacity Change	

Table 3 - SCATS FY 1997 - 2000 TIP

Co-Rte-Sect PID# Map #	Length in Miles	DESCRIPTION Location & Termini Type of work	TOTAL COST (000)	P H A S E	Federal Fund Type	Funding by Phase FISCAL YEAR				For Info only 2001+	Project Sponsor	Air Quality Status
						1997	1998	1999	2000			
						10917 47	Widening and Resurfacing.		P R C C			
All Systems Except Interstate 94100	0.00 Rail Highway Crossing Safety		*P *C	STP STP						ODOT	No Analysis - Exempt	
All Systems	0.00 Highway Planning Research		*P P P P	SPR PL STP CMAQ						ODOT	No Analysis - Exempt	
All Systems	0.00 Preparation of Individual Program Documents & Provide Guidance to LPAs		*P	STP						ODOT	No Analysis - Exempt	
All Systems 94510	0.00 Rideshare Program		*P P	STP CMAQ						ODOT	No Analysis - Exempt	
All Systems	0.00 Bridge Inspection		*P	BR						ODOT	No Analysis - Exempt	
All Systems 94600	0.00 Right-of-Way Hardship and Protective Buying		*R R	NH STP						ODOT	No Analysis - Exempt	
All Systems	0.00 National Recreational trails		*P R C	NRT NRT NRT						ODNR	No Analysis - Exempt	
All Systems	0.00 Specialized services provide by statewide/districtwide consultant contract		*P P	NH STP						ODOT	No Analysis - Exempt	
All Systems	0.00 Ohio Department of Public Safety 402 Safety program Activities		*P	STP						ODPS	No Analysis - Exempt	

**Table 3 - SCATS FY 1997 - 2000 TIP**

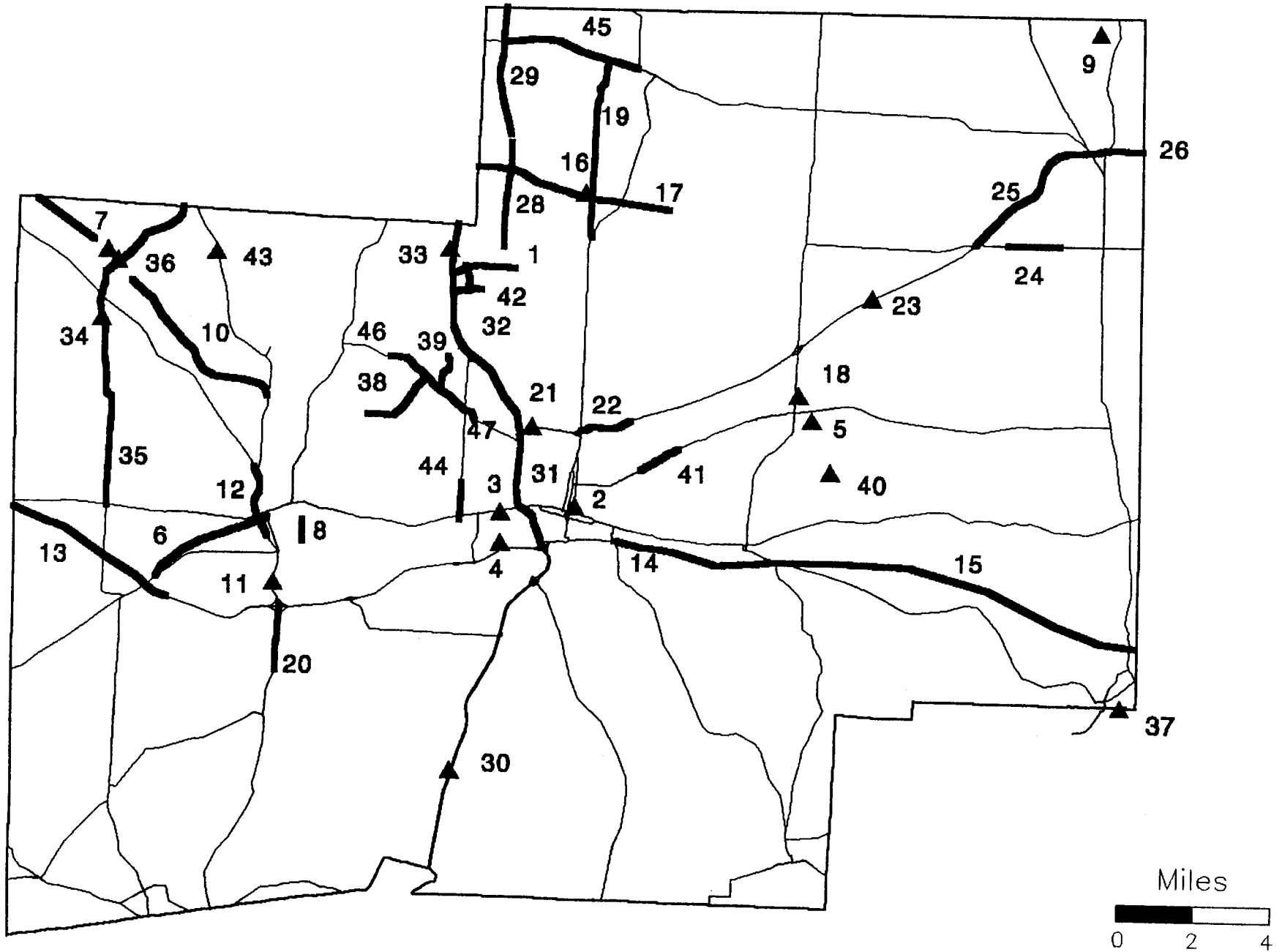
Co-Rte-Sect PID# Map #	Length in Miles	DESCRIPTION Location & Termini Type of work	TOTAL COST (000)	P H A S E	Federal Fund Type	Funding by Phase FISCAL YEAR				For Info only 2001+	Project Sponsor	Air Quality Status
						1997	1998	1999	2000			
All Systems 94650	0.00	Transportation Enhancement Activities		*C	STP						ODOT	No Analysis - Exempt
All Systems	0.00	Environmental Site Assessments		*P	STP						ODOT	No Analysis - Exempt
All Systems 94800	0.00	Undivided Highway Resurfacing		*C	IM C C						ODOT	No Analysis - Exempt
All Systems 94850	0.00	Other Basic Maintenance Projects		*C	IM NH STP						ODOT	No Analysis - Exempt

SUMMARY		1997	1998	1999	2000	2001+
SCATS FEDERAL	STP/MA	8,880	4,216	5,400	3,516	22,004
SCATS FEDERAL	CMAQ	1,019	0	0	640	0
TOTAL SCATS FEDERAL		9,899	4,216	5,400	4,156	22,004
COUNTY ENGINEERS FEDERAL SPENDING	STP	1,052	860	0	0	0
ODOT FEDERAL	BR/BRZ	2,799	0	288	0	0
ODOT FEDERAL	IM	4,400	0	990	688	9,200
ODOT FEDERAL	NH	24,830	2,640	4,960	14,932	73,040
ODOT FEDERAL	STP	1,474	2,299	904	928	7,280
TOTAL ODOT FEDERAL		33,503	4,939	7,142	16,548	89,520
TOTAL STATE		15,346	1,520	2,028	4,247	25,366
TOTAL LOCAL		2,788	1,071	1,025	654	1,838
TOTAL TIP		62,588	12,606	15,595	25,605	138,728

### Table 3a ODOT Maintenance Projects

PID	CO RTE_SECTION	SALE DATE	COST	TYPE WORK
16178	STA-93-11.71	March 1997	150	Structure Replacement & Bridge Treatment
	Various Locations	N/A	150	Structural Damage Collision Repair
	Various Locations	N/A	75	Structure and Culvert Repair & Replacement
	Various Locations	N/A	75	Minor Structure & Culvert Repair
	Various Locations	N/A	151	Balance transfered to 4-lane resurfacing Structure treatment
16209	District Wide	March 1997	90	Herbicidal Spraying
16212	Stark	March 1997	45	Mowing
16213	District Wide	N/A	100	Brush Cutting
16216	STA/SUM	June 1997	350	Guardrail Ding & Dent
16217	District Wide	April 1997	350	Raised Pavement Markings
16219	West Half	April 1997	325	Pavement Markings
16221	West Half	April 1997	100	Pavement Markings
16222	West Half	May 1997	200	Loop Detector

Figure 3 - TIP Highway Project Map



### III. TRANSIT PROJECTS

This section consists of tables listing the transit projects recommended for implementation within the next four years by the Stark Area RTA and the City of Alliance. The first three tables summarize the capital, operating, and planning expenses anticipated and the funding source and amount for each. The next four tables show capital costs by fiscal year.

OHIO TRANSPORTATION IMPROVEMENT PROGRAM  
 TRANSIT  
 Stark Area RTA  
 Summary Sheet  
 (Thousands of dollars except Planning)

(begins July 1)	Total Expenditures			Federal Share		
	Capital	Operating	Planning	Capital	Operating	Planning
1997	1,042.3	3,997.0	18,750.0	833.8	239.0	15,000.0
1998	1,000.0	4,122.0	15,000.0	800.0	112.0	12,000.0
1999	1,000.0	4,010.0	12,500.0	800.0	0.0	10,000.0
2000	1,000.0	4,010.0	12,500.0	800.0	0.0	10,000.0

OHIO TRANSPORTATION IMPROVEMENT PROGRAM  
 TRANSIT  
 City of Alliance  
 Summary Sheet  
 (Thousands of dollars)

(begins July 1)	Total Expenditures			Federal Share		
	Capital	Operating	Planning	Capital	Operating	Planning
1997	0.0	149.7	0.0	0.0	25.3	0.0
1998	0.0	155.2	0.0	0.0	34.1	0.0
1999	0.0	158.5	0.0	0.0	34.8	0.0
2000	0.0	162.2	0.0	0.0	35.6	0.0

OHIO TRANSPORTATION IMPROVEMENT PROGRAM

ANTICIPATED OPERATING SCHEDULE

STATE's Fiscal Year beginning July 1, 1996  
(Thousands of dollars)

F.Y.	Recipient of Funds	Agency Responsible for Project Implementation	Operating Expenses	Operating Revenues	Net Project Cost	Local Dedicated Tax	Subsidy		
							Local Other*	State	Federal
1997	Stark Area RTA	Stark Area RTA	3,997.0	460.0	3,537.0	2,500.0	80.0	718.0	239.0
	City of Alliance	City of Alliance	149.7	39.8	109.9		42.7	41.9	25.3 #
1998	Stark Area RTA	Stark Area RTA	4,122.0	470.0	3,652.0	2,750.0	72.0	718.0	112.0
	City of Alliance	City of Alliance	155.2	41.4	113.8		33.1	46.6	34.1
1999	Stark Area RTA	Stark Area RTA	4,010.0	470.0	3,540.0	2,750.0	72.0	718.0	0.0
	City of Alliance	City of Alliance	158.5	42.4	116.1		33.7	47.6	34.8
2000	Stark Area RTA	Stark Area RTA	4,010.0	470.0	3,540.0	2,750.0	72.0	718.0	0.0
	City of Alliance	City of Alliance	162.2	43.5	118.7		34.4	48.7	35.6

Local dedicated tax assumes continuation of local property tax  
# - State assistance similar to Section 5311 funding

OHIO TRANSPORTATION IMPROVEMENT PROGRAM

ANTICIPATED OPERATING SCHEDULE

OPERATOR's Fiscal Year beginning January 1, 1997  
(Thousands of dollars)

F.Y.	Recipient of Funds	Agency Responsible for Project Implementation	Operating Expenses	Operating Revenues	Net Project Cost	Local Dedicated Tax	Subsidy		
							Local Other	State	Federal
1997	Stark Area RTA	Stark Area RTA	3,917.1	450.8	3,466.3	2,450.0	78.4	703.6	234.2
	City of Alliance	City of Alliance	146.7	39.0	107.7		31.4	44.0	32.3 #
1998	Stark Area RTA	Stark Area RTA	4,039.6	460.6	3,579.0	2,695.0	70.6	703.6	109.8
	City of Alliance	City of Alliance	152.1	40.6	111.5		32.4	45.6	33.5
1999	Stark Area RTA	Stark Area RTA	3,929.8	460.6	3,469.2	2,695.0	70.6	703.6	0.0
	City of Alliance	City of Alliance	155.3	41.5	113.8		33.0	46.6	34.1
2000	Stark Area RTA	Stark Area RTA	3,929.8	460.6	3,469.2	2,695.0	70.6	703.6	0.0
	City of Alliance	City of Alliance	158.9	42.6	116.3		33.7	47.7	34.9

Local dedicated tax assumes continuation of local property tax

# - State assistance similar to Section 5311 funding

\* - includes E&H fare assistance and other reimbursements, such as Taxes Paid



OHIO TRANSPORTATION IMPROVEMENT PROGRAM

TRANSIT

ANTICIPATED SECTION 5307 PLANNING SCHEDULE

STATE's Fiscal Year beginning July 1, 1996

F.Y.	Recipient of Funds	Agency Responsible for Project Implementation	Total Project Cost	Federal Funding	State Funding	Local Funding
1997	Stark Area RTA	Stark Area RTA	18,750	15,000	1,875	1,875
1998	Stark Area RTA	Stark Area RTA	15,000	12,000	1,500	1,500
1999	Stark Area RTA	Stark Area RTA	12,500	10,000	1,250	1,250
2000	Stark Area RTA	Stark Area RTA	12,500	10,000	1,250	1,250

OHIO TRANSPORTATION IMPROVEMENT PROGRAM

TRANSIT

CAPITAL IMPROVEMENTS

Fiscal Year 1997		(Thousands of dollars)					beginning July 1, 1996					Planning Documentation Located in:					
Recipient of funds	Agency responsible for project implementation	R	E	W	Total project cost*	Source of Federal Funding				Amount of Federal funding	Amount of State funding		Amount of Local funding		Year	Document title	
						Flex Funds	5	5	5		5	ODOT	Other	Tax			Other
Stark Area Regional Transit Authority:																	
1.	3 30-foot 30 passenger busses wheelchair equipped	x		x	675.0	x					540.0	67.5	0.0	0.0	67.5	1992	TDP
2.	5 paratransit vans with wheelchair lifts	x			325.0	x					260.0	32.5	0.0	0.0	32.5	1996	TDP
SARTA Subtotal:					1,000.0						800.0	100.0	0.0	0.0	100.0		
1.	Specialized Transportation Program				42.3						33.8	0.0	0.0	0.0	8.5		
GRAND TOTAL:					1,042.3						833.8	100.0	0.0	0.0	108.5		

\* - Assumes current service and subsidy levels

OHIO TRANSPORTATION IMPROVEMENT PROGRAM

TRANSIT

CAPITAL IMPROVEMENTS

Fiscal Year 1998		(Thousands of dollars)										beginning July 1, 1997				
Recipient of funds	Agency responsible for project implementation	R	E	W	Total project cost*	Source of Federal Funding				Amount of Federal funding	Amount of State funding		Amount of Local funding		Planning Documentation Located in:	
						Flex Funds	5	5	5		5	ODOT	Other	Tax	Other	Year
Description of Improvement		ex	pl	ac	ES											
Stark Area Regional Transit Authority:																
1.	3 30-foot 30 passenger busses wheelchair equipped	x	x		675.0	x				540.0	67.5	0.0	0.0	67.5	1996	TDP
2.	5 paratransit vans with wheelchair lifts	x			325.0	x				260.0	32.5	0.0	0.0	32.5	1996	TDP
GRAND TOTAL:					1,000.0					800.0	100.0	0.0	0.0	100.0		

\* - Assumes current service and subsidy levels

OHIO TRANSPORTATION IMPROVEMENT PROGRAM

TRANSIT

CAPITAL IMPROVEMENTS

Fiscal Year 1999		(Thousands of dollars)										beginning July 1, 1998				
Recipient of funds	Agency responsible for project implementation	R	E	W	Total project cost*	Source of Federal Funding				Amount of Federal funding	Amount of State funding		Amount of Local funding		Planning Documentation Located in:	
						Flex Funds	5	5	5		5	ODOT	Other	Tax	Other	Year
Description of Improvement		ex	pl	ac	ES											
Stark Area Regional Transit Authority:																
1.	3 30-foot 30 passenger busses wheelchair equipped	x	x		675.0	x				540.0	67.5	0.0	0.0	67.5	1996	TDP
2.	5 paratransit vans with wheelchair lifts	x			325.0	x				260.0	32.5	0.0	0.0	32.5	1996	TDP
GRAND TOTAL:					1,000.0					800.0	100.0	0.0	0.0	100.0		

\* - Assumes current service and subsidy levels

OHIO TRANSPORTATION IMPROVEMENT PROGRAM

TRANSIT

CAPITAL IMPROVEMENTS

Fiscal Year 2000		(Thousands of dollars)				beginning July 1, 1999										
Recipient of funds	Agency responsible for project implementation	R e x p l a n c e i q u i t	W h e e l c h a i r l i f t	Total project cost*	Source of Federal Funding				Amount of Federal funding	Amount of State funding		Amount of Local funding		Planning Documentation Located in:		
					Flex Funds	530	530	530		530	ODOT	Other	Tax	Other	Year	Document title
Stark Area Regional Transit Authority:																
1.	3 30-foot 30 passenger busses wheelchair equipped	x	x	675.0	x				540.0	67.5	0.0	0.0	67.5	1996	TDP	
2.	5 paratransit vans with wheelchair lifts	x		325.0	x				260.0	32.5	0.0	0.0	32.5	1996	TDP	
GRAND TOTAL:				1,000.0					800.0	100.0	0.0	0.0	100.0			

\* - Assumes current service and subsidy levels

## IV. FUNDING

A required component of the Transportation Improvement Program is an analysis of the financial resources available to implement the TIP. This analysis is necessary to make the TIP a realistic programming tool rather than a "wish list" of desired transportation improvements.

### HIGHWAY FISCAL CONSTRAINT

Highway project funding is provided through the categorical federal-aid highway funds, the minimum allocation funds and state and local highway funds. The major sources of funds in the SCATS TIP are the following:

- Interstate Maintenance (IM) funds
- Interstate Reimbursement (IR) funds
- National Highway System (NHS) funds
- Surface Transportation Program (STP) funds
- Bridge Replacement (BR) funds
- Donor State Bonus (DSB) funds
- Congestion Management/Air Quality (CMAQ) funds
- Minimum Allocation (MA) funds

These categories of funds were authorized in the Intermodal Surface Transportation Assistance Act (ISTEA) of 1991. The type of funding determines who is responsible for project selection. Stark County is designated as a Transportation Management Area or TMA. In TMA's, the state (ODOT) selects projects using NHS, BR or IM funds in cooperation with the MPO (SCATS). All other projects are selected by the MPO (SCATS Policy Committee) in consultation with the state (ODOT).

In addition to the annual allocation, project spending is constrained by federal obligation ceilings. These ceilings limit the annual transportation expenditures from the Highway Trust Fund to a given amount in each state, often less than the annual allocation (MA funds are not subject to obligation limits). This year ODOT is requiring each MPO to keep State Fiscal Year (SFY) programmed expenditures to an amount equal to the annual allocation for SFY 1997-2000. Table 4 shows programmed expenditures verses obligation limits for funding programs where federal highway funding is provided by SCATS. The funding estimates and obligation limits are those provided by ODOT.

As shown in the table, programmed projects are do not exceed the estimated obligation limits plus available MA funds in FY 97 through FY 98. In FY 1999, the programmed projects exceed the estimated obligation limits plus available MA funds by \$1,080,000. In FY 2000 the programmed projects are less than the STP/CMAQ allocation but the negative balance from FY 1999 means the TIP is overprogrammed by \$567,000 and still does not meet the fiscal constraint requirement. This level of overprogramming can only be accommodated by borrowing obligation authority in FY 99 for repayment in FY 2000 and FY 2001. SCATS intends to pursue this option, but has not been able to confirm an agreement at this time.

TABLE 4  
SCATS HIGHWAY PROGRAMS FINANCIAL ANALYSIS  
(000'S)

State Fiscal Year				STP/DSB CMAQ OBLIGATION		TOTAL
		STP/DSE	CMAQ	LIMIT	MA	
96	Carryover - 6/30/95	7,740	2,669		2,599	13,008
	FY 96 Allocation - 10/1/95	2,678	1,257		247	4,182
	Federal Funds Available SFY 96	10,418	3,926		2,846	17,190
	SFY 96 Program Limit			3,807	2,846	6,653
	Federal Funds Obligated SFY 96	3,807	0	3,807	653	4,460
	Amount Overprogrammed SFY 96			0		
	Note: This Fiscal Year includes \$3,500 for STA-C98 expected to be obligated in September of calendar 96)					
97	Projected carryover - 6/30/96	6,611	2,669		2,193	11,473
	FY 97 Allocation - 10/1/96	2,655	1,404		110	4,169
	Federal Funds Available SFY 97	9,266	4,073		2,303	15,642
	SFY 97 Program Limit			4,059	2,303	6,362
	Federal Funds Programmed SFY 97	3,040	1,019	4,059	2,340	6,399
	Amount Overprogrammed SFY 97			37		
98	Carryover to SFY 98	6,226	3,054		(37)	9,243
	FFY 98 Allocation - 10/1/97	2,655	1,404		110	4,169
	Federal Funds Available SFY 98	8,881	4,458		73	13,412
	SFY 98 Program Limit			4,059	73	4,132
	Federal Funds Programmed SFY 98	4,059	0	4,059	157	4,216
	Amount Overprogrammed SFY 98			84		
99	Carryover to SFY 99	4,822	4,458		(84)	9,196
	FFY 99 Allocation - 10/1/98	2,655	1,404		110	4,169
	Federal Funds Available SFY 99	7,477	5,862		26	13,365
	SFY 99 Program Limit			4,059	26	4,085
	Federal Funds Programmed SFY 99	5,400	0	5,400	0	5,400
	Amount Overprogrammed SFY 99			1,341		
00	Carryover to SFY 00	2,077	5,862		26	7,965
	FFY 00 Allocation - 10/1/00	2,655	1,404		110	4,169
	Federal Funds Available SFY 00	4,732	7,266		136	12,134
	SFY 00 Program Limit			4,059	136	4,195
	Federal Funds Programmed SFY 00	3,516	640	4,156	0	4,156
	Amount Overprogrammed SFY 00			(39)		
	Balance end of SFY 00	1,216	6,626		136	7,978

## MAINTENANCE & OPERATION EXPENDITURES

A TIP requirement is to demonstrate that existing transportation facilities are being adequately operated and maintained. Operation and maintenance expenditures are made by all levels of government and are often in-house activities which are difficult to document. In order to document these activities in Stark County, SCATS obtained Calendar Year 1996 road and bridge fund budget amounts for each township and municipality in the county. This data was obtained from the county auditor's office. Townships use a standardized budget which includes the following budget categories: Motor Vehicle License Tax Fund, Gas Tax Fund, Road and Bridge Fund and Road District Fund. Municipalities use a wide variety of funding categories including General Fund Street Maintenance, Street Maintenance and Repair, Street Levy, State Highway Improvement Fund and Motor Vehicle License Fund. These funds can only be spent on roads and bridges. Capital expenditures budgeted from the funds have been subtracted and the various municipal capital improvement funds have not been included. Expenditures by the Stark County Engineer were estimated from previous years. ODOT expenditures for the state highway system in Stark County are not included. The following table summarizes the maintenance and operation expenditures for each locality in the county. The table shows that, on the average, Stark County local governments spend \$10,962 per mile of road maintained. In 1994, according to the FHWA publication *Selected Highway Statistics and Charts 1994*, a total of \$32,217,000,000 was spent by all levels of government on administration, operation and maintenance on the 3,906,544 miles of the nation's roads and streets. This equals an average expenditure of \$8,247 per mile of highway. The Stark County expenditures indicate that the regions transportation system maintenance and preservation needs are being met.

## Maintenance & Operation Expenditures for 1996

	Operations & Maintenance Budgets	Road Mileage Maintained	O & M Budget per Mile
<b>Stark County Townships</b>			
Bethlehem Township	\$228,976	37.51	\$6,104
Canton Township	\$688,574	95.81	\$7,187
Jackson Township	\$3,126,065	151.26	\$20,667
Lake Township	\$1,139,172	116.78	\$9,755
Lawrence Township	\$350,900	56.61	\$6,199
Lexington Township	\$310,121	42.58	\$7,283
Marlboro Township	\$213,626	38.78	\$5,509
Nimishillen Township	\$452,681	66.54	\$6,803
Osnaburg Township	\$311,447	53.15	\$5,860
Paris Township	\$248,409	52.02	\$4,775
Perry Township	\$1,535,580	144.47	\$10,629
Pike Township	\$257,308	38.52	\$6,680
Plain Township	\$2,497,341	160.49	\$15,561
Sandy Township	\$162,300	28.82	\$5,632
Sugar Creek Township	\$267,637	44.66	\$5,993
Tuscarawas Township	\$365,093	52.32	\$6,978
Washington Township	\$257,088	38.81	\$6,624
<b>Stark County Municipalities</b>			
Alliance City	\$2,161,192	108.41	\$19,935
Beach City Village	\$172,385	6.63	\$26,001
Brewster Village	\$248,885	15.36	\$16,203
Canal Fulton Village	\$276,723	22.90	\$12,084
Canton City	\$2,978,873	420.94	\$7,077
East Canton Village	\$252,000	11.19	\$22,520
East Sparta Village	\$103,550	5.98	\$17,316
Hartville Village	\$94,677	12.19	\$7,767
Hills & Dales Village	\$6,200	3.76	\$1,649
Limaville Village	\$15,100	3.16	\$4,778
Louisville City	\$182,200	40.68	\$4,479
Magnolia Village	\$62,821	3.67	\$17,117
Massillon City	\$883,428	150.00	\$5,890
Meyers Lake Village	\$88,332	2.49	\$35,475
Minerva Village	\$343,300	12.88	\$26,654
Navarre Village	\$224,767	9.35	\$24,039
North Canton City	\$806,600	69.00	\$11,690
Waynesburg Village	\$52,550	6.44	\$8,160
Wilmot Village	\$16,060	2.35	\$6,834
Stark Co Engineer	\$6,741,948	439.11	\$15,354
<b>Highway Total</b>	<b>\$28,123,909</b>	<b>2,565.62</b>	<b>\$10,962</b>
City of Alliance Transit	\$149,700	n/a	n/a
Stark Area RTA	\$3,917,060	n/a	n/a
<b>Stark County Total</b>	<b>\$32,190,669</b>	<b>n/a</b>	<b>n/a</b>

TRANSIT FISCAL CONSTRAINT

The following four tables show transit funding availability vs. programmed expenditures. The first table shows the transit annual element by funding category. The second shows the annual element project summary. The third table shows the historical and future expenditure of funds vs. fund allocations. The three tables together show that the programmed operating assistance equals the funding allocation and that capital expenditures will require additional federal funding.

**TRANSIT ANNUAL ELEMENT**

For October 1, 1996, through September 30, 1997

ANNUAL ELEMENT FUNDING SUMMARY	AVAILABLE	PROGRAMMED	REMAINING
Transit funds programmed	\$1,121,680	\$1,087,840	\$33,840
Highway funds programmed	0	0	0
Total funds programmed	1,121,680	1,087,840	33,840
Section 5307 Funds (Total)	1,087,840	1,054,000	33,840
Operating Assistance	239,000	239,000	0
Planning Assistance	15,000	15,000	0
Capital Assistance	833,840	800,000	33,840
Funds remaining			
Capital Funds	0	0	
Specialized Transportation	33,840	33,840	0

**ANNUAL ELEMENT PROJECT SUMMARY**

(Operators Fiscal Year beginning January 1, 1997)

CAPITAL or OPERATING	SOURCE	AMOUNT	RECIPIENT or APPLICANT	PROJECT DESCRIPTION
Operating	Sec 5307	\$3,917,060	Stark Area RTA	Operating Expenses
Operating	Sec 5311	146,676	Alliance	Operating Expenses
Planning	Sec 5307	18,750	Stark Area RTA	Planning
Capital	Sec 5307	675,000	Stark Area RTA	3 busses
Capital	Sec 5307	325,000	Stark Area RTA	5 wheelchair vans
Capital	Spec.Trans.	42,300	Unknown	Specialized Transportation



# MASS TRANSPORTATION PROJECTS

Fiscal Year	ANTICIPATED FEDERAL SHAR		ACTUAL or ESTIMATED FEDERAL PARTICIPATION	
	CAPITAL	OPERATING	COST ##	ALLOCATION #
75			\$586,290	\$539,213
76			1,136,073	1,022,272
77			494,067	1,116,292
78			1,481,370	1,392,968
79			1,596,165	1,519,244
80			3,191,065	1,709,796
81			3,413,654	1,706,827
82			1,681,785	1,633,820
83			1,536,023	1,483,005
84			1,759,365	1,493,734
85			1,386,233	1,333,563
86			1,367,337	1,338,302
87			1,412,150	1,334,532
88			1,415,685	1,222,002
89			3,297,175	1,209,770
90			1,305,800	1,165,600
91			1,373,540	1,152,340
92			1,355,870	1,146,740
93 ###			3,194,300	1,153,100
94 ###			2,101,280	1,067,200
95 ###			2,305,168	978,456
96 ###			2,305,168	978,456
<b>SUBTOTAL</b>			<b>\$39,695,563</b>	<b>\$27,697,232</b>
97 *	\$833,840	\$239,000	1,072,840	1,321,944
98	800,000	112,000	912,000	1,321,944
99	800,000	0	800,000	1,321,944
00	800,000	0	800,000	1,321,944
<b>TOTAL</b>	<b>\$3,233,840</b>	<b>\$351,000</b>	<b>\$43,280,403</b>	<b>\$32,985,008</b>

\* - includes funding for Specialized Transportation program

# - after 1978, from Section 15 Report, Form 202, pg 3 of 3,  
Total Federal Cash Grants & Reimbursements

## - after 1978, includes Allocation plus Section 15 Report,  
Form 103, Part A, Total Federal Assistance for Capital

### - estimates from previous TIP's

## Programmed

Fund	FY97	FY98	FY99	FY00	TIP Total
Section 5307 Capital	800,000	800,000	800,000	800,000	3,200,000
Section 5307 Operating	239,000	112,000	0	0	351,000
Section 5307 Planning	15,000	12,000	10,000	10,000	47,000
Spec. Trans. Pro.	33,840	33,840	33,840	33,840	135,360
<b>Totals</b>	<b>1,087,840</b>	<b>957,840</b>	<b>843,840</b>	<b>843,840</b>	<b>3,733,360</b>

## Allocated

Fund	FY97	FY98	FY99	FY00	TIP Total
Section 5307 Capital	1,321,944	1,321,944	1,321,944	1,321,944	5,287,776
Section 5307 Operating	239,000	112,000	0	0	351,000
Section 5307 Planning	15,000	12,000	10,000	10,000	47,000
Spec. Trans. Pro.	33,840	33,840	33,840	33,840	135,360
<b>Totals</b>	<b>1,609,784</b>	<b>1,479,784</b>	<b>1,365,784</b>	<b>1,365,784</b>	<b>5,821,136</b>

## Balances

Fund	FY97	FY98	FY99	FY00	TIP Total
Section 5307 Capital	521,944	521,944	521,944	521,944	2,087,776
Section 5307 Operating	0	0	0	0	0
Section 5307 Planning	0	0	0	0	0
Spec. Trans. Pro.	0	0	0	0	0
<b>Totals</b>	<b>521,944</b>	<b>521,944</b>	<b>521,944</b>	<b>521,944</b>	<b>2,087,776</b>

# APPENDIX

## CANTON REGIONAL TRANSIT AUTHORITY FINANCIAL CAPACITY ANALYSIS SUMMARY

APRIL 29, 1996

### I. BACKGROUND

The Canton Regional Transit Authority (CRTA) currently operates fourteen (14) fixed routes Monday through Friday between the hours of 6:15 A.M. and 6:30 P.M. and on Saturday between 8:25 A.M. and 6:30 P.M. The CRTA utilizes twenty-six (26) buses in the AM peak and twenty five (25) buses in the PM peak hours and twenty-one (21) buses during the mid-day. In 1995, the CRTA employed 81 people of which 59 were union employees. The bus operators and mechanics are represented by the American Federation of State, County and Municipal Employees (AFSCME) Local 1880. The Union was certified in January 31, 1985. The Teamsters Union had represented the employees prior to October of 1984.

The general financial condition of the Authority since 1985 has been slowly improving. The farebox revenue decreased by point six percent (0.6) in 1995. As to compare the cost per hour and cost per mile data of 1995 to 1994, they are 15.52% increase and 6.35% increase respectively. This slight increase was due to reduction in operating time pertaining to decrease in non-peak service hour in July 1995. However, due to operating miles and hours are both decreasing, the cost per mile and the cost per hour are both increasing. The Authority procured eleven replacement buses; they were delivered in March and August of 1995. With the stable cost of diesel fuel and some other related products, the Authority was be able to operate more efficiently in 1995 and this trend should carry on in coming years.

### II. FINANCIAL INDICATORS

#### A. CASH FLOW AND CASH POSITION

In reviewing the data (see Attachment) the net quick assets in 1995 had a minor drop in 1995 when compared with 1994. This decrease was due to withdraw Federal grants by year end plus decreased the cash inlays at year end. With the purchase of eleven new buses in 1995, the cash would be greatly outlaid in 1995. During 1992, the Authority issued a \$ 400,000 note for the purchase of eight 1992 Gillig buses. This five year note was to relieve a temporary cash shortage due to deferral in property tax receipts. The Authority should be able to pay back this

installment debt by the due date of 1996.

As compared the statistics of 1995 with that of previous year, we found that this trend is only a temporary phenomen. While capital projects increase heavily in 1995, the net quick assets were decreased significantly at the end of 1995.

Nevertheless, owing to previous years's savings described above, CRTA should be able to cover the total expenditures. Besides this, with the gradual reduction of the current liabilities, the asset ratio should be increasing gradually.

## B. REVENUE AND COST POSITION TRENDS

### 1. FAREBOX REVENUE TRENDS

Farebox revenue has been a major concern to the CRTA during the past five years. Average passenger fares increased to \$0.75 in 1995. The farebox revenue increased by 1.12% compared with 1994. This slight increase is attributed to fare changes and the schedules changes in 1995, the farebox revenue is expected to continue to increase in year 1996.

The general economics and geography of the Canton area has also impacted ridership. The Canton area, for example, has continued to maintain a higher than average unemployment rate. That rate has averaged 6-9% over the past five years which is 2-4% higher than the national average. In addition, the population of Canton area has decreased by 3% since 1984.

### 2. TAXES AND SUBSIDIES TRENDS

Because of the economic conditions of the community, property tax revenues have remained flat for years, Due to continuing reduction in Federal assistance; uncertainties of state and local assistance, Canton RTA, like other transit systems of the nation, faces a much tougher financial hardship in coming years. The pass of total 3.9 mills property tax levy on November 5th, 1992 general election provided the Authority extra source of funds for paratransit service that was committed to the general public prior to the election. However due to forty-eight percent (48%) cut from Federal government, CRTA proposed to increase the property tax by 1.1 mills. This increase did not pass in May of 1995 ballot. The Authority then tried a quarter percent (0.25%) county wide sales tax on March 19 of 1996's ballot. However, due to school levy and other local issues that offset our effort; the March 19's vote was short by ten percent on the first try. The Authority's Board of Trustees propose to try again this issue on November of 1996. Since the county wide service and the future of this Authority depends on this

elections, extra effort and the broad help from every aspect of the communities is needed. Most importantly, the important message for county wide of transit service along with curb-to-curb service for seniors and people with disabilities would be clearly and specifically addressed to all the voters. Without passage this one quarter percent (0.25%) sales tax issue, there will be no transit service in this area.

### 3. COST TRENDS

To offset the loss in Federal assistance and the lack of increases in property tax revenues, the Authority has been constantly applying various cost containment measures while still maintaining current service levels. In 1995, the Authority purchased eleven (11) Gillig coaches. These buses were delivered in March and August of 1995. With the purchases of these buses along with the eight (8) Gillig buses which were purchased in 1993, and sixteen (16) Orion buses which were purchased in 1989, the bus parts cost was reduced. It is understandable that new buses do require less maintenance cost. However, labor cost were slightly decreased in 1995. Besides this, decreases in workers compensation cost rate and other insurance claim would impact the total operating cost. The main object for Canton RTA in the future years is to control the operating cost, maintain the service to the community, and acquire more capital replace all the old buses and equipments.

### III. THE FUTURE

The most significant factor regarding total revenue is the future of Federal operating assistance. Since 1987, Federal Operating assistance has decreased by approximately 18%, an additional fifty percent (50%) decrease had force the Authority into fare increases and implementation of cost containment measures. The Authority continues to posture on the basis that Federal assistance will continue to decrease. Decisions related to capital procurement are based on cost containment or necessity. Therefore, the Authority had seeked an change in property tax from its current 3.9 mills of property tax to a quarter percent (0.25%) sales tax. At the same time, service would expand from city boundary to the whole Stark County. The quarter percent (0.25%) sales tax would generate about seven million dollars of revenue.

The Authority has purchased sixteen Orion buses in 1989 and eight (8) Gillig were purchased in 1993, and eleven (11) were purchased in 1995. Due to long term limitation in tax dollars, those purchases made the Authority to borrow from local bank and it

took up to five years to retire the debt. Fortunately the Canton RTA is operating out of a relatively new facility, several short-term items will be increased. Because of the longer recapitalization rate, many short-term economic gains from the purchase of new equipment will be negated. The long-term financial condition of the CRTA will be extremely dependent on the local economic conditions, fuel prices, local population trends and the systems ability to contain costs. The Authority's policy board is committed to the philosophy that current revenues will pay for current costs.

Thus, the Authority will not rely on long-term indebtedness to fund short-term costs.

In order not to be bound by decreasing Federal, State funding and limited property tax dollars, the option would be for the Authority to try to go for sales taxes. The county wide sales tax would not only provide additional operating money, it would also provide the capital money for local share as well. As a result of this circumstance, the earlier the Authority is able to pass the quarter percent sales tax the better for the Authority and the whole community per se as well.

CANTON REGIONAL TRANSIT AUTHORITY  
FINANCIAL CAPACITY ANALYSIS WORKSHEET

DATA ELEMENT	FISCAL YEAR							1993	1994	1995
	1987	1988	1989	1990	1991	1992				
<b>NET QUICK ASSETS:</b>										
Cash and Cash Items	+ 428,935	884,253	421,580	580,690	274,274	710,447	130,989	1,191,760	711,914	
Receivables	+2,169,770	2,057,410	2,458,138	2,088,220	2,080,545	2,687,062	3,527,983	2,694,053	2,692,914	
Trade Payables	- 39,685	37,315	90,503	99,007	165,175	71,331	43,773	40,283	56,970	
Accrued Payroll Liab.	- 119,104	122,576	122,979	137,179	144,702	105,614	122,274	133,290	111,754	
Accrued Tax Liab.	- 169,685	103,368	213,086	185,036	208,121	245,030	200,796	233,724	93,161	
Short-Term Debt	-	-	-	-	-	80,000	80,000	80,000	80,000	
Other Current Liab.	- 101,827	65,860	64,765	71,385	66,823	103,829	304,568	284,977	296,753	
<b>Total Net Quick Assets</b>	<b>2,168,404</b>	<b>2,802,544</b>	<b>2,358,385</b>	<b>2,177,302</b>	<b>1,849,933</b>	<b>2,790,705</b>	<b>2,907,561</b>	<b>3,113,539</b>	<b>2,766,160</b>	
<b>OPERATING EXPENSES</b>										
Labor	1,737,246	1,484,737	1,654,879	1,221,441	1,786,294	1,503,034	1,996,171	2,295,909	2,046,124	
Fringe Benefits	920,747	903,626	950,454	1,067,289	1,140,502	1,272,074	1,183,383	1,330,416	1,233,210	
Services	305,854	284,456	202,705	222,411	217,541	222,639	190,372	178,490	192,887	
Materials and Supplies	605,680	525,012	617,436	596,293	612,032	600,072	625,950	613,359	497,295	
Utilities	124,184	131,589	125,089	121,973	141,507	138,233	139,394	134,574	129,641	
Casualty and Liab.	311,511	193,619	174,436	219,125	190,379	161,342	195,507	172,556	352,047	
Purch Transportation	0	0	0	0	0	0	0	0	0	
Other ( Taxes & Misc. )	55,569	50,750	135,567	127,608	153,428	155,428	121,214	116,052	114,738	
<b>Total Operating Expense</b>	<b>4,091,118</b>	<b>3,614,799</b>	<b>4,100,347</b>	<b>4,176,140</b>	<b>4,277,633</b>	<b>4,493,220</b>	<b>4,456,991</b>	<b>4,841,356</b>	<b>4,566,940</b>	
<b>OPERATING REVENUE:</b>										
Fare Fares-Transit	375,270	331,609	385,914	283,371	410,611	400,833	368,048	424,575	420,960	
Other Transp. Revenue.	41,392	46,329	34,707	40,566	43,843	55,683	45,824	40,411	47,253	
<b>Total Operating Revenue</b>	<b>416,662</b>	<b>377,938</b>	<b>420,621</b>	<b>423,937</b>	<b>454,454</b>	<b>456,516</b>	<b>433,872</b>	<b>464,986</b>	<b>468,213</b>	
<b>NON-OPERATING REVENUES:</b>										
Federal Operating Asst	1,334,532	1,222,002	1,209,770	1,165,551	1,152,339	1,146,733	1,089,091	1,152,000	998,478	
State General Funds	511,103	521,848	569,903	611,416	618,700	666,510	674,248	718,667	655,000	
Local General Funds	-	-	-	-	-	-	-	-	-	
State Dedicated Funds	123,621	122,616	194,217	124,887	129,896	119,036	129,159	181,250	133,051	
Local Dedicated Funds	233,046	173,319	186,319	176,525	165,216	90,085	31,858	15,287	4,593	
Other	1,563,621	1,487,576	1,552,165	1,555,451	1,480,488	2,542,366	2,510,533	2,553,995	2,416,774	
<b>Total Revenue</b>	<b>3,765,787</b>	<b>3,532,661</b>	<b>3,749,374</b>	<b>3,633,820</b>	<b>3,846,639</b>	<b>4,969,755</b>	<b>4,434,889</b>	<b>4,621,199</b>	<b>4,207,886</b>	
<b>CAPITAL INVESTMENT :</b>										
New Capital Projects	97,022	242,103	2,606,188	192,510	221,228	127,136	1,260,346	61,680	1,157,782	
Capital Reinvestment	-	-	-	-	-	-	-	-	-	
<b>Total Capital Invest</b>	<b>97,022</b>	<b>242,103</b>	<b>2,606,188</b>	<b>192,510</b>	<b>221,228</b>	<b>127,136</b>	<b>1,260,346</b>	<b>61,680</b>	<b>1,157,782</b>	
<b>OPERATING STATISTICS :</b>										
Total Passengers	1,701,002	1,198,969	1,190,541	1,262,794	1,428,487	1,224,385	1,187,776	1,277,942	1,021,504	
Total Passenger miles	6,625,210	6,576,076	6,239,053	4,543,218	4,412,366	4,337,488	3,062,399	4,246,847	3,655,846	
Revenue Vehicle miles	1,084,524	854,927	1,079,034	1,001,216	972,419	1,006,477	1,073,933	1,232,517	1,004,902	
Revenue Vehicle hours	100,485	78,600	98,229	96,227	91,907	93,985	94,852	101,421	89,956	
Employees	96	96	96	96	96	95	98	99	99	
Cost/Mile	3.77	4.23	3.80	4.17	4.40	4.46	4.15	3.93	4.54	
Cost/Hour	40.71	41.93	41.74	43.40	46.54	47.81	46.99	47.74	50.77	

FINANCIAL CAPACITY ANALYSIS INDICATORS WORKSHEET - PAGE 1

Appropriation Fiscal Year

Line Element	1995	1996	1997	1998	1999	2000	2001	2002	1993	1994	1995
(Circle When Actual)	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
A. \$ Change in Net Quick Assets.....	\$163 K	\$33 K	\$197 K	\$436 K	-\$214 K	-\$211 K	\$201 K	\$ 921K	117K	1750k	- 307K
B. % Change in Net Quick Assets.....	0.05%	1.65%	10.00%	20.00%	-0.23%	-0.04%	-12.00%	49.24%	4.19%	60.21%	- 11.16%
C. Ratio of Net Quick Assets: Annual Op Costs	50.02%	49.04%	52.99%	72.00%	60.20%	62.14%	44.34%	62.11%	65.4%	96.2%	60.6%
D. % Change in Ratio	4.04%	-0.90%	-0.32%	-19.01%	-13.75%	-10.40%	-15.90%	17.77%	3.13%	30.8%	- 35.6%
E. Average Passenger Fare	\$0.375	\$0.375	\$0.375	\$0.450	\$0.450	\$0.45%	\$0.626	\$0.525	\$0.525	\$ 0.525	0.581
F. % Change in Pass Fare	25.00%	0.00%	0.00%	20.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	5.62%
G. Change in Ridership	-70 K	-89 K	-70 K	502 K	-0 K	72 K	166 K	- 144K	-220K	90k	- 256 K
H. % Change in Ridership	0.91%	3.72%	-4.30%	-29.51%	-0.70%	6.07%	13.12%	-10.09%	17.12%	7.59%	- 20.07%
I. Federal Operating Asst											
1. \$ Change	160,171	4,739	-3,770	-112,530	-12,232	-44,219	-13,212	- 5,601	-57,647	+ 62,909	- 153,522
2. % Change	10.00%	0.36%	-0.20%	2.04%	-1.00%	-3.66%	-1.13%	-0.49%	-5.03%	5.78%	- 13.33%
J. State General Funds											
1. \$ Change	-13,166	-16,043	-3,770	10,445	75,365	41,513	7,204	47,010	7,738	44,419	- 63,667
2. % Change	-3.20%	-3.40%	-0.20%	2.04%	14.45%	7.20%	1.19%	7.73%	1.16%	6.59%	- 8.86%
K. State Dedicated Funds											
1. \$ Change	-7,209	12,366	-7,026	-1,005	71,601.	-69,330	6,009	-11,040	11,103	52,091	- 48,199
2. % Change	-5.20%	9.44%	-4.91%	-0.01%	60.39%	-35.70%	4.01%	-9.11%	9.40%	40.33%	-26.59%
L. Local Dedicated Funds											
1. \$ Change	-46,215	63	-3,610	-54,727	0,060	-0,794	-11,309	-75,131	-58,227	-16,571	- 10,704
2. % Change	-16.94%	0.03%	-1.50%	-23.40%	4.49%	-5.26%	-6.41%	-45.47%	-64.64%	-52.02%	- 70.02%
M. Other											
1. \$ Change	10,026	-121,512	155,716	-70,045	74,509	-6,714	-74,963	1,067,070	37,833	43,462	- 137,721
2. % Change	-5.73%	-2.10%	3.53%	-4.06%	5.01%	-0.43%	-4.02%	72.13%	1.48%	1.73%	- 5.37%
N. Total Non-Op Revenue											
1. \$ Change	224,316	66,743	142,009	-233,062	216,313	-315,544	-87,191	1,023,116	-134,866	186,310	- 413,233
2. % Change											

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FINANCIAL CAPACITY ANALYSIS INDICATORS WORKSHEET - PAGE 2

Data Element	Applicant Fiscal Year											
	1995	1996	1997	1998	1999	2000	2001	1992	1993	1994	1995	
<b>O. Major Cost Element % Chg:</b>												
1. Labor	-1.00%	-0.03%	1.49%	-13.99%	24.00%	-1.00%	-1.00%	6.53%	4.90%	15.02%	-10.88%	
2. Fringe Benefits	-0.21%	3.64%	2.00%	-1.06%	9.61%	7.76%	0.73%	19.67%	-6.58%	11.95%	-7.31%	
3. Services	-2.32%	23.54%	14.70%	-6.67%	-24.74%	9.72%	-2.19%	1.00%	-14.49%	-6.24%	8.63%	
4. Materials and Supplies	-12.36%	-6.06%	14.04%	-13.32%	1.09%	-3.42%	2.64%	-1.20%	4.31%	-2.01%	-18.92%	
5. Utilities	-10.40%	-0.43%	-1.26%	5.07%	-4.07%	-2.40%	16.02%	-2.25%	0.84%	-3.46%	-3.67%	
6. Casualty and Lab.	233.33%	54.23%	-2.10%	-37.05%	-9.91%	25.62%	-13.12%	-15.25%	21.18%	-11.74%	104.02%	
7. Purch Transportation	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
D. Other (Taxes and Misc.)	0.24%	12.12%	-13.02%	-5.63%	44.13%	-5.07%	32.77%	-15.60%	-37.98%	-4.26%	-1.13%	
<b>P. Cost/Mile</b>	3.73	3.62	3.77	4.23	3.00	4.17	4.40	4.46	4.15	3.93	4.54	
Q. % Change	3.90%	-2.95%	4.14%	12.20%	-10.17%	9.74%	5.52%	1.36%	-6.95%	-5.30%	15.52%	
<b>R. Cost/Hour</b>	30.14	30.70	40.71	41.93	41.74	43.40	46.64	47.01	46.99	47.74	50.77	
S. % Change	3.90%	1.64%	4.90%	3.00%	-0.45%	3.90%	7.24%	2.73%	-1.72%	1.13%	6.35%	
<b>T. Cost/Passenger</b>	2.10	2.00	2.41	3.01	3.44	3.31	2.99	3.56	3.75	3.79	4.47	
U. % Change	5.00%	13.01%	10.55%	24.90%	14.29%	-3.70%	-9.67%	19.06%	5.34%	1.07%	17.94%	
<b>V. Cost/Passenger Mile</b>	0.02	1.10	0.62	0.55	0.66	0.92	0.07	1.04	1.46	1.14	1.25	
W. % Change	17.30%	-45.60%	-47.46%	-11.29%	-20.00%	-9.70%	6.43%	7.22%	40.30%	-19.18%	9.65%	
<b>X. Change in Nav Miles</b>	1,059 K	1,091 K	1,004 K	-230 K	224 K	70 K	-29 K	34K	67K	159K	-228K	
Y. % Change in Nav Miles	3.02%	0.01%	0.55%	-21.17%	20.21%	-7.21%	-2.00%	3.50%	6.70%	14.77%	-18.47%	
<b>Z. Change in Nav Hours</b>	103 K	102 K	100 K	-22 K	20 K	-2 K	-4 K	2K	.9K	7K	-11K	
AA. % Change in Nav Hours	-4.63%	-0.97%	-1.96%	-21.70%	24.99%	-2.07%	-4.49%	2.26%	0.92%	6.93%	-11.30%	
<b>AB. Nav Miles/Employee</b>	10,061	11,409	11,297	9,905	11,240	10,429	10,129	10,594	11,107	12,449	10,151	
AC. % Change	1.01%	6.37%	-1.67%	-21.17%	26.21%	-7.21%	-2.00%	4.59%	5.60%	11.28%	-18.46%	

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FINANCIAL CAPACITY ANALYSIS INDICATOR WORKSHEET - PAGE 2

Applicant Fiscal Year

Data Element	1995	1996	1997	1998	1999	2000	2001	1992	1993	1994	1995
O. Major Cost Element % Ch:											
1. Labor	-1.00%	-0.00%	1.49%	-13.99%	24.00%	-1.00%	-1.00%	6.53%	4.90%	15.02%	
2. Fringe Benefits	-0.21%	3.64%	2.00%	-1.06%	9.61%	7.70%	0.70%	19.67%	-6.58%	11.95%	
3. Services	-2.32%	23.54%	14.70%	-6.67%	-24.74%	9.72%	-2.19%	1.00%	-14.49%	-6.24%	
4. Materials and Supplies	-12.36%	-6.06%	14.04%	-13.32%	1.09%	-3.42%	2.64%	-1.20%	4.31%	-2.01%	
5. Utilities	-10.40%	-0.40%	-1.26%	5.97%	-4.07%	-2.49%	16.02%	-2.25%	0.84%	-3.46%	
6. Casualty and Lab.	233.30%	54.23%	-2.10%	-37.05%	-9.91%	25.62%	-13.12%	-15.25%	21.18%	-11.74%	
7. Purch Transportation	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
8. Other (Taxes and Misc.)	0.24%	12.12%	-13.02%	-5.63%	44.10%	-5.07%	32.77%	-15.60%	-37.98%	-4.26%	
P. Cost/Mile	3.73	3.62	3.77	4.23	3.00	4.17	4.40	4.46	4.15	3.93	
Q. % Change	3.90%	-2.95%	4.14%	12.20%	-10.17%	9.74%	5.52%	1.36%	-6.95%	-5.30%	
R. Cost/Hour	30.14	30.70	40.71	41.93	41.74	43.40	46.64	47.01	46.99	47.74	
S. % Change	3.90%	1.60%	4.90%	3.00%	-0.45%	3.90%	7.24%	2.73%	-1.72%	1.13%	
T. Cost/Passenger	2.10	2.00	2.41	3.01	3.44	3.31	2.99	3.56	3.75	3.79	
U. % Change	5.00%	13.01%	10.55%	24.90%	14.29%	-3.70%	-9.67%	19.06%	5.34%	1.07%	
V. Cost/Passenger Mile	0.02	1.10	0.62	0.55	0.66	0.92	0.07	1.04	1.46	1.14	
W. % Change	17.30%	-45.60%	-47.46%	-11.29%	-20.00%	-9.70%	6.43%	7.22%	40.30%	-19.18%	
X. Change in Rev Miles	1,059 K	1,091 K	1,004 K	-230 K	224 K	70 K	-29 K	34K	67K	159K	
Y. % Change in Rev Miles	3.02%	0.01%	0.55%	-21.17%	20.21%	-7.21%	-2.00%	3.50%	6.70%	14.77%	
Z. Change in Rev Hours	103 K	102 K	100 K	-22 K	20 K	-2 K	-4 K	2K	.9K	7K	
AA. % Change in Rev Hours	-4.63%	-0.97%	-1.96%	-21.70%	24.95%	-2.05%	-4.49%	2.26%	0.92%	6.93%	
AB. Rev Miles/Employee	10,061	11,409	11,297	9,905	11,240	10,429	10,129	10,594	11,187	12,449	
AC. % Change	1.01%	6.37%	-1.67%	-21.17%	26.21%	-7.21%	-2.00%	4.59%	5.60%	11.28%	

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**SCATS AIR QUALITY CONFORMITY REPORT**

**APPENDIX**

to

**SCATS FY 1997-2000 Transportation Improvement  
Program**

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# Introduction

The Clean Air Act Amendments of 1990 expanded transportation's role in contributing to national clean air goals. The 1990 amendments expand the definition of "transportation conformity" to:

*Conformity to the (air quality implementation) plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and that such activities will not (i) cause or contribute to any new violations of any standards in any area, (ii) increase the frequency or severity of any existing violation of any standard in any areas, or (iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.*

A fourth requirement is that plans, programs and projects do not delay the timely implementation of transportation control measures (TCMs) in the applicable State Implementation Plan (SIP).

This document, which is an appendix to the SCATS 1997-2000 Transportation Improvement Program (TIP), describes the conformity determination. The conformity determination for was conducted in accordance with the *Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs and Projects Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act*, 40 CFR Parts 51 and 93, issued November 24, 1993. The final rule included several significant changes from the interim conformity rule which had been in place. First, in addition to demonstrating that transportation plans and programs in ozone nonattainment areas must lead to reductions in volatile organic compounds (VOCs, an ozone precursor), the final rule also requires plans and TIPs to lead to reductions during the transitional period in oxides of nitrogen, (NO<sub>x</sub>, another ozone precursor). Secondly, the final rule requires emission burdens from plans and programs to be beneath the proposed emission budgets in the submitted implementation plans.

As will be explained below, SCATS 1997-2000 TIP and 2010 Transportation Plan conform to the State Implementation Plan because they:

- Contribute to the Implementation Plan's purpose of eliminating and reducing ozone violations;
- Emission burdens from the Plan and TIP are below the budgets established for them in the Implementation Plan;
- Provide for timely implementation of transportation control measures in the applicable State Implementation Plan;
- The Plan and TIP have been prepared in accordance with the final conformity guidance.

# **Nonattainment Area Designation and Redesignation Plan**

Canton, Ohio was classified as marginal nonattainment for ozone. The nonattainment area included all of Stark County in northeast Ohio. The Stark County Area Transportation Study (SCATS) is the MPO for this county. The SCATS MPO boundary and urban planning model cover the entire nonattainment area. A redesignation request was prepared by the Ohio EPA. This was the result of a cooperative process led by the Ohio EPA but closely involving SCATS, the Air Pollution Control Division of the Canton Health Department and with frequent consultation with the ODOT. The request includes regional maintenance and contingency plans. On April 1, 1996 Canton was redesignated as in attainment and is in the "maintenance area" status.

## **Transportation Plan and TIP Conformity Analysis Procedures**

The SCATS Transportation Improvement Program is a four year annually updated document that lists all Federally funded and regionally significant projects scheduled for implementation in Stark County. The Program is conducted on the State's July - June Fiscal Year. Consistent with the ISTEA and 1990 Clean Air Act Amendments, air quality issues were an integral component of the TIP development process. The TIPs developed by Ohio's MPOs are incorporated directly into the STIP. The narrative below describes the procedures utilized in the conformity analysis for the SCATS FY 1997 - 2000 TIP and Transportation Plan.

The following requirements for conducting the FY 1997 - 2000 TIP conformity determinations were outlined in letters from William L. MacDowell, Chief of the USEPA Region 5 Regulation Development Section Air Enforcement Branch to Gordon Proctor of ODOT on May 12, 1995 and to Ohio EPA's Che Brewer-Coon on May 9, 1995. These letters indicated that Canton must meet "Special provisions for nonattainment areas which are not required to demonstrate reasonable further progress and attainment".

- Use of latest planning assumptions (Section 51.412)
- Use of latest emissions estimation model (Sec. 51.414)
- Use of appropriate consultation procedures (Section 51.416)
- Provides for timely implementation of transportation control measures in the SIP (Section 51.430).
- Contribution to emissions reductions in VOC and NO<sub>x</sub> (Section 51.438)
- Fiscally constrained (Section 51.408)

### **1. Latest Planning Assumptions**

The FY 1997-2000 TIP conformity analyses readily meet this requirement. The SCATS TIP is developed consistent with the most recent SCATS Transportation Plan. The modeling process used

to develop each the Transportation Plan is calibrated using the latest population and land use data available. Further, USEPA's most recent emissions software, MOBILE5A, is used for all mobile source emission analyses. The emission inventories and budgets are also from the most recent Ohio SIP submittals, which were also developed using the MOBILE5A software. All mobile source emission inventories, budgets, and milestone projections were generated using the appropriate Inspection and Maintenance, anti-tampering, and vapor recovery flags in MOBILE5A.

At a July 15, 1994 meeting to review the STIP conformity report, the FHWA suggested that the Vehicle Miles Traveled (VMT) growth projected in Ohio's urban transportation models be compared with the historical HPMS VMT growth. It was suggested that this comparison would provide an additional means of assuring that the models were providing accurate results, thereby meeting the conformity requirements for using the latest planning assumptions.

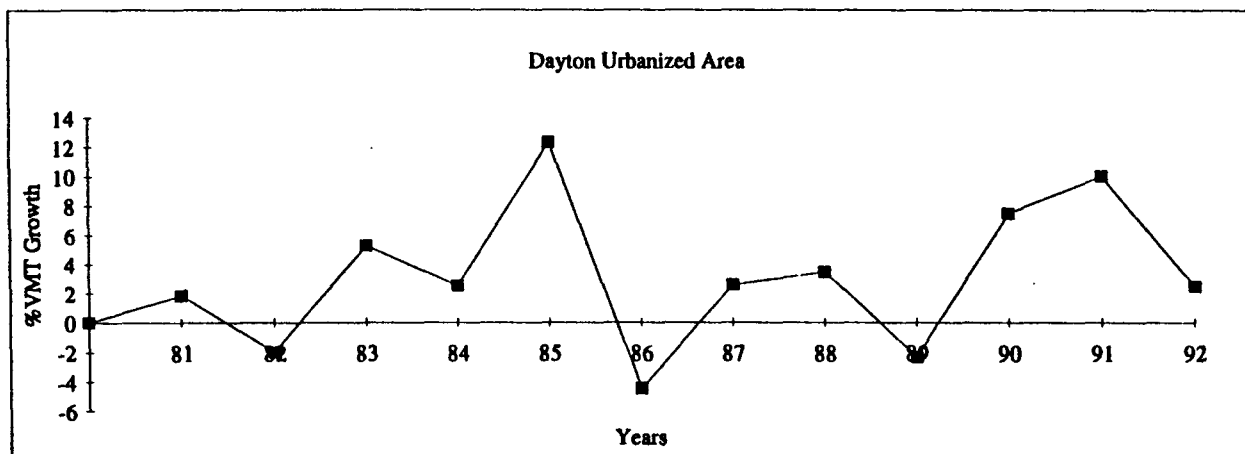
To initiate this comparison, ODOT reviewed the HPMS data, as submitted to the FHWA, for Ohio's urbanized areas for the years 1980 to 1992. As a first step, data for each functional class of roadway in each urbanized was totaled by year. This calculation represents total urbanized area HPMS VMT for each year between 1980 and 1992. A percentage annual change in total HPMS VMT growth was then calculated for each urbanized area. ODOT's intent was to then compare the annual percentage HPMS VMT growth with the annual percentage VMT growth from the urban models. However, there was so much fluctuation in the annual HPMS VMT growth, that ODOT does not have confidence in the HPMS VMT growth trends.

VMT growth to a growth rate exceeding 10% to 15% in a three year span. Figure 1 charts the HPMS growth rates for the Dayton and Toledo urbanized areas. These areas are representative of the fluctuation in the VMT growth rates that the HPMS data provides. Further, in 1990, significant changes were made to the HPMS data base to correct under reporting from previous years. A one-time adjustment was made to bring the estimates more in line with the FHWA/HPMS theoretical predictions. A new methodology used larger samples that yielded VMT figures which were generally higher than those submitted previously. The ODOT Engineers working with the HPMS data assert that any comparison of the pre 1990 data and the post 1990 data is not valid.

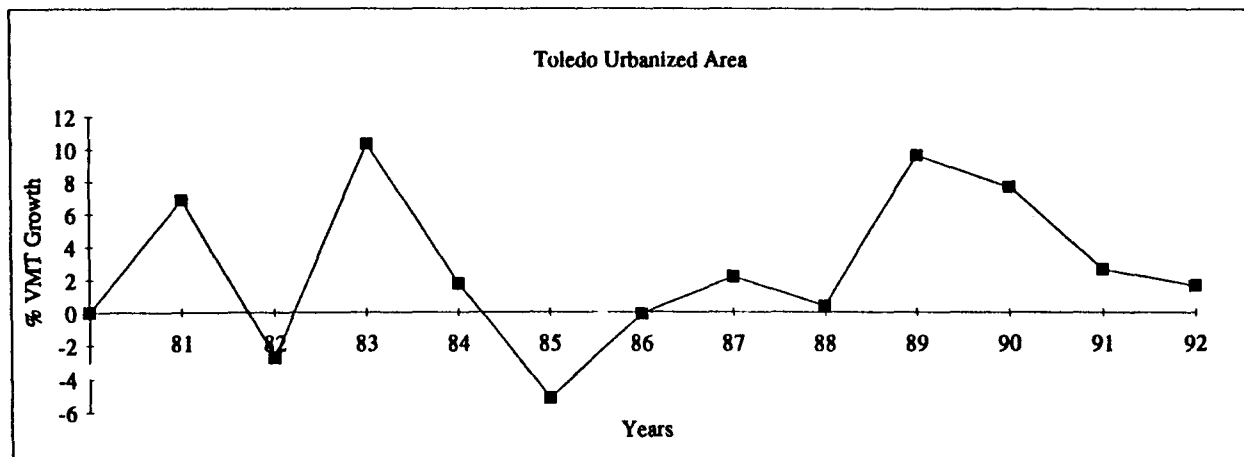
Because of the fluctuation in the HPMS VMT growth, ODOT does not have confidence that a comparison of this data with the urban models' VMT growth is meaningful. The urban transportation models are therefore the best information that ODOT can provide concerning urbanized area VMT growth. As stated above the models are developed and kept current based upon the most recent population and land use data available. They are also validated based upon current traffic counts. ODOT is confident that the urban models accurately project VMT growth in Ohio's urbanized areas.

Figure 1  
**HPMS Annual % of VMT Growth**  
**(1980-1992)**

	81	82	83	84	85	86	87	88	89	90	91	92
Dayton	1.84	-1.99	5.27	2.51	12.31	-4.48	2.58	3.47	-2.31	7.47	10	2.49



	81	82	83	84	85	86	87	88	89	90	91	92
Toledo	6.86	-2.75	10.36	1.75	-5.16	-0.11	2.17	0.39	9.66	7.68	2.64	1.66





## **2. Use of Latest Emissions Estimation Model**

Ohio's urbanized areas maintain regional travel demand forecasting models for use in their urban transportation planning processes. These models employ a traditional four step modeling process to project existing and future traffic volumes and travel patterns on the regional transportation networks. The four step process consists of trip generation, trip distribution, modal split, and route assignment. Output from the urban models is link-by-link directional 24 hour traffic volumes for the existing or future regional transportation networks.

The Ohio Department of Transportation (ODOT) holds the models and provides extensive technical support for all of the areas. ODOT's modeling is run on the main frame PlanPac software.

The TIP conformity demonstrations for Ohio's urbanized nonattainment areas utilize the capabilities of the urban transportation models. These models are uniquely suited to perform the attainment and milestone year Plan and TIP analyses required under the Final Conformity rule. The modeling process identifies growth in vehicle miles of travel and changes in regional travel patterns resulting from the projects that are proposed in the nonattainment area transportation plans and programs.

To generate pollutant burdens for the respective TIP analysis scenarios, ODOT completes a three phase process. Phase 1 uses program G5AIMPAR, written by ODOT, to create the control records required by U. S. EPA MOBILE5A to estimate emission factors. The temperature, percent Hot and Cold starts, and the vehicle mix vary for each hour of the day for both hydrocarbons (HC) and carbon monoxide (CO). Emission factors are calculated for each speed measured in miles per hour (MPH). The speeds vary from 5 MPH to 65 MPH for freeways and from 5 MPH to 55 MPH for surface arterials. Parameter records are used to override default values. The values for the Inspection Maintenance program, Anti-Tampering program, Pressure test, the Stage II Vapor Recovery System, and on board VRS were specified by the Ohio EPA.

The G5AIMPAR.MSG listing shows:

- a) The control records for program G5AIMPAR
- b) The flag summary for the hourly ambient HC, the hourly ambient CO and the 24 hour HC required for evaporative and refueling emission factors
- c) The hours requested
- d) Inspection and Maintenance program summary
- e) Anti-Tampering program summary
- f) Pressure Test program summary
- g) Stage II Vapor Recovery System program summary
- h) On board Vapor Recovery System summary
- i) The hourly temperatures (s for HC and w for CO), percent Cold and Hot starts and the vehicle mixes for freeways and surface arterials

The percent Cold and Hot starts were developed using "Determination of Percentages of Vehicles Operating In the Cold Start Mode, EPA-450/3-77-023, Office of Air and Waste Management, Office of Air Quality Planning Standards, Research Triangle Park, North

Carolina 27711". The vehicle mixes were developed using Ohio observed data obtained by the Bureau of Technical Services.

- j) Summary of the first scenario record for HC for freeway
- k) Summary of the first local area parameter record for HC for freeway

Phase 2 uses USEPA MOBILE5A to generate 13, 444 emission factors based on input created by program G5AIMPAR. Output routines were added to MOBILE5A to write the emission factors in an array format.

Phase 3 uses program CMAQ5AN, written by ODOT, to relate the MOBILE5A emission factors with the urban models' 24 hour link data files to generate hourly pollutant burdens for hydrocarbons (HC), oxides of nitrogen (NO<sub>x</sub>), and carbon monoxide (CO).

Program CMAQ5AN reads 1) the transportation links containing the weighted 24 hour volumes 2) the node grid coordinates and 3) the emission factors from program MOBILE5A (5Mar93) and then lists 1) the credits 2) the program control records 3) the table summaries used by the program 4) the number of centroids 5) the option values used 6) the hours requested 7) the seasonal factors for both HC and CO. The hourly volumes are multiplied by the corresponding seasonal factor.

After the seasonal factors, listed is the interzonal vehicle miles of travel (VMT). The VMT is calculated by assuming that the zonal area in square miles is represented as a circle. The radius is computed and the intrazonal trips are multiplied by the radius to compute the intrazonal VMT. The directional hourly speeds are estimated by applying the percent Average Daily Traffic (ADT), percent Direction, percent heavy duty trucks adjusted by 1.7 to represent auto equivalents. The auto equivalent is divided by the directional capacity and the resulting volume to capacity ratio (V/C) is used in a table lookup to determine the directional speed. The hour, functional classification and directional speed are used to derive the directional emission factor using USEPA MOBILE5A array file. If required, emission factors are interpolated. The above process is done hourly by direction on each link in the network. After processing all hours, CMAQ5AN lists the 1) hourly vehicle miles of travel and pollutant burdens for freeways and surface arterials 2) the total vehicle miles and pollutant burden for evaporative and refueling HC and 3) the total HC pollutant burden. All items listed above are summarized for each run.

The speed-flow model used in the CMAQ5AN (hereinafter referred to as CMAQ5A) program was evaluated against the 1985 Highway Capacity Manual (HCM) equations. A basic freeway segment analysis was performed along with each of the three arterial types as defined by the HCM. For each illustration the HCM and other data were converted using Level of Service 'C' being equal to a volume-to-capacity ratio of 1.0, as this is the capacity used by the CMAQ5A model.

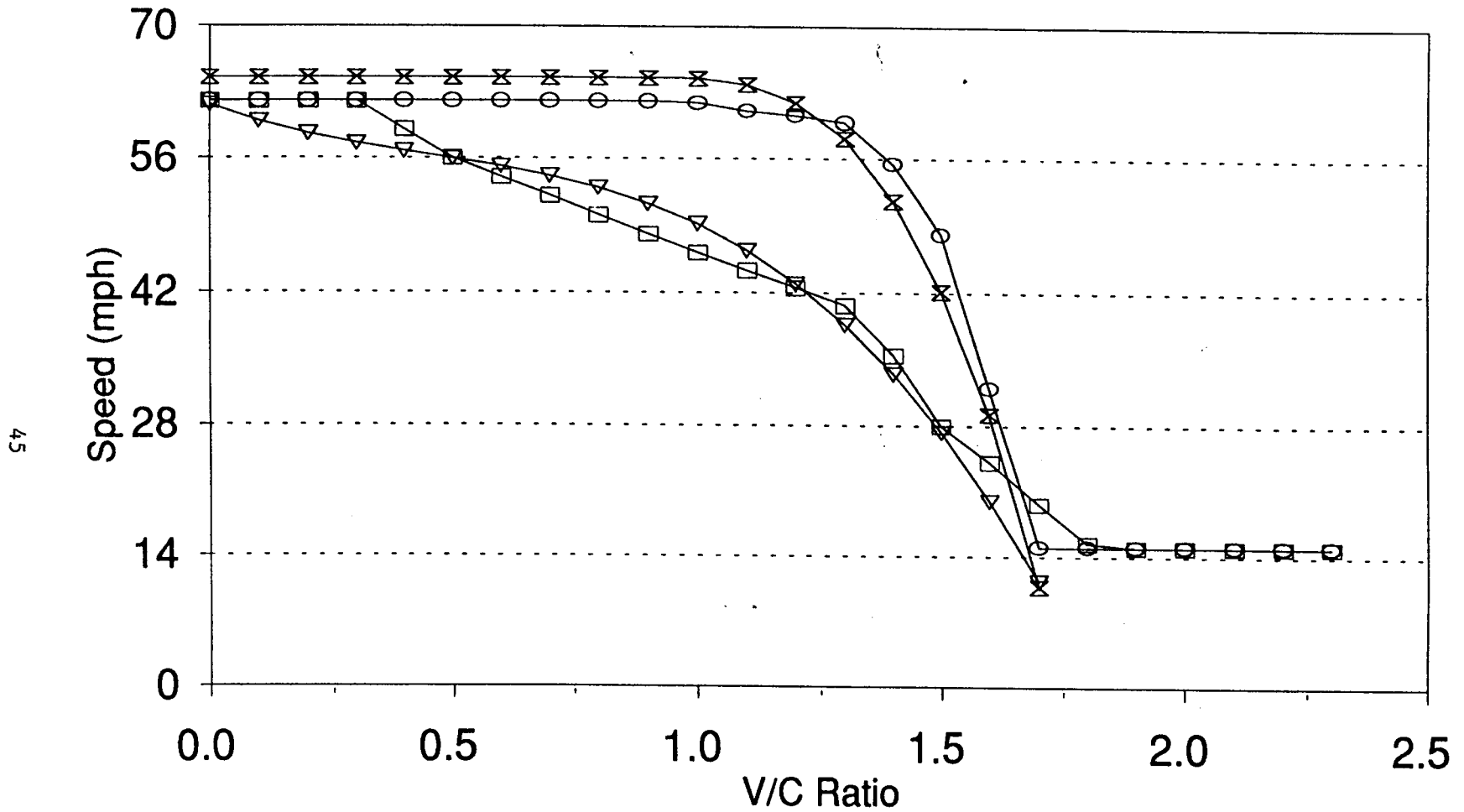
A linear regression model was used to plot the HCM freeway data for volume-to-capacity ratio versus speed. Four plots are illustrated in Figure 2. The previous version of CMAQ5A, represented by the □ marker, correlated closely with the 1985 HCM (∇). The newer version of CMAQ5A (○) uses the proposed 1994 HCM basic freeway segment curve. Data collected as a part of a travel time study in the Columbus area was used to evaluate the new CMAQ5A data. This data, referred to as

"observed" (8) data, was extracted from the urban freeway segments of the study. The raw data showed no statistical correlation in terms of regression. Therefore selected speed-flow data points were used for linear regression resulting in the curve as shown in Figure 2. This data lends some significance to the new CMAQ5A freeway speed-flow relationships.

The arterial speed-flow relationships use the 1985 HCM arterial Class definitions. The CMAQ5A surface arterials are defined by area type (CBD, central city, and suburb). The speed-flow data from CMAQ5A for suburbs was compared to HCM Class I; central city compared to Class II, and CBD compared to Class III. Figure 3 shows the relationship between arterial type (Class) I for CMAQ5A and the 1985 HCM. The curves are very similar. Figure 4 depicts arterial type II data with characteristics similar to the type I CMAQ5A/HCM relationship. The type III graph of Figure 5 is a departure from the close association of data points of the previous types. A relatively simple test was done to demonstrate the effects of each speed-flow curve on emission factors. Using a v/c ratio of 1.3 to represent a "base network" and 1.0 as a "build network", HC exhaust emission factors were determined based on the relative speed at each v/c.. The HCM curve resulted in a 20% decrease in HC exhaust emissions while the CMAQ5A curve showed a 9% decrease. Therefore the CMAQ5A curve could be considered to be the more conservative equation when used in conformity analysis. A determination as to why the curves are significantly different, as compared to the other arterial type comparisons, was not made.

Figure 2

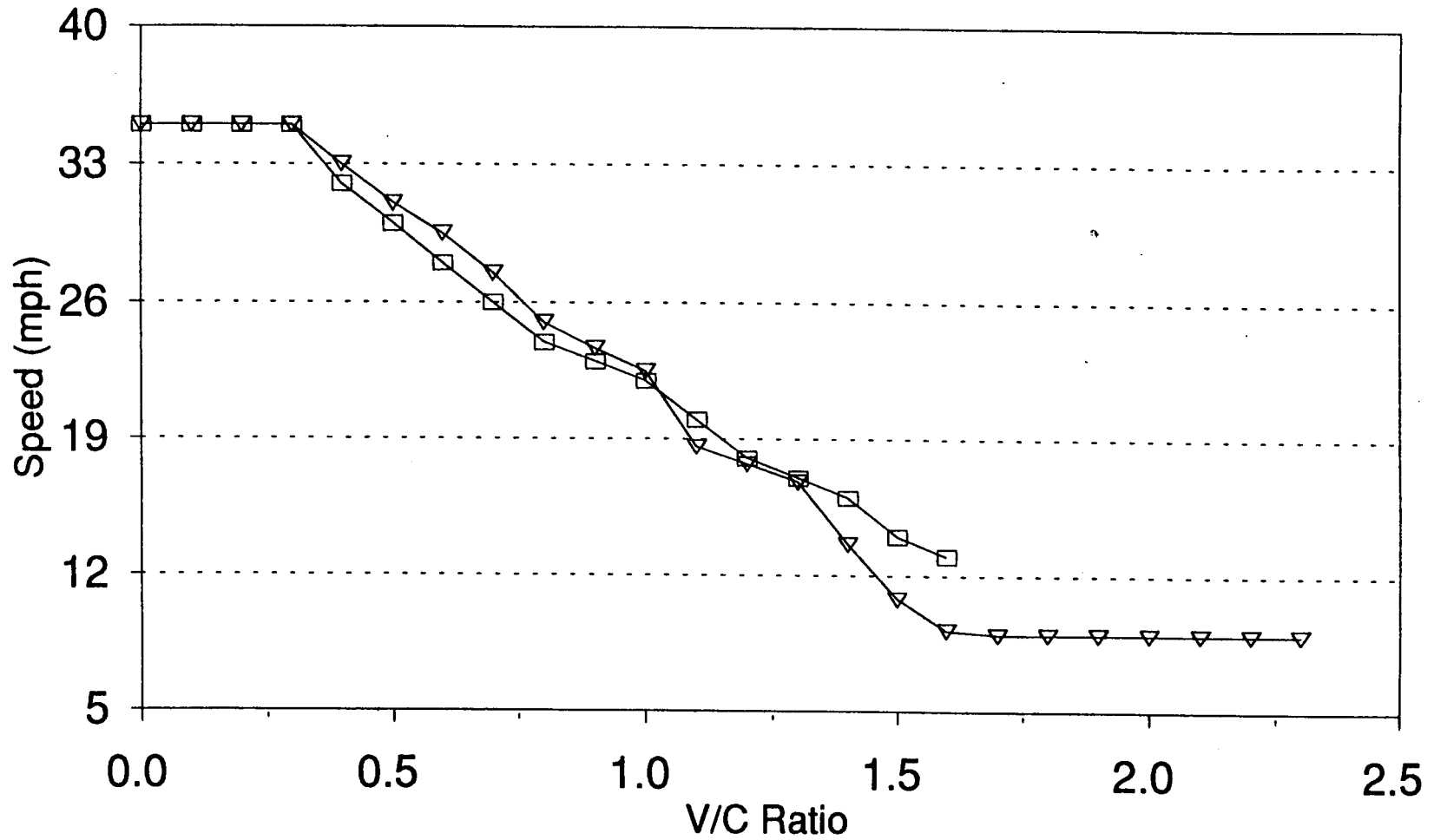
### Freeway Segment Speed-Flow (v/c of 1.0 = LOS 'C')



▽ 1985 HCM    □ Old CMAQ5A    ○ New CMAQ5A    × Observed

Figure 3

### Arterial Type I Speed-Flow (v/c of 1.0 = LOS 'C')



▽ CMAQ5A    □ 1985 HCM

Figure 4

### Arterial Type II Speed-Flow (v/c of 1.0 = LOS 'C')

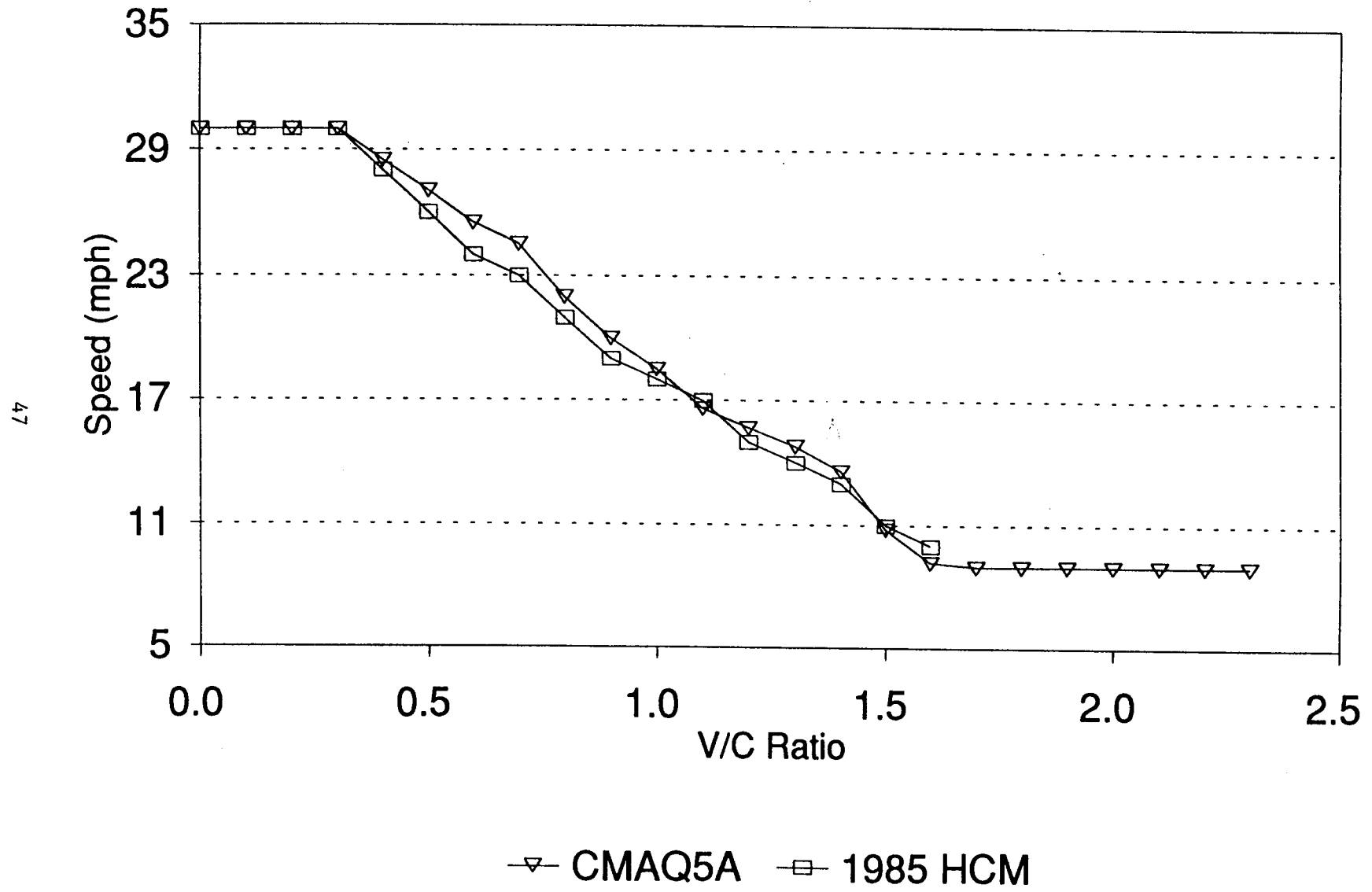
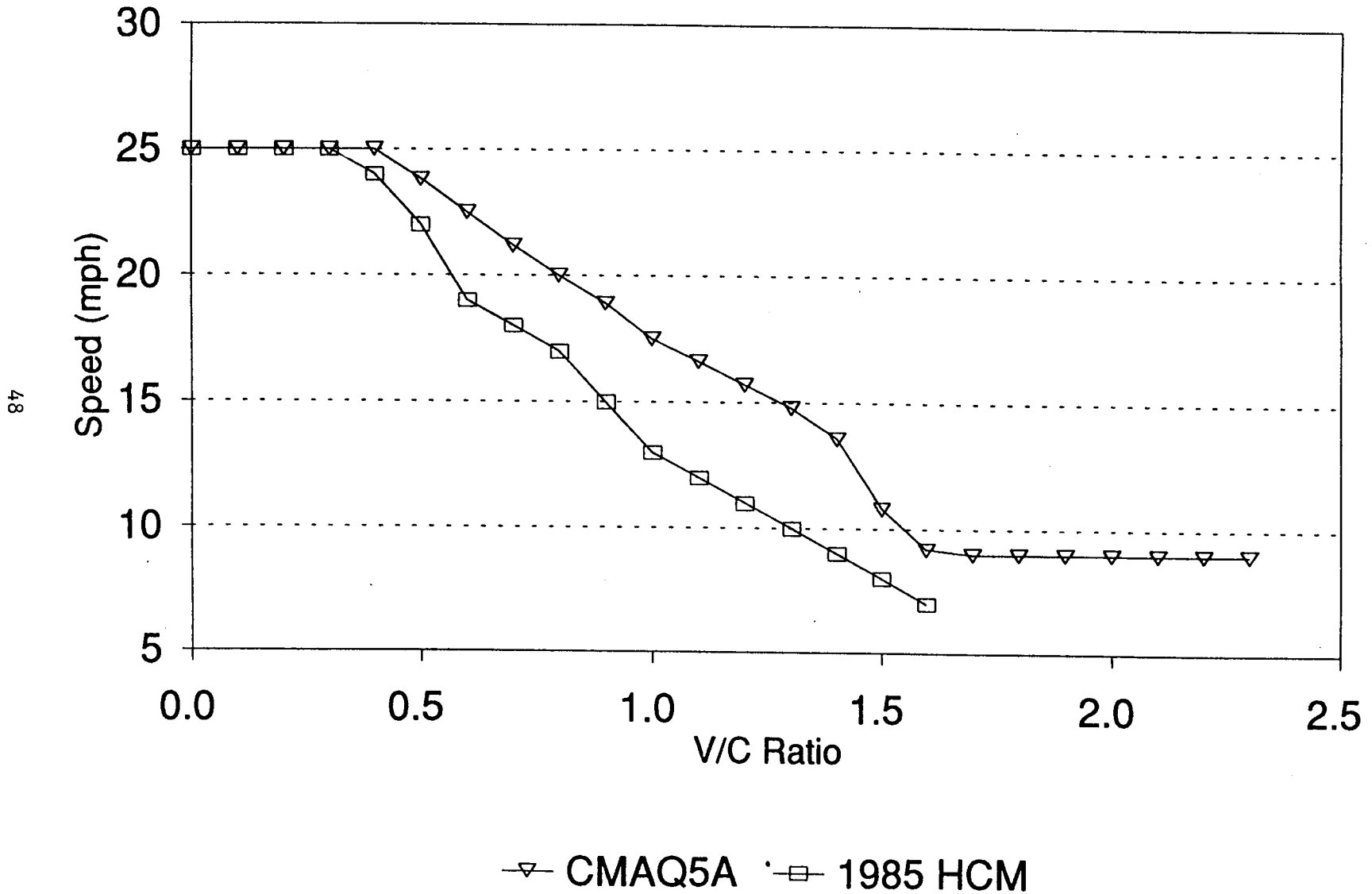


Figure 5

### Arterial Type III Speed-Flow (v/c of 1.0 = LOS 'C')



## Factoring Process to Normalize HPMS and Model Results

Section 51.440 of the final Conformity rule requires development of a factor "to reconcile and calibrate the network-based model estimates of vehicle miles traveled in the base year of its validation to the HPMS estimates for the same period."

Although Sec. 51.452 refers to calibrating VMT, it specifies that this is a requirement for serious and above areas after Jan. 1, 1995. Although no Ohio nonattainment areas meet this requirement, Ohio decided that reconciling the HPMS generated data and the model generated data was merited. ODOT, OEPA, and the MPOs discussed whether the calibration should be based upon differences in emissions or on differences in VMT. The group decided that the emissions were the pertinent factor and therefore used the emissions difference for the calibration.

Ohio's factoring process compares the SIP 1990 baseline emission inventories from the SIP with the 1990 baseline emissions from the urban model. A simple ratio calculating the percentage difference between the 1990 HPMS-generated emissions and the model emissions establishes the calibration factor. This factor is then applied to the Plan and TIP analysis scenarios to compare those emissions to the emissions in the redesignation plans, 15% plans or Attainment demonstrations. These are shown below:

### 1990 HPMS

1990 MODEL = Calibration Factor

$$\text{HC factor} = 31.65/35.609 = .888$$

$$\text{NOx factor} = 16.24/27.391 = .593$$

## Off Model Emission Reduction Credits

Specific transportation improvements that are included in the nonattainment area Transportation Plans and funded through the TIPs generate significant emission reductions, however these reductions are not reflected in either the urban modeling process or the non-model HPMS procedures. Ohio identifies this type of emission reductions as "off model" credits.

Off model credits are an important component of the Ohio nonattainment area conformity determinations. Emission reductions resulting from Congestion Mitigation and Air Quality (CMAQ) projects are not accounted for in the urban modeling process. However, certain CMAQ projects such as park and ride lots, and traffic flow operational improvements will result in significant emission reductions that need to be accounted for in the conformity process. SCATS has not included off model credits in this conformity test.



### **3. Use of Appropriate Consultation Procedures**

In Ohio, the Ohio Environmental Protection Agency (OEPA) is the lead agency for coordinating development of the State Implementation Plan (SIP) and redesignation requests. The Ohio Department of Transportation, the nonattainment area Metropolitan Planning Organizations (MPOs), and the Local Air Agencies participated in the development of the SIP, the redesignation requests and transportation plans and Transportation Improvement Programs (TIP)s.

Concurrent with the Statewide agencies' work on SIP issues, the Ohio MPOs began responding to the Intermodal Surface Transportation Efficiency Act's (ISTEA) requirement to update urbanized area Transportation Plans and Programs. A key consideration in the transportation planning process used to update these plans and programs was the linkage between air quality and transportation mobile source emissions. The mobile source emission inventories and budgets established through the SIP process served as control totals for plan and program development. Once again, frequent consultation among the MPOs, DOT and the Ohio EPA occurred as the plans and programs were developed.

Nonattainment areas are required to have both a conforming transportation plan and a conforming TIP. Under ISTEA, metropolitan nonattainment areas are required to update their transportation plans. SCATS has adopted an ISTEA Transportation Plan update. A USDOT conformity determination has been issued for the Plan on September 29, 1995.

### **4. Timely Implementation of TCMs**

The November 15, 1993 SIP submittal includes Transportation Control Measures (TCMs), only in the Cleveland/Akron nonattainment area. No TCMs are required to be implemented in the Canton area.

### **5. Contribution to Emissions Reductions in HC and NOx**

In its FY 1997-2000 TIP conformity demonstration, SCATS demonstrates that the TIP passes the "budget test". As a marginal nonattainment area, it had until 1993 to demonstrate attainment. The redesignation request documents this effort. The milestone years for this nonattainment area is 1990, the base year; 1993, 2005, and 2010, the final year of the TIP and the Plan.

The SCATS Transportation Plan was determined to be in conformity. The TIP is consistent with this Plan.

Based upon the criteria presented in Section 51.430 of the Final Conformity rule Plan and TIP analysis highway networks were developed as follows:

1990 Base year: This represents the regional highway network that was in place in 1990 and that was used to develop the State Implementation Plan 1990 mobile source inventories.

**Attainment Year Milestone 1993:** This represents the existing network plus regionally significant projects that were open to traffic in 1993. This milestone year analysis is performed for the nonattainment areas based upon the Clean Air Act's attainment schedules.

**2005 Network** This represents the Baseline scenario network plus regionally significant projects that are expected to be open to traffic by the analysis year.

**2010 Plan Horizon Year (2010) Network:** This represents the completed Plan network using the Plan horizon year traffic assignment.

The following table shows the relevant status of all Plan and TIP projects in each scenario.

**Y - Include in scenario**

**N - Not included in scenario**

**N/A-Exempt project not modeled**

Conformity Analysis Scenarios					2005	2010
TIP	Plan				Action	Action
MAP#	MAP#	NAME	TYPE OF PROJECT	ANALYSIS SCENARIO	(build)	(build)
1	3	STA-Applegrove St	4-Lane	Capacity change & new facility	Y	Y
2		STA-Canton CBD Signals	Traffic Signalization	No analysis - emission neutral	N/A	N/A
3		STA-Canton 30 Signals	Traffic Signalization	No analysis - emission neutral	Y	Y
4		STA- Canton 94 Signals	Traffic Signalization	No analysis - emission neutral	Y	Y
5		STA-Louisville Bikeway	Bikeway	No analysis - emission neutral	N/A	N/A
6		STA-Millersburg	Resurfacing	No analysis - emission neutral	N/A	N/A
7		STA-O&E Canal	Pedestrian Facilities	No analysis - emission neutral	N/A	N/A
8	15	STA-16th St SE	4-Lane/RR Bridge	Capacity change & new facility	Y	Y
9		STA-TR 3	Bridge	No analysis - emission neutral	N/A	N/A
10		STA-CR 17	Resurfacing	No analysis - emission neutral	N/A	N/A
11	16	STA-SR 21- 8.98	2 Ramps	New facility	Y	Y
12		STA-SR 21-10.24	Resurfacing	No analysis - emission neutral	N/A	N/A
13		STA-US30-0.00	Resurfacing	No analysis - emission neutral	N/A	N/A
14	12	STA-US 30-17.21	New 4-Lane Freeway	New facility	Y	Y
16		STA-CR 31 STA-CR 62	Intersection improvement	No analysis - emission neutral	N/A	N/A
17		STA-CR 31	Resurfacing	No analysis - emission neutral	N/A	N/A
18		STA-SR 44-13.08	Bridge replacement	No analysis - emission neutral	N/A	N/A
19		STA-CR 62	Resurfacing	No analysis - emission neutral	N/A	N/A
20	42	STA-US62/SR21	Widening	Capacity Change	Y	Y
21		STA-US 62-21.51	Bridge Rehab	No analysis - emission neutral	N/A	N/A
22		STA-US62-23.42	Resurfacing	No analysis - emission neutral	N/A	N/A
23		STA-US 62-30.43	Bridge Rehab	No analysis - emission neutral	N/A	N/A
24		STA-US 62-34.87	Add turn Lane & Misc	No analysis - emission neutral	N/A	N/A
25		STA-US62F-34.83	Resurfacing.	No analysis - emission neutral	N/A	N/A
26	13	STA-US62F-39.18	New 4-Lane Freeway	New facility	Y	Y
27		STA-US62J-38.90	Bridge Rehab	No analysis - emission neutral	N/A	N/A
28		STA-CR 66 Part 1	Resurfacing.	No analysis - emission neutral	N/A	N/A
29		STA-CR 66 Part 2	Resurfacing.	No analysis - emission neutral	N/A	N/A
30		STA-IR 77- 3.69	Bridge Rehab	No analysis - emission neutral	N/A	N/A
31	11	STA-IR 77- 9.40	6-Lane Freeway	Capacity change	Y	Y
32a		STA-IR 77-12.74	Reconstruction	No analysis - emission neutral	N/A	N/A
32b		STA-IR 77-12.74	6-Lane Freeway	Capacity change	Y	Y
33		STA-IR 77-17.92	Bridge replacement	No analysis - emission neutral	N/A	N/A
34		STA-SR 93-11.71	Resurfacing	No analysis - emission neutral	N/A	N/A
35		STA-SR 93-17.25	Bridge Rehab	No analysis - emission neutral	N/A	N/A
36		STA-SR 93-18.15	Bridge replacement	No analysis - emission neutral	N/A	N/A
37		STA-SR 93-19.36	Bridge replacement	No analysis - emission neutral	N/A	N/A
38	4	Everhard Hills & Dales STA-CR98-0.00	4-Lane widening & Relocation	Capacity change & new facility	Y	Y
39		STA-CR101	Widen to 5 lanes	Capacity change	Y	Y
40		STA-CR112	Bridge elimination	No analysis - emission neutral	N/A	N/A
41	9	Mahoning Ave STA-SR 153-2.28	Widen to 3 lanes	Capacity change	Y	Y
43		STA-SR236-5.45	Intersection improvement	No analysis - emission neutral	N/A	N/A
44	8	Whipple Ave STA-SR297-1.12	Widen to 5-Lanes	Capacity change	Y	Y
45	21	STA-SR619-0.51	Widen to 4-Lanes	Capacity change	Y	Y
N/A		Rail Highway Crossing Safety	Railroad Crossings	No analysis - emission neutral	N/A	N/A
N/A		Highway Planning Research	Planning	No analysis - emission neutral	N/A	N/A
N/A		Individual Program Documents & Provide Guidance to LPAs	Documents	No analysis - emission neutral	N/A	N/A
N/A		Rideshare Program	Rideshare	No analysis - emission neutral	N/A	N/A
N/A		Bridge Inspection	Inspection	No analysis - emission neutral	N/A	N/A
N/A		Hardship and Protective Buying	R/W	No analysis - emission neutral	N/A	N/A
N/A		National Recreational trails	Trails	No analysis - emission neutral	N/A	N/A

Analysis Scenarios					2005	2010
TIP	Plan				Action	Action
MAP#	MAP#	NAME	TYPE OF PROJECT	ANALYSIS SCENARIO	(build)	(build)
N/A		Specialized services provide by statewide/districtwide consultantcontract	Specialized Services	No analysis - emission neutral	N/A	N/A
N/A		Ohio Department of Public Safety 402 Safety program	402 Program	No analysis - emission neutral	N/A	N/A
N/A		Transpotation Enhancements	Transpotation Enhancements	No analysis - emission neutral	N/A	N/A
N/A		Environmental Site Assessments	Site Assessments	No analysis - emission neutral	N/A	N/A
N/A		Undivided Highway Resurfacing	Resurfacing	No analysis - emission neutral	N/A	N/A
N/A		Other Basic Maintenance	Miscellaneous	No analysis - emission neutral	N/A	N/A
	1	Harrison Ave	2-Lane	No analysis - emission neutral	N/A	N/A
	2	Trump Ave	2-Lane/RR Bridges	No analysis - emission neutral	N/A	N/A
	5	Portage St STA-CR 228	Signals/Widening	Capacity change	Y	Y
42	6	Portage St	4-Lane	Capacity change	Y	Y
	7	Faircrest St	2-Lane	No analysis - emission neutral	N/A	N/A
	10	Whipple Ave	4-Lane	Capacity change	Y	Y
46	14	Fulton Rd STA-687-3.45	4-Lane	Capacity change	N	Y
	17a	Hills & Dales	4-Lane	Capacity change	N	Y
	17b	Jackson Ave	New 2-Lane	New facility	N	Y
	18	I2-13th St NW	4-Lane	Capacity change & new facility	N	Y
	19	Fulton Rd	4-Lane	Capacity change	N	Y
47	20	Fulton Rd STA-687-4.70	4-Lane	Capacity change	Y	Y
	22	I-77	Interchange	New facility	N	Y
	23	I-77	6-Lane Freeway	Capacity change	Y	Y
	24	Waywood Extension	New 2-Lane	New facility	N	Y
	25	US 30	4-Lane Freeway	New facility	N	Y
	26	SR 241 Wales	4-Lane	Capacity change	N	Y
	27	Perry Dr	4-Lane/RR Bridge	Capacity change	N	Y
	29	Dressler Rd	4-Lane	Capacity change	N	Y
	30	Richville	2-Lane	No analysis - emission neutral	N/A	N/A
	32	Applegrove St	4-Lane	Capacity change	N	Y

Plan and TIP Budget Test			
	EMISSIONS (tons/day)		VMT (thousands)
	HC	NOx	
1990 Baseline	31.65	16.24	7,820
1993 Inventory	19.80	15.20	
2005 Build	15.30	11.36	8,469
2005 Budget	15.34	12.00	
2010 Plan	13.65	10.67	8,400

The above table compares the 2005 Build and 2010 Build emissions to the 1993 emissions and the 2005 Maintenance Plan emission budget.

## 6. Fiscally Constrained

The SCATS Transportation Plan and FY 1997 - 2000 TIP is fiscally constrained consistent with US DOT Metropolitan Planning Regulations (23 CFR part 450)

## **Final Conformity Determination**

Based on the above descriptions, SCATS has determined conformity between the FY 1996-1999 TIP, the Transportation Plan and the Ohio State Implementation Plan.. As described in this document, the conformity determination analysis was conducted consistent with the *Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs and Projects Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act*, 40 CFR Parts 51 and 93, issued November 24, 1993