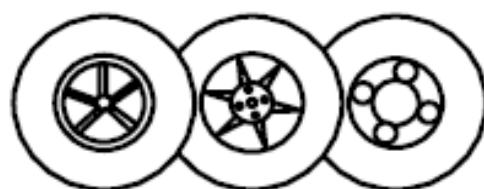


# ***FY 2011-2014 TRANSPORTATION IMPROVEMENT PROGRAM***

*Battle Creek Area Transportation Study*

601 Avenue A  
Springfield, MI 49037

Phone: 269-963-1158 Fax: 269-963-4951  
Email: [bcatsmpo@aol.com](mailto:bcatsmpo@aol.com)



## **BCATS**

*June 2010*

## **ACKNOWLEDGMENTS**

*This document partially fulfills work item 2.0601 of BCATS' annual Unified Work Program (UWP) for FY 2010 & UWP work item 2.0501 for FY 2011.*

*The preparation of this report has been financed , in part, through grants from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), U.S. Department of Transportation, under the Metropolitan Planning Program, Section 104(f) of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation. Additional financing was provided by the Cities of Battle Creek and Springfield, and the Calhoun County Road Commission. This document was prepared by Andrew Tilma, BCATS' Principal Planner, under the supervision and with the assistance of Patricia Karr, BCATS' Executive Director.*

***BCATS' "FY 2011-2014 Transportation Improvement Program" was approved by the Battle Creek Area Transportation Study Policy Committee on June 23, 2010 (Resolution #10-28). The draft minutes of the June 23<sup>rd</sup> Policy Committee meeting, including discussion of the TIP and the specific resolution, are included in the Appendix.***

**BATTLE CREEK AREA TRANSPORTATION STUDY  
601 Avenue A - Springfield, MI 49037  
(269) 963-1158 - fax (269) 963-4951  
e-mail: [bcatsmpo@aol.com](mailto:bcatsmpo@aol.com)**

***FHWA & FTA jointly approved the FY11-14 Statewide Transportation Improvement Program (STIP), including all of Michigan's urbanized area Transportation Improvement Programs (TIPs) by reference, on October 27, 2010.***

*This document printed December 7, 2010.*

# BATTLE CREEK AREA TRANSPORTATION STUDY FY 2011-2014 TRANSPORTATION IMPROVEMENT PROGRAM

---

## *Table of Contents*

Section 1	<b>INTRODUCTION</b> .....	<b>1</b>
Section 2	<b>FINANCIAL CONSTRAINT</b> .....	<b>5</b>
Section 3	<b>PUBLIC PARTICIPATION</b> .....	<b>13</b>
Section 4	<b>CONSULTATION</b> .....	<b>19</b>
Section 5	<b>ENVIRONMENTAL JUSTICE</b> .....	<b>21</b>
Section 6	<b>AIR QUALITY CONFORMITY</b> .....	<b>29</b>
Section 7	<b>PROJECT LIST</b> .....	<b>39</b>
Section 8	<b>IMPLEMENTATION</b> .....	<b>49</b>
	<b>APPENDIX</b> .....	<b>53</b>
	Draft minutes of June 23, 2010 BCATS Policy Committee meeting	
	Air Quality Conformity Summary Tables, Graph, & Resolution	
	TIP Approval Resolution	
	Certification Resolution	
	Environmental Justice Analysis for Battle Creek Transit (August/2007)	
	Glossary	





## SECTION 1 - INTRODUCTION

This document represents the Transportation Improvement Program for the Battle Creek Area Transportation Study (BCATS) for Fiscal Years (FYs) 2011-2014 (October 1, 2010 through September 30, 2014) and has been prepared in accordance with Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) regulations.<sup>1</sup> These joint regulations establish the Transportation Improvement Program (TIP) as an integral component of the overall transportation planning process.

Recognizing that many transportation actions and their impacts are by nature regional in scope, the transportation planning process is aimed at creating a forum in which local, State, and Federal agencies responsible for developing transportation improvements can act in a coordinated manner. This regional, comprehensive, and intermodal approach facilitates the orderly development of transportation facilities and services in urban areas.

According to joint FHWA and FTA regulations, the TIP is "a prioritized listing/program of transportation projects covering a period of four years that is developed and formally adopted by a metropolitan planning organization (MPO) as part of the metropolitan transportation planning process, consistent with the metropolitan transportation plan, and required for projects to be eligible for funding under Title 23 U.S.C. and Title 49 U.S.C. Chapter 53." The major purpose of the TIP is to identify and prioritize Federal-Aid projects and programs in local urbanized areas. An equally important objective of the TIP is to ensure that scheduled transportation improvements are consistent with current and projected financial resources.

A Transportation Improvement Program developed in consideration of these purposes provides for the efficient use of available financial resources in addressing the area's transportation needs. This orderly and efficient programming of prioritized transportation improvements is the primary reason for TIP development.

### PROGRAM DEVELOPMENT PROCESS

According to the Federal regulations, Federal-aid projects identified in the TIP must be consistent with the long-range transportation planning process (including any management systems in place to support the process - for pavement, bridges, safety, congestion, public transportation, and intermodal transportation) and must be developed by the local MPO (in this case BCATS), the State, and any affected public transit operator(s).

This *FY 2011-2014 Transportation Improvement Program* has been developed in consideration of the *2030 Transportation Plan* for the Battle Creek metropolitan area, and is also related to the *FY 2008-2011 Transportation Improvement Program*<sup>2</sup>. The 4-R (reconstruction,

---

<sup>1</sup> U.S. Code of Federal Regulations (23 CFR 450)

<sup>2</sup> FY 2008-2011 Transportation Improvement Program, Battle Creek Area Transportation Study, November 2007, as amended.

rehabilitation, restoration, and resurfacing) needs of the State and local agencies have also been considered.

The development of the Transportation Improvement Program begins with the Michigan Department of Transportation (MDOT) and local road & transit agencies recommending to BCATS the projects and programs (from the Plan and 4-R needs) which they identify as best meeting the transportation needs of their respective systems. These recommendations are referred to the TIP Sub-Committee of the BCATS Technical Committee, which evaluates the projects and sets overall program strategies for the four year program. The TIP Sub-Committee includes representatives from the local road agencies, Battle Creek Transit, and MDOT, along with BCATS staff.

**Prioritization of Federal-Aid Projects** - A multi-jurisdictional effort which best illustrates the cooperative nature of the transportation planning process is the selection and prioritization of Federal-aid projects proposed to utilize Federal Surface Transportation Program - Urban funds, to be included in the TIP. Review of projects using other Federal-aid for transportation is also conducted within this process, although final authority for selection of projects using other Federal-aid generally rests with MDOT.

The initial selection of projects to include in the TIP is primarily the responsibility of the TIP Sub-Committee in consultation with BCATS staff. The merits of each project are examined, based on local needs, priorities, and importance within the areawide transportation system, and also on factors delineated in current federal transportation legislation. Due to the small amount of funding available for local discretion, BCATS does not have an extensive or involved project prioritization procedure.

The entire TIP project list (including the selected Federal-aid projects and recommendations established by the TIP Sub-Committee and staff) is forwarded to the Technical and Policy Committees for review before release of the preliminary list for public comment. Following an appropriate comment period, it is then the responsibility of the Policy Committee to grant final approval to the project list, which is included in the TIP document. Amendments or changes in the TIP may occur at any time during this review process. The process for amending the TIP after final approval is discussed later in this document.

## **SPECIAL TRANSPORTATION ISSUES**

The identification of special transportation issues is an important phase of the project programming process. The issues and needs identified in this section, and others identified in BCATS' annual Unified Work Program are of critical importance in addressing transportation issues in the area.

**Transportation for the Elderly and Persons with Disabilities** - Battle Creek Transit (BCT) and BCATS are aware of the need for specialized transportation facilities and services for the elderly and persons with disabilities, and welcome opportunities to work with organizations and non-

profits in meeting that need. BCATS staff participates on BCT's "Local Coordinating Committee" along with other representatives/agencies, to periodically discuss public transit operations in the metropolitan area.

In addition to accessible line-haul service into areas with high populations of elderly citizens and persons with disabilities, BCT operates a lift-equipped, demand-response door-to-door service, available to the general able-bodied public but targeted for the elderly and the disabled, particularly those confined to wheelchairs, who are unable to utilize conventional public transportation or other transportation services.

BCT's commitment to providing essential transportation for the elderly and persons with disabilities will continue, with changes in operational procedures and policies as necessary to ensure continued compliance with the Americans with Disabilities Act of 1990 (ADA, PL 101-336). BCT is currently in full compliance with FTA "Special Efforts" and ADA requirements in regard to its level of door-to-door service accessible to persons with disabilities. Moreover, any buses and vans purchased by BCT are wheelchair accessible in accordance with Michigan Public Act 140.

BCT, BCATS, and other area agencies involved in transportation planning or service have examined ways of improving transportation through more effective coordination. BCT originally completed the required *Coordination Public Transit Human Service Agency Plan* in 2007. The Plan was updated in February, 2009. BCT currently has agreements with the Battle Creek Public Schools and the Calhoun County Mental Health Department for BCT to provide transportation services to area students and mental health clients, through both the "Tele-Transit" and fixed-route services. In addition, BCT serves as a pass-through agency for state funds for several local non-profit transit providers.



## SECTION 2 - FINANCIAL CONSTRAINT

An integral part of any planning effort is the analysis of available financial resources. The translation of any plan into programs and projects is dependent upon the availability of funds to implement that plan. This section presents the anticipated transportation funding picture for the Battle Creek metropolitan area, highlighting the major Federal transportation aid programs expected to be available to support projects under the "Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users" (SAFETEA-LU), the current Federal transportation funding legislation enacted in 2005, and currently operating under continuing extensions. It is expected that successor legislation will go into effect sometime during the life of this document.

The primary Federal transportation funding program administered through the BCATS process is the Surface Transportation Program-Urban Local. In Michigan, these funds are distributed by a formula among Census urbanized areas with over 50,000 people by the most recent available decennial Census urbanized area figures (currently from 2000). It is the responsibility of the MPOs in those urbanized areas to prioritize and select which transportation improvements will receive the Surface Transportation Program-Urban funds (see Section 1). The specific funding category for BCATS is "STP Urban Areas < 200,000 Population", abbreviated "**STUL**" in the new uniform TIP format previously adopted by MPOs statewide and MDOT. Under the current federal legislation, **BCATS' annual STUL allocation is expected to average \$1,407,975** per year over the four years of this TIP. The revenue figures were provided by MDOT and use a growth rate of 3.2% per year over the life of the TIP.

There are additional funding sources available for local consideration of projects. Local safety funds are awarded at the state level for projects up to \$400,000 in federal funds. A local share of 20% is required for this program. The selection of projects is done on a yearly basis. The program currently provides up to 86% of its funding for projects with scopes that directly correct areas with high levels of fatal and incapacitating injury crashes. Very limited funds are available for other categories of safety projects.

Another category of Federal transportation funds is for "Transportation Enhancement Activities". Four broad groups of activities are eligible for these funds: 1) Non-motorized Facilities - bicycle and pedestrian facilities, and preservation of abandoned railway corridors; 2) Transportation Aesthetics - acquisition of scenic easements and scenic sites, scenic highway programs, landscaping and beautification, and control and removal of outdoor advertising; 3) Mitigation of Water Pollution Due to Highway Runoff - limited to facilities and programs that are beyond current requirements and procedures for mitigation; and 4) Historic Preservation - acquisition of historic sites, historic highway programs, historic preservation, rehabilitation of historic structures, and archaeological planning and research. Project applicants are required to provide at least a 20% "local" match, although increasing the "local" share up to 50% or more of the eligible participating project costs, or committing to including additional work as nonparticipating, warrants a high priority in selection. There is no limit to the number of Enhancement applications that can be submitted from a given area, although MDOT does

consider "geographic equity" as a criterion in selecting projects. BCATS staff and Technical & Policy Committee members have the responsibility to review each proposed Enhancement project, and provide an endorsement for each project with a letter of support (and willingness to amend the project(s) into the current TIP if selected for funding) from BCATS to include with the application.

In June 2004, the counties of Kalamazoo, Calhoun, and Van Buren were determined to be in "Basic Non-Attainment" (as the "Kalamazoo-Battle Creek-MI Non-Attainment Area") for the eight hour ozone standard established under the 1990 Federal *Clean Air Act Amendments (CAAA)*. In May 2007, the area was re-designated to an "Attainment/Maintenance" status as measurements showed improved air quality meeting the CAAA standards. Road and transit agencies in either "Non-Attainment" or "Attainment/Maintenance" areas are eligible to receive Federal "**Congestion Mitigation Air Quality (CMAQ)**" funds. Any project proposed to use CMAQ funds must demonstrate that traffic congestion and mobile emissions will be reduced, consequently improving air quality, by its implementation. Common CMAQ projects include new public transit buses, non-motorized trails, adding turn lanes & other intersection improvements, traffic signal modernization & interconnection, and public education campaigns. Application, review, and selection of CMAQ projects in Calhoun County is coordinated through BCATS. CMAQ funds designated to Calhoun County are split 50/50 between MDOT and the "local" transportation agencies (village/city/county road agencies, & public transit operators). Almost \$1.0 million annually in Federal CMAQ funds has been provided to Calhoun County transportation agencies (including MDOT) for programming in the past. It is projected that a similar level of CMAQ funding will be available over the years of this FY 2011- 2014 TIP, although uncertainty of the CMAQ program precludes programming of CMAQ projects beyond those that have been deemed "eligible" by FHWA (based on submitted applications). While BCATS' *2030 Transportation Plan* makes some assumptions about the future of the CMAQ program, there are no guarantees relative to CMAQ revenue. Additional discussion of air quality and other related requirements is presented later in this document under Section 6 - Air Quality Conformity.

Beyond the STUL, "local safety", Enhancement, and CMAQ funding categories, the MPOs have limited direct responsibility in determining which projects are to receive Federal transportation aid. The majority of other Federal transportation funding, in the categories of Interstate Maintenance, National Highway System (NHS), and non-STUL Surface Transportation Program (STP), is generally allocated by MDOT, at its discretion, towards improvements on its State highway system, the "interstates" and "trunklines".

The designation of the NHS and accompanying Federal funding category does offer an opportunity for those routes on the NHS to secure additional Federal transportation aid. In the BCATS area, **I-94**, **I-194**, **I-94BL**, **M-96 (Helmer Rd)** [from I-94BL (Dickman) south to Columbia Ave], and **M-96 (Columbia Ave)** [from M-96 (Helmer Rd) east to I-94BL (E Michigan Ave)] are officially part of the NHS.

Federal funds for bridge rehabilitation and replacement are assigned to "critical bridge" projects across Michigan by a statewide Bridge Committee. Candidate bridges are first identified by the responsible road agency, then evaluated, prioritized, and selected for funding by the Bridge Committee of state, county, and municipal transportation officials. Currently, one bridge in the BCATS area has been identified for this category of funding. The bridge to be funded is the 20<sup>th</sup> Street Bridge over the Kalamazoo River, under the jurisdiction of the City of Battle Creek.

In the BCATS area, Battle Creek Transit (BCT), a department of the City of Battle Creek, is the primary, established transit operator designated to receive Federal transit funds. The two main funding programs sponsored by the Federal Transit Administration (FTA) are Section 5307 capital and operating funds (distributed by formula to public transit agencies), and Section 5309 "discretionary" capital funds (distributed through an MDOT application and evaluation process in cooperation with FTA). Any FTA funding to be utilized in the BCATS area must "pass-through" BCT as the designated Federal recipient. Typically, funds from the State Comprehensive Transportation Fund (CTF) are used for the local match for FTA Section 5307 & Section 5309 capital expenses, as well as providing nearly one-half of BCT's operating costs. Additional operating funds are supplied by a subsidy from the City of Battle Creek General Fund and from farebox & advertising revenue.

In 2009, an additional category of federal funds was added to the list of available funding options. The American Recovery and Reconstruction Act was passed in February, 2009, providing a lump sum to Michigan for allocation under the same formulas as the SAFETEA-LU funding. This program provided approximately \$2.1 million to BCATS which was programmed in FY 2009 and FY 2010. All of the projects included under this program will be obligated before the first year of the new TIP. Additional legislation proposed in early calendar year 2010 may provide additional "stimulus" funds for transportation that will need to be addressed in the FY 2011-2014 TIP. However, it is equally possible that there will be no additional funding of this nature. It is all dependent upon the actions of Congress.

## **DEVELOPMENT OF REVENUES & COSTS**

BCATS utilized a "year of expenditure dollars" methodology for representing revenues and costs in its *2030 Transportation Plan*. This methodology is continued in this *FY 2011-2014 Transportation Improvement Program (TIP)*. Information from the Plan is used within the TIP, when practical to do so. Past practice, historic data, already committed funding, and cooperatively agreed-to factors with MDOT were used in developing the methodology for this process.

### **Revenues**

It has been prescribed at the state level that all MPO's are to utilize an inflation factor of 3.2% per year for federal funding categories in developing the new TIPs. Given the fact that there is still no new, longer-term, federal transportation bill, this is the best estimate available at this time. BCATS has modified this directive relative to selected funding categories where it is

deemed appropriate to do so - such as the state administered “local safety” category, which utilizes federal funding. This category is expected to remain static over the course of the four years of the TIP based on the way that the program has been administered historically. Projects are tailored to the amount of funding available in this category. Congestion Mitigation Air Quality (CMAQ) funding is being handled separately, as noted earlier in this section.

BCATS has utilized Act 51 data to develop the necessary information to assess future non-federal revenues in several general categories for the local road agencies. The methodology for this remains unchanged from the discussion in Chapter XV - Financial Analysis of BCATS’ *2030 Transportation Plan*. BCATS made assumptions about inflating these figures based on conservative estimates due to the static and declining financial situation in Michigan.

MDOT made its revenue figures available by general categories for the *2030 Transportation Plan* (“preserve” and “improve/expand/new roads”) which makes it impossible to use these figures for any specific funding categories reflected in the *FY 2011-2014 TIP*.

MDOT also provided lump sum figures for the Plan for transit to cover federal and state revenues estimated for operations, maintenance, and capital purchases. These figures also do not lend themselves to any breakdown by specific federal funding source for the purposes of the TIP. BCATS estimated local revenues (including general fund contributions, farebox and other) and kept that figure constant over the period of the long range plan.

## **Costs**

For the purposes of the TIP, the local road agencies provided their estimated project costs already in “year of expenditure dollars” based on their own estimating procedures and process. They describe their processes as being based on trend lines for various project category types. Each year they adjust the linear cost per foot for each type of treatment. They inflate different types of projects at different rates based on their experience. MDOT provided its cost estimates based in its agency policy of inflating near-term construction projects at 4% per year.

There are no “Advance Construct” or “Advance Construct Conversion” projects in the initial FY 2011-2014 TIP. Therefore the issues affecting costs determination for these projects was not an issue in this TIP.

Transit costs were increased at 3% per year for operating and 3% per year for transit capital. The percent increase for operating costs was based on those costs being more related to labor costs. Therefore, an average CPI factor was utilized. The capital costs were increased based on historic experience.

Specifics about the historic background for this cost development to “year of expenditure dollars” can be found in Chapter XV - Financial Analysis of the 2030 Transportation Plan document.



## OPERATIONS & MAINTENANCE

Additional money is required to maintain and operate the roadway transportation systems. In the BCATS process, every road agency is expected to ensure that sufficient funds are available to first maintain and operate their respective systems before implementing a major capital improvement within the BCATS TIP. A review of MDOT's and the local road agencies' maintenance and operating expenses (from Act 51 reports) was initially undertaken as part of BCATS' *2030 Transportation Plan*. That review demonstrated the availability of funds to both continue maintenance and operating activities, and to complete other local projects in addition to matching federal-aid for selected projects (including TIP projects). That information was reviewed and updated as input to this new four-year TIP.

Table 2-1 on the next page summarizes (for the 4-year time period of the TIP) the consideration of adequacy of revenues to meet all obligations for the transportation system. The data for the local agencies is derived from Act 51 reports. It is presented in a manner consistent with the process previously used for the *2030 Transportation Plan* and the FY 2008-2011 TIP, for both operations and maintenance costs and revenues. The figures for the "Non-Federal Revenue" category for MDOT were developed by MDOT staff specifically for the BCATS area for use with this 2011-2014 TIP. Table 2-1, provides a general picture of the adequacy of revenues to meet the needs of all aspects of the transportation system.

Based on Table 2-1, there are adequate resources to assure that programmed capital projects do not negatively impact the preservation of the existing transportation system.

## TIP FINANCIAL PLAN TABLES

BCATS' *FY 2011-2014 Transportation Improvement Program* project listing provides a summary of how transportation revenues in the program will be invested over a four year period by the state and local agencies which have legal responsibility to build, operate, and maintain the public highway, road, street, and transit systems. Federally-funded expenditures are required by Federal law to be consistent with BCATS' *2030 Transportation Plan*, adopted in November, 2007, and to be constrained to address only projects for which it is anticipated that there will be enough revenue to complete.

The total investment of State, local, and Federal funds in the Battle Creek metropolitan area's transportation system for the four-year period as outlined in this TIP is just over \$26.9 million, for roadway capital improvement projects and for transit, both capital projects and operating programs.

Table 2-2 on the following pages depicts all of the necessary information in the prescribed standardized table format to determine that BCATS' *FY 2011-2014 TIP* is financially constrained.

**TABLE 2-1**  
**Financial Consideration of Operations & Maintenance of**  
**the Interstate, Trunkline, and Major Street/Primary Road System in the BCATS Area**

<b>Operations and Maintenance Cost (O+M) Categories</b>	<b>Local Agencies (2011-2014) (\$ in 000's) (costs inflated 3%/yr from 2009 \$)</b>	<b>MDOT (2011-2014) (\$ in 000's) (costs inflated 3%/yr from 2010 \$)</b>	<b>TOTAL (\$ in 000's)</b>
Routine Maintenance	\$ 17,703	Includes MDOT garage and contracts with Battle Creek, Springfield, and CCRC (20%) (all for the BCATS area only)	-
Winter Maintenance	\$ 8,698		-
Traffic Services	\$ 5,826		-
Administration, Engineering and Records	\$ 4,426		-
<b>TOTAL</b>	<b>\$ 36,653</b>	<b>\$ 4,461</b>	<b>\$ 41,114</b>
<b>Total Non-Federal Revenue Estimated for Both Capital Projects and O+M</b>	<b>Local Agencies (2011-2014) (\$ in 000's) (revenues inflated at various rates, see list at left)</b>	<b>MDOT (2011-2014) (\$ in 000's) (total revenue estimate) (see below)</b>	<b>TOTAL (\$ in 000's)</b>
MTF (+2%/yr from 2009)	\$ 42,045	Includes state MTF, bonds, and other revenues used to support the capital, operations and maintenance program (BCATS area only) (2010 base estimate inflated at 3%/yr by MDOT)	-
EDF (+0.0%/yr from 2009)	\$ 1,179		-
Local (+0.0%/yr from 2009)	\$ 213		-
Oper Trans (+2%/yr from 2009) + Other	\$ 4,562*		-
<b>TOTAL</b>	<b>\$ 47,999</b>	<b>\$ 4,950</b>	<b>\$ 52,949</b>
<b>Summary</b>	<b>Local Agencies</b>	<b>MDOT</b>	<b>TOTAL</b>
Total non-federal funding dedicated to TIP capital projects (2011-2014)	\$ 1,387	\$ 235	\$ 1,622
<b>Balance available for O+M and other non-TIP level engineering/construction + other projects over the life of the TIP</b>	<b>\$ 46,612</b>	<b>\$ 4,715</b>	<b>\$ 51,327</b>
* some local funding is included in the operating transfers entry			

*Battle Creek Area Transportation Study (BCATS)  
FY 2011-2014 Transportation Improvement Program (TIP)  
Demonstration of Financial Constraint*

TABLE 2-2 (page 1 of 2)

06/23/10	2011				2012			
Highway Program	Estimated Federal Revenue	Estimated Non-Federal Revenue	Estimated Total Revenue	Total Proposed Commitments	Estimated Federal Revenue	Estimated Non-Federal Revenue	Estimated Total Revenue	Total Proposed Commitments
MDOT AC & M Program		\$0	\$0	\$0		\$0	\$0	\$0
MDOT FA Program	\$1,956,845	\$538,060	\$2,494,905	\$2,494,905	\$841,342	\$93,482	\$934,824	\$934,824
<b>Sub-Total MDOT</b>	<b>\$1,956,845</b>	<b>\$538,060</b>	<b>\$2,494,905</b>	<b>\$2,494,905</b>	<b>\$841,342</b>	<b>\$93,482</b>	<b>\$934,824</b>	<b>\$934,824</b>
Local STP	\$1,342,166	\$335,470	\$1,677,636	\$1,677,350	\$1,385,115	\$346,250	\$1,731,365	\$1,731,250
Local Bridge	\$444,400	\$111,100	\$555,500	\$555,500	\$0	\$0	\$0	\$0
Local CMAQ	\$498,316	\$124,570	\$622,886	\$375,000	\$479,952	\$89,460	\$569,412	\$0
Local Safety	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Local Equity Bonus (TEDF)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Local Other FHWA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Local AC Starts		\$0	\$0	\$0		\$0	\$0	\$0
Local Non-Federal		\$380,000	\$380,000	\$380,000		\$386,080	\$386,080	\$386,080
<b>Sub-Total Local</b>	<b>\$2,284,882</b>	<b>\$951,140</b>	<b>\$3,236,022</b>	<b>\$2,987,850</b>	<b>\$1,865,067</b>	<b>\$821,790</b>	<b>\$2,686,857</b>	<b>\$2,117,330</b>
<b>Total Highway</b>	<b>\$4,241,727</b>	<b>\$1,489,200</b>	<b>\$5,730,927</b>	<b>\$5,482,755</b>	<b>\$2,706,409</b>	<b>\$915,272</b>	<b>\$3,621,681</b>	<b>\$3,052,154</b>
<b>Transit Fund Source</b>	<b>Estimated Federal Revenue</b>	<b>Estimated Non-Federal Revenue</b>	<b>Estimated Total Revenue</b>	<b>Total Proposed Commitments</b>	<b>Estimated Federal Revenue</b>	<b>Estimated Non-Federal Revenue</b>	<b>Estimated Total Revenue</b>	<b>Total Proposed Commitments</b>
CTF - Comprehensive Transit Fund	\$0	\$92,624	\$92,624	\$92,624	\$0	\$93,550	\$93,550	\$93,550
Section 3038 - Over the Road Bus Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 3045 - National Fuel Cell Technology Development Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5303 - Metropolitan Transportation Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5304 - Statewide Transportation Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5305 - Metropolitan and Statewide Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5307 - UZA Formula	\$964,042	\$2,168,368	\$3,132,411	\$3,132,411	\$979,470	\$2,203,063	\$3,182,533	\$3,182,533
Section 5308 - Clean Fuels Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5309 - Capital Bus and Capital New Starts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5310 - Elderly & Disabled	\$175,272	\$43,818	\$219,090	\$219,090	\$0	\$0	\$0	\$0
Section 5311 - Non-UZA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5313 - Transit Cooperative Research Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5314 - National Research and Technology Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5316 - Job Access/Reverse Commute	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5317 - New Freedom Initiative	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5320 - Alternative Transportation in Parks and Public Lands	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5339 - Alternative Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5505 - University Transportation Centers Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ARRA Section 5307 - UZA Formula	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ARRA Section 5311 - Non-UZA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ARRA - Transit Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Transit</b>	<b>\$1,139,314</b>	<b>\$2,304,810</b>	<b>\$3,444,125</b>	<b>\$3,444,125</b>	<b>\$979,470</b>	<b>\$2,296,613</b>	<b>\$3,276,083</b>	<b>\$3,276,083</b>
<b>Grand Total</b>	<b>\$5,381,042</b>	<b>\$3,794,010</b>	<b>\$9,175,052</b>	<b>\$8,926,880</b>	<b>\$3,685,879</b>	<b>\$3,211,885</b>	<b>\$6,897,764</b>	<b>\$6,328,237</b>

*Battle Creek Area Transportation Study (BCATS)  
FY 2011-2014 Transportation Improvement Program (TIP)  
Demonstration of Financial Constraint*

**TABLE 2-2 (page 2 of 2)**

06/23/10	2013				FY 2014			
Highway Program	Estimated Federal Revenue	Estimated Non-Federal Revenue	Estimated Total Revenue	Total Proposed Commitments	Estimated Federal Revenue	Estimated Non-Federal Revenue	Estimated Total Revenue	Total Proposed Commitments
MDOT AC & M Program		\$0	\$0	\$0		\$0	\$0	\$0
MDOT FA Program	\$34,786	\$7,714	\$42,500	\$42,500	\$0	\$0	\$0	\$0
<b>Sub-Total MDOT</b>	<b>\$34,786</b>	<b>\$7,714</b>	<b>\$42,500</b>	<b>\$42,500</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Local STP	\$1,429,439	\$357,338	\$1,786,777	\$1,786,688	\$1,475,181	\$368,750	\$1,843,931	\$1,843,750
Local Bridge	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Local CMAQ	\$498,673	\$124,648	\$623,321	\$0	\$517,928	\$128,496	\$646,424	\$0
Local Safety	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Local Equity Bonus (TEDF)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Local Other FHWA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Local AC Starts		\$0	\$0	\$0		\$0	\$0	\$0
Local Non-Federal		\$392,257	\$392,257	\$392,257		\$398,533	\$398,533	\$398,533
<b>Sub-Total Local</b>	<b>\$1,928,112</b>	<b>\$874,243</b>	<b>\$2,802,355</b>	<b>\$2,178,945</b>	<b>\$1,993,109</b>	<b>\$895,779</b>	<b>\$2,888,888</b>	<b>\$2,242,283</b>
<b>Total Highway</b>	<b>\$1,962,898</b>	<b>\$881,957</b>	<b>\$2,844,855</b>	<b>\$2,221,445</b>	<b>\$1,993,109</b>	<b>\$895,779</b>	<b>\$2,888,888</b>	<b>\$2,242,283</b>
<b>Transit Fund Source</b>	<b>Estimated Federal Revenue</b>	<b>Estimated Non-Federal Revenue</b>	<b>Estimated Total Revenue</b>	<b>Total Proposed Commitments</b>	<b>Estimated Federal Revenue</b>	<b>Estimated Non-Federal Revenue</b>	<b>Estimated Total Revenue</b>	<b>Total Proposed Commitments</b>
CTF - Comprehensive Transit Fund	\$0	\$94,486	\$94,486	\$94,486	\$0	\$95,431	\$95,431	\$95,431
Section 3038 - Over the Road Bus Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 3045 - National Fuel Cell Technology Development Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5303 - Metropolitan Transportation Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5304 - Statewide Transportation Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5305 - Metropolitan and Statewide Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5307 - UZA Formula	\$995,137	\$2,238,311	\$3,233,447	\$3,233,447	\$1,011,061	\$2,274,124	\$3,285,185	\$3,285,185
Section 5308 - Clean Fuels Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5309 - Capital Bus and Capital New Starts	\$400,000	\$100,000	\$500,000	\$500,000	\$0	\$0	\$0	\$0
Section 5310 - Elderly & Disabled	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5311 - Non-UZA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5313 - Transit Cooperative Research Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5314 - National Research and Technology Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5316 - Job Access/Reverse Commute	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5317 - New Freedom Initiative	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5320 - Alternative Transportation in Parks and Public Lands	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5339 - Alternative Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5505 - University Transportation Centers Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ARRA Section 5307 - UZA Formula	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ARRA Section 5311 - Non-UZA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ARRA - Transit Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Transit</b>	<b>\$1,395,137</b>	<b>\$2,432,796</b>	<b>\$3,827,933</b>	<b>\$3,827,933</b>	<b>\$1,011,061</b>	<b>\$2,369,555</b>	<b>\$3,380,616</b>	<b>\$3,380,616</b>
<b>Grand Total</b>	<b>\$3,358,035</b>	<b>\$3,314,754</b>	<b>\$6,672,788</b>	<b>\$6,049,378</b>	<b>\$3,004,170</b>	<b>\$3,265,334</b>	<b>\$6,269,504</b>	<b>\$5,622,899</b>

## SECTION 3 - PUBLIC PARTICIPATION

Throughout the BCATS' TIP development process, consideration is given to public participation so that citizens, affected public agencies, transportation agency employees, private providers of transportation, and other interested parties have an opportunity to comment on the proposed TIP. In December, 2006, BCATS adopted a Transportation Participation Plan. The Participation Plan outlines who will be notified of BCATS activities. It also provides an outline for participation activity within the context of the development of the TIP, the Long Range Plan, and for planning and corridor studies.

The development of the 2011-2014 TIP was the subject of two special newsletter/flyer sheets which were distributed to an extensive listing of persons, agencies, and groups, as well as additional agencies identified with the "Consultation" process, see Section 4. These sheets were published in January, 2010 and April, 2010. A complete listing of persons, agencies, and groups contacted is listed at the end of this section. Copies of the information sheets follow this section. BCATS also made copies available to the local units of government and the local libraries for distribution. The January publication included a time line for development and adoption of the TIP.

In May, 2010, BCATS published a formal notice (reprinted below) of "request for comments" on the proposed new TIP in the general circulation daily newspaper, the *Battle Creek Enquirer*. The public notice listed the dates of the BCATS' Committee meetings in June, 2010 as opportunities to comment on the FY 2011-2014 TIP.

Air quality conformity computer modeling was required to be discussed in the FY 2011-2014 TIP, due to a project in the Kalamazoo area, but not due to any model triggering projects within the four years of project programming in the BCATS area. Therefore, BCATS did not pursue any public notice regarding air quality.

and not realizing that oil companies did not have "their act together when it came to worst case scenarios."

**Battle Creek ENQUIRER**  
**CLASSIFIEDS**  
*More Results. Every Day.*

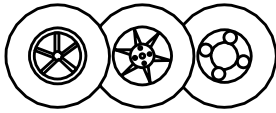
**REQUEST FOR COMMENTS ON TRANSPORTATION PROJECTS**

THE BATTLE CREEK AREA TRANSPORTATION STUDY (BCATS) HEREBY GIVES NOTICE of opportunity for public involvement in the final development of its Transportation Improvement Program (TIP) for fiscal years (FYs) 2011-2014 (10/1/10-9/30/14). Projects to be implemented with Federal transportation funds in the BCATS metropolitan area (cities of Battle Creek & Springfield, and townships of Bedford, Pennfield, Emmett, Newton, & Leroy) must be identified in the TIP. The draft FY 2011-2014 TIP currently includes fifty projects representing nearly \$25 million total, including just over \$12 million in Federal transportation funds to be expended in the BCATS area over the next four years. The draft FY 2011-2014 TIP document will be available for review at the BCATS office beginning June 7, 2010; electronic "pdf" copies can be provided upon request after that date. Discussion and action regarding the TIP will be conducted at the regular meetings of BCATS' Technical Committee on Wednesday, June 9, 2010, and Policy Committee on Wednesday, June 23, 2010. Both meetings begin at 1:30 pm in the Council Chambers of Springfield City Hall, 601 Avenue A, Springfield. Public comment on the proposed TIP is encouraged before or at those meetings; BCATS' regular meetings are open to the public. Comments will be accepted for 30 days following publication of this notice. Direct questions and/or comments to: BCATS, 601 Avenue A, Springfield, MI 49037; ph 269/963-1158, fax 269/963-4951, e-mail [bcatsmpo@aol.com](mailto:bcatsmpo@aol.com).

0100013152

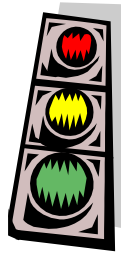


The Newsletter of  
the Battle Creek  
Area Transportation  
Study



**BCATS**

January, 2010



# "The Signal"

## 2011-2014 TIP

601 Avenue A, Springfield, MI 49037 (269) 963-1158  
fax (269) 963-4951 e-mail: bcatsmpo@aol.com

Remember: All BCATS Committee meetings are open to the public. Contact the staff office for details.

### *BCATS Develops New FY 2011-2014 TIP*

The Battle Creek Area Transportation Study (BCATS) has started the process of developing a new four-year document for the programming and implementation of transportation improvements in the greater Battle Creek area. The document is called the **Transportation Improvement Program**, or **TIP** for short. In order for any of the state or local agencies, including transit, to receive Federal funding for a transportation project, the project must be included in this TIP document.

The projects considered for the document are first drawn from existing long range transportation plans prepared by BCATS, which list proposed improvements to the major transportation infrastructure of the area for the next twenty to twenty-five years. In addition, general road, safety, maintenance, transit and non-motorized projects are all considered. Projects from all of the local road agencies, transit, and the Michigan Department of Transportation are included in the TIP.

Representatives of all of the implementing agencies for potential projects meet to discuss possible projects and their relative priority to each other. Opportunities for collaborating, combining, or complementing each other's projects are explored at this point in the process. The funding for future improvements is very limited, so coordination is important. Some of the road projects currently being **proposed** in the BCATS area for the 2011-2014 TIP are listed below (note - transit operating and capital funds will also be included in each year's program, as well as these road projects).

This listing is subject to change as development of the TIP continues.

- 2011 - Beckley/B Drive N**, from M-66 eastward to 6 1/2 Mile Road (resurface)  
**Capital Ave. SW**, from Fairfield south to Weeks & from Cascade south to Rebecca (resurface)  
**20th St.**, from Columbia Ave. north to Goguac Street (resurface)  
**Helmer Rd.**, from Beckley Rd. north to Gethings (resurface)  
**North Ave.**, from Capital Ave. NE north to Roosevelt Ave. (resurface)
- 2012 - B Drive N.**, from 8 1/2 Mile Rd. east to 11 Mile Rd. (resurface)  
**Capital Ave. SW**, from Weeks south to Cascade (resurface)  
**20th St. at Dickman Rd.** intersection (reconfigure crossover in SE quadrant)  
**Jackson St./Stringham Rd.**, from Bedford Rd. west & north to Michigan Ave. (resurface)  
**I-194 Bridges over Dickman Rd./Fountain/GTWRR**, (deep overlay and upgrades)  
**M-66 (Capital Ave. NE) Bridge over Wanondaga Creek** (replacement)
- 2013 - B Drive S.**, from 8 1/2 Mile Road east to 12 Mile Rd. (resurface)  
**Beckley Rd.**, from Minges Rd. east to M-66 ( resurface)  
**Goguac St.**, from Helmer Rd. east to Carl Ave. (resurface)  
**Upton Ave.** from Ave. A east to City Limit & **Avenue A**, from 20th to Upton (resurface)  
**I-194 at Dickman Road** interchange (replace tower lighting)
- 2014 - Raymond Rd.** (limits to be determined) (resurface)  
**East Ave.**, from Emmett St. north to Roosevelt Ave. (resurface)  
**Territorial Rd.**, from Helmer Rd. east to 20th St. & **Evergreen Rd.**, from Avenue A to Harmonia Rd. (resurface)  
**I-94BL**, from I-94 to W. Columbia Ave. (overlay and minor widening)



**Public input** is welcomed at each phase in the development of the new TIP document. Please contact the BCATS office for further details, or speak directly to the responsible road agency personnel in your area.

The purpose of this newsletter is to provide the public with information regarding the activities of the Battle Creek Area Transportation Study (BCATS). The public is encouraged to contact BCATS at the above address or telephone (269) 963-1158, fax (269) 963-4951 or e-mail: bcatsmpo@aol.com concerning issues in *The Signal* or other transportation matters.



## Schedule for the Development of the 2011-2014 TIP

Nov.  
2009

The process for developing a new Transportation Improvement Program extends over many months. After preparing a preliminary project list for the four-year program, BCATS will request public comment on the proposed list. Look for this in the next couple of months.

The list of projects must also undergo an assessment related to air quality impacts. The group of projects selected for the TIP is not allowed to result in worse levels of ozone as a result of the projects being implemented. A technical computer modeling process, carried out by the Michigan Department of Transportation, determines if the projects pass the air quality requirement.

BCATS also reviews the project listings to see if there will be any disproportionate impacts on areas of the community which are designated as “environmental justice” areas. These are areas where there are higher than average percentages of persons who are considered low income or traditionally underserved, such as: some minority communities.

In June, 2010, it is expected that the BCATS Committees (the Technical and the Policy Committees) will formally act on adopting the new Transportation Improvement Program for 2011 to 2014. Comments are solicited throughout the process and there will be a final public hearing at the Policy Committee meeting for comments on the TIP before the final action of the Committee is taken.

June  
2010

Following action by the BCATS’ Committees, the new TIP is submitted to the Michigan Department of Transportation (MDOT) and the federal funding agencies for their review and approval. The FY 2011-2014 TIP is scheduled to be effective as of October 1, 2010.

## Maintaining the 2011-2014 TIP After It is Adopted

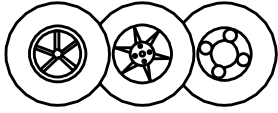
The process for maintaining the new Transportation Improvement Program is ongoing. The document is fully updated every three years but changes occur between updates. Certain categories of federal funding are awarded on an annual basis. In order for the funds to be spent, the projects selected for those funds need to be added to the existing TIP. This is done through an “amendment” process. The amendment process requires a re-evaluation of financial soundness (called fiscal constraint), a double check of environmental justice issues and sometimes a review of air quality impacts (depending upon the type of project). The amendment process requires similar levels of effort for public involvement as the original development of the TIP.

**Reminder: Public input** is welcomed at each phase in the development of the new TIP document. Please contact the BCATS office for further details.



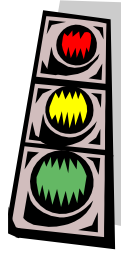


The Newsletter of  
the Battle Creek  
Area Transportation  
Study



**BCATS**

April, 2010



601 Avenue A, Springfield, MI 49037 (269) 963-1158  
fax (269) 963-4951 e-mail: bcatsmpo@aol.com

# "The Signal" 2011-2014 TIP

Remember: All BCATS Committee meetings are open to the public. Contact the staff office for details.

## *BCATS to Finalize New FY 2011-2014 TIP*

The Battle Creek Area Transportation Study (BCATS) continues to work through the process of developing a new four-year document for the programming and implementation of transportation improvements in the greater Battle Creek area. The document, called the **Transportation Improvement Program**, or **TIP** for short, is to be finalized within the next two months. In order for any of the state or local agencies, including transit, to receive Federal funding for a transportation project, their project must be included in this TIP document.

The projects considered for the document are first drawn from existing long range transportation plans prepared by BCATS, which list proposed improvements to the major transportation infrastructure of the area for the next twenty to twenty-five years. In addition, general road, safety, maintenance, transit, and non-motorized projects are all considered. Projects from all of the local road agencies, transit, and the Michigan Department of Transportation are included in the TIP. Opportunities for collaborating, combining, or complementing each other's projects are explored during project identification. The funding for future improvements is very limited, so coordination is important. The projects making the final list for the 2011-2014 TIP are listed below, and continued on the reverse side of this sheet:



**Public input** is welcomed at each phase in the development of the new TIP document. Please contact the BCATS office for further details, or speak directly to the responsible road agency personnel in your area.

- 2011 - Beckley/B Drive N**, from M-66 eastward to 6 1/2 Mile Road (resurface)  
**Capital Ave. SW**, from Fairfield south to Weeks & from Cascade south to Rebecca (resurface)  
**20th St.**, from Columbia Ave. north to Goguac Street (resurface)  
**20th St. Bridge** over the Kalamazoo River (rehabilitation)  
**Helmer Rd.**, from Beckley Rd. north to Gethings (resurface)  
**North Ave.**, from Capital Ave. NE north to Roosevelt Ave. (resurface)  
**1 32-Passenger Transit Bus** for Battle Creek Transit (BCT) service area (replacement)  
**2 10-Passenger Transit Vans** for BCT demand-response service (replacement)  
**Transit Operating Assistance Program** for BCT (annual program)  
**Transit Security Upgrade** project for BCT (misc. security upgrades)  
**Specialized Services Operating Assistance** for numerous local human service agencies  
**Up to 7 Transit Vans** for numerous local human service agencies
- 2012 - B Drive N.**, from 8 1/2 Mile Rd. east to 11 Mile Rd. (resurface)  
**Capital Ave. SW**, from Weeks south to Cascade (resurface)  
**20th St. at Dickman Rd.** intersection (reconfigure crossover in SE quadrant)  
**Jackson St./Stringham Rd.**, from Bedford Rd. west & north to Michigan Ave. (resurface)  
**I-194 Bridges over Dickman Rd./Fountain/GTWRR**, (deep overlay and upgrades) \*\*\*  
**M-66 (Capital Ave. NE) Bridge over Wanondaga Creek** (replacement) \*\*\*  
**Transit Operating Assistance Program** for BCT (annual program)  
**Transit Security Upgrade** project for BCT (misc. security upgrades)

The purpose of this newsletter is to provide the public with information regarding the activities of the Battle Creek Area Transportation Study (BCATS). The public is encouraged to contact BCATS at the above address or telephone (269) 963-1158, fax (269) 963-4951 or e-mail: bcatsmpo@aol.com concerning issues in *The Signal* or other transportation matters.

**FY 2011 –2014 TIP Project List (continued)**

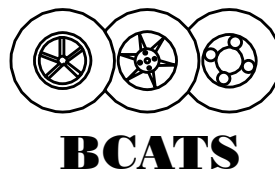
- 2013 - B Drive S.**, from 8 1/2 Mile Road east to 12 Mile Rd. (resurface)  
**Beckley Rd.**, from Minges Rd. east to M-66 ( resurface)  
**Goguac St.**, from Helmer Rd. east to Carl Ave. (resurface)  
**Upton Ave.** from Ave. A east to City Limit & **Avenue A**, from 20th to Upton (resurface)  
**I-194 at Dickman Road** interchange (replace tower lighting)  
**M-96 (E. Columbia Ave.) Bridge** over Raymond Rd. (superstructure replacement and other repairs) \*\*\*  
**1 10-Passenger Transit Van** for BCT (replacement)  
**Farebox System Upgrade** for BCT (upgrade 10-yr. old system)  
**Transit Operating Assistance Program** for BCT (annual program)  
**Transit Security Upgrade** project for BCT (misc. security upgrades)
- 2014 - Raymond Rd.** from Verona Rd. south to Golden Ave. (resurface)  
**6 1/2 Mile Rd.** from Christian Dr. north to G Drive N (resurface)  
**East Ave.**, from Emmett St. north to Roosevelt Ave. (resurface)  
**Territorial Rd.**, from Helmer Rd. east to 20th St. & **Evergreen Rd.**, from Avenue A to Harmonia Rd. (resurface)  
**I-94BL**, from I-94 to W. Columbia Ave. (overlay and minor widening) \*\*\*  
**I-94 BL NE Quadrant Exit 92 Carpool Lot** (resurfacing)  
**Transit Operating Assistance Program** for BCT (annual program)  
**Transit Security Upgrade** project for BCT (misc. security upgrades)

\*\*\*due to financial shortfalls at the state level, MDOT has identified some of its projects as “may be delayed due to the reduced highway investment strategy” - if additional revenues are not made available at the state level to match federal transportation aid, these projects will not proceed in the year currently programmed and will be moved to an “illustrative list” in the BCATS FY 2011-2014 TIP until future reprogramming is determined

## Making Comments on the FY 2011-2014 TIP Before Final Adoption

The TIP development schedule requires BCATS to submit a locally adopted TIP document to the Michigan Department of Transportation (MDOT) by July 15, 2010. It is expected that the BCATS Policy Committee will act on the new TIP at its meeting on June 23, 2010. A draft of the final document is planned to be available for review as of approximately June 1, 2010. The June meetings of both the BCATS Technical Committee (6/9/10) and BCATS Policy Committee (6/23/10) will provide public opportunity to comment on the FY 2011-2014 TIP. The BCATS staff also welcomes comment on any of the information in this newsletter (see front for contact information).

**Reminder: Public input** is welcomed at the meetings of the BCATS' Technical and Policy Committees. Please contact the BCATS office for further details.



## SECTION 4 - CONSULTATION

### Process

The Federal SAFETEA-LU legislation requires that BCATS consult with federal, state and local entities that are responsible for the following:

- Economic growth and development
- Environmental protection
- Airport operations
- Freight movement
- Land use management
- Natural resources
- Conservation
- Historic preservation
- Human service transportation providers

The goal of this process is to eliminate or minimize conflicts with other agencies' plans and programs that impact transportation, or for which transportation decisions may impact them.

BCATS provided its newsletter publication specifically geared to the new TIP in January, 2010 and April, 2010 to the following consultation agencies:

- Fish and Wildlife Service
- US EPA Region 5
- Michigan DNRE - Kalamazoo District
- Michigan DNRE - Plainwell
- National Trust for Historic Preservation
- Office of State Archaeologist
- Calhoun Soil Conservation District
- USDA - Michigan State Office
- Michigan Department of Agriculture
- W.K. Kellogg Airport
- Michigan Department of Community Health
- Michigan Economic Development Corporation
- Disability Resource Center
- Calhoun County MSU Extension
- USGS - Lansing District
- SW Michigan Land Conservancy
- Calhoun County Farm Service Agency
- Natural Resources Conservation Service
- Consumers Energy
- Calhoun County Drain Commissioner
- BC/CAL/KAL Inland Port Development Corporation
- Nottawaseppi Huron Band of Potawatomi Indian Tribe
- Friends of the Kal-Haven Trail
- Region III Area Agency on Aging
- Jase Bolger, State Representative
- Kate Segal, State Representative
- Mike Nofs, State Senator
- City of Battle Creek Planning Department
- Charter Township of Bedford
- Charter Township of Pennfield
- Charter Township of Emmett
- Leroy Township
- Newton Township
- Battle Creek Unlimited
- Community Action Agency of Southcentral Michigan
- Burnham Brook Center
- Marian E. Burch Adult Day Care Center and Rehab. Center
- Behnke, Inc. (trucking)
- Kellogg Corporation
- Kraft Foods - Post Division
- Canadian National Railroad
- Battle Creek Area Chamber of Commerce
- State Historic Preservation Office

The newsletter provided a listing of proposed projects for the new FY 2011-2014 TIP and requested input on the preliminary list of projects. This piece was distributed to both the “Public Participation” and “Consultation” mailing lists for BCATS, avoiding duplication where the lists overlap. The information sheets (copy included at the end of Section 3 - Public Participation) highlighted most of the major projects planned over the four-year TIP time frame. The January, 2010 publication provided a time-line for the remainder of the TIP development process. Input to the process from the public was stressed throughout both of the information sheets.

### **Responses/Comments**

BCATS received no input from the consultation agencies following distribution of the January, 2010 newsletter or the April, 2010 newsletter.

### **Treatment of Responses/Comments**

Since there were no comments on the proposed projects, BCATS staff reviewed prior comments from the last TIP cycle to evaluate areas to review relative to the proposed projects. Given the high percentage of 2011-2014 TIP projects that are reconstruction, resurfacing, or maintenance related, there are very few projects which would impact the environmental issues previously noted by any of the consultation agencies.

## SECTION 5 - ENVIRONMENTAL JUSTICE

In accordance with Federal guidelines on Environmental Justice (EJ) that amplify Title VI of the Civil Rights Act, attention has been placed on the need to incorporate environmental justice principles into the processes and projects of transportation planning. While procedural and analytical processes for meeting these requirements are largely unspecified, the potential for disproportionate impacts of transportation improvement projects on racial minorities and impoverished neighborhoods is to be considered. BCATS has conducted an analytical process within the MPO area to identify the size and location of racial minority populations, and populations below poverty level in the 2000 Census. The distribution of Hispanic residents has also been assessed. Transportation improvements proposed for FY 2011-2014 implementation and listed in this TIP were placed on thematic maps of percent African-American; American Indian & Alaska Native; Asian, Native Hawaiian, & Other Pacific Islander; Hispanic; and below poverty level populations (by Census block) to visually assess whether or not imminent transportation system investments may disproportionately burden or fail to meet the needs of any segment of the population. Summary statistics of the racial minorities, Hispanic, and below poverty level populations within .10, .25, and .50 mile of a planned TIP road project were also calculated. Maps, tables, and additional discussion are presented in this section.

The following tables display percentages quantifying the varying racial composition of the overall metropolitan area population compared to the populations within .10, .25, and .50 mile of BCATS' TIP major road projects in this FY 2011-2014 TIP, either as funded or as "illustrative" projects. (See Section 7 for explanation of the "illustrative" list)

TABLE 5-1	BCATS Metropolitan Area		EJ Zones - Distance from FY 2011-2014 TIP Road Project					
			within .50 mile		within .25 mile		within .10 mile	
<i>Area (sq mi)</i>	217.08	----	41.48	19.1%	18.72	8.6%	6.72	3.1%
<i>Total Population</i>	94,695	----	47,046	49.7%	22,140	23.4%	7,711	8.1%
<i>White</i>	77,341	81.7%	38,034	80.8%	18,569	83.9%	6,537	84.8%
<i>African-American</i>	12,823	12.4%	5,746	12.2%	2,138	9.7%	665	8.6%
<i>American Indian &amp; Alaska Native</i>	1,441	0.7%	373	0.8%	152	0.7%	42	0.5%
<i>Asian, Native Hawaiian, &amp; Other Pacific Islander</i>	1,687	1.5%	853	1.8%	390	1.8%	165	2.1%
<i>Other Race or 2+ Races</i>	3,593	3.8%	2,040	4.3%	890	4.0%	303	3.9%
<i>Individuals of Hispanic Origin</i>	3,261	3.4%	2,061	4.4%	939	4.2%	302	3.9%
<i>Individuals Below Poverty Level</i>	11,031	11.6%	6,139	13.0%	2,642	11.9%	872	11.3%

The above table displays the composition of the 2000 Census population within the three EJ Zones, or "bands" within .50, .25, and .10 mile of FY 2011-2014 TIP road projects. The bands, or "buffer" zones, surrounding the planned TIP road projects are shown shaded in light green, yellow, and red in Figure 5:1 following in this section. The percentages can be compared across columns to the percentage under "BCATS Metropolitan Area", to determine how the makeup of the EJ Zones' population matches that of the overall area. For instance, almost 12% of the metropolitan area total population is below poverty level, while approximately 13% of the population within .50 mile of a FY 2011-2014 TIP road project is below poverty level.

The next table calculates a different statistic, that is how the percentage of each subject population group in each sub-area EJ Zone compares to each EJ Zone's percentage of the total metropolitan area population. In this case, the percentages for each EJ Zone should be compared up & down rows to the Total Population % to see if the given zone's proportion of the subject variable population is more concentrated than it is for the whole metropolitan area. For instance here, while only 23.4% of the total metropolitan area population resides within .25 mile of a FY 2011-2014 TIP road project, almost 30% of the area's individuals of Hispanic origin do so.

TABLE 5-2	BCATS Metropolitan Area	EJ Zones - Distance from FY 2011-2014 TIP Road Project					
		within .50 mile		within .25 mile		within .10 mile	
<i>Area (sq mi)</i>	217.08	41.48	19.1%	18.72	8.6%	6.72	3.1%
<b>Total Population</b>	<b>94,695</b>	<b>47,046</b>	<b>49.7%</b>	<b>22,140</b>	<b>23.4%</b>	<b>7,711</b>	<b>8.1%</b>
<i>White</i>	77,341	38,034	49.2%	18,569	24.0%	6,537	8.5%
<i>African-American</i>	12,823	5,746	44.8%	2,138	16.7%	665	5.2%
<i>American Indian &amp; Alaska Native</i>	1,441	373	25.9%	152	10.6%	42	2.9%
<i>Asian, Native Hawaiian, &amp; Other Pacific Islander</i>	1,687	853	50.6%	390	23.1%	165	9.8%
<i>Other Race or 2+ Races</i>	3,593	2,040	56.8%	890	24.8%	303	8.4%
<i>Individuals of Hispanic Origin</i>	3,261	2,061	63.2%	939	28.8%	302	9.3%
<i>Individuals Below Poverty Level</i>	11,031	6,139	55.7%	2,642	23.9%	872	7.9%

Figure 5:1 on the next page highlights the .10, .25, and .50 mile zones around each project. Maps on the following pages (Figures 5:2-6) depict concentrations of racial minorities, Hispanic, and below poverty level populations with the major road projects planned in this TIP for FY 2011-2014. The bold, black lines on the maps are roads that comprise the network for BCATS' "Travel Demand Forecast Model", or TDFM.

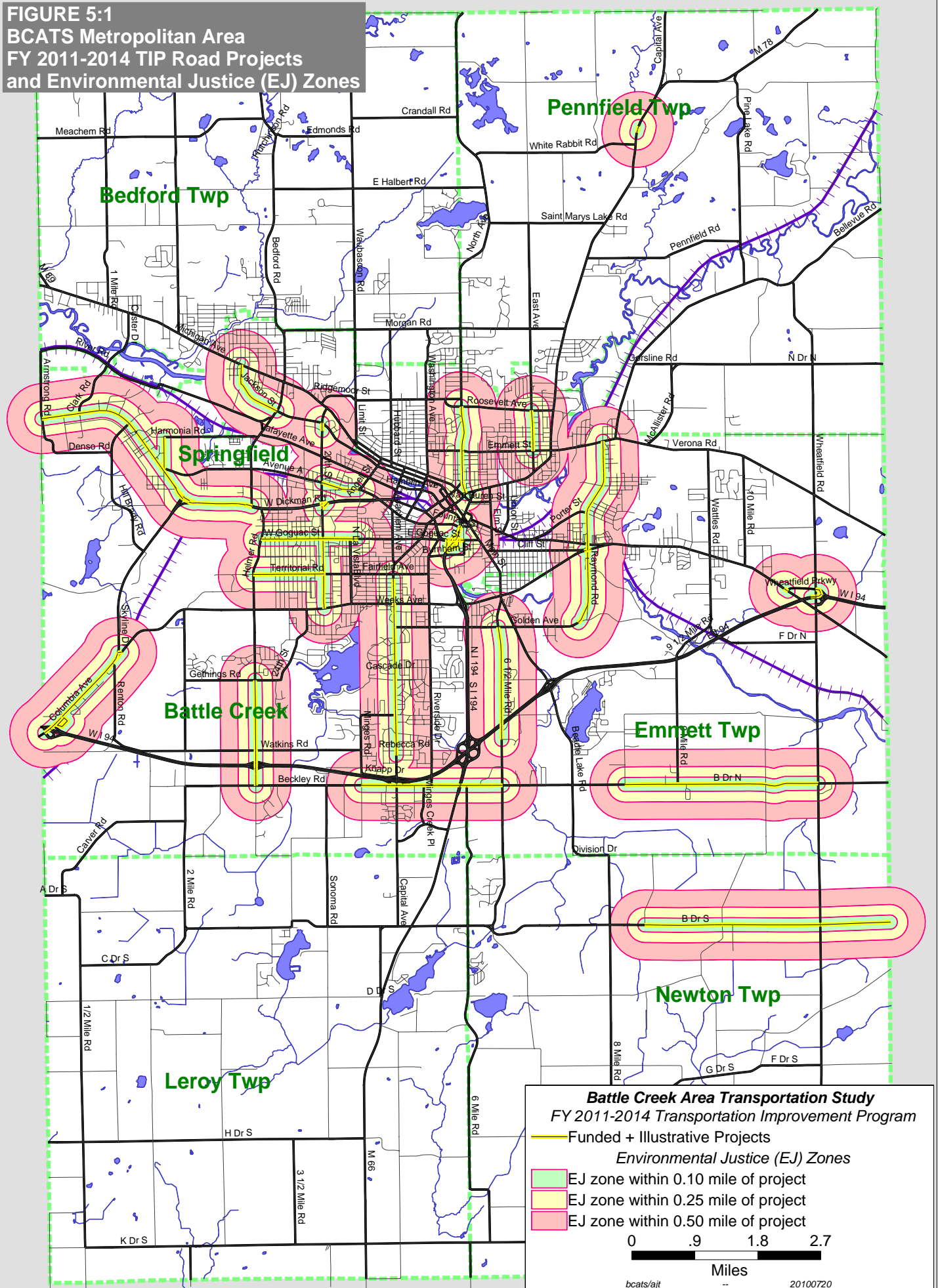
Review of the preceding tables and the maps indicates that BCATS' imminent TIP road projects will impact non-minority as well as minority and low-income populations. The figures in the tables suggest that a slightly larger percentage of the non-white populations may be impacted during the construction phase of the projects. However, the completion of these short-term TIP projects will, in turn, provide a higher benefit to those project areas than the overall population. None of the planned projects involve residential displacements. Other construction related project impacts, such as noise, dust, and access inconvenience will be short-lived and confined to the traditional construction season.

When looking at the most directly impacted residents (those within .10 mile of the planned improvements), there is no glaring disproportional impact to any of the identified groups as compared to the area as a whole (see highlighted columns of Tables 5-1 & 5-2).

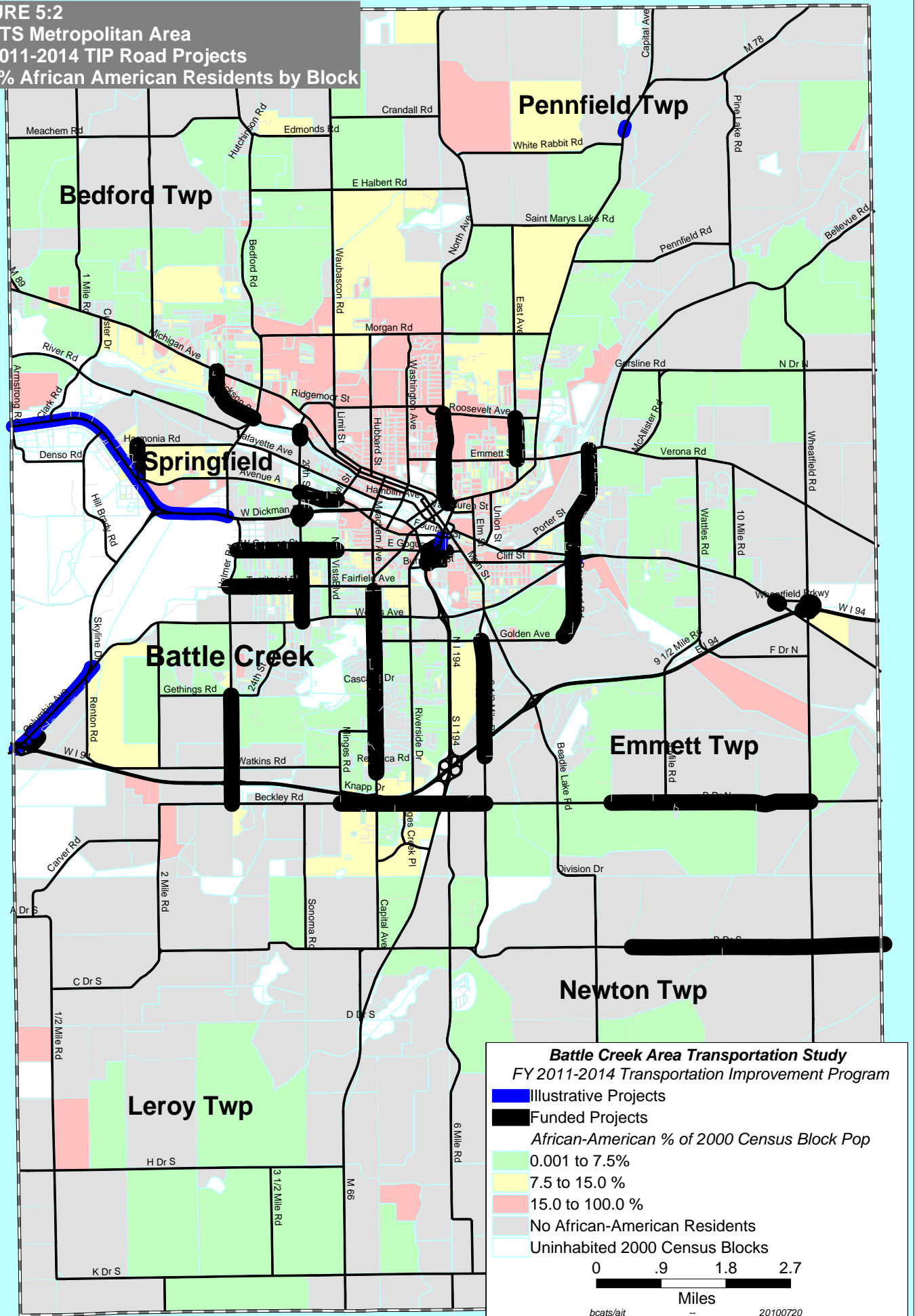
Relative to public transit, an environmental justice analysis prepared by BCATS for Battle Creek Transit in August, 2007 is included in the Appendix of this document.



**FIGURE 5:1**  
**BCATS Metropolitan Area**  
**FY 2011-2014 TIP Road Projects**  
**and Environmental Justice (EJ) Zones**

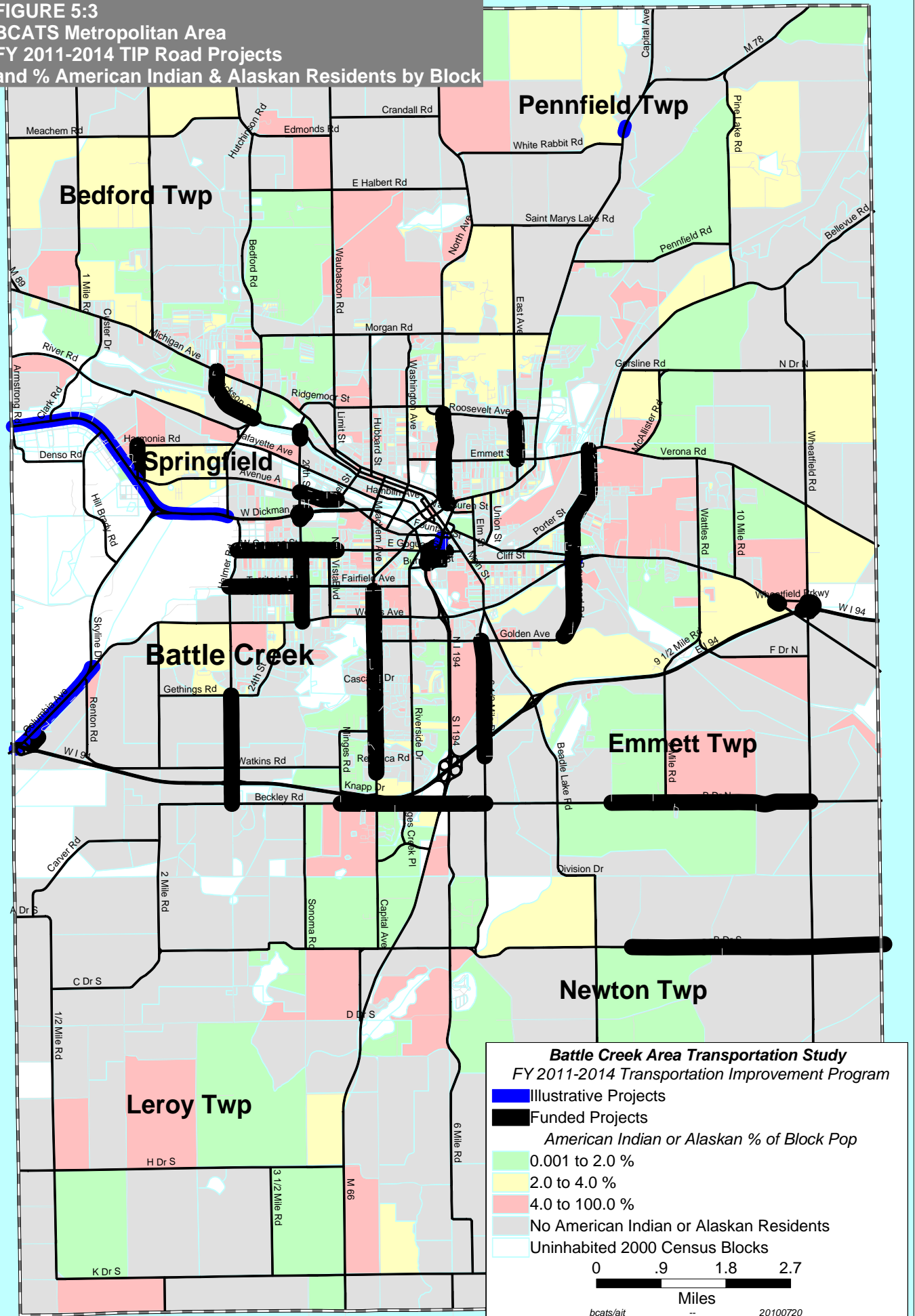


**FIGURE 5:2**  
**BCATS Metropolitan Area**  
**FY 2011-2014 TIP Road Projects**  
**and % African American Residents by Block**

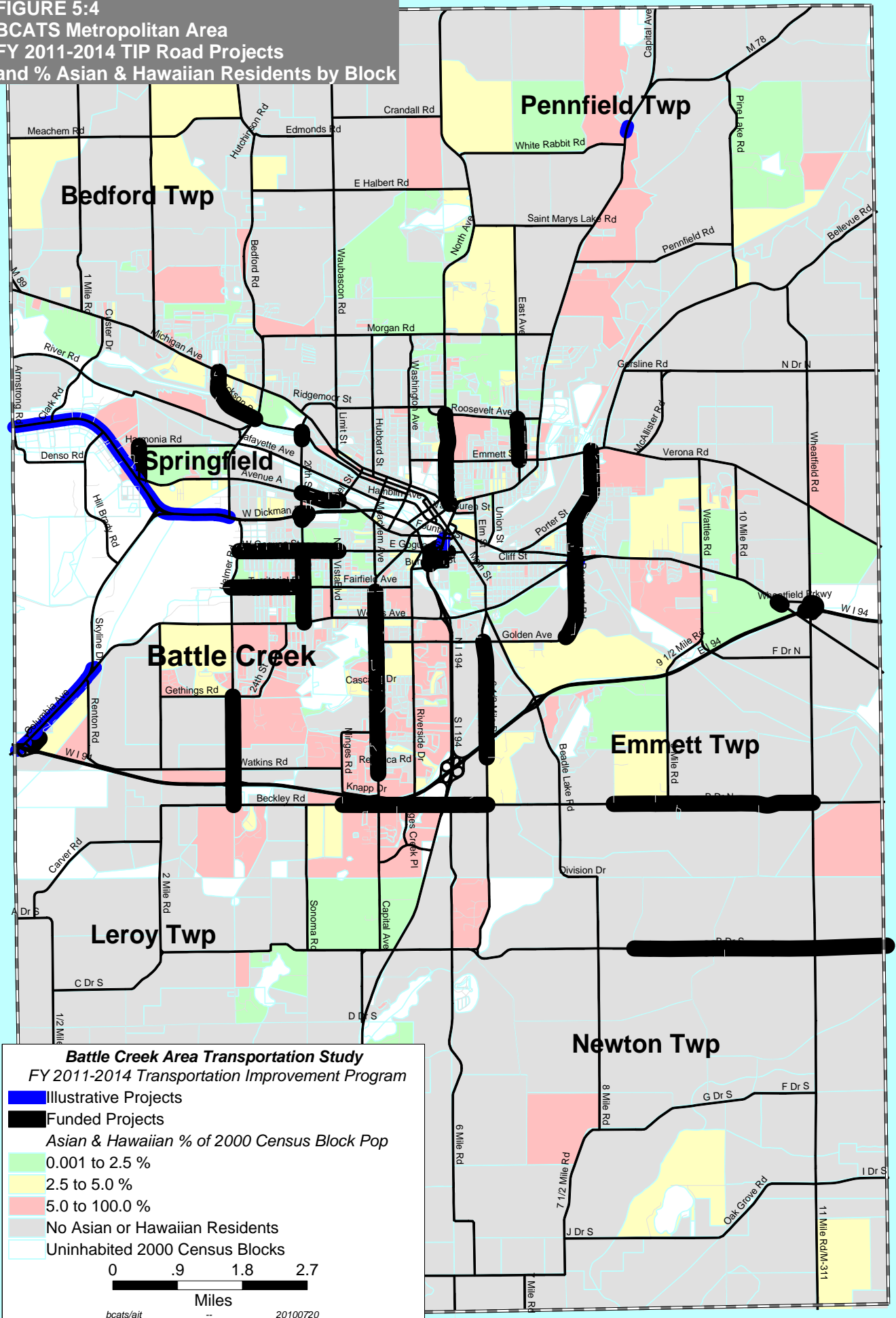




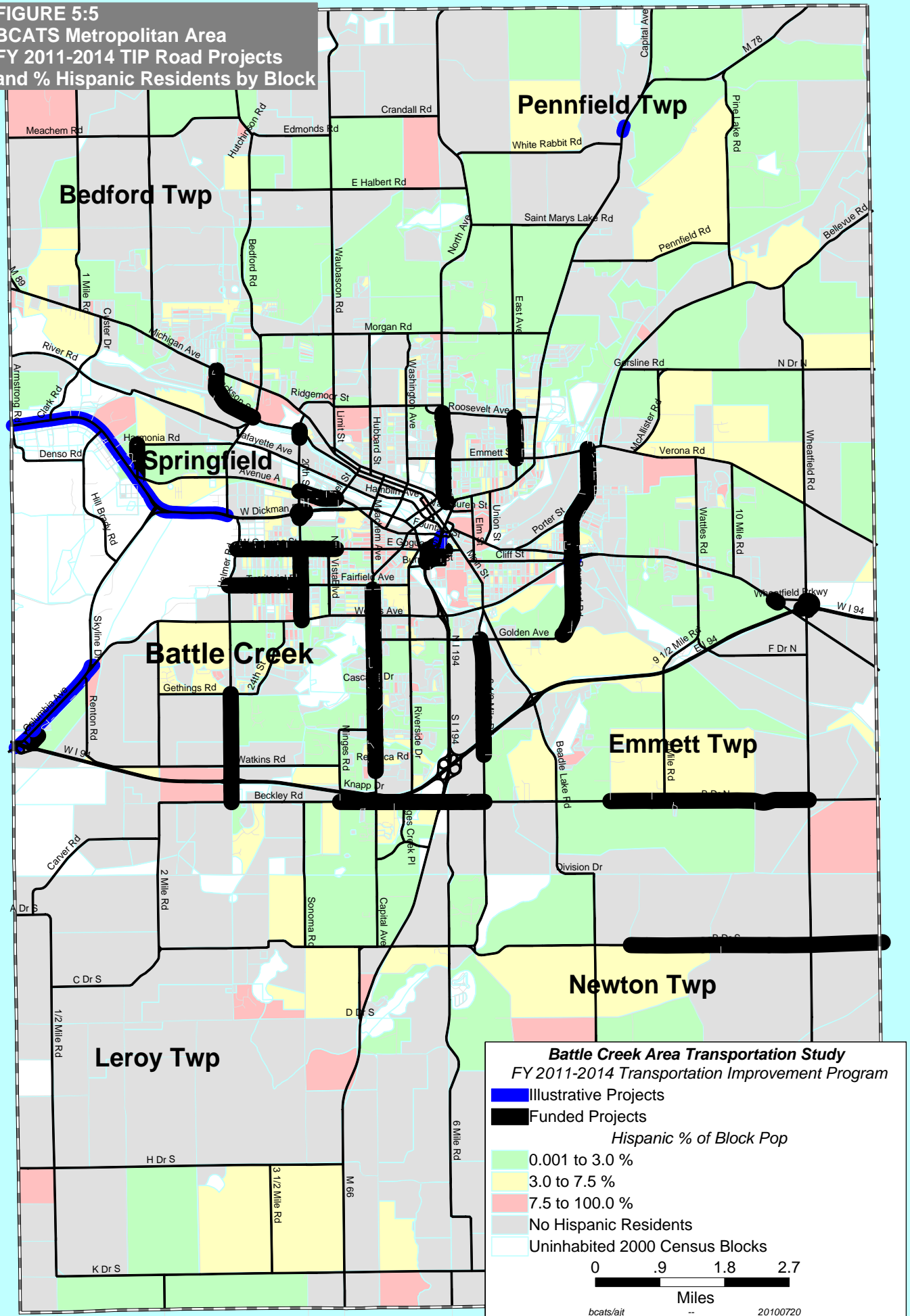
**FIGURE 5:3**  
**BCATS Metropolitan Area**  
**FY 2011-2014 TIP Road Projects**  
**and % American Indian & Alaskan Residents by Block**



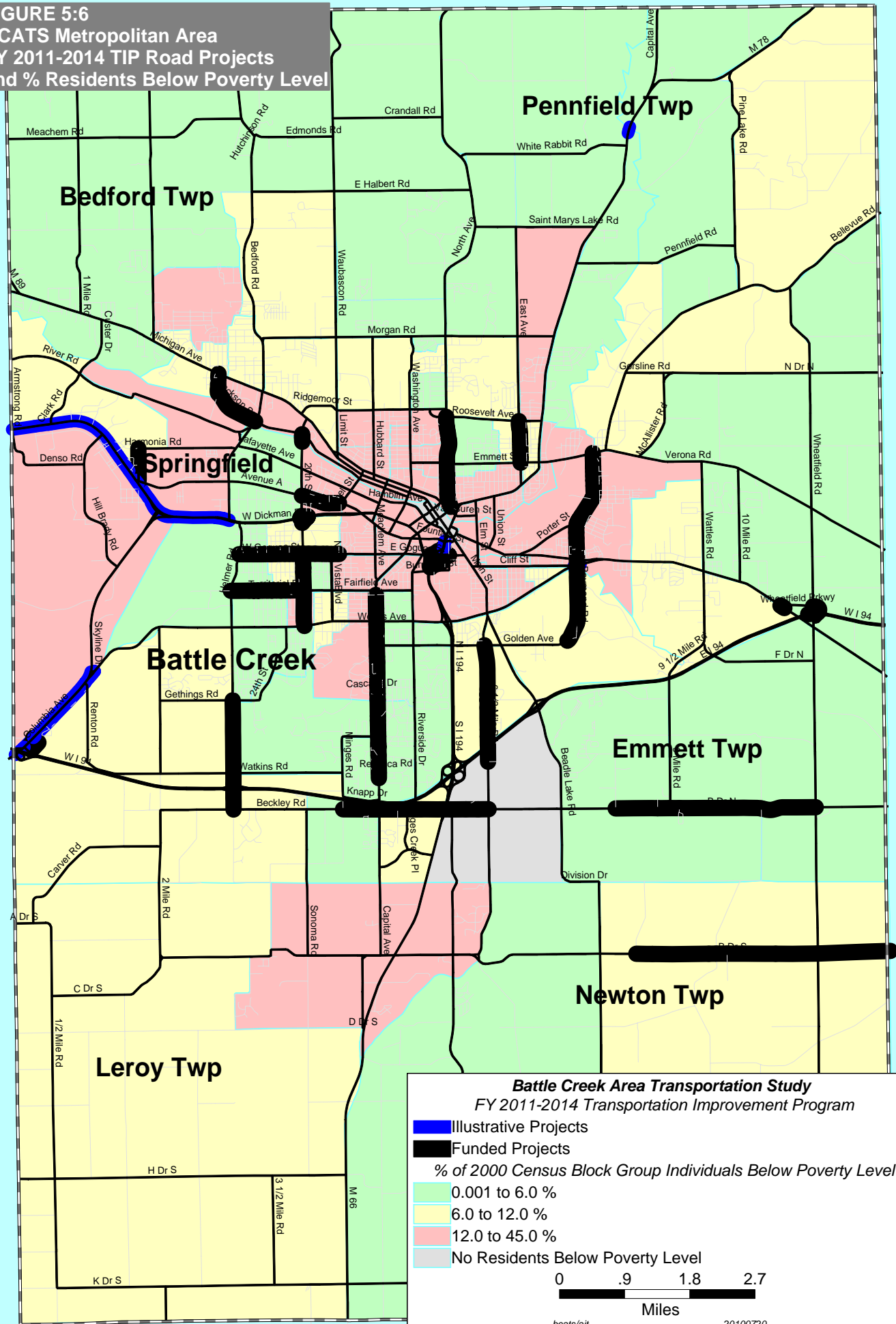
**FIGURE 5:4**  
**BCATS Metropolitan Area**  
**FY 2011-2014 TIP Road Projects**  
**and % Asian & Hawaiian Residents by Block**



**FIGURE 5:5**  
**BCATS Metropolitan Area**  
**FY 2011-2014 TIP Road Projects**  
**and % Hispanic Residents by Block**



**FIGURE 5:6**  
**BCATS Metropolitan Area**  
**FY 2011-2014 TIP Road Projects**  
**and % Residents Below Poverty Level**





## **SECTION 6 - AIR QUALITY CONFORMITY**

### **KALAMAZOO - BATTLE CREEK MI NONATTAINMENT AREA**

The Clean Air Act Amendments of 1990 (CAAA) established the mandate for better coordination between air quality and transportation planning. The CAAA requires that all transportation plans and transportation investments in nonattainment and maintenance areas be subject to an air quality conformity determination. The purpose of this determination is to demonstrate that the Transportation Plan and Transportation Improvement Program (TIP) conform to the intent and purpose of the State Implementation Plan (SIP). The intent of the SIP is to achieve and maintain clean air and meet National Ambient Air Quality Standards (NAAQS). Therefore, the Transportation Plan and the TIP must demonstrate that the implementation of these projects do not result in greater mobile source emissions than the emissions budget. The Kalamazoo - Battle Creek - MI Non-Attainment Area for the eight hour ozone standard was designated a Basic Non-Attainment area effective June 15, 2004. On May 16, 2007, the area was redesignated to Attainment/ Maintenance with a 2018 mobile source emissions budget.

This Attainment/Maintenance area includes the counties of Kalamazoo, Calhoun, and Van Buren. Ozone is formed when volatile organic compounds (VOC) and oxides of nitrogen (NOx) combine with sunlight and high temperatures. One way to reduce the amount of ozone is to reduce the amount of VOC and NOx which are produced in the region. VOC and NOx emissions originate, in part, from highway motor vehicles and can be reduced by decreasing congestion and/or providing for alternatives to the automobile, such as transit and ridesharing.

Air quality analyses were performed in August, 2007 on the Battle Creek Area Transportation Study 2030 Transportation Plan, and the State Transportation Improvement Program (STIP) for the non-urban portion of the nonattainment area, and in January, 2009 on the TIP Amendment for the Metropolitan Transportation Plan for the Kalamazoo Area, in order to determine the impact of the transportation system improvements on vehicle emissions. The Federal Highway Administration (FHWA) and the United States Environmental Protection Agency (EPA) require that the implementation of projects in the Transportation Plans and TIPs do not result in mobile source emissions greater than the emissions budget. The conformity determination conducted for the Transportation Plans were prepared in accordance with EPA's transportation conformity rule. The conformity demonstration was performed by comparing emissions from year 2011, 2018, 2025, and 2030 to the emission budget.

#### **2009 & 2010 UPDATES**

In January, 2009, the Michigan Department of Transportation was provided with funding for the I-94 widening project from east of Oakland Drive to west of Lovers lane, including the interchange at Westnedge Avenue in Kalamazoo County. This project was originally tested with an Open to Traffic Year of 2018. The funding, which was provided through American Reinvestment and Recovery Act (ARRA), allowed MDOT to start construction of the project in 2011 with finalization of the project expected in 2012.

The City of Parchment's Commerce Road/G Avenue project contained in the KATS 2030 Transportation Plan had an open to traffic date of 2018. This project, now known as River Reach Boulevard/G Avenue, has been advanced due to the associated redevelopment project moving faster than anticipated in the 2030 Transportation Plan. It is now anticipated to be open to traffic in 2012.

Because of the new open to traffic dates for these two expansion projects, the 2030 Transportation Plan for Kalamazoo was amended in March, 2009 to reflect these two changes. Air quality analyses were run for the draft amended 2030 Transportation Plan in January, 2009. The analyses showed that the amended Transportation Plan is in conformity with applicable air quality standards. The 2030 Transportation Plan was amended in March, 2009 and found to be in conformity with applicable air quality standards. The Federal Highway Administration and the Environmental Protection Agency concurred with the conformity finding.

The Battle Creek Area Transportation Study FY 2011 - 2014 Transportation Improvement Program and the projects identified for future construction by Van Buren County did not contain non-exempt projects based on a review by the Interagency Work Group in June, 2010. The Kalamazoo Area Transportation Study FY 2011 - 2014 Transportation Improvement Program contains one non-exempt project (River Reach/G Avenue). This project is contained in the 2030 Transportation Plan as amended in March, 2009. This amended 2030 Transportation Plan was tested and found in conformity with air quality standards. Therefore, the FY 2011 - 2014 Transportation Improvement Program is in compliance with a conforming Transportation Plan and is in conformity with applicable air quality standards.

## **AIR QUALITY ASSESSMENT CRITERIA**

Kalamazoo and Battle Creek's 2030 Transportation Plans and the Van Buren County proportion of the STIP conformity demonstration was made in compliance with all applicable conformity requirements and have been determined to satisfy the following conformity criteria and procedures set forth in the EPA's Transportation Conformity Rule:

1. The conformity demonstration was based on the latest planning assumptions.
2. The conformity demonstration was based on the latest emission model available.
3. The conformity demonstration was made according to the consultation procedures of the final conformity rule and the SIP conformity procedures.
4. The demonstration was made that completing the components of the LRPs and TIPs do not exceed the approved 8-hour conformity budget.
5. Each project contained in the LRPs and TIPs was reviewed by the Interagency Work Group (IAWG), being consistent with the consultation procedures established in the SIP. During the review, a determination was made by the IAWG on each project as to whether it needed to be modeled or was exempt from emission modeling.

## BACKGROUND

The following describes the procedures used to estimate and analyze travel demand for the Kalamazoo - Battle Creek - MI Maintenance Area. The Kalamazoo Area Transportation Study (KATS) and Battle Creek Area Transportation Study (BCATS) and the Michigan Department of Transportation (MDOT) developed socio-economic data for 1998, 2002, 2011, 2018, 2025 and 2030.

These data are the basis for forecasting in the travel demand models which, in turn, generate the inputs required for the air quality conformity analysis.

These inputs are the amount of travel expressed as vehicle miles of travel (VMT) and average speed by National Functional Classification (NFC) by county. Individual NFCs by county are then grouped to provide the needed data structure required for EPA's Mobile6.2.

Air quality conformity analysis must be performed on a countywide basis. The urban travel demand forecast models do not cover the whole of all three counties. Kalamazoo County is covered entirely by an urban travel demand model and uses one of the latest travel demand modeling technologies, TransCAD. For Calhoun County, an urban travel demand model covers the cities of Battle Creek and Springfield and the townships of Bedford, Pennfield, Emmett, and Leroy and Newton townships, using TransCAD. In Van Buren County and for the portion of Calhoun County not covered by the urban travel demand model, the MDOT statewide model is used to estimate travel.

The VMT and speed data generated by the KATS model, BCATS model, and the statewide model are normalized using county Highway Performance Monitoring System (HPMS) VMT figures to provide the basis for the estimation of present and future VMT and speeds by NFC for each county. The air quality conformity analysis performed assumes that transportation projects are included in the milestone year they are presumed to be open to traffic. The following table demonstrates and summarizes the data resulting in the conformity determination for the Kalamazoo 2030 Transportation Plan and 2011-14 TIP, which has not changed from the 2008-14 TIP Amendment air quality analysis, and the Battle Creek 2030 Transportation Plan and 2011-14 TIP, which has not changed from the 2008-11 TIP air quality analysis, and the Van Buren STIP which were completed in March, 2009.

**Table 6-1**  
**Results for the Kalamazoo-Battle Creek-MI Maintenance Area 8 Hour Ozone Standard**  
**March 2009**

Scenario	Emissions in kilograms/day	
	VOC	NO <sub>x</sub>
<b>Attainment Budget</b>	26,916.6200	49,315.3900
<b>2011 Action</b>	11,513.9753	18,596.3872
<b>2018 Action</b>	8,055.7996	9,777.3080
<b>2025 Action</b>	6,641.5964	7,128.9189
<b>2030 Action</b>	6,745.9615	6,424.2306

The remainder of this section provides additional technical details and documentation as necessary to support this determination.

## MODELING PROCEDURES

MDOT developed and calibrated the travel demand models used in this analysis. Urban travel demand models were developed for Kalamazoo County and part of Calhoun County. The remainder of Calhoun County and all of Van Buren County was modeled with the statewide model. The travel demand models use the standard four-step transportation modeling process.

- 1- Trip generation model
- 2- Trip distribution model
- 3- Mode choice model
- 4- Highway assignment model

### *KATS Urban Travel Demand Model:*

The trip generation model uses a combination of local and (NCHRP 365) trip generation rates. The trip generation variables used in the model are dwelling units, retail employment, service employment, and non-retail/service employment. The trip distribution model uses the standard gravity model to estimate origin/destination tables. It also uses Friction Factors for trip attractiveness.

The mode choice model is a single mode model. It uses vehicle occupancy rates to convert person trips to vehicle trips on the network. The trip assignment model uses an equilibrium algorithm. The model was calibrated according to the strict calibration standards used by MDOT and suggested by FHWA. The model includes 375 traffic analysis zones. The network is coded to output information based on area type, facility type, number of lanes, speeds, NFC, capacity, street names, and vehicle assignment.

### *BCATS Urban Travel Demand Model:*

The trip generation model uses a combination of local and NCHRP 365 trip generation rates. The trip generation variables used in the model are households, retail employment, service



employment, and non-retail - non-service employment. The trip distribution model uses the standard gravity model to estimate origin/destination tables. It also uses Friction Factors for trip attractiveness. The mode choice model is a single mode model. It uses vehicle occupancy rates to convert person trips to vehicle trips on the network. The trip assignment model uses an equilibrium algorithm. The model was calibrated according to the strict calibration standards used by MDOT and suggested by FHWA. The model includes 311 traffic analysis zones. The network is coded to output information based on area type, facility type, number of lanes, speeds, NFC, capacity, street names, and vehicle assignment. The BCATS model covers the greater Battle Creek area; for the portion of the county not covered by the BCATS model the MDOT statewide model is utilized.

#### *Statewide Travel Demand Model:*

The statewide model was used for all of Van Buren County and non-urban parts of Calhoun County. The model was developed in TransCAD and calibrated for year 2000. The model covers all counties of the state and includes NFC collectors and above; local roads are excluded. Trip generation employs a cross classification lookup with trip rates developed from a combination of local models, National Cooperative Highway Research Program Report 187, Nationwide Personal Transportation Survey (NPTS), and the Transportation Management Area (TMA) model trip generation rates. The trip generation variables used in the model are households by three income groups and five size categories along with six categories of employment. The trip distribution model uses a gravity model to estimate origin/destination tables. The mode choice model converts person trips to vehicle trips by removing transit trips and applying auto occupancy factors, which are sensitive to the length of the trip (longer trips having higher occupancies). The trip assignment model uses an all-or-nothing algorithm. The model was calibrated according to the strict calibration standards used by MDOT and suggested by FHWA. The model includes 2,392 traffic analysis zones and the network is coded to provide as output VMT, VHT, and speeds by NFC.

## **HIGHWAY PERFORMANCE MONITORING SYSTEM (HPMS) DATA**

The EPA and the United States Department of Transportation (USDOT) have both endorsed HPMS as the appropriate source of VMT estimates. HPMS is the FHWA's annual program to collect roadway data in all 50 states to assess the condition of the highway system in terms of traffic congestion, accessibility, and pavement condition. The FHWA requires counts to determine the areawide VMT for all Federal Aid Urban Areas (FAUA). MDOT supplements the counts outside the FAUA with additional counts in small cities, rural areas, and especially in rural areas of counties with nonattainment status. These supplemental counts follow the same random selection procedures as those inside the FAUA.

The HPMS data used is from MDOT's Universe file and is stratified by NFC. MDOT is currently undertaking a data improvement process to update the HPMS Universe, non-sample traffic data.

## MODEL VEHICLE MILES OF TRAVEL (VMT)

HPMS Universe data provides the VMT estimates for the calibration year of the travel demand model, 1998 for Kalamazoo County, 2002 for Calhoun County, and 2000 for Van Buren County. To maintain consistency between HPMS and modeled VMT and among milestone years (as an example for Kalamazoo County) model VMT is scaled. The 1998 HPMS VMT distribution was used to scale the 2011, 2018, 2025, and 2030 VMT. Thus, the 1998 total HPMS VMT remained the same while future modeled VMT distributions changed to reflect the HPMS distribution. Then the scaled VMT by NFC are collapsed into four groups, to meet the requirements of Mobile6.2. These groups are: 1) rural interstate, 2) rural major and minor arterials/collectors/local streets, 3) urban interstate/freeway, and 4) urban principal and minor arterials/collectors/local streets. This is done for all interim and future analysis years. This same process is used for vehicle hours of travel (VHT). The following are the scaled travel demand modeled VMT for each county.

**Table 6-2**  
**Calhoun County Vehicle Miles of Travel**

NFC	HPMS 2002	2002	2011	2018	2025	2030
Rural Interstate Freeway	1,352,653	1,352,653	1,496,431	1,591,715	1,729,591	1,828,392
Rural Major & Minor Arterial/Collector/Local Street	1,049,599	1,049,599	1,147,437	1,218,778	1,311,278	1,380,807
Urban Interstate/Freeway	613,280	613,280	722,061	789,511	883,229	906,075
Urban Principal & Minor Arterial/Collector/Local Street	1,745,004	1,745,004	1,924,093	2,095,444	2,208,238	2,287,801
<b>TOTAL</b>	<b>4,760,536</b>	<b>4,760,536</b>	<b>5,290,022</b>	<b>5,695,448</b>	<b>6,132,336</b>	<b>6,403,075</b>

**Table 6-3**  
**Kalamazoo County Vehicle Miles of Travel**

NFC	HPMS 1998	1998	2011	2018	2025	2030
Rural Interstate Freeway	473,000	473,000	567,102	615,220	664,548	699,790
Rural Major & Minor Arterial/Collector/Local Street	1,448,000	1,448,000	1,664,110	1,816,874	1,971,472	2,095,917
Urban Interstate/Freeway	1,049,000	1,049,000	1,238,478	1,340,336	1,427,920	1,498,265
Urban Principal & Minor Arterial/Collector/Local Street	3,128,000	3,128,000	3,567,894	3,747,475	4,012,313	4,158,147
<b>TOTAL</b>	<b>6,098,000</b>	<b>6,098,000</b>	<b>7,037,584</b>	<b>7,519,905</b>	<b>8,076,253</b>	<b>8,452,119</b>

**Table 6-4  
Van Buren County Vehicle Miles of Travel**

<b>NFC</b>	<b>HPMS 2000</b>	<b>2000</b>	<b>2011</b>	<b>2018</b>	<b>2025</b>	<b>2030</b>
Rural Interstate Freeway	951,422	951,422	1,132,683	1,228,880	1,322,854	1,388,884
Rural Major & Minor Arterial/Collector/Local Street	1,424,341	1,424,341	1,671,745	1,811,451	1,941,738	2,032,197
Urban Interstate/Freeway	0	0	0	0	0	0
Urban Principal & Minor Arterial/Collector/Local Street	120,532	120,532	140,085	150,421	158,648	164,268
<b>TOTAL</b>	<b>2,496,295</b>	<b>2,496,295</b>	<b>2,944,513</b>	<b>3,190,752</b>	<b>3,423,240</b>	<b>3,585,349</b>

## MODEL SPEED

The modeled speed is derived by dividing the total aggregated scaled VMT by the total aggregated scaled VHT, except for local roads estimated by the statewide model. For Van Buren County and rural Calhoun County speeds for local roads were estimated by averaging speeds generated by the urban models. The speeds for each county are summarized in the next three tables.

**Table 6-5 – Calhoun County Speed**

<b>NFC</b>	<b>2002</b>	<b>2011</b>	<b>2018</b>	<b>2025</b>	<b>2030</b>
Rural Interstate Freeway	69.2	68.8	68.5	67.9	67.3
Rural Major & Minor Arterial/Collector/Local Street	50.3	50.1	49.8	49.5	49.3
Urban Interstate/Freeway	65.6	62.9	60.2	53.3	51.8
Urban Principal & Minor Arterial/Collector/Local Street	39.7	38.7	38.6	38.9	38.6
<b>TOTAL</b>	<b>50.8</b>	<b>50.0</b>	<b>49.5</b>	<b>48.9</b>	<b>48.5</b>

**Table 6-6 – Kalamazoo County Speed**

<b>NFC</b>	<b>1998</b>	<b>2011</b>	<b>2018</b>	<b>2025</b>	<b>2030</b>
Rural Interstate Freeway	62.9	63.9	61.4	60.5	59.7
Rural Major & Minor Arterial/Collector/Local Street	44.0	43.4	43.0	42.4	41.7
Urban Interstate/Freeway	55.5	55.2	55.7	55.5	55.0
Urban Principal & Minor Arterial/Collector/Local Street	34.4	34.4	34.2	34.1	33.9
<b>TOTAL</b>	<b>40.6</b>	<b>40.6</b>	<b>40.5</b>	<b>40.2</b>	<b>39.9</b>

TABLE 6-7 - Van Buren County Speed

NFC	2000	2011	2018	2025	2030
Rural Interstate Freeway	69.1	68.6	68.2	67.7	67.3
Rural Major & Minor Arterial/Collector/Local Street	46.4	47.3	47.1	47.0	46.7
Urban Interstate/Freeway	0	0	0	0	0
Urban Principal & Minor Arterial/Collector/Local Street	37.9	37.9	38.0	38.1	38.1
<b>TOTAL</b>	<b>53.1</b>	<b>53.0</b>	<b>52.8</b>	<b>52.6</b>	<b>52.3</b>

## CONFORMITY ANALYSIS

The conformity analysis was performed using the Mobile6.2 program. Mobile6.2 is a computer program that estimates VOC and NO<sub>x</sub> emission factors for gasoline and diesel -fueled on road motor vehicles. The model was developed by the USEPA.

Mobile6.2 calculates emission factors for twenty-eight individual vehicle types in two regions of the country. Mobile6.2 emission factor estimates depend on various conditions such as average travel speed, operating modes, fuel volatility, and mileage accrual rates. Many of the variables affecting vehicle emissions can be specified by the user. The analysis is based on comparing the emissions budget to the analysis years 2011, 2018, 2025, and 2030.

Critical Mobile6.2 inputs assumptions are:

- Temperature:

Maximum temperature = 95.0° F

Minimum temperature = 71.0° F

- The Reid Vapor Pressure (RVP) value = 9.0

- Emission factors are based on an average day during the month of July.

Sample Mobile6.2 inputs and outputs files are available upon request.

### *Mobile6.2 - Inputs*

The inputs to the Mobile6.2 emissions factor model are VMT and average speed by NFC grouped as shown in the previous tables.

### *Mobile6.2 - Results*

The following tables provide the results of Mobile6.2 emissions. The emission impact for each analysis year 2011, 2018, 2025, and 2030 is compared to the emission budget. To attain conformity, the emissions for the whole area must be less than the emission budget.

Table 6-8 – Calhoun County Emissions

Scenario	Emissions in kilograms/day	
	VOC	NOx
<b>Attainment Budget</b>	n/a	n/a
<b>2011 Action</b>	3,913.1074	6,765.0293
<b>2018 Action</b>	2,747.9878	3,527.9974
<b>2025 Action</b>	2,265.0708	2,534.0020
<b>2030 Action</b>	2,296.4592	2,271.8425

Table 6-9 – Kalamazoo County Emissions

Scenario	Emissions in kilograms/day	
	VOC	NOx
<b>Attainment Budget</b>	n/a	n/a
<b>2011 Action</b>	5,451.1118	8,051.9906
<b>2018 Action</b>	3,789.3121	4,261.7563
<b>2025 Action</b>	3,132.9599	3,155.0266
<b>2030 Action</b>	3,185.8435	2,858.8958

Table 6-10 – Van Buren County Emissions

Scenario	Emissions in kilograms/day	
	VOC	NOx
<b>Attainment Budget</b>	n/a	n/a
<b>2011 Action</b>	2,149.7561	3,779.3673
<b>2018 Action</b>	1,518.4997	1,987.5543
<b>2025 Action</b>	1,243.5657	1,439.8903
<b>2030 Action</b>	1,263.6588	1,293.4923

## CONFORMITY DEMONSTRATION

The following table clearly demonstrates that the Transportation Plans, the Transportation Improvement Programs, and regionally significant projects result in lower emissions in each of the milestone years than the approved maintenance budget, consistent with USDOT/EPA conformity rules. These results support the determination of conformity with applicable requirements of the SIP following and in accordance with the Clean Air Act, as amended and SAFETEA-LU.

Table 6-11  
Results for the Kalamazoo-Battle Creek-MI Maintenance Area 8 Hour Ozone Standard  
March 2009

Scenario	Emissions in kilograms/day	
	VOC	NOx
<b>Attainment Budget</b>	26,916.6200	49,315.3900
<b>2011 Action</b>	11,513.9753	18,596.3872
<b>2018 Action</b>	8,055.7996	9,777.3080
<b>2025 Action</b>	6,641.5964	7,128.9189
<b>2030 Action</b>	6,745.9615	6,424.2306

## MPO ACTION

A summary of the results was presented and considered by the BCATS and KATS Technical Committees and was also considered by their respective Policy Committees. Based on the materials contained in this document, the BCATS and KATS committees have determined that their respective 2030 Transportation Plans (as adopted by the Kalamazoo Area Transportation Study in March, 2009) and 2011 - 2014 TIPs demonstrate conformity with the SIP. The rural areas of Calhoun and Van Buren counties followed their public participation process.

## SECTION 7 - PROJECT LIST

This section presents specific transportation improvements which the participating units of government intend to undertake during fiscal years (FYs) 2011-2014 (October 1, 2010–September 30, 2014). The list of planned FY 2011-2014 road and transit projects consists of 54 projects, totaling \$26.9 million in local, State, and Federal funds, and is presented at the end of this section. Preceding the project list is a table of the “Fund Source” abbreviations and the acceptable “Primary Work Types” used in the project list’s “uniform format” used statewide since 2007.

A new data item in this TIP project list is "Total Project Cost", shown in the right-most column. That cost includes the "Total Phase Cost" of the project plus expenses for engineering/design, right-of-way acquisition, utility work, and any other "non-participating" costs not eligible for Federal-aid. For local construction projects, the additional expenses have been assumed to approximate 10% of the "Total Phase Cost", generally for engineering/design. None of the local projects in this original FY11-14 TIP have extra right-of-way, utility, or "non-participating" costs. MDOT provides the "Total Project Cost" estimate for its State trunkline projects. For transit projects, there typically are no costs beyond the "Total Phase Cost". The cost figures used for the "Demonstration of Financial Constraint" (Table 2-2 in Section 2), and for any other summary cost totals in this document, are all based on the "Total Phase Cost".

The following narrative summarizes funding and expenditures for the four-year road and transit programs.

The **FY 2011-2014 road program** includes 28 projects, all together proposed to utilize **\$10.8 million** in local, State, and Federal funds. Of the listed road projects, 21 are specific road or road-related construction projects, and are highlighted in Figure 7:1 on a following page in this section and also included in Section 5's environmental justice analysis. There are no “Advance Construct” or “Advance Construct Conversion” projects in the initial FY11-14 TIP. The remaining seven road projects are “General Program Account” (GPA) “projects”.

Several years ago MDOT developed GPA “lump sum” programs for listing in MPO TIPS “to address the need for small improvements as they arise”. The four Local GPAs in the categories of Bridges, Highway Railroad Crossings, Highway Safety, and Transportation Enhancements are no longer required in BCATS’ TIP. Seven Trunkline GPAs are included for FY11: Bridge Capital Preventative Maintenance & Capital Scheduled Maintenance (CPM & CSM), Highway CPM & CSM, Highway Railroad Crossings, Highway Safety, Pre-Construction Engineering (includes early preliminary engineering, preliminary engineering, right-of-way acquisition, and “SUB” phase preliminary engineering for bridge projects), Program Development Scoping, and Transportation Enhancements. These programs are listed with an estimated total cost to represent what level of funds may possibly be utilized within each program in the BCATS' area.

In recent years it has become and will continue to be BCATS’ practice to list major GPA projects, typically activity greater than \$100,000, separate from the GPA “project”, with their own cost

& funding estimates. Such projects will be amended to the TIP as necessary & appropriate. It is also anticipated that the same seven Trunkline GPAs will be amended annually for FY12, FY13, & FY14 as funding levels are established.

Specified MDOT construction projects include:

- < In **FY 2011**: Improvements at the I-94 Exit 104 Interchange at M-311 (11 Mile Rd), including extension & superelevation modification of the freeway entrance ramp from M-311 to I-94 wb, and the addition of a center left turn lane on I-94BL/M-96 (Michigan Ave) for southeast-bound traffic on Michigan Ave at the Wheatfield Parkway intersection.
- < In **FY 2012**: Replacement of the tower lighting at the I-194/M-66 interchange with I-94BL (Dickman Rd).
- < In **FY 2013**: Resurfacing of the carpool parking lot along I-94BL (W Columbia/Climax Rd) in the northeast quadrant of the I-94 Exit 92 Interchange.
- < In **FY 2014**: No MDOT projects specified.

Numerous projects across the State in MDOT's *2010-2014 Five-Year Transportation Program* have been "delayed due to the reduced highway investment strategy" implemented in response to uncertainty over the availability of adequate State funds to match Federal-aid. Consequently, those projects cannot be officially programmed in TIPs at this time, and so are listed only as

<b>TABLE 7-1</b> <b>Battle Creek Area Transportation Study – FY 2011-2014 TIP</b> <b>Illustrative Projects</b>					
Fiscal Year	Project Name	Limits	Project Description	Total Estimated Cost	MDOT Job No.
2011	I-194/M-66 bridge over GTWRR	I-194 over GTWRR in downtown Battle Creek	Concrete deep overlay, beam end repair, full paint, pin & hanger replacement	\$ 1,918,000	106888
2011	I-194/M-66 bridges over Dickman & Fountain	I-194 over I-94BL (Dickman) and over Fountain in downtown Battle Creek	Concrete deep overlay, beam end repair, full paint, pin & hanger replacement	\$ 2,756,000	104046
2011	M-96 (Dickman Rd W)	from Armstrong Rd eastward to northern leg of M-37 (Helmer)	Cold milling and one course HMA overlay with ADA ramp upgrades	\$ 1,054,000	109498
2012	M-66 bridge over Wanondaga Creek	M-66 over Wanondaga Creek, ~0.6 mi south of M-78, ~0.2 mi north of White Rabbit Rd (T Dr N)	Bridge replacement & rehabilitate approaches	\$ 1,227,000	89916
2013	M-96 (Columbia Ave E) bridge over Raymond Rd	M-96 bridge over Raymond Rd, 1.9 mi east of I-194 in Battle Creek	Superstructure replacement, substructure repair, approaches	\$ 1,492,000	105878
2014	I-94BL (W Columbia/Climax Rd)	from I-94 northeastward to Columbia Ave turnoff	HMA overlay & minor widening	\$ 3,779,000	102976

"illustrative" projects. The six BCATS-area projects in Table 7-1, displayed above, are noted in Figure 7:1 and were also included in Section 5's environmental justice analysis, in part to facilitate each project's expeditious amendment to the TIP as its funding is confirmed.



BCATS' Federal Surface Transportation Program-Urban (STUL) funds will be applied to:

- < In **FY 2011**: Resurfacing portions of Beckley Rd-B Dr N, Capital Ave SW, 20<sup>th</sup> St, Helmer Rd, and North Ave; and purchasing two replacement vans for Battle Creek Transit's (BCT's) demand-response service.
- < In **FY 2012**: Resurfacing portions of Jackson St-Stringham Rd, Capital Ave SW, and B Dr N; and reconfiguring the 20<sup>th</sup> St @ I-94BL (Dickman Rd) intersection.
- < In **FY 2013**: Resurfacing portions of Beckley Rd, B Dr S, Goguac St, Upton Ave, and Avenue A; and purchasing one replacement van for BCT's demand-response service.
- < In **FY 2014**: Resurfacing portions of East Ave, 6½ Mile Rd, Raymond Rd, Territorial Rd, and Evergreen Rd.

Congestion Mitigation Air Quality (CMAQ) funds at present are only designated for purchasing one large bus for BCT's fixed-route service, in FY11. Other FY11-14 CMAQ projects will be amended to the TIP as project applications are submitted to MDOT and determined eligible for CMAQ funding by the Federal Highway Administration (FHWA).

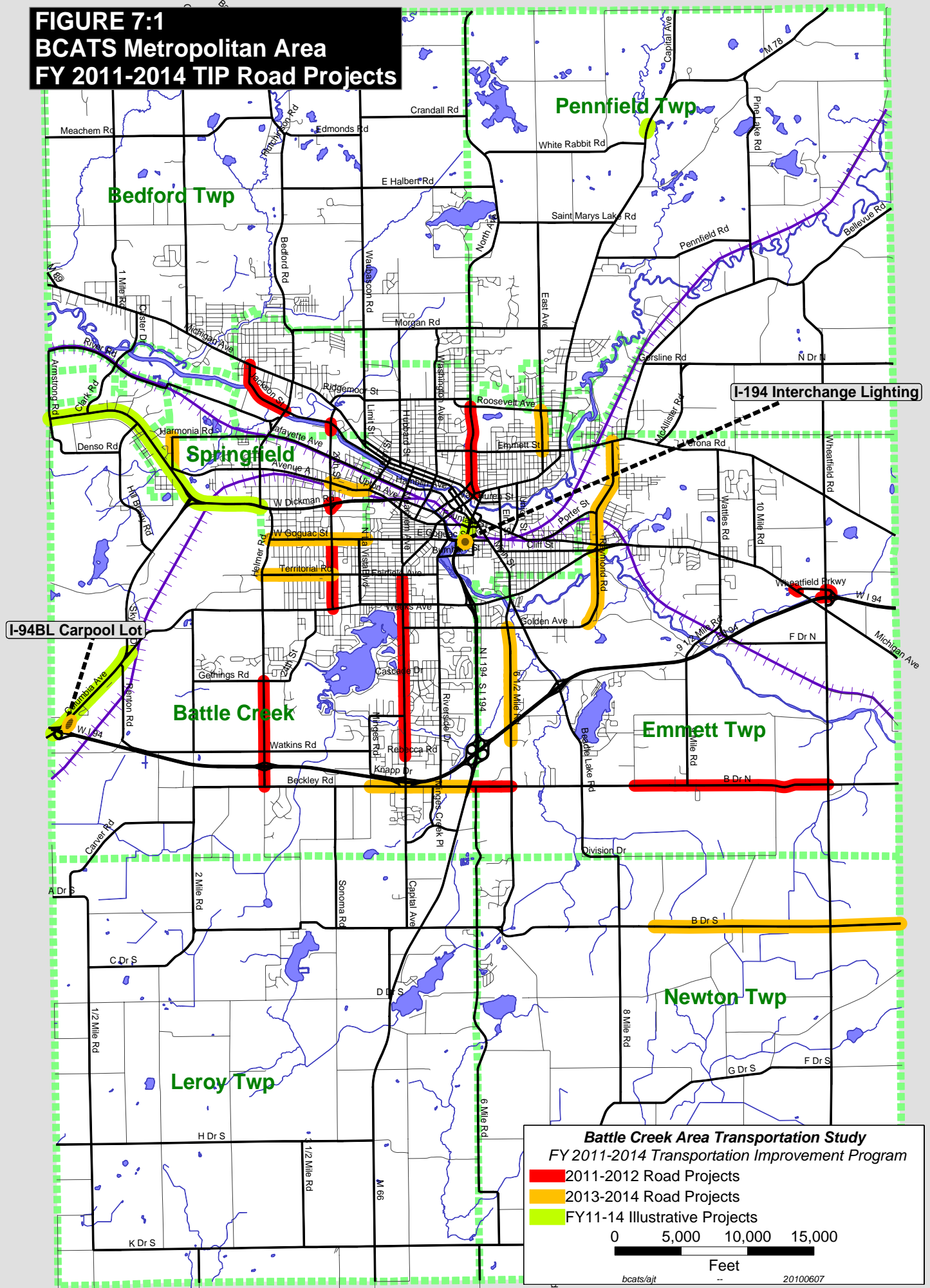
The **FY 2011-2014<sup>3</sup> transit program** developed by Battle Creek Transit (BCT) requests a total of \$3.9 million in Section 5307 operating funds from the Federal Transit Administration (FTA). BCT is required by FTA to expend an amount equal to 1% of its Section 5307 operating assistance on "safety and security"; accordingly, a \$10,000 "Transit Security Upgrade" project is listed in each year of this TIP. The operating funds requested from FTA will be matched by \$5.0 million from the State, and \$3.8 million from the City of Battle Creek. Almost \$1.6 million in farebox and other miscellaneous revenue is also expected over the next four years to offset operating expenses. State specialized services operating assistance, that BCT "passes through" to several local human service agencies, in an amount of approximately \$94,000 annually, is listed in each year of this TIP.

In FY13, BCT is requesting a total of \$400,000 in FTA Section 5309 capital funds, to be matched by State funds in the amount of \$100,000, to update & upgrade its ten+ year old fare collection system. As noted previously, STUL & CMAQ funding will facilitate replacement of several BCT vehicles in FY11 & FY13. Other FY11-14 transit capital expenditures include Federal Section 5310 Capital funds of \$175,000 "passed through" BCT, matched with \$44,000 in State funds, to purchase a total of seven 7-15 passenger wheelchair accessible buss/vans for local human service agencies in FY11. Besides the "Transit Security Upgrade" projects, no transit capital expenditures are indicated in FY12 or FY14.

---

<sup>3</sup> The BCT fiscal year runs from July 1 through June 30.

**FIGURE 7:1**  
**BCATS Metropolitan Area**  
**FY 2011-2014 TIP Road Projects**



Code	Fund Description	Source
AR	American Recovery and Reinvestment Act - Any Area	Federal
AR1	American Recovery and Reinvestment Act - 120 Day Obligation	Federal
ARE	American Recovery and Reinvestment Act - Enhancement	Federal
ARE1	American Recovery and Reinvestment Act - Enhancement - 120 Day Obligation	Federal
ARU	American Recovery and Reinvestment Act - TMA	Federal
ARUL	American Recovery and Reinvestment Act - Small MPO, Small Urban	Federal
ARL	American Recovery and Reinvestment Act - Rural	Federal
AIRR	American Recovery and Reinvestment Act - Indian Reservation Roads	Federal
AFHL	American Recovery and Reinvestment Act - National Park Roads	Federal
AFFH	American Recovery and Reinvestment Act - Forest Highways	Federal
AFBD	American Recovery and Reinvestment Act - Ferry Boats	Federal
BHI	Bridge Rehabilitation - Prior 1991 - Interstate	Federal
BHN	Bridge Rehabilitation - National Highway System (NHS)	Federal
BHO	Bridge Rehabilitation - Not Classified, Off System	Federal
BHT	Bridge Rehabilitation - Surface Transportation Program (STP)	Federal
BI08	Build Michigan FY08	Federal
BOWD	Business Opportunity & Workforce Development Center	Federal
BRI	Bridge Replacement - Pre 1991 Interstate	Federal
BRN	Bridge Replacement - National Highway System (NHS)	Federal
BRO	Bridge Replacement - Not Classified, Off System	Federal
BRT	Bridge Replacement - Surface Transportation Program (STP)	Federal
CBGD	Corridor & Border Crossing Discretionary	Federal
CBIP	Coordinated Border Infrastructure Program - SAFETEA-LU	Federal
CM	Congestion Mitigation & Air Quality	Federal
CMG	Congestion Mitigation & Air Quality - 100% Federal	Federal
DIG	ISTEA Demonstration 100% Federal on Interstate	Federal
DOG	ISTEA Demonstration 100% Federal Not Classified	Federal
DPN	ISTEA Demonstration 80% Federal on NHS	Federal
DPO	ISTEA Demonstration 80% Federal Not Classified	Federal
DPS	ISTEA Demonstration 80% Federal on STP	Federal
DPSA	Demonstration Project Section 112 Division A	Federal
DST	Donor Bonus Surface Transportation	Federal
DSTU	Donor Bonus Surface Transportation - (Urban > 200,000)	Federal
DSTT	Donor Bonus Surface Transportation - Rural - Trunkline	Federal
EBSL	Equity Bonus - SAFETEA-LU	Federal
EDAF	Economic Development - Category A with Federal Aid	Federal
EDCF	Economic Development - Category C with Federal Aid	Federal
EDDF	Economic Development - Category D with Federal Aid	Federal
EDFF	Economic Development - Category F with Federal Aid	Federal
ER	Emergency Relief	Federal
FBD	Ferry Boat & Terminal Discretionary	Federal
FFH	Federal Forest Highway	Federal
FLH	Federal Land Highways - Public Lands	Federal
HBOA	Highway Bridge Obligation Authority	Federal
HPP	High Priority Projects (Demo)	Federal
HPSL	High Priority Projects - SAFETEA-LU	Federal
HRRR	High Risk Rural Roads - SAFETEA-LU	Federal
HSG	High Speed Rail Crossings - 100% Federal	Federal
HSIP	Highway Safety Improvement Program - SAFETEA-LU	Federal
IM	Interstate Maintenance - No Added Lanes	Federal
IMD	Interstate Maintenance Discretionary	Federal
IMG	Interstate Maintenance - Safety - 100% Federal	Federal
ITS	Intelligent Transportation Systems	Federal
JST	85% Minimum Floor Surface Transportation	Federal
JSTU	85% Minimum Floor Surface Transportation (Urban Area > 200,000)	Federal
LTA	Local Technical Assistance Program	Federal
MG	Minimum Guarantee	Federal
NCII	National Corridor Infrastructure Improvement - SAFETEA-LU	Federal
NH	National Highway System	Federal
NHG	National Highway System - Safety - 100% Federal	Federal
NHI	National Highway Funds on I (Does not Qualify for I)	Federal
NHIM	National Highway Funds on I (Qualifies for IM)	Federal
NHS	National Highway System - MDOT Safety Program	Federal
NRT	National Recreational Trails	Federal
OFHWA	Other FHWA Funds (Specify source in <i>Comments</i> )	Federal
PNRS	Projects of National and Regional Significance	Federal
RP	Research Project	Federal
RPH	American Recovery and Reinvestment Act	Federal
SBD	Scenic Byways - Discretionary	Federal
SIB	State Infrastructure Bank	Federal
SLG	Surface Transportation Safety	Federal
SRSE	Safe Routes to School - Either - SAFETEA-LU	Federal
SRSI	Safe Routes to School - Infrastructure - SAFETEA-LU	Federal
SRSN	Safe Routes to School - Non-infrastructure - SAFETEA-LU	Federal
SST	Supportive Services Training	Federal
ST	Surface Transportation Program (STP) - Any Area	Federal
STE	STP - Enhancement	Federal
STG	STP - Safety - 100% Federal for ST	Federal
STH	STP - Safety - Hazard Elimination	Federal
STI	STP - Interstate (90%)	Federal
STL	STP - Local	Federal

STR	STP - Safety - Rail-Highway Crossing Protection	Federal
STRG	STP - Safety Rail-Highway & Incentive Payment - 100% Federal	Federal
STS	STP - Any Area- MDOT Safety Program	Federal
STT	STP - Trunkline	Federal
STU	STP - Urban Areas > 200,000 Population	Federal
STUL	STP - Urban Areas < 200,000 Population	Federal
STUT	STP - Urban Areas < 200,000 Population - Trunkline	Federal
SUG	STP - Safety - 100% Federal for STU	Federal
TBR	Timber Bridge Fund	Federal
TCP	Tax Compliance Program	Federal
TCSP	Transportation, Community and System Preservation	Federal
TG	Transportation Grant (100% Fed)	Federal
TIP	Transportation Improvements Projects SAFETEA-LU	Federal
3038	Section 3038 - Over the Road Bus Program	Transit
3045	Section 3045 - National Fuel Cell Technology Development Program	Transit
5303	Section 5303 - CTF Metropolitan Transportation Planning	Transit
5304	Section 5304 - CTF Statewide Transportation Planning	Transit
5305	Section 5305 - Metropolitan and Statewide Planning	Transit
5307	Section 5307 - UZA Formula	Transit
5308	Section 5308 - Clean Fuels Program	Transit
5309	Section 5309 - Capital Bus and Capital New Starts	Transit
5310	Section 5310 - Elderly & Disabled	Transit
5311	Section 5311 - Non-UZA	Transit
5313	Section 5313 - Transit Cooperative Research Program	Transit
5314	Section 5314 - National Research and Technology Program	Transit
5316	Section 5316 - Transit - Section 5316 - Job Access/Reverse Commute	Transit
5317	Section 5317 - Transit - Section 5317 - New Freedom Initiative	Transit
5320	Section 5320 - Alternative Transportation in Parks and Public Lands	Transit
5339	Section 5339 - Alternative Analysis	Transit
5505	Section 5505 - University Transportation Centers Program	Transit
A307	Section 5307 - UZA Formula - American Recovery and Reinvestment Act	Transit
A311	Section 5311 - Non-UZA - American Recovery and Reinvestment Act	Transit
AR-T	American Recovery and Reinvestment Act - Transit	Transit
BI04	Build Michigan Bond Issue 2004	State
BI06	Build Michigan Bond Issue 2006	State
BI08	Build Michigan Bond Issue 2008	State
BT01	Bond Trunkline Roads for First Issue	State
CTF	Comprehensive Transportation Fund	State
EDA	Economic Development - Category A	State
EDC	Economic Development - Category C	State
EDD	Economic Development - Category D	State
EDF	Economic Development - Category F	State
JT07	Jobs Today Bond Issue 2007 GARVEE (State AC for Federal GARVEE Bonds)	State
LFMP	Local Fund Match Program - 100% Local	State
M	State Funds - Michigan Betterment	State
MBS	Michigan Budget Stabilization	State
MBWB	Michigan Blue Water Bridge	State
MCS	State Funds - Critical Structures	State
MDA	Drainage Assessment	State
MER	Emergency Program	State
MIR	State Funds - Institutional Roads	State
MRR	Michigan Railroad	State
MRRF	Michigan Revolving Real Estate Fund	State
MS	Safety Program	State
MTB	Turnback Program	State
SIBG	100% State Infrastructure Bank	State
CITY	Local - City (Specify city in <i>Comments</i> )	Local
CNTY	Local - County (Specify county in <i>Comments</i> )	Local
OLF	Other Local Funds (Specify local fund source in <i>Comments</i> )	Local
PRVT	Private (Non-governmental)	Local
TRAL	Local - Transit Authority Funds (Specify transit authority in <i>Comments</i> )	Local
TWP	Local - Township (Specify township in <i>Comments</i> )	Local
VLG	Local - Village (Specify village in <i>Comments</i> )	Local

#### Primary Work Types

Bridge - other	Surface Transportation	Transit operations	Transit
Bridge replacement	Surface Transportation	Transit operations equipment	Transit
Bridge restore & rehabilitate	Surface Transportation	Transit vehicle additions/replacements	Transit
New route/structure (capacity increase)	Surface Transportation	Transit vehicle rehabilitation	Transit
Reconstruct	Surface Transportation	Aviation	Miscellaneous
Restore & rehabilitate	Surface Transportation	GPA	Miscellaneous
Resurface	Surface Transportation	Heritage routes	Miscellaneous
Roadside facility	Surface Transportation	Intermodal/multimodal	Miscellaneous
Traffic ops/safety	Surface Transportation	Marine/port	Miscellaneous
Widen - major (capacity increase)	Surface Transportation	Miscellaneous	Miscellaneous
Widen - minor	Surface Transportation	Planning and research	Miscellaneous
Transit communication equipment	Transit	Rail	Miscellaneous
Transit facility	Transit	Studies	Miscellaneous
Transit maintenance equipment and parts	Transit	Wetland mitigation	Miscellaneous

\*\*\*\* Battle Creek Area Transportation Study (BCATS) -- Project List -- FY 2011-2014 Transportation Improvement Program (TIP) \*\*\*\*  
6/23/10

Fiscal Year	County	Implementing Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost (\$1000s)	Federal Fund Source	State Matching Funds (\$1000s)	State Fund Source	Local Matching Funds (\$1000s)	Local Fund Source	Total Phase Cost (Fed-Aid + Match) (\$1000s)	MDOT Job No.	Local ID No.	MPO/ Rural Approval Date	Amendment Type	Air Quality	Comments	Total Project Cost (\$1000s)
2011	Calhoun	Calhoun County Road Commission	Beckley Rd - B Dr N	from Minges Rd eastward to M-66 eastward to 6 1/2 Mile Rd	0.6	Resurface	Resurfacing	CON		237	STUL			59	CNTY	296	101248	2011012.0	06/23/10		Exempt	Amended to FY08-11 TIP March/09 to adjust cost with increased local share after updated estimate of STUL revenue available. Local Act 51 funds from City of Battle Creek and CCRC. Original limits from Minges Rd to 6 1/2 Mile Rd, total cost \$793,000, local share ~30%. Under CCRC jurisdiction east of 6 Mile Rd (as B Dr N). Amended to FY08-11 TIP Jan/10 to move work west of M-66 to 2013 by City of BC, list CCRC as Implementing Agency for entire segment east of M-66, & adjust cost with 20% local share.	326
2011	Calhoun	City of Battle Creek	20th St and Jackson St	20th St -- from Michigan to north Springfield city limits (0.4 mi) & from south Springfield limits (Gogucac) to M-96/Columbia (1.0 mi); Jackson St -- from 20th to Angell (including part in Springfield) (1.0 mi)	1.0	Resurface	Resurfacing	CON		199	STUL			50	CITY	249	101247	2011011.0	06/23/10		Exempt	Local Act 51 funds from City of Battle Creek. Original local share ~30%. Original \$624,000 project amended to FY08-11 TIP March/09 to remove Jackson work, revise limits, and adjust cost with increased local share after updated estimate of STUL revenue available. Jackson from Bedford to Angell resurfaced in 2009 with ARRA funds (as amended). Jackson-Stringham from Bedford to Michigan planned to be resurfaced in 2012 with STUL funds. Amended to FY08-11 TIP Jan/10 to remove 20th St work from Michigan to north Sprngfld city limits & adjust cost with 20% local share.	274
2011	Calhoun	City of Battle Creek	20th St bridge over Kalamazoo River	from Jackson St southward ~ 400'	0.1	Bridge - other	Rehabilitation	CON		444	BHT	83	M	28	CITY	556	105338		06/23/10		Exempt	Local Act 51 funds from City of Battle Creek. Amended to FY08-11 TIP April/10 to add project approved for bridge funds Nov/08.	611
2011	Calhoun	City of Battle Creek	Capital Ave SW - Phase 1	from Weeks Fairfield southward to Weeks, and from Cascade southward to Rebecca	1.7	Resurface	Resurfacing	CON		300	STUL			75	CITY	375	101249	2011013.0	06/23/10		Exempt	Local Act 51 funds from City of Battle Creek. Local share ~30%. Original \$355,000 project amended to FY08-11 TIP March/09 to revise limits and adjust cost with increased local share after updated estimate of STUL revenue available. Amended to FY08-11 TIP Jan/10 to move work from Weeks southward to Cascade to 2012, & adjust cost with 20% local share.	413
2011	Calhoun	City of Battle Creek	Helmer Rd	Beckley Rd to Gethings Rd	1.5	Resurface	Resurfacing	CON		209	STUL			52	CITY	261	109772	2011902.7	06/23/10		Exempt	Amended to FY08-11 TIP Jan/10	287
2011	Calhoun	City of Battle Creek	North Ave	from Capital Ave NE northward to Roosevelt Ave	1.3	Resurface	Resurfacing	CON		269	STUL			67	CITY	337	109773	2011903.7	06/23/10		Exempt	Amended to FY08-11 TIP Jan/10	370
2011	Calhoun	City of Battle Creek - Transit	1 (one) 35' 32-Passenger Wheelchair Accessible Bus	BCT service area		Transit vehicle additions/replacements	REPLACE one large bus used in fixed-route service	T-Cap		300	CM	75	CTF			375	110394	2008025.0	06/23/10		Exempt	Amended to FY08-11 TIP April/10, upon affirmative CMAQ eligibility determination from FHWA 3/26/10.	375
2011	Calhoun	City of Battle Creek - Transit	2 (two) 10-Passenger Lift-Equipped Buses/Vans	Demand-response service		Transit vehicle additions/replacements	REPLACE two buses/vans used in demand-response service	T-Cap		128	STUL	32	CTF			160	109774	2011904.7	06/23/10		Exempt	Amended to FY08-11 TIP Jan/10	160
2011	Calhoun	City of Battle Creek - Transit	Burnham Brook (dba Region 3B Area Agency on Aging) Capital Assistance	within Calhoun County		Transit vehicle additions/replacements	REPLACE One (1) 7-passenger minivan w/AC, front wheel drive, wheelchair accessibility	T-Cap		25	5310	6	CTF			31		2010016.0	06/23/10		Exempt	Amended to FY08-11 TIP April/10 to add project with funds "passed through" Battle Creek Transit (BCT). Project was "advertised" by BCT in public notices February/10.	31
2011	Calhoun	City of Battle Creek - Transit	Community Action (formerly Community Action Agency) Capital Assistance	within Calhoun County		Transit vehicle additions/replacements	REPLACE One (1) 15-passenger van w/AC, rear wheel drive, & lift	T-Cap		27	5310	7	CTF			34		2010017.0	06/23/10		Exempt	Amended to FY08-11 TIP April/10 to add project with funds "passed through" Battle Creek Transit (BCT). Project was "advertised" by BCT in public notices February/10.	34
2011	Calhoun	City of Battle Creek - Transit	Community Inclusive Recreation Capital Assistance	within Calhoun County		Transit vehicle additions/replacements	REPLACE One (1) 10-passenger cutaway 90" interior van w/lift - gas	T-Cap		51	5310	13	CTF			64		2010018.0	06/23/10		Exempt	Amended to FY08-11 TIP April/10 to add project with funds "passed through" Battle Creek Transit (BCT). Project was "advertised" by BCT in public notices February/10.	64
2011	Calhoun	City of Battle Creek - Transit	Expected Transit Farebox Revenue	BCT service area		Transit operations		T-Ops						380	CITY	380		2011015.0	06/23/10		Exempt	City of Battle Creek "farebox revenue" from fares, + "auxiliary" transit revenues (misc transp contracts, advertising) + "NonTrans" revenues (e.g. TIFA). Administrative action 4/20/10 to adjust cost estimates to match FY11 BCT operating/capital application to MDOT/FTA.	380
2011	Calhoun	City of Battle Creek - Transit	Marian Burch Adult Day Care Center Capital Assistance	within Calhoun County		Transit vehicle additions/replacements	REPLACE Two (2) 12-passenger vans w/AC, rear wheel drive	T-Cap		34	5310	8	CTF			42		2010020.1	06/23/10		Exempt	Amended to FY08-11 TIP April/10 to add project with funds "passed through" Battle Creek Transit (BCT). Project was "advertised" by BCT in public notices February/10.	42
2011	Calhoun	City of Battle Creek - Transit	Progressive Residential Services, Inc. Capital Assistance	within Calhoun County		Transit vehicle additions/replacements	ADD One (1) 7-passenger minivan w/deep tint, heavy duty	T-Cap		17	5310	4	CTF			21		2010020.2	06/23/10		Exempt	Amended to FY08-11 TIP April/10 to add project with funds "passed through" Battle Creek Transit (BCT). Project was "advertised" by BCT in public notices February/10.	21
2011	Calhoun	City of Battle Creek - Transit	Progressive Residential Services, Inc. Capital Assistance	within Calhoun County		Transit vehicle additions/replacements	REPLACE One (1) 15-passenger van w/deep tint, entry assistance, heavy duty	T-Cap		21	5310	5	CTF			27		2010020.2	06/23/10		Exempt	Amended to FY08-11 TIP April/10 to add project with funds "passed through" Battle Creek Transit (BCT). Project was "advertised" by BCT in public notices February/10.	27
2011	Calhoun	City of Battle Creek - Transit	Specialized Services Operating Assistance	within Calhoun County		Transit operations	Operating assistance to local human services agencies	T-Ops				93	CTF			93		2010021.0	06/23/10		Exempt	Amended to FY08-11 TIP April/10 to add project with funds "passed through" Battle Creek Transit (BCT). Project was "advertised" by BCT in public notices February/10.	93
2011	Calhoun	City of Battle Creek - Transit	Transit Operating Assistance	BCT service area		Transit operations		T-Ops		954	5307	1,228	CTF	938	CITY	3,120		2011014.0	06/23/10		Exempt	Local funds from City of Battle Creek general fund. Administrative action 4/20/10 to adjust cost estimates to match FY11 BCT operating/capital application to MDOT/FTA.	3,120
2011	Calhoun	City of Battle Creek - Transit	Transit Security Upgrade	BCT vehicles & facilities		Transit facility	Miscellaneous security related improvements	T-Cap		10	5307	2	CTF			12		2011016.0	06/23/10		Exempt	Required 1% of S5307 funding to be spent on safety & security	12
2011	Calhoun	MDOT	I-94 Interchange (exit 104) CON	at M-311 (11 Mile Rd)	0.7	Traffic ops/safety	Extension & superelevation modification of ramp from M-311 to I-94 wb; add center left turn lane on I-94BL/M-96 (Michigan Ave) for sb traffic on Michigan Ave @ Wheatfield Parkway intersection	CON		456	IM	51	M			507	108715		06/23/10		Exempt	Amended to FY08-11 TIP Jan/10 to add project. Amended to FY08-11 TIP April/10 to move from 2010 to 2011.	552
2011	Calhoun	MDOT	Trunkline - Bridge Capital Preventive Maint & Capital Scheduled Maint (Bridge CPM/CSM)	Battle Creek metro area		GPA	Bridge Preventive Maintenance	CON		243	BHT	61	M			304		2011003.0	06/23/10		Exempt		304
2011	Calhoun	MDOT	Trunkline - Highway Capital Preventive Maint & Capital Scheduled Maint (Hwy CPM/CSM)	Battle Creek metro area		GPA	Highway Preventive Maintenance Projects	CON		571	ST	143	M			714		2011002.0	06/23/10		Exempt		714
2011	Calhoun	MDOT	Trunkline - Highway Railroad Crossing	Battle Creek metro area		GPA	Rail/Hwy Crossing Improvements	CON		31	STR	8	M			38		2011004.0	06/23/10		Exempt		38
2011	Calhoun	MDOT	Trunkline - Highway Safety	Battle Creek metro area		GPA	Traffic Control & Safety Projects	CON		275	STS	183	M			458		2011001.0	06/23/10		Exempt	Maintenance/upgrade of existings signs, signals, pavement markings, & guardrail.	458
2011	Calhoun	MDOT	Trunkline - Preliminary Engineering & Right-of-Way Pre-Construction Engineering	Battle Creek metro area		GPA	EPE, PE, & ROW for R&R projects + SUB (bridge PE)	PE		188	ST	47	M			236		2011005.0	06/23/10		Exempt	Administrative action 6/16/10 to modify name, description, & phase, also to include SUB phase (bridge PE) activity under this GPA.	236
2011	Calhoun	MDOT	Trunkline - Program Development Scoping	Battle Creek metro area		GPA	Review needs by corridor to determine cost & scope of potential projects for use in Call for Projects process.	EPE		84	ST	19	M			103			06/23/10		Exempt	Amended to FY08-11 TIP to add new GPA "project" July/10; cost estimate by BCATS, based on FY10 I-94 Trunkline Scoping project cost + 3.2%.	103
2011	Calhoun	MDOT	Trunkline - Transportation Enhancements	Battle Creek metro area		GPA	to be determined	CON		108	STE	27	M			135		2011007.0	06/23/10		Exempt		135



\*\*\*\* Battle Creek Area Transportation Study (BCATS) -- Project List -- FY 2011-2014 Transportation Improvement Program (TIP) \*\*\*\*  
6/23/10

Fiscal Year	County	Implementing Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost (\$1000s)	Federal Fund Source	State Matching Funds (\$1000s)	State Fund Source	Local Matching Funds (\$1000s)	Local Fund Source	Total Phase Cost (Fed-Aid + Match) (\$1000s)	MDOT Job No.	Local ID No.	MPO/ Rural Approval Date	Amendment Type	Air Quality	Comments	Total Project Cost (\$1000s)
2012	Calhoun	Calhoun County Road Commission	B Dr N	from 8 1/2 Mile Rd eastward to 11 Mile Rd	2.8	Resurface	Resurfacing	CON		640	STUL			160	CNTY	800	110527	1201.0	06/23/10		Exempt	Local Act 51 funds from CCRC.	880
2012	Calhoun	City of Battle Creek	Capital Ave SW - Phase 2	from Weeks southward to Cascade	0.9	Resurface	Resurfacing	CON		228	STUL			57	CITY	285	110528	1202.0	06/23/10		Exempt	Local Act 51 funds from City of Battle Creek.	314
2012	Calhoun	City of Battle Creek	Jackson St-Stringham Rd	from M-37 (Bedford Rd) westward then northward to M-89 (Michigan Ave)	0.9	Resurface	Resurfacing	CON		200	STUL			50	CITY	250	110529	1203.0	06/23/10		Exempt	Local Act 51 funds from City of Battle Creek.	275
2012	Calhoun	City of Battle Creek - Transit	Expected Transit Farebox Revenue	BCT service area		Transit operations		T-Ops						386	CITY	386		1204.0	06/23/10		Exempt	City of Battle Creek "farebox revenue" from fares, misc transp contracts, advertising, & TIFA. Estimated 1.6% increase from previous year.	386
2012	Calhoun	City of Battle Creek - Transit	Specialized Services Operating Assistance	within Calhoun County		Transit operations	Operating assistance to local human services agencies	T-Ops				94	CTF			94		1205.0	06/23/10		Exempt	State funds "passed through" Battle Creek Transit (BCT). Estimated 1% increase from previous year.	94
2012	Calhoun	City of Battle Creek - Transit	Transit Operating Assistance	BCT service area		Transit operations		T-Ops		970	5307	1,247	CTF	953	CITY	3,170		1206.0	06/23/10		Exempt	Local funds from City of Battle Creek general fund. Estimated 1.6% increase from previous year for each source.	3,170
2012	Calhoun	City of Battle Creek - Transit	Transit Security Upgrade	BCT vehicles & facilities		Transit facility	Miscellaneous security related improvements	T-Cap		10	5307	2	CTF			12		1207.0	06/23/10		Exempt	Required 1% of \$5307 funding to be spent on safety & security	12
2012	Calhoun	City of Springfield	20th St @ I-94BL (Dickman) Intersection	southeast quadrant of 20th/Dickman Intersection	0.1	Traffic ops/safety	Remove "New Jersey turn" crossover/cutoff, reconstruct intersection, update/modify signal as necessary	CON		317	STUL			79	CITY	396	110532	1208.0	06/23/10		Exempt	Local Act 51 funds from City of Springfield. Cooperative project with MDOT, additional Fed/State funding may be required.	436
2012	Calhoun	MDOT	I-194 Interchange Lighting CON	I-194/M-66 at I-94BL (Dickman Rd)	0.4	Roadside facility	Replace tower lighting	CON		841	IM	93	M			935	103272	1209.0	06/23/10		Exempt	Listed in FY of funding obligation, not FY of construction (FY13)	976
2013	Calhoun	Calhoun County Road Commission	B Dr S	from 8 1/2 Mile Rd eastward to 12 Mile Rd	3.5	Resurface	Resurfacing	CON		640	STUL			160	CNTY	800	110533	1301.0	06/23/10		Exempt	Local Act 51 funds from CCRC.	880
2013	Calhoun	City of Battle Creek	Beckley Rd	from Minges Rd eastward to M-66	1.4	Resurface	Resurfacing	CON		400	STUL			100	CITY	500	110541	1302.0	06/23/10		Exempt	Local Act 51 funds from City of Battle Creek.	550
2013	Calhoun	City of Battle Creek - Transit	1 (one) 10-Passenger Lift-Equipped Bus/Van	Demand-response service		Transit vehicle additions/replacements	Replace one bus/van used in demand-response service	T-Cap		65	STUL	16	CTF			82	110542	1303.0	06/23/10		Exempt		82
2013	Calhoun	City of Battle Creek - Transit	Expected Transit Farebox Revenue	BCT service area		Transit operations		T-Ops						392	CITY	392		1304.0	06/23/10		Exempt	City of Battle Creek "farebox revenue" from fares, misc transp contracts, advertising, & TIFA. Estimated 1.6% increase from previous year.	392
2013	Calhoun	City of Battle Creek - Transit	Farebox System Upgrade	BCT vehicles & facilities		Transit operations equipment	Update & upgrade 10-yr old fare collection system	T-Cap		400	5309	100	CTF			500		1305.0	06/23/10		Exempt		500
2013	Calhoun	City of Battle Creek - Transit	Specialized Services Operating Assistance	within Calhoun County		Transit operations	Operating assistance to local human services agencies	T-Ops				94	CTF			94		1306.0	06/23/10		Exempt	State funds "passed through" Battle Creek Transit (BCT). Estimated 1% increase from previous year.	94
2013	Calhoun	City of Battle Creek - Transit	Transit Operating Assistance	BCT service area		Transit operations		T-Ops		985	5307	1,267	CTF	968	CITY	3,221		1307.0	06/23/10		Exempt	Local funds from City of Battle Creek general fund. Estimated 1.6% increase from previous year for each source.	3,221
2013	Calhoun	City of Battle Creek - Transit	Transit Security Upgrade	BCT vehicles & facilities		Transit facility	Miscellaneous security related improvements	T-Cap		10	5307	2	CTF			12		1308.0	06/23/10		Exempt	Required 1% of \$5307 funding to be spent on safety & security	12
2013	Calhoun	City of Springfield	Goguac St	from Helmer Rd eastward to Carl Ave (east city limits)	1.4	Resurface	Resurfacing	CON		227	STUL			57	CITY	284	110543	1309.0	06/23/10		Exempt	Local Act 51 funds from City of Springfield.	313
2013	Calhoun	City of Springfield	Upton Ave & Avenue A	Upton from Avenue A eastward to city limits, Avenue A from 20th St eastward to Upton	0.6	Resurface	Resurfacing	CON		97	STUL			24	CITY	121	110578	1310.0	06/23/10		Exempt	Local Act 51 funds from City of Springfield. Cost estimated @ \$220,000/mile. Project may also include resurfacing of non-Fed-aid eligible segment of Upton from Helmer Rd eastward to Avenue A, ~ 1.3 mi.	133
2013	Calhoun	MDOT	I-94BL (W Columbia/Climax Rd) Carpool Lot - CON	in northeast quadrant of I-94 interchange at exit 92.		Roadside facility	Resurface carpool parking lot	CON		35	IM	8	M			43	103278	1311.0	06/23/10		Exempt	Listed in FY of funding obligation, not FY of construction (FY14)	45
2014	Calhoun	Calhoun County Road Commission	6 1/2 Mile Rd	from Christian Dr northward to G Dr N (Golden Ave)	1.6	Resurface	Resurfacing	CON		352	STUL			88	CNTY	440	110856	1401.0	06/23/10		Exempt	Local Act 51 funds from CCRC.	484
2014	Calhoun	Calhoun County Road Commission	Raymond Rd	Verona to Golden	2.7	Resurface	Resurfacing	CON		703	STUL			176	CNTY	879	110887	1402.0	06/23/10		Exempt	Local Act 51 funds from CCRC.	967
2014	Calhoun	Cities of BC & Springfield	Territorial Rd & Evergreen Rd	Territorial from Helmer eastward to 20th St, Evergreen from Avenue A northward to Harmonia	1.5	Resurface	Resurfacing	CON		292	STUL			73	CITY	365		1403.0	06/23/10		Exempt	Local Act 51 funds from Cities of Battle Creek & Springfield.	402
2014	Calhoun	City of Battle Creek	East Ave	from Emmett St northward to Roosevelt Ave	0.6	Resurface	Resurfacing	CON		128	STUL			32	CITY	160		1404.0	06/23/10		Exempt	Local Act 51 funds from City of Battle Creek.	176
2014	Calhoun	City of Battle Creek - Transit	Expected Transit Farebox Revenue	BCT service area		Transit operations		T-Ops						399	CITY	399		1405.0	06/23/10		Exempt	City of Battle Creek "farebox revenue" from fares, misc transp contracts, advertising, & TIFA. Estimated 1.6% increase from previous year.	399
2014	Calhoun	City of Battle Creek - Transit	Specialized Services Operating Assistance	within Calhoun County		Transit operations	Operating assistance to local human services agencies	T-Ops				95	CTF			95		1406.0	06/23/10		Exempt	State funds "passed through" Battle Creek Transit (BCT). Estimated 1% increase from previous year.	95
2014	Calhoun	City of Battle Creek - Transit	Transit Operating Assistance	BCT service area		Transit operations		T-Ops		1,001	5307	1,288	CTF	984	CITY	3,273		1407.0	06/23/10		Exempt	Local funds from City of Battle Creek general fund. Estimated 1.6% increase from previous year for each source.	3,273
2014	Calhoun	City of Battle Creek - Transit	Transit Security Upgrade	BCT vehicles & facilities		Transit facility	Miscellaneous security related improvements	T-Cap		10	5307	3	CTF			13		1408.0	06/23/10		Exempt	Required 1% of \$5307 funding to be spent on safety & security	13





## SECTION 8 - IMPLEMENTATION

An important stage which follows the development of the Transportation Improvement Program (TIP) is the implementation of the programmed projects. Given existing and anticipated financial constraints, these projects represent viable solutions to the transportation needs of Battle Creek area residents.

The success of any planning effort designed to address the public's needs ultimately lies in the translation of plans and policies into programs and projects which are effectively implemented. Planning in response to critical transportation problems means little if scheduled improvements are not carried out.

### **Responsible Agencies**

The responsibility for the implementation of the projects identified in this document is shared by participating units of government on the basis of jurisdiction, or legal responsibility, for the portion of the transportation network in question. Appropriate units of government and their respective responsibilities areas follows:

**Michigan Department of Transportation (MDOT):** MDOT is responsible for roadway improvements on the state highway system in the Battle Creek metropolitan area. These facilities, termed "trunklines," include I-94, I-94 Business Loop, I-194, M-66, M-78, M-37, M-89, M-96, M-294, and M-311.

**Calhoun County Road Commission (CCRC):** The CCRC is responsible for roadway improvements in the Townships of Bedford, Pennfield, Emmett, Leroy, and Newton (all of which are within the BCATS' study area) with the exception of the roadways under the jurisdiction of MDOT.

**City of Battle Creek:** The City of Battle Creek, through its Public Works Department, is responsible for all roadway improvements within its boundaries, with the exception of the roadways under the jurisdiction of MDOT. The City of Battle Creek, through Battle Creek Transit (which is a City of Battle Creek department), is responsible for improvements to the public transit system within the metropolitan area.

**City of Springfield:** The City of Springfield is responsible for all highway improvements within its boundaries, with the exception of roadways under the jurisdiction of MDOT.

### **Procedures for Implementation**

The TIP must be approved by the BCATS Policy Committee and must also be incorporated into MDOT's statewide TIP, called the STIP. The STIP must be approved by the governor, FHWA, and FTA. After these requirements have been met, the appropriate units of government may begin work on the transportation improvements for which they are responsible.

Work on all non-Federal-aid projects and programs may begin at any time at the discretion of the implementing agency.

Federal-aid transportation and transportation-related improvements are initiated and coordinated through the MDOT Transportation Service Center (TSC) office (the Marshall TSC covers the BCATS area), in concert with the MDOT Southwest Region office (located in Kalamazoo) and MDOT staff in Lansing. Federally assisted transit improvements should be initiated through MDOT's Bureau of Multi-Modal Transportation.

### **Administrative Actions, Amendments, Pro Rata Policy**

This document sets forth road and mass transit improvements for the Battle Creek metropolitan area. The scheduling of these projects represents only a best estimate of future improvements, since many circumstances may alter the characteristics of transportation programming in the Battle Creek area. The dynamic nature of the transportation environment often requires that changes be made in planned improvements. The TIP is, therefore, intended to be flexible, and amendments or revisions to scheduled projects may be made as circumstances dictate.

In general, there is a need to formally act only when the desired proposal modifies or adds a Federal-aid project. Actions that are sought for a project component scheduled beyond the four-year horizon of the current TIP should be introduced in the next production cycle of the TIP document.

### **Administrative Actions**

There are occasions when the advancement of projects is shifted within the years of the TIP, based upon changing circumstances. In those situations, the following project selection process (approved by the BCATS Policy Committee on July 25, 2007) will be utilized:

*The project selection process shall consider all state and local projects in the first two years of the TIP as being selected. However, any change in the priority for advancement of those projects to the implementation phase shall be made known to the BCATS staff immediately and shall have the concurrence of the TIP Subcommittee, which establishes the initial TIP listing. The BCATS Technical and Policy Committees shall be advised of any changes in project priority in the first two years of the TIP as an informational item at their next regularly scheduled meeting dates. Projects contained in the third and fourth years of the TIP may be advanced only after administrative approval is granted by the Technical and Policy Committees by formal action. However, such administrative approval/action will not constitute a formal amendment to the TIP.*

There are also occasions when other aspects of projects (beyond the implementation year) change before the project is implemented. Some of those changes are substantial and require a formal TIP amendment, as outlined in next portion of this section. However, many times those changes are minor and will be allowed to be executed by staff per the following language (approved by the BCATS Policy Committee on July 25, 2007):

*Changes to projects in the areas of fund source, project phase, cost change, and scope change which do not require a formal TIP amendment, per either BCATS or FHWA/FTA policies (see section on amendments) shall be considered administrative actions which may be carried out by staff to expedite the implementation of the project(s). Any such changes will be made known to the BCATS Technical and Policy Committees at the time of the next regularly scheduled TIP quarterly amendment and/or project listing update cycle.*

## **Amendments**

A formal TIP amendment is needed, before federal approval for funding can be obtained, only when a new project is to be added or when the following substantive revisions are made to a currently programmed project:

- 1. Year:** When a project is moved into the TIP from outside the 4-year scope of the TIP (postponing a project to a future year does not require an amendment). Note: see the preceeding “Administrative Actions” discussion regarding project movement within the already approved 4-year listing of projects in the TIP.
- 2. Project Phase:** When an additional phase is to be added to a given project, or the project phase is changed from that listed for a particular year (for example: preliminary engineering, right-of-way, or construction)
- 3. Cost Change:**
  - FHWA Programs: When a project’s cost, as shown in the TIP, increases by 25% or more as a result of inflation or poor initial estimate, or if the cost change is equal to or greater than 25% of the total federal fund category in any given fiscal year.
  - FTA Programs: For major changes exceeding 30% of the project’s cost, as shown in the TIP.
- 4. Scope Change:** When the purpose or scope of a project in the TIP changes. This may result in a cost change as well, depending upon the extent of the scope change involved. The change may also be a redefinition of the magnitude of the project where the cost remains unchanged.

TIP amendments require public involvement and notice, financial constraint analysis, and air quality conformity determination, the same as for the original TIP.

## **Pro Rata Policy for TIP Projects**

On July 25, 2007, the BCATS Policy Committee adopted the following regarding the consideration of percent federal participation in projects involving Surface Transportation Program Urban (STUL) (for areas under 200,000 population) funding.

*For BCATS projects utilizing STUL funding, it shall be considered that the fullest extent of federal participation shall be made available for each project (currently 80% of eligible*

*project costs) unless specifically noted otherwise in the TIP document and notice is provided to MDOT of an exception.*

*In cases where the project estimates (prior to bid letting) show a potential cost increase of more than 25% over the approved TIP cost, the owner of the project shall be required to contact the BCATS staff office immediately with this cost information and the scheduled bid letting date. If necessary, changes will be made to other projects or the pro rata share of the subject project in order to maintain the financial integrity of the STUL program.*

*In cases where, after bid letting, it is apparent that a project's cost will be more than 25% over the approved TIP cost (BCATS staff will determine this either by notification from the project sponsor or by accessing MDOT's bid letting list which is available electronically), BCATS staff will follow the "Typical Project Obligation/Agreement/Award/Adjustment Process" flowchart (most current version) to respond to the situation and make any changes to the pro rata share, if deemed necessary to maintain the financial integrity of the STUL program. Staff may electronically poll BCATS committee members regarding any potential change that would affect the STUL program decisions that were originally approved by the BCATS committees.*

After any changes are made relative to the situations discussed in the above paragraphs, BCATS staff will revise the STUL funding schedule with the updated information and provide this updated information to the BCATS committees at their next regularly scheduled meetings. Any necessary amendments or administrative changes to projects will be dealt with at that time.

---

# APPENDIX



# Draft Minutes of Policy Committee Meeting of June 23, 2010 (including TIP discussion & approval)

---

## BATTLE CREEK AREA TRANSPORTATION STUDY Policy Committee Minutes of June 23, 2010 Meeting

MEMBERS PRESENT: Hugh Coward, Mark Dionise, Rich Werner (for Chris Simmons), Tom Matson (for Sue Anderson), Greg Rickmar (for Susan Baldwin), Susan Richardson, Tom Sprau, and Laveta Hardish  
VOTING MEMBERS ABSENT: Gene Adkins, Rob Behnke, and Terris Todd  
NON-VOTING MEMBERS ABSENT: Carl Holsinger and Rachael Tupica  
OTHERS PRESENT: Pat Karr and Andrew Tilma

Chair Matson called the meeting to order at 1:30 p.m. in the Council Room of Springfield City Hall.

### ROLL CALL

It was determined that a quorum was present (see above for voting members who were present). Introductions were made for the benefit of all present.

### APPROVAL OF THE AGENDA

It was moved by Rickmar, supported by Richardson, to approve the agenda as amended to add items 6.A. - Equipment Purchase and 7.D. Resolution of Appreciation for Susan Richardson. **MOTION CARRIED UNANIMOUSLY.**

Res.  
10-25

### PUBLIC COMMENTS

There were no public comments.

### APPROVAL OF THE MINUTES

It was moved by Sprau, supported by Richardson, to approve the minutes of the May 26, 2010 meeting, as presented, subject to any additions, corrections or changes. **MOTION CARRIED UNANIMOUSLY.**

Res.  
10-26

### COMMUNICATIONS

Karr reported the following items of communication:

- BCATS has received information from FHWA regarding checklists that they use for reviewing UWP, TIP, and Long Range Plan documents. They have also provided sample disclaimer and credit language for inclusion in plans and program documents.
- The final FY 2011 UWP document is being conveyed to MDOT today.
- The Certification Resolution approved in May has been executed by BCATS and MDOT and is ready to be included in the final TIP document
- Registration material is out for the annual MTPA conference and staff is registered to attend the conference.
- A positive eligibility letter has been received from FHWA for the remainder of the FY 2010 CMAQ project applications.
- Springfield's street sweeper has been received and has been put into use.
- A public notice for the FY 2011-2014 TIP was published in the BC Enquirer on May 28, 2010.
- The April TIP amendment is still pending, with hopes that it may be approved yet today.

## UNFINISHED BUSINESS

### A. Budget for Equipment Purchase

Karr updated the Committee about the purchase of a replacement computer for the staff office. The quote came in \$4.28 over the approved budget of \$2,500.00. Karr requested approval to proceed with the purchase at the \$2,504.28 amount.

**It was moved by Richardson, supported by Werner, to approve the establishing of a budget for the computer purchase at \$2,504.28 and to approve the purchase as outlined by Karr. MOTION CARRIED UNANIMOUSLY.**

**Res.  
10-27**

## NEW BUSINESS

### A. FY 2011-2014 Transportation Improvement Program

Karr reviewed portions of the draft document which has been sent with the advance material. She covered the introduction, financial constraint, public involvement, consultation, air quality, and implementation portions of the new TIP. A revised financial constraint table was distributed by Tilma based on changes that have been made to the project list.

Tilma distributed updated material for the project list chapter of the document and material regarding the environmental justice considerations. Environmental justice relative to transit was discussed. No disproportionate impacts are expected on the EJ populations as a result of the projects in the FY 2011-2014 TIP. Tilma noted that the GPA accounts for MDOT have been added back into the document for FY 2011, per guidance from MDOT. There was discussion about the use and applicability of the GPA accounts. Tilma also pointed out the use of an illustrative list in this year's TIP, which BCATS has not utilized in the past. This is being used to identify delayed MDOT projects that have been removed from formal inclusion due to the state's lack of matching funds for federal-aid.

Tilma also noted the importance of having the FY 2011 program lists the same in both the current and new TIPs. Tilma specified that MDOT projects are all being listed in the year of funding obligation, which may not be the same as the year of construction.

The final TIP document needs to be submitted to MDOT by July 15, 2010.

**It was moved by Rickmar, supported by Richardson, to approve the FY 2011-2014 Transportation Improvement Program, with the noted changes and additions (including the resolutions contained therein). MOTION CARRIED UNANIMOUSLY.**

**Res.  
10-28**

### B. 2035 Transportation Plan - Goals and Objectives

The BCATS Transportation Plan is being updated to continue to meet the federal requirement for a 20-year horizon on the long range plan. Karr commented that the first steps of updating the 2030 Transportation Plan to the 2035 horizon year involves updating the goals and objectives section. The material had been made available in advance of the meeting.

**It was moved by Richardson, supported by Coward, to approve the updated Goals and Objectives for the 2035 Transportation Plan. MOTION CARRIED UNANIMOUSLY.**

**Res.  
10-29**

### C. FY 2011-2014 Congestion Mitigation Air Quality (CMAQ) Project Selection

Tilma reviewed the table which lists all of the CMAQ projects for the 2010 to 2014 time period. He provided an update to the Committee on the status of the 2010 projects, all of which have been deemed eligible, and are either completed or in the process of implementation. The remainder of the future year projects were reviewed. It was noted that the description for one item on the 2012 list had been inadvertently omitted. The description was provided by Werner from the Technical Committee list and was added as a correction to the table.



Tilma noted that MDOT also has a similar dollar amount allocated for CMAQ projects for each of the years being considered. BCATS has yet to received information about any proposed CMAQ projects for Calhoun County from MDOT.

**It was moved by Coward, supported by Sprau, to approve the FY 2011-2014 CMAQ project list for development of applications to submit for eligibility determination, with the correction noted to the table. MOTION CARRIED UNANIMOUSLY.**

**Res.  
10-30**

**D. Resolution of Appreciation for Susan Richardson**

Karr indicated that Richardson is retiring from MDOT and that her time spent as a member of BCATS' Policy Committee has been appreciated and her input to the program has been very positive. A resolution of appreciation has been prepared to honor her. Karr read the resolution into the record.

Richardson thanked the Committee for the recognition and told the Committee that she is going to work for the Region 2 Planning Commission part-time as a transportation planner. She indicated that Rick Fowler, Technical Committee representative, will be attending Policy Committee for the foreseeable future.

**It was moved by Werner, supported by Coward, to unanimously adopt the resolution of appreciation for Susan Richardson, as presented.**

**Res.  
10-31**

**COMMENTS**

**A. Next Meeting**

Chair Matson announced that the next Policy Committee meeting will be Wednesday, July 21, 2010, 1:30 p.m. in the City of Springfield Council Chambers. It was noted that the meeting will be one week earlier than usual due to the MTPA Conference. This change from the standard fourth Wednesday was noted on the meeting schedule approved last December. Matson stated that he will not be able to attend the next meeting. It was noted to Sprau that he should plan to Chair the next meeting.

**B. Committee Member Comments**

Sprau congratulated Rickmar on the graduation notice for his child that was in the BC Enquirer.

Matson commented on the emissions process that is involved with Springfield's new street sweeper. He also indicated the mill and overlay projects that Springfield is doing under the MEDC ICE grants. They may be submitting additional requests for road work under this program.

Dionise indicated that MDOT is submitting a project on Dickman Road for Category A funding. He requested a letter of support from the City of Springfield for the project.

**C. Public Comments**

There were no public comments

**ADJOURNMENT**

Chair Matson adjourned the meeting at 2:28 p.m.

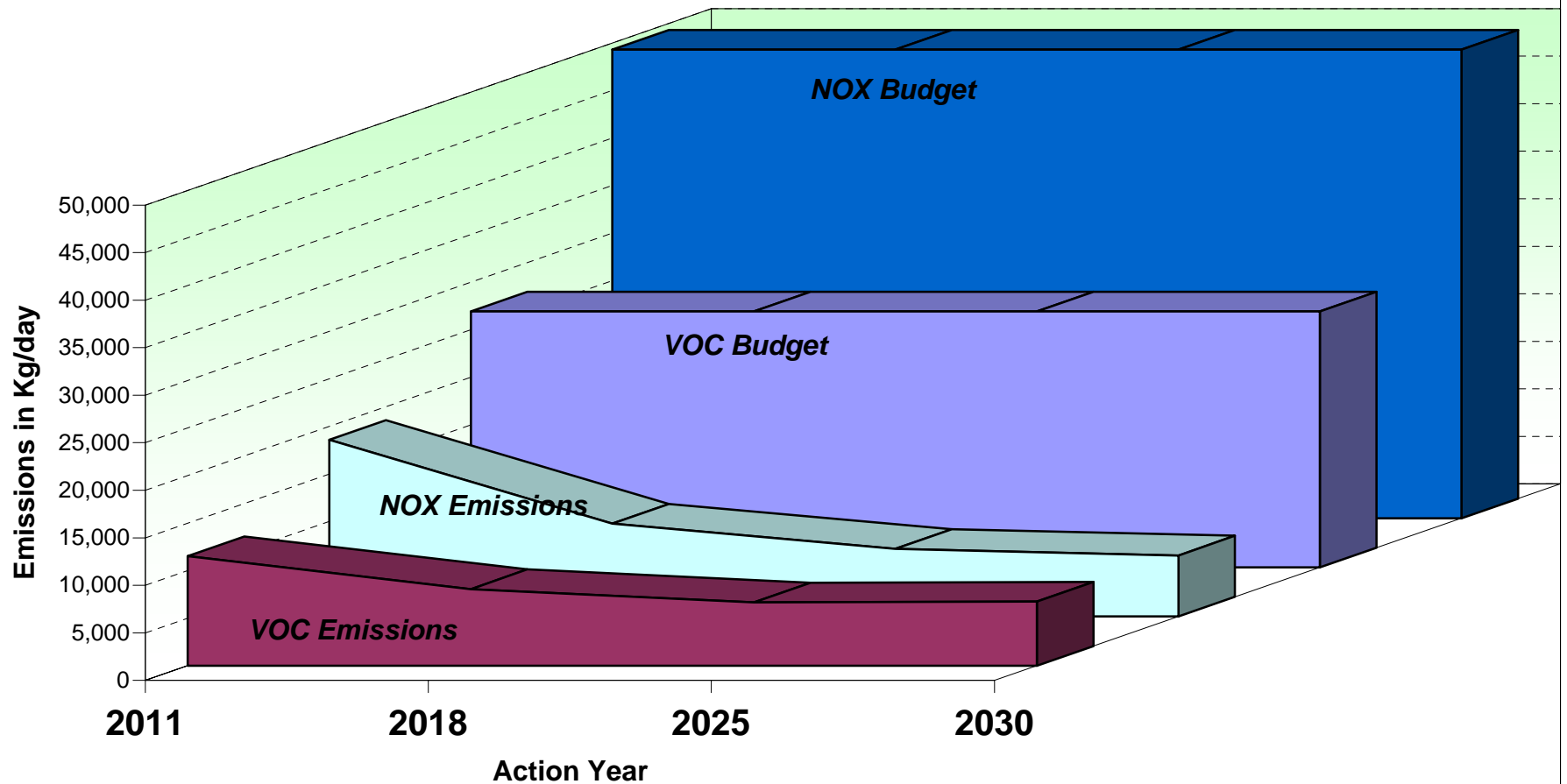


**Kalamazoo Nonattainment Area Conformity Demonstration Summary  
2030 LRP and 2008-2011 TIP**

All values expressed in Kg/day

		Attainment Budget	2011 Action		2018 Action		2025 Action		2030 Action	
Calhoun County	VOC	Not Published separately by EPA	3,913.1074		2,747.9878		2,265.0708		2,296.4592	
	NOX		6,765.0293		3,527.9974		2,534.0020		2,271.8425	
Kalamazoo County <small>With I-94</small>	VOC	Not Published separately by EPA	5,451.1118		3,789.3121		3,132.9599		3,185.8435	
	NOX		8,051.9906		4,261.7563		3,155.0266		2,858.8958	
VanBuren County	VOC	Not Published separately by EPA	2,149.7561		1,518.4997		1,243.5657		1,263.6588	
	NOX		3,779.3673		1,987.5543		1,439.8903		1,293.4923	
<b>Maintenance Area Totals</b>			<b>26,916.6200</b>	<b>49,315.3900</b>	<b>11,513.9753</b>	<b>18,596.3872</b>	<b>8,055.7996</b>	<b>9,777.3080</b>	<b>6,641.5964</b>	<b>7,128.9189</b>
			VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX

# Kalamazoo Nonattainment Area Air Quality Conformity for 2030 Transportation Plans & FY 2008-2011 TIPs



# CALHOUN COUNTY SUMMARY FOR 8 HOUR ATTAINMENT 2030 LRP 2008-2011 TIP

## Countywide VMT, VHT and Speed Summary

<u>NFC</u>	<u>2002</u> <u>HPMS</u>	<u>2002</u>	<u>2011</u> <u>ACTION</u> <u>VMT</u>	<u>2018</u> <u>ACTION</u> <u>VMT</u>	<u>2025</u> <u>ACTION</u> <u>VMT</u>	<u>2030</u> <u>ACTION</u> <u>VMT</u>
Rural Interstate/Freeway	1,352,653	1,352,653	1,496,431	1,591,715	1,729,591	1,828,392
Rural Major & Minor Arterial/Collector/Local Street	1,049,599	1,049,599	1,147,437	1,218,778	1,311,278	1,380,807
Urban Interstate/Freeway	613,280	613,280	722,061	789,511	883,229	906,075
Urban Principal & Minor Arterial/Collector/Local Street	1,745,004	1,745,004	1,924,093	2,095,444	2,208,238	2,287,801
<b>VMT (Vehicle Miles of Travel) -- Total</b>	<b>4,760,537</b>	<b>4,760,537</b>	<b>5,290,022</b>	<b>5,695,448</b>	<b>6,132,336</b>	<b>6,403,074</b>

<u>NFC</u>	<u>2002</u>	<u>2011</u> <u>ACTION</u> <u>VHT</u>	<u>2018</u> <u>ACTION</u> <u>VHT</u>	<u>2025</u> <u>ACTION</u> <u>VHT</u>	<u>2030</u> <u>ACTION</u> <u>VHT</u>
Rural Interstate/Freeway	19,549	21,743	23,235	25,491	27,172
Rural Major & Minor Arterial/Collector/Local Street	20,878	22,913	24,463	26,471	28,008
Urban Interstate/Freeway	9,352	11,480	13,118	16,559	17,477
Urban Principal & Minor Arterial/Collector/Local Street	43,956	49,691	54,307	56,783	59,233
<b>VHT (Vehicle Hours of Travel) -- Total</b>	<b>93,735</b>	<b>105,825</b>	<b>115,123</b>	<b>125,304</b>	<b>131,891</b>

<u>NFC</u>	<u>2002</u>	<u>2011</u> <u>ACTION</u> <u>Speed</u>	<u>2018</u> <u>ACTION</u> <u>Speed</u>	<u>2025</u> <u>ACTION</u> <u>Speed</u>	<u>2030</u> <u>ACTION</u> <u>Speed</u>
Rural Interstate/Freeway	69.2	68.8	68.5	67.9	67.3
Rural Major & Minor Arterial/Collector/Local Street	50.3	50.1	49.8	49.5	49.3
Urban Interstate/Freeway	65.6	62.9	60.2	53.3	51.8
Urban Principal & Minor Arterial/Collector/Local Street	39.7	38.7	38.6	38.9	38.6
<b>Speed -- Systemwide Average</b>	<b>50.8</b>	<b>50.0</b>	<b>49.5</b>	<b>48.9</b>	<b>48.5</b>



*Battle Creek Area Transportation Study - Policy Committee*

---

**Acceptance of the 8-Hour Ozone Transportation Conformity Analysis  
for the FY 2011-2014 Transportation Improvement Program**

**WHEREAS**, the United States Environmental Protection Agency (EPA) has designated Kalamazoo County, Calhoun County, and Van Buren County (hereafter referred to as Kalamazoo-Battle Creek-MI) as an Attainment/Maintenance Area; and

**WHEREAS**, the *FY 2011-2014 Transportation Improvement Program (TIP)* for the Battle Creek metropolitan area will be pending approval by the Michigan Department of Transportation, Federal Transit Administration, Federal Highway Administration and Environmental Protection Agency after local Battle Creek Area Transportation Study (BCATS) Policy Committee action on the document; and

**WHEREAS**, the Interagency Work Group for the Kalamazoo-Battle Creek-MI Maintenance Area has identified proposed projects contained in the *FY 2011-2014 TIP* to determine applicability for Air Quality Conformity Analysis Testing; and

**WHEREAS**, the results of the conformity analysis conducted by the Michigan Department of Transportation demonstrates that the forecasted levels of volatile organic compound (VOC) and nitrogen oxide (NOx) emissions for the Kalamazoo-Battle Creek-MI Maintenance Area are significantly below “attainment budget” levels established for the area by EPA, thereby demonstrating conformity.

**NOW, THEREFORE BE IT RESOLVED**, that the Battle Creek Area Transportation Study Policy Committee accepts the results of the 8-Hour Ozone Transportation Conformity Analysis for the *FY 2011-2014 TIP* for the Battle Creek metropolitan area; and

**BE IT FURTHER RESOLVED**, that the 8-Hour Ozone Transportation Conformity Analysis for the Kalamazoo-Battle Creek-MI Maintenance Area demonstrates conformity with the State Implementation Plan; and

**BE IT FURTHER REVOLVED**, that the Battle Creek Area Transportation Study Policy Committee hereby authorizes inclusion into BCATS’ *FY 2011-2014 Transportation Improvement Program* a section titled “Air Quality Conformity - Kalamazoo-Battle Creek-MI Maintenance Area” containing a summary of the analysis findings and supplemental data.

(signed original on file)

Tom Matson, Chairperson  
Battle Creek Area Transportation Study Policy Committee

June 23, 2010

Date

**BATTLE CREEK AREA TRANSPORTATION STUDY**  
**Approval of the**  
***FY 2011-2014 TRANSPORTATION IMPROVEMENT PROGRAM***

**WHEREAS**, the Battle Creek Area Transportation Study is the designated Policy Committee and Metropolitan Planning Organization (MPO) for greater Battle Creek, and

**WHEREAS**, the Battle Creek Area Transportation Study is responsible for the development of a Transportation Improvement Plan (TIP) which is required by both the Federal Transit Administration and Federal Highway Administration, and

**WHEREAS**, the Battle Creek Area Transportation Study *FY 2011-2014 TIP* has been developed pursuant to Section 134 of title 23, United States Code, and

**WHEREAS**, the Battle Creek Area Transportation Study *FY 2011-2014 TIP* includes a "Financial Constraint Demonstration" that lists categories of anticipated revenue and estimated funding amounts for the identified projects for each fiscal year, with the total of proposed commitments not exceeding the total estimated revenue in any category in any fiscal year, and thus is financially constrained, and

**WHEREAS**, the Battle Creek Area Transportation Study *FY 2011-2014 TIP* was developed with the opportunity for public input and comment as provided for in the policies of the Battle Creek Area Transportation Study;

**NOW THEREFORE BE IT RESOLVED**, it is the finding of the Battle Creek Area Transportation Study that its *FY 2011-2014 Transportation Improvement Program* is consistent with its *2030 Transportation Plan* (November 2007), and

**BE IT FURTHER RESOLVED**, that the Battle Creek Area Transportation Study approves its *FY 2011-2014 Transportation Improvement Program*.

(signed original on file)  
Thomas Matson, Chair  
Battle Creek Area Transportation Study Policy Committee

DATE: June 23, 2010



Battle Creek Area Transportation Study (BCATS)

**Resolution #10-22**

BCATS Policy Committee - May 26, 2010

**METROPOLITAN TRANSPORTATION PLANNING PROCESS CERTIFICATION  
for the Battle Creek Area Transportation Study FY 2011**

In accordance with 23 CFR 450.334, the Michigan Dept of Transportation (MDOT) and the Battle Creek Area Transportation Study, the Metropolitan Planning Organization for the Battle Creek, Michigan urbanized area, hereby certify, as part of the STIP submittal, that the transportation planning process is addressing the major issues in the metropolitan planning area and is being conducted in accordance with all applicable requirements of:

23 U.S.C. 134, 49 U.S.C. 5303, and 23 CFR 450.334;

Sections 174 and 176(c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504 and 7506(c) and (d)) and 40 CFR part 93;

Title VI of the Civil Rights Act of 1964; as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;

49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment and business opportunity;

Section 1101(b) of the SAFETEA-LU (Pub. L. 109-59) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;

23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;

The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) And 49 CFR parts 27, 37, and 38;

The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;

Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and


Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

*Battle Creek Area Transportation Study*



Tom Matson, Chairperson  
Battle Creek Area Transportation Study  
Policy Committee  
Date: June 1, 2010

*Michigan Department of Transportation*



Susan Mortel, Director  
Bureau of Transportation Planning  
MDOT  
Date: 6/11/10



**BATTLE CREEK AREA TRANSPORTATION STUDY (BCATS)**  
**Environmental Justice (EJ) Analysis for Battle Creek Transit (BCT)**  
*Prepared August, 2007 by Andrew Tilma, BCATS Principal Planner*

**BCATS Metropolitan Area** is comprised of the Cities of Battle Creek & Springfield, and Bedford, Pennfield, Emmett, Newton, & Leroy Townships.

**BCT's "Tele-Transit" (demand-response) service area** is bounded by a line extended east & west from St Mary's Lake Rd on the north; the county line on the west; the southern City of Battle Creek and Emmett Township limits (Division Dr) on the south; and M-311/11 Mile Rd on the east.

**BCT's Fixed-Route Service Area** is all areas within .25 mile (to either side) of the current designated fixed-routes.

	BCATS Metropolitan Area		BCT Demand-Response Service Area		City of Battle Creek		BCT Fixed-Route Service Area	
<i>Area (sq mi)</i>	216.88	----	104.32	----	43.62	----	18.92	----
<i>Total Population</i>	<b>94,679</b>	----	<b>84,433</b>	----	<b>53,049</b>	----	<b>44,215</b>	----
<i>White</i>	77,325	<b>81.7%</b>	67,447	<b>79.9%</b>	39,634	<b>74.7%</b>	31,434	<b>71.1%</b>
<i>Black / African-American</i>	11,724	<b>12.4%</b>	11,616	<b>13.8%</b>	9,414	<b>17.7%</b>	9,272	<b>21.0%</b>
<i>American Indian &amp; Alaska Native</i>	636	<b>0.7%</b>	600	<b>0.7%</b>	410	<b>0.8%</b>	375	<b>0.8%</b>
<i>Asian, Native Hawaiian, &amp; Other Pacific Islander</i>	1,401	<b>1.5%</b>	1,347	<b>1.6%</b>	1,039	<b>2.0%</b>	699	<b>1.6%</b>
<i>Other Race or 2+ Races</i>	3,593	<b>3.8%</b>	3,422	<b>4.1%</b>	2,552	<b>4.8%</b>	2,434	<b>5.5%</b>
<i>Individuals of Hispanic Origin</i>	3,261	3.4%	3,112	3.7%	2,450	4.6%	2,248	5.1%
<i>Individuals Below Poverty Level</i>	11,030	11.6%	10,448	12.4%	7,610	14.3%	7,265	16.4%
<i>Individuals Age 5+ with Disability</i>	18,784	19.8%	17,059	20.2%	11,083	20.9%	9,805	22.2%
<i>Individuals of Age &lt; 20</i>	26,930	28.4%	24,168	28.6%	15,729	29.7%	13,197	29.8%
<i>Individuals of Age 65+</i>	12,869	13.6%	11,491	13.6%	7,225	13.6%	5,671	12.8%
<i>Occupied Housing Units (HUs)</i>	37,743	----	33,895	----	21,216	----	18,157	----
<i>Occupied HUs with No Vehicle Available</i>	3,305	8.8%	3,240	9.6%	2,503	11.8%	2,477	13.6%

The above table displays the composition of the 2000 Census population in the BCATS Metropolitan Area and three sub-areas related to BCT. The percentages can be compared across columns to the percentage under "BCATS Metropolitan Area", to determine how the makeup of the sub-area population matches that of the overall area. For instance, almost 12% of the metropolitan area total population is below poverty level, while over 16% of the BCT fixed-route service area population is below poverty level. The last row presents the percentages of the occupied housing units in each area that reported no vehicle available in the 2000 Census.

	BCATS Metropolitan Area		BCT Demand-Response Service Area		City of Battle Creek		BCT Fixed-Route Service Area	
<i>Area (sq mi)</i>	216.88		104.32	48.1%	43.62	20.1%	18.92	8.7%
<i>Total Population</i>	<b>94,679</b>		<b>84,433</b>	<b>89.2%</b>	<b>53,049</b>	<b>56.0%</b>	<b>44,215</b>	<b>46.7%</b>
<i>White</i>	77,325		67,447	<b>87.2%</b>	39,634	<b>51.3%</b>	31,434	<b>40.7%</b>
<i>Black / African-American</i>	11,724		11,616	<b>99.1%</b>	9,414	<b>80.3%</b>	9,272	<b>79.1%</b>
<i>American Indian &amp; Alaska Native</i>	636		600	<b>94.4%</b>	410	<b>64.4%</b>	375	<b>59.0%</b>
<i>Asian, Native Hawaiian, &amp; Other Pacific Islander</i>	1,401		1,347	<b>96.1%</b>	1,039	<b>74.1%</b>	699	<b>49.9%</b>
<i>Other Race or 2+ Races</i>	3,593		3,422	<b>95.3%</b>	2,552	<b>71.0%</b>	2,434	<b>67.7%</b>
<i>Individuals of Hispanic Origin</i>	3,261		3,112	95.4%	2,450	75.1%	2,248	68.9%
<i>Individuals Below Poverty Level</i>	11,030		10,448	94.7%	7,610	69.0%	7,265	65.9%
<i>Individuals Age 5+ with Disability</i>	18,784		17,059	90.8%	11,083	59.0%	9,805	52.2%
<i>Individuals of Age &lt; 20</i>	26,930		24,168	89.7%	15,729	58.4%	13,197	49.0%
<i>Individuals of Age 65+</i>	12,869		11,491	89.3%	7,225	56.1%	5,671	44.1%
<i>Occupied Housing Units (HUs)</i>	37,743		33,895	89.8%	21,216	56.2%	18,157	48.1%
<i>Occupied HUs with No Vehicle Available</i>	3,305		3,240	98.0%	2,503	75.7%	2,477	75.0%

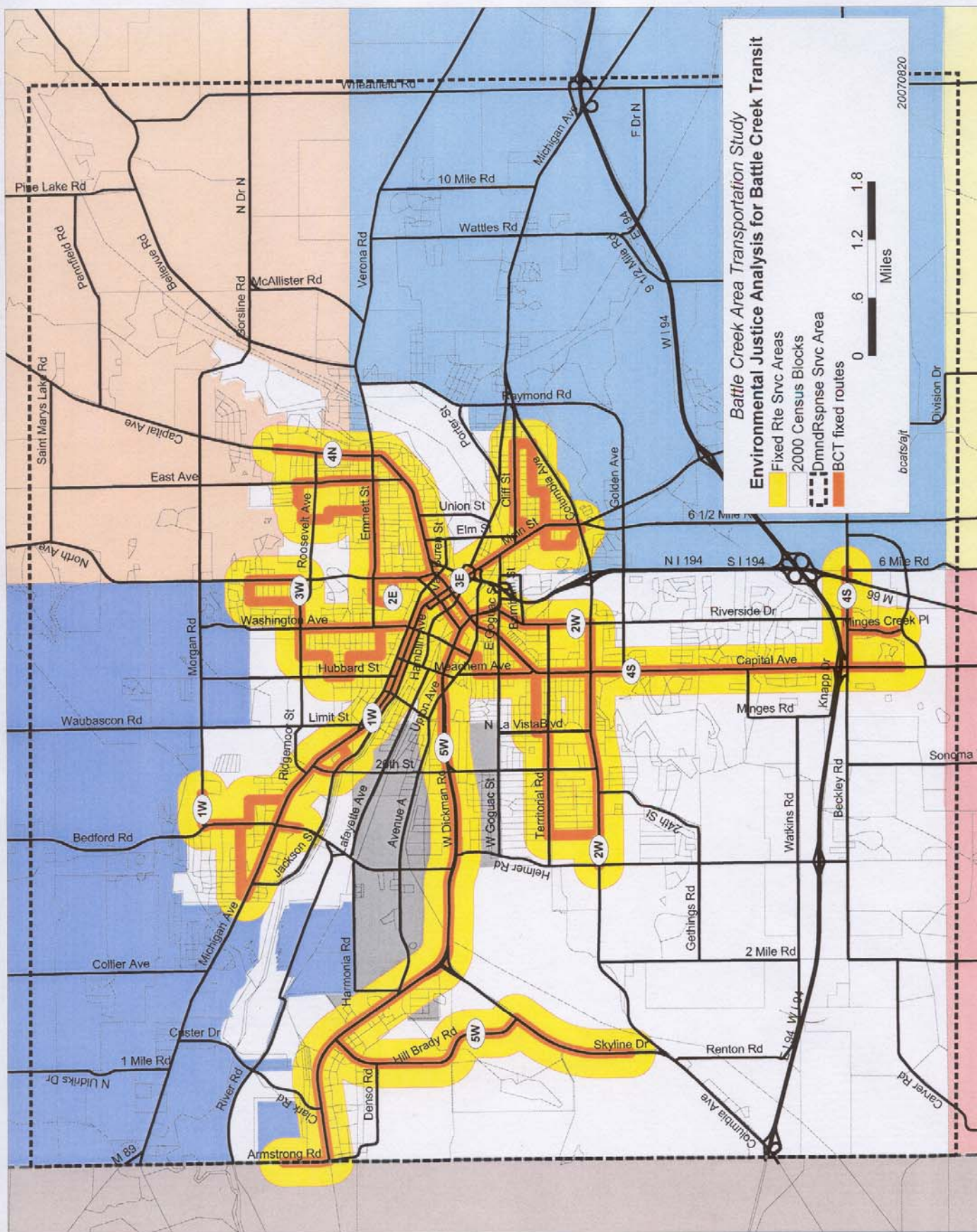
This second table above calculates a different statistic, that is how the percentage of each subject population group or housing variable in each sub-area compares to each sub-area's percentage of the total metropolitan area population. In this case, the percentages for each sub-area should be compared up & down rows to the Total Population % to see if the given sub-area's proportion of the subject variable population is more concentrated than it is about the whole metropolitan area. For instance here, while only 47% of the total metropolitan area population resides within .25 mile of a BCT fixed-route, over 79% of the area's Black/African-American residents do so. Relative to housing, the fixed-route service area contains less than half the area's occupied housing units, but 75% of the occupied housing units with no vehicle available.

**Source: 2000 US Census Block & Block Group data, aggregated by specified geographic areas.**





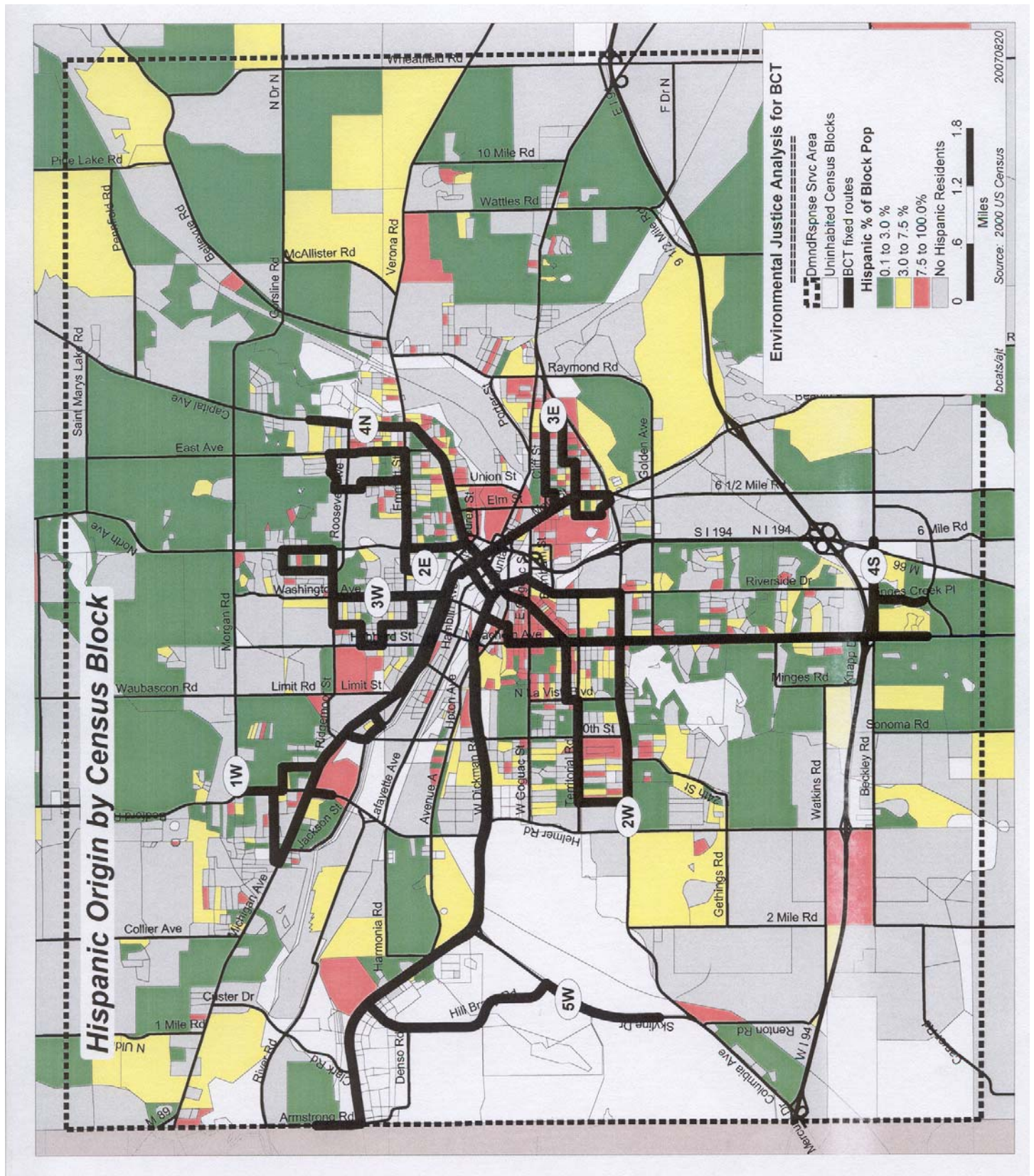




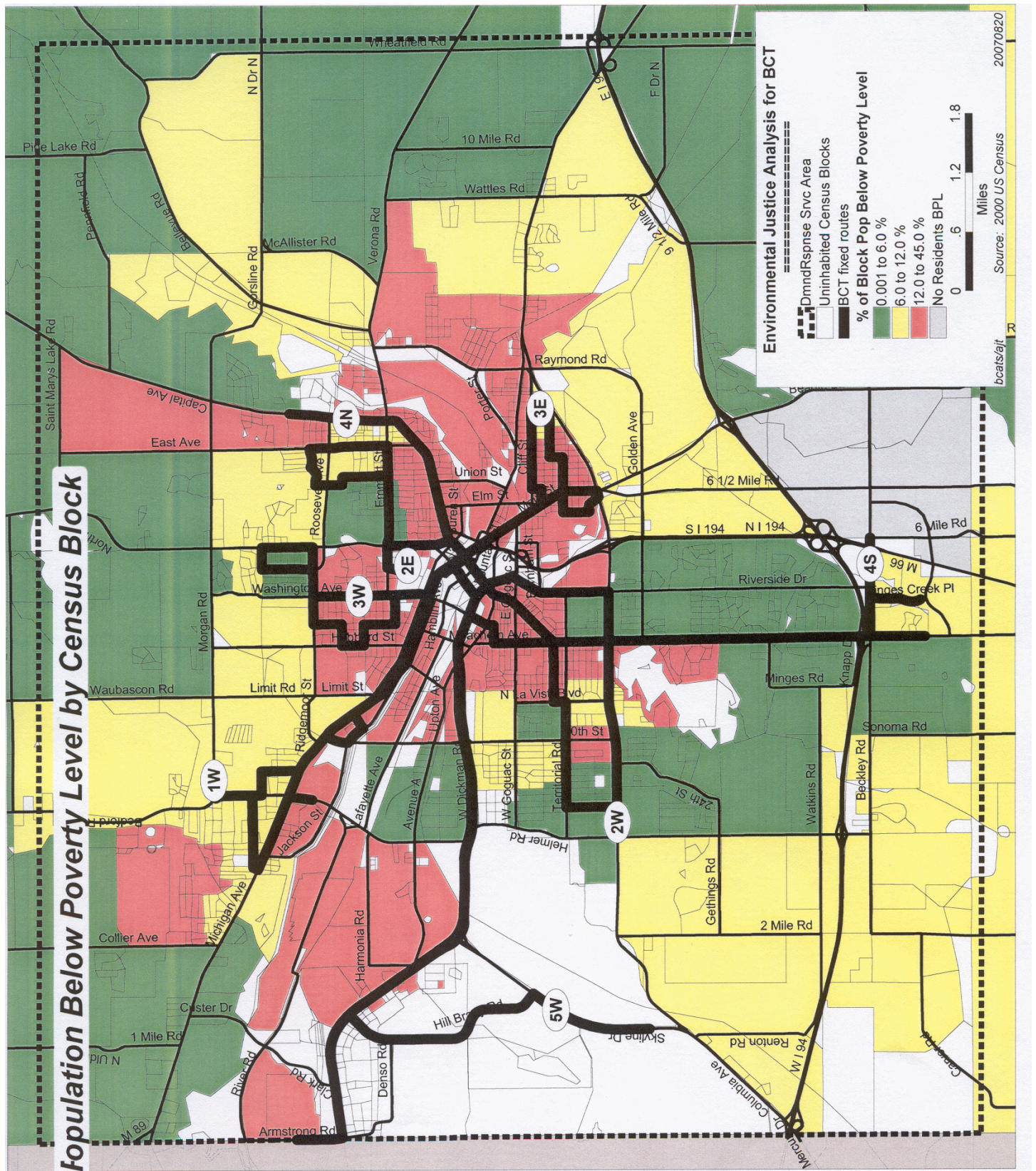




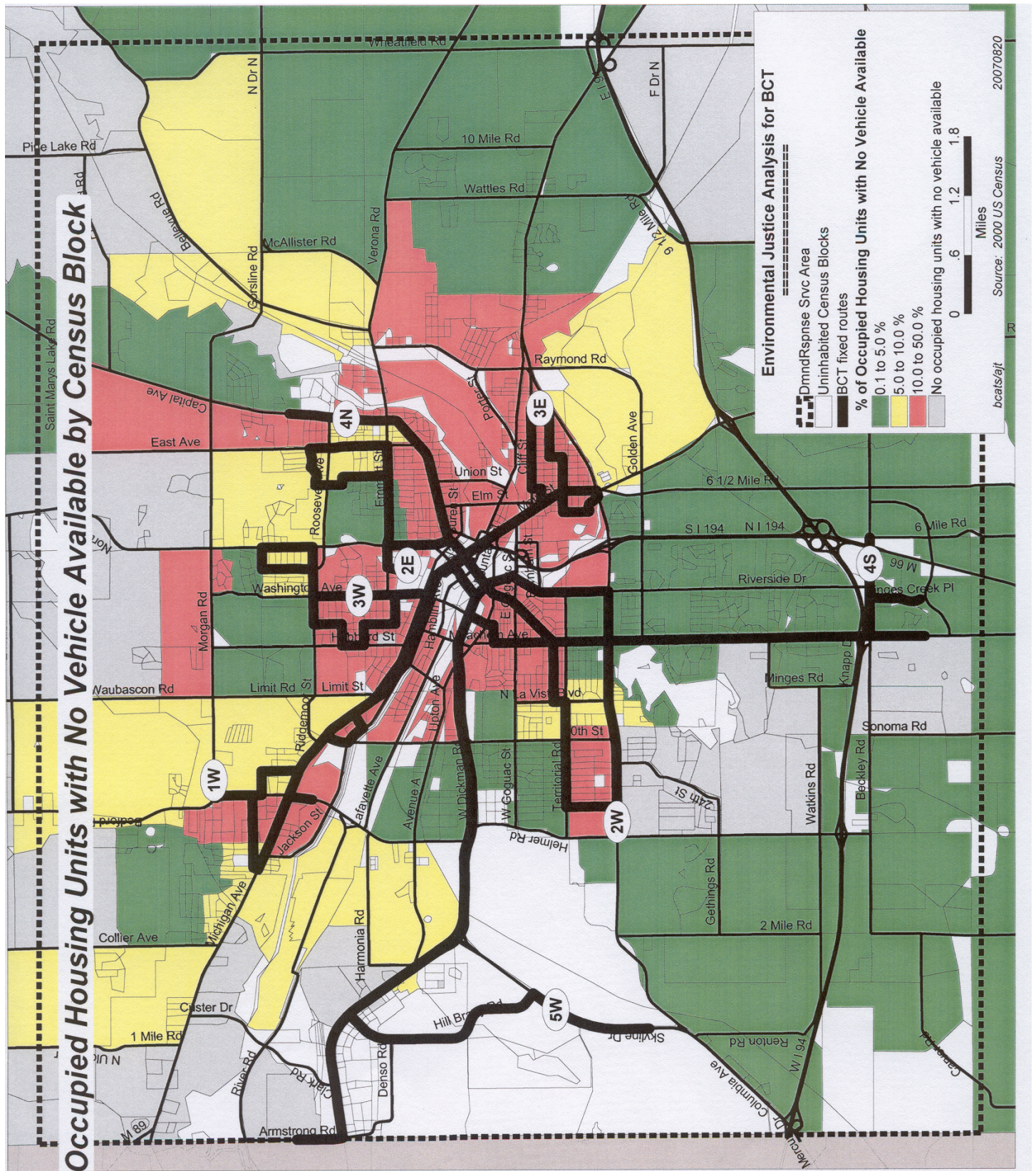






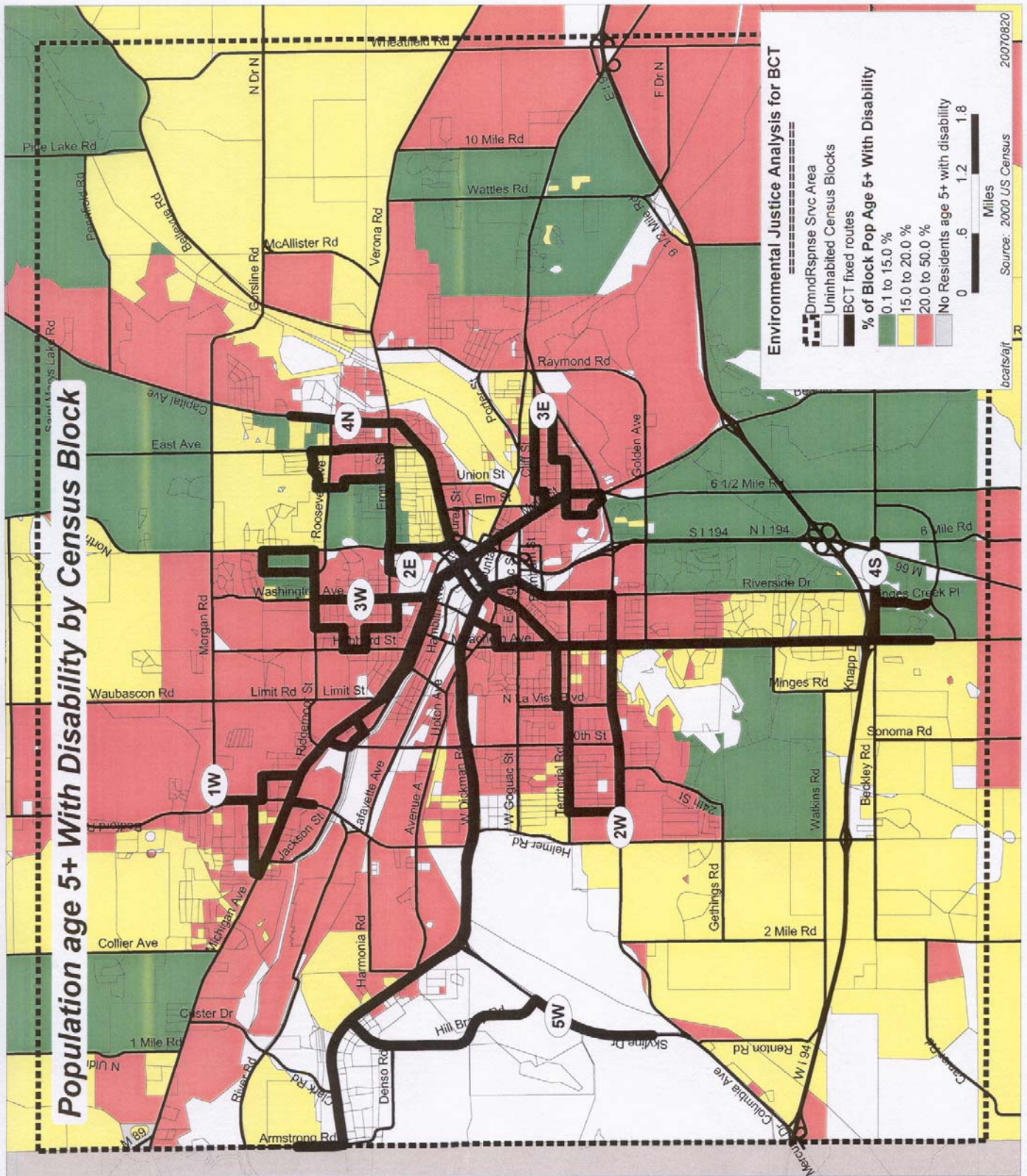




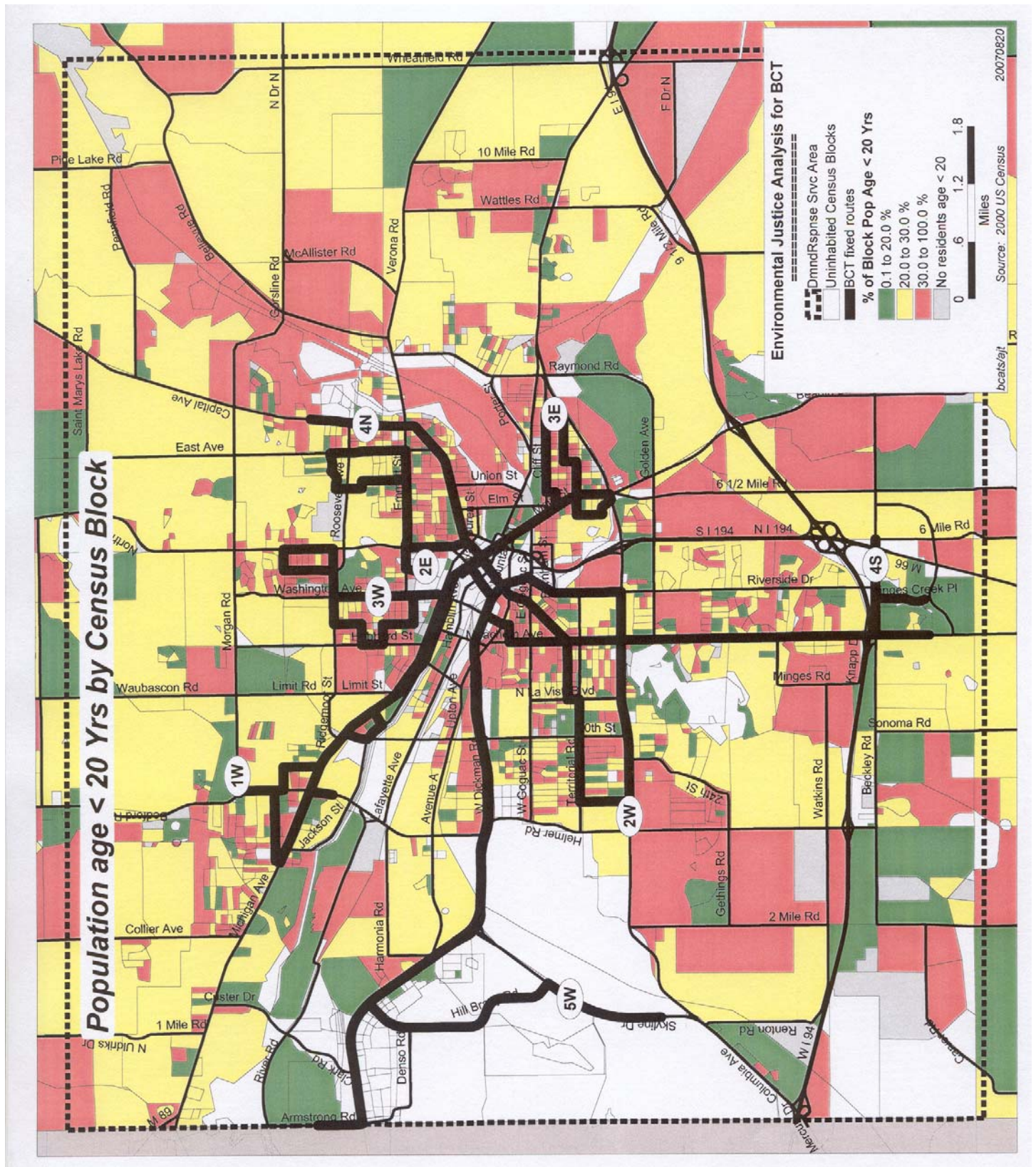




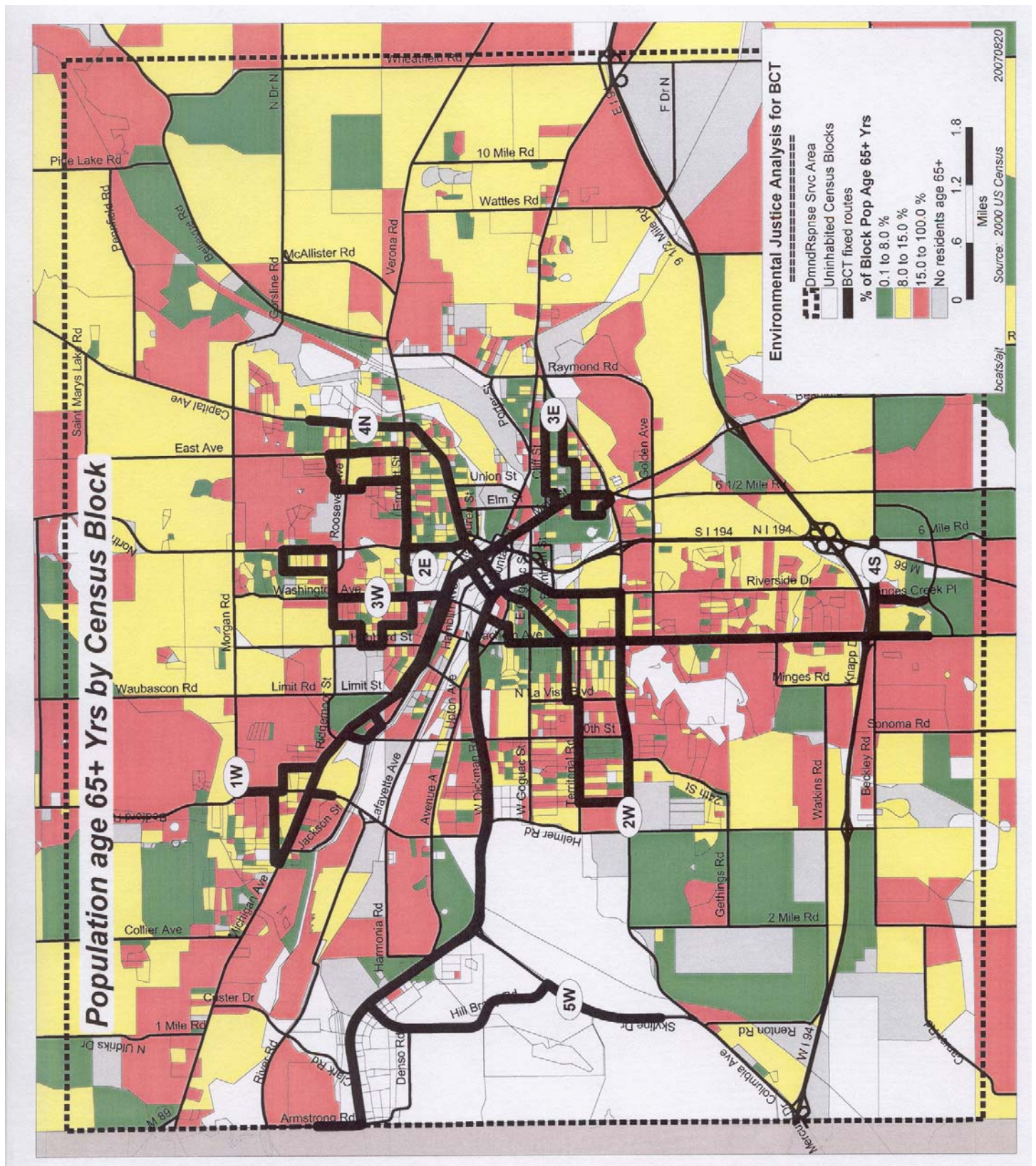
# Population age 5+ With Disability by Census Block











Battle Creek Area Transportation Study  
2000 Census Language Statistics  
prepared August/2007 for Battle Creek Transit

<i>Estimated values from 2000 Census Block Group Data</i>	State of Michigan		Calhoun County		BCATS Metropolitan Area		BCT Demand Response Service Area		City of Battle Creek		BCT Fixed-Route Service Area	
<b>Population</b>	<b>9,938,444</b>		137,985		94,695		82,776		54,090		39,034	
<b>Age 5+ with language data</b>	<b>9,268,782</b>	Percent of Age 5+ with language data	129,025	Percent of Age 5+ with language data	88,381	Percent of Age 5+ with language data	77,062	Percent of Age 5+ with language data	50,095	Percent of Age 5+ with language data	36,096	Percent of Age 5+ with language data
<b>5+_English only</b>	<b>8,487,401</b>	<b>91.57%</b>	122,810	95.18%	83,688	94.69%	72,716	94.36%	46,909	93.64%	33,721	93.42%
<b>5+_Other language</b>	<b>781,381</b>	<b>8.43%</b>	6,215	4.82%	4,693	5.31%	4,346	5.64%	3,186	6.36%	2,375	6.58%
<b>5+_Other lang_Engl &lt;very well</b>	<b>294,606</b>	<b>3.18%</b>	2,434	1.89%	1,974	2.23%	1,921	2.49%	1,448	2.89%	1,117	3.09%
<b>5+_Other lang_Spanish</b>	<b>246,688</b>	<b>2.66%</b>	3,331	2.58%	2,471	2.80%	2,305	2.99%	1,759	3.51%	1,498	4.15%
<b>5+_Other lang_Sp_Engl &lt;very well</b>	<b>100,689</b>	<b>1.09%</b>	1,415	1.10%	1,136	1.29%	1,110	1.44%	883	1.76%	799	2.21%
<b>5+_Other lang_Indo-European</b>	<b>303,122</b>	<b>3.27%</b>	1,723	1.34%	1,186	1.34%	1,048	1.36%	711	1.42%	484	1.34%
<b>5+_Other lang_Indo-Eur_Engl &lt;very well</b>	<b>96,900</b>	<b>1.05%</b>	381	0.30%	281	0.32%	265	0.34%	163	0.33%	123	0.34%
<b>5+_Other lang_Asian and Pacific Island</b>	<b>104,467</b>	<b>1.13%</b>	978	0.76%	955	1.08%	920	1.19%	670	1.34%	347	0.96%
<b>5+_Other lang_API_Engl &lt;very well</b>	<b>48,454</b>	<b>0.52%</b>	537	0.42%	522	0.59%	510	0.66%	382	0.76%	174	0.48%
<b>5+_Other lang_other/unknown</b>	<b>127,104</b>	<b>1.37%</b>	183	0.14%	81	0.09%	73	0.09%	46	0.09%	46	0.13%
<b>5+_Other lang_other/unknown_Engl &lt;very well</b>	<b>48,563</b>	<b>0.52%</b>	101	0.08%	35	0.04%	36	0.05%	20	0.04%	21	0.06%

**BCATS Metropolitan Area** is comprised of the Cities of Battle Creek & Springfield, and Bedford, Pennfield, Emmett, Newton, & Leroy Townships.

**BCT's "Tele-Transit" (demand-response) service area** is bounded by a line extended east & west from St Mary's Lake Rd on the north; the county line on the west; the southern City of Battle Creek and Emmett Township limits (Division Dr) on the south; and M-311/11 Mile Rd on the east.

**BCT's Fixed-Route Service Area** is all areas within .25 mile (to either side) of the current designated fixed-routes.



# GLOSSARY

---

BCATS - Battle Creek Area Transportation Study

CBC - City of Battle Creek

CCRC - Calhoun County Road Commission

FACILITY - A specific road, road segment, route, or route segment.

FEDERAL-AID URBAN BOUNDARY - The boundaries of the area which encompass the entire urban place as designated by the U.S. Bureau of Census plus that adjacent area as agreed upon by local officials in cooperation with the State.

FHWA - Federal Highway Administration

FISCAL YEAR (FY) - For Federal and State of Michigan agencies, and BCATS, the time period beginning October 1 and ending September 30 of the subsequent calendar year. Fiscal years are designated by the calendar year in which they end.

FUNCTIONAL CLASSIFICATION - An identification and categorization of segments of the street and highway system according to the character of service they provide.

LONG RANGE TRANSPORTATION PLAN (LRTP) - Determination of transportation facilities/improvements that are projected for the next 20 years.

LRTP/LRP - Long Range Transportation Plan/Long Range Plan

MDOT - Michigan Department of Transportation

METROPOLITAN PLANNING ORGANIZATION (MPO) - The organization designated by the Governor responsible, together with the State, for comprehensive transportation planning according to 23 U.S.C. 134, 23 U.S.C. 104(f)(3), and 49 U.S.C. 1602(a)(2) and (c)(a)1, 49 U.S.C. 1603(a), and 49 U.S.C. 1064(g)(1) and (1). This organization shall be the forum for cooperative decision making by principal elected officials of general local government.

MPO - Metropolitan Planning Organization

RIGHT-OF-WAY - A general term denoting land, property or interest therein, usually in a strip, acquired for or devoted to transportation purposes

STATE IMPLEMENTATION PLAN FOR AIR QUALITY (SIP) - A plan developed by the State for an air quality control region which details what has to be done to assure compliance with the air quality guidelines.

STUDY AREA - The area delineated for the purpose of data collection by a transportation study. This area contains the central city and surroundings, that is expected to take on urban characteristics in the next 20 to 30 years (i.e. - by the end of the long range planning period), and is the area for which forecasts of travel are made. Also METROPOLITAN AREA.

TRANSPORTATION IMPROVEMENT PROGRAM (TIP) - A staged multi-year program of planned transportation improvement projects.

URBAN AREA - An urban place as designated by the Bureau of the Census having a population of 50,000 or more and not within any other urbanized area.

URBAN AREA BOUNDARY - The boundaries of the area that encompass the entire urban place as designated by the U.S. Bureau of Census plus that adjacent area as agreed upon by local officials in cooperation with the State.

URBAN(IZED) AREA (UA) - An urban place containing a city (or twin cities) of 50,000 or more (central city) plus the surrounding closely settled incorporated area which meets certain criteria of population size or density, as designated by the Bureau of the Census, and not within any other urbanized area. As defined by minimum population density, the urbanized area can include the central city, suburbs, and the closely settled fringe of development.

---





