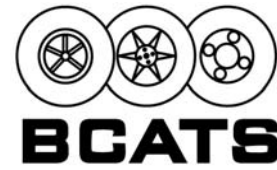


**BATTLE CREEK AREA  
TRANSPORTATION STUDY**



# 2035 METROPOLITAN TRANSPORTATION PLAN



## Executive Summary

*APPROVED June 22, 2011*

by the BCATS Policy Committee

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## **ACKNOWLEDGMENTS**

*This document partially fulfills the Federal requirements for the development of a twenty-year long range Transportation Plan by the Metropolitan Planning Organization (MPO), in this case the Battle Creek Area Transportation Study (BCATS). This Plan was prepared under work activity 2.0428 of the Unified Work Program of BCATS.*

*The contents of this report reflect the analysis, findings and recommendations of the BCATS planning process and do not necessarily represent programs or projects that have been approved for final funding and implementation by the Michigan Department of Transportation (MDOT), the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), or any local road or transit agency. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation. This document does not constitute a standard, specification, or regulation. Final funding and implementation approvals are carried out through the Transportation Improvement Program process.*

*This Plan and document were financed by the following means: through grants from the FHWA and FTA; with funds provided by the MDOT (for its staff time); and locally with matching funds provided by the City of Battle Creek, the Calhoun County Road Commission, and the City of Springfield.*

*The BCATS 2035 Metropolitan Transportation Plan was formally approved by the BCATS' Policy Committee on June 22, 2011.*

### **Statement of Vision**

#### ***2035 Metropolitan Transportation Plan***

“The *2035 Metropolitan Transportation Plan* for the Battle Creek Area Transportation Study is a vision of the area’s transportation system through the year 2035. The transportation improvements in the first four years (2011-2014) of the Plan are considered firm commitments by the implementing agencies. This means that the improvements in the first four years will be completed unless unforeseen circumstances prevent completion. The remaining years of the Plan are a vision of how the transportation system may develop based on the existing master and zoning plans of the cities and townships in the Battle Creek Area Transportation Study area, transit development programs, and the current projections of available revenues. The transportation improvements in the later years (2015-2035) represent current priorities for the future. The transportation plan is updated every four years and the priorities for the later years can and will change as conditions warrant.”

### ***Battle Creek Area Transportation Study***

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# **Battle Creek Area Transportation Study**

## ***2035 Metropolitan Transportation Plan***

**June 2011**

### **EXECUTIVE SUMMARY**

The Battle Creek Area Transportation Study (BCATS), as the Metropolitan Planning Organization (MPO) for the greater Battle Creek, Michigan area, is charged by the Federal Department of Transportation (DOT) with maintaining a continuing, comprehensive, and cooperative transportation planning program. At present, this charge includes the development of a transportation plan, with a minimum horizon of 20-years, that is fiscally constrained by reasonably available revenues, and meets the conditions of air quality conformity, where applicable.

The development and content of this plan is mandated by the federal “Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) legislation (enacted August 10, 2005, and currently operating under continuing resolutions) and accompanying regulations (promulgated February 14, 2007). The last update of the BCATS transportation plan occurred in November, 2007. This current update of the transportation plan, with a horizon year of 2035, was required to meet the federal transportation requirements and the air quality conformity requirements of the US EPA. It was approved by the BCATS Policy Committee on June 22, 2011. A copy of the approving resolution is included as the last page of this *Executive Summary*.

### **GOALS & OBJECTIVES**

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An important first step in any planning effort is the development of goals & objectives to support and to provide direction for the planning work to come. Goals & objectives reflect the values and desires of the individuals setting them. Goals & objectives are also valuable in measuring the effectiveness and success of the plans that are developed. Some of the objectives may compete or conflict with one another. This is to be expected, as the goals & objectives are broad in nature and designed to deal with many issues. It is the responsibility of the policy decision-makers to weigh the trade-offs between the goals & objectives when evaluating the plans and programs developed to address the needs of the community. It must be recognized that BCATS by itself cannot implement projects or improvements to directly satisfy the stated goals & objectives; however, BCATS provides a forum for coordinated decisions to be made cooperatively in the best interests of the greater Battle Creek area.

In developing goals & objectives for the Plan, and for BCATS in general, several existing plans and policy statements were considered as input, including: BCATS’ previously adopted Goals & objectives from the 2030 Long Range Transportation Plan, Michigan Department of Transportation goals for the MI Transportation Plan (see chapter VI), State of Michigan Strategic Highway Safety Plan for 2009-2012, Michigan Climate Action Plan, and FHWA’s SAFETEA-LU rules and regulations.

SAFETEA-LU requires transportation plans which involve all levels of government and all surface transportation modes. The intent of SAFETEA-LU is to improve transportation and provide for consideration of projects and strategies that will:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
2. Increase the safety of the transportation system for motorized and non-motorized users
3. Increase the security of the transportation system for motorized and non-motorized users
4. Increase accessibility and mobility of people and freight
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns

6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
7. Promote efficient system management and operation
8. Emphasize the preservation of the existing transportation system

The MPO plans are coordinated with the state plans (as noted above) and the statewide planning process. The following updated goals & objectives were reaffirmed by the BCATS Policy Committee in June, 2010 to guide the minor update of the *2030 Transportation Plan* to a horizon year of 2035. A complete representation of the goals & objectives for the *Plan* is included in Chapter III of the full *2035 Metropolitan Transportation Plan* document.

### **GOAL 1: SAFETY**

To minimize the loss of life, injuries, and property damage resulting from travel on all modes within the BCATS area

### **GOAL 2: ACCESSIBILITY**

To provide all travelers in the community with reasonable access to important destinations such as: residence, employment, recreation, community facilities and commercial centers

### **GOAL 3: PRESERVATION**

To preserve the investment in the area's transportation system

### **GOAL 4: EFFICIENCY**

To achieve maximum efficiency, utilization, and performance from the transportation system

### **GOAL 5: FINANCIAL**

To minimize the financial costs of the transportation system to travelers and the community as a whole

### **GOAL 6: COMPREHENSIVE PLANNING**

To coordinate the planning and development of transportation facilities within the metropolitan area and in conjunction with countywide and statewide planning efforts

### **GOAL 7: PUBLIC INVOLVEMENT**

To provide for public involvement in the planning and development of transportation facilities and services

### **GOAL 8: ENVIRONMENTAL IMPACTS**

To avoid disrupting social and economic life or creating a less attractive or less healthy living environment for Battle Creek area residents due to unintended harmful effects of transportation on the immediate and global environment

### **GOAL 9: COMMUNITY IMPACT**

To avoid and reduce conflicts between transportation facilities and land use

## **PUBLIC PARTICIPATION**

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SAFETEA-LU expanded upon the public participation process for its predecessor legislation relative to the participation of the public and other interested parties in the transportation planning process. The metropolitan transportation planning regulations implementing SAFETEA-LU specify that:

*“The MPO shall develop and use a documented participation plan that defines a process for providing citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.”*

To this end, BCATS developed the required Participation Plan, which was approved by the BCATS Policy Committee on December 20, 2006. A listing of interested parties included in the notification process is included in the full *2035 Metropolitan Transportation Plan* document, Chapter IV - Public Participation.

As part of the public participation process for the *2030 Transportation Plan*, BCATS surveyed the public relative to priorities for the transportation system. The survey results revealed that the highest priority by far was for the preservation of existing roadways. The second highest priority was for the specific widening of Interstate 94 and then widening in general where it is warranted to deal with congestion. Since this *2035 Metropolitan Transportation Plan* is a minor update of that *2030 Transportation Plan* completed in late 2007, another full-fledged general opinion survey was not deemed necessary at this time, and those previous survey results were considered still valid for the plan update to 2035.

BCATS provided updates relative to plan development throughout the process, at its regular Committee meetings, online, with newsletters/flyers distributed by regular mail and also made available at public facilities across the area, and with a May 25, 2011 public notice in the *Battle Creek Enquirer*. Copies of the newsletter/flyers associated with the Plan development, and the public notice are included in the full *2035 Metropolitan Transportation Plan* document, Chapter IV - PUBLIC PARTICIPATION.

## CONSULTATION

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A new requirement for the development of long range plans, since the implementing regulations for SAFETEA-LU went into effect, is the aspect of “Consultation” 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. A complete listing of contact agencies and organizations is included in the full *2035 Metropolitan Transportation Plan* document in Chapter V - Consultation.

BCATS received comments from some agencies when an initial contact letter was sent out in January, 2007 as part of the *2030 Transportation Plan* consultation process. The comments/issues generated by the 2007 letter that were still relevant were considered in this update of the 2030 plan to a 2035 horizon. The consultation mailing list received the same newsletter information about this plan update process as those on the public participation list. BCATS also provided correspondence to the targeted agencies as the plan’s list of recommended improvements was developed & finalized. Up until the time of adoption of the *2035 Metropolitan Transportation Plan*, BCATS did not receive any new comments relative to this plan update from the consultation list. Upon local adoption & State & Federal approval of this plan update, the consultation agencies will be notified that, should they wish to consult BCATS’ updated plan, it is available on the BCATS website.

## INTERMODAL CONSIDERATIONS

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Three chapters in the *2035 Metropolitan Transportation Plan* are devoted to the consideration of modes other than highways which are utilized for the movement of people and goods in the BCATS area. The modes reviewed included: aviation, rail, trucking, pedestrian, non-motorized, transit, taxicab, intercity bus, and ride-sharing. Transit

provided information for the inclusion of transit projects in the overall Plan project listing. Ongoing work done in the planning & implementation of non-motorized projects by the local agencies is supported by BCATS within programming of its own long range transportation plan.

## **COORDINATION WITH THE STATE LONG RANGE PLAN & STATE LONG RANGE PLANNING**

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Federal regulations require that BCATS' Plan coordinate with statewide long range plans required of the state. In March 2007 the Michigan Department of Transportation (MDOT) completed its own long range transportation plan, called the *MI Transportation Plan: Moving Michigan Forward*. The plan set forth four goals that reflect the same focus as the BCATS Plan goals for the transportation system. Those goals are:

1. System Improvement: Modernize and enhance the transportation system to improve mobility and accessibility.
2. Efficient and Effective Operations: Improve the efficiency and effectiveness of the transportation system and transportation services and expand MDOT's coordination and collaboration with partners.
3. Safety and Security: Continue to improve transportation safety and ensure the security of the transportation system.
4. Stewardship: Preserve transportation system investments, protect the environment, and utilize public resources in a responsible manner.

MDOT also developed a State Highway Safety Plan (SHSP), published in August 2006, and in March 2009 the Michigan Department of Environmental Quality published a *Climate Action Plan (CAP)* addressing the issues of: climate change, reduction in greenhouse gases, and changes to the future of energy usage in the state. BCATS has taken these state plans and priorities into consideration in the development of the *BCATS 2035 Metropolitan Transportation Plan*.

## **IDENTIFICATION OF RECOMMENDED PROJECTS FOR THE 2035 METROPOLITAN TRANSPORTATION PLAN**

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Future capacity deficiencies on the BCATS roadway network have been identified utilizing a computerized Travel Demand Forecast Model (TDFM) maintained by MDOT. Socio-economic data (population, households, and employment) in the model base year of 2002 were used to develop a simulation of traffic volumes and conditions on the area's roadways which are compared to known volumes and conditions in the same base year. Once the two sets of information are in relative agreement ("calibrated"), the projection of future socio-economic data allows for future traffic volumes to be approximated on the roadway network and for locations of future congestion (too many vehicles for the road design) to be identified. "Expansion" projects in the Plan are derived from this analysis as well as consideration of economic development needs.

Safety-related concerns are routinely identified through periodic review of crash data and discussions with staff of the area road agencies & Battle Creek Transit. Typical safety-related projects are largely intersection related, but may also deal with signal progression & other operational issues along corridors, and usually are implemented as short-term operating improvements not specified in long-range plans. One prominent safety-related concern in the BCATS area is the high level of vehicle/deer crashes; this *Plan* includes a discussion of that topic and identification of specific road segments where the levels are significant.

Pavement rehabilitation projects are listed as "preservation" on the project list for specific improvements which are not included in the "expansion" category. The road agencies use pavement management assessment to develop schedules for pavement rehabilitation. It should be noted that on-going lower level pavement rehabilitation and maintenance activities are not reflected as specific projects in the *2035 Plan*.

Public transit projects are listed in the project list and represent on-going funding for transit operations, security projects, vehicle replacement, farebox upgrades and other capital improvements.

## **OPERATIONAL AND MANAGEMENT STRATEGIES**

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SAFETEA-LU requires that BCATS include “operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods.” To this end, BCATS has identified a number of transportation strategies that it participates in and/or promotes which will achieve these objectives. These strategies include: asset management, capital preventative maintenance, general maintenance, safety projects, intelligent transportation system activities, access management, pedestrian and non-motorized improvement, and optimization of public transit services.

## **FINANCIAL PLAN**

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The SAFETEA-LU regulations require an extensive review of the financial feasibility of the improvements included in the long range plan. The BCATS *2035 Metropolitan Transportation Plan* must be financially constrained, which means that there must be sufficient and reasonably available funds to carry-out the projects included in the *Plan*. Adequate funding necessary to maintain the existing transportation system must also be shown to exist so that the existing system is preserved. The new regulations also require that all revenues and costs be inflated to “year of expenditure dollars” to most accurately reflect the validity of the financial constraint calculated. BCATS has conducted a lengthy process to determine costs and revenues in future dollars. Costs for the operations and maintenance of the of the existing system have been developed and projected over the life of the *Plan*. Based on all of this analysis, tables were developed which summarize available revenue and available costs over the life of the *Plan*. For detail about the development of any figures in the following tables, please see Chapter XV - FINANCIAL PLAN of the full *2035 Metropolitan Transportation Plan* document.

### **Summary of Available Revenues for the BCATS 2035 Metropolitan Transportation Plan**

<b>Projected Capital Revenues</b>	<b>Total \$</b>
Federal Transportation Funds for Construction of Local Roads	88,593,000
Federal and State Funding for State Controlled Roadways in BCATS area	333,230,000
Federal/State/Local Transit Funding (operating and capital)	134,166,000
State and Local Funding for Construction and Operations/Maintenance of Local Roads	358,777,000
<b>TOTAL</b>	914,766,000

**Summary of 2035 Metropolitan Transportation Plan  
Operations/Maintenance & Capital Expenditures 2011-2035**

(Individual Projects are described in a detailed listing in Chapter XVII)

<b>Operations/Maintenance (O/M) Expenditures for Local &amp; State Roads</b>	<b>Total \$</b>
<b>Estimated Expenditures for O/M of Local Roads</b>	<b>229,188,000</b>
<b>Estimated Expenditures for O/M of State Roads</b>	<b>40,105,000</b>
<b>Planned Capital Expenditures</b>	
<b>Local Road Projects</b>	
Improve/Expand (4 projects)	14,306,000
Preservation (38 projects)	61,374,000
Safety and Operations/Air Quality Improvements (15 projects)	3,934,000
Non-motorized (1 project)	1,793,000
<b>Total</b>	<b>81,407,000</b>
<b>Transit Projects</b>	
Preservation (operating expense projects) (51 projects)	113,867,000
Vehicle Replacement (82 total vehicles) (29 projects)	16,217,000
Vehicle Addition (1 total vehicle) (1 project)	21,000
Other Capital (13 projects)	2,938,000
Facility Project (2 projects)	2,652,000
Security (annual) (25 projects)	315,000
<b>Total</b>	<b>136,010,000</b>
<b>State Projects</b>	
Preservation (27 projects)	130,856,000
Operations/CMAQ (5 projects)	4,208,000
Safety (1 project)	584,000
Bridges (9 projects)	39,828,000
<b>Total</b>	<b>175,476,000</b>
<b>TOTAL CAPITAL EXPENDITURES</b>	<b>392,893,000</b>
<b>Total Expenditures</b>	<b>662,186,000</b>

The total expenditures identified in the BCATS 2035 Metropolitan Transportation Plan are within the total federal, state, and local revenues estimated for the 2035 Metropolitan Transportation Plan. As shown in the following table, there is projected to be adequate revenue available for capital expenditures as well as for operations and maintenance expenditures for the transportation system. Therefore, the BCATS 2035 Metropolitan Transportation Plan is financially constrained.

**Demonstration of Financial Constraint for the  
2035 Metropolitan Transportation Plan of the Battle Creek Area Transportation Study**

Total federal, state, and local revenues estimated to be available for road related construction, transit capital/operating and road related operations and maintenance of the major street/primary road system and state roadway system within the BCATS area	\$914,766,000
Expenditures for Operations/Maintenance of Local & State Roads	(\$269,293,000)
Expenditures for Local Road Improvement Projects	(\$81,407,000)
Expenditures for Transit Improvement Projects	(\$136,010,000)
Expenditures for State Improvement Projects	(\$175,476,000)
<b>REMAINING BALANCE</b>	<b>\$252,580,000</b>



## ENVIRONMENTAL MITIGATION

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SAFETEA-LU requires that BCATS include in its long range plan “a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan.”

The goal of this process is to eliminate or minimize environmental impacts from the planned projects in the MPO’s transportation plan. This applies primarily to the “improve and expand” type projects. However, addressing this issue in the transportation plan is not intended to be project specific. The owners of any future project are still required to meet all of the necessary requirements of the National Environmental Policy Act (NEPA) process.

In September, 2007, BCATS’ Policy Committee adopted a set of guidelines for “Considering Environmental Issues in the Transportation Planning Process” for use by BCATS and the area’s transportation agencies. The guidelines include areas of concern specifically identified by some of the agencies contacted under the “Consultation” efforts discussed above. These areas of concern include: farmlands, wetlands, drainage, flood plains, threatened and endangered species, impaired streams and other water bodies, air quality, and noise.

BCATS review of these issues led to the identification of environmental and cultural factors in the BCATS area which were reviewed relative to future transportation projects. The projects which have a specific location identified for them (except for signal interconnect projects) were assessed as to whether they may be in an area that might impact any of eleven selected factors. "Expansion" projects involving the location of a new roadway or widening of existing roads have the greatest potential for impacting multiple resource or cultural areas. The "expansion" projects recommended in this *Plan* are the Morgan Rd Extension with a new bridge over the Battle Creek River, the Glen Cross Rd Extension, and the Avenue A Re-alignment/Military Ave Extension.

The environmental guidelines and the assessment table and project overlay maps related to this issue are located in Chapter XVI - ENVIRONMENTAL MITIGATION of the full 2035 *Metropolitan Transportation Plan* document.

## AIR QUALITY CONFORMITY

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The “Kalamazoo-Battle Creek-MI Non-Attainment Area”, comprised of Kalamazoo, Calhoun, & VanBuren counties, was designated a “Basic Non-Attainment” area for the eight-hour ozone standard effective June 15, 2004, and was re-designated to “Attainment/Maintenance” on May 16, 2007 and given a 2018 mobile source emission budget. Those actions make BCATS subject to requirements for conducting a conformity analysis on its plans and Transportation Improvement Programs (TIPs), meaning the *Plan* must include a demonstration that the implementation of projects recommended in the *Plan* do not result in greater mobile source emissions than the emissions budget. Even as an air quality "Attainment/Maintenance" area, BCATS still must complete the conformity requirements.

Relative to Kalamazoo and Battle Creek’s *Plans* and TIPs, a conformity demonstration was made in compliance with all applicable conformity requirements. The implementation of projects in *Plans* & TIPs, and other regionally significant projects in the Non-Attainment Area results in lower emissions than the emissions budget in each of the milestone years of the assessment as shown in the table on the following page.

# Results for the Kalamazoo-Battle Creek MI Non-Attainment Area 8 Hour Ozone Standard

March 2011

Scenario	Emissions in kilograms/day	
	VOC	NOx
<b>Attainment Budget</b>	<b>26,916.6200</b>	<b>49,315.3900</b>
<b>2011 Action</b>	11,388.0916	18,016.8318
<b>2018 Action</b>	7,793.8609	9,268.0277
<b>2025 Action</b>	6,183.1643	6,531.0889
<b>2035 Action</b>	6,180.8517	5,563.1903

## 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. Therefore, it is a regular component of the BCATS' plans and TIPs to evaluate the potential of planned improvements relative to negative impacts on areas with racial minorities, Hispanic populations, and populations with income below the poverty level.

The analysis completed for this component, which is included in detail in Chapter XIX - ENVIRONMENTAL JUSTICE ANALYSIS in the full *2035 Metropolitan Transportation Plan* document, shows that there will impacts to non-minority as well as minority and low-income populations as a result of the projects recommended in the *2035 Metropolitan Transportation Plan*. However, none of the "expansion" roadway projects impact populated areas. None of the recommended 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 recommend improvements) there is no glaring disproportional impact to any of the identified groups as compared to the area as a whole.

## 2035 METROPOLITAN TRANSPORTATION PLAN PROJECTS

Nearly \$392.9 million in "year of expenditure dollars" would be expended through implementation of the 221 "projects" recommended for inclusion in the *Plan*. The 52 projects at specific locations where an improvement is proposed are listed in the following table, and also displayed in the map at the end of this *Executive Summary*. The "BCATS ID" project numbers correspond to the mapped locations.

For discussion and evaluation, the proposed projects were designated one or more of ten "Project Types":	1. Non-motorized	6. Traffic Operations
	2. Expansion (new or widened roads)	7. Transit Operating
	3. Preservation (of pavement)	8. Transit Capital
	4. Security (generally for transit)	9. Bridges
	5. Safety-Related	10. Air Quality

For projects of multiple "Type", the first category listed is the predominant focus of the project and the category used in tabulating numbers of projects and total project costs by category. Following the map at the end of this *Executive Summary* is a graphic breakdown by project type, by the number of projects and by the total estimated costs of projects in each category.

**Battle Creek Area Transportation Study (BCATS)**  
**2035 Metropolitan Transportation Plan**  
**Site-Specific Recommended Improvements**

YEAR	BCATS ID	LENGTH (miles)	NAME	LIMITS	DESCRIPTION	COST*	AGENCY	PROJECT TYPE
2011	2	0.60	Beckley Road/B Drive N	from M-66 to 6.5 Mile Rd	Resurface	\$ 296	CCRC	Preservation
2011	3	4.10	Calhoun Co. Trail Phase 1	from Emmett St through Ott Preserve to Bridge Park	New multi-modal trailway	\$ 1,793	CCRC	Non-motorized
2011	4	0.60	Beckley Road/B Drive N	from M-66 to 6.5 Mile Rd	Modify geometrics & signals at 6 Mile Rd & at Harper Village Dr intersections	\$ 200	CCRC & City of BC	Traffic Operations, Safety-Related, & Air Quality
2011	6	1.00	20th Street	from Goguc St to Columbia Ave	Resurface	\$ 249	City of BC	Preservation
2011	7	0.10	20th Street Bridge	over Kalamazoo River	Rehabilitation	\$ 556	City of BC	Preservation
2011	8	1.70	Capital Ave. SW	from Fairfield to Rebecca	Resurface	\$ 375	City of BC	Preservation
2011	9	0.10	Capital/Hamblin Signal Upgrade	Approaches & traffic signal devices at intersection of Capital Ave & Hamblin Ave in downtown Battle Creek	Replace 2 & add 2 steel strain poles to support new mast arm design signal system. Add signal faces for left-turn phasing (new), and detector cameras on for full signal actuation on each approach. Appurtenant signage & lane markings.	\$ 254	City of BC	Air Quality & Traffic Operations
2011	10	0.10	Hamblin/Jackson Intersection (2010 ARRA)	Intersection & approaches	Rsurface all roadway pavement; minor widening to accomodate improved curb, gutter, & pedestrian facilities.	\$ 85	City of BC	Safety-Related
2011	11	1.50	Helmer Road	from Beckley Rd to Gethings Rd	Resurface	\$ 261	City of BC	Preservation
2011	12	1.30	North Avenue	from Capital Ave NE to Roosevelt Ave	Resurface	\$ 337	City of BC	Preservation
2011	19	0.10	I-194/M-66 Bridge	over GTWRR	Rehabilitation	\$ 1,918	MDOT	Bridges
2011	20	0.10	I-194/M-66 Bridges	over Dickman Road and Fountain Ave.	Rehabilitation	\$ 2,756	MDOT	Bridges
2011	21	0.70	I-94 Interchange (exit 104)	at 11 Mile Road	Ramp work and center left turn lane on southbound Michigan Ave at Wheatfield Parkway	\$ 584	MDOT	Safety-Related
2011	22	6.10	M-37 (Bedford Rd.)	from Creekview Dr to north county line	Double Chip Seal	\$ 375	MDOT	Preservation
2011	23	3.50	M-96 (Dickman Rd.)	from Armstong Rd to Helmer Rd	Resurface	\$ 1,054	MDOT	Preservation
2012	25	2.80	B Drive N	from 8.5 Mile Rd to 11 Mile Rd	Resurface	\$ 800	CCRC	Preservation
2012	26	0.10	B Drive N/Beadle Lake Road Intersection	Intersection & Approaches	Modify geometrics & upgrade signals	\$ 250	CCRC	Traffic Operations, Safety-Related, & Air Quality
2012	28	0.90	Capital Ave. SW	from Weeks Rd to Cascade Dr	Resurface	\$ 285	City of BC	Preservation
2012	29	0.90	Jackson St./Stringham Road	from Bedford Rd to M-89 (Michigan Ave)	Resurface	\$ 250	City of BC	Preservation
2012	35	0.10	I-94BL/20th Street Intersection	Crossovers in SE quadrant of inters.	Redesign SE quadrant to traditional 4-leg intersection	\$ 396	City of Springfield	Traffic Operations
2012	36	0.40	I-194 Interchange	at Dickman Road	Interchange Lighting upgrade	\$ 935	MDOT	Traffic Operations
2012	37	0.07	I-194/M-66 southbound off ramp onto M-96 (Columbia Ave E)	I-194/M-66 exit 2 interchange	Widen terminal ending to create a right turn lane onto M-96	\$ 75	MDOT	Air Quality & Traffic Operations
2012	38	1.70	I-94BL/M-96 (E. Michigan Ave)	from Wattles Rd to M-311 (11 Mile Rd)	resurface/restripe and minor widening along 4/10ths mile at eastern edge of project	\$ 1,607	MDOT	Traffic Operations & Air Quality
2012	39	0.80	M-66 (Capital Ave NE) bridge over Wanondaga Creek	over Wanondaga Creek	Replacement of bridge and rehab of approaches	\$ 1,248	MDOT	Bridges
2012	40	2.30	M-96 (Columbia Ave E)	from west of Riverside Dr eastward to I-194/M-66, and from east of M-294 (Main St/Beadle Lake Rd) eastward to junction at I-94BL (Michigan Ave)	1.5" cold milling & 1.5" HMA resurfacing, ADA ramps	\$ 1,100	MDOT	Preservation
2012	41	0.10	M-96 (Columbia Ave E) bridge over Raymond Rd	Bridge over Raymond Rd.	Bridge replacement	\$ 1,810	MDOT	Bridges

YEAR	BCATS ID	LENGTH (miles)	NAME	LIMITS	DESCRIPTION	COST*	AGENCY	PROJECT TYPE
2013	42	3.50	B Drive S	from 8.5 Mile Rd to 12 Mile Rd	Resurface	\$ 800	CCRC	Preservation
2013	45	1.40	Beckley Road	from Minges Rd to M-66	Resurface	\$ 500	City of BC	Preservation
2013	52	1.40	Gogucac Street	from Helmer Rd to Carl Ave	Resurface	\$ 284	City of Springfield	Preservation
2013	53	0.60	Upton Ave/Avenue A	from Avenue A eastward to city limits / from 20th St eastward to Upton 20th St.	Resurface	\$ 121	City of Springfield	Preservation
2013	54	3.40	I-194 Freeway Signing	from I-94 to Hamblin Ave	Signing upgrade	\$ 460	MDOT	Traffic Operations
2013	55		I-94 & I-194 ITS Project	In BCATS area	Installation of 4 ITS mess. signs on I-94 and 1 sign on I-194	\$ 1,131	MDOT	Traffic Operations
2013	56	0.10	I-94BL Carpool Lot	NE quadrant at Exit 92	Resurface	\$ 43	MDOT	Preservation
2014	58	1.60	6 1/2 Mile Road	from Christian Dr to G Dr N	Resurface	\$ 440	CCRC	Preservation
2014	59	2.70	Raymond Road	from Verona Rd to Golden Ave	Resurface	\$ 879	CCRC	Preservation
2014	60	0.10	Wattles Road/Verona Road Intersection	Intersection & Approaches	Modify geometrics & upgrade signals	\$ 225	CCRC	Traffic Operations, Safety-Related, & Air Quality
2014	61	0.60	East Avenue	from Emmett St to Roosevelt Ave	Resurface	\$ 160	City of BC	Preservation
2014	65	1.50	Territorial Rd & Evergreen Ave	from Helmer Rd eastward to 20th St & from Avenue A northward to Harmonia Rd	Resurface	\$ 365	City of BC & City of Springfield.	Preservation
2014	66	0.50	I-94 EB Rest Area	Rest Area #703	Reconstruction	\$ 4,202	MDOT	Preservation
2014	67	1.60	I-94BL/M-37 (Climax Rd/Columbia Ave W)	from I-94 exit 92 interchange to Columbia Ave W turnoff	HMA overlay and minor widening	\$ 4,560	MDOT	Preservation
2016	74	1.00	Glen Cross Road Extension	from M-66 east and north to B Dr N	New Route	\$ 2,138	CCRC	Expansion
2016	80	0.13	Avenue A re-alignment / Military Ave extension	from M-96 (Dickman Rd) to Avenue A	Close M-96/Avenue A intersection, extend Military Ave northeastward to meet Avenue A	\$ 228	City of Springfield	Expansion, Safety-Related, Traffic Operations, & Air Quality
2019	90	0.10	Morgan Road Bridge Over Battle Creek River	at Battle Creek River	New Bridge	\$ 5,970	CCRC	Expansion
2019	91	1.30	Morgan Road Extension	from M-66 (Capital Ave NE) to Bellevue Rd at N Dr N	New Route	\$ 5,970	CCRC	Expansion
2020	97	0.90	Verona Rd	from McAllister Rd to Wattles Rd	minor widening for center left turn lane and resurfacing	\$ 1,099	CCRC	Traffic Operations & Air Quality
2020	102		Transit facility renovation	for Battle Creek Transit	renovation of facilities	\$ 1,195	City of BC Transit	Transit Capital
2021	110		EB and WB Bridges on I-94	over GTWRR	minor widening and rehabilitation	\$ 3,668	MDOT	Bridges
2023	119		EB and WB Bridges on I-94	over 6 1/2 Mile Rd.	minor widening and rehabilitation	\$ 4,618	MDOT	Bridges
2025	130		EB and WB Bridges on I-94	over M-294 (Beadle Lake Rd.)	minor widening and rehabilitation	\$ 3,884	MDOT	Bridges
2027	141		EB and WB Bridges on I-94	over 9 Mile Road	minor widening and rehabilitation	\$ 4,162	MDOT	Bridges
2030	152		Transit facility renovation	for Battle Creek Transit	renovation of facilities	\$ 1,457	City of BC Transit	Transit Capital
2030	156		EB and WB Bridges on I-94	over Kalamazoo River	replacement of bridges	\$ 15,764	MDOT	Bridges

\* COST in thousands of "year of expenditure" dollars

Other road projects not on the list of "Site-Specific Recommended Improvements", as proposed in this *Plan*, include annual general projects to address pavement preservation on both "local" (non-State) and State trunkline roadways. Specific work for the "Preserve Strategy" projects are typically identified two or three years in advance and programmed accordingly into the Transportation Improvement Program (TIP) for implementation.

Both operating and capital expenditures for public transit are listed as "projects" in this *Plan*. Battle Creek Transit's (BCT's) annual operating cost, annual State "Specialized Services Operating Assistance" funds "passed through" BCT to local social service agencies, and an annual transit security capital improvement project (required by the Federal Transit Administration), are recommended as "projects" in each *Plan* year. Other BCT capital projects over

the twenty-five years of the *Plan* include replacement of 82 vehicles, most for BCT but several for the local social service agencies, adding new & replacing bus passenger shelters, periodic upgrades of the electronic farebox system and the automatic vehicle locator/computer aided dispatch (AVL/CAD) system, and periodic renovation of BCT's maintenance garage & administrative offices.

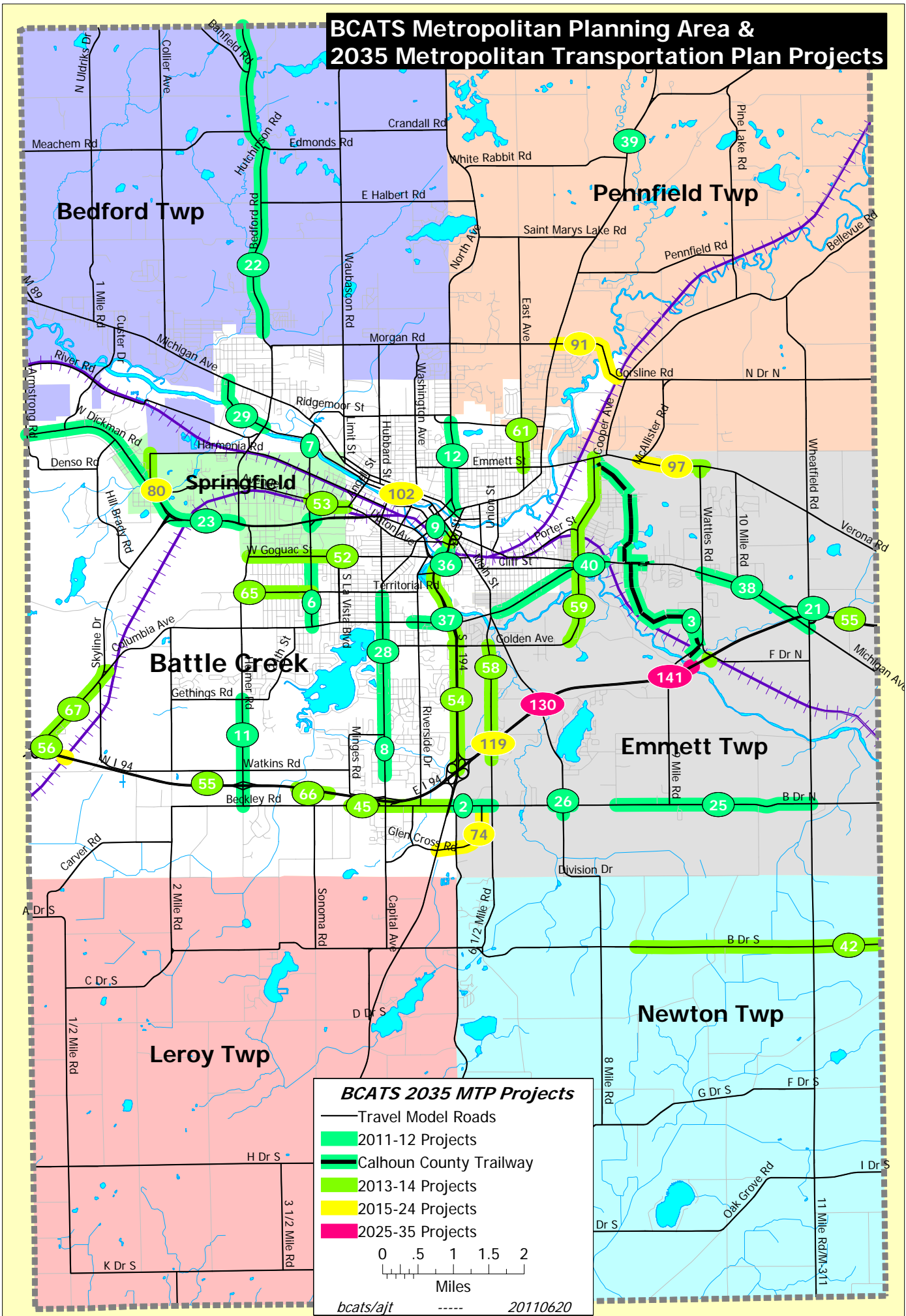
## CONCLUSION

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This *Executive Summary* provides a very cursory review of the contents of the Battle Creek Area Transportation Study's *2035 Metropolitan Transportation Plan* in an effort to have a succinct summary for interested individuals and the general public at-large. The full *2035 Plan* document is over 160 pages in length. Specifics regarding any of the information contained in this *Executive Summary* can be found in the complete *Plan* document.

This *Executive Summary* is included at the beginning of, and as part of, the full *Plan* document. It is also available as a stand alone report. The full document is available as a pdf document online at BCATS' website at <http://www.bcatsmpo.org>. The document can also be obtained by contacting the BCATS staff office at 601 Avenue A, Springfield, MI 49037, 269/963-1158, or contacting BCATS by e-mail at [bcats@bcatsmpo.org](mailto:bcats@bcatsmpo.org). A fee may be charged for a paper copy of the full document.

# BCATS Metropolitan Planning Area & 2035 Metropolitan Transportation Plan Projects



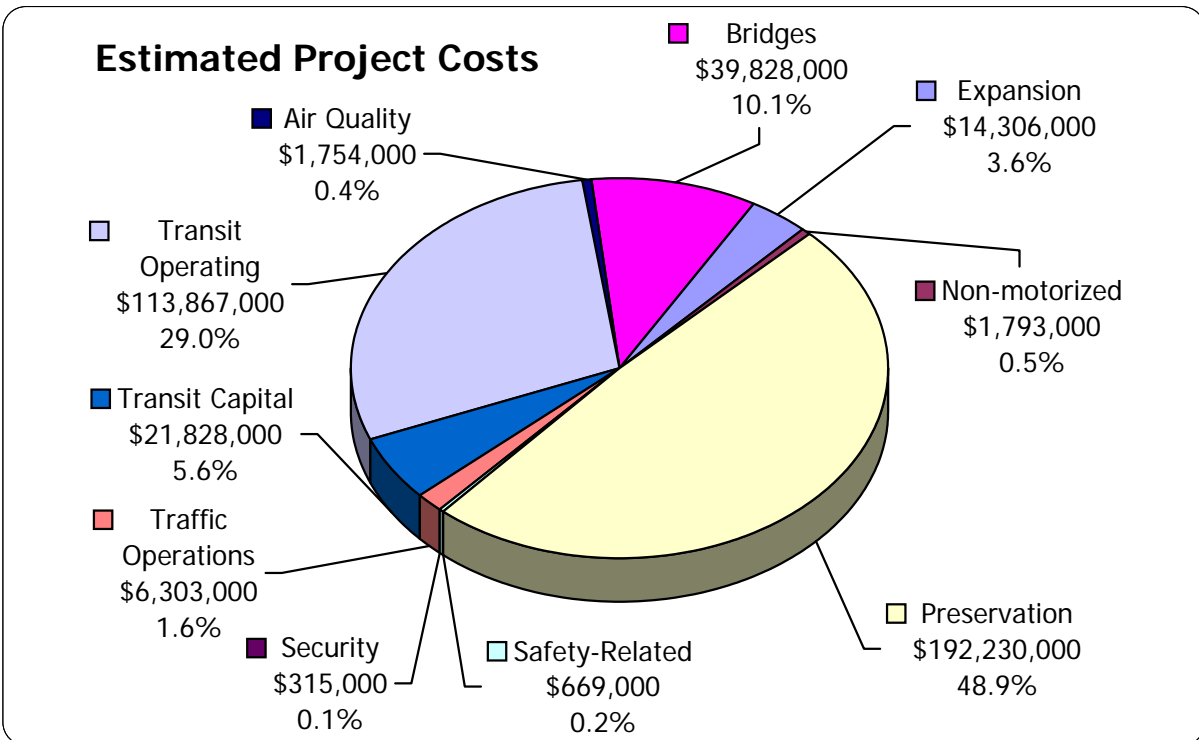
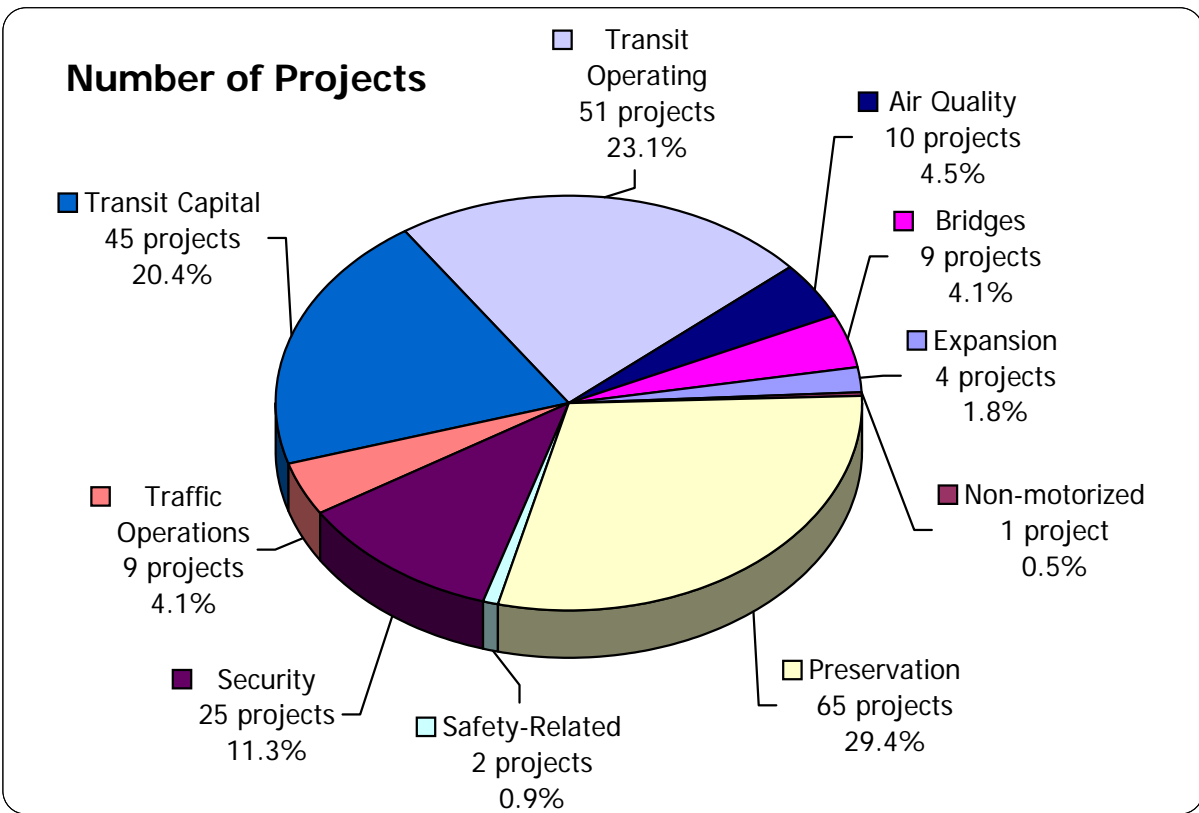
**BCATS 2035 MTP Projects**

- Travel Model Roads
- 2011-12 Projects
- Calhoun County Trailway
- 2013-14 Projects
- 2015-24 Projects
- 2025-35 Projects

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# Battle Creek Area Transportation Study (BCATS) 2035 Metropolitan Transportation Plan Recommended Projects by Type



**Resolution #11-27**  
**Resolution to Approve the 2035 METROPOLITAN TRANSPORTATION PLAN**  
**for the Battle Creek Area Transportation Study**

**WHEREAS**, the Battle Creek Area Transportation Study (BCATS) is the designated Policy Committee and Metropolitan Planning Organization (MPO) for the Battle Creek, Michigan urban area; and

**WHEREAS**, the development of a long range transportation plan is a requirement of both the Federal Highway Administration and the Federal Transit Administration; and

**WHEREAS**, the BCATS *2035 Metropolitan Transportation Plan* as been developed pursuant to USC 23 Section 134, as amended by the Safe, Accountable, Flexible, Efficient, Transportation Act: A Legacy for Users (SAFETEA-LU) federal transportation legislation, with a planning horizon of at least 20 years; and

**WHEREAS**, the BCATS *2035 Metropolitan Transportation Plan* identifies transportation facilities that should function as an integrated metropolitan transportation system; and

**WHEREAS**, the BCATS *2035 Metropolitan Transportation Plan* includes a financial analysis that demonstrates how the projects that have been identified will have adequate funding, and indicates the resources that are reasonably expected to be made available to carry out the Plan; and

**WHEREAS**, the BCATS *2035 Metropolitan Transportation Plan* recognizes the necessity of preserving the existing transportation system and includes projects that will enhance the efficiency of the existing transportation system to relieve vehicular congestion and improve the mobility of people and goods; and

**WHEREAS**, the BCATS *2035 Metropolitan Transportation Plan* was developed through a process that included input from private citizens, private providers of transportation, affected public agencies, and other interested parties; and

**WHEREAS**, the BCATS *2035 Metropolitan Transportation Plan* was developed utilizing a consultation process taking into consideration the plans and programs of other agencies; and using information obtained through the consultation process, recognizes potential environmental mitigation needs as related to projects in the Plan; and

**WHEREAS**, the BCATS *2035 Metropolitan Transportation Plan* was analyzed as a part of the Kalamazoo-Battle Creek-MI Maintenance Area and has been shown to conform with the State Implementation Plan (SIP) for air quality; and

**WHEREAS**, this Plan can be amended periodically upon request and with appropriate documentation supporting such a request;

**NOW THEREFORE BE IT RESOLVED**, that the Policy Committee of the Battle Creek Area Transportation Study finds the *2035 Metropolitan Transportation Plan* to be SAFETEA-LU compliant and approves its submission to the Michigan Department of Transportation for consideration by the Federal Highway Administration, Federal Transit Administration and the Environmental Protection Agency, as necessary.

ATTEST:           (signed original on file)                                Date: June 22, 2011  
          Tom Matson  
          Chairperson, BCATS Policy Committee





