tration taxes to be used for public transportation programs. As described above, Act 51 appropriates about 8.8 percent of the MTF to the CTF.

The other major revenue source for the CTF is 4.65 percent of sales-tax revenue from automotive-related businesses. Because this revenue source is not dedicated to transportation by the Constitution, the amount of sales-tax revenue appropriated to the CTF has been reduced in some years and the funds transferred to the General Fund or the STF, typically $5 to $25 million/year.

Statute's Role in Funding Distribution for the CTF

Appropriations from the CTF are guided by estimated revenues and the requirements in Act 51 of 1951. Act 51 requires the CTF to be distributed in the following priority:

1. Debt service obligations
2. Cost of administration
3. Local bus operating assistance
4. Other programs

Act 51 mandates a minimal level of funding for several CTF funded programs, although there have been fiscal years that the annual appropriations bill did not abide by these minimums. The programs and their funding floors are:

- Local bus operating assistance at FY 1997 levels, which equals $121,332,410
- 10% of program funds for intercity passenger and freight programs
- $3,600,100 for specialized services,
- $2,000,000 for municipal credit, and
- $8,000,000 for bus capital federal match.

A brief summary of the four largest local transit CTF programs follows. The largest of these programs—over 80 percent of the annual CTF appropriation—is local bus operating assistance which is described last. This is the only CTF program distributed by statutory formula.

Bus Transit Capital

This is the largest program under "Public Transportation Development" as shown in Figure 4.2 E. Act 51 requires that no less than $8,000,000 be distributed each fiscal year either to match federal aid for local bus capital projects, or for 100 percent of the cost of capital projects by authorities not able to receive federal aid. The actual amount is fixed by the annual appropriations process and has been less than the $8,000,000 minimum in Act 51. Act 51 requires MDOT to use the CTF to provide the match for federal transit grants awarded to MDOT or to local agencies. While Act 51 requires MDOT to provide 66-2/3rds of the required match, historically MDOT has provided all of the required match, although since FY2005 MDOT has had to use toll revenue credits to meet the CTF's match obligations. MDOT distributes CTF match in response to federal grants, so the amount of CTF each agency receives is a function of the federal funds they receive that must be matched.

Transportation to Work

This is one of the programs under "Public Transportation Development" as shown in Figure 4.2 E. The size of this program is governed by annual appropriation. Annual appropriations bills require that sufficient funds be distributed to match federal Job Access Reverse Commute (JARC) grants to local transit agencies. JARC grants are distributed by a competitive grant process managed by regional planning agencies for large urban areas, and by the state for small urban agencies and non-urbanized areas. MDOT determines the amount of CTF Transportation to Work funds each agency will receive each year as a direct function of the amount of federal JARC assistance each agency receives.

Specialized Services

This is one of the programs under "Public Transportation Development" as shown in Figure 4.2 E. Act 51 defines "specialized services" as public transportation primarily designed for persons with disabilities or persons 65 years of age or older. The Act dictates eligible recipients of this class of funding.

The size of this program is governed by annual appropriation, however, Act 51 requires at least $3,600,100 in CTF funds be provided for this program each year. MDOT conducts an annual application

process for these funds consistent with Act 51. Since funding for this program has remained relatively static, MDOT distributes funding to maintain existing services from year to year. For most agencies, the amount of funding they receive each year does not change.

State Operating Assistance/Local Bus Operating

Under Section 10e of Act 51, after debt service and administration, the first priority for the CTF shall be "the payment of operating grants to eligible authorities and eligible governmental agencies." In Fiscal 2009, 82 percent of the CTF program appropriations were for local transit operating assistance.

Act 51 establishes a formula for distribution of CTF funds appropriated for local transit operating assistance. Under this transit formula, Act 51 establishes two "peer groups" based on population. It also establishes different maximum levels of assistance to each group:

- Urban areas with populations over 100,000—up to 50 percent of eligible operating expenses. Currently there are 9 agencies in 7 urban areas in this group.
- Urbanized areas with populations under 100,000 and non-urbanized areas—up to 60 percent of eligible operating expenses. Currently there are 75 transit agencies and local governments in this group.

Act 51 fixes maximum distribution rates for each group (50% and 60%). However, the amount appropriated for operating assistance has never been sufficient to meet these maximums, so MDOT must calculate each year's distribution rate for the two groups based on budgeted and actual operating expenses (accounted for as prescribed by MDOT). Each group's share of the appropriation is divided by that group's total eligible expenses to come up with the percentage of the appropriation that will be distributed to each agency in that group. In Fiscal 2010, the distribution rates are 25.7 percent for the "50% group" and 35.0 percent for the "60% group."

A complete description of how the operating assistance amount is calculated is available as Appendix A to this report.

CTC & Associates LLC (CTC) was hired by MDOT to review and summarize information from the Federal Highway Administration (FHWA), American Association of State Highway and Transportation Officials (AASHTO), Transportation Research Board (TRB) and other authoritative sources regarding state formulae, statutes and practices for distributing transportation revenue. In addition, CTC conducted an online survey of state departments of transportation (DOTs) regarding distribution of transportation revenue. Twenty-three agencies responded to the survey. CTC followed up with telephone interviews of targeted states to gain further understanding of their practices regarding distribution of transportation revenue. The following section summarizes their findings from the survey of targeted states. The complete report can be found in Appendix B.

FINDINGS

The 23 state DOTs who responded to the survey are employing a wide range of revenue sources and factors to determine the allocation of funding for their surface transportation programs.

Allocation of Road User Fees

- The most commonly reported problem associated with transportation funding systems is an overall lack of funding, not a systemic flaw in distribution formulae.
- Allocations of road-user fees for state highways ranged from 100 percent (West Virginia) to 25.37 percent (Oklahoma).
- County road allocations ranged from 40.5 percent (Kentucky) to zero percent (Georgia, Maine, North Carolina and West Virginia); city and village street allocations ranged from 30.5 percent (Arizona) to zero percent (Delaware, Texas and West Virginia).
- Where an allocation of road user fees for public transit was noted, all but one of the percentage allocations is under 10 percent, ranging from 6.4 percent (Wisconsin) to zero percent (Illinois, Indiana and Ohio). At 43 percent, New Jersey's percentage allocation for transit is a notable exception. Oklahoma's allocation of 54.85 percent to "other non-transportation uses" was the highest reported by respondents.

Revenue Sources

- More than one-third of respondents (39 percent) do not use large sources of revenue other than road-user fees to fund their transportation programs.
- Almost two-thirds of respondents (60 percent) reported using large sources of revenue other than road user fees to fund their transportation program.
- Other funding sources reported by the remaining respondents included: tolls, general revenue funds, gambling revenues, state sales and use taxes, state corporate income taxes, bond revenues, and local sales option taxes.

FACTORS USED TO DISTRIBUTE ROAD FUNDING

- Almost three quarters of respondents (72 percent) reported no recent changes to their distribution formulae.
- The factors for distribution of road and bridge funding currently used by the most respondents are road performance indicators (50 percent) and federal Functional Classification (46 percent).
- Five states - Iowa, Kansas, Maine, Missouri and Utah - report using Vehicle Miles Traveled (VMT) to allocate funding among geographic areas or road systems.
- Other distribution factors not noted above that agencies are using or considering using vary widely, and include capacity, condition, economic development, motor vehicle registrations, population, functional class, safety, congestion, and proportion of revenue contributed.

TRANSIT FUNDING SOURCES

The AASHTO publication "Survey of State Funding for Public Transportation," 2007, presents the results of AASHTO's annual public transportation funding survey of the 50 states and the District of Columbia. The report reflects FY 2006 funding. Data from the AASHTO report indicate that the 51 transportation departments distributed $11.1 billion in state transit funding in 2006. Total state funding for transit ranged from zero dollars (three states - Alabama, Hawaii and Utah - do not provide state funding for

transit) to $2.573 billion in state transit funding distributed by New York, followed by California's $2.208 billion. Michigan ranked 12th in terms of total state transit funding with $201 million, and 16th in terms of funding per capita based on the level of investment reported by all 51 departments.

The AASHTO report categorizes funding distribution methods as discretionary, formula-based, local pass-through, or other. Twenty-nine states reported the use of formula-based methods to distribute at least some transit funding and of these, eight states distribute 100 percent of state transit funding by formula. With $178 million and 88.6 percent of state transit funds distributed by formula, Michigan ranks seventh in terms of dollars of state transit funding distributed by formula and sixth in terms of the percentage of funds distributed by formula (the eight states distributing 100 percent of funds by formula are counted as one state).

Of the 29 states using formula-based distribution methods, 23 provided additional information about the formulae in use. According to the AASHTO report, methods in use by states include:

- Funds for operating, capital and planning expenses are distributed to cities, towns and counties based on population.
- 75 percent of funds are allocated to counties by population and 25 percent is retained by the state for interregional improvements.
- Funds are allocated to operators by regional planning agencies based on population, prior year fares and local revenues.
- 60 percent of funds are allocated evenly to all providers; 40 percent is distributed to local jurisdictions based on the elderly and disabled population.
- State funds are distributed to both rural and urban transit systems based on a percentage of the prior year's allocation.
- A statutory formula distributes funds to each county for public transportation operators in that county based on population and a base funding amount.
- 100 percent of state funds are allocated by formula - 80 percent needs and 20 percent performance.

In a survey of State DOTs conducted for this report, respondents were asked for information that clarified or corrected the information in the AASHTO publication. Ten respondents provided clarification or additional detail about their transit funding formulae:

- Rural area funds are distributed according to historical data and annual applications.
- The allocation of state transit funding is based on peer group and performance metrics that relate the number of passengers, miles of service and locally derived income to each dollar of operating expense.
- All transit systems that provide more than 50,000 rides a year are provided funding based on ridership numbers. Mileage is weighted for those systems with less than 50,000 rides per year as most of those systems are demand-response. Capital requests are competitive.
- The allocation formula for the program to assist the state's fixed-route transit systems in urbanized areas includes a performance component.
- Funding for transit aid is decided by the legislative biennial budget process, not formulae. Distribution of the funding to individual systems is based on a statutory tier structure, amount of funding available and a requirement that each system within a tier receives the same percentage of operating subsidy.

PROBLEMATIC ELEMENTS OF TRANSPORTATION FUNDING SYSTEMS

States reported a number of problematic elements in their funding systems. More than three-quarters of respondents (79 percent) reported that some interests feel a class of road or transit agency, or a geographic area, is systematically under-funded by the current distribution formula. Almost two-thirds (64 percent) of respondents noted one or more elements of their transportation funding systems were a source of chronic trouble or complaint.

Section 394 of the 2010 Transportation budget asked MDOT to provide an analysis of "alternative distribution strategies for state and local road and street programs, including distribution methods based on vehicle miles traveled as compared to lane miles."

ALTERNATIVES FOR ROAD FUNDING

For purposes of this study, two alternative road distribution formula scenarios were examined, the first substituting Annual Vehicle Miles Traveled (AVMT) into the county and city internal formulas, and the second substituting lane miles. Act 51 does not currently require that counties and municipalities certify AVMT and lane mile data to MDOT. To create these scenarios, estimates of AVMT and lane miles were made.

To generate the estimated funding distributions, the appropriate AVMT and lane mile data was substituted into the existing Act 51 distribution formulas wherever the existing factor – route mile data – appeared. Under current law, route mile data is certified by each county and municipal jurisdiction to MDOT, on an annual basis.

Generating AVMT Data

MDOT reports *estimates* of AVMT to the FHWA each year, through the Highway Performance Monitoring System (HPMS). This report is legally required and FHWA guidance is followed. Data collection for this effort typically costs MDOT approximately $4 million annually. As noted previously, AVMT is derived from Annual Average Daily Traffic (AADT) estimates. Three processes are currently used to generate the AADT estimates, for three types of road:

- *State trunkline.* Approximately 9,700 route miles are divided into roughly 4,000 traffic segments. Each segment has an AADT estimate based on a traffic study or traffic count conducted by MDOT over a two year period. A traffic count typically requires a mechanical device that counts the number of vehicles per day at a specific point along the roadway.
- *Federal-aid Highways (County or City jurisdiction).* Approximately 26,600 route miles are divided into roughly 16,000 traffic segments. Of these, traffic counts are conducted by metropolitan and regional planning organizations on about 2,500 sample segments over a three year period. As part of the HPMS reporting procedure, the resulting estimated AADT is used to estimate AVMT for this set of roads, using a sampling process. Non-sampled segments receive an estimated AADT which is either based on old traffic counts or an estimated count.
- *Non Federal-aid Highways.* There are approximately 83,600 route miles of this type of road. Estimated AADT reported through the HPMS process is not based on traffic counts. Rather, the figures are derived from old traffic estimates to which MDOT has applied an estimated annual growth rate over the years.

The references to estimates, sampling, and multi-year processes are emphasized in order to contrast AVMT data with route mile data, which is used in the current formula. Under current law, each county and municipality can and does measure and report (certify) route mile data for each roadway under respective jurisdiction. This self-reporting may result in minor errors. However, the current process for generating AVMT data is MDOT-driven, and relies heavily on estimates. The lower the functional class, the greater the reliance on estimates. This is largely a financial decision because data is expensive to collect. Traffic estimates are acceptable for transportation planning purposes, but individual county and municipal jurisdictions would likely challenge funding distribution based on these estimates. The non-annual nature of the AVMT data generating process would also likely be an issue.

As noted previously, the cost to collect sufficient data for planning purposes is approximately $4 million per year. To collect more refined data on which to base a revenue distribution formula would be very costly. One solution could be to place sufficient traffic counters to provide the AVMT data. MDOT estimates the cost of a single traffic count at $150. For all federal-aid highways, if traffic counts for each segment were captured, the total cost would be $3 million (20,000 segments x $150). For non federal-aid highways, the estimated number of segments ranges between 48,666 and 153,333, so the total cost would be between $7.3 million and $23 million.

Generating Lane Mile Data

Lane mile data is also reported by MDOT to HPMS. There are also differences in data generation, according to the same three road types as above:

- *State trunkline.* To support asset management and other business practices, MDOT collects information about every mile of state trunkline in a GIS-based digital inventory. One attribute of this file is lane miles; the lane mile inventory is updated yearly.
- Federal-aid Highways (County or City jurisdiction). Data for the lane mile attribute is collected annually during the Asset Management condition rating process, Pavement Surface Evaluation and Rating (PASER ratings).
- Non Federal-aid Highways. These roadways rarely have more than two lanes. Examples of such roadways are: residential streets in neighborhoods, and lightly traveled roads in the countryside. All roads of this type are estimated to have two lanes.

There is less estimating involved with lane mile data, compared to AVMT. For the Pavement Surface Evaluation and Rating System (PASER) ratings process, the county or municipality with jurisdiction over a given roadway may or may not be directly involved. The self-reporting aspect of the current route miles approach may be diminished with the lane mile approach.

RESULTS

Effects of AVMT and Lane Miles Approaches on Counties

Table 6.2 A compares changes to county distributions under the AVMT and Lane Mile scenarios for a sampling of counties.[1] Of the two approaches, substituting AVMT creates a greater redistribution of funding. Twelve counties would see estimated funding increases under the AVMT approach. Five counties, (Oakland, Wayne, Macomb, Genesee, and Livingston) would receive estimated increases ranging between 24 percent and 33 percent. Twenty-one counties are estimated to lose between 35 percent and 47 percent of their current Act 51 distributions. Figure 6.2 B shows the geographic distribution of estimated changes to distributions.

The method which substitutes lane miles for route miles produces less dramatic results. Eight counties would see funding increases under this scenario. Wayne County would receive the largest percentage increase (4%), followed by Newaygo, Macomb, Oakland, and Genesee, each with 2 percent increases. Ten counties' distributions would remain fairly static, and the remaining counties would see estimated funding decreases in the range of 1 percent to 4 percent. Figure 6.2 C shows the geographic distribution of estimated changes to distributions.

Effects of AVMT and Lane Miles Approaches on Cities and Villages

Table 6.2 D compares the AVMT and Lane Mile scenarios for a sampling of cities and villages.[2] Applying the AVMT approach to cities and villages produces results similar to the county results. A relatively small number of cities and villages (38 out of 533) would see increases under the AVMT approach, with eight seeing increases over 30 percent (seven in Southeast Michigan). Estimates show that over 100 cities and villages would lose half or more of their current funding. Figure 6.2 E shows the geographic distribution of estimated changes in Act 51 distributions.

As with the AVMT approach, 38 cities and villages would see increases under the Lane Miles approach, with the largest percentage increase going to Pontiac (13 percent), Lansing (8 percent), Roseville (8 percent), and Warren (7 percent). One hundred seventy-eight cities/villages would lose more than 10 percent of their current funding under this scenario. Figure 6.2 F shows the geographic distribution of estimated changes in Act 51 distributions.

Expanding the Alternative Scenarios

Either of the two above scenarios could be also expanded to include state trunkline to determine distributions among all Act 51-eligible agencies.

Under the AVMT approach, because state trunklines handle such a large proportion of traffic, MDOT would receive approximately half of all Act 51 distributions, reducing transportation funds to counties and cities dramatically, although cities with higher traffic volumes would be less impacted. Under the

[1] *Estimated Act 51 distributions for each county under the AVMT and lane miles scenarios are found in Appendix C.*

[2] *Estimated Act 51 distributions for each city and village under the AVMT and lane miles scenarios are found in Appendix C.*

Lane Miles approach, because the local-access road system accounts for such a large portion of the transportation network, an estimated 70 percent of the funding would be distributed to counties, with cities distributions accounting for another 17 percent, and trunklines receiving an estimated 12 percent of the MTF.

Any revision to the existing or new transportation funding distribution formula should entail a blended approach that takes into account the need to provide for both mobility and access, to adequately fund all modes, and to ensure stable and predictable levels of future funding. It must be developed using verifiable data at all levels of the system. Such an approach, where a formula uses multiple variables to maintain the transportation system in a way that reflects statewide transportation priorities, could be beneficial, provided the data were available, and sufficient resources on hand to ensure a smooth transit for all transportation agencies currently receiving funding.

Table 6.2 A

SAMPLING OF COUNTY ESTIMATED SHARES

AVMT vs. Lane Miles

		Annual Vehicle Miles Traveled			Lane Miles		
County	Orig. Act 51 Formula Share*	Estimated Share	$ Change	Percent Change	Estimated Share	$ Change	Percent Change
Oakland	$55,975,000	$74,223,000	$18,248,000	33%	$57,072,000	$1,097,000	2%
Wayne	$55,728,000	$70,684,000	$14,956,000	27%	$57,814,000	$2,086,000	4%
Macomb	$34,481,000	$44,303,000	$9,822,000	28%	$35,161,000	$680,000	2%
Genesee	$19,887,000	$24,682,000	$4,795,000	24%	$20,202,000	$315,000	2%
Kent	$27,335,000	$30,765,000	$3,430,000	13%	$27,678,000	$343,000	1%
Livingston	$11,119,000	$14,083,000	$2,964,000	27%	$10,948,000	($171,000)	-2%
Ottawa	$15,065,000	$15,651,000	$586,000	4%	$14,625,000	($440,000)	-3%
Washtenaw	$15,747,000	$16,241,000	$494,000	3%	$15,523,000	($224,000)	-1%
Kalamazoo	$12,145,000	$12,301,000	$156,000	1%	$11,953,000	($192,000)	-2%
Jackson	$10,042,000	$9,522,000	($520,000)	-5%	$9,863,000	($179,000)	-2%
Allegan	$7,565,000	$6,255,000	($1,310,000)	-17%	$7,530,000	($35,000)	0%
Montcalm	$5,054,000	$3,663,000	($1,391,000)	-28%	$5,031,000	($23,000)	0%
Cheboygan	$3,293,000	$1,882,000	($1,411,000)	-43%	$3,258,000	($35,000)	-1%
Menominee	$3,127,000	$1,697,000	($1,430,000)	-46%	$3,089,000	($38,000)	-1%
Newaygo	$4,509,000	$3,025,000	($1,484,000)	-33%	$4,605,000	$96,000	2%
Sanilac	$4,945,000	$2,766,000	($2,179,000)	-44%	$4,915,000	($30,000)	-1%

NOTE: Sorted by AVMT $ Change
NOTE: Numbers may not be precise do to rounding.
**Based on 2009 Act 51 distributions*

Figure 6.2 B

COUNTY ALTERNATIVE DISTRIBUTION

Substitute AVMT for Route Miles in Act 51 Formula

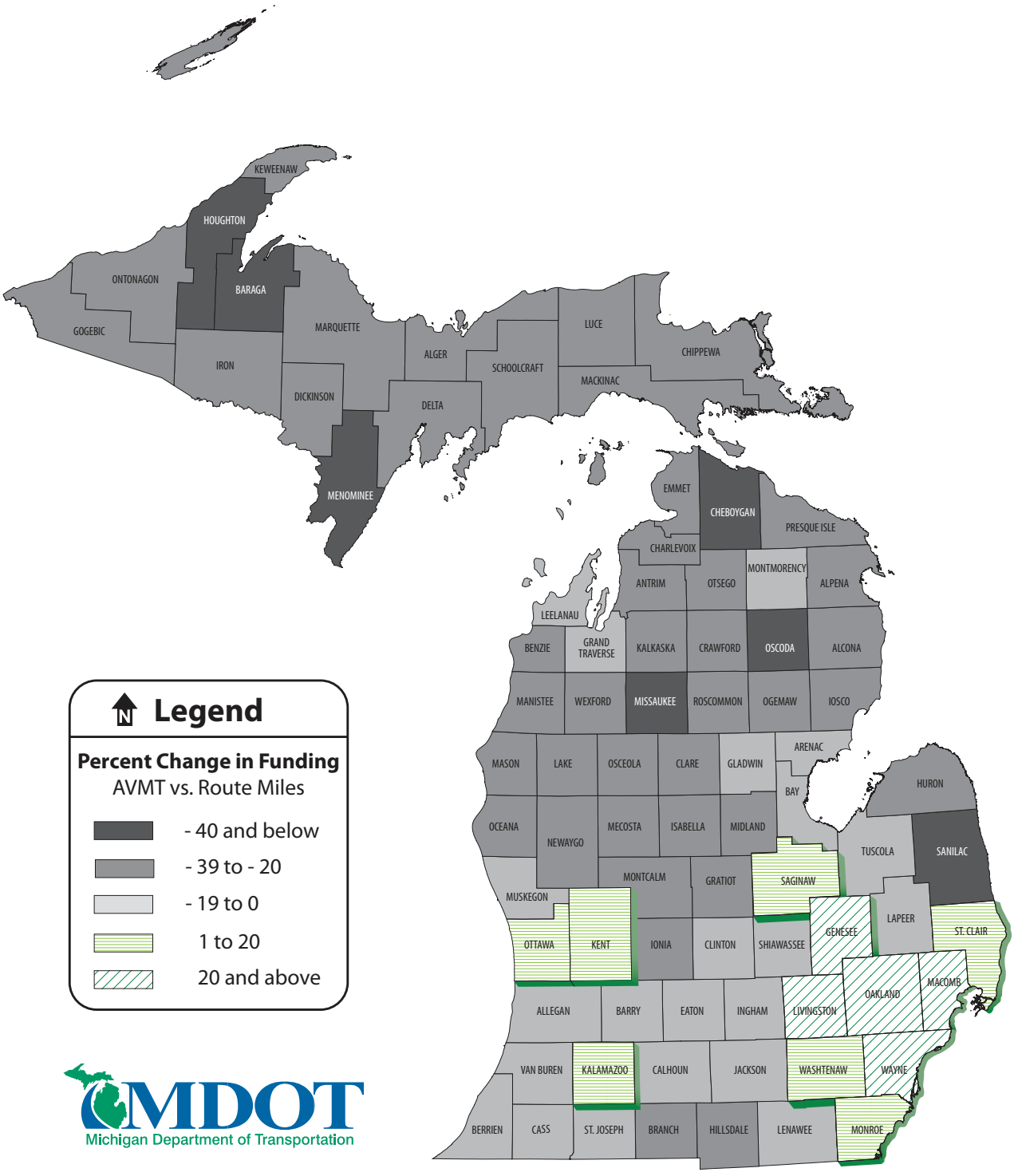


Figure 6.2 C

COUNTY ALTERNATIVE DISTRIBUTION

Substitute Lane Miles for Route Miles in Act 51 Formula

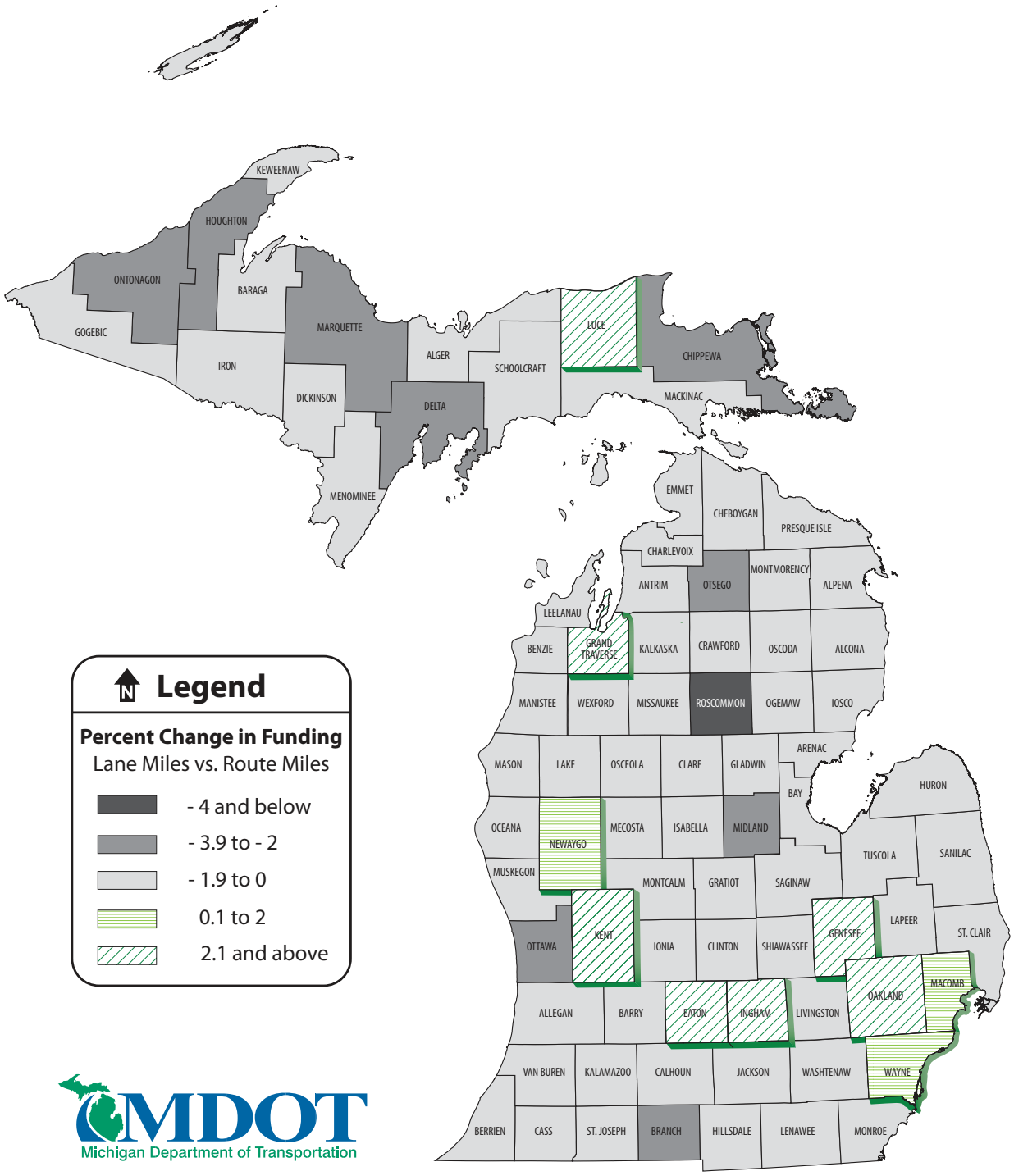


Table 6.2 D

SAMPLING OF CITY ESTIMATED SHARES

AVMT vs. Lane Miles

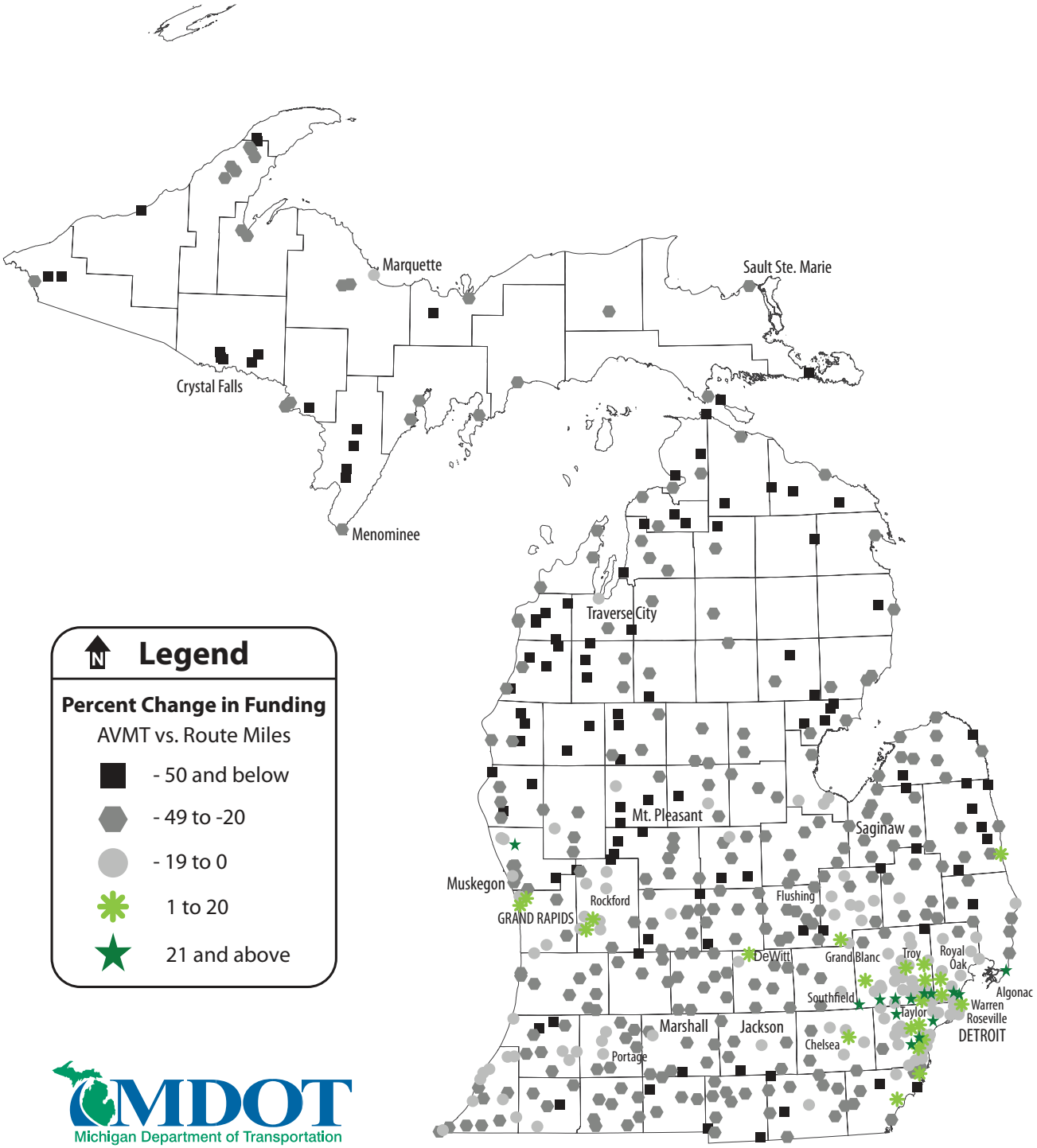
		Annual Vehicle Miles Traveled			Lane Miles		
City	Orig. Act 51 Formula Share*	Estimated Share	$ Change	Percent Change	Estimated Share	$ Change	Percent Change
Detroit	$55,022,000	$67,140,000	$12,118,000	22%	$57,774,000	$2,752,000	5%
Southfield	$4,583,000	$6,793,000	$2,210,000	48%	$4,631,000	$48,000	1%
Taylor	$3,465,000	$4,516,000	$1,051,000	30%	$3,609,000	$144,000	4%
Troy	$4,438,000	$5,310,000	$872,000	20%	$4,457,000	$19,000	0%
Royal Oak	$3,386,000	$4,151,000	$765,000	23%	$3,543,000	$157,000	5%
Warren	$7,429,000	$8,117,000	$688,000	9%	$7,953,000	$524,000	7%
Roseville	$2,486,000	$3,100,000	$614,000	25%	$2,674,000	$188,000	8%
Gr. Rapids	$11,990,000	$12,566,000	$576,000	5%	$11,874,000	($116,000)	-1%
Algonac	$242,000	$306,000	$64,000	26%	$227,000	($15,000)	-6%
Grand Blanc	$399,000	$392,000	($7,000)	-2%	$415,000	$16,000	4%
Portage	$2,984,000	$2,971,000	($13,000)	0%	$2,980,000	($4,000)	0%
Rockford	$243,000	$208,000	($35,000)	-14%	$228,000	($15,000)	-6%
De Witt	$251,000	$190,000	($61,000)	-24%	$242,000	($9,000)	-4%
Flushing	$457,000	$395,000	($62,000)	-14%	$438,000	($19,000)	-4%
Crystal Falls	$149,000	$73,000	($76,000)	-51%	$134,000	($15,000)	-10%
Chelsea	$250,000	$171,000	($79,000)	-32%	$224,000	($26,000)	-10%
Marshall	$438,000	$339,000	($99,000)	-23%	$400,000	($38,000)	-9%
Traverse City	$874,000	$755,000	($119,000)	-14%	$833,000	($41,000)	-5%
Mt Pleasant	$1,358,000	$1,155,000	($203,000)	-15%	$1,364,000	$6,000	0%
Menominee	$593,000	$365,000	($228,000)	-38%	$543,000	($50,000)	-8%
Jackson	$2,255,000	$1,993,000	($262,000)	-12%	$2,271,000	$16,000	1%
Muskegon	$2,750,000	$2,178,000	($572,000)	-21%	$2,651,000	($99,000)	-4%
Saginaw	$4,205,000	$3,383,000	($822,000)	-20%	$4,279,000	$74,000	2%

NOTE: Sorted by AVMT $ Change
NOTE: Numbers may not be precise do to rounding.
*Based on 2009 Act 51 distributions**

Figure 6.2 E

MUNICIPAL ALTERNATIVE DISTRIBUTION

Substitute AVMT for Route Miles in Act 51 Formula

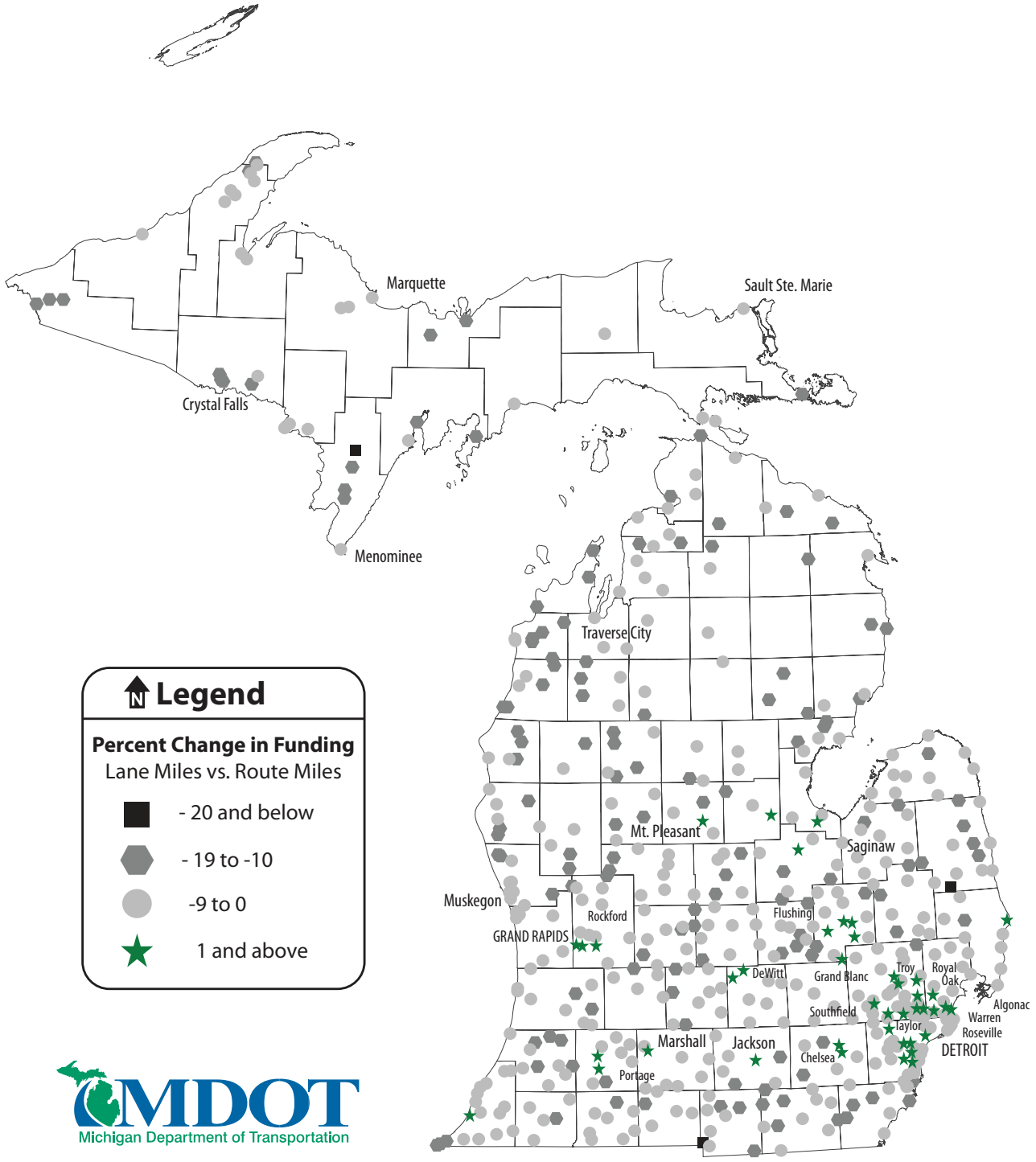


MDOT
Michigan Department of Transportation

Figure 6.2 F

MUNICIPAL ALTERNATIVE DISTRIBUTION

Substitute Lane Miles for Route Miles in Act 51 Formula



MDOT
Michigan Department of Transportation

ALTERNATIVES TO THE TRANSIT FORMULA

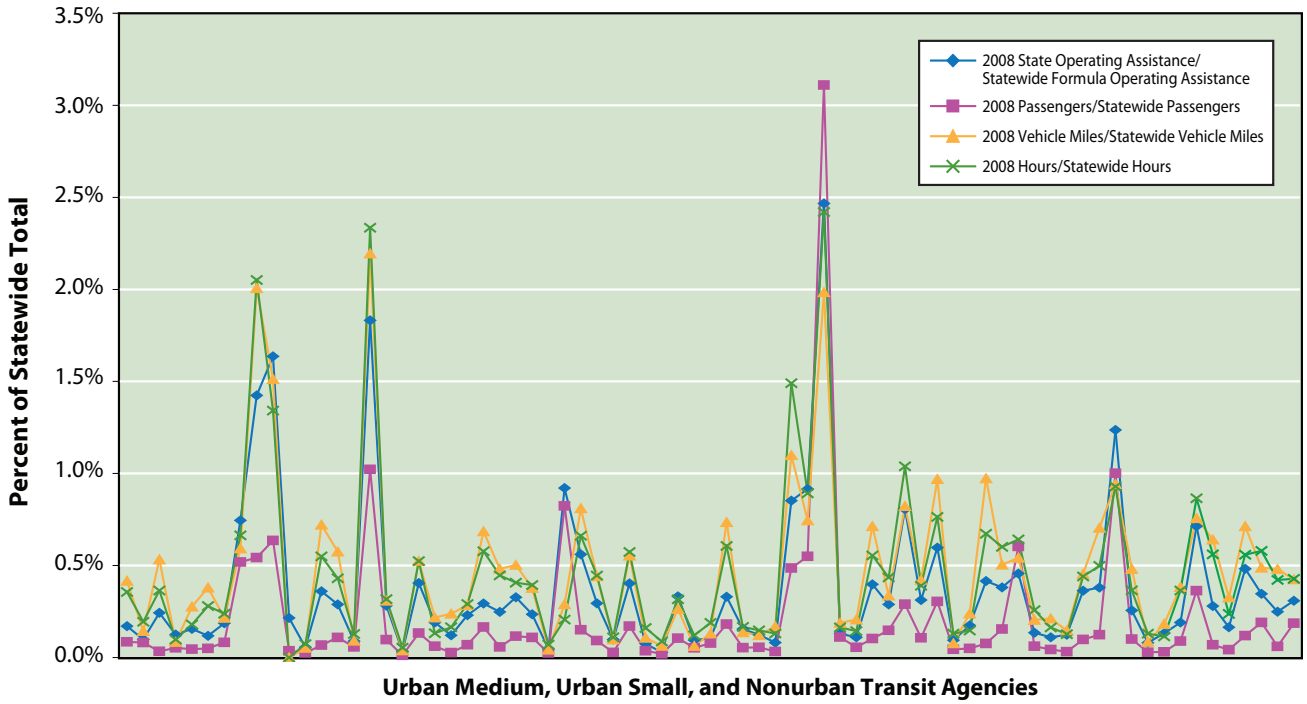
Over the years various formal and informal recommendations have been made to revisit and alter the current transit formula. However, prior recommendations have only suggested general principles for a new formula with insufficient specificity to calculate possible distribution results.

For the purpose of this report, MDOT undertook several efforts to estimate the impact of different transit funding formulas. The first distribution method MDOT considered links each agency's share of funding to the agency's share of service provided. In this analysis, ridership and service hours were assumed to approximate service. As shown in Figure 6.3 A, funding and service factors do tend to track together. It is important to note that the graph below has a total range of just 3.5% (i.e., the variation between the three service factors and share of funding) and most transit agencies have less than a one percent range for all of their factors. This graph indicates an equitable distribution using the current transit formula and suggests that a formula based on share of statewide service would not significantly change the distribution results.

MDOT also reviewed recent trends in transit agency service levels to determine if a distribution method based on agency performance over time would yield significantly different results than the current formula. MDOT compared operating expenses, ridership, service hours, and service miles for each agency over several years (Fiscal Years 2006, 2007, and 2008) as opposed to the single year analysis included in Figure 6.3 A. The analysis shows that the vast majority of agencies have performed very consistently over these years, virtually mirroring Figure 6.3 A. Therefore, it would appear that a formula that included all of these factors and also took into account trends over time, would not have yielded significantly different results from the current formula, which is based solely on expenses. However, MDOT acknowledges that agency behavior under a formula that included additional factors may have differed from their behavior under the current formula.

Figure 6.3 A

STATEWIDE TRENDS BY TRANSIT AGENCY



(Due to scale, view is limited to nonurban, medium, and small urban agencies only, however, this trend holds true for the large urban and metro agencies as well.)

To conduct a more in-depth analysis, a specific formula recommendation would need to be developed with very specific guidance on which factors (such as ridership, service hours or service miles) should be used to allocate the funds and the weight each factor should play.

MASSTrans Proposal

Recently, one of Michigan's two transit associations proposed a new formula. Under the proposed MASSTrans formula the amount each agency receives would be determined by a multiple step distribution process. The initial distribution would be primarily based on either expenses (as with the current Act 51 formula) or service area population. Each agency would receive the lesser of their "soft cap," (which is an amount based on their percent of service area population and square miles compared to state's population and square miles) and their "hard cap" (which is a guaranteed percent of their eligible expenses). Those agencies which received their "soft cap" in the initial distribution would be eligible for additional funding under a second distribution. The second distribution would be based on expenses that were not funded under the soft cap.

The MASSTrans formula would impact the amount of formula funds received by each agency as compared to the current formula distribution method. While MASSTrans has generated a spreadsheet with the projected results of this proposed formula, the results are incomplete. There is not an existing standard for determining population attributable to each agency's service area when there is an overlap of service area or when the service boundaries are not based on jurisdictional lines. To conduct the analysis, MASSTrans made assumptions about service area square miles and population. In addition, for a few areas, MASSTrans analysis had to group transit agencies together to come up with an estimated service area square miles and population, and as such, an agency-by-agency comparison is not possible. Figures 6.3 B, 6.3 C and 6.3 D show the distribution amounts for each agency or group of agencies under both formulae. These exhibits clearly show how each agency is impacted by the change – some negatively, some positively.

The maximum increase is +12% and the maximum decrease is -17%, with an average change of +6%. These percentage changes do not suggest a fundamental shift in the allocation of funding among agencies. However, as the three figures below show, the formula would result in minor movement of funds from large and small urban systems (which carry 92 percent of the passengers) to nonurban systems. In total, large and small urban systems would lose about one percent of their funding (as compared to the current formula) and moving these funds to nonurban systems which would result in a 6% increase for that group. The main argument for this alternative formula is that it will limit the amount of operating assistance that an expanding system could receive, and as such is more protective of existing recipients than the current formula. The main argument against this alterative formula is that it will not support the expansion of transit services in our urban areas, including rapid transit, which is critical to Michigan's economic future.

Figure 6.3 B

ACT 51/MASSTRANS FY2009 FORMULA COMPARISON FOR DETROIT METRO AREA