

# Understanding Public Opinion Regarding Transit in Southeast Michigan



MNTRC Report 12-38



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REPORT 12-38

# UNDERSTANDING PUBLIC OPINION REGARDING TRANSIT IN SOUTHEAST MICHIGAN

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## EXECUTIVE SUMMARY

This report focuses on the understanding of public opinion trends in the transit field. This research stemmed from an investigation entitled *The Role of Media and Public Opinion Efforts in the Transit Field: The Detroit Region Case Study*,<sup>2</sup> which was part of a comprehensive study by the University of Detroit Mercy transit team entitled *Factors that Inhibit and Enable Effective Regional Transit in Southeastern Michigan*<sup>3</sup> funded by the U.S. Department of Transportation (through the Mineta National Transit Research Consortium).

For decades, efforts to integrate regional bus services have failed, leaving Southeast Michigan with three transit agencies that serve three distinct areas of the region, with poor interfaces among them. Low levels of coordination among transit providers and a lack of high-speed alternatives for the public results in very inefficient and sparse transit service in the region. A new Regional Transit Authority of Southeast Michigan (RTA) was recently formed with a bill passed in 2013. This Authority will be responsible for service coordination and future regional transit initiatives in four southeast counties of the State of Michigan (Washtenaw, Wayne, Oakland, and Macomb). A four-county vote on public funding for transit is expected in 2016. Transit activists and various stakeholder groups in the region will engage the public to promote increased public support for transit initiatives and improved public involvement in regional transit planning.

The overall goals of this study were to assess the nature of public opinion regarding regional transit and to understand how opinion varies in relation to socio-demographic characteristics, political attitudes and orientations, and geographical characteristics of respondents. In addition, these results would be interpreted to identify key recommendations for building a positive public opinion regarding transit in future transit initiatives in Southeast Michigan. The project involved three phases – Phase 1: A pilot mail survey; Phase 2: An educational effort; and Phase 3: A comprehensive phone and email survey.

This report focuses on findings from the analysis of data gathered through the full survey conducted during Phase 3 of the project. In the interest of providing background data, a brief overview of outcomes of Phase 1 and Phase 2 of the project is also included. Findings from the Phase 1 confirm the strong social divide that characterized the Detroit Metro region and highlighted the political nature of opinions regarding transit.<sup>4</sup>The following themes, among others, emerged in this initial phase of the project:

- Responses were related to respondent ethnicity and political affiliation;
- Two-thirds (66%) of respondents support public funding for transit (more specifically for a tax increase);
- Respondents agreed strongly on benefits of public transit; and
- Respondents believed that even if transit is not important at a personal level (“me and my family”), it is a priority for people without automobiles and the “general public.”

The following key elements and recommendations for educational campaigns resulted from Phase 1 of the study:

- Campaign branding and messaging should strive to bridge the personal needs and priorities of people and the perspective of regional growth in order to overcome the disconnection between the two;
- Messages should focus on tangible benefits of public transit (such as job access and economic development), versus large scale environmental benefits (such as lower pollution levels); and
- The public has an overall willingness to support some tax increase for transit improvements.

A detailed discussion of findings from Phase 1 of the project, i.e. the pilot survey, can be found in Bernasconi et al., 2013.<sup>5</sup> The lessons learned from the pilot served to refine and improve the survey method and instrument, as well as direct further literature review and the focus of the next phases of the study.

On-the ground public engagement and education efforts conducted in Phase 2 included personal interactions and informal surveys. The following themes emerged from this phase of the study:

- The majority of respondents wanted better bus service and new rapid transit;
- Respondents were concerned with transit accessibility and affordability, as well as accountability in tax money spending; and
- Respondents expressed strong support (71%) for a \$20-\$40 a year tax that would fund more and better public transit.

Interpretation of Phase 2 efforts provided the following key elements and recommendations for educational campaigns:

- On-the-ground feedback from the public can provide relevant and useful input and should always precede official campaigning and transit planning;
- There is a real need for education to increase awareness of transit issues and opportunities, as there were many more people who knew little about public transit compared with those who held strong opinions, especially in the outer suburbs; and
- The public is willing to pay to improve regional transit. This result is consistent with what emerged in the pilot survey during Phase 1, and it indicates that the region is ready to support a new dedicated funding stream for regional transit.

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Results from Phases 1 and 2 served as the foundation for Phase 3 of the research. Through the study of public opinion surveys, local media coverage on public opinion about transit, and of previous educational campaigns, an *ad hoc* comprehensive survey was designed during Phase 3 and administered to likely voters in four counties of Southeast Michigan (Wayne, Washtenaw, Oakland, and Macomb).

This survey was organized in five parts and included questions on knowledge and use of the current systems, perceptions regarding the need of transit improvement in the region, support for public funding, opinions regarding the newly formed RTA, and willingness to take action to support transit improvement and expansion in the region. The data was examined using cluster analysis, which identified five voter groups (i.e., clusters): Supporters, Opposers, Young Swing Voters, Old Swing Voters, and Conservative No Votes. This analysis included: orientation toward public funding for transit, willingness to take action to support transit, satisfaction with current systems, and socio-demographic and political traits of respondents.

Findings from the cluster analysis provide insights into opinion patterns of likely voters, including the following:

- Overall, the majority of respondents support some form of funding. However, respondents are divided on the preferred method of funding.
- Respondents' most desired improvement is to add rapid transit in the region, followed by improved safety of the current system, and improved routes. Rapid transit is a priority with various groups (including Young Swing Voters and Conservative No Votes) and is also considered the most important potential benefit from the RTA.
- Close to 30% of the people are unsure about potential benefits from the RTA. Among non-supporters, one of the top reasons for not supporting or being unsure about public funding for transit is distrust and lack of knowledge about how funds would be spent. This is confirmed by what emerged as the most important potential negative aspects of the RTA – “Wasteful expenses for a service people don’t use,” and “A new government agency and layer of bureaucracy.”
- Swing groups will play an important role in securing support for regional transit, as they make up 45% of the total sample. Younger voters – specifically Young Swing Voters – are particularly important, as they are willing to provide more monetary support and to vote YES on additional taxes to fund transit even if they are unsure about supporting the specific method suggested in the survey for public funding for transit.
- Geographically, significant differences exist across the four counties: Washtenaw and Oakland have the largest percentage of Supporters, while Macomb has the smallest. Also, Wayne and Macomb Counties have the largest portion of undecided voters (50%+ Swing Voters).

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In addition to cluster analysis, other statistical tests were also performed on the data. In this survey, questions 9, 19, and 20 asked respondents to indicate their willingness to pay for public transit and about the amounts they would be willing to pay using different financing strategies. A composite index was formed from these three questions to measure strength of support. The following trends across demographic factors were revealed using the statistical procedure analysis of variance:

- Support for transit is influenced by political and ideological orientation (overall, liberals and Democrats are more supportive than Republicans and conservatives). Notably, “non-extremists” (leaning Democrats and leaning Republicans) are more generous than other political and ideological groups even if they answer NO to Q9 (“Do you support public funding for transit?”);
- Union households are less willing to pay for transit; and
- Support for transit is correlated with income and education (positively) and also ethnicity (African Americans are supportive but lack resources, which likely reduces their willingness to pay).

The interpretation of results prompted the following recommendations:

- Educating voters about RTA’s purposes and plans, together with public involvement, are key elements in securing support for transit;
- Clear communication about transit funds spending, including anticipated benefits and timelines, will be crucial, as a lack of knowledge about how transit funds are spent is the main reason that voters are unsure about supporting public funding of transit;
- Transparency in decision making and clear accountability measures are important, as a significant number of voters expressed distrust in the wisdom of government spending of tax dollars and in the efficiency of having an additional governing body (i.e., the RTA);
- Campaign messaging should focus on the positive impact of transit for non-riders (e.g., job access and economic development) and on specific improvements the public desires (including: adding rapid transit; improved safety on buses, at stops and at stations; improved routes to better connect home, work and key entertainment destinations; and making existing bus service more convenient and reliable);
- The campaign messages and efforts should concentrate on Swing Voters while also solidifying the commitment of Supporters. Of particular interest are the Young Swing Voters, who are more willing to support transit financially; and
- Educational and advocacy efforts should strategically segment messaging across counties. Specifically, Macomb had the fewest Supporters and Wayne the fewest Opposers. Young Swing Voters were concentrated in Washtenaw, Wayne, and Oakland Counties, with Old Swing Voters primarily in Wayne and Macomb Counties.

As the four-county area moves forward toward the proposed vote to fund the RTA, it will be important that RTA advocates and local transit activists strategically enact an effective educational campaign that resonates with opinions, perceptions, and priorities of the public. To reach different voter types, increase knowledge of transit benefits, and shape positive public opinion, the various stakeholder groups in the region should employ a variety of communication tools to convey appropriate messages and strategically coordinate their efforts. A more positive public opinion will be a key factor to building support for transit in the region.

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## I. INTRODUCTION

### INTRODUCTION TO THE PROJECT

This report focuses on understanding public opinion trends related to transit in Metro Detroit. (For purposes of this report, “Metro Detroit” and “Southeast Michigan” are considered to be the four counties within the Southeast Michigan Regional Transit Authority: Macomb, Oakland, Wayne and Washtenaw.) This research arose from an earlier investigation entitled *The Role of Media and Public Opinion Efforts in the Transit Field: The Detroit Region Case Study*,<sup>6</sup> which was part of an initial comprehensive study by the University of Detroit Mercy transit team entitled *Factors that Inhibit and Enable Effective Regional Transit in Southeastern Michigan*.<sup>7</sup> The initial study focused broadly on issues related to regional transit for the Detroit Metro region and other comparable regions, and it included investigations in the areas of leadership/politics, governance/law, finance, transit-oriented development, transit equity/access, and public opinion/media. Overall considerations on the role of media in public opinion and an in-depth analysis of local news coverage in the Detroit Metro region and comparable regions can be found in Bernasconi et al., 2014.<sup>8</sup> Other related interim reports can be found online at the University of Detroit Mercy Transportation Center website.<sup>9</sup>

This report describes research conducted by a team of researchers during 2013 and 2014 on current perceptions and public opinion of transit in Southeast Michigan. An in-depth empirical investigation was conducted to uncover patterns in public opinion regarding transit. The project was organized into three phases. In Phase 1, an initial pilot survey was designed and administered. Preliminary findings served as the foundation for Phase 2, an educational campaign developed and enacted by Transportation Riders United (TRU). In Phase 3, a major public opinion survey was developed and administered with the help of an external polling consultant firm. The study focused on several main factors, including satisfaction with current systems, expectations and opinions of the newly formed Regional Transit Authority of Southeast Michigan, and willingness to take action to support public funding for transit. Public opinion was studied as patterns or profiles in relation to socio-demographic characteristics, political attitudes and orientations, and geographical characteristics of respondents, with the goal of generating recommendations for building a positive public opinion regarding future transit initiatives in Southeast Michigan.

### NEED FOR THIS RESEARCH

“The Transportation Planning Process Key Issues” report by the Federal Highway Administration (FHWA-HEP-07-039, 2007) lists the education of the public on transportations issues, the identification of techniques for engaging the public, and the definition of methods to measure the effectiveness of the participation program among key planning process factors. Perceptions of transit and transit needs and priorities depend on regional contexts and vary across socio-demographic population groups; for this reason the analysis of economic and demographic data is essential for effective transit planning (Tomer, 2012)<sup>10</sup> Other studies have uncovered the low level of knowledge of the public on efficiency levels of transit in their region<sup>11</sup>; as well as the influence of public attitudes on travel mode.<sup>12</sup> The study of public perceptions becomes key for effective policy making



toward improved quality of transit and satisfaction of riders, and consequently to increase transit loads and ridership, in particular choice riders, i.e. those who would otherwise drive private automobiles.<sup>13</sup> The complex and shifting contemporary regional transit landscape calls for comprehensive studies investigating public perceptions and beliefs regarding transit and planning initiatives.<sup>14</sup> Such studies can provide vital information for identifying and defining best practices for transit educational public opinion efforts in the region.

Research on public perceptions and opinions is critical in regions such as Metro Detroit that have long suffered from inadequate transit service due to unsatisfactory transit funding, management, and planning. As discerned from a comprehensive study conducted by the UDM transit team (Hanifin et al., 2013),<sup>15</sup> *an agglomeration of various factors slowed and diverted attention from the development of an effective mass transit system in the Metro Detroit area. These factors included the inability of various governmental agencies to work cooperatively, problems with legal barriers, funding, and/or labor. In addition, there was a problem of poor public opinion on transit in general, but specifically with spending priorities and safety. Moreover, there was an element of ethnic division and prejudice. The result of these unmet challenges is that there are three transit agencies serving three distinct regions with poor interfaces among them.*<sup>16</sup> The following summarizes the previous frustrations and failures in the Detroit Metro region:

“For many years, efforts to develop effective regional mass transit in Metro Detroit have been thwarted by a wide variety of factors. These include conflicting interests of various governmental agencies and individuals, legal barriers, funding issues, labor/jobs issues, perceptions of competing objectives of transit-oriented development and commuter service, public opinion regarding transit and spending priorities, rider concerns (and perceptions) regarding safety, and even ethnic prejudice.”

Building on the understanding gathered through the initial comprehensive study of factors influencing effective regional transit in Metro Detroit, the current study focused more specifically on issues of public opinion regarding transit in order to better understand which perceptions and fears from the public hinder trust and support for public transit. An understanding of current trends in public opinion can guide legislators, activists, and planners as they build a more positive public opinion. This is necessary to increase opportunities for regional transit improvement and realize the myriad benefits that improved transit will bring to the region and to all who reside or visit here.

## **THE STUDY AREA: THE FOUR-COUNTY REGION**

Five transit providers serve the four-county region studied (Washtenaw, Wayne, Oakland, and Macomb): the Suburban Mobility Authority for Regional Transportation (SMART), the Detroit Department of Transportation (DDOT), the Detroit People Mover (DPM), Ann Arbor Transportation Authority (AATA), and Amtrak. Another new provider, M-1 Rail, has begun construction of a modern streetcar line that will begin operation in 2016. An additional key player in transit issues for this region is the Southeast Michigan Council of Governments (SEMCOG), the area’s metropolitan planning organization (MPO).



The five transit providers operate with little coordination in the region. In addition to the lack of high-speed alternatives for the public, this results in very inefficient and sparse transit service in the region. As a consequence, the public has generally low levels of satisfaction with the current systems. A recent study by SEMCOG identified the two key factors that people find dissatisfying: the overall transportation system, in particular in terms of road pavement maintenance, and public transit (SEMCOG, 2008).

A new Regional Transit Authority of Southeast Michigan (RTA) has recently been formed with a bill passed in December 2013. This Authority will be responsible for service coordination and future regional transit initiatives in four counties of the State of Michigan (Washtenaw, Wayne, Oakland, and Macomb). A four-county vote on public funding is expected in 2016. Transit activists and various stakeholder groups in the region will engage the public to promote increased public support for transit initiatives and improved public involvement in regional transit planning. This recent development should be viewed in the context of decades of inefficient transit planning and funding characterized by frequent forming of new governing or transit planning agencies that quickly dissolved or failed to enact plans. Table 1 presents a brief list of transit events since 1967 in the Detroit Metro region. It shows that the region has been characterized by a lack of regionalism and a severe socio-economic divide between Detroit and the metropolitan area. A more detailed transit history of the region is also included in the Appendix.

**Table 1. Key Transit Events, 1967-2013<sup>17</sup>**

Year	Events
1967	The South-Eastern Michigan Transportation Authority (SEMTA) is formed.
1976	President Gerald Ford offers Southeast Michigan \$600 million to build a rail transit system. Only the downtown "People Mover" (1987) is built.
1979	SEMTA approves a regional transit plan but plans are never implemented.
2003	The Detroit Regional Transportation Authority (DARTA) is formed through an inter-local intergovernmental agreement (IGA).
2006	The Michigan State Supreme Court decision dissolves DARTA.
2007	M1-Rail (initially named "TRAIL") is formed to develop a regional rapid transit system, starting with street-car service on Woodward Ave.
2009	Legislature fails to approve the development of a Regional Transit Authority (RTA).
2010	The City of Detroit's population drops to 713,777 from 951,270 in 2000.
2012	Michigan Senate passes bills to create an RTA for Southeast Michigan.
2013	Ray LaHood of the Federal Transit Association announces \$25 million in federal funds for M1-Rail. A bill is passed to create a Regional Transit Authority for Southeast Michigan (RTA).

## PURPOSE OF THE STUDY

The overall goal of this study was to assess the nature of public opinion regarding transit within the general framework of considering positive public opinion as an integral element for developing support for regional transit. For this purpose, the project was organized into three phases – Phase 1: a pilot mail survey; Phase 2: an educational effort; and Phase 3: a comprehensive phone and email survey. The first two phases provide quantitative, empirical, and qualitative foundations for the third phase. In the first phase, a pilot survey

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explored public opinions and attitudes toward transit from a variety of perspectives. Phase 2 enhanced understanding through a series of active, one-on-one public engagements that elaborated on, and provided context for, understanding the nature of public opinion. This phase guided the refinement of the survey tool in view of the third phase. Finally, Phase 3 represented the culmination of this work on assessing the nature of opinions and the nuances of differences across people and across the region. This report will focus on the discussion of methods and findings from Phase 3.

The three phases of the project, and the concomitant data analysis, provided the foundation and evidence for the authors to identify key recommendations for building positive public opinion about transit and its value for future transit initiatives in Southeast Michigan. The three phases had different purposes. More specifically, the objectives of Phases 1 and 3 included:

- To understand how public opinions and attitudes toward transit vary across different population groups;
- To understand the public's willingness to take certain actions to improve transit sustainability;
- To measure relationships among opinions, attitudes, and socio-demographic characteristics of population groups;
- To identify key content priorities (messages) for regional transit educational campaigns, and link specific messages to various population groups;
- To identify methods for effective regional transit public opinion efforts for specific population groups; and
- To promote visibility of public opinion on transit through the distribution of key findings regarding public opinions to the public, the news media, and key stakeholders in the region.

Phases 1 and 3 provided critical data on current transit perception differences across diverse population groups in the region. Findings are presented in this report, which includes recommendations for prioritized actions for effective public communication and opinion efforts. These findings can aid transit professionals, community stakeholder groups, transit activists, planners, and journalists as they seek to understand public opinion regarding transit and develop strategies for increasing support for transit. Findings can also assist researchers in understanding public opinion as it enables and inhibits transit development in the nation's most "transit poor" region, Metro Detroit.

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Phase 2 was designed to enhance the understanding of public opinion, primarily through face-to-face public engagement, and also to provide educational opportunities to raise awareness of transit in the area. Thus, Phase 2 also provided data, but of a more qualitative nature. In general, the goals of this phase were to:

- Hear from community members in their own words about the changes they want to see in public transit in metro Detroit;
- Better understand what excited and what concerned the public regarding transit and public investment in transit improvement;
- Hear from community members about their willingness to support higher taxes to fund improvements in public transit; and
- Begin to inform the public about the underfunding of transit in Metro Detroit and the benefits of improved transit.

As such, the overall study sought to provide a better understanding of the human component of transit. In doing so, the overarching goal was to prepare the ground for future major transit educational and advocacy programs.

## **CORE CONCEPTS INTRODUCED**

When approaching public opinion regarding transit, it is important to clearly define public opinion, the role of media, and public involvement. The following definitions are extrapolated from a study entitled *The Role of Media and Public Opinion Efforts in the Transit Field: The Detroit Region Case Study*.<sup>18</sup> *Public opinion* is the collective attitude of the general public that results from ongoing, unfiltered interactions of individuals across social environments, using various communication modes. Public opinion is crucial to the success of transit because the more positive the perception of transit, the more likely it is to be utilized. The *role of media* is as an interpreter and broadcaster that communicates those opinions to decision makers, such as elected officials, and also reflects that opinion back to the public to become part of the conversation. In this dynamic process, media can have beneficial effects in that such communications can facilitate resolution, or they can contribute to and intensify the controversy. The *role of public involvement* in transit issues is as a factor that can be leveraged to align transit agencies' plans and priorities with the needs and desires of the public. Specifically, improving communication between transit agencies and the public can improve public opinion toward the agencies and facilitate the effectiveness of the agencies in meeting public needs.<sup>19</sup>

The above definitions provide the conceptual underpinnings to the study. Within this framework, the focus of this study is consistent with a growing recognition of the importance of understanding trends in opinions, attitudes, priorities, and of measuring the willingness to take action of diverse population groups in a region. Gathering this understanding is unequivocally the most appropriate first step toward improved communication with the public, increased support for transit, and consequently, better regional transit.

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## II. METHODS

Methods included the following to analyze the data on public opinion regarding transit and to formulate recommendations on the topic:

- Review of public opinion surveys, rider surveys, and likely voters surveys;
- Review of campaign/outreach materials of transit agencies and advocacy groups in comparable regions and the Detroit region;
- Design and administration of a pilot survey and a full survey; and
- Statistical analysis of data.

Previous work by the authors on public opinion regarding transit, with focus on the role of media and its relation to public opinion, was also used to guide this study.<sup>20</sup>

### THE THREE-PHASED APPROACH

The project was organized into three phases – Phase 1: a pilot mail survey; Phase 2: an educational effort; and Phase 3: a comprehensive phone and email survey. The research methods employed across these phases varied so the first two phases served as foundational pieces for the third phase, as discussed below.

#### Phase 1: Pilot Survey

To gather preliminary data, a pilot survey was designed and, with the assistance of a polling firm, administered via mail in March 2013 to a sample of likely voters from the four-county area of Southeast Michigan. The goal was to obtain a sample that reflected the target population in terms of a broad set of characteristics, gender, age, race, political affiliation, and geographical location, among others. A list-based sample of traditional Michigan high-participation registered voters and voters that fit Michigan Gubernatorial election patterns was utilized. Most of these voters had voted (60% and higher voting participation rate) in the primary, general election, and odd-year municipal and county elections in Michigan since becoming registered to vote. Additionally, the list included a sizable minority of random moderate (30% to 59% voting participation rate) and low (1% to 30% voting participation rate) participation voters.

The list-based sample pool was pre-weighted to the geographical regions of Southeastern Michigan. A set of criteria related to socio-demographic, geographical, and political attitude traits of respondents was employed to ensure appropriate representation of the targeted population. This strategy also included oversampling groups that are typically underrepresented in mail-based surveys. In addition, those respondents who did not answer within the given timeframe were contacted via telephone. These efforts provided a total of 307 surveys.

Data analysis included descriptive statistics with cross-tabulates and graphs. Chi-square tests and analysis of variance procedures were applied to study the relationship among knowledge about transit, usage, and demographical attributes. The Importance-Satisfaction score (I-S score), which measures the relationship between perceived importance of a transit issue/item and level of satisfaction with the issue/item, was also calculated to determine priorities of likely voters. More specifically, the I-S score is a single composite index calculated through the following formula:  $I-S \text{ score} = (\% \text{ importance}) * (1 - \% \text{ satisfaction})$ . This formula reflects the salience of transit issues/items. This operationalization reflects the idea that an item/issue viewed as most important and most dissatisfying will be likely to be a priority in terms of perceived need for improvement or change. A score near 1 indicates that the item/issue is extremely important, but extremely unsatisfactory. A score near 0 indicates that it is very satisfactory and/or unimportant.<sup>21</sup> Additional details on methods employed in Phase 1 of the project can be found in Bernasconi et al., 2013.

## **Phase 2: Direct and Indirect Public Engagement**

Phase 2 was led by the Transportation Riders United (TRU) organization and consisted of two strategies: direct public engagement and public education. Direct public engagement involved engaging people directly, one-on-one, at public events and locations where people gather, including community fairs, festivals, farmers' markets, community meetings, and transit centers throughout the region. From April-September 2013, TRU representatives attended a total of 50 events selected to represent a variety of people from across Southeast Michigan. At these events, TRU staff and volunteers asked random people, "What changes would you like to see in public transit?" Those who were willing to stop were asked to complete a brief one-page survey to share their personal ideas and concerns about transit and transit funding. In addition, educational materials were distributed with information about transit benefits, the RTA, regional underfunding of transit, and opportunities to become involved in transit improvement efforts.

TRU staff and volunteers spoke with many thousands of people this way and collected 2,350 surveys and 87 online surveys. Of these, 40% were Detroit residents, with a fair representation of other areas (Wayne County outside of Detroit, Oakland, and Washtenaw ranging from 10%-22%), except for Macomb County, which was under-represented (5%). This survey was not scientific, but rather it designed to facilitate the conversation and help capture and contribute to the qualitative information collected via personal communications in the direct engagement portion of this phase.

## **Phase 3: Survey**

### *Survey Design*

Results from Phases 1 and 2 served as the foundation for Phase 3, which was fairly extensive and systematic survey of likely voters in the four counties (Oakland, Washtenaw, Macomb, and Wayne). This survey consisted of five parts and included questions on knowledge and use of the current systems, perceived need for transit improvement in the region, support for public funding, opinions on the newly formed RTA, and willingness to take action to support transit improvement and expansion in the region. The full set of questions is

provided in Appendix B. Email and automated telephone calls were employed and resulted in a total of 799 complete surveys. This full survey was designed and administered with the assistance of the Foster McCollum White & Baydoun (FMWB) polling consultants firm to target registered and most likely projected voters for the November 2014 election. However, it should be noted that the vote on this ballot measure was subsequently moved to November 2016.

To approach younger respondents, email was employed (in addition to phone) to administer the survey. Twenty-two percent of the sample was reached via email, while 78% via phone interview. Of the younger respondents, 61% were reached via email. This demonstrates the importance of employing mixed methods for maximum effectiveness in reaching appropriate groups.

### Sample

A total of 81,406 calls were made to the full sample phone list, with 622 qualified respondents and a response rate of 0.076% for the automated call sample pool. A total of 23,100 email addresses sample of likely-voters was utilized in seven cycles of email outreach. The email survey provided 177 qualified respondents, with a response rate of 0.027% of the email sample pool. Thus, using both methods, a total of 799 people completed survey. The demographics of respondents to this survey are closely aligned with the demographics of the projected voter population for the four-county region. Demographic characteristics surveyed included education, income, political affiliation and political ideology, ethnicity, and union household. Details on sample socio-demographic distributions can be found in Figure 1.

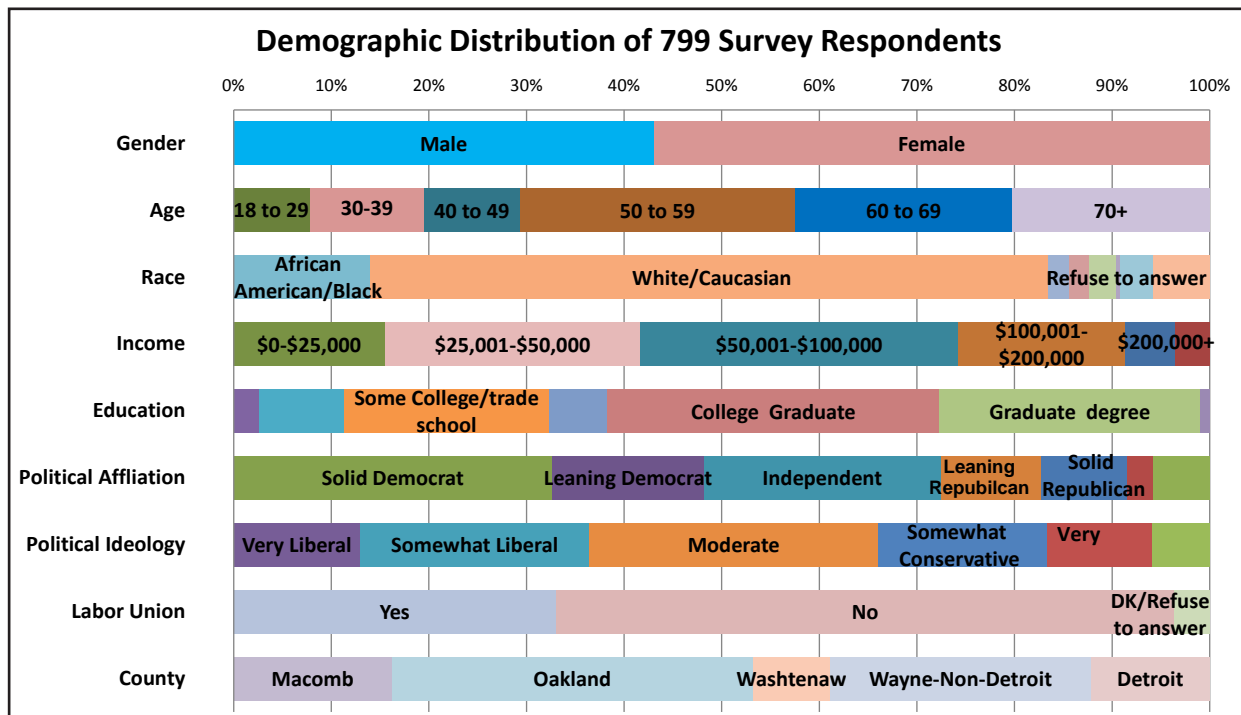


Figure 1. Demographic Distribution of Sample



Although the sampling approach and survey methods were used strategically to overcome typical survey-based study limitations, it must be noted that there are some underrepresented demographic groups. In particular, African-Americans compose about 14% of the respondent pool, versus about 20% of the projected turnout model. Overall, this sample is also more highly educated, as 26.7% of respondents have earned a graduate degree, compared with 15.8% of projected voters. In terms of political affiliation, the sample includes fewer Republicans and Democrats than the projected turnout model (respectively, approximately 22% versus 37%, and 48% versus 58%), while 30% self-identified as “independent” or “unknown,” compared with 4.5% of projected voters. Finally, the sample is older than the projected voters, as 29% of respondents are age 18-49, compared with 45% of the projected voters. Such discrepancies are common with automated call surveys, which is why email surveys were also utilized. Email can be more effective in recruiting younger participants. It is interesting to note that the composite group of 39 years old and below is fairly represented, as well as those 50 years old and above, while the intermediate 40-49-year-old group is underrepresented. This middle-age working group is extremely difficult to reach with automated calls to home lines. It must be noted that the Telephone Consumer Protection Act (TCPA) (47 U.S.C. 227, 47 CFR 64.1200) prohibits the use of an “automatic telephone dialing system” to contact “any telephone number assigned to a cellular telephone service” without “express prior consent” from the party being called.

In spite of these limitations, the sample of respondents in this study is reasonably representative of Metro Detroit voters. In particular, the sample was consistent with demographic characteristics of the 2014 projected turnout models with respect to gender and income. It was also geographically consistent with the projected turnout model, as shown in Table 2.

### *Statistical Analysis*

Cluster analysis was performed on the data gathered through the final survey. Cluster analysis is an exploratory, data-driven statistical technique that can discern and facilitate efforts to characterize groups of respondents whose response profiles are similar to one another.<sup>22</sup> The response profiles can differentiate among groups, revealing groups of individuals who share similar scores on a set of variables. For example, Ragsdale and Rusk (1993) used cluster analysis to show five distinct types of non-voters, in contrast with previous treatments of the group as a large monolith.<sup>23</sup> Similarly, cluster analysis was employed in the present study to understand likely voter types and how they differ regarding opinions, willingness to take action, and priorities. Such an approach could permit identifying different strategies and messaging to target specific identified and key voter groups.

More specifically, cluster analysis allows grouping a set of objects in such a way that objects in a particular group are more similar to each other than to those in other groups on the selected attributes. This common technique of statistical data analysis helps to screen a large mass of data and identify characteristics that are valuable in differentiating across groups. The analysis can be performed by various methods whose algorithms differ. The results also vary by what aspects (attributes) were used to form clusters and how to find them efficiently. Cluster analysis is not an automatic task. It involves an iterative process of

discovery or interactive multi-objective optimization through trial and error until the result achieves the desired properties.

K-mean clustering was used in the analysis performed in this paper. The groups (clusters) were formed until:

- It could be determined that respondents fall into clear-cut sub-groups.
- Five groups were formed. Based on the level of support of public transit, five groups seems to be the most appropriate number. It also provides clear separation on other characteristics of respondents.
- In the resulting distinct groups, “typical” group responses can be identified.

**Table 2. Key Sample Characteristics**

Characteristics		Actual Survey Percentage	2014 Election Model Weight Percentage
Age	18-29	7.88	11.35
	30-39	11.64	14.14
	40-49	9.76	19.67
	50-59	28.29	22.50
	60-69	22.15	17.47
	70 and older	20.28	14.88
Geographical Regions of Southeast Michigan	Macomb County	16.24	19.55
	Oakland County	36.96	34.13
	Washtenaw County	7.93	8.42
	Wayne County	38.87	37.90
Household Income	\$0-\$25,000	15.52	13.33
	\$25,001-\$50,000	26.16	12.77
	\$50,001-\$100,000	32.54	41.47
	\$100,001-\$200,000	17.15	26.08
	\$200,001 +	5.13	6.35
Education Level	Less than High School diploma	2.63	6.03
	High School graduate	8.76	14.38
	Some College/trade school	26.91	31.14
	College Graduate	34.04	32.66
	Graduate degree	26.66	15.78
Ethnicity/Race	African American/Black	14.02	20.43
	White/Caucasian	69.46	67.45
	Hispanic/Latino	2.13	2.53
	Arab American/Chaldean	2.00	2.44
	Asian/Pacific Islander	2.75	4.34
	Native American	0.50	0.26
	More than one racial/ethnic identity	3.38	2.54



Characteristics		Actual Survey Percentage	2014 Election Model Weight Percentage
Political Orientation	Solid Democrat	32.67	58.39 Total Democrats
	Leaning Democrat	15.52	
	Independent	24.28	4.45 Total Swing
	Solid Republican	10.26	37.16 Total Republicans
	Leaning Republican	8.76	
	Tea Party	2.75	
	Undecided/Don't know	5.76	

To identify clusters (i.e., voter groups), specific criteria were employed to separate respondents into homogeneous groups. Five groups, identifying typologies of respondents, have been defined using the following variables: (Additional details can be found in Table 3 and in Appendix A.)

- Satisfaction levels on public transit
- Agreement levels on the need for public transit improvements
- Agreement levels on supporting public transit with taxes and fees
- Dollar amount for supporting public transit with personal contribution
- Willingness to vote for vehicle registration fees
- Age
- Income level
- Political affiliation
- Political ideology
- Education level

**Table 3. Cluster Analysis Variables (attributes)**

Category	Questions	Response Levels
Support for Transit	(Q3) Satisfaction levels on public transit	Lowest=1, Highest=5
	(Q7) Agreement levels on the need for public transit improvements	Yes=1, Unsure=2, No=3
	(Q8) Agreement levels on supporting public transit with taxes and fees	Yes=1, Unsure=2, No=3
	(Q19) Dollar amount for supporting public transit with personal contribution	\$0, \$10, \$30, \$55, \$85
	(Q20) Willingness to vote for vehicle registration fees	Yes=1, Unsure=2, No=3
Socio-demographic Traits	(Q22) Age	25, 35, 45, 55, 65, 75
	(Q23) Income level	\$12,500, \$27,500, \$75,000, \$150,000, \$250,000
	(Q26) Education level	Less than High School diploma=1, High School graduate=2, Some College/trade school=3, Technical or Vocational School Graduate=4, College Graduate=5, Graduate degree=6
Political Traits	(Q24) Political affiliation	Solid Democrat=1, Leaning Democrat=2, Independent=3, Leaning Republic=4, Solid Republic=5, Tea Party=6
	(Q25) Political ideology	Very Liberal=1, Somewhat Liberal=2, Moderate=3, Somewhat Conservative=4, Very Conservative=5

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## III. FINDINGS

### PUBLIC OPINION PATTERNS AND SIGNIFICANT FACTORS

The study of public opinion patterns suggested several significant trends and issues, which are discussed by voter type and geographical location. Overall findings and their applicability to the Detroit region are presented here, as well as in the final discussion of conclusions and recommendations. Though findings from the three phases are presented in the report, it must be noted that summarized findings from Phase 1 and 2 are included as background information to better understand the outcomes of Phase 3. More detail and emphasis is placed in the final phase, which included a more comprehensive survey administered to a larger population.

### FINDINGS FROM PHASE 1: PILOT SURVEY

Overall, the pilot study uncovered a strong disconnect between respondents' personal priorities their perspectives and perceptions regarding regional transit. Several themes emerged, including (Bernasconi et. al., 2013):

- A low level of use and knowledge about the system in the region (in particular for White versus African American), although respondents admitted using public transit systems in other states;
- Although transit was not important at the personal level (“me and my family”), it was perceived as a priority for people without automobiles and the “general public”;
- The “transit-less” life style (i.e., the choice of location for living, shopping, and other activities is not influenced by transit availability) was in contrast with the belief that public transit was a vital element for Southeast Michigan (84%);
- A strong agreement on benefits of public transit, in particular for direct, concrete benefits (e.g., job access) rather than for more vague or indirect benefits (e.g., clean air); and
- Finally, 66% of respondents indicated they were willing to support a tax increase to improve transit in the region.

Additionally, it must be noted that results differed in relation to ethnicity and political affiliation of respondents, “highlighting the strong social divide characterizing the region and the clear political nature of opinions regarding transit.”<sup>24</sup>

The following recommendations for educational campaigns resulted from Phase 1 of study:

- Campaign branding and messaging should strive to bridge the personal needs and priorities of people and the perspective of regional growth in order to overcome the existing disconnect between the two;

- Messages should focus on tangible benefits of public transit (such as job access and economic development), versus large-scale environmental benefits (such as lower pollution levels); and
- The campaign should strive to build upon the overall willingness of the public to support some form of tax increase for transit improvements, which was uncovered during Phase 1.

## **FINDINGS FROM PHASE 2: DIRECT AND INDIRECT PUBLIC ENGAGEMENT**

The outcomes of Phase 1 provided directions for Phase 2, the outreach stage of the project. The team relied on the extensive on-the-ground engagement efforts of Transportation Riders United. Several thousands of personal interactions generated through the direct and indirect engagement efforts provided valuable qualitative data. Additional data was collected via an informal questionnaire with more than 2,400 opinions gathered.

The majority of these respondents were residents of the City of Detroit, with reasonable representation from the other areas, with the exception Macomb County, which was underrepresented. The survey provided respondents several options to choose from, as well as the possibility of selecting multiple options. The results revealed that a large majority of respondents saw the following as high priorities:

- More frequent, reliable, and safer bus service;
- New rapid transit;
- Affordable, convenient transit to Metro Airport;
- Better transit for seniors, people with disabilities, and others without transportation options; and
- Readily available information about transit services.

Several patterns emerged from the data, including the following:

- The majority of respondents wanted more frequent, safer, and reliable bus service and new rapid transit such as express buses, light rail, and commuter trains;
- Transit accessibility (i.e., the capability of transit to meet the needs of particular groups such as seniors and people with disabilities) was a priority for respondents, together with better city-to-suburb connections;
- Many respondents were concerned with the affordability of transit for riders in general or for a subset of riders, such as retirees;
- The need for stronger accountability in tax money spending was seen as a key item for transit support; and

- There was strong majority support for a \$20-\$40 a year tax that would fund more and better public transit.

In addition to seeking public input, the engagement efforts also served as an opportunity to educate people. A handout provided information about the benefits of transit, the new Regional Transit Authority, and the underfunding of transit in Southeast Michigan compared with other major metropolitan areas. More than 4,000 of these handouts were distributed in 2013.

The following key elements and recommendations for educational campaigns resulted from Phase 2 of study:

- On-the-ground feedback from the public can provide relevant and useful input and should always precede official campaigning and transit planning;
- There is a real need for education to increase awareness of transit issues and opportunities, as the number of people who knew little about public transit strongly outnumbered those who had strong opinions, especially in the outer suburbs; and
- The public is willing to pay more to improve regional transit. This result is consistent with what emerged in the pilot survey during Phase 1, and it indicates that the region is ready to support a new dedicated funding stream for regional transit.

It should be noted that while direct public engagement efforts were useful in a number of respects, such as correcting misperceptions, providing personalized education, and garnering public ideas, they were too limited in scope to have real, meaningful impact on public awareness. This direct engagement strategy brought in only a small fraction of a substantial population, and it was limited because only interested people shared their opinions and/or benefitted from the educational drive.

Overall, the informal approach used in Phase 2 complemented Phase 1, as it included items uncaptured by the mail-based pilot survey. Findings from Phase 2 of the project helped refine the content and language of the survey instrument used in Phase 3.

## **FINDINGS FROM PHASE 3: SURVEY**

### *Preliminary Analysis*

Results from Phase 3 revealed a variety of complex relationships between respondents' traits, opinions regarding transit, level of support for public funding for transit, and willingness to take action. In summary, the following overall trends in responses emerged from the survey:

- While only 9.6% of respondents regularly use transit in the area, 85% indicate they use transit elsewhere;
- 86% of respondents indicate they believe Southeast Michigan needs improved transit;

- 67% of respondents indicate they would support public funding of Southeast Michigan transit through regional taxes and fees, while 18.6% are unsure about it, leaving only 14.3% who oppose this (Figure 2);
- \$23 is the average amount respondents are willing to contribute annually towards funding transit;
- 47% indicate they believe they will see benefits from the RTA, while 30% are unsure about it (Figure 2); and
- When asked if they would support an increased vehicle registration fee of \$10-\$40, 46% of respondents said yes, while 42.5% are opposed, and 11.5% are unsure (Figure 2).

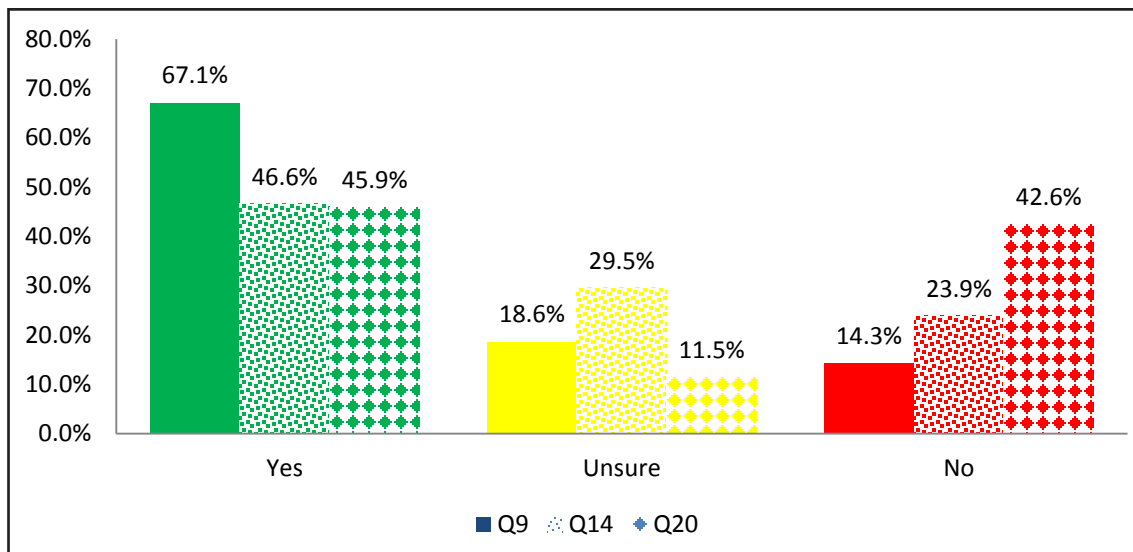
To identify the level of support for transit, three key questions, with possible responses “Yes,” “Unsure,” and “No” were utilized:

Q9. Do you support public funding of Southeast Michigan transit through regional taxes and fees?

Q14. Last year, the Regional Transit Authority (RTA) was created by the Michigan legislature for Southeastern Michigan to bring new public transit options and better coordinate the existing bus systems. Do you believe there will be any benefits from the Regional Transportation Authority and efforts to improve public transit in your area?

Q20. If the November 2014 election was held today, would you vote for an increased vehicle registration fee for Wayne, Oakland, Macomb and Washtenaw County residents of \$10-40 a year to raise roughly \$100 million to pay for improving public transit via the RTA?

Regarding support for transit, Figure 2 shows the distribution of respondents. This approach allowed the researchers to understand levels of support for transit in the four-county region and begin to group respondents with similar levels of support. As seen in Figure 2, a strong majority of likely voters support public funding in general. However, a smaller, but still considerable, number believes they will see benefits from the new RTA, and is willing to take action and vote Yes in the next election. Similarly, although only a small portion of respondents oppose public funding for transit, a much larger percentage will vote No in the next election. Another item to note is that almost one-third of respondents (29.5%) is unsure about benefits from the RTA.

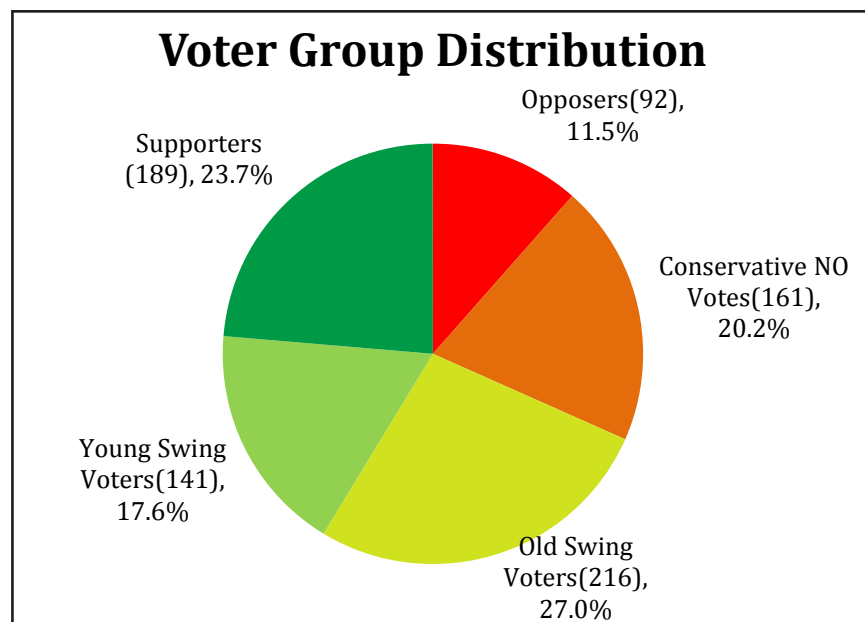


**Figure 2. Summary of Key Questions Regarding Support for Transit**

### *Voter Group Analysis*

As noted earlier, the cluster analysis identified five distinct voter groups. Each voter group describes respondents with similar views regarding transit, funding, and socio-demographic characteristics. Specifically, the five groups differ on the following variables: Satisfaction levels with transit; Agreement on the need for transit improvements and on supporting public transit with taxes and fees; Dollar amount for supporting transit with personal contribution; Willingness to vote for vehicle registration fees; and Specific socio-demographic characteristics.

The cluster analysis revealed five groups that can be characterized as: Supporters, Opposers, Young Swing Voters, Old Swing Voters, and Conservative No Votes. Figure 6 shows the overall distribution of voter groups, while Table 4 summarizes the mean and standard deviation (in parentheses) of each attribute for all clusters (voter groups).



**Figure 3. Voter Group Distribution**

**Table 4. Cluster Analysis Results – Mean (top) and Standard Deviation (bottom)**

	Q3	Q7	Q8	Q19	Q20	Q22	Q23	Q24	Q25	Q26
Opposers	3.04 1.2	2.58 0.5	2.34 0.8	7.17 14.3	2.60 0.8	55.00 14.8	76522 62640	3.50 1.5	3.58 1.2	4.53 1.3
Conservative NO Votes	1.86 1.0	1.02 0.1	1.77 0.8	16.86 19.4	2.50 0.8	60.59 10.2	70155 50268	4.00 1.2	3.99 0.9	4.84 1.1
Old Swing Voters	1.73 1.1	1.04 0.2	1.36 0.6	12.45 14.5	1.95 0.9	63.98 11.1	37940 37076	1.70 0.9	2.47 1.0	2.96 1.2
Young Swing Voters	1.83 1.0	1.02 0.1	1.33 0.6	22.02 19.8	1.91 0.9	33.72 8.0	78493 54139	2.50 1.1	2.65 0.9	4.91 1.0
Supporters	1.47 0.9	1.02 0.1	1.04 0.2	51.46 26.2	1.26 0.6	58.39 11.2	114709 69986	1.90 1.0	2.26 0.9	5.27 0.9
All	1.86 1.1	1.20 0.5	1.47 0.7	23.65 25.4	1.97 0.9	55.6 15.2	74190 61191	2.53 1.4	2.89 1.2	4.41 1.4

### *Voter Groups Profiles*

The following descriptions capture the key traits for each group:

**Supporters [24%]:** A typical voter from this cluster is extremely dissatisfied with the current transit system. He/she strongly agrees that the system needs improvement and strongly agrees to support the system with taxes or fees. This person is the most generous of all the voter groups, as he/she is willing to pay \$51/year to support transit and will definitely vote for increasing vehicle registration fee. On average, he/she is around 58 years old, has the highest income (most likely above \$100,000), and is the most highly educated, with at least a college degree. A member of this voter group is likely to be a solid Democrat with liberal attitudes.



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**Young Swing Voters [18%]:** A typical voter in this cluster is most likely dissatisfied or unsure about the current transit system. He/she strongly agrees that the system needs improvement and is willing to contribute about \$22/year. However, voters in this group have mixed views on supporting vehicle registration fees (chances of voting For 44%; Against 35%; Unsure 21%). He/she is on average only 33 years old, the youngest among all the groups. This person is most likely Independent or Democrat (no Republicans) and has attitudes that are somewhere from moderate-leaning to somewhat liberal. He/she probably has a college degree and earns about \$78,500/year.

**Old Swing Voters [27%]:** A typical voter in this group is most likely unsatisfied or unsure about the current transit system and strongly agrees that the system needs improvement. This person would most likely either support or feel unsure about supporting the system through taxes, but is willing to contribute only about \$12/year. Like the Young Swing Voters, those in this group have mixed views about supporting vehicle registration fees (chances of voting For 46%; Against 42%; Unsure 12%). He/she is on average about 64 years old, the oldest among all groups. He/she is a solid Democrat and has liberal attitudes. This group is not as well educated, having at best some college, and earns less than \$38,000, both the lowest among all groups.

**Conservative No Votes [20%]:** A typical voter in this group is less satisfied with the current transit system and wants to see it improved. Voters in this group are willing to contribute about \$17/year and are likely to support or feel unsure about supporting the system through taxes. However, he/she would most likely vote against vehicle registration fees. Therefore, the group is called “Conservative No Votes.” He/she is about 60 years old, most likely a Republican or Independent and leans conservative on political issues. He/she most likely holds a college degree and earns about \$70,000/year.

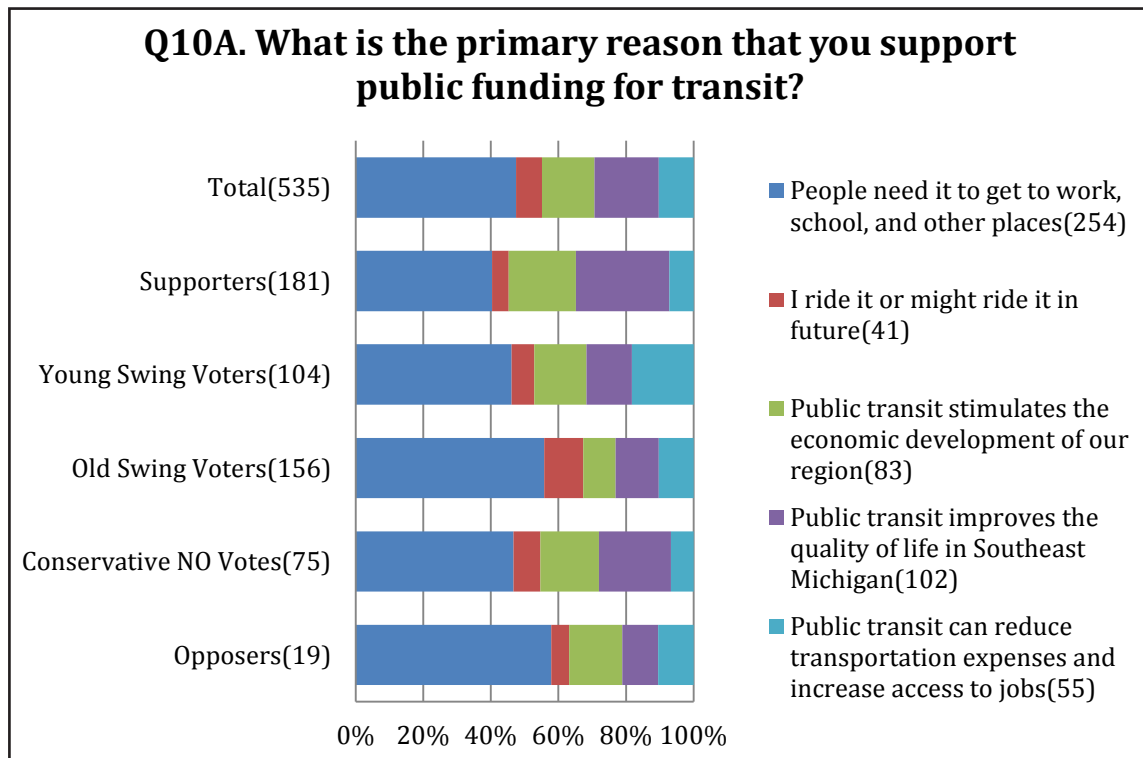
**Opposers [12%]:** This group has the highest satisfaction level with the current transit systems among all groups, does not think that the current transit system needs improvement, and does not want to contribute money to support the system. A voter from this group is willing to contribute the least of all the groups: \$7/year, compared with \$23/year for the total sample. He/she would vote against vehicle registration fees. His/her age is about 55. He/she has an education level that is less than college and earns approximately \$76,500/year. He/she is most likely a Republican or Independent and leans conservative on political issues.

These descriptions show that both Conservative No Votes and Opposers would vote No to increased vehicle registration fees. However, these two groups differ on other issues. While Opposers are the most satisfied with the current transit system, don't think any improvement is needed, and don't want to contribute money (on average \$7), Conservative No Votes are less satisfied with the current system, want improvements, are divided on the public funding for transit issue, and are willing to contribute slightly more money to support transit (\$17, which is significantly more than the \$7 offered by Opposers, but still below the overall sample average of \$23).

### Voter Group Results Overview

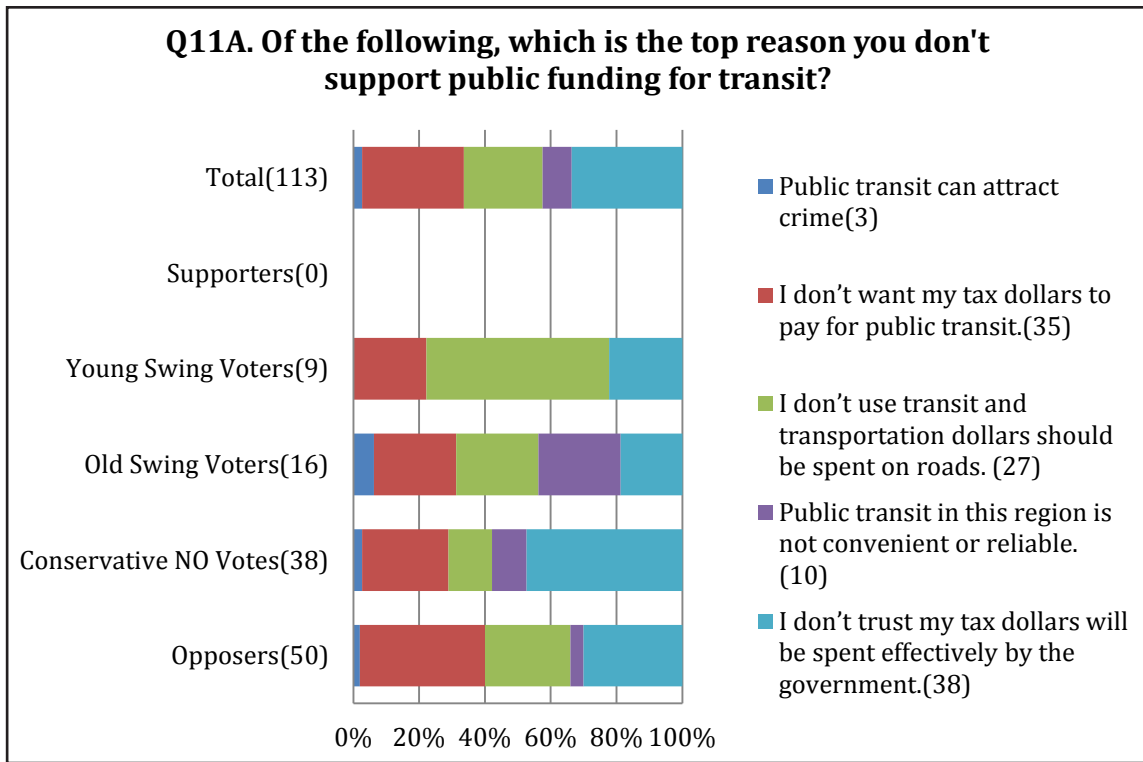
Voter group analysis provided insight to understand the priorities, needs, and attitudes of the different voter types. A brief description of the findings is included in this section.

For those who agree to support public funding for transit (67% of respondents), all groups unanimously selected as their primary reason for supporting public funding “People need it to get to work, school, and other places.” This voice was particularly strong among the Old Swing Voters (Figure 4).



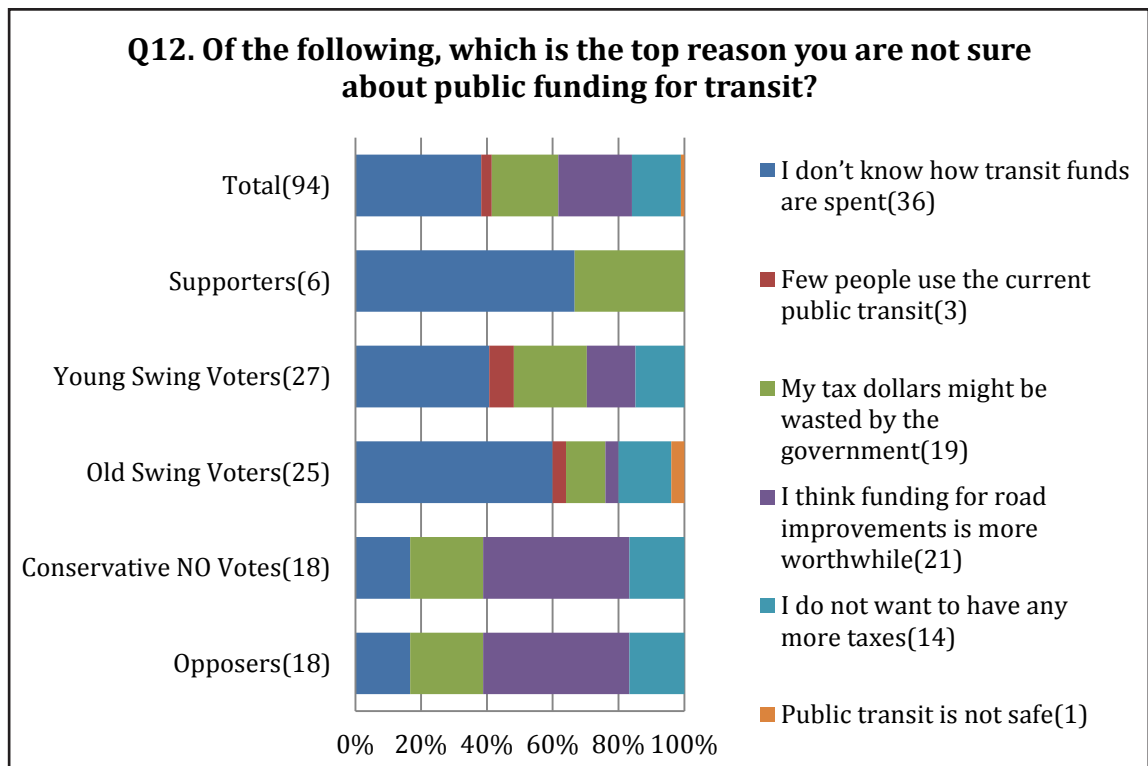
**Figure 4. Primary Reasons to Support Public Funding for Transit**

For those who do not agree to support public funding for transit (14.3% of respondents), the top reasons for not supporting it are “not trusting the government spending on tax money” and “don’t want to pay for the transit with tax dollars.” “I don’t use transit and transit funds should be spent on roads” was particularly strong among Young Swing Voters (Figure 5).



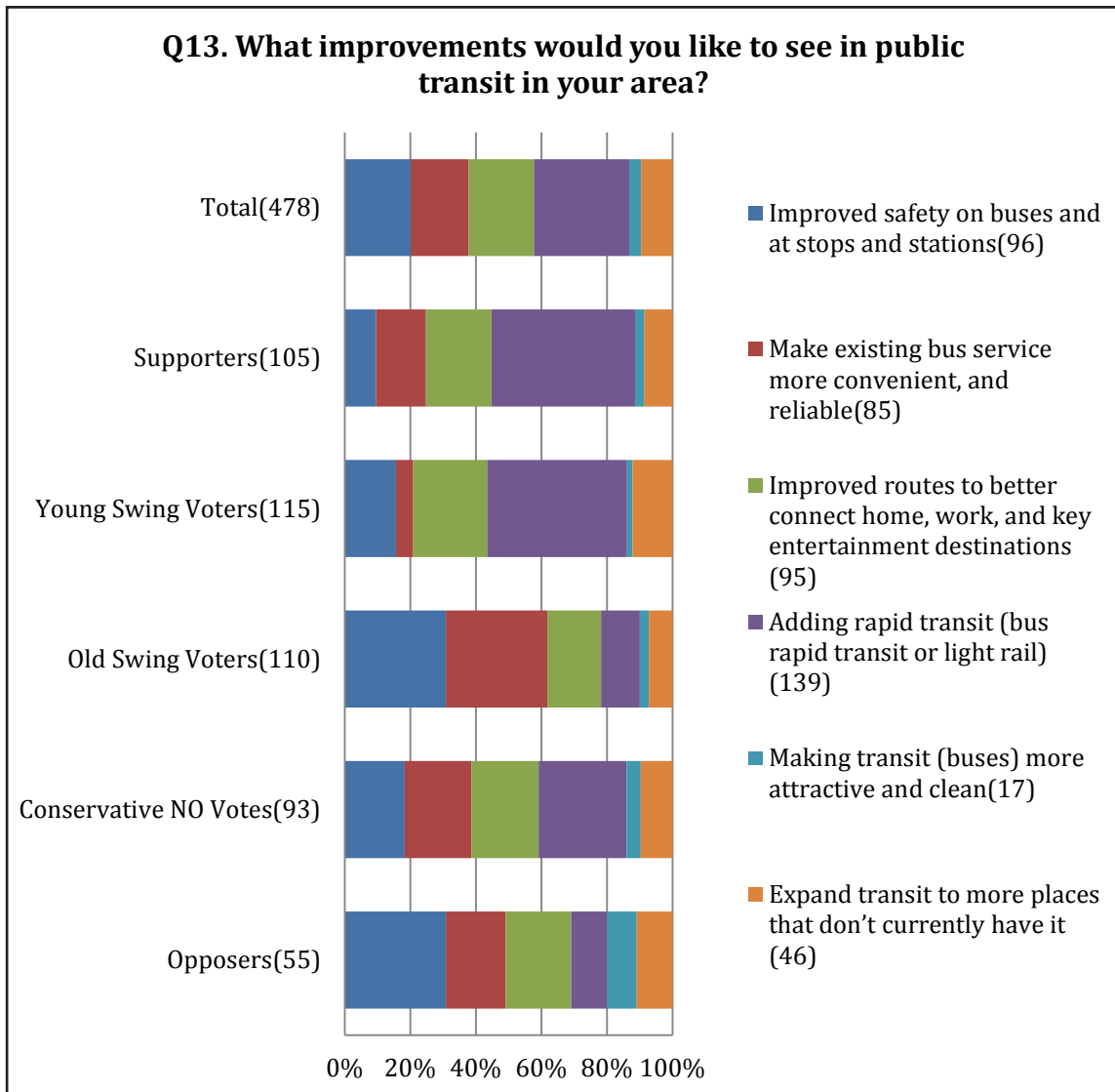
**Figure 5. Top Reason for Not Supporting Public Funding for Transit**

For those who are unsure about supporting public funding for transit (18.6% of respondents), the top reason for being unsure about public funding for transit is “I don’t know how transit funds are spent.” The Opposers think that their tax dollars would be better spent on road improvements (Figure 6).



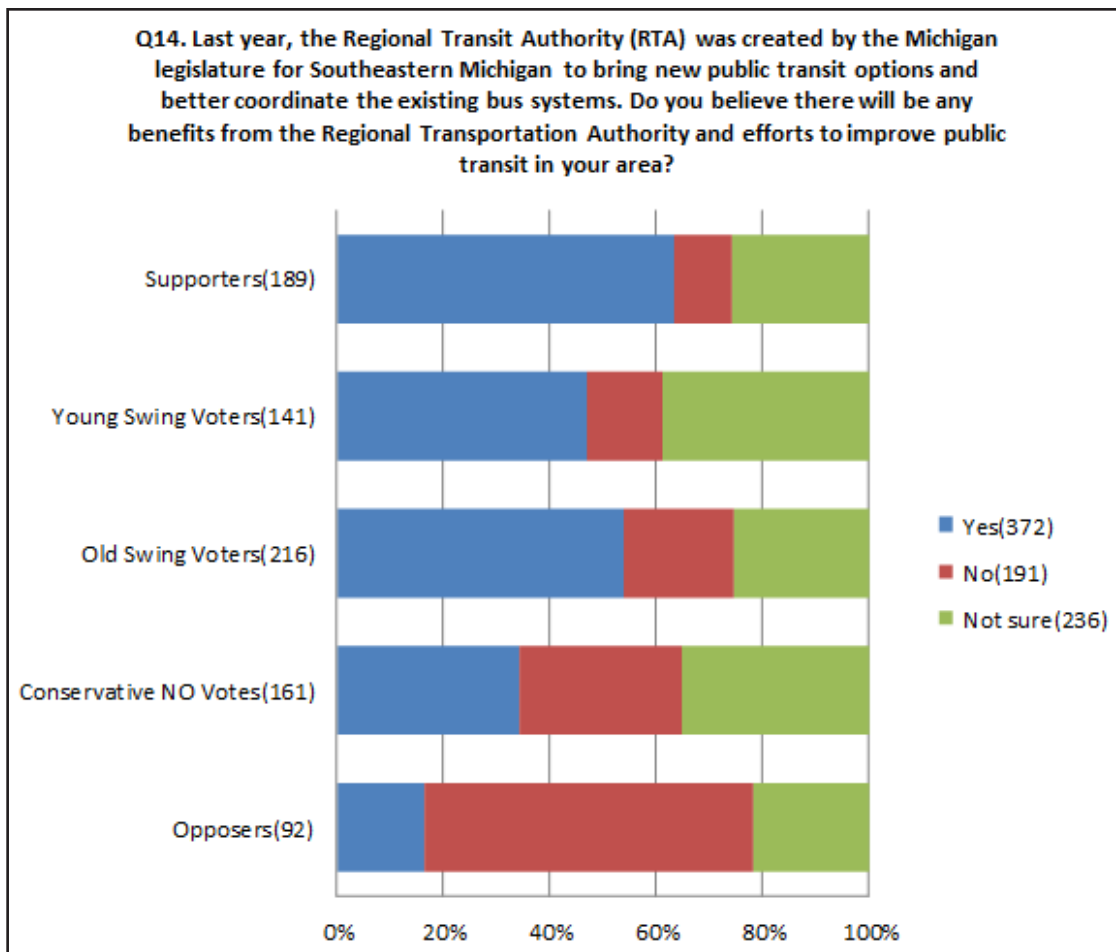
**Figure 6. Top Reasons to be Unsure about Supporting Public Funding for Transit**

“What improvements would you like to see in public transit in your area?” For those with an opinion on that question, the far most popular response is adding rapid transit, followed by improved safety on buses and stops, improved routes to better connect destinations, and improving existing bus service (Figure 7). Support for adding rapid transit is strongest among Supporters, Young Swing Voters, and Conservative No Votes.



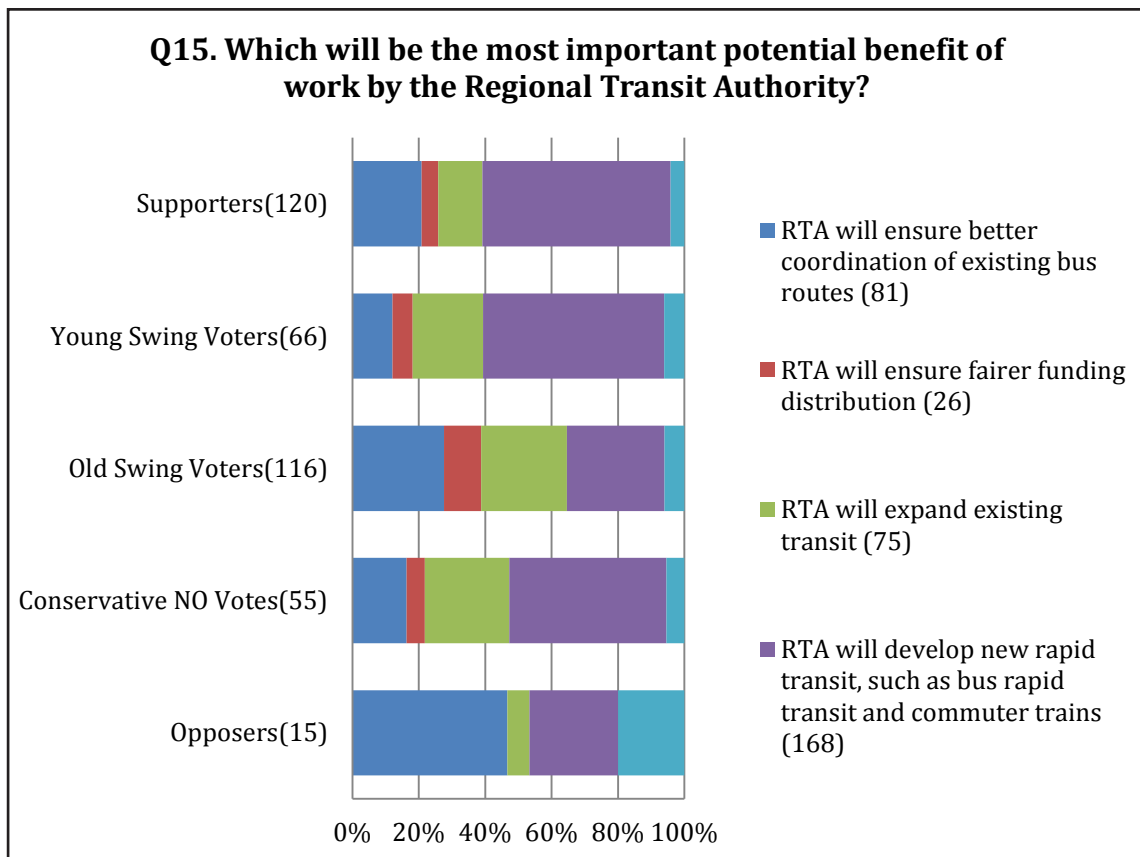
**Figure 7. Desired Transit Improvements**

Regarding the benefits of RTA, a plurality (46.6%) believes there will be benefits from RTA, with only a relatively small portion of respondents against it (23.9%), but the “Unsure” portion (29.5%) is notable (Figure 8). In terms of voter groups, while 64% of Supporters believe that the RTA will bring benefits, 62% of Opposers do not believe so. About 50% of all Swing Voters (Old and Young) believe in the benefit of RTA. Only 18% do not believe in the benefit of the RTA, and 31% are uncertain. Conservative No Votes are almost evenly distributed among “Yes,” “No,” and “Unsure.”



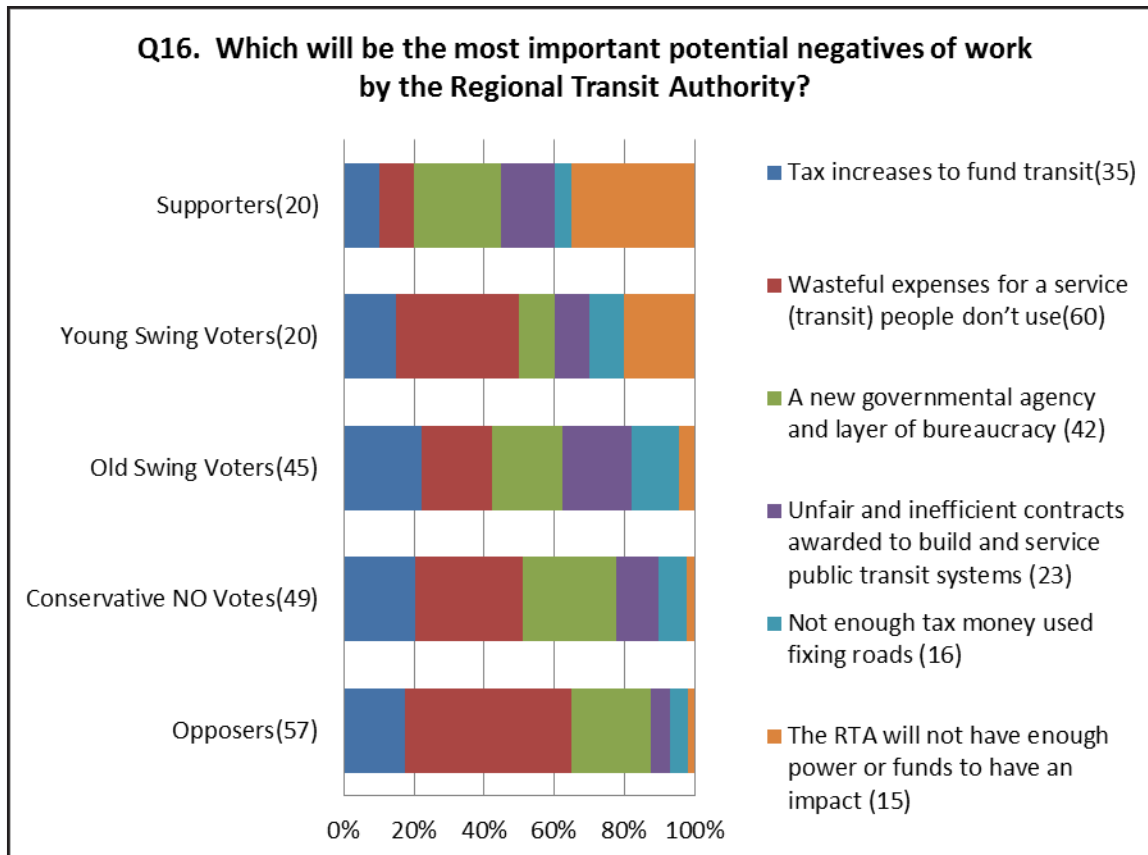
**Figure 8. Belief in Benefits of the RTA**

For those who believe RTA is beneficial to the regional transit, most respondents consider developing rapid transit as the most important potential benefit of RTA. More than half of Supporters and Young Swing Voters and nearly half (48%) of Conservative No Votes consider developing rapid transit as the most important benefit of RTA. For the Old Swing Voters, opinions are almost equally split between “RTA will ensure better coordination of existing bus routes” and “RTA will develop new rapid transit.” (Figure 9)



**Figure 9. Potential Benefits of RTA**

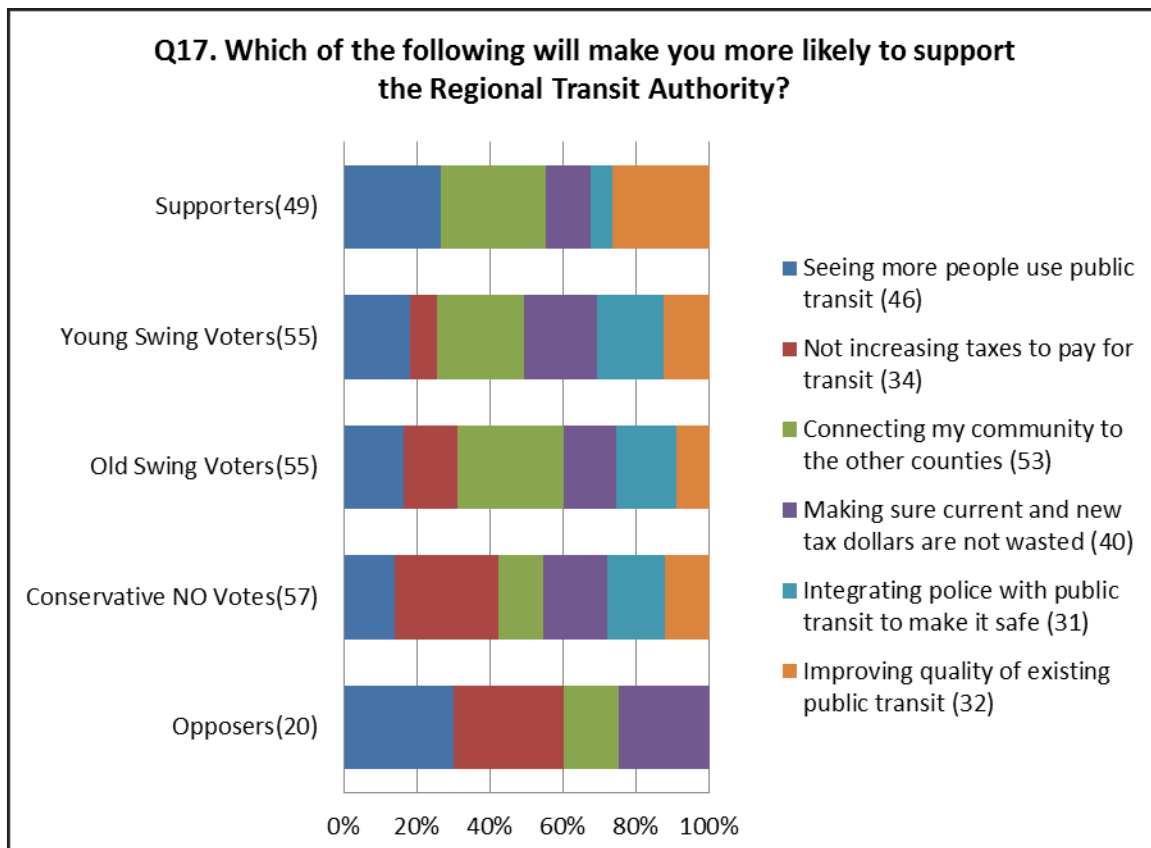
For those who do not believe RTA is beneficial to regional transit, the main potential negative is “wasteful expenses for a service people don’t use,” followed by a “new government agency and layer of bureaucracy.” The top concern of Opposers, Young Swing Voters, and Conservative NO Votes is “wasteful expenses for a service people don’t need,” while the Old Swing Voters worry that RTA might increase tax to fund transit. The few supporters’ concern is that RTA will not have enough power or funds to have an impact (Figure 10).



**Figure 10. Potential Negatives of RTA**

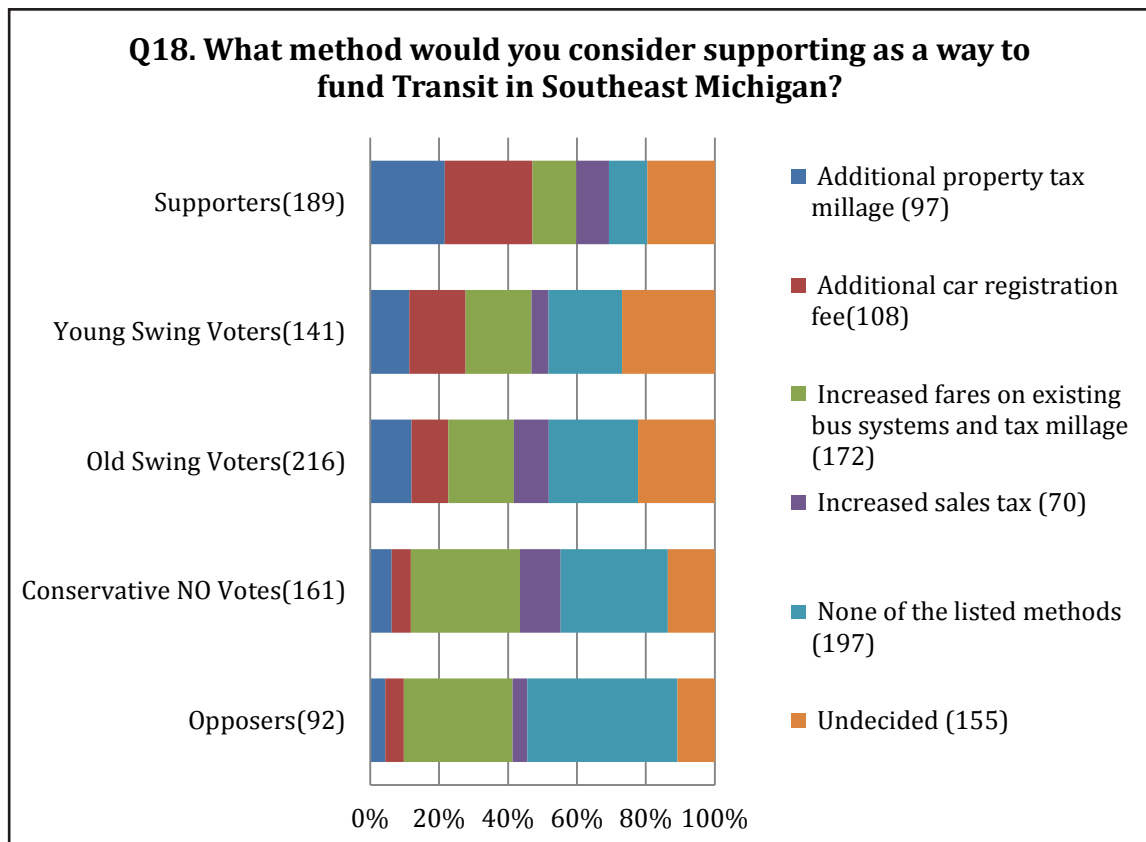
For those who are unsure about RTA’s benefit to regional transit, the reasons that would make them more supportive are spread. However, one factor – connecting communities across counties – emerged as an overarching theme selected by various groups (Figure 11). The Supporters would like to see more people use public transit, connecting communities, and improving the quality of existing public transit. The Conservative No Votes would not want increased taxes. The Old Swing Voters want the communities to be connected. The Young Swing Voters would like seeing more people using public transit, connecting communities, making sure tax dollars are not wasted, and improving the quality of current public transit. The Opposers also want to see more people using public transit, not increasing taxes, and not wasting tax money.





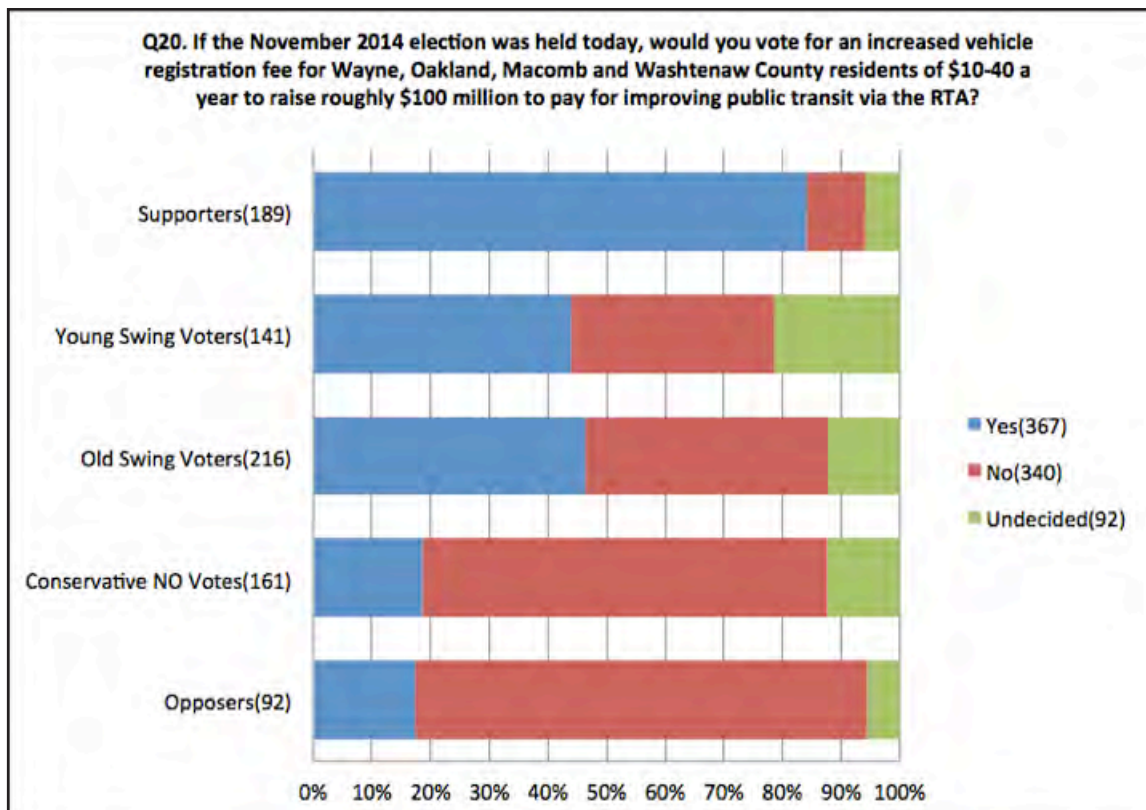
**Figure 11. What is Desired from the RTA**

When asked about methods they would support to fund transit, most of the people select “none of the listed methods,” followed by “undecided.” Most Supporters would like additional property tax millage or car registration, but still, one-fifth are indecisive. Old Swing Voters mostly do not like any listed methods. Conservative No Votes and Opposers either want to see increasing fares on the existing bus system and tax mileage or none of the listed methods. The Young Swing Voters are most likely indecisive, while others are equally distributed among additional car registration fee, increase fares, and none of the listed methods. Increasing sales tax is the least favorite method (Figure 12).



**Figure 12. Methods of Funding Transit**

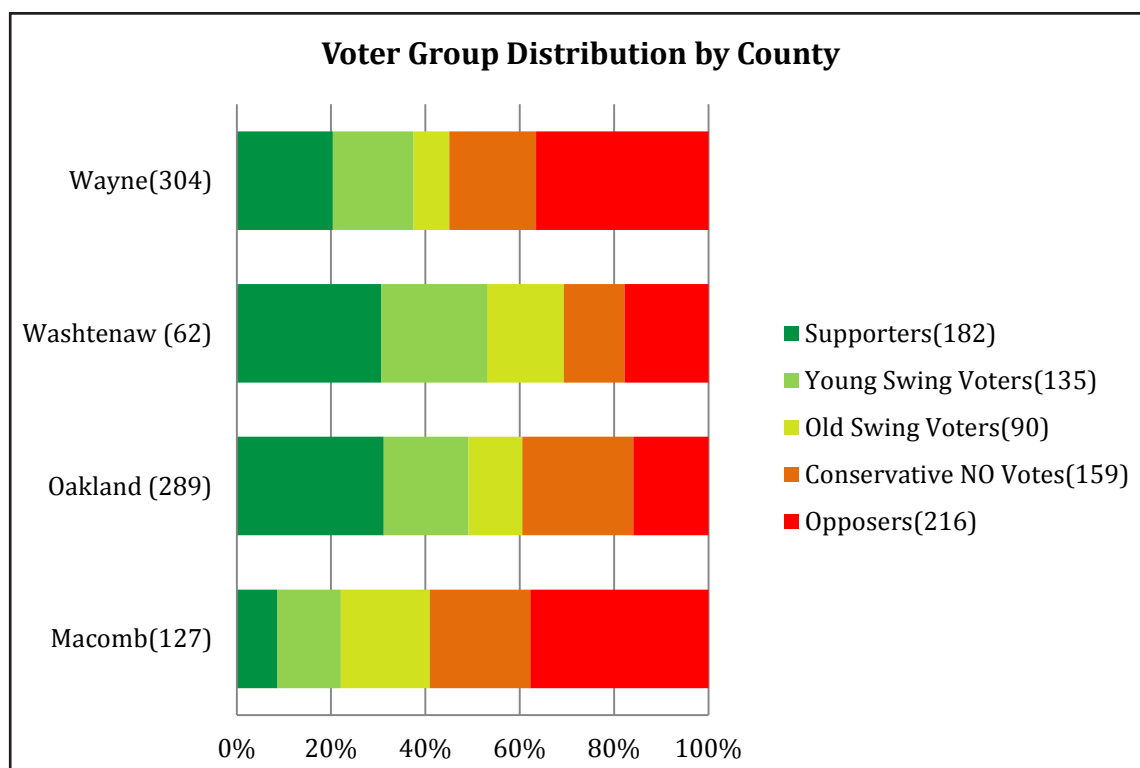
Regarding the upcoming vote, it appears that the entire group is split evenly between “Yes” and “No.” Overall, 45.9% of respondents would vote Yes, 42.5% would vote No, while 11.5% are Undecided. In terms of voter groups, the Swing groups are split between Yes and No, the Supporters will vote Yes, and Opposers and Conservative No Votes will vote No (Figure 13).



**Figure 13. Ballot Test Question**

*The Geographical Perspective: Voter Groups by County*

When looking at Voter Groups by county, it is possible to understand which county will more likely include larger undecided groups. As seen in Figure 14, both Wayne and Macomb Counties had the largest proportion of Old Swing Voters. Washtenaw and Oakland Counties had the largest percentage of Supporters. However, a relatively large percentage (23.5%) of Conservative No Votes in Oakland County is not negligible. Macomb had the smallest percentage of Supporters; this county contains mostly Old Swing Voters, Conservative No Voters, and Opposers. If the Swing Voters (Old and Young) were considered as one undecided group, it can be seen that both Wayne and Macomb Counties have the largest portion (50%+) of undecided voters.



**Figure 14. Voter Group by County**

### *The Geographical Split: Detroit versus Non-Detroit Wayne County*

As a second step, the analysis was performed separating Detroit from the remainder of the county. This was done in consideration of the geographical and socio-economic diversity of Wayne County, which includes the City of Detroit as well as several suburban and rural centers. The analysis suggests that socio-economic and demographic diversity impacts the opinion on transit and confirms the importance of conducting thorough analyses that factor in such diversities.

Results confirm several well-known characteristics of the Detroit urban condition. As an example, socio-demographic analysis confirmed that Detroit residents are less educated and less wealthy than other residents of its county. They are older on average, as well as more likely to be politically affiliated with the Democratic Party.

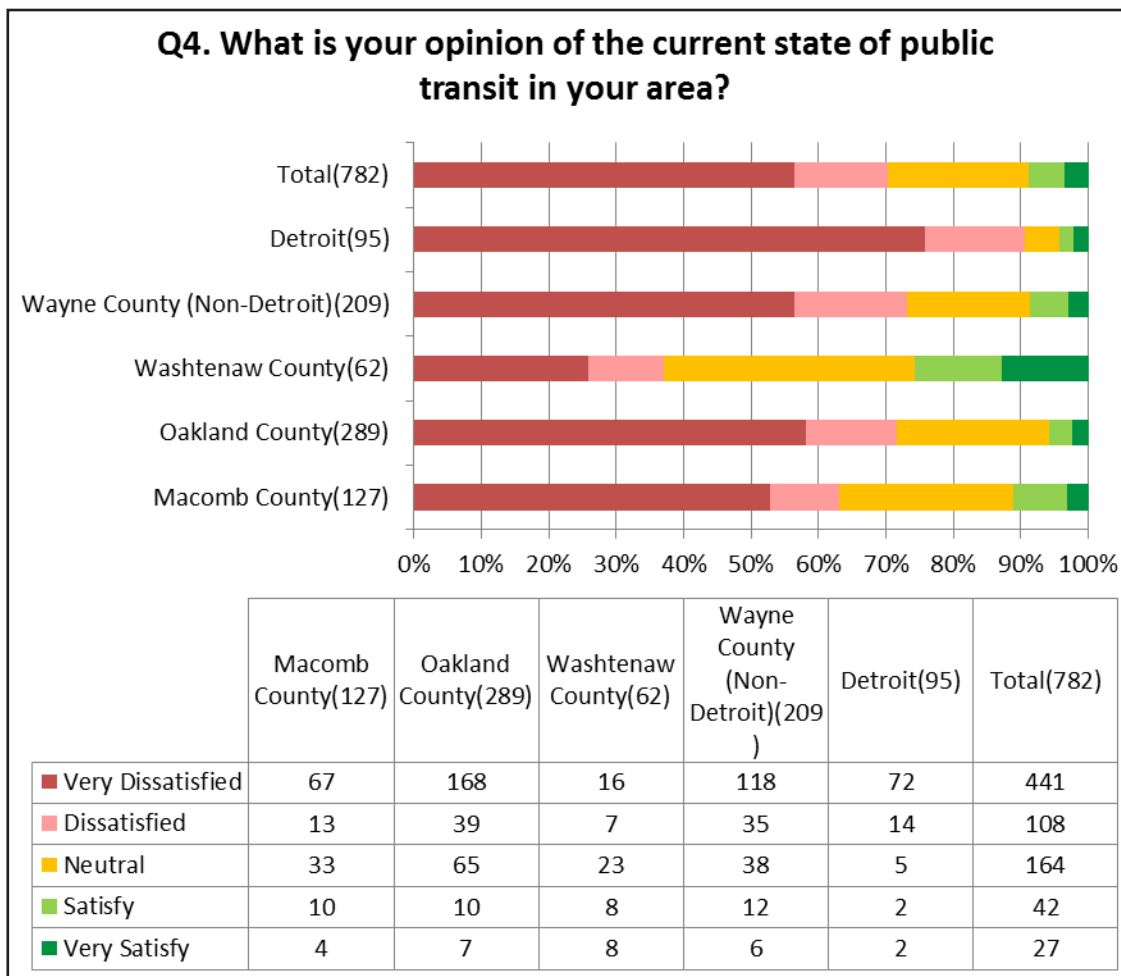
The following graphs display response trends of the overall sample in relation to:

- *Satisfaction levels.* Detroit residents are significantly less satisfied with transit than the rest of Wayne County residents (Figure 15);
- *Transit usage.* Detroit residents have family or friends that use public transit significantly more frequently than the rest of Wayne County residents (Figure 16);
- *Awareness of benefits from the RTA.* Detroit residents seem more aware of potential benefits from the RTA (Figure 17);

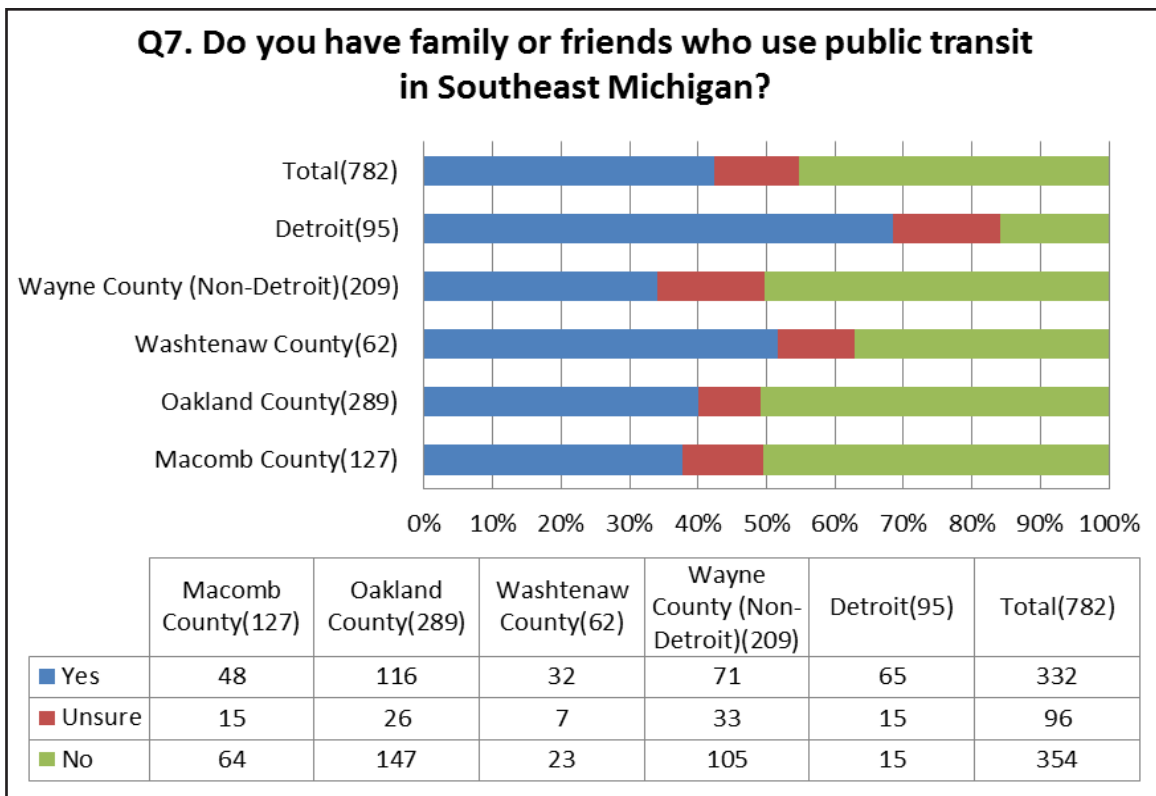
- *Top concerns.* Detroit residents are more concerned with tax increases and unfairness and inefficiency during the implementation of transit improvements (Figure 18);
- *Willingness to pay.* Detroit residents are willing to contribute a lower amount annually compared with the rest of the county and are overwhelmingly in the \$1-20 zone (Figure 19);
- *Level of support in the next vote.* Detroit residents are less supportive in the ballot test question (Figure 20).

In terms of socio-demographic characteristics, the sample of Detroit residents differed from the rest of the Wayne County residents in terms of age, political affiliation, and ethnicity (Figures 21, 22, and 23 in Appendix). Finally, voter group analysis revealed that Detroit has higher numbers of Old Swing Voters compared with Wayne and any other county.

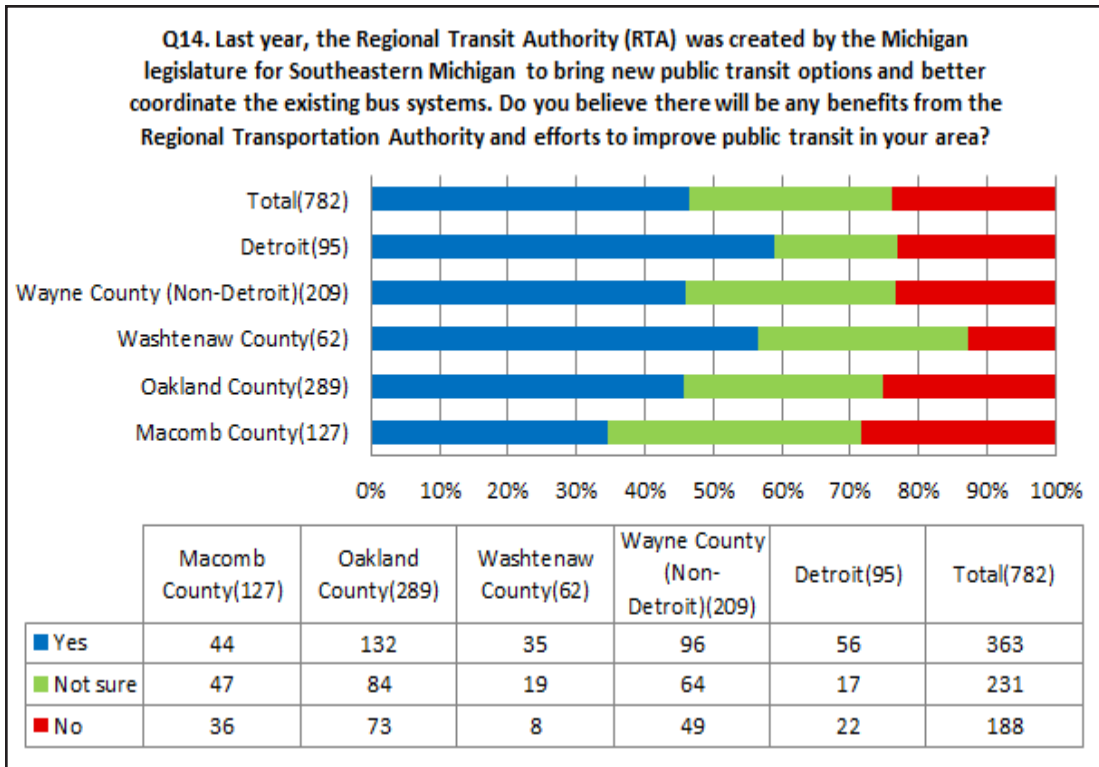
Overall, results suggest that it is relevant to study core metropolitan cities separately from the larger county. Several significant patterns in responses, level of support for public funding for transit, and socio-demographic traits of respondents vary significantly between the city and the larger area.



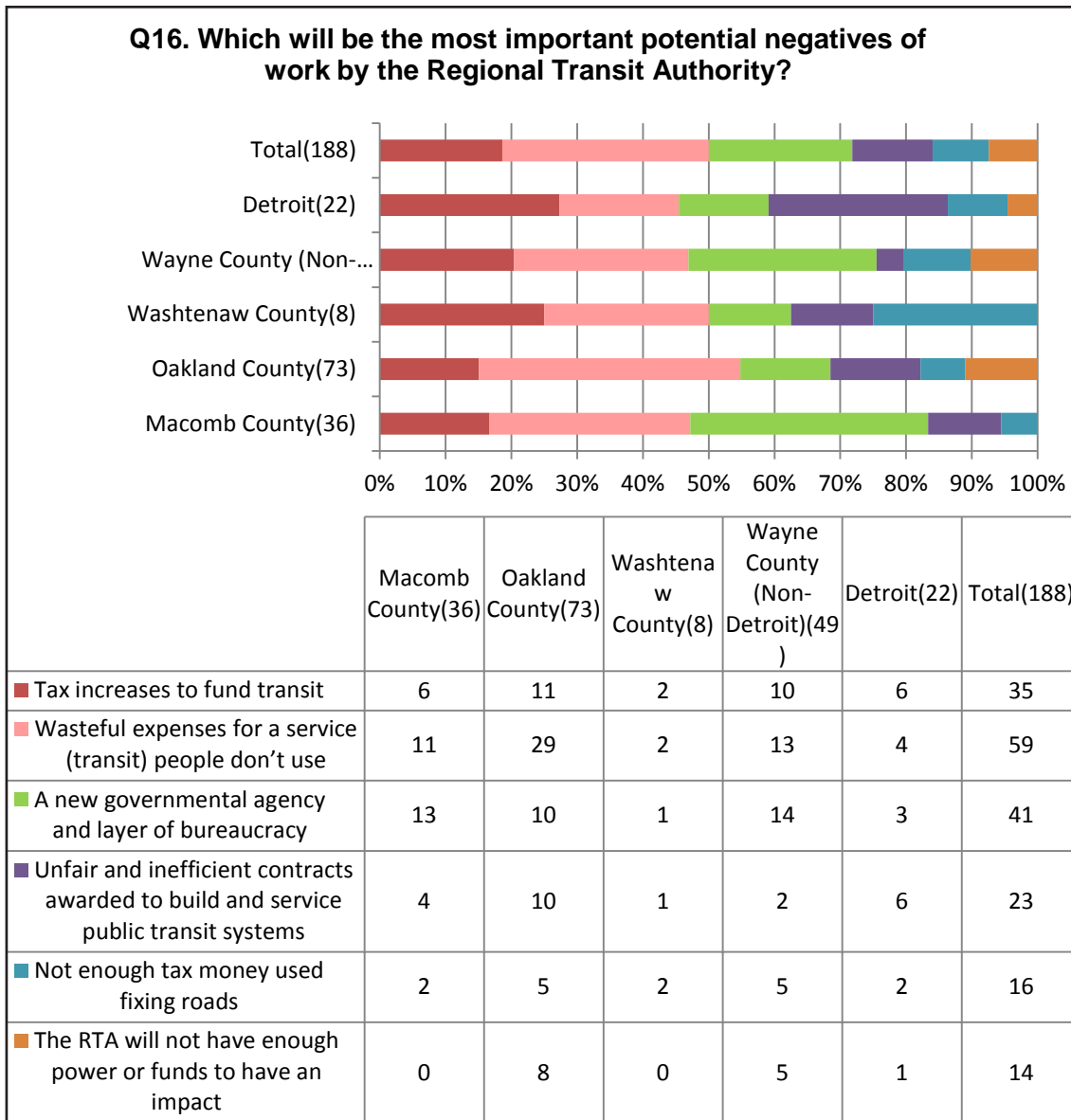
**Figure 15. Satisfaction Levels in Detroit and Wayne County**



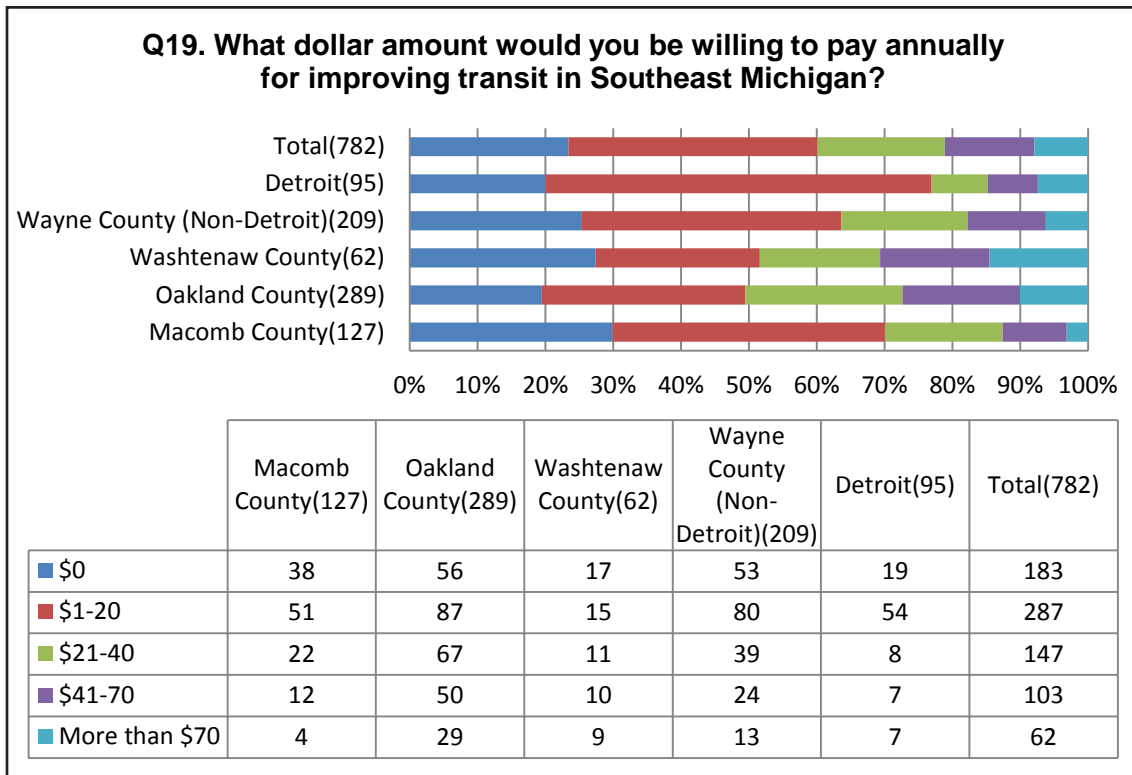
**Figure 16. Transit Usage in Detroit and Wayne County**



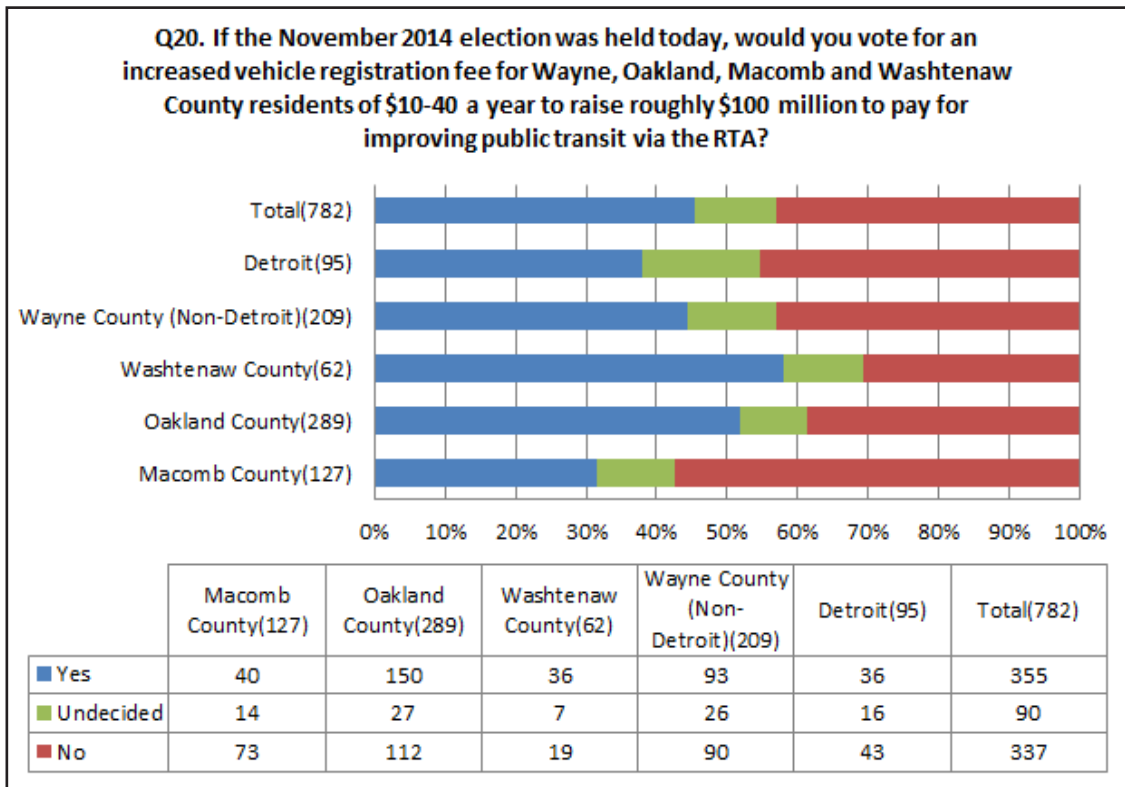
**Figure 17. Awareness of Benefits from the RTA**



**Figure 18. Potential Negatives from the RTA**



**Figure 19. Willingness to Pay for Transit Improvements**



**Figure 20. Ballot Test Question**



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## KEY FINDINGS OVERVIEW

Summarizing, the following key findings emerged from the analysis of voter groups:

- Funding transit:
  - Overall, 55.9% of respondents support some form of funding method. However, respondents are quite divided on the preferred method of funding; 24.7% do not support any of the options suggested.
  - Among non-supporters, the top reasons for not supporting or being unsure about public funding for transit are distrust and lack of knowledge of how funds would be spent. This is confirmed by what emerged in terms of most important potential negatives of RTA (“Wasteful expenses for a service people don’t use,” and “A new government agency and layer of bureaucracy.”) This is understandable, as the RTA has not yet established any educational programs about itself or transit potentials, and it has no plan for the use of new transit funds.
- What people want:
  - People want to add rapid transit in the region as their top priority, followed by improved safety of the current system and improved routes. Rapid transit speaks to the various groups (including Young Swing Voters and Conservative No Votes) and is also considered the most important potential benefit from RTA. Improving routes is also consistent with what would make people more supportive of RTA (“Connecting my community with other counties”).
- Believing in the RTA:
  - Close to 30% of respondents are unsure about potential benefits from RTA. This means that almost one-third have no clear opinion yet, and they may change their mind in one way or another.
- Which groups will count more:
  - Swing groups will be key to securing support for regional transit (total composite: 45% of respondents); Young Swing Voters are particularly important, as they are willing to support more (monetary support) and to vote Yes (Q20) even if they are unsure about supporting public funding for transit (Q9). On the contrary, Old Swing Voters tend to behave like the Conservative No Votes group (i.e., against funding and against voting Yes on the ballot question).
- Where to focus:
  - Significant geographic differences emerged across counties: Washtenaw and Oakland have the largest percentage of Supporters, while Macomb has the smallest. Also, Wayne and Macomb Counties have the largest portion of undecided voters (50%+ Swing Voters).

In addition to cluster analysis, other statistical tests were also performed on data and revealed the following trends:

- Support for transit is influenced by political and ideological orientation. (Overall, liberals and Democrats support more than Republican and conservatives.) Note that “non-extremists” are more generous (leaning Democrats and leaning Republicans), even if they answer No to Q9 (“Do you support public funding for transit?”);
- Union households are less willing to pay for transit; and
- Support for transit is positively correlated with income and education and related to ethnicity. (African-Americans are supportive, but they lack resources, which impacts their willingness to pay.)

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## IV. RECOMMENDATIONS FOR PUBLIC OPINION EFFORTS

Data suggest a clear opportunity to secure approval of new transit funding by the voters of the RTA's four-county region. However, considerable work must be accomplished to convince swing voters to support such funding. Because an overwhelming 86% of respondents agree that transit needs improvement, it is appropriate and necessary that the RTA and transit agencies promptly proceed to develop the specific plans that will improve and expand transit service. Given that 67% of respondents would support public funding of transit, it is also reasonable and appropriate for the RTA to make plans for a regional transit tax to enable improved and expanded transit. (Only 14% oppose.) Findings from the survey yield the following set of recommendations:

### 1. PUBLIC ENGAGEMENT AND EDUCATION OF VOTERS ABOUT THE RTA PURPOSES AND PLANS

#### **Issue: Uncertainty about the RTA benefits**

Almost one-third of respondents were unsure the RTA would bring any benefits. This is perfectly understandable, given that the RTA was formed only recently, has not had a CEO, and has not yet created any outreach or educational program. Further, while the RTA approved a broadly defined plan, most voters in the region are not aware of that plan.

**Recommendation: Educating the public about RTA and its purposes, and communicating to the public the purposes and details of the Regional Transit Plan, must be the top priority.**

The research on the four peer regions highlighted that a clear image of the plan/initiatives, if captured and amplified by media coverage, together with the employment of educational tools to engage the public, can create a ripple effect within the community, increasing support for transit initiatives and sustaining effective regional transit development (Hanifin et al., 2013). This finding confirms the priority of engaging in education and communication for transit agencies and advocacy groups. In particular, findings suggested that the lack of engagement in online and social media tools determines a low visibility for outreach efforts.

### 2. CLEAR COMMUNICATION ABOUT TRANSIT FUNDS SPENDING

#### **Issue: Distrust in transit funding spending**

The lack of knowledge on how transit funds will be spent emerged as the main reason that voters are unsure about supporting public funding of transit. A significant number of voters expressed distrust in the wisdom of government spending tax dollars and in the efficiency of having an additional governing body.

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**Recommendation: Transparency in decision making and clear accountability measures by the RTA**

The RTA has an important opportunity and responsibility to broadly promote to voters a clear plan of how new transit funding will be spent, which benefits it will produce, and the timeline and cost for specific improvements. The RTA should clarify its position as an agency that is dedicated solely to the creation of effective regional transit, and that it is not part of any city or county in the region or any preexisting governmental agency. The RTA should also embrace transparency in decision-making and incorporate clear accountability measures into its plans. This includes an easy-to-use website with a progress dashboard, acknowledging and seeking to address problems, and regularly and openly engaging with the public.

**3. CAMPAIGN MESSAGING AND TARGETS****Issue: Strengthening perceived benefits of transit for different groups**

Results confirmed a well-known characteristic of the four-county electorate: the high number of non-users that are asked to believe in and support the transit system, in view of indirect benefits rather than benefits from direct use. Results also revealed specific desired improvements and expected benefits that can positively resonate with the public during future campaigns.

**Recommendation: Messages should focus primarily on the benefits for non-riders and indirect benefits.**

Campaign messages should highlight **the importance of improved transit to better provide access to jobs, and education**, as “People need it to get to work, school, and other places” was the primary reason all groups supported public funding for transit. It is also important to note that only 7.7% of people support public funding for transit because they personally ride it or might ride it in the future. Other identified top reasons include the positive impact of transit on the quality of life and on economic development.

**Recommendation: Messages should relate to specific improvements, which will be made possible through the additional funding.**

Many supporters and undecided voters see rapid transit as the top potential benefit of the RTA. This expectation should be reflected in the regional transit plans. The specific improvements desired by respondents should be conveyed through campaign messaging. Primary desired improvements are:

- Adding rapid transit (29% of respondents);
- Improving safety on buses and at stops and stations (20% of respondents);
- Improving routes to better connect home, work, and key entertainment destinations (20% of respondents); and

- Making existing bus service more convenient and reliable (18% of respondents).

Desired improvements vary among voter groups. In terms of views on transit improvements, the Young Swing Voters, Supporters, and even Conservative No Voters prioritize adding rapid transit, and the Old Swing Voters want improved convenience, reliability, and safety of the current system. Therefore, the plan should include both improvements, and messaging should reflect this dual approach and be tailored to each group's interests.

The expansion of the existing system to connect communities across counties is the top improvement that would make undecided voters more likely to endorse and support RTA. Messaging should emphasize a vision of building rapid transit that connects communities to other counties.

### **Issue: Identifying target voter groups**

#### **Recommendation: Messages should focus on undecided groups**

As Supporters (23.7%) and Opposers (11.5%) have largely made up their minds about support for transit funding, they should not be the primary focus in any public funding campaign. The campaign messages and efforts should concentrate primarily on Swing Voters (Old Swing Voters, 27.0%; Young Swing Voters, 17.6%; TOTAL 44.6%). Of particular interest are the Young Swing Voters, who are more willing to monetarily support transit. At the same time, the broadly disseminated messaging must solidify the commitment of supporters and blunt the inevitable messaging of the opposition.

Because 61% of Young Swing Voters in this survey were reached by email, it can be said that most appropriate methods to approach younger groups while campaigning include: emails, Internet (blogs and social media web sites), and mobile phone apps.

Geographically, Macomb had fewest Supporters, and Wayne had fewest Opposers, while Young Swing Voters were primarily in Washtenaw, Wayne, and Oakland Counties, and the Old Swing Voters were primarily in Wayne and Macomb Counties.

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## V. CONCLUSION

This study allowed the research team to identify patterns in public opinion regarding transit for likely voters in a four-county area of Southeast Michigan. Results were utilized to define a set of recommendations for successful future educational efforts and campaigns in the Detroit region and comparable regions.

Public opinion regarding regional transit was assessed in relation to socio-demographic characteristics, political attitudes and orientations, and geographical characteristics of respondents. Five voter groups were identified to facilitate efforts to define appropriate messages and methods for future campaigns. Recommendations include: recognizing the importance of educating the public about RTA plans and purposes; emphasizing transparency in decision making and clear accountability measures; and specific campaigning guidelines in terms of key recommended messages, identified priorities of the public, methods to reach younger groups, voter group priority targets, and geographical targets of campaigning.

Findings confirm that there are great opportunities to strengthen voters' support for regional transit and for public funding for transit. Much must be done to shape the opinion of undecided voters and reinforce that of supporters. Therefore, a major public campaign is needed to increase public awareness of transit benefits and to build public support for transit investment.

To educate and engage sufficient numbers of voters with clear and shared messages, it is advisable that the RTA partner with other transit stakeholders and related groups while devising and conducting educational campaigns. Further, it is also advisable that stakeholders develop an advocacy organization independent of the RTA to lead and fund the advocacy campaign to fund the RTA's transit improvement plan. This group must include a broad array of stakeholders including business, education, health care, fitness, and environmental leaders, as well as the traditional community, rider, senior, and faith-based supporters of transit.

Additional analysis of current data gathered through the survey can secure insights related to more defined voter segments reflecting trends that emerge according to location, income, education, age, ethnicity, and political orientation. These additional findings can be employed to guide the messaging of advocates who may communicate with specific demographic groups. While additional assessment of public opinion will be needed as plans and funding ballot initiatives are developed, the authors believe the results of this study provide valuable information and guidance to the RTA and key stakeholder groups. This, in turn, defines the pathway to the strong public understanding and support necessary to fund, create, and operate world-class transit service to all who live in or visit Southeast Michigan.

## APPENDIX A

### ADDITIONAL TABLES AND FIGURES

**Table 5. Key Transit Events, 1967-2013**

Year	Events
1967	Southeastern Michigan Transportation Authority (SEMTA) is formed to take over the financially strapped private companies operating suburban mass transit services in Wayne, Oakland, and Macomb Counties.
1969	Detroit Regional Transportation and Land Use Study (TALUS) recommends rail rapid transit in eight major region corridors. There was no follow-up.
1974	The Department of Street Railways (DSR) is reorganized as the Detroit Department of Transportation (DDOT).
1976	President Gerald Ford offers Southeast Michigan \$600 million to build a rail transit system. Other than “People Mover” (1987), nothing else is built due to the lack of local/regional support. (SEMTA did consolidate transit providers, improve bus service, and develop commuter rail service from Ann Arbor and Pontiac to Detroit.)
1979	SEMTA approves a regional transit plan, but subsidies are cut and the plans are never implemented. SEMTA soon reduced transit service.
1983	SEMTA eliminates commuter rail from Pontiac to Detroit.
1984	SEMTA eliminates commuter rail from Ann Arbor to Detroit. Regional leaders approve the <i>Regional Public Transportation Consensus Plan</i> , a refined version of the 1979 <i>Regional Transit Plan</i> . The plan is never implemented.
1987	The “PeopleMover” downtown transit line is built at \$67 million per mile.
1989	The Regional Transit Coordinating Council (RTCC) is formed in an effort to provide efficient public transportation in Southeast Michigan. SEMTA is reorganized without the City of Detroit and renamed the Suburban Mobility Authority for Regional Transportation (SMART).
1994	SMART and DDOT attempt to merge five routes, but the project is cancelled.
1996	SMART and DDOT establish a common regional bus pass. Further attempts to merge services fail.
1997	The Michigan Department of Transportation (MDOT) suggests re-establishing commuter rails at \$2 million per mile, which was considered to be too expensive by regional leaders.
1998	DDOT terminates its suburban service. SMART picks up the abandoned routes.
1999	General Motors removes the commuter rail spur that is west of Renaissance Center to make room for a parking deck. MDOT expands I-375 toward the river. The effect of both actions eliminates downtown rail access. MDOT Transit Plan includes \$10 million cuts in funding as incentive for SMART and DDOT to combine services.
2001	Detroit Regional Chamber spearheads legislation to create a Detroit Regional Transportation Authority (DARTA).
2002	Legislation to form DARTA is vetoed by Governor John Engler. SMART millage is increased from .33 mi. to .59 mi. and successfully passes in all three counties.
2003	DARTA is formed through an inter-local intergovernmental agreement (IGA) with powers, functions, responsibilities, and authority essential to providing quality public transportation, but it needs the consent of Michigan municipalities. SEMCOG convenes the transit impediments committee of elected officials.
2005	SEMCOG announces it will conduct a study to evaluate the opportunity to develop an Ann Arbor to Detroit commuter line that would include a stop at/by Metropolitan Airport, consolidating two previous studies.
2006	The Michigan State Supreme Court decision dissolves DARTA and IGA. RTCC hires CEO John Hertel to develop a regional mass transit plan in Southeastern Michigan, the Detroit Regional Mass Transit Project. DDOT initiates the Detroit Transportation Options for Growth Study (DTOGS).
2007	M1-Rail is formed (initially named “TRAIL”) to develop a regional rapid transit system, starting with development of a modern street car service on Woodward Ave. A team from the University of Detroit Mercy and Deloitte develops the preliminary plan for this system.



Year	Events
2008	DDOT, in its DTOGS project, identifies Woodward Ave. as the location for the light rail project. In December, RTTC board approves a tri-county multimodal <i>Comprehensive Regional Transit Service Plan</i> prepared by Detroit Regional Mass Transit. The RTTC defines the next steps for the establishment of an RTA and a regional transit funding plan.
2009	Legislature fails to approve the development of an RTA.
2010	City of Detroit's population drops to 713,777 from 951,270 in 2000 (Max population 1,850,000 in 1950). M1-Rail and DTOGS projects merge into the Woodward Light Rail project. Despite initial agreement on development and funding, disagreements exist concerning alignment of the light rail route. Joint USDOT, State of Michigan, and City of Detroit cancelation of Woodward Light Rail DOT Tiger 1 grant of \$25 million awarded to M-1 Rail.
2011	The City of Detroit cuts DDOT bus operating subsidy and approves a bond issue to help fund Woodward Light Rail's required match. Joint USDOT, State of Michigan, and City of Detroit cancelation of Woodward Light Rail; Private investors of M-1 continue to develop initially planned 3.4 mile streetcar system. Governor Snyder proposes legislation to form an RTA and provide funding. SMART cuts service by 22% due to lower property values.
2012	Oakland County overwhelmingly passes the SMART millage increase with a 79% approval. In November, Michigan Senate passes bills to create an RTA for Southeast Michigan.
2013	Ray LaHood, head of the Federal Transit Administration, announces \$25 million in federal funds for the private proposal for development of light rail along Woodward Ave. Ten members from Wayne, Macomb, Oakland and Washtenaw Counties are appointed to RTA board. A bill is passed for the creation of a new Regional Transit Authority (RTA) for Southeast Michigan.

Sources: SmartBus, "History of Transit in Southeast Michigan Region," SmartBus [website] (2013), <http://www.smartbus.org/aboutus/overview/Pages/History-of-Transit-in-Southeast-Michigan-Region-.aspx> (Accessed January 30, 2014).  
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 Perry, Jeffrey M. 2010. Contextual transit [electronic resource], from <<http://archives.udmercy.edu:8080/dspace/handle/10429/215>>.

## Voter Group Analysis

The questions used for cluster analysis included:

- Q4. What is your opinion of the current state of public transit in your area?

(3.5% satisfied; 5.5% somewhat satisfied; 21% neutral; 13.5% somewhat dissatisfied; 56.4% very dissatisfied)

- Q8. Do you think Southeast Michigan needs improved public transit?

(86.3% yes; 7.1% unsure; 6.6% no)



- Q9. Do you support public funding of Southeast Michigan transit through regional taxes and fees?

(67.1% yes; 18.6% unsure; 14.3% no)

- Q19. What dollar amount would you be willing to pay annually for improving transit in Southeast Michigan?

(23.1% \$0; 6.3% \$1-20; 18.9% \$21-40; 13.5% \$41-70; 8% \$70+)

- Q20. If the November 2014 election was held today, would you vote for an increased vehicle registration fee for Wayne, Oakland, Macomb and Washtenaw County residents of \$10-40 a year to raise roughly \$100 million to pay for improving public transit via the RTA?

(45.9% yes; 11.5% undecided; 42.6% no)

- Q22. Which age range best represents you?

(7.9% 18-29; 11.6% 30-39; 9.8% 40-49; 28.3% 50-59; 22.2% 60-69; 20.3% 70+)

- Q23. Which income range best represents your household?

(15.5% \$0-25,000; 26.2% \$25,001-50,000; 36.0% \$50,001-100,000; 17.1% 100,001-200,000; 5.1% \$200,000+)

- Q24. Generally speaking, do you consider yourself a Democrat, an Independent, a Republican, or a Tea Party member?

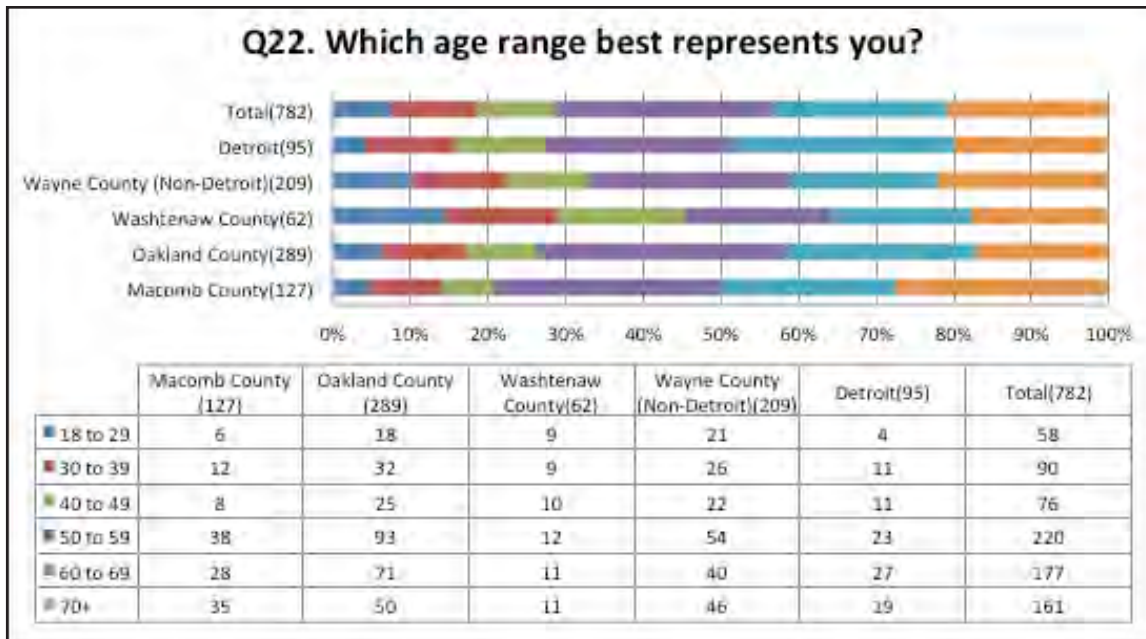
(32.7% Solid Democrat; 21.3% Leaning Democrat; 24.3% Independent; 10.3% Solid Republican; 8.8% Leaning Republican; 2.8% Tea Party)

- Q25. When it comes to political issues, do you generally consider yourself to be a liberal, a moderate, or a conservative?

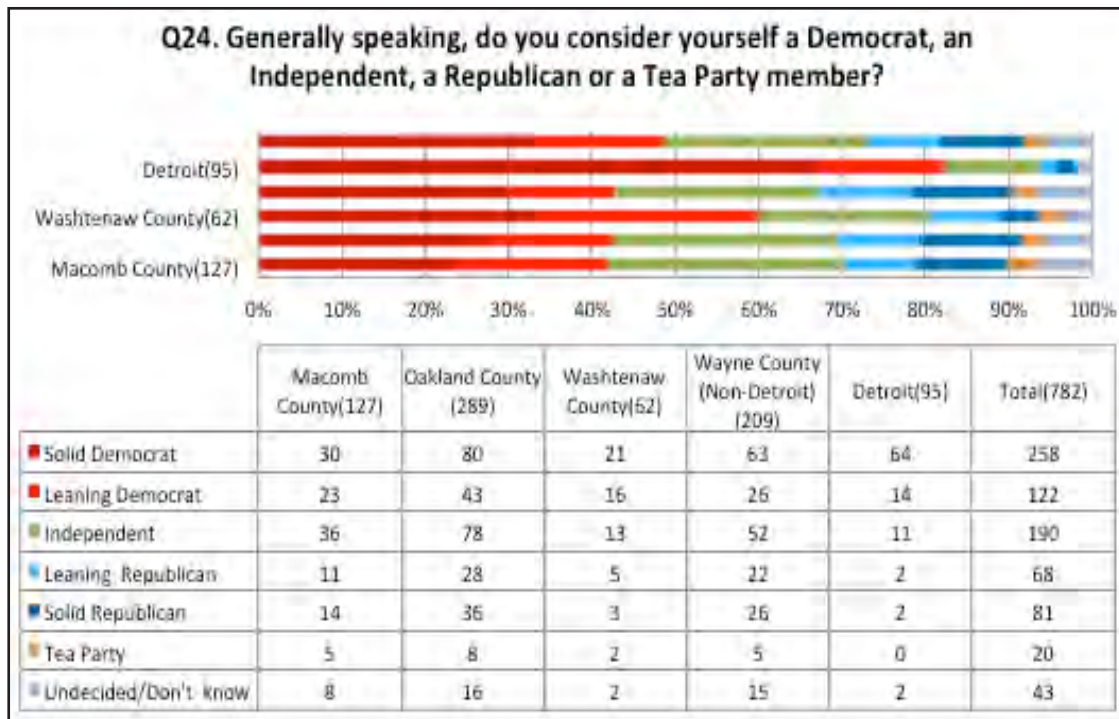
(13.0% very liberal; 23.4% somewhat liberal; 35.5% moderate; 17.3% somewhat conservative; 10.8% very conservative)

- Q26. From the following list, what is the last grade of formal education you have completed?

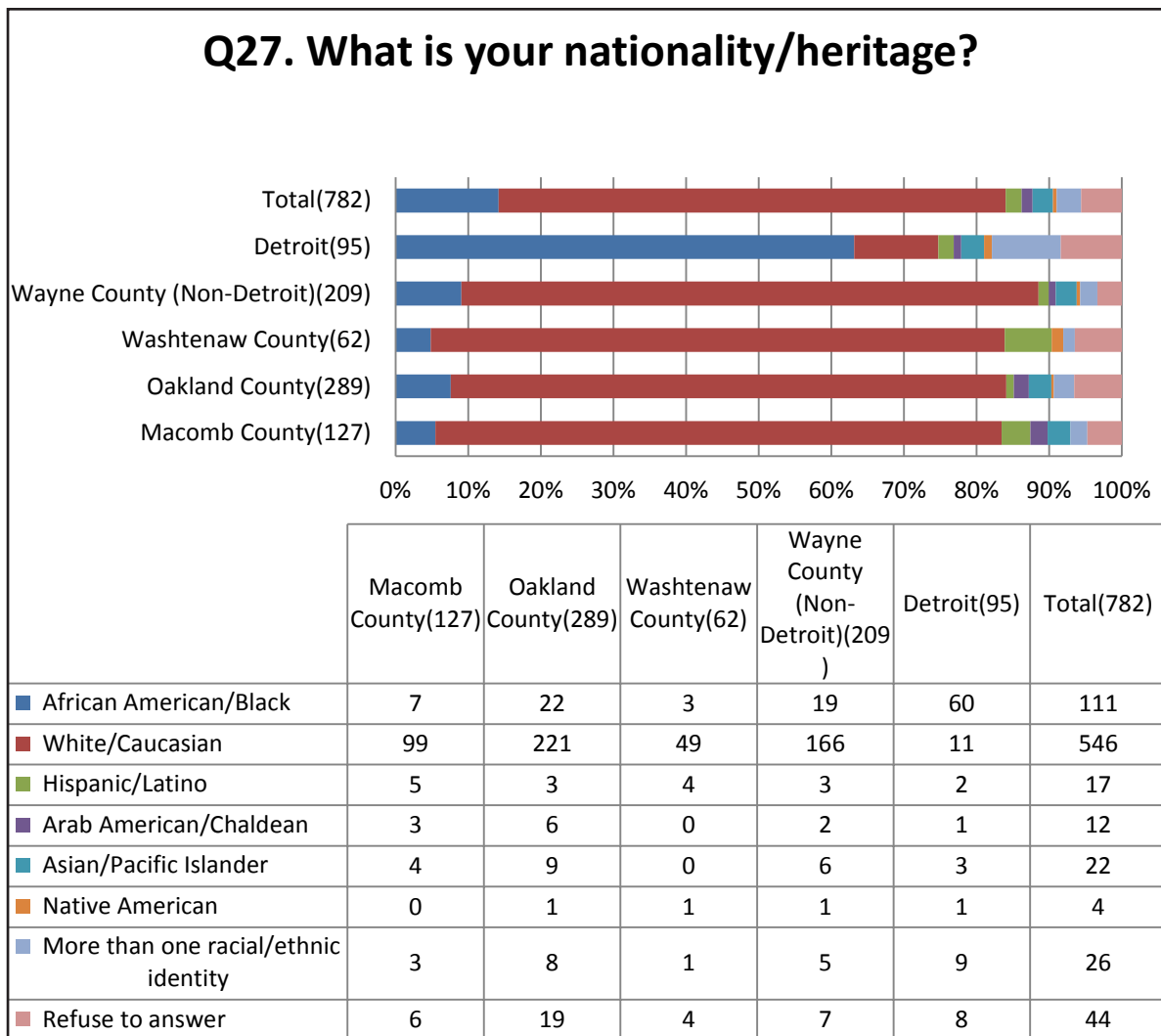
(2.6% less than high school; 8.8% high school graduate; 20.9% some college; 7.0% technical school; 34.0% college graduate; 26.7% graduate degree)



**Figure 21. Age Groups – Detroit versus Wayne County**



**Figure 22. Political Affiliation – Detroit versus Wayne County**



**Figure 23. Ethnicity – Detroit versus Wayne County**

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## APPENDIX B

### SURVEY ON PUBLIC OPINION REGARDING TRANSIT IN SOUTHEAST MICHIGAN

#### Filter statement

Good day, a research team at University of Detroit Mercy is conducting a survey and would like your opinion on public transit and potential transit improvements in Southeast Michigan. The survey is anonymous and records are confidential. The survey will take approximately 10 minutes. If you have questions, please contact Dr. Kathy Zhong at the University of Detroit Mercy, at zhongk@udmercy.edu.

For your participation in our email survey, you will be entered into a drawing to win one of three gift cards worth \$50. The gift cards are sponsored by the University of Detroit Mercy. You have to complete the entire survey, including the demographic questions, in order to be eligible for the drawing. Winners will be randomly drafted upon completion of the survey program and will be contacted within seven business days of their selection by an appropriate staff from our research team.

If you do not meet the criteria of the first three questions, the survey will come to an end. Thank you.

1. Do you agree to participate in this important survey?
  - A. YES (CONTINUE)
  - B. NO (TERMINATE)
  
2. Are you 18 years old or older and registered to vote in Michigan?
  - A. YES (CONTINUE)
  - B. NO (TERMINATE)
  
3. How likely is it that you will vote in the November 2014 General Election? Would you say you will... (READ AND ROTATE)
  - A. Definitely vote (CONTINUE)
  - B. Probably vote (CONTINUE)
  - C. Be a 50-50 chance to vote (TERMINATE)
  - D. Probably NOT vote (TERMINATE)
  - E. Definitely NOT vote (TERMINATE)
  - F. DK/Refused (TERMINATE)

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This survey seeks your opinion on public transit in southeast Michigan. Public transit is defined as publicly funded local bus services provided for the general public by SMART, the Detroit Department of Transportation, and the Ann Arbor Transit Authority. It also includes the door-to-door para-transit services provided for seniors and people with disabilities and the downtown Detroit People Mover. We are not referring to school buses, carpooling programs, or private buses or vans. Public transit services are typically administered through regional and local governmental agencies.

4. What is your opinion of the current state of public transit in your area?
  - A. Very satisfied
  - B. Somewhat satisfied
  - C. Somewhat unsatisfied
  - D. Very unsatisfied
  - E. No opinion
  
5. Have you used public transit in your area?
  - A. Never used public transit
  - B. Use public transit regularly
  - C. Used public transit rarely within in the last 5 years
  - D. Used public transit, but more than 5 years ago
  
6. Have you ever used public transit outside of Southeast Michigan?
  - A. Yes, in other parts of Michigan
  - B. Yes, in other states or countries
  - C. Yes, in other parts of Michigan and/or other states or countries
  - D. No, I have never used public transportation outside of my area
  - E. DK/Refused
  
7. Do you have family or friends who use public transit in Southeast Michigan?
  - A. Yes
  - B. No
  - C. Unsure

- 
8. Do you think Southeast Michigan needs improved public transit?
- A. Yes
  - B. No
  - C. Unsure
9. Do you support public funding of Southeast Michigan transit through regional taxes and fees? Tree Question
- A. Yes -Go to question 10A, Skip 11 & 12.
  - B. No- Go to Question 11A, skip 10 & 12.
  - C. Not Sure- Go to Question 12, skip 10 & 11.
- 10A. What is the primary reason that you support public funding for transit?
- A. People need it to get to work, school, and other places
  - B. I ride it or might ride it in future
  - C. Public transit stimulates the economic development of our region
  - D. Public transit improves the quality of life in Southeast Michigan
  - E. Public transit can reduce transportation expenses and increase access to jobs
- 10B. What is the secondary reason that you support public funding for transit?  
You must select a different response from what you answered in the previous question.
- A. People need it to get to work, school, and other places
  - B. I ride it or might ride it in future
  - C. Public transit stimulates the economic development of our region
  - D. Public transit improves the quality of life in Southeast Michigan
  - E. Public transit can reduce transportation expenses and increase access to jobs
  - F. Other reason or I don't know
- 11A. Of the following, which is the top reason you don't support public funding for transit?
- A. Public transit can attract crime
  - B. I don't want my tax dollars to pay for public transit
  - C. I don't use transit and transportation dollars should be spent on roads
  - D. Public transit in this region is not convenient or reliable
  - E. I don't trust my tax dollars will be spent effectively by the government
-

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- 11B. Of the following, which is the second reason you don't support public funding for transit? You must select a different response from what you answered in the previous question.
- A. Public transit can attract crime
  - B. I don't want my tax dollars to pay for public transit
  - C. I don't use transit and transportation dollars should be spent on roads
  - D. Public transit in this region is not convenient or reliable
  - E. I don't believe my tax dollars will be spent effectively by the government
  - F. Other reason or I don't know
12. Of the following, which is the top reason you are not sure about public funding for transit?
- A. I don't know how transit funds are spent
  - B. Few people use the current public transit
  - C. My tax dollars might be wasted by the government
  - D. I think funding for road improvements is more worthwhile
  - E. I do not want to have any more taxes
  - F. Public transit is not safe
13. What improvements would you like to see in public transit in your area?
- A. Improved safety on buses and at stops and stations
  - B. Make existing bus service more convenient, and reliable
  - C. Improved routes to better connect home, work, and key entertainment destinations
  - D. Adding rapid transit (bus rapid transit or light rail)
  - E. Making transit (buses) more attractive and clean
  - F. Expand transit to more places that don't currently have it
14. Last year, the Regional Transit Authority (RTA) was created by the Michigan legislature for Southeastern Michigan to bring new public transit options and better coordinate the existing bus systems. Do you believe there will be any benefits from the Regional Transportation Authority and efforts to improve public transit in your area?:
- A. Yes -Go to question 15, skip 16 & 17
  - B. No- Go to Question 16, skip 15 & 17
  - C. Not Sure- Go to Question 17, skip 15 & 16
-

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15. Which will be the most important potential benefit of work by the Regional Transit Authority?
- A. RTA will ensure better coordination of existing bus routes
  - B. RTA will ensure fairer funding distribution
  - C. RTA will expand existing transit
  - D. RTA will develop new rapid transit, such as bus rapid transit and commuter trains
  - E. RTA will manage funds effectively and efficiently
16. Which will be the most important potential negatives of work by the Regional Transit Authority?
- A. Tax increases to fund transit
  - B. Wasteful expenses for a service (transit) people don't use
  - C. A new governmental agency and layer of bureaucracy
  - D. Unfair and inefficient contracts awarded to build and service public transit systems
  - E. Not enough tax money used fixing roads
  - F. The RTA will not have enough power or funds to have an impact
17. Which of the following will make you more likely to support the Regional Transit Authority?
- A. Seeing more people use public transit
  - B. Not increasing taxes to pay for transit
  - C. Connecting my community to the other counties
  - D. Making sure current and new tax dollars are not wasted
  - E. Integrating police with public transit to make it safe
  - F. Improving quality of existing public transit
18. What method would you consider supporting as a way to fund Transit in Southeast Michigan?:
- A. Additional property tax millage
  - B. Additional car registration fee
  - C. Increased fares on existing bus systems and tax millage
  - D. Increased sales tax
  - E. None of the listed methods
  - F. Undecided
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19. What dollar amount would you be willing to pay annually for improving transit in Southeast Michigan?:
- A. \$0
  - B. \$1-20
  - C. \$21-40
  - D. \$41-70
  - E. More than \$70
20. If the November 2014 election was held today, would you vote for an increased vehicle registration fee for Wayne, Oakland, Macomb and Washtenaw County residents of \$10-40 a year to raise roughly \$100 million to pay for improving public transit via the RTA?:
- A. Yes
  - B. No
  - C. Undecided

Now just a few more questions for demographic purposes....

21. Gender:
- A. Male
  - B. Female
22. Which age range best represents you?
- A. Ages 18 to 29
  - B. Ages 30 to 39
  - C. Ages 40 to 49
  - D. Ages 50 to 59
  - E. Ages 60 to 69
  - F. Ages 70 and older
23. Which income range best represents your household?
- A. \$0 - \$25,000
  - B. \$25,001 - \$50,000
  - C. \$50,001 - \$100,000
  - D. \$100,001 - \$200,000
  - E. \$200,001 +

- 
24. Generally speaking, do you consider yourself a Democrat, an Independent, a Republican, or a Tea Party member?
- A. Solid Democrat
  - B. Leaning Democrat
  - C. Independent
  - D. Solid Republican
  - E. Leaning Republican
  - F. Tea Party
  - G. Undecided/Don't know
25. When it comes to political issues, do you generally consider yourself to be a liberal, a moderate or a conservative?
- A. Very Liberal
  - B. Somewhat Liberal
  - C. MODERATE
  - D. Somewhat Conservative
  - E. Very Conservative
  - F. Refuse to answer
26. From the following list, what is the last grade of formal education you have completed?
- A. Less than High School diploma
  - B. High School graduate
  - C. Some College/trade school
  - D. Technical or Vocational School Graduate
  - E. College Graduate
  - F. Graduate degree
  - G. Refuse to answer

27. What is your nationality/heritage?
- A. African American/Black
  - B. White/Caucasian
  - C. Hispanic/Latino
  - D. Arab American/Chaldean
  - E. Asian/Pacific Islander
  - F. Native American
  - G. More than one racial/ethnic identity
  - H. Refuse to answer
28. Are you or is any member of your household a member of a labor union?
- A. No
  - B. Yes, Self
  - C. Yes, Household
  - D. DK/Refused

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## ABBREVIATIONS AND ACRONYMS

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AATA	Ann Arbor Transportation Authority
APTA	American Public Transportation Association
BRT	Bus Rapid Transit
DARTA	Detroit Regional Transportation Authority
DDOT	Detroit Department of Transportation
DPM	Detroit People Mover
DTC	Detroit Transportation Corporation
DTOGS	Detroit Transportation Options for Growth Study
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
IGA	Intergovernmental Agreement
M-1 Rail	Streetcar line along Woodward Avenue in Detroit Michigan
MDOT	Michigan Department of Transportation
MPO	Metropolitan Planning Organization
RTA	Regional Transit Authority
RTCC	Regional Transit Coordinating Council
SEMCOG	Southeast Michigan Council of Governments
SEMTA	Southeastern Michigan Transportation Authority
SMART	Suburban Mobility Authority for Regional Transportation
SPLOST	Special-Purpose Local-Option Sales Tax
TALUS	Transportation and Land Use Study
TRU	Transportation Riders United
US DOT	U.S. Department of Transportation

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### **XIAOHUI ZHONG, PH.D.**

Dr. Xiaohui Zhong is a professor of mathematics of University of Detroit Mercy. Her main research expertise is in applied statistical analysis. During her tenure in UDM, she taught courses in Probability and Statistics for engineering, Mathematical Modeling, Mathematics of Finance, and Mathematical Thinking, with publications in Cost Analysis of Light Rail Transits, Analysis of Public Transit Opinion, Collaborative Recommendation Systems, and Behavior of Distractive Driving in Dilemma Zones. She is also the principal investigator and co-principal investigator of two major National Science Foundation grants.

### **LEO E. HANIFIN, D.E.**

Dr. Leo Hanifin is a professor of mechanical engineering and the leader of research in transit and innovation at the University of Detroit Mercy (UDM). Previously, Dr. Hanifin was the Dean - College of Engineering and Science UDM from 1991-2012. From 2006-2012, he was the director of the Michigan Ohio (MIOH) University Transportation Center, a coalition of five universities supported by the US and Michigan Departments of Transportation. In one MIOH project, he led UDM faculty members from engineering and architecture, who partnered with Deloitte to develop the preliminary plan for the Woodward Transit Catalyst System (now M1 rail). He is a member of the M-1 Rail Board of Directors and the Citizens' Advisory Committee of the Detroit Regional Transit Authority. He recently led of a team of more than 30 faculty members and students engaged in transit research, teaching, and K-12 outreach at UDM, as part of the Mineta National Transit Research Consortium.

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Dr. Slowik is an industrial/organizational (I/O) psychologist and an associate professor at the University of Detroit Mercy. In addition to teaching classes in I/O psychology, she teaches multivariate statistics, developmental psychology, and social psychology. Her research interests include the study of creativity, motivation, and the psychology of the

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## **MEGAN OWENS**

Ms. Owens is executive director of Transportation Riders United, a non-profit organization that works to improve public transit in greater Detroit through education, engagement, and advocacy. As director of TRU, she has been leading on-the-ground transit education programs in the Southeast Michigan region for seven years.

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