2009 Ohio E-Check Customer Satisfaction Survey



Prepared by Voinovich School of Leadership and Public Affairs – Ohio University July 2010



Acknowledgements

Many people contributed to the success of this survey, and we are grateful for their support and assistance. Project staff at Ohio University's Voinovich School of Leadership and Public Affairs included Nicole Yandell, Project Manager; Sara Lichtin Boyd, Senior Research Associate; Holly Craycraft, Research Assistant; Rachel Barnette, Undergraduate Research Associate. At the Ohio Environmental Protection Agency, we wish to thank Heidi Griesmer, Media Relations Manager; Mike Riggleman, Manager, Mobile Sources Section; Dave Alspaugh, E-Check Section Supervisor; and Barbara Walker, Environmental Specialist. At Envirotest Systems Corporation, we are deeply grateful for the assistance provided by Prentiss Taylor, General Manager; Gina Giordano, Customer Service & Public Relations Supervisor; and Jane Pickett, QA & Customer Service Manager.

Table of Contents

Executive Summary	1
Introduction	5
How the Survey Was Conducted	7
Survey Instrument	7
Sample Selection	7
Survey Process	7
Survey Response	8
Survey Results	9
Satisfaction with the E-Check Experience	
Prior Knowledge of Vehicle Maintenance Benefits	12
Awareness of E-Check Information Resources	
Usage of E-Check Information Resources	14
Assistance from Ohio EPA	16
Preparing for the E-Check Test	17
Failing E-Check	18
Recalling the E-Check Experience	19
Understanding E-Check Requirements	23
Opinions Regarding Emissions Testing Options	
Vehicle Emissions and the Environment	28
Demographic Questions	30
Appendix I: 2009 Ohio E-Check Customer Opinion Survey	33
Appendix II: 2009 E-Check Frequency Tables	38

Executive Summary

The 2009 Ohio E-Check Customer Satisfaction Survey was mailed to 1,200 motorists evenly divided among those whose vehicles were tested in Zone 1 and Zone 4. A total of 629 completed surveys were returned for a 52.4 percent response rate (compared to 42 percent in 2008). This year's survey instrument was unchanged from the 2008 survey. Last year, five new questions were added to the survey addressing emissions testing options. Even with these additions, the majority of the survey remains unchanged from prior years, allowing for comparison of past and current results.

Findings from the 2009 survey demonstrate the same high rates of motorist satisfaction as in the previous three surveys and, similar to last year, show evidence of a slight upward trend in many areas. There have been increases in awareness of the E-Check Web site as well as the relationship between vehicle emissions and the environment. In addition, motorists' experiences at the E-Check station were mostly very positive, and customer opinions show continued improvement compared to the previous surveys. Customer approval of Ohio EPA's management of the E-Check program has also increased significantly over the past four years.

In response to the questions addressing motorist interest in alternative emissions testing systems, respondents expressed strong support for the current independent testing system as compared to a system that also allows for testing at authorized automotive repair stations. A majority indicated they would not feel confident of their test results if their vehicles were repaired at the same facility at which the test took place.

There was no significant variation in response to the survey by gender, race, educational level, or income and little variation by age and zone. Important findings are described below.

_

¹ Zone 1 consists of Geauga, Lake, Lorain, Medina, Portage and Summit counties while Cuyahoga County is the entirety of Zone 4. See map on page 6.

Overall Satisfaction with the E-Check Experience

- Overall satisfaction with the E-Check experience remains high. For two
 consecutive years, 94 percent of all respondents answered yes when asked, "Were
 you satisfied with your overall experience when you received your last E-Check
 test?" Similarly, when satisfaction was queried as a scaled question, 93 percent of
 2009 and 2008 respondents agreed or strongly agreed they were satisfied with
 their most recent test experience.
- Compared to those who were dissatisfied with their E-Check experience, satisfied respondents were significantly more likely to understand why their vehicle needed to be tested, to feel the wait time at the station was of acceptable length, and that their test results were explained well. Satisfied respondents were also significantly more likely than dissatisfied respondents to believe that emissions testing can reduce air pollution, to believe that they are helping to reduce air pollution by having their car tested, and to approve of Ohio EPA's management of E-Check.
- Those few respondents indicating dissatisfaction with their overall experience were also more likely to be concerned that their vehicle might be damaged during testing.

Vehicle Maintenance and Repair

- Regarding the three questions on the benefits of regular vehicle maintenance, respondents were least familiar with the impact of regular maintenance on their vehicle's gas mileage.
- In 2009, the average cost of repairs for respondents' vehicles that failed the initial E-Check test was \$261 compared to \$328 in 2006. Median costs were \$300 and \$150, respectively.

Usage of E-Check Information Resources

- The survey appears to show a shift from telephone to internet as the primary
 means by which people obtain information about the E-Check program. More
 respondents are aware of and use the E-Check Web site than the toll-free
 information number.
- The majority of respondents, at least 98 percent each year, have not contacted Ohio EPA for assistance with the program or to discuss their test experience.

Recalling the E-Check Experience

- There has been continued improvement in the already high approval ratings for most aspects of the E-Check experience. In 2009, at least 93 percent of respondents reported the stations were easy to find, the waiting booths were clean, the test results were accurate, and the employees were polite and helpful. At least 84 percent of respondents in 2009 found the wait time at the E-Check station to be acceptable and were not concerned that their vehicle would be damaged during testing.
- Satisfaction rates were not as high for a few aspects of the E-Check testing
 experience, but these continue to show improvement compared to previous years.
 About 74 percent of the 2009 respondents felt their test results were explained
 well, and 32 percent would have liked a better explanation of what happened to
 their vehicle during testing.

Understanding E-Check Requirements

- In 2009, there was a decline in the percentage of respondents that found the E-Check requirements hard to understand.
- This year, 61 percent of respondents reported difficulty understanding why E-Check is not a statewide program, compared to 66 percent in 2008 and approximately 59 percent in 2006 and 2007.

Opinions Regarding Emissions Testing Options

- For the second year in a row, respondents expressed the greatest level of support (67 percent) for the current testing system, while 22 percent expressed interest in a system offering E-Check stations as well as testing at authorized repair stations.
- A minority of respondents, 21 percent, expressed interest in an emissions testing system that provides testing and automotive repair services at the same location, while 20 percent agreed they would be confident in test results if their vehicle was repaired at the same facility where it was tested.

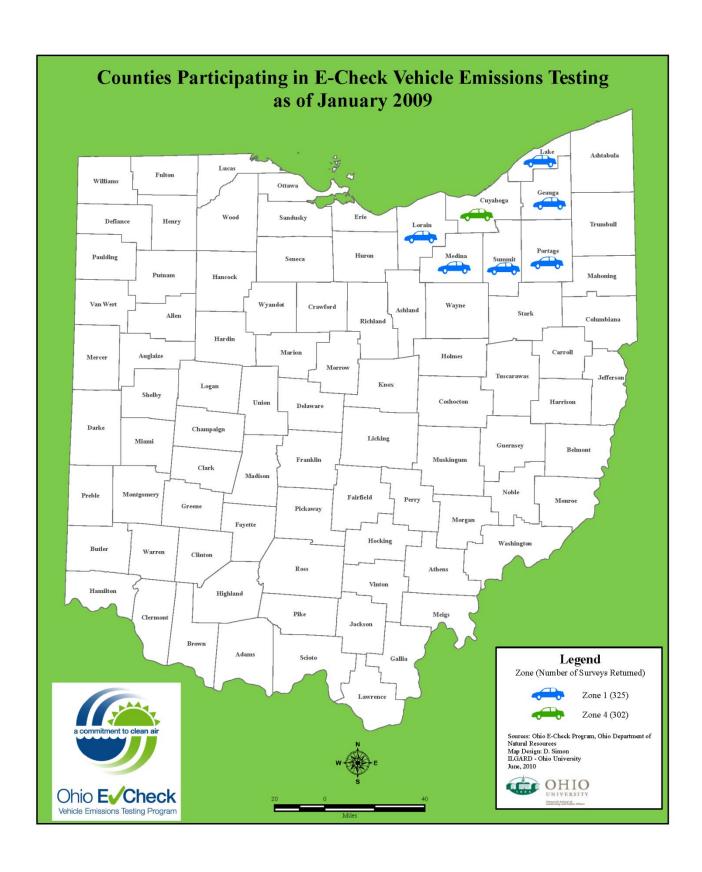
Vehicle Emissions, the Environment, and Ohio EPA

- Significantly more respondents are aware of the relationship between vehicle emissions and the environment. In 2009, 77 percent agreed that vehicle emissions testing helps reduce air pollution, and 71 percent reported they are helping to reduce air pollution by having their car E-Checked, compared to 67 and 61 percent, respectively in 2006.
- More 2009 respondents (48 percent) agreed that motor vehicles create more ozone
 pollution than industry compared to 39 percent in 2006. However, each year
 approximately one-third of all respondents did not answer this question, perhaps
 indicating a lack of knowledge.
- The approval rating for Ohio EPA's management of the E-Check program increased significantly from 68 percent in 2006 to 83 percent in 2009, a change of 15 percentage points.

Introduction

Starting in 2000, motorist satisfaction with the Ohio E-Check program has been evaluated annually by means of independently administered surveys. Until 2005, changes to the survey instrument and the E-Check population prohibited analysis of variations and trends from year to year. Since 2005, however, the survey has shared the same E-Check population and a majority of the questions, making it possible to compare results across time.

This report reviews the results of the current survey and compares results from the last four years when possible. Survey results are illustrated with graphs of the responses to the 2006, 2007, 2008, and 2009 surveys. Statistical testing was conducted between the 2006 and 2009 studies, and these results are reported as well. Also noted in the report are any significant differences in the 2009 survey results due to E-Check zone, reported satisfaction with the E-Check program or demographic variations among respondents. The response rate to the 2009 survey was 52.4 percent, a 10 percentage point increase over the 2008 response rate of 42.1 percent.



How the Survey Was Conducted

Survey Instrument

The 2009 survey was the same as the 2008 Ohio E-Check Customer Satisfaction Survey. For 2008, several changes were made to the survey instrument. These changes included; (1) revisions to the questions on the usage of E-Check information resources; (2) the addition of five questions to gauge customers' opinions on potential changes to the emission testing program; (3) the removal of a question on receiving a wavier; and (4) adjustments to the question order and layout to account for these changes. For the third year, the previously black-and-white form was printed in color to make it more attractive for recipients to complete and return. Minimal changes were made to the letters and postcards that are used in this survey, and the sample size of 600 households per zone is also duplicative of the previous studies. A copy of the survey instrument is provided as Appendix I.

Sample Selection

The sample was selected from among all vehicles tested for emissions between October 15 and December 15, 2009. The Voinovich School was provided with a database of tested vehicles from each of the two zones. Project staff applied a random number generator to this database to ultimately select 600 vehicle owners from each zone to receive the survey. To provide adequate representation of customers who failed the emissions test, care was taken to ensure that 13 percent of the selected vehicles failed their initial emissions test. Also as part of this selection process, vehicles associated with potentially troublesome addresses were removed from the sample, including those that appeared to be fleet vehicles, those owned by businesses, and those for which only a partial or out of state address was provided.

Survey Process

Four mailings were used to maximize response in correspondence with the methodology outlined by Dan Dillman in <u>Mail and Internet Surveys</u>, 2nd <u>Edition</u>. The first of these mailings, an advance postcard explaining the survey and requesting the participation of prospective respondents, took place on February 26, 2010. The survey instrument, cover

letter, and a stamped, return-addressed envelope were mailed on March 3, followed by a thank you/reminder postcard sent out on March 10. On March 25, the fourth and final mailing to non-respondents took place. This fourth mailing included a cover letter, the survey form, and a stamped, return-addressed envelope. The cover letter reiterated the importance of the project and again encouraged prospective respondents to return their survey.

Survey Response

2009 Survey Response Rate

	All Zones		Zone 1		Zone 4	
	N	%	Ν	%	Ν	%
Number surveys returned ¹	629	52.4%	325	54.2%	302	50.3%
Number surveys mailed	1200		600		600	

¹ N for all zones does not equal total for Zone 1 and Zone 4 because two surveys were returned with missing identifiers.

The Voinovich School received 629 completed surveys by May 2010, for a response rate of 52 percent. This response rate is 10 percentage points higher than the 2008 survey. Two surveys were returned with their form number removed, making it impossible to identify the zone from which they originated. The response rate per zone for the remaining surveys was 54 percent from Zone 1, and 50 percent from Zone 4. The response rates for the various E-Check surveys conducted since 2000 have ranged between 41 and 62 percent.²

Comparison of E-Check Survey Response Rates

Table 2: E-Check Survey Response Rates

Year Survey Conducted	Response	N	%
2000	744	1,200	62.0%
2001	659	1,200	54.9%
2003	604	983	61.4%
2004	547	1,200	45.6%
2005 (OBD-II survey)	626	1,200	52.2%
2005	494	1,200	41.2%
2006	575	1,200	47.9%
2007	564	1,200	47.0%
2008	505	1,200	42.1%
2009	629	1,200	52.4%

² 2000 through 2004 response rates obtained from E-Check survey reports prepared by The Ohio State University Center for Survey Research.

2009 Ohio E-Check Customer Satisfaction Survey Voinovich School of Leadership and Public Affairs at Ohio University

Survey Results

This section outlines the responses to the 2009 E-Check Customer Satisfaction Survey. When available, the 2008, 2007, and 2006 survey results are graphically presented alongside this year's results for comparison. This section also includes the results of chi-square³ testing conducted on the disaggregated 2009 survey results, as well as between the 2006 and the 2009 results. Where appropriate, the 2009 results are also reported by:

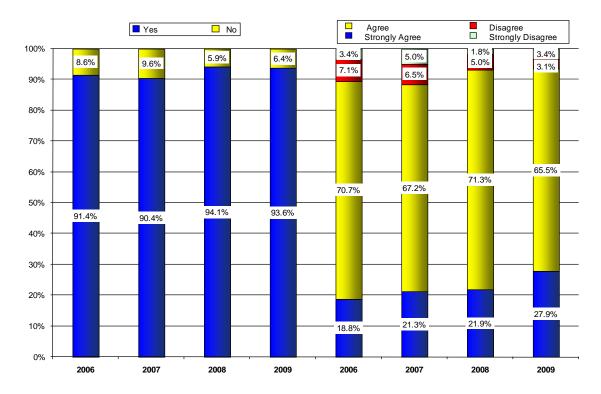
- E-Check zone
- Reported satisfaction with the E-Check test experience (q1 and q23)
- Age, gender, race, household income, and educational level of the survey respondents.

In addition, Appendix II contains frequency distributions for each item on the 2009 survey for all respondents and by E-Check zone. Where appropriate, Appendix II also documents margin of error on the survey results, based on a 95 percent confidence interval.

_

³ A chi-square test is used to determine if two variables are significantly related. Significant cross-tabulations are indicated in the report by the notation (p < .05) where p = probability that a finding of interest was reached by chance.

Satisfaction with the E-Check Experience



Two questions on the survey address overall satisfaction with E-Check.

- The E-Check program continues to maintain a high level of overall satisfaction. In response to question 1, approximately 94 percent of 2009 and 2008 respondents answered "yes," they were satisfied with their most recent E-Check test.
- In response to question 23, the percentage of the sample that agreed or strongly
 agreed that they were satisfied with their test experience was 93 percent in 2009
 and 2008.

Satisfaction with Overall Experience by County of Residence

	Yes	No
Cuyahoga	95.0%	5.0%
Geauga	90.0%	10.0%
Lake	90.9%	9.1%
Lorain	95.5%	4.5%
Medina	97.6%	2.4%
Portage	84.4%	15.6%
Summit	94.1%	5.9%

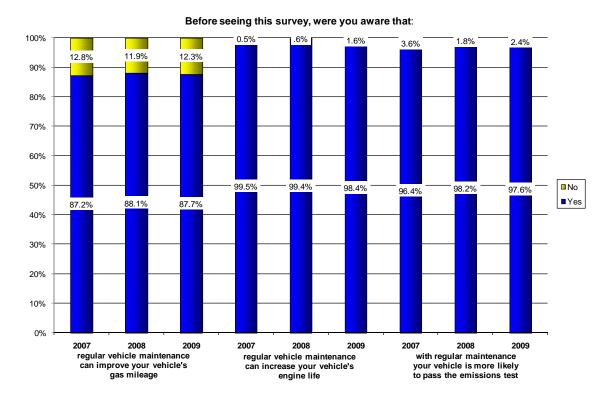
Satisfaction varies from 84.4 percent to 97.6 percent across the counties
participating in the E-Check program. The highest levels of respondent
satisfaction are from Medina County, and the lowest levels are from Portage
County.

Satisfaction with Overall Experience by E-Check Station

Station	Yes	No	Total
1	40	2	42
2	34	0	34
3	47	2	49
4	24	2	26
5	16	0	16
6	44	3	47
7	12	11	13
8	32	2	34
10	31	4	35
11	25	0	25
12	20	4	24
13	19	2	21
14	7	1	8
15	14	3	17
16	16	0	16
17	27	0	27
18	24	0	24
19	36	6	42
20	31	2	33
21	25	1	26
22	7	0	7
23	19	1	20
24	24	1	25

- Customers from each of the 23 E-Check stations participated in the survey.
- There is little variation in satisfaction level by the station where the respondent's vehicle was tested.
- Only one station (Station 19) had more than four respondents reporting they were not satisfied with their most recent test experience.

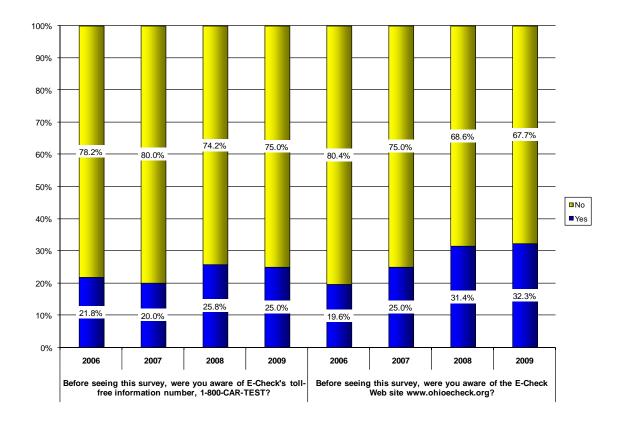
Prior Knowledge of Vehicle Maintenance Benefits



Starting in 2007, the E-Check Customer Opinion Survey examined respondents' understanding of the potential benefits of regular vehicle maintenance to the vehicle and the environment.

- When respondents were asked about the impact of regular vehicle maintenance on gas mileage, approximately 12 percent were unaware that regular maintenance could improve a vehicle's gas mileage by as much as 10 percent.
- Almost two percent of respondents were unaware that regular maintenance can increase their vehicle's engine life.
- Approximately 98 percent of respondents knew that, with regular maintenance, their vehicle is more likely to pass the emissions test.

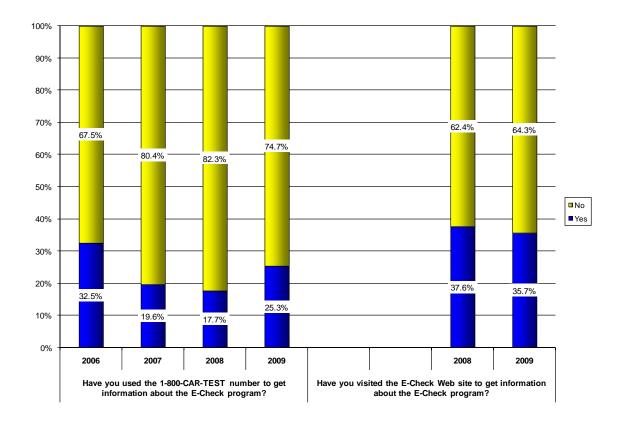
Awareness of E-Check Information Resources



The following survey findings relate to respondents' knowledge of the various sources of information on E-Check.

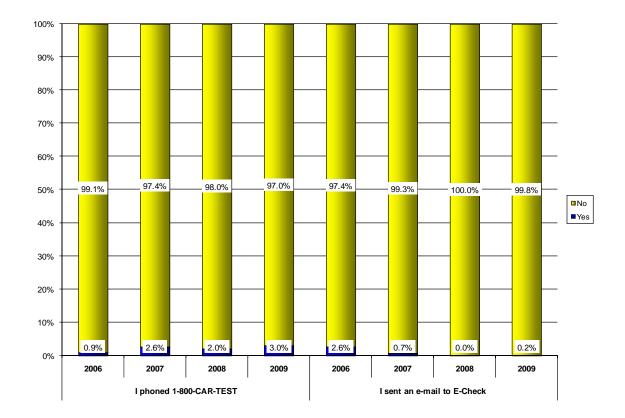
- For the second year in a row, approximately a quarter of respondents reported they were aware of E-Check's toll-free information number.
- Respondents' awareness of the E-Check Web site has increased each year. In 2009, 32.3 percent of respondents reported they were aware of the Web site. This represents an almost 13 percentage point increase from 2006 (p < .05).
- More respondents aged 59 or less than those aged 60 and older were aware of E-Check's Web site (p < .05).

Usage of E-Check Information Resources



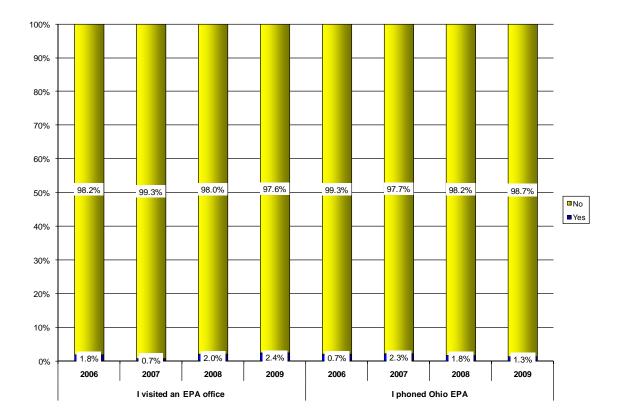
A question was added to the 2008 E-Check Customer Opinion Survey to gauge respondents' usage of the E-Check Web site as an information resource.

- Among the respondents to the 2009 survey who knew about 1-800-CAR-TEST,
 25.3 percent used this resource to get information about the E-Check program.
- Of the respondents who were aware of www.ohioecheck.org, almost 36 percent have visited the Web site to get information about the E-Check program.
- Approximately 99 percent of respondents who visited the E-Check Web site found the information helpful.
- Proportionally, more respondents aged 59 or less than those aged 60 and older reported visiting the E-Check Web site to get information about the E-Check program (p < .05).



- Each year, three percent or fewer of the respondents who were aware of the E-Check toll-free number called it to discuss their most recent test experience.
- In 2009, three of the 16 respondents who reported calling 1-800-CAR-TEST did not find it helpful.
- In 2009, one respondent reported sending an e-mail to E-Check regarding their test experience or for assistance with the program. This individual did not indicate whether or not it was helpful.

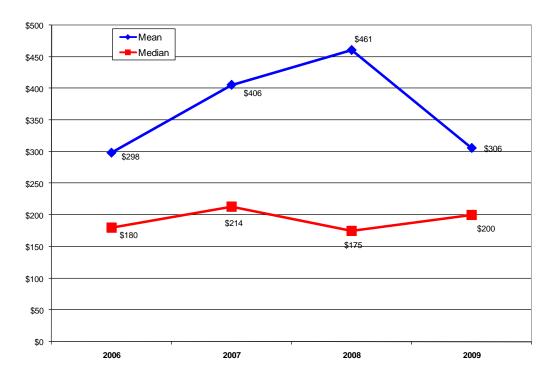
Assistance from Ohio EPA



- Most respondents did not visit an Ohio EPA office or phone Ohio EPA for assistance with the E-Check program or to discuss their test experience.
- Each year, approximately two percent of respondents report visiting an EPA office or calling Ohio EPA regarding the E-Check program.
- In 2009, 13 respondents reported visiting an Ohio EPA office. Of the respondents that visited an Ohio EPA office for assistance, nine reported that it was helpful and four did not answer this follow-up question.
- Of the seven respondents who reported calling Ohio EPA regarding the E-Check program, three indicated that the call was helpful, one reported it was not helpful, and three did not answer the follow-up question.

Preparing for the E-Check Test





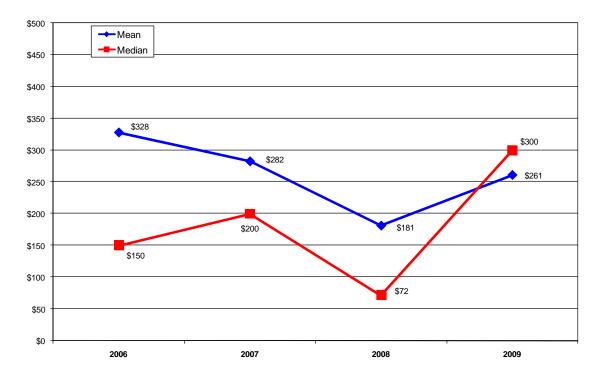
- Approximately 11 percent of 2009 respondents reported taking their car in for repairs prior to having their car tested, an increase from the seven percent of respondents in 2006 (p < .05).
- In 2009, the mean (average) amount spent in anticipation of E-Check testing was \$306, and the median⁴ amount was \$200.

-

⁴ Median: Of all reported repair amounts, the middle one from the highest and the lowest values.

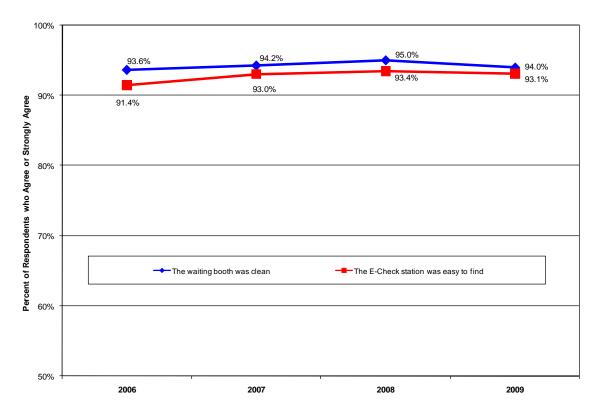
Failing E-Check

How much did you spend on repairs for the retest?

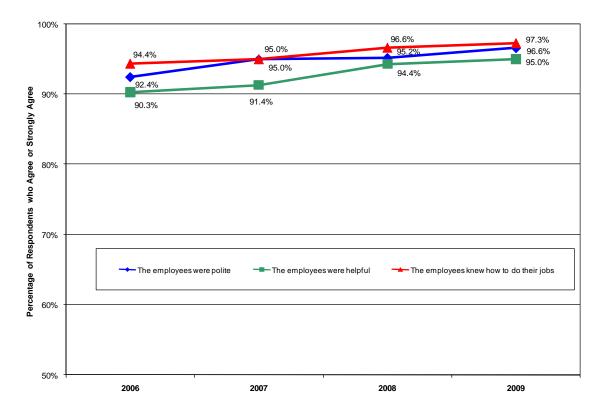


- In 2009, approximately eight percent of respondents reported that their vehicle failed the E-Check test.
- Among those whose vehicles failed the test, the mean (average) amount spent on repairs was \$261, and the median amount was \$300.

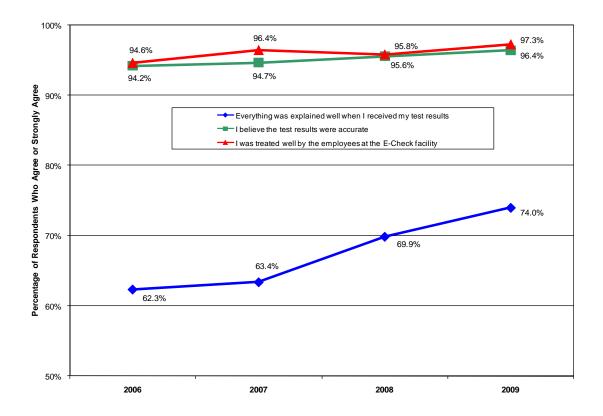
Recalling the E-Check Experience



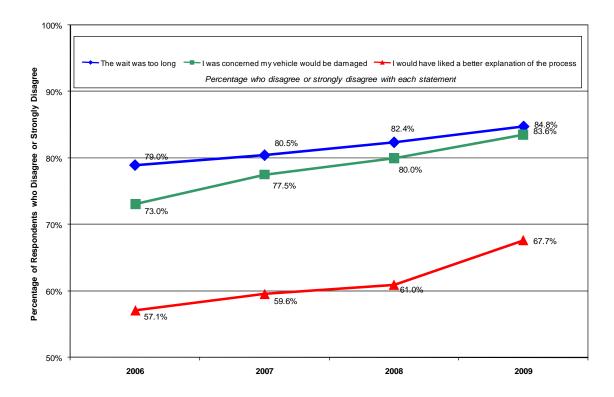
- In 2009, 94 percent of respondents either agreed or strongly agreed that the waiting booth was clean. The percentage of respondents reporting that the waiting room was clean has been consistently high across the four-year period.
- The percentage of respondents that agreed the E-Check station was easy to find increased from approximately 91 percent in 2006 to 93 percent in 2009.



- The survey respondents continue to be satisfied with the E-Check employees.
- In 2009, approximately 97 percent agreed or strongly agreed that E-Check employees were polite compared to 92 percent in 2006 (p < .05).
- The percentage of respondents that strongly agreed or agreed that the E-Check employees were helpful increased from 90 percent in 2006 to 95 percent in 2009 (p < .05).
- For the second consecutive year, 97 percent either agreed or strongly agreed that E-Check employees knew how to do their jobs.



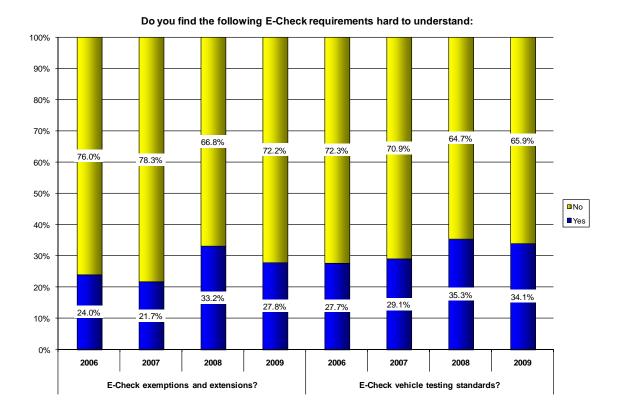
- The percentage of respondents that either agreed or strongly agreed that everything was explained well when they received their test results increased 12 percentage points from 62 percent in 2006 to 74 percent in 2009 (p < .05).
- Proportionally, more respondents who agreed everything was explained well when they received their results were satisfied with their E-Check experience than those who disagreed (p < .05).
- Approximately 96 percent of 2009 respondents affirmed their belief that the E-Check test results were accurate.
- Over 97 percent of respondents agreed or strongly agreed they were treated well by E-Check facility employees.



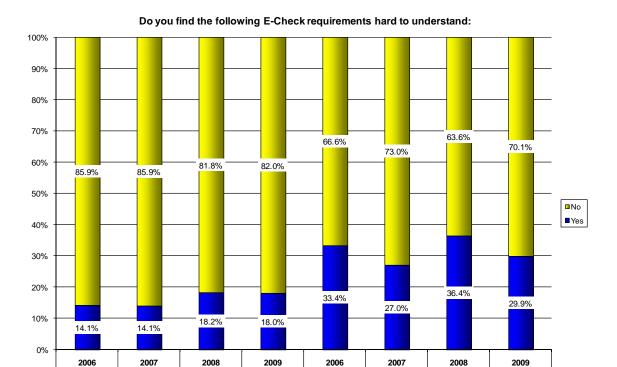
This chart shows the percentage of respondents who disagreed or strongly disagreed with the three survey items designed to capture customer criticism of the E-Check process.

- Over the past four survey years, E-Check showed steady improvement in customer opinions regarding wait times (p < .05), explanation of the testing process (p < .05), and concern over vehicle damage (p < .05).
- In 2009, approximately 85 percent of respondents did not feel their wait time at the E-Check facility was too long.
- Proportionally, more respondents who reported the wait time at the E-Check facility was reasonable were satisfied than those who reported the wait time was too long (p < .05).
- Approximately 16 percent of all respondents in 2009 were concerned their vehicles would be damaged during the E-Check process.
- Respondents that were concerned their vehicle would be damaged were more likely to be dissatisfied with their E-Check experience than those that were unconcerned (p < .05).
- Approximately one-third of 2009 respondents would have liked a better explanation of what was happening to their vehicle during testing.

Understanding E-Check Requirements



- In 2009, 27.8 percent of respondents categorized E-Check exemptions and extensions as hard to understand.
- The percentage of respondents reporting difficulty understanding E-Check vehicle testing standards (technical thresholds that determine pass or fail) increased from 27.7 percent in 2006 to 34.1 percent in 2009 (p < .05).



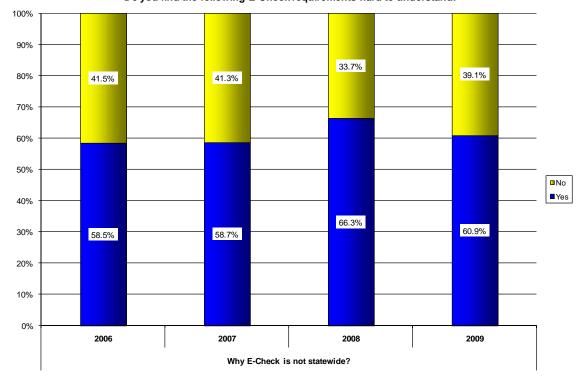
• In 2009, 18 percent of survey respondents reported it was difficult to understand E-Check requirements regarding when their vehicle needs to be tested.

Why my vehicle needs testing?

When my vehicle needs testing?

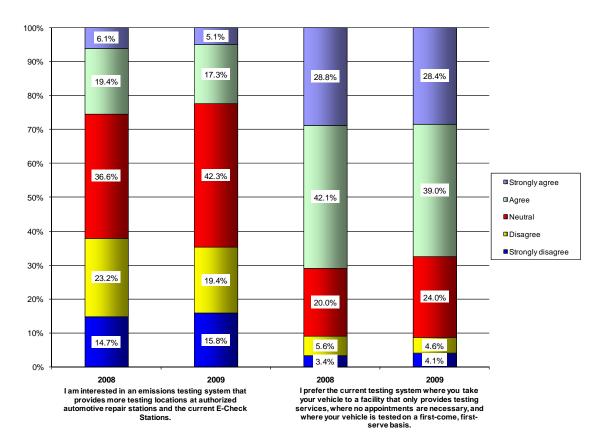
- Almost 30 percent of respondents reported they find it hard to understand why their vehicle needs to be tested.
- Proportionally, more satisfied respondents reported understanding the need to have their vehicle tested than dissatisfied respondents (p < .05).

Do you find the following E-Check requirements hard to understand:



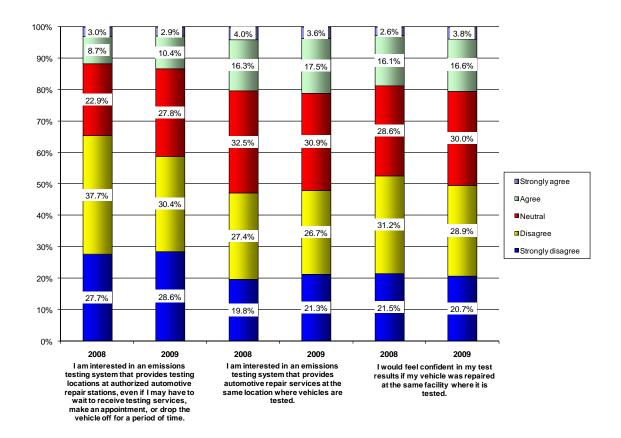
 Approximately 61 percent of the 2009 respondents affirmed that it is hard to understand why E-Check testing is not a required statewide program, compared to almost 59 percent in 2006 and 2007.

Opinions Regarding Emissions Testing Options



In 2008, new questions were added to the E-Check Customer Opinion Survey to examine respondents' preferences for potential changes to the emissions testing program.

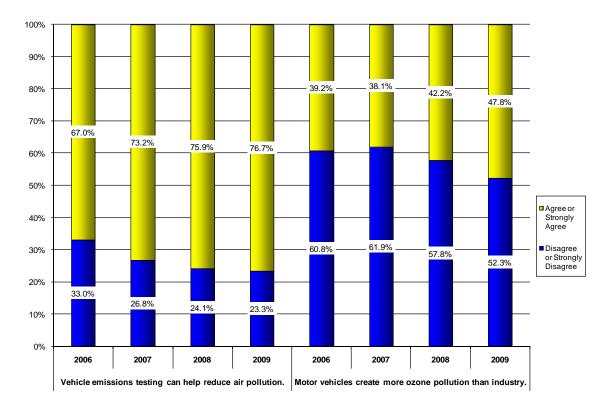
- When asked if they were interested in an emissions testing system that provides more testing locations at authorized automotive repair stations and the current E-Check Stations, approximately 35.3 percent disagreed or strongly disagreed, another 42.3 percent had no opinion and only 22.4 percent agreed or strongly agreed with this option.
- Approximately 67.4 percent of 2009 respondents expressed support for the current testing system while nine percent disagreed or strongly disagreed.



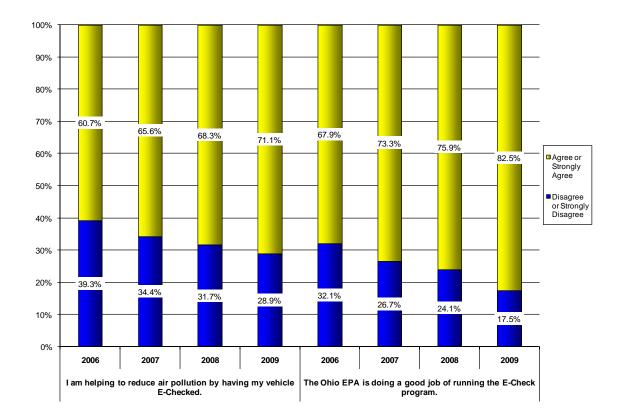
Respondents were also asked about various features of emissions testing at authorized automotive repair stations.

- For the second year in a row, respondents expressed the greatest level of
 disagreement with testing at authorized automotive repair stations that would
 require waiting to receive testing, making an appointment, or dropping off their
 vehicle for a period of time. Approximately 59 percent of respondents disagreed
 or strongly disagreed with this option while 13.3 percent expressed agreement.
- While 21.1 percent of respondents agreed or strongly agreed that they would be
 interested in an emissions testing system that provides automotive repair services
 at the same location where vehicles are tested, 48 percent expressed disagreement.
- Almost half of 2009 respondents disagreed or strongly disagreed that they would be confident in their test results if their vehicle was repaired at the same facility where it was tested, while 20.4 percent agreed or strongly agreed they would be confident in their test results under these circumstances.

Vehicle Emissions and the Environment



- Proportionally, more 2009 respondents (77 percent) agreed that vehicle emissions testing can help reduce air pollution compared to the 67 percent agreement rate in $2006 \ (p < .05)$.
- Respondents who agreed vehicle emissions testing can help reduce air pollution were more likely to report being satisfied with their E-Check experience than those who disagreed (p < .05).
- More Zone 4 respondents agreed vehicle emissions testing can help reduce air pollution than respondents from Zone 1 (p < .05).
- More 2009 respondents (48 percent) agreed that motor vehicles create more ozone pollution than industry compared to 39 percent of respondents in 2006 (p < .05).
- Each year, approximately a third of respondents marked "don't know" or left blank the question regarding motor vehicles and industry pollution, perhaps indicating a lack of knowledge. This question had the lowest response of any question on the survey.



- Significantly more 2009 respondents (71 percent) agreed they are helping to reduce air pollution by participating in the E-Check program compared to 61 percent in the 2006 survey (p < .05).
- Proportionally more Zone 4 respondents agreed they are helping to reduce air pollution by having their vehicle tested than those from Zone 1 (p < .05).
- Respondents who agreed they are helping to reduce air pollution by having their vehicle
 E-Checked were also more likely to report being satisfied with their E-Check experience
 than respondents who disagreed (p < .05).
- Also this year, approximately 83 percent of respondents agreed that Ohio EPA is doing a
 good job of running the E-Check program, a 15 percentage point increase from the 68
 percent agreement rate in 2006 (p < .05).
- Proportionally, more respondents who agreed that Ohio EPA is doing a good job of running the E-Check program also reported satisfaction with their overall test experience than those who disagreed (p < .05).

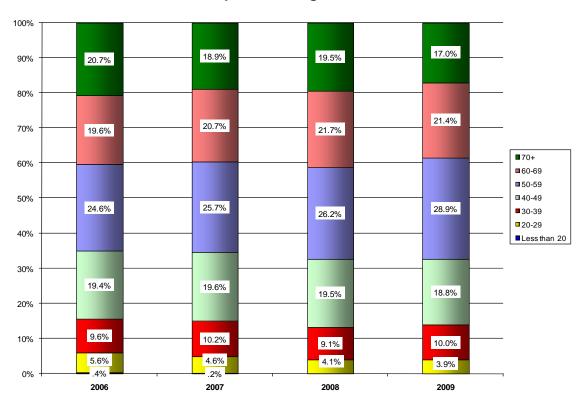
Demographic Questions

Respondent's Gender

	Male	Female
2006	51.5%	48.5%
2007	58.1%	41.9%
2008	58.0%	42.0%
2009	59.5%	40.5%

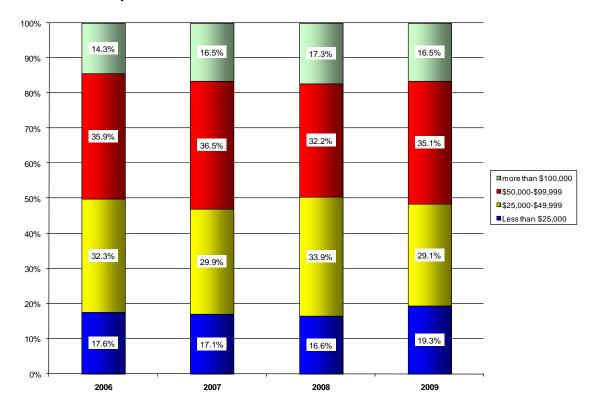
 Each year, more males than females participate in the E-Check Customer Satisfaction Survey.

Respondent's Age



- In 2008 and 2009, none of the survey participants indicated they were less than 20 years old.
- Approximately half of the respondents reported their age as between 50 and 69 years old.

Respondent's Total Annual Household Income



- Each year, approximately half of respondents have incomes of \$50,000 or more.
- No significant differences were found among the responses provided by specific income categories when cross-tabulated with other survey questions.

Respondent's Race or Ethnicity

	White	African - American	Asian - American	American Indian	Latin American (Hispanic)	Other
2006	90.9%	5.7%	0.8%	0.4%	1.5%	0.8%
2007	88.1%	7.2%	1.3%	0.2%	1.3%	1.9%
2008	87.8%	9.1%	1.1%	0.8%	1.7%	0.6%
2009	84.7%	10.3%	2.2%	0.7%	1.9%	1.0%

^{*} For 2008 and 2009, sum does not equal 100 percent because respondents were allowed to select all that apply.

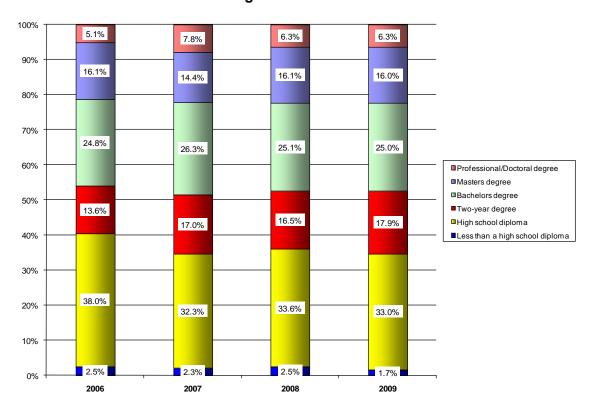
• Each year, the majority of respondents indicate their race or ethnicity as white.

Individual that took the vehicle to the E-Check station

	The vehicle owner	A relative of the vehicle owner	A friend of the vehicle owner	Other
2006	93.3%	5.2%	0.0%	1.5%
2007	94.4%	5.1%	0.2%	0.4%
2008	94.5%	5.3%	0.2%	0.0%
2009	95.2%	4.4%	0.3%	0.0%

• The vast majority of respondents take their own car to the E-Check station.

Household's Highest Level of Education



- Each year, all educational levels were represented in the survey.
- There were no significant trends in response to the various survey questions when cross-tabulated against the educational level of the survey respondents.

Appendix I: 2009 Ohio E-Check Customer Opinion Survey							

Ohio E-Check 2009 Customer Opinion Survey



Were you satisfied with your overall experience when you received your last E-Check test?	O Yes	O No
Before seeing this survey		
2. Were you aware that regular vehicle maintenance such as replacing air filters can improve your vehicle's gas mileage by as much as 10 percent and can save up to 26 cents per gallon?	O Yes	O No
3. Were you aware that regular vehicle maintenance can increase your vehicle's engine life?	O Yes	O No
Were you aware that with regular maintenance your vehicle is more likely to pass the emissions test?	O Yes	O No
5. Were you aware of E-Check's toll-free information number, 1-800-CAR-TEST?	O Yes	O No

Mark answers like this:

Not like this: ⋈ ⋖

Please turn over for more questions

6. Have you used the 1-800-CAR-TEST number to get information about the E-Check

7. Were you aware of the E-Check Web site, www.ohioecheck.org?

program?

Instructions for completing survey:

O No

O No

O Yes

O Yes

Before seeing this survey									
Have you visited the E-Check Web site to get information about If yes, was the information helpful?	ut the E-Checl	k program?		es O No					
9. Did you contact any of these resources regarding your most recent test experience, or for assistance with E-Check? I phoned 1-800-CAR-TEST									
10. Before having the initial E-Check test, did you have any repairs			le? OY	es O No					
If yes, how much did you spend on emissions-related repa	irs before the	initial test?	*		.00				
11. Did your vehicle fail the initial E-Check test?				es O No	00				
If yes, how much did you spend on emissions-related repa	irs for the rete	est?	\$.00				
For each of the following statements please think ab	out your m	ost recent	E-Chec	k experie	nce:				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Don't Know				
12. The length of wait at the E-Check facility was too long.	0	0	0	0	0				
13. The waiting booth was clean.	0	0	0	0	0				
14. The E-Check employees were polite.	0	0	0	0	0				
15. The E-Check employees were helpful.	0	0	0	0	0				
16. The E-Check employees knew how to do their jobs.	0	0	0	0	0				
 I was concerned my vehicle would be damaged during the E-Check process. 	0	0	0	0	0				
18. I would have liked a better explanation of what was happening my vehicle during the testing.	to o	0	0	0	0				
19. Everything was explained well when I received my test results.	0	0	0	0	0				
20. I believe the test results were accurate.	0	0	0	0	0				
21. I was treated well by the employees at the E-Check facility.	0	0	0	0	0				
22. The E-Check station was easy to find.	0	0	0	0	0				
23. I was satisfied with my overall test experience.	0	0	0	0	0				

Please continue on next page

Do you find the following E-Check requirements hard to	understa	nd			
24. E-Check exemptions and extensions?			O Yes	O No	
25. E-Check vehicle testing standards (technical thresholds that	determine p	oass/fail)?	O Yes	O No	
26. When my vehicle needs testing?			O Yes	O No	
27. Why my vehicle needs testing?			O Yes	O No	
28. Why E-Check testing is not statewide?			O Yes	O No	
Comment Section: Please tell us which questions previ	_		ng to:		
Question#					
In some states, motorists can choose to have their emi as E-Check that exclusively conduct emissions testing. Please give us your opinions regarding these testing op	or at aut tions.	•	•		stations.
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
29. I am interested in an emissions testing system that provides more testing locations at authorized automotive repair stations and the current E-Check Stations.	0	0	0	0	0
30. I am interested in an emissions testing system that provides testing locations at authorized automotive repair stations, even if I may have to wait to receive testing services, make an appointment, or drop the vehicle off for a period of time.	0	0	0	0	0
31. I am interested in an emissions testing system that provides automotive repair services at the same location where vehicles are tested.	0	0	0	0	0
32. I would feel confident in my test results if my vehicle was repaired at the same facility where it is tested.	0	0	0	0	0

33. I prefer the current testing system where you take your vehicle to a facility that only provides testing services, where no appointments are necessary, and where your vehicle is tested on a first-come, first-serve basis.	•	•	•	•	0
Please turn over for i	nore ques	tions		4800	0389709

4896389704

For each of the following statements, please fill in the circle that best describes your opinion:

	Strongly Disagree	Disagree	Agree	Strongly Agree	Don't Know
34. Vehicle emissions testing can help reduce air pollution.	0	0	0	0	0
35. Motor vehicles create more ozone pollution than industry	0	0	0	0	0
36. I am helping to reduce air pollution by having my vehicle E-Checked.	0	0	0	0	0
37. The Ohio EPA is doing a good job of running the E-Check program.	0	0	0	0	0

Please answer some questions so we can compare your answers to those of others.

38. Your gender:	O Male	Female					
39. Your age:	O Less than 20 O 20-29	O 30-39 O 40-49	○ 50-59 ○ 60-69	O 70+			
40. Your total annual household income:	O Less than \$25,000 ○ \$25,000-\$49,999		-\$99,999 an \$100,000				
41. Your race (mark all that apply):	O White O African - American			American (Hispanic)			
42. Are you	O The vehicle owner O A friend of the vehicle owner O Other						
43. The adult in your home with the highest education has:	O Less than a high s O High school diplon O Two-year degree	na	O Bachelors do O Masters deg O Professiona				
Comment Section: Please tell us which	questions you are	referring to:					
Question#							
Outstan #							

Thank you for participating in the E-Check Customer Opinion Survey!

Please return your completed survey within two weeks in the stamped addressed envelope to: Ohio University-Voinovich School, Building 22-The Ridges, Athens, Ohio 45701

Appendix II: 2009 E-0	Check Frequen	cy Tables	

2009 E-Check Survey Frequency Tables

1. Were you satisfied with your overall experience when you received your last E-Check test?

All Zones			Zone 1		Zone 4		
	N	%	ME*	N	%	N	%
Yes	574	93.6%	1.9%	294	93.3%	280	94.6%
No	39	6.4%	1.9%	21	6.7%	16	5.4%
Total	613	100.0%		315	100.0%	296	100.0%

Before seeing this survey . . .

2. Were you aware that regular vehicle maintenance such as replacing air filters can improve your vehicle's gas mileage by as much as 10 percent and can save up to 26 cents per gallon?

	All Zones			Zo	ne 1	Zone 4	
	N	%	ME	Ν	%	Ν	%
Yes	550	87.7%	2.6%	295	91.3%	253	83.8%
No	77	12.3%	2.6%	28	8.7%	49	16.2%
Total	627	100.0%		323	100.0%	302	100.0%

3. Were you aware that regular vehicle maintenance can increase your vehicle's engine life?

	All Zones			Zone 1		Zone 4	
	N	%	ME	Ν	%	N	%
Yes	614	98.4%	1.0%	316	98.1%	296	98.7%
No	10	1.6%	1.0%	6	1.9%	4	1.3%
Total	624	100.0%		322	100.0%	300	100.0%

4. Were you aware that with regular vehicle maintenance your vehicle is more likely to pass the emissions test?

All Zones				Zone 1		Zone 4	
	N	%	ME	Ν	%	Ν	%
Yes	600	97.6%	1.2%	304	96.8%	294	98.3%
No	15	2.4%	1.2%	10	3.2%	5	1.7%
Total	615	100.0%		314	100.0%	299	99.0%

5. Were you aware of E-Check's toll-free information number, 1-800-CAR-TEST?

	All Zones			Zone 1		Zone 4	
	Ν	%	ME	Ν	%	Ν	%
Yes	156	25.0%	3.4%	75	23.4%	79	26.3%
No	467	75.0%	3.4%	246	76.6%	221	73.7%
Total	623	100.0%		321	100.0%	300	100.0%

6. Have you used the 1-800-CAR-TEST number to get information about the E-Check program?

	All Zones				Zone 1		one 4
	N	%	ME	N	%	N	%
Yes	39	25.3%	6.9%	15	20.0%	23	29.9%
No	115	74.7%	6.9%	60	80.0%	54	70.1%
Total	154	100.0%		75	100.0%	77	100.0%

7. Were you aware of the E-Check Web site www.ohioecheck.org?

	All Zones			Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Yes	201	32.3%	3.7%	100	31.3%	99	32.8%
No	422	67.7%	3.7%	219	68.7%	203	67.2%
Total	623	100.0%		319	100.0%	302	100.0%

^{*}ME=margin of error

8. Have you visited the E-Check Web site to get information about the E-Check program?

All Zones				Zone 1		Zone 4	
	Ν	%	ME	N	%	N	%
Yes	71	35.7%	6.7%	35	35.4%	36	36.7%
No	128	64.3%	6.7%	64	64.6%	62	63.3%
Total	199	100.0%		99	100.0%	98	100.0%

If yes, was the information helpful?

	All Zones			Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Yes	70	100.0%	0.0%	34	100.0%	36	100.0%
No	0	0.0%	0.0%	0	0.0%	0	0.0%
Total	70	100.0%		34	100.0%	36	100.0%

9. Did you contact any of these resources regarding your most recent test experience, or for assistance with E-Check?

I phoned 1-800-CAR-TEST

	All Zones			Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Yes	16	3.0%	1.4%	5	1.8%	11	4.3%
No	525	97.0%	1.4%	276	98.2%	247	95.7%
Total	541	100.0%		281	100.0%	258	100.0%

If yes, was it helpful?

All Zones				Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Yes	12	80.0%	20.2%	4	80.0%	8	80.0%
No	3	20.0%	20.2%	1	20.0%	2	20.0%
Total	15	100.0%		5	100.0%	10	100.0%

I visited an EPA office

	All Zones			Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Yes	13	2.4%	1.3%	6	2.1%	7	2.7%
No	529	97.6%	1.3%	275	97.9%	252	97.3%
Total	542	100.0%		281	100.0%	259	100.0%

If yes, was it helpful?

All Zones					Zone 1		one 4
	N	%	ME	N	%	N	%
Yes	9	100.0%	0.0%	4	100.0%	5	100.0%
No	0	0.0%	0.0%	0	0.0%	0	0.0%
Total	9	100.0%		4	100.0%	5	100.0%

I phoned Ohio EPA

All Zones				Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Yes	7	1.3%	1.0%	3	1.1%	4	1.6%
No	533	98.7%	1.0%	277	98.9%	254	98.4%
Total	540	100.0%		280	100.0%	258	100.0%

If yes, was it helpful?

All Zones					Zone 1		one 4
	N	%	ME	N	%	N	%
Yes	3	75.0%	42.4%	3	100.0%	0	0.0%
No	1	25.0%	42.4%	0	0.0%	1	100.0%
Total	4	100.0%		3	100.0%	1	100.0%

I sent an e-mail to E-Check

	All Zones			Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Yes	1	0.2%	0.4%	0	0.0%	1	0.4%
No	536	99.8%	0.4%	278	100.0%	256	99.6%
Total	537	100.0%		278	100.0%	257	100.0%

If yes, was it helpful?

		All Zones		Zone 1		Zone 4	
	N % ME			Ν	%	N	%
Yes	0	0.0%	0.0%	0	0.0%	0	0.0%
No	0	0.0%	0.0%	0	0.0%	0	0.0%
Total	0	0.0%		0	0.0%	0	0.0%

10. Before having the initial E-Check test, did you have any repairs performed on your vehicle?

All Zones					Zone 1		ne 4
	N % ME			N	%	N	%
Yes	70	11.4%	2.5%	31	9.9%	39	13.1%
No	543	88.6%	2.5%	283	90.1%	258	86.9%
Total	613	100.0%		314	100.0%	297	100.0%

10a. If yes, how much did you spend on the repairs before the initial test?

	All Zon	es es	Zone 1	Zone 4
	N		N	Ν
Maximum	\$1,500	-	\$1,500	\$1,200
Minimum	\$15		\$15	\$20
Mean (average)	\$306		\$334	\$281
Median	\$200		\$200	\$200

11. Did your vehicle fail the initial E-Check test?

All Zones					Zone 1		Zone 4	
	N	N % ME		N	%	N	%	
Yes	50	8.1%	2.1%	25	7.9%	25	8.4%	
No	567	91.9%	2.1%	291	92.1%	274	91.6%	
Total	617	100.0%		316	100.0%	299	100.0%	

11a. If yes, how much did you spend on the repairs for the retest?

		All Zones		Zone 1	Zone 4
	N		N	N	
Maximum	\$600			\$500	\$600
Minimum	\$18			\$50	\$18
Mean (average)	\$261			\$292	\$230
Median	\$300			\$314	\$225

For statements 12-23, please think about your most recent E-Check experience:

12. The length of wait at the E-Check facility was too long.

		All Zones		Zone 1		Zone 4	
	N	N % ME N		Ν	%	N	%
Strongly Agree	22	3.6%	1.4%	10	3.1%	10	3.4%
Agree	72	11.7%	2.5%	41	12.8%	31	10.5%
Disagree	338	54.8%	3.9%	170	53.1%	168	56.9%
Strongly disagree	185	30.0%	3.6%	99	30.9%	86	29.2%
Total	617	100.0%		320	100.0%	295	100.0%

13. The waiting booth was clean.

		All Zones		Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Strongly Agree	166	27.1%	3.5%	97	30.4%	69	23.6%
Agree	410	66.9%	3.5%	209	65.5%	199	68.2%
Disagree	27	4.4%	1.6%	11	3.4%	16	5.5%
Strongly disagree	10	1.6%	1.0%	2	0.6%	8	2.7%
Total	613	100.0%		319	100.0%	292	100.0%

14. The E-Check employees were polite.

		All Zones		Zone 1		Zone 4	
	N	N % ME N		Ν	%	N	%
Strongly Agree	227	36.7%	3.8%	124	38.9%	103	34.6%
Agree	371	59.9%	3.8%	185	58.0%	184	61.7%
Disagree	13	2.1%	1.1%	5	1.6%	8	2.7%
Strongly disagree	8	1.3%	0.9%	5	1.6%	3	1.0%
Total	619	100.0%		319	100.0%	298	100.0%

15. The E-Check employees were helpful.

		All Zones		Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Strongly Agree	181	29.9%	3.5%	99	31.7%	82	28.1%
Agree	395	65.2%	3.8%	195	62.5%	198	67.8%
Disagree	21	3.5%	1.4%	12	3.8%	9	3.1%
Strongly disagree	9	1.5%	0.9%	6	1.9%	3	1.0%
Total	606	100.0%		312	100.0%	292	100.0%

16. The E-Check employees knew how to do their job.

To. The E officer of proyect refer from the do their job.										
	All Zones				Zone 1		Zone 4			
	N	%	ME	N	%	N	%			
Strongly Agree	207	35.3%	3.7%	106	35.1%	101	35.7%			
Agree	363	61.9%	3.9%	186	61.6%	176	62.2%			
Disagree	8	1.4%	0.9%	4	1.3%	4	1.4%			
Strongly disagree	8	1.4%	0.9%	6	2.0%	2	0.7%			
Total	586	100.0%		302	100.0%	283	100.0%			

17. I was concerned my vehicle would be damaged during the E-Check process.

		All Zones		Zone 1		Zone 4	
	N	N % ME N		N	%	N	%
Strongly Agree	38	6.3%	1.9%	24	7.8%	12	4.1%
Agree	61	10.1%	2.3%	32	10.4%	29	10.0%
Disagree	335	55.6%	3.9%	164	53.1%	171	58.8%
Strongly disagree	168	27.9%	3.5%	89	28.8%	79	27.1%
Total	602	100.0%		309	100.0%	291	100.0%

18. I would have liked a better explanation of what was happening to my vehicle during the testing.

	· ·						
		All Zones		Zone 1		Zone 4	
	N	N % ME N		N	%	N	%
Strongly Agree	43	7.2%	2.0%	24	7.8%	19	6.6%
Agree	151	25.2%	3.4%	70	22.7%	81	28.0%
Disagree	330	55.0%	3.9%	173	56.0%	156	54.0%
Strongly disagree	76	12.7%	2.6%	42	13.6%	33	11.4%
Total	600	100.0%		309	100.0%	289	100.0%

19. Everything was explained well when I received my test results.

All Zones				Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Strongly Agree	82	13.5%	2.6%	48	15.4%	34	11.6%
Agree	368	60.5%	3.9%	183	58.7%	184	62.6%
Disagree	135	22.2%	3.2%	68	21.8%	67	22.8%
Strongly disagree	23	3.8%	1.5%	13	4.2%	9	3.1%
Total	608	100.0%		312	100.0%	294	100.0%

20. I believe the test results were accurate.

All Zones					Zone 1		ne 4
	N	%	ME	N	%	N	%
Strongly Agree	141	25.2%	3.3%	68	23.7%	73	26.9%
Agree	398	71.2%	3.8%	205	71.4%	192	70.8%
Disagree	11	2.0%	1.0%	7	2.4%	4	1.5%
Strongly disagree	9	1.6%	0.9%	7	2.4%	2	0.7%
Total	559	100.0%		287	100.0%	271	100.0%

21. I was treated well by the employees at the E-Check facility.

		All Zones		Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Strongly Agree	207	33.3%	3.7%	109	33.9%	98	32.9%
Agree	398	64.0%	3.8%	203	63.0%	193	64.8%
Disagree	10	1.6%	1.0%	6	1.9%	4	1.3%
Strongly disagree	7	1.1%	0.8%	4	1.2%	3	1.0%
Total	622	100.0%		322	100.0%	298	100.0%

22. The E-Check station was easy to find.

	All Zones			Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Strongly Agree	194	31.2%	3.6%	105	32.7%	89	29.8%
Agree	385	61.9%	3.8%	200	62.3%	183	61.2%
Disagree	32	5.1%	1.7%	11	3.4%	21	7.0%
Strongly disagree	11	1.8%	1.0%	5	1.6%	6	2.0%
Total	622	100.0%		321	100.0%	299	100.0%

23. I was satisfied with my overall test experience.

	All Zones				Zone 1		ne 4
	Ν	%	ME	N	%	N	%
Strongly Agree	170	27.9%	3.6%	88	28.2%	82	27.8%
Agree	399	65.5%	3.8%	199	63.8%	200	67.8%
Disagree	19	3.1%	1.7%	12	3.8%	7	2.4%
Strongly disagree	21	3.4%	1.0%	13	4.2%	6	2.0%
Total	609	100.0%		312	100.0%	295	100.0%

Do you find the following E-Check requirements hard to understand. . .

24. E-Check exemptions and extensions?

	All Zones			Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Yes	166	27.8%	3.6%	81	26.4%	84	29.2%
No	431	72.2%	3.6%	226	73.6%	204	70.8%
Total	597	100.0%		307	100.0%	288	100.0%

25. E-Check vehicle testing standards (technical thresholds that determine pass/fail)?

	All Zones				Zone 1		ne 4
	N	%	ME	Ν	%	Ν	%
Yes	205	34.1%	3.8%	105	34.2%	99	33.8%
No	397	65.9%	3.8%	202	65.8%	194	66.2%
Total	602	100.0%		307	100.0%	293	100.0%

26. When my vehicle needs testing?

		All Zones		Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Yes	109	18.0%	3.1%	57	18.3%	51	17.5%
No	496	82.0%	3.1%	254	81.7%	241	82.5%
Total	605	100.0%		311	100.0%	292	100.0%

27. Why my vehicle needs testing?

All Zones				Zone 1		Zone 4	
	N	%	ME	N	%	N	%
Yes	184	29.9%	3.6%	94	29.6%	89	30.2%
No	431	70.1%	3.6%	224	70.4%	206	69.8%
Total	615	100.0%		318	100.0%	295	100.0%

28. Why E-Check testing is not done statewide?

		All Zones		Zone 1		Zone 4	
	N	%	ME	Ν	%	N	%
Yes	370	60.9%	3.9%	199	62.8%	170	58.8%
No	238	39.1%	3.9%	118	37.2%	119	41.2%
Total	608	100.0%		317	100.0%	289	100.0%

In some states, motorists can choose to have their emissions testing take place at facilities such as E-Check that exclusively conduct emissions testing, or at authorized automotive repair stations. Please give us your opinion regarding these testing options.

29. I am interested in an emissions testing system that provides more testing locations at authorized automotive repair stations and the current E-Check Stations.

		All Zones		Zone 1		Zone 4	
	Ν	%	ME	Ν	%	Ν	%
Strongly Agree	31	5.1%	1.7%	10	3.2%	21	7.1%
Agree	106	17.3%	3.0%	45	14.3%	61	20.6%
Neutral	259	42.3%	3.9%	132	42.0%	127	42.9%
Disagree	119	19.4%	3.1%	67	21.3%	52	17.6%
Strongly disagree	97	15.8%	2.9%	60	19.1%	35	11.8%
Total	612	100.0%		314	100.0%	296	100.0%

30. I am interested in an emissions testing system that provides testing locations at authorized automotive repair stations, even if I may have to wait to receive testing services, make an appointment, or drop the vehicle off for a period of time.

		All Zones			Zone 1		ne 4
	N	%	ME	Ν	%	N	%
Strongly Agree	18	2.9%	1.3%	4	1.3%	14	4.7%
Agree	64	10.4%	2.4%	29	9.1%	35	11.8%
Neutral	171	27.8%	3.5%	89	28.1%	82	27.6%
Disagree	187	30.4%	3.6%	93	29.3%	94	31.6%
Strongly disagree	176	28.6%	3.6%	102	32.2%	72	24.2%
Total	616	100.0%		317	100.0%	297	100.0%

31. I am interested in an emissions testing system that provides automotive repair services at the same location where vehicles are tested.

All Zones				Zone 1		Zone 4	
	N	N % ME N		Ν	%	Ν	%
Strongly Agree	22	3.6%	1.5%	7	2.2%	15	5.2%
Agree	106	17.5%	3.0%	39	12.5%	67	23.0%
Neutral	187	30.9%	3.7%	92	29.4%	95	32.6%
Disagree	162	26.7%	3.5%	95	30.4%	67	23.0%
Strongly disagree	129	21.3%	3.3%	80	25.6%	47	16.2%
Total	606	100.0%		313	100.0%	291	100.0%

32. I would feel confident in my test results if my vehicle was repaired at the same facility where it is tested.

,	All Zones					Zone 4	
	Ν	%	ME	Ν	%	Ν	%
Strongly Agree	23	3.8%	1.5%	9	2.8%	14	4.7%
Agree	102	16.6%	2.9%	48	15.2%	54	18.3%
Neutral	184	30.0%	3.6%	88	27.8%	96	32.5%
Disagree	177	28.9%	3.2%	94	29.7%	83	28.1%
Strongly disagree	127	20.7%	3.2%	77	24.4%	48	16.3%
Total	613	100.0%		316	100.0%	295	100.0%

33. I prefer the current testing system where you take your vehicle to a facility that only provides testing services, where no appointments are necessary, and where your vehicle is tested on a first-come first-serve basis.

		All Zones			Zone 1		ne 4
	N	%	ME	Ν	%	Ν	%
Strongly Agree	174	28.4%	3.6%	98	31.0%	75	25.3%
Agree	239	39.0%	3.9%	118	37.3%	121	40.9%
Neutral	147	24.0%	3.4%	73	23.1%	74	25.0%
Disagree	28	4.6%	1.6%	12	3.8%	16	5.4%
Strongly disagree	25	4.1%	1.6%	15	4.7%	10	3.4%
Total	613	100.0%		316	100.0%	296	100.0%

For each of the following statements, please fill the circle that best describes your opinion:

34. Vehicle emissions testing can help reduce air pollution.

		All Zones		Zone 1		Zone 4	
	Ν	%	ME	Ν	%	Ν	%
Strongly Agree	115	21.1%	3.1%	41	14.5%	74	28.6%
Agree	302	55.5%	3.9%	156	55.1%	146	56.4%
Disagree	81	14.9%	2.7%	55	19.4%	26	10.0%
Strongly disagree	46	8.5%	2.1%	31	11.0%	13	5.0%
Total	544	100.0%		283	100.0%	259	100.0%

35. Motor vehicles create more ozone pollution than industry.

		All Zones		Zone 1		Zone 4	
	N	N % ME /		Ν	%	Ν	%
Strongly Agree	32	8.0%	1.7%	10	4.7%	22	11.8%
Agree	159	39.8%	3.4%	87	41.0%	72	38.7%
Disagree	142	35.5%	3.3%	75	35.4%	67	36.0%
Strongly disagree	67	16.8%	2.5%	40	18.9%	25	13.4%
Total	400	100.0%		212	100.0%	186	100.0%

36. I am helping to reduce air pollution by having my vehicle E-Checked.

All Zones					Zone 1		ne 4
	N	%	ME	Ν	%	N	%
Strongly Agree	73	14.4%	2.6%	24	9.0%	49	20.4%
Agree	288	56.7%	4.0%	144	54.1%	144	60.0%
Disagree	91	17.9%	2.8%	59	22.2%	32	13.3%
Strongly disagree	56	11.0%	2.3%	39	14.7%	15	6.3%
Total	508	100.0%		266	100.0%	240	100.0%

37. The Ohio EPA is doing a good job of running the E-Check program.

	Zone 1		Zone 4				
	N	N % ME			%	Ν	%
Strongly Agree	57	11.5%	2.3%	18	6.9%	39	16.5%
Agree	353	71.0%	3.9%	189	73.0%	164	69.5%
Disagree	46	9.3%	2.1%	27	10.4%	19	8.1%
Strongly disagree	41	8.2%	2.0%	25	9.7%	14	5.9%
Total	497	100.0%		259	100.0%	236	100.0%

Please answer some questions so we can compare your answers to those of others.

38. Your gender:

All Zones			Zo	ne 1	Zone 4		
	N	%		Ν	%	Ν	%
Male	357	59.5%		192	62.1%	163	56.4%
Female	243	40.5%		117	37.9%	126	43.6%
Total	600	100.0%		309	100.0%	289	100.0%

39. Your age:

		All Zones	Zo	ne 1	Zo	ne 4
	N	%	N	%	N	%
Less than 20	0	0.0%	0	0.0%	0	0.0%
20-29	24	3.9%	12	3.8%	12	4.1%
30-39	61	10.0%	27	8.5%	34	11.7%
40-49	115	18.8%	63	19.7%	52	17.9%
50-59	177	28.9%	89	27.9%	86	29.6%
60-69	131	21.4%	75	23.5%	56	19.2%
70 or older	104	17.0%	53	16.6%	51	17.5%
Total	612	100.0%	319	100.0%	291	100.0%

40. Your total annual household income:

		All Zones	All Zones			Zone 4	
	N	N %		N	%	Ν	%
Less than \$25,000	101	19.3%		48	18.0%	53	20.9%
\$25,000-\$49,999	152	29.1%		84	31.5%	68	26.9%
\$50,000-\$99,999	183	35.1%		86	32.2%	97	38.3%
More than \$100,000	86	16.5%		49	18.4%	35	13.8%
Total	522	100.0%		267	100.0%	253	100.0%

41. Your race:

All Zones			Zone 1		Zone 4		
	N	N %		N	%	N	%
White	494	84.7%		280	92.4%	213	76.3%
African-American	60	10.3%		16	5.3%	44	15.8%
Asian-American	13	2.2%		4	1.3%	9	3.2%
American Indian	4	0.7%		0	0.0%	4	1.4%
Latin American	11	1.9%		2	0.7%	9	3.2%
Other	6	1.0%		1	0.3%	5	1.8%

Total does not equal 100 percent because respondents were allowed to select all that apply.

42. Are you. . .

All Zones					Zone 1		ne 4
	N	%		Ν	%	Ν	%
The vehicle owner	580	95.2%		305	96.5%	273	93.8%
Relative of vehicle owner	27	4.4%		10	3.2%	17	5.8%
Friend of vehicle owner	2	0.3%		1	0.3%	1	0.3%
Other	0	0.0%		0	0.0%	0	0.0%
Total	609	100.0%		316	100.0%	291	100.0%

43. The adult in your home with the highest education has:

	All Zones			Zone 1		Zone 4	
	N	%		Ν	%	Ν	%
Less than a high school diploma	10	1.7%		4	1.3%	6	2.1%
High school diploma	194	33.0%		105	35.1%	89	31.1%
Two-year degree	105	17.9%		54	18.1%	51	17.8%
Bachelors degree	147	25.0%		80	26.8%	67	23.4%
Masters degree	94	16.0%		40	13.4%	52	18.2%
Professional/doctoral degree	37	6.3%		16	5.4%	21	7.3%
Total	587	100.0%		299	100.0%	286	100.0%



e OHIO UNIVERSITY

Voinovich School of Leadership and Public Affairs

Building 21, The Ridges Athens, OH 45701-2979

T: 740.593.9381 F: 740.593.4393