2007 Dynamic Message Sign

FINAL Report



Conducted for

Department of Public Works, City of Overland Park

by

ETC Institute

725 W. Frontier Circle Olathe, Kansas 66061 (913) 829-1215

Dynamic Message Sign Survey Executive Summary

Purpose and Methodology

ETC Institute administered a survey for the Department of Public Works, City of Overland Park, during January and February of 2007. The survey was administered for the purpose of measuring the perceived value of the signs and exploring their future use.

The survey was administered by mail and by phone to a random sample of Overland Park residents. The results for the random sample of 527 respondents have a 95% level of confidence with a precision of at least +/-4.5%.

This report contains:

- > a summary of the methodology for administering the survey and major findings
- > charts showing the overall results for questions on the survey
- tables that show the results for each question on the survey
- > a copy of the survey instrument.

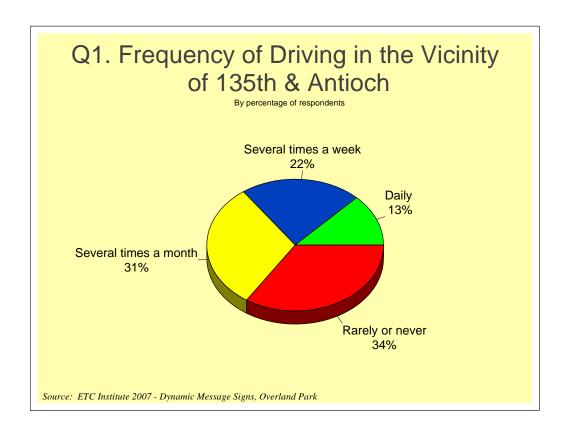
Interpretation of "Don't Know" Responses. The percentage of persons who gave "don't know" responses is important because it often reflects the level of utilization of City services. The percentage of "don't know" responses for each question is provided in the Tabular Data Section of this report. When the "don't know" responses have been excluded, the text of this report will indicate that the responses have been excluded with the phrase "who had an opinion."

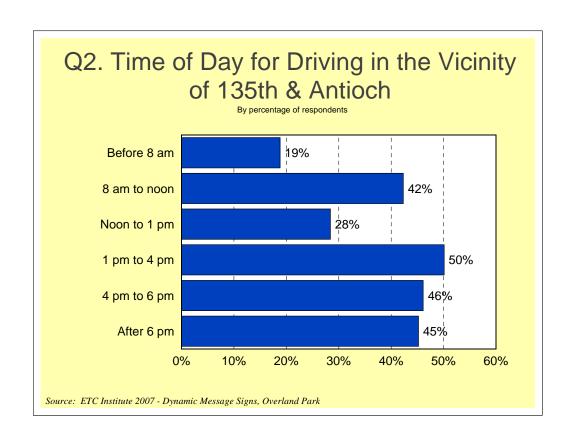
Major Findings

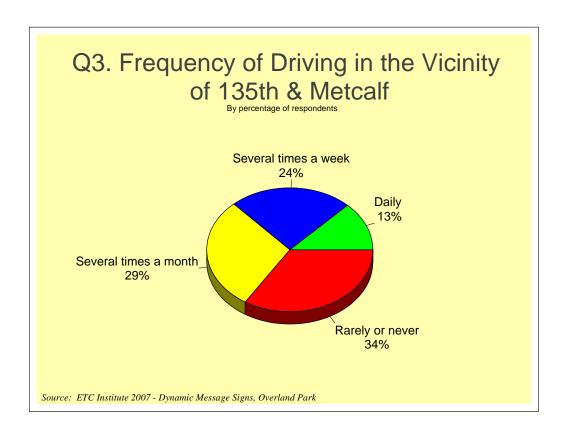
Most Residents Thought the City should Continue to Use the Dynamic Message Signs. Sixty-eight percent (68%) of those surveyed thought that the City should continue to use the signs; 13% said no, and 19% did not have an opinion. Fifty-two percent (52%) would like see more of the Dynamic Message Signs.

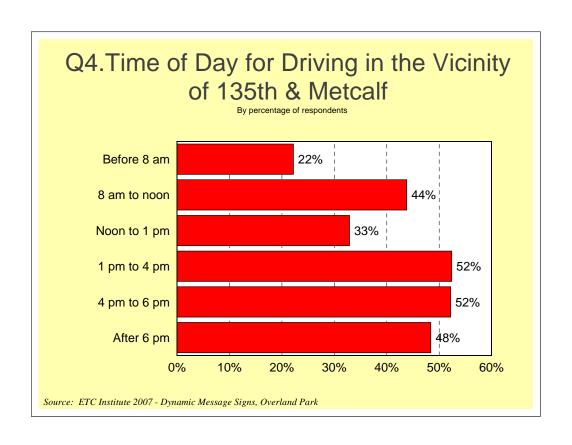
- ➤ How Residents Felt About the Value of Various Types of Messages. Most (91%) of those surveyed who had an opinion, saw the road construction message as valuable and 91% percent saw the accident notification message as valuable. Eighty-seven percent (87%) saw the amber alert message as valuable, and 61% saw travel times posted on the Dynamic Message Signs as valuable.
- ➤ <u>How the Messages Impacted Route Change.</u> Twenty-eight percent (28%) of those surveyed changed their route as a result of messages posted on the Dynamic Message Signs; 66% did not change their route, and 6% did not know.
- ➤ <u>Overall Satisfaction with Dynamic Message Signs.</u> Sixty-seven percent (67%) of those surveyed, who had an opinion, were satisfied with Dynamic Message Signs (23% "very satisfied", 44% "satisfied"). Only 5% were dissatisfied, and 28% were neutral.
- ➤ <u>Awareness of the Signs.</u> Forty-four percent (44%) of those surveyed were familiar with the Dynamic Message Sign at 135th and Metcalf; 40% were familiar with the sign at 135th and Antioch.
- ➤ How Residents Perceive the Clarity of the Message. Eighty-two percent (82%), of those surveyed, who had an opinion, felt the signs were easy to understand (31% "very easy" and 51% "easy"). Only 3% felt they were hard to understand and 15% were neutral.
- ➤ When the Signs Have no Traffic Related Message. Twelve percent (12%) of those surveyed thought the sign wasn't working when there was no message; most (72%) thought there was nothing to display, and 7% thought that no one had updated the sign. When there is no critical traffic information to display, 58% of those surveyed would like to see time and temperature displayed on the sign.
- The Importance of the Appearance of the Signs to Residents The appearance of the sign was important to 48% of those surveyed (13% "very important", 35% "somewhat important"). Fourteen percent 14% said that it was not important, 30% were neutral, and 6% did not have an opinion.
- Where the Signs Should be Placed Those surveyed were asked how supportive they were of three different placement options for the Dynamic Message Signs; 85% of those surveyed who had an opinion, were supportive of the signs being placed near major intersections, 67% were supportive of the signs being placed along major streets in commercial areas, and 38% were supportive of the signs being placed on major streets bordering residential areas.

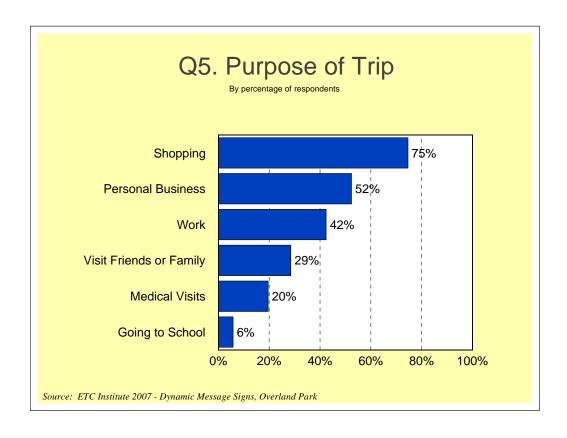
Section 1: Charts and Graphs

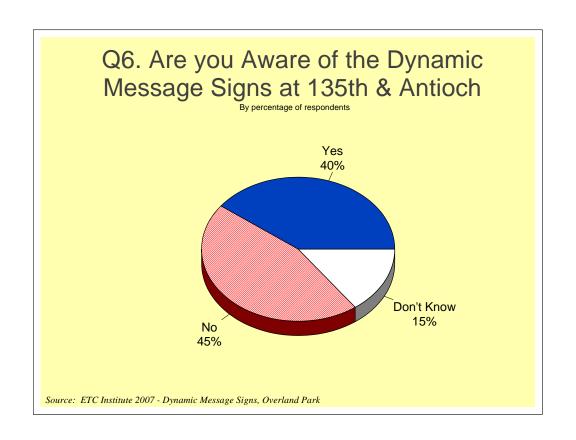


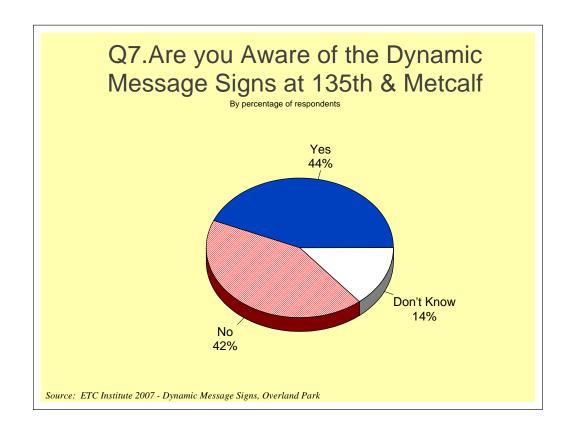


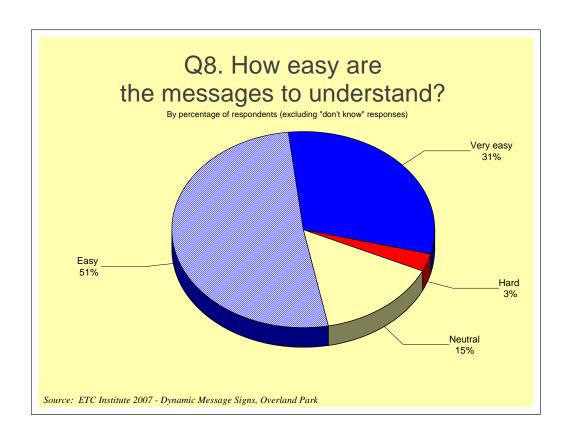


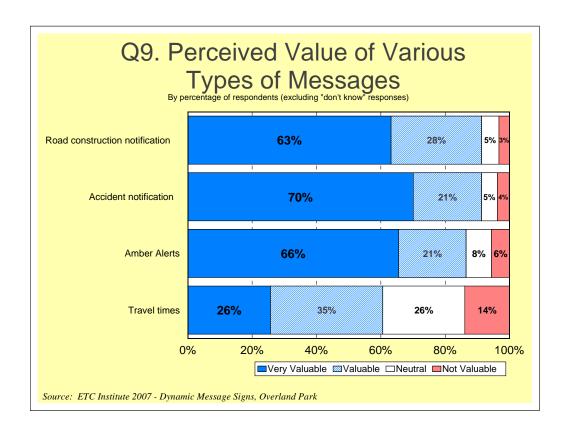


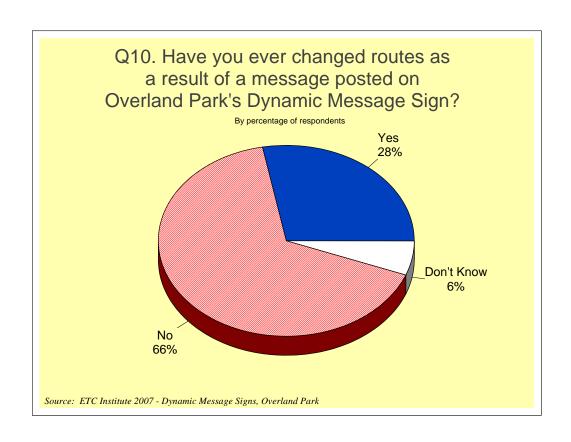


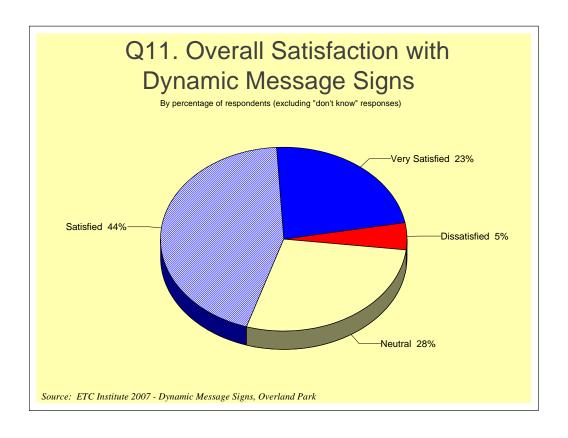


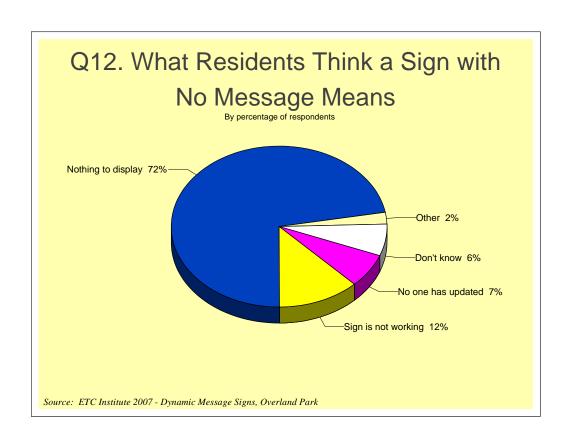


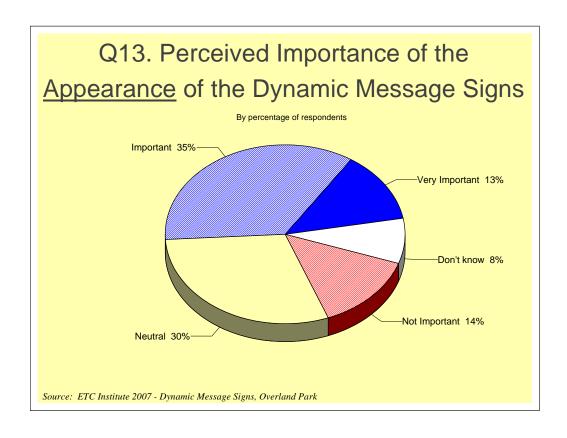


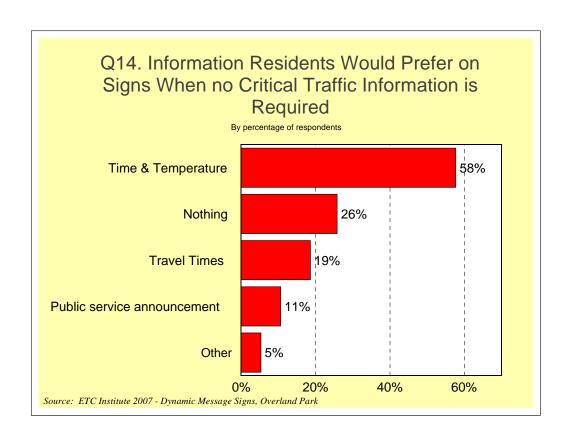


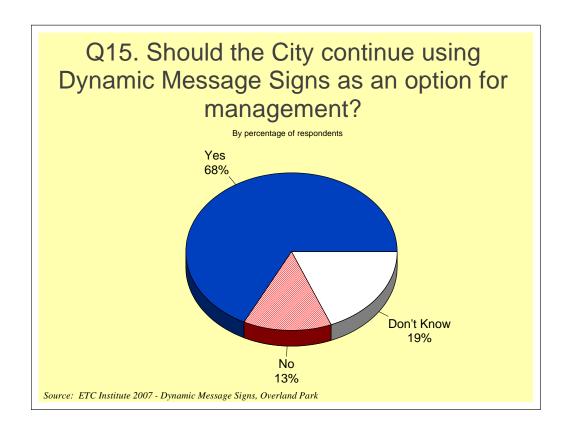


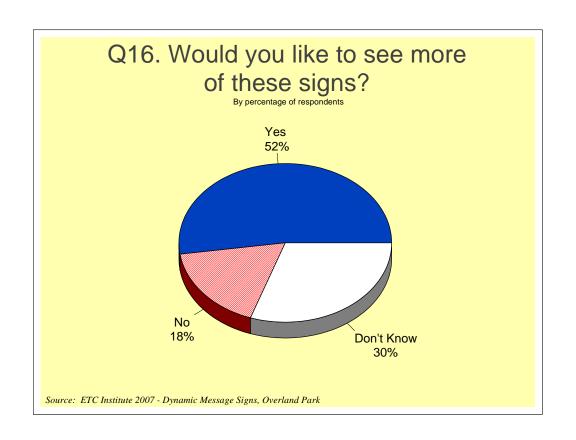


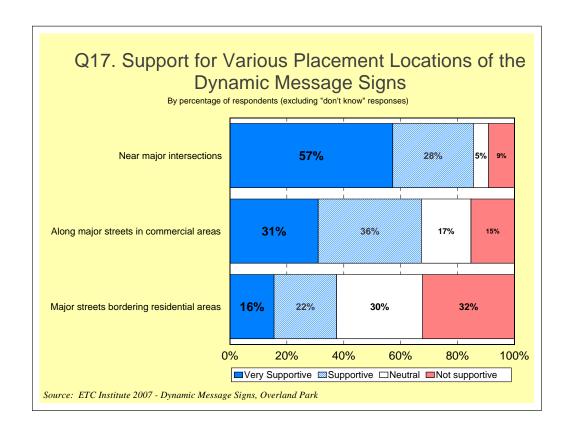


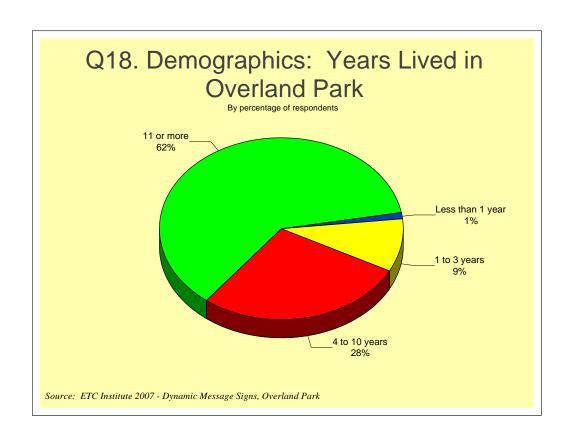


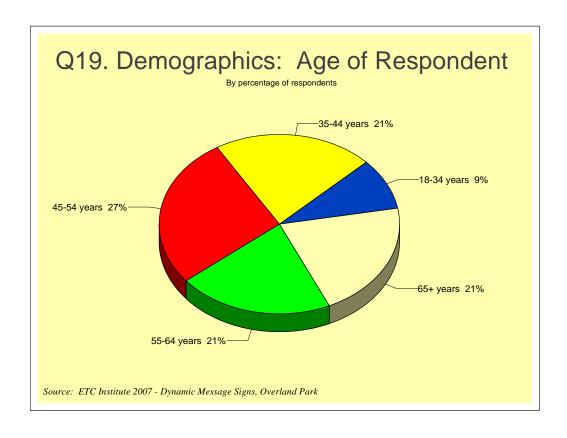


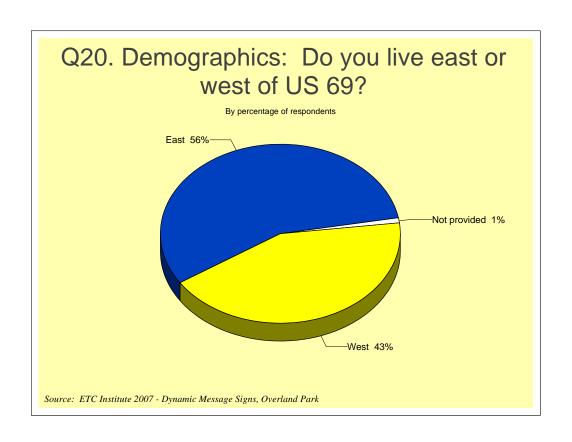


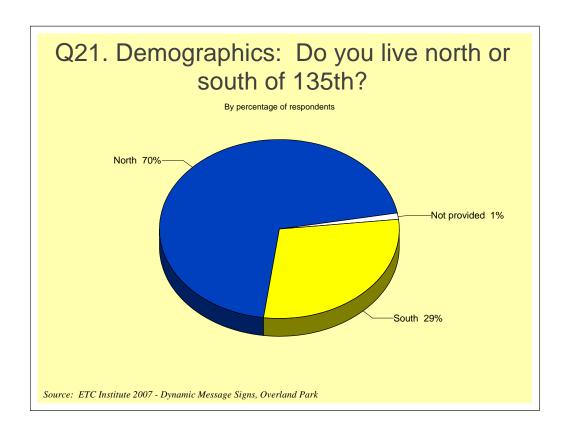


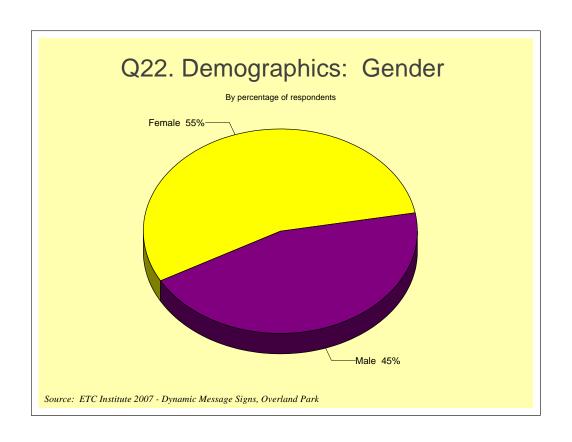












Section 2: Tabular Data

Q1. Please indicate how often you currently drive in the vicinity of the intersection of 135th and Antioch in Overland Park?

Q1 Currently drive by 135th & Antioch	Number	Percent
1=Daily	67	12.7 %
2=Several times each week	116	22.0 %
3=Several times a month	162	30.7 %
4=Rarely or never	182	34.5 %
Total	527	100.0 %

Q2. What times of day do you typically drive in the vicinity of 135th and Antioch?

Q2 What time of day	Number	Percent
1 = Before 8 am	65	18.8 %
2 = 8 am to noon	146	42.3 %
3 = Noon to 1 pm	98	28.4 %
4 = 1 pm to 4 pm	173	50.1 %
5 = 4 pm to 6 pm	159	46.1 %
6 = After 6 pm	156	45.2 %
9 = Don't know	1	0.3 %
Total	798	_

Q3. Please indicate how often you currently drive in the vicinity of the intersection of 135th and Metcalf in Overland Park?

Q3 How often drive by 135th & Metcalf	Number	Percent
1=Daily	67	12.7 %
2=Several times each week	126	23.9 %
3=Several times a month	154	29.2 %
4=Rarely or never	178	33.8 %
9=Don't know	2	0.4 %
Total	527	100.0 %

Q4. What times of day do you typically drive in the vicinity of 135th and Metcalf?

Q4 Times of day drive by 135th & Metcalf	Number	Percent
1 = Before 8 am	77	22.2 %
2 = 8 am to noon	152	43.8 %
3 = Noon to 1 pm	114	32.9 %
4 = 1 pm to 4 pm	182	52.4 %
5 = 4 pm to 6 pm	181	52.2 %
6 = After 6 pm	168	48.4 %
9 = Don't know	2	0.6 %
Total	876	

Q5. What kind of trip are you typically making at the times of the day you indicated in Questions 2 and 4 (check all that apply)?

Q5 Kind of trip typically making	Number	Percent	
1 = Work	147	42.4 %	
2 = Shopping	259	74.6 %	
3 = Medical visits	68	19.6 %	
4 = Going to school	20	5.8 %	
5 = Visit friends or family	99	28.5 %	
<u>6</u> = Personal business	182	52.4 %	
Total	775		

Q6. Have you seen the dynamic message signs posted near the intersections of 135th and Antioch?

Q6 Seen dynamic message signs near 135th	Number	Percent
1=Yes	210	39.8 %
2=No	238	45.2 %
9=Don't know	79	15.0 %
Total	527	100.0 %

Q7. Have you seen the dynamic message signs posted near the intersections of 135th and Metcalf?

Q7 Seen dynamic message signs near 135th	Number	Percent
1=Yes	229	43.5 %
2=No	224	42.5 %
9=Don't know	74	14.0 %
Total	527	100.0 %

Q8. What do you think of the messages on these signs? Do you think they are:

Q8 What think of messages	Number	Percent
1=Very easy to understand	88	16.7 %
2=Easy to understand	147	27.9 %
3=Neutral	44	8.3 %
4=Hard to understand	6	1.1 %
5=Very hard to understand	2	0.4 %
9=Don't know	240	45.5 %
Total	527	100.0 %

Q9. Please indicate how valuable each of the following types of information posted on dynamic message signs are, on a scale of 1 to 4 where 4 means "very valuable" and 1 means "not valuable."

(N=527)

	Not valuable	Neutral	Valuable	Very valuable	Don't know
	1	2	3	4	9
Q9a Amber alerts	5.1%	7.2%	19.2%	59.8%	8.7%
Q9b Road construction notification	3.0%	4.9%	25.8%	58.1%	8.2%
Q9c Accident notification	3.4%	4.6%	19.5%	64.5%	8.0%
Q9d Travel times	12.5%	23.0%	31.5%	23.1%	9.9%

Q9. Please indicate how valuable each of the following types of information posted on dynamic message signs are, on a scale of 1 to 4 where 4 means "very valuable" and 1 means "not valuable." (excluding don't know)

(N=527)

,	Not			Very
	valuable	Neutral	Valuable	valuable
	1	2	3	4
Q9a Amber alerts	5.6%	7.9%	21.0%	65.5%
Q9b Road construction notification	3.3%	5.4%	28.1%	63.2%
Q9c Accident notification	3.7%	4.9%	21.2%	70.1%
Q9d Travel times	13.9%	25.5%	34.9%	25.7%

Q10. Have you changed your route as a result of a message on the dynamic message signs?

Q10 Changed route as result of message	Number	Percent
1=Yes	147	27.9 %
2=No	350	66.4 %
9=Don't know	30	5.7 %
Total	527	100.0 %

Q11. How would you rate your overall satisfaction with dynamic message signs in the City of Overland Park?

Q11 Overall satisfaction with dynamic	Number	Percent	
1=Very satisfied	90	17.1 %	
2=Satisfied	173	32.8 %	
3=Neutral	109	20.7 %	
4=Dissatisfied	13	2.5 %	
5=Very dissatisfied	5	0.9 %	
9=Don't know	137	26.0 %	
Total	527	100.0 %	

Q12. If you see a dynamic message sign with no information displayed, do you believe:

Q12 Do you believe	Number	Percent
1=Nothing currently important to display	383	72.7 %
2=Sign is not working	65	12.3 %
3=No one has bothered to update	34	6.5 %
4=Other	12	2.3 %
9=Don't know	33	6.3 %
Total	527	100.0 %

Q12. Other:

Q12 Other	Number	Percent
ARE VERY DISTRACTING=	1	8.3 %
DON'T GIVE IT ANY THOUGHT=	1	8.3 %
HAVEN'T SEEN SIGNS=	1	8.3 %
NEVER SEE SIGNS=	1	8.3 %
NO DISTRACTION TO DRIVING=	1	8.3 %
NOT ENOUGH INFO GIVEN=	1	8.3 %
NOT YET OPPERATIONAL=	1	8.3 %
SIGNS MIGHT NOT BE WORKING=	1	8.3 %
TAXES WASTED=	1	8.3 %
TOO LAZY FOR REMINDERS=	1	8.3 %
WASTE OF MY MONEY=	1	8.3 %
WHAT'S THEIR PURPOSE=	1	8.3 %
Total	12	100.0 %

Q13. How important is the attractiveness these signs?

Q13 How important is attractiveness	Number	Percent
1=Very important	69	13.1 %
2=Important	186	35.3 %
3=Neutral	155	29.4 %
4=Not important	75	14.2 %
9=Don't know	42	8.0 %
Total	527	100.0 %

Q14. When there is no critical traffic information to provide on the dynamic message signs, what kind of information would you like to see displayed?

Q14 What information would you like to	Number	Percent
1 = Time & temperature	304	57.7 %
2 = Public service announcements	56	10.6 %
3 = Nothing	136	25.8 %
4 = Travel times	98	18.6 %
5 = Other	28	5.3 %
9 = Don't know	19	3.6 %
Total	641	

Q14. Other.

Q14 Other	Number	Percent
ADS FOR UPCOMING EVENTS=	1	3.6 %
ANYTHING TO SHOW SIGN WORKS=	1	3.6 %
BEING INFORMATIVE=	1	3.6 %
BETTER ON INTERSTATES/HWY=	1	3.6 %
DAY & TIME & DATE & TEMP=	1	3.6 %
DEPT STORE SALES & CHIEFS=	1	3.6 %
DISTRACTING TO DRIVERS=	1	3.6 %
DOESN'T MATTER=	1	3.6 %
DON'T WASTE ENERGY=	1	3.6 %
DON'T WASTE TAX DOLLARS=	1	3.6 %
DRIVE SAFELY=	1	3.6 %
EVENT SUCH AS JAZZFEST=	1	3.6 %
EXTREMELY TACKY SIGNS=	1	3.6 %
HAVE A NICE DAY=	1	3.6 %
HUG A VET, VOTE DD/MO=	1	3.6 %
NO OPINION=	1	3.6 %
NOT NEEDED=	1	3.6 %
ONLY IF COST EFFECTIVE=	1	3.6 %
ONLY IF NOT ADDITIONAL CASH=	1	3.6 %
PEOPLE WOULD IGNORE IT=	1	3.6 %
ROAD CONDITIONS=	1	3.6 %
ROAD CONDITIONS IF BAD=	1	3.6 %
ROAD CONDITION DURING MONTHS=	1	3.6 %
TAXES BEING CUT IN HALF=	1	3.6 %
THANKS FOR TRAVEL IN OP=	1	3.6 %
TOO MUCH INFO SLOWS TRAFFIC=	1	3.6 %
TRAFFIC SAFETY REMINDERS=	1	3.6 %
WHERE SPEED TRAPS ARE LOCATED=	1	3.6 %
Total	28	100.0 %

Q15. Do you think the City of Overland Park should continue considering dynamic message signs as an option for traffic management in the City?

Q15 Think should continue considering	Number	Percent
1=Yes	357	67.7 %
2=No	70	13.3 %
3=Don't know	100	19.0 %
Total	527	100.0 %

Q16. Would you like to see more of these signs?

Q16 Like to see more	Number	Percent
1=Yes	275	52.2 %
2=No	93	17.6 %
3=Don't know	159	30.2 %
Total	527	100.0 %

Q17. For each of the following, please rate your support for each location placement of the dynamic message signs, on a scale of 1 to 4 where 4 means "very supportive" and 1 means "not supportive."

(N=527)

	Not supportive	Neutral	Supportive	Very supportive	Don't know
	1	2	3	4	9
Q17a Near major interchanges	8.3%	4.9%	25.8%	52.2%	8.7%
Q17b Along major streets in commercial areas	13.7%	15.6%	32.4%	27.7%	10.6%
Q17c Major streets bordering residential areas	28.5%	26.6%	19.4%	13.7%	12.0%

Q17. For each of the following, please rate your support for each location placement of the dynamic message signs, on a scale of 1 to 4 where 4 means "very supportive" and 1 means "not supportive." (excluding don't know)

(N=527)

	Not		Very	
	supportive	Neutral	Supportive	supportive
	1	2	3	4
Q17a Near major interchanges	9.1%	5.4%	28.3%	57.2%
Q17b Along major streets in commercial				
areas	15.3%	17.4%	36.3%	31.0%
Q17c Major streets bordering residential				
areas	32.3%	30.2%	22.0%	15.5%

Q18. How long have you lived in the Overland Park area?

Q18 How long have lived in Overland Park area	Number	Percent
1=Less than 1 year	6	1.1 %
2=1 to 3 years	49	9.3 %
3=4 to 10 years	144	27.3 %
4=11 or more	326	61.9 %
9=Not provided	2	0.4 %
Total	527	100.0 %

Q19. Which of the following best describes your age?

Q19 Age	Number	Percent
1=Under 25	3	0.6 %
2=25 to 34	46	8.7 %
3=35 to 44	112	21.3 %
4=45 to 54	143	27.1 %
5=55 to 64	109	20.7 %
6=65+	110	20.9 %
9=Not provided	4	0.8 %
Total	527	100.0 %

Q20. Do you live east or west of US 69?

Q20 Live east or west of US 69	Number	Percent
1=East	297	56.4 %
2=West	225	42.7 %
9=Not provided	5	0.9 %
Total	527	100.0 %

Q21. Do you live north or south of 135th Street?

Q21 Live north or south of 135th Street	Number	Percent
1=North	370	70.2 %
2=South	151	28.7 %
9=Don't know	6	1.1 %
Total	527	100.0 %

Q22. Your gender:

Q22 Gender	Number	Percent
1=Male	236	44.8 %
2=Female	291	55.2 %
Total	527	100.0 %

Section 3 **Survey Instrument**



City Hall • 8500 Santa Fe Drive Overland Park, Kansas 66212 913/895-6040 • Fax 913/895-5055 www.opkansas.org

January 9, 2007

Dear Overland Park resident:

In 2006, the City of Overland Park began providing **Dynamic Message Signs** (DMS) on some of our major streets such as 135th Street, Antioch Road and Metcalf Avenue. The messages are designed to provide motorists with an alert of critical information such as road construction ahead, an accident ahead, or an amber alert. We currently have seven dynamic message signs along major Overland Park streets and are not to be confused with the K.C. Scout message signs located about I-35, I-435 and other parts of the metropolitan highway network.

We are evaluating the effectiveness and desirability of these **Dynamic Message Signs** as a traffic management tool, and we would like to have input from our residents.

<u>Please help us by taking a few minutes to complete the enclosed survey.</u> Your input will assist us in making future decisions about the allocation of city resources and the services provided to motorists in Overland Park.

You can return your survey in the enclosed return-reply envelope to ETC Institute, 725 W. Frontier Circle, Olathe, KS 66061. If you have questions, please contact Brian Shields, City Traffic Engineer, City of Overland Park at (913) 895-6024 or by email at brian.shields.@opkansas.org.

Thank you for completing this survey and helping to make Overland Park a better community.

Sincerely,

William D. Brown

Director of Public Works



Example of a Dynamic Message Sign in Overland Park.

2007 Community Dynamic Message Survey

The City of Overland Park would like your opinions about traffic **Dynamic Message Signs** in our community. Please take a few minutes to complete this important survey. When you are finished, please return your survey in the postage-paid envelope provided. If you have questions, please contact Brian Shields, the City's Traffic Engineer at 913-895-6024.

(1) Daily	
(2) Several times each week	
(3) Several times a month	
(4) Rarely or never (Go to Q3	3)
What times of day do you typic ALL THAT APPLY)	eally drive in the vicinity of 135 th and Antioch? (CHECK
(1) Before 8 a.m.	
(1) Before 8 a.m. (2) 8 a.m. to noon	
(2) 8 a.m. to noon (2) noon to 1 p.m.	
(3) Hoon to 1 p.m. (4) 1 p.m. to 4 p.m.	
(5) 4 p.m. to 6 p.m.	
(6) After 6 p.m.	
135 th and Metcalf in Overland I(1) Daily(2) Several times each week(3) Several times a month	
(4) Rarely or never (Go to Qo What times of day do you typic	cally drive in the vicinity of 135 th and <u>Metcalf</u> ? (CHECK
ALL THAT APPLY)	any unive in the vicinity of 135° and interest. (CILLER
(1) Before 8 a.m.	
(2) 8 a.m. to noon	
(3) noon to 1 p.m.	
(4) 1 p.m. to 4 p.m.	
(5) 4 p.m. to 6 p.m.	
(6) After 6 p.m.	
	cally making at the times of the day you indicated in
Questions 2 and 4 (check all tha	at apply)?
Questions 2 and 4 (check all tha(1) Work	at apply)?(4) Going to school
Questions 2 and 4 (check all that	at apply)?

6.	Have you seen the dynamic mess Antioch?(1) Yes(2) No(9)			e intersect	ions of 135	th and
7.	Have you seen the dynamic mess Metcalf? (1) Yes(2) No(9	age signs pos	ted near the	e intersect	ions of 135	th and
8.	What do you think of the messages on these signs? Do you think they are:(1) Very easy to understand(4) Hard to understand(2) Easy to understand(5) Very hard to understand(3) Neutral(9) Don't know				nd	
9.	Please indicate how valuable each dynamic message signs are, on a means "not valuable."					
How	Valuable Are:	Very Valuable	Valuable	Neutral	Not Valuable	Don't Know
A.	Amber Alerts	4	3	2	1	9
B.	Road construction notification	4	3	2	1	9
C.	Accident notification	4	3	2	1	9
D.	Travel times	4	3	2	1	9
10.11.	Have you changed your route as signs?(1) Yes(2) No How would you rate your overall City of Overland Park?(1) Very satisfied(2) Satisfied(3) Neutral		with dynam (4) I (5) V	·	g e signs in t d isfied	
12.	If you see a dynamic message sig(1) There is nothing currently i(2) The sign is not working(3) No one has bothered to upd(4) Other:	mportant to d ate the sign w	isplay vith current i		-	eve:
13.	How important is the attractiven(1) Very important(2) Important(3) Neutral	ess these sigr	(4) N	Not import Oon't knov		

14.	When there is no critical traffic in what kind of information would y(1) Time and temperature(2) Public service announcement(3) Nothing – leave the space black of the sp	ou like to sents, like "Don	e displayed?	?	nic message	signs,
15.	Do you think the City of Overland signs as an option for traffic management (1) Yes(2) No(3	agement in t	he City?	onsidering	dynamic mo	essage
16.	Would you like to see more of the(1) Yes(2) No(3	_	v			
17.	For each of the following, please a dynamic message signs, on a scale means "not supportive."					
How	Supportive Are You with Placement:	Very Supportive	Supportive	Neutral	Not Supportive	Don't Know
A.	Near major interchanges	4	3	2	1	9
B.	Along major streets in commercial areas	4	3	2	1	9
D.	Major streets bordering residential areas	4	3	2	1	9
18.	How long have you lived in the O(1) Less than 1 year(2) 1 to 3 years		x area? (3) 4 to 10 y (4) 11 or mo			
19.	Which of the following best describes your age?(1) Under 25					
20.	Do you live east or west of US 69?(1) east(2) west					
21.	Do you live north or south of 135 ^t	h Street?	(1) north	(2)) south	
22.	Your gender: (1) Male(2) Female				

This concludes the survey. Thank you for your time! Please Return Your Completed Survey in the Enclosed Postage Paid Envelope Addressed to:

ETC Institute, 725 W. Frontier Circle, Olathe, KS 66061