

# Arbitron Digital Billboard Report: Cleveland Case Study

Presented by:

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### Introduction

Welcome to Arbitron's evaluation of digital highway billboards. This survey is designed to measure travelers' awareness and attitudes towards digital billboards on major highways and to gauge their level of engagement with billboard advertising messages.

### Some significant findings of the research include:

- \* More than half of all Cleveland travelers notice digital billboards and the more a person commutes, the more likely they are to be aware of the displays.
- \* Public reaction to digital signage is positive. The billboard's ability to display timely news, traffic, weather advisories and AMBER Alert notices makes the vast majority of commuters (over 80%) feel the digital signs provide an important community service.
- \* Digital billboards are an effective advertising platform. Over eight out of 10 travelers could successfully recall at least one of the ads running during the survey period and the majority of commuters agree digital billboards are a "cool way to advertise."

### **Description of Methodology**

This case study focuses on seven digital billboards operating in Cleveland, OH. The digital displays are located on four interstate highways in the Cleveland, OH, area: I-77, I-90, I-271 and I-480.

Arbitron Inc. conducted random digit dial (RDD) interviews between November 27 and December 3, 2007, with 402 persons 18 years of age and older in the Cleveland, OH, Arbitron-defined Metro. To qualify for the survey, respondents had to have traveled in a vehicle (car, truck, bus or taxi) on I-77, I-90, I-271 or I-480 in the 30 days preceding the survey period.

The study was designed and conducted by Arbitron Inc. on behalf of the Outdoor Advertising Association of America. Data were weighed to reflect census figures and factored in the likelihood of each demographic group qualifying for the survey based on the above mentioned "roads traveled" screening criteria.

### **Digital Billboard Locations**

- 1. **I-271:** west side, 125 feet south of Solon Road (facing north)
- 2. **I-480:** south side, 2 miles east of I-71 (facing east)
- 3. **I-90 (Innerbelt Freeway):** south side, 100 feet east of West 3rd Street (facing south)
- 4. **I-77:** west side, 0.3 miles south of Pershing Avenue (facing north)
- 5. **I-90:** south side, 70 feet east of West 55th Street (facing west)
- 6. **I-90:** south side, 0.5 miles west of Eddy Road (facing east)
- 7. **I-480:** north side, 0.5 miles east of Broadway (facing east)



### **Key Findings**

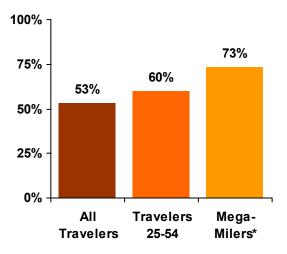
### I. Digital Billboard Viewership and Engagement

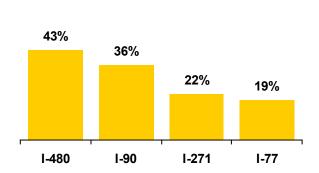
### More Than Half of Cleveland Highway Travelers Noticed Digital Billboards in the Past Month

"One specific type of billboard is called digital billboards. These digital roadside billboards repeatedly change advertising messages electronically every eight seconds."

"Have you noticed any digital billboards in the Cleveland area in the past 30 days?"

"Do you recall ever seeing digital billboards on any of the following highways?"





Base: Persons 18 years or older living in the Cleveland, OH, Metro area who traveled on I-77, I-90, I-271 or I-480 in the past 30 days.

#### More than half of Cleveland highway travelers noticed digital billboards in the past month.

Fifty-three percent of Cleveland Metro residents who traveled in a car, truck, bus or taxi on Interstate 77, 271, 480 or 90 in the past month noticed digital billboards on those roads. The core adult traveler demographic of 25- to 54-year-olds showed an increased awareness of digital billboards, with six in 10 (60%) noticing one in the past month.

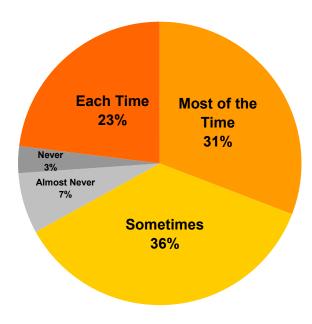
Awareness of digital billboards increased with frequency of travel. Seventy-three percent of the heaviest commuters, known as mega-milers, recalled seeing at least one of these electronic displays during the past month.



<sup>\*</sup> Mega-milers are those heavy commuters who travel 200 miles or more per week; they represent 30% of all Cleveland travelers.

## Nine Out of 10 Digital Billboard Viewers Notice the Advertising Some, Most or Each Time They Pass a Board

"How often do you notice the advertising messages on digital billboards?"



Base: Persons 18 years or older living in the Cleveland, OH, Metro area who traveled on I-77, I-90, I-271 or I-480 in the past 30 days.

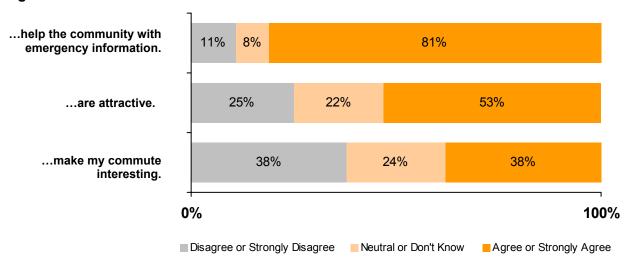
**Nearly all travelers who notice digital billboards look at the advertising messages at least some of the time.** Ninety percent of respondents who notice digital billboards said they also note the advertising messages on them either sometimes, most of the time or each time. Nearly one-quarter of viewers say they notice the advertising message *each time* they see a digital billboard.



## The Majority of Digital Billboard Viewers Find the Signs to Be Attractive and Helpful to the Community

"Now using a 5-point scale where a '1' means you 'strongly disagree' and '5' means you 'strongly agree,' how much do you disagree or agree with the following statements? You can also use a 2, 3, or 4 if you feel somewhere in between."

### Digital billboards...



Base: Persons 18 years or older living in the Cleveland, OH, Metro area who traveled on 1-77, 1-90, 1-271 or 1-480 in the past 30 days.

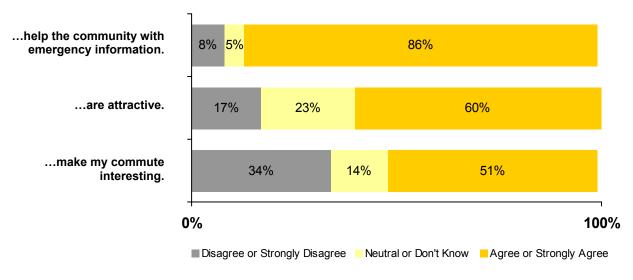
**Viewers strongly find digital billboards helpful in providing information about community emergencies.** More than four out of five travelers (81%) who notice digital billboards think the signs help their community by providing important and timely emergency information, such as AMBER Alerts. More than half of viewers (53%) think the digital billboards are attractive, and 38% think the signs make their commute more interesting.



## Young Adult Breakout: 18-to 34-Year-Old Travelers Have an Especially Positive Attitude Towards Digital Billboards

"Now using a 5-point scale where a '1' means you 'strongly disagree' and '5' means you 'strongly agree,' how much do you disagree or agree with the following statements? You can also use a 2, 3, or 4 if you feel somewhere in between."

### Digital billboards...



Base: Persons 18 to 34 years old living in the Cleveland, OH, Metro area who traveled on I-77, I-90, I-271 or I-480 in the past 30 days. Note: Totals subject to rounding.

**Young adults 18-34 have especially positive feelings about digital billboards**. Eighty-six percent of young adults think digital billboards help their community with timely emergency information and six in 10 (60%) think digital billboards are attractive. Digital billboards make commuting more interesting for over half (51%) of young adults.

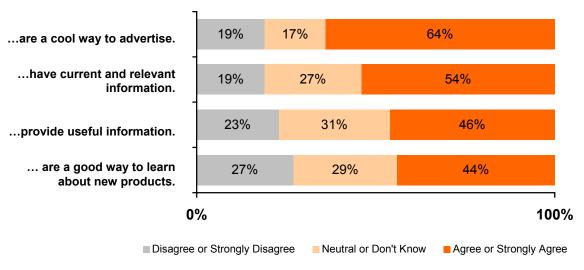


### II. Digital Billboard Advertising Acceptance and Recall

## Most Digital Billboard Viewers Have Positive Attitudes Toward the Advertising Messages

"Now using a 5-point scale where a '1' means you 'strongly disagree' and '5' means you 'strongly agree,' how much do you disagree or agree with the following statements? You can also use a 2, 3, or 4 if you feel somewhere in between."

### Digital billboards...



Base: Persons 18 years or older living in the Cleveland, OH, Metro area who traveled on I-77, I-90, I-271 or I-480 in the past 30 days.

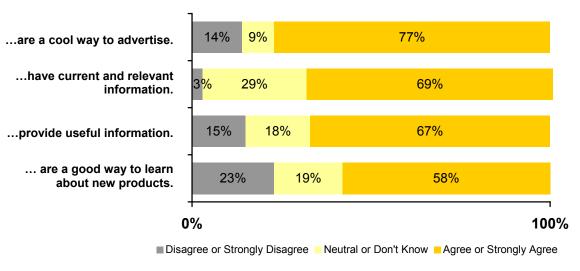
Nearly two out of three viewers think digital billboards are a "cool way to advertise." Sixty-four percent of those who notice the digital billboards think the signs are a "cool way to advertise." More than half (54%) of viewers think the signs display "current and relevant information," and 46% think they "provide useful information." Forty-four percent of travelers feel digital billboards are a "good way to learn about new products."



## Young Adult Breakout: 18-to 34-Year-Old Travelers Have Especially Positive Attitudes Toward Advertising Messages on Digital Billboards

"Now using a 5-point scale where a '1' means you 'strongly disagree' and '5' means you 'strongly agree,' how much do you disagree or agree with the following statements? You can also use a 2, 3, or 4 if you feel somewhere in between."

### Digital billboards...



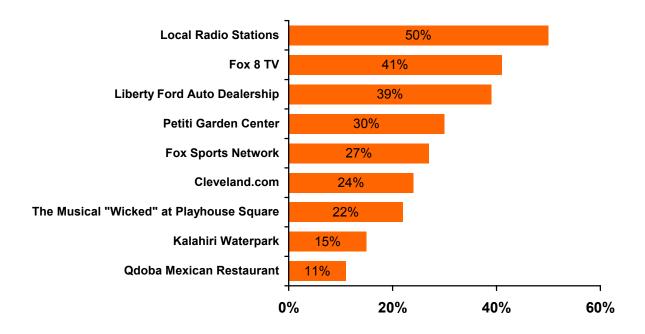
Base: Persons 18 to 34 years old living in the Cleveland, OH, Metro area who traveled on I-77, I-90, I-271 or I-480 in the past 30 days. Note: Totals subject to rounding.

More than three-quarters of young adults think digital billboards are "a cool way to advertise." Seventy-seven percent of young adults 18-34 who notice the digital billboards feel the signs "are a cool way to advertise." Sixty-nine percent of young adults think the signs display "current and relevant information," and 67% think they "provide useful information." Fifty-eight percent of young adults feel digital billboards are a "good way to learn about new products."



## The Local Radio Stations, a Local TV Channel and an Auto Dealership Generated the Highest Brand-Aided Advertising Recall

"Do you remember seeing messages for any of the following on digital billboards?"



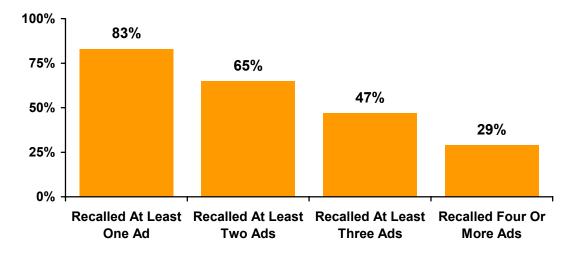
Base: Persons 18 years or older living in the Cleveland, OH, Metro area who traveled on 1-77, 1-90, 1-271 or 1-480 in the past 30 days.

Recall of specific brands of advertising on the digital billboards ranged from 50% to 11%. One out of two (50%) travelers who noticed digital billboards recalled seeing the specific ads for local radio stations that were running in the market during the survey period, and 41% remembered seeing the ad for the local Fox TV affiliate. The recall across all nine advertisers averaged 29%.



### The Majority of Digital Billboard Viewers Recalled, on a Brand-Aided Basis, at Least One Advertisement

"Do you remember seeing messages for any of the following on digital billboards?"



Base: Persons 18 years or older living in the Cleveland, OH, Metro area who traveled on I-77, I-90, I-271 or I-480 in the past 30 days.

More than eight out of 10 viewers recalled at least one of the advertisements currently running on the digital billboards in Cleveland. Eighty-three percent of those who noticed the digital billboards recalled, on a brand-aided basis, at least one of the nine advertisements currently running, and 65% of viewers recalled at least two.

### **Something to Talk About**

### Nearly One in Five Viewers Discussed an Ad Seen on a Digital Billboard with Other People

"Now I would like to ask you about some things you learned from seeing digital billboards. Have you ever seen something funny that you talked about with others that day?"

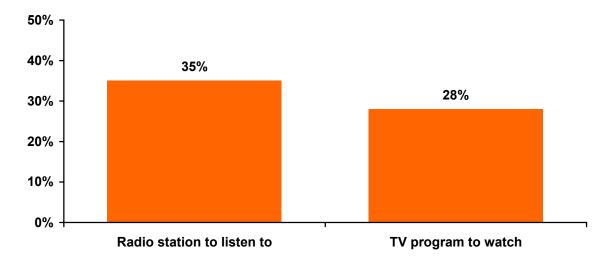
Nineteen percent of travelers who recalled a specific ad on the digital billboards said they talked about the advertising message with their family, friends or coworkers that day.

Base: Persons 18 years or older living in the Cleveland, OH, Metro area who traveled on I-77, I-90, I-271 or I-480 in the past 30 days and recalled at least one ad.



## More Than One-Third of Digital Billboard Viewers Learned About a TV Show or Radio Station from the Signs

"Now I would like to ask you about some things you learned from seeing digital billboards. Have you ever noted a...?"



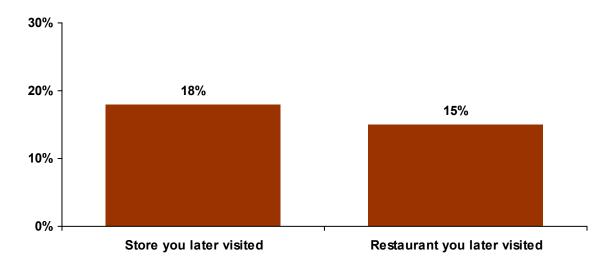
Base: Persons 18 years or older living in the Cleveland, OH, Metro area who traveled on I-77, I-90, I-271 or I-480 in the past 30 days and noticed the digital billboards.

**Digital billboards can drive traffic to other media.** Thirty-five percent of travelers who noticed digital billboards noted a radio station message they saw on a digital billboard, and 28% of viewers noted a television program to watch.



### **Digital Billboards Drive Traffic to Local Businesses**

"Now I would like to ask you about some things you learned from seeing digital billboards. Have you ever learned about a...?"



Base: Persons 18 years or older living in the Cleveland, OH, Metro area who traveled on 1-77, 1-90, 1-271 or 1-480 in the past 30 days and noticed the digital billboards.

Nearly one in five viewers were motivated to visit a store after seeing an advertisement for the store on a digital billboard. Eighteen percent of travelers who noticed the digital billboards learned about a store they later visited, and 15% of viewers learned about a restaurant they later visited.

### **Getting the Word Out on Special Events**

### Nearly Two of Five Viewers Learned About an Event They Were Interested in Attending From a Digital Billboard

"Now I would like to ask you about some things you learn from seeing digital billboards. Have you ever learned about an event you were interested in?"

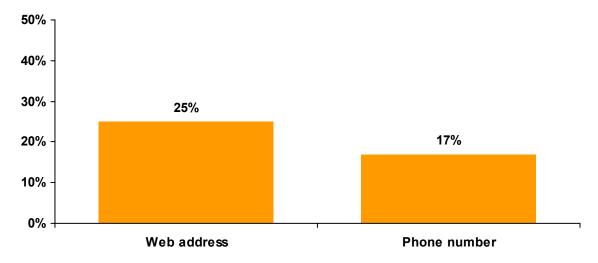
Thirty-nine percent of travelers who noticed the digital billboards learned about an event that they were interested in attending.

Base: Persons 18 years or older living in the Cleveland, OH, Metro area who traveled on I-77, I-90, I-271 or I-480 in the past 30 days and noticed the digital billboards.



### Digital Billboards Prompt Viewers to Learn More About a Brand Through Phone Numbers and Web Addresses

"Now I would like to ask you about some things you learned from seeing digital billboards. Have you ever noted a...?"



Base: Persons 18 years or older living in the Cleveland, OH, Metro area who traveled on 1-77, 1-90, 1-271 or 1-480 in the past 30 days and noticed the digital billboards.

One-quarter of viewers noted an advertiser's Web address displayed on a digital billboard. Twenty-five percent of travelers who noticed digital billboards noted the Web site address of an advertiser, and 17% noted an advertiser's phone number.



### **Appendix A**

### **Travel Habits of Cleveland Metro Residents**

### Cleveland highway travelers in the past week

- 87% drove themselves.
- 58% traveled in a car or truck as a passenger.
- 17% carpooled to or from work either as a driver or as a passenger.
- 10% took a bus.
- Average total miles traveled: 200 (median 105).

#### Cleveland work commuters

- Commuters traveled an average of 16 miles one way.
- Almost half (45%) traveled for 10 to 30 minutes one way, and 36% traveled over a half hour each way.



### **Appendix B**

### **Demographic Profile of Cleveland Travelers**

	Cleveland Residents <sup>1</sup>	Cleveland Highway Travelers	Travelers Who Noticed Digital Billboards	
Gender				
Men	48%	49%²	50% <sup>2</sup>	
Women	52%	51%	50%	
Age				
18–24	12%	13%	7%	
25–34	16%	16%	18%	
35–44	18%	19%	23%	
45–54	20%	22%	24%	
55–64	15%	14%	19%	
65+	19%	16%	9%	
Employment Status				
Employed full-time	47%	55%	65%	
Employed part-time	18%	13%	11%	
Retired	18%	19%	13%	
Homemaker	8%	5%	4%	
Unemployed	4%	5%	5%	
Student	3%	3%	1%	
Income				
\$50K+	49%	58%	54%	
\$75K+	28%	33%	32%	
Ethnicity				
White	86%	74%	76%	
African-American	12%	18%	15%	
Hispanic/Latino	3%	3%	3%	

<sup>&</sup>lt;sup>1</sup>Data in this column are from Scarborough 12-Month Survey (March '06–February '07).

Note: Totals subject to rounding. All sections do not add up to 100% because some respondents declined to answer certain demographic questions.



<sup>&</sup>lt;sup>2</sup>How to read: Forty-nine percent (49%) of the Cleveland residents who traveled on Cleveland highways in the past 30 days are male, and 50% of those travelers who noticed digital billboards are male.

### **Appendix C**

## Demographic Profile of Cleveland Travelers by Miles Traveled in the Past Seven Days

	Cleveland Highway Travelers	<b>Light Travelers</b> (Fewer than 75 Miles) 33% of sample	Medium Travelers (75-200 Miles) 34% of sample	Mega-Milers (200+ Miles) 30% of sample
Gender				
Men	49% <sup>1</sup>	43% <sup>1</sup>	47%	59%
Women	51%	57%	53%	41%
Age				
18–24	13%	16%	11%	13%
25–34	16%	13%	17%	20%
35–44	19%	14%	18%	25%
45–54	22%	17%	26%	22%
55–64	14%	15%	15%	13%
65+	16%	25%	14%	8%
Employment Status				
Employed full-time	55%	34%	60%	77%
Employed part-time	13%	17%	13%	8%
Retired	19%	28%	18%	7%
Homemaker	5%	8%	4%	3%
Unemployed	5%	9%	3%	1%
Student	3%	3%	2%	4%
Income				
\$50K+ HHI	58%	46%	60%	70%
\$75K+ HHI	33%	20%	33%	48%
Ethnicity				
White	74%	69%	81%	77%
African-American	18%	23%	13%	16%
Hispanic/Latino	3%	4%	2%	2%

<sup>&</sup>lt;sup>1</sup>How to read: Forty-nine percent (49%) of the Cleveland residents who traveled on Cleveland highways in the past 30 days are male, and 43% of light travelers are male.

Note: Totals subject to rounding. All sections do not add up to 100% because some respondents declined to answer certain demographic questions.



# **About Outdoor Advertising Association** of America (OAAA)

The Outdoor Advertising Association of America is the lead trade association representing the outdoor advertising industry. Founded in 1891, OAAA is dedicated to uniting, promoting, protecting and advancing outdoor advertising interests in the U.S. With nearly 1,100 member companies, OAAA represents more than 90% of industry revenues.

\*Information supplied by OAAA.

### **About Arbitron Inc.**

Arbitron Inc. (NYSE: ARB) is an international media and marketing research firm serving the media—radio, television, cable, online radio and out-of-home—as well as advertisers and advertising agencies in the United States and Europe. Arbitron's core businesses are measuring network and local market radio audiences across the United States; surveying the retail, media and product patterns of local market consumers; and providing application software used for analyzing media audience and marketing information data. The Company has developed the Portable People Meter<sup>TM</sup>, a new technology for media and marketing research, which has been selected as one of *Time* magazine's "Best Inventions of 2007."

Arbitron's marketing and business units are supported by a world-renowned research and technology organization located in Columbia, Maryland. Arbitron has approximately 1,900 employees; its executive offices are located in New York City.

Through its Scarborough Research joint venture with The Nielsen Company, Arbitron provides additional media and marketing research services to the broadcast television, newspaper and online industries

Arbitron's Out-of-Home division provides training, consumer shopping data and audience profiles for out-of-home media. Currently, more than 100 out-of-home plants/place-based media and thousands of media industry clients—agencies, advertisers, stations, marketers and networks—utilize Arbitron and Scarborough consumer behavior information and software.

Credible third-party measurement helps advertisers justify their investment in the medium. The Company's 50+ years of audience measurement experience help sellers focus on selling the value of their advertising rather than justifying the credibility of their measurement. Arbitron research studies about cinema advertising, the outdoor industry and traditional and nontraditional media can be found on the Company's Web site at www.arbitron.com and can be downloaded free of charge.

Portable People Meter<sup>TM</sup> is a mark of Arbitron Inc.





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