

BILLBOARDS IN AKRON, OHIO: A CONCERNED INVESTIGATION



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Introduction

The purpose of this paper is to determine if there is a spatial and socioeconomic pattern to billboards in Akron, Ohio. For the purpose of this study, billboards were defined as off-premise advertising signs along public roadways that advertise a product or service found at some other location (Floyd, 2000). This means that large advertising signs promoting the goods or services offered at the location of where the billboard stands are not classified as billboards. In Akron, there are many off-premise advertising signs, or billboards.

The factors related to billboards that were investigated included: 1) spatial, 2) demographic, 3) billboard scale, and 4) profit orientation. Spatial factors included neighborhood vicinity and major roads in Akron. Demographic factors included neighborhood education, income, and race. The issue of billboard scale is concerned with whether or not the organization promoted in the billboard is local or national in scope. And finally, the profit orientation of the promoted organization, either for-profit or not-for-profit, was correlated with these other variables.

There were two levels of analysis in this study: 1) the pattern of the promoted organizations in the billboards, and 2) how these patterns related to physical patterns of social neighborhoods in Akron. These two levels of analysis together allowed us to determine if there are patterns to billboards in Akron, Ohio.

The importance of this research lies in understanding how Akron is influenced by, and is influential in, corporate advertising (billboards). We believe that geography plays a crucial role in corporate billboard advertising as Akron is, as are many American cities, socioeconomically segregated by neighborhoods. Furthermore, because

billboards usually promote products or services for specific markets, an analysis of billboards, can help to understand corporate market areas. This paper begins with a brief overview of billboards, the billboard industry, and some important cases and theories related to them. The second section of this paper concerns the methods and results of the fieldwork. The third section concludes and makes a few recommendations for improving the billboard experience in Akron.

Background

Billboards

There are four standard size billboards: 1) the 72 square foot junior poster, 2) the 300 square foot poster panel, 3) the 672 square foot painted bulletin, and 4) the 1,200 square foot and up spectacular. There are more than 500,000 billboards in the United States, with a new one being built every 30 minutes (Scenic America, 2001; Scenic Florida, 2000). In 1997, Ohio was home to more billboards than any other state except Florida (Columbus Dispatch, 1997). Four states currently have a total ban (old and new) on billboards: Alaska, Hawaii, Maine, and Vermont. Also, there are an estimated 1,000 communities that prohibit the construction of new billboards (Scenic America, 2001).

Before the 1860s, outdoor advertising was mostly local (OAAA, 2000). By 1870 there was around 300 small sign painting and leasing companies in the U.S. According to the Outdoor Advertising Association of America (OAAA), during the late 1800s, Ohio was one of the first states to form a billposter association to advocate for billboards (OAAA, 2000). In 1900, billboard size was standardized and big advertisers such as

Kellogg and Coca-Cola began mass-producing signs. Since the early 1900s, the industry has donated “open space” – unused billboard space – for public service messages (OAAA, 2000). This tactic is often employed at the local level and is used to gain support from local politicians who are often on the board of the charitable group given the billboard space (Scenic America, 2001b).

During the City Beautiful movement, billboards were seen as urban pests. In fact, in 1897, Lea & Perrins' Sauce had a 16-foot high by 2,360-foot wide advertisement on the Erie Basin breakwater facing New York bay (Wilson, 1987). Citizen activists charged that billboards were a nuisance and that they promoted immoral behavior (tobacco, liquor, and cheap theaters). Activists wrote letters and boycotted products in many cities to help clean up the visual image of the city (Wilson, 1987). In most cases, the Court ruled against all-out bans and the idea of aesthetic nuisance.

Billboard Industry

According to Scenic Florida (2000), the billboard industry contributed more than \$2 million dollars to Congressional candidates between 1990 and 1995, even though the billboard industry is only 0.8 percent of total advertising revenue in this country (Scenic America, 2001). Furthermore, large advertising corporations dominate the billboard industry. The five largest billboard companies in the U.S. hold more than 80 percent of this country's billboards (Scenic America, 2001). Fifty-eight of the top 100 mega brands are regular outdoor advertisers (OAAA, 2000b). Outdoor advertising is the most cost effective advertising method in terms of relative audience exposure. For example: it costs \$5.92 per thousand people for a 1 minute radio ad, but only \$1.78 for

a standard 300 square foot billboard in the top 100 markets (OAAA, 2000c). OAAA claims that in medium and big cities like Akron, 75 percent of advertising clients are local, and therefore billboards help the local economy (OAAA, 2000c). Finally, the industry operates by a self-regulatory Code of Industry Principles for Billboards.

One of the top five billboard advertising companies is the Phoenix based Eller Media, which was acquired in 1997 by Clear Channel Communications (CCC). Eller Media owns over half a million outdoor displays around the world. They have the ability to reach over half the entire U.S. population, and over 75 percent of the U.S. Hispanic population. According to Eller Media (2001): "Outdoor [advertising] is great because you can't turn it off, throw it away, or click on the next page." Clear Channel Communications, a publicly traded San Antonio based corporation on the New York Stock Exchange, is one of the world's largest media companies. As of December 1999, CCC owns 509 radio stations, 24 television stations, 555,157 display faces, and 120 live entertainment venues. It also owns 400,000 display faces in 36 countries around the world. From September 1999 to September 2000, CCC's sales were \$4.2 billion, with a net income of \$431 million (Yahoo!, 2001).

Eller Media is the largest billboard-advertising corporation in the Cleveland, Akron, and Canton designated market area. Eller claims to be able to effectively target any ethnic or social group in the market area. According to Eller, the Cleveland/Akron/Canton market area is experiencing significant economic development and population growth. They estimate the median household income to be \$38,147, with 83 percent of the population Caucasian. Also, Eller (2001b) has calculated that 82.1 percent of workers in the market area drive to work alone, therefore being prime

advertisement consumers. Furthermore, Eller (2001b) assures dominance in selected areas of the Cleveland, Akron, and Canton market area.

Billboard Law

In 1958, Congress passed voluntary legislation to allow states to control billboards along Interstate highways. In 1965, the Highway Beautification Act was passed, which limited billboards to commercial and industrial areas along federally funded highways. The Act also required “just compensation” for the removal of billboards, which has subsequently been used by the industry to maintain many of its billboards (Floyd, 2000). Tobacco television advertising was banned in 1972, leaving it to billboards and other media.

In 1981, the billboard industry won its case in the U.S. Supreme Court when the Court held that San Diego’s no billboard ordinance violated the constitution (OAAA, 2000). San Diego’s ordinance was ruled unlawful because it violated the First Amendment to the Constitution (free speech) by favoring commercial over non-commercial signs. Since that time, the U.S. Supreme Court has determined that aesthetics is a justifiable reason to restrict billboards, and that an all out ban on off-premise advertising is justifiable in maintaining city aesthetics (Scenic Florida, 2001). In 1987, the Supreme Court of Ohio ruled that the City of Lakewood could regulate billboards because they are a nuisance (Scenic Florida, 2001). Finally, in 1999 tobacco advertising was banned from billboards, but revenue was replaced by the anti-smoking campaign advertising (Prentice, 1999).

The city of Akron maintains loose billboard restrictions as a way to satisfy local and national business interests. Akron's municipal code is devoid of any regulations on permanent signs except construction safety and size restrictions (Mayor's Task Force on Signage, 1992). As a result, the Mayor's Task Force on Signage called for: 1) a freeze on all billboard construction, 2) the removal of billboards within the central business district, and 3) the removal of any billboard within 500 feet of a Scenic corridor (Mayor's Task Force on Signage, 1992). Unfortunately, both the mayor and the city council did not implement any of the Task Force's recommendations.

Urban Theory

The political economic perspective of urban analysis argues that powerful member of the local business and political community work together for the benefit of increasing profits, which subsequently increases government tax returns. Unfortunately there are negative externalities that result from this pro-growth coalition, which are often paid for by the local people. In the case of billboards, the local people suffer from billboards being a visual nuisance, which decrease the quality of life in the city. Furthermore, in the eyes of the powerful business and political community, citizens go from being seen as taxpayers to being seen as consumers. According to the political economic approach, the local government is in a tough position because it is responsible for advancing the business interests of its territory, while at the same time, dealing with the negative side effects (social and environmental). Also, competition between localities for business often depends upon minimizing costs for local businesses through neglecting social, economic, and political conditions for the people

(Cox and Mair, 1988). The corporate world makes use of billboards because they are an excellent way to target specific markets because many U.S. cities are geographically segregated along socioeconomic lines. Sadly, the powerful business and political community of Akron - without much say from Akronites - has traded our beautiful visual landscape for increased profits.

Field Work and Analysis

Study Area and Characteristics

The spatial boundary of this research was the Akron municipal area. The municipal area was chosen over the metropolitan area because it would be difficult to change local ordinances in multiple cities if the results of this research suggest just that. Since billboards are along roadways, the field work was collected in a linear fashion along Market Street, Exchange Street, Tallmadge Avenue, Main Street, Arlington Road, and Copley Road. These roads extend in every compass direction and into many diverse areas of Akron. The selection of these roads was based on the results of the 1998 Akron Metropolitan Area Transportation Study (AMATS) research on road use. These six streets were among the most traveled in the city of Akron in 1998.

Analysis

Since many billboard structures sometime contain more than one individual billboard advertisement, data was collected in terms of individual advertisements. Thus, a single point in Akron could have up to four billboard advertisements (two front and

back signs next to one another). Therefore, billboards will herein be referred to as billboard advertisements, and not just billboards.

Within the municipal boundaries of Akron, along the aforementioned six major thoroughfares, 132 billboard advertisements were observed on the days of February 3 and 17, 2001 (see map 1 at the end of this paper). Since that time, some billboards changed advertisements, while others remained the same. Thus, we only analyzed the observations of those two days, and not necessarily the present day conditions. Also, in our analysis, demographic data from the 1990 Census was used. It would have been desirable for Census 2000 data to be used for this project, but as of this writing, the US Census Bureau has not released the 2000 data.

As previously mentioned, our analysis centered around three variables that billboards target: education, income, and race. Education information was agglomerated for all those of 25 years and older with high school educations. Assuming an average family size of four persons, the poverty threshold in 2001 is \$12,700 (USHHR, 1990). Thus, income evaluations were based on this poverty threshold, even though 1990 data still constitutes only a rough estimate of current income. Both education and income were acquired on a census tract level. Finally, race was accumulated at a census block level (a more specific geographical breakdown). Since Akron's largest non-White race is Black (roughly one-quarter of the population, compared to 70% White), the comparisons based upon race were White-Black (US Census, 2000).

Who Owns It?

The vast majority of billboard structures indicate company ownership: the company that rents the advertisement space to different organizations for self-

promotion. Often times, the company that owns the billboard has its name written on the top or bottom frame of the structure. For Akron, Eller Media owns 91.7 percent of the billboards surveyed.

Who owns it?	Number	Percentage
Eller	121	91.7%
Infinity	2	1.5%
Kilbane	3	2.3%
Outdoor Systems	2	1.5%
Unknown *	4	3.0%

* No visible company ownership

Is the Advertisement for a Local Organization?

If the organization being advertised targets people outside of Akron, then it was classified as “not local”. An organization that is easily recognizable only in the local Akron area was classified as “local”. Our results indicate that there is a 50/50 split of local versus non-local advertisements in Akron.

Is it local?	Number	Percentage
Yes	62	47.0%
No	63	47.7%
Unknown *	7	5.3%

* A billboard ad space without an ad

Is the Advertisement for a Profit Making Organization?

“Profit” was assigned to a billboard advertisement if the organization being promoted in the billboard advertisement is an organization that accumulates profit. “Non-profit” infers the opposite—the organization’s purpose is not the accumulation of

profit. In Akron, just under 70 percent of billboards advertise profit seeking organizations.

Status	Number	Percentage
Profit	92	69.7%
Non-profit	33	25.0%
Unknown	7	5.3%

Billboard Location

The street that the billboard advertisement is “on” indicates what road a driver would have to be traveling on in order to properly see the advertisement. Of the six major Akron roads surveyed, Main (both North and South) is the major road for billboard advertisements.

Which street is it on?	Number	Percentage *
Arlington	26	19.7%
North	3	2.3%
South	23	17.4%
Copley	9	6.8%
Exchange	21	15.9%
East	17	12.9%
West	4	3.0%
Main	34	25.8%
North	15	11.4%
South	19	14.4%
Market	28	21.2%
East	20	15.2%
West	8	6.1%
Memorial / Tallmadge	14	10.6%
Memorial	3	2.3%
Tallmadge	11	8.3%

* Rounding may cause accumulative percentages to not equal 100%

Clusters of Akron Billboards

Five heavily dense clusters of billboards were located within the city of Akron. The billboard clusters were determined by extending a quarter-mile radius buffer around each billboard, and then by designating the most densely overlapping areas. These clusters ranged in size from nine to 31 billboards (see map 2 at the end of this paper).

These clusters were assigned numbers as follows:

1	North Main Street
2	Downtown Akron
3	East Market Street
4	South Arlington Road
5	South Main Street

Using these clusters, six different aspects of billboards and billboard placement/targeting were examined. Three of these aspects related directly to the billboard advertisements themselves, while the other three were concerned with the neighborhoods in which the billboards reside.

Local ownership of the advertised organization, ownership of the billboard, and the profit/non-profit status of the advertised organization were analyzed for all five clusters. Also, the neighborhood income, education, and race that houses the billboard was analyzed. As mentioned previously, the analysis was done via median household income, percent of high school graduates, and percentage Black (see maps 3, 4, and 5 at the end of this paper). For all six of these criteria a location quotient (LQ) was generated in order to standardize the data set. The LQ compares the degree of concentration of a particular group amongst the clusters. An LQ value of 1 is average. Thus, if an LQ is larger than 1 it is more heavily concentrated than the average, and an

LQ smaller than 1 indicates a less than average. Cluster five – South Main Street – has a “Non-profit” LQ of 2.00, which means it has twice as many non-profit advertisements as the other clusters. Also, Cluster three– East Market Street – has a “Black” LQ of 0.09, which means it is approximately 91 percent less Black in terms of its surrounding population, than the other clusters. The results of the comparisons between clusters are summarized in the table below.

Cluster 1: Fairly average on all accounts.
Cluster 2: Both the poorest and least educated, and has the least number of non-profit billboard ads.
Cluster 3: The richest, least Black, highest educated, and the most local ads, which are all Eller-owned.
Cluster 4: The most Black cluster and has the least number of local billboard advertisements.
Cluster 5: Twice the average number of non-profits, 2 nd lowest percent Black and 2 nd highest education attainment.

High school or more data is standardized based upon a population including children, where education was determined for 25 years old and older.

Cluster	Local	LQ	Eller-owned	LQ	Non-profit	LQ	Income	LQ	HS or more	LQ	Black	LQ
1	53%	1.12	95%	1.03	21%	0.84	\$ 22,267	1.26	46%	1.10	17%	0.93
2	52%	1.10	97%	1.06	13%	0.52	\$ 12,193	0.69	28%	0.67	13%	0.72
3	56%	1.18	100%	1.09	22%	0.89	\$ 25,206	1.42	50%	1.19	2%	0.09
4	43%	0.91	90%	0.99	24%	0.95	\$ 16,304	0.92	38%	0.91	40%	2.24
5	44%	0.95	78%	0.85	50%	2.00	\$ 22,443	1.27	50%	1.19	4%	0.22
Total	47%	1.00	92%	1.00	25%	1.00	\$ 17,741	1.00	42%	1.00	18%	1.00

Conclusions and Recommendations

Different clusters contained different demographics and billboard qualities. In the more disadvantaged (more defenseless) clusters, such as the poor, Black, and less-educated clusters—clusters 2 and 4—there were far fewer non-profit and local organization advertisements. On the other hand, more affluent clusters, primarily cluster 3, had a more local focus and the most monopolized billboard ownership (Eller).

However, the other cluster with the highest education level—cluster 5—had the least Eller-owned billboards, and consequently the most non-profit advertisements.

It is important to note that our analysis between billboard clusters does not include the affluent West Akron area. This is because there are virtually no billboards on West Market Street. In fact, the only billboard in the West Akron area is in a strip mall. Their affluence, and subsequently stronger voices in the political arena, may have helped them in keeping their community billboard free. Yet, it is important to help all of Akron's community free themselves of these visual nuisances – especially those communities that need the most help.

While only four states currently have a total ban on billboards, there are an estimated 1,000 communities that prohibit the construction of new billboards (Scenic America, 2001). History has shown that it is extremely difficult to remove existing billboards. Therefore, we recommend restricting the construction of new billboards, as it has been shown to be the most effective way to lessen the billboard nuisance (Floyd, 2000). In line with the recommendation of Kent (1999) and the Mayor's Task Force on Signage (1992), we conclude that the City of Akron should take the steps necessary to obtain the results of other successful cities and states that have curtailed billboards.

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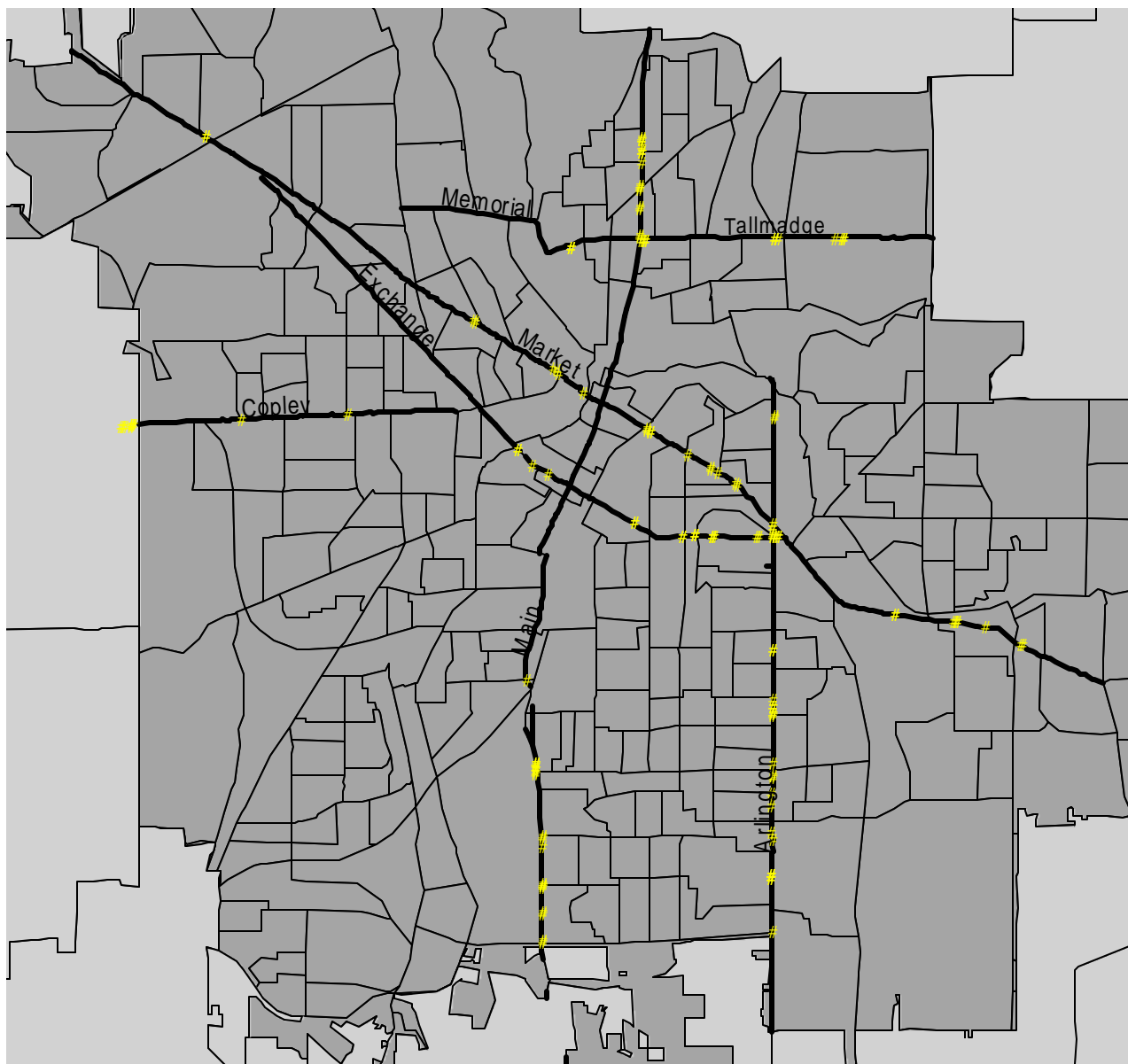
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Maps

Billboards on major Akron roads



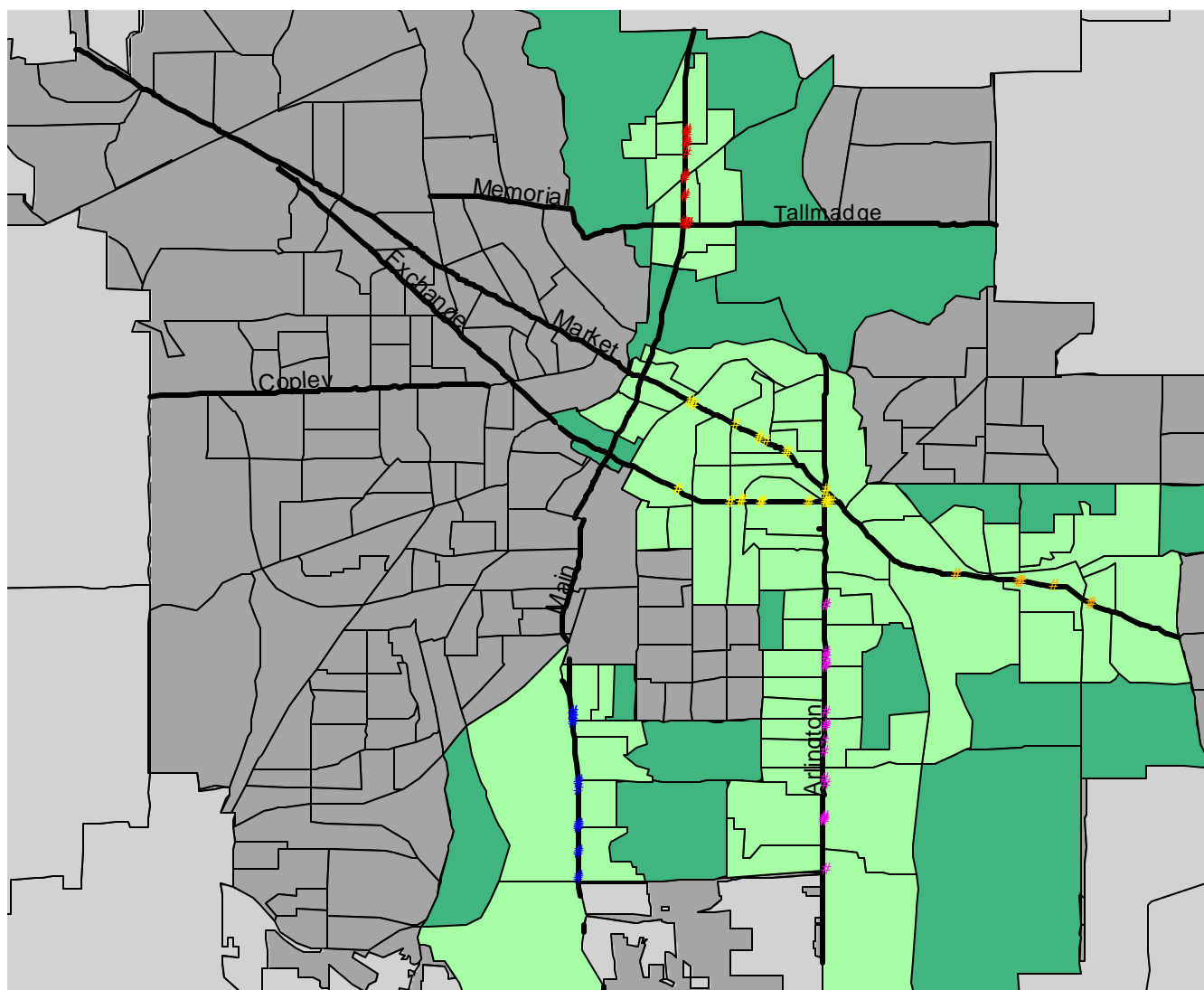
0 2 Miles

Billboard(s)
Major roads



Map 1

Billboard clusters in Akron



Clusters

- # 1
- # 2
- # 3
- # 4
- # 5

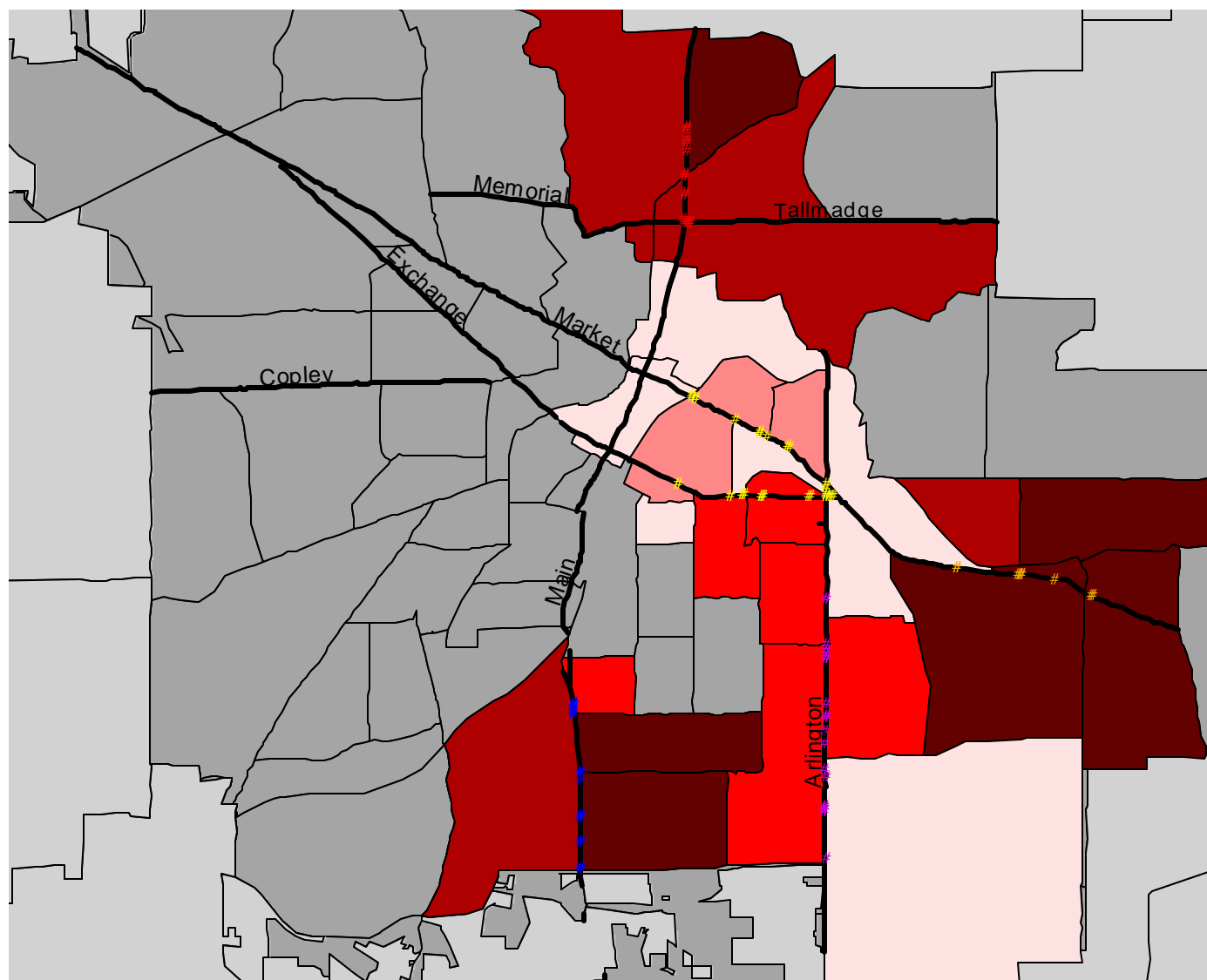
1990 Census Block Groups
 1990 Census Tracts



2 0 2 4 Miles

Map 2

Median Household Income by Akron billboard clusters



Clusters

- # 1
- # 2
- # 3
- # 4
- # 5

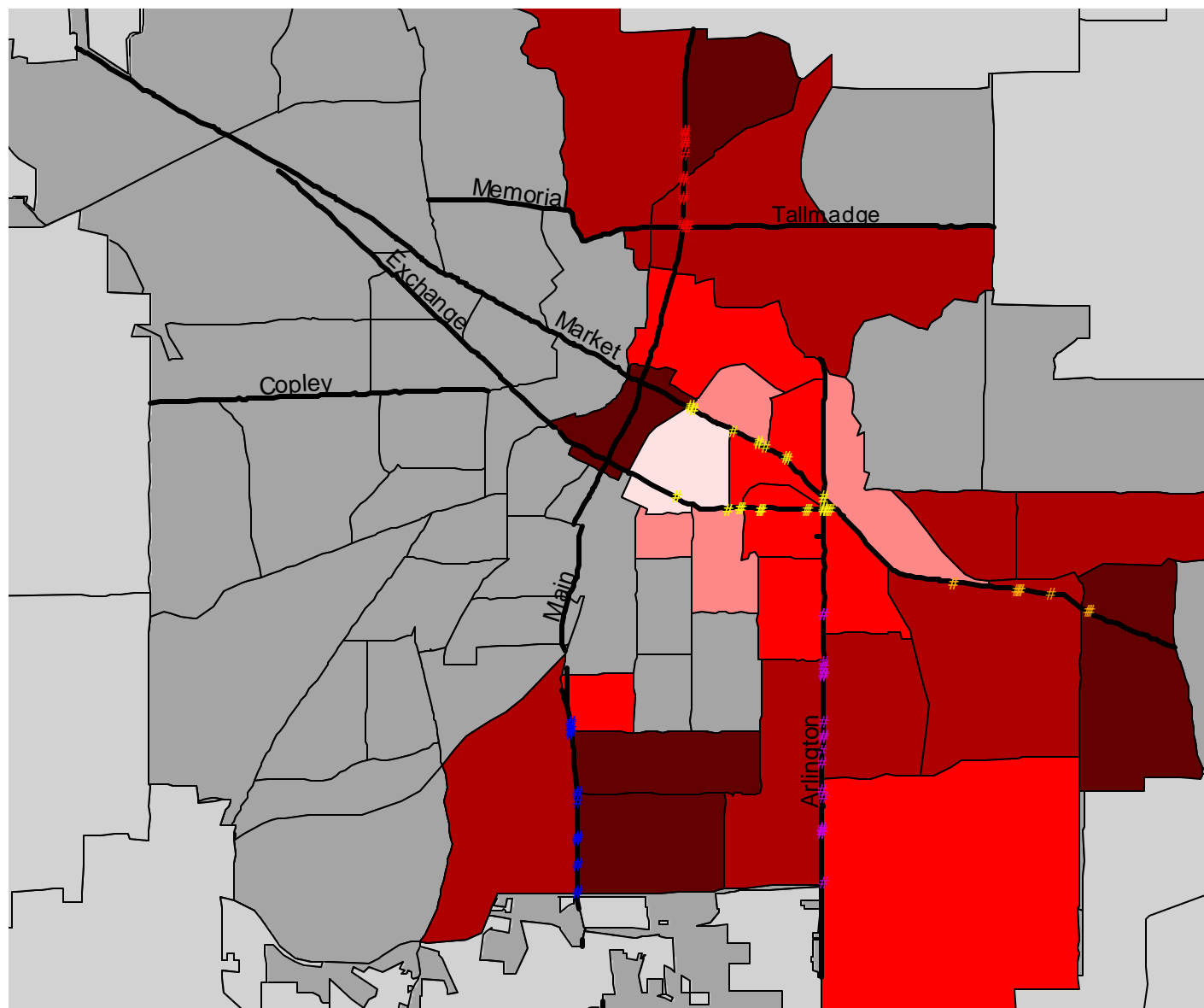
1990 Census Tract

	\$6,600 - \$12,700
	\$12,701 - \$14,800
	\$14,801 - \$18,900
	\$18,901 - \$23,000
	\$23,001 - \$27,200



Map 3

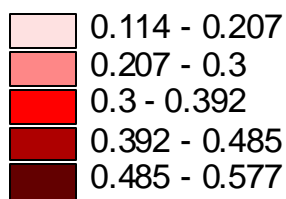
Percent High School Graduate by Akron billboard clusters



Clusters

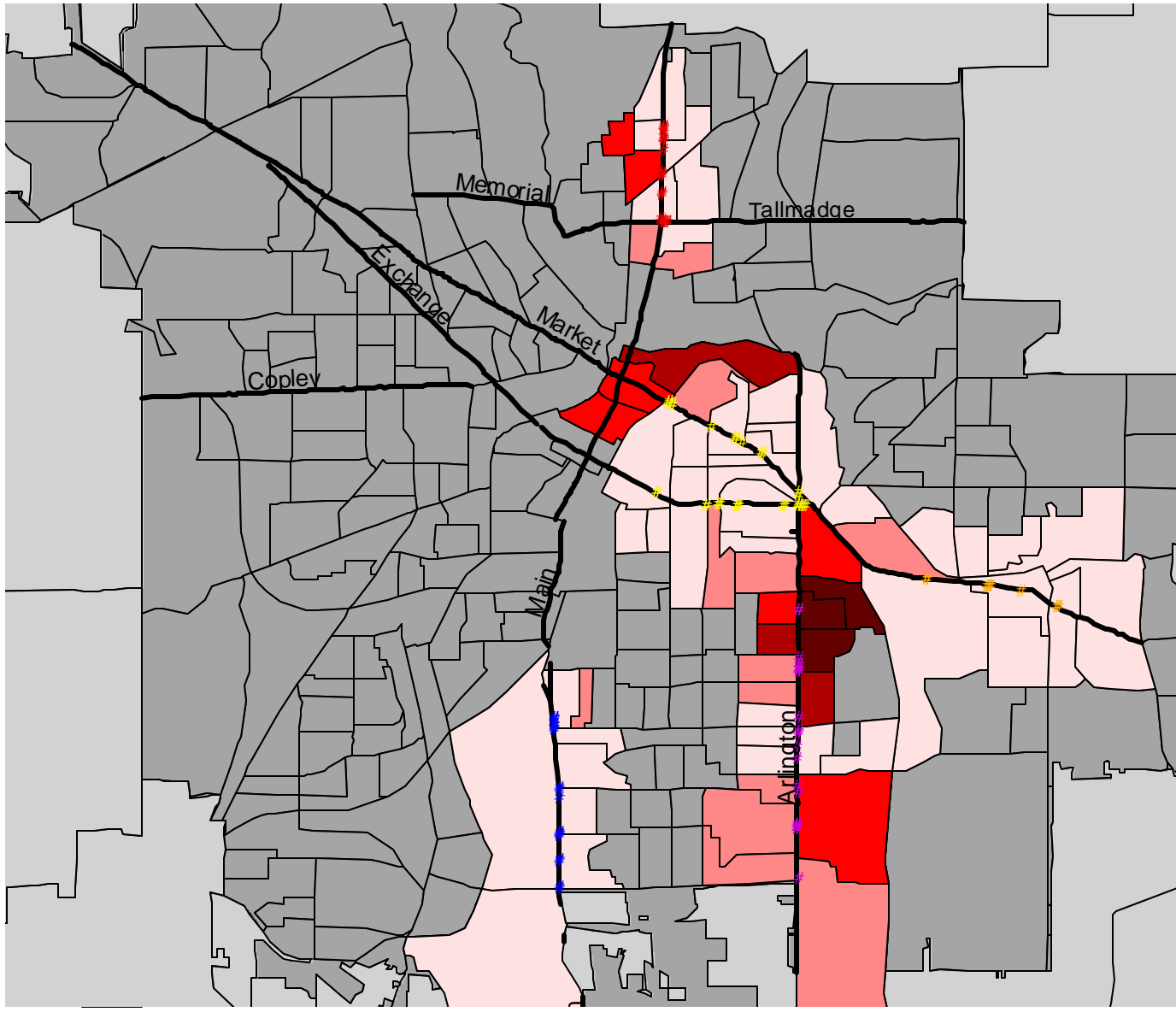
- # 1
- # 2
- # 3
- # 4
- # 5

1990 Census Tracts



Map 4

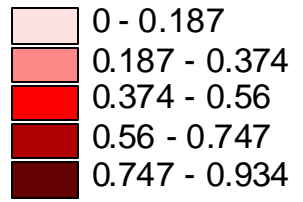
Percent Black by Akron billboard clusters



Clusters

- # 1
- # 2
- # 3
- # 4
- # 5

1990 Census Block Groups



Map 5