Digital Billboard Safety, Expanded David Zokaites July 19, 2022

Digital Billboards

- Provide profitable roadside advertising
- Work like giant TVs
- Distract drivers that's the whole point
- Reduce road safety
- More ad changes \rightarrow more ad revenue, less safety
- Each image should be shown at least 10 seconds

More Collisions

- "The presence of a digital billboard, especially with short display time, leads to visual distraction, which has a negative impact on driving behavior and traffic safety." from "Driving simulator study on the influence of digital illuminated billboards near pedestrian crossings" https://www.sciencedirect.com/science/article/abs/pii/S13698478183 0456X
- "The crash data analysis at 18 study sites in Alabama and Florida revealed that the presence of digital billboards is correlated with an increase in crash rates" from "Digital Advertising Billboards and Driver Distraction" https://rosap.ntl.bts.gov/view/dot/36939

Slower Ads Are Safer

- "Digital billboards lead to visual distraction."
- "Digital billboards have, generally, a negative impact on driving behavior."
- "Digital billboards with a display time of 3 s have the most negative consequences." as compared to 6
- from "Driving simulator study on the influence of digital illuminated billboards near pedestrian crossings"
 - https://www.sciencedirect.com/science/article/abs/pii/S13698478183 0456X

Display Each Image 10 Seconds

- "On the basis of research results, experience, and the analysis of recommendations discussed in other papers, the authors suggest requirements and limits related to large-sized billboards: ... Minimum advertisement display time: 10 s."
- See "Large-Sized Digital Billboards Hazard"
- https://www.researchgate.net/publication/27129116
 8_Large-Sized_Digital_Billboards_Hazard

Electronic Signs, Safest To Worst, Biggest To Smallest

- Book Your Billboard 14th & Cliff
 12 still images in 2 minutes, 10 seconds each
- Lamar 10th & Cliff
 20 still images in 2 minutes, 6 seconds each
- Vern Eide 12th & Sycamore 20 changing images in 2 minutes, 6 seconds each
- One American Bank 14th and Minnesota
 24 animated images in 2 minutes, 5 seconds each
- Ace Hardware 12th & Kiwanis
 35 animated images in 2 minutes, 3.4 seconds each

City Ordinance 1

- Digital billboards must be static no changes are allowed
- All digital billboards break city law because they change ads
- CHAPTER 160: ZONING / OFF-PREMISES SIGNS / § 161.587 PURPOSE AND INTENT / § 160.591 GENERAL REGULATIONS
- "(j) Blinking or flashing lights are prohibited. Electronic message signs are permitted. The message shall be static; animation is prohibited."

City Ordinance 2

- On premises signs covered by different ordinance
- CHAPTER 160: ZONING / ON-PREMISES SIGN REGULATIONS / § 160.570 PURPOSE AND INTENT / § 160.577 ILLUMINATION.
- "(b) Electronic message sign. (1) Electronic message sign displays shall be limited to displays which are gradual movements, including, but not limited to, dissolve, fade, scrolling, or traveling. However, sudden movement is prohibited, including, but not limited to, blinking and flashing."

Recommendations

- Add "BILLBOARDS" to ordinance title "OFF-PREMISES SIGNS"
- Update city ordinance so each billboard ad must be shown for a minimum of 10 seconds
- Enforce the updated ordinance
- Check all local electronic signs and billboards
- Work with businesses to eliminate animated ads
- Keep roads safe

Kudos

- Councilor Starr stays after meetings to chat
- Councilor Neitzert working on improving ordinance
- Councilor Merkouris responded to email
- City clerks always helpful





Motherhood Sure Is Tiring