



# COOP Capstone Project

Cohort C580

# Introduction



**StratusLink Communications** is a telecommunications provider that offers a comprehensive suite of connectivity and digital services tailored to individual and enterprise clients.

This project aims to strategically expand the digital advertising efforts to gain a competitive advantage by making data-driven decisions to determine budget allocation.

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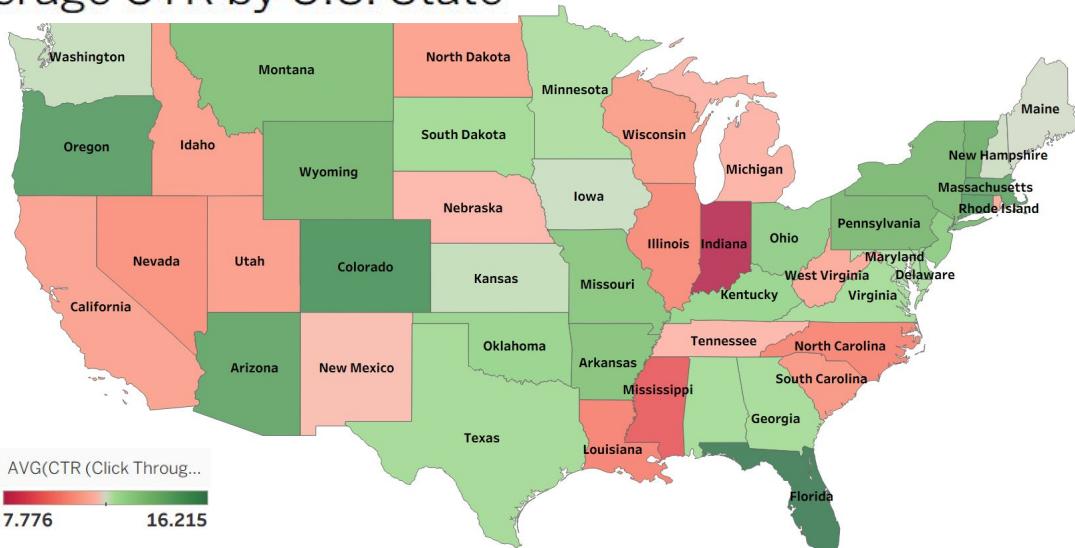
Victor Cabrera, Panagiotis Kavvouras, Mario Guerrero & Sekou Bangoura

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# Spatial Analyst

# US States Branding Metrics - CTR & Viewability

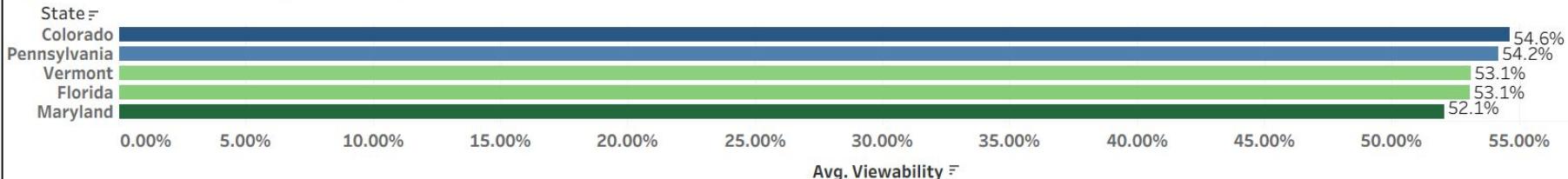
## Average CTR by U.S. State



## Insights

- **Florida** leads, its #1 in viewable impressions (**7.9M**) and the highest CTR (**16.2%**).
- **Connecticut** has High CTR (**14.9%**) but Low viewability (**41.2%**). So this indicates that ads are seen but placement is weak so improving inventory could make it a much stronger performer.
- **Indiana** is by far the weakest state across different metrics, has lowest CTR (**7.8%**) and viewability below average (**43.9%**).

## Top 5 AVG Viewability % States



# Branding Metrics - Region & Urbanicity

REGION	Avg CTR(%)	Avg Viewability(%)	Total Viewable Impressions
Northeast	13.11%	48.87%	42.1M
South	12.27%	48.60%	79.3M
West	12.98%	48.90%	50.8M
Midwest	11.63%	48.51%	46.4M

- The **Northeast** has the highest CTR (13.11%) which means it is the region with the strongest ad engagement. The **West** has the highest viewability (48.90%).
- The **South** has the most viewable impressions (79.3M), but this may be due to a higher allocated spend. Meanwhile, the **Midwest** underperforms in CTR (11.63%) and is the weakest overall across multiple metrics.

URBANICITY	Avg CTR(%)	Avg Viewability(%)	Total Viewable Impressions
Urban	12.49%	49.30%	78.1M
Suburban	12.78%	48.56%	78.6M
Rural	11.99%	48.15%	61.9M

- Urban** has strong total impressions (78.1M) and solid viewability (49.30%).
- Suburban** has the highest CTR (12.78%) and the highest total impressions (78.6M), making it the overall top-performing environment.
- Rural** is the lowest across all metrics, and we should carefully evaluate this environment before allocating additional spend.

# Key Advertising Highlights - CPA, CVR and CPM

- Best-performing states:** Connecticut, Tennessee, and Wyoming show the lowest CPA, highest CVR, and lowest CPM.
- Worst-performing states:** Alaska, Nebraska, New York, Alabama, Iowa, and Michigan show high CPA or CPM and weaker conversion efficiency.
- Audience patterns:** Younger users (18–30) have lower CPA and higher CVR, while older audiences are more expensive to reach and convert.
- Device trends:** Smartphones deliver lower CPA and CPM; desktop traffic is the least cost-efficient.
- Gender impact:** Minimal effect on CVR, but males show higher CPA and CPM than other groups.



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Olivia Pan, Karla Martinez, Marieli Mota, Rachel Rubio

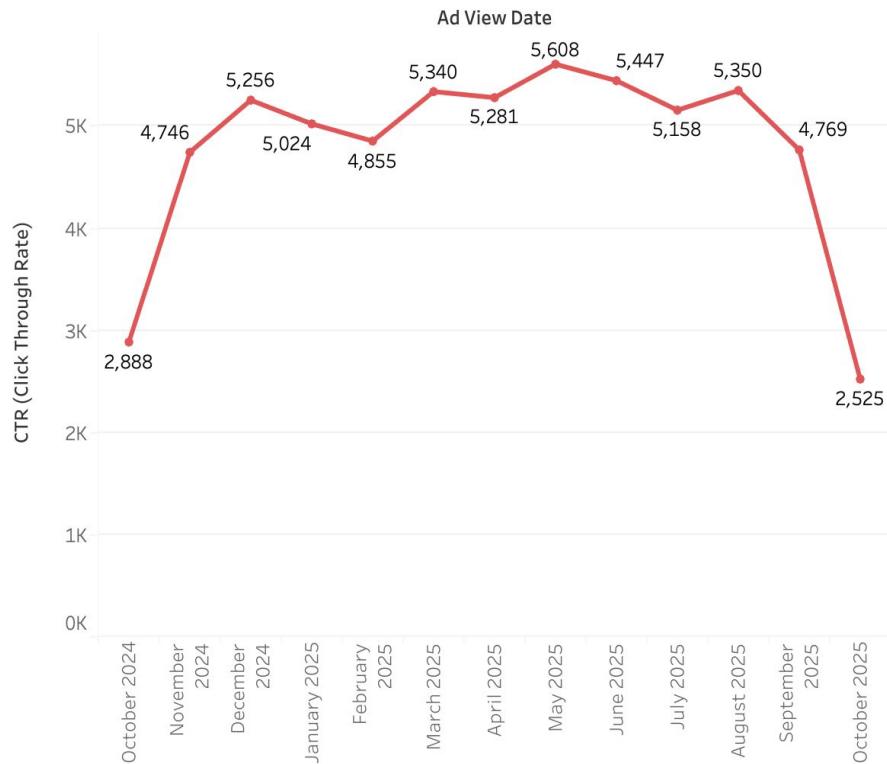
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# Audience Analystt



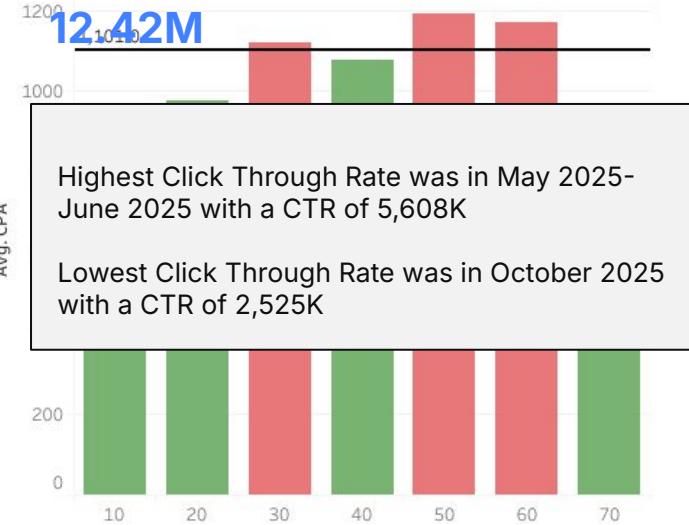
# CPA & CTR

CTR Monthly Performance

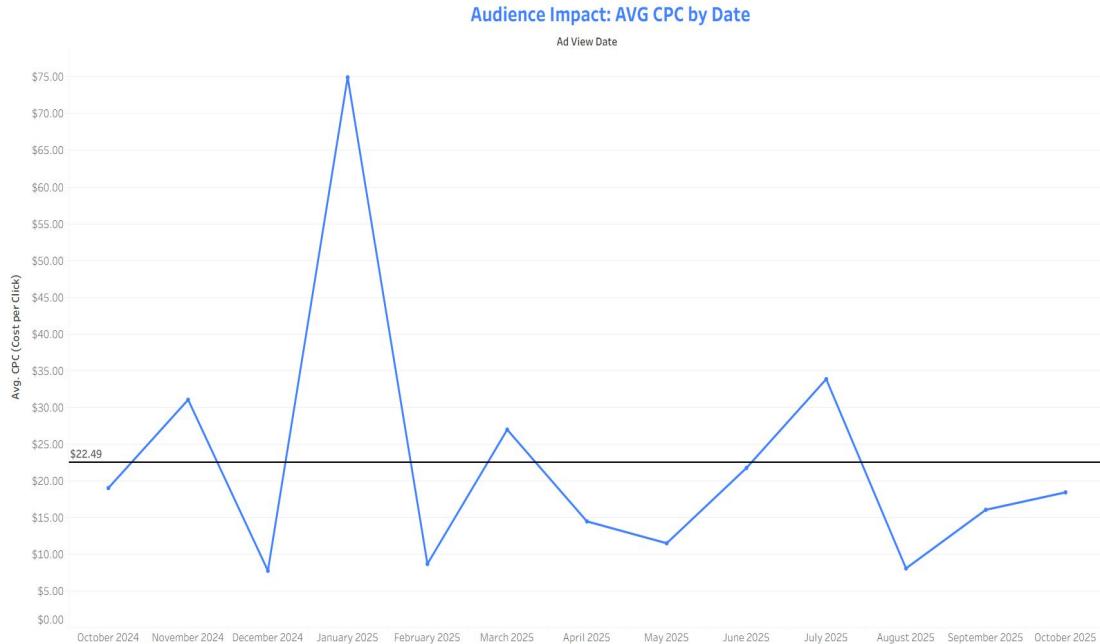


**CPA Benchmark**  
**\$1,101**

Age  
**Total Click Through Rate**



# CPC



Baseline of Total Clicks

**4,220,759**

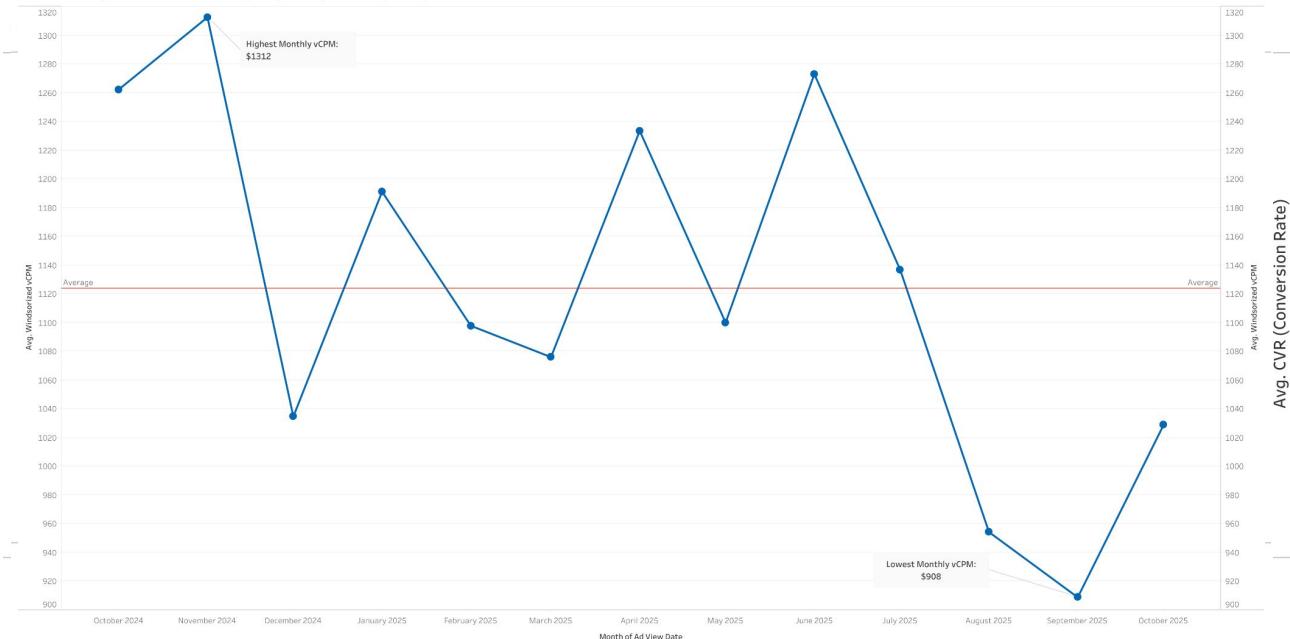
Highest sum of clicks was in May 2025 totaling **10,290,256**

Lowest sum of clicks was for Oct 2025 reaching the **constant value**

# CPM + vCPM + CVR

## Insights

vCPM Over Time (2024-2025)  
Shows monthly shifts in viewable cost per 1,000 impressions (vCPM) over time



### CPM

- Lowest CPM (\$63-\$64) occurs in April-May
- Highest CPM (\$98) occurs in January

### Viewable CPM

- vCPM (~\$1,312) peaks in November 2024 because of holiday-season competition
- August-September show lower vCPM (\$905-\$935) as inventory expands and demand softens

### CVR

- CVR peaks (~\$55) in March and October 2025, indicating stronger user intent during key seasonal periods.
- Summer months show a dip to \$48-\$49, consistent with lower engagement.

# Personas



Gen Z Student

Name: Maya Johnson

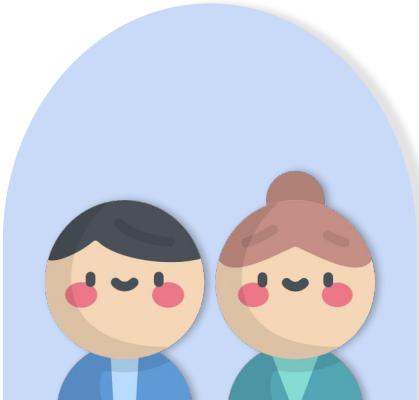
Gender: Female

Marital Status: Single

Location: Boston

Age: 20s

Occupation: Full-time college student



Family Focused Planner

Name: Daniel Reyes

Gender: Male

Marital Status: Married

Location: New York City

Age: 40s

Occupation: Project manager



Craftswoman

Name: Barbara Walter

Gender: Non-binary

Marital Status: Widowed

Location: Texas

Age: 70s

Occupation: Laborer/Retired

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Kadija Abdoulaye, Julia Cordova, Tasmim Hanif

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# Creative Analyst

# Creative Sizing Reference

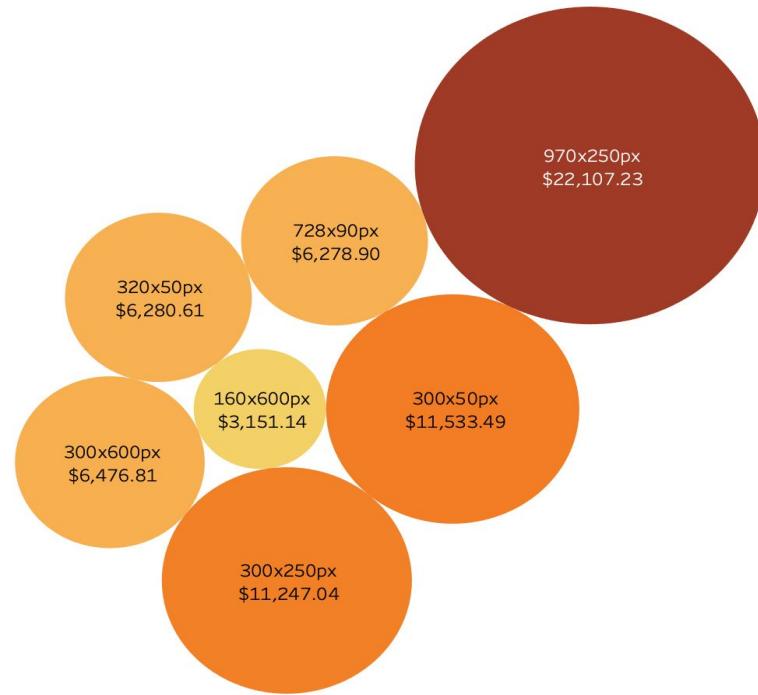
0: 160x600px

4: 320x50px

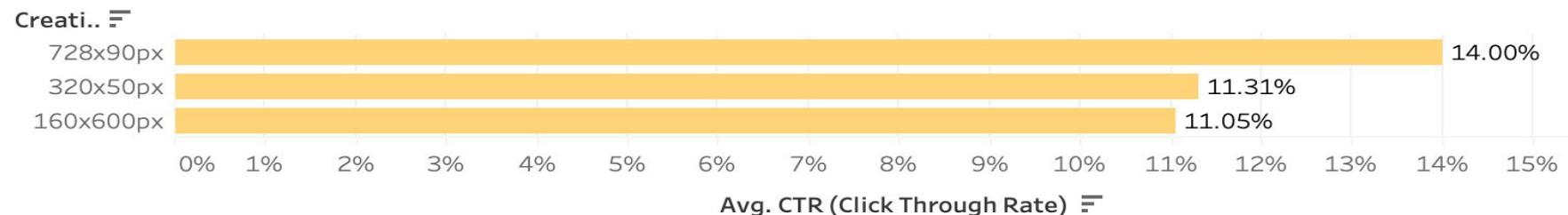
5: 728x90px

**The top-performing creative size is 728x90px. It has one of the lowest cost per acquisitions and consistently achieves the strongest overall performance across key engagement and efficiency metrics.**

CPA Performance Across Creative Sizes

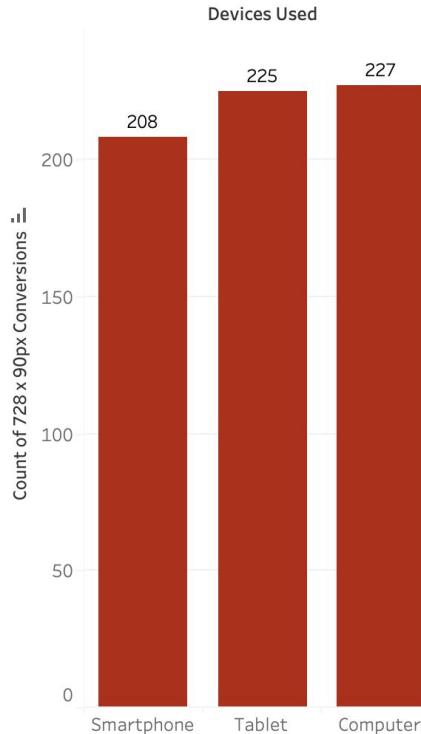


### Top-Performing Creative Sizes by CTR

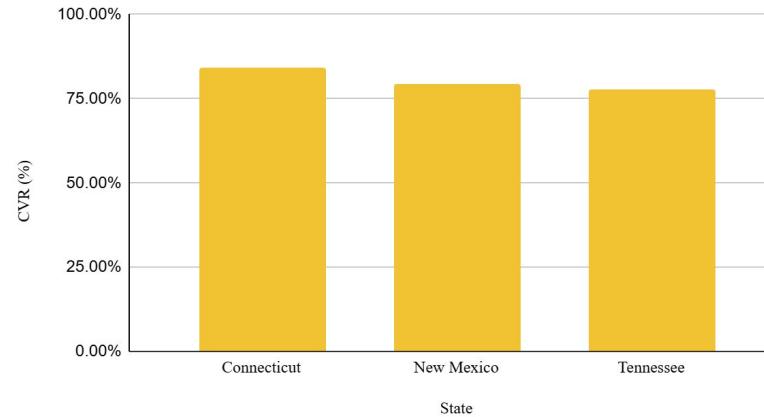


# The 728×90px size is used the most on computers, with the second closest being tablets.

## Devices Used for 728x90px



Size 728x90px Top 3 states CVR

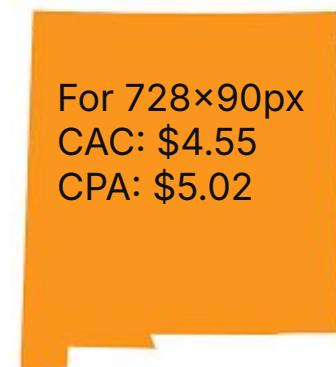


The CVR being the highest in Connecticut at 84.21 %,  
New Mexico at 79.56%

## Connecticut

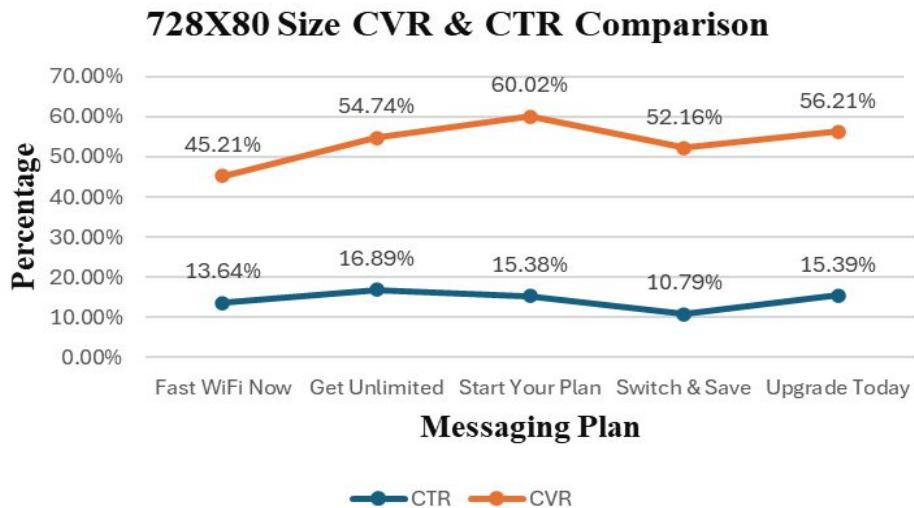


## New Mexico



# Top Messaging Plan Using 728X90px size

**Get Unlimited** is the best overall performer for 728x90px size because it combines high CTR, strong CVR, and a reasonable CPA.



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Aneesa Zaman, Helen Lin, Ismael Sinani, & Haseeb Javad

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# Media Inventory



# Key Findings Before Deep Dive

## Campaign Performance: Initial Insights

- Most publishers delivered 45–55% viewability — **below the 60% goal**
- Higher viewability tends to lead to stronger CTR and CVR
- A clear split emerged between high-performing and low-performing publishers
- Early analysis suggested 5 publishers consistently deliver better visibility & engagement
- Several publishers under-delivered on both visibility and efficiency

# Inventory Performance Dashboard

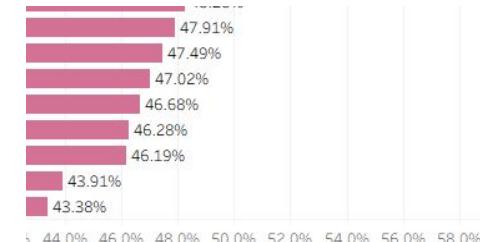
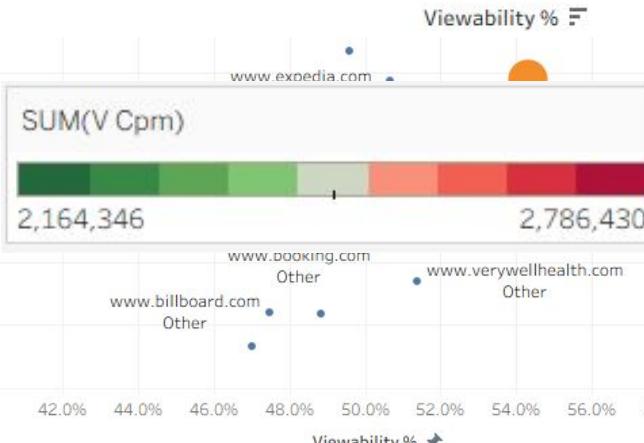
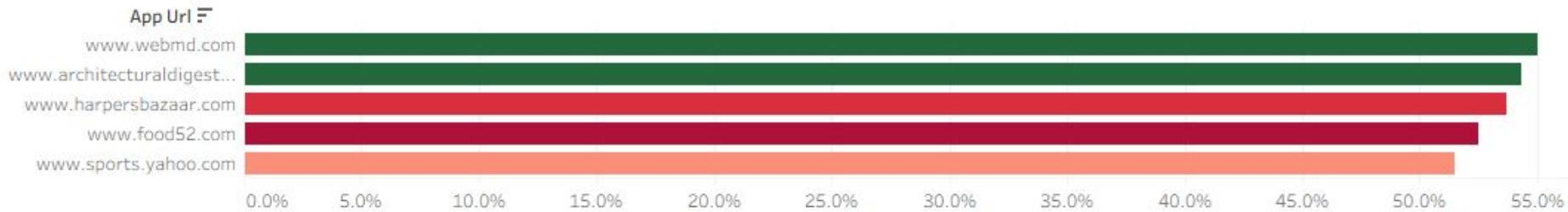
## Viewability % by Publisher



## CTR vs Viewability Scatter Plot

Top 5 publishers highlighted

## Top 5 Publishers by Viewability %



# Final Recommendations

## Top 5 Recommended Direct Buy Publishers

- **WebMD** — highest viewability (55.03%), strong CTR & CVR, medically-engaged audience.
- **Architectural Digest** — 54.31% viewability, premium lifestyle audience, strong CTR.
- **Food52** — 52.50% viewability, strong CTR/CVR, high-quality impressions.
- **Sports.Yahoo** — 51.50% viewability, excellent CTR, large scalable audience.
- **Houzz** — 51.04% viewability, strong audience quality, consistent CTR

## Underperforming Publishers

Some publishers consistently under-delivered:

- **Billboard**
- **Expedia**
- **Instyle**

They failed to meet the 60% viewability threshold, had weak CTR, and produced inefficient vCPM. These sites should be deprioritized to reduce wasted spend.

## Suggested Buy Rates

- CPM: \$5–\$8
- vCPM target: < \$20,000 (based on your campaign average)
- CPC: \$0.40–\$0.60
- CPA: \$90–\$100

# Conclusion

- **Spatial Analyst:**

For optimizing the campaign at the geographical level, we recommend that scaling efforts should **focus on high-performing states (Florida, Connecticut), suburban audiences with mobile devices**, and strong regions like the **Northeast and the West**. While weak-performing locations like Rural Indiana in the Midwest need a lot of optimization in terms of ad placement and creative messaging, before we allocate more budget to it.

- **Audience Analyst:**

To optimize campaign performance, strategically allocate budget to high-performing, **cost-efficient months like March, April, May, August, and September** while **tightening budgets during high-competition periods like January, July, and November** by focusing on high-value audience segments. Prioritize acquisition-driven campaigns in **March and October when conversion rates peak**, shift to awareness campaigns during summer months when engagement dips, and **continuously test new creative strategies and audience segmentation to maintain performance throughout the year**. Finally, leverage the successful targeting and creative elements from peak performance months to guide future campaigns and prevent steep declines in engagement.

- **Creative Analyst:**

We recommend prioritizing the **728x90px size since it drives the lowest costs and strongest conversions**, especially in **Connecticut** and **New Mexico**, and performs best when paired with the **'Get Unlimited' message**. To maximize visibility and engagement, focus this size on desktop placements, with top-of-page or sidebar positions in Native or Rich Media formats.

- **Inventory Analyst:**

To improve campaign quality and move closer to the **60 percent viewability goal**, we recommend **shifting more budget toward the top performing publishers such as WebMD, Architectural Digest, Harper's Bazaar, Sports Yahoo, and Food52**. These partners delivered the strongest viewability, engagement, and overall efficiency, making them the most reliable sources of high quality impressions. We also recommend **securing direct buy rates in the five to eight dollar CPM range will further ensure access to premium inventory and help stabilize results across future campaigns**.

# Thank you!