



Prepared by C515



# AT&T Inc.

Enhancing Advertisement Strategy

27 May, 2025



# *Agenda*

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- Meet the Team
- Background
- Project Objectives
- Audience
- Spatial
- Creative
- Inventory & Viewability
- Conclusion



# *Meet the Team*

**Project Manager**

**Dusu Sidibay**

**Audience Analysts**

**Reem Ali**

**Lara Buchan**

**Alejandro Tigre**

**Spatial Analysts**

**Cindy He**

**Nicholas Louie**

**Myunbo Pen**

**Angela Wang**

**Creative Analysts**

**Abir Akond**

**Nicholas Noto**

**Manvi Oberoi**

**Jackie Yee**

**Inventory  
Analysts**

**Safirah Milien**

**Jenny Osorto**

**Puja Roy**

**Rich Verdi**



# *Background*

## **Current scenario:**

Our client, AT&T, has tasked Cohort 515 with maximizing future advertising strategies by analyzing its campaign reporting data in several key areas: Audience, Spatial, Creative, and Inventory.

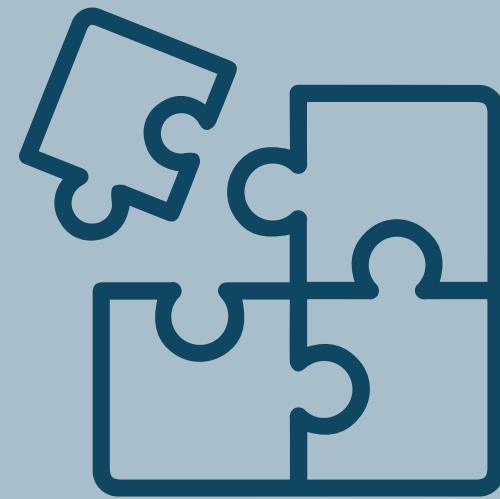


# Project Objectives



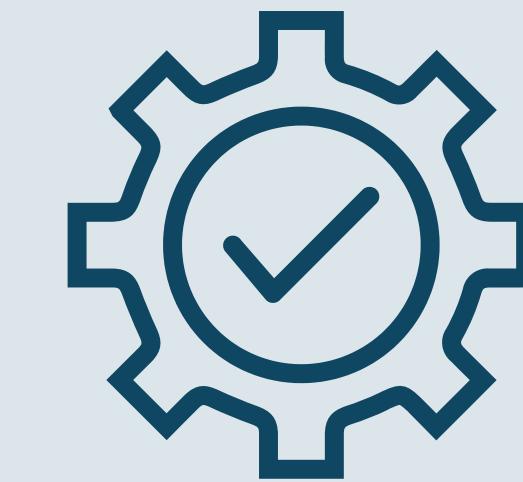
## Primary Goal

- Audience - \$250 CPA
- Desktop conversion - \$500 CPA
- Smartphone conversion - \$400 CPA
- Viewability - 60%



## Secondary Goal

- Audience - 0.015% CTR
- Desktop conversion - 0.04% CTR
- Smartphone conversion - 0.04% CTR
- Viewability - \$80 vCPM



## Implementation Plan

- Uncover insights that will lead to more cost-effective and performance-driven media planning in order to increase overall profits

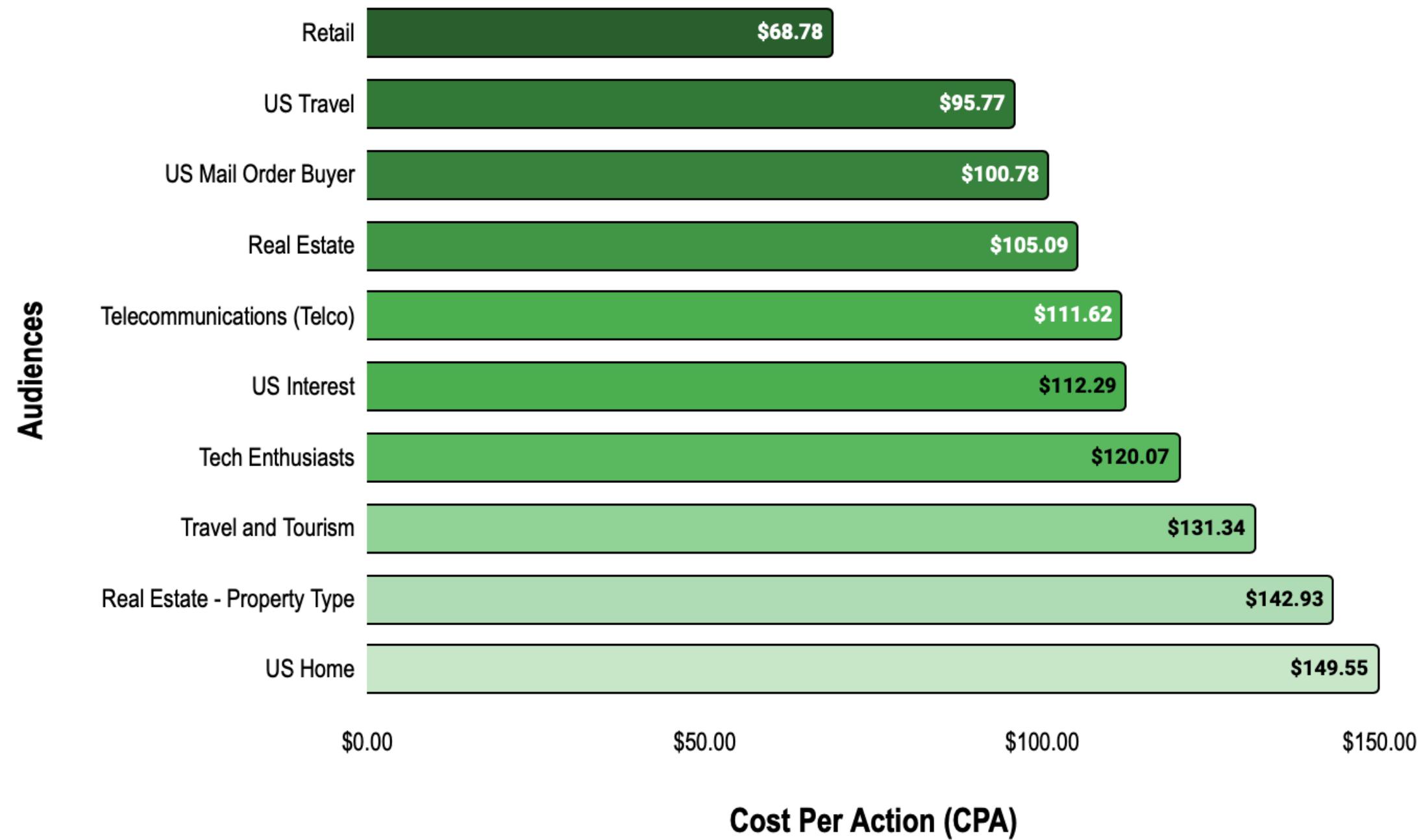
# *Audience*



# Top 10 Audience by CPA

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## Top 10 Audiences by CPA



CPA

- Low CPA = Good
- The target was to get a CPA rate of \$250 or below.
- The CPA of the entire dataset was \$327.34.  
-Off target by 30.94%

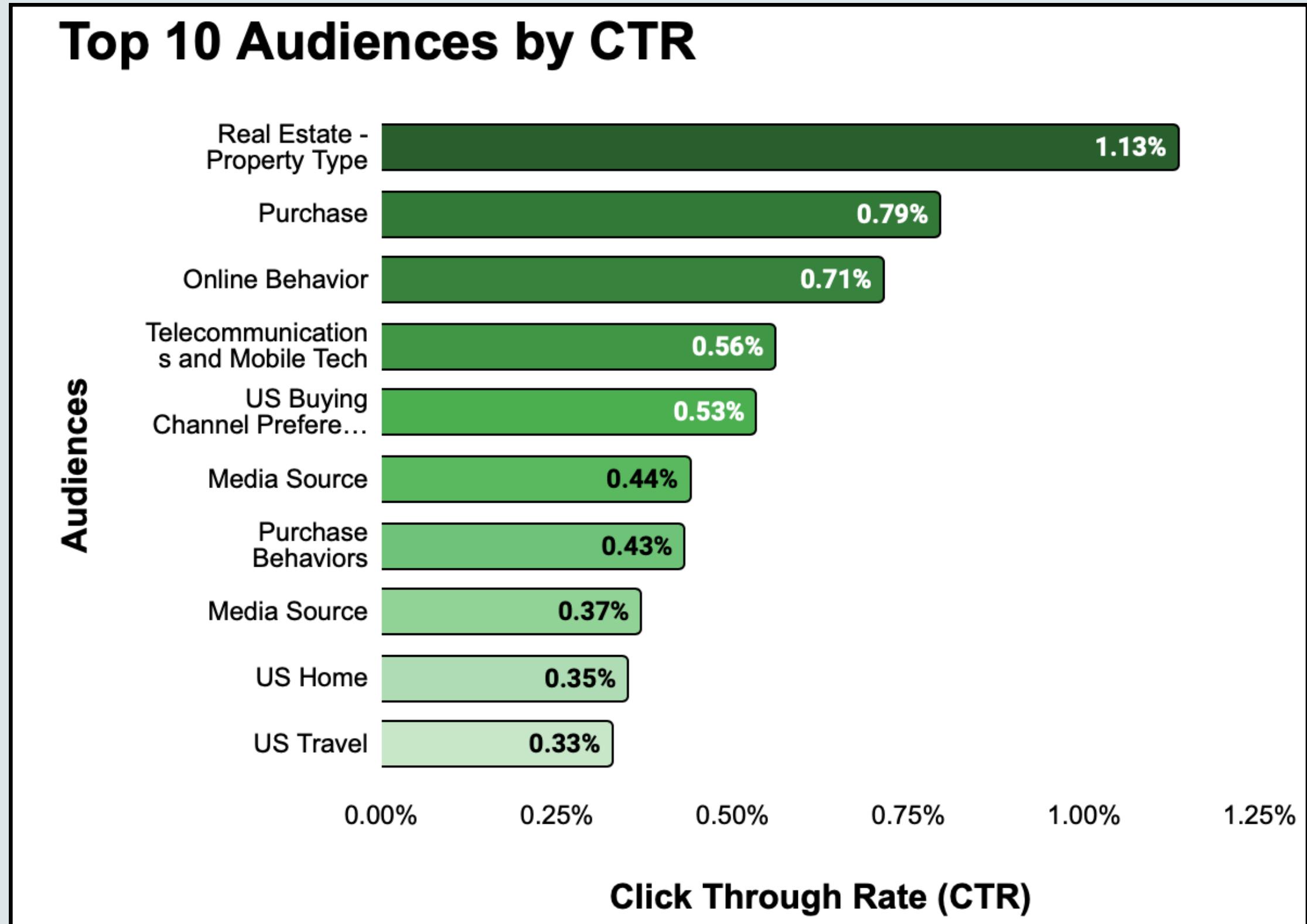
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# CTR

- High CTR = Good
- The goal was to get a CTR rate of 0.015% and above.
- The CTR for the entire dataset was 0.27%.  
-Over target by 0.255%

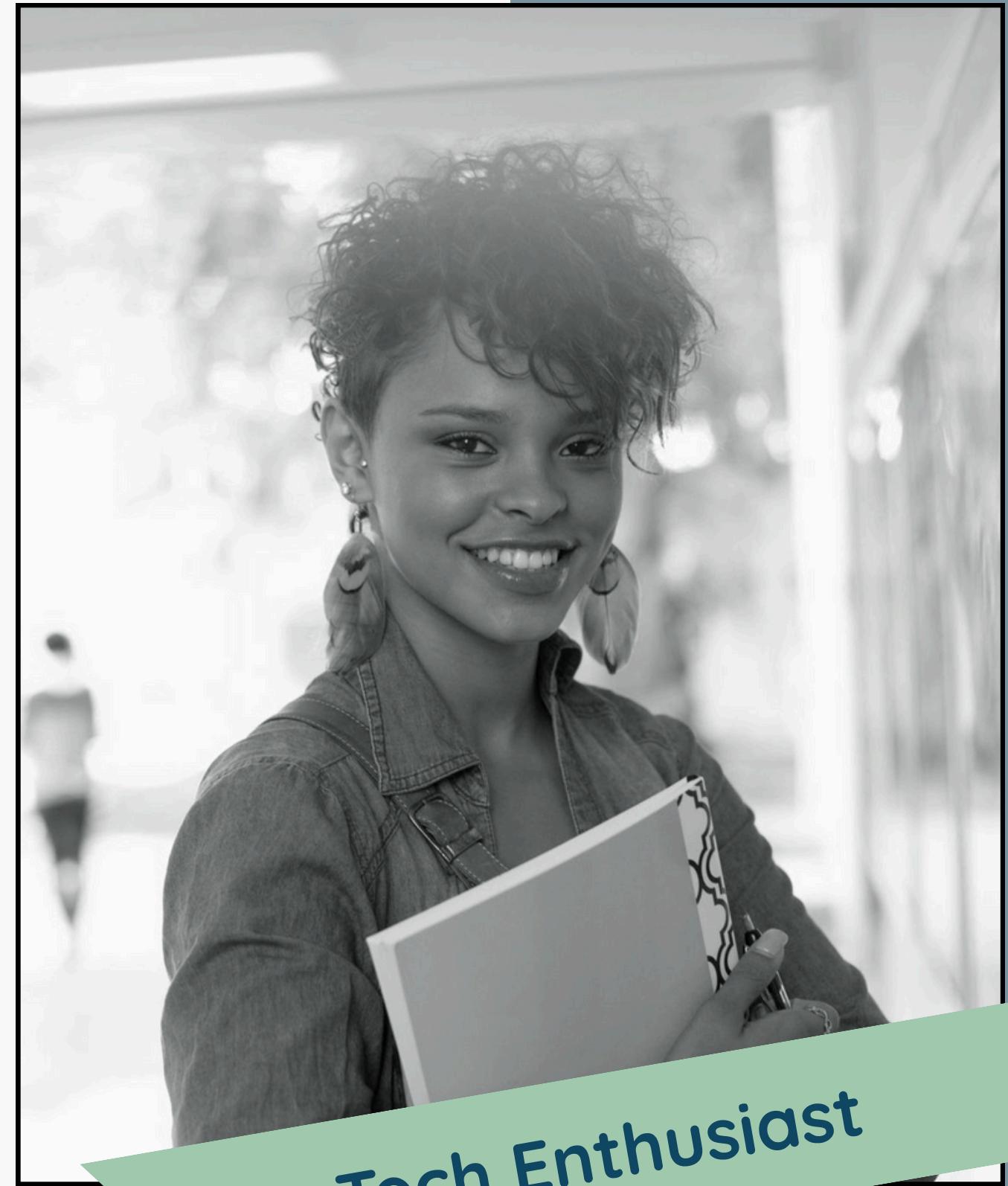
## Top 10 Audience by CTR



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# Rebecca Smith

- **Age:** 32
- **Location:** Delaware
- **Education:** High School Graduate
- **Family:** Single, No Kids
- **Career & Lifestyle:** Freelance content creator and budding tech entrepreneur. She spends most of her time researching the latest gadgets, testing new apps, and creating tech tutorials on TikTok.
- **Interests:** Smart home devices, budget-friendly tech upgrades, and minimalist aesthetics.
- **Shopping Behavior:** Price-conscious but loyal to brands that align with her values. Loves bundles and early access to product launches.
- **Why She Matters:** Rebecca is an early adopter who influences others , ideal for launching new tech products.
- **Persona Tag:** Tech Trendsetter on a Mission



Tech Enthusiast

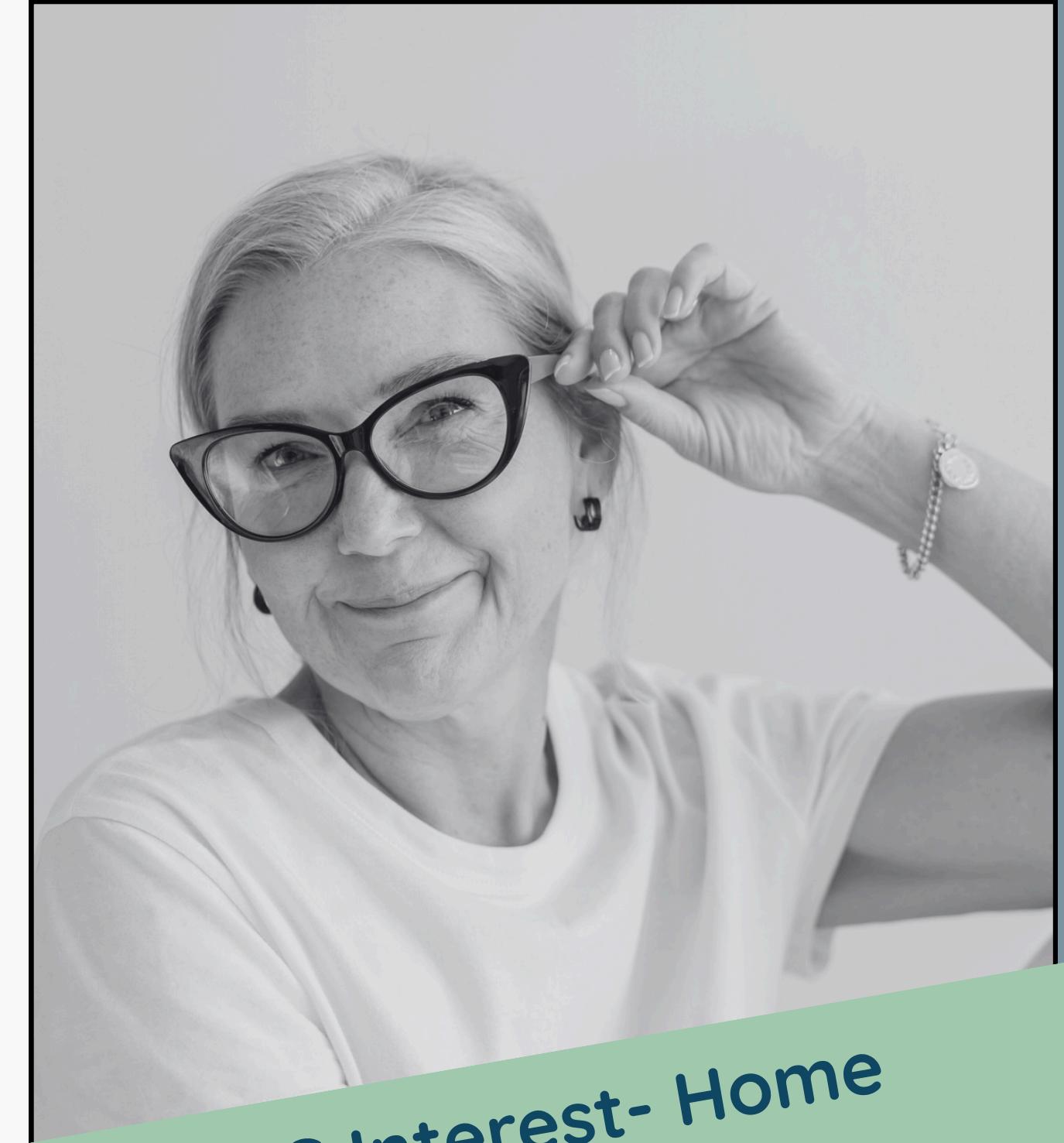
# Jacob Miller



- **Age:** 27
- **Location:** Texas
- **Education:** College Graduate
- **Family:** Single, No Kids
- **Career & Lifestyle:** Works in telecommunications and is climbing the corporate ladder. He enjoys visiting coworking spaces, catching up on tech news, and listening to business podcasts.
- **Interests:** Productivity tools, office gear, wireless gadgets, and stylish but functional fashion.
- **Shopping Behavior:** Seeks convenience and function, shops online frequently and appreciates smart recommendations.
- **Why He Matters:** Jacob is a modern professional who invests in efficiency and brand trust.
- **Persona Tag:** Driven Digital Professional

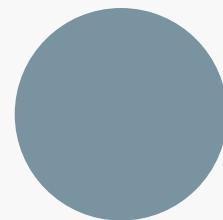
# Mary Williamson

- **Age:** 55
- **Location:** Connecticut
- **Education:** Did Not Attend College
- **Family:** Mother of Two
- **Career & Lifestyle:** Works part-time and devotes much of her time to family and home projects. She values durability, family-safe products, and easy to use tools
- **Interests:** Home improvement, gardening, cooking, and DIY tutorials on YouTube.
- **Shopping Behavior:** Looks for reliability, clear instructions, and brands with excellent customer service.
- **Why She Matters:** Mary is a decision-maker for household purchases and a brand loyalist once trust is established.
- **Persona Tag:** Family Focused Home Improver

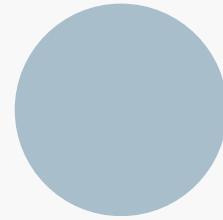


US Interest- Home Improvement

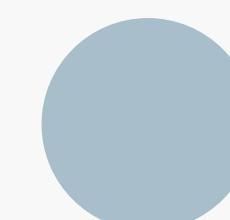
# Recommendations



CTR: Excellent (Keep it up)



Room for Improvement:  
CPA: US Health & Fitness \$752.17  
(Goal: \$250 and below)



## Age Range with Average CPAs

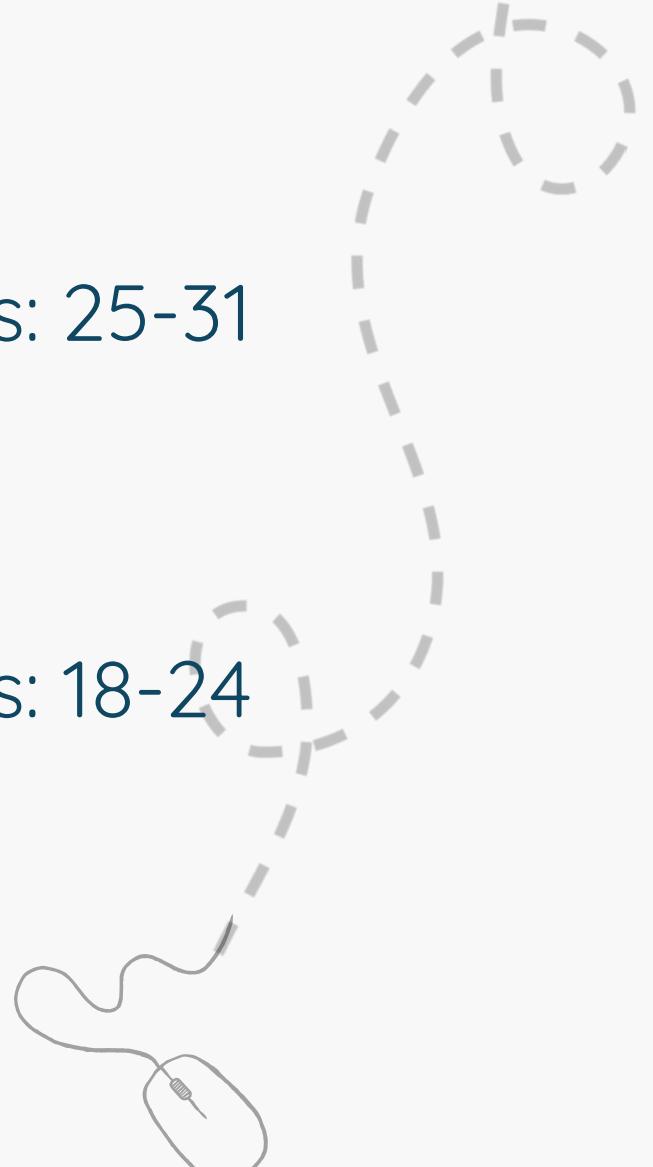
Females & Males: 25-31

## Age Range with Average CVRs

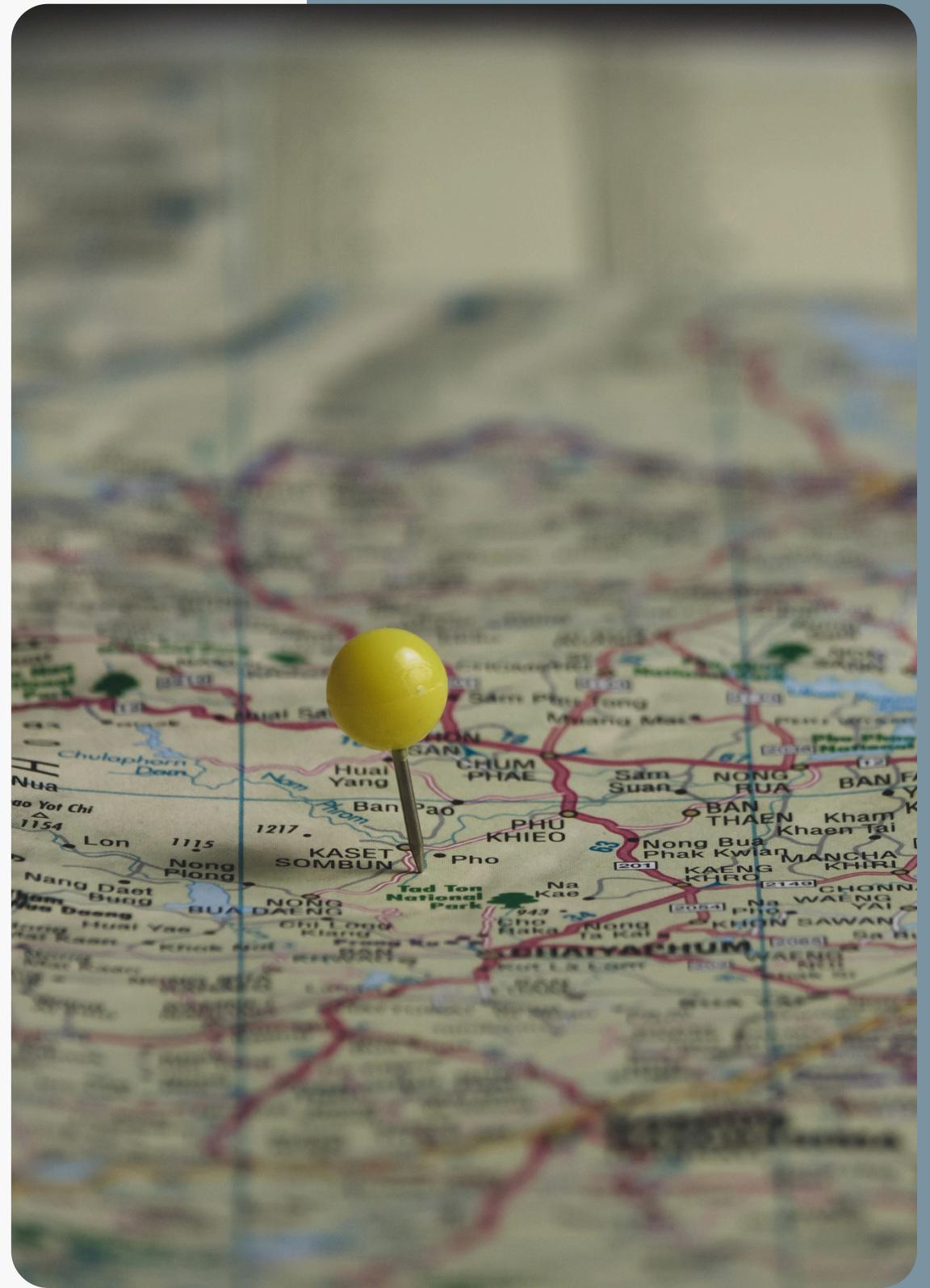
Females & Males: 25-31

## Age Range with Average CTR

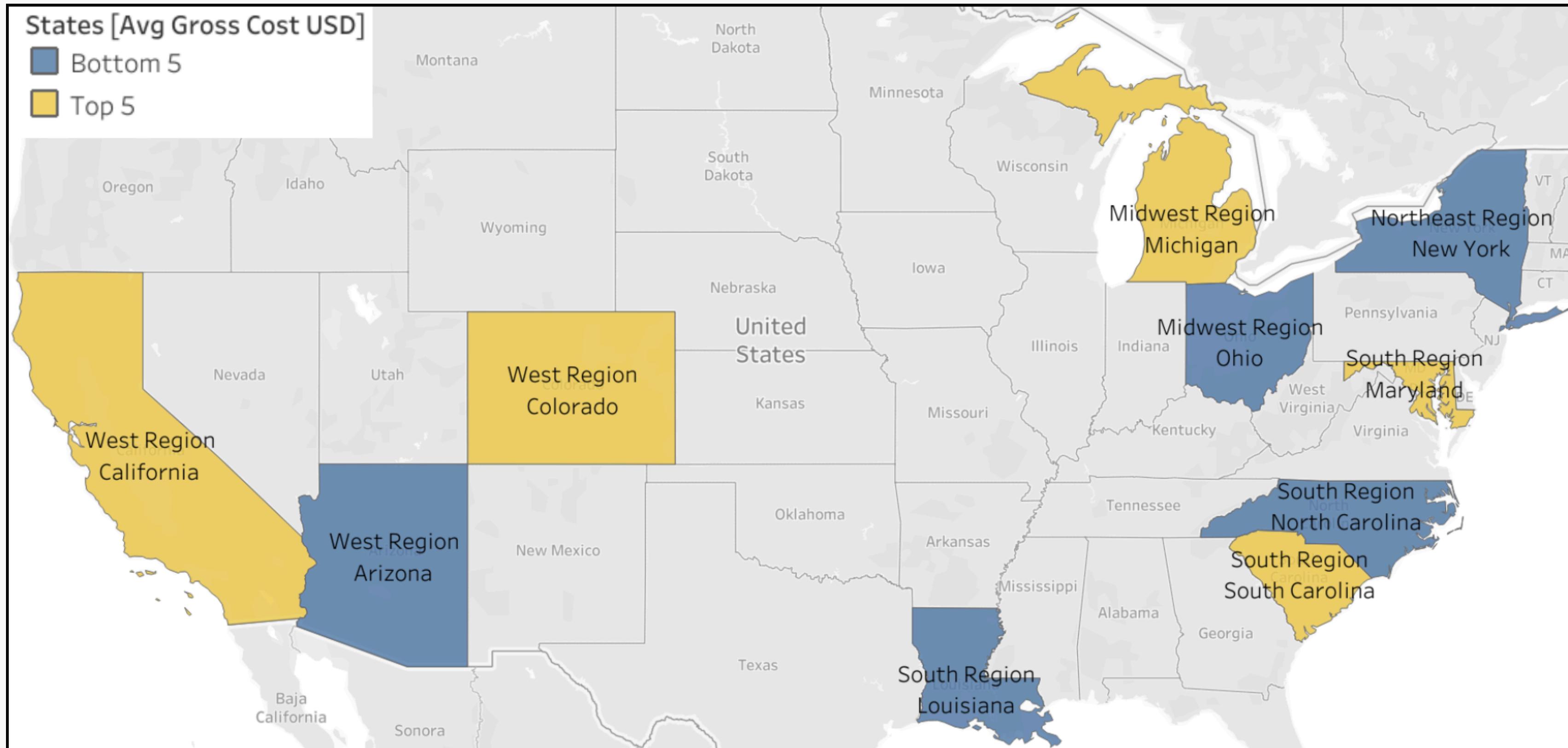
Females & Males: 18-24



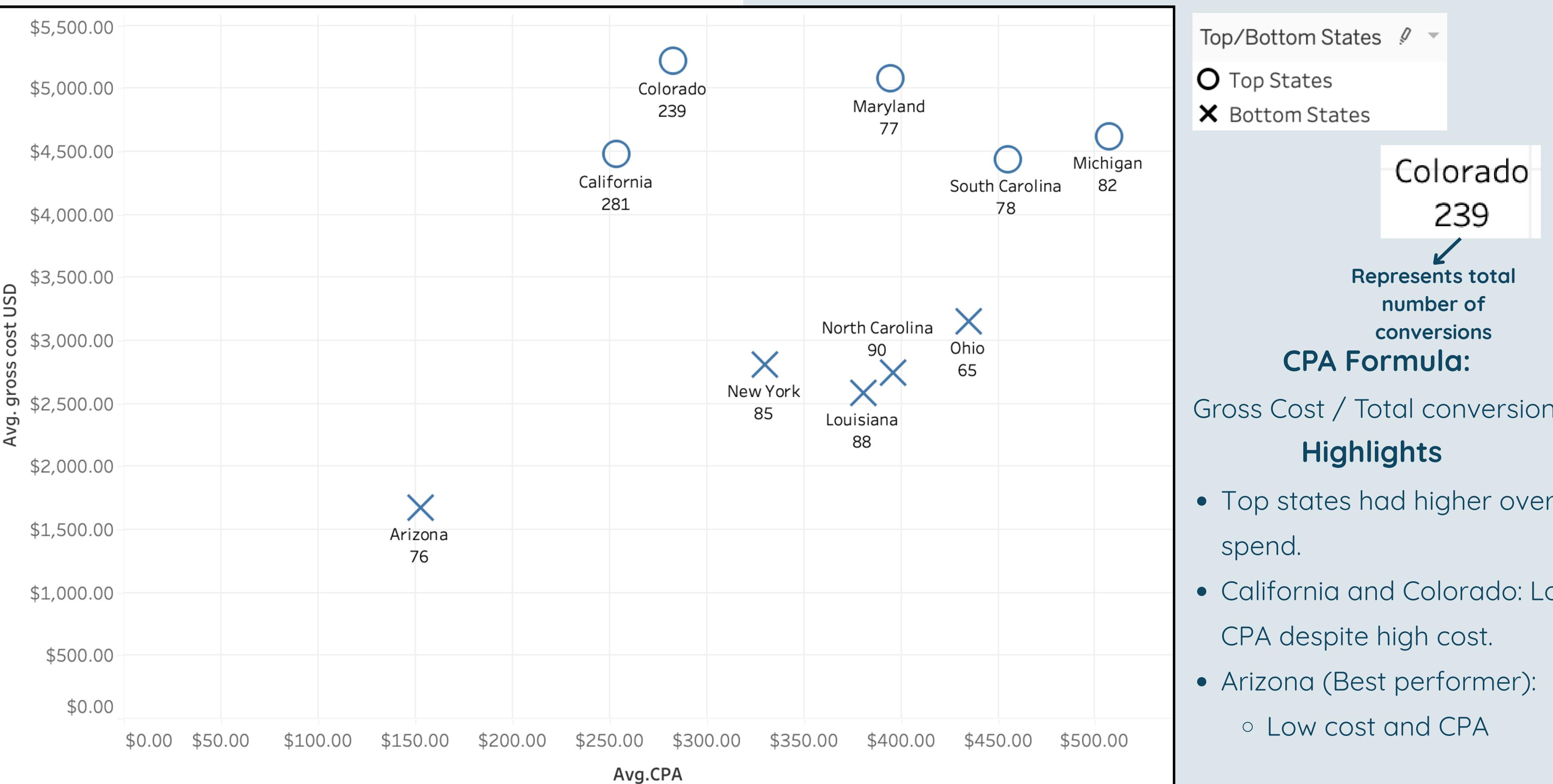
# *Spatial*



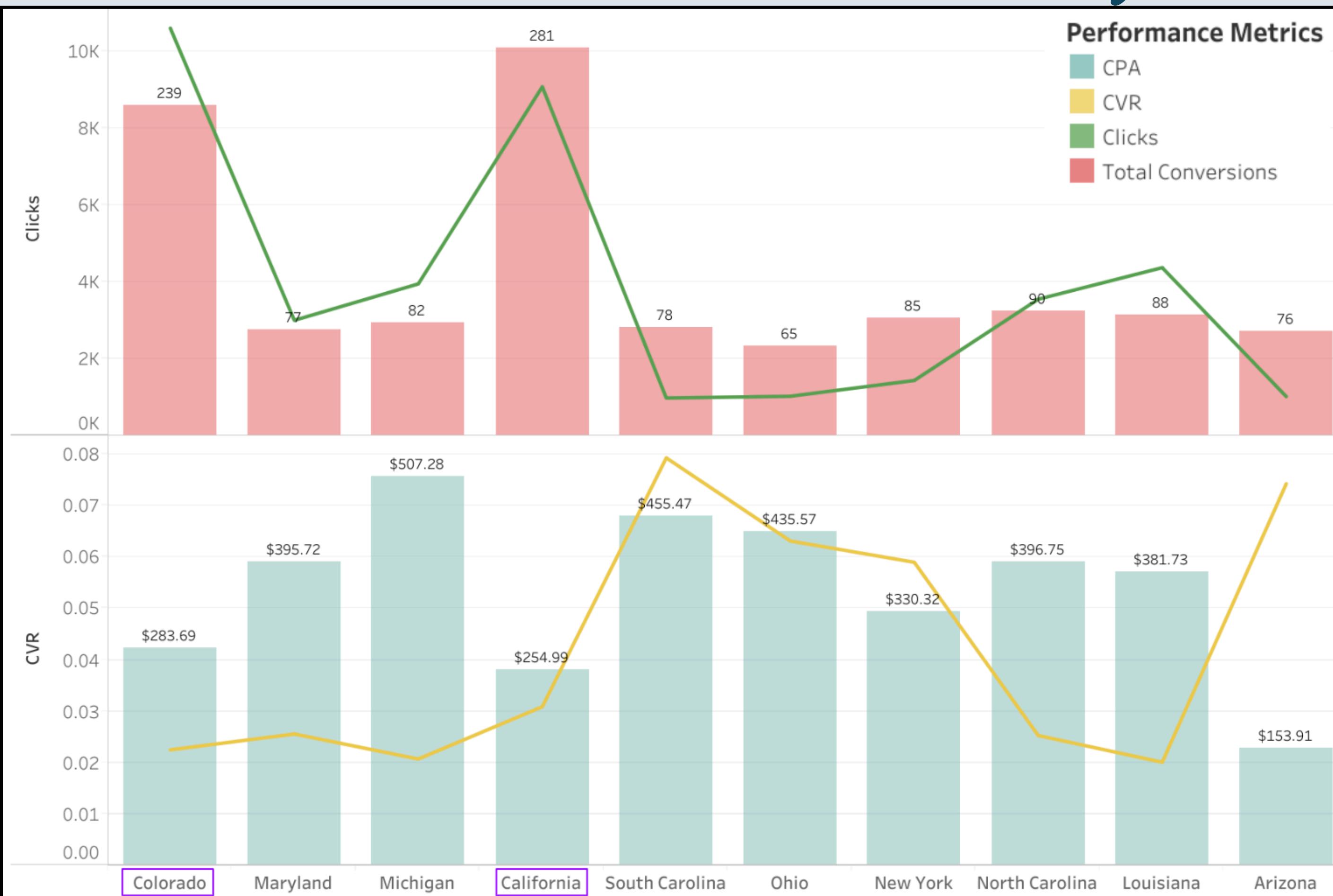
# *Top/Bottom 5 States by Avg Gross Cost (USD)*



# Avg. Gross Cost vs Avg. CPA Top/Bottom States



# Clicks, Conversions, CPA and CVR by State



## Guide

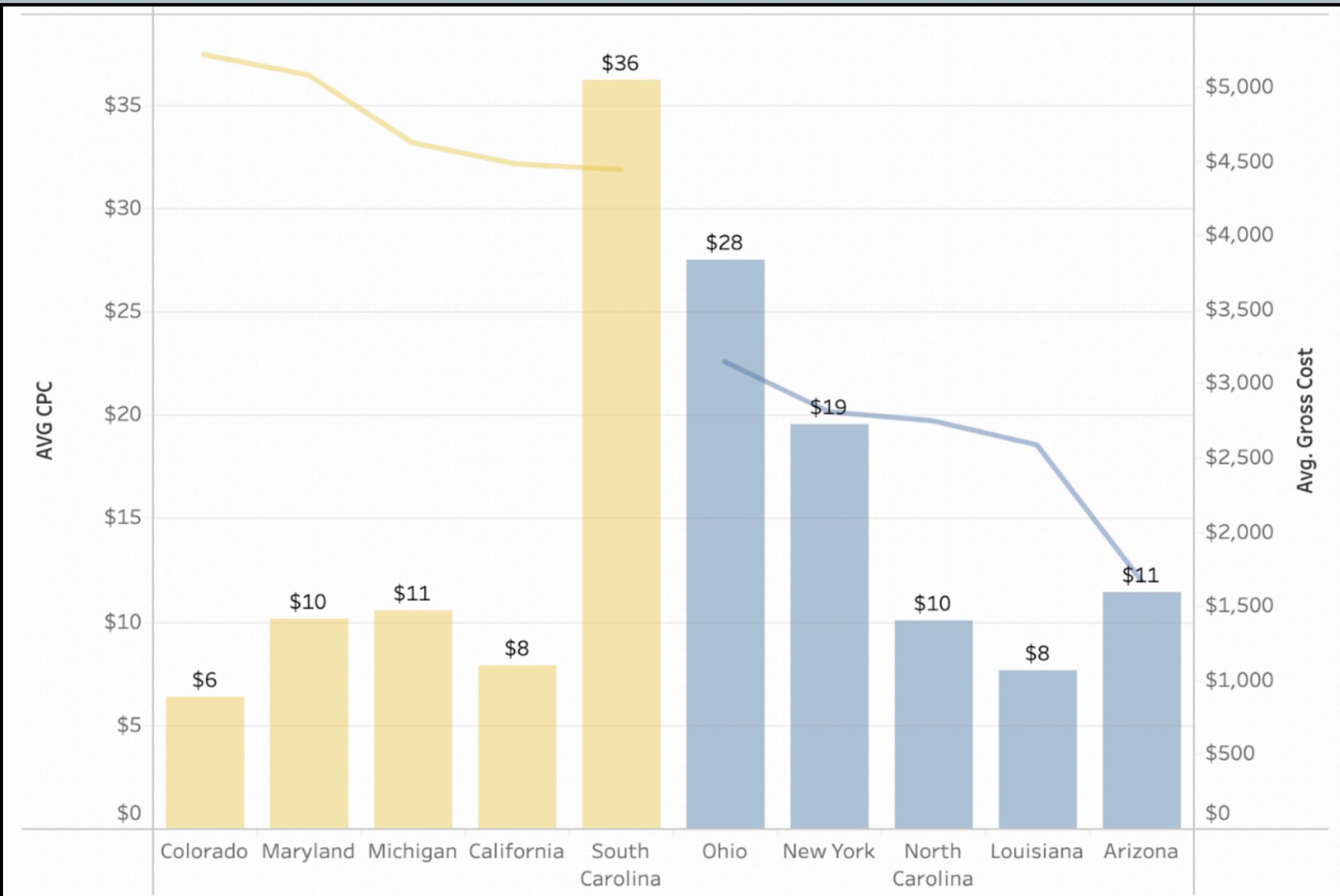
- **High Conversions** = good
- **High Clicks** = good
- **Low CPA** = good
- **High CVR** = good

## Highlights

Colorado and California stand out here:

- High Conversions
- High Clicks
- Low CPA

# Avg Gross Cost vs CPC by Top/Bottom 5 States



Top 5/Bottom 5

Top 5

Bottom 5

## CPC Formula

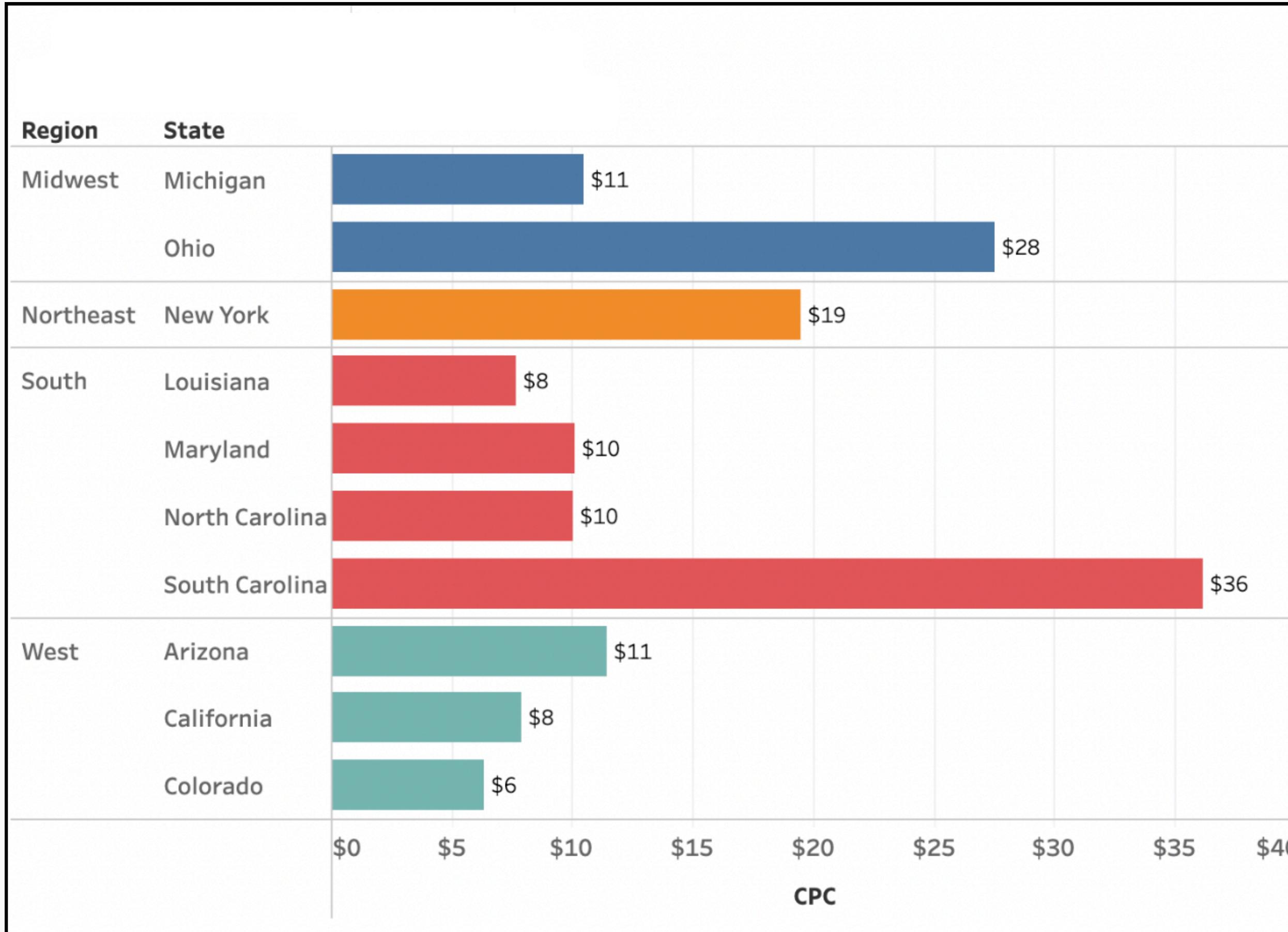
Gross Cost/Clicks

Lower CPC = Good

## Highlights

- South Carolina has a very **high** CPC (\$36) - not cost effective.
- Colorado had the **lowest** CPC of (\$6) with the highest gross cost, making the state cost-effective.

# Avg CPC by Region



## Highlights

- The West region was the **most** cost effective overall - lowest AVG CPC.
- The Midwest region had inconsistent performance between states which shows a wide range in cost effectiveness.

# *vCPM vs Viewable Impression (VI)*



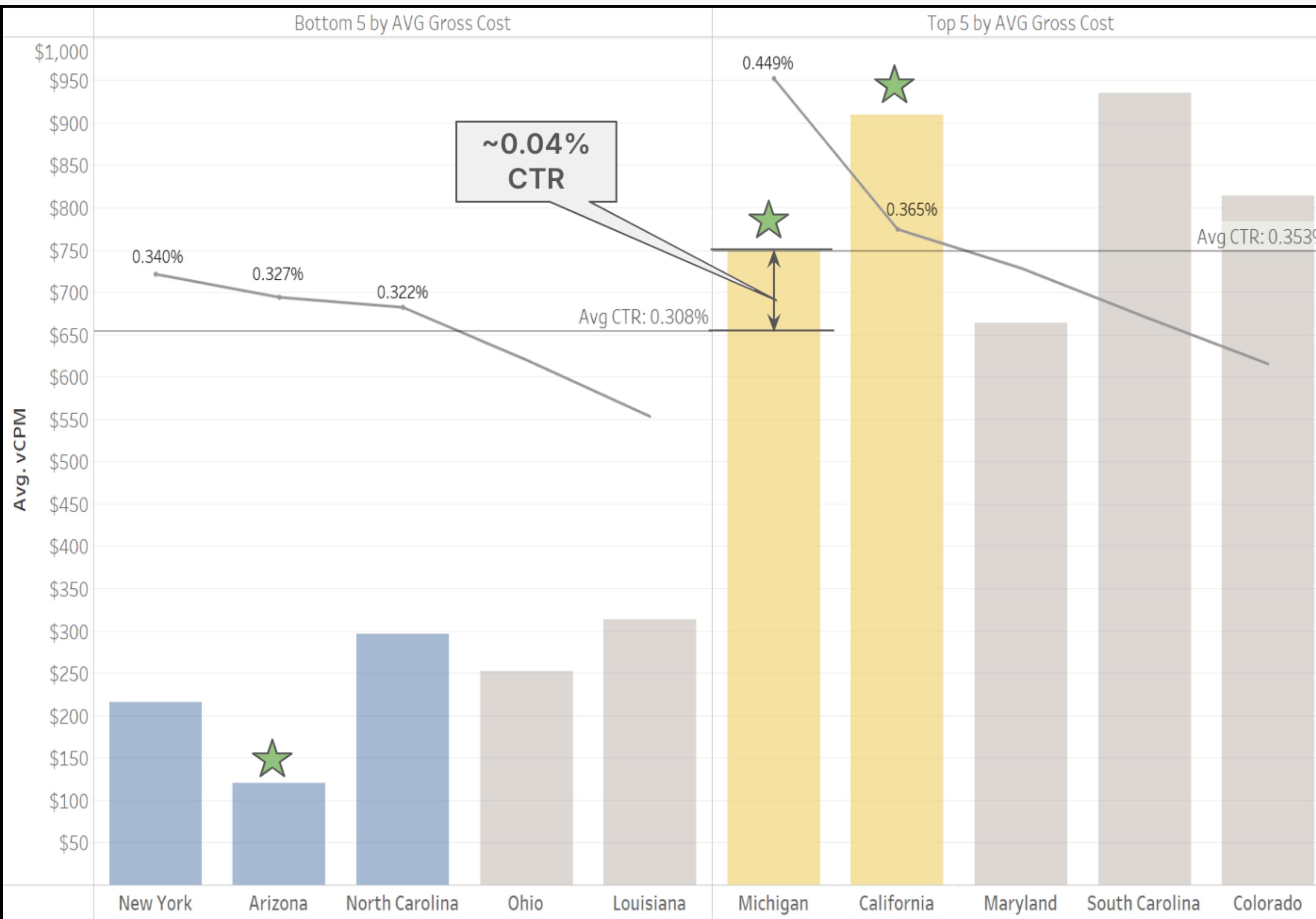
## Formula

$$vCPM = 1000 * (\text{gross cost} / \text{VI})$$

## Highlights

- Huge  $\Delta$  in the VIs between Top and Bottom 5 states!
- **But**, a bigger budget does not always give more VIs
- **Bottom 5:** Louisiana and North Carolina landed ~10k+ extra VI on average
- **Top 5:** Colorado, Maryland, and California scored ~15k+ extra VI on average

# *vCPM vs CTR*



## *Formula*

$$CTR = (clicks / impressions) * 100$$

$$vCPM = 1000 * (gross cost / VI)$$

## *Highlights*

- Low  $\Delta$  CTR between Top and Bottom 5 states
- **Bottom 5:** Arizona's low vCPM and higher than average CTR is ideal
- **Top 5:** Michigan has a low vCPM and higher than average CTR is ideal

# *vCPM vs Viewability*

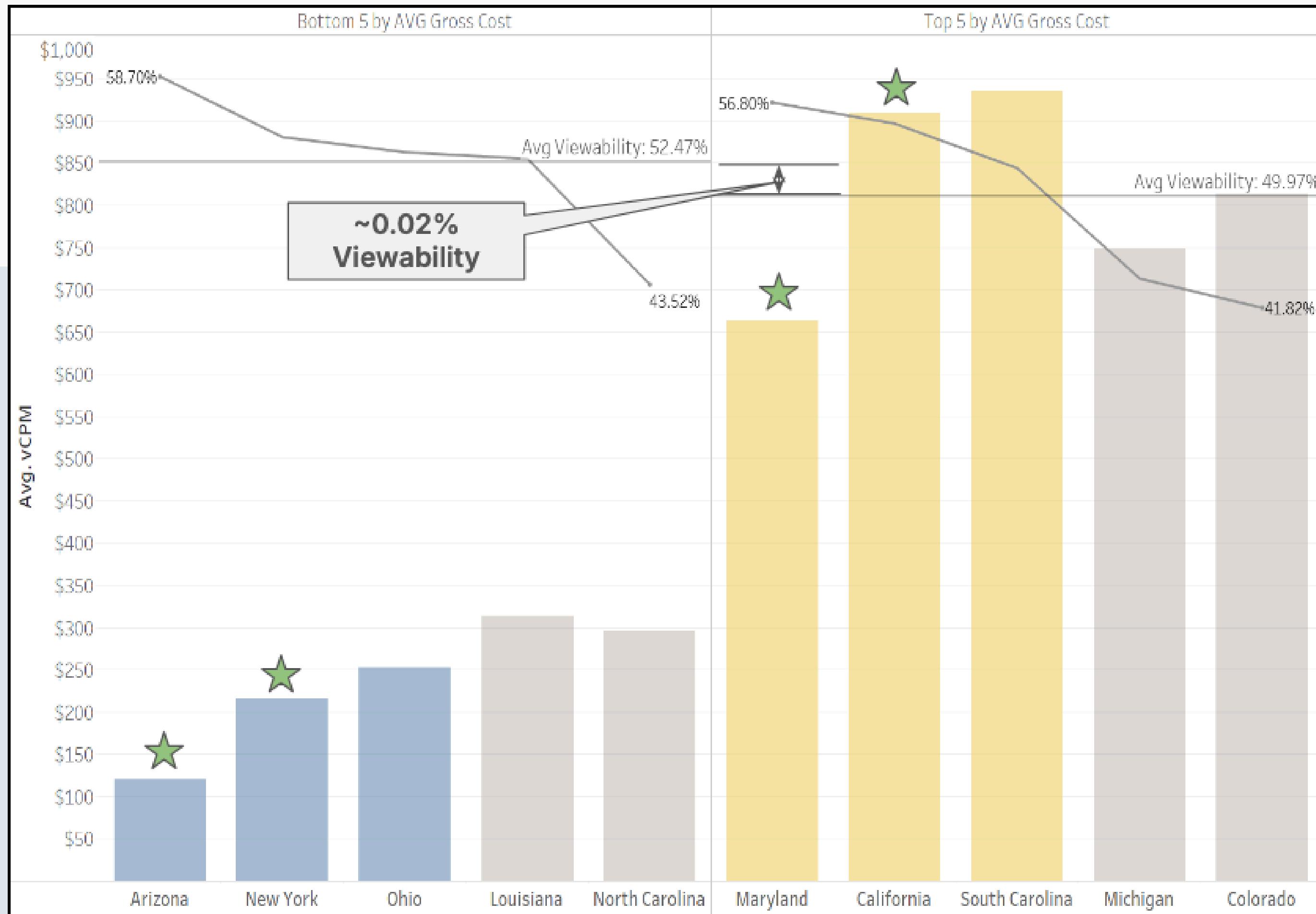
## *Formula*

$$\text{Viewability} = (\text{VI} / \text{MI}) * 100$$

$$v\text{CPM} = 1000 * (\text{gross cost} / \text{VI})$$

## *Highlights*

- Low  $\Delta$  Viewability between Top and Bottom 5 states
- **Bottom 5:** Arizona, New York, and Ohio have higher than average viewability!
- **Top 5:** Maryland, California, and South Carolina have higher than average viewability!



# Recommendations

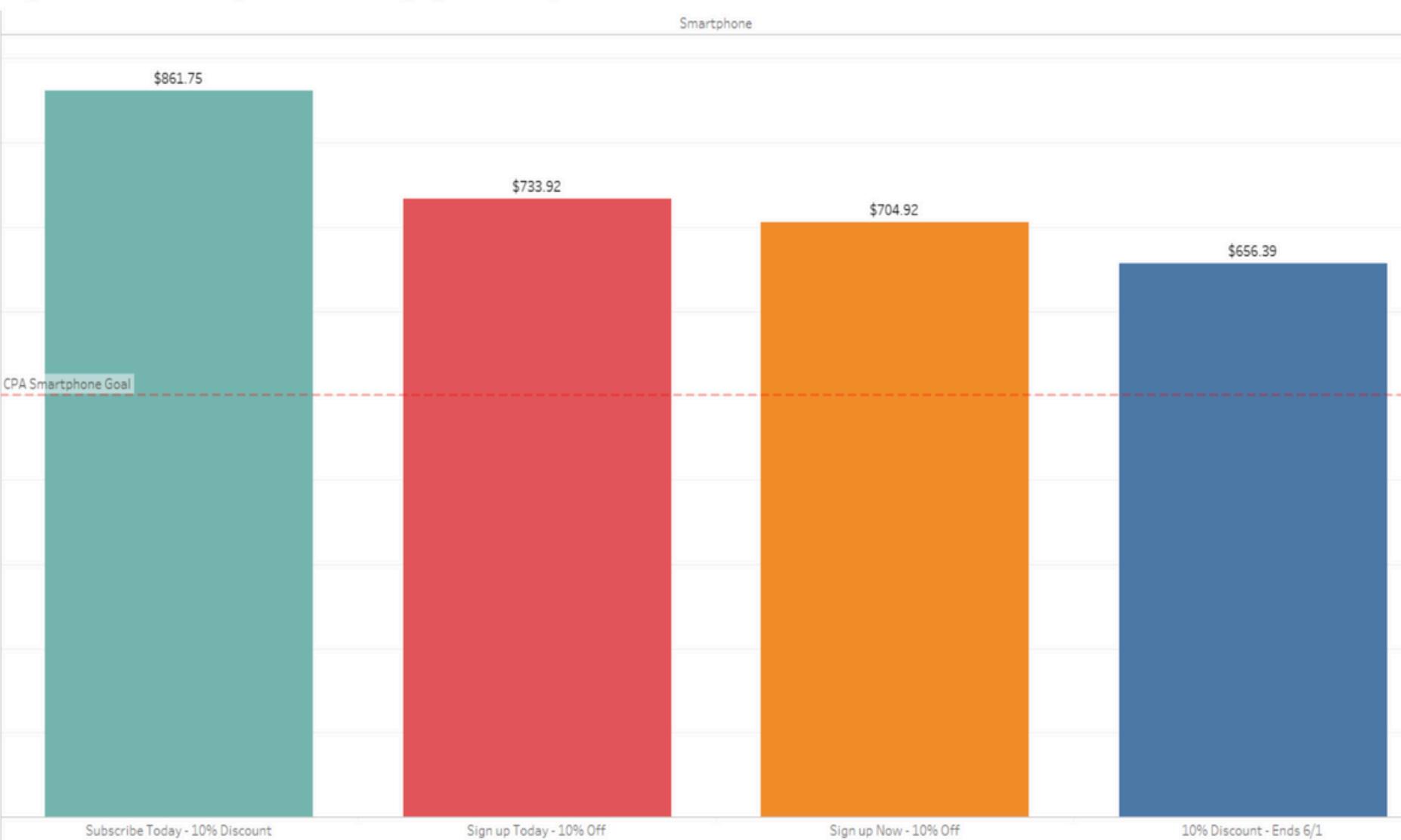
States	Avg CPC	Avg CPA	Avg vCPM	Avg CTR	Avg CVR	Avg Clicks	Avg Conversions	Overall Performance
California	\$8	\$255	\$909	0.37%	3.09%	9094	281	High
Arizona	\$11	\$154	\$120	0.33%	7.43%	1023	76	High
Colorado	\$6	\$284	\$814	0.29%	2.25%	10620	239	High
Maryland	\$10	\$396	\$664	0.34%	2.56%	3009	77	Moderate
Michigan	\$11	\$507	\$748	0.45%	2.07%	3957	82	Low
South Carolina	\$36	\$455	\$936	0.32%	7.93%	983	78	Low

# Creative



# Creative Messaging Average CPA by Device

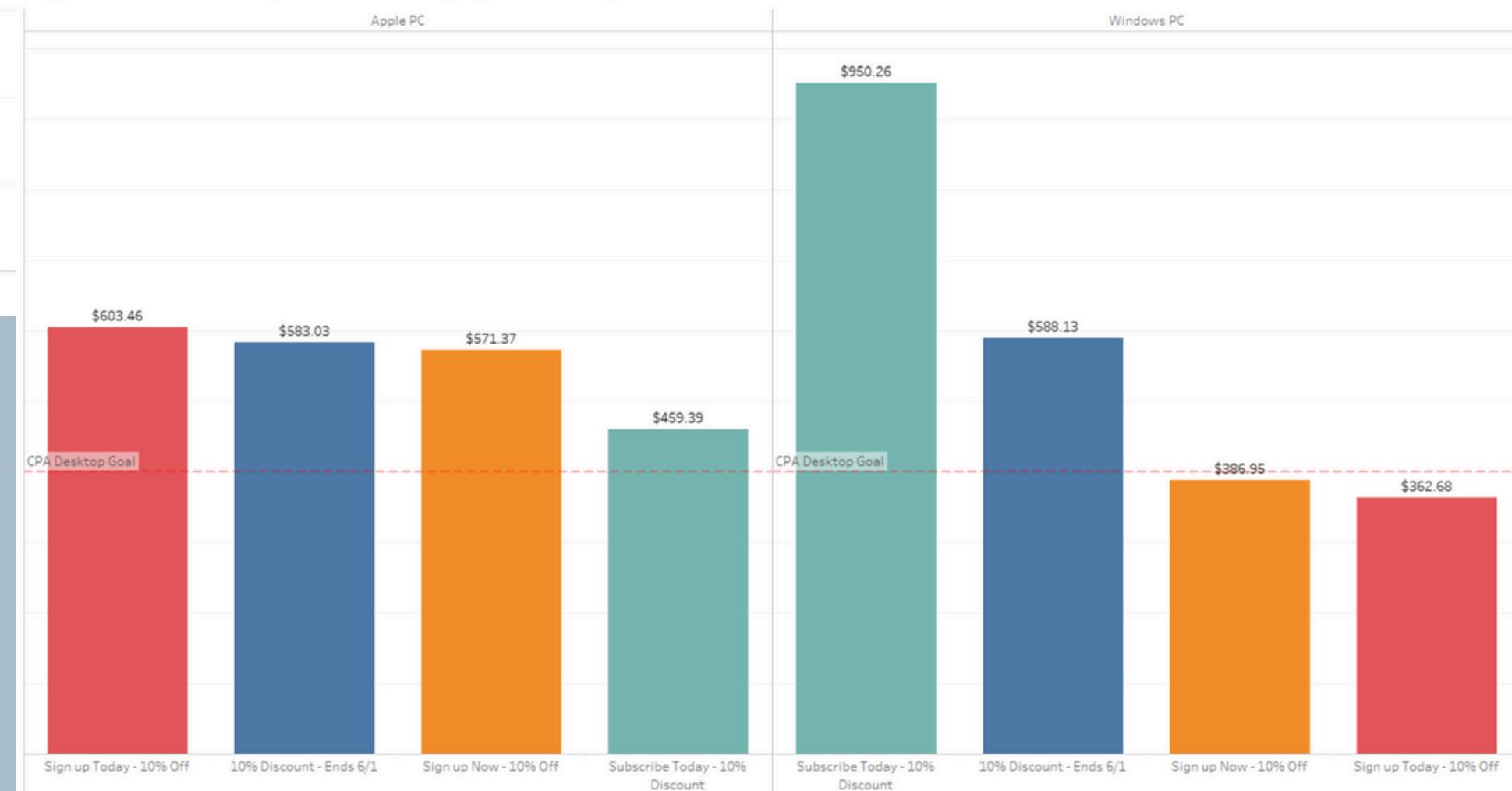
Avg CPA — Breakdown by Creative Messaging and Smartphone



## Key Insight

- Windows PCs show more cost-efficient CPA performance than Apple PCs.
- The same creatives perform better on Windows, especially the “Sign Up” variants.

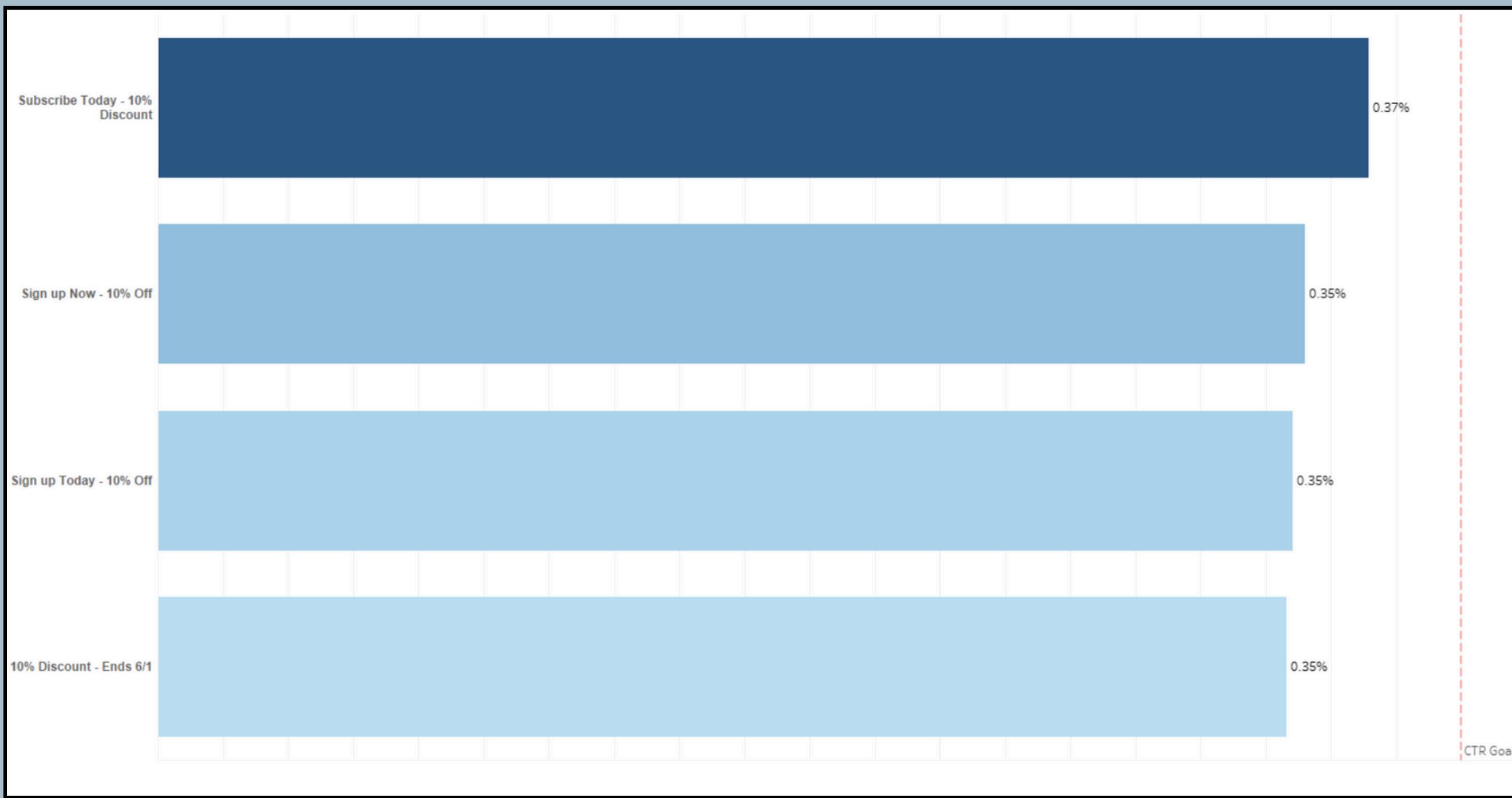
Avg CPA — Breakdown by Creative Messaging and Desktop



## Key Insight

- Smartphones are underperforming overall in terms of CPA.
- The “**Subscribe Today**” message has consistently high CPAs across both desktop and mobile.

# *Creative Messaging CTRs*

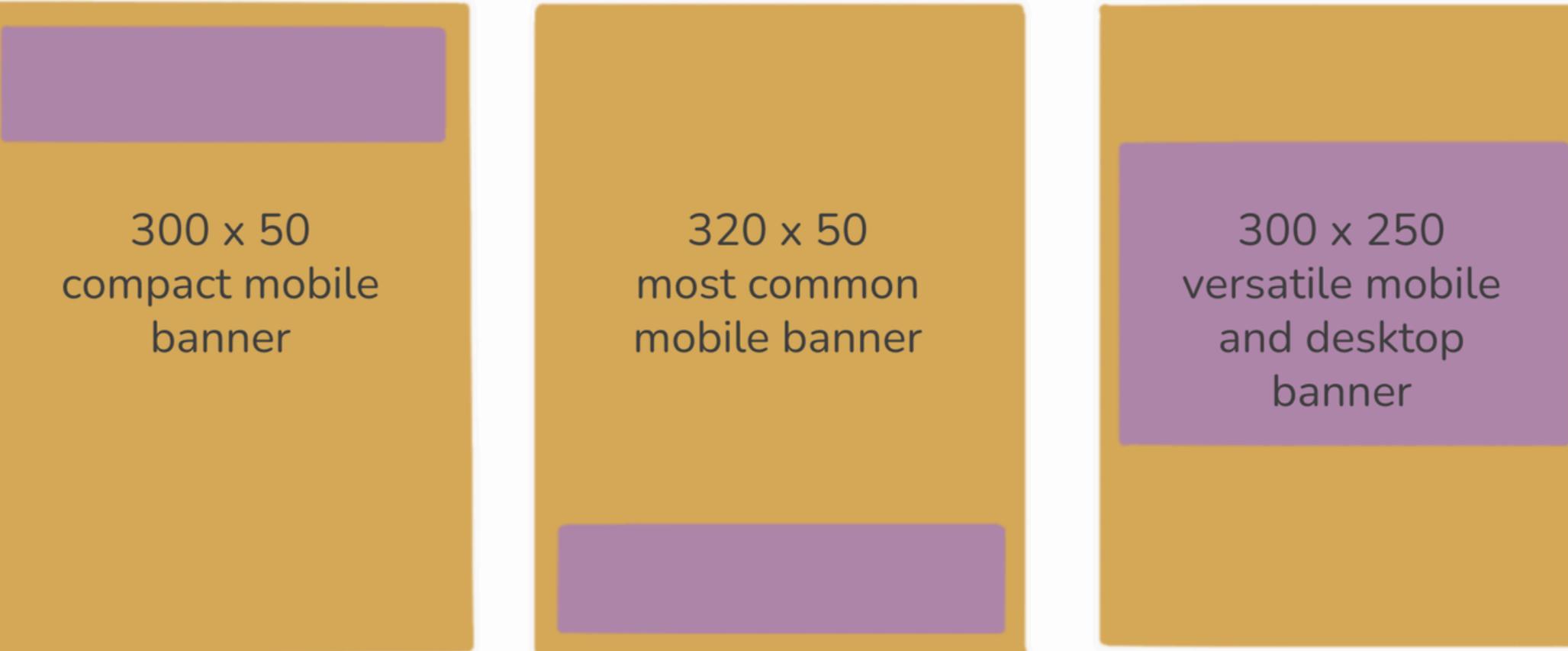


- "Subscribe Today - 10% Discount" leads in CTR – but underperforms in CPA
- This message generates the most clicks (0.37%), but consistently has the highest cost per acquisition across all devices.
- High CTR does not necessarily mean high conversions. This creative messaging fails to convert users after the click.



# Creative Size Definitions

- **300x50:** uncommon, but used for specific ad placements
- **320x50:** most common especially for **mobile-specific** ad placements
- **300x250:** **versatile** and wide banner, larger size gives it more visibility



## CPA by Creative Size and Device Insights:

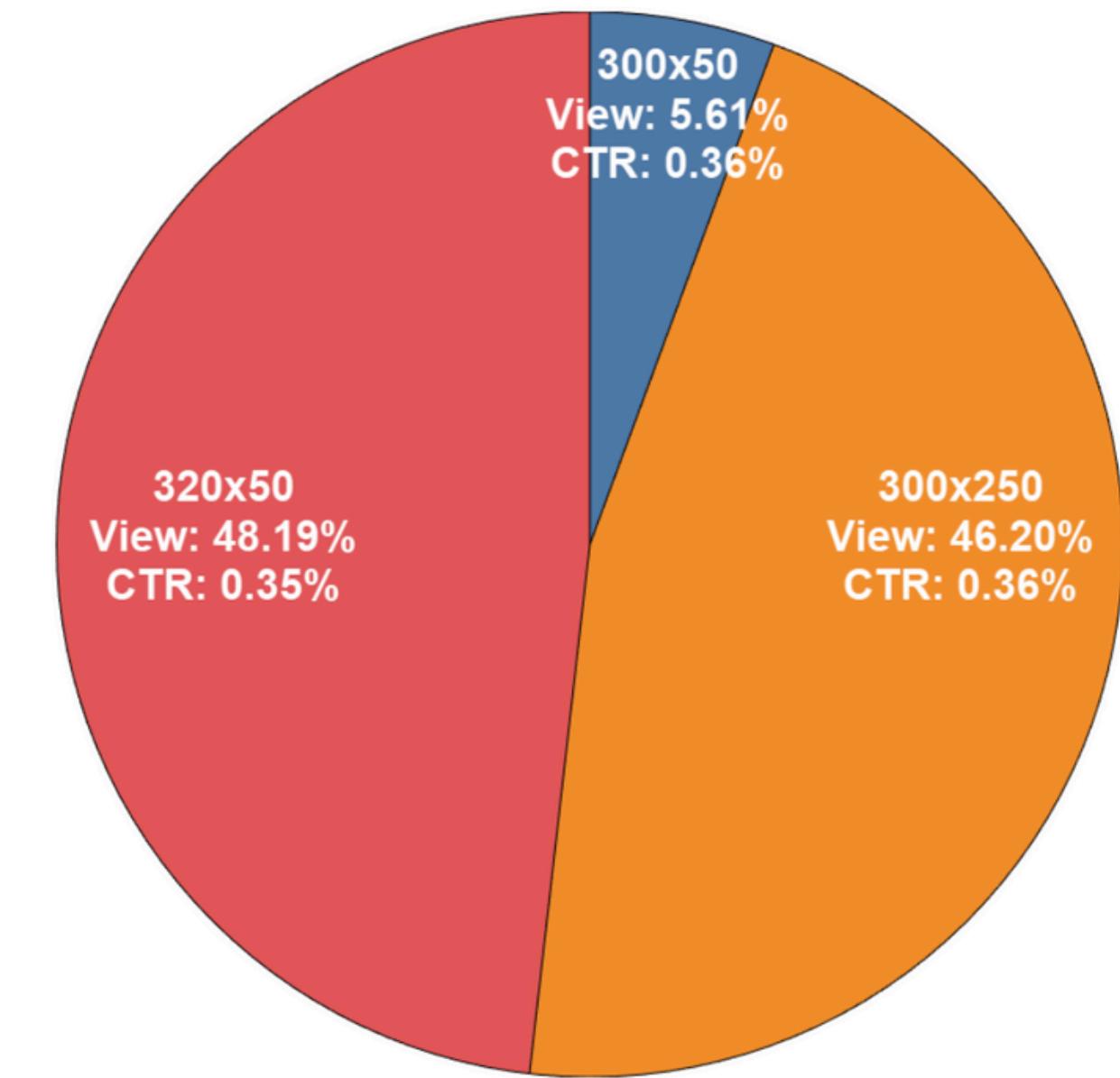
- Apple PC and Windows PCs are **cost effective** in terms of **CPA**.
- 320x50 ad banners are **cost-effective** for **mobile campaigns**.
- While **mobile** have the most creative size banners, they are as **not cost-effective** as **desktop ads**.
- By device CPA benchmark, they surpass it.



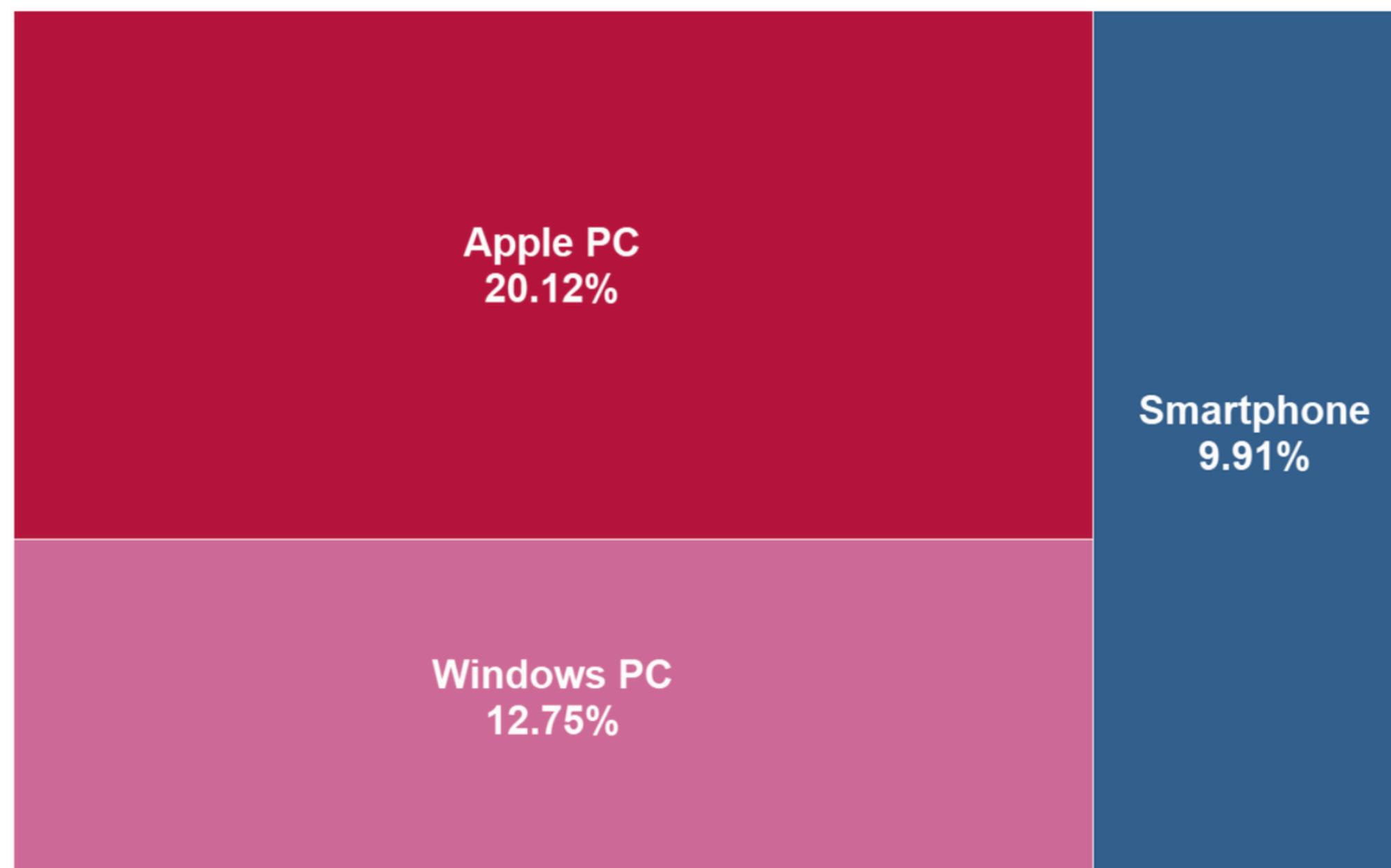
# Creative Size by Viewable Impressions

- **320x50** ad size reports the **most viewable impressions**, making it effective in **smartphone-based campaigns**.
- **300x250** size inches closely to the number of **view impressions** that **320x50 has**, making it a notable contender in campaigns
- **300x50 size lags** in terms of **viewable impressions** by a majority
- **CTR** rates between devices are **similar**.

Creative Size by View Impression



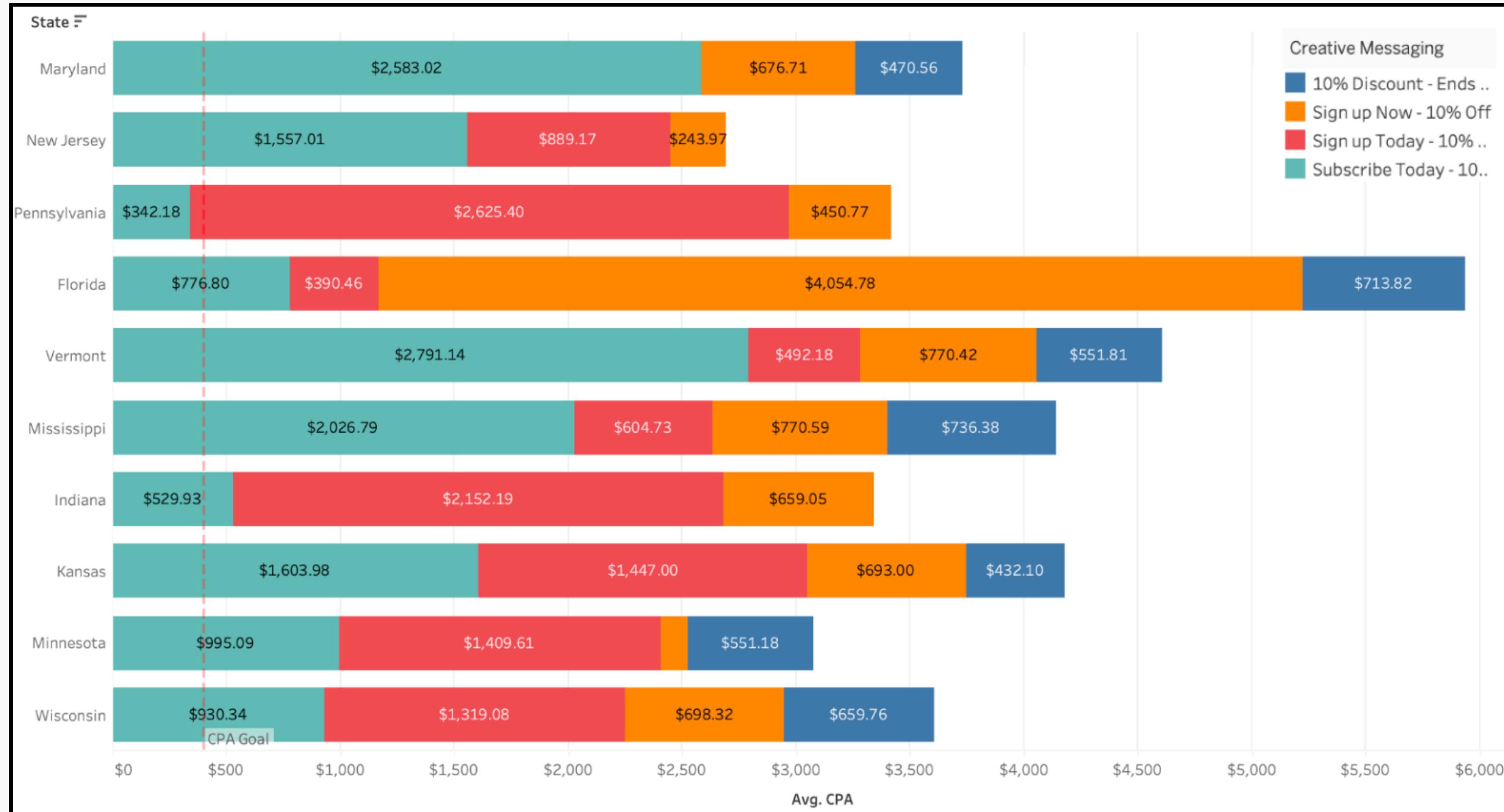
Conversions by Device



## Device by Conversion Insights:

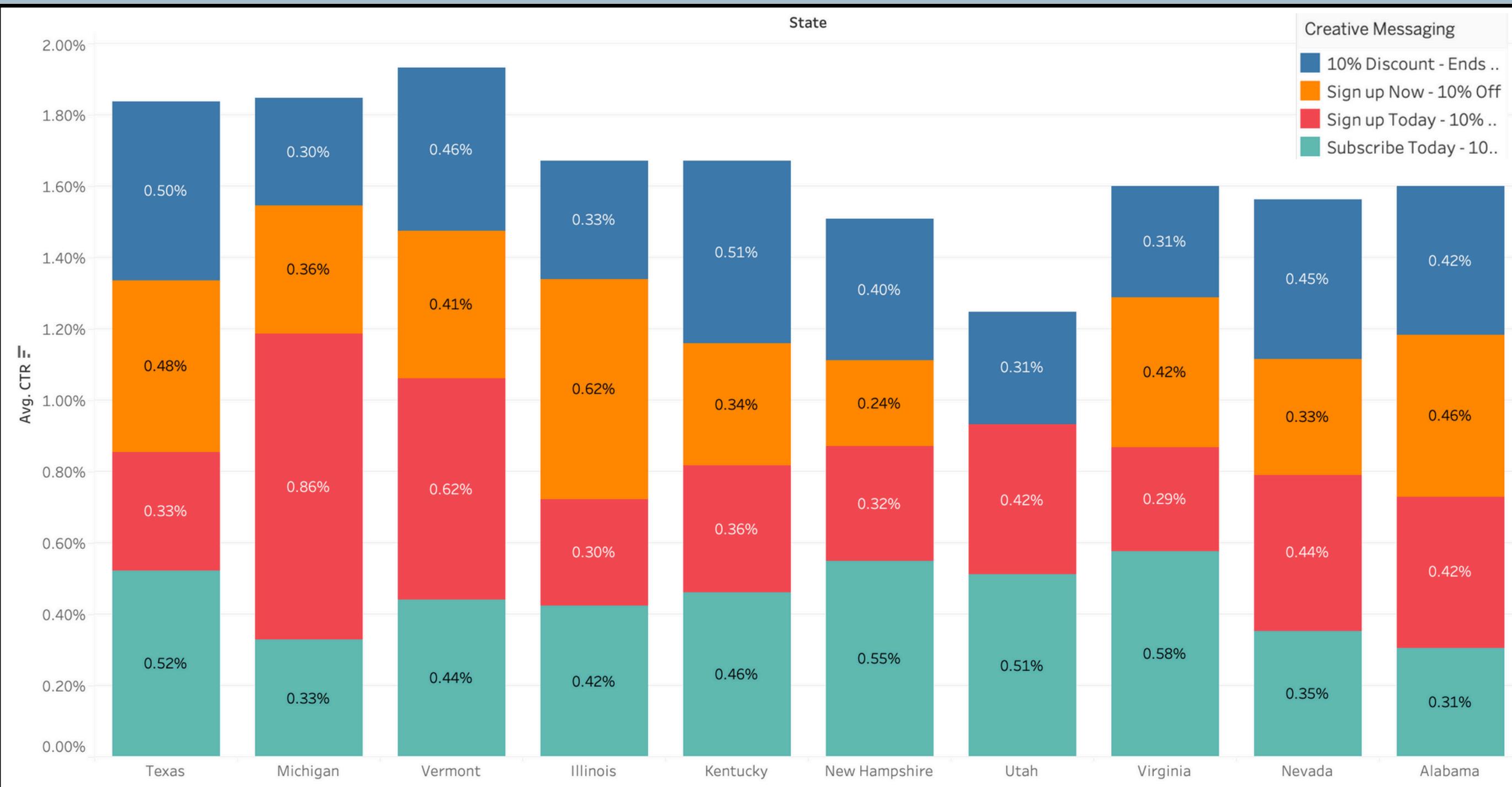
- **300x250** ads are versatile in any campaign, **desktop** or **smartphone**.
- **Desktop conversions** (Apple PCs and Windows PCs) **surpass smartphones by 22.96%**
- Showcases that desktop driven campaigns are most successful for driving audience actions into desirable outcomes.

# Top 10 States by CPA for Each Creative Message



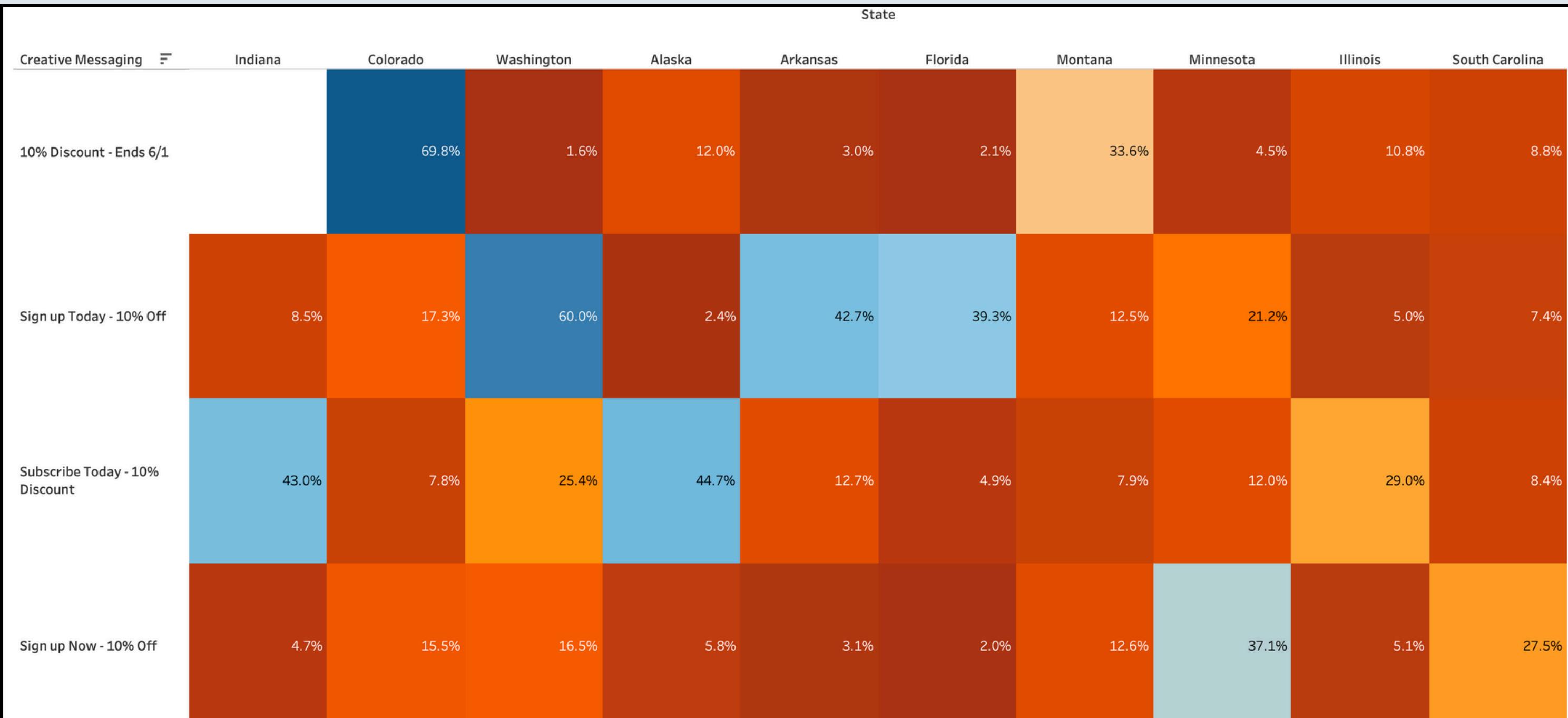
- Florida had the highest CPA at \$5,935.06, driven primarily by “Sign up Today – 10% Off.”
- Indiana and Vermont showed more cost-efficient results, all below the CPA benchmark.
- Vermont’s best-performing message had a CPA of \$534.83, making it one of the most cost-effective states.

# Top 10 States by CTR - What Messaging Worked Best?



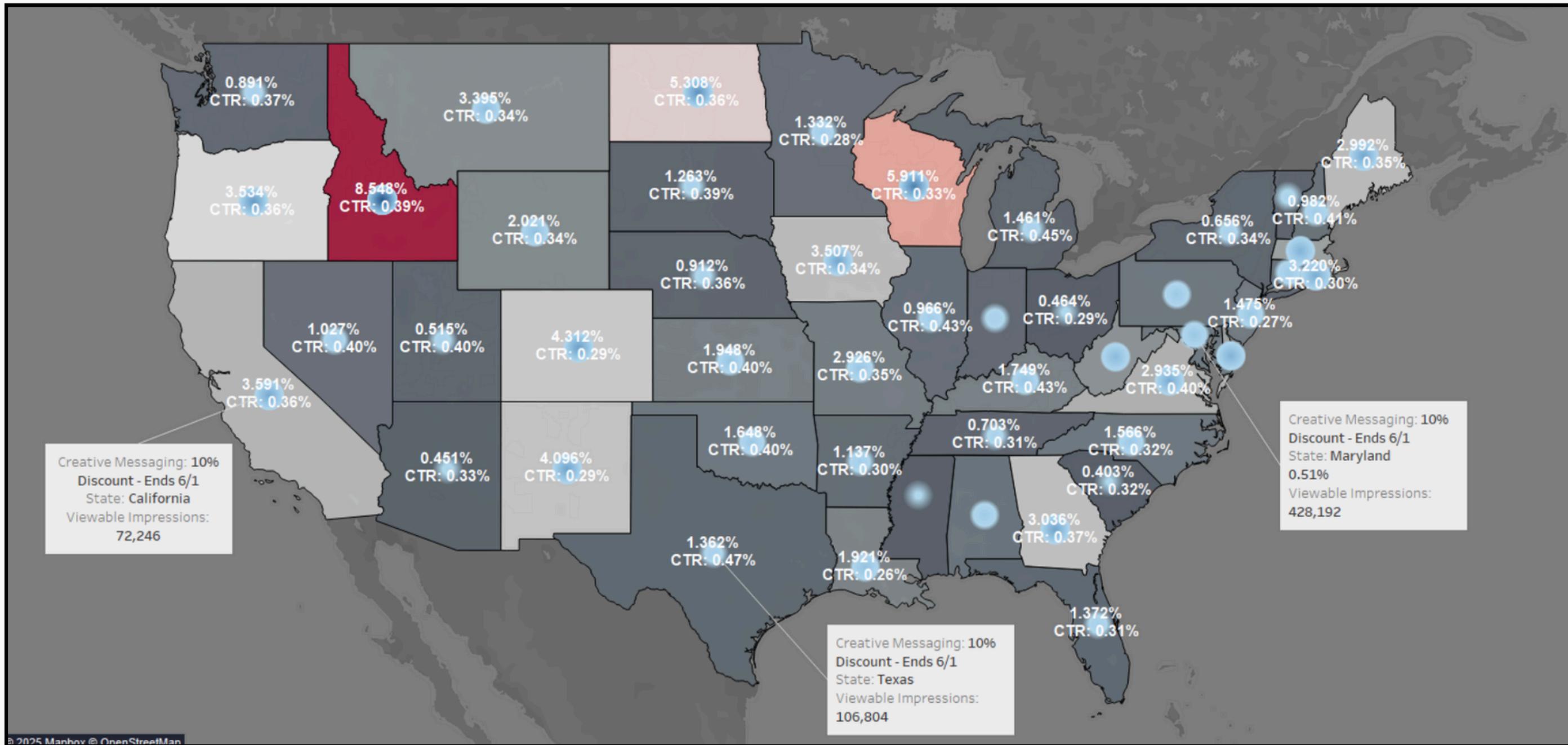
- Utah (1.84%) and Virginia (1.77%) exceeded the CTR goal of 0.015% by over 10x
- “Subscribe Today – 10% Discount” consistently ranked highest in CTR across most states.
- Michigan is a unique case where “Sign up Today – 10% Off” led at 0.86%.

# Top 10 States by Creative Messaging & Conversions



- Colorado had the highest CVR at 69.8% using “10% Discount – Ends 6/1”.
- Indiana and Washington also had strong performance with CVRs over 40%.
- High CVR didn’t always correlate with low CPA or high CTR, proving the value of multi-metric analysis.

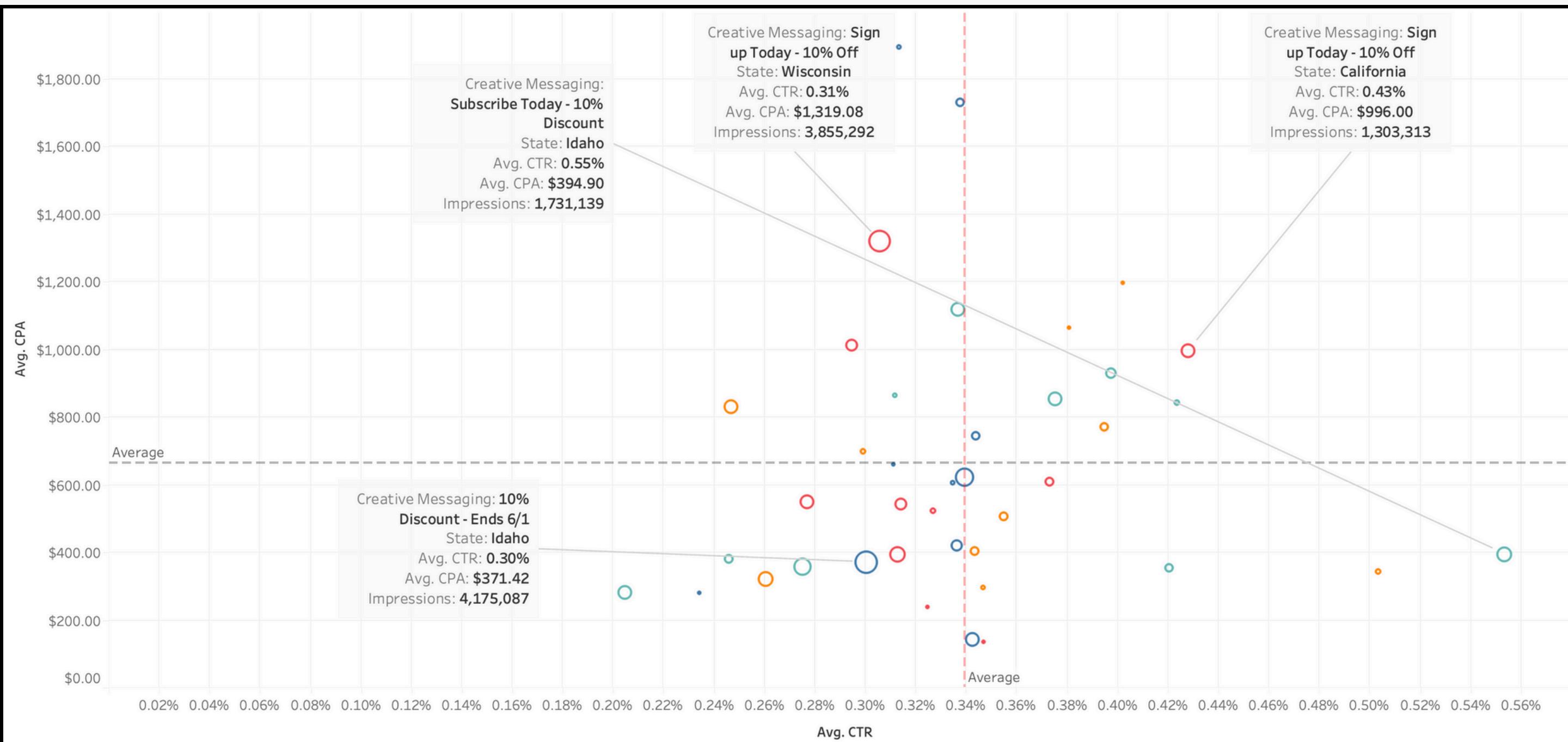
# Creative Messaging: Reach vs. Efficiency by State



- California and Texas had among the most impressions, but varied in efficiency.
- Idaho had the strongest CPA/CTR balance with 0.55% CTR and \$394.90 CPA.
- California's 0.43% CTR was promising, but paired with a high CPA of \$996.

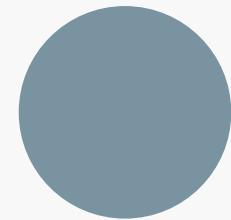


# *CTR vs. CPA: Finding the Most Efficient Creative Messages*

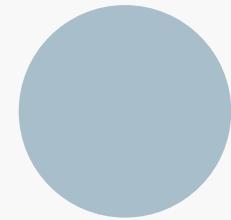


- Idaho's "Subscribe Today - 10% Discount" had a 0.55% CTR and \$394 CPA, the most efficient combo.
- California had a high CTR (0.43%) but a high CPA (\$996), showing imbalance.
- Bubble size = Impressions; Larger bubbles = Higher audience exposure.

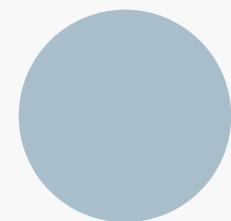
# *Recommendations*



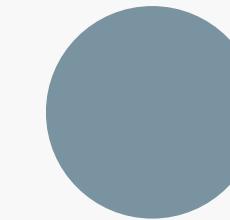
Increase "Subscribe Today – 10% Discount" budget in cost-efficient states like Idaho and Indiana



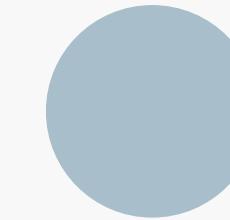
Prioritize 320x50 creative size for mobile-focused campaigns



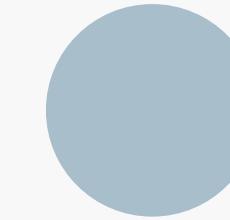
Pause "Sign up Today – 10% Off" in Florida and Wisconsin due to high CPA over \$4,000 and reallocate to Idaho and Vermont



Focus mid-funnel strategies on Idaho, Vermont, and Indiana, which balance high CTR, low CPA, and strong CVR



Test 300x250 creatives for multi-platform reach in high-performing states like California & Idaho



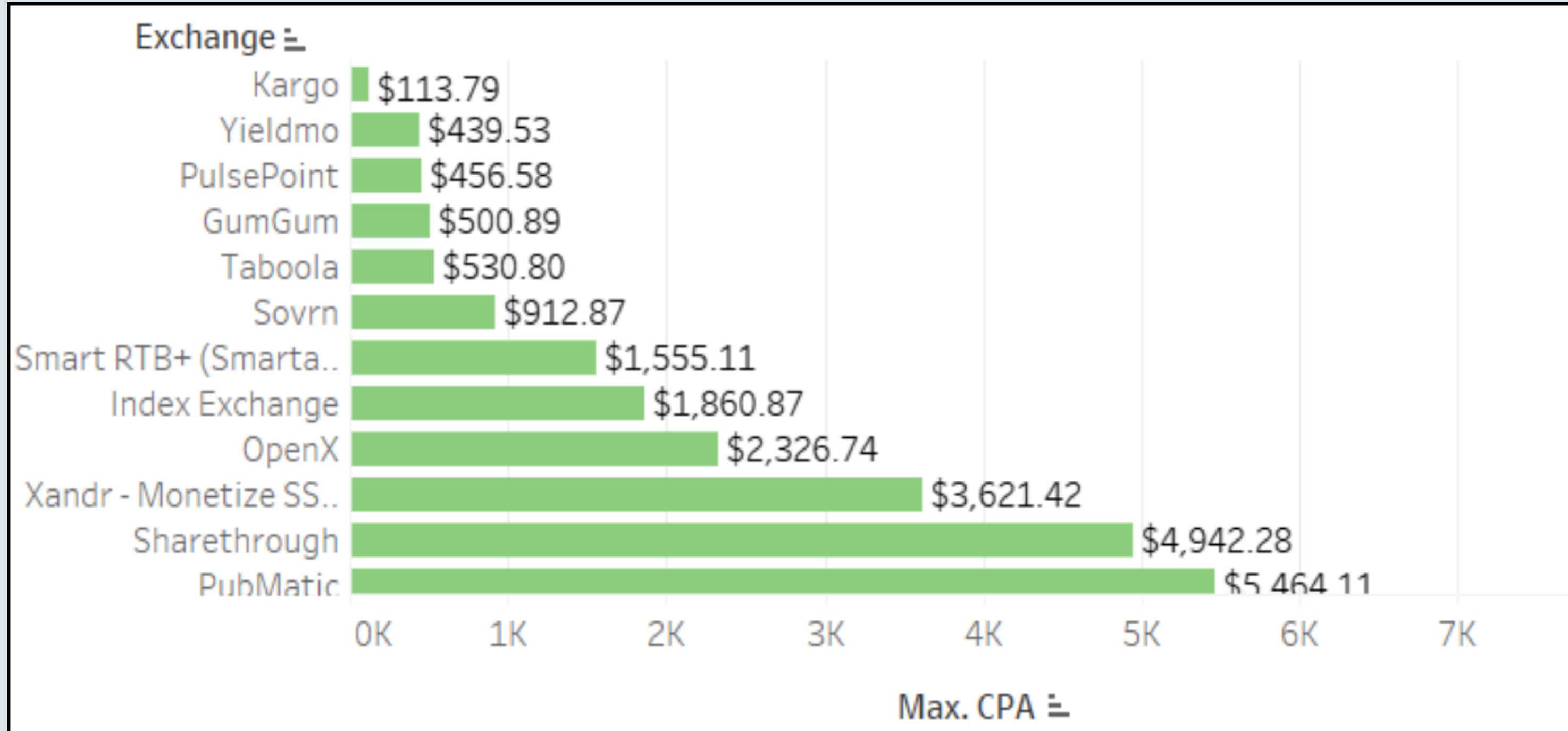
Audit high-impression messages & adjust content to boost CTR

# *Inventory & Viewability*



# Exchange by CPA

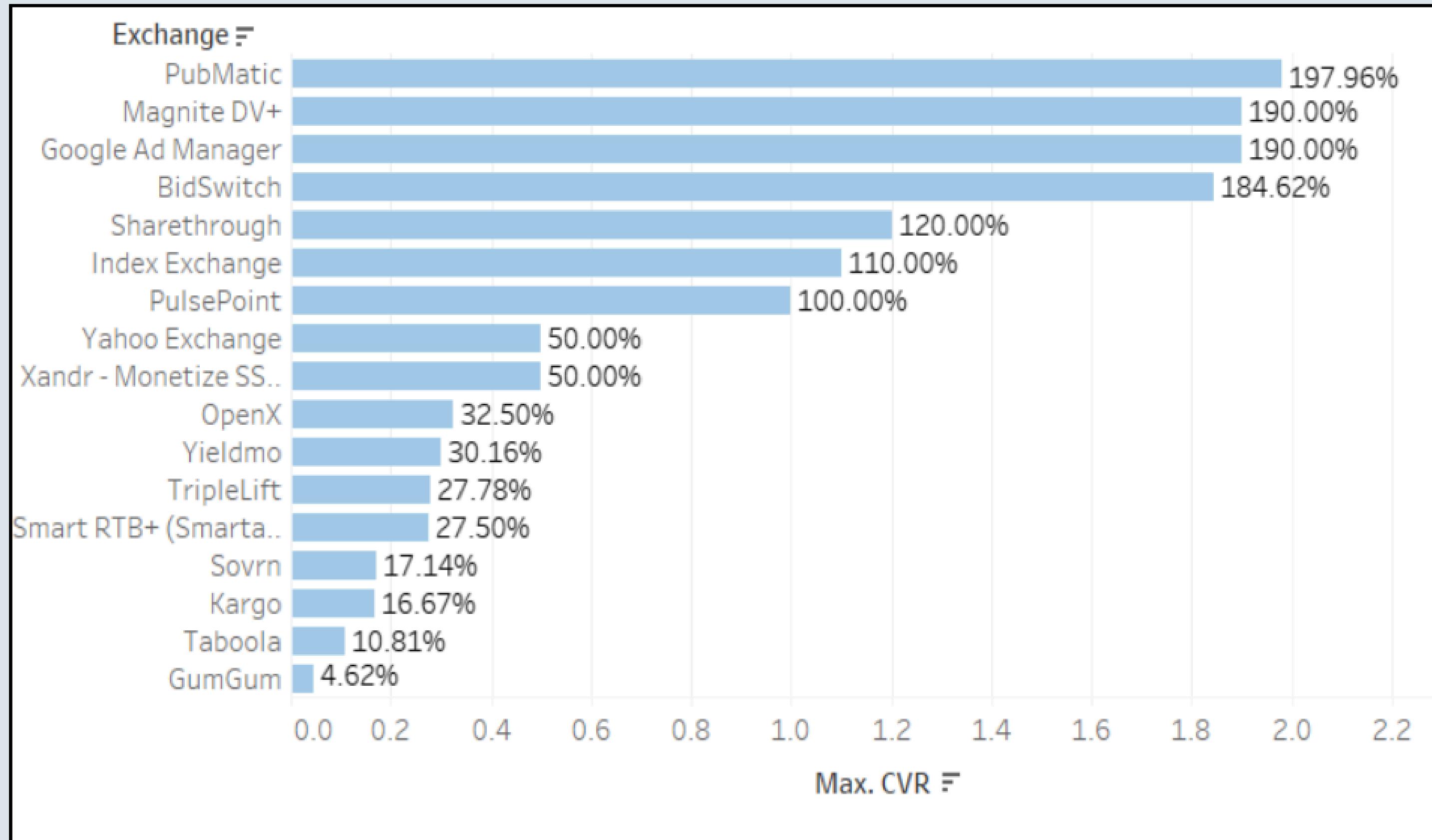
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# Exchange by CVR

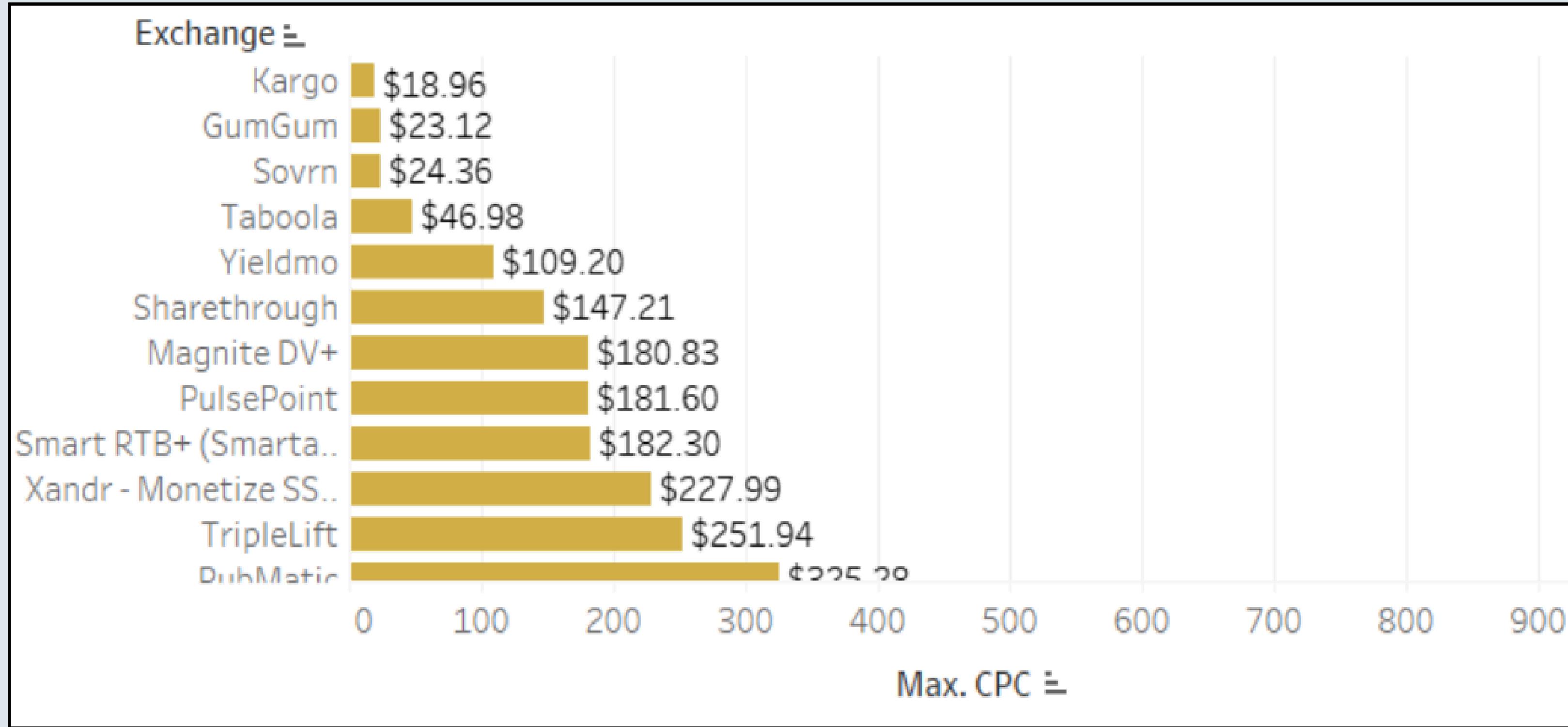
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# Exchange by CPC

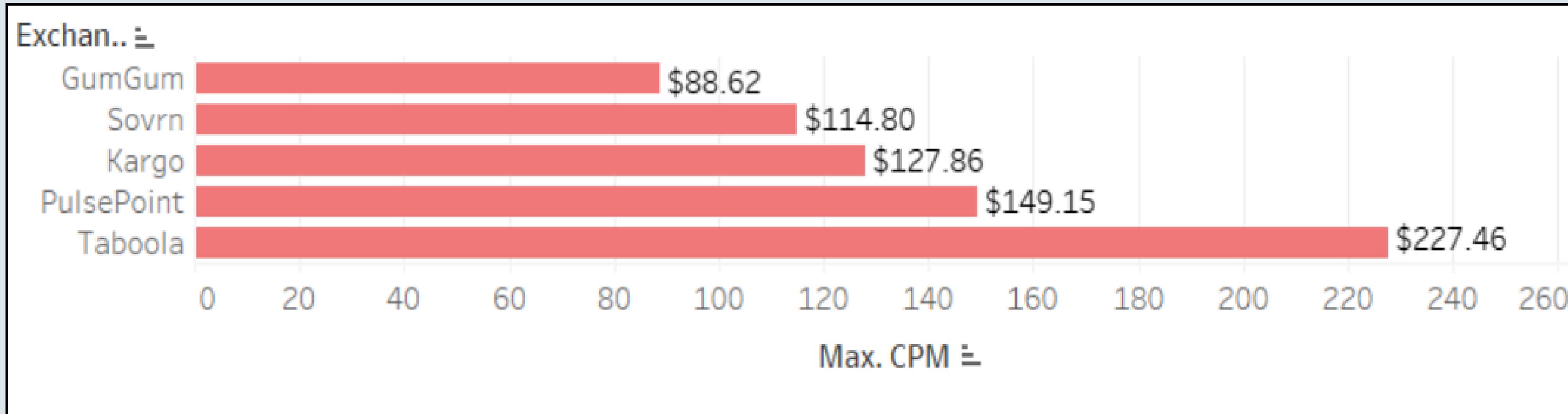
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# *Exchange by CPM*

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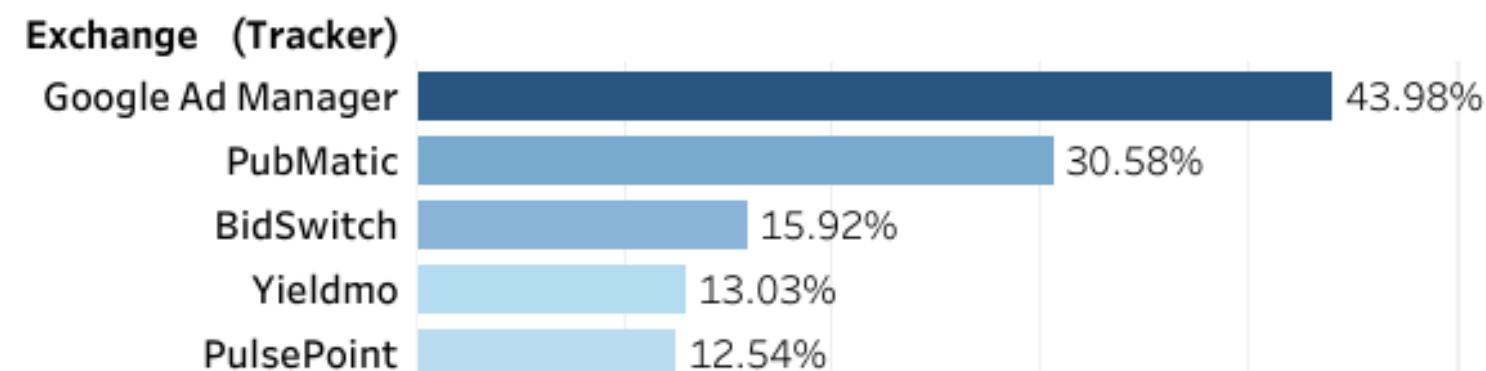
# *Top Performing Exchanges*

Exchange	KPI Analysis
Kargo	Lowest CPA & CPC
PubMatic	Highest CVR
Magnite DV+	Excellent CVR & manageable CPC
Yieldmo	Good CPA & CVR balance
GumGum	Low CPM for branding focus

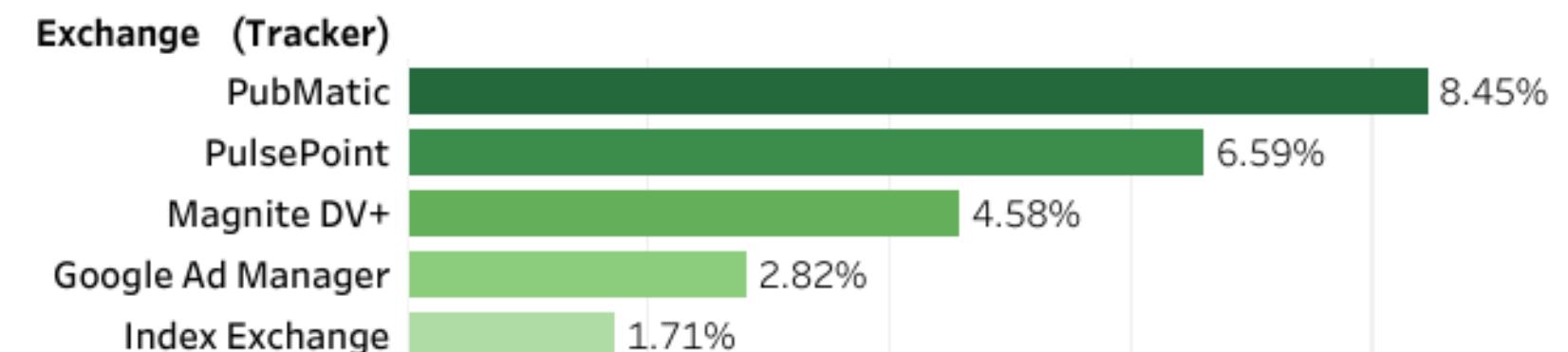


# Top 5 Exchanges By Metrics

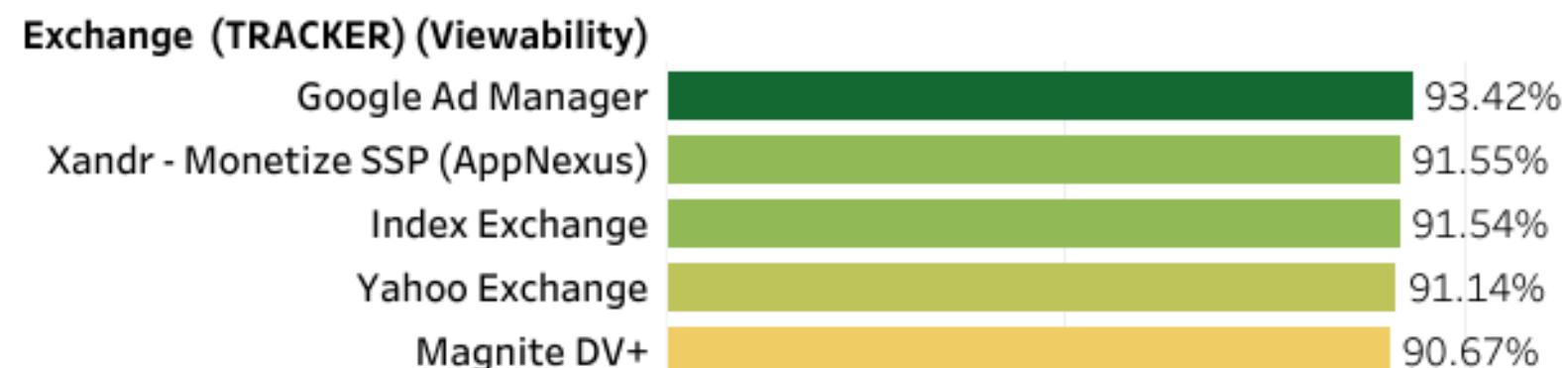
Viewable Impressions



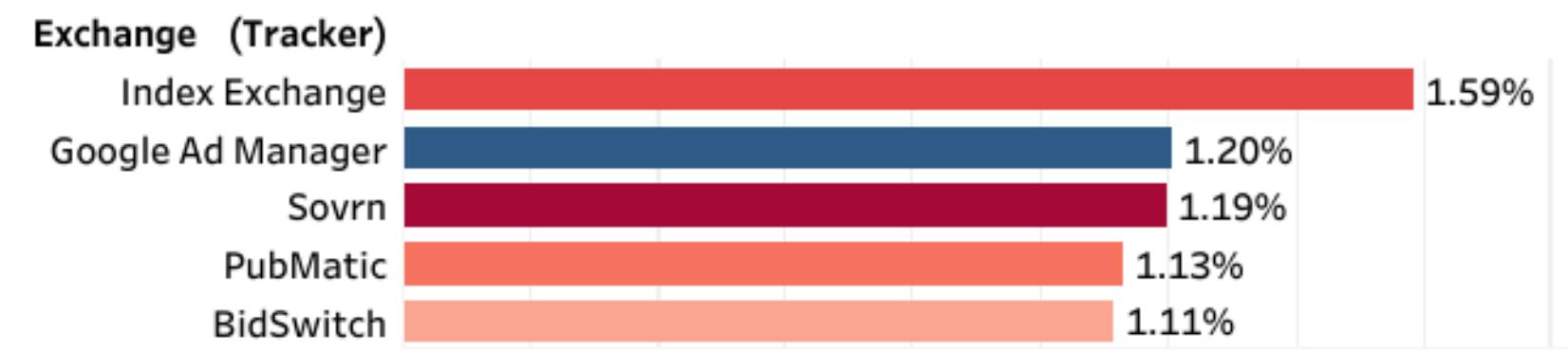
Measurable Expressions



Viewability



CTR



# *Top Performing Exchanges by Branding KPI*

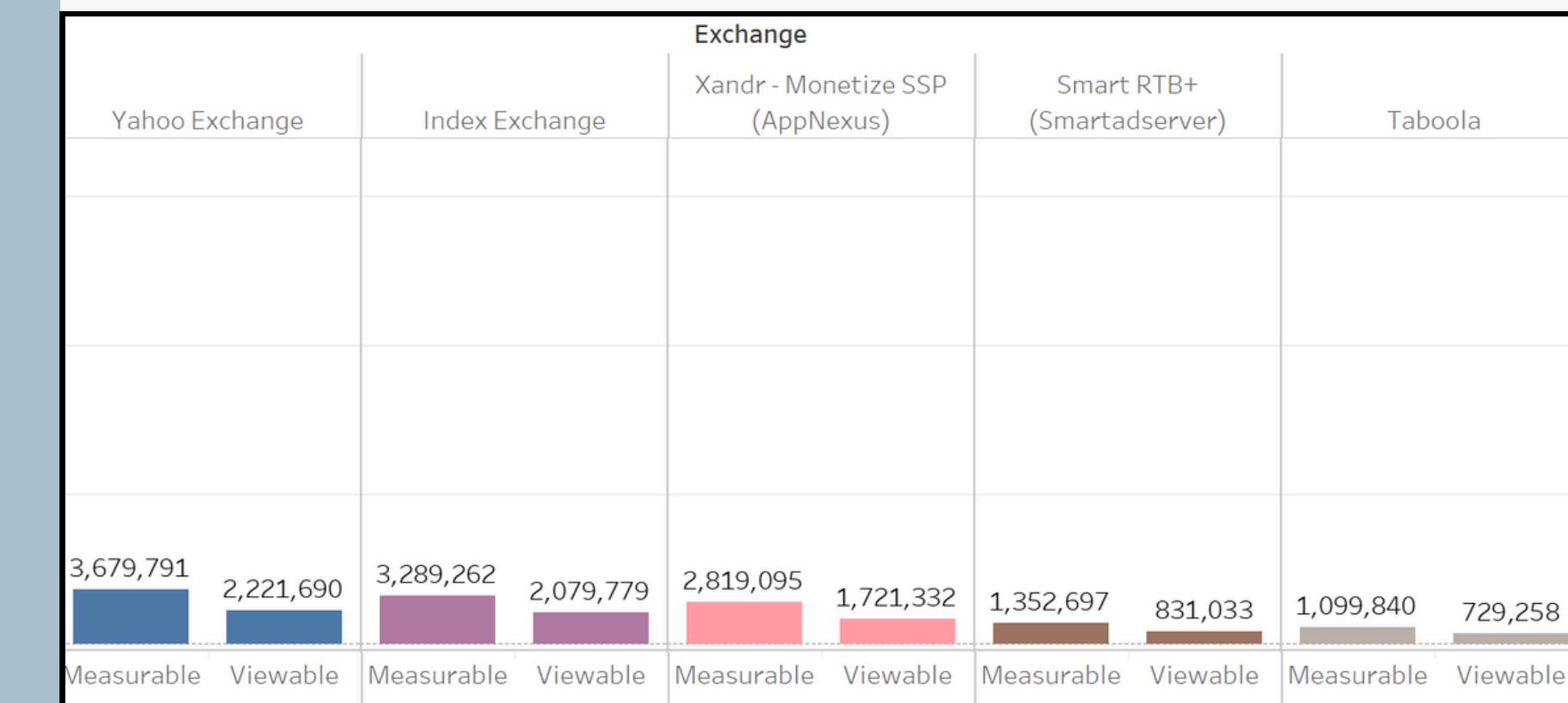
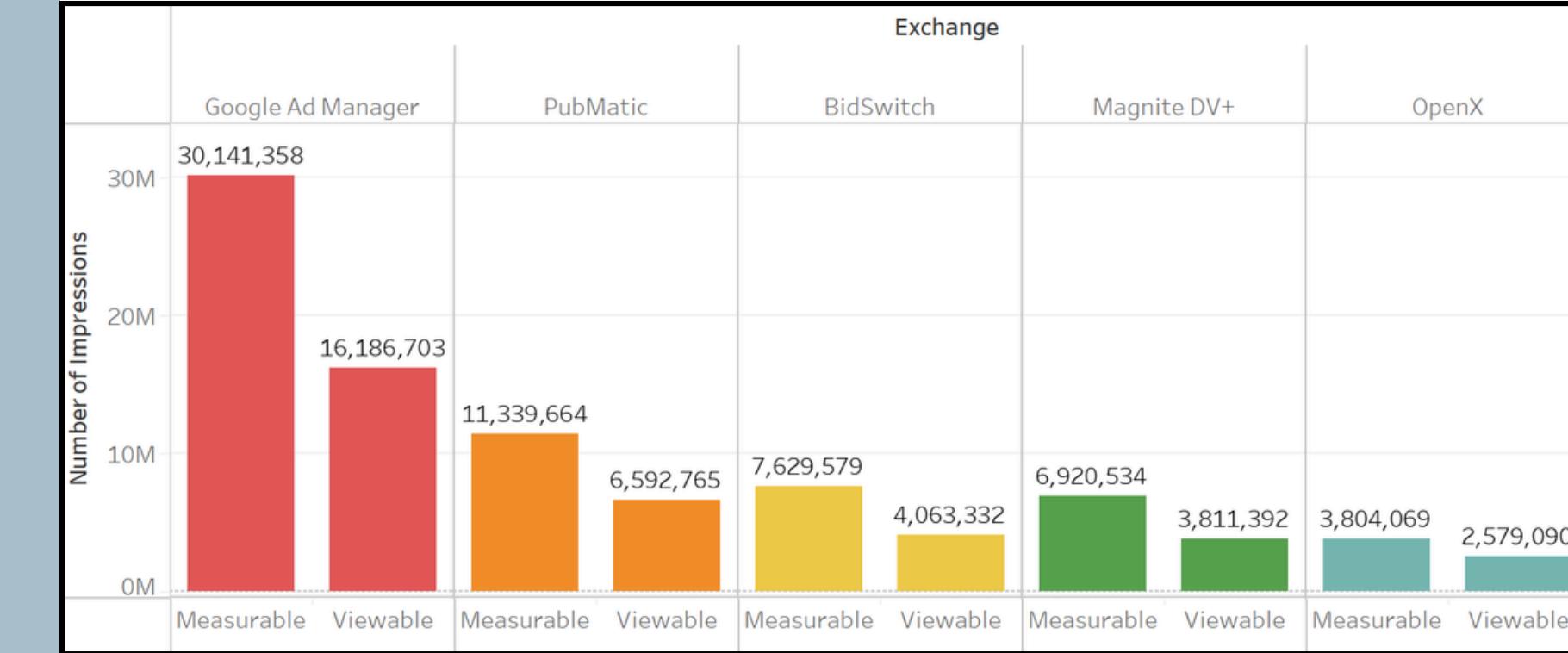
Branding Metric	Top Exchange	Performance Insight
Viewable Impression	Google Ad Manager	Highest CTR at 43.98% (Strong user engagement)
Measureable Impressions	PubMatic	8.45% (Most visible impressions served)
CTR	Google Ad Manager	1.59% (Consistent Advisability)
Viewability Rate	Index Exchange	93.24% (Industry leading-viewability)

# Exchange Measurable & Viewable Impression Findings

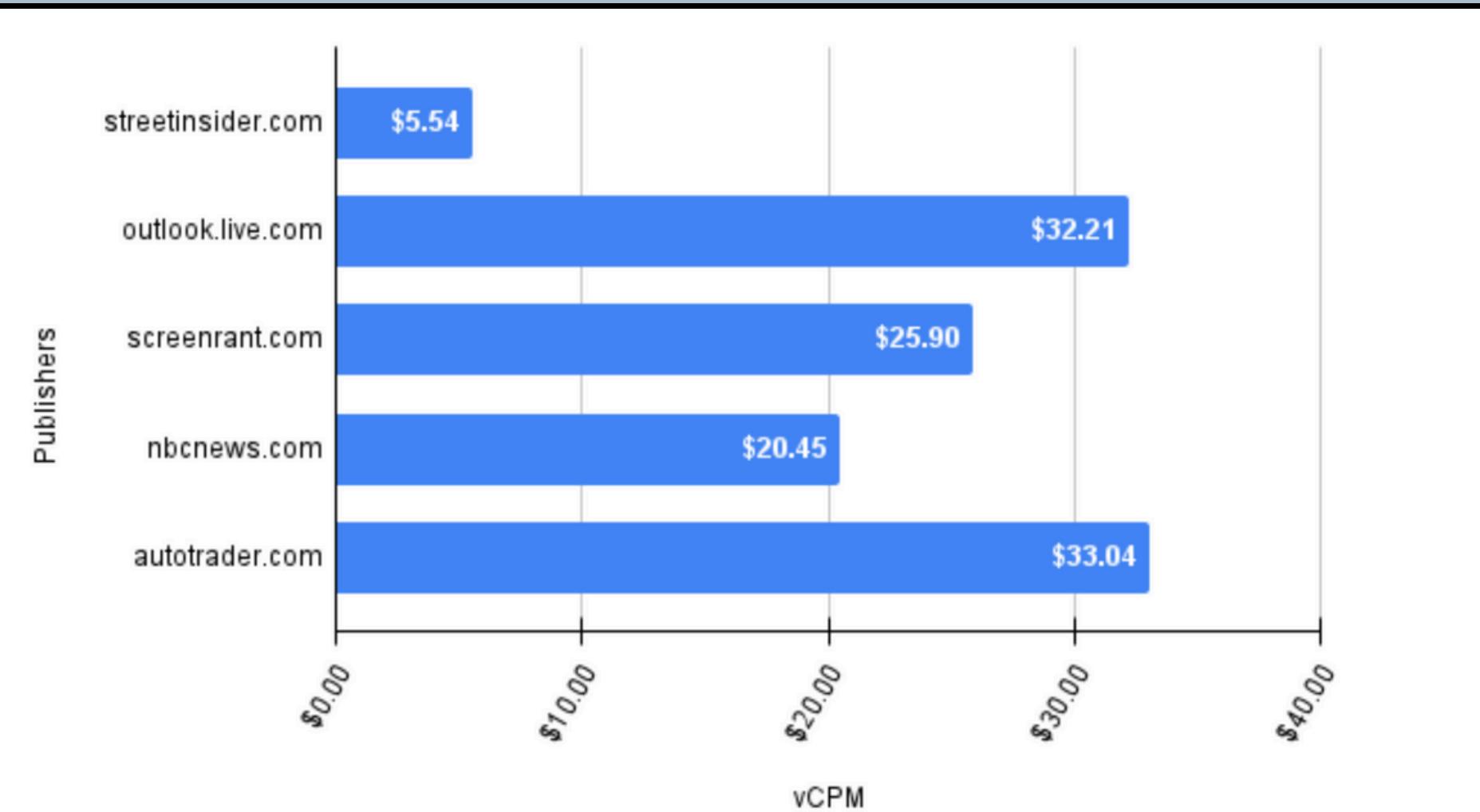
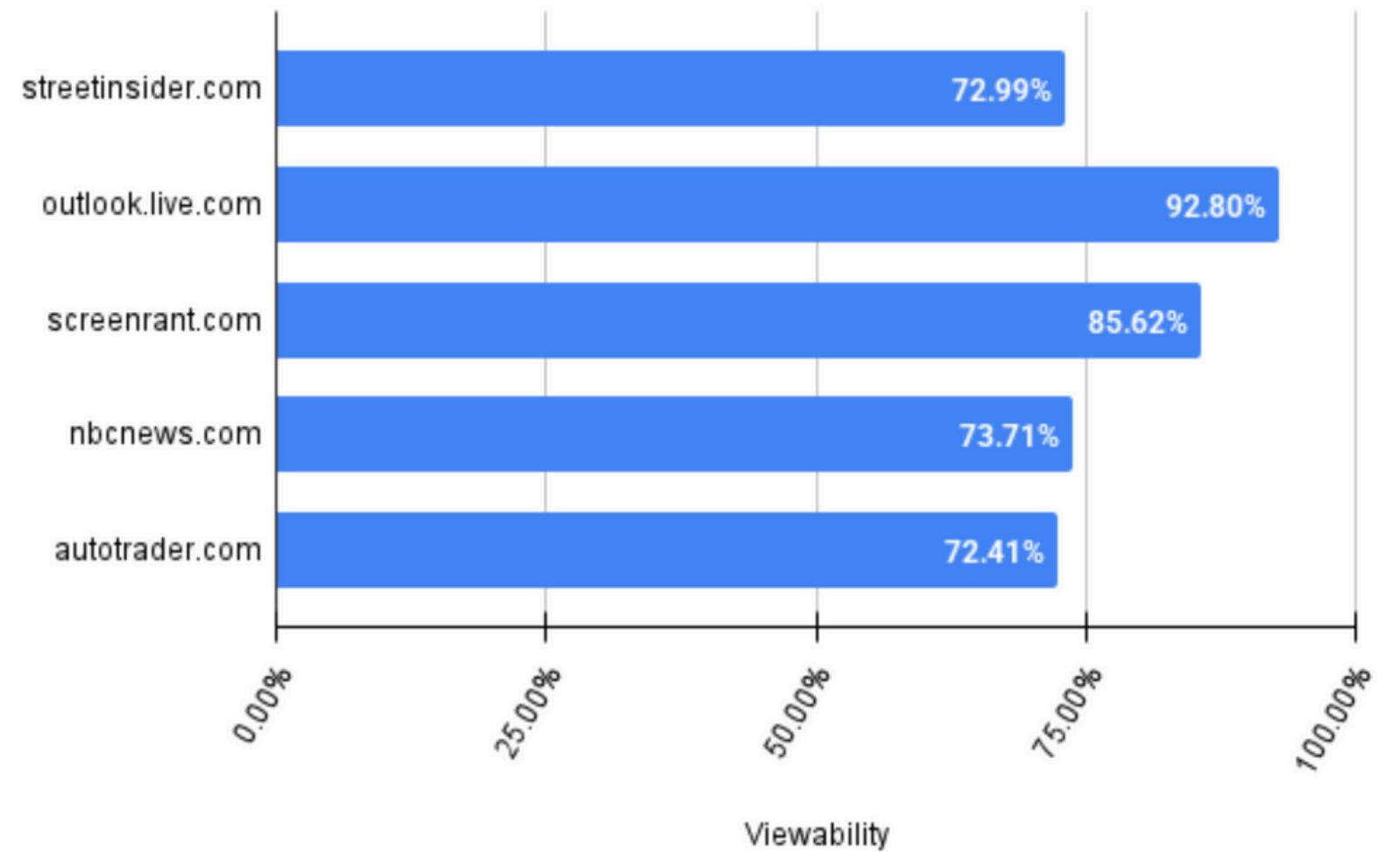
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- Focused on the 10 exchanges that had the biggest measurable and viewable impressions.
- Top 5: Google Ad Manager, PubMatic, BidSwitch, Magnite DV+, OpenX
- Bottom 5: Yahoo Exchange, Index Exchange, Xandr Monetize SSP (AppNexus), Smart RTB+ (Smartadserver), Taboola

Ads are the most successful in the Top 5 exchanges!

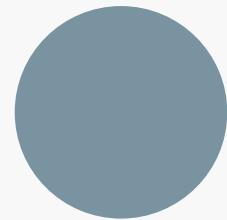


# *Recommended Publishers*

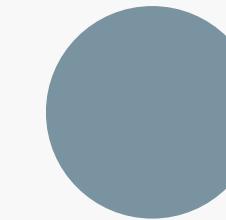


# *What Rates Should We Pay For Direct Buy?*

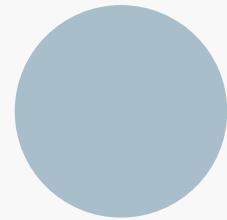
Direct Buy Rate = Cost per Thousand Viewable Impression



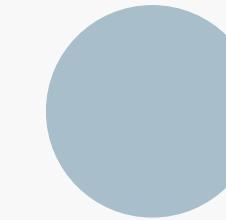
Autotrader.com - \$33.04



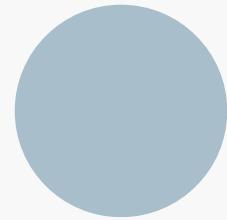
Nbcnews.com - \$20.45



Outlook.live.com - \$32.21



Streetinsider.com - \$5.54



Screenrant.com - \$25.90

# Conclusion



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By implementing a well-researched and innovative ad strategy, our goal is not only to boost immediate key performance indicator but also to establish a sustainable framework for continued growth and success.



Thank You

