



# Media Plan Optimization: Incremental Increases in OOH Share Brand Metrics Analysis

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October 2024

# Project Summary

This report explores the impact of **incremental reallocation of budget** to achieve media plan optimization

- A prior 2023 study confirmed the importance of OOH in the media mix and determined that historical under-allocation of budget to OOH prevented overall media plan optimization. Findings included OOH:
  - Delivered a strong RROAS that can improve overall campaign RROAS
  - Drove improved brand perceptions throughout the marketing funnel
- Comprehensive econometric modelling was conducted on key Brand Metrics to understand the role of OOH in driving brand measures. Three categories were evaluated within this study: Automotive, CPG Food, and Retail Grocery.
- The 2023 analysis provided RROAS numbers by media channel and optimal allocations by channel, detailing the impact of OOH in the mix in driving key brand perceptions, and included guidelines for allocating media channel spend levels to optimize overall improvements in brand scores.
- This study builds on the 2023 analysis and examines the impact of **incremental reallocation of budget** on the path to full optimization of the total media plan, and the resulting optimal levels for OOH. This analysis supports the recommendation to use an incremental approach to adjusting OOH media allocations rather than single dramatic increases to full optimization.

This document showcases the results of the impact of incremental reallocation of budget on brand metric analysis across the three categories. Brand metric scores are reported to 4 decimal places, as movements within brand metrics are small in terms of overall ROAS, but still represent strong increases. Incremental steps analysis across sales ROI is available in a separate document.

## Key Findings

Even minimum or increases to OOH achieves significant gains for the total media plan

- Optimal budget allocation across **all media channels** demonstrates that **OOH budget** should be **increased** to improve **all three brand metric scores**
- ROAS** across all three brand metric scores **increases** with increased **allocation to OOH**
- Optimal budget allocation demonstrates that **OOH** has been an **historically significantly under invested** media channel
- The **majority of the gain** in brand metric ROAS is achieved with just the **first incremental increase of OOH**
- Results provide **confidence** that increasing **OOH** investment only slightly, achieves **significant gains**



# Summary Charts: Comparing brand metric models across categories

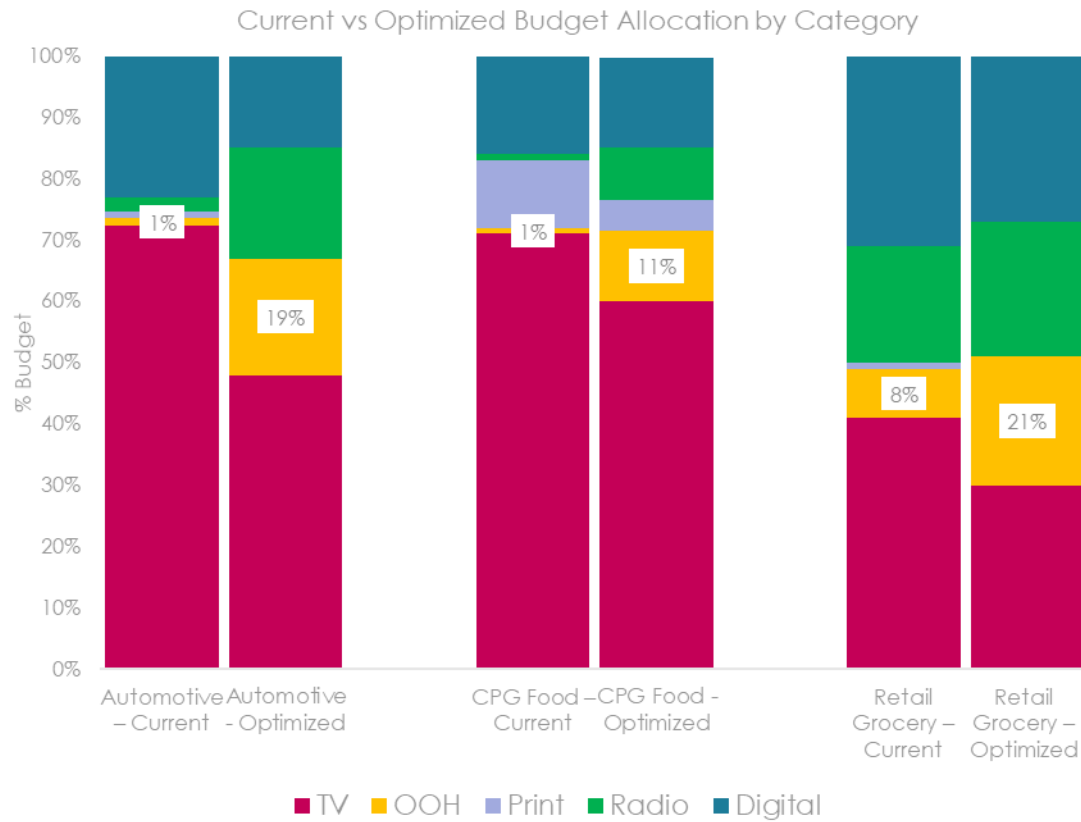
# Brand Awareness - Summary



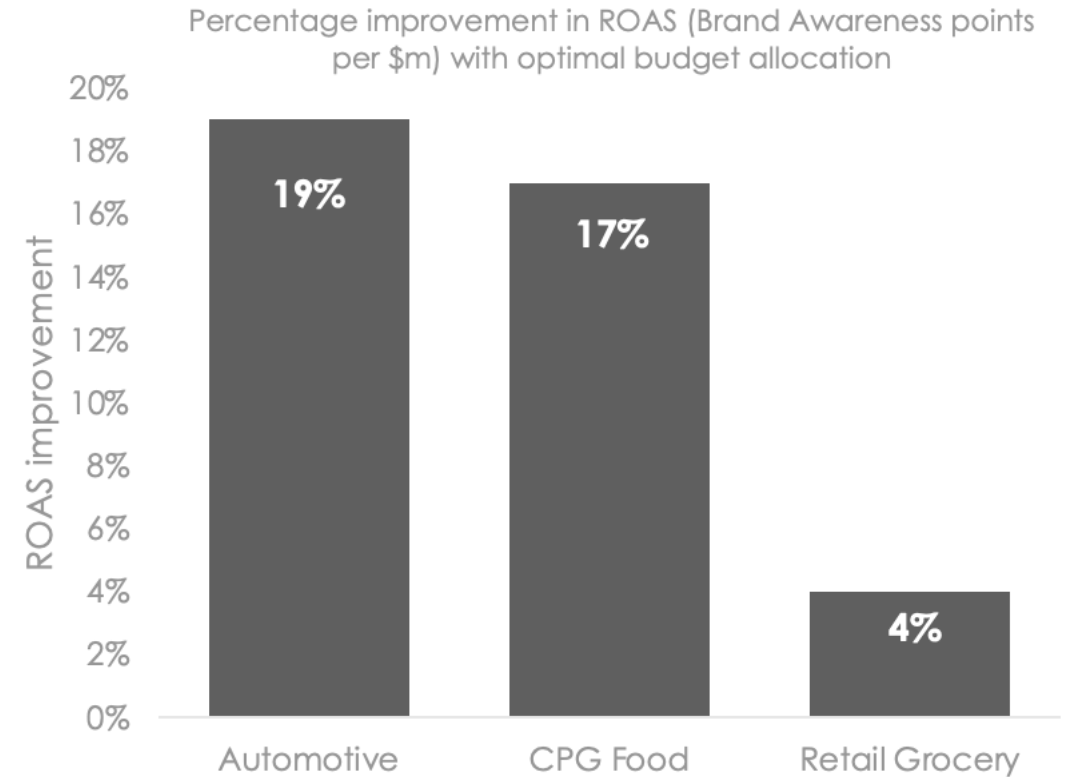
# Brand Awareness by Category: Current vs Optimal Media Allocation and ROAS improvement

OOH is increased in all categories to achieve optimization

## Optimized budget allocations recommends an increase in OOH in all three categories



## ROAS improves across all categories with an increase in allocation to OOH for optimal budget



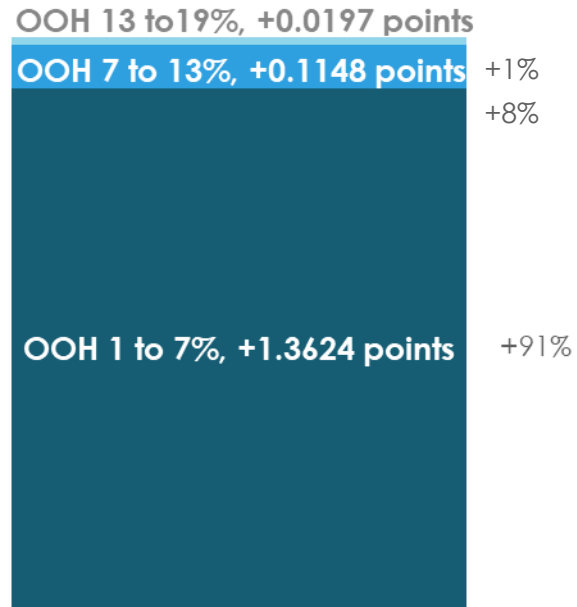
# Brand Awareness: impact of 3 incremental increases across 3 categories

The initial incremental increase in OOH allocation generates the largest gain across three categories



## Automotive

Increase in Brand Awareness with incremental increases in OOH for optimal allocation



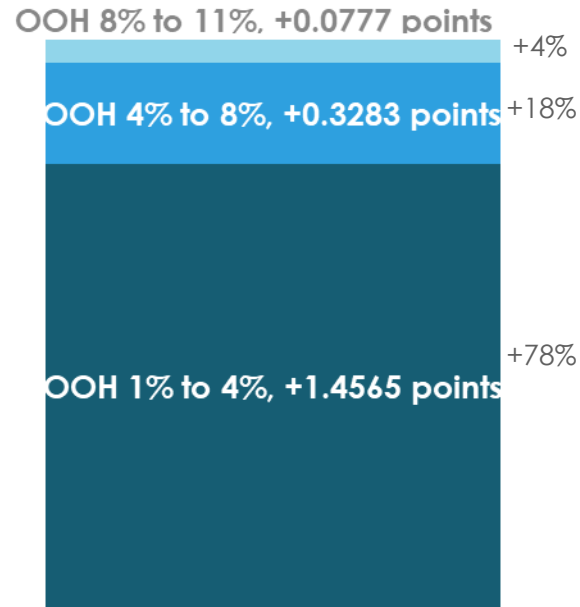
Full Optimization is 1% to 19%: Total gain **1.50 points**

**91%** gain is achieved in the **first incremental step**



## CPG Food

Increase in Brand Awareness with incremental increases in OOH for optimal allocation



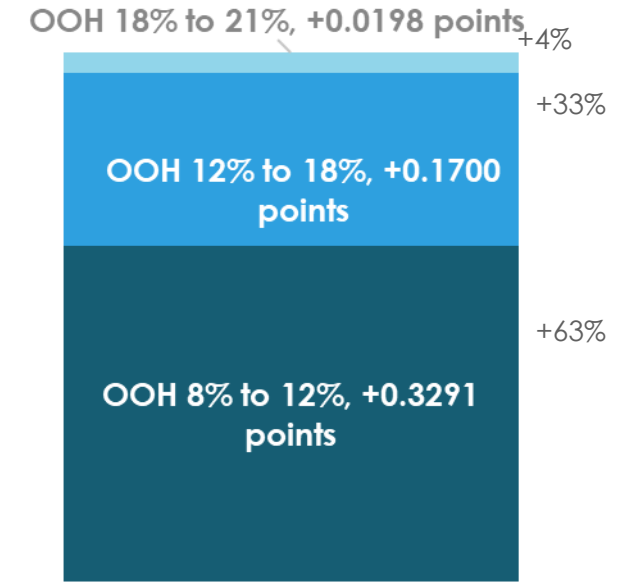
Full Optimization is 1% to 11%: Total gain **1.86 points**

**78%** gain is achieved in the **first incremental step**



## Retail Grocery

Increase in Brand Awareness with incremental increases in OOH for optimal allocation



Full Optimization is 8% to 21%: Total gain **0.52 points**

**63%** gain is achieved in the **first incremental step**

# Brand Awareness: incremental steps results summary table – all categories

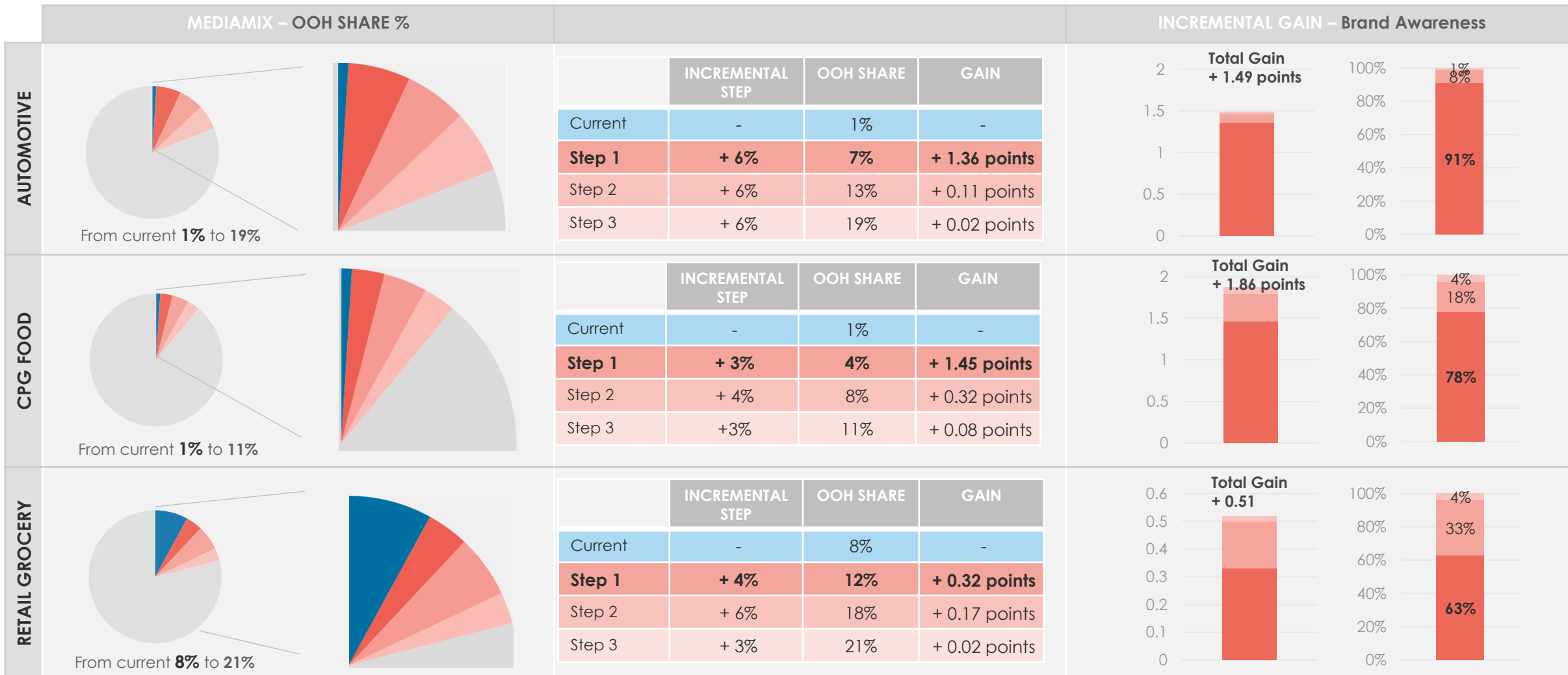
Majority of gain is achieved in step 1 for all categories

Brand Awareness	Automotive			CPG Food			Retail Grocery		
	% OOH allocation step increase	Increase in Brand Metric	% of total gain in step	% OOH allocation step increase	Increase in Brand Metric	% of total gain in step	% OOH allocation step increase	Increase in Brand Metric	% of total gain in step
Step 1	OOH 1% to 7%	1.3624	91%	OOH 1% to 4%	1.4565	78%	OOH 8% to 12%	0.32910	63%
Step 2	OOH 7% to 13%	0.1148	8%	OOH 4% to 8%	0.3283	18%	OOH 12% to 18%	0.17000	33%
Step 3	OOH 13% to 19%	0.0197	1%	OOH 8% to 11%	0.0777	4%	OOH 18% to 21%	0.01980	4%
Total - Optimal	OOH 1% to 19%	1.4969	100%	OOH 1% to 11%	1.8625	100%	OOH 8 to 21%	0.51890	100%



# BRAND AWARENESS through Incremental OOH Share

Majority of gain is achieved in step 1 for all categories



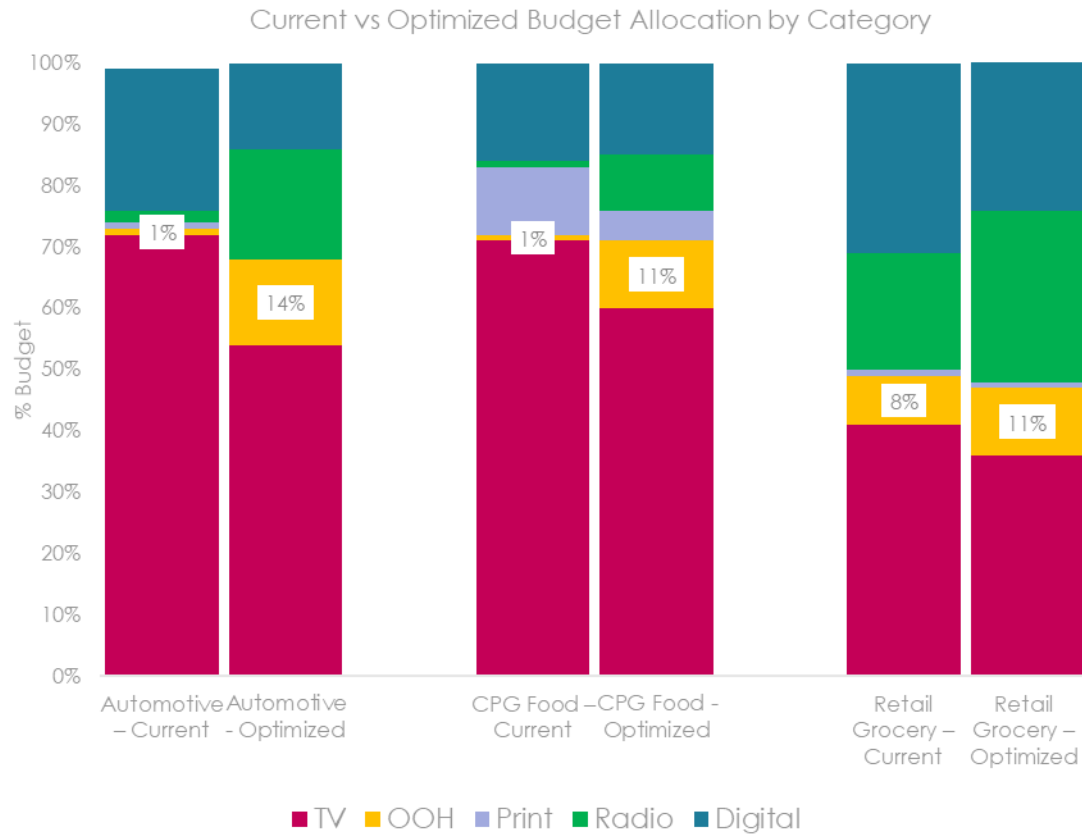
## Consideration - Summary



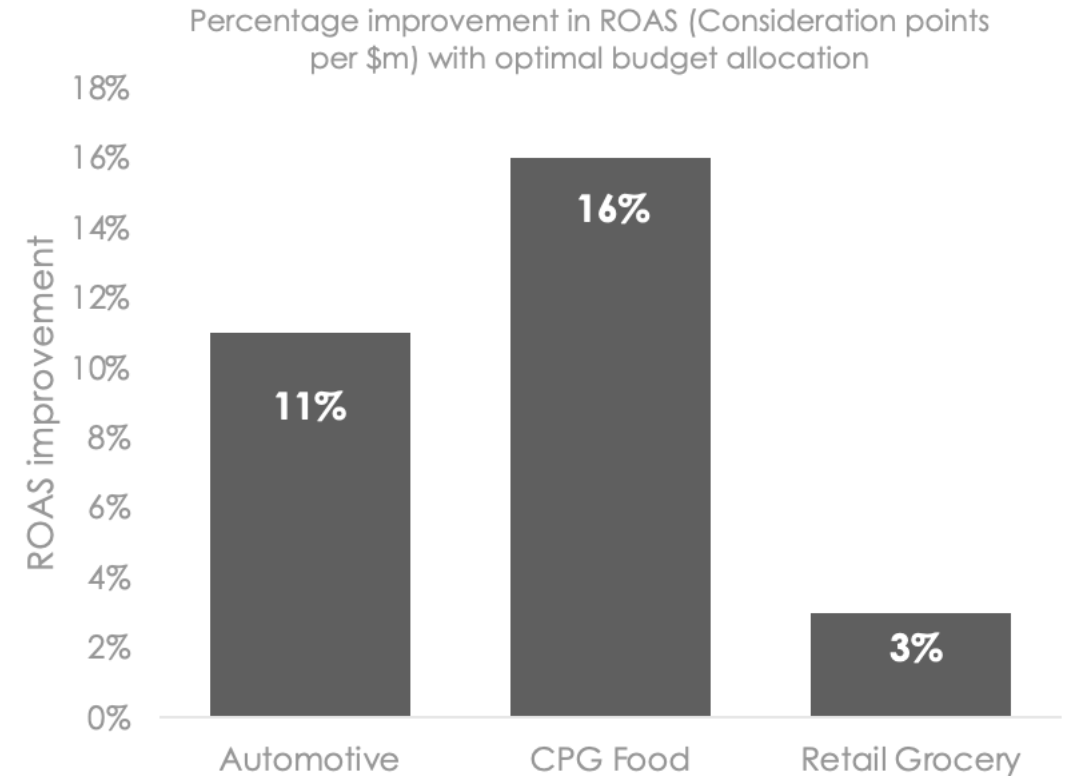
# Brand Consideration by Category: Current vs Optimal Media Allocation and ROAS improvement

OOH is increased in all categories to achieve optimization

## Optimized budget allocations recommends an increase in OOH in all three categories



## ROAS improves across all categories with an increase in allocation to OOH for optimal budget



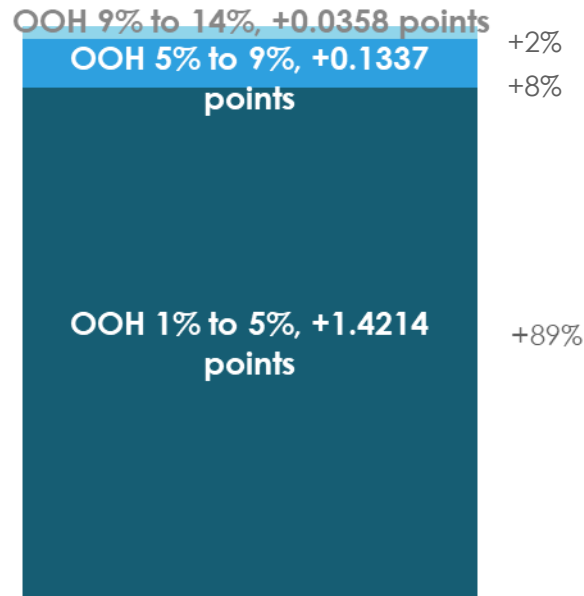
# Brand Consideration: impact of 3 incremental increases across 3 categories

The initial incremental increase in OOH allocation generates the largest gain across three categories



## Automotive

Increase in Brand Consideration with incremental increases in OOH for optimal allocation



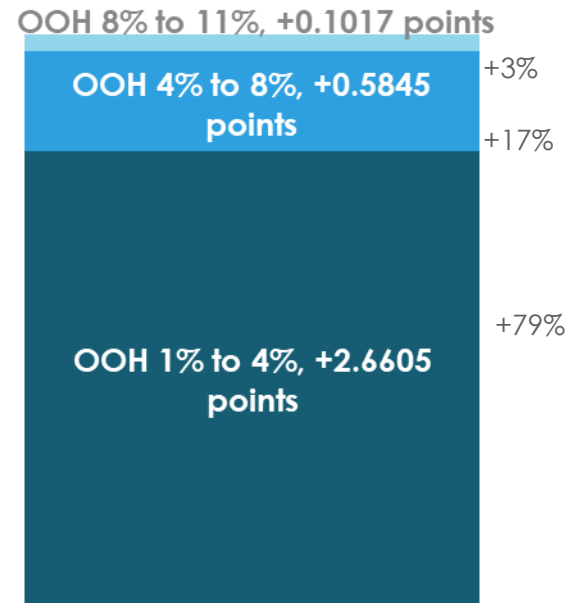
Full Optimization is 1% to 14%: Total gain **1.59 points**

**89%** gain is achieved in the **first incremental step**



## CPG Food

Increase in Brand Consideration with incremental increases in OOH for optimal allocation



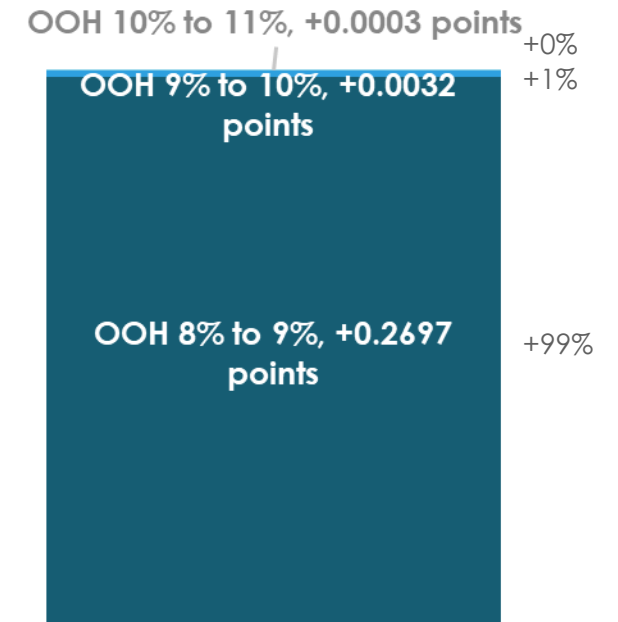
Full Optimization is 1% to 11%: Total gain **3.35 points**

**79%** gain is achieved in the **first incremental step**



## Retail Grocery

Increase in Brand Consideration with incremental increases in OOH for optimal allocation



Full Optimization is 8% to 11%: Total gain **0.27 points**

**99%** gain is achieved in the **first incremental step**

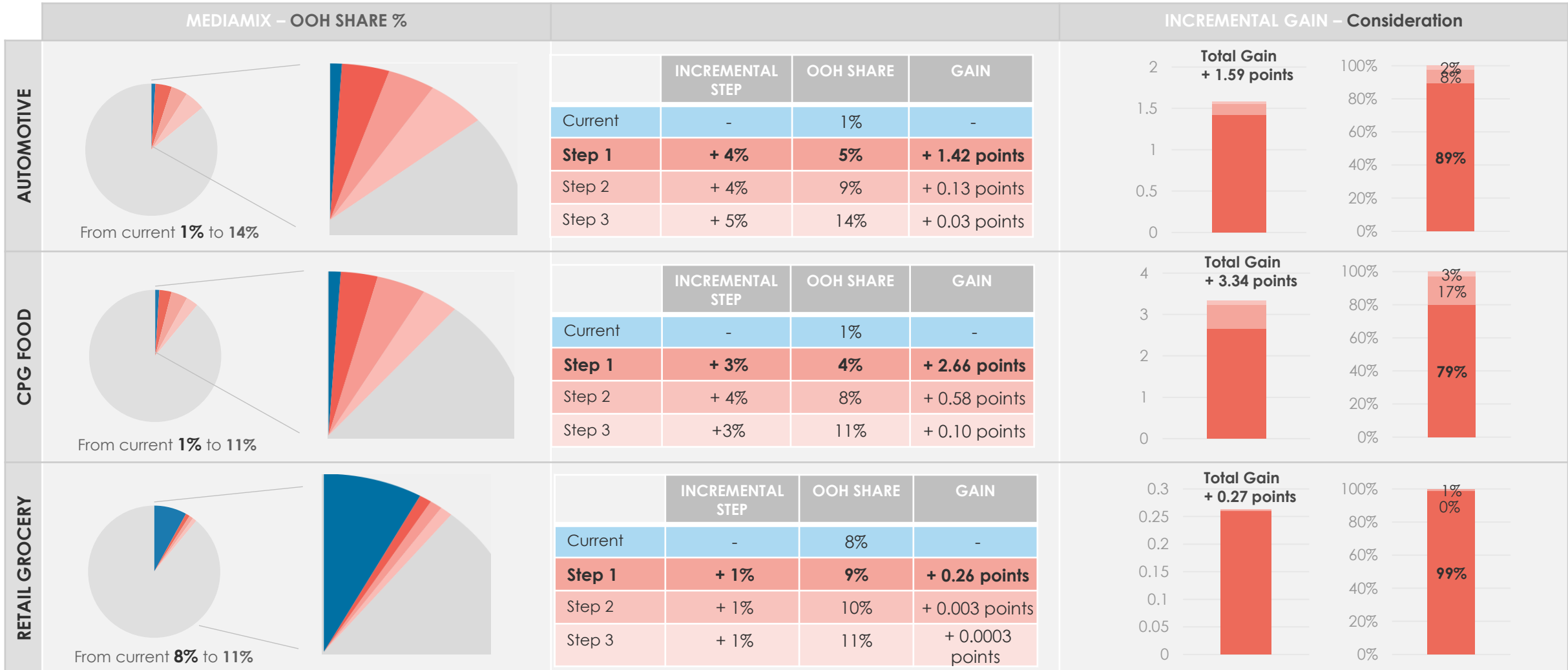
# Brand Consideration: incremental steps results summary table – all categories

Majority of gain is achieved in step 1 for all categories

Consideration	Automotive			CPG Food			Retail Grocery		
	% OOH allocation step increase	Increase in Brand Metric	% of total gain in step	% OOH allocation step increase	Increase in Brand Metric	% of total gain in step	% OOH allocation step increase	Increase in Brand Metric	% of total gain in step
Step 1	OOH 1% to 5%	1.4214	89%	OOH 1% to 4%	2.6605	79%	OOH 8% to 9%	0.2697	99%
Step 2	OOH 5% to 9%	0.1337	8%	OOH 4% to 8%	0.5845	17%	OOH 9% to 10%	0.0032	1%
Step 3	OOH 9% to 14%	0.0358	2%	OOH 8% to 11%	0.1017	3%	OOH 10% to 11%	0.0003	0%
Total - Optimal	OOH 1% to 14%	1.5909	100%	OOH 1% to 11%	3.3467	100%	OOH 8% to 11%	0.2732	100%

# CONSIDERATION through Incremental OOH Share

Majority of gain is achieved in step 1 for all categories



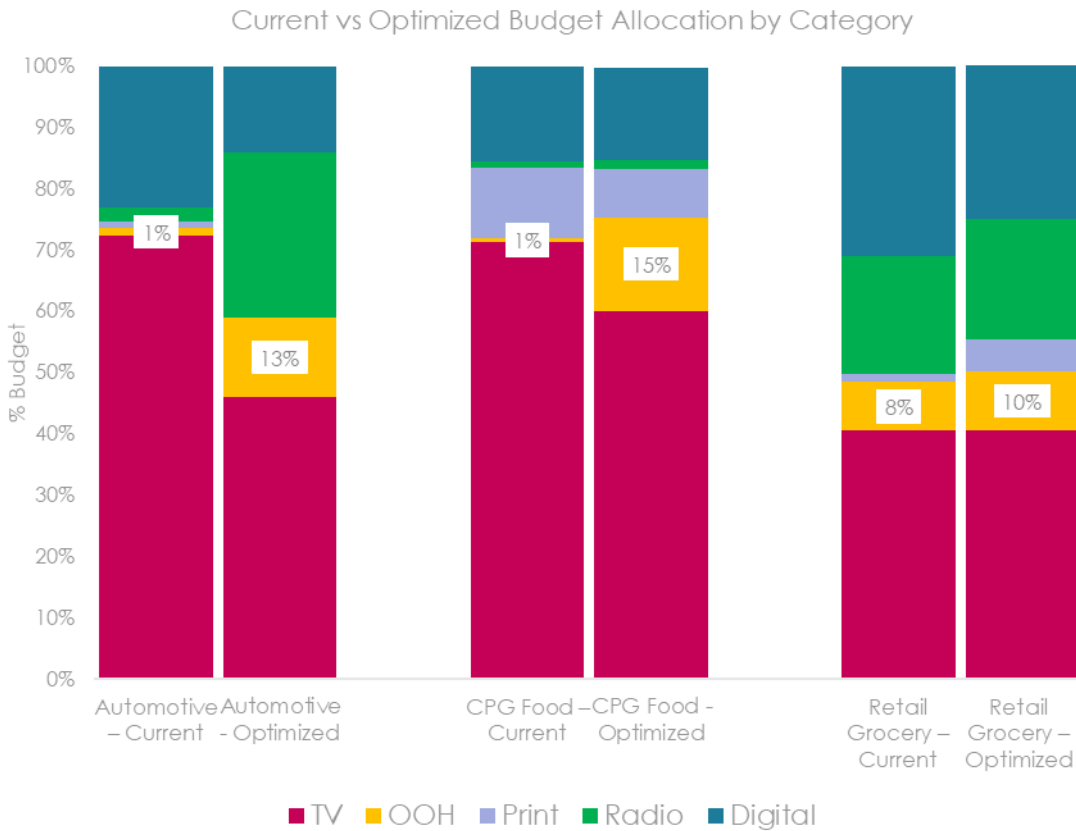
## Purchase Intent - Summary



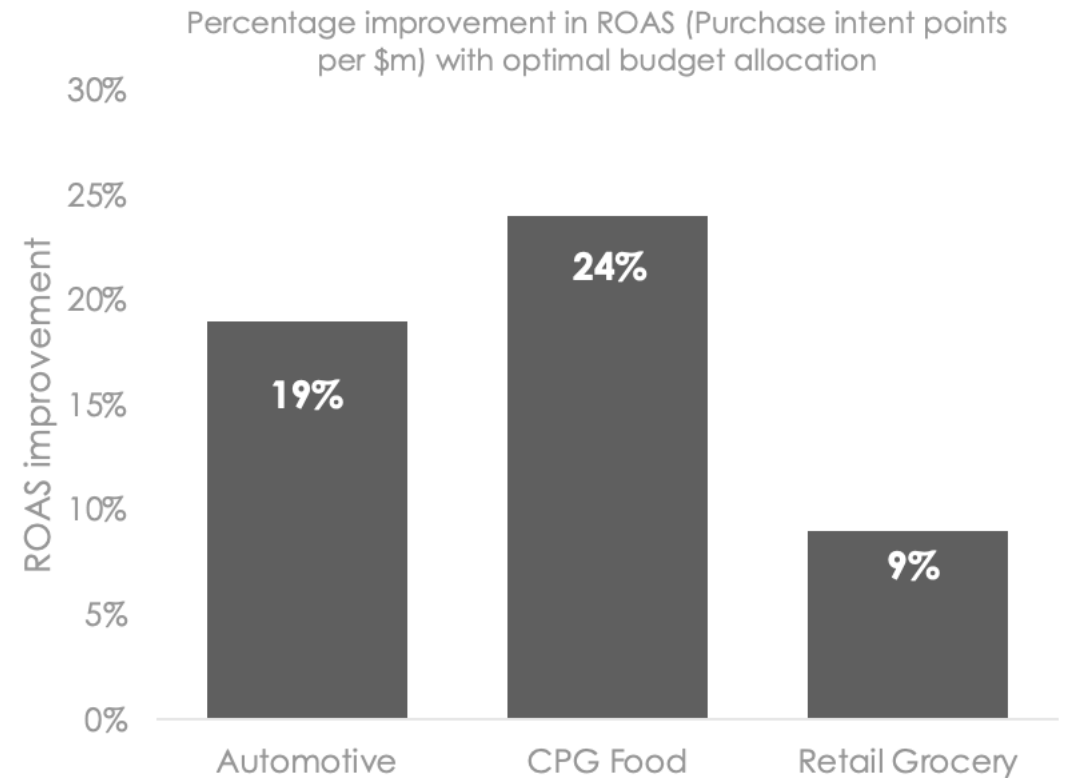
# Purchase Intent by Category: Current vs Optimal Media Allocation and ROAS improvement

OOH is increased in all categories to achieve optimization

## Optimized budget allocations recommends an increase in OOH in all three categories



## ROAS improves across all categories with an increase in allocation to OOH for optimal budget





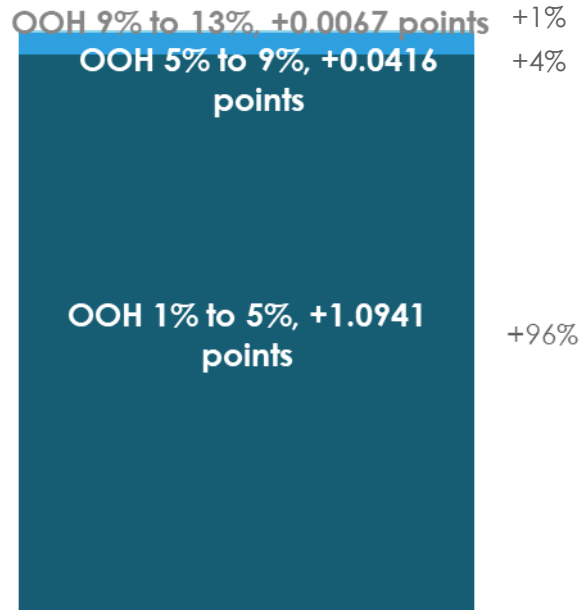
# Purchase Intent: impact of 3 incremental increases across 3 categories

The initial incremental increase in OOH allocation generates the largest gain across three categories



## Automotive

Increase in Purchase Intent with incremental increases in OOH for optimal allocation



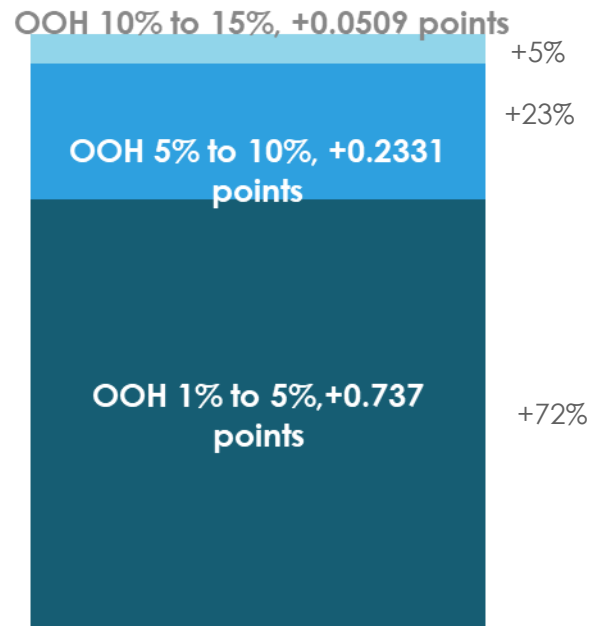
Full Optimization is 1% to 13%: Total gain **1.14 points**

**96%** gain is achieved in the **first incremental step**



## CPG Food

Increase in Purchase Intent with incremental increases in OOH for optimal allocation



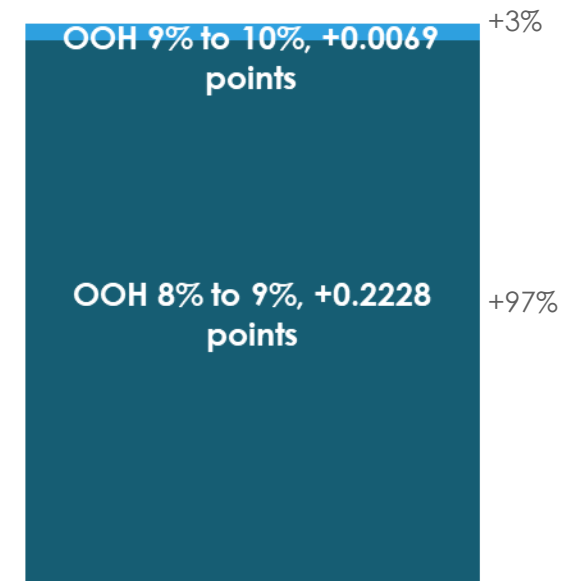
Full Optimization is 1% to 15%: Total gain **1.02 points**

**72%** gain is achieved in the **first incremental step**



## Retail Grocery

Increase in Purchase Intent with incremental increases in OOH for optimal allocation



Full Optimization is 8% to 10%: Total gain **0.22 points**

**97%** gain is achieved in the **first incremental step**

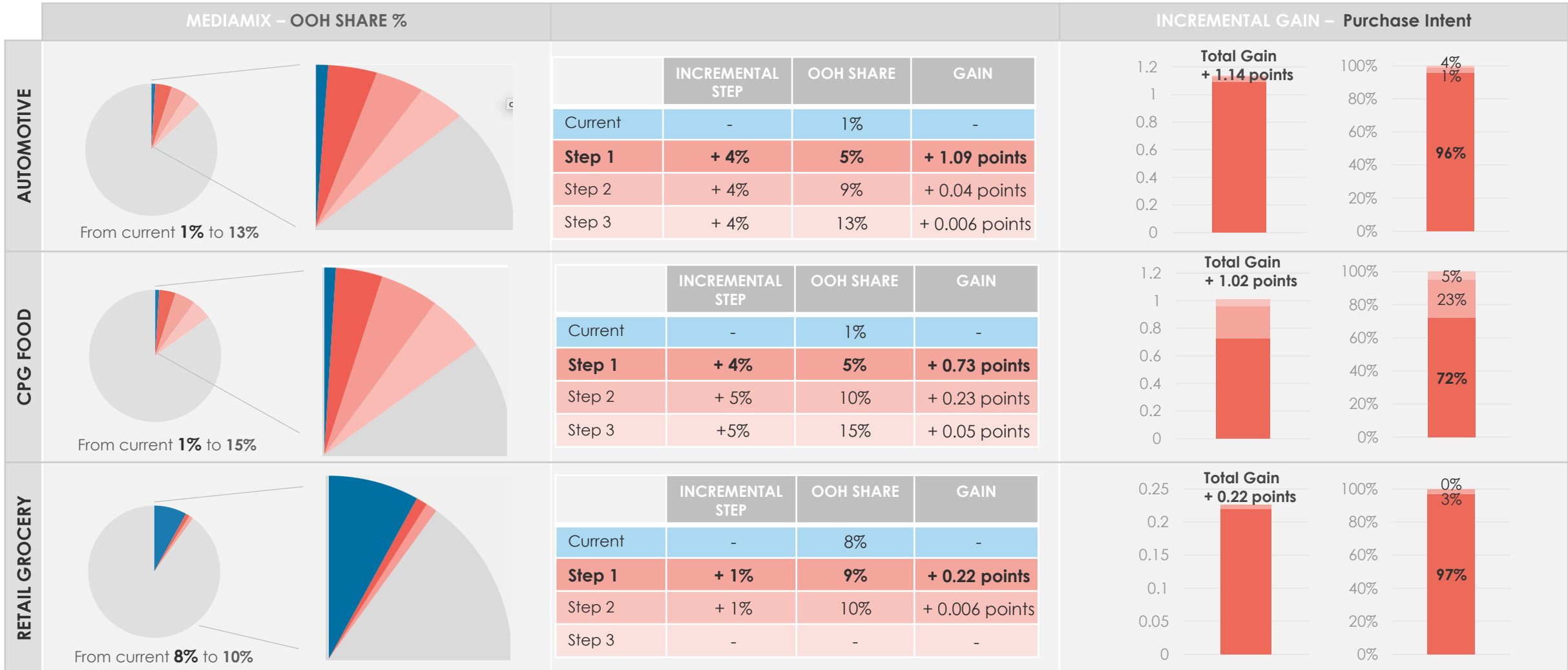
# Purchase Intent: incremental steps results summary table – all categories

Majority of gain is achieved in step 1 for all categories

Purchase Intent	Automotive			CPG Food			Retail Grocery		
	% OOH allocation step increase	Increase in Brand Metric	% of total gain in step	% OOH allocation step increase	Increase in Brand Metric	% of total gain in step	% OOH allocation step increase	Increase in Brand Metric	% of total gain in step
Step 1	OOH 1% to 5%	1.0941	96%	OOH 1% to 5%	0.7370	72%	OOH 8% to 9%	0.2228	97%
Step 2	OOH 5% to 9%	0.0416	4%	OOH 5% to 10%	0.2331	23%	OOH 9% to 10%	0.0069	3%
Step 3	OOH 9% to 13%	0.0067	1%	OOH 10% to 15%	0.0509	5%			
<b>Total - Optimal</b>	OOH 1% to 13%	1.1424	100%	OOH 1% to 15%	1.021	100%	OOH 8% to 10%	0.2297	100%

# PURCHASE INTENT through Incremental OOH Share

Majority of gain is achieved in step 1 for all categories



# Automotive Budget Allocation: Incremental Steps on Brand Metrics

## Detail Charts

- Brand Awareness
- Consideration
- Purchase Intent



# Automotive Brand Awareness – Detail Charts

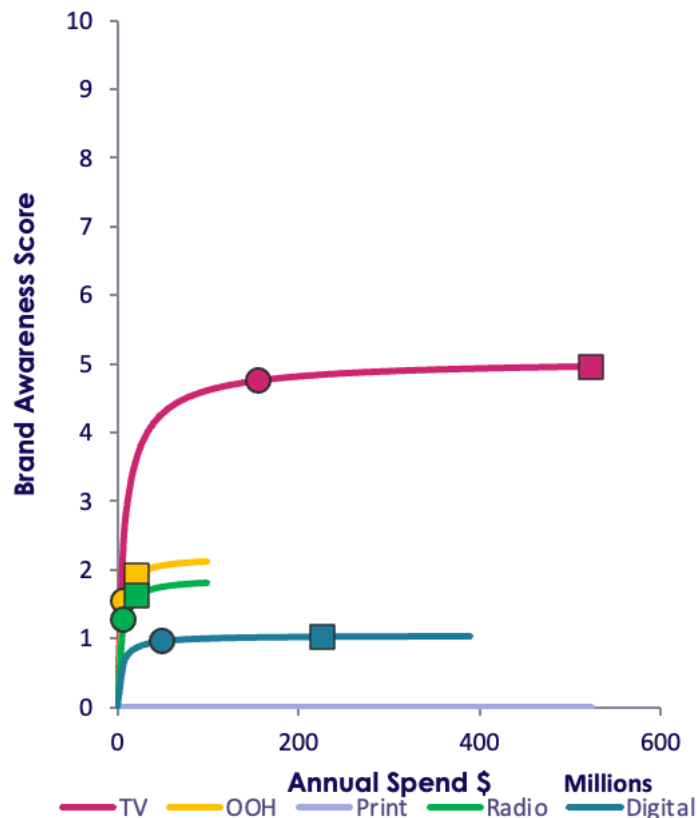




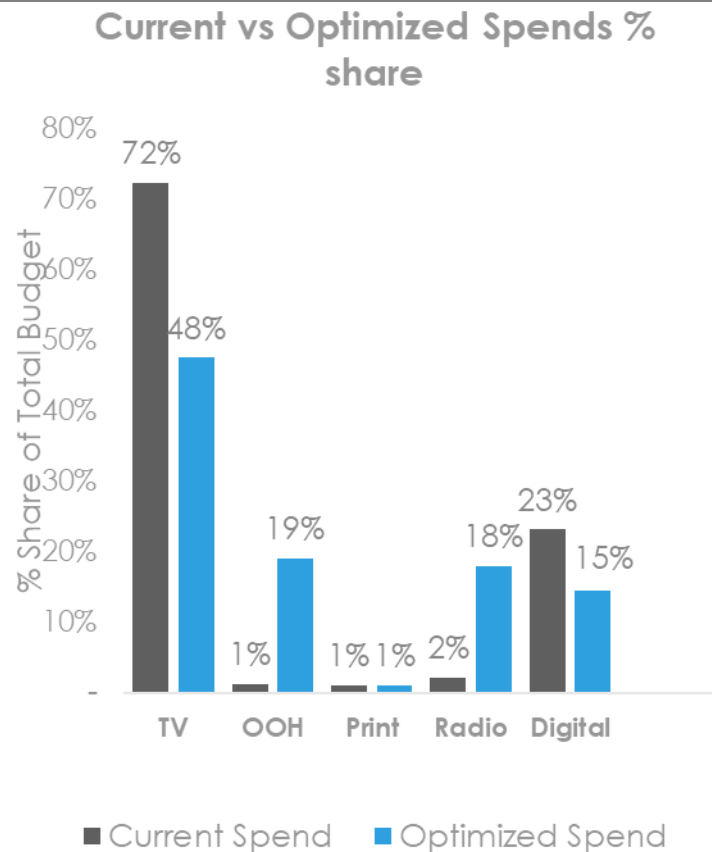
# Automotive OPTIMAL OOH allocation for Brand Awareness ROAS

Increase OOH from 1 to 19%

## Brand Awareness response curves to identify optimal spend levels



## Using the response curves to optimize current spend levels



## Recommendations and Results

Decrease TV to 48% and **upweight OOH to 19%, Radio to 18%**  
(Downweight TV and Digital)

Extra **1.4969** Brand Awareness points generated using the same budget

**Total media ROAS** increases from **0.0367** to **0.0438**

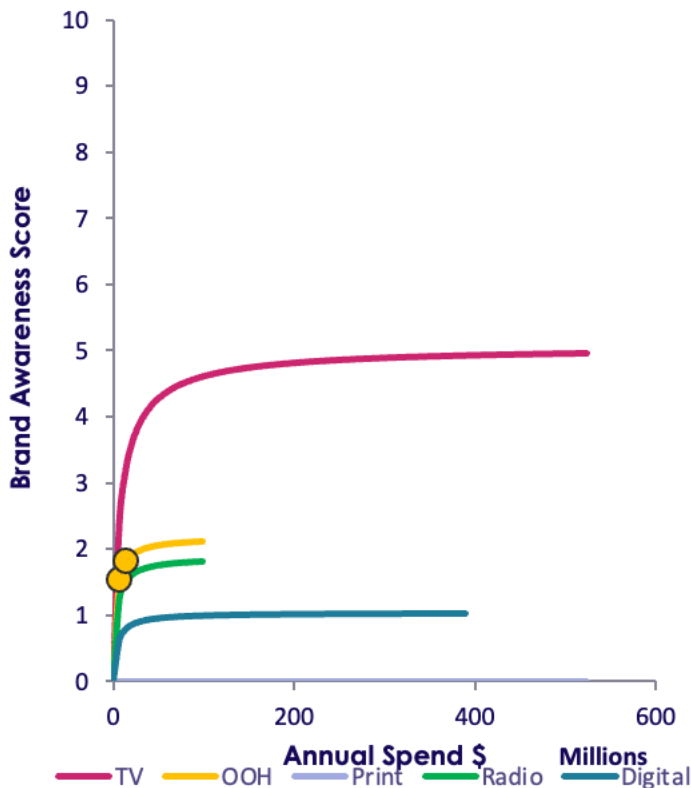
**+19% Total media ROAS** increase



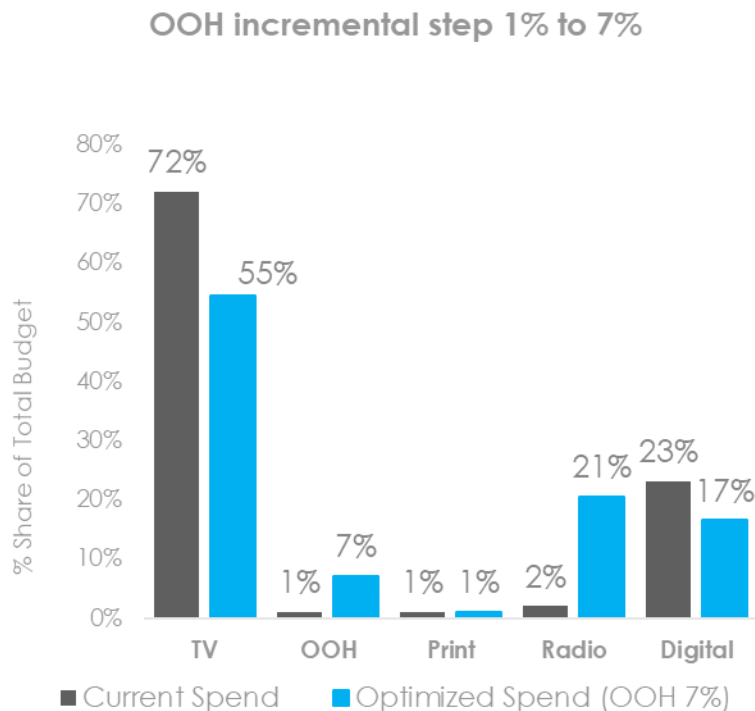
# Automotive FIRST INCREMENTAL OOH increase for Brand Awareness ROAS

increase OOH from 1% to 7% (optimal OOH is 19%)

Brand Awareness response curves:  
dots show incremental OOH increase  
1 - 7 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 1% to 7%**

(Downweight TV and Digital)

Extra **1.3624** Brand Awareness points generated using the same budget

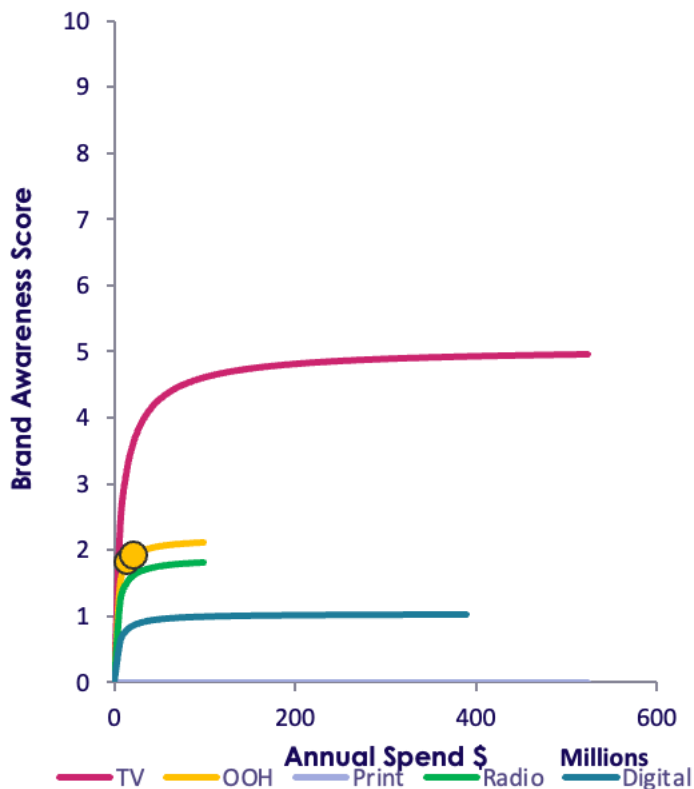
**Total media ROAS** increases from **0.0367** to **0.0431**  
**+17% Total media ROAS** increase



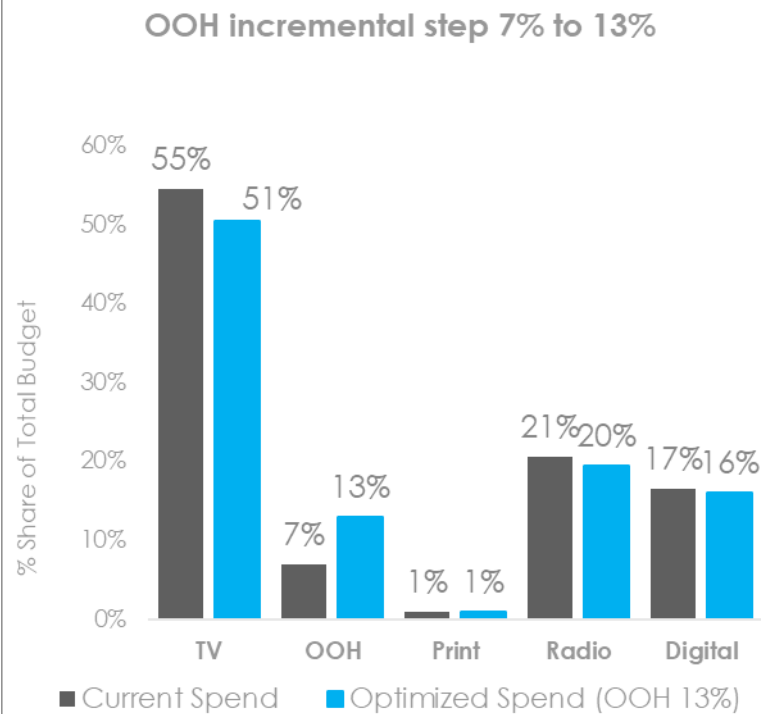
# Automotive SECOND INCREMENTAL OOH increase for Brand Awareness ROAS:

Increase OOH from 7% to 13% (optimal OOH is 19%)

Brand Awareness response curves:  
dots show incremental OOH increase  
7 - 13 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 7% to 13%**  
(Downweight TV, Radio and Digital)

Extra **0.1148** Brand Awareness points generated using the same budget

**Total media ROAS** increases from **0.0431** to **0.0436**  
**+1% Total media ROAS** increase

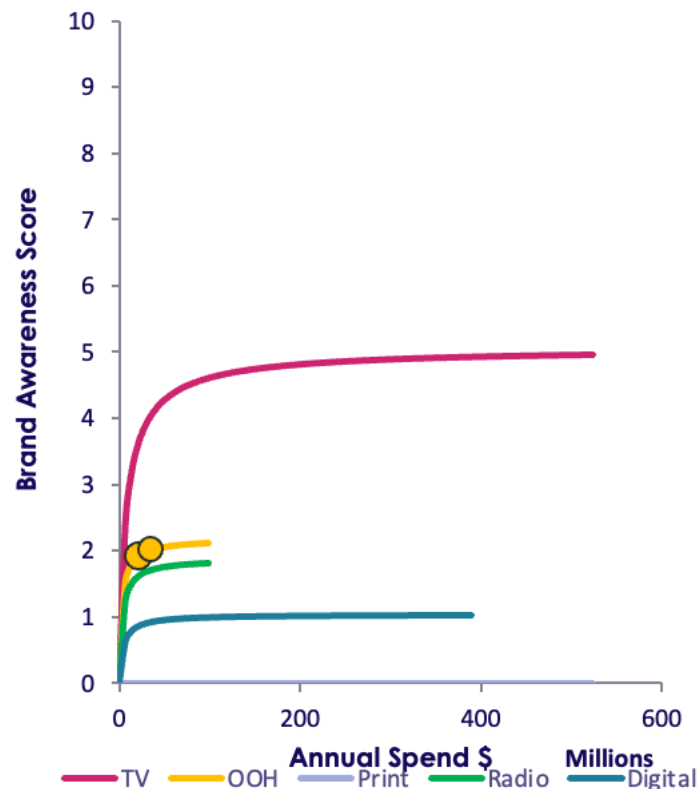




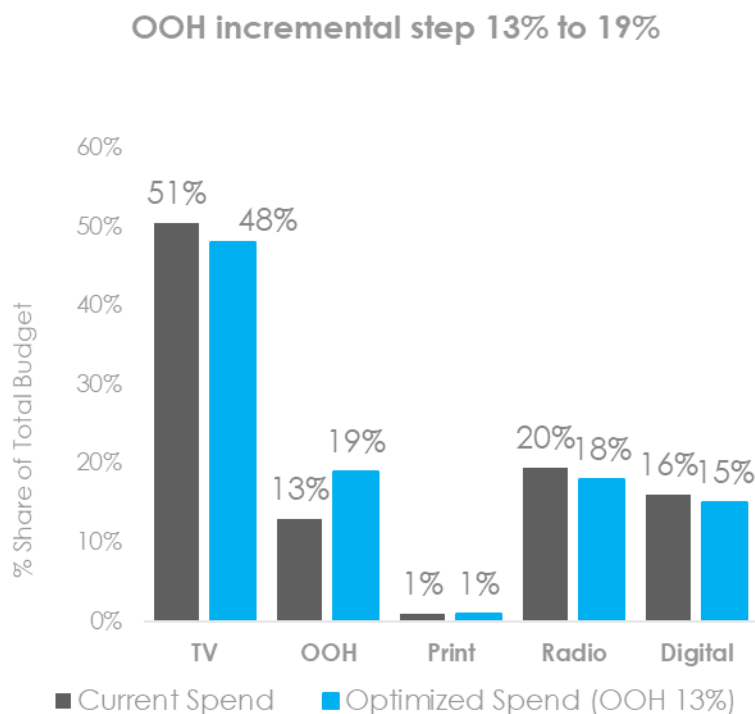
# Automotive FINAL INCREMENTAL OOH increase for Brand Awareness ROAS:

Increase OOH from 13% to 19%, (optimal OOH is 19%)

Brand Awareness response curves:  
dots show incremental OOH increase  
13 - 19 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 13% to 19%**  
(Downweight TV, Radio and Digital)

Extra **0.0197** Brand Awareness points generated using the same budget

**Total media ROAS** increases from **0.0436** to **0.0437**  
**+0.21%** **Total media ROAS** increase

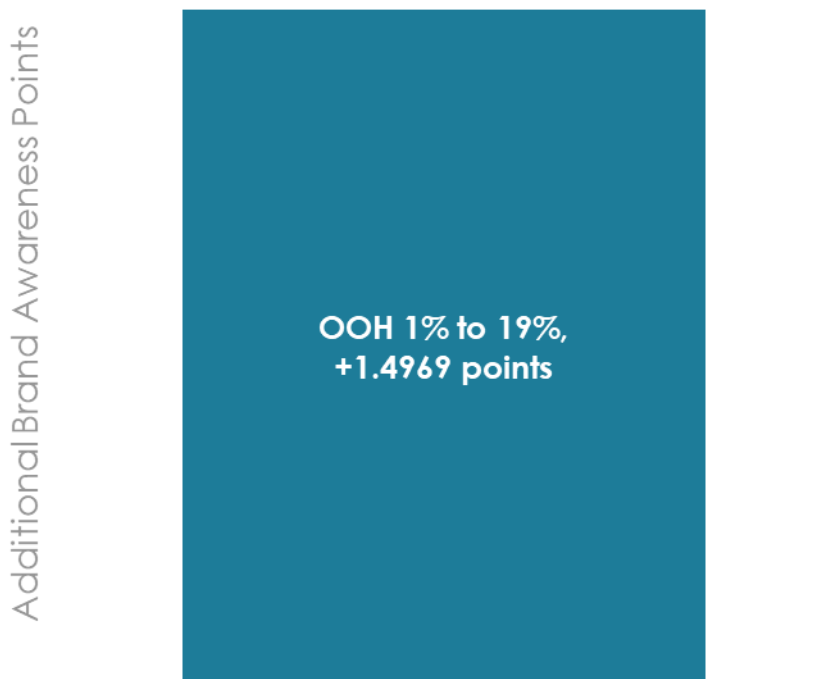


# Automotive Brand Awareness: optimized vs incremental steps in increasing OOH% allocation

The first incremental increase from 1% to 7% generates the largest part of the optimized Brand Awareness increase

## Full Optimization

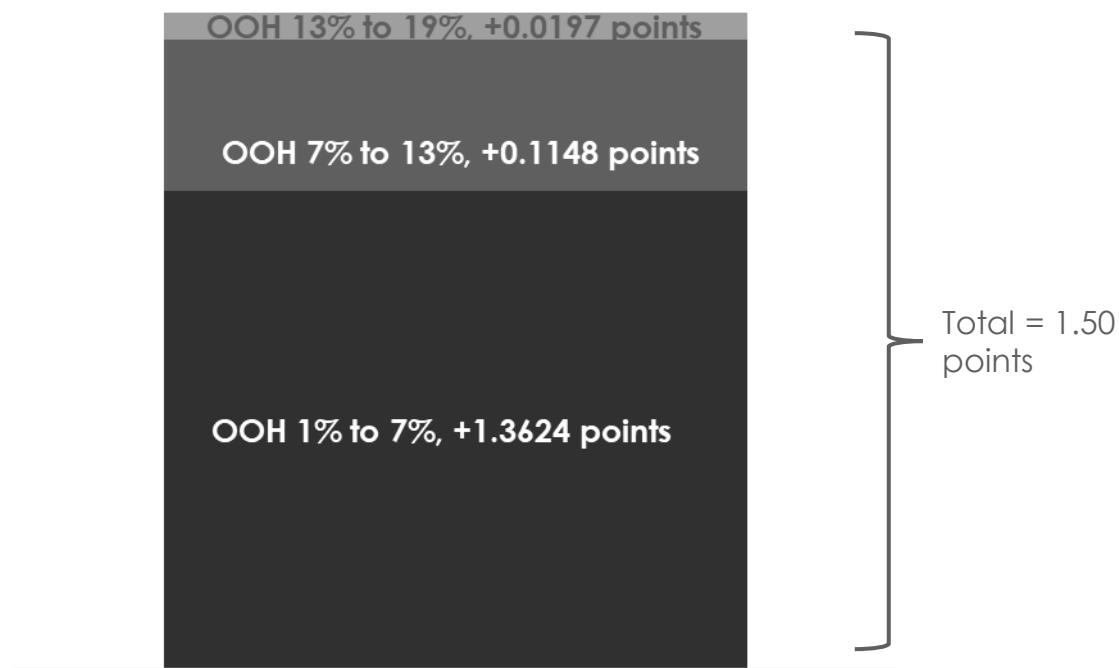
Additional Brand Awareness points generated from optimizing OOH straight to 19%



Additional Brand Awareness generated full optimization

## Incremental Optimization

Additional Brand Awareness points generated from incremental increases in OOH



Additional Brand Awareness generated Incrementally

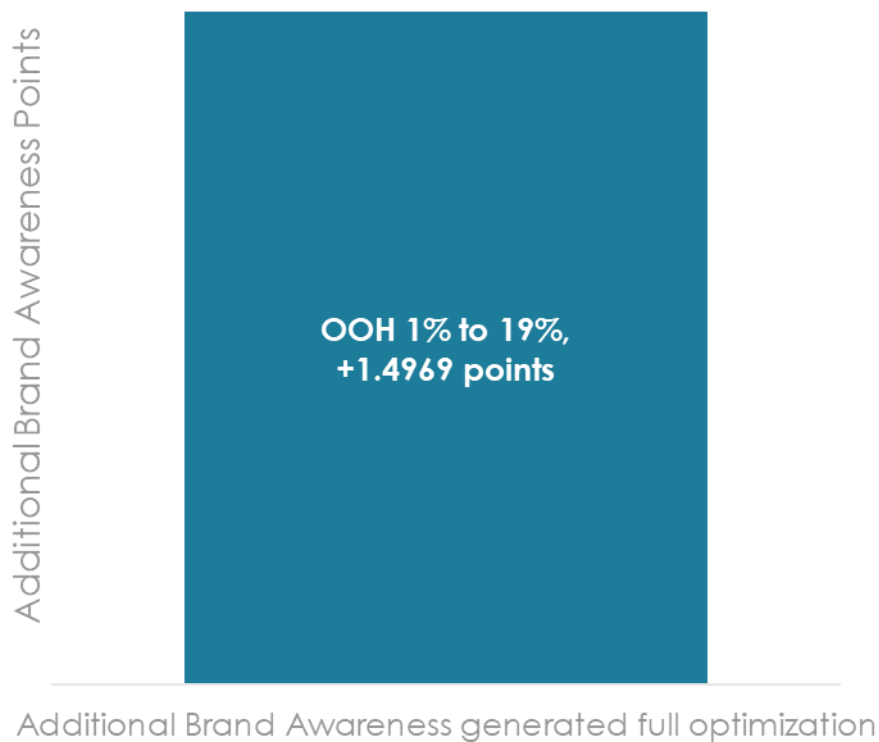


# Automotive Brand Awareness: optimized vs incremental steps in increasing OOH% allocation

The first incremental increase from 1% to 7% generates the largest part of the optimized Brand Awareness increase

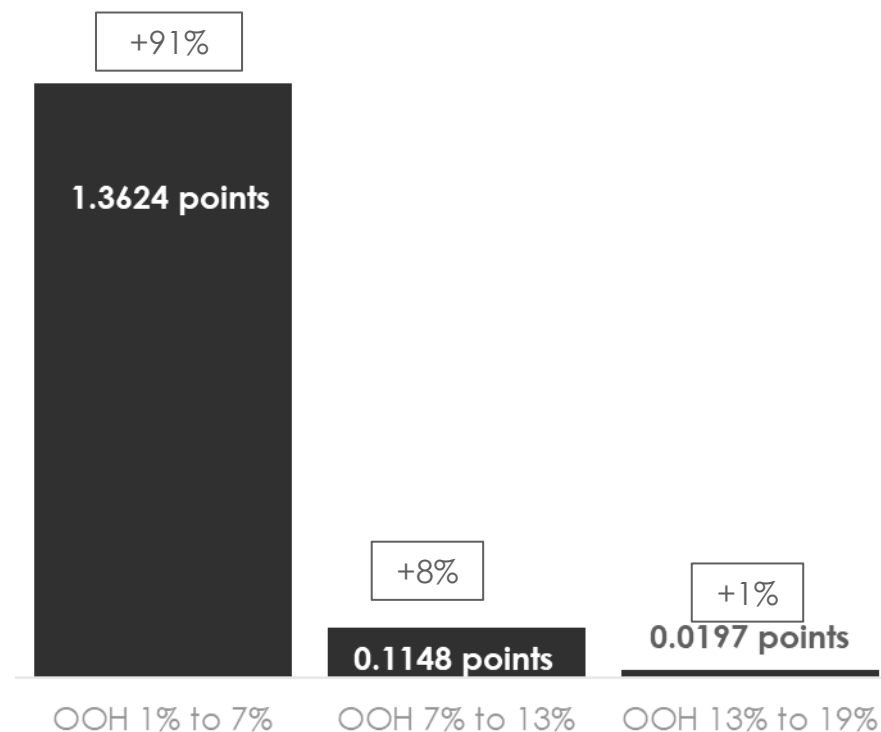
## Full Optimization

Additional Brand Awareness points generated from optimizing OOH straight to 19%



## Incremental Optimization

Additional Brand Awareness points generated from incremental increases in OOH



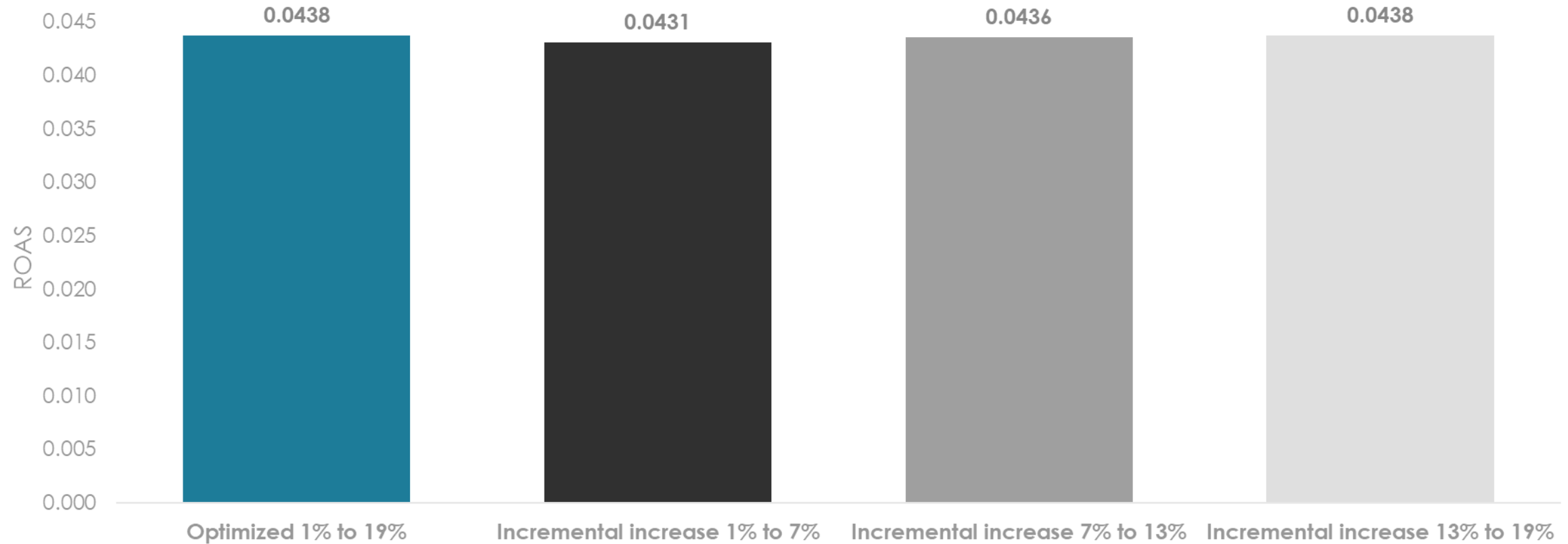
X% = percentage of total optimized brand awareness points generated in that step



# Automotive Optimizing OOH to 19% vs Incremental increases in OOH allocation: ROAS

Optimal ROAS of 0.0438 with optimal 19% OOH allocation is very nearly achieved within the 7-13% OOH allocation

### Total Campaign ROAS – Brand Awareness



# Automotive Consideration – Detail Charts

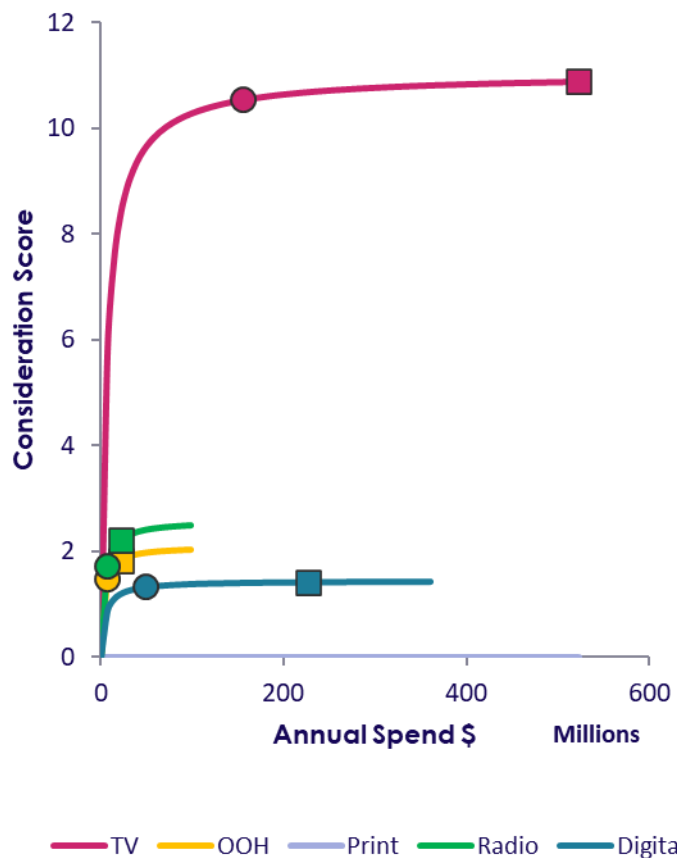




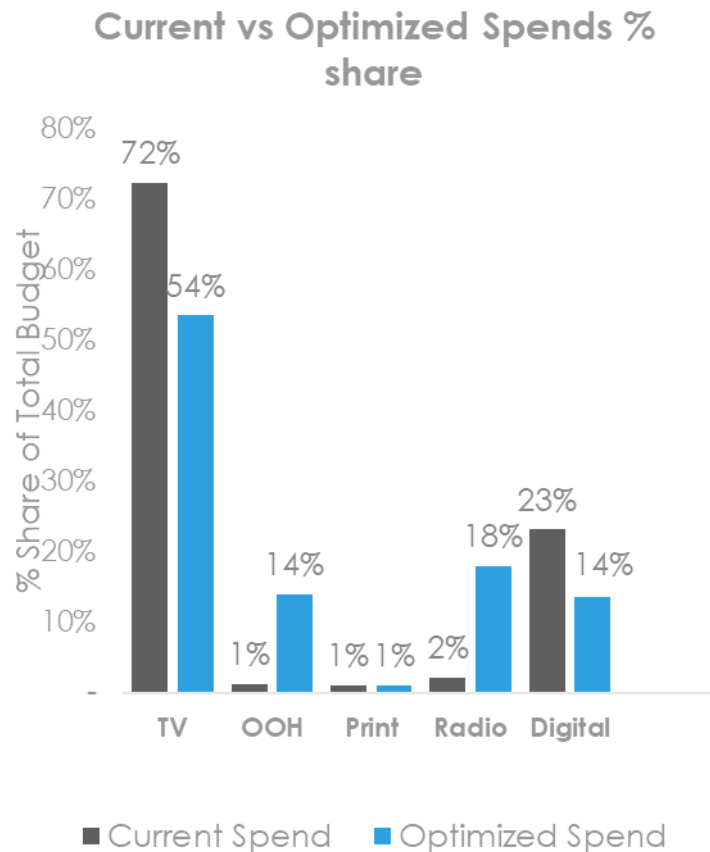
# Automotive OPTIMAL OOH allocation for Consideration ROAS

Increase OOH from 1% to 14%

## Consideration response curves to identify optimal spend levels



## Using the response curves to optimize current spend levels



## Recommendations and Results

Decrease TV to 54% and **upweight OOH to 14%, Radio to 18%**  
(Downweight TV and Digital)

Extra **1.5910** Consideration points generated using the same budget

**Total media ROAS** increases from **0.0674** to **0.0749**

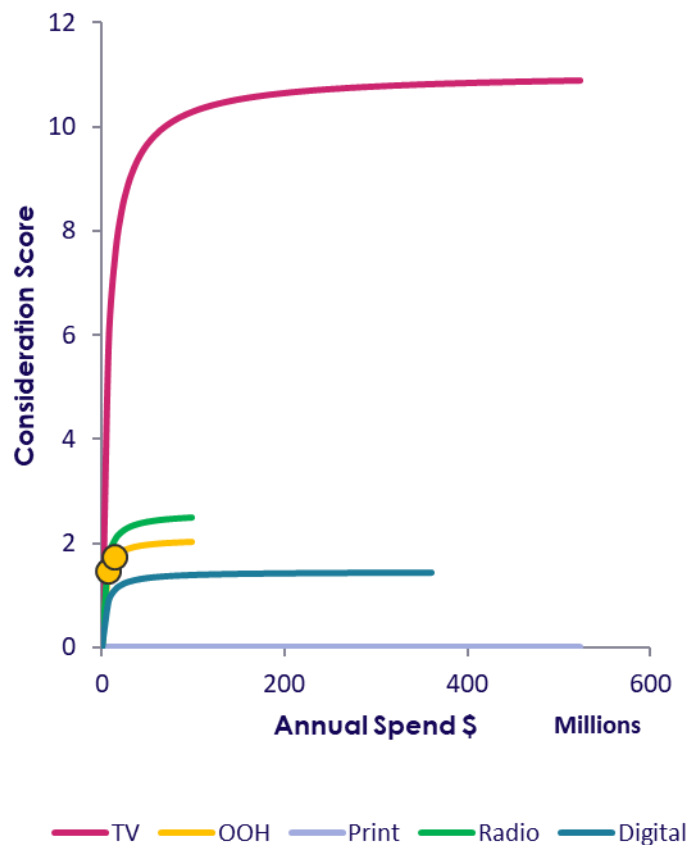
**+11% Total media ROAS** increase



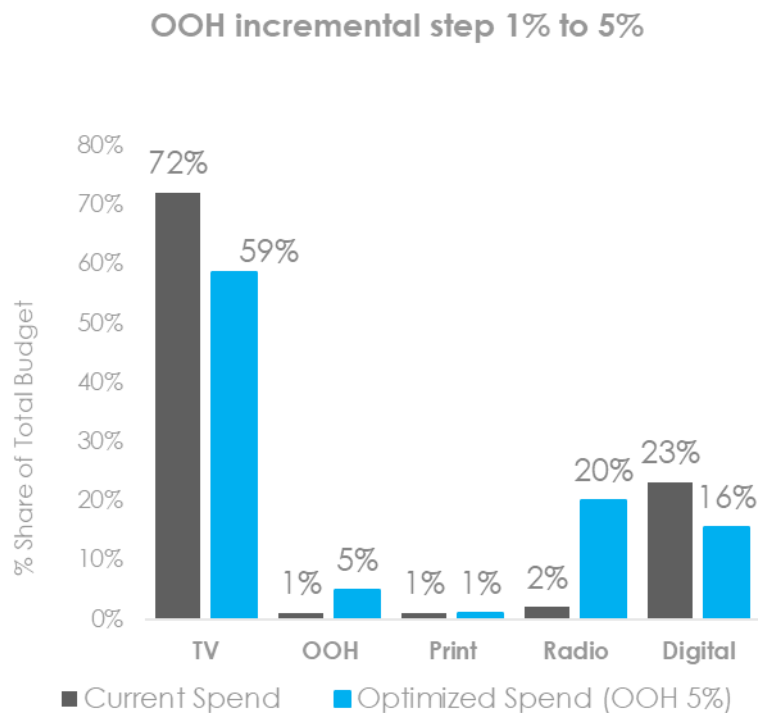
# Automotive FIRST INCREMENTAL OOH increase for Consideration ROAS

Increase OOH from 1% to 5% (optimal OOH is 14%)

Consideration response curves: dots show incremental OOH increase 1 - 5%



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 1% to 5%**

(Downweight TV and Digital)

Extra **1.4214** Consideration points generated using the same budget

**Total media ROAS** increases from **0.0674** to **0.0741**

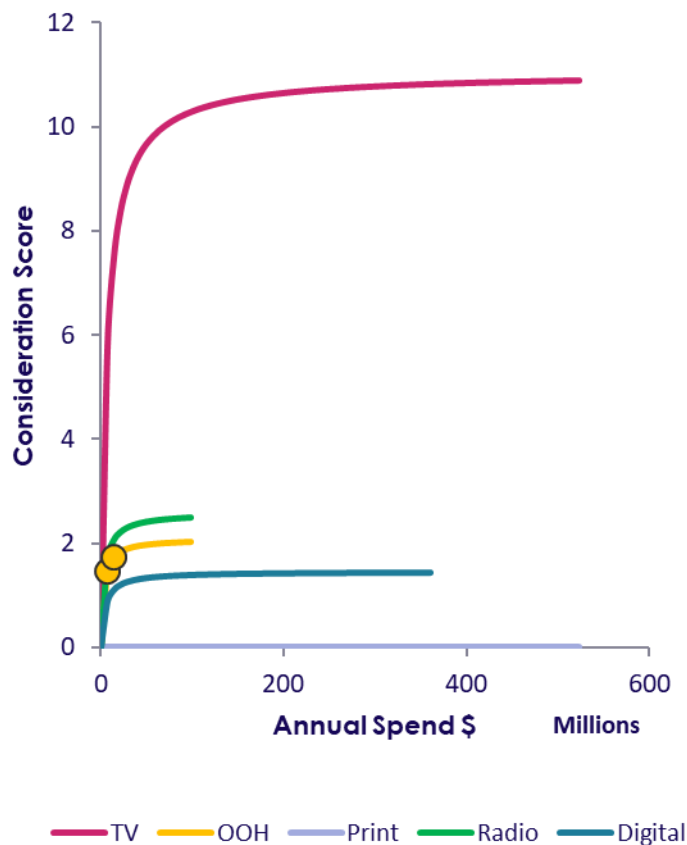
**+10% Total media ROAS** increase



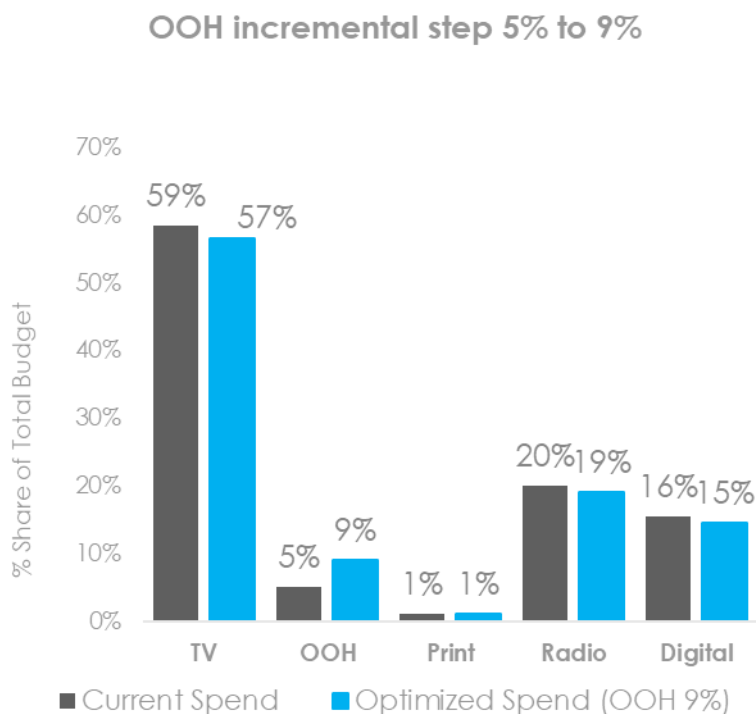
# Automotive SECOND INCREMENTAL OOH increase for Consideration ROAS

Increase OOH from 5% to 9% (optimal OOH is 14%)

Consideration response curves: dots show incremental OOH increase 5 - 9%



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 5% to 9%**

(Downweight TV, Radio and Digital)

Extra **0.1337** Consideration points generated using the same budget

**Total media ROAS** increases from **0.0741** to **0.0747**

**+1% Total media ROAS** increase

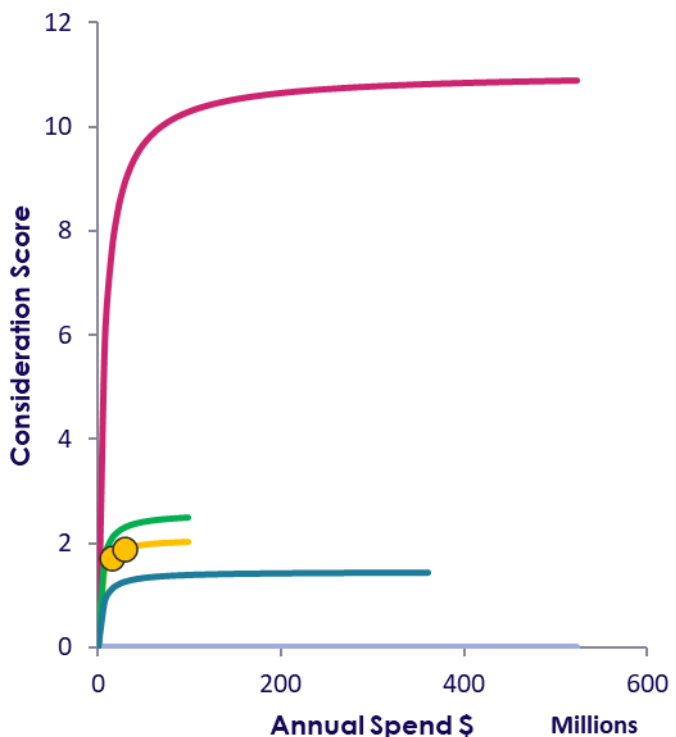




# Automotive FINAL INCREMENTAL OOH increase for Consideration ROAS

Increase OOH from 9% to 14% (optimal OOH is 14%)

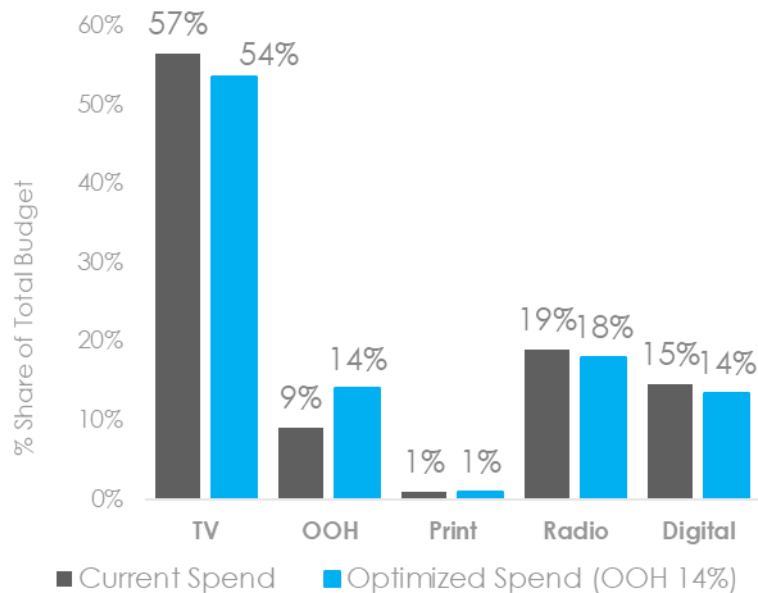
Consideration response curves: dots show incremental OOH increase 9 - 14%



— TV — OOH — Print — Radio — Digital

Reallocation of current budget to optimize – incremental step for OOH

OOH incremental step 9% to 14%



Recommendations and Results

**Incremental upweight OOH from 9% to 14%**

(Downweight TV, Radio and Digital)

Extra **0.0358** Consideration points generated using the same budget

**Total media ROAS** increases from **0.0747** to **0.0749**

**+0.23%** **Total media** ROAS increase

# Automotive Consideration: optimized vs incremental steps in increasing OOH% allocation

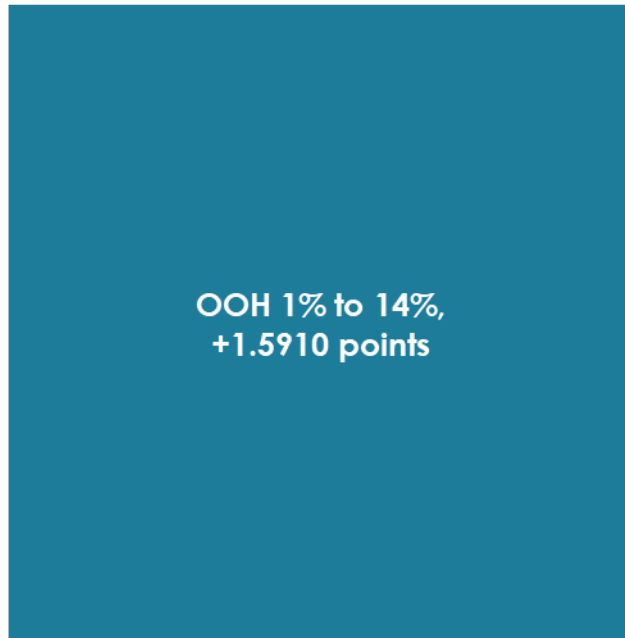


The first incremental increase from 1% to 5% generates the largest part of the optimized Consideration increase

## Full Optimization

Additional Consideration points generated from optimizing OOH straight to 14%

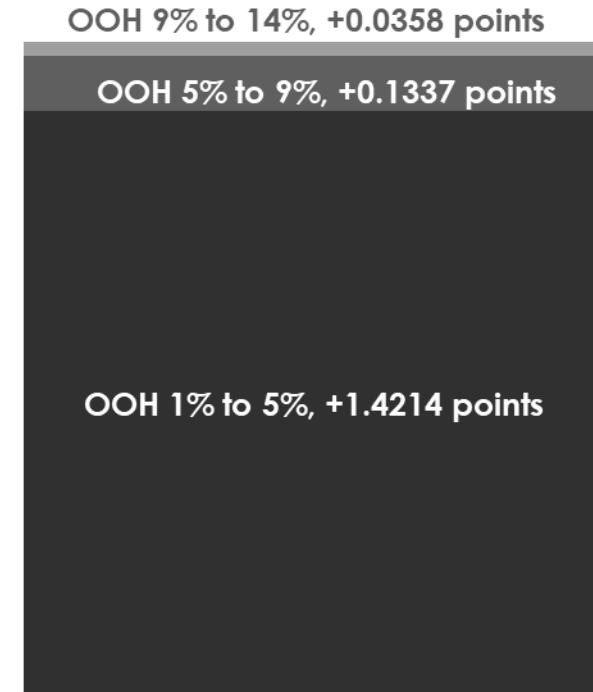
Additional Consideration Points



Additional Consideration points generated full optimization

## Incremental Optimization

Additional Consideration points generated from incremental increases in OOH



Total = 1.59 points

Additional Consideration points generated incrementally

# Automotive Consideration: optimized vs incremental steps in increasing OOH % allocation



The first incremental increase from 1% to 5% generates the largest part of the total optimized Consideration increase

## Full Optimization

Additional Consideration points generated from optimizing OOH straight to 14%

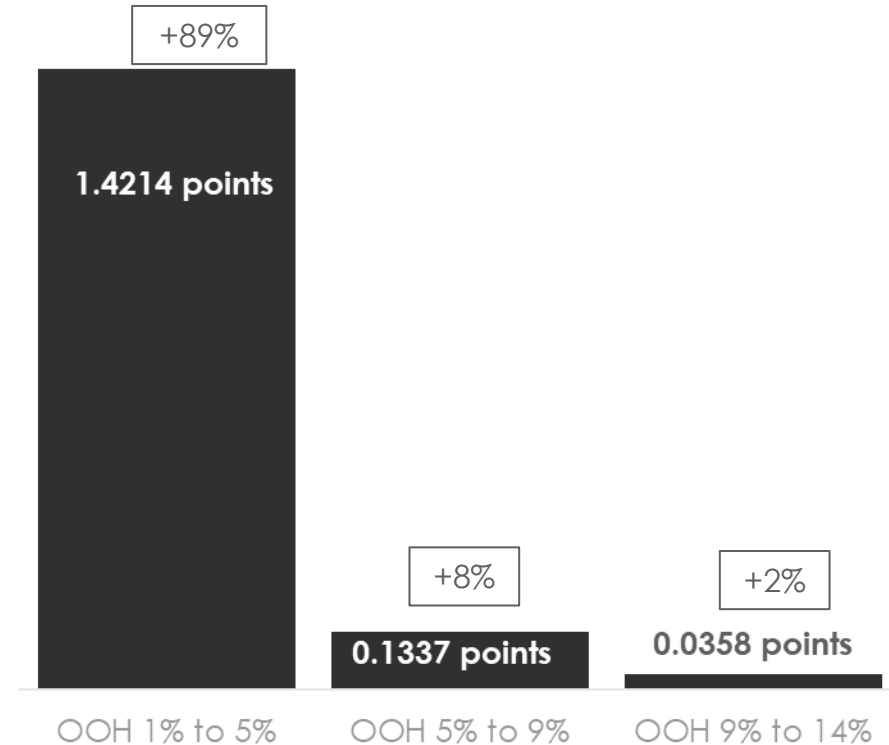
Additional Consideration Points



Additional Consideration points generated full optimization

## Incremental Optimization

Additional Consideration points generated from incremental increases in OOH

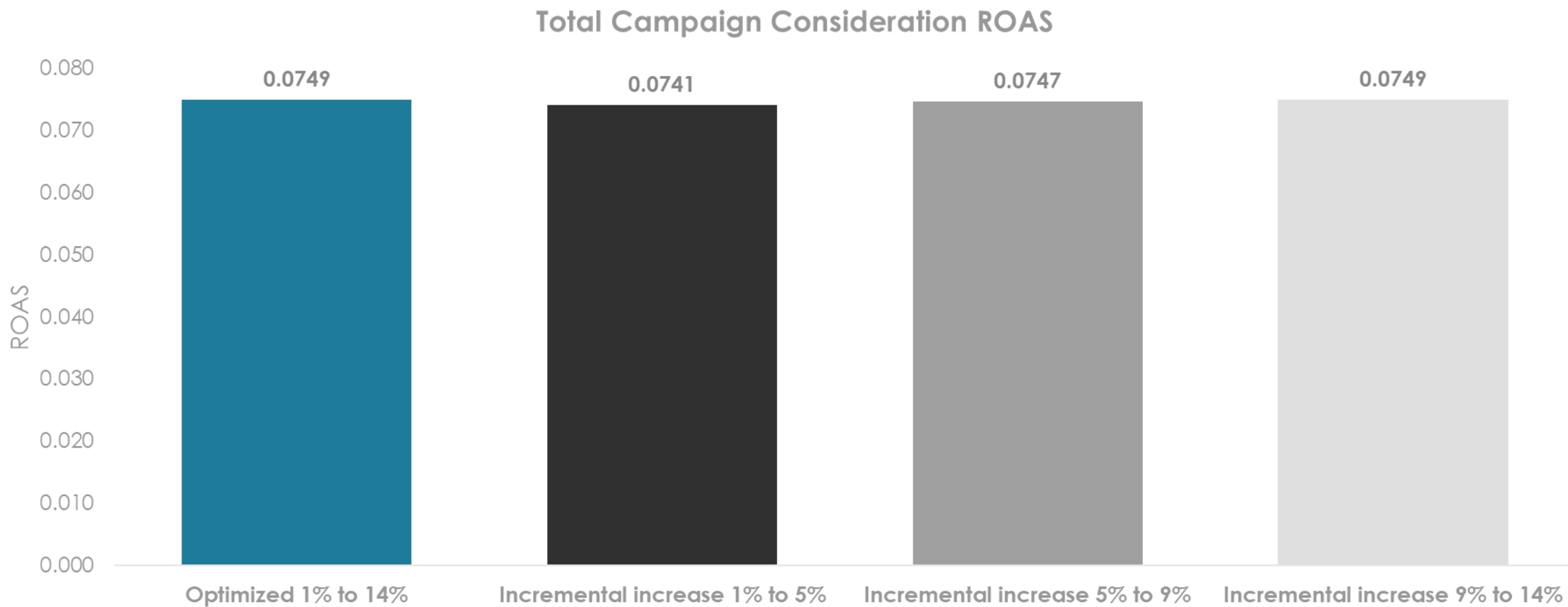


X% = percentage of total optimized consideration points generated in that step



# Automotive Optimizing OOH to 14% vs Incremental increases in OOH allocation: ROAS

Optimal ROAS of 0.075 with optimal 14% OOH allocation is also achieved within the 5-9% OOH allocation



# Automotive Purchase Intent – Detail Charts

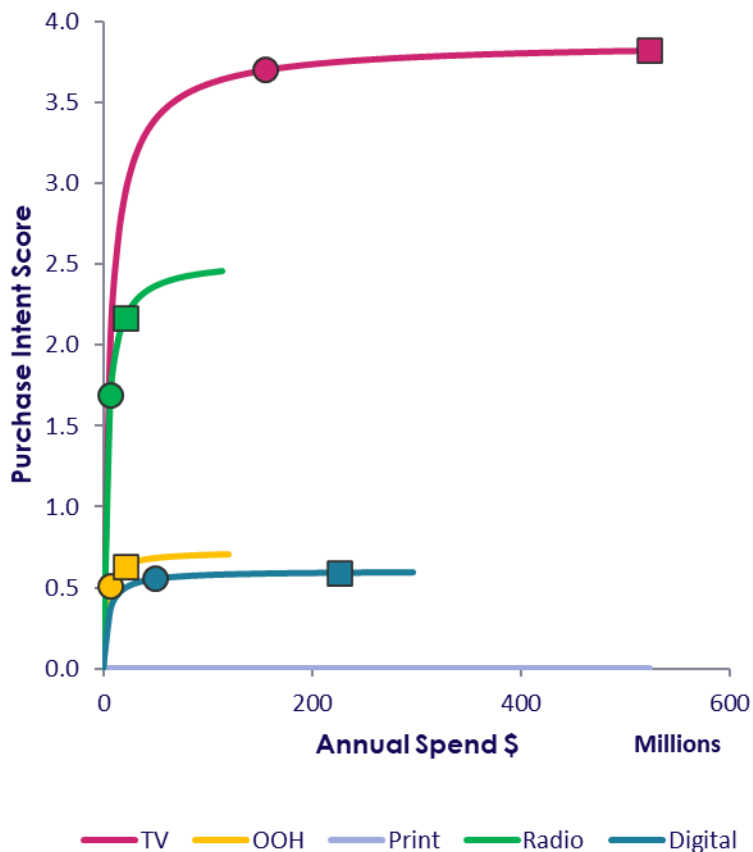




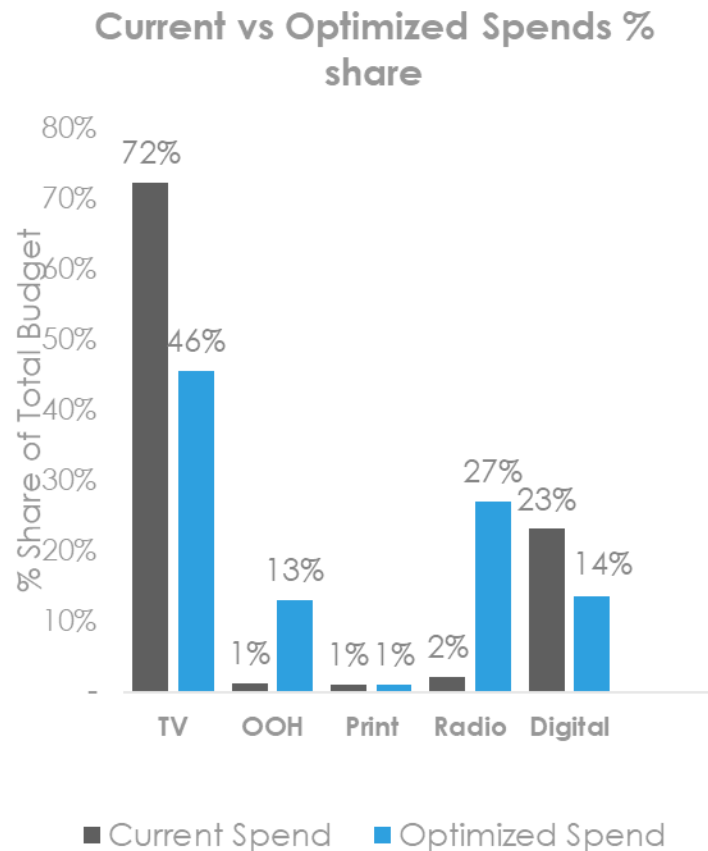
# Automotive OPTIMAL OOH allocation for Purchase Intent ROAS

Increase OOH from 1% to 13%

## Purchase Intent response curves to identify optimal spend levels



## Using the response curves to optimize current spend levels



## Recommendations and Results

Decrease TV to 46% and **upweight OOH to 13%**, **Radio to 27%**  
(Downweight TV and Digital)

Extra **1.1425** Purchase Intent points generated using the same budget

**Total media ROAS** increases from **0.0283** to **0.0337**

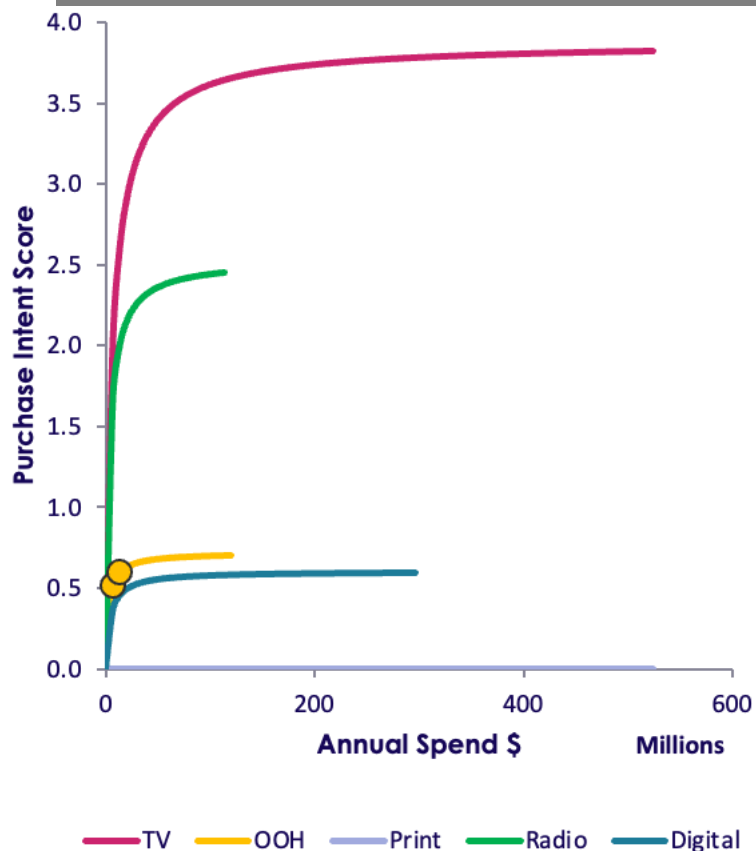
**+19% Total media ROAS** increase



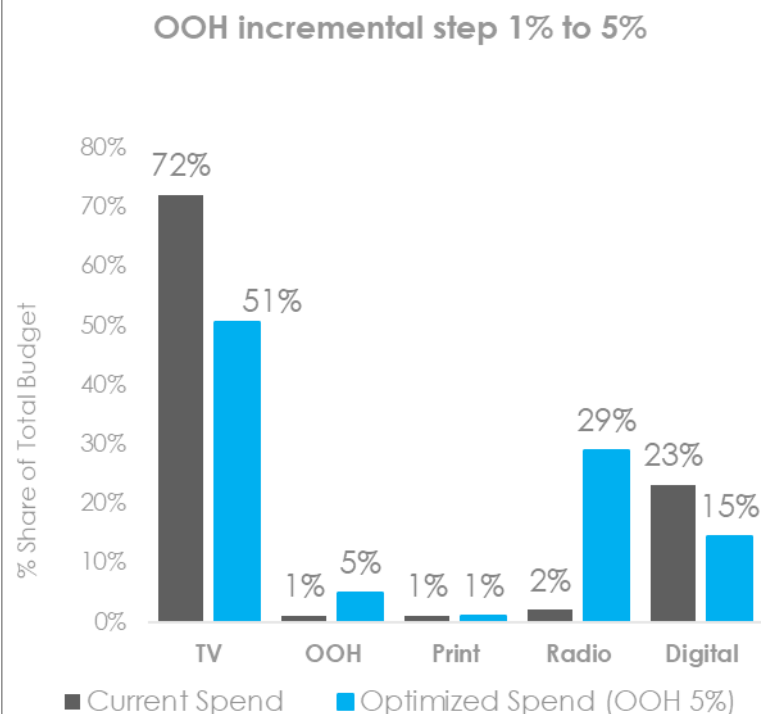
# Automotive FIRST INCREMENTAL OOH increase for Purchase Intent ROAS

Increase OOH from 1% to 5% (optimal OOH is 13%)

Purchase Intent response curves: dots show incremental OOH increase 1 - 5%



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 1% to 5%**

(Downweight TV and Digital)

Extra **1.0941** Purchase Intent points generated using the same budget

**Total media ROAS** increases from **0.0283** to **0.0335**

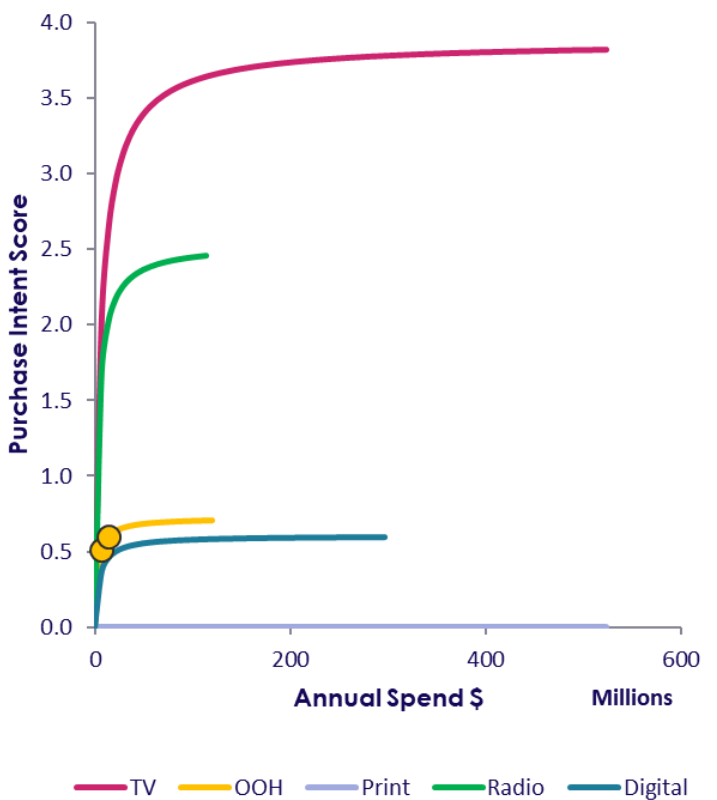
**+18%** **Total media ROAS** increase



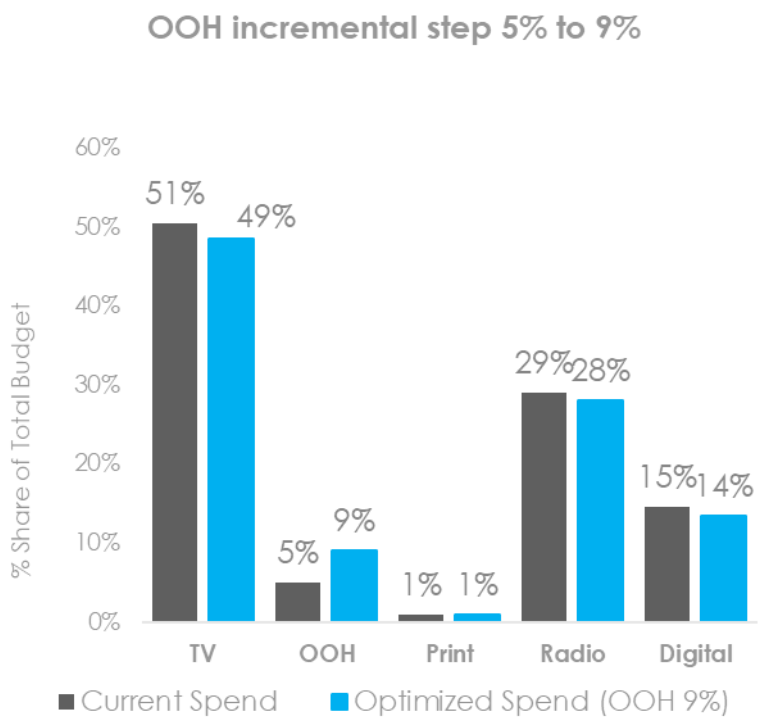
# Automotive SECOND INCREMENTAL OOH increase for Purchase Intent ROAS

Increase OOH from 5% to 9% (optimal OOH is 13%)

Purchase Intent response curves: dots show incremental OOH increase 5 - 9%



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 5% to 9%**  
(Downweight TV, Radio and Digital)

Extra **0.0416** Purchase Intent points generated using the same budget

**Total media ROAS** increases from **0.0335** to **0.0337**  
**+1% Total media ROAS** increase

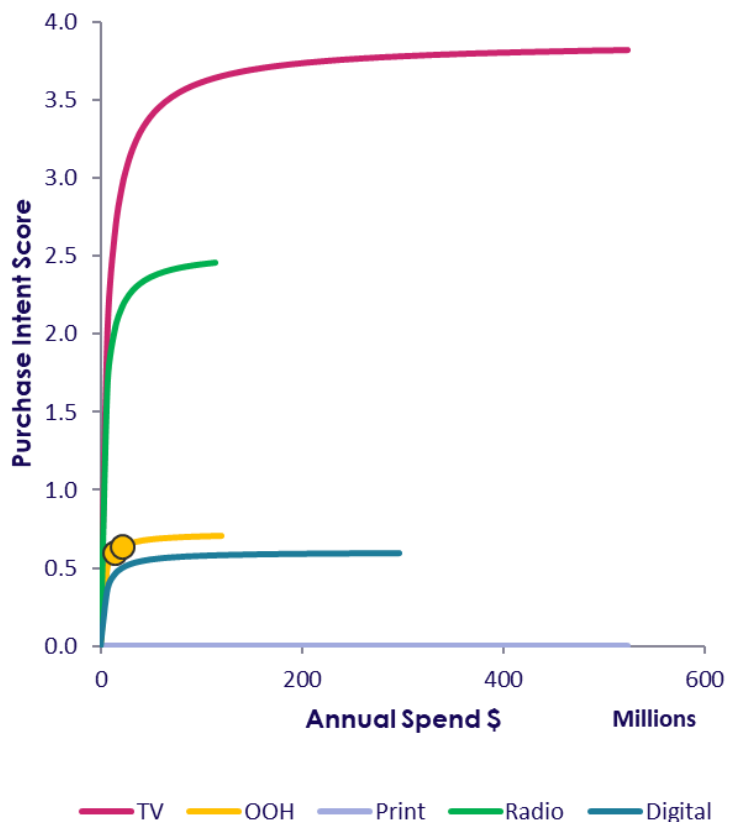




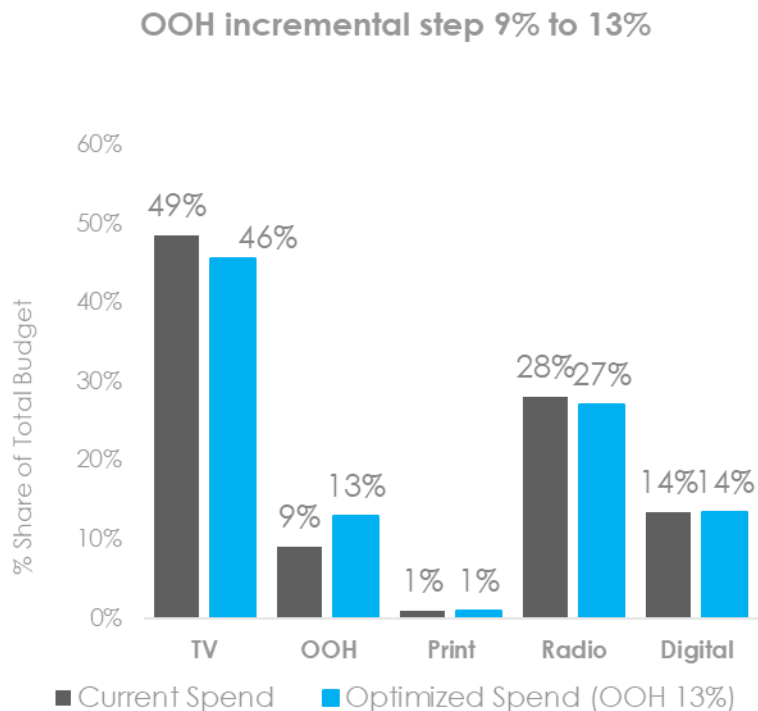
# Automotive FINAL INCREMENTAL OOH increase for Purchase Intent ROAS

Increase OOH from 9% to 13% (optimal OOH is 13%)

Purchase Intent response curves: dots show incremental OOH increase 9 - 13%



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 9% to 13%**

(Downweight TV and Radio)

Extra **0.0067** Purchase Intent points generated using the same budget

**Total media ROAS** increases from **0.0337** to **0.0337**

**+0.01%** **Total media ROAS** increase

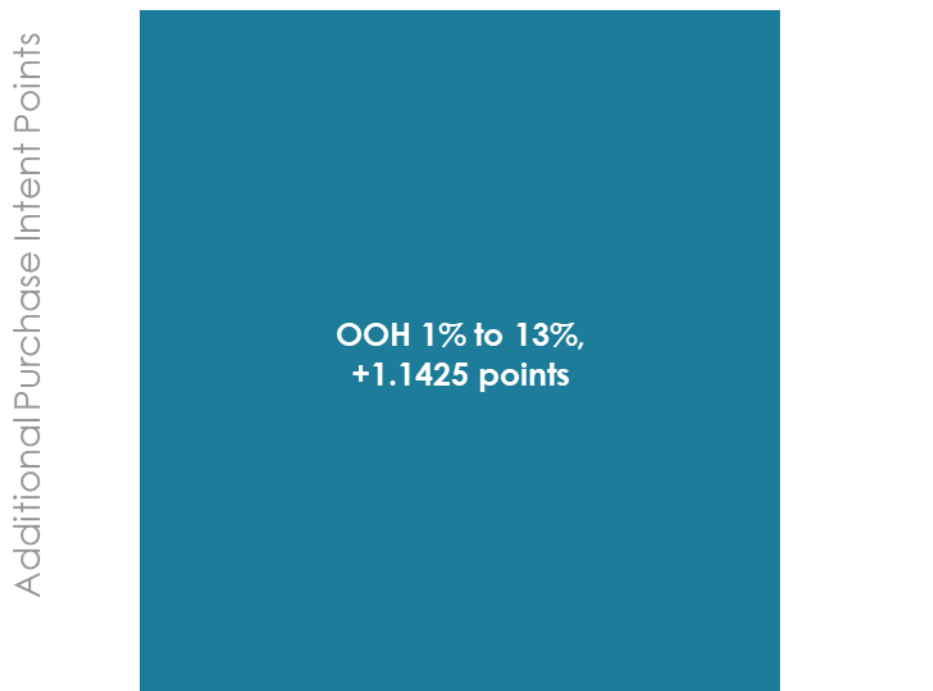


# Automotive Purchase Intent: optimized vs incremental steps in increasing OOH% allocation

The first incremental increase from 1% to 5% generates the largest part of the optimized Purchase Intent increase

## Full Optimization

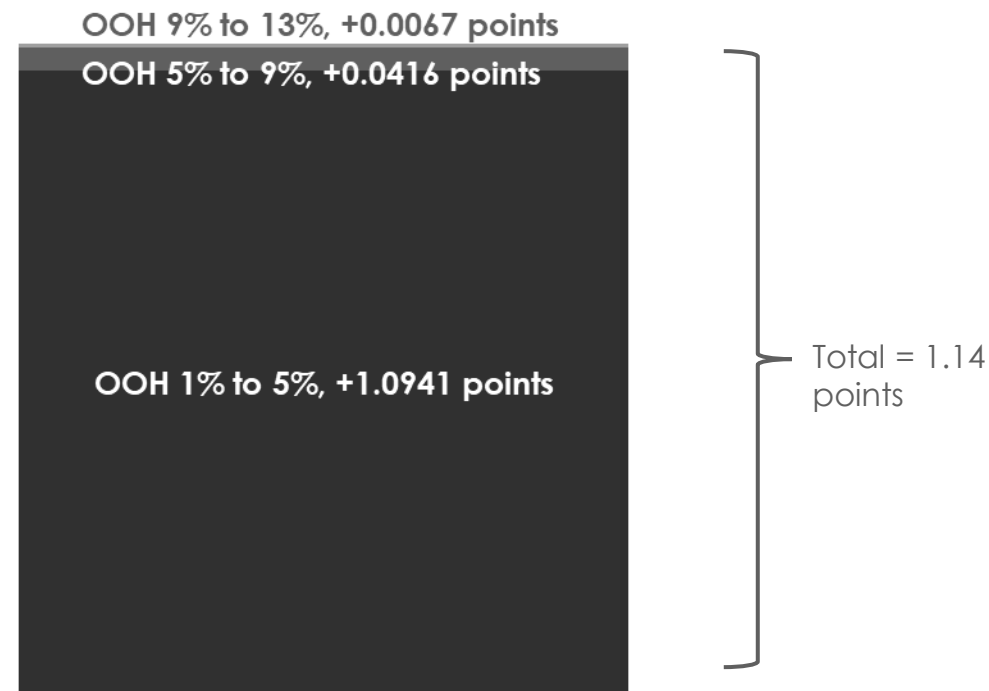
Additional Purchase Intent points generated from optimizing OOH straight to 13%



Additional Purchase Intent points generated full optimization

## Incremental Optimization

Additional Purchase Intent points generated from incremental increases in OOH



Additional Purchase Intent points generated incrementally

# Automotive Purchase Intent: optimized vs incremental steps in increasing OOH% allocation

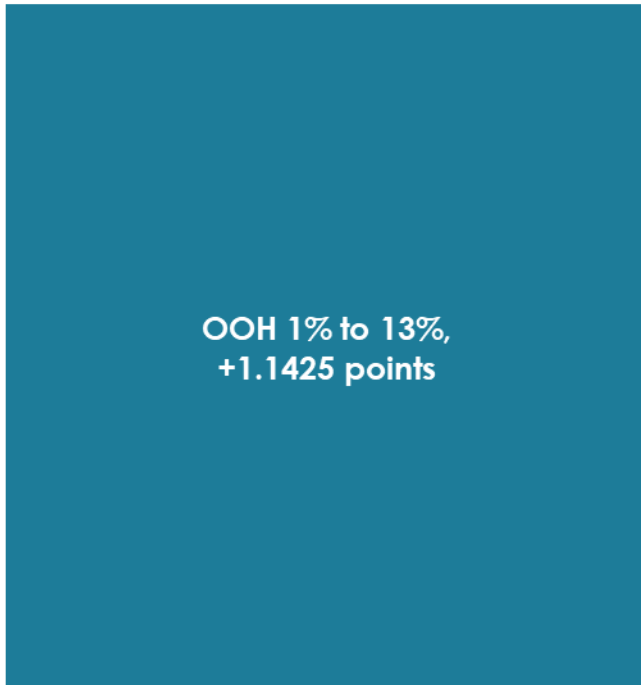


The first incremental increase from 1% to 5% generates the largest part of the optimized Purchase Intent increase

## Full Optimization

Additional Purchase Intent points generated from optimizing OOH straight to 13%

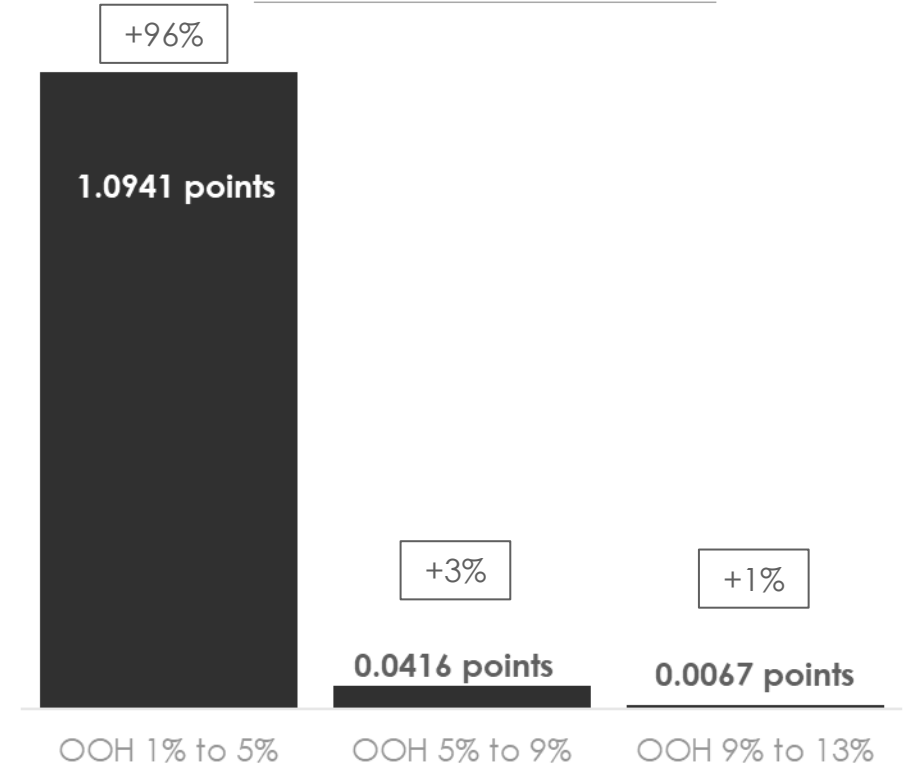
Additional Purchase Intent Points



Additional Purchase Intent points generated full optimization

## Incremental Optimization

Additional Purchase Intent points generated from incremental increases in OOH

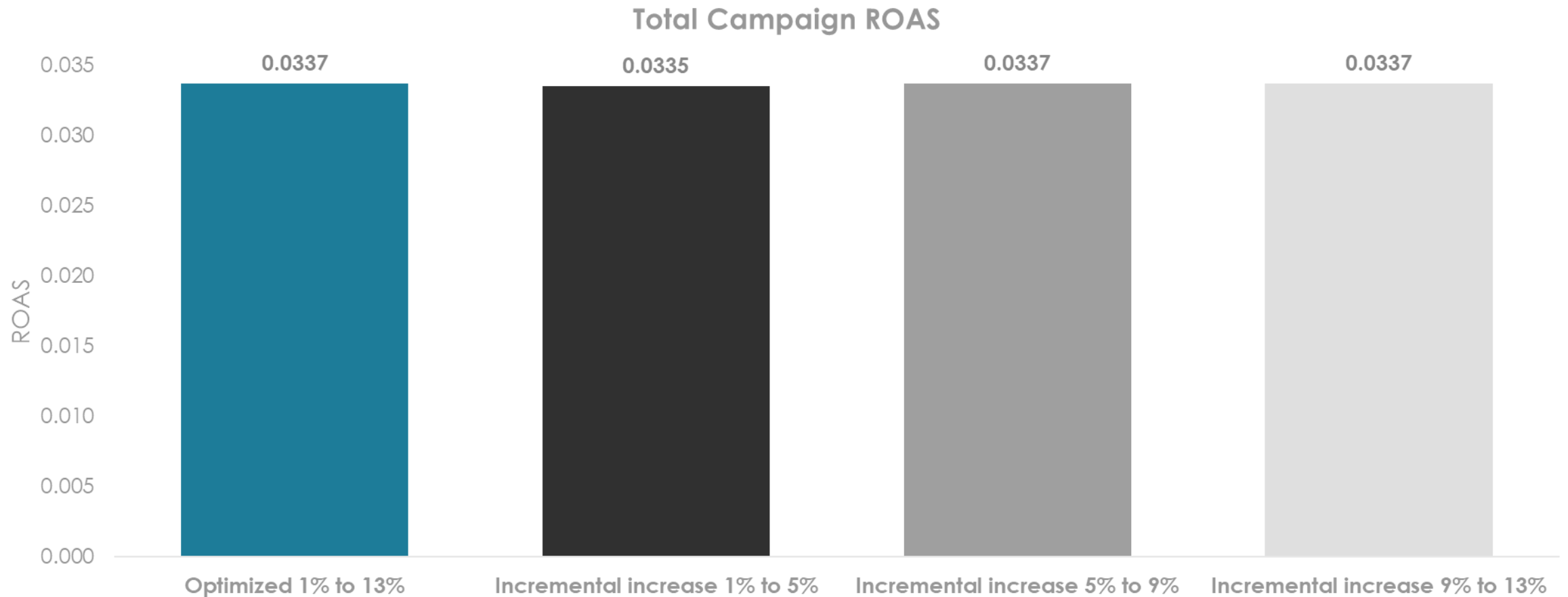


X% = percentage of total optimized purchase intent points generated in that step



# Automotive Optimizing OOH to 13% vs Incremental increases in OOH allocation: ROAS

Optimal ROAS of 0.03 with optimal 13% OOH allocation is also achieved within the 5-9% OOH allocation



# CPG Food

## Budget Allocation: Incremental Steps on Brand Metrics

### Detail Charts

- Brand Awareness
- Consideration
- Purchase Intent



# CPG Food Brand Awareness – Detail Charts

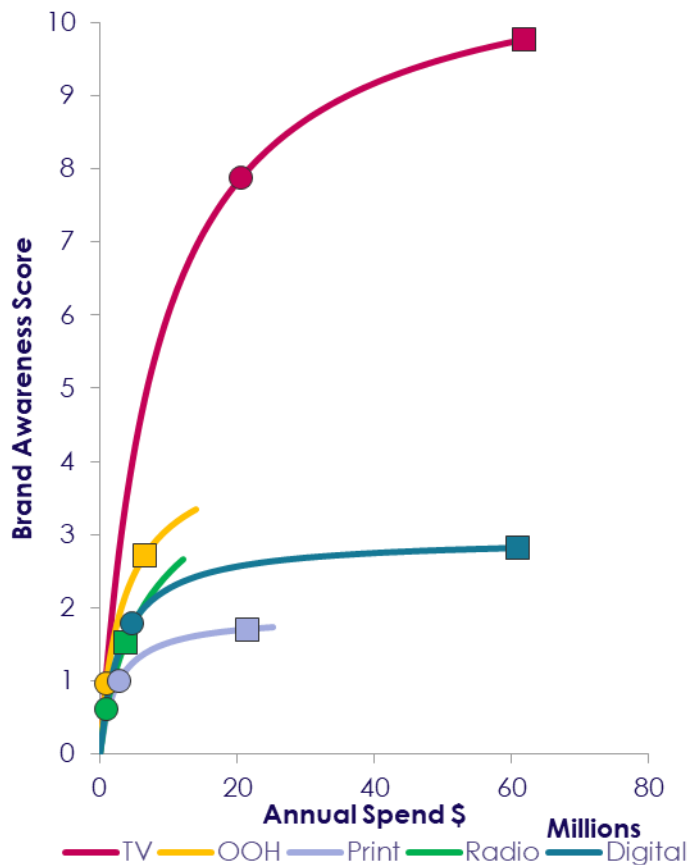




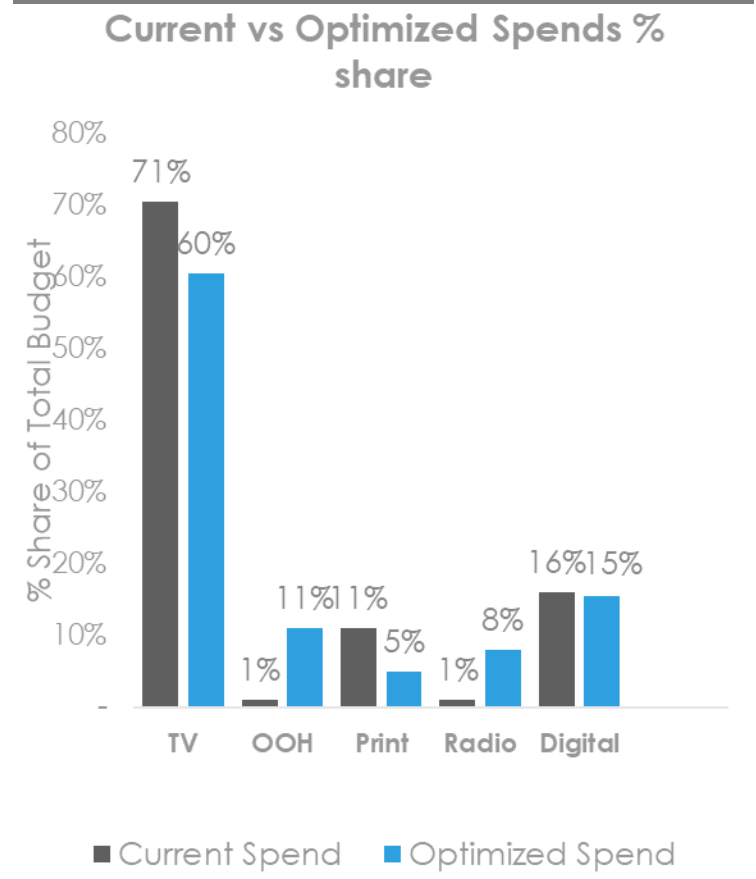
# CPG Food FULL OPTIMAL OOH allocation for Brand Awareness ROAS

## Increase OOH from 1 to 11%

### Brand Awareness response curves to identify optimal spend levels



### Using the response curves to optimize current spend levels



### Recommendations and Results

Decrease TV to 60% and **upweight OOH to 11%**  
Also increase Radio

**Extra 1.8626** Brand Awareness Points generated using the same budget

**Total media ROAS** increases from **0.3952** to **0.4614**  
**+17% Total media ROAS** increase

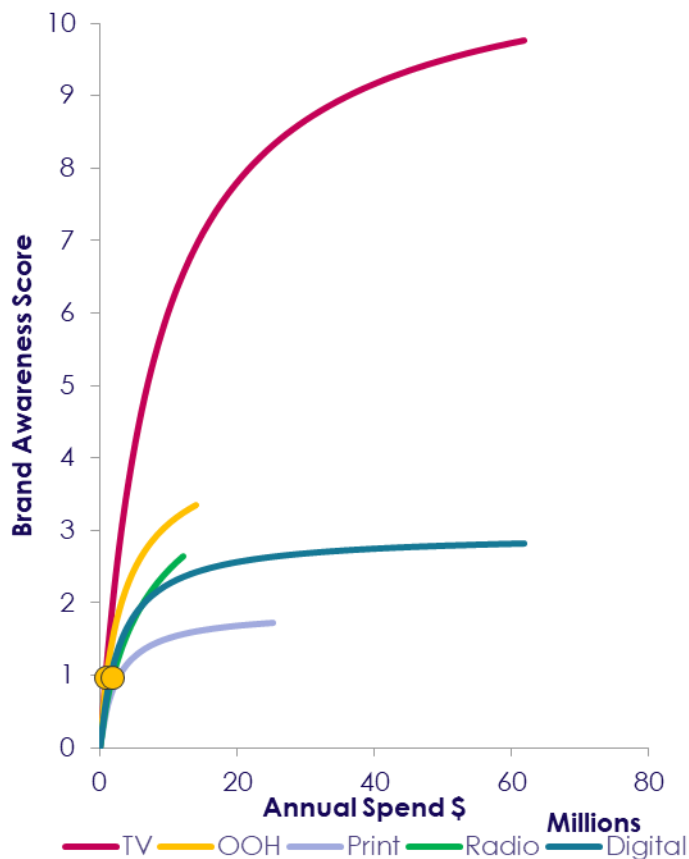
Scenario based on average brand 2022 Vivix spend  
Constraints applied: minimum 60% spend has been allocated to TV and minimum 15% Digital allocation



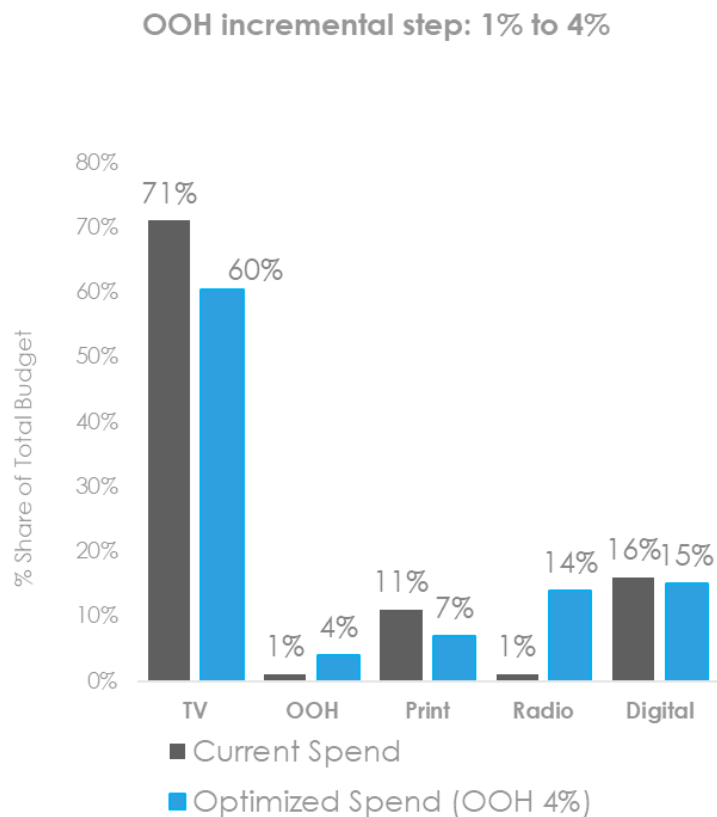
# CPG FIRST INCREMENTAL OOH increase for Brand Awareness ROAS

increase OOH from 1% to 4% (optimal OOH is 11%)

Brand Awareness response curves:  
dots show incremental OOH increase  
1 - 4 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH**  
from **1% to 4%**  
(Downweight TV, Print and Digital)

**Extra 1.4565** Brand Awareness Points generated using the same budget

**Total media ROAS** increases from **0.3952** to **0.4470**

**+13% Total media ROAS** increase

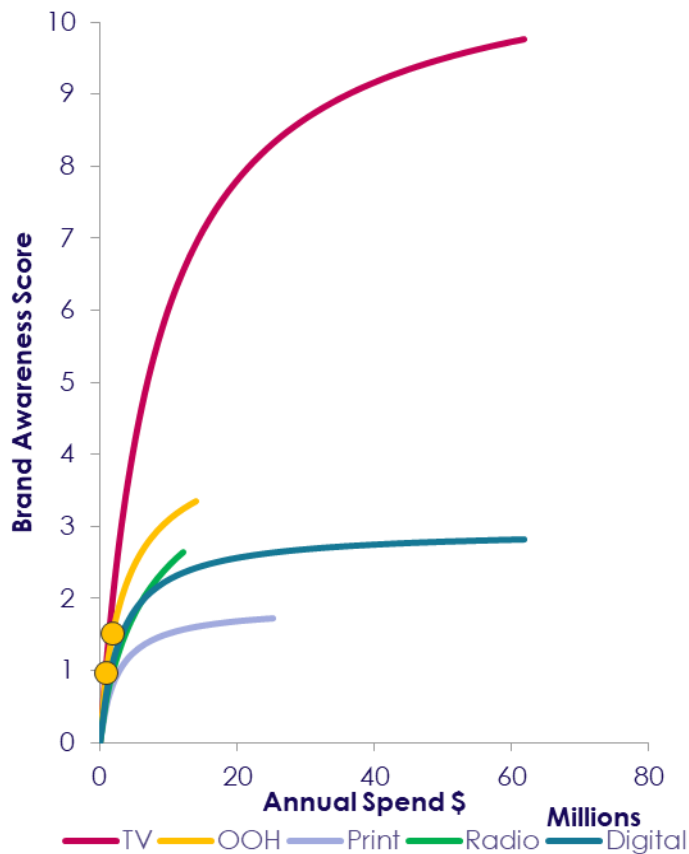




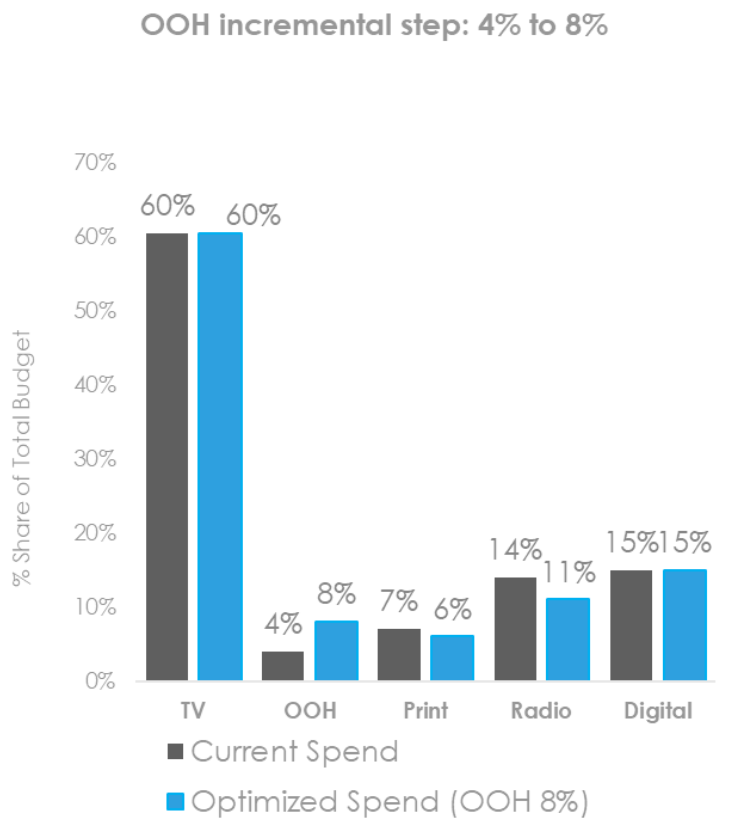
# CPG SECOND INCREMENTAL OOH increase for Brand Awareness ROAS

Increase OOH from 4% to 8% (optimal OOH is 11%)

Brand Awareness response curves:  
dots show incremental OOH increase  
4 - 8 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 4% to 8%**  
(Downweight Print and Radio)

**Extra 0.3283 Brand Awareness Points** generated using the same budget

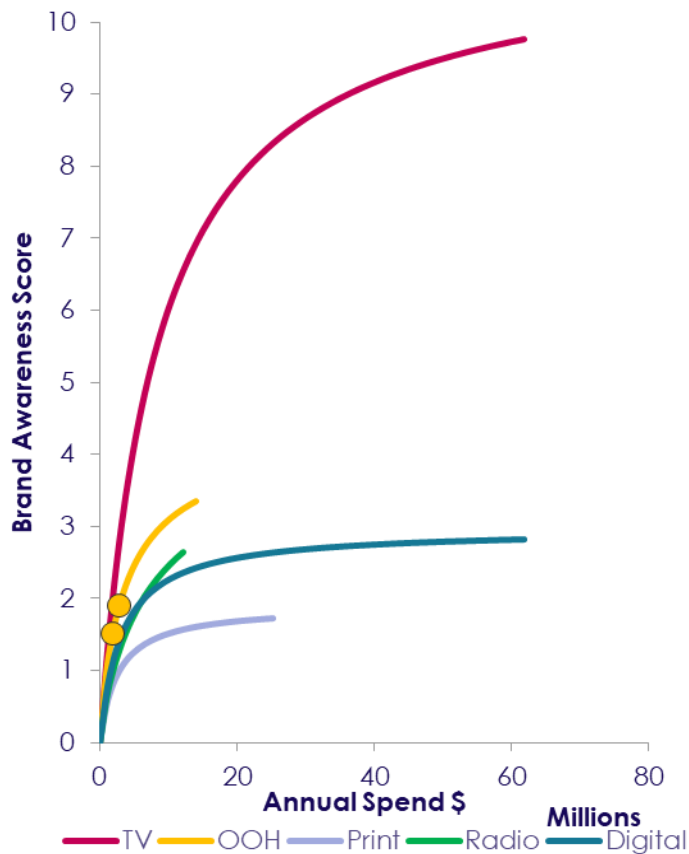
**Total media ROAS** increases from **0.4470** to **0.4586**  
**+3% Total media ROAS** increase



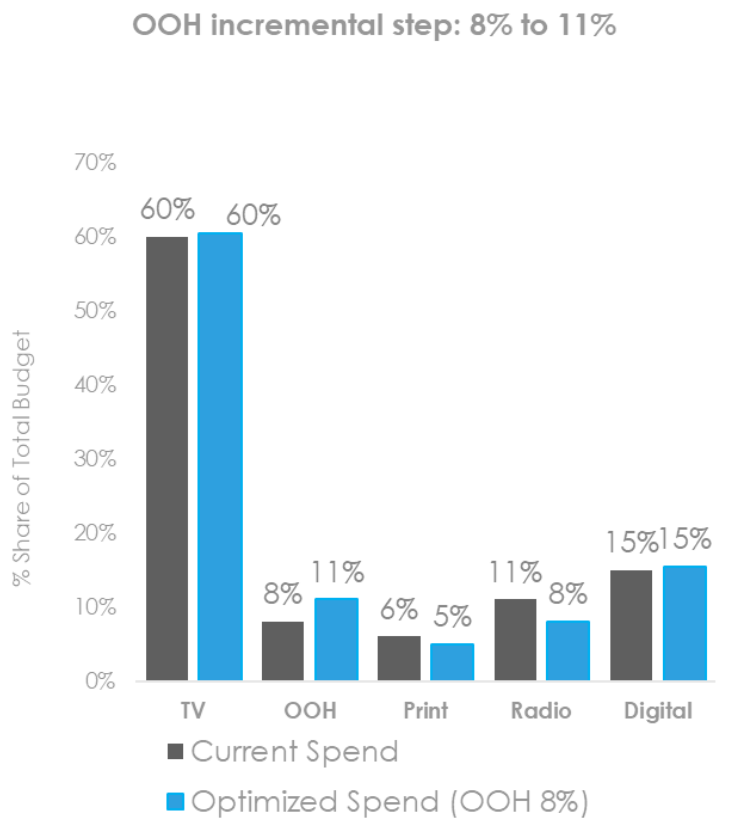
# CPG FINAL INCREMENTAL OOH increase for Brand Awareness ROAS

Increase OOH from 8% to 11% (optimal OOH is 11%)

Brand Awareness response curves:  
dots show incremental OOH increase  
8 - 11%



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 8% to 11%**  
(Downweight Print and Radio)

**Extra 0.0777 Brand Awareness Points** generated using the same budget

**Total media ROAS** increases from **0.4586** to **0.4614**  
**+1% Total media ROAS** increase



# CPG Food Brand Awareness: optimized vs incremental steps in increasing OOH% allocation

The first incremental increase from 1 to 4% generates the largest part of the optimized Awareness increase

## Full Optimization

Additional Brand Awareness points generated from optimizing OOH straight to 11%

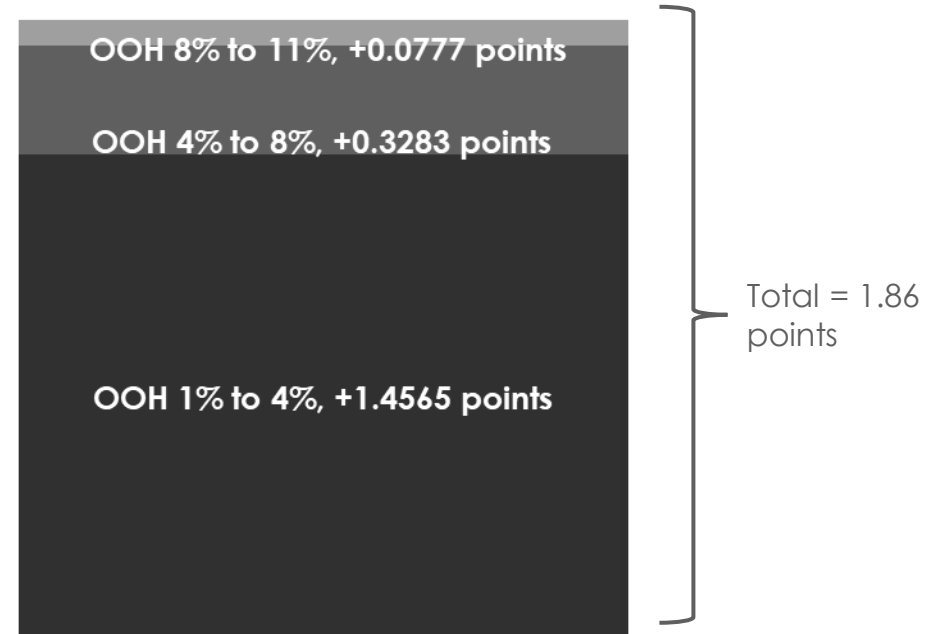
Additional Brand Awareness Points



Additional Brand Awareness generated full optimization

## Incremental Optimization

Additional Brand Awareness points generated from incremental increases in OOH



Additional Brand Awareness generated Incrementally



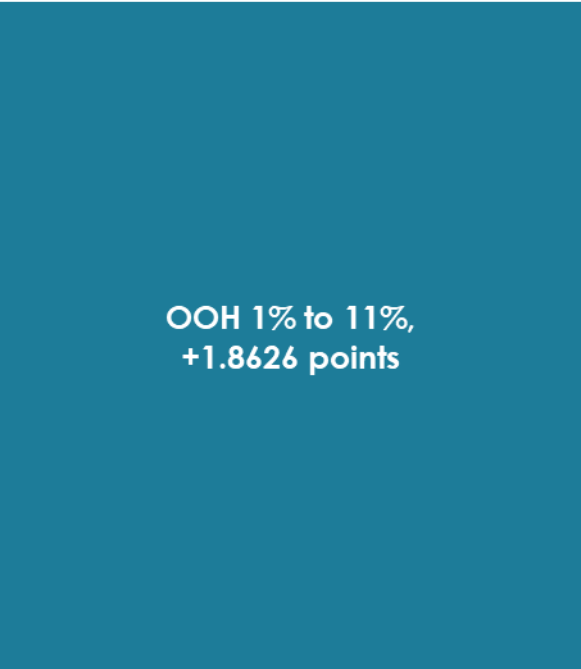
# CPG Food Brand Awareness: optimized vs incremental steps in increasing OOH% allocation

The first incremental increase from 1 to 4% generates the largest part of the total optimized Awareness increase

## Full Optimization

Additional Brand Awareness points generated from optimizing OOH straight to 11%

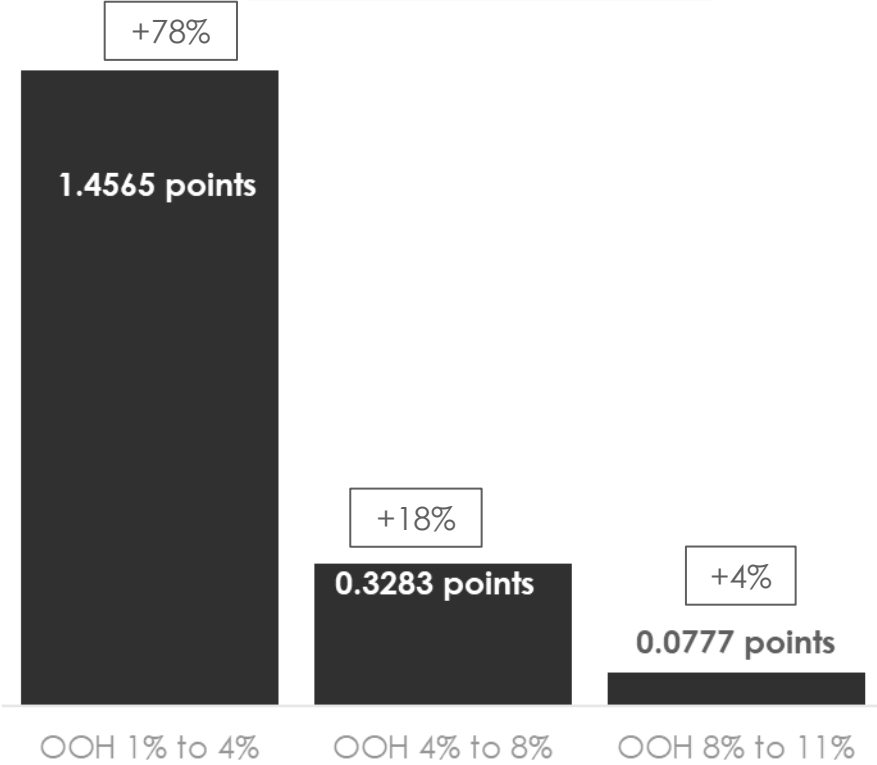
Additional Brand Awareness Points



Additional Brand Awareness generated full optimization

## Incremental Optimization

Additional Brand Awareness points generated from incremental increases in OOH

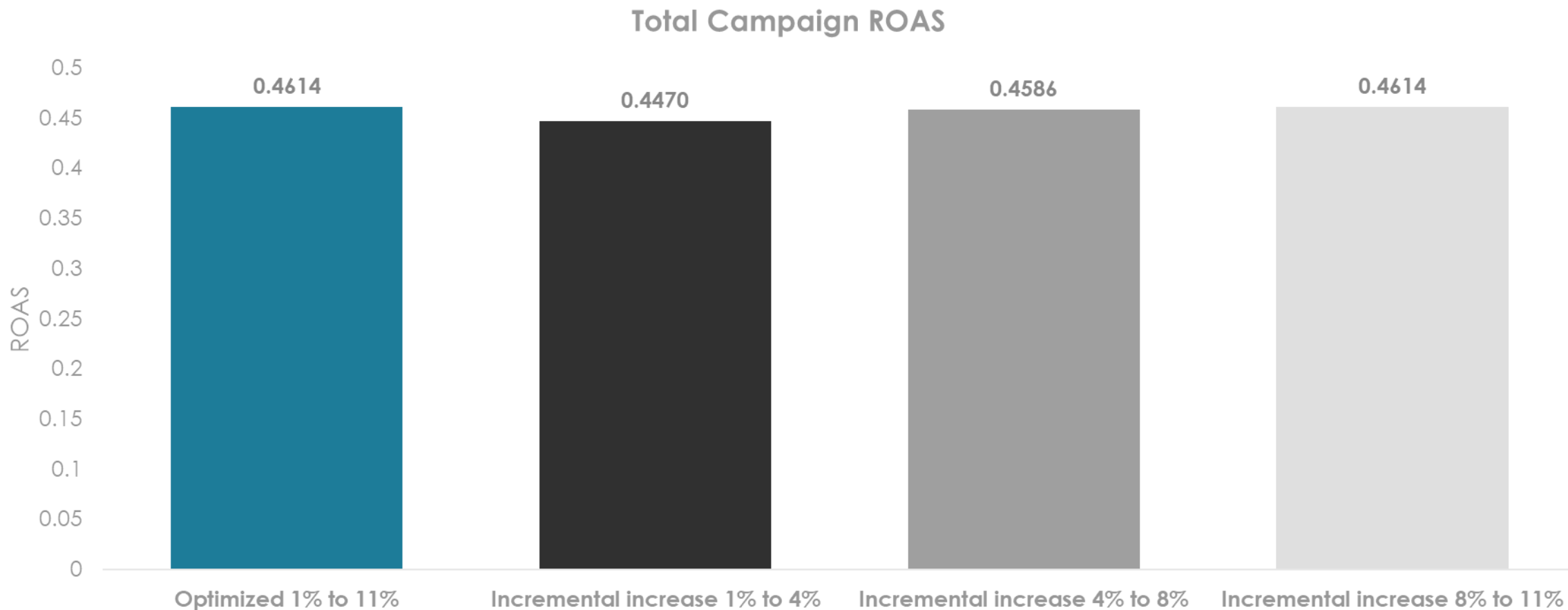


X% = percentage of total optimized brand awareness points generated in that step



# CPG Food Optimizing OOH to 11% vs Incremental increases in OOH allocation ROAS

Optimal ROAS of 0.46 with optimal 11% OOH allocation is very nearly achieved within the 4-8% OOH allocation



# CPG Food Consideration – Detail Charts

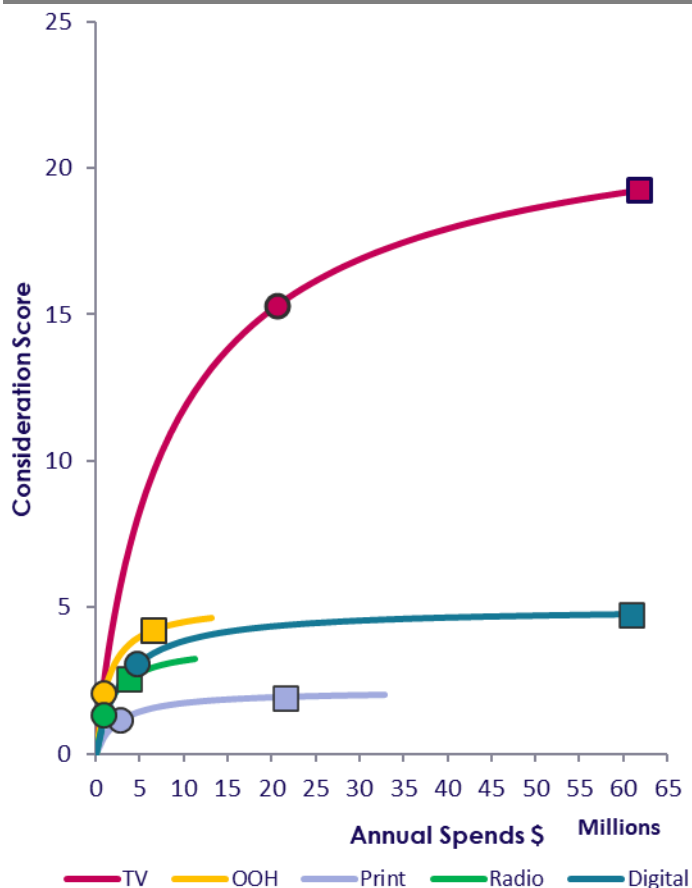




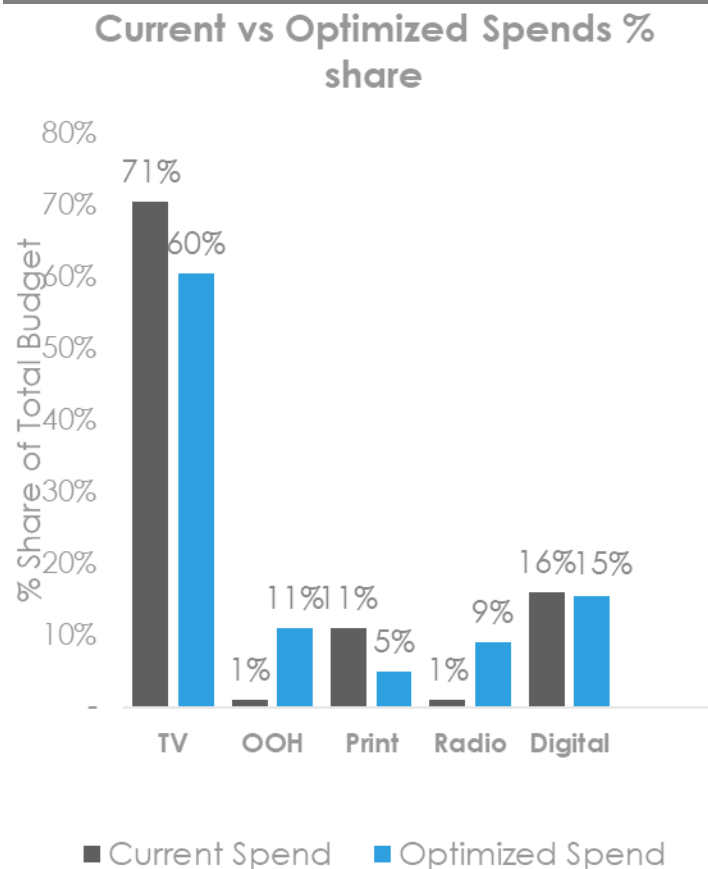
# CPG Food FULL OPTIMAL OOH allocation for Consideration ROAS

## Increase OOH from 1 to 11%

### Consideration response curves to identify optimal spend levels



### Using the response curves to optimize current spend levels



### Recommendations and Results

Decrease TV to 60% and **upweight OOH to 11%**  
Also increase Radio

**Extra 3.3466** consideration points generated using the same budget

**Total media ROAS** increases from **0.7290** to **0.8480**

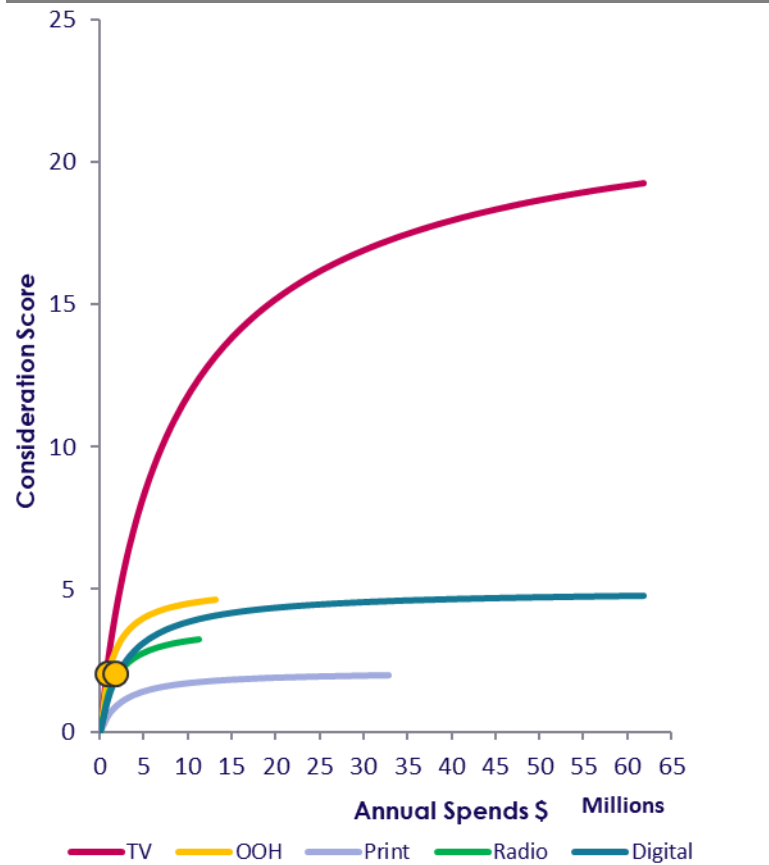
**+16% Total media ROAS** increase



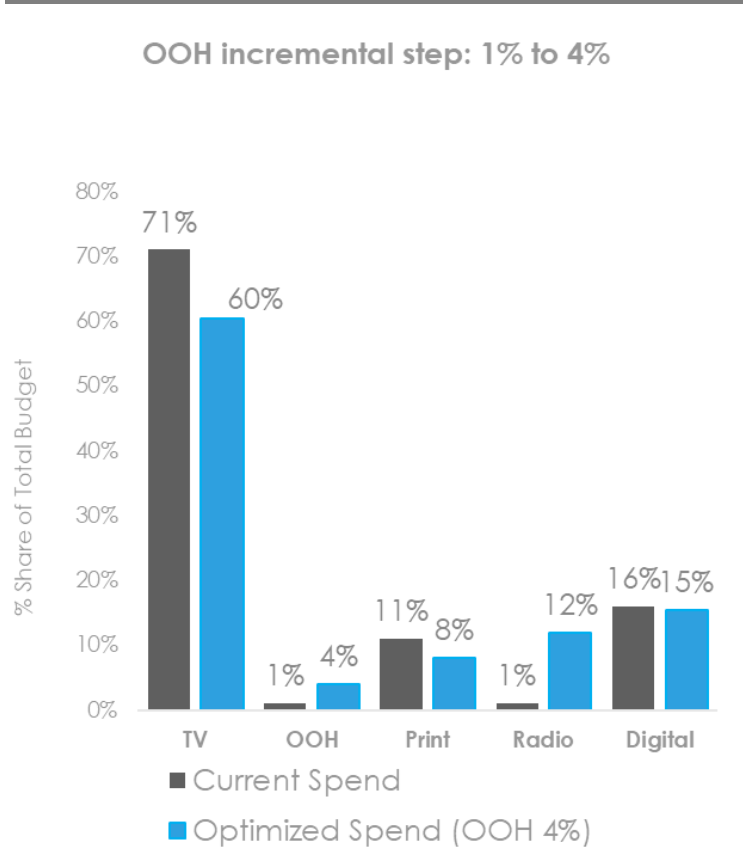
# CPG Food FIRST INCREMENTAL OOH increase for Consideration ROAS

Increase OOH from 1% to 4% (optimal OOH is 11%)

Consideration response curves: dots show incremental OOH increase 1 - 4 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 1% to 4%**  
(Downweight TV, Digital and Print)

**Extra 2.6605** consideration points generated using the same budget

**Total media ROAS** increases from **0.7290** to **0.8236**  
**+13% Total media ROAS** increase

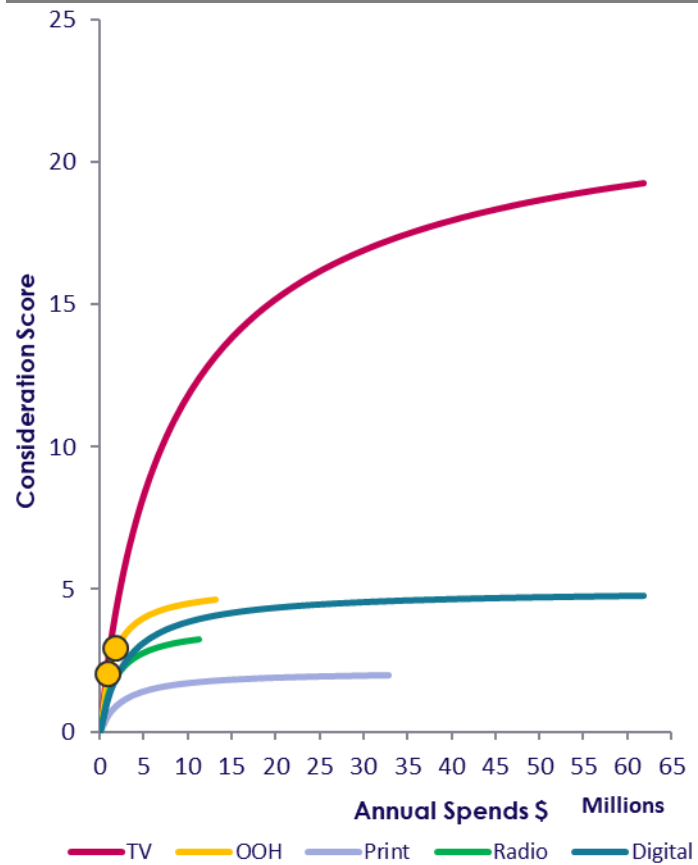




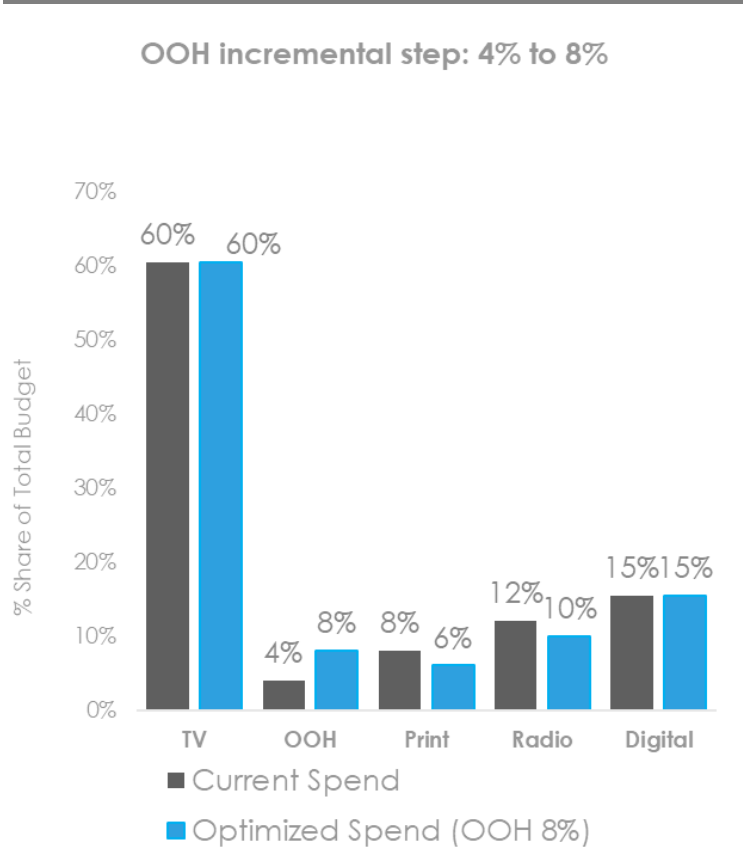
# CPG Food SECOND INCREMENTAL OOH increase for Consideration ROAS

Increase OOH from 4% to 8% (optimal OOH is 11%)

Consideration response curves: dots show incremental OOH increase 4 – 8 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 4% to 8%**  
(Downweight Radio and Print)

**Extra 0.5845** consideration points generated using the same budget

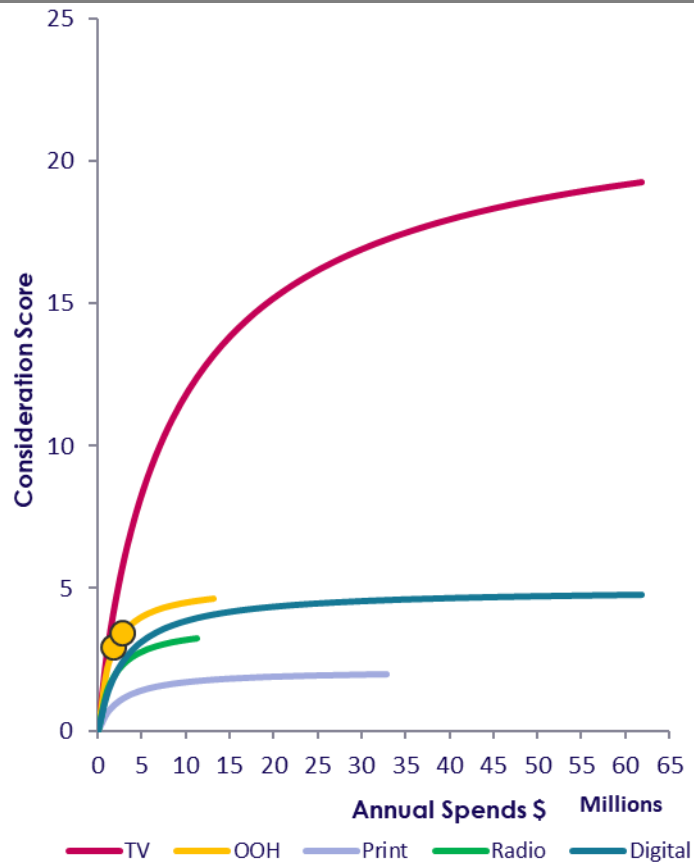
**Total media ROAS** increases from **0.8236** to **0.8444**  
**+3% Total media ROAS** increase



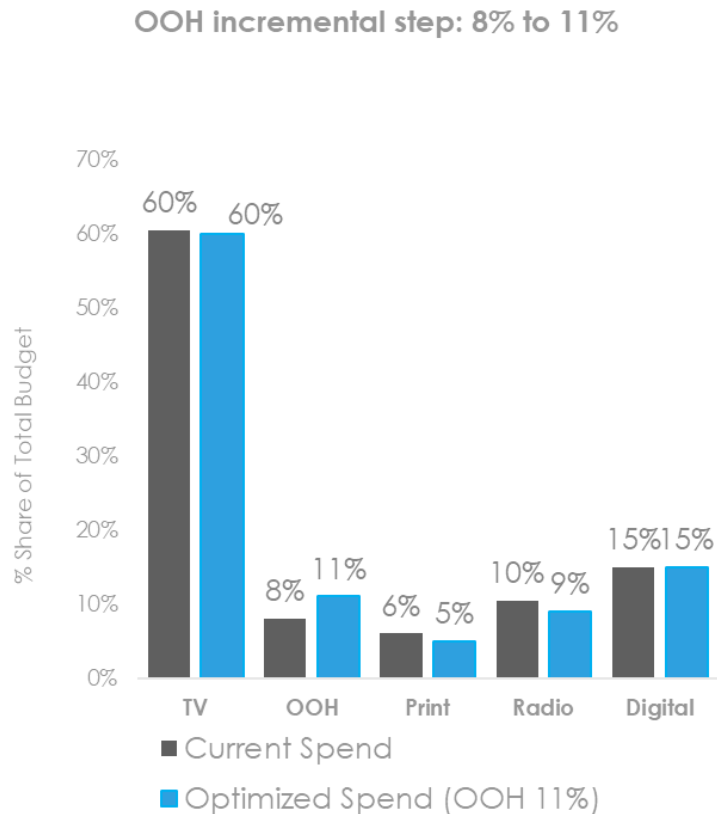
# CPG Food FINAL INCREMENTAL OOH increase for Consideration ROAS

Increase OOH from 8% to 11% (optimal OOH is 11%)

Consideration response curves: dots show incremental OOH increase 8 - 11 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 8% to 11%**  
(Downweight Radio and Print)

**Extra 0.1017** consideration points generated using the same budget

**Total media ROAS** increases from **0.8444** to **0.8480**

**+0.43% Total media ROAS** increase



# CPG Food Consideration: optimized vs incremental steps in increasing OOH% allocation

The first incremental increase from 1 to 4% generates the largest part of the total Consideration increase

## Full Optimization

Additional Consideration points generated from optimizing OOH straight to 11%

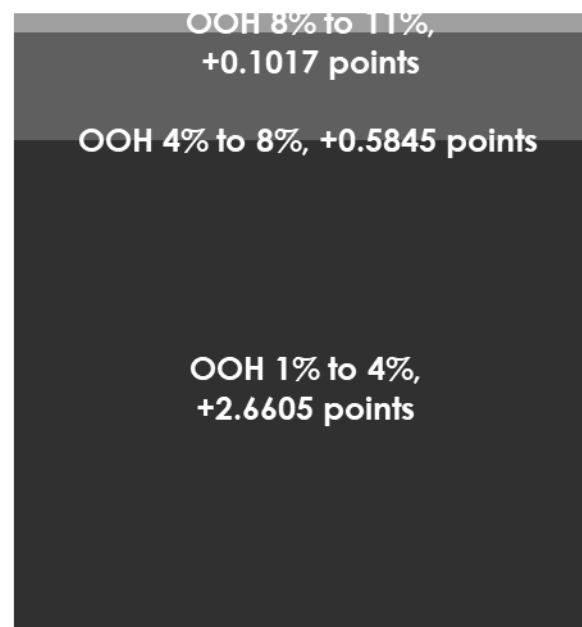
Additional Consideration Points



Additional Consideration generated full optimization

## Incremental Optimization

Additional Consideration points generated from incremental increases in OOH



Total = 3.35 points

Additional Consideration generated Incrementally



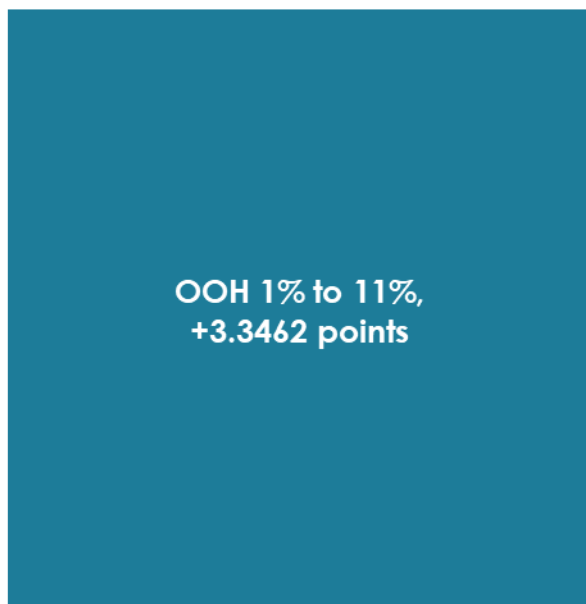
# CPG Food Consideration: optimized vs incremental steps in increasing OOH% allocation

The first incremental increase from 1 to 4% generates the largest part of the optimized Consideration increase

## Full Optimization

Additional Consideration points generated from optimizing OOH straight to 11%

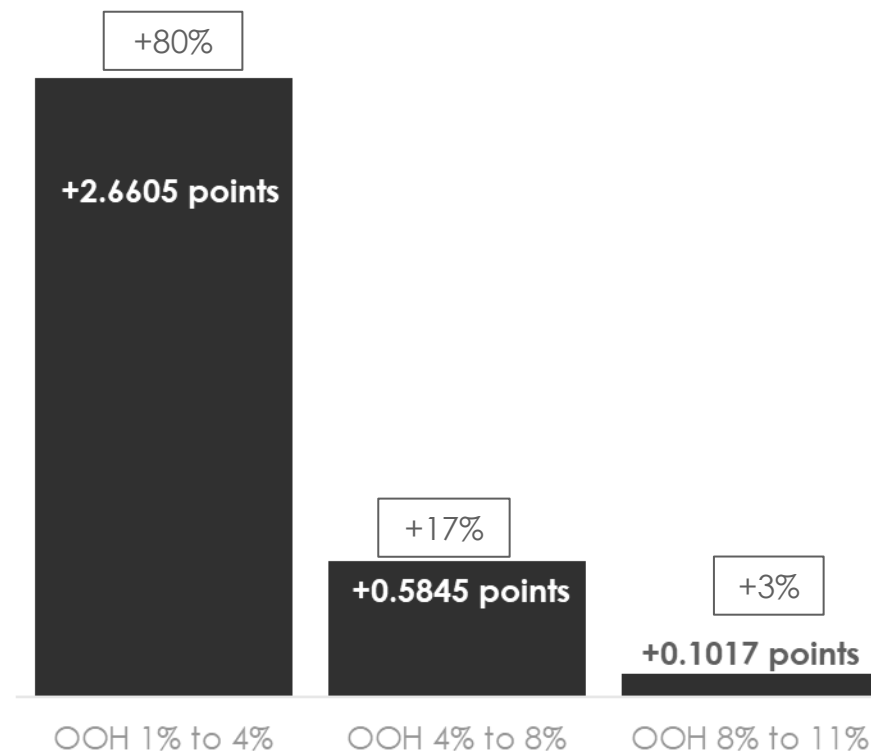
Additional Consideration Points



Additional Consideration generated full optimization

## Incremental Optimization

Additional Consideration points generated from incremental increases in OOH

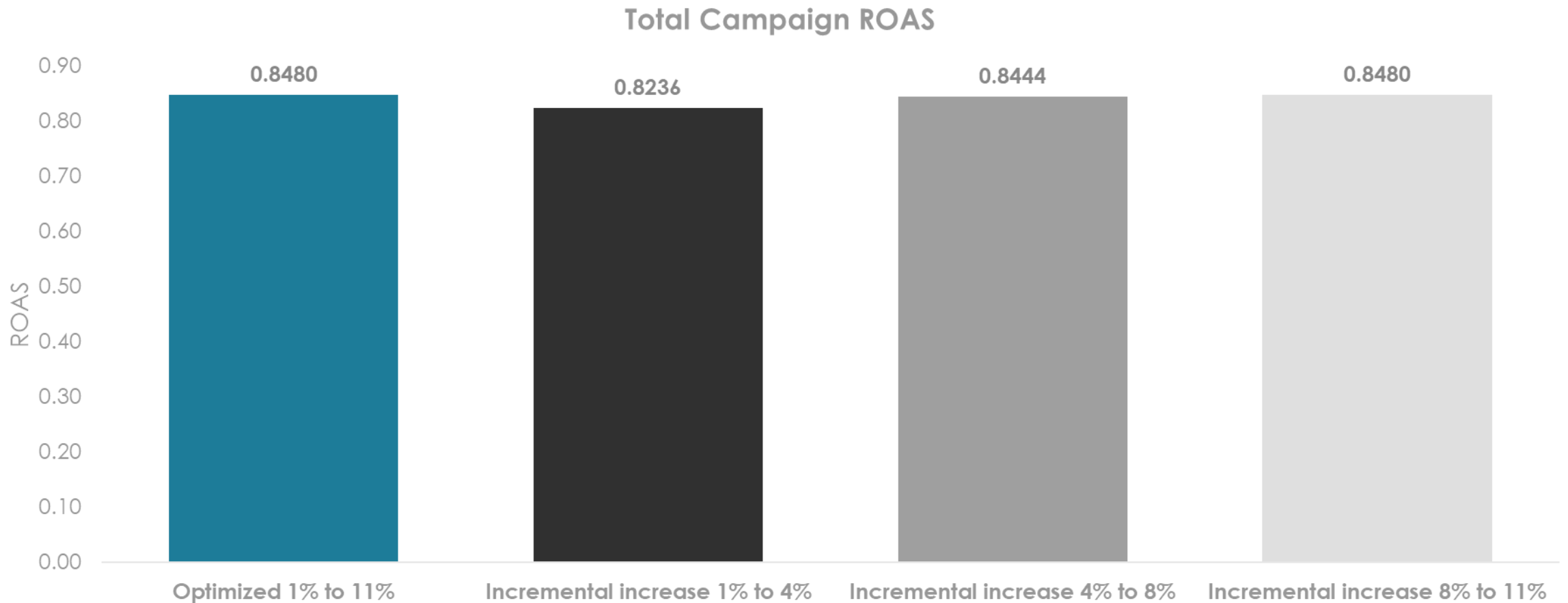


X% = percentage of total optimized consideration points generated in that step



# CPG Food Optimizing OOH to 11% vs Incremental increases in OOH allocation ROAS

Optimal ROAS of 0.85 with optimal 11% OOH allocation is also nearly achieved within the 4-8% OOH allocation



# CPG Food Purchase Intent – Detail Charts

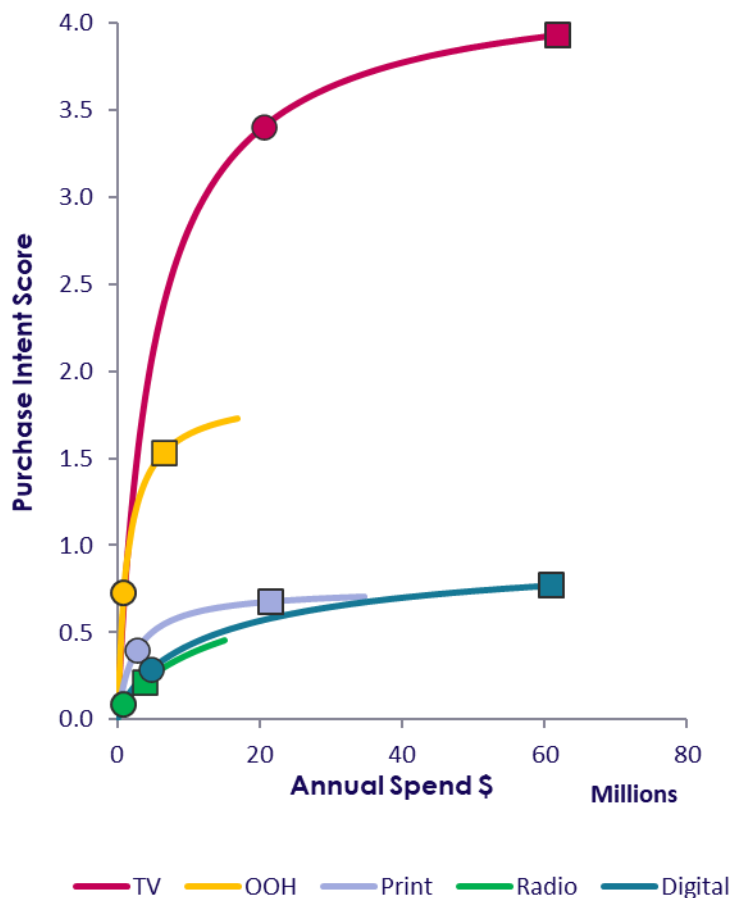




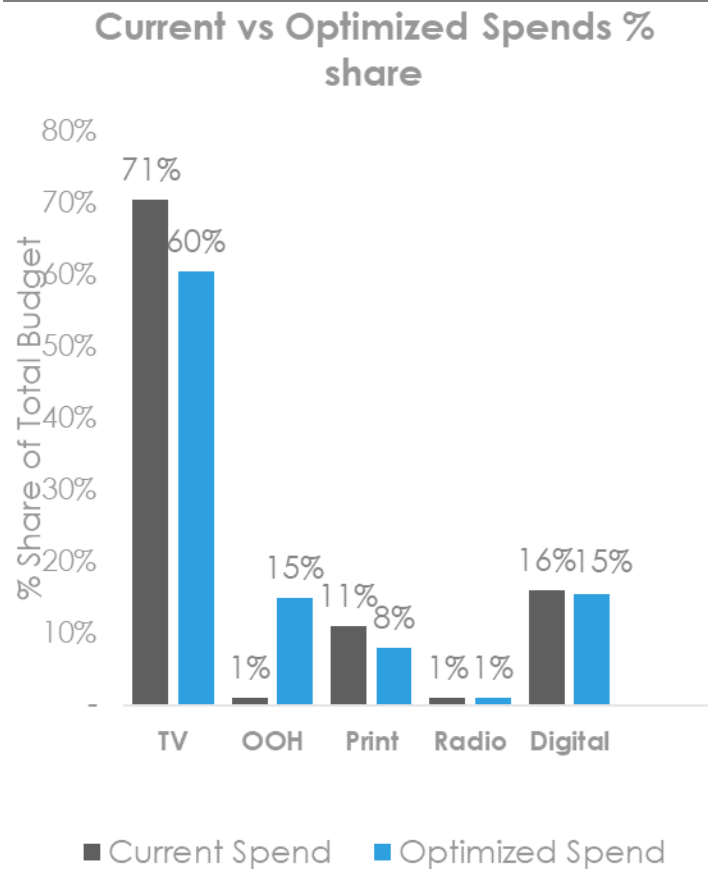
# CPG Food FULL OPTIMAL OOH allocation for Purchase Intent ROAS

## Increase OOH from 1 to 15%

### Purchase Intent response curves to identify optimal spend levels



### Using the response curves to optimize current spend levels



### Recommendations and Results

Decrease TV to 60% and  
**Upweight OOH to 15%**  
Decrease Print and Digital

**Extra 1.0210** Purchase Intent points generated using the same budget

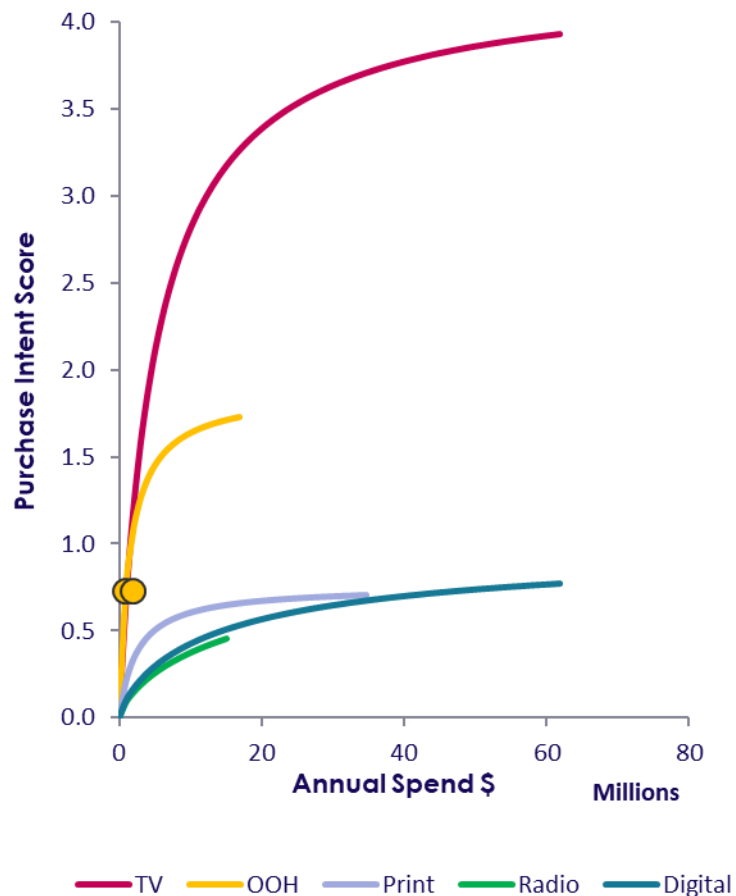
**Total media ROAS** increases from **0.1536** to **0.1899**  
**+24% Total media ROAS** increase



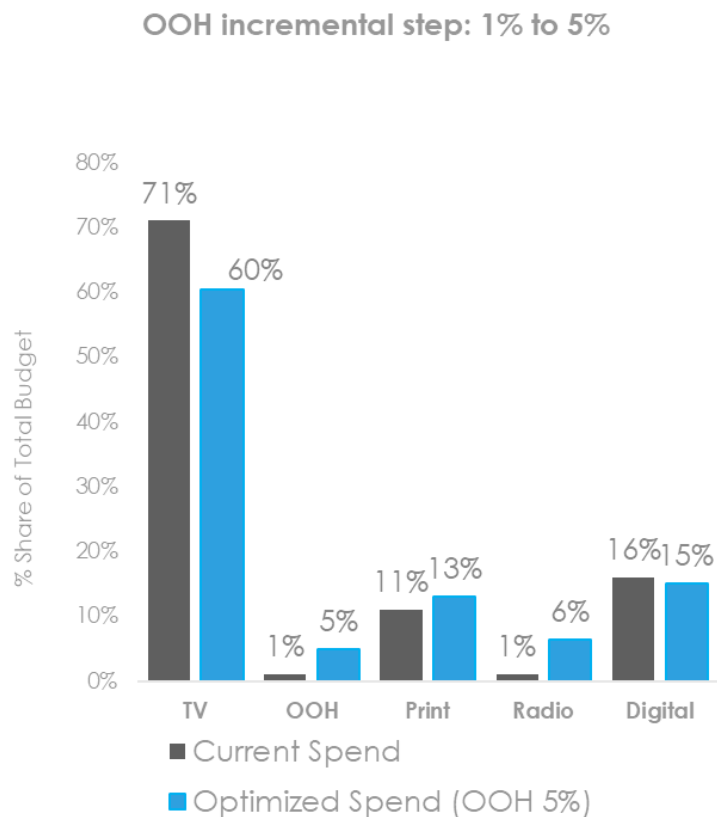
# CPG FIRST INCREMENTAL OOH increase for Purchase Intent ROAS

Increase OOH from 1% to 5% (optimal OOH is 15%)

Purchase Intent response curves: dots show incremental OOH increase 1 - 5 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 1% to 5%**  
(Downweight TV and Digital)

**Extra 0.7370** Purchase Intent points generated using the same budget

**Total media ROAS** increases from **0.1536** to **0.1798**  
**+17% Total media ROAS** increase

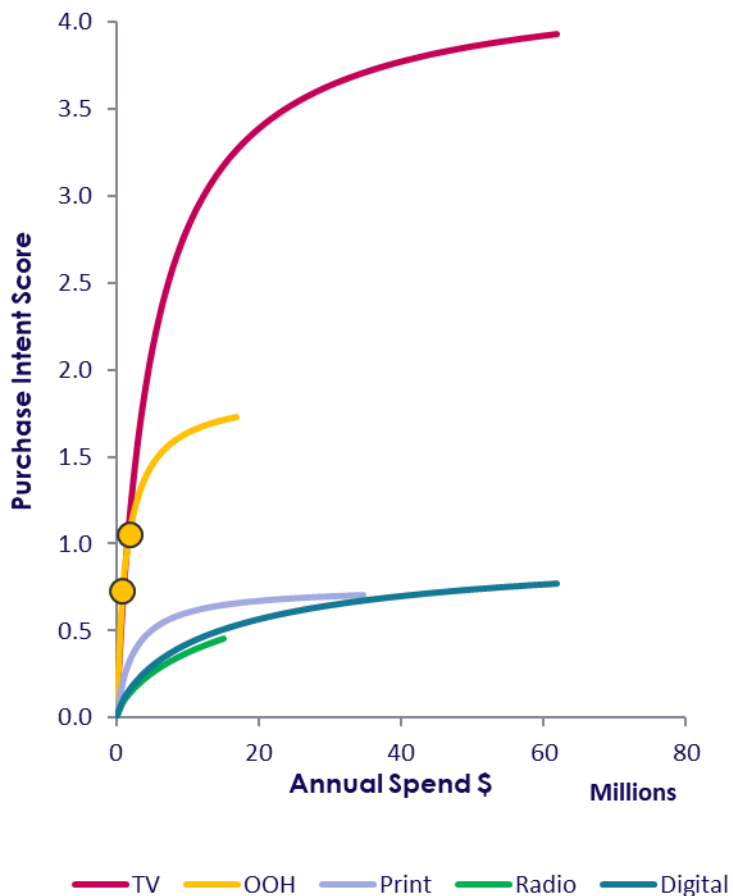




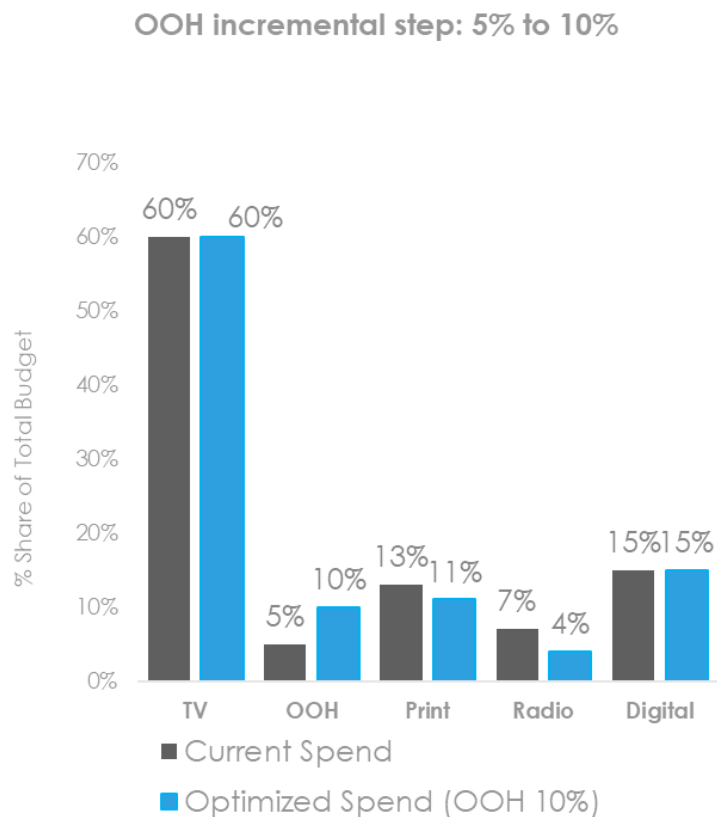
# CPG SECOND INCREMENTAL OOH increase for Purchase Intent ROAS

Increase OOH from 5% to 10% (optimal OOH is 15%)

Purchase Intent response curves: dots show incremental OOH increase 5 - 10 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 5% to 10%**  
(Downweight Print and Radio)

**Extra 0.2331** Purchase Intent points generated using the same budget

**Total media ROAS** increases from **0.1798** to **0.1881**

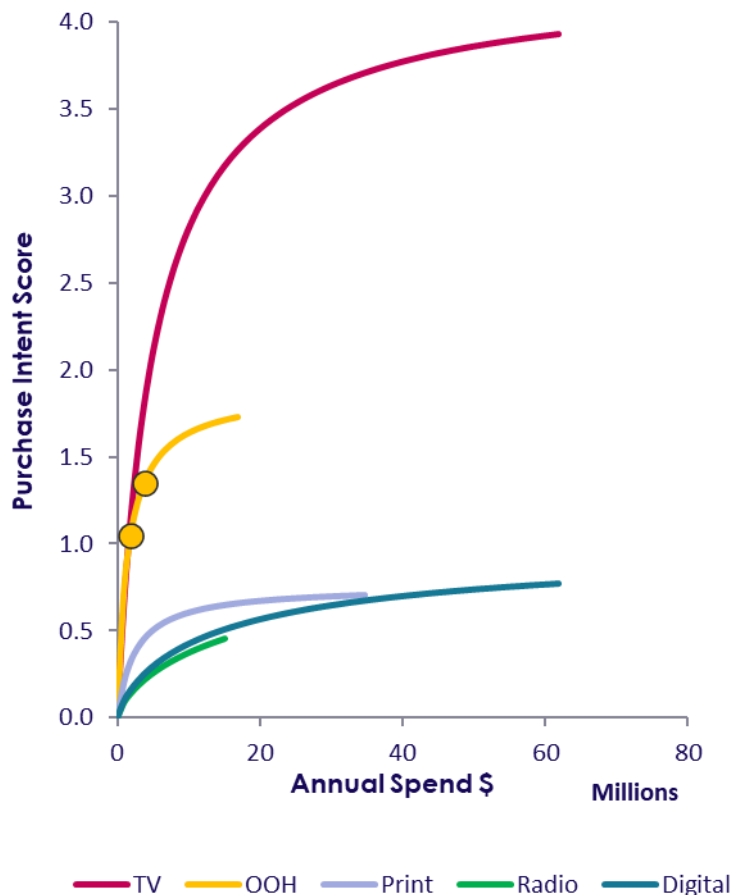
**+5% Total media ROAS** increase



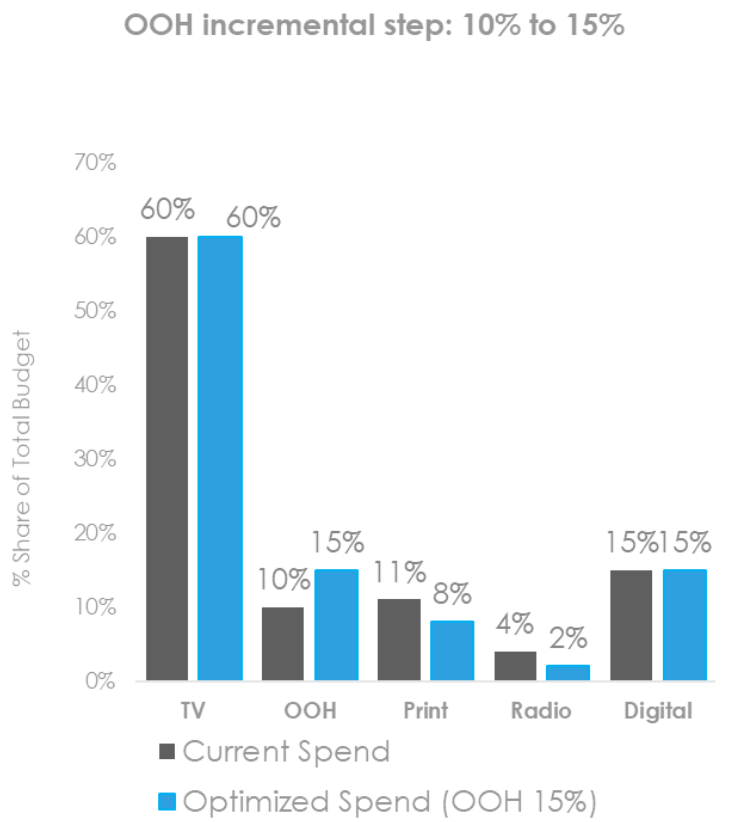
# CPG FINAL INCREMENTAL OOH increase for Purchase Intent ROAS

Increase OOH from 10% to 15% (optimal OOH is 15%)

Purchase Intent response curves: dots show incremental OOH increase 10 - 15%



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 10% to 15%**  
(Downweight Print and Radio)

**Extra 0.0509** Purchase Intent points generated using the same budget

**Total media ROAS** increases from **0.1881** to **0.1899**  
**+1% Total media ROAS** increase



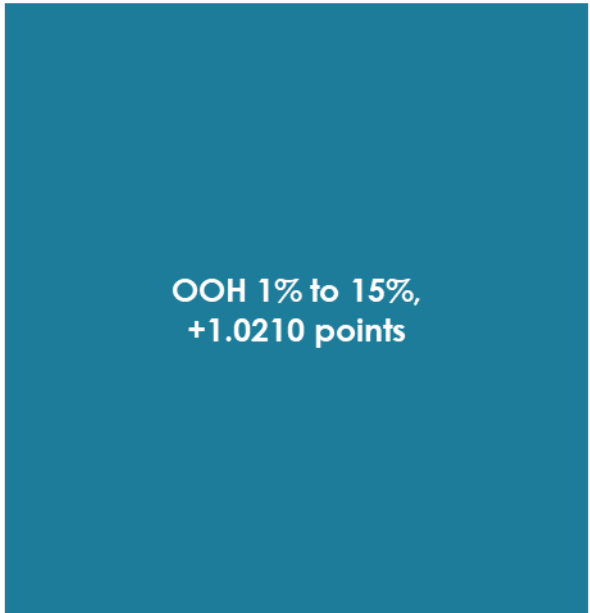
# CPG Food Purchase Intent: optimized vs incremental steps in increasing OOH% allocation

The first incremental increase from 1 to 5% generates the largest part of the optimized Purchase Intent increase

## Full Optimization

Additional Purchase Intent points generated from optimizing OOH straight to 15%

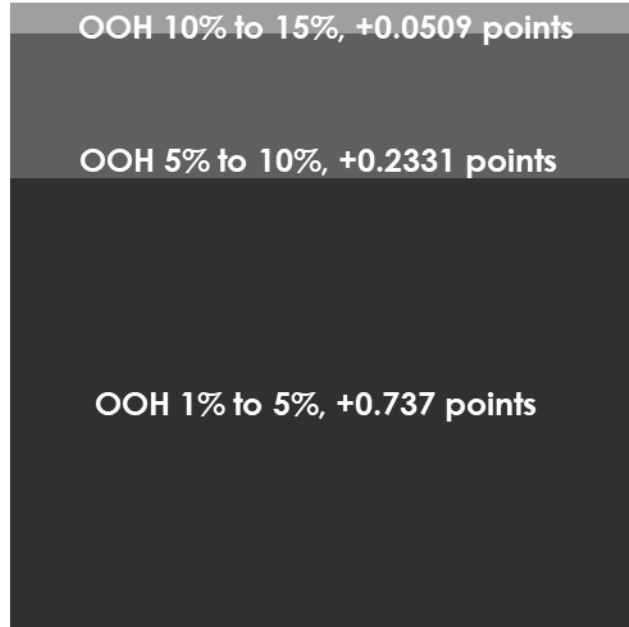
Additional Purchase Intent Points



Additional Purchase Intent generated full optimization

## Incremental Optimization

Additional Purchase Intent points generated from incremental increases in OOH



Total = 1.02 points

Additional Purchase Intent generated Incrementally

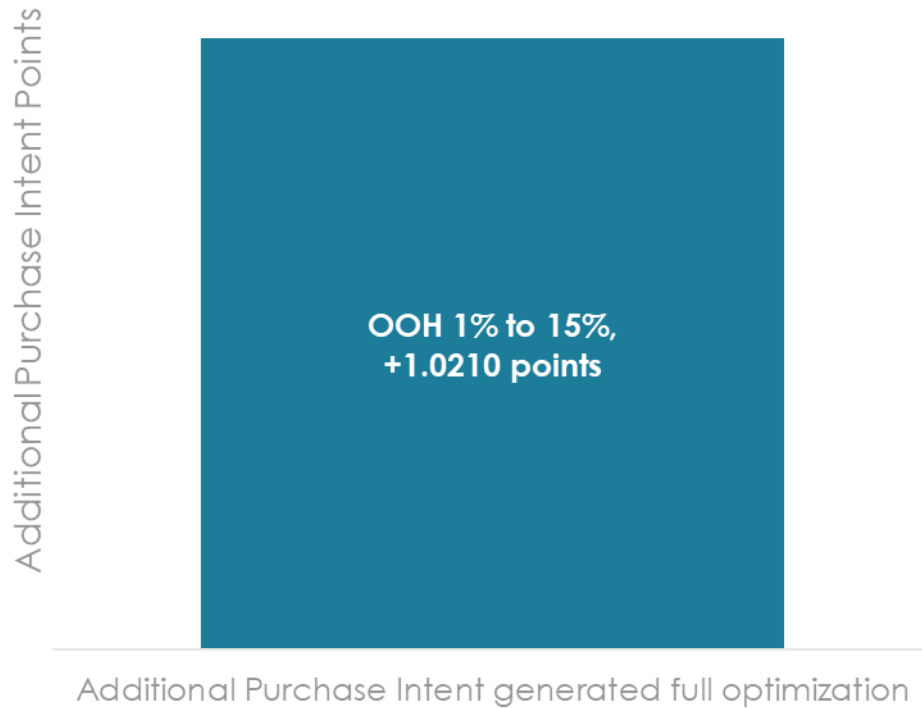
# CPG Food Purchase Intent: optimized vs incremental steps in increasing OOH% allocation



The first incremental increase from 1 to 5% generates the largest part of the optimized Purchase Intent increase

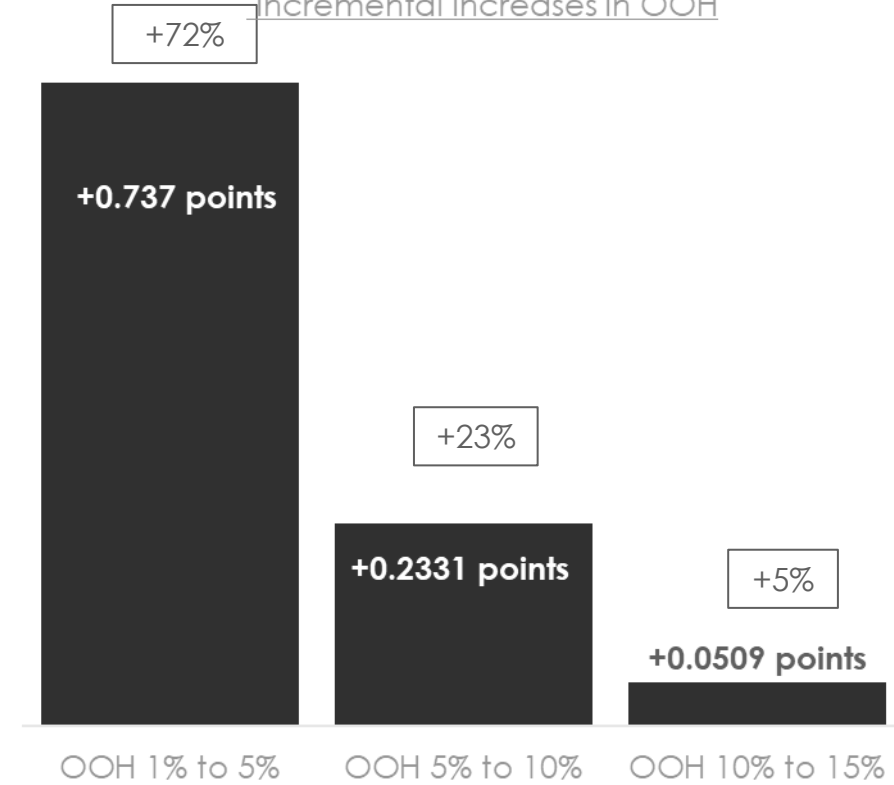
## Full Optimization

Additional Purchase Intent points generated from optimizing OOH straight to 15%



## Incremental Optimization

Additional Purchase Intent points generated from incremental increases in OOH

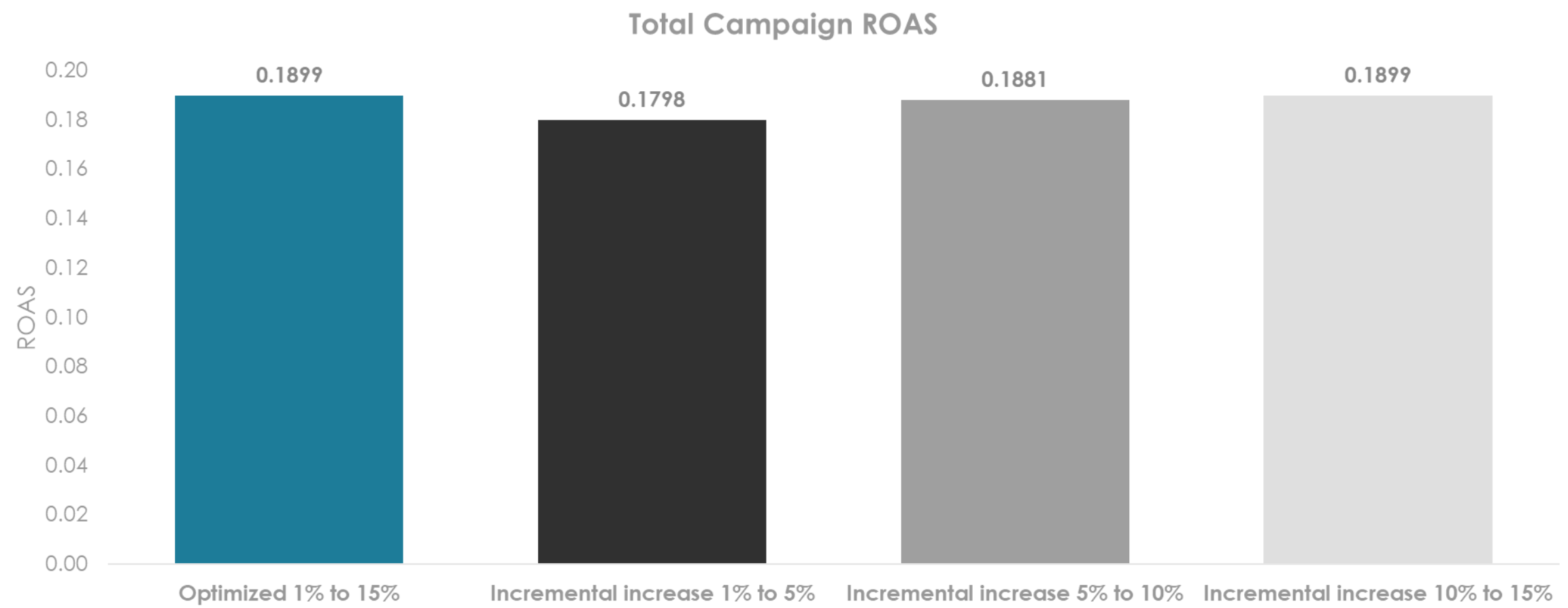


X% = percentage of total optimized purchase intent points generated in that step



# CPG Food Optimizing OOH to 15% vs Incremental increases in OOH allocation ROAS

Optimal ROAS of 0.19 with optimal 15% OOH allocation is also achieved within the 5-10% OOH allocation



# Retail Grocery

## Budget Allocation: Incremental Steps on Brand Metrics

### Detail Charts

- Brand Awareness
- Consideration
- Purchase Intent



# Retail Grocery Brand Awareness – Detail Charts

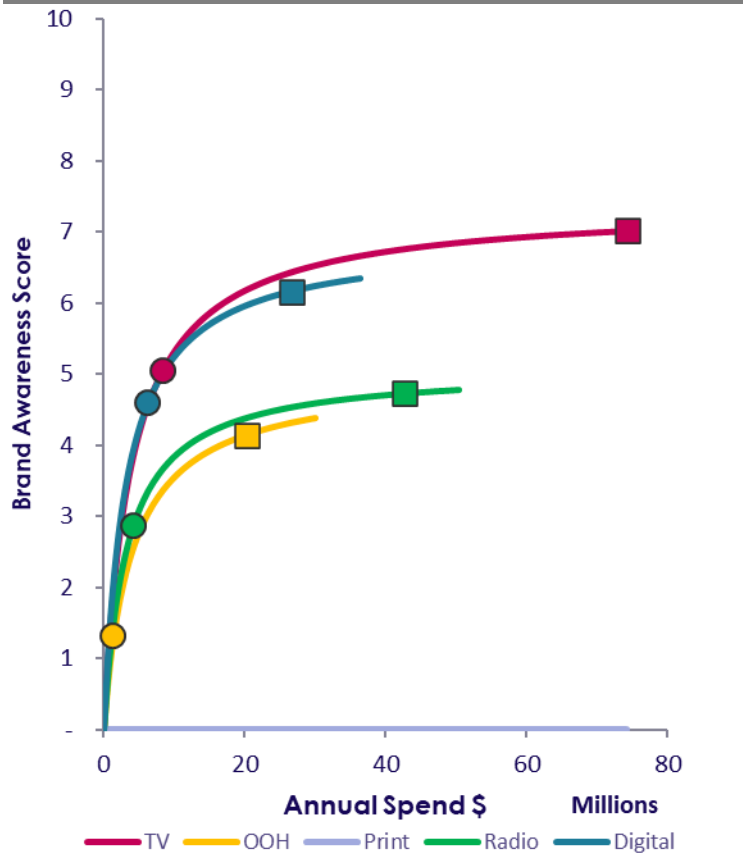




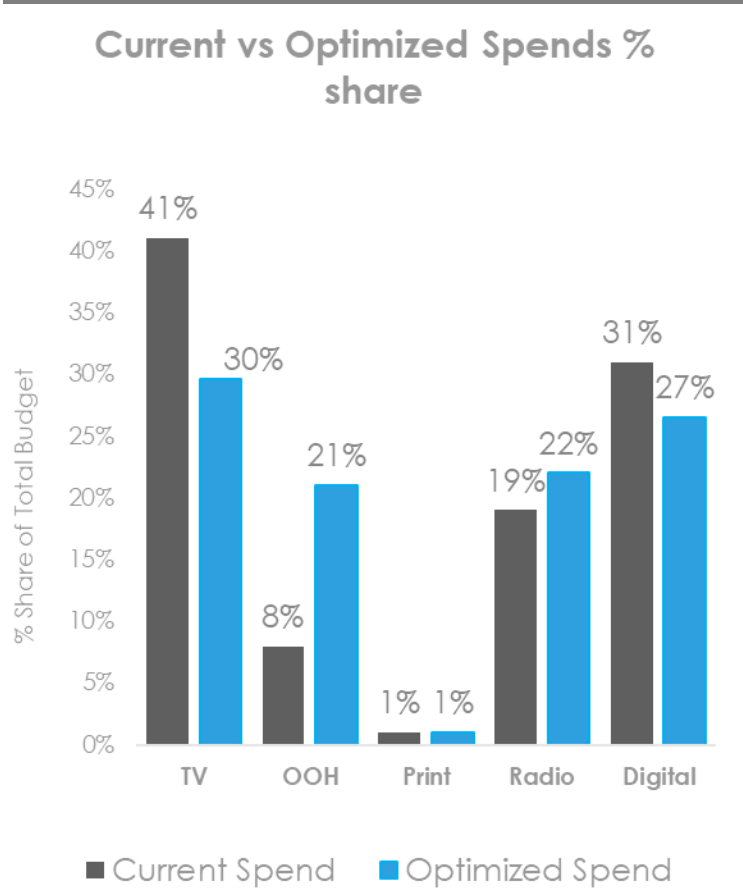
# Retail Grocery FULL OPTIMAL OOH allocation for Brand Awareness ROAS

Increase OOH from 8 to 21%

## Brand Awareness response curves to identify optimal spend levels



## Using the response curves to optimize current spend levels



## Recommendations and Results

Decrease TV to 30% and Digital to 27%  
**Upweight OOH to 21%**

Extra **0.5189** Brand Awareness points generated using the same budget

**Total media ROAS** increases from **0.6667** to **0.6914**  
**+4% Total media ROAS** increase

Vivvix spend Scenario based on average brand 2022  
 Constraints applied: minimum 1% spend has been allocated to Print

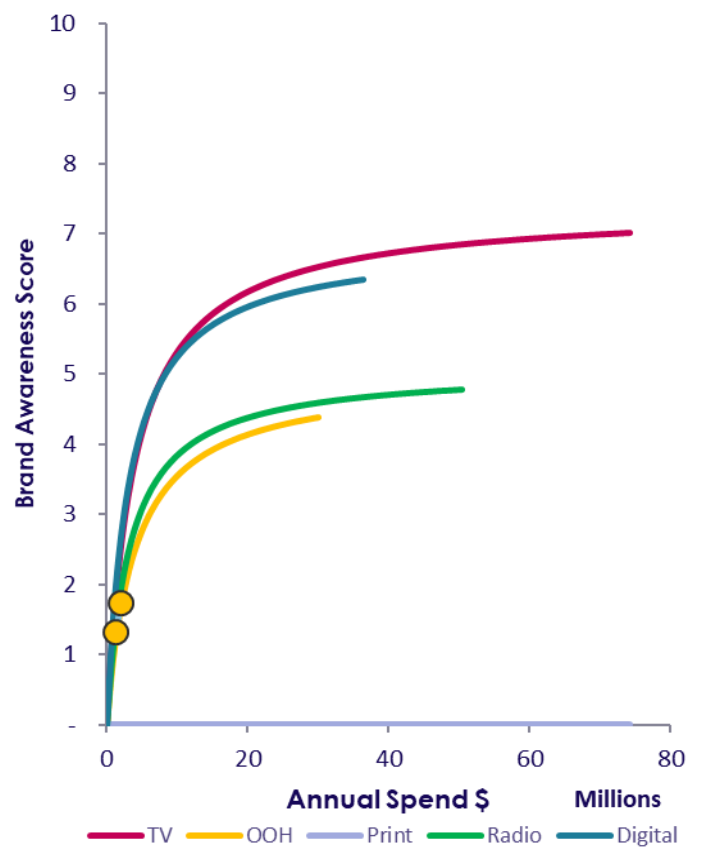




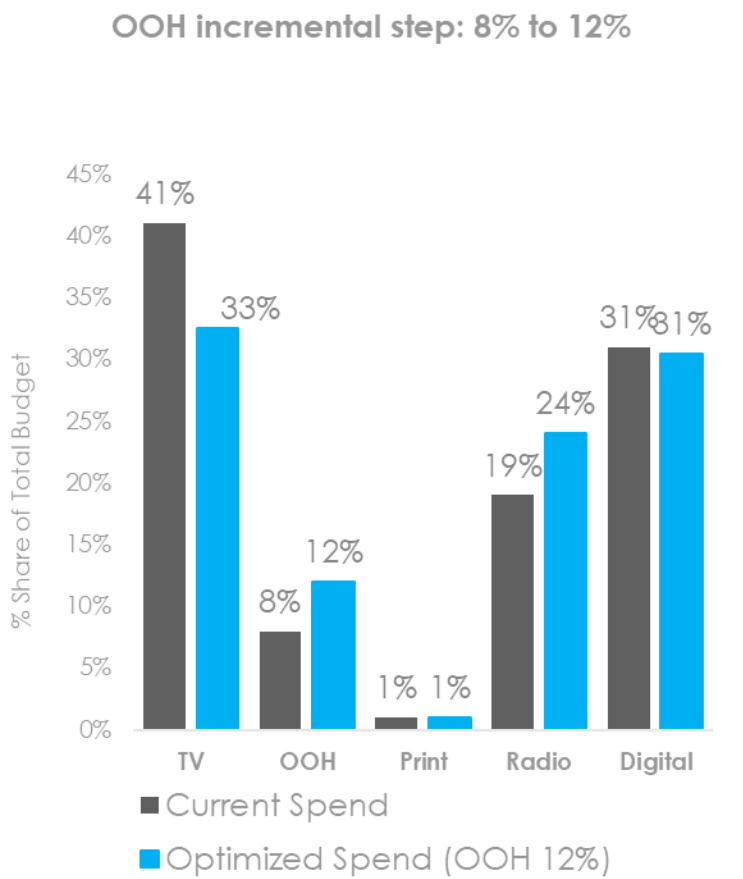
# Retail Grocery FIRST INCREMENTAL OOH increase for Brand Awareness ROAS

Increase OOH from 8% to 12% (optimal OOH is 21%)

Brand Awareness response curves: dots show incremental OOH increase 8 - 12 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 8% to 12%**  
(Downweight TV)

**Extra 0.3291** Brand Awareness generated using the same budget

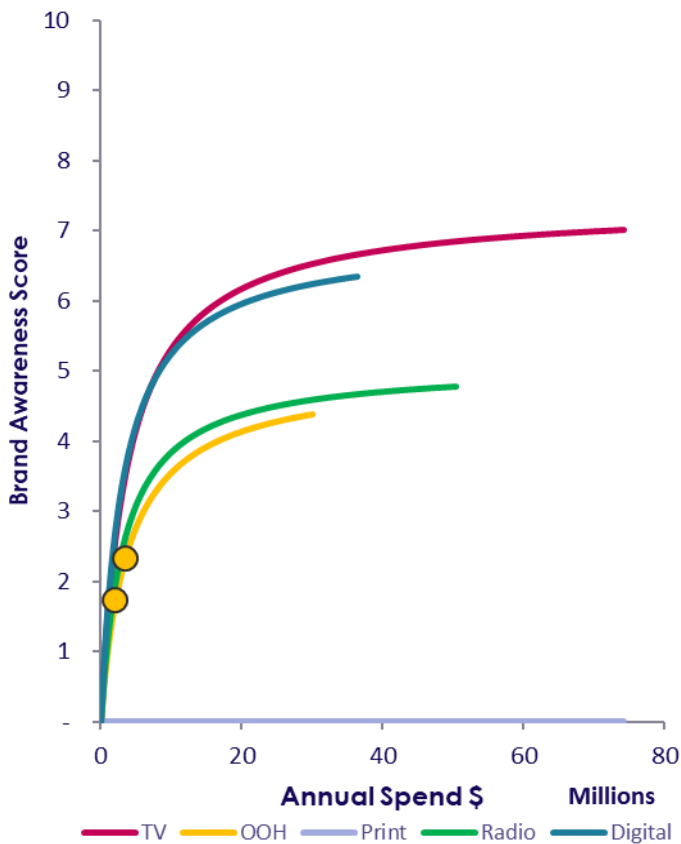
**Total media ROAS** increases from **0.6667** to **0.6824**  
**+2% Total media ROAS** increase



# Retail Grocery SECONDARY INCREMENTAL OOH increase for Brand Awareness ROAS

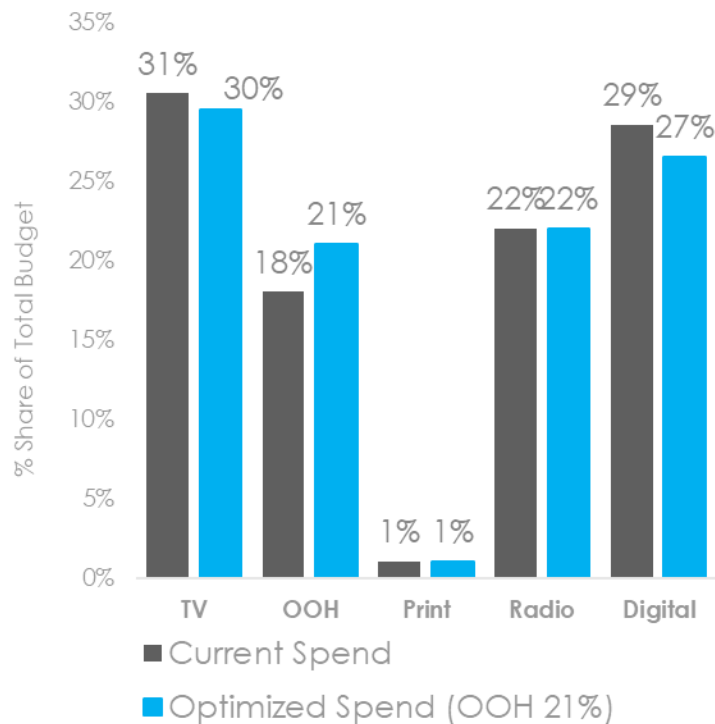
Increase OOH from 12% to 18% (optimal OOH is 21%)

Brand Awareness response curves: dots show incremental OOH increase 12- 18 %



Reallocation of current budget to optimize – incremental step for OOH

OOH incremental step: 18% to 21%



Recommendations and Results

**Incremental upweight OOH from 12% to 18%**  
(Downweight TV, Radio and Digital)

**Extra 0.1700** Brand Awareness generated using the same budget

**Total media ROAS** increases from **0.6824** to **0.6905**

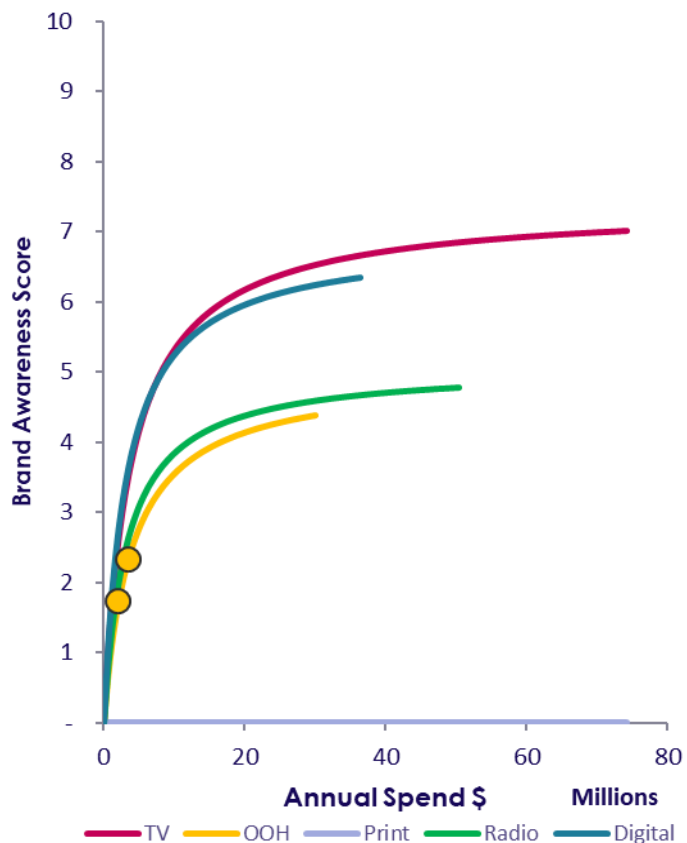
**+1% Total media ROAS** increase



# Retail Grocery FINAL INCREMENTAL OOH increase for Brand Awareness ROAS

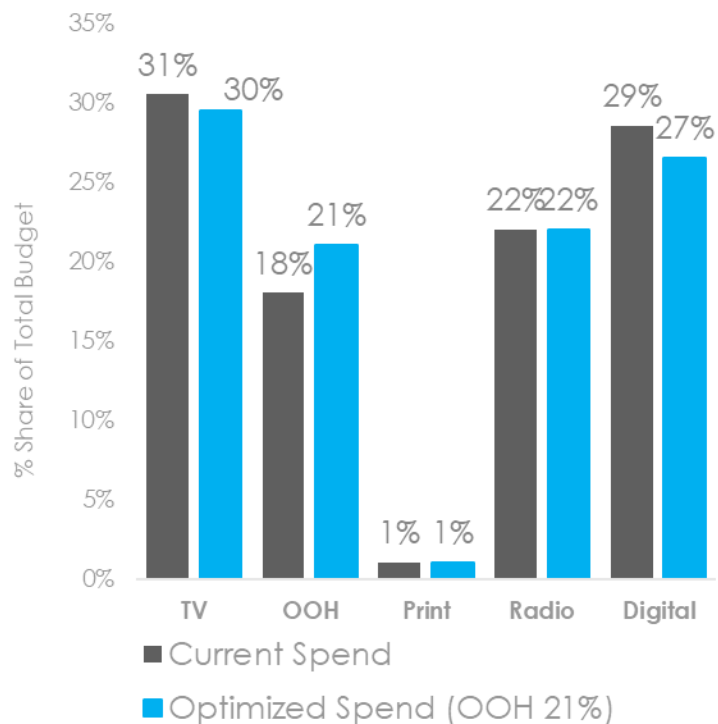
Increase OOH from 18% to 21% (optimal OOH is 21%)

Brand Awareness response curves: dots show incremental OOH increase 18 - 21%



Reallocation of current budget to optimize – incremental step for OOH

OOH incremental step: 18% to 21%



Recommendations and Results

**Incremental upweight OOH from 18% to 21%**  
(Downweight TV and Digital)

**Extra 0.0198** Brand Awareness generated using the same budget

**Total media ROAS** increases from **0.6905** to **0.6914**

**+0.14%** **Total media ROAS** increase

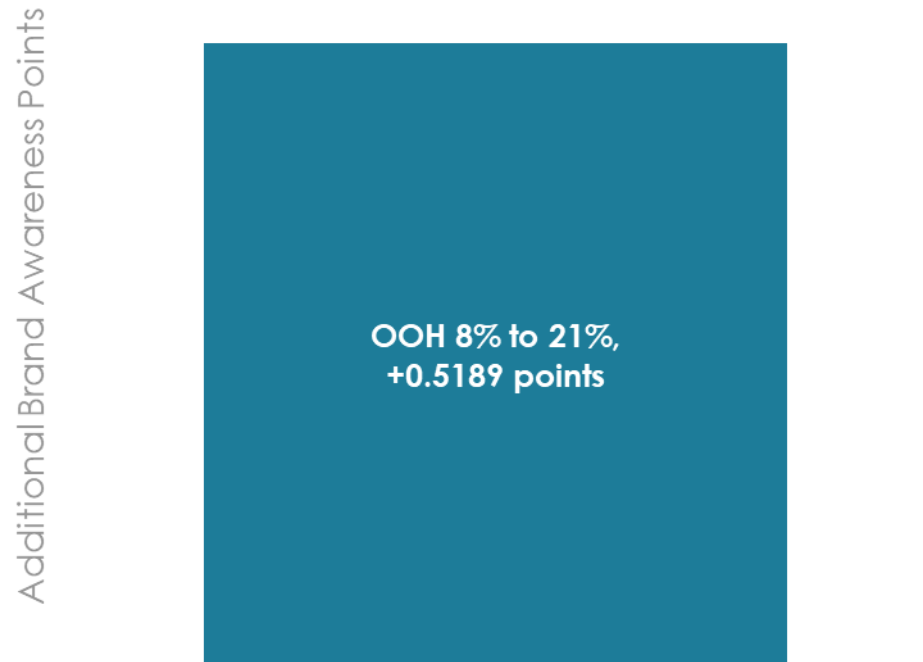
# Retail Grocery Brand Awareness: optimized vs incremental steps in increasing OOH% allocation



The first incremental increase from 8 to 12% generates the largest part of the optimized Awareness increase

## Full Optimization

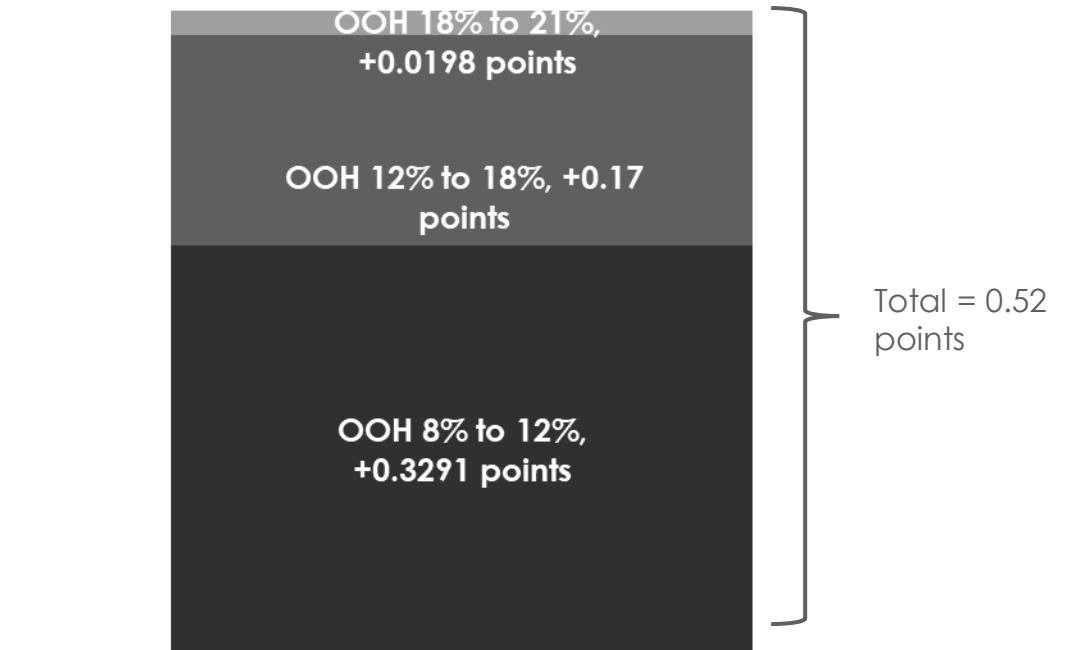
Additional Brand Awareness points generated from optimizing OOH straight to 21%



Additional Brand Awareness generated full optimization

## Incremental Optimization

Additional Brand Awareness points generated from incremental increases in OOH



Additional Brand Awareness generated Incrementally

# Retail Grocery Brand Awareness: optimized vs incremental steps in increasing OOH % allocation

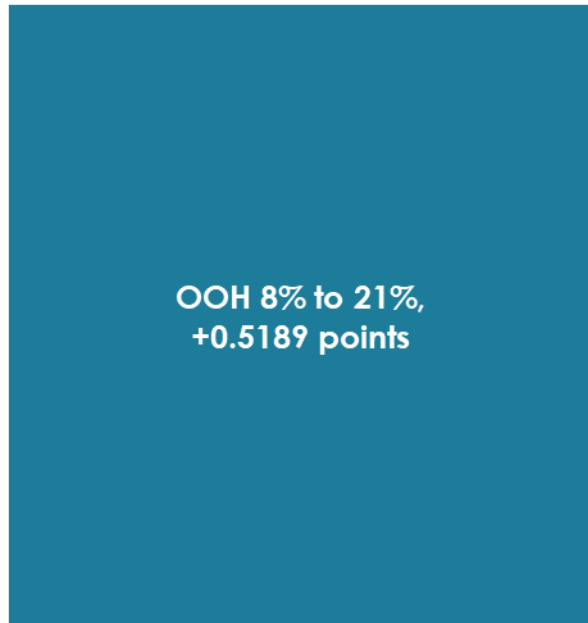


The first incremental increase from 8 to 12% generates the largest part of the optimized Awareness increase

## Full Optimization

Additional Brand Awareness points generated from optimizing OOH straight to 21%

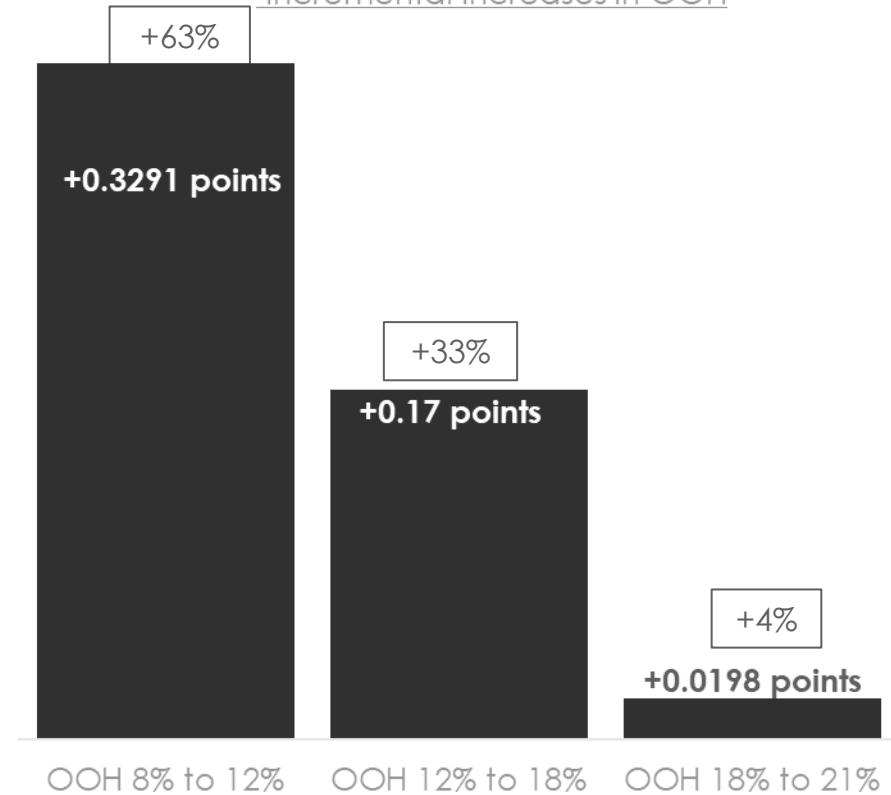
Additional Brand Awareness Points



Additional Brand Awareness generated full optimization

## Incremental Optimization

Additional Brand Awareness points generated from incremental increases in OOH

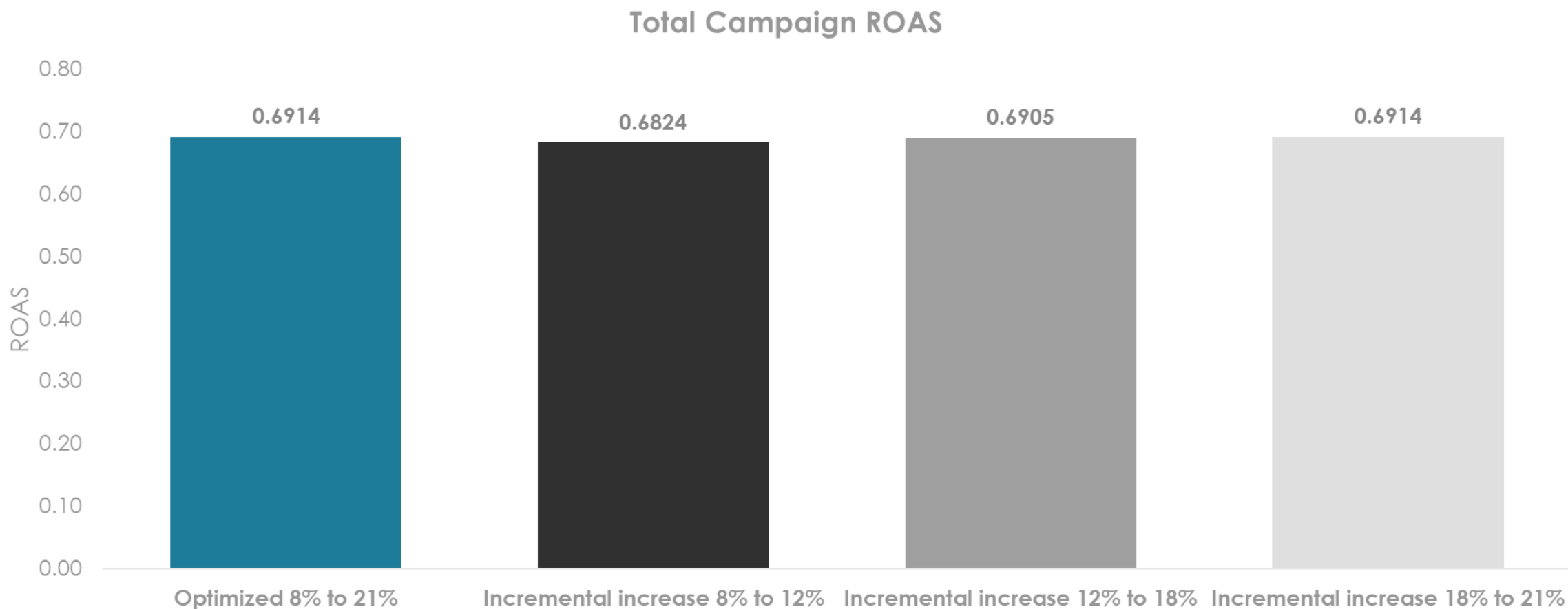


X% = percentage of total optimized Awareness points generated in that step

# Retail Grocery Optimizing OOH to 21% vs Incremental increases in OOH allocation ROAS



Optimal ROAS of 0.69 with optimal 21% OOH allocation is also achieved within the 12-18% OOH allocation



# Retail Grocery Consideration – Detail Charts

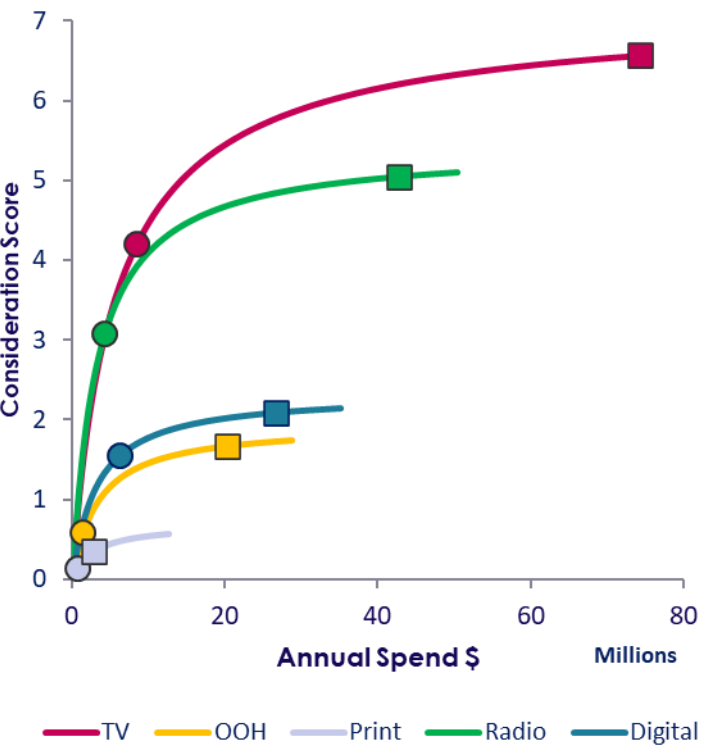




# Retail Grocery FULL OPTIMAL OOH allocation for Consideration ROAS

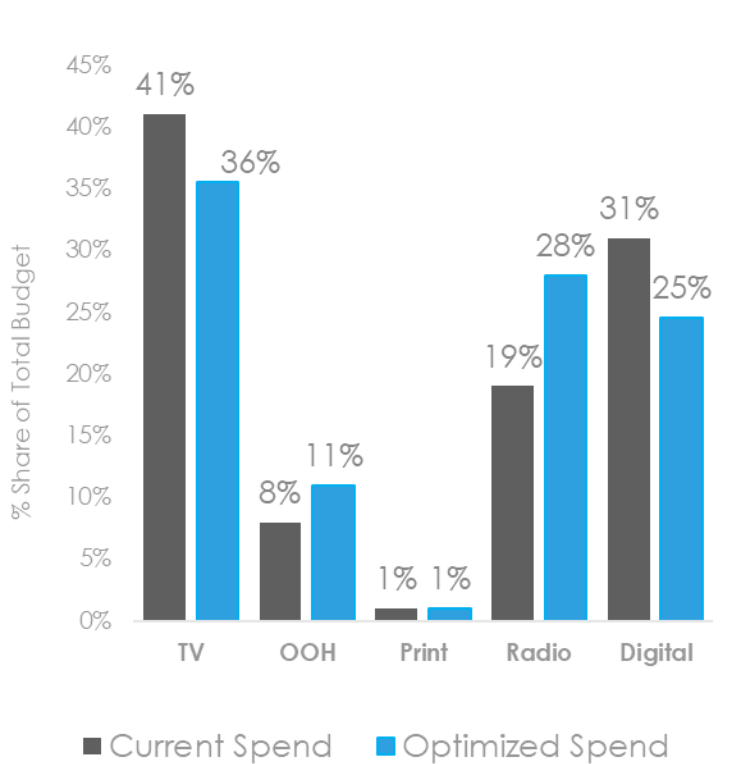
## Increase OOH from 8 to 11%

### Consideration response curves to identify optimal spend levels



### Using the response curves to optimize current spend levels

#### Current vs Optimized Spends % share



### Recommendations and Results

Decrease TV to 36% and Digital to 25% and **upweight OOH to 11%**

Extra **0.2732** Consideration points generated using the same budget

**Total media ROAS** increases from **0.4529** to **0.4658**  
**+3% Total media ROAS** increase

Vivix spend Scenario based on average brand 2022  
 Constraints applied: minimum 25% spend has been allocated to Digital

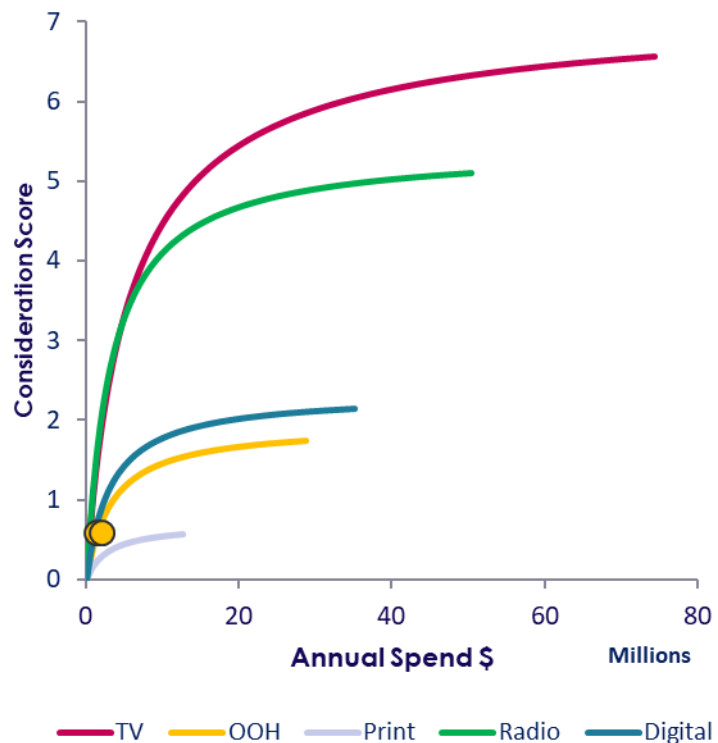




# Retail Grocery FIRST INCREMENTAL OOH increase for Consideration ROAS

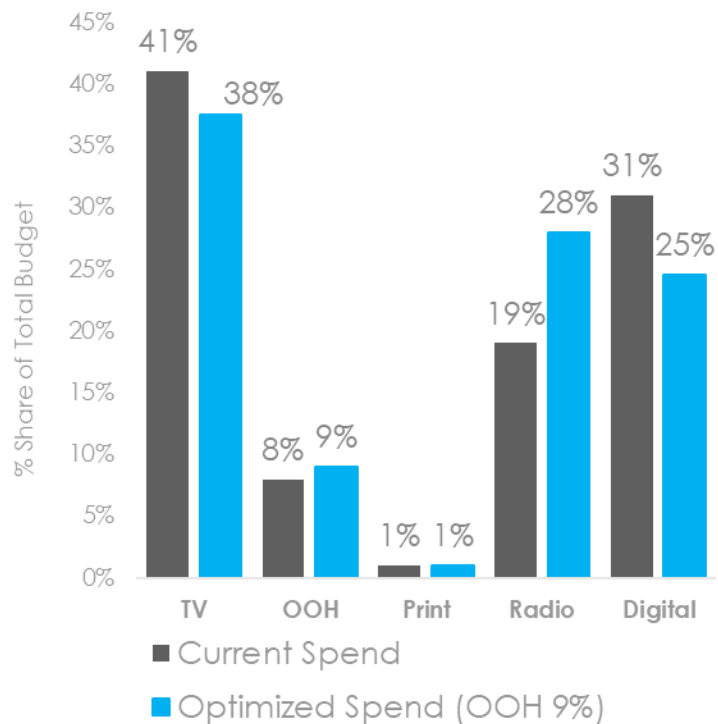
Increase OOH from 8% to 9% (optimal OOH is 11%)

Consideration Curves: dots show incremental OOH increase 8- 9 %



Reallocation of current budget to optimize – incremental step for OOH

OOH incremental step: 8% to 9%



Recommendations and Results

**Incremental upweight OOH**  
from **8% to 9%**  
(Downweight TV and Digital)

**Extra 0.2697** Consideration points generated using the same budget

**Total media ROAS** increases from **0.4529** to **0.4657**

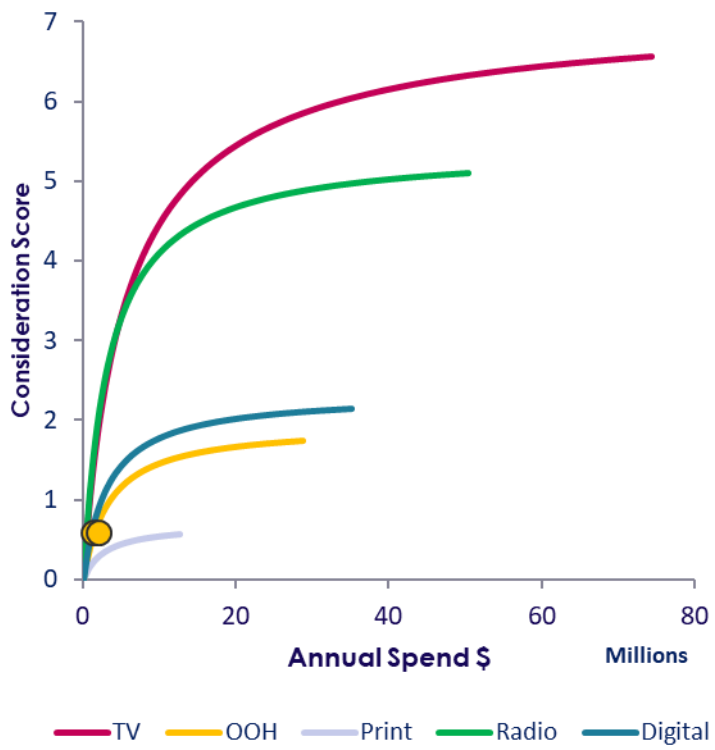
**+3% Total media ROAS** increase



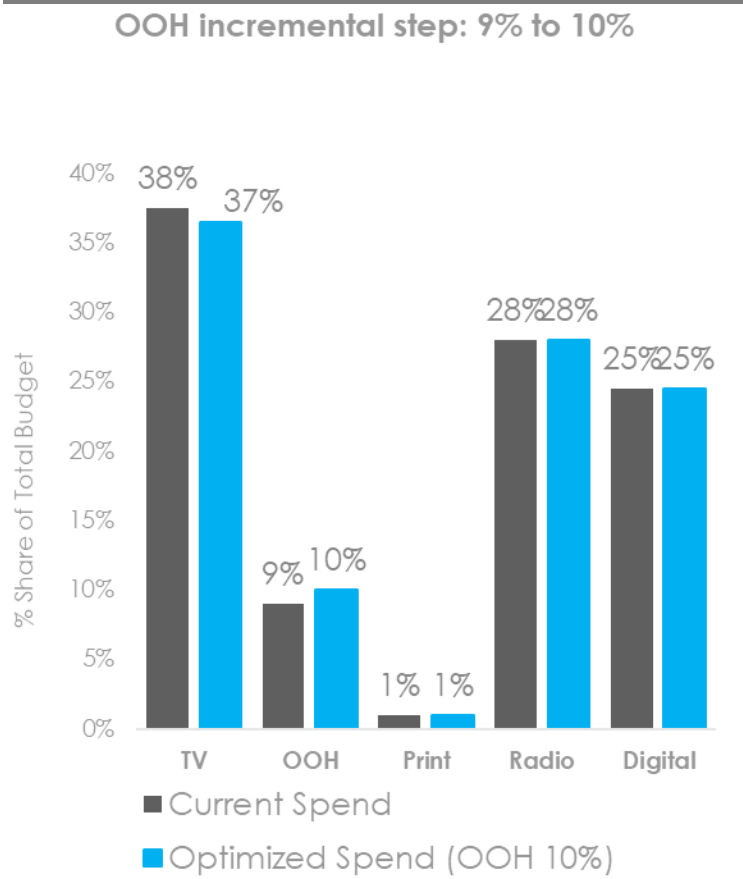
# Retail Grocery SECOND INCREMENTAL OOH increase for Consideration ROAS

Increase OOH from 9% to 10% (optimal OOH is 11%)

Consideration Curves: dots show incremental OOH increase 9- 10 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 9% to 10%**  
(Downweight TV)

**Extra 0.0032** Consideration points generated using the same budget

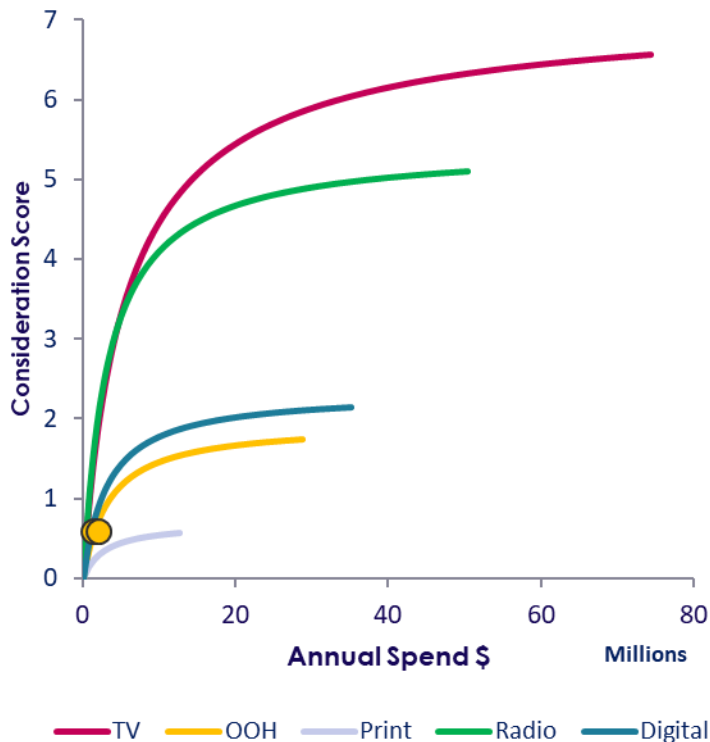
**Total media ROAS** increases from **0.4657** to **0.4658**  
**+0.032% Total media ROAS** increase



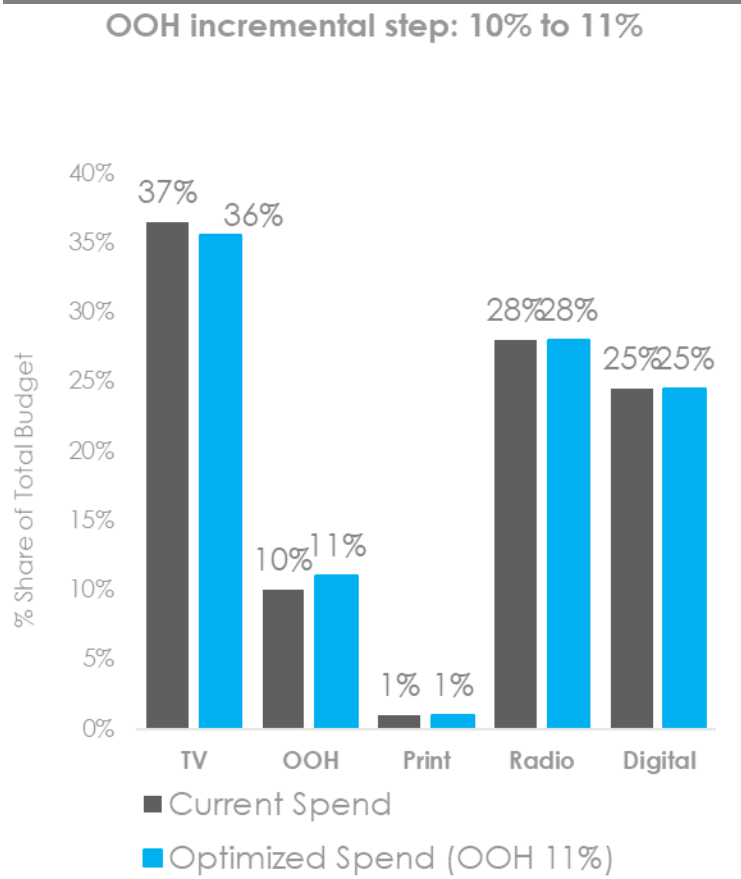
# Retail Grocery FINAL INCREMENTAL OOH increase for Consideration ROAS

Increase OOH from 10% to 11% (optimal OOH is 11%)

Consideration Curves: dots show incremental OOH increase 10- 11 %



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 10% to 11%**  
(Downweight TV)

**Extra 0.00034** Consideration points generated using the same budget

**Total media ROAS** increases from **0.46587** to **0.46589**  
**+0.0034% Total media ROAS** increase

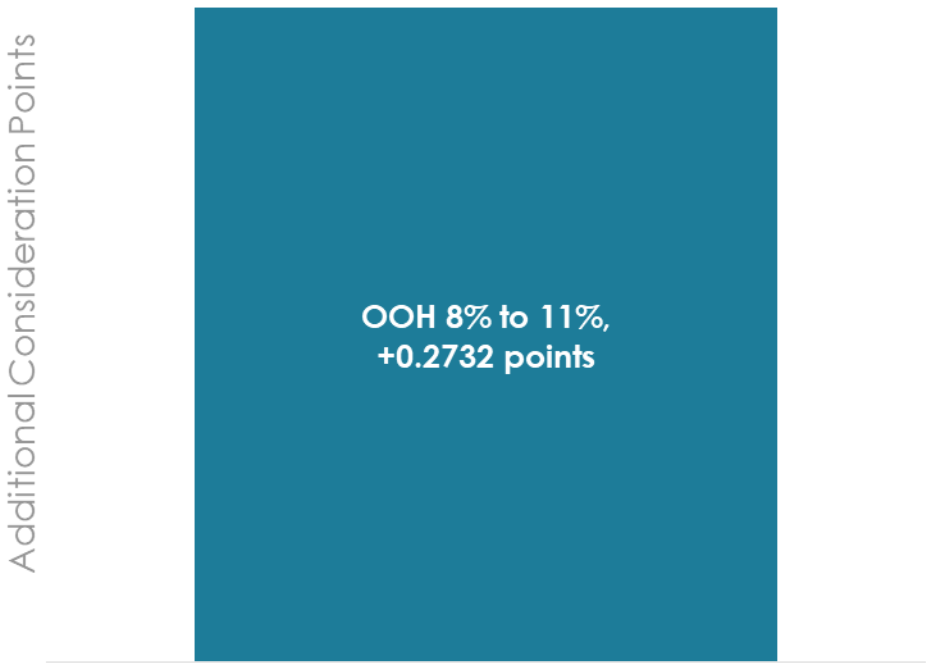
# Retail Grocery Consideration: optimized vs incremental steps in increasing OOH% allocation



The first incremental increase from 8 to 9% generates the largest part of the total optimized income increase

## Full Optimization

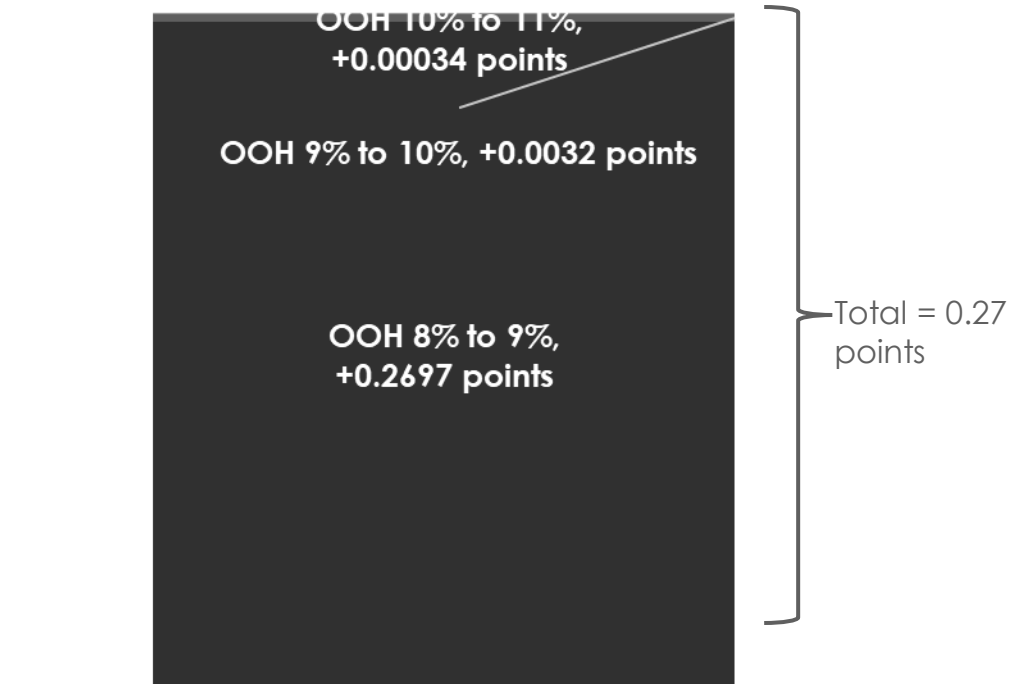
Additional Consideration points generated from optimizing OOH straight to 11%



Additional Consideration generated full optimization

## Incremental Optimization

Additional Consideration generated from incremental increases in OOH



Additional Consideration generated Incrementally

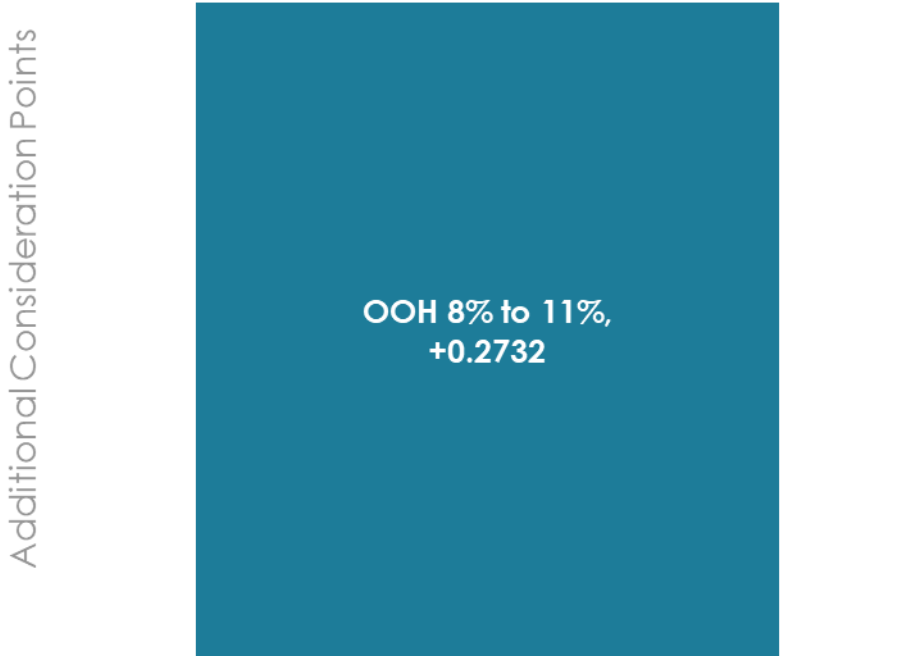
# Retail Grocery Consideration: optimized vs incremental steps in increasing OOH% allocation



The first incremental increase from 8 to 9% generates the largest part of the optimized Consideration increase

## Full Optimization

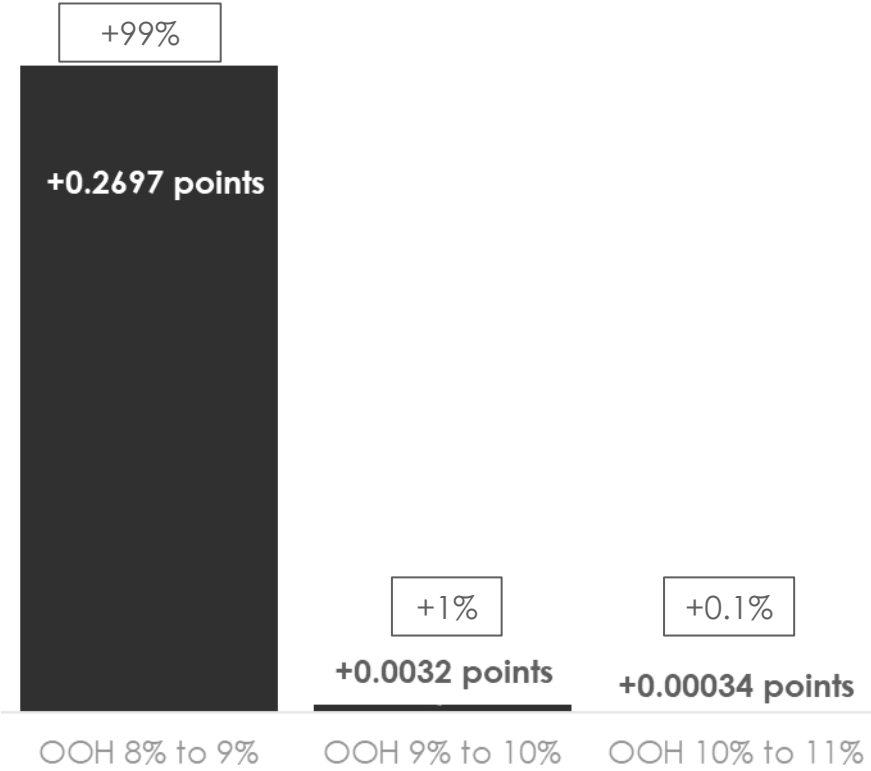
Additional Consideration points generated from optimizing OOH straight to 11%



Additional Consideration generated full optimization

## Incremental Optimization

Additional Consideration points generated from incremental increases in OOH

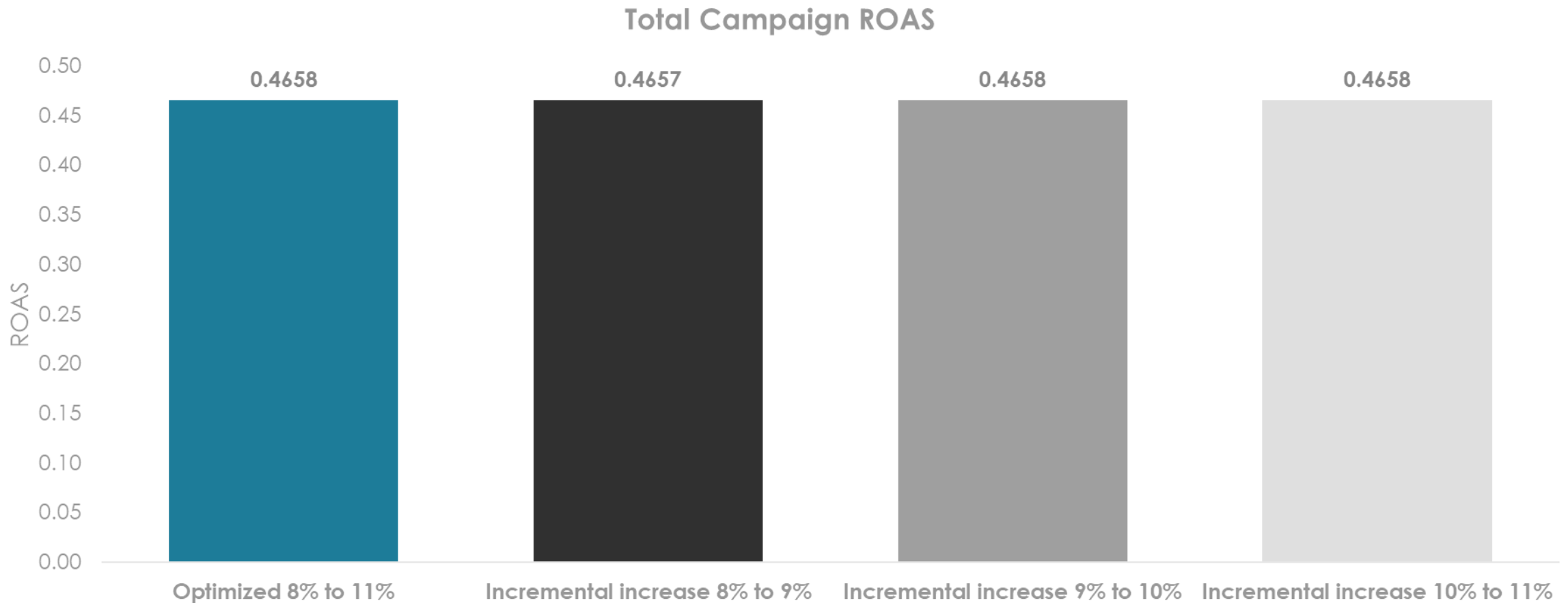


X% = percentage of total optimized Consideration points generated in that step

# Retail Grocery Optimizing OOH to 11% vs Incremental increases in OOH allocation ROAS



Optimal ROAS of 0.4658 with optimal 11% OOH allocation is also achieved within the 9-10% OOH allocation



# Retail Grocery Purchase Intent – Detail Charts

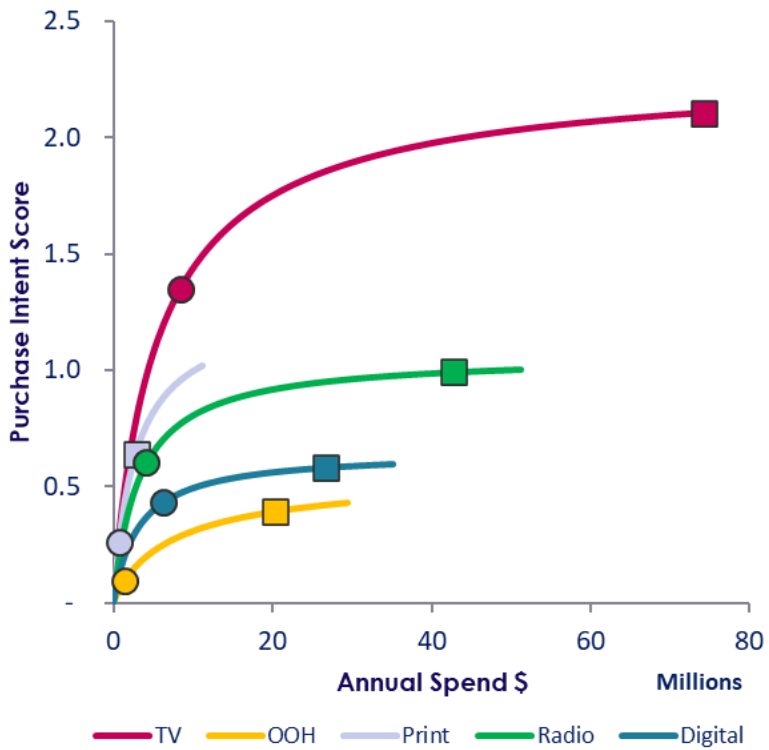




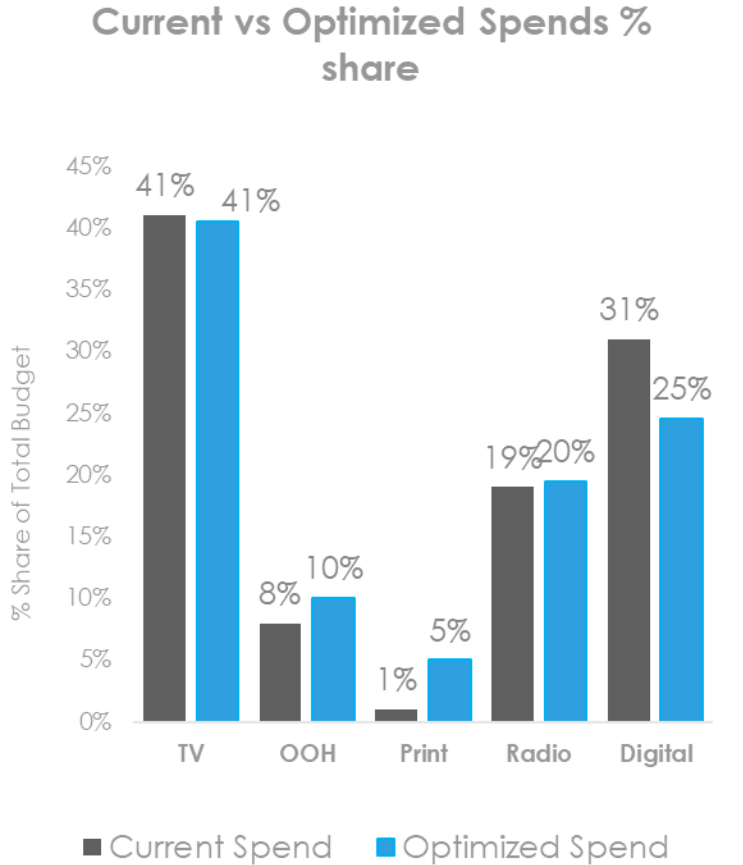
# Retail Grocery FULL OPTIMAL OOH allocation for Purchase Intent ROAS

Increase OOH from 8 to 10%

## Purchase Intent response curves to identify optimal spend levels



## Using the response curves to optimize current spend levels



## Recommendations and Results

Decrease Digital to 25% and upweight OOH to 10%

Extra **0.2297** Purchase Intent points generated using the same budget

**Total media ROAS** increases from **0.1243** to **0.1352**  
**+9% Total media ROAS** increase

Vivix spend Scenario based on average brand 2022  
Constraints applied: Retail Grocery maximums TV 41%, Print 5%, Radio 20%, and minimum of 25% for Digital

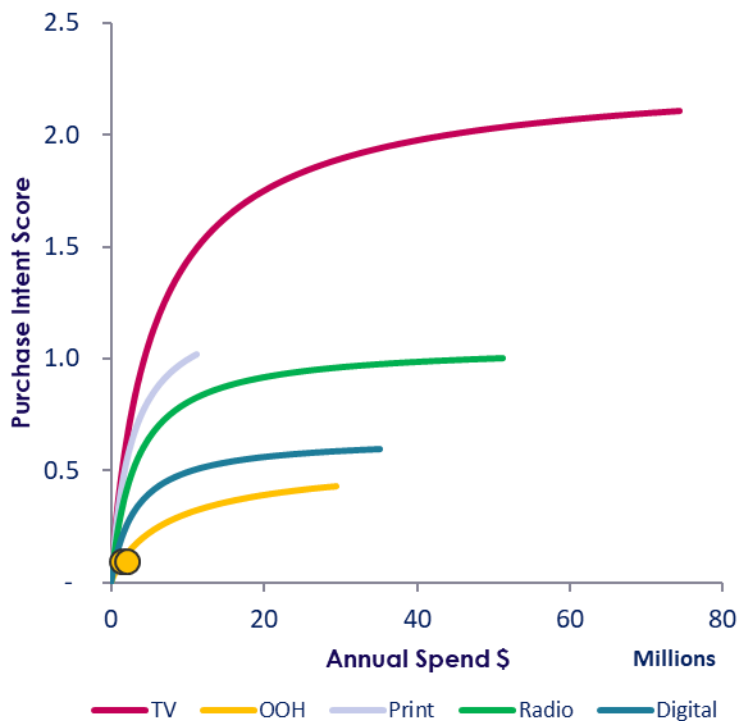




# Retail Grocery FIRST INCREMENTAL OOH increase for Purchase Intent ROAS

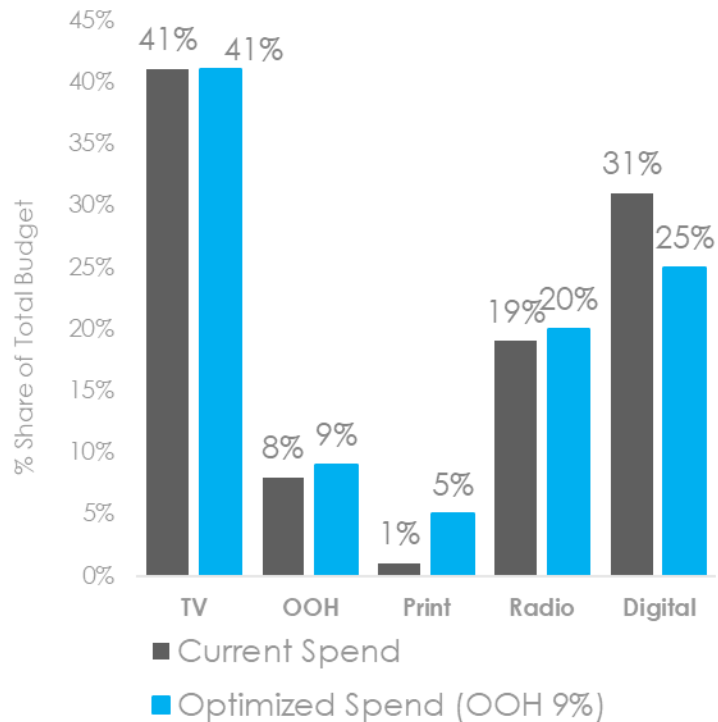
Increase OOH from 8% to 9% (optimal OOH is 10%)

Purchase Intent Curves: dots show incremental OOH increase 8- 9 %



Reallocation of current budget to optimize – incremental step for OOH

OOH incremental step: 8% to 9%



Recommendations and Results

**Incremental upweight OOH**  
from **8% to 9%**  
(Downweight Digital)

**Extra 0.2228** Purchase Intent points generated using the same budget

**Total media ROAS** increases from **0.1243** to **0.1359**

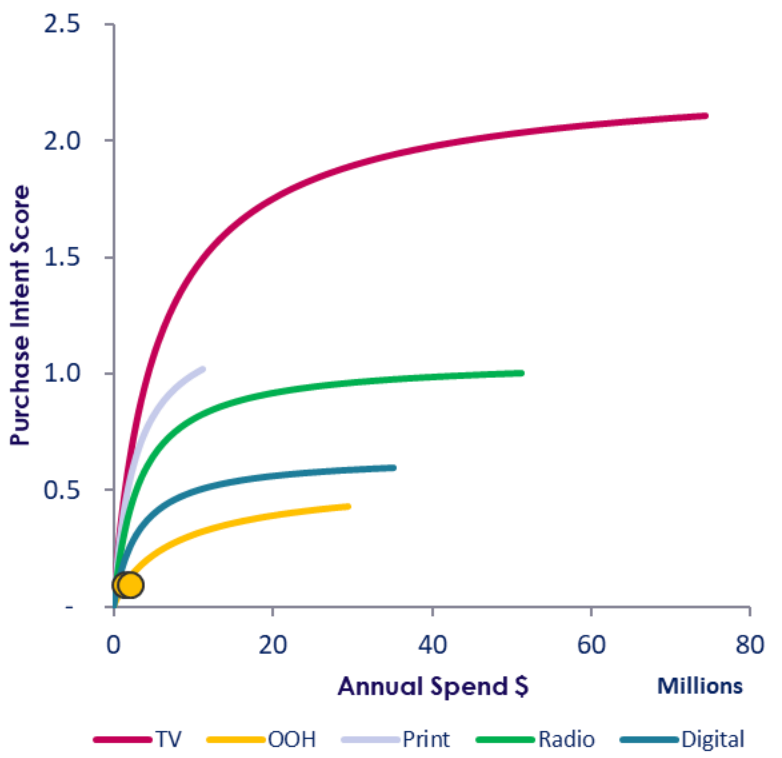
**+9% Total media ROAS** increase



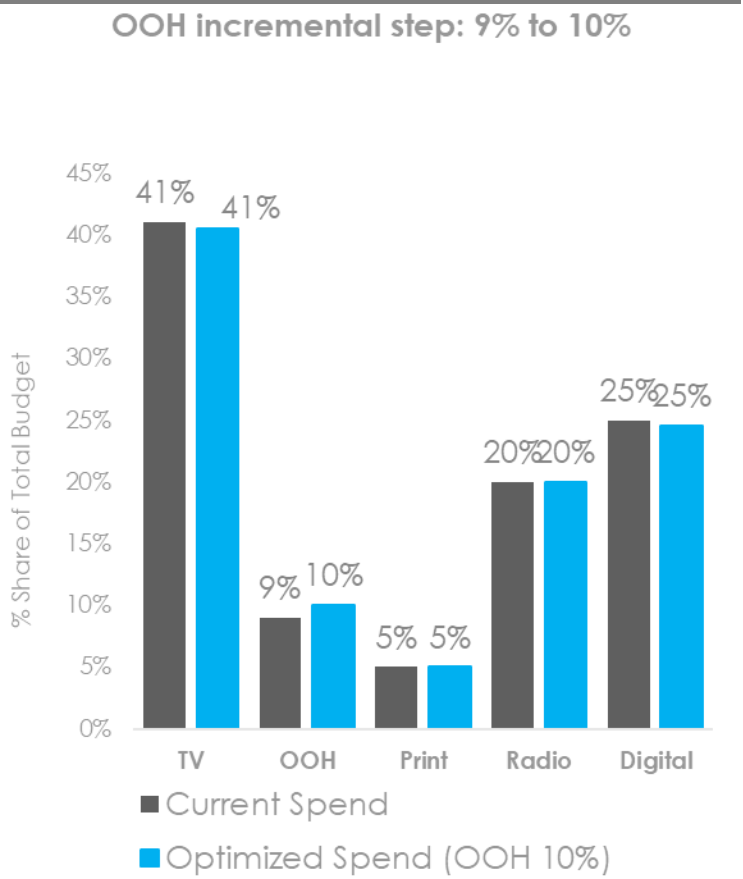
# Retail Grocery FINAL INCREMENTAL OOH increase for Purchase Intent ROAS

Increase OOH from 9% to 10% (optimal OOH is 10%)

Purchase Intent Curves: dots show incremental OOH increase 9- 10%



Reallocation of current budget to optimize – incremental step for OOH



Recommendations and Results

**Incremental upweight OOH from 9% to 10%**  
(Downweight Radio)

**Extra 0.0069** Purchase Intent points generated using the same budget

**Total media ROAS** stay the same at **0.1352**



# Retail Grocery Purchase Intent: optimized vs incremental steps in increasing OOH% allocation

The first incremental increase from 8 to 9% generates the largest part of the optimized Purchase Intent increase

## Full Optimization

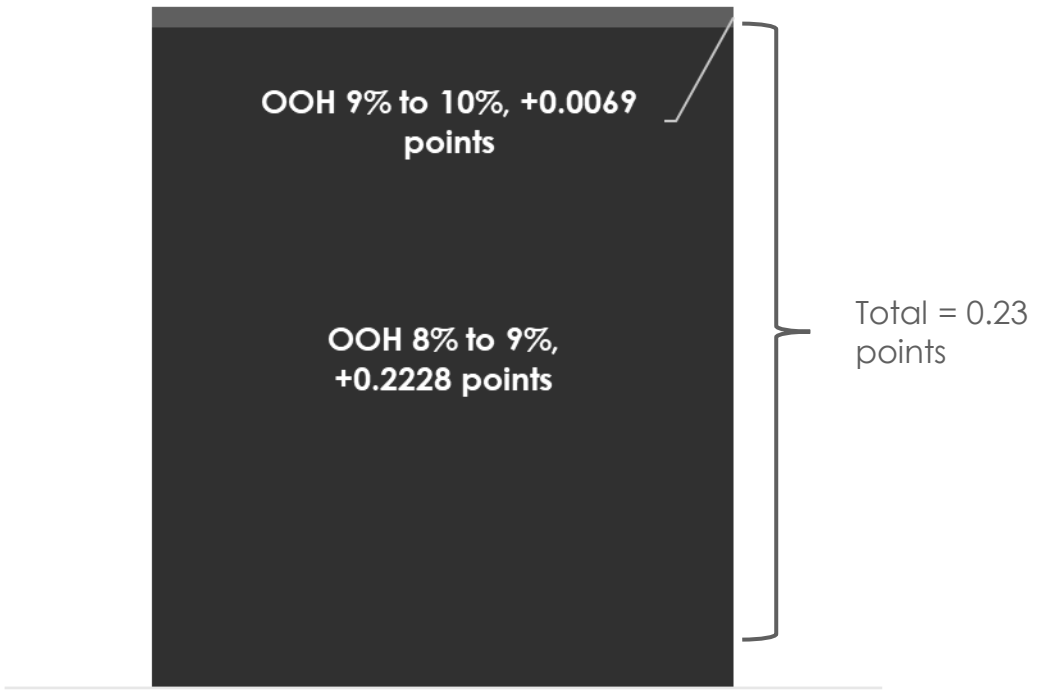
Additional Purchase Intent points generated from optimizing OOH straight to 10%



Additional Purchase Intent generated full optimization

## Incremental Optimization

Additional Purchase Intent points generated from incremental increases in OOH



Additional Purchase Intent generated Incrementally

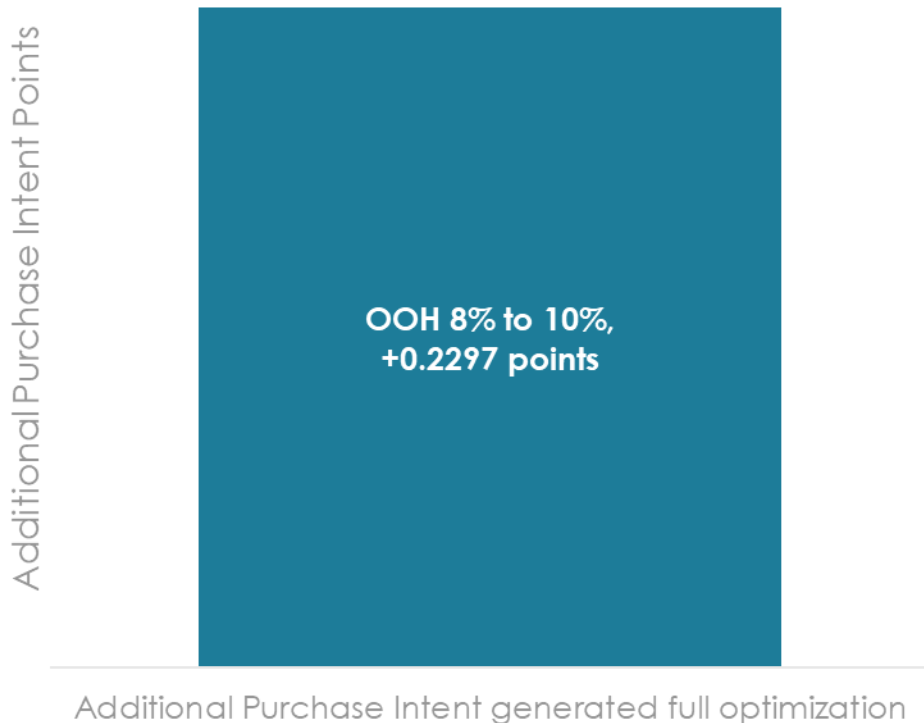


# Retail Grocery Purchase Intent: optimized vs incremental steps in increasing OOH% allocation

The first incremental increase from 8 to 9% generates the largest part of the optimized Purchase Intent increase

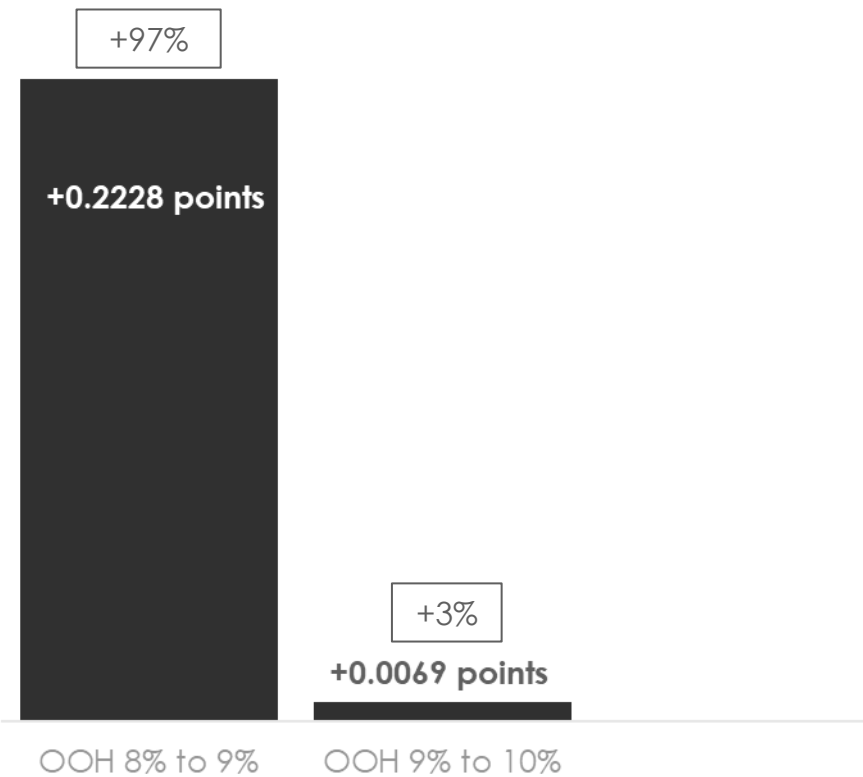
## Full Optimization

Additional Purchase Intent points generated from optimizing OOH straight to 10%



## Incremental Optimization

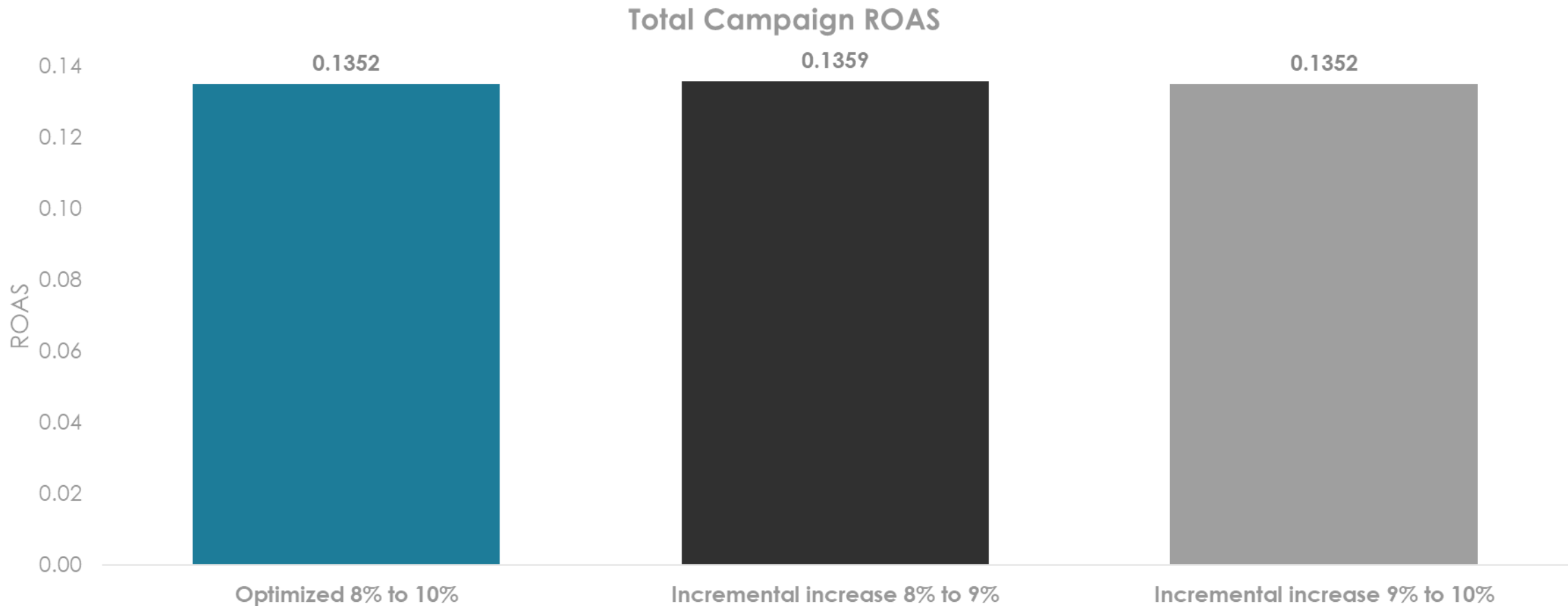
Additional Purchase Intent points generated from incremental increases in OOH



# Retail Grocery Optimizing OOH to 10% vs Incremental increases in OOH allocation ROAS



Optimal ROAS with optimal 10% OOH allocation is also achieved within the 8-9% OOH allocation





# Appendix

# 2022 Average Spend for all categories by channel

Automotive category has the highest spend

Channel	Automotive Average Annual Spend per brand 2022 \$m	CPG Food Average Annual Spend per brand 2022 \$m	Retail Grocery Average Annual Spend per brand 2022 \$m
TV	153.58	20.07	8.54
OOH	2.57	0.17	1.65
Print	2.32	3.20	0.30
Radio	4.63	0.29	4.03
Digital	49.04	4.39	6.51
<b>TOTAL</b>	<b>212.14</b>	<b>28.12</b>	<b>21.03</b>

# Optimising Brand Awareness ROAS – OOH spend ranges current vs optimized

By category, for Small vs Medium vs Large Brands

Current OOH spend range:

OOH Spend Range current \$m	Small	Medium	Large	Spend range current
<b>Automotive</b>	1.00	0.58	6.53	\$0.58m to \$6.53m
<b>CPG Food</b>	0.06	0.02	0.42	\$0.02m to \$0.42m
<b>Retail Grocery</b>	0.31	0.61	4.04	\$0.31m to \$4.04m

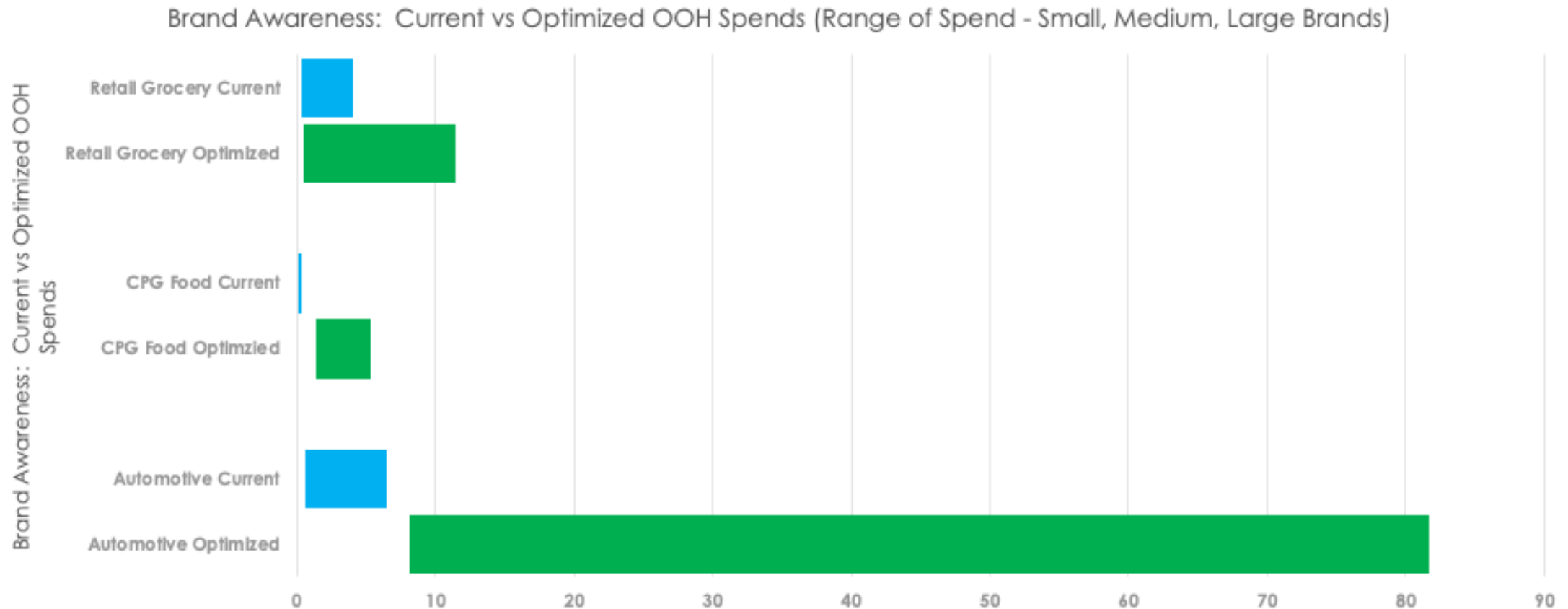
Optimized OOH spend range:

OOH Spend Range optimized \$m	Small	Medium	Large	Spend range optimized
<b>Automotive</b>	8.10	31.92	81.72	\$8.10m to \$81.72m
<b>CPG Food</b>	1.40	2.57	5.29	\$1.40m to \$5.29m
<b>Retail Grocery</b>	0.46	2.29	11.44	\$0.46m to \$11.44m



# Optimising Brand Awareness ROAS – OOH spend ranges current vs optimized

By category, across small, medium and large brands



Note: spend ranges based on average 2022 Vivvix brand spend

# Optimising Consideration ROAS – OOH spend ranges current vs optimized

By category, for Small vs Medium vs Large Brands

Current OOH spend range:

OOH Spend Range current \$m	Small	Medium	Large	Spend range current
<b>Automotive</b>	1.00	0.58	6.53	\$0.58m to \$6.53m
<b>CPG Food</b>	0.06	0.02	0.42	\$0.02m to \$0.42m
<b>Retail Grocery</b>	0.31	0.61	4.04	\$0.31m to \$4.04m

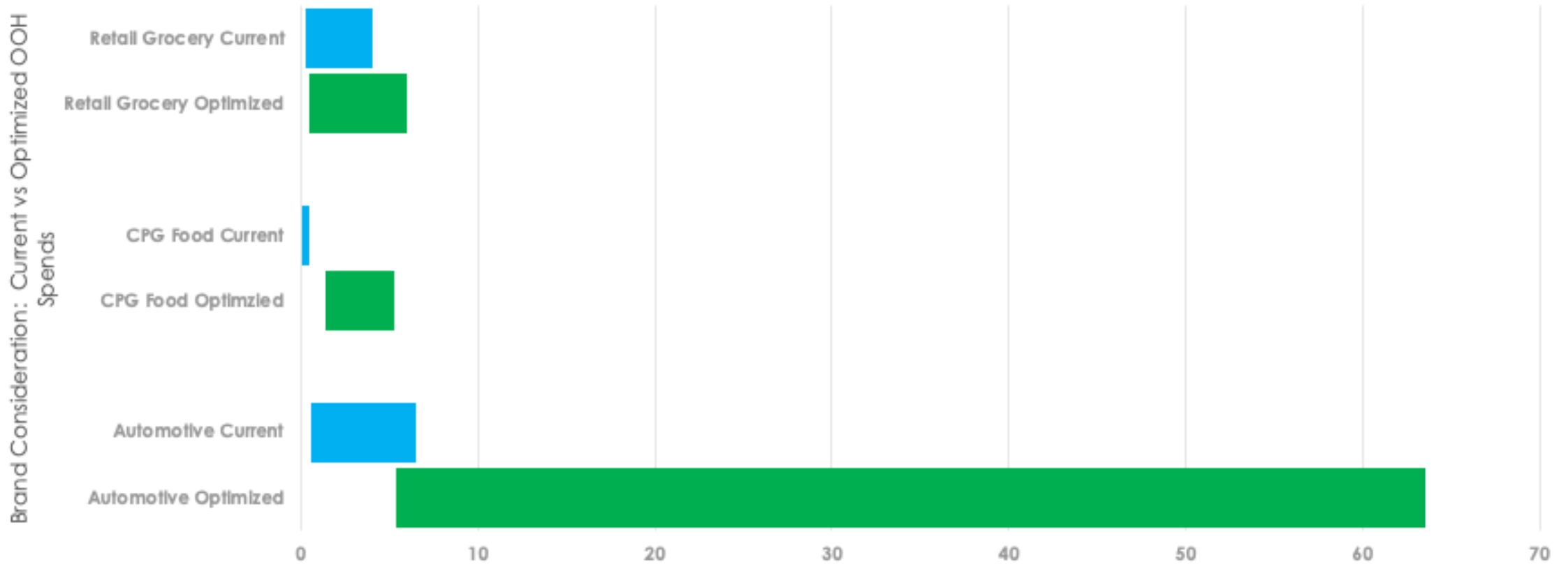
Optimized OOH spend range:

OOH Spend Range optimized \$m	Small	Medium	Large	Spend range optimized
<b>Automotive</b>	5.40	23.52	63.56	\$5.40m to \$63.56m
<b>CPG Food</b>	1.35	2.51	5.29	\$1.35m to \$5.29m
<b>Retail Grocery</b>	0.46	0.91	5.96	\$0.46m to \$5.96m

# Optimising Consideration ROAS – OOH spend ranges current vs optimized

By category, across small, medium and large brands

Brand Consideration: Current vs Optimized OOH Spends (Range of Spend - Small, Medium, Large Brands)



Note: spend ranges based on average 2022 Vivvix brand spend

# Optimising Purchase Intent ROAS – OOH spend ranges current vs optimized

By category, for Small vs Medium vs Large Brands

Current OOH spend range:

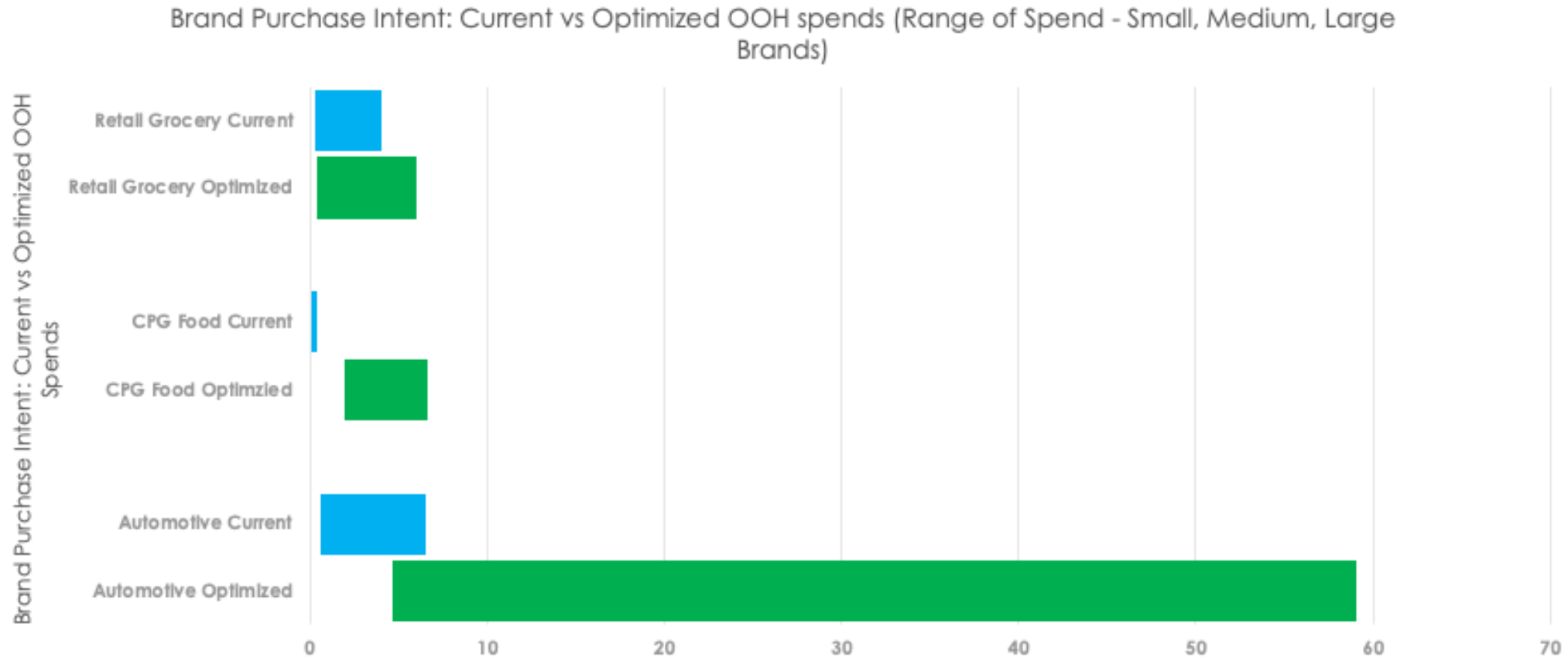
OOH Spend Range current \$m	Small	Medium	Large	Spend range current
<b>Automotive</b>	1.00	0.58	6.53	\$0.58m to \$6.53m
<b>CPG Food</b>	0.06	0.02	0.42	\$0.02m to \$0.42m
<b>Retail Grocery</b>	0.31	0.61	4.04	\$0.31m to \$4.04m

Optimized OOH spend range:

OOH Spend Range optimized \$m	Small	Medium	Large	Spend range optimized
<b>Automotive</b>	4.63	21.84	59.02	\$4.63m to \$59.02m
<b>CPG Food</b>	1.92	3.53	6.61	\$1.92m to \$6.61m
<b>Retail Grocery</b>	0.39	1.27	5.96	\$0.39m to \$5.96m

# Optimising Purchase Intent ROAS – OOH spend ranges current vs optimized

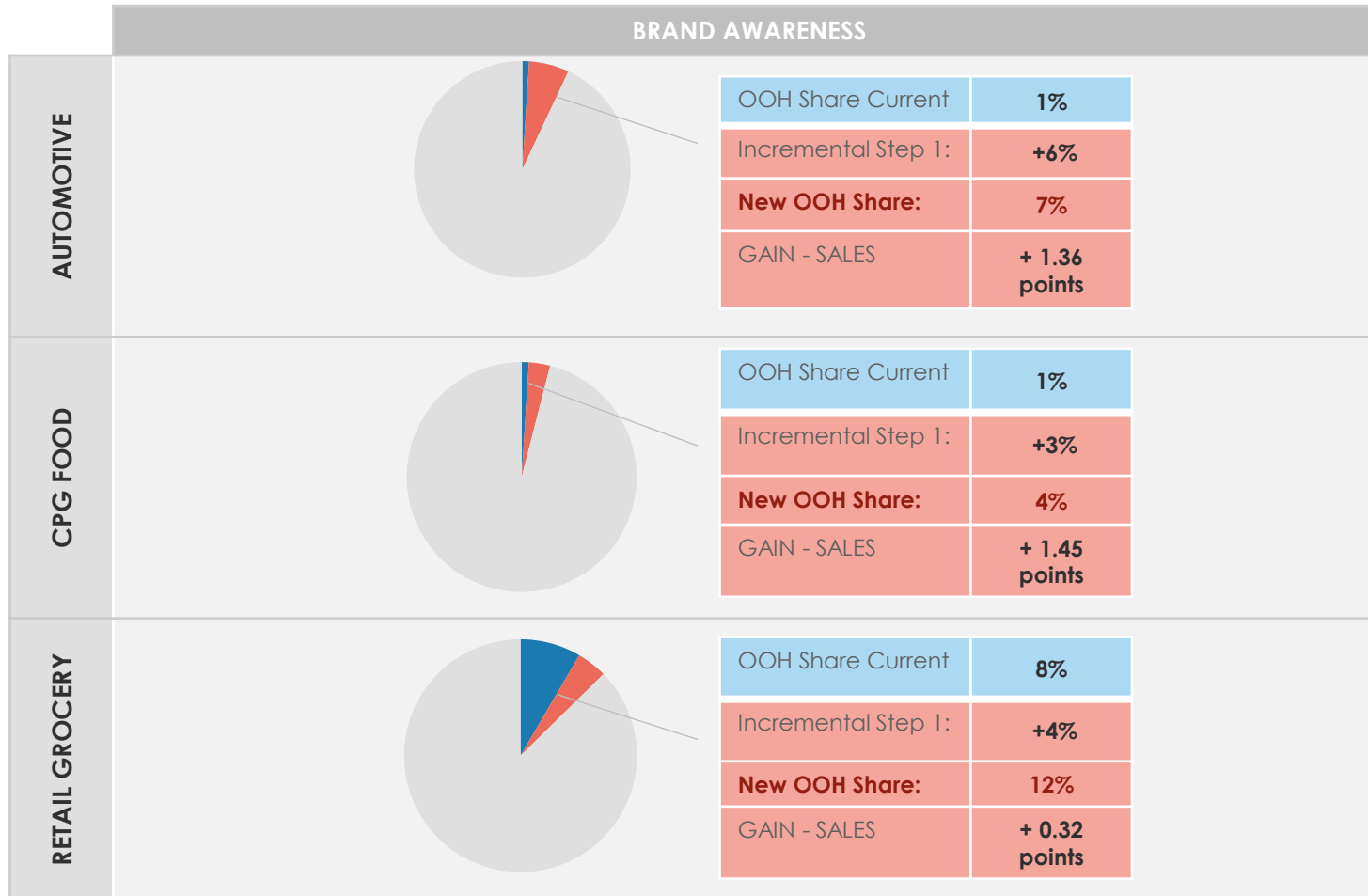
By category, across small, medium and large brands



Note: spend ranges based on average 2022 Vivvix brand spend

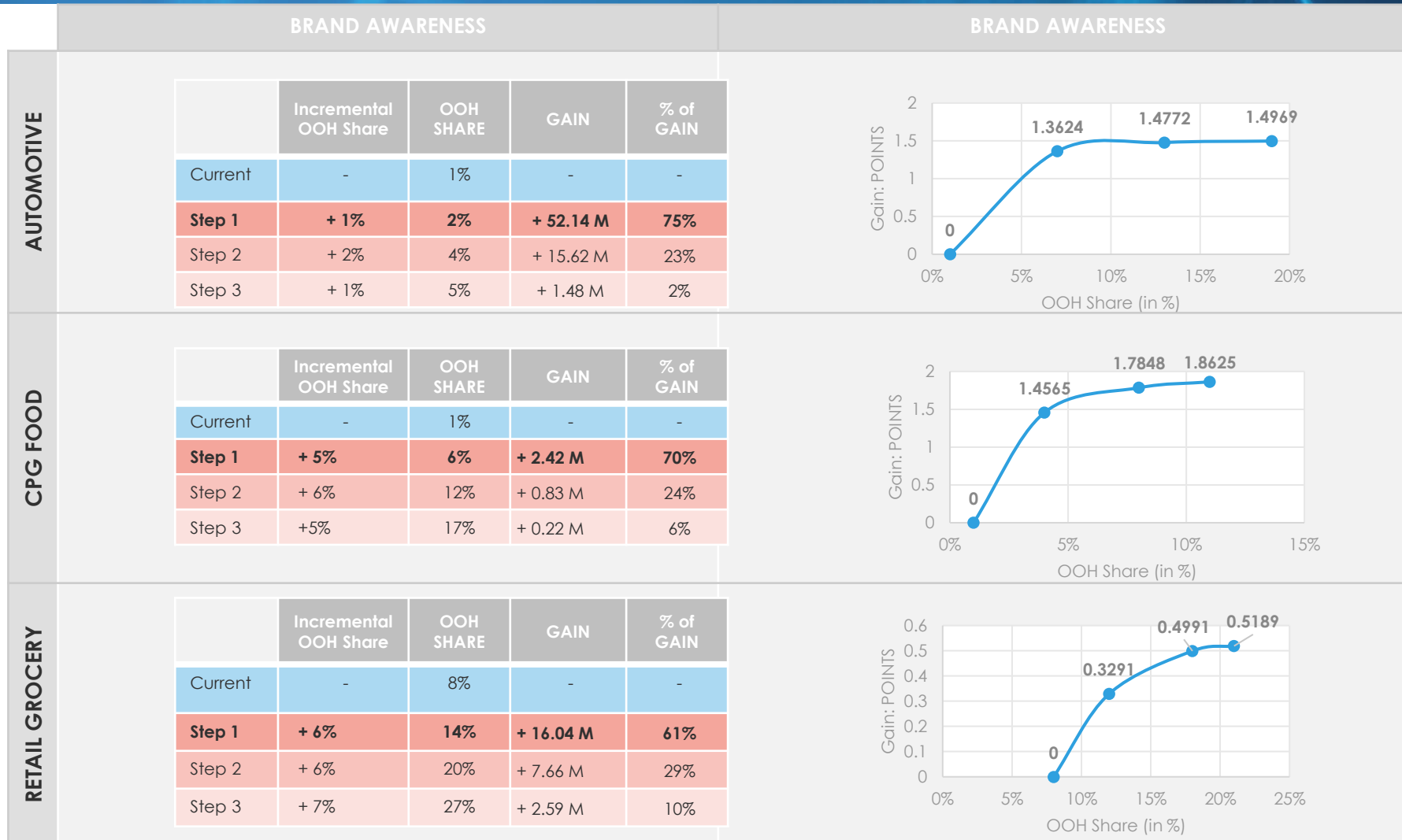
# The first incremental increase in Brand Awareness OOH achieves Significant Gains

Across sales - Summary Chart for Step 1



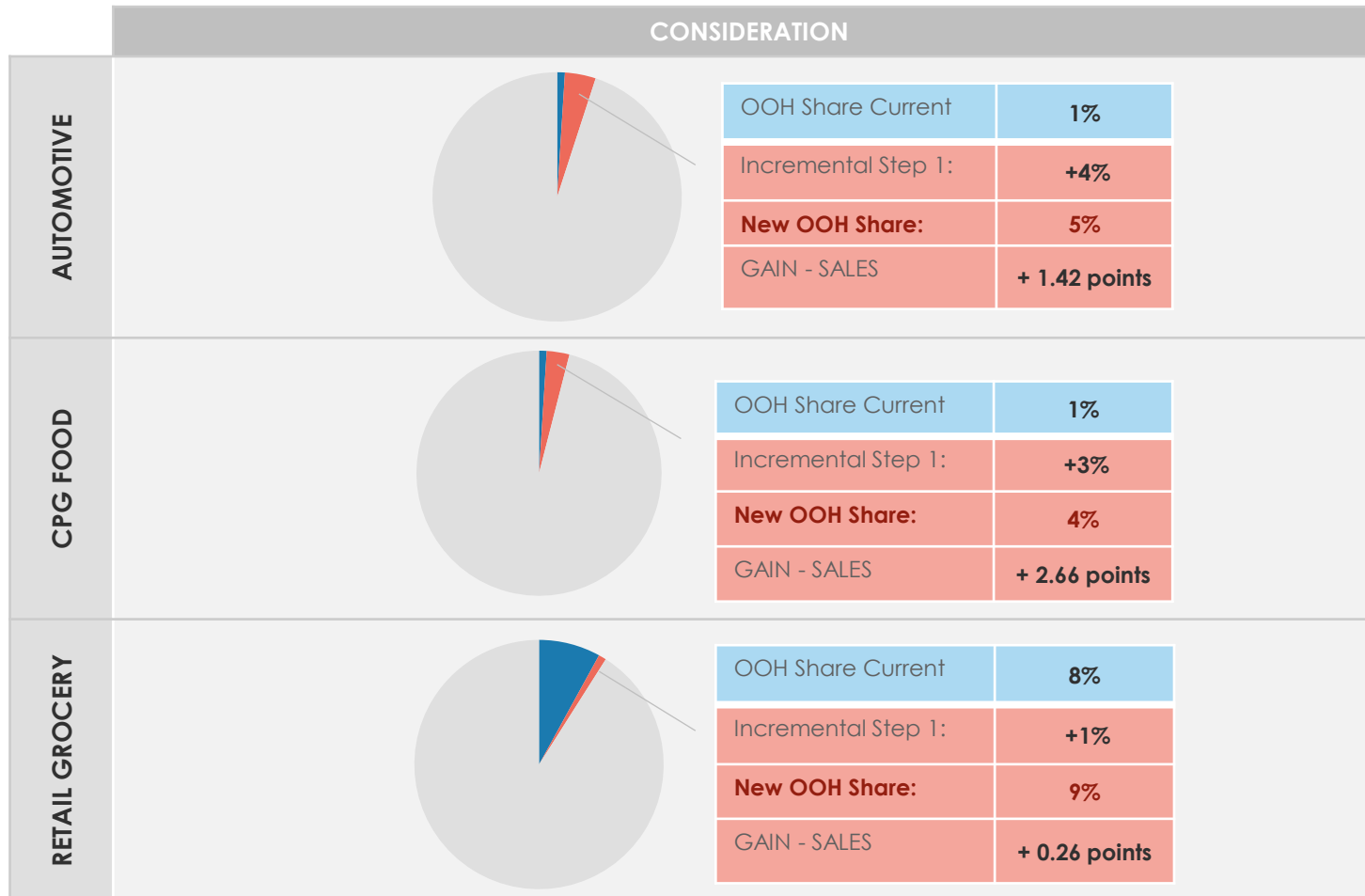
# Optimized Media Plan through Incremental increases in Brand Awareness OOH Share

## Incremental Steps Summary Chart across Brand Awareness



# The first incremental increase in Consideration OOH achieves Significant Gains

Across sales - Summary Chart for Step 1





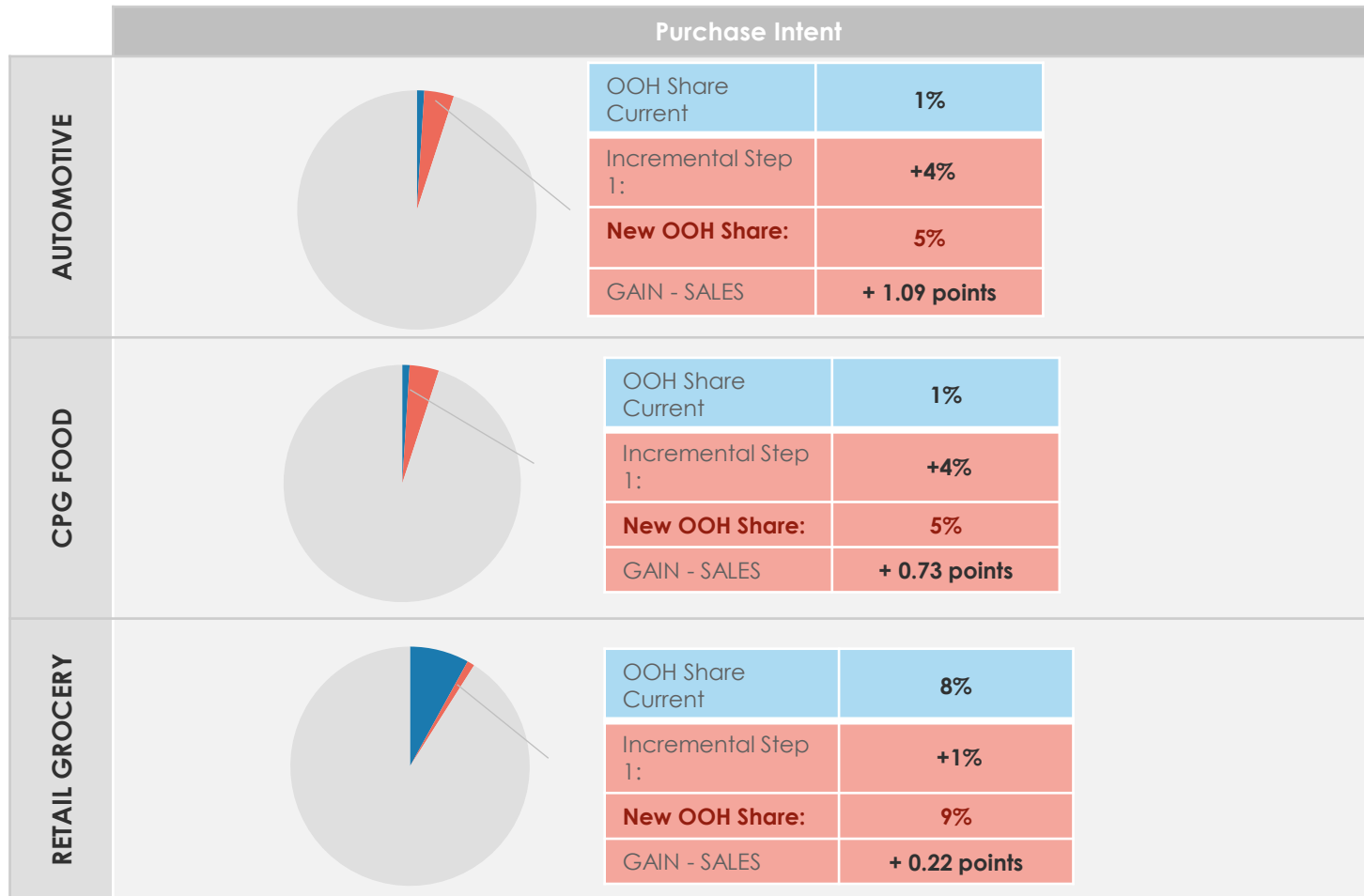
# Optimized Media Plan through Incremental increases in Consideration OOH Share

## Incremental Steps Summary Chart across Consideration



# The first incremental increase in Purchase Intent OOH achieves Significant Gains

Across sales - Summary Chart for Step 1



# Optimized Media Plan through Incremental increases in Purchase Intent OOH Share

## Incremental Steps Summary Chart across Purchase Intent

