May 10th 2021

Nielsen in COVID: Measurement Defects and TV's Consequences

VAB

There Is Much More to Convey About Nielsen's COVID-period Data Defects, and The Effects of Those Defects on Nielsen's *Largest Clients*

Nielsen's year-long COVID suspension (March 2020 thru March 2021) of in-home field servicing led to polarized 2021 opinions and consequences between Nielsen and their largest clients – the national multiscreen TV network groups

It Was the Steep, Progressive Drops in Nielsen's Measurement of TV Use Of-Any-Kind (TUT) That Was both Counter-Intuitive & Controversial

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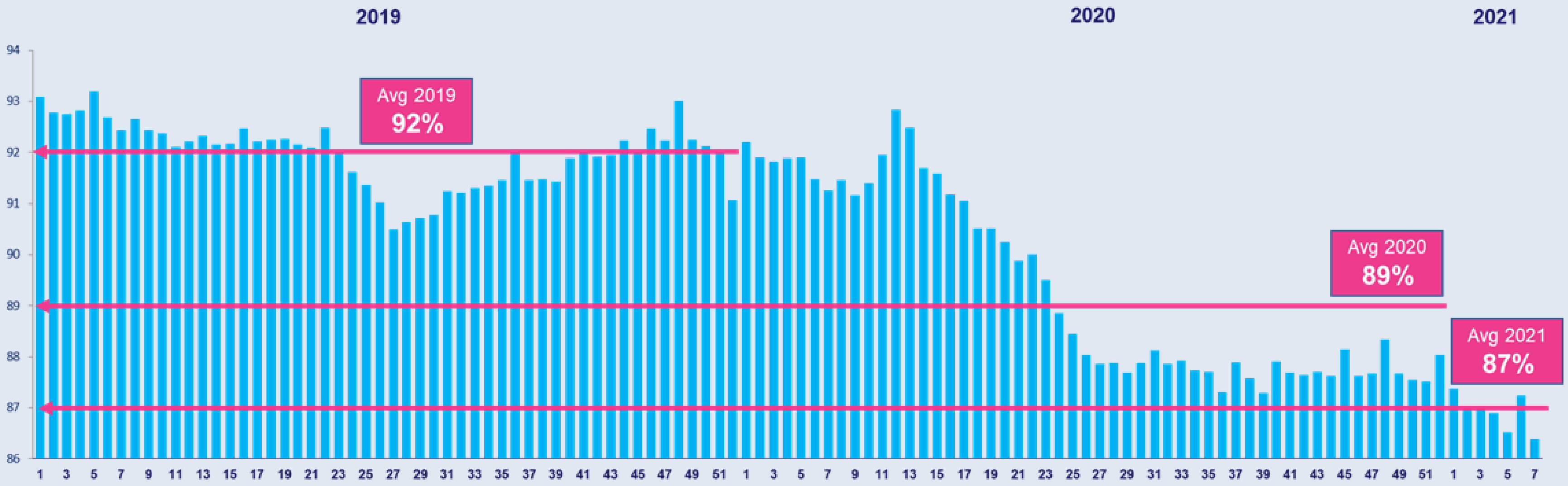
- **Nielsen COVID-period TV usage and TV measurement data depicted steady, steep declines in TV usage that began dropping in April 2020 and got <u>progressively worse thru Feb. 2021</u>**

(Chart enclosed)



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Unbeknownst to Nielsen's TV ratings clients, Nielsen had made extensive changes to their field procedures and their household withholding processes in June 2020

VAB

It Took Major Pressure From Nielsen's TV Clients & The VAB for Nielsen to Begin to Communicate About, or Address Their COVID Changes – In *Any* Way

The procedural changes were <u>never communicated</u> or brought to the attention of Nielsen's clients, including a communication Nielsen made at the 6-month mark of COVID:

- **In that letter (Sept. 10, 2020) Nielsen reassured its clients that they were taking the necessary (steps) to "*innovate and maintain measurement that meets high-quality standards we have set for ourselves and that you have come to expect*"**

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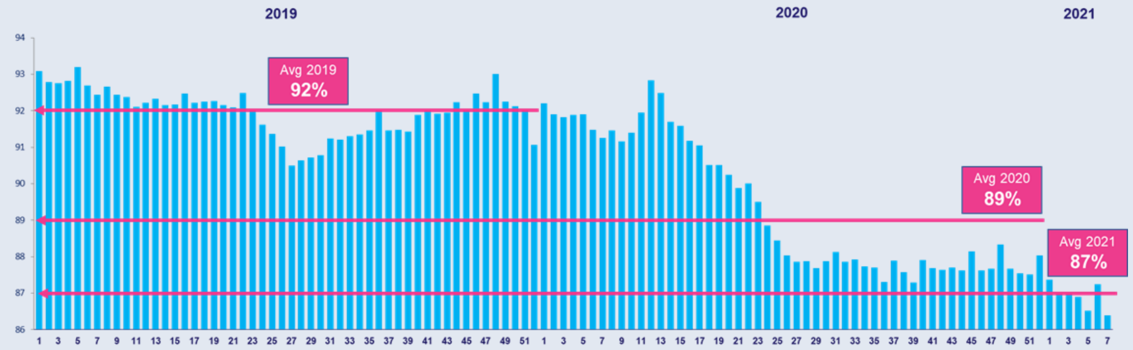
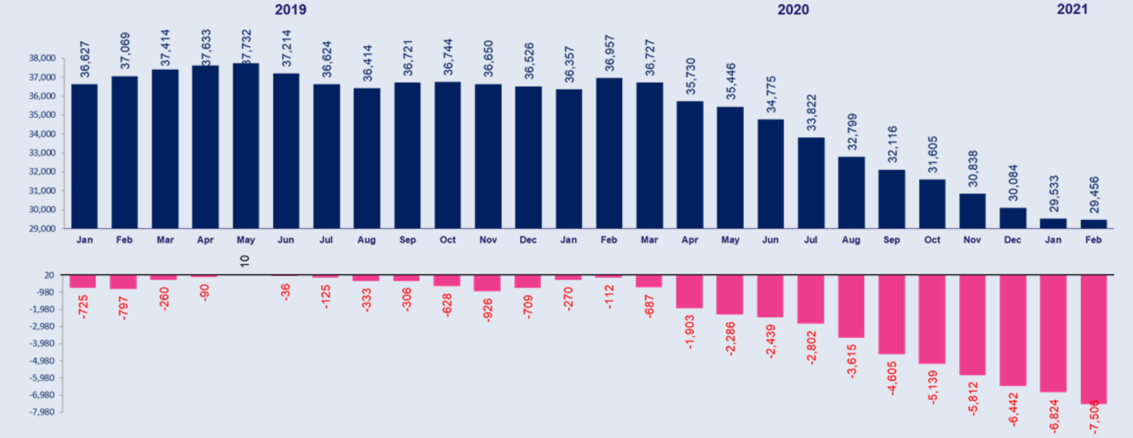
Throughout 1Q 2021 – the national TV networks and the VAB brought significant, continuous evidence of major COVID-period data defects to the attention of top Nielsen execs…

… While that prompted Nielsen to resume in-home servicing in late March 2021, top Nielsen execs steadfastly and publicly denied any defects in their published ratings, stating that the overall panel trends were reflective of valid viewing behavior.

Nielsen Denied That Their Shrinking & Degraded Measurement Panel Had Caused Any Problems…

Nielsen further denied any corollary between their shrinking COVID panel size and TV's shrinking TV usage… (Charts enclosed)**… maintaining that their COVID data processes were fully reliable and their TV usage & measurement data was accurate.**





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But Nielsen had indeed significantly changed and weakened their processes for generating ratings …

- **Pre-pandemic (Feb. 2020) Nielsen had 36.9k homes in monthly TV panel**
- **A year later: (Feb. 2021) that panel shrunk to 29.5k homes (-20%)** (Chart enclosed)
- **9,400** (32%) **of those 29,500 homes were *impaired* homes - the 9,400 *most malfunctioning***
- **All 9,400 would have been removed from the TV panel pre-pandemic**

Denial, Deflection & Delay from Nielsen – Answers & Insights Were Not Coming

As the list of questions asked by the VAB (and their network members) to Nielsen kept piling up, no clear answers or analyses came in response from Nielsen…

- **120% rise in zero-tuning homes during COIVID?**
- **Impact of 9,400 impaired homes on COVID TV data?**
- **Impact of 28% loss in Black homes from panel, and 23% loss of Hispanic homes?**
- **Impact of > 20% loss of larger homes (4+ people) from panel?**
- **Impact of >20% loss of homes with 3+ sets from panel?**
- ***Declines* in COVID-period streaming among 18-34s…contrary to all other sources?**

(Charts enclosed)

Nielsen's April 9th COVID "White Paper" Did Not Answer Their Client's Questions

As the list of questions asked by the VAB (and their network members) to Nielsen kept piling up, no clear answers or analyses came in response from Nielsen…

Instead: Nielsen issued an April 9th COVID "white paper" that ignored the issues raised by VAB/TV; but focused on very general rationalizations for why TV usage and ratings declined so much over the past year…

- ***"The media industry, just like all others, wasn't prepared for the grand shift in daily life that the pandemic forced, seemingly overnight."***
- ***"Consumers have changed their content consumption behavior with shifts to different devices (computer/mobile) and different mediums (podcasts, streaming audio & video)… we recommend taking these shifting consumer dynamics into consideration as you plan for the future"***

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- ***"While we have seen changes in our panel metrics, based on sample size, representation and compositions from additional validation sources, Nielsen remains confident in the quality of the estimates we produce. Nielsen continues to stand behind our audience estimates as representative of media consumption."***

None of The VAB Questions Were Answered

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VAB April 14th Letter to Nielsen CEO David Kenny For Three Immediate Audits:

1. Third Party, Independent Audit: VAB is requesting Nielsen's full cooperation and full access to an independent third-party auditor. The independent auditor will be tasked to verify the accuracy of Nielsen's outcomes data during the March 2020 – March 2021 time period. As part of the independent "outcomes" audit process, the auditor will have the ability, autonomy and authority to create a recommendation that could include a market-facing numerical adjustment factor.

2. Immediate audit to be conducted by the MRC Auditors Ernst & Young: The VAB calls for an immediate process audit of Nielsen's COVID changes be performed by MRC auditors Ernst & Young. All accredited services are required to disclose documentation of any changes to the service as well as full disclosure of those changes and detailed tracking of KPIs. The VAB believes it is essential to disclose what KPIs MRC and Nielsen monitored both before and after the changes were made throughout the pandemic.

3. Disclose Findings of the 9,400 Homes: The VAB calls on Nielsen to disclose the findings on the "9,400 homes" it intends to resume in-home maintenance on, including the findings from the 2,058 homes where servicing has already been "completed." The full report of 9,400 homes should also be MRC audited as many 2020 issues were all a direct result of Nielsen relaxing/changing the restrictions, and methodology used to produce the audience estimates (i.e. including but not limited to changes to faults, flags, crediting rules, weights, etc.)

Nielsen Refuses VAB Call for Independent Audit, Offering Only a Business-as-Usual MRC Audit Process

- ***"We have been clear and transparent with the MRC and our clients on every change in protocol we needed to make during COVID to keep our people and our panelists safe. We also conducted of own assessment of the drivers of the reported audience estimates in the white paper we shared with you last week"***

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MRC Reached Out to VAB on Our Call for Disclosure on the Impact of the 9,400 Impaired Homes on COVID TV Data

MRC had already begun examining the 9,400 impaired homes effect on COVID TV usage & measurement data

Results to be shared at May 10th MRC TV Committee meeting (comprised of both TV buyside & sellside clients)

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Two May 6th Revelations Underscore the Polarized Consequences Of Nielsen's Suspension of COVID In-Home Field Servicing:

As part of Nielsen's 5/6/2021 1Q earnings call – they cite the $100 million operational cost savings (savings from closing Nielsen's Field and Call Center operations – used to maintain the quality of Nielsen's TV measurement panel)… which played a major role in high Nielsen profits.

That Same Day:

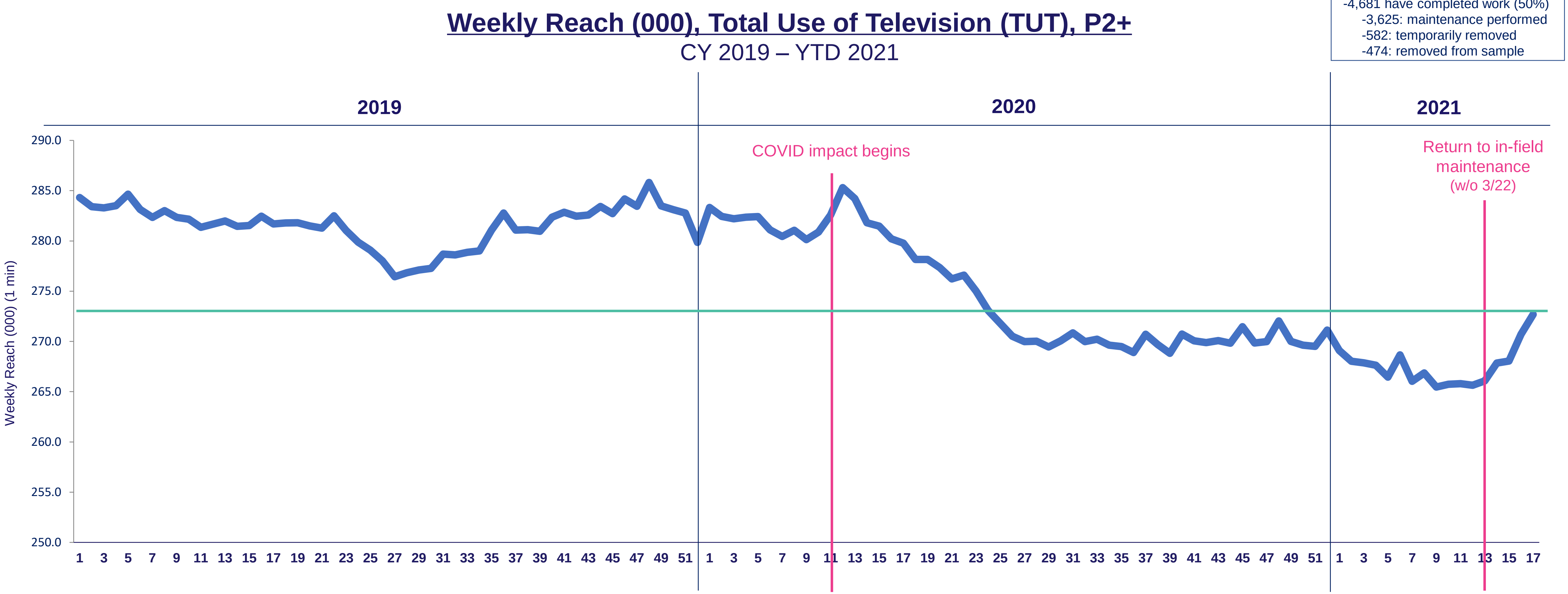
VAB issues charts showing the effects of Nielsen "fixing" the first half of the 9,400 impaired homes – with the TUT (Total homes using Television) declines reversing immediately due to Nielsen repairs… (Charts enclosed)

- This obvious corollary contradicts Nielsen's repeated claim that their degraded COVID panel did not lead to exaggerated declines in COVID TV usage.

TUT weekly reach began to quickly recover in April once Nielsen returned to in-field maintenance for their TV panel – and is at its highest level in the last 10 months (June ‘20)

9,400 homes requiring in-person maintenance

as of 4/22:
-4,681 have completed work (50%)
-3,625: maintenance performed
-582: temporarily removed
-474: removed from sample



Source: Nielsen R&F Time Period Report, Live+7, Total Day, P2+. Viewing Source: Total Use of Television. Time period: w/o 12/31/18 – w/o 4/19/21. The numbers on the horizontal axis represent the week # of the appropriate calendar year.

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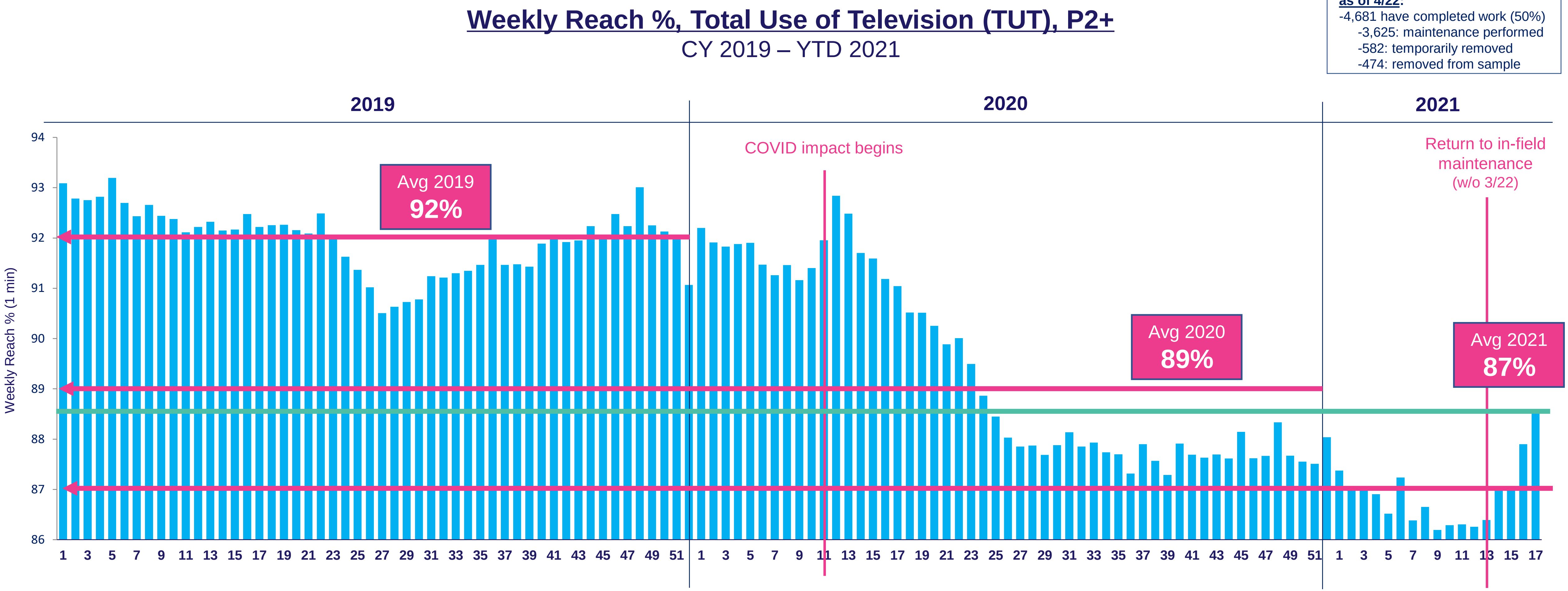

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The May 10th MRC TV Committee Meeting Reviews a First "Simulation" on the Negative Impact of the 9,400 Impaired Homes:

The simulation Nielsen performed revealed a range of adjustment factors to be used to adjust for understated TUT & PUT

MRC saw fit to release a statement of their own to comment Nielsen's 5/10 analysis and provide some additional guidance to the TV marketplace

- This is an unprecedented occurrence
- Both Nielsen's analysis and the MRC statement essentially contradict *months* of Nielsen's denials on any significant problem, and it calls for deeper scrutiny into the accuracy of their COVID period TV data.

Apparently Part of May 10th MRC Statement (Highlights)

MRC believes that Total Usage of Television (TUT) by persons 18-49 was understated by approximately 2 to 6 percent for the February 2021 measurement period…

MRC believes that Persons Using Television (PUT) estimates among the persons 18-49 group was understated by a range of 1 to 5 percent in February 2021.

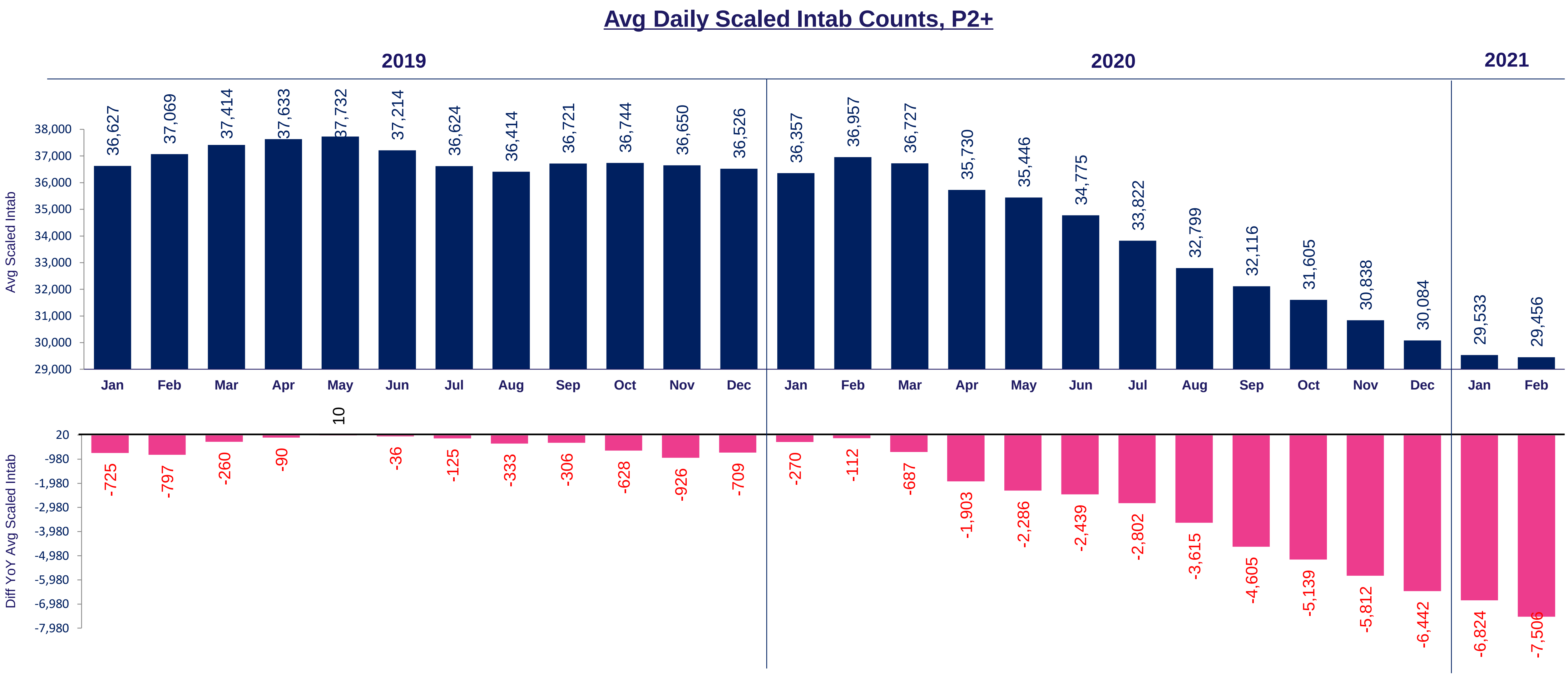
Nielsen Ad Intel reported $3.9 Billion in National Ad Spend for Feb. ’21, A Fair Base for Calculating “The Cost” of Nielsen Undercounting TV Audiences

Feb. 2021 TV Ad Spend Estimate*		Range of TV Adjustment Factors	Theoretical 1-Month Cost Undercounted Audience	Theoretical 12-Month Cost Undercounted Audience
$3.9b	X	+1.0%	$39MM	$468MM
$3.9b	X	+1.5%	$59MM	$702MM
$3.9b	X	+2.0%	$78MM	$936MM
$3.9b	X	+2.5%	$98MM	$1.2b
$3.9b	X	+3.0%	$117MM	$1.4b
$3.9b	X	+3.5%	$137MM	$1.6b
$3.9b	X	+4.0%	$156MM	$1.9b
$3.9b	X	+4.5%	$176MM	$2.1b
$3.9b	X	+5.0%	$195MM	$2.3b
$3.9b	X	+5.5%	$215MM	$2.6b
$3.9b	X	+6.0%	$234MM	$2.8b

* Source: Nielsen Ad Intel, March 2020 – March 2021, broadcast months. Cable TV, Network TV (broadcast), Spanish language cable TV, Spanish language network TV (broadcast), includes all dayparts, excludes promos and PSAs.

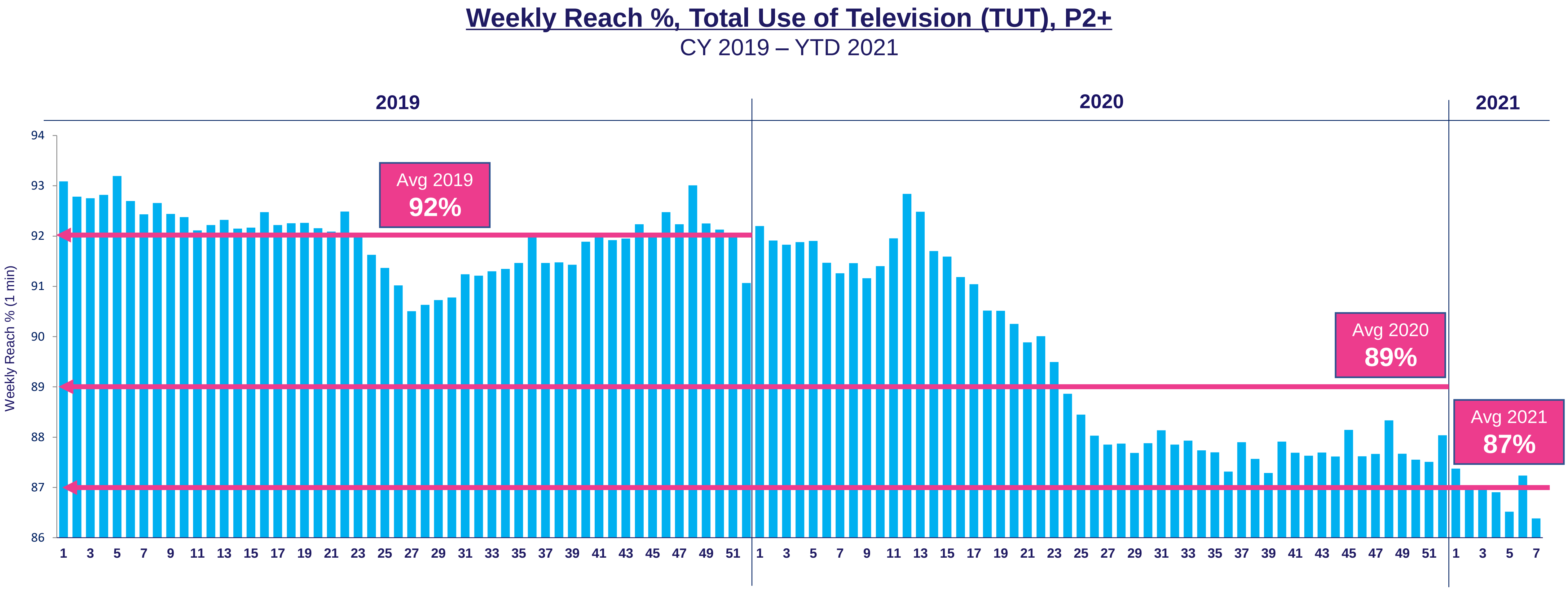
VAB Charts

Since COVID Onset - Nielsen Lost 20% of its Panel Respondents…
Compounding Each Successive Month Nielsen Did Not do Field Service



Source: Nielsen NPower, Universe Estimate, UE and Sample Information Report, P2+. Reflects broadcast months from January 2019 – February 2021 (through w/o 2/8/21). 2019 YoY comparisons vs. 2018 broadcast month data.

Nielsen Issued Data of Steep TV Usage Declines During COVID - Corollary to Their Panel Declines… Contrary to a Mountain of Other COVID TV Data



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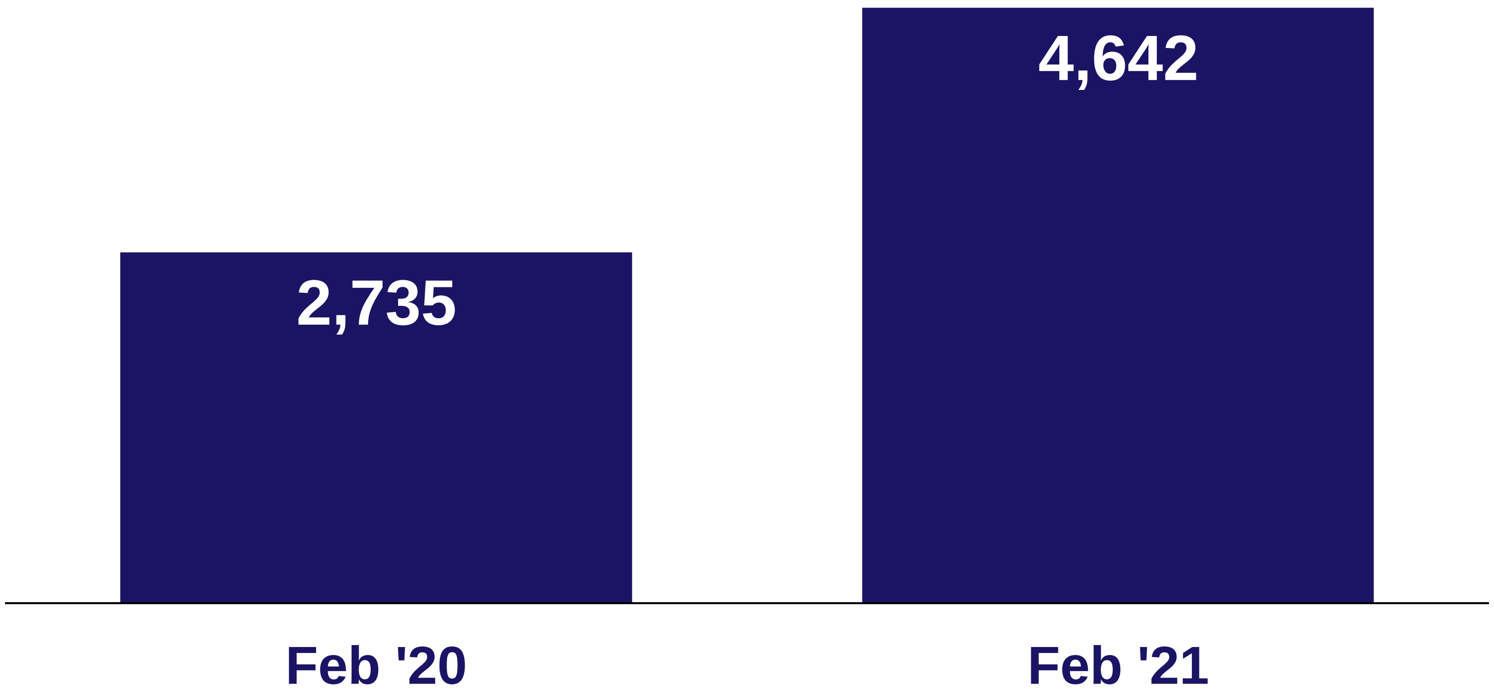
A Major Defect of the Degraded Nielsen Panel: a 120% Increase in Share of Homes Watching No Television of Any Type During COVID – a TV Dependent Time

Total Use of Television (TUT) Segmentation: Non-Viewers / % of Non-Viewers

February 2020 vs. February 2021



	Feb '20	Feb '21
Non-Viewers % of P2+ Sample	**2.5%**	**5.6%**

Source: Nielsen NPower, Number of Minutes Time Period Segmentation Report, P2+. Reflects broadcast months. % = Non-viewers as a % of each period's independently unified (75%) sample.

Clear Conclusion: With Nielsen Doing No At-Home Panel Servicing During COVID… An All-Time High of Empty or Non-Responding Homes Were Factored Into COVID TV Audience Measurement

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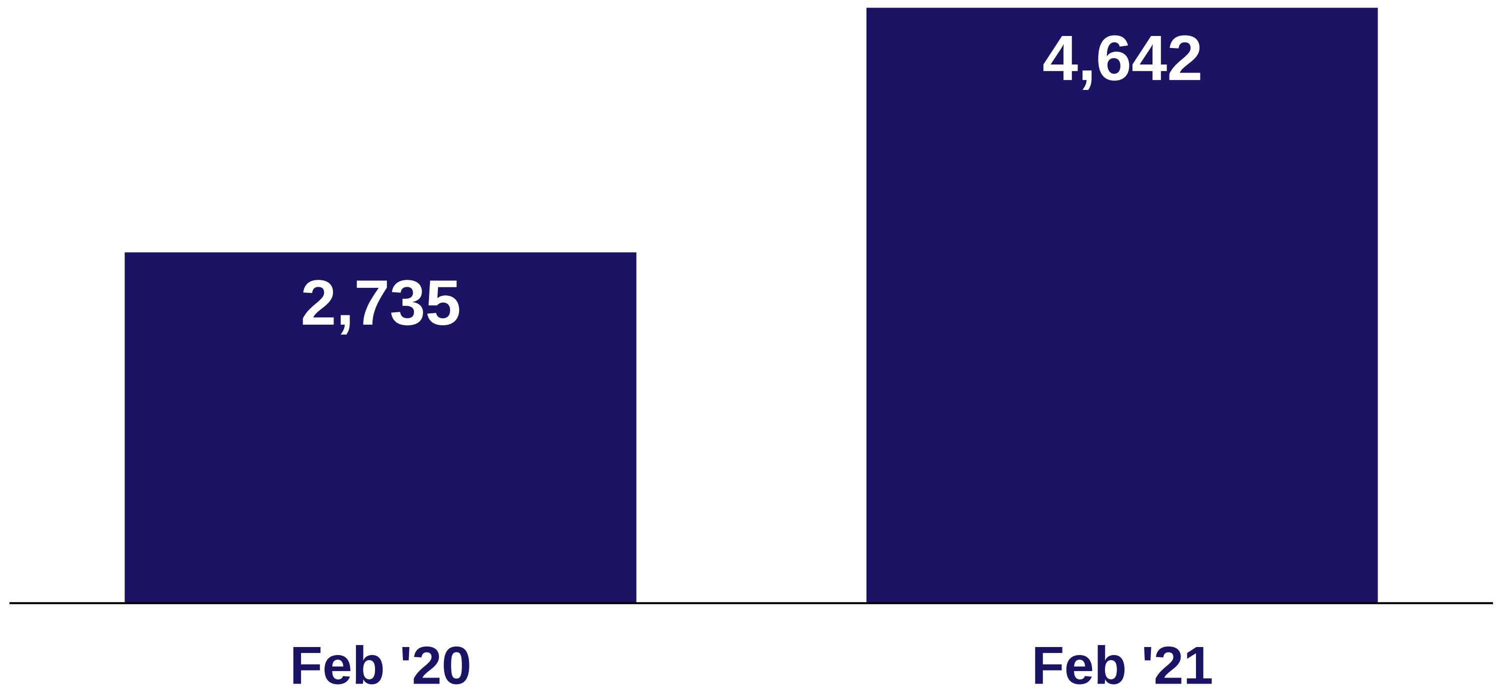

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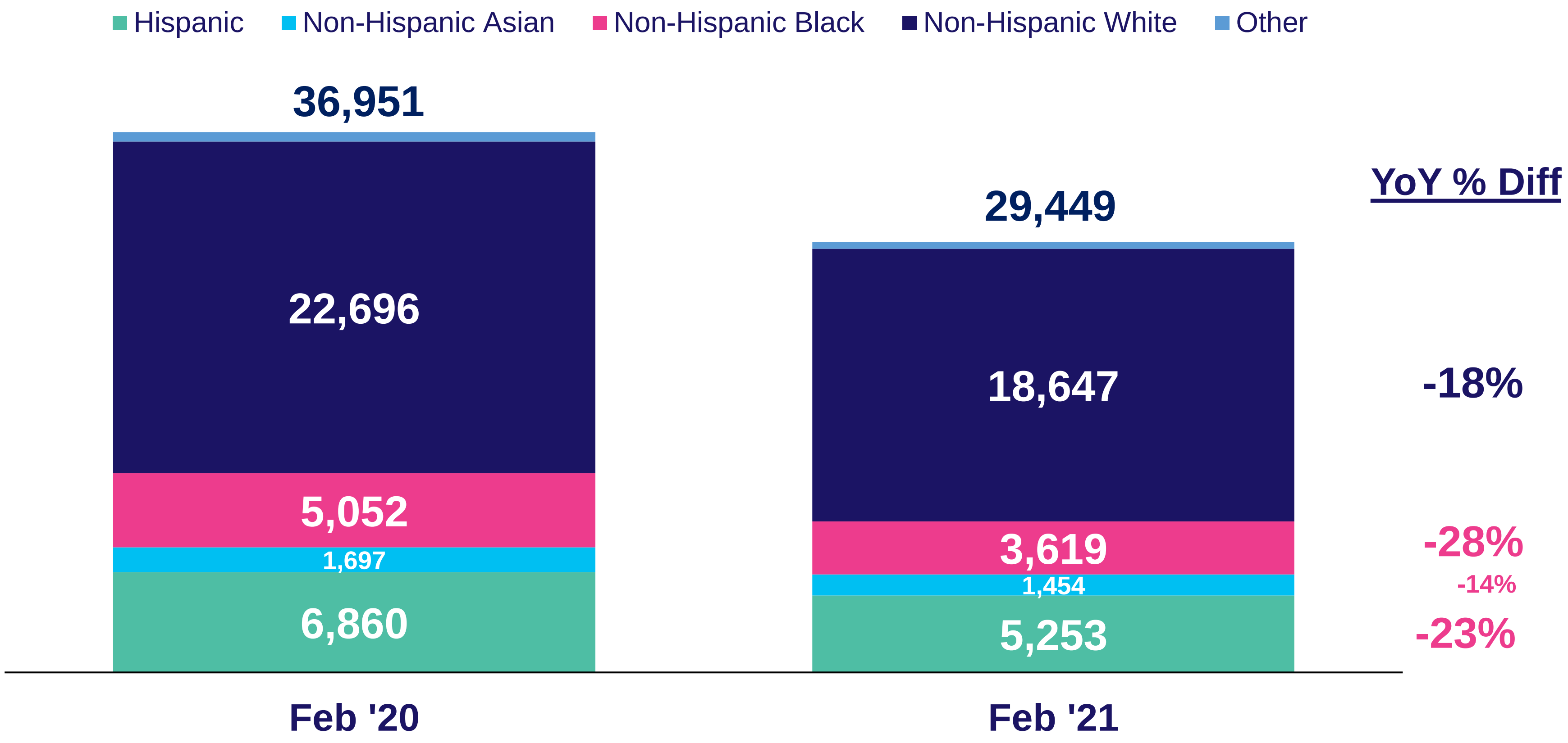
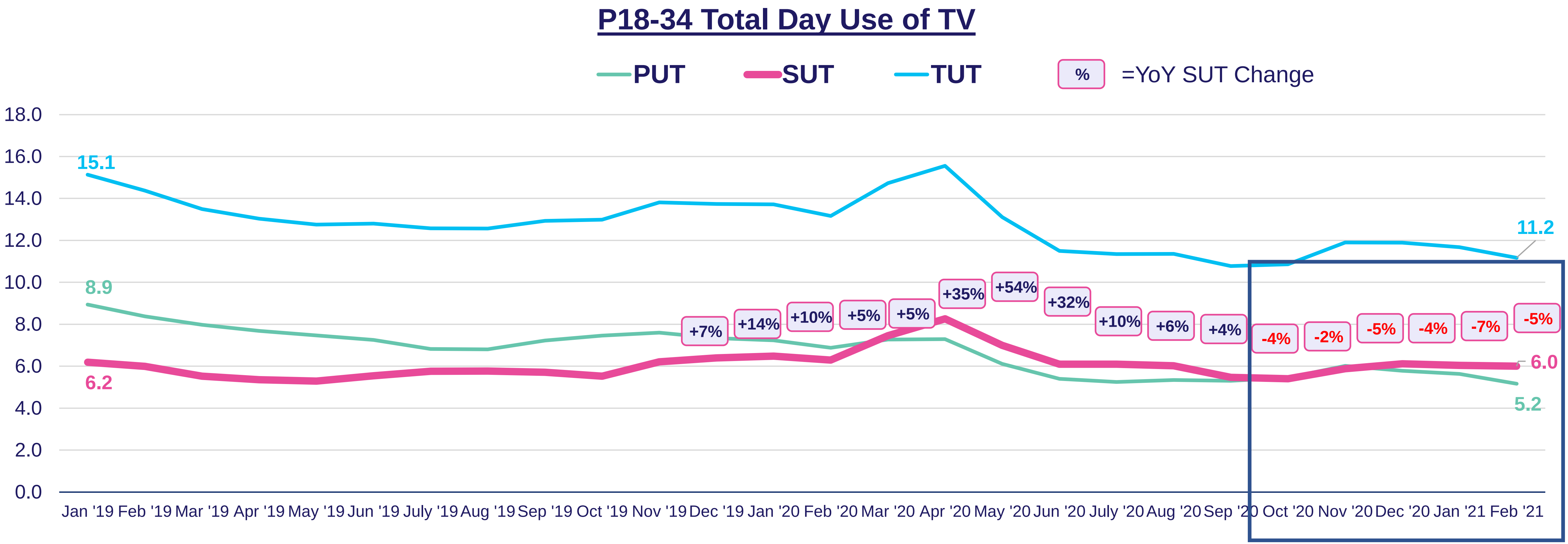
By February 2021, both Black and Hispanic Homes Lost a Quarter of Their Representation Within the Nielsen Panel

Avg Daily Scaled Intab Counts: Share By Ethnicity
February 2020 vs. February 2021



Source: Nielsen NPower, Universe Estimate, UE and Sample Information Report, P2+. Market breaks: Origin / Race. Reflects broadcast months.

The Pink "SUT" Line Reports a Decline in Streaming on TV Among Adults 18-34 Over the Last Six Months… While All Other Major & Credible Sources Report the Opposite (Obvious) Continued Rise in TV Streaming:



Source: Nielsen PUT-SUT-TUT Tracker, Oct '18 – Feb '21, P18-34, Total Day

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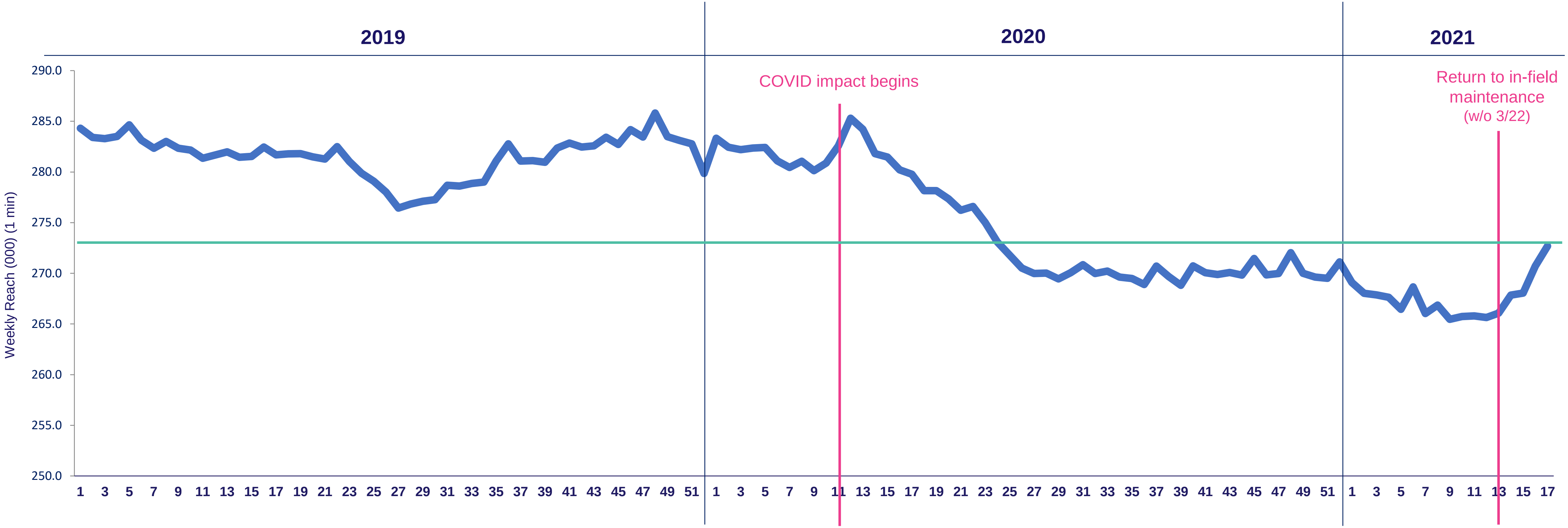

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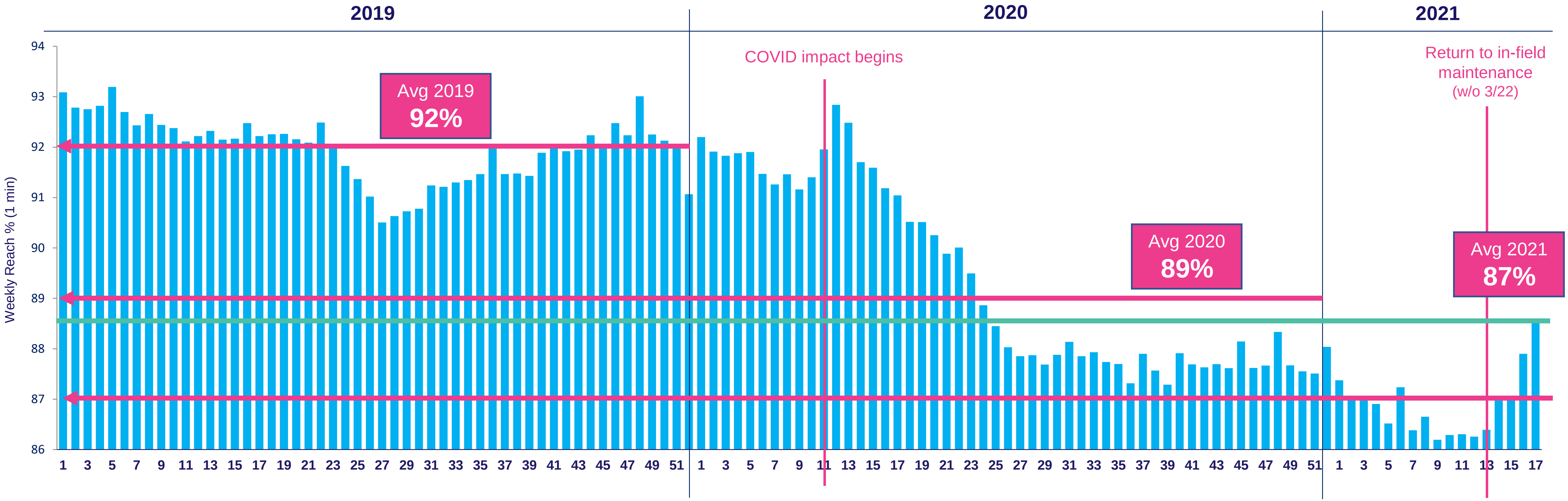

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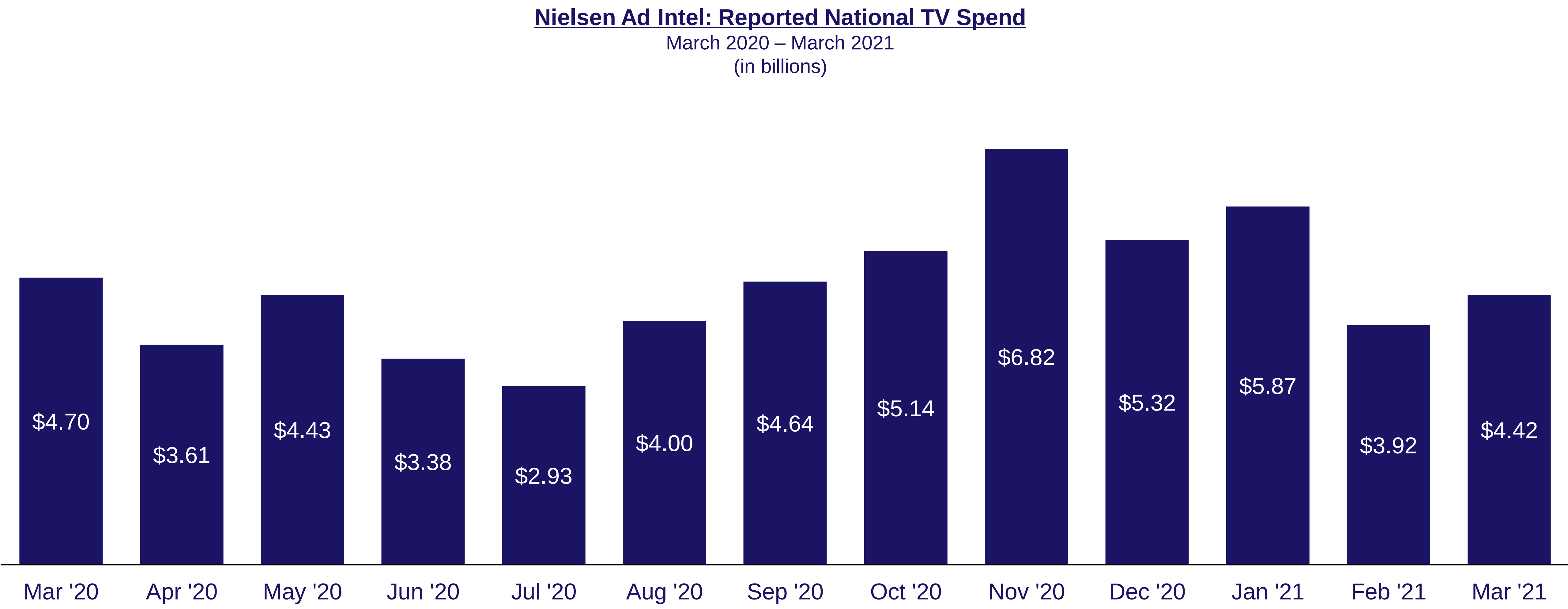

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