

Facebook's Reach (on Reach)

Miscalculations In The Age Of Precision

Summary

In what's seemingly become a regular occurrence as of late, Facebook was recently forced again to publicly defend some of their key metrics to the advertising community. This time it involved the estimated reach numbers that Facebook reflects in their Ads Manager product after global reports surfaced that the potential reach for younger demos in several countries was higher than current Census population data.

This discrepancy was brought to the forefront in the United States when a respected Wall Street analyst did the same analysis at the country level for the investor community. This “potential reach” inflation should be important to advertisers since the metric lives in the Facebook Ads Manager product; a self-serve tool that allows anyone to plan, budget, buy and optimize their own campaigns across Facebook platforms.

In this report, we set out to confirm the numbers that were being reported in the press and then we drilled down further into several geographies - states, cities, zip codes - to see if this reach inflation is a nationwide issue or if it's just isolated to a few areas throughout the country.

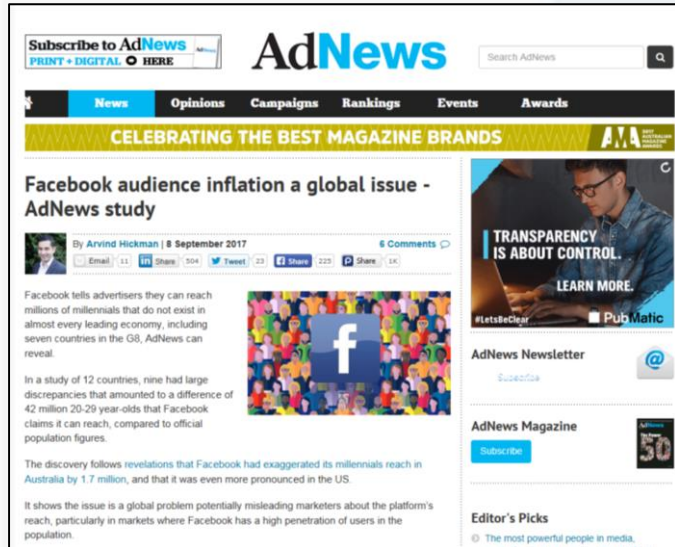
Finally, we set forth an example of executing an advertising schedule through Facebook Ads Manager to show the potential impact that reach inflation could have on an advertiser's campaign.









In August, AdNews In Australia Revealed That Facebook Claims It Can Reach More Young People Than What The Census Reports

The screenshot shows the AdNews website interface. At the top, there is a navigation bar with categories: News, Opinions, Campaigns, Rankings, Events, and Awards. A search bar is located on the right. Below the navigation is a banner for the 2017 Australian Marketing Awards with the slogan 'RECOGNITION IS THE GREATEST MOTIVATOR'. The main article headline reads 'Facebook says platform can reach 1.7m more young adult users than Aussie population', written by Arvind Hickman on August 30, 2017. The article includes social media sharing options and a '4 Comments' link. A key update is provided: 'Update: AdNews has updated the original article with the latest rebased estimates from the ABS as well as adding new figures from Nielsen. The headline figure changes from 2 million to 1.7 million and all subsequent calculations have been adjusted.' The article text states that Facebook claims its platform allows advertisers to reach 1.7 million more 15- to 40-year-old users in Australia than the country's official population. An illustration shows three silhouettes of people looking at a grid that recedes into the distance. The article also notes that the gap between Facebook users and population data has been revised from the original article to incorporate the latest rebased estimates of 2016 census data. A sidebar on the right features a 'TRANSPARENCY IS ABOUT CONTROL OF USER EXPERIENCE' graphic, an 'AdNews Newsletter' subscription button, an 'AdNews Magazine' subscription button, and an 'Editor's Picks' section with three items: 'The most powerful people in media, marketing and advertising: The AdNews Power 50', 'Reframing Australia: What does an 'ordinary' Australian family look like?', and 'One week left to enter the Australian Magazine Awards'.

FACEBOOK'S REACH (ON REACH)

In Fact, This Facebook Reach Inflation Occurs Globally



	P18-24			P25-34		
		FB Potential Reach	Diff		FB Potential Reach	Diff
 <i>United Kingdom</i>	Census 5.6MM	7.6MM	<u>+2.0MM</u>	Census 8.9MM	11.0MM	<u>+2.1MM</u>
 <i>Germany</i>	5.8MM	7.8MM	<u>+2.0MM</u>	9.9MM	10.0MM	<u>+97K</u>
 <i>France</i>	5.5MM	7.3MM	<u>+1.8MM</u>	8.0MM	9.3MM	<u>+1.3MM</u>
 <i>Canada</i>	3.1MM	4.1MM	<u>+1.0MM</u>	4.8MM	6.0MM	<u>+1.2MM</u>
 <i>Italy</i>	4.3MM	5.6MM	<u>+1.3MM</u>	7.0MM	7.6MM	<u>+0.6MM</u>
 <i>Australia</i>	2.1MM	3.0MM	<u>+0.9MM</u>	3.3MM	4.3MM	<u>+1.0MM</u>
 <i>Mexico</i>	15.2MM	23.0MM	<u>+7.8MM</u>	19.9MM	22.0MM	<u>+2.1MM</u>
 <i>Brazil</i>	23.5MM	33.0MM	<u>+9.5MM</u>	34.0MM	34.0MM	-----
 <i>Argentina</i>	4.7MM	7.9MM	<u>+3.2MM</u>	6.6MM	8.8MM	<u>+2.2MM</u>

FACEBOOK'S REACH (ON REACH)

Source: 2017 estimated Global Census; Facebook Ads Manager. "FB Potential Reach" includes Facebook + Instagram + Audience Network + Messenger platforms and reflects "everyone in this location" data pulled on September 22nd, 2017 (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

This Became A Big Topic In The United States When A Respected Analyst Brought It To The Industry's Attention

The screenshot shows the top of a New York Times article. The headline is "Facebook Tells Advertisers It Can Reach Many Young People. Too Many." by SAPNA MAHERWARI, dated SEPT. 6, 2017. The main image shows a group of people walking on a sidewalk. Below the image, a caption reads: "Facebook has told companies that its online advertising tools can reach 25 million more young people in the United States than the census says exist. Elizabeth Costley/Houston Chronicle, via Associated Press." A "RELATED COVERAGE" section lists three other articles: "Facebook Takes Steps to Improve Advertising Data After Criticism" (11:13 AM ET, 9/11/17), "Facebook Acts to Restore Trust After Overstating Video Views" (10:28 AM ET, 9/11/17), and "Facebook Introduces a Dedicated Home for Videos" (10:19 AM ET, 9/11/17).

The screenshot shows a CNBC article from the "SOCIAL MEDIA" section. The headline is "Facebook inflates its ad reach by millions, analyst claims" by REUTERS, published 1:03 AM ET Wed, 6 Sept 2017. The main image shows a hand holding a smartphone displaying a social media interface. A text overlay on the image reads: "Facebook is being accused of inflating its ad reach numbers, again". Below the image, the article text states: "Facebook inflates the number of people who can see the advertisements on its platform, a Pivotal Research Group analyst said in a note. Facebook's Ads Manager claims a potential reach of 41 million 18- to 24-year olds and 60 million 25- to 34-year olds in the United States, whereas U.S. census data shows that last year there were a total of 31 million people between the ages of 18 and 24, and 45 million in the 25-34 age group, the analyst said."

The screenshot shows a Bloomberg Technology article. The headline is "Facebook Faulted for Saying It Can Reach People Who Don't Exist" by Jing Cao and Sarah Frier, dated September 06, 2017 10:46 AM. The article is updated on September 06, 2017 12:21 PM. The Bloomberg logo and navigation menu are visible at the top.

The screenshot shows a Business Insider article from the "TECH INSIDER" section. The headline is "Facebook says it can reach 25 million more people in the US than census data shows exist" by Alex Heath, dated Sep. 6, 2017, 10:55 AM. The article has 9,019 views. The Business Insider logo is visible at the top.

FACEBOOK'S REACH (ON REACH)

Using The Publicly Accessible Ads Manager, Anyone With A Facebook Account Can Review The Platform's Estimated Reach

<https://www.facebook.com/ads/manager/creation>

The screenshot displays the Facebook Ads Manager interface. The left sidebar contains navigation options: Campaign (Objective), Ad Account (Create New), Ad Set (Page, Audience, Placements, Budget & Schedule), and Ad (Identity, Format, Fullscreen Experience, Text). The main content area is divided into several sections:

- Ad Set Name:** US - 18-24
- Page:** Choose the Facebook Page you want to promote. Includes a "Facebook Page" field and a "+ Create a Facebook Page" button.
- Audience:** Define who you want to see your ads. Learn more. Includes "Create New" and "Use a Saved Audience" options.
- Custom Audiences:** A notification for "Target Ads to People Who Know Your Business" is visible.
- Locations:** A dropdown menu is open, showing "Everyone in this location" selected. Below it, "United States" is selected, and "Include" is chosen. There is a "Browse" button and a link to "Add Bulk Locations...".
- Age:** 18 - 24
- Gender:** All, Men, Women
- Languages:** Enter a language...

On the right side, there are two summary boxes:

- Audience Size:** A gauge chart shows the audience selection is "fairly broad". The potential reach is 40,000,000 people.
- Estimated Daily Results:** Reach is 11,000 - 67,000 (of 38,000,000). A note explains that estimates are based on factors like past campaign data, budget, and market data, and are not guaranteed.

FACEBOOK'S REACH (ON REACH)

So We Were Able To Confirm The Numbers That Were Reported In The Press



Facebook's potential reach against Adults 18-34 in the United States is almost 22 Million higher than the U.S. Census A18-34 population

Facebook Platforms - Potential Reach

(FB + Instagram + Audience Network + Messenger)

"Everyone In This Location"

<u>Demo</u>	<u>2016 Census</u>
P18-24	31,020,241
P25-34	44,268,470

39,000,000 +8.0MM

58,000,000 +13.7MM

P18-34 Diff: +21.7MM

FACEBOOK'S REACH (ON REACH)

Source: 2016 U.S. Census (American Community Survey, 1-year estimate); Facebook Ads Manager. Based on "everyone in this location" United States data pulled on September 22nd, 2017. (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

**One Of The More Common Explanations For
Why There Is This Reach Overage Is Due To
Visits From Travelers Outside The Geography..**

But Is This True?

From An Audience Perspective, The Ads Manager Tool Allows You To Select Just Those People Who Live In A Specific Location

The screenshot shows the Facebook Ads Manager interface. The 'Audience' section is active, displaying a dropdown menu for 'Locations'. The menu options are: 'Everyone in this location', 'People who live in this location' (selected), 'People whose home is within the selected area', 'People recently in this location', 'People traveling in this location', and 'United States'. A red box highlights this menu. A yellow callout box with a red border points to the 'People who live in this location' option, containing the text: 'Naturally by selecting "people who live in this location," travelers should be excluded from the target audience'. The interface also shows 'Audience Size' (Potential Reach: 58,000,000 people) and 'Estimated Daily Results' (Reach: 7,800 - 49,000).

<https://www.facebook.com/ads/manager/creation>

FACEBOOK'S REACH (ON REACH)

Interestingly, There's No Difference In The Potential Reach Between "Everyone" In The U.S. & Those That "Live" Here

Although it'd be expected that "everyone in this location" would include non-resident travelers, this universe within Facebook Ads Manager reflects the same size as "people who live in this location"



Facebook Platforms - Potential Reach

(FB + Instagram + Audience Network + Messenger)

Demo

"Everyone
In This Location"

"People Who Live
In This Location"

P18-24

39,000,000

39,000,000

P25-34

58,000,000

58,000,000

In theory, "everyone" should include travelers as well even though the country-wide numbers are the same as the resident totals (i.e., "people who live in this location")

Note: there are only 670K and 940K identified within the potential reach as those who are "traveling in this location" among P18-24 & P25-34, respectively

FACEBOOK'S REACH (ON REACH)



Source: 2016 U.S. Census (American Community Survey, 1-year estimate); Facebook Ads Manager. Based on "everyone in this location" and "people who live in this location" data pulled on September 22nd, 2017. (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

Is This Reach Inflation Issue Nationwide Or Just Isolated To A Few Areas?

To Answer This We Conducted The Below P18-34 Analysis On Several Geographical Levels:



2016 U.S. Census Data

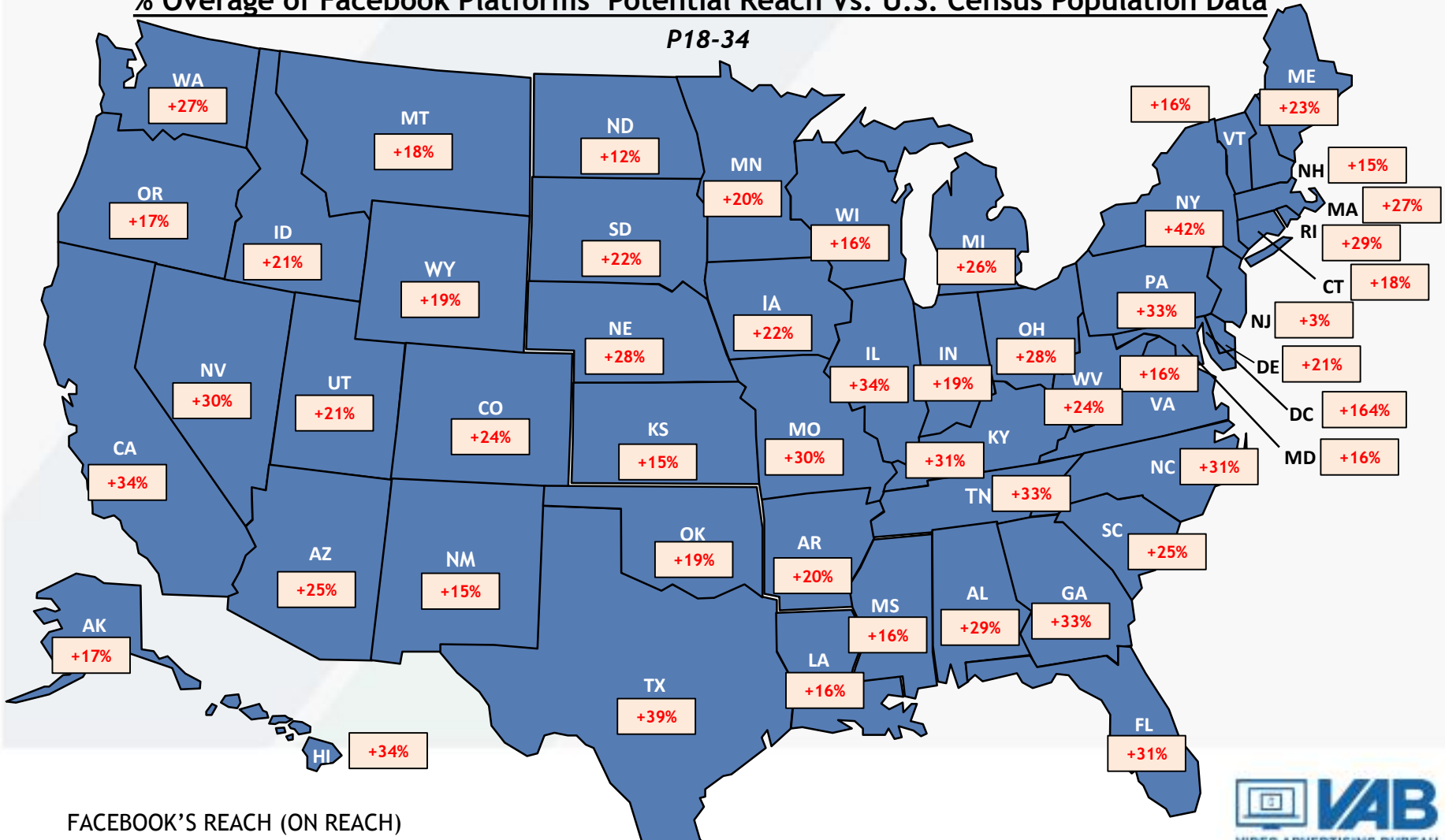
Vs.

“People Who *Live* In This Location” Data
From Facebook Ads Manager



In *Every* State, Facebook Claims They Can Reach More P18-34 Residents Than What Is Reported By The U.S. Census Bureau

% Overage of Facebook Platforms' Potential Reach Vs. U.S. Census Population Data



FACEBOOK'S REACH (ON REACH)

Source: 2016 U.S. Census (American Community Survey, 1-year estimate); Facebook Ads Manager based on data pulled on September 22nd, 2017; P18-34. "FB Potential Reach" includes Facebook + Instagram + Audience Network + Messenger platforms. Facebook data based on "People who live in this location."



Facebook Platforms' Reach Inflation Stretches Anywhere Between 3% - 42% By State Vs. The U.S. Census

P18-34 Population By State: 2016 U.S. Census vs. Facebook Platforms' Potential Reach

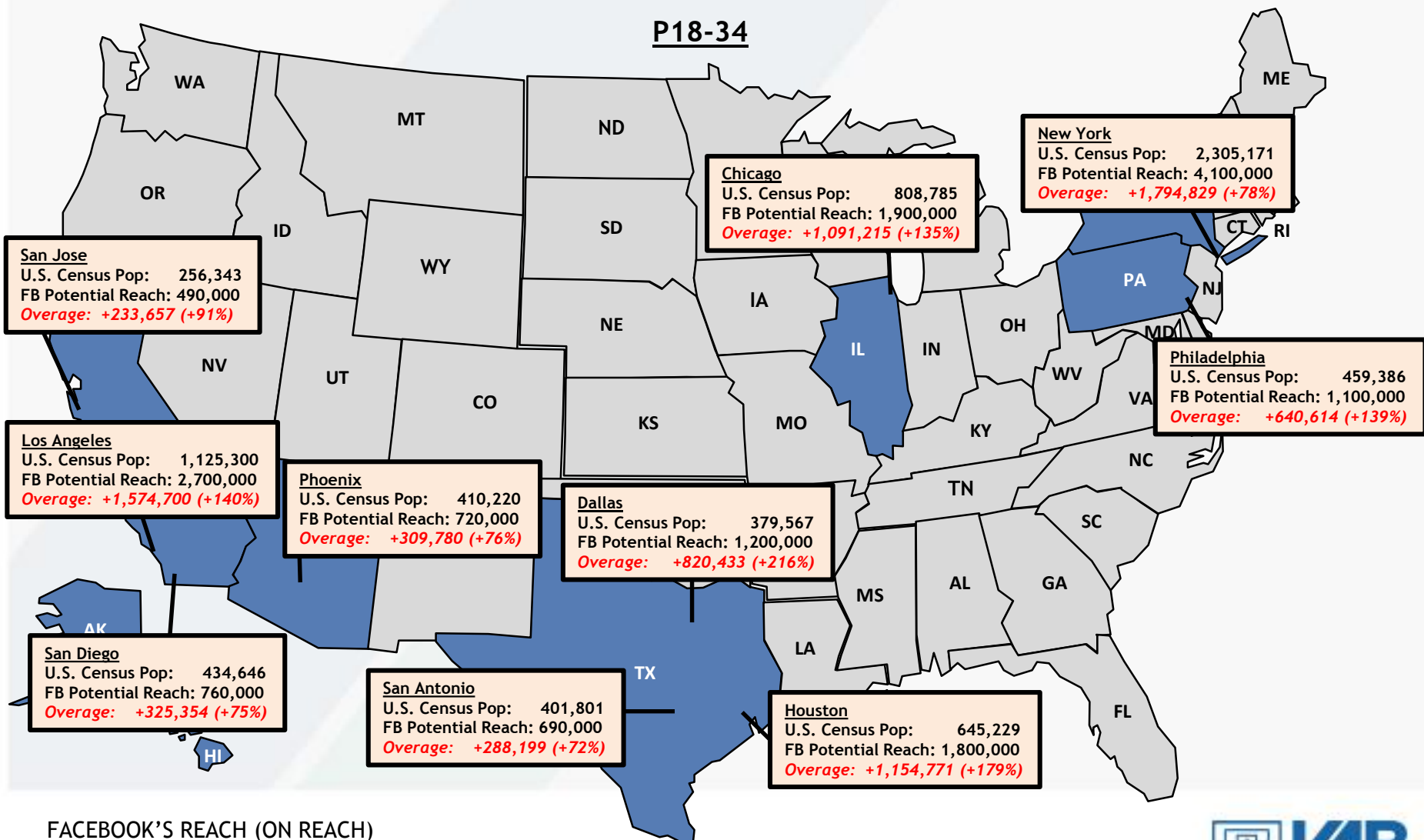
State	2016 U.S. Census		Facebook Ads Manager (Potential Reach)		
	P18-34		"People Who Live In This Location"		
			FB Platforms*		
	Potential Reach	#	P18-34		% Difference
Alabama	1,089,379	1,400,000	310,621	29%	
Alaska	197,344	230,000	32,656	17%	
Arizona	1,601,077	2,000,000	398,923	25%	
Arkansas	672,356	810,000	137,644	20%	
California	9,734,004	13,000,000	3,265,996	34%	
Colorado	1,374,055	1,700,000	325,945	24%	
Connecticut	793,972	940,000	146,028	18%	
Delaware	214,215	260,000	45,785	21%	
District of Columbia	235,004	620,000	384,996	164%	
Florida	4,431,674	5,800,000	1,368,326	31%	
Georgia	2,412,627	3,200,000	787,373	33%	
Hawaii	335,711	450,000	114,289	34%	
Idaho	380,390	460,000	79,610	21%	
Illinois	2,982,759	4,000,000	1,017,241	34%	
Indiana	1,518,969	1,800,000	281,031	19%	
Iowa	714,710	870,000	155,290	22%	
Kansas	677,398	780,000	102,602	15%	
Kentucky	993,882	1,300,000	306,118	31%	
Louisiana	1,118,918	1,300,000	181,082	16%	
Maine	267,627	330,000	62,373	23%	
Maryland	1,383,783	1,600,000	216,217	16%	
Massachusetts	1,655,262	2,100,000	444,738	27%	
Michigan	2,223,939	2,800,000	576,061	26%	
Minnesota	1,253,029	1,500,000	246,971	20%	
Mississippi	687,407	800,000	112,593	16%	
Missouri	1,383,111	1,800,000	416,889	30%	

State	2016 U.S. Census		Facebook Ads Manager (Potential Reach)		
	P18-34		"People Who Live In This Location"		
			FB Platforms*		
	Potential Reach	#	P18-34		% Difference
Montana	228,312	270,000	41,688	18%	
Nebraska	444,358	570,000	125,642	28%	
Nevada	676,213	880,000	203,787	30%	
New Hampshire	286,981	330,000	43,019	15%	
New Jersey	1,940,950	2,000,000	59,050	3%	
New Mexico	476,552	550,000	73,448	15%	
New York	4,798,105	6,800,000	2,001,895	42%	
North Carolina	2,293,174	3,000,000	706,826	31%	
North Dakota	204,647	230,000	25,353	12%	
Ohio	2,578,391	3,300,000	721,609	28%	
Oklahoma	925,960	1,100,000	174,040	19%	
Oregon	941,497	1,100,000	158,503	17%	
Pennsylvania	2,863,667	3,800,000	936,333	33%	
Rhode Island	256,712	330,000	73,288	29%	
South Carolina	1,116,252	1,400,000	283,748	25%	
South Dakota	197,324	240,000	42,676	22%	
Tennessee	1,503,170	2,000,000	496,830	33%	
Texas	6,826,336	9,500,000	2,673,664	39%	
Utah	793,316	960,000	166,684	21%	
Vermont	138,035	160,000	21,965	16%	
Virginia	1,976,775	2,300,000	323,225	16%	
Washington	1,734,544	2,200,000	465,456	27%	
West Virginia	379,038	470,000	90,962	24%	
Wisconsin	1,288,652	1,500,000	211,348	16%	
Wyoming	134,665	160,000	25,335	19%	
Grand Total	75,336,230	97,000,000	21,663,770	29%	

FACEBOOK'S REACH (ON REACH)

Source: 2016 U.S. Census (American Community Survey, 1-year estimate); Facebook Ads Manager based on data pulled on September 22nd, 2017; P18-34. "FB Potential Reach" includes Facebook + Instagram + Audience Network + Messenger platforms. Facebook data based on "People who live in this location." (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

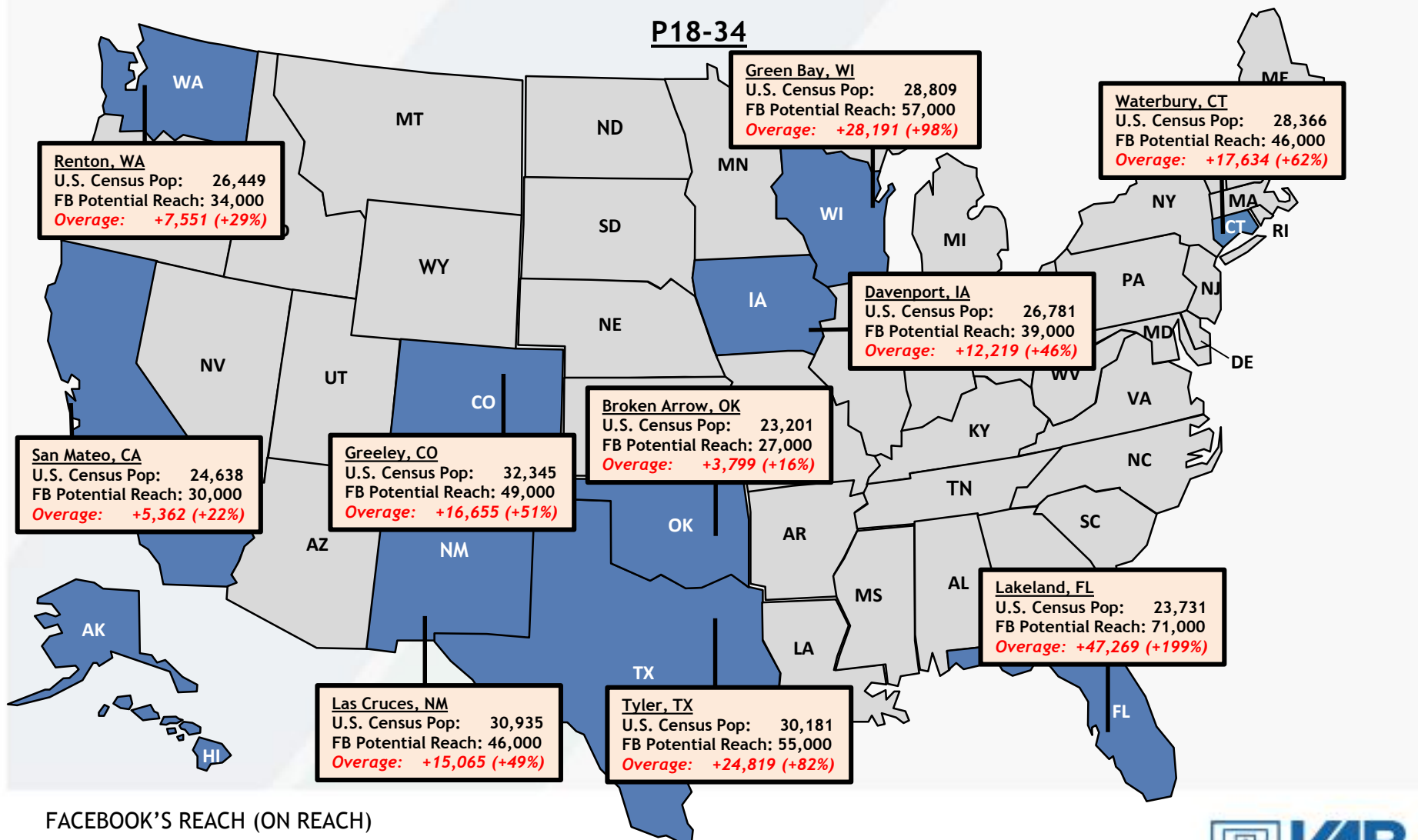
The Facebook P18-34 Reach Inflation Is Much More Pronounced Within The Ten Most Populous Cities



FACEBOOK'S REACH (ON REACH)

Source: 2016 U.S. Census (American Community Survey, 1-year estimate); Facebook Ads Manager based on data pulled on September 22nd, 2017; P18-34. "FB Potential Reach" includes Facebook + Instagram + Audience Network + Messenger platforms. Facebook data based on "People who live in this location" and reflects the city with no radius added. The 10 most populous cities are based on total population. (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

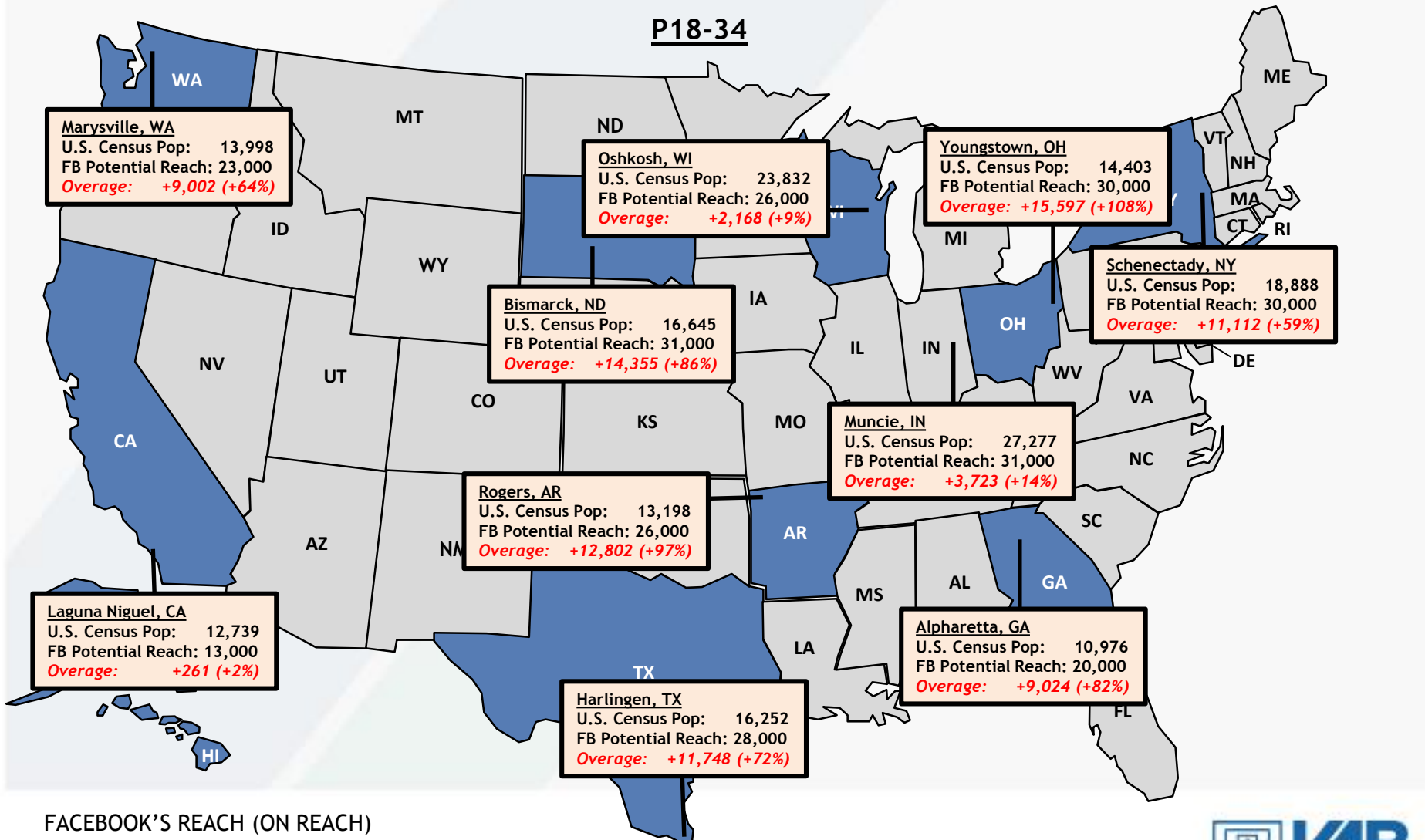
Similar P18-34 Reach Inflation Is Seen Among “Mid-Sized” Cities As Well



FACEBOOK'S REACH (ON REACH)

Source: 2016 U.S. Census (American Community Survey, 1-year estimate); Facebook Ads Manager based on data pulled on September 22nd, 2017; P18-34. "FB Potential Reach" includes Facebook + Instagram + Audience Network + Messenger platforms. Facebook data based on "People who live in this location" and reflects the city with no radius added. "Mid-Sized" cities are based on a diverse cross-section of 10 cities with a total population between 100K - 110K with no more than one city reflected per state. (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

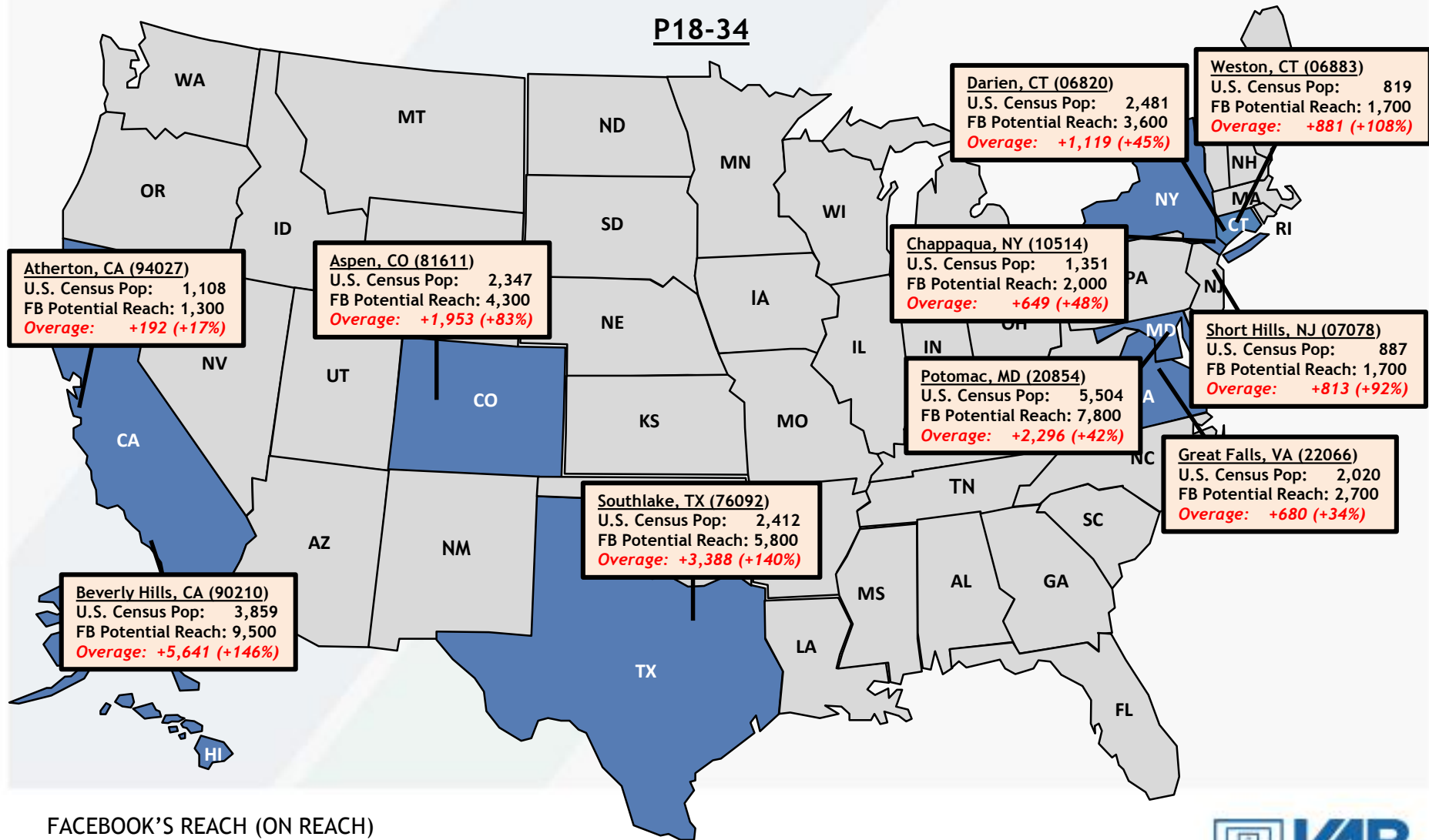
These P18-34 Reach Inflation Trends Are Also Seen Among “Smaller” Cities Throughout The Country



FACEBOOK’S REACH (ON REACH)

Source: 2016 U.S. Census (American Community Survey, 1-year estimate); Facebook Ads Manager based on data pulled on September 22nd, 2017; P18-34. “FB Potential Reach” includes Facebook + Instagram + Audience Network + Messenger platforms. Facebook data based on “People who live in this location” and reflects the city with no radius added. “Smaller” cities are based on a diverse cross-section of ten cities with a total population between 60K - 70K, with no more than one city reflected per state. (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

Facebook Also Overestimates Their Potential Reach Among The Young & Affluent Within Targeted Zip Codes



FACEBOOK'S REACH (ON REACH)

Source: 2015 U.S. Census (2016 data at the zip code level had not been released as of September 2017); Facebook Ads Manager based on data pulled on September 22nd, 2017; P18-34. "FB Potential Reach" includes Facebook + Instagram + Audience Network + Messenger platforms. Facebook data based on "People who live in this location." "Affluent" zip codes were selected based on metrics like median home values as reported by sources such as Forbes. (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

OK, So Reach Is Overstated...

So What?

There's A Potential For Facebook Reach Inflation To Have Real Consequences For An Advertiser's Overall Communications Plan

In addition to providing audience and targeting data, more importantly Facebook Ads Manager functions as a tool for an advertiser to plan, budget, buy and optimize their own campaigns across Facebook platforms.

The screenshot shows the Facebook Ads Manager interface for configuring an ad set. The main configuration area is titled "Budget & Schedule" and includes the following details:

- Ad Set Name:** US - 18-34
- Budget:** Daily Budget of \$5000.00 USD. A note states "Actual amount spent daily may vary."
- Schedule:** Set to "Set a start and end date" with a duration of 1 day. The start date is Sep 22, 2017 at 12:00 AM, and the end date is Sep 23, 2017 at 12:00 AM (Eastern Time). A note states "Your ads will run for 1 day. You'll spend no more than \$5,000.00."
- Optimization for Ad Delivery:** Set to "Reach".
- Frequency Cap:** 1 impression every 1 day.
- Bid Amount:** Set to "Manual" with a bid of \$6.59 per 1,000 impressions. A suggested bid range of \$5.13-\$8.97 is shown.
- When You Get Charged:** Set to "Impression".
- Ad Scheduling:** Set to "Run ads all the time".
- Delivery Type:** Set to "Standard - Show your ads throughout your selected schedule (recommended)".

On the right side, the "Audience Size" section shows a gauge indicating "Your audience selection is fairly broad" and a "Potential Reach" of 97,000,000 people. Below this, the "Estimated Daily Results" section shows a "Reach" of 1,900,000 - 12,000,000 (of 73,000,000). A disclaimer notes that estimates are based on past campaign data and market data, and do not guarantee results.

<https://www.facebook.com/ads/manager/creation>

FACEBOOK'S REACH (ON REACH)

Source: Facebook Ads Manager based on data pulled on September 20th, 2017; P18-34, United States, "people who live in this location." "FB Potential Reach" includes Facebook + Instagram + Audience Network + Messenger platforms. (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

To Make A Buy, It's As "Simple" As Selecting Your Target Then Setting The Budget, Campaign Dates And Entering A Bid Amount

Once all buy parameters are set, Facebook will calculate the estimated daily reach of your campaign based on "past campaign data, the budget entered and market data"

The screenshot shows the Facebook Ads Manager interface for creating an ad set. The interface is divided into several sections:

- Left Sidebar:** Contains navigation options for Campaign, Ad Account, Ad Set, and Ad.
- Top Bar:** Shows the Ad Set Name "US - 18-34" and a search bar.
- Budget & Schedule Section:**
 - Budget:** Set to "Daily Budget" at \$5000.00 USD.
 - Schedule:** Set to "Set a start and end date" with a start date of Sep 22, 2017, and an end date of Sep 23, 2017.
 - Optimization for Ad Delivery:** Set to "Reach".
 - Frequency Cap:** Set to "1 impression every 1 day".
 - Bid Amount:** Set to "Manual" at \$6.59 per 1,000 impressions.
 - When You Get Charged:** Set to "Impression".
 - Ad Scheduling:** Set to "Run ads all the time".
 - Delivery Type:** Set to "Standard - Show your ads throughout your selected schedule (recommended)".
- Audience Size Section:** Shows a gauge for audience selection and a "Potential Reach" of 97,000,000 people.
- Estimated Daily Results Section (highlighted in red):** Shows "Reach" of 1,900,000 - 12,000,000 (of 73,000,000).

Annotations with red arrows point to specific fields:

- "Select target in the 'Audience' section" points to the Ad Set Name field.
- "Set Your Budget" points to the Budget field.
- "Set Your Desired Campaign Dates" points to the Start and End date fields.
- "Decide how often people see your ad" points to the Frequency Cap field.
- "Select an automatic bid or enter a bid amount yourself based on 1,000 impressions, i.e. CPM (cost-per-thousand)" points to the Bid Amount field.

<https://www.facebook.com/ads/manager/creation>

FACEBOOK'S REACH (ON REACH)

Source: Facebook Ads Manager based on data pulled on September 20th, 2017; P18-34, United States, "people who live in this location." "FB Potential Reach" includes Facebook + Instagram + Audience Network + Messenger platforms. (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

To Verify The Accuracy Of The Estimated Daily Reach Metric, We Built A One-Day Campaign Designed To Maximize Reach

While a one-day schedule is not a “typical” campaign length, we were limited to this time period for comparison purposes since Facebook only reports estimated reach results at the daily level

The screenshot shows the Facebook Ads Manager interface for a campaign named "P18-34". The interface is annotated with several red boxes and arrows pointing to specific settings:

- Ad Set Name:** "US - 18-34"
- Campaign Objective:** "P18-34"
- Budget & Schedule:**
 - Budget:** "Daily Budget + \$5000.00" (Annotated as "\$5,000 Daily Budget")
 - Schedule:** "Set a start and end date" (Annotated as "One-Day schedule")
 - Start/End Dates:** "Sep 22, 2017 12:00 AM" to "Sep 23, 2017 12:00 AM" (Annotated as "Your ads will run for 1 day")
- Optimization for Ad Delivery:** "Reach" (Annotated as "1x Frequency cap to maximize reach")
- Frequency Cap:** "1 impression every 1 day"
- Bid Amount:** "Manual" option selected with a bid of "\$6.59 per 1,000 impressions" (Annotated as "The manual bid option includes both a Facebook suggested bid / CPM and range")
- Bid Range:** "Suggested bid: \$6.59 USD (\$5.13-\$8.97)" (Annotated as "Low Range" Bid / CPM = \$5.13, "Suggested" Bid / CPM = \$6.59, "High Range" Bid / CPM = \$8.97)
- Audience Size:** "Potential Reach: 97,000,000 people"
- Estimated Daily Results:** "Reach 1,900,000 - 12,000,000 (of 73,000,000)"

<https://www.facebook.com/ads/manager/creation>

FACEBOOK'S REACH (ON REACH)

Source: Facebook Ads Manager based on data pulled on September 20th, 2017; P18-34, United States, “people who live in this location.” “FB Potential Reach” includes Facebook + Instagram + Audience Network + Messenger platforms. (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

Based On The Budget & Bid, An Advertiser Can Use Media Math To Figure Out Their Expected Campaign Impressions

$$\underline{\text{Budget} / \text{CPM} \times 1,000 = \text{Impressions}}$$

Budget & Schedule
Define how much you'd like to spend, and when you'd like your ads to appear. [Learn more](#)

Budget
\$5000.00 USD

Actual amount spent daily may vary.

Schedule Run my ad set continuously starting today
 Set a start and end date

Start
End
(Eastern Time)

Your ads will run for **1 day**. You'll spend no more than **\$5,000.00**.

Optimization for Ad Delivery

Frequency Cap impression every day

Bid Amount Automatic - Let Facebook set the bid that helps you get the most reach at the best price.
 Manual - Enter a bid based on what 1,000 impressions are worth to you.

per 1,000 impressions
Suggested bid: \$6.59 USD (\$5.13-\$8.97)

When You Get Charged

Ad Scheduling Run ads all the time
 Run ads on a schedule

Delivery Type - Show your ads throughout your selected schedule (recommended)

Audience Size
Your audience selection is fairly broad.
Potential Reach: 97,000,000 people

Estimated Daily Results
Reach
1,900,000 - 12,000,000 (of 73,000,000)

The accuracy of estimates is based on factors like past campaign data, the budget you entered and market data. Numbers are provided to give you an idea of performance for your budget, but are only estimates and don't guarantee results.
Were these estimates helpful?

At a \$5K budget, below reflects the **Impressions*** to be delivered based on the CPMs:

"Low Range" Bid / CPM = \$5.13	=	974,659 IMPs
"Suggested" Bid / CPM = \$6.59	=	758,725 IMPs
"High Range" Bid / CPM = \$8.97	=	557,414 IMPs

**in theory, impressions should be interchangeable with unique reach with a 1x frequency cap.*

<https://www.facebook.com/ads/manager/creation>

FACEBOOK'S REACH (ON REACH)

Source: Facebook Ads Manager based on data pulled on September 20th, 2017; P18-34, United States, "people who live in this location." "FB Potential Reach" includes Facebook + Instagram + Audience Network + Messenger platforms. (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

From The Math, An Advertiser Would See That The Impressions Are Much Lower Than Facebook's Estimated Reach Results

It's important to note that in a one-day campaign with a 1x frequency cap (as reflected below), the term "impressions" can be used interchangeably with "reach"

Budget & Schedule
 Define how much you'd like to spend, and when you'd like your ads to appear. [Learn more.](#)

Budget Daily Budget
 \$5000.00 USD

Actual amount spent daily may vary. [?](#)

Schedule Run my ad set continuously starting today
 Set a start and end date

Start
End
 (Eastern Time)

Your ads will run for **1 day**. You'll spend no more than **\$5,000.00**.

Optimization for Ad Delivery

Frequency Cap impression every day

Bid Amount Automatic - Let Facebook set the bid that helps you get the most reach at the best price.
 Manual - Enter a bid based on what 1,000 impressions are worth to you.

per 1,000 impressions
 Suggested bid: \$6.59 USD (\$5.13-\$8.97)

When You Get Charged

Ad Scheduling Run ads all the time
 Run ads on a schedule

Delivery Type

Audience Size
 Your audience selection is fairly broad.

Potential Reach: 97,000,000 people

Estimated Daily Results
 Reach
 1,900,000 - 12,000,000 (of 73,000,000) [?](#)

The accuracy of estimates is based on factors like past campaign data, the budget you entered and market data. Numbers are provided to give you an idea of performance for your budget, but are only estimates and don't guarantee results.

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At a \$5K budget, below reflects the **Impressions*** to be delivered based on the CPMs:

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<https://www.facebook.com/ads/manager/creation>

Notably, There Is Also A Very Wide Gap Within The Estimated Daily Reach Range For A Platform That Often Touts Its' Precision Targeting

There is a gap of over 10 million A18-34's (1.9MM - 12.0MM) between the low & high range for a demo-targeted, one-day \$5K buy

Budget & Schedule
 Define how much you'd like to spend, and when you'd like your ads to appear. [Learn more.](#)

Budget \$5000.00
 \$5000.00 USD

Actual amount spent daily may vary. ⓘ

Schedule Run my ad set continuously starting today
 Set a start and end date

Start
 End
 (Eastern Time)

Your ads will run for **1 day**. You'll spend no more than **\$5,000.00**.

Optimization for Ad Delivery

Frequency Cap impression every day

Bid Amount Automatic - Let Facebook set the bid that helps you get the most reach at the best price.
 Manual - Enter a bid based on what 1,000 impressions are worth to you.

per 1,000 impressions
 Suggested bid: \$6.59 USD (\$5.13-\$8.97)

When You Get Charged

Ad Scheduling Run ads all the time
 Run ads on a schedule

Delivery Type - Show your ads throughout your selected schedule (recommended)

Audience Size
 Your audience selection is fairly broad.

Potential Reach: 97,000,000 people

Estimated Daily Results
 Reach
 1,900,000 - 12,000,000 (of 73,000,000) ⓘ

The accuracy of estimates is based on factors like past campaign data, the budget you entered and market data. Numbers are provided to give you an idea of performance for your budget, but are only estimates and don't guarantee results.

Were these estimates helpful?

At a \$5K budget, below reflects the **Impressions*** to be delivered based on the CPMs:

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<https://www.facebook.com/ads/manager/creation>

Key Question: How Can Facebook's Estimated Daily Reach Be 2x - 12x Times Larger Than What It Should Be Based On Basic Media Math?

Impressions Based On Budget & Bid/CPM:
557.4K - 974.7K

Facebook's Estimated Daily Reach:
1.9MM - 12.0MM

Question:
How can FB's estimated daily reach be between **1.9MM - 12.0MM** for a one-day \$5K schedule with a 1x freq cap when media math (\$\$\$ / CPM = IMPs) says the impressions range for the campaign based on the suggested bid range would be between **557.4K - 974.7K**?

Estimated Daily Results
Reach
1,900,000 - 12,000,000 (of 73,000,000)

Bid Amount
Automatic - Let Facebook set the bid that helps you get the most reach at the best price.
Manual - Enter a bid based on what 1,000 impressions are worth to you.
\$6.59 per 1,000 impressions
Suggested bid: \$6.59 USD (\$5.13-\$8.97)

At a \$5K budget, below reflects the Impressions* to be delivered based on the CPMs:

"Low Range" Bid / CPM = \$5.13	=	974,659 IMPs
"Suggested" Bid / CPM = \$6.59	=	758,725 IMPs
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<https://www.facebook.com/ads/manager/creation>

According To The Math, It Would Take A Lot More Than The \$5K Budget To Achieve The Campaign Reach Facebook Estimates

Based on Facebook's suggested bid (CPM) range, it would actually cost anywhere between \$9.7K - \$107.6K to deliver against their own P18-34 estimated daily reach for a one-day campaign schedule

	Original Budget	Bid / CPM	"Low End" Reach Range		"High End" Reach Range	
			Facebook Est. Daily Reach	Revised Budget	Facebook Est. Daily Reach	Revised Budget
"Low Range" Bid / CPM	\$5,000	\$5.13	1,900,000	\$9,747	12,000,000	\$61,560
"Suggested" Bid / CPM	\$5,000	\$6.59	1,900,000	\$12,521	12,000,000	\$79,080
"High Range" Bid / CPM	\$5,000	\$8.97	1,900,000	\$17,043	12,000,000	\$107,640

FACEBOOK'S REACH (ON REACH)

Source: Facebook Ads Manager based on data pulled on September 20th, 2017; P18-34, United States, "people who live in this location." "FB Potential Reach" includes Facebook + Instagram + Audience Network + Messenger platforms. (Facebook numbers are fluid and are subject to change based on the date when numbers are pulled).

Apparently Other People Have Noticed This Reach Discrepancy As Well

The screenshot shows the Facebook Business Advertiser Help Center. The main heading is "Facebook estimated reach is really off...". Below it, a user named Jason Melman asks: "Hi! I am running an ad to promote my page on Facebook and it says the estimated daily reach would be from 1,300 to 3,200. I have ran it for approx. 4 days and so far the total reach has only been 210 people total. Is there a reason for this that could be corrected?". The question is marked as a "Good Question". A featured answer from John Facebook Help Team states: "The estimated daily reach calculator is only an estimate. The estimation is based on your defined audience and ad set budget, and not how people will respond to your creative. The numbers are only an approximate estimate to help you decide on how much you want to spend on ads, and not as a prediction of how many people will actually see your ad once it's running. If your ads are receiving a much lower reach than estimated, it's possible that your ad's creative might need some tweaking to resonate more positively with your audience." A red box highlights this answer, and a red callout box with an arrow pointing to it says "What does the ad's creative have to do with Reach?".

FACEBOOK'S REACH (ON REACH)

Closing Thoughts

Whether this is truly another metrics glitch remains to be seen. However, with questions of trust regarding ad-tech platforms at an all-time high among many marketers, our analysis provides another instance where first-party data should at least be questioned, or even challenged, particularly when the numbers don't align with universally accepted metrics such as U.S. Census Bureau population data and basic media math.

Advertisers and their agencies must remain vigilant with all their media partners when it comes to their campaign executions and deliveries. We believe in complete transparency as an industry and for advertisers to verify their campaign metrics and results through independent, third party data sources.

And for everyone, both advertisers and agencies, as you plan your campaigns, execute your schedules and evaluate your post-buy analyses across your multiplatform media partners, our advice continues to remain the same:

Assume Nothing, Investigate Everything

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TheVAB.com



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