

# Project (SQL): Analyzing American Baby Name Trends

How have American baby name tastes changed since 1920? Which names have remained popular for over 100 years, and how do those names compare to more recent top baby names? These are considerations for many new parents, but the skills we'll practice while answering these queries are broadly applicable. After all, understanding trends and popularity is important for many businesses, too!

We'll be working with data provided by the United States Social Security Administration, which lists first names along with the number and sex of babies they were given to in each year. For processing speed purposes, we've limited the dataset to first names which were given to over 5,000 American babies in a given year. Our data spans 101 years, from 1920 through 2020.

## **baby\_names**

column	type	meaning
year	int	year
first_name	varchar	first name
sex	varchar	sex of babies given first_name
num	int	number of babies of sex given first_name in that year

## 1. Classic American names

Let's get oriented to American baby name tastes by looking at the names that have stood the test of time!

first_name	sum
James	4748138
John	4510721
William	3614424
David	3571498
Joseph	2361382
Thomas	2166802
Charles	2112352
Elizabeth	1436286

## 2. Timeless or trendy?

Was the name classic and popular across many years or trendy, only popular for a few years?

first_name	sum	popularity_type
Aaliyah	15870	Trendy
Aaron	530592	Semi-classic
Abigail	338485	Semi-trendy
Adam	497293	Semi-trendy
Addison	107433	Trendy
Adrian	147741	Semi-trendy
Aidan	68566	Trendy
Aiden	216194	Trendy
Alan	162041	Semi-trendy
Albert	260945	Semi-trendy

### 3. Top-ranked female names since 1920

What are the top-ranked female names since 1920?

name_rank	first_name	sum
1	Mary	3215850
2	Patricia	1479802
3	Elizabeth	1436286
4	Jennifer	1404743
5	Linda	1361021
6	Barbara	1343901
7	Susan	1025728
8	Jessica	994210
9	Lisa	920119
10	Betty	893396

### 4. Picking a baby name

Perhaps a friend has heard of our work analyzing baby names and would like help choosing a name for her baby, a girl. She doesn't like any of the top-ranked names we found in the previous task.

She's set on a traditionally female name ending in the letter 'a' since she's heard that vowels in baby names are trendy. She's also looking for a name that has been popular in the years since 2015.

Let's see what we can do to find some options for this friend!

first_name
Olivia
Emma
Ava
Sophia
Isabella
Mia
Amelia
Ella
Sofia
Camila
Aria
Victoria
Layla
Nora
Mila
Luna

## 5. The Olivia expansion

Let's explore the rise of the name Olivia with the help of a window function.

year	first_name	num	cumulative_olivias
1991	Olivia	5601	5601
1992	Olivia	5809	11410
1993	Olivia	6340	17750
1994	Olivia	6434	24184
1995	Olivia	7624	31808
1996	Olivia	8124	39932
1997	Olivia	9477	49409
1998	Olivia	10610	60019
1999	Olivia	11255	71274
2000	Olivia	12852	84126
2001	Olivia	13977	98103
2002	Olivia	14630	112733
2003	Olivia	16152	128885
2004	Olivia	16106	144991
2005	Olivia	15694	160685
2006	Olivia	15501	176186

## 6. Many males with the same name

year	max_num
1920	56914
1921	58215
1922	57280
1923	57469
1924	60801
1925	60897
1926	61130
1927	61671
1928	60703
1929	59804

## 7. Top male names over the years

In this task, we find out what that top male name is for each year in our dataset.

year	first_name	num
2020	Liam	19659
2019	Liam	20555
2018	Liam	19924
2017	Liam	18824
2016	Noah	19154
2015	Noah	19650
2014	Noah	19319
2013	Noah	18266
2012	Jacob	19088
2011	Jacob	20378
2010	Jacob	22139
2009	Liam	21124

8. The most years at number one

first_name	count_top_name
Michael	44
Robert	17
Jacob	14
James	13
Liam	4
John	4
Noah	4
David	1