

# PA Fraud Investigation from PA Voter Rolls and Mail In Ballot Data

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## Chapter 1: Outright Fraud

Description	Votes
Mail In Applications After The Deadline	2081
Mail In Double Voters	399
Mail In Received After 11-06 Deadline	18379
Mail In Received Before Sent	22685
Mail In Received Without Being Sent	10127
Mail In Received and Sent on Same Day	32577
Registration Date After the 10-19 Deadline	39789
Voted with Two Different Methods (Provisional, In Person, or Mail In)	1684
First, Last Name and DOB Match Double Voters	4421
<b>Total Votes</b>	<b>132142</b>

This table shows vote counts that are either outright illegal by law (ie votes cast past registration dates, double votes), or votes that would be impossible to cast legitimately.

### Sources:

PA Voter Rolls 2021-01-18, 2021-02-01, and the PA Ballot Checker Site Scrape (<https://www.pavoterservices.pa.gov/pages/ballottracking.aspx>) against the 2020-11-16 PA Voter Rolls (Includes results for 54 of the 67 counties)

## Chapter 2: Fraud

Description	Votes
Mail In 1 Day Send Receive Difference	51347
Mail In 2 Day Send Receive Difference	43291
Mail In 3 Day Send Receive Difference	42079
Voters With Only 1 Letter For First Name	19609
Voters Forced to Use Provisional Because Mail In Ballot In 'Pending'	56352
Registrations with a Registration date before 2020-04-06 added after 2020-04-06	54205
	<b>266883</b>

This table shows vote counts that are either implausible or impossible to have been cast legitimately, fraudulently avoid identification, fraudulently were forced to use provisional, or used artificial registrations.

### Notes:

59k Voters were found to have used provisional who also attempted to use mail in ballots. In PA if you used Mail In you have to explicitly bring your ballot to the polls to be canceled otherwise you will be forced to use provisional.

## Registrations with a Registration date before 2020-04-06 added after 2020-04-06:

In between the PA Voter rolls 2020-04-06 and 2020-12-28 ... 801,216 unique voter ids were added and 343,286 were removed. Of these 801,216 unique voter ids added, 225,970 were found to have a registration date before 2020-04-06, which should be impossible if the account was added to the rolls *after* 2020-04-06. Of the 225,970 ... 71,898 were found not to be registrations which simply moved from one county to another and thus getting a new voter\_id (they were not found in the deleted list at all between 2020-04-06 and 2020-12-28).

Thus these 71,898 registrations added after 2020-04-06 with a registration date before 2020-04-06 were considered to be 'ghost registrations'. Of these 71,898 ... 54,205 voted.

## Sources:

PA Voter Rolls 2020-12-28, Voter History / Poll Books derived from the PA Voter Rolls 2020-12-28, PA Voter Rolls 2020-04-06, PA Voter Rolls 2021-01-18, and the PA Ballot Checker Site Scrape (<https://www.pavoterservices.pa.gov/pages/ballottracking.aspx>) against the 2020-11-16 PA Voter Rolls (Includes results for 54 of the 67 counties)

## Chapter 3: Over / Under Vote Counts

Total Under / Over Votes on a County Level	Votes
Presidential Votes Which Do Not Have An Assigned Voter	18285
Assigned Voters Whose Presidential Vote Was Lost / Trashed / Not Given	13148

## Notes:

Under / Over votes are calculated at a county level. If calculated at a precinct level the sum for the county increases by 80% on average. IE For Allegheny county, the over vote count increases from 4,288 to 10,032 when evaluated at a precinct level instead of a county level.

It is estimated the 18,285 over vote count level would raise to about 80,000 if all counties were evaluated at a precinct level.

Under / Over Votes on Case to Case	Votes
Allegheny County Over Votes	10032
Luzerne County In-Person Over Votes	3065
Allegheny County Mail-In Under Votes (Lost / Trashed / 'Not Given')	8038
Allegheny County Provisional Over Votes	3795

## Notes:

This table is mainly to highlight very specific counties' under and over vote discrepancies.

Ie Allegheny County, despite all other counties doing excellent in their ability to match up mail in counts with the [www.electionreturns.pa.gov](http://www.electionreturns.pa.gov) mail in results, has a towering 8038 mail in votes which seem to have been lost. And in Allegheny 3,795 more provisional 'voters' have voted in the presidential election than Allegheny has told individual voters their provisional vote counted.

## Sources:

- PA Voter Rolls 2020-11-02, 2020-11-09, 2020-11-16, 2020-11-23, 2020-11-30, 2020-12-07, 2020-12-14, 2020-12-21, 2020-12-28, 2021-01-04, 2021-01-11, 2021-01-18
- Voter History / Poll Books derived from the PA Voter Rolls 2021-01-18
- County level election results from [www.electionreturns.pa.gov](http://www.electionreturns.pa.gov)
- Precinct level results for Allegheny, Luzerne, Westmoreland, Chester, Delaware and Montgomery from their respective county websites
- PA Mail In Ballot Checker Site Scrape (<https://www.pavoterservices.pa.gov/pages/ballottracking.aspx>) against the 2020-11-16 PA Voter Rolls (Includes results for 54 of the 67 counties)
- PA Provisional Ballot Checker Site Scrape (<https://www.pavoterservices.pa.gov/pages/ProvisionalBallotSearch.aspx>) against the 2020-12-28 PA Voter Rolls
- PA opendata ballot data from <https://data.pa.gov/Government-Efficiency-Citizen-Engagement/2020-General-Election-Mail-Ballot-Requests-Departm/mcba-yywm/data>

## Chapter 4: County Level Abnormalities / Fraud

### Abnormal Registration Growths:

Both Philadelphia and Chester counties had abnormal registration growths over the past 15-20 years which gave them towering influence. Philadelphia went from 7<sup>th</sup> to 1<sup>st</sup> in voter registration influence and Chester from 13<sup>th</sup> to 6<sup>th</sup>.

Almost all other counties stayed at their exact same placement. If Philadelphia and Chester would have done the same Philadelphia would have been at a registration count of 330k instead of 1.1 million. And Chester would have been 200k instead of 367k.

### Abnormal Regularly Reoccurring Large Registration Dates:

In Allegheny county abnormally large registration dates happened in regular intervals that appear to be in the relation to local elections at the time. Almost all were always on XXXX-XX-01 dates.

Of the these top 30 abnormally large regularly occurring registration dates, almost all of them had a voter turnout of above 85%. Allegheny's over all turnout was 75%.

## 90% Turnouts:

Out the of top 10 most influential counties, Chester and Montgomery had a towering 85% turnout while the average for the rest were 76% (the state average is 76%).

Out of the top precincts with a 90% turnout or higher, Montgomery had a towering 63 of the 159. Delaware county had 21 and Chester county 15.

## Fraudulently Low Republican to Trump Mail In Turnouts:

In all counties, regardless of whether someone votes with mail-in or in-person, there is an expectation that the ratios of Republican to Trump or Democrat to Biden will remain the same within a county. In all but 3 counties this remained the same for Republican to Trump.

For the counties of Montgomery, Chester and Delaware however, the Republican to Trump mail-in turnout was fraudulently low, when compared to the Republican to Trump in-person turnout within the same county.

Ie for Delaware county the Republican to Trump mail-in 'turnout' was 100% (there was a Trump vote for every Republican that voted), however for mail-in this ratio was 67%.

For Biden however this decoupling was a lot worse. Ie for Fayette county Biden had an in-person count / ratio of 55%, however in mail-in the count was 93%, an exorbitantly higher difference.

Biden despite having a wide varying range of in-person Democrat to Biden 'turnouts', 47% to 142%, the mail-in 'turnouts' for Democrat to Biden were always locked in to 100% to 130% for all counties.

## Anomalously High Usage of 'Online' Mail In Ballots:

For the counties of Chester and Montgomery, a towering and staggering 2.2x of the mail in ballots that were counted were in the form of 'online' (vs other forms of mail in). This set them as complete outliers far past the previous extreme as all other counties were in a fluid range of 0.7 to 1.7. The state average was 1.3 .

## Appendix: Sources

### Chapter 1: Outright Fraud

#### Mail In Applications After The Deadline:

```
select count(*) from pamailin where app_received>='2020-10-28' and status='Vote Recorded';
+-----+
| count(*) |
+-----+
|      2081 |
+-----+
```

#### Mail In Double Voters:

```
select count(*) from pamailin A,
(select count(*) as count, voter_id from pamailin where status='Vote Recorded' group by voter_id having count(*)>1) B
```

```
where A.voter_id=B.voter_id;
+-----+
| count(*) |
+-----+
|      399 |
+-----+
```

## Mail In Received After 11-06 Deadline:

```
select count(*) from pamailin where ballot_received>'2020-11-06' and status='Vote
Recorded';
+-----+
| count(*) |
+-----+
|    18379 |
+-----+
```

## Mail In Received Before Sent:

```
select count(*) from pamailin where ballot_received<ballot_mailed_on and status='Vote
Recorded';
+-----+
| count(*) |
+-----+
|    22685 |
+-----+
```

## Mail In Received Without Being Sent:

```
select count(*) from pamailin where ballot_mailed_on='0000-00-00' and status='Vote
Recorded';
+-----+
| count(*) |
+-----+
|    10127 |
+-----+
```

## Mail In Received and Sent on Same Day:

```
select count(*) from pamailin where ballot_mailed_on=ballot_received and status='Vote
Recorded';
+-----+
| count(*) |
+-----+
|    32577 |
+-----+
```

## Registration Date After the 10-19 Deadline:

```
select count(*) from regis where last_vote_date='2020-11-03' and
registration_date>'2020-10-19';
+-----+
| count(*) |
+-----+
|    39789 |
+-----+
```

## Voted with Two Different Methods (Provisional, In Person, or Mail In):

```
create table result_0125_in_person_voters
select A.id_number from regis A, vohis B
where A.id_number=B.id_number and el_date='2020-11-03' and el_method='AP';

create table result_0125_provisional_voters
select A.id_number from regis A, vohis B
where A.id_number=B.id_number and el_date='2020-11-03' and el_method='P'
```

```

UNION DISTINCT
select voter_id as id_number from paprovis
where status in ('Counted', 'Partially Counted');

create table result_0125_mail_in_voters
select A.id_number from regis A, vohis B
where A.id_number=B.id_number and el_date='2020-11-03' and el_method in ('AB', 'MB')
UNION DISTINCT
select voter_id as id_number from pamailin
where status='Vote Recorded';

create table result_0125_overlap_voters
select id_number from result_0125_in_person_voters;

insert into result_0125_overlap_voters
select id_number from result_0125_provisional_voters;

insert into result_0125_overlap_voters
select id_number from result_0125_mail_in_voters;

select count(*), count from
(select count(*) as count, id_number from result_0125_overlap_voters group by id_number)
A
group by count order by count desc;
+-----+-----+
| count(*) | count |
+-----+-----+
|      842 |      2 |
| 6917803 |      1 |
+-----+-----+

```

## First, Last Name and DOB Match Double Voters:

```

select count(*) from regis A,
(select count(*) as count, first_name, last_name, dob from regis where
last_vote_date='2020-11-03' group by first_name, last_name, dob HAVING count(*)>1) B
where A.dob=B.dob
and A.first_name=B.first_name
and A.last_name=B.last_name
and A.last_vote_date='2020-11-03';
+-----+
| count(*) |
+-----+
|      4421 |
+-----+

```

## Chapter 2: Fraud

### Mail In 1 Day Send Receive Difference:

```

select count(*) from pamailin where status='Vote Recorded' and DATEDIFF(ballot_received,
ballot_mailed_on)=1;
+-----+
| count(*) |
+-----+
|      51347 |
+-----+

```

### Mail In 2 Day Send Receive Difference:

```

select count(*) from pamailin where status='Vote Recorded' and DATEDIFF(ballot_received,
ballot_mailed_on)=2;
+-----+
| count(*) |
+-----+
|      43291 |
+-----+

```



## Mail In 3 Day Send Receive Difference:

```
select count(*) from pamailin where status='Vote Recorded' and DATEDIFF(ballot_received,
ballot_mailed_on)=3;
+-----+
| count(*) |
+-----+
|    42079 |
+-----+
```

## Voters With Only 1 Letter For First Name:

```
select count(*) from regis where LENGTH(first_name)=1 and last_vote_date='2020-11-03';
+-----+
| count(*) |
+-----+
|    19609 |
+-----+
```

## Voters Forced to Use Provisional Because Mail In Ballot In 'Pending':

```
select count(distinct A.id_number) from regis A, vohis B, pamailin C where
A.id_number=B.id_number and A.id_number=C.voter_id and no_r=0 and el_date='2020-11-03'
and el_method='P' and status='Pending';
+-----+
| count(distinct A.id_number) |
+-----+
|                56352 |
+-----+
```

## Registrations with a Registration date before 2020-04-06 added after 2020-04-06:

```
#Get voter ids which were deleted between 2020-04-06 and 2020-12-28
create table result_0406_vs_1228_del_ids
select id_number from regis_0406
except
select id_number from regis;
Query OK, 343286 rows affected (4 min 12.014 sec)

#Get voter ids which were added between 2020-04-06 and 2020-12-28
create table result_0406_vs_1228_del_ids_rev
select id_number from regis
except
select id_number from regis_0406;
Query OK, 801216 rows affected (4 min 7.915 sec)

#Get full registration details of those added after 2020-04-06 with a registration date
before 2020-04-06
create table result_0406_vs_1228_bad_reg_entries
select A.* from regis A, result_0406_vs_1228_del_ids_rev B where A.id_number=B.id_number
and registration_date<'2020-04-06';
Query OK, 225970 rows affected (5.912 sec)

#Get full registration details of those removed between 2020-04-06 and 2020-12-28
create table result_0406_vs_1228_del_entries
select A.* from regis_0406 A, result_0406_vs_1228_del_ids B where
A.id_number=B.id_number;

#Get registration details of those added after 2020-04-06 with a registration date
before 2020-04-06, who were not found to be people just moving to a new county and thus
getting a new voter_id
create table result_0406_vs_1228_bad_reg_entries_new
select A.* from result_0406_vs_1228_bad_reg_entries A,
(select registration_date, dob from result_0406_vs_1228_bad_reg_entries group by
registration_date, dob
except
select registration_date, dob from result_0406_vs_1228_del_entries group by
```

```

registration_date, dob) B
where A.registration_date=B.registration_date
and A.dob=B.dob;

select count(*) from result_0406_vs_1228_bad_reg_entries_new where last_vote_date='2020-11-03';
+-----+
| count(*) |
+-----+
|      54205 |
+-----+

```

## Chapter 3: Over / Under Vote Counts:

### Presidential Votes Which Do Not Have An Assigned Voter:

```

select SUM(reported_total-recorded_total) as sum_diff from (select count(*) as
recorded_total, county from regis where last_vote_date='2020-11-03' group by county) A,
(select SUM(total_votes) as reported_total, county from pares where title='President of
the United States' group by county) B where A.county=B.county and reported_total-
recorded_total>0;
+-----+
| sum_diff |
+-----+
|      18285 |
+-----+

```

### Assigned Voters Whose Presidential Vote Was Lost / Trashed / Not Given:

```

select SUM(reported_total-recorded_total) as sum_diff from (select count(*) as
recorded_total, county from regis where last_vote_date='2020-11-03' group by county) A,
(select SUM(total_votes) as reported_total, county from pares where title='President of
the United States' group by county) B where A.county=B.county and reported_total-
recorded_total<0;
+-----+
| sum_diff |
+-----+
|     -13148 |
+-----+

```

### Allegheny County Over Votes:

```

select SUM(total_votes_prec-known_total_voted) as total_under_over, A.county from
(select SUM(total_votes) as total_votes_prec, precinct_code, precinct_name2, county from
paprec group by precinct_code, county) A,
(select count(*) as known_total_voted, precinct_code, county from regis where
last_vote_date='2020-11-03' group by precinct_code, county) B
where A.precinct_code=B.precinct_code
and A.county=B.county
and total_votes_prec>known_total_voted
group by A.county;
+-----+-----+
| total_under_over | county |
+-----+-----+
|          10032 | ALLEGHENY |
|           1934 | CHESTER |
|           3639 | DELAWARE |
|           4117 | LUZERNE |
|           3941 | MONTGOMERY |
|            662 | WESTMORELAND |
+-----+-----+

```

### Precinct Level Increases Over County Level Over / Under Votes:

```

#county level under and over votes
select reported_total, recorded_total, reported_total-recorded_total as diff, A.county

```

```
from (select count(*) as recorded_total, county from regis where last_vote_date='2020-11-03' group by county) A, (select SUM(total_votes) as reported_total, county from pares where title='President of the United States' group by county) B where A.county=B.county order by diff desc;
```

reported_total	recorded_total	diff	county
719733	715445	4288	ALLEGHENY
153321	149816	3505	LUZERNE
510157	507157	3000	MONTGOMERY
327931	325749	2182	DELAWARE
314502	313334	1168	CHESTER
118478	117486	992	WASHINGTON
83829	83029	800	MONROE
...			
170942	171462	-520	NORTHAMPTON
113305	113926	-621	BUTLER
280239	280939	-700	LANCASTER
204697	205432	-735	WESTMORELAND
184713	185462	-749	LEHIGH
115410	116200	-790	LACKAWANNA
141595	142387	-792	CUMBERLAND
137083	138005	-922	ERIE
147368	148956	-1588	DAUPHIN
205540	207628	-2088	BERKS

```
#over votes from precinct sums for counties
select SUM(total_votes_prec-known_total_voted) as total_under_over, A.county from
(select SUM(total_votes) as total_votes_prec, precinct_code, precinct_name2, county from
paprec group by precinct_code, county) A,
(select count(*) as known_total_voted, precinct_code, county from regis where
last_vote_date='2020-11-03' group by precinct_code, county) B
where A.precinct_code=B.precinct_code
and A.county=B.county
and total_votes_prec>known_total_voted
group by A.county;
```

total_under_over	county
10032	ALLEGHENY
1934	CHESTER
3639	DELAWARE
4117	LUZERNE
3941	MONTGOMERY
662	WESTMORELAND

10032 + 1934 + 3639 + 4117 + 3941 + 662 = 24325  
4288 + 1168 + 2182 + 3505 + 3000 - 735 = 13408

24325 / 13408 = 1.814

## Luzerne County In-Person Over Votes:

```
create table vohis_result_county_methods_11_03
select count(*) as count, el_method, county from regis A, vohis B where
A.id_number=B.id_number and el_date='2020-11-03' group by county, el_method order by
county, el_method;

select total_in_person_votes, hcount, total_in_person_votes-hcount as diff, A.county
from
(select SUM(count) as hcount, county from vohis_result_county_methods_11_03 where
el_method='AP' group by county) A,
(select SUM(total_votes) as total_votes, SUM(mail_in_votes) as total_mail_in_votes,
SUM(in_person_votes) as total_in_person_votes, SUM(provisional_votes) as
total_provisional_votes, county from pares where title='President of the United States'
group by county) B
where A.county=B.county
order by diff desc;
```

total_in_person_votes	hcount	diff	county
93864	90799	3065	LUZERNE
263448	260994	2454	MONTGOMERY
192313	190487	1826	DELAWARE
80347	78651	1696	WASHINGTON
49775	48210	1565	MONROE
160949	159792	1157	CHESTER
186153	185629	524	LANCASTER
...			
136170	136658	-488	BERKS
142802	143352	-550	WESTMORELAND

## Allegheny County Mail-In Under Votes:

```
select total_mail_in_votes, paballot_mail_in, total_mail_in_votes-paballot_mail_in as
diff, A.county from
(select count(*) as paballot_mail_in, county from paballot where ballot_returned_date!
='0000-00-00' group by county) A,
(select SUM(mail_in_votes) as total_mail_in_votes, county from pares where
title='President of the United States' group by county) B
where A.county=B.county
ORDER BY diff desc;
```

total_mail_in_votes	paballot_mail_in	diff	county
164304	161372	2932	BUCKS
150083	147954	2129	CHESTER
128812	127248	1564	DELAWARE
33992	32871	1121	MONROE
...			
52235	53246	-1011	CUMBERLAND
41226	42347	-1121	LACKAWANNA
54157	55340	-1183	DAUPHIN
65179	66520	-1341	BERKS
342731	350769	-8038	ALLEGHENY

## Allegheny County Provisional Under Votes:

```
select reported_provis, count_counted as counted, count_rejected as rejected,
reported_provis-count_counted as over_under,
count_rejected/(count_counted+count_rejected) as reject_rate, A.county from
(select count(*) as count_counted, county from paprovis where status in ('Counted',
'Partially Counted') group by county) A,
(select count(*) as count_rejected, county from paprovis where status='Rejected' group
by county) B,
(select SUM(provisional_votes) as reported_provis, county from pares where
title='President of the United States' group by county) C
where A.county=B.county
and A.county=C.county
order by over_under desc;
```

reported_provis	counted	rejected	over_under	reject_rate	county
14287	10492	851	3795	0.0750	ALLEGHENY
2950	1977	188	973	0.0868	LUZERNE
879	566	82	313	0.1265	CRAWFORD
...					
14391	14889	1241	-498	0.0769	PHILADELPHIA
62	1451	106	-1389	0.0681	MONROE

## Chapter 4: County Level Abnormalities / Fraud:

### Abnormal Registration Growths:

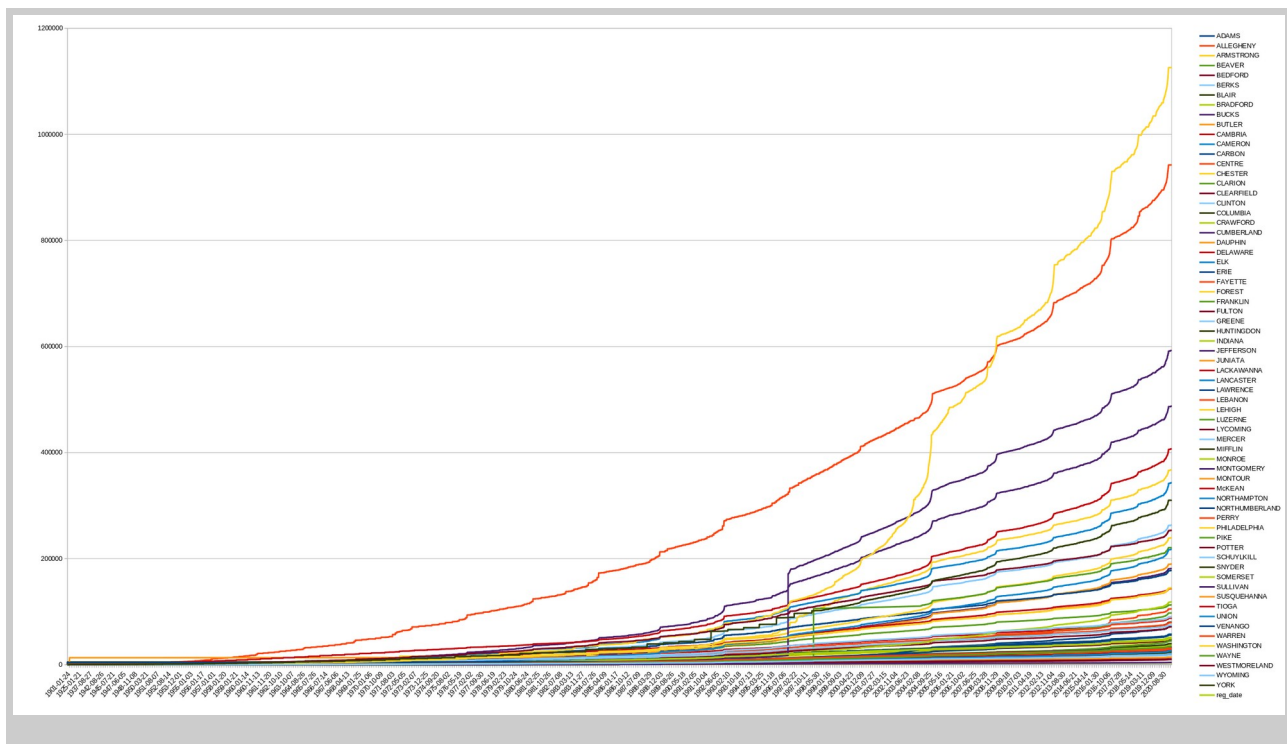
```
#Current registration rank by county
SET @rank:=0;
select @rank:=@rank+1 as No, A.* from
(select count(*), county from regis group by county order by count(*) desc limit 20) A;
```

No	count(*)	county
1	1125785	PHILADELPHIA
2	942318	ALLEGHENY
3	593016	MONTGOMERY
4	487575	BUCKS
5	406827	DELAWARE
6	367576	CHESTER
7	343175	LANCASTER
8	310773	YORK
9	263637	BERKS
10	245696	WESTMORELAND
11	239670	LEHIGH
12	221143	LUZERNE
13	218066	NORTHAMPTON
14	189841	DAUPHIN
15	181469	CUMBERLAND
16	177792	ERIE
17	144832	WASHINGTON
18	144212	LACKAWANNA
19	143237	BUTLER
20	118748	MONROE

```
#County registration rank before 1990-01-01. Please note Montgomery (and Luzerne)
#are not represented at all at this point, therefore Chester is actually
#considered to be 13th.
SET @rank:=0;
select @rank:=@rank+1 as No, A.* from
(select count(*), county from regis where registration_date<'1990-01-01' group by county
order by count(*) desc limit 20) A;
```

No	count(*)	county
1	223016	ALLEGHENY
2	74457	BUCKS
3	67020	DELAWARE
4	55367	LANCASTER
5	54937	WESTMORELAND
6	54577	PHILADELPHIA
7	44403	BERKS
8	41510	YORK
9	40321	ERIE
10	34803	LACKAWANNA
11	33723	LEHIGH
12	33299	CHESTER
13	30160	WASHINGTON
14	28311	CUMBERLAND
15	27375	BUTLER
16	25836	NORTHAMPTON
17	25758	BEAVER
18	24702	DAUPHIN
19	22765	CAMBRIA
20	19815	SCHUYLKILL

```
#Graph of the accumulative registration count over time for all counties
```



## Abnormal Regularly Reoccurring Large Registration Dates:

```
#Top Ten registration dates for Allegheny County
select total_count, voted_count, voted_count / total_count as turnout,
A.registration_date from
(select count(*) as total_count, registration_date from regis where county='ALLEGHENY'
group by registration_date) A,
(select count(*) as voted_count, registration_date from regis where county='ALLEGHENY'
and last_vote_date='2020-11-03' group by registration_date) B
where A.registration_date=B.registration_date
order by total_count desc
limit 10;
```

total_count	voted_count	turnout	registration_date
9083	7872	0.8667	1992-10-01
8260	7254	0.8782	1984-10-01
7668	621	0.0810	2018-11-19
7464	6546	0.8770	1988-10-01
6981	5804	0.8314	1996-10-01
6555	5636	0.8598	1992-09-01
6250	5208	0.8333	2000-10-01
5095	4569	0.8968	1976-10-01
4897	4399	0.8983	1980-10-01
4731	4157	0.8787	1984-03-01

```
#Top Ten highest turnout large registration dates for Allegheny County
select total_count, voted_count, voted_count / total_count as turnout,
A.registration_date from
(select count(*) as total_count, registration_date from regis where county='ALLEGHENY'
group by registration_date) A,
(select count(*) as voted_count, registration_date from regis where county='ALLEGHENY'
and last_vote_date='2020-11-03' group by registration_date) B
where A.registration_date=B.registration_date
and total_count>500
order by turnout desc
limit 10;
```

total_count	voted_count	turnout	registration_date
555	521	0.9387	1971-12-01

633	593	0.9368	1972-08-01
3659	3420	0.9347	1971-07-01
2602	2414	0.9277	1971-09-01
1381	1278	0.9254	1974-10-01
1884	1742	0.9246	1980-08-01
602	553	0.9186	1978-08-01
810	744	0.9185	1979-01-01
772	707	0.9158	1976-03-01
1604	1465	0.9133	1980-04-01

```
#Overall turnout across the whole county for Allegheny
select total_count, voted_count, voted_count / total_count as turnout from
(select count(*) as total_count from regis where county='ALLEGHENY') A,
(select count(*) as voted_count from regis where county='ALLEGHENY' and
last_vote_date='2020-11-03') B;
```

total_count	voted_count	turnout
942318	720327	0.7644

## 90% Turnouts:

```
#Top Ten most influential counties
select total_count, voted_count, voted_count / total_count as turnout, A.county from
(select count(*) as total_count, county from regis group by county) A,
(select count(*) as voted_count, county from regis where last_vote_date='2020-11-03'
group by county) B
where A.county=B.county
order by voted_count desc
limit 10;
```

total_count	voted_count	turnout	county
1125785	741375	0.6585	PHILADELPHIA
942318	720327	0.7644	ALLEGHENY
593016	508118	0.8568	MONTGOMERY
487575	396151	0.8125	BUCKS
406827	325367	0.7998	DELAWARE
367576	313345	0.8525	CHESTER
343175	280714	0.8180	LANCASTER
310773	238466	0.7673	YORK
263637	207528	0.7872	BERKS
245696	205154	0.8350	WESTMORELAND

```
#Top Ten most highest turnout counties
select total_count, voted_count, voted_count / total_count as turnout, A.county from
(select count(*) as total_count, county from regis group by county) A,
(select count(*) as voted_count, county from regis where last_vote_date='2020-11-03'
group by county) B
where A.county=B.county
order by turnout desc
limit 10;
```

total_count	voted_count	turnout	county
593016	508118	0.8568	MONTGOMERY
367576	313345	0.8525	CHESTER
20153	17051	0.8461	ELK
32624	27494	0.8428	BEDFORD
245696	205154	0.8350	WESTMORELAND
14427	12042	0.8347	JUNIATA
112814	94104	0.8342	BEAVER
4337	3613	0.8331	SULLIVAN
10958	9107	0.8311	POTTER
71460	59240	0.8290	LYCOMING

```
#Average turnout amongst the top ten most influential counties without Chester
#and Montgomery included
select SUM(total_count), SUM(voted_count), SUM(voted_count) / SUM(total_count) as
turnout from
(select count(*) as total_count, county from regis group by county) A,
(select count(*) as voted_count, county from regis where last_vote_date='2020-11-03'
group by county) B
where A.county=B.county
and A.county NOT IN ('MONTGOMERY', 'CHESTER')
order by voted_count desc
limit 8;
```

SUM(total_count)	SUM(voted_count)	turnout
7943803	6092233	0.7669

```
#Breakdown of the counties with precincts with a turnout above 90%
select count(*), county from
(select total_count, voted_count, voted_count / total_count as turnout, A.precinct_code,
A.county from
(select count(*) as total_count, precinct_code, county from regis group by
precinct_code, county) A,
(select count(*) as voted_count, precinct_code, county from regis where
last_vote_date='2020-11-03' group by precinct_code, county) B
where A.precinct_code=B.precinct_code
and A.county=B.county
and voted_count / total_count>=0.9) A
group by county order by count(*) desc;
```

count(*)	county
65	MONTGOMERY
22	DELAWARE
15	CHESTER
7	CAMBRIA
7	BEAVER
6	ALLEGHENY
5	DAUPHIN
5	WESTMORELAND
5	LANCASTER
4	LYCOMING
3	HUNTINGDON
3	WASHINGTON
3	BEDFORD
3	LEHIGH
2	CENTRE
2	CLARION
2	SCHUYLKILL
2	COLUMBIA
1	SNYDER
1	LEBANON
1	CUMBERLAND
1	TIOGA
1	FRANKLIN
1	LAWRENCE
1	POTTER
1	ELK

## Fraudulently Low Republican to Trump Mail In Turnouts:

```
# T_vs_R_inp = Trump in-person votes / Republicans who voted in-person in the county
# T_vs_R_mail = Trump mail-in votes / Republicans who voted mail-in in the county
# TR_inp_vs_mail = T_vs_R_inp / T_vs_R_mail, which is the correlation number between the two (it should always
# stay close to 1)
create table vohis_result_county_party_methods_11_03
select count(*) as count, el_method, party_code, county from regis A, vohis B where A.id_number=B.id_number and
el_date='2020-11-03' group by county, party_code, el_method order by county, party_code, el_method;

select T_in_person_votes/R_in_person as T_vs_R_inp, T_mail_in_votes/R_mail_in as T_vs_R_mail,
B_in_person_votes/D_in_person as B_vs_D_inp, B_mail_in_votes/D_mail_in as B_vs_D_mail,
```



```

(T_in_person_votes/R_in_person)/(T_mail_in_votes/R_mail_in) as TR_inp_vs_mail,
(B_in_person_votes/D_in_person)/(B_mail_in_votes/D_mail_in) as BD_inp_vs_mail, A.county from
(select total_votes as T_total_votes, in_person_votes as T_in_person_votes, mail_in_votes as T_mail_in_votes,
county from pares where title='President of the United States' and party='R' group by county) A,
(select total_votes as B_total_votes, in_person_votes as B_in_person_votes, mail_in_votes as B_mail_in_votes,
county from pares where title='President of the United States' and party='D' group by county) B,
(select SUM(count) as R_mail_in, county from vohis_result_county_party_methods_11_03 where el_method IN ('AB',
'MB') and party_code='R' group by county) C,
(select SUM(count) as D_mail_in, county from vohis_result_county_party_methods_11_03 where el_method IN ('AB',
'MB') and party_code='D' group by county) D,
(select SUM(count) as R_in_person, county from vohis_result_county_party_methods_11_03 where el_method='AP' and
party_code='R' group by county) E,
(select SUM(count) as D_in_person, county from vohis_result_county_party_methods_11_03 where el_method='AP' and
party_code='D' group by county) F
where A.county=B.county
and A.county=C.county
and A.county=D.county
and A.county=E.county
and A.county=F.county
order by T_vs_R_mail;

```

T_vs_R_inp	T_vs_R_mail	B_vs_D_inp	B_vs_D_mail	TR_inp_vs_mail	BD_inp_vs_mail	county
0.9975	0.6750	1.3177	1.3023	1.47774272	1.01184849	DELAWARE
1.0879	0.7596	1.4151	1.3914	1.43230741	1.01703847	CHESTER
1.1334	0.7800	1.2275	1.2719	1.45318204	0.96510260	MONTGOMERY
1.1119	0.8270	1.1742	1.2195	1.34459506	0.96281061	DAUPHIN
1.1111	0.8286	1.2767	1.3343	1.34088541	0.95682921	LANCASTER
1.1056	0.8453	1.2718	1.3105	1.30800713	0.97042675	CUMBERLAND
1.1438	0.8634	1.2069	1.2804	1.32483194	0.94259957	CENTRE
1.1337	0.8643	0.9689	1.2383	1.31174066	0.78242793	WYOMING
1.0953	0.8792	1.2512	1.2916	1.24577377	0.96868744	UNION
1.0922	0.8856	1.1231	1.2753	1.23332909	0.88062352	SNYDER
1.1416	0.8943	1.1012	1.2857	1.27653620	0.85648533	LEBANON
1.1158	0.8947	1.0177	1.2897	1.24716476	0.78905422	BRADFORD
1.2043	0.8974	1.1111	1.2788	1.34199628	0.86882908	BUCKS
1.1161	0.9183	1.0169	1.2337	1.21530148	0.82428300	PERRY
1.1306	0.9224	1.0500	1.2825	1.22577525	0.81872493	FRANKLIN
1.1614	0.9224	1.0926	1.2517	1.25909079	0.87293902	YORK
1.1651	0.9305	1.0181	1.2204	1.25207963	0.83420148	SUSQUEHANNA
1.1717	0.9426	1.0031	1.2762	1.24308406	0.78599549	MONTOUR
1.2274	0.9474	0.8603	1.1077	1.29550139	0.77665857	WARREN
1.1572	0.9540	0.9919	1.2287	1.21308578	0.80729620	BUTLER
1.1294	0.9542	0.8667	1.1839	1.18363512	0.73205915	HUNTINGDON
1.1690	0.9574	0.8708	1.1146	1.22101674	0.78129861	CRAWFORD
1.1600	0.9606	1.0675	1.2641	1.20759898	0.84449391	ADAMS
1.1232	0.9619	1.0096	1.2535	1.16762550	0.80549513	TIOGA
1.1546	0.9668	0.7665	1.2053	1.19415178	0.63595158	MIFFLIN
1.1589	0.9748	1.0900	1.2773	1.18883763	0.85336284	WAYNE
1.1456	0.9773	0.9556	1.1780	1.17220118	0.81120349	BLAIR
1.2378	0.9815	0.9958	1.1515	1.26121880	0.86474840	BERKS
1.1670	0.9864	0.8930	1.1732	1.18307655	0.76111030	VENANGO
1.2601	0.9908	0.9295	1.1019	1.27177718	0.84352164	ERIE
1.1478	0.9943	0.9721	1.1816	1.15436845	0.82267562	LYCOMING
1.2765	1.0027	1.0500	1.2014	1.27307369	0.87402150	LEHIGH
1.1172	1.0038	0.8636	1.2145	1.11291904	0.71106564	POTTER
1.2185	1.0062	0.6735	1.0020	1.21102430	0.67211876	SOMERSET
1.1871	1.0136	0.7327	1.0906	1.17108865	0.67181148	JEFFERSON
1.1998	1.0167	0.7441	1.1337	1.18011657	0.65633900	SULLIVAN
1.2119	1.0272	0.7268	1.0966	1.17980670	0.66280964	FOREST
1.1814	1.0337	0.7742	1.1203	1.14293089	0.69112432	CLARION
1.2329	1.0387	0.7934	1.0950	1.18703153	0.72459097	SCHUYLKILL
1.1786	1.0398	0.5738	1.1085	1.13348902	0.51761352	FULTON
1.2317	1.0499	0.7228	1.1452	1.17316707	0.63114632	CAMERON
1.1257	1.0548	0.9982	1.2521	1.06728497	0.79718749	McKEAN
1.2519	1.0574	0.8511	1.0824	1.18389576	0.78636503	MERCER
1.2075	1.0584	0.8921	1.1440	1.14085473	0.77980934	COLUMBIA
1.2080	1.0605	0.8409	1.1411	1.13910381	0.73698489	NORTHUMBERLAND
1.1551	1.0632	0.6100	1.1242	1.08642879	0.54258124	BEDFORD
1.1673	1.0660	0.6902	1.1359	1.09497990	0.60767323	JUNIATA
1.2476	1.0683	0.7700	1.1245	1.16781376	0.68473081	INDIANA
1.3843	1.0688	0.9573	1.0859	1.29517943	0.88156288	ALLEGHENY
1.2299	1.0780	0.8427	1.0908	1.14096336	0.77257872	CLINTON
1.2697	1.1032	1.1211	1.2767	1.15093877	0.87809906	PIKE
1.2423	1.1080	0.6927	1.0347	1.12121805	0.66946134	CLEARFIELD
1.3374	1.1089	0.9942	1.1831	1.20605896	0.84032489	NORTHAMPTON
1.2511	1.1168	0.6609	1.0620	1.12024833	0.62233201	ARMSTRONG
1.3569	1.1377	0.7458	1.0751	1.19263637	0.69368781	WASHINGTON
1.3316	1.1827	1.1217	1.2116	1.12590527	0.92573524	MONROE
1.3036	1.1835	0.7267	1.0470	1.10150802	0.69405529	WESTMORELAND
1.3209	1.1864	0.7785	1.0669	1.11342499	0.72964715	CARBON
1.3924	1.1898	0.7770	1.0260	1.17031058	0.75728521	LUZERNE
1.4293	1.1921	0.8084	1.0236	1.19896412	0.78970536	LACKAWANNA
1.3182	1.2084	0.6078	0.9799	1.09090967	0.62029337	ELK
1.3326	1.2143	0.7272	1.0104	1.09743998	0.71974582	LAWRENCE
1.3945	1.2418	0.7474	1.0314	1.12295730	0.72470558	BEAVER
1.5809	1.2495	0.9968	1.0832	1.26518738	0.92025263	PHILADELPHIA
1.3917	1.2943	0.5910	0.9505	1.07517920	0.62172714	CAMBRIA
1.4471	1.4883	0.4731	0.8943	0.97228045	0.52899287	GREENE
1.4581	1.4926	0.5555	0.9357	0.97686950	0.59363953	FAYETTE

## Anomalously High Usage of 'Online' Mail In Ballots:

#Breakdown of ballot types

```
select count(*), ballot_type from pamailin group by ballot_type;
```

count(*)	ballot_type
6170601	
87	ALTERNATIVE
86	BEDRIDDEN VETERAN
2531	CIVILIAN
120	CIVILIAN - REMOTE/ISOLATED
11443	CIVILIAN OVERSEAS
4606	EMERGENCY
54	Federal (Unregistered)
1185771	MAIL-IN
10757	MILITARY
94	MILITARY - REMOTE/ISOLATED
5631	ONLINE MAIL-IN NOT VERIFIED
1361271	ONLINE MAIL-IN VERIFIED
4824	ONLINE REGULAR ABSENTEE NOT VERIFIED
316477	ONLINE REGULAR ABSENTEE VERIFIED
55073	Regular Absentee
8	VETERAN

#Ratio of 'online' ballots vs other per county

```
select mail_in_count, online_count, online_count/mail_in_count ratio, A.county from
(select count(*) as online_count, county from pamailin where ballot_type IN ('ONLINE
MAIL-IN NOT VERIFIED', 'ONLINE MAIL-IN VERIFIED', 'ONLINE REGULAR ABSENTEE NOT
VERIFIED', 'ONLINE REGULAR ABSENTEE VERIFIED') and status='Vote Recorded' group by
county order by count(*) desc) A,
(select count(*) as mail_in_count, county from pamailin where ballot_type NOT IN
('ONLINE MAIL-IN NOT VERIFIED', 'ONLINE MAIL-IN VERIFIED', 'ONLINE REGULAR ABSENTEE NOT
VERIFIED', 'ONLINE REGULAR ABSENTEE VERIFIED', '') and status='Vote Recorded' group by
county order by count(*) desc) B
where A.county=B.county
order by online_count/mail_in_count desc;
```

mail_in_count	online_count	ratio	county
45731	104189	2.2783	CHESTER
75285	167657	2.2270	MONTGOMERY
12020	20557	1.7102	CENTRE
20625	34727	1.6837	DAUPHIN
19877	33136	1.6671	CUMBERLAND
62471	102460	1.6401	BUCKS
49569	78518	1.5840	DELAWARE
29980	46284	1.5438	YORK
13264	19995	1.5075	BUTLER
31156	45593	1.4634	LEHIGH
36999	53337	1.4416	LANCASTER
31162	42542	1.3652	NORTHAMPTON
28459	38205	1.3425	BERKS
15862	21272	1.3411	WASHINGTON
26333	33171	1.2597	WESTMORELAND
157471	193161	1.2266	ALLEGHENY
3946	4570	1.1581	COLUMBIA
19788	22455	1.1348	LACKAWANNA
173348	196171	1.1317	PHILADELPHIA
9948	11211	1.1270	FRANKLIN
23532	26074	1.1080	ERIE
4305	4581	1.0641	WAYNE
16157	16875	1.0444	MONROE
2827	2895	1.0241	PERRY
2080	2057	0.9889	WYOMING
4680	4612	0.9855	CARBON
8742	8531	0.9759	BLAIR

8116	7867	0.9693	FAYETTE
3633	3395	0.9345	ARMSTRONG
4923	4306	0.8747	NORTHUMBERLAND
2477	2154	0.8696	HUNTINGDON
4579	3940	0.8604	CLEARFIELD
9722	8146	0.8379	CAMBRIA
3095	2563	0.8281	SUSQUEHANNA
675	559	0.8281	FULTON
2264	1847	0.8158	CLARION
2403	1960	0.8156	GREENE
2384	1944	0.8154	JEFFERSON
2721	2149	0.7898	MIFFLIN
3608	2843	0.7880	VENANGO
3684	2884	0.7828	BRADFORD
2426	1865	0.7688	CLINTON
9272	7124	0.7683	SCHUYLKILL
6218	4710	0.7575	CRAWFORD
2333	1738	0.7450	McKEAN
8681	6418	0.7393	MERCER
4818	3501	0.7267	SOMERSET
2242	1616	0.7208	ELK
3291	2336	0.7098	BEDFORD
3187	2210	0.6934	WARREN
35090	22155	0.6314	LUZERNE
523	308	0.5889	SULLIVAN
486	253	0.5206	FOREST
497	224	0.4507	CAMERON

#Average ratio of 'online' ballots vs other for all counties

```
select mail_in_count, online_count, online_count/mail_in_count ratio from
(select count(*) as online_count from pamailin where ballot_type IN ('ONLINE MAIL-IN NOT
VERIFIED', 'ONLINE MAIL-IN VERIFIED', 'ONLINE REGULAR ABSENTEE NOT VERIFIED', 'ONLINE
REGULAR ABSENTEE VERIFIED') and status='Vote Recorded') A,
(select count(*) as mail_in_count from pamailin where ballot_type NOT IN ('ONLINE MAIL-
IN NOT VERIFIED', 'ONLINE MAIL-IN VERIFIED', 'ONLINE REGULAR ABSENTEE NOT VERIFIED',
'ONLINE REGULAR ABSENTEE VERIFIED', '' ) and status='Vote Recorded') B;
```

mail_in_count	online_count	ratio
1058965	1435851	1.3559