

Report of Vote Counting for determining an alternative name to Stapleton (8/12/2020)

Prepared by Amanda Allshouse, on behalf of Stapleton United Neighbors

Summary

We believe that the consistency in results across rounds, high agreement between ballot participants and available public records, and similarity in results when analyzed by different subsets of validation criteria, demonstrate a robustness of our reported primary results: that Central Park is the community-preferred alternative name with 63% of voters selecting this name. Furthermore, we believe that the high participation in this process by residents is to be noted, in that it exceeds participation in other processes in previous years.

Primary results from each round are reported in Panel 1 on page 3, with stricter validation imposed on subsequent pages without a difference in results.

Details on the approach to validation are listed below in the methods section.

An appendix includes screen shots from Survey Monkey. These are included to show raw results prior to SUN working with the data. Results are the same as SUN's results.

Objective

To apply a standard criteria to each ballot to determine objectively whether it met the inclusion criteria of: an adult renting or owning in the Stapleton community in Denver or Aurora.

Methods

Validation criteria from within the ballot included: 1) completeness, 2) affirmation of qualification, 3) non-duplicate, and 4) reasonable name/address.

Completeness was defined as completing the vote. In rounds 1 and 2, if a ballot included at least one option ranked (out of a possible three), it was included. In the third round, a complete vote was simply whether a selection was made on the one voting question. An incomplete ballot is referred to as "blank".

On each ballot, a person was asked to check "I affirm that I am an adult renting/owning in the Stapleton community in Denver or Aurora". If a person checked "no" to this question, the ballot was not counted, this is referred to as "self-flagging".

Duplicate votes were identified by name, email address, and phone number through visual inspection (i.e. manually). All duplicated names were reviewed to determine whether there were two (or three!) instances of the same name from unique people. Two people with different names, but the same email address were allowed, however the same name with the same email address from two different property addresses were not allowed. One instance of a name occurred three times and was determined to be three individuals with the same name.

Invalid names or addresses were blatantly not the name or address of a resident. Examples were "test", "Boaty McBoatface", or profanity.

Each address was geocoded and mapped. Geocoding is taking a physical address and assigning a latitudinal and longitudinal coordinate to it. Geocoding was performed with Google maps Application programming interface (API). All addresses within the footprint of the community (Denver or Aurora blocks) were counted as “in boundary”, otherwise were “out of boundary”. A map of these dots is not included in this report, as participants were guaranteed confidentiality.

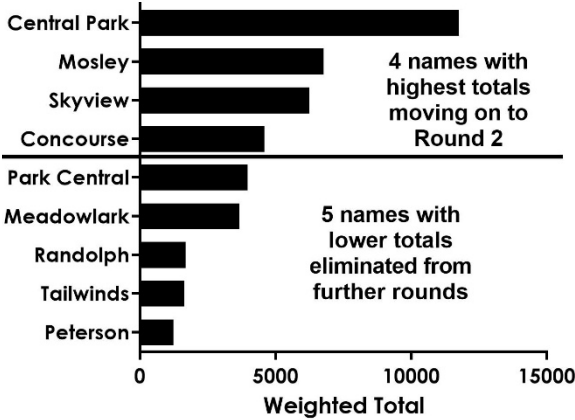
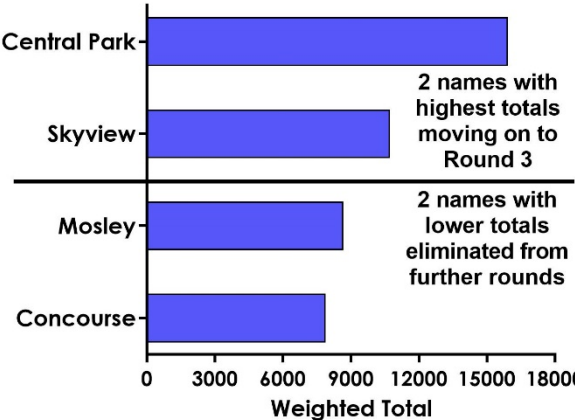
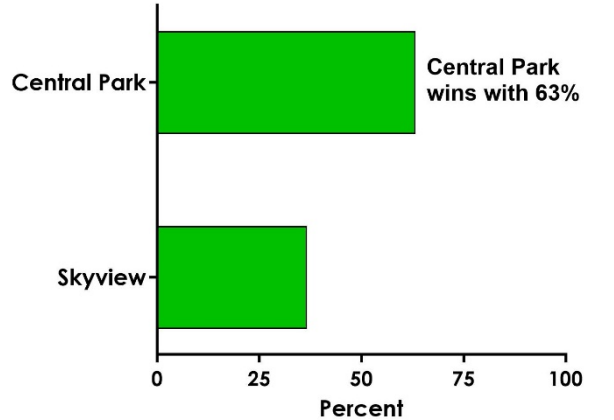
Two external sources were incorporated into ballot validation: property records and voter registration rosters. Starting with round 2, property records (available for Denver addresses only) and voting records were geocoded and matched by geocoded address to each ballot. If a person’s last name as entered on their ballot matched either the last name listed first on the property record, or one of the three first last names of voters registered to the address, the ballot was considered a “name match”. A selection of ballots in-boundary but not matched by name were hand-validated in rounds two and three. In addition to geocoding, parcels and voter records were also used for manual checks in all three rounds. Manual validation involved checking ballot information against property records or voter registration rosters for a given address.

Primary results are reported as votes among in-boundary participants after screening out blank/self-flagging/duplicate/invalid names. The subset of name-validated in-boundary ballots meeting all other criteria are reported subsequently.

Determining the winning names in rounds one and two were based on a weighted. A weighted total is the sum of 1st place votes times 3, 2nd place votes times 2, and 3rd place votes times 1. A high “average” score with a low weighted total would indicate a name preferred strongly by those who prefer it, but not widely among all voters. A name with a low average but a high weighted total would indicate a name that is acceptable to many, but not usually a 1st choice. A priori we committed to using weighted totals, rather than number of votes or average score. The commitment to this approach was discussed during SUN’s monthly meeting June 16th, and finalized and voted on publicly at SUN’s June 24th meeting called for the purpose of finalizing the name selection process.

In the third round of voting only one selection was permitted between two names, and the results are reported as a percent with frequency (# votes).

Panel 1. Primary results

Round 1: Monday 7/13- 2pm Saturday 7/18/2020 Number ballots submitted: 7861 Blank / self-flagged / duplicate / invalid: 494* Not in boundary: 254 N reported below: 7,113	Round 2: Monday 7/20 - 2pm Friday 7/24/2020 Number ballots submitted: 7902 Blank / self-flagged / duplicate / invalid: 129 Not in boundary: 183 N reported below: 7,590	Round 3: Sunday 7/26 - 2pm Thursday 7/30/2020 Number ballots submitted: 8002 Blank / self-flagged / duplicate / invalid: 200 Not in boundary: 146 N reported below: 7,656																																																																					
Round 1 community name voting results 	Round 2 community name voting results 	Round 3 community name voting results 																																																																					
Round 1 primary result table <table><tr><th>Name</th><th>Weighted total</th><th>Mean</th><th># votes</th></tr><tr><td>Central Park</td><td>11764</td><td>2.48</td><td>4735</td></tr><tr><td>Mosley</td><td>6769</td><td>2.36</td><td>2868</td></tr><tr><td>Skyview</td><td>6243</td><td>1.87</td><td>3344</td></tr><tr><td>Concourse</td><td>4585</td><td>1.8</td><td>2544</td></tr><tr><td>Park Central</td><td>3961</td><td>1.8</td><td>2197</td></tr><tr><td>Meadowlark</td><td>3674</td><td>1.79</td><td>2053</td></tr><tr><td>Randolph</td><td>1676</td><td>1.67</td><td>1004</td></tr><tr><td>Tailwinds</td><td>1627</td><td>1.63</td><td>1001</td></tr><tr><td>Peterson</td><td>1227</td><td>1.65</td><td>742</td></tr></table>	Name	Weighted total	Mean	# votes	Central Park	11764	2.48	4735	Mosley	6769	2.36	2868	Skyview	6243	1.87	3344	Concourse	4585	1.8	2544	Park Central	3961	1.8	2197	Meadowlark	3674	1.79	2053	Randolph	1676	1.67	1004	Tailwinds	1627	1.63	1001	Peterson	1227	1.65	742	Round 2 primary result table <table><tr><th>Variable</th><th>Weighted total</th><th>Mean</th><th># votes</th></tr><tr><td>Central Park</td><td>15939</td><td>2.44</td><td>6529</td></tr><tr><td>Skyview</td><td>10720</td><td>1.85</td><td>5794</td></tr><tr><td>Mosley</td><td>8666</td><td>2.22</td><td>3899</td></tr><tr><td>Concourse</td><td>7893</td><td>1.63</td><td>4853</td></tr></table>	Variable	Weighted total	Mean	# votes	Central Park	15939	2.44	6529	Skyview	10720	1.85	5794	Mosley	8666	2.22	3899	Concourse	7893	1.63	4853	Round 3 primary result table <table><tr><th>Variable</th><th># votes</th><th>Percent</th></tr><tr><td>Central Park</td><td>4841</td><td>63.23</td></tr><tr><td>Skyview</td><td>2815</td><td>36.77</td></tr></table>	Variable	# votes	Percent	Central Park	4841	63.23	Skyview	2815	36.77
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*Round 1 had a much higher number of blank ballots, likely from great interest in what the original 9 options were and how the ballot was formatted. In rounds 2 and 3, prior to geocoding each address was manually reviewed to ensure form fields were aligned (e.g. last name was not listed as address)

Panel 2. Stricter vetting criteria: match of name and property record

Round 1: For 5303*, address was in-boundary, and ballot name matched property record or voter registration. <table><tr><th>Name</th><th>Weighted total</th><th>Mean</th><th># votes</th></tr><tr><td>Central Park</td><td>8890</td><td>2.5</td><td>3557</td></tr><tr><td>Mosley</td><td>4900</td><td>2.32</td><td>2111</td></tr><tr><td>Skyview</td><td>4724</td><td>1.88</td><td>2515</td></tr><tr><td>Concourse</td><td>3487</td><td>1.8</td><td>1937</td></tr><tr><td>Park Central</td><td>2963</td><td>1.8</td><td>1642</td></tr><tr><td>Meadowlark</td><td>2721</td><td>1.78</td><td>1532</td></tr><tr><td>Randolph</td><td>1212</td><td>1.69</td><td>719</td></tr><tr><td>Tailwinds</td><td>1208</td><td>1.63</td><td>741</td></tr><tr><td>Peterson</td><td>836</td><td>1.65</td><td>508</td></tr></table>	Name	Weighted total	Mean	# votes	Central Park	8890	2.5	3557	Mosley	4900	2.32	2111	Skyview	4724	1.88	2515	Concourse	3487	1.8	1937	Park Central	2963	1.8	1642	Meadowlark	2721	1.78	1532	Randolph	1212	1.69	719	Tailwinds	1208	1.63	741	Peterson	836	1.65	508	Round 2: Beyond the validation of 7590 addresses, N=5742* votes were matched to both names AND addresses associated with the submitted address. <table><tr><th>Name</th><th>Weighted total</th><th>Mean</th><th># votes</th></tr><tr><td>Central Park</td><td>12142</td><td>2.45</td><td>4959</td></tr><tr><td>Skyview</td><td>8118</td><td>1.85</td><td>4385</td></tr><tr><td>Mosley</td><td>6404</td><td>2.22</td><td>2891</td></tr><tr><td>Concourse</td><td>5987</td><td>1.63</td><td>3677</td></tr></table>	Name	Weighted total	Mean	# votes	Central Park	12142	2.45	4959	Skyview	8118	1.85	4385	Mosley	6404	2.22	2891	Concourse	5987	1.63	3677	Round 3: Among 7,656 validated addresses, N=5834* votes were matched to both names AND addresses associated with the submitted address. <table><tr><th>Variable</th><th># votes</th><th>Percent</th></tr><tr><td>Central Park</td><td>3715</td><td>63.68</td></tr><tr><td>Skyview</td><td>2119</td><td>36.32</td></tr></table>	Variable	# votes	Percent	Central Park	3715	63.68	Skyview	2119	36.32
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Grey coloring is applied here because for round 1, this was performed retroactively in preparation of this report as this step was not implemented until round 2 for use during previously-reported real-time results. No difference in results.	Among the subset of 5742 with stricter round 1 validation, the distribution of votes were similar and not substantially different from that of the larger group.	Among the subset of 5834 with stricter round 1 validation, the distribution of votes were similar and not substantially different from that of the larger group.																																																																					

*Note that if a name were not matched through automation, it could have been due to a different last name from the 1st name on the property record, or a hyphenated name, a name with an apostrophe (e.g. O'Brien), or renting from an address with multiple units.

Panel 3. Manual validation of records not matched in Panel 2

Round 1: In round one, our validation was in its infancy. We checked manually n=2847, confirming with property or voting records. <table><tr><th>Variable</th><th>Sum</th></tr><tr><td>Central Park</td><td>4780</td></tr><tr><td>Mosley</td><td>2640</td></tr><tr><td>Skyview</td><td>2450</td></tr><tr><td>Concourse</td><td>1919</td></tr><tr><td>Park Central</td><td>1592</td></tr><tr><td>Meadowlark</td><td>1492</td></tr><tr><td>Randolph</td><td>649</td></tr><tr><td>Tailwinds</td><td>641</td></tr><tr><td>Peterson</td><td>448</td></tr></table>	Variable	Sum	Central Park	4780	Mosley	2640	Skyview	2450	Concourse	1919	Park Central	1592	Meadowlark	1492	Randolph	649	Tailwinds	641	Peterson	448	Round 2: Among the 1848 votes that were “in boundary” but not matched by name, results were similar to the name-matched distribution of votes. <table><tr><th>Name</th><th>Sum</th><th>Mean</th><th># votes</th></tr><tr><td>Central Park</td><td>3797</td><td>2.42</td><td>1570</td></tr><tr><td>Skyview</td><td>2602</td><td>1.85</td><td>1409</td></tr><tr><td>Mosley</td><td>2262</td><td>2.24</td><td>1008</td></tr><tr><td>Concourse</td><td>1906</td><td>1.62</td><td>1176</td></tr></table> When 316 of these were manually checked, four were deemed invalid, 230 were confirmed with voter records as rentals, or a second name on a property address, and the remainder could not be validated. Again, no substantial difference among subsets with stricter validation.	Name	Sum	Mean	# votes	Central Park	3797	2.42	1570	Skyview	2602	1.85	1409	Mosley	2262	2.24	1008	Concourse	1906	1.62	1176	Round 3: Among 1822 votes without a name match, results were overall similar to the primary results. <table><tr><th>Variable</th><th># votes</th><th>Percent</th></tr><tr><td>Central Park</td><td>1126</td><td>61.8</td></tr><tr><td>Skyview</td><td>696</td><td>38.2</td></tr></table> When 81 of these were manually validated, one was deemed invalid, with 66 meeting validation criteria.	Variable	# votes	Percent	Central Park	1126	61.8	Skyview	696	38.2
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Among the subset of 2847 with stricter round 1 validation, the distribution of votes were similar and not substantially different from that of the larger group.	Results were similar to the overall distribution, with only 1% of a subset deemed invalid upon manual inspection.	Results were similar to the overall vote, with only 1 vote deemed invalid out of 81 upon manual inspection.																																																	

*Note that if a name were not matched through automation, it could have been due to a different last name from the 1st name on the property record, or a hyphenated name, a name with an apostrophe (e.g. O’Brien), or renting from an address with multiple units.

Panel 4. Reduction of votes in Round 3 only to one vote per household

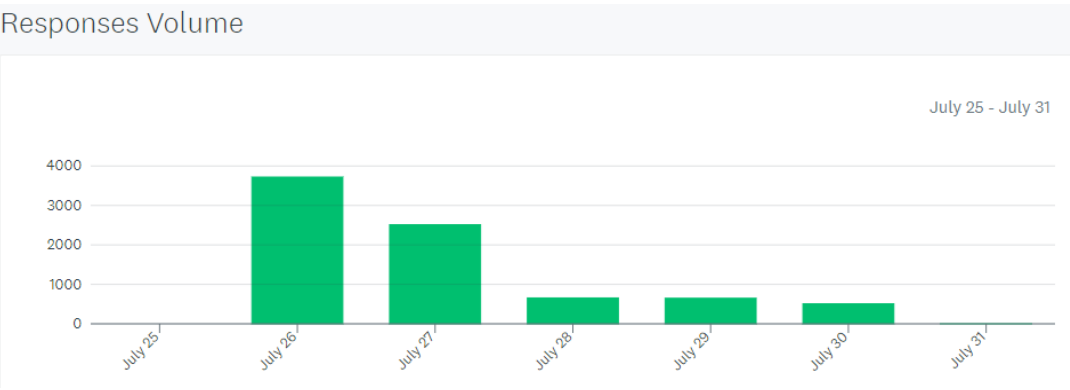
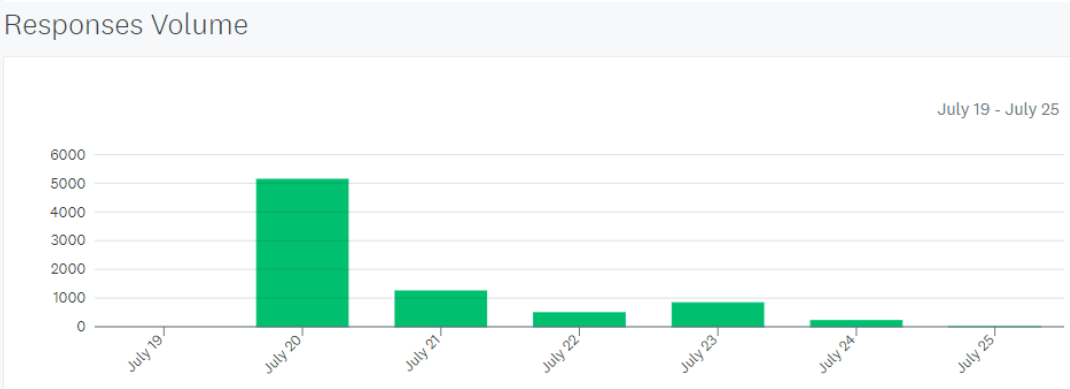
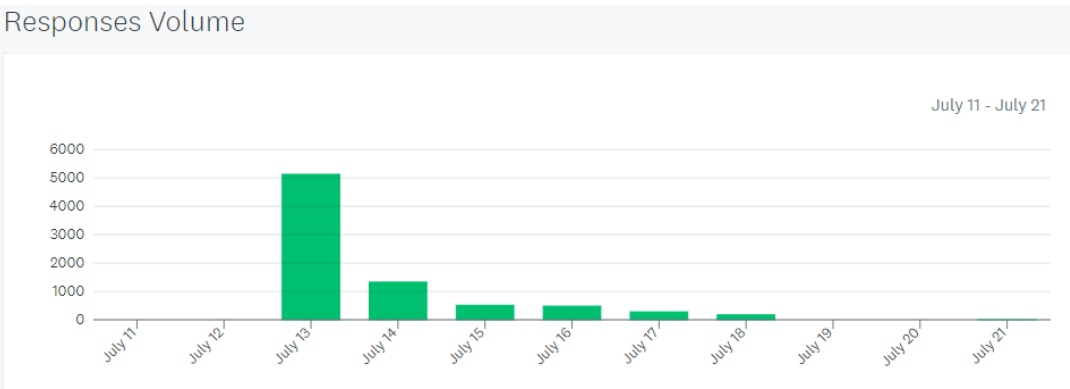
Among All submitted votes in-boundary (i.e. panel 1)	All name-verified* in-boundary responses (i.e. panel 2)								
<table border="1"> <thead> <tr> <th>N</th><th>Vote</th></tr> </thead> <tbody> <tr> <td>5136</td><td>63.394% for Central Park</td></tr> </tbody> </table> The N=5136 counts ALL in-boundary responses, reducing all responses from the same address (e.g. regardless of apartment number) to one vote per address. A household with 2 votes that were the same, would count as that vote (a 0 if skyview, a 1 if Central Park). If two votes diverged, the household vote would count as “.5”. If three votes from a household diverged, possible values would be 0.33, or 0.66. And so on. All instances of very high volume of votes from one address aligned with addresses known to be high density housing.	N	Vote	5136	63.394% for Central Park	<table border="1"> <thead> <tr> <th>N</th><th>Mean</th></tr> </thead> <tbody> <tr> <td>4220</td><td>63.944% for Central Park</td></tr> </tbody> </table> When all in-boundary addresses from name-verified ballots were reduced to one vote per household, there were 4220 households in round 3.	N	Mean	4220	63.944% for Central Park
N	Vote								
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When reporting results as one average vote per address among addresses within the footprint of the community, the results are not different by a meaningful amount (63.39 vs 63.68).	Results were not substantially different from the overall vote (63.94 vs 63.68%).								

*Note that if a name were not matched through automation, it could have been due to a different last name from the 1st name on the property record, or a hyphenated name, a name with an apostrophe (e.g. O’Brien), or renting from an address with multiple units.

Appendix: SurveyMonkey Screen Shots – data that SUN has never “touched”... results are still the same.

CLOSED Community Name Vote - Round #1 Created: 07/10/2020 Modified: 07/18/2020	7,861 Responses	95% Completion rate	3 mins Typical time spent	... Options
CLOSED Community Name Vote - Round #2 Created: 07/19/2020 Modified: 07/24/2020	7,902 Responses	99% Completion rate	2 mins Typical time spent	... Options
CLOSED Community Name Vote - Third and Final Created: 07/25/2020 Modified: 07/30/2020	8,002 Responses	99% Completion rate	1 min Typical time spent	... Options

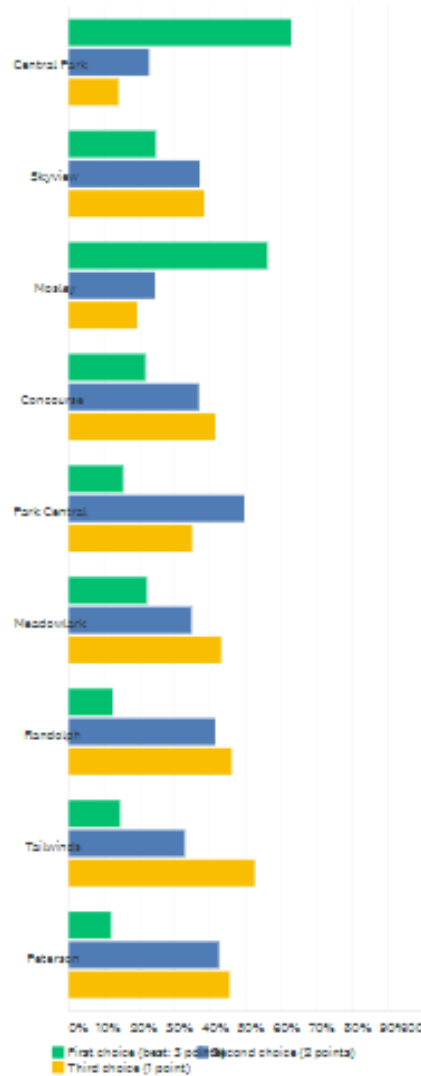
Each round, responses followed a similar distribution of a large number of responses the first day, with a dramatic fall-off in subsequent days.



Graph of each of three rounds of voting from Survey Monkey – among all submitted ballots

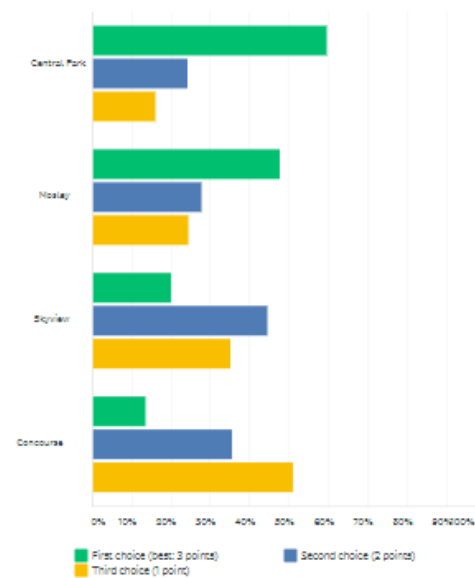
Please consider each name, and indicate which three you would assign ranks 1, 2 and 3. #1 is highest (most preferred), #3 is lowest (least preferred). Please choose: #1, #2, #3. Please note the order of these options is randomized to appear differently to each person responding.

Answered: 7,470 Skipped: 391



Please consider each name, and indicate which three you would assign ranks 1, 2 and 3. #1 is highest (most preferred), #3 is lowest (least preferred). Please choose: #1, #2, #3. Please note the order of these options is randomized to appear differently to each person responding.

Answered: 7,818 Skipped: 84



Please consider each name, and indicate which you would prefer. Please note the order of these options is randomized to appear differently to each person responding.

Answered: 7,905 Skipped: 97

