



## STAR Voting Technical Specifications

Version 1.3 published 12/20/24. Download pdf [here](#).

### Section 1. Terms and Definitions:

**1.a.** "STAR Voting" is the name for the single-winner STAR voting method described in section 2.b. The term "STAR Voting" may also be used more generally to refer to the single-winner STAR voting method described in section 2.b., the multi-winner STAR voting method described in section 2.c, and the Proportional STAR Voting method described in section 2.d. Unless otherwise specified, the term "STAR Voting" should be assumed to refer to the single-winner STAR Voting method.

**1.b.** The mnemonic "Score Then Automatic Runoff" may accompany the name STAR Voting and may be used to describe the STAR Voting tabulation, but shall not be used instead of the name "STAR Voting." Acceptable example uses include the following:

- STAR stands for Score Then Automatic Runoff and that's exactly how it works.
- STAR "Score Then Automatic Runoff" Voting uses a 5 star ballot.

**1.c.** "Bloc STAR Voting" or "Basic Multi-Winner STAR Voting" is conducted by repeating the STAR Voting process until all seats have been filled, as described in section 2.c.

**1.d.** "Proportional STAR Voting" may refer to any method of tabulating the five star ballot in such a way that the results proportionally reflect the makeup of the electorate. Voting methods which may use the name Proportional STAR Voting must be authorized by the board of STAR Voting Action 501c4. STAR Voting Action reserves the right to update the list of endorsed Proportional STAR Voting methods, and to upgrade the algorithms for tabulation of these methods pending advances in the field of expressive proportional representation voting methods.

**1.e.** "Multi-Winner STAR Voting" may refer to Bloc STAR Voting as described in section 2.c. or to Proportional STAR Voting as described in section 2.d. Unless otherwise specified it should be assumed to refer to Bloc STAR Voting.

**1.f.** A "Five Star Ballot" is the type of ballot used in STAR Voting in which voters may score each candidate independently from zero through five stars with zero being the worst and five being the best rating possible.

**1.g.** The terms "Score" and "Star" may be used interchangeably to refer to a score or rating given to a specific candidate, to refer to the act of scoring or rating a candidate, or to refer to a candidate's total score or total stars received. For example, Candidate A received 46 stars in the scoring round; the total score for Candidate A was 46.

**1.h.** A "Round" in STAR Voting refers to a round of tabulation in which ballots are counted.

**1.i.** "Scoring Round" The scoring round in a STAR Voting election refers to the first round of tabulation, in which the total score received by each candidate across all ballots cast is summed. Single-winner and Bloc STAR Voting have a single scoring round. Proportional STAR Voting has a scoring round for each seat up for election in the race, though these may be referred to as simply "Rounds".

**1.j.** An "Automatic Runoff," "Runoff," or "Runoff Round" in STAR Voting refers to the final round of tabulation for each seat in single-winner and Bloc STAR Voting. In an Automatic Runoff voters do not need to vote again, ballots are simply recounted to determine which of the two highest scoring candidates from the preceding scoring round was preferred (scored higher) by each voter. Each voter's full vote goes to the finalist they prefer. The candidate who receives the most votes wins. An Automatic Runoff is a type of "Instant Runoff," but the term Instant Runoff should not be used to refer to STAR Voting.

**1.k.** "Election" refers to a single election or race, or series of races which are officiated simultaneously by one entity, often the board of elections for a jurisdiction. An example election would be the 2020 Oregon General Election.

**1.l.** "Race" refers to an election for a specific position up for election. Races may be single-winner or multi-winner. Each race by definition must use a single voting method and be tabulated independently from all other races. An example race would be the 2020 Portland, Oregon Mayoral Race.

**1.m.** "Seat" refers to a position which can be filled by a single individual, generally, the winner of the election for that seat.

**1.n.** A "Finalist" in a single-winner STAR or Bloc STAR Voting election refers to the two highest scoring candidates in the Scoring Round who advance to the Automatic Runoff for a given seat up for election.

**1.o.** "A vote of equal preference" is the technical term to describe when a ballot in the STAR Voting runoff gave both finalists the same score or left both finalists blank. This means that the vote was counted and that the voter had expressed equal preference or no preference between the two finalists in the runoff.

**1.p.** An "Undervote" in a race refers to a voter who voted in an election and scored at least one candidate in at least one race higher than a zero, but who gave no scores to any of the candidates for another race. These ballots will be counted towards the total number of votes cast for the election in general and their vote will be counted in the races they voted in, but will not count as a vote in any races where they left all candidates blank or where they scored all candidates at zero stars. Thus the total number of voters or votes cast may vary from race to race within one election.

**1.q.** The terms "1st Place," "2nd Place," etc are the preferred terms to describe the "Winner Rankings" in a multi-winner Bloc or Proportional STAR Voting election. For example, if Candidate A won the first seat and Candidate B won the second seat then Candidate A would be the 1st place winner and Candidate B would be the 2nd place winner. Though a 5 Star Ballot or rating ballot is a method of showing preference order and can be described as a type of ranking, the word "Ranking" should not be used to describe the act of scoring candidates on the ballot. To prevent confusion with ranked voting, the term "Ranking" should generally be avoided if another term is acceptable.

## **Section 2. Procedures:**

**2.a.** Single-Winner STAR Voting is conducted as follows:

**2.a.i.** Candidates are scored from 5 stars (best) to 0 stars (worst).

**2.a.ii.** Ballots are tabulated in two rounds:

**Scoring Round:** For each position for which a candidate appears on the ballot, the vote tally system will calculate the sum total of the scores received by each candidate and then determine the two finalists who received the greatest total scores.

**Automatic Runoff Round:** Of the two finalists identified in the Scoring Round each voter's vote will be considered cast in favor of the candidate to whom the voter gave the greater score. If a voter gave both candidates the same score, the voter's ballot will be considered a vote of "no preference" between the finalists. The finalist with the majority of votes cast in their favor wins.

**2.b.** Ties will be broken as follows:

1. Ties in the scoring round should be determined in favor of the candidate who was preferred (scored higher) by more voters. If there are only two candidates this will be the majority preferred candidate, if there are multiple tied candidates this will be the candidate(s) preferred over all other candidates.
2. Ties in the Runoff Round should be broken in favor of the candidate who was scored higher if possible.
3. In the event that a tie can not be resolved as above, the election will be called as a tie and broken randomly, unless a further tie breaking procedure was adopted in advance of the election and was publicly disclosed.

**2.c.** For Bloc STAR Voting elections, positions will be filled as described in sections 2.a and 2.b., with an additional Automatic Runoff round conducted for each seat up for election.

**2.d.** For Proportional STAR Voting elections positions will be filled by tabulating ballots using a Proportional STAR Voting method such as "Allocated Score Voting" which is authorized and endorsed by the STAR Voting Action 501c4, and which must be specified in advance of the election and publicly disclosed. (See Appendix F.)

## Section 3. Balloting Protocols

**3.a.** The voter instructions and voting method explanation will be printed on the ballot itself prominently:

**3.b.** Ballots will contain the following voting instructions in clear and accessible language near the top of the ballot or near the top of the section of the ballot where STAR Voting will be used:

- Give your favorite candidate five stars.
- Give your last choice zero stars or leave them blank.
- Equal scores are allowed.
- Score other candidates as desired.

**3.c.** Multi-winner elections will specify the number of winners to be elected in each race above that race on the ballot.

**3.d.** The STAR Voting method will be explained on the ballot as follows:

- Single-winner STAR Voting: This election will use STAR Voting, in which the two highest scoring candidates are finalists. Your full vote goes to the finalist you prefer.
- Multi-winner STAR Voting: This election will use STAR Voting to elect  $x$  winners. In STAR Voting, the two highest scoring candidates are finalists and your vote goes to the finalist you prefer. The finalist preferred by the most voters wins. This process repeats until all seats have been filled.
- Winners in Proportional STAR Voting are selected in rounds. Each round elects the candidate with the highest total score, and then designates that candidate's strongest supporters as represented. Subsequent rounds include all voters who are not yet fully represented.

**3.e.** Voting instruction and the voting method explanations in sections e1-e3 may be paraphrased or translated as long as they are presented with the meaning unchanged and in clear and accessible language.

**3.f.** Supplemental information on STAR Voting for voters will be available, and information on where to find these materials will be printed on the ballot itself.

**3.g.** The ballot rating scale will be formatted according to the following specifications:

**3.g.i.** The scale will be labeled from worst (0 stars) to best (5 stars.) Terms used must specify clearly that the scale is relative to the options available and do not represent absolute values such as good and bad.

**3.g.ii.** The candidate rows for each race will contain shading or horizontal lines which will clearly indicate which fields correspond to which candidates.

**3.g.iii.** If bubbles to be filled in or stars to be clicked will be used, these bubbles or stars will each be individually labeled with the numbers 0-5.

## **Section 4. Election Results:**

**4.a.** All STAR Voting elections official results will include the following information:

- The election date.
- The number of votes cast for the election as a whole and (if different) for each race within the election.
- The voting method for each race.
- The election winner or winners listed in the order of election.
- If results are preliminary, the "Percent Reporting" or percentage of ballots cast which are included in the preliminary results should be included and the results should include a header making it clear that these are "Preliminary Results."

(See Appendix D)

**4.b.** Single-Winner STAR Voting official results will also include the following information for each race:

- The "Total Score" for each candidate, (often displayed as a bar graph.)
- The "Runoff Votes" for each finalist.
- The "Percentage of Runoff Votes" for each finalist, not counting votes of no preference, (often displayed as a pie chart.)

(See Appendix D, Figure 4)

**4.c.** Bloc STAR Voting official results will also include the following information for each race:

- The "Total Score" for each candidate.
- The "Runoff Votes" and "Percentage of Runoff Votes" for each finalist for the first seat up for election.
- The "Runoff Votes" and "Percentage of Runoff Votes" for each finalist for the first additional seat up for election.

(See Appendix D, Figure 5)

**4.d.** Proportional STAR Voting official results will also include the following information for each race:

- The "First Seat Total Score" for each candidate.
- The adjusted "Second Seat Total Score" for each remaining candidate
- The adjusted "Third Seat Total Score" for each remaining candidate
- The adjusted total scores for each remaining candidate for each additional seat up for election.

(See Appendix D, Figure 6)

**4.e.** If additional election data is available, information on where to obtain it and when it will be available will be provided below the official results.

**4.f.** Additional election data for Single-Winner and Bloc STAR Voting elections may include:

- The average score received by each candidate in the scoring round.
- A preference matrix showing the number of voters who preferred each candidate over each other candidate. (See Appendix E)
- The Automatic Runoff votes and percentages, including the no-preference runoff votes.
- The full anonymized cast vote record (CVR) for the race.

**4.g.** Additional election data for Proportional STAR Voting elections may include:

- The number of votes needed to fill one quota.
- The full anonymized cast vote record (CVR) for the race.

**4.i.** All STAR Voting election results should be presented cleanly and clearly and simply. Care should be taken to not include auxiliary information or numbers in the main official results released that would be confusing to lay people. Examples of information that should not be included in main official results:

- Candidates should not be numbered in the order they are listed on the ballot.
- Average scores should not be presented.
- Preference matrices should only be included in additional information available on request.

## **Section 5. Protocols Regarding Voter Error and Spoiled Ballots**

**5.a.** Failure to follow the ballot instructions explicitly, such as failing to give any candidate 5 stars or 0 stars, will not result in a voided or spoiled ballot. In all cases, if the ballot is filled out in such a way that the voter's intent is clear or can be determined the ballot should be counted according to the voter's intent.

**5.b.** In the event that a voter marked multiple scores for a single candidate, an election official should look to see if additional marks were made to indicate which score was correct. An X is often used to indicate that a vote marked was accidental and should be ignored, especially if the voter did not use Xs on other parts of their ballot.

**5.c.** In the event that a voter filled out multiple scores for a single candidate sequentially in a row from the lowest up, (For example, marking the 1, 2, 3, and 4,) the vote should be counted for the highest score marked (4 stars in this example) as the voter was likely filling their ballot out to look like a five star rating.

**5.d.** Voters whose ballots were not able to be counted should be promptly notified and should be allowed to resubmit the votes within a reasonable amount of time after the election is over whenever possible, especially if the election is close enough that these ballots could be determinative. In the event that outstanding ballots could change the election, the result shouldn't be certified until all outstanding ballots have been counted or until the window to correct issues has expired.

**5.e.** Voters who would like to change or edit their votes before the final deadline has passed should be allowed to do so when possible.

**5.f.** If one voter is confirmed to have cast multiple ballots, only the last ballot cast should be counted unless one ballot is blank, in which case the blank ballot should be discarded, or unless voter intent can be determined to be otherwise. This is especially important for online elections where voters may have experienced technical difficulties.

## **Section 6. Protocols regarding tabulation of ballots and batch summability**

**6.a.** Single-winner and Bloc STAR Voting allow for any subset or "batch" of ballots to be fully tallied independent of all other ballots.

**6.b.** Batch tabulation of ballots is accomplished by tallying the total score received by each candidate, and by tallying the head to head preference votes (automatic runoff votes) between each pair of candidates. These results can be recorded using a preference matrix with an additional column for the total score for each candidate. (See Appendix E)

**6.c.** Batch tabulation allows for ballots to be fully tabulated as they come in, before all ballots are in hand. Batch tabulation also allows ballots to be fully tabulated at the batch, precinct, and county level without centralization of ballots. This also permits full recounts, audits, or risk limiting audits, at any stage in the election officiation.

**6.d.** In most cases, jurisdictions upgrading to STAR Voting from Plurality voting or similar methods will be able to continue to use existing protocols regarding the scanning of ballots at the most local level possible and regarding the tabulation of ballots by batch.


## **Section 7. Protocols regarding auditing of election results**

**7.a.** STAR Voting elections are fully auditable and standard election integrity protocols which allow for hand recounts, audits, or risk limiting audits should be followed by those officiating STAR Voting elections.

**7.b.** Partial recounts, full manual recounts, and Risk Limiting Audits for STAR Voting can be done using similar protocols to those used for plurality voting. More information on STAR Voting Audits can be found here: <https://www.starvoting.us/audit>

## **Appendix A. STAR Voting sample ballots illustrating key design and language elements**

**Figure A: Single-Winner STAR Voting ballot:**



## STAR VOTING


SCORE - THEN - AUTOMATIC - RUNOFF

- Give your favorite(s) five stars.
- Give your last choice(s) zero or leave blank.
- Score other candidates as desired.
- Equal scores indicate no preference.

	Worst						Best
	0	★ 1	★ 2	★ 3	★ 4	★ 5	
<b>Andre</b>	(0)	(1)	(2)	(3)	(4)	● (5)	
<b>Blake</b>	● (0)	(1)	(2)	(3)	(4)	(5)	
<b>Carmen</b>	(0)	● (1)	(2)	(3)	(4)	(5)	
<b>David</b>	(0)	(1)	(2)	(3)	● (4)	(5)	
<b>Ella</b>	(0)	(1)	(2)	(3)	● (4)	(5)	

The two highest scoring candidates are finalists.  
Your full vote goes to the finalist you prefer.

**Figure B: Bloc STAR Voting ballot:**



## STAR VOTING

SCORE - THEN - AUTOMATIC - RUNOFF


This election will elect 3 winners.

- Give your favorite(s) five stars.
- Give your last choice(s) zero or leave blank.
- Score other candidates as desired.
- Equal scores indicate no preference.

	Worst						Best
	0	★ 1	★ 2	★ 3	★ 4	★ 5	
<b>Andre</b>	(0)	(1)	(2)	(3)	(4)	● (5)	
<b>Blake</b>	● (0)	(1)	(2)	(3)	(4)	(5)	
<b>Carmen</b>	(0)	● (1)	(2)	(3)	(4)	(5)	
<b>David</b>	(0)	(1)	(2)	(3)	● (4)	(5)	
<b>Ella</b>	(0)	(1)	(2)	(3)	● (4)	(5)	

The two highest scoring candidates are finalists. Your full vote goes to the finalist you prefer. The finalist with the most votes is elected. This process repeats with remaining candidates until all seats are filled.

**Figure C: Proportional STAR Voting ballot:**



## STAR VOTING

SCORE - THEN - AUTOMATIC - RUNOFF

This election will elect 3 winners.

- Give your favorite(s) five stars.
- Give your last choice(s) zero or leave blank.
- Score other candidates as desired.
- Equal scores indicate no preference.

	Worst					Best
	0	★ 1	★ 2	★ 3	★ 4	★ 5
<b>Andre</b>	(0)	(1)	(2)	(3)	(4)	● (5)
<b>Blake</b>	● (0)	(1)	(2)	(3)	(4)	(5)
<b>Carmen</b>	(0)	● (1)	(2)	(3)	(4)	(5)
<b>David</b>	(0)	(1)	(2)	(3)	● (4)	(5)
<b>Ella</b>	(0)	(1)	(2)	(3)	● (4)	(5)

Winners in Proportional STAR are elected in rounds. Each round elects the candidate with the highest total score, then designates that candidate's strongest supporters as represented. Subsequent rounds include all voters who are not yet fully represented.

## Appendix B. Example STAR Voting Results:

**Figure 4. Single-Winner STAR Voting Results:**

<b>OFFICIAL RESULTS: Libertarian Party 2020 Presidential Nomination - May Poll</b>			
<b>Voting Method: STAR Voting</b>			
<b>Winner: Justin Amash</b>			
Number of voters: 2909			
Election Date: 5/30/2020			
	<b>Total Score</b>	<b>Runoff Votes</b>	<b>% of Runoff Votes</b>
Justin Amash	8018	1404	55%
Vermin Supreme	7220	1138	45%
Jim Gray	3826		
Jacob Hornberger	3193		
Jo Jorgensen	2625		
Adam Kokesh	2324		
Daniel Behrman	1941		
John Monds	1707		
Sam Robb	1315		
Sorinne Ardeleanu	929		
Arvin Vohra	919		
<b>Additional Information</b>			
Voting method:	STAR Voting		
Number of winners:	1		
Runoff no-preference votes	367		

**Figure 5. Bloc STAR Voting Results**

<b>OFFICIAL RESULTS: Libertarian Party 2020 Presidential Nomination - May Poll (Fictionalized)</b>					
<b>Voting Method: Multi-Winner STAR Voting</b>					
<b>Winners: Justin Amash and Gary Johnson</b>					
Number of voters: 2909					
Election Date: 5/30/2020					
	<b>Total Score</b>	<b>First Seat Runoff Votes</b>	<b>% of Runoff Votes</b>	<b>Second Seat Runoff Votes</b>	<b>% of Runoff Votes</b>
Justin Amash	8018	1404	55%		
Gary Johnson	7220	1138	45%	1682	58%
Jim Gray	3826			1205	42%
Jacob Hornberger	3193				
Jo Jorgensen	2625				
Adam Kokesh	2324				
Daniel Behrman	1941				
John Monds	1707				
Sam Robb	1315				
Sorinne Ardeleanu	929				
Arvin Vohra	919				
<b>Additional Information</b>					
Voting method:	STAR Voting				
Number of winners:	1				
Runoff no-preference votes:	367				

**Figure 6: Proportional STAR Voting Results:**

<b>OFFICIAL RESULTS: Libertarian Party 2020 Presidential Nomination - May Poll (Fictionalized)</b>			
<b>Voting Method: Proportional STAR Voting</b>			
<b>Winners:</b>	<b>Justin Amash wins 1st seat - Gary Johnson wins 2nd seat</b>		
Election Date: 5/30/2020			
	<b>First Seat Total Score</b>	<b>Second Seat Total Score</b>	
Justin Amash	8018		
Gary Johnson	7220	7010	
Jim Gray	3826	3624	
Jacob Hornberger	3193	3096	
Jo Jorgensen	2625	2841	
Adam Kokesh	2324	2256	
Daniel Behrman	1941	1928	
John Monds	1707	1620	
Sam Robb	1315	1242	
Sorinne Ardeleanu	929	810	
Arvin Vohra	919	450	
<b>Additional Information</b>			
Voting method:	Proportional STAR Voting		
Number of voters:	2909		
Number of winners:	2		
Number of voters in a win quota:	1500		

## Appendix C: An example of STAR Voting Batch Level Results

STAR Voting Batch Level Results								
Scoring Round		Preference Matrix						
Candidates	Total Score	Lisa	Bart	Marge	Homer	Krusty	Mr Burns	Flanders
Lisa	3350	-	640	646	666	710	666	702
Bart	962	141	-	179	201	252	253	253
Marge	882	134	131	-	157	235	219	226
Homer	660	76	111	103	-	212	190	203
Krusty	543	43	140	161	146	-	163	152
Mr Burns	533	118	67	69	109	172	-	171
Flanders	358	31	71	91	90	96	121	-

## Appendix D: Technical Description and Python Code for Allocated Score Voting

**Description:**

Allocated Score Voting is a type of Proportional STAR Voting. Winners in Allocated Score Voting are selected in rounds. Each round elects the candidate with the highest total score and then designates a quota worth of voters from that candidate's strongest supporters as represented. Subsequent rounds include all voters who are not yet fully represented until all seats have been filled.

### Procedure:

Each voter scores all candidates on a [0,5] scale.

1. Select the candidate with the highest sum of score as each round's winner.
2. Set the vote weight to zero for up to one [quota's](#) worth of voters whose ballots gave the winner the highest score, as follows:
  - a. Sort voter's ballots into groups by the score each ballot contributed to the winner's total.
  - b. Starting with the group which gave the highest score to the winner and continuing in descending order, add each subsequent group to the quota if doing so will not cause the quota to be exceeded.
3. For the next group of voters "Fractional Surplus Handling" will be applied to each ballot: an equal fraction of each voter in this group's ballot weight is allocated to the winner's quota to ensure that the quota can be filled exactly. This group will have the remainder of their vote weight continue forward to be counted in subsequent rounds of winner selection and allocation.
4. Repeat this process until all the seats are filled.

### Python Implementation:

Given a Pandas dataframe S with columns representing candidates and rows representing voters the entries would encode the full cast vote record (the score given to each candidate by each voter on each ballot) for a max score of K (K=5 for Proportional STAR Voting), and a desired number of winners W.

```
import pandas as pd
```

```
import numpy as np
```

```
def Allocated_Score(K, W, S):
```

```
    #Normalize score matrix
```

```
    ballots = pd.DataFrame(S.values/K, columns=S.columns)
```

```
    #Find number of voters and quota size
```

```
    V = ballots.shape[0]
```

```
    quota = V/W
```

```
    ballot_weight = pd.Series(np.ones(V),name='weights')
```

```
    #Populate winners in a loop
```

```

winner_list = []
while len(winner_list) < W:

    weighted_scores = ballots.multiply(ballot_weight, axis="index")

    #Select winner
    w = weighted_scores.sum().idxmax()

    #Add winner to list
    winner_list.append(w)

    #remove winner from ballot
    ballots.drop(w, axis=1, inplace=True)

    #Create lists for manipulation
    cand_df = pd.concat([ballot_weight,weighted_scores[w]],
axis=1).copy()
    cand_df_sort = cand_df.sort_values(by=[w], ascending=False).copy()

    #find the score where a quota is filled
    split_point = cand_df_sort[cand_df_sort['weights'].cumsum() <
quota][w].min()

    #Amount of ballot for voters who voted more than the split point
    spent_above = cand_df[cand_df[w] > split_point]['weights'].sum()

    #Allocate all ballots above split point
    if spent_above>0:
        cand_df.loc[cand_df[w] > split_point, 'weights'] = 0.0

    #Amount of ballot for voters who gave a score on the split point
    weight_on_split = cand_df[cand_df[w] == split_point]['weights'].sum()

    #Fraction of ballot on split needed to be spent
    if weight_on_split>0:
        spent_value = (quota - spent_above)/weight_on_split

    #Take the spent value from the voters on the threshold evenly
    cand_df.loc[cand_df[w] == split_point, 'weights'] =
cand_df.loc[cand_df[w] == split_point, 'weights'] * (1 - spent_value)

    ballot_weight = cand_df['weights'].clip(0.0,1.0)

return winner_list

```

## **Appendix D: STAR Voting for Eugene Sample Initiative Petition. (Authorizing and establishing single-winner and/or Bloc STAR Voting for Eugene, OR City Elections.)**

### **2024 Proposed Amendments to Eugene City Charter, Sections 20 and 24:**

**(NOTE:** Matter in **boldfaced** type in an amended section is new; matter [italic and bracketed] is existing law to be omitted.)

Section 20. Election.

**(1)** Immediately after the votes at any municipal election have been canvassed **and tallied as provided in subsection (4) of this Section**, the city manager or designee shall issue a certificate of election to each person declared by the canvassers to have been elected. The certificate shall be prima facie evidence of the facts therein stated, but the city council shall be the judge of the election and qualifications of the mayor and councilors, and in case of a contest between two or more persons claiming to be mayor or councilor, shall determine the contest.

**(2)** Commencing January 1, 2026, election of municipal officers in elections with more than one candidate shall be conducted according to STAR Voting as described in subsections (3) and (4) of this Section. The election of such officers shall occur at a November general election or at any special election and shall not include a primary election.

**(3)** A ballot shall be delivered to each registered elector, regardless of party affiliation.

**(4)** Method of STAR Voting.

**(a)** The voting method described below is known as STAR Voting and shall be referred to by the name "STAR Voting."

**(b)** For each seat up for election by means of STAR Voting, votes shall be tallied using a two-round process which consists of a scoring round and an automatic runoff round. The scoring round shall calculate the sum total of the scores received by each candidate and determine the two candidates who received the greatest total scores. Those two candidates shall be the finalists and shall advance to the automatic runoff round, where the finalist preferred by more voters wins.

**(c)** Characteristics of the ballot:

**1.** The ballot shall specify the number of winners in each race, if the number is more than one.

**2.** The ballot shall provide each elector the option to score each candidate for an office from zero to five stars.

**3. The scoring scale shall be labeled "worst" (0 stars) to "best" (5 stars) from left to right.**

**4. Each elector may score each candidate for an office from zero to five, independently of how the elector scores any of the other candidates for the elected office. An elector may give the same score to multiple candidates in the same race.**

**5. If the elector does not specify a score for a candidate, the score assigned is zero.**

**6. The ballot shall include instructions which convey the following information in clear and accessible language:**

- **Give your favorite(s) five stars.**
- **Give your last choice(s) zero stars or leave blank.**
- **Score other candidates as desired.**
- **Equal scores indicate no preference.**

**7. The ballot shall include an explanation of how votes will be tallied as described under subsection (4) of this section in clear and accessible language such as the following:**

**STAR Voting races are tallied as follows: Scores given are totaled and the two highest scoring candidates overall advance as finalists to the automatic runoff. In the runoff each voter has one vote and your full vote goes to the finalist you scored higher. The finalist with the most votes wins.**

**(d) Vote tallying is conducted in two rounds:**

**1. Scoring round:**

**The vote tally system or counting board shall add the total scores given to each candidate from all ballots.**

**For each office, the two candidates who have the highest total scores shall be the finalists and advance to an automatic runoff round.**

**2. Automatic Runoff round:**

**Each elector's full vote shall be considered cast in favor of the finalist to whom that elector gave the higher score. If an elector gave both finalists the same score, that elector's ballot will be considered a vote of "equal preference" between the finalists.**

**The finalist in whose favor a greater number of votes are cast shall be the winner.**

**(e) If more than one seat is to be filled for a given office, the following STAR Voting multi-winner method shall be used:**

**The first winner, as determined pursuant to paragraphs (b) - (d) of this subsection, is removed from the calculations.**

**The two remaining candidates who have the highest total scores shall be the finalists for the second seat and shall advance to an automatic runoff round, which shall be conducted as specified in paragraph (d) of this subsection in order to determine the next winner.**

**This process of removing winners from the calculations, advancing the two highest-scoring remaining candidates to the runoff round, and determining the additional winner as specified in paragraph (d) of this subsection shall be repeated as many times as necessary to fill the available seats.**

**(f) The winner of each automatic runoff shall be entitled to a certificate of election to office and shall be considered the person who received the highest number of votes cast for purposes of ORS 254.065.**

**(g) Ties in STAR Voting that affect the outcome of the election shall be resolved as follows:**

**1. A tie in the scoring round shall be determined in favor of the candidate or candidates who were preferred (scored higher) by more voters than any other of the tied candidates, if possible.**

**2. A tie in the automatic runoff round shall be determined in favor of the candidate with the highest overall score in the scoring round, if possible.**

**3. If the above methods do not resolve a tie, it may be resolved under rules adopted by the City Council not later than 60 days prior to the date of the election.**

**4. If a tie is not resolved by any of the above methods, the election shall be declared to be a tie and shall be resolved pursuant to ORS 254.575 or applicable local government law.**

**(h) The City Council shall, by ordinance, establish rules for the orderly administration of the election using STAR Voting.**

Section 24. Vacancies - Filling.

(1) The Eugene Water & Electric Board shall fill a vacancy on the board by appointment within ninety days after the vacancy occurs.

(2) The council shall fill a vacancy in any other elective city office by appointment within ninety days after the vacancy occurs. A person so appointed shall hold office until the successor to the office is duly elected and qualifies therefor.

(3) If the position of a city councilor or mayor becomes vacant more than 100 calendar days prior to the [May] **November** election of any year, an election to fill that vacancy shall be conducted in the same year. If the position of city councilor or mayor becomes vacant less than 100 days prior to the [May] **November** election of any year, the election to fill that vacancy shall be conducted the next year. *[If a candidate for election to a vacated position achieves a majority of all votes cast for that position in the May election, that candidate shall assume office the following July 1, notwithstanding Section 21 of this charter.]* The term of office of any person elected to fill a vacancy shall expire when the term of the vacated position expires.

(4) Notwithstanding subsection (3), if the election required by this Section 24 would occur in the fourth year of the term of the vacated position, then no election to fill the vacancy will be held. Instead, the individual appointed under subsection (2) will remain in office through the expiration of the term of the vacated position.

## **Appendix E: Oakridge STAR Voting Pilot Project Initiative**

A section 35.30 is added to the Oakridge City Code as follows:

### **§ 35.30 STAR VOTING IN ELECTIONS.**

- (A) Commencing November 1, 2026, and ending after the general election on November 5, 2030, all Oakridge municipal elections in which more than one candidate has filed shall be conducted according to STAR Voting as described in subsections (B) and (C) of this Section. The election of such officers shall occur at a November general election or at any special election and shall not include a primary election.
- (B) A ballot shall be delivered to each registered elector, regardless of party affiliation.
- (C) Method of STAR Voting.
  - (1) The voting method described below is known as STAR (Score Then Automatic Runoff) Voting and shall be referred to by the name "STAR Voting."
  - (2) For each seat up for election by means of STAR Voting, votes shall be tallied using a two-round process which consists of a scoring round and an automatic runoff round. The scoring round shall calculate the sum total of the scores received by each candidate and determine the two candidates who received the greatest total scores. Those two candidates shall be the finalists and shall advance to the automatic runoff round, where the finalist preferred by more voters wins.

(3) Characteristics of the ballot:

(a) The ballot shall specify the number of winners in each race.

(b) The ballot shall provide each elector the option to score each candidate for an office from zero to five stars.

(c) The scoring scale shall be labeled "worst" (0 stars) to "best" (5 stars).

(d) Each elector may score each candidate for an office from zero to five, independently of how the elector scores any of the other candidates for the elected office. An elector may give the same score to multiple candidates in the same race.

(e) If the elector does not specify a score for a candidate, the score assigned is zero.

(f) The ballot shall include instructions which convey the following information in clear and accessible language:

- Give your favorite candidate(s) five stars.
- Give your last choice candidate(s) zero stars or leave them blank.
- Equal scores are allowed.
- Score other candidates as desired.

(g) The ballot shall include an explanation of how votes will be tallied as described under paragraph (4) of this subsection in clear and accessible language such as the following:

STAR Voting races are tallied as follows: Scores given are totaled, and the two highest scoring candidates overall advance as finalists to the automatic runoff. In the automatic runoff, your full vote goes to the finalist you scored higher. The finalist with the most votes wins.

(4) Vote tallying is conducted in two rounds:

(a) Scoring round:

(i) The vote tally system or counting board shall add the total scores given to each candidate from all ballots.

(ii) For each office, the two candidates who have the highest total scores shall be the finalists and advance to an automatic runoff round.

(b) Automatic Runoff round:

(i) Each elector's vote shall be considered cast in favor of the finalist to whom that elector gave the higher score. If an elector gave both finalists the same score, that elector's ballot shall be considered an "equal preference vote" between the finalists.

(ii) The finalist in whose favor a greater number of votes are cast shall be the winner.

(5) If more than one seat is to be filled for a given office, the following STAR Voting multi-winner method shall be used:

(a) The first winner is determined pursuant to paragraphs (2) - (4) of this subsection.

(b) The two remaining candidates who have the highest total scores shall be the finalists for the second seat and shall advance to an automatic runoff round, which shall be conducted as specified in paragraph (4) of this subsection in order to determine the next winner.

(c) This process of electing winners, totaling scores for all remaining candidates, advancing the two highest-scoring remaining candidates to the automatic runoff round, and determining the additional winner as specified in paragraph (4) of this subsection shall be repeated as many times as necessary to fill the available seats.

(6) The winner of each automatic runoff shall be entitled to a certificate of election to office and, for purposes of ORS 254.065, shall be considered the person who received the highest number of votes cast.

(7) Ties in STAR Voting that affect the outcome of the election shall be resolved as follows:

(a) A tie in the scoring round shall be determined in favor of the candidate or candidates who were preferred (scored higher) by more voters than any other of the tied candidates, if possible.

(b) A tie in the automatic runoff round shall be determined in favor of the candidate with the highest overall score in the scoring round, if possible.

(c) If the above methods do not resolve a tie, it may be resolved under rules adopted by the City Council not later than 60 days prior to the date of the election.

(d) If a tie is not resolved by any of the above methods, the election shall be declared to be a tie and shall be resolved pursuant to ORS 254.575 or applicable local government law.

(D) To ensure transparency of election results, full anonymous ballot data, election data, and election results for each round shall be open to the public and made available for independent review and analysis.

## **Appendix F: Sample Ballot Title - Oakridge Pilot Project**

**Caption:** Allow voters to show preferences between candidates for city offices.

**Question:** Shall Oakridge allow voters to show preferences between candidates? Voters score candidates from 5 stars (best) to 0 stars (worst).

**Summary:** The Oakridge City Council and Charter Review Subcommittee referred this measure to implement STAR (Score Then Automatic Runoff) Voting for Oakridge municipal elections for 3 election cycles, at no cost to city.

Currently, candidates for mayor and city council do not need a majority to win. Under STAR Voting, the top-scoring candidates are finalists and the majority-preferred finalist wins.

If adopted, STAR Voting would allow voters to show preferences by scoring all candidates from 5-stars (best) to 0-stars (worst). Candidates left blank receive 0.

Ballots are then counted in two rounds:

- 1) Scoring Round: Ballots are tallied and the two top-scoring candidates advance as finalists.
- 2) Automatic Runoff Round: One person, one vote. Each voter's full vote automatically goes to the finalist they preferred. The finalist with the most votes wins.

For transparency, full election results and anonymous ballot data will be released for independent review.

This pilot project would last three election cycles (2026, 2028, 2030). Then voters would vote on a Charter amendment to decide if Oakridge should use STAR Voting permanently.