



---

215 W. Main Street • Northville, Michigan 48167-1540  
Phone: (248) 349-1300 • FAX: (248) 349-9244

**MEETING OF THE ELECTION COMMISSION**  
**October 16, 2017**  
**8:00 a.m.**

Notice is hereby given that a meeting of the City of Northville Election Commission will be held at the City of Northville Municipal Building, 215 W. Main Street, Northville, Michigan, 48167, (248) 349-1300, to consider the following:

**AGENDA**

- 1. Call to Order**
- 2. Citizen Comments** – limited to matters not on the agenda
- 3. Approval of Agenda**
- 4. Approval of the Minutes**  
- 9/6/17
- 5. New Business**
  - A. Appointment of Election Inspectors, AVCB Inspectors, and Receiving Board Members – 11/07/17 General Election
  - B. Public Accuracy Test 11/07/17 General Election
- 6. Adjournment**

Respectfully submitted,  
Dianne Massa, City Clerk  
Election Commission Chairperson

Posted: September 28, 2017

**City of Northville  
ELECTION COMMISSION  
MEETING MINUTES  
September 6, 2017**

A meeting of the Election Commission of the City of Northville, Michigan, was held at the City of Northville Municipal Building, Council Chambers, 215 West Main Street, Northville, Michigan, at 8:01 a.m. at which time and place the following Commission members were present:

**Present:** Dianne Massa, City Clerk/Chairperson  
Robert Marzano, City Attorney  
Councilmember Marilyn Price

**Absent:** None

**Also Present:** None

**Citizen Comments**

None

**Approval of the Agenda**

**Motion Marzano, seconded by Price** to approve the agenda as presented. **Motion carried unanimously.**

**Approval of the Minutes**

**Motion Marzano, seconded by Price** to approve the July 31, 2017 Election Commission meeting minutes as presented. **Motion carried unanimously.**

**New Business**

**A. Ballot Layout – November 7, 2017 City General Election**

The City is working with the Oakland County Clerk's Office for scanner and touch writer programming, ballot layout, and printing. The ballots will be printed by Printing Systems in Taylor, Michigan. Printing Systems is state-certified to print ballots for the Verity system.

It was explained that the ballot layout and proof were also reviewed by the Michigan Bureau of Elections and it was found to be in compliance with State Election Law and Bureau of Elections guidelines.

Due to implementation of the new Verity system, voters will now darken a box instead of an oval next to their choice. Also, as the ballot layout is done by “county,” the Precinct 1 ballot will have the county header changed to “Wayne” by Printing Systems before the ballots are printed. Oakland County is not able to make that change because they are programming countywide.

In response to Commissioner questions, it was explained that the candidate names for City Council do not rotate on this ballot because there are only two candidates running in a “vote for not more than two” contest. It was also explained that Absent Voter ballots issued to voters are the same ballot as the precinct ballot. We start with ballot number one for the AV voters, and continue issuing ballots in sequential order. On Election Day, the remaining ballots are sent to the polling place for use as a precinct-based ballot.

**Motion Price, seconded by Marzano** to approve the ballot layout as presented. **Motion carried unanimously.**

#### **Discussion**

The Election Commission will need to meet in October to appoint the board of election inspectors and conduct the public accuracy test.

Being no further business to come before the Election Commission, the meeting was adjourned.

**Adjournment: 8:08a.m.**

Respectfully submitted,

Dianne Massa, City Clerk  
Chairperson

# CITY OF NORTHVILLE

**DATE:** October 16, 2017  
**TO:** Members of the Election Commission  
**FROM:** Dianne Massa, City Clerk  
**RE:** Board of Election Inspectors and Receiving Board  
November 7, 2017 General Election

## **Summary**

State law requires the Election Commission to appoint the election inspectors and receiving board for each voting precinct. It is recommended the Election Commission approve the following assignments for the aforementioned election.

## **Precinct 1**

Janiece Paver, Chairperson	D
Wendy Gutowski	D
Angel Castro	R
Lorna Massa	R
Michelle Avallone	R
Terry Mittman	R

## **Precinct 2**

Alyse Hydell, Chairperson	D
Jerry Mittman	R
Jo Ellen Hyatt	R
Sally Keys	D
Linda Bastien	D
Rodney Johnson	R
Laura Sparling	D

## **Absent Voter Counting Board**

Edith Paradowski, Chairperson	D
Alice Fleck	R
Michael Hyatt	R
Mary Lu Talraas	D

## **Receiving Board**

Sandi Wiktorowski	D
Cindy Kushner	R

**Recommendation:** Move to appoint the Election Inspectors and Receiving Board Members for the November 7, 2017 Election and further, to authorize the City Clerk to make emergency appointments as necessary to ensure sufficient staffing at each precinct.

## CITY OF NORTHVILLE

**DATE:** October 16, 2017  
**TO:** Members of the Election Commission  
**FROM:** Dianne Massa, City Clerk  
**RE:** Public Accuracy Test  
November 7, 2017 General Election

### **Summary**

In accordance with state law, the Public Accuracy Test is conducted by the Election Commission at an open meeting. The meeting was posted in accordance with the Open Meetings Act and published in the Northville Record.

Attached are the applicable pages for logic and accuracy testing of the tabulators and related voting equipment. The attached chart of predetermined results was created using this manual. The test deck mirrors the chart of predetermined results.

Preliminary logic testing was conducted with no issues. Logic testing results matched the predetermined results. All materials used to conduct pretesting was sealed in an approved storage container directly following testing.

The Election Commission chooses one precinct for testing at the Public Accuracy Test. The same test deck and chart of predetermined results is used at the Public Accuracy Test.

**November 7, 2017 Election  
Test Deck Chart**

Ballot No.	Mayor (vote for not more than 1)		City Council (vote for not more than 2)				NPS Prop (vote for not more than 1)	
	Candidate #1	Write In	Candidate #1	Candidate #2	Write In	Write In	Yes	No
<b>1</b> (all pos marked)	0	0	0	0	0	0	0	0
<b>2</b> (stray marks)	Stray Marks							
<b>3</b> (blank ballot)	Blank Ballot							
<b>4</b> (NP correct - OV prop)	1		1	1			0	0
<b>5</b> (OV NP - Prop correct)	0	0	0	0	0		1	
<b>6</b> (security id)	0		0	0			0	
<b>Sub total</b> (ballots 1-6)	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
<b>7</b>	1		1	1			1	
<b>8</b>		1	1		1			1
<b>9</b>						1		
<b>TOTAL</b> (ballots 1-11)	<b>2</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>

After subtotal of all columns, vote additional ballots as necessary so that a different total number of valid votes are cast for each candidate within an office, and for and against each proposal. It is not required that each write position show a different total number of votes.

## PREPARATION OF VOTING EQUIPMENT

### PRE-ELECTION LOGIC AND ACCURACY TESTING OF TABULATORS AND VOTER ASSIST TERMINALS:

The conduct of Pre-election Logic and Accuracy Testing of all tabulators and voter assist terminals (VAT) prior to each election is the responsibility of the local election commission.

A **preliminary** accuracy test is required for all tabulators and VAT prior to each election. In addition a **public** test of one or more selected tabulators must be performed as discussed below. A public test of the voter assist terminal is not required.

The **preliminary** accuracy test should be conducted for both the tabulator and the VAT as soon as the program(s) and ballots are received by the clerk. The **public** accuracy test for the tabulator must be conducted no later than five days before the election. In addition, a notice of the test must be published in a newspaper or journal of general circulation at least 48 hours prior to the conduct of the test.

All election materials used to conduct the pre-election logic and accuracy testing (including the test deck, chart of predetermined results, zero tape and accuracy test results) must be secured in an approved ballot container for the duration of the retention period.

- The number on the seal used to secure the pre-election test materials must be recorded on the Tabulator Test Certification form, Voter Assist Terminal Preparation Checklist and Test Certification form, and the Ballot Container Certificate.
- The serial numbers on the seals used to seal the programs into the tabulator and terminal following successful testing must be recorded in the Poll Book (Clerk's Preparation Certificate).

It is acceptable to use the same ballot container for the preliminary and public tests (but **not** Election Day), provided that the following steps are taken to ensure proper security:

- A. The test materials from the preliminary accuracy test are sealed into an approved container directly following the test and the seal number is documented on the proper test certification forms and ballot container certificate.
- B. Prior to the conduct of the public accuracy test, the original ballot container seal is broken, verified and deposited into the container. The tabulator test deck is removed and used to conduct the public accuracy test.
- C. The test materials from the public accuracy test are deposited into the ballot container directly following the test and a new seal is affixed.

- D. The new seal number is documented on the test certification form and on the ballot container certificate.

Detailed instruction on pre-election logic and accuracy testing of tabulators and voter assist terminals can be requested for groups and associations depending on the availability of BOE representatives.

### **TABULATOR PROGRAMMING:**

To ensure an accurate vote count, all tabulators must be programmed to reject blank ballots, ballots containing overvotes and partisan primary ballots which are invalid due to crossover voting. If this programming feature is not employed as required, inaccurate vote results can occur due to ballots that contain false blank reads; ballots containing votes which cannot be scanned by the tabulator due to the voter's use of an improper marking implement; false overvotes; and false crossover votes (if a partisan primary).

Proper programming affords the election inspector assigned to the tabulator the opportunity to offer the voter a replacement ballot. When the tabulator rejects these ballots, without looking at the ballot, the election inspector discretely explains the reason for the rejection to the voter and steps away from the tabulator while the voter visually inspects his or her ballot. If it is determined that the error is a false read, a replacement ballot is issued.

If the tabulator is not programmed to identify and reject overvoted ballots, no vote will count in the race due to the false overvote which will, in turn, result in an inaccurate vote total.

An explanation of how false blank ballots, false overvotes and false crossover votes can result in inaccurate vote totals is provided below:

***False overvote created by ballot correction:*** Ballot instructs voter to "Vote for not more than 1." Voter: 1) records a vote by filling in the oval or box 2) changes his or her mind and crosses out or attempts to erase the mark and 3) votes for a different candidate by filling in a second oval or box.

***False overvote created by invalid write-in:*** Ballot instructs voter to "Vote for not more than 1." Voter: 1) records a vote by filling in the oval or box 2) enters the name of an individual who *is not a declared write-in candidate* in the write-in position assigned to the office and 3) records a vote for the write-in candidate by filling in the oval or box assigned to the write-in position. (A write-in vote is invalid if it is cast for an individual who is not a declared write-in candidate for the office and political party (if a partisan primary) involved.)

***Blank ballot which contains valid votes:*** Ballot instructions direct the voter to: "...use only a black or blue ink pen. DO NOT USE ANY OTHER INK COLOR!" The voter does not read the instructions and uses an unacceptable marking tool to mark his or her ballot or makes a mark that is not large enough or dark enough to be read.



**False crossover vote created by ballot correction:** The partisan primary ballot instruction advises voters: "IF YOU VOTE IN MORE THAN ONE PARTY SECTION, YOUR PARTISAN BALLOT WILL BE REJECTED." Voter: 1) records a vote in one of the party columns appearing on the ballot 2) changes his or her mind and crosses out or attempts to erase the mark and 3) records a vote in one or more offices in another party column.

**False crossover vote created by invalid write-in:** The partisan primary ballot instructions advise voters: "IF YOU VOTE IN MORE THAN ONE PARTY SECTION, YOUR PARTISAN BALLOT WILL BE REJECTED." Voter: 1) enters an "invalid" write-in in one of the party columns on the ballot 2) records the vote by filling in the oval or box assigned to the write-in position and 3) records votes in one or more offices in another party column. (A write-in vote is invalid if it is cast for an individual who is not a declared write-in candidate for the office or political party (if a partisan primary) involved.)

## TESTING OF ELECTRONIC VOTING SYSTEMS

Prior to each election all electronic tabulating equipment must be tested to verify that 1) the equipment is performing properly, 2) the ballots have been properly prepared for each precinct, and 3) that the programs will accurately count votes. It is the responsibility of the election commission to conduct a preliminary and public accuracy test where a "test deck" of voted ballots is tabulated by the electronic equipment and the results are verified against predetermined results.

This manual contains step-by-step procedures for creating test decks and charts of predetermined results for partisan primary, general and non-partisan elections. The procedures reflect the requirements established by Michigan Election Law (MCL 168.1 - 168.992) and the Electronic Voting Systems Promulgated Rules (R 168.771 - 168.793). Electronic voting system users are prohibited from using testing procedures which do not meet the requirements of the statute and promulgated rules.

Certain test considerations, such as split tickets (crossover votes), are only applicable to partisan primary elections and are not considered when preparing test decks and charts for general elections or non-partisan elections. Likewise, straight party voting applies only to partisan general elections and is not a consideration when preparing tests decks and charts for partisan primary elections and non-partisan elections.

While the laws and rules contained in this manual apply to all electronic voting systems, they were originally written for punch card. Therefore, all references to "punch" and "card" should be read as "mark" and "ballot" when being applied to voting systems and the voter assist terminal.

MCL 168.798(1) states in part:

Before beginning the count of ballots, the board of election commissioners shall test the electronic tabulating equipment to determine if the electronic tabulating equipment will accurately count the votes cast for all offices and on all questions.... The test shall be conducted in the manner prescribed by rules promulgated by the secretary of state pursuant to the administrative procedures act of 1969.... In the test, a different number of valid votes shall be assigned to each candidate for an office, and for and against each question.

R 168.776 provides:

- (1) The election commission providing the program or its authorized assistant shall prepare a test deck with predetermined results.
- (2) The test deck shall consist of ballot cards of the same type to be used in the election with the word "TEST" stamped, printed, or written on each card.

## **PREPARING A CHART OF PREDETERMINED RESULTS**

It is recommended that the chart of predetermined results be prepared as early as possible prior to the election. The following information will be needed to complete this task: 1) a complete listing of all offices that will appear on the ballot 2) the total number of candidates whose names will appear under each office 3) the total number of votes allowed under each office and 4) the total number of proposals that will appear on the ballot. Preparing the chart of predetermined results as early as possible will help to ensure that the required tests and any needed repairs to voting equipment or corrections to ballots or programs may be carried out in a timely manner.

## **PREPARING A TEST DECK**

Once the official ballots are received, a test deck is prepared that mirrors the chart of predetermined results. Once the program is received, the program edit listing (tabulator zero report tape) must be checked against the ballot to verify that all office titles, candidate names, maximum number of votes allowed, number of write-in positions and proposals agree. After this check is successfully completed the preliminary test may be conducted.

While a single chart of predetermined results may be used for multiple precincts, a separate test deck must be prepared for each precinct to ensure that the program prepared for each tabulator and the unique code or precinct identifier contained in each ballot style will be recognized and accepted by the tabulator and that all votes will be properly awarded. Split precincts (precincts in which two or more

ballot styles will be issued) require a similar procedure. A separate test deck must be created for each ballot style.

Since test decks should always be made using the same ballots printed for use at the polls on Election Day, you will want to increase the number of ballots ordered for each precinct to be used for this purpose. It is also recommended that all ballots included in the test deck be marked using a black or blue ink pen and that a certain number of test ballots be folded to simulate the tabulation of absent voter ballots.

**NOTE:** If a test deck includes ballots marked by a printer and those ballots did not come from the stock that will be used on Election Day, at least three should be replaced and hand marked with Election Day ballots. This ensures testing of both the program and Election Day ballots.

**Rejection of Blank or Overvoted Ballots** - Tabulators must be programmed to inform the voter if their voted ballot contains one or more races or issues that are overvoted or their ballot is blank. In such cases, the voter must be offered an opportunity to revote the ballot. The test deck will include ballots designed to test for these requirements. It should be noted, however, that in an office where no candidates are running, it will not be possible to overvote the office because the write-in positions will always be equal to the maximum number of votes allowed. This exception is noted throughout the instructions.

**Write-in Votes** - The test deck will include ballots which contain marks in the write-in positions. While the tabulator will identify that a write-in vote was cast under a given office on the ballot, it will not be possible to verify the specific write-in position(s) used. The actual tallying of write-in votes for declared write-in candidates is carried out by the board of election inspectors following the close of the polls. If the ballots are processed in an absent voter counting center, write-in votes may be tallied throughout Election Day as time permits.

## **DEFINITIONS**

**Overvote**--vote for more than the number of candidates to be elected or nominated to an office or vote both yes and no on a proposal. No votes will be counted.

**Undervote**--vote for less than the number of candidates to be elected or nominated to an office or do not cast any vote on a proposal. Votes cast for candidates will be counted.

**Split Ticket (primary election ballot only)**--vote for candidates of more than one political party. No partisan section votes will be counted.

Straight Party Ticket (general election ballot only)--vote for all candidates of a single party by virtue of the straight party vote option. Each candidate under the party selected will receive a vote.

Split Ticket (general election ballot only)--straight party vote combined with direct votes for candidates of other political parties. Each candidate under the party selected will receive a vote except where superceded by a direct vote for a candidate.

Mixed Ticket (general election ballot only)-- no straight party vote is cast. Voter casts direct votes for candidates of multiple political parties.

Non-partisan candidate--candidate seeking a non-partisan office. Party affiliation is not considered, i.e., judicial candidates.

Partisan candidate--candidate seeking a partisan office under a recognized political party or a candidate seeking a partisan office with no party affiliation (NPA.), i.e., State Representative, DEM. or State Representative, NPA.

Party affiliation--political party represented by a candidate seeking a partisan office under a party, i.e., County Clerk, REP.

## **RULES RELATING TO ELECTRONIC VOTING SYSTEMS**

### **R168.773 PREPARATION OF PROGRAM**

#### **RULE 3**

(10) The vote tabulation portion of the program shall be written:

(a) To reflect the rotation sequence of the candidates' names and ballot position numbers as they appear on the ballot labels in the various precincts.

(b) To count valid votes cast by a voter for candidates for an office.

(c) To count valid votes cast by a voter for or against any question.

(d) So as not to count votes cast by a voter for an office or question if the number of votes cast by a voter exceeds the number which the voter is entitled to vote for on that office or question.

(e) To ignore punches in a ballot card in positions where a candidate's name or questions do not appear on the official ballot. These punches shall not have effect on the ballot.

(g) When 2 partisan candidates are to be elected to the same office and the voter has voted a straight party ticket for 1 political party and that party has only 1 candidate for that office, a vote shall be counted for the party candidate for that office and if the voter has voted for a candidate of a different political party for that office, that vote shall be counted.

(h) When a voter has voted a straight party ticket for a political party and has voted individual votes for members of that party only, a vote shall be counted for each candidate of that party. These conditions do not constitute an overvote.

#### R168.776 PREPARATION OF OFFICIAL TEST DECK

##### RULE 6

(1) The election commission providing the program or its authorized assistant shall prepare a test deck with predetermined results.

(2) The test deck shall consist of ballot cards of the same type to be used in the election with the word "TEST" stamped, printed, or written on each card.

(3) A document, record, chart, or listing shall be prepared indicating the punches recorded in the test ballot card. This documentation shall indicate each valid or invalid vote.

(4) In addition to other requirements of the act, a ballot card for use in the test deck for a partisan general election shall be prepared:

(a) So that each political party receives not less than 2 straight ticket votes and so that any 2 parties do not receive the same number of straight ticket votes.

(b) So that 2 or more parties receive straight ticket votes on 1 ballot.

(c) So that at least 1 of the ballots with a straight ticket vote for a party shall be individual punches for candidates of the same party, candidates of a different party, candidates for the same office of different parties, and nonpartisan candidates and proposals.

(d) In which punches appear in positions other than those used for candidates, proposals, or to indicate straight party voting.

(e) In which a punch does not appear.

- (f) In which a punch appears in each position where a candidate or proposal appears on the ballot.
- (5) In addition to other requirements of the act, a ballot card for use in the test deck for a partisan primary shall be prepared:
  - (a) So that punches appear on the same ballot card for candidates of different political parties, along with candidates for nonpartisan offices and votes for proposals.

RULE 6(5)(b-c) NO LONGER RELEVANT – Party Qualification Section no longer appears on the primary ballot

RULE 6 (6-7) NO LONGER RELEVANT – applies to obsolete mainframe computer hardware used for punch card tabulation only.

## TEST PROCEDURES FOR NON-PARTISAN ELECTION WITH PROPOSALS

Working with the ballot to be tested, prepare a chart that reflects each office, candidate, write-in position (the number of write-in positions will be equal to the number of candidates to be nominated or elected), and a position for the "yes" and "no" for each proposal. Enter the total number of votes allowed for each office and proposal under each office or proposal heading. Where instructed to "vote correctly" vote for the maximum number of candidates allowed and vote "yes" or "no" on all proposals.

Following the instructions below, use a "1" to show votes that count, and a "0" to show votes that do not count due to an overvote in an office or proposal. *(See sample ballot and sample chart on page 28.)*

To create a test deck, vote ballots as follows:

1. Using 1 ballot, vote all positions that are used on the ballot for candidates, write-ins, and proposals. EXCEPTION: If no candidates are running for an office, skip the office; overvoting will not be possible.

R168.773 - Rule 3(10)(d). Will not count any votes.

See sample chart on page 28 – Test Ballot #1

2. Using 1 ballot, vote all positions that are not used on the ballot for candidates, write-ins, and proposals. To complete this step, mark the unused vote positions. (NOTE: Do not make marks in between the used vote positions.)

R168.773 - Rule 3(10)(e). Will not count any votes.

See sample chart on page 28 – Test Ballot #2

3. Insert 1 blank ballot into the test deck.

R168.776 - Rule 6(4)(e). Will not count any votes.

See sample chart on page 28 – Test Ballot #3

4. Vote the following:

Vote 1 ballot correctly in the non-partisan section and overvote the proposal section of the ballot

(b) Vote 1 ballot correctly in the proposal section and overvote the non- partisan section of the ballot

R168.773 - Rule 3(10)(b)(c) and (f). Will only count votes cast in the non-partisan section in (a). Will only count votes cast in the proposal section in (b).

See sample chart on page 28 – Test Ballot #4 and #5

5. Vote correctly one or more ballots from a different precinct. These ballots will be rejected because the precinct code is improper for the program and tabulator being tested. No votes will count. You should not be able to override the tabulator’s rejection of this ballot.

See sample chart on page 28 – Test Ballot #6

WHEN INSTRUCTIONS 1 THROUGH 5 ARE COMPLETED, PERFORM THE FOLLOWING:

(1) Subtotal all columns on the chart to determine the total number of votes cast for each candidate, write-in position, and proposal that should be counted when the test deck is tabulated.

(2) Vote additional ballots as necessary so that a different total number of valid votes are cast for each candidate within an office, and for and against each proposal. Note: It is not required that each write-in position show a different total number of votes.

R168.773 - Rule 3(10)(a). None of the candidates, write-in positions, or proposals shall have an accumulated vote total of zero.

See sample chart on page 28 – Test Ballots #7, #8, #9, #10, #11, #12, #13, #14 and #15

(3) Tabulate all ballots included in the test deck **overriding all rejected ballots so they are accepted by the tabulator**. (You should not be able to override the wrong precinct ballot.) Print out the vote totals as tabulated. Only properly cast votes will be counted.

(4) Compare the predetermined totals with the tabulator totals for each candidate, write-in position, and proposal.



(5) If the totals BALANCE, the test is complete.

If the totals DO NOT BALANCE, the errors must be found and corrected. Errors may be in the chart of predetermined results, how the test deck was marked, the programming, or due to a flaw in the ballots. Once the error or problem is identified and corrected the test must be re-run. Once the totals balance the test is complete.

NON-PARTISAN SECTION		PROPOSAL SECTION	
LOCAL SCHOOL DISTRICT		LOCAL SCHOOL DISTRICT	
LOCAL SCHOOL DISTRICT BOARD MEMBER Vote for not more than 4		SCHOOL DISTRICT NAME	
Bill Wendt	<input type="radio"/>	SPECIAL MILLAGE REQUEST  This proposal would institute a special 1 mill levy, monies raised to be spent recruiting better high school football players.  Should this millage be adopted?	
Jill Collingsworth	<input type="radio"/>		
Morton A. Harrison	<input type="radio"/>		
Elsa Klein	<input type="radio"/>		
Calvin Lutz	<input type="radio"/>		
Wendy Preston	<input type="radio"/>		
Kris Stevenson	<input type="radio"/>		
	<input type="radio"/>		
	<input type="radio"/>	NO	<input type="radio"/>

Note: Sample ballot is an example only and does not abide fully by Ballot Production Standards

Sample Ballot Chart															
Non-Partisan Election with a Proposal															
NonPartisan												Prop.			
City Council												Millage			
(4)												(1)			
B	C	C	C	C	C	C	C	C	W	W	W	W	Y	N	
A	A	A	A	A	A	A	A	A	I	I	I	I	E	O	
L	N	N	N	N	N	N	N	N	1	2	3	4	S		
#	1	2	3	4	5	6	7								
Sub	0	1	0	1	0	1	0	1	0	1	0	0	0	0	1
7	1	1	1	1											1
8	1	1	1	1											1
9	1	1	1	1											
10	1	1	1	1											
11	1	1	1			1									
12	1	1	1			1									
13	1					1	1	1							
14	1					1	1	1							
15										1	1	1			
Total	8	7	6	5	4	3	2	1	1	1	1	1	2	1	