



YARDS PER CATCH (YPC) CALCULATOR USER MANUAL

Innovation Creator: Mr. Mark Zarb

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1. Historical Background

Using lessons learned from his first full-season replay of the 1982 NFL season's complete 16-game, non-strike schedule, Mark Zarb recognized the need for an innovation that would better distinguish between different types of receivers. This realization led him to create the Yards per Catch (YPC) Calculator in 2005. The innovation accounted for the frequency with which a passing offense would operate in A, B, or C index against its scheduled opponents, incorporated the quarterback's passing column, assigned an **S**, **M**, or **E** rating based on each receiver's actual yards-per-catch average, and worked seamlessly within the game engine without requiring additional dice rolls. He first tested the system during his replay of the 1965 NFL season and was extremely pleased with the results.

The first revision to the original rules associated with this innovation occurred following the completion of my replay of the 2011 NFL season. During the actual season, Drew Brees passed for 5,476 yards and 46 touchdowns. In the replay, however, Brees threw for 5,062 yards and 37 touchdowns. Analysis of this variance led to the revisions outlined below for Play Results (PR) 1 and 2 on Short and Medium pass plays.

- Short Passes PR 1/2. Revision: If the receiver is M-rated and the board result is a TD, treat it as a TD regardless of where on the field it occurs.
- Medium Passes PR 1/2. If the receiver is M or E-rated and the board result is a TD, treat it as a TD regardless of where it occurs.

This revision worked well with one notable exception: the M-rated receiver who possessed a high yards-per-catch average but had a relatively modest long gain, a situation that became known as the "Bill Mathis Rule."

During the 1967 season, Bill Mathis of the New York Jets averaged 17.2 yards per reception, yet his longest catch of the season was only 38 yards. Because Mathis was categorized as an M-rated receiver, the rules allowed him to potentially record a 99-yard touchdown reception. This issue became the impetus for Mark Zarb to develop the second-generation YPC Calculator.

Note: All YPC ratings posted on this site were created using the original calculator and remain perfectly acceptable for use. For receivers who fit the Bill Mathis profile, I recommend limiting receivers with a long between 0 and 38 yards to 38 yards and receivers with a long between 39 to 50 yards to 50 yards.

2. Preparation

a. Cell Color Coding

To use the calculator, only enter data into the **tan-colored cells**. The **light gray** and **dark gray** cells contain formulas and should not be modified. The **green-colored cell (O4)** displays the calculator's estimated YPC rating and serves as the final output of the model.

N	O	P	Q	R	S	T
B	C		SHORT	A	B	C
YPC Act.	9.1		Catches	7.3	35.6	17.06
YPC Adj	9.4	100	100	11.3	48.8	0.0
YPC Est.	12.1			3.9	17.1	
med				SHORT	MEDIUM	0.0
0.00	0.00	0.0	0.0	0.6	0.4	0.0
20.34	41.56	2.8	115.4	0.6	0.4	0.0
11.07	19.54	2.8	54.3	0.6	0.4	0.0
0.00	0.00	0.0	0.0	0.6	0.4	0.0
9.08	15.20	2.8	42.2	0.6	0.4	0.0
15.77	27.65	5.6	153.6	0.6	0.4	0.0
6.99	12.36	2.8	34.3	0.6	0.4	0.0
14.10	34.07	11.1	378.6	0.6	0.4	0.0

b. Data Input

A	B	C	D	E	F	G	H	I	J	K	L
A	0.1875	3	D	0.44	A	1.38641849					Receiver Grad
B	0.8125	13	S	0.31	B	10.2555618	Recvr	MCCOY	Rec'vrs Long	22	
C	0	0	G	0.25	C	4.11013818	grade(s)	B/C	QB	TAYLOR	
YARDS PER CATCH SHORT PASS				YARDS PER CATCH MEDIUM PASS					QB	YRDS PER	YRDS PER
	A	B	C		A	B	C		CARD	SHORT	MED
1	48.68	48.68	48.68	1	50.85	50.85	50.85	0	3	0.00	0.00
2	42.35	36.85	30.77	2	50.85	50.85	50.85	1	35	35.36	50.85

Using the +8/-8 Rule, determine the frequency with which your pass offense will operate in A, B, and C index against its scheduled opponents. Using the Mark Zarb-carded 2015 Buffalo Bills as an example, the Bills would be in A-Index three times, B Index 13 times, and C Index zero times during the season.

- 3 in Cell C1, 13 in cell C2, and 0 in cell C3.

Cells E1:E3 - Represent the estimated percentage of times a team will face each defensive alignment on pass plays.

Cell I2 - Enter the receiver's name. This field does not affect the calculation but makes it easier to track which receiver's rating is being generated.

Cell I3 - Enter the receiver's grade. Split grades should be entered in the format **A/B**, **B/A**, **B/C**, etc.

Cell K2 - Enter the receiver's longest reception. This value does not affect the calculation directly but will be used when determining the final YPC rating.

Cell K3 - Enter the quarterback's name. This value is used to calculate the quarterback adjustment in conjunction with the data entered in **Cells V22:W28**.

A	B	C	D	E	F	G	H	I	J	K	L
A	0.1875	3	D	0.44	A	1.38641849					Receiver Grad
B	0.8125	13	S	0.31	B	10.2555618	Recvr	MCCOY	Rec'vrs Long	22	
C	0	0	G	0.25	C	4.11013818	grade(s)	B/C	QB	TAYLOR	
YARDS PER CATCH SHORT PASS				YARDS PER CATCH MEDIUM PASS					QB	YRDS PER	YRDS PER
	A	B	C		A	B	C		CARD	SHORT	MED
1	48.68	48.68	48.68	1	50.85	50.85	50.85	0	3	0.00	0.00
2	42.35	36.85	30.77	2	50.85	50.85	50.85	1	35	35.36	50.85

Cells V22:W28 - contain the quarterback's surname and his Passing YPC value. Enter the quarterback's surname in Column V and his Passing YPC in Column W. These values are used by the calculator to determine the quarterback adjustment that is incorporated into the receiver's final YPC rating.

Cell W31 - Enter the team's Yards per Catch (YPC) value.

	V	W	X
19			
20	QB's Need to be listed in alphabetical order		
21		QB YPC	
22	MANUEL	10.8	-1.4
23	TAYLOR	12.5	0.3
24	0	0.0	-12.2
25	0	0.0	-12.2
26	0	0.0	-12.2
27	0	0.0	-12.2
28	0	0.0	-12.2
29			
30		Team YPC	
31		12.2	

Cell O2 - Enter the receiver's **Yards per Catch (YPC)**. This is the receiver's actual YPC value and serves as a key input in the calculation process used to determine the player's final YPC rating.

	O
1	C
2	9.1
3	9.4
4	12.1

Cells J6:J41 - Enter the quarterback's **P column** values from his player card. These values are used by the calculator to incorporate the quarterback's passing characteristics into the YPC calculation and help determine the receiver's projected YPC rating.

Cells R6:R13 - Enter **0.6** in **Cell R6** and copy (drag) the value down through **Cell R13**. As a result, **Cells S6:S13** will automatically update to **0.4** based on the worksheet formulas.

	R	S
5	SHORT	MEDIUM
6	0.6	0.4
7	0.6	0.4
8	0.6	0.4
9	0.6	0.4
10	0.6	0.4
11	0.6	0.4
12	0.6	0.4
13	0.6	0.4

Cell T5 - Enter the **yardage adjustment** value (positive or negative) used to fine-tune the projected YPC rating. Increasing the value will increase the estimated YPC, while decreasing the value will lower it. This adjustment should be used only when necessary to align the calculator's output with the receiver's desired YPC rating.

	T	U	V
1	C	A	E
2	17.06	0.0	26
3	0.0	0.0	40
4		0.0	
5	0.0	yardage adjustment	

	J
4	QB
5	CARD
6	3
7	35
8	11
9	19
10	8
11	26
12	16
13	6
14	26
15	18
16	8
17	16
18	8
19	13
20	5
21	35
22	9
23	26
24	31
25	10
26	27
27	6
28	16
29	21
30	8
31	36
32	12
33	21
34	7
35	26
36	11
37	16
38	27
39	18
40	35
41	2

3. Creating YPC Ratings

a. 2015 Buffalo Bills Receiver Ratings

The table below illustrates the YPC ratings for a Mark Zarb-carded 2015 Buffalo Bills squad, based on Tyrod Taylor's card. We will refer to this table throughout the following sections as I explain how to create ratings for E-, S-, and M-rated receivers, including the Bill Mathis-type receiver.

	A	B	C	D	E	F
1	TAYLOR					
2		Grade	YPC Rating		Long	Actual YPC
3	Clay	A	S 2-5, (-1), 40		40	10.4
4	Dixon	C	S 2-6, (-2), 14		14	7.3
5	Easley	C	M 2-5, (+32), 58		58	58.0
6	Felton	C	S 2, M 3, 12		12	12.0
7	Gillislee	C	S 2-6, (-4), 14		14	4.8
8	Goodwin	C	S 2, M 3, 14		14	12.0
9	Gragg	C	S 2, M 3-5, 29		29	12.5
10	Gray	C	S 2-6, (-6), 2		2	2.0
11	Harvin	C	E, 51		51	11.5
12	Herron	C	S 2-4, (-3), 9		9	6.7
13	Hogan	B	E 2, M 3-4, 46		46	12.5
14	McCoy	B/C	S 2-5, (-1), 22		22	9.1
15	Mulligan	C	S 2-6, (-6), 2		2	2.0
16	O'Leary	C	S 2, M 3-8, (+17), 37		37	37.0
17	Salas	C	S 2, M 3-8, 20		20	13.7
18	Taylor	C	-		4	4.0
19	Watkins	A	M 2-7, (+2), 63		63	17.5

b. E-Rated Receiver

We will use Percy Harvin as an example of how to create an E-rated receiver. Determining the YPC rating for each receiver is an iterative process:

Cell I2 - Enter the receiver's name. This field does not affect the calculation but makes it easier to track which receiver's rating is being generated.

Cell I3 - Enter the receiver's grade. Split grades should be entered in the format **A/B, B/A, B/C**, etc.

Cell K2 - Enter the receiver's longest reception. This value does not affect the calculation directly but will be used when determining the final YPC rating.

Cell O2 - Enter the receiver's **Yards per Catch (YPC)**. This is the receiver's actual YPC value and serves as a key input in the calculation process used to determine the player's final YPC rating.

	I	J	K	L	M	N	O
1				Receiver Grade		C	C
2	HARVIN	Rec'vrs Long	51			YPC Act.	11.5
3	C	QB	TAYLOR			YPC Adj	11.8
4		QB	YRDS PER	YRDS PER		YPC Est.	12.0
5		CARD	SHORT	MED	short	med	

YPC Est: The YPC Adjustment in cell O3 is 11.8, which is within 0.2 of the YPC Estimate in cell O4, so no further adjustments are required. This results in Percy Harvin receiving an E-Rating. **NOTE: Further steps are only necessary if the difference between cells O3 and O4 is greater than 0.2.**

c. S-Rated Receiver

We will use Charles Clay as an example of how to create an S-rated receiver. Determining the YPC rating for each receiver is an iterative process:

Cell I2 - Enter the receiver's name. This field does not affect the calculation but makes it easier to track which receiver's rating is being generated.

Cell I3 - Enter the receiver's grade. Split grades should be entered in the format **A/B, B/A, B/C**, etc.

Cell K2 - Enter the receiver's longest reception. This value does not affect the calculation directly but will be used when determining the final YPC rating.

Cell O2 - Enter the receiver's **Yards per Catch (YPC)**. This is the receiver's actual YPC value and serves as a key input in the calculation process used to determine the player's final YPC rating.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		A	A		SHORT	A	B	C
2	CLAY	Rec'vrs Long	40			YPC Act.	10.4		Catches	39.0	21.0	0.00
3	A	QB	TAYLOR			YPC Adj	10.7	100	100	60.0	0.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	12.8			21.0	0.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	0.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
7	1	35	40.43	50.85	24.26	20.34	44.60	2.8	123.9	0.6	0.4	0.0
8	1	11	15.71	29.85	9.42	11.94	21.36	2.8	59.3	0.6	0.4	0.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
10	1	8	12.65	24.42	7.59	9.77	17.36	2.8	48.2	0.6	0.4	0.0
11	2	26	24.74	44.64	14.85	17.86	32.70	5.6	181.7	0.6	0.4	0.0
12	1	16	11.25	20.13	6.75	8.05	14.80	2.8	41.1	0.6	0.4	0.0
13	4	6	39.83	49.60	23.90	19.84	43.74	11.1	486.0	0.6	0.4	0.0

Since Charles Clay's YPC Adjustment in cell O3 is less than the YPC Estimate in cell O4 by more than 0.2, enter a 1 in cell R6 to lower cell O4. Continue this process through cells R7 to R13 until cell O4 gets within 0.2 of **YPC Adj in cell O3**, rounding up or down as needed. A plus or minus adjustment in cell T5 may also be necessary to further fine-tune the receiver's grade.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		A	A		SHORT	A	B	C
2	CLAY	Rec'vrs Long	40			YPC Act.	10.4		Catches	39.0	21.0	0.00
3	A	QB	TAYLOR			YPC Adj	10.7	100	100	60.0	0.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	11.1			21.0	0.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	0.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	0.0
7	1	35	40.43	50.85	40.43	0.00	40.43	2.8	112.3	1	0	0.0
8	1	11	15.71	29.85	15.71	0.00	15.71	2.8	43.6	1	0	0.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	0.0
10	1	8	12.65	24.42	12.65	0.00	12.65	2.8	35.1	1	0	0.0
11	2	26	24.74	44.64	24.74	0.00	24.74	5.6	137.5	1	0	0.0
12	1	16	11.25	20.13	11.25	0.00	11.25	2.8	31.3	1	0	0.0
13	4	6	39.83	49.60	39.83	0.00	39.83	11.1	442.6	1	0	0.0

Cell O4 (YPC Est) is still greater than 0.2 of cell O3 (YPC Adj), so a minus adjustment must be made in cell T5.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		A	A		SHORT	A	B	C
2	CLAY	Rec'vrs Long	40			YPC Act.	10.4		Catches	39.0	21.0	0.00
3	A	QB	TAYLOR			YPC Adj	10.7	100	100	60.0	0.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	9.8			21.0	0.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	-1.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	-1.0
7	1	35	40.43	50.85	40.43	0.00	39.43	2.8	109.5	1	0	-1.0
8	1	11	15.71	29.85	15.71	0.00	14.71	2.8	40.9	1	0	-1.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	-1.0
10	1	8	12.65	24.42	12.65	0.00	11.65	2.8	32.4	1	0	-1.0
11	2	26	24.74	44.64	24.74	0.00	22.74	5.6	126.4	1	0	-1.0
12	1	16	11.25	20.13	11.25	0.00	10.25	2.8	28.5	1	0	-1.0
13	4	6	39.83	49.60	39.83	0.00	35.83	11.1	398.1	1	0	-1.0

After the adjustment to cell T5, cell O4 (YPC Est) is now 9.8. Since 9.8 is less than the YPC Adjustment of 10.7 in cell O3, enter 0.6 in cell R13 and work upward accordingly until you get as close as possible to 10.7 while remaining within 0.2 of cell O3.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		A	A		SHORT	A	B	C
2	CLAY	Rec'vrs Long	40			YPC Act.	10.4		Catches	39.0	21.0	0.00
3	A	QB	TAYLOR			YPC Adj	10.7	100	100	60.0	0.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	10.6			21.0	0.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	-1.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	-1.0
7	1	35	40.43	50.85	40.43	0.00	39.43	2.8	109.5	1	0	-1.0
8	1	11	15.71	29.85	15.71	0.00	14.71	2.8	40.9	1	0	-1.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	-1.0
10	1	8	12.65	24.42	12.65	0.00	11.65	2.8	32.4	1	0	-1.0
11	2	26	24.74	44.64	14.85	17.86	30.70	5.6	170.6	0.6	0.4	-1.0
12	1	16	11.25	20.13	6.75	8.05	13.80	2.8	38.3	0.6	0.4	-1.0
13	4	6	39.83	49.60	23.90	19.84	39.74	11.1	441.5	0.6	0.4	-1.0

Now that cell O4 is 10.6 and cell O3 is 10.7, Charles Clay receives a rating of S2-5, (-1), 40. The table below illustrates what occurs if you continue adjusting the R-column.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		A	A		SHORT	A	B	C
2	CLAY	Rec'vrs Long	40			YPC Act.	10.4		Catches	39.0	21.0	0.00
3	A	QB	TAYLOR			YPC Adj	10.7	100	100	60.0	0.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	10.9			21.0	0.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	-1.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	-1.0
7	1	35	40.43	50.85	40.43	0.00	39.43	2.8	109.5	1	0	-1.0
8	1	11	15.71	29.85	15.71	0.00	14.71	2.8	40.9	1	0	-1.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	-1.0
10	1	8	12.65	24.42	7.59	9.77	16.36	2.8	45.4	0.6	0.4	-1.0
11	2	26	24.74	44.64	14.85	17.86	30.70	5.6	170.6	0.6	0.4	-1.0
12	1	16	11.25	20.13	6.75	8.05	13.80	2.8	38.3	0.6	0.4	-1.0
13	4	6	39.83	49.60	23.90	19.84	39.74	11.1	441.5	0.6	0.4	-1.0

While the adjustment remains within the 0.2 threshold, the previous adjustment was closer, at 0.1 instead of 0.2.

d. M-Rated Receiver with a Long Gain of 51 Yards or Greater.

We will use Sammy Watkins as an example of how to create an M-rated receiver.

Determining the YPC rating for each receiver is an iterative process:

Cell I2 - Enter the receiver's name. This field does not affect the calculation but makes it easier to track which receiver's rating is being generated.

Cell I3 - Enter the receiver's grade. Split grades should be entered in the format **A/B**, **B/A**, **B/C**, etc.

Cell K2 - Enter the receiver's longest reception. This value does not affect the calculation directly but will be used when determining the final YPC rating.

Cell O2 - Enter the receiver's **Yards per Catch (YPC)**. This is the receiver's actual YPC value and serves as a key input in the calculation process used to determine the player's final YPC rating.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		A	A		SHORT	A	B	C
2	WATKINS	Rec'vrs Long	63			YPC Act.	17.5		Catches	39.0	21.0	0.00
3	A	QB	TAYLOR			YPC Adj	17.8	100	100	60.0	0.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	12.8			21.0	0.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	0.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
7	1	35	40.43	50.85	24.26	20.34	44.60	2.8	123.9	0.6	0.4	0.0
8	1	11	15.71	29.85	9.42	11.94	21.36	2.8	59.3	0.6	0.4	0.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
10	1	8	12.65	24.42	7.59	9.77	17.36	2.8	48.2	0.6	0.4	0.0
11	2	26	24.74	44.64	14.85	17.86	32.70	5.6	181.7	0.6	0.4	0.0
12	1	16	11.25	20.13	6.75	8.05	14.80	2.8	41.1	0.6	0.4	0.0
13	4	6	39.83	49.60	23.90	19.84	43.74	11.1	486.0	0.6	0.4	0.0

Since Sammy Watkins's YPC Adjustment in cell O3 is greater than the YPC Estimate in cell O4, enter a 0 in cell R6 to raise cell O4. Continue this process through cells R7 to R13 until cell O4 gets within 0.2 of YPC Adjustment in cell O3, rounding up or down as needed. A plus or minus adjustment in cell T5 may also be necessary to further fine-tune the receiver's grade.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		A	A		SHORT	A	B	C
2	WATKINS	Rec'vrs Long	63			YPC Act.	17.5		Catches	39.0	21.0	0.00
3	A	QB	TAYLOR			YPC Adj	17.8	100	100	60.0	0.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	15.3			21.0	0.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	0.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	0.0
7	1	35	40.43	50.85	0.00	50.85	50.85	2.8	141.3	0	1	0.0
8	1	11	15.71	29.85	0.00	29.85	29.85	2.8	82.9	0	1	0.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	0.0
10	1	8	12.65	24.42	0.00	24.42	24.42	2.8	67.8	0	1	0.0
11	2	26	24.74	44.64	0.00	44.64	44.64	5.6	248.0	0	1	0.0
12	1	16	11.25	20.13	0.00	20.13	20.13	2.8	55.9	0	1	0.0
13	4	6	39.83	49.60	0.00	49.60	49.60	11.1	551.1	0	1	0.0

Cell O4 (YPC Est) is still less than 0.2 compared to cell O3 (YPC Adj), so a plus adjustment must be made in cell T5.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		A	A		SHORT	A	B	C
2	WATKINS	Rec'vrs Long	63			YPC Act.	17.5		Catches	39.0	21.0	0.00
3	A	QB	TAYLOR			YPC Adj	17.8	100	100	60.0	0.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	18.0			21.0	0.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	2.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	2.0
7	1	35	40.43	50.85	0.00	50.85	52.85	2.8	146.8	0	1	2.0
8	1	11	15.71	29.85	0.00	29.85	31.85	2.8	88.5	0	1	2.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	2.0
10	1	8	12.65	24.42	0.00	24.42	26.42	2.8	73.4	0	1	2.0
11	2	26	24.74	44.64	0.00	44.64	48.64	5.6	270.2	0	1	2.0
12	1	16	11.25	20.13	0.00	20.13	22.13	2.8	61.5	0	1	2.0
13	4	6	39.83	49.60	0.00	49.60	57.60	11.1	640.0	0	1	2.0

After the plus 2 adjustment, cell O4 is within 0.2 of cell O3; however, there is a larger disparity of 0.5 from the YPC Act in cell O2. Let's see what happens when 0.6 is entered into cell R13 and we work upward accordingly, remaining within the 0.2 window of cell O3 while closing the gap with cell O2.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		A	A		SHORT	A	B	C
2	WATKINS	Rec'vrs Long	63			YPC Act.	17.5		Catches	39.0	21.0	0.00
3	A	QB	TAYLOR			YPC Adj	17.8	100	100	60.0	0.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	17.6			21.0	0.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	2.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	2.0
7	1	35	40.43	50.85	0.00	50.85	52.85	2.8	146.8	0	1	2.0
8	1	11	15.71	29.85	0.00	29.85	31.85	2.8	88.5	0	1	2.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	2.0
10	1	8	12.65	24.42	0.00	24.42	26.42	2.8	73.4	0	1	2.0
11	2	26	24.74	44.64	0.00	44.64	48.64	5.6	270.2	0	1	2.0
12	1	16	11.25	20.13	0.00	20.13	22.13	2.8	61.5	0	1	2.0
13	4	6	39.83	49.60	23.90	19.84	51.74	11.1	574.9	0.6	0.4	2.0

Now that cell O4 remains within 0.2 of cell O3 and closed the gap with cell O2, Sammy Watkins receives a rating of M 2-7, (+2), 63. The table below illustrates what occurs if you continue adjusting the R-column.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		A	A		SHORT	A	B	C
2	WATKINS	Rec'vrs Long	63			YPC Act.	17.5		Catches	39.0	21.0	0.00
3	A	QB	TAYLOR			YPC Adj	17.8	100	100	60.0	0.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	17.3			21.0	0.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	2.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	2.0
7	1	35	40.43	50.85	0.00	50.85	52.85	2.8	146.8	0	1	2.0
8	1	11	15.71	29.85	0.00	29.85	31.85	2.8	88.5	0	1	2.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	2.0
10	1	8	12.65	24.42	0.00	24.42	26.42	2.8	73.4	0	1	2.0
11	2	26	24.74	44.64	0.00	44.64	48.64	5.6	270.2	0	1	2.0
12	1	16	11.25	20.13	6.75	8.05	16.80	2.8	46.7	0.6	0.4	2.0
13	4	6	39.83	49.60	23.90	19.84	51.74	11.1	574.9	0.6	0.4	2.0

Now, the adjustment is outside the 0.2 range of cell O3, which is incorrect.

e. “Bill Mathis” Type Receiver

Check the Receiver’s Long Gain: Once the YPC is calculated, make an adjustment based on the receiver’s actual long gain. However, not all receivers will receive this adjustment. For “S” receivers, if the steps above result in the appropriate YPC, no adjustment is made for long gain. Long gain adjustments may be necessary for players with E or M designations. Typically, this would apply to a player with a high YPC but a short, long gain, such as Chris Hogan, Nick O’Leary, or Greg Salas.

If the receiver’s Long is between 0 and 38 yards, cells R6 and R7 will be 1. This means that PRNs 1 or 2 are read from the short pass boards. If the receiver’s Long is between 39 and 50 yards, cells R6 and R7 will be 0.6. This means that PRNs 1 or 2 are read from the pass play as called. If the receiver’s Long is greater than 50 yards, cells R6 and R7 will be 0. This means that PRNs 1 or 2 are read from the medium pass boards.

Long between 0 and 38 yards.

We will use Greg Salas as an example of how to create an M-rated receiver with a **long between 0 and 38 yards**. Determining the YPC rating for each receiver is an iterative process:

Cell I2 - Enter the receiver's name. This field does not affect the calculation but makes it easier to track which receiver's rating is being generated.

Cell I3 - Enter the receiver's grade. Split grades should be entered in the format **A/B, B/A, B/C**, etc.

Cell K2 - Enter the receiver's longest reception. This value does not affect the calculation directly but will be used when determining the final YPC rating.

Cell O2 - Enter the receiver's **Yards per Catch (YPC)**. This is the receiver's actual YPC value and serves as a key input in the calculation process used to determine the player's final YPC rating.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		C	C		SHORT	A	B	C
2	SALAS	Rec'vrs Long	20			YPC Act.	13.7		Catches	0.0	39.0	21.00
3	C	QB	TAYLOR			YPC Adj	14.0	100	100	0.0	60.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	12.0			0.0	21.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	0.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
7	1	35	34.72	50.85	20.83	20.34	41.17	2.8	114.4	0.6	0.4	0.0
8	1	11	13.91	27.40	8.34	10.96	19.31	2.8	53.6	0.6	0.4	0.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
10	1	8	9.90	22.48	5.94	8.99	14.93	2.8	41.5	0.6	0.4	0.0
11	2	26	19.18	38.76	11.51	15.50	27.01	5.6	150.1	0.6	0.4	0.0
12	1	16	8.67	17.13	5.20	6.85	12.05	2.8	33.5	0.6	0.4	0.0
13	4	6	32.46	33.43	19.47	13.37	32.84	11.1	364.9	0.6	0.4	0.0

Since Greg Salas' YPC Adjustment in cell O3 is greater than the YPC Estimate in cell O4, normally a 0 would be entered into cell R6 to raise cell O4. However, this is where it gets tricky: Greg Salas' long reception was only 20 yards, resulting in a 1 being entered into cells R6 and R7.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		C	C		SHORT	A	B	C
2	SALAS	Rec'vrs Long	20			YPC Act.	13.7		Catches	0.0	39.0	21.00
3	C	QB	TAYLOR			YPC Adj	14.0	100	100	0.0	60.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	11.6			0.0	21.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	0.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	0.0
7	1	35	34.72	50.85	34.72	0.00	34.72	2.8	96.4	1	0	0.0
8	1	11	13.91	27.40	8.34	10.96	19.31	2.8	53.6	0.6	0.4	0.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
10	1	8	9.90	22.48	5.94	8.99	14.93	2.8	41.5	0.6	0.4	0.0
11	2	26	19.18	38.76	11.51	15.50	27.01	5.6	150.1	0.6	0.4	0.0
12	1	16	8.67	17.13	5.20	6.85	12.05	2.8	33.5	0.6	0.4	0.0
13	4	6	32.46	33.43	19.47	13.37	32.84	11.1	364.9	0.6	0.4	0.0

Since Greg Salas' YPC Adjustment in cell O3 is greater than the YPC Estimate in cell O4, enter a 0 in cell R8 to raise cell O4. Continue this process through cells R9 to R13 until cell O4 gets within 0.2 of YPC Adjustment in cell O3, rounding up or down as needed. A plus or minus adjustment in cell T5 may also be necessary to further fine-tune the receiver's grade.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		C	C		SHORT	A	B	C
2	SALAS C	Rec'vrs Long	20			YPC Act.	13.7		Catches	0.0	39.0	21.00
3		QB	TAYLOR			YPC Adj	14.0	100	100	0.0	60.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	13.8			0.0	21.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	0.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	0.0
7	1	35	34.72	50.85	34.72	0.00	34.72	2.8	96.4	1	0	0.0
8	1	11	13.91	27.40	0.00	27.40	27.40	2.8	76.1	0	1	0.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	0.0
10	1	8	9.90	22.48	0.00	22.48	22.48	2.8	62.4	0	1	0.0
11	2	26	19.18	38.76	0.00	38.76	38.76	5.6	215.3	0	1	0.0
12	1	16	8.67	17.13	0.00	17.13	17.13	2.8	47.6	0	1	0.0
13	4	6	32.46	33.43	0.00	33.43	33.43	11.1	371.4	0	1	0.0

Now cell O4 is within 0.2 of cell O3, so you no longer have to worry about this receiver significantly exceeding his actual long gain, as his rating would be S 2, M 3-8, 20.

Long between 0 and 38 yards with +/- Adjustment.

We will use Nick O'Leary as an example of how to create an M-rated receiver with a **long between 0 and 38 yards and that needs a +/- adjustment**. Determining the YPC rating for each receiver is an iterative process:

Cell I2 - Enter the receiver's name. This field does not affect the calculation but makes it easier to track which receiver's rating is being generated.

Cell I3 - Enter the receiver's grade. Split grades should be entered in the format **A/B, B/A, B/C**, etc.

Cell K2 - Enter the receiver's longest reception. This value does not affect the calculation directly but will be used when determining the final YPC rating.

Cell O2 - Enter the receiver's **Yards per Catch (YPC)**. This is the receiver's actual YPC value and serves as a key input in the calculation process used to determine the player's final YPC rating.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		C	C		SHORT	A	B	C
2	O'LEARY	Rec'vrs Long	37			YPC Act.	37		Catches	0.0	39.0	21.00
3	C	QB	TAYLOR			YPC Adj	37.3	100	100	0.0	60.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	12.0			0.0	21.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	0.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
7	1	35	34.72	50.85	20.83	20.34	41.17	2.8	114.4	0.6	0.4	0.0
8	1	11	13.91	27.40	8.34	10.96	19.31	2.8	53.6	0.6	0.4	0.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
10	1	8	9.90	22.48	5.94	8.99	14.93	2.8	41.5	0.6	0.4	0.0
11	2	26	19.18	38.76	11.51	15.50	27.01	5.6	150.1	0.6	0.4	0.0
12	1	16	8.67	17.13	5.20	6.85	12.05	2.8	33.5	0.6	0.4	0.0
13	4	6	32.46	33.43	19.47	13.37	32.84	11.1	364.9	0.6	0.4	0.0

Since Nick O'Leary YPC Adjustment in cell O3 is greater than the YPC Estimate in cell O4, normally a 0 would be entered into cell R6 to raise cell O4. However, this is where it gets tricky: Nick O'Leary's long reception was only 37 yards, resulting in a 1 being entered into cells R6 and R7.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		C	C		SHORT	A	B	C
2	O'LEARY	Rec'vrs Long	37			YPC Act.	37		Catches	0.0	39.0	21.00
3	C	QB	TAYLOR			YPC Adj	37.3	100	100	0.0	60.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	13.8			0.0	21.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	0.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	0.0
7	1	35	34.72	50.85	34.72	0.00	34.72	2.8	96.4	1	0	0.0
8	1	11	13.91	27.40	0.00	27.40	27.40	2.8	76.1	0	1	0.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	0.0
10	1	8	9.90	22.48	0.00	22.48	22.48	2.8	62.4	0	1	0.0
11	2	26	19.18	38.76	0.00	38.76	38.76	5.6	215.3	0	1	0.0
12	1	16	8.67	17.13	0.00	17.13	17.13	2.8	47.6	0	1	0.0
13	4	6	32.46	33.43	0.00	33.43	33.43	11.1	371.4	0	1	0.0

Continue this process through cells R9 to R13 until cell O4 gets within 0.2 of YPC Adjustment in cell O3, rounding up or down as needed. A plus or minus adjustment in cell T5 may also be necessary to further fine-tune the receiver's grade.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		C	C		SHORT	A	B	C
2	O'LEARY	Rec'vrs Long	37			YPC Act.	37		Catches	0.0	39.0	21.00
3	C	QB	TAYLOR			YPC Adj	37.3	100	100	0.0	60.0	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	37.3			0.0	21.0	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	17.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	1	0	17.0
7	1	35	34.72	50.85	34.72	0.00	51.72	2.8	143.7	1	0	17.0
8	1	11	13.91	27.40	0.00	27.40	44.40	2.8	123.3	0	1	17.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	17.0
10	1	8	9.90	22.48	0.00	22.48	39.48	2.8	109.7	0	1	17.0
11	2	26	19.18	38.76	0.00	38.76	72.76	5.6	404.2	0	1	17.0
12	1	16	8.67	17.13	0.00	17.13	34.13	2.8	94.8	0	1	17.0
13	4	6	32.46	33.43	0.00	33.43	101.43	11.1	1127.0	0	1	17.0

Now cell O4 is within 0.2 of cell O3, so you no longer have to worry about this receiver significantly exceeding his actual long gain, as his rating would be S 2, M 3-8, (+17), 37.

Long between 39 and 50 yards.

We will use Chris Hogan as an example of how to create an M-rated receiver with a **long between 39 and 50 yards**. Determining the YPC rating for each receiver is an iterative process:

Cell I2 - Enter the receiver's name. This field does not affect the calculation but makes it easier to track which receiver's rating is being generated.

Cell I3 - Enter the receiver's grade. Split grades should be entered in the format **A/B, B/A, B/C**, etc.

Cell K2 - Enter the receiver's longest reception. This value does not affect the calculation directly but will be used when determining the final YPC rating.

Cell O2 - Enter the receiver's **Yards per Catch (YPC)**. This is the receiver's actual YPC value and serves as a key input in the calculation process used to determine the player's final YPC rating.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		B	B		SHORT	A	B	C
2	HOGAN	Rec'vrs Long	46			YPC Act.	12.5		Catches	7.3	35.6	17.06
3	B	QB	TAYLOR			YPC Adj	12.8	100	100	11.3	48.8	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	12.2			3.9	17.1	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	0.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
7	1	35	35.79	50.85	21.47	20.34	41.81	2.8	116.1	0.6	0.4	0.0
8	1	11	14.24	27.86	8.55	11.15	19.69	2.8	54.7	0.6	0.4	0.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
10	1	8	10.41	22.84	6.25	9.14	15.39	2.8	42.7	0.6	0.4	0.0
11	2	26	20.22	39.86	12.13	15.94	28.08	5.6	156.0	0.6	0.4	0.0
12	1	16	9.15	17.69	5.49	7.08	12.57	2.8	34.9	0.6	0.4	0.0
13	4	6	33.84	36.46	20.30	14.58	34.89	11.1	387.6	0.6	0.4	0.0

Since Chris Hogan's YPC Adjustment in cell O3 is greater than the YPC Estimate in cell O4, normally a 0 would be entered into cell R6 to raise cell O4. However, this is where it gets tricky: Chris Hogan's long reception was 46 yards, resulting in a 0.6 being left in cells R6 and R7. Continue this process through cells R8 to R13 until cell O4 gets within 0.2 of YPC Adjustment in cell O3, rounding up or down as needed. A plus or minus adjustment in cell T5 may also be necessary to further fine-tune the receiver's grade.

	I	J	K	L	M	N	O	P	Q	R	S	T
1				Receiver Grade		B	B		SHORT	A	B	C
2	HOGAN	Rec'vrs Long	46			YPC Act.	12.5		Catches	7.3	35.6	17.06
3	B	QB	TAYLOR			YPC Adj	12.8	100	100	11.3	48.8	0.0
4		QB	YRDS PER	YRDS PER		YPC Est.	12.7			3.9	17.1	
5		CARD	SHORT	MED	short	med				SHORT	MEDIUM	0.0
6	0	3	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.6	0.4	0.0
7	1	35	35.79	50.85	21.47	20.34	41.81	2.8	116.1	0.6	0.4	0.0
8	1	11	14.24	27.86	0.00	27.86	27.86	2.8	77.4	0	1	0.0
9	0	19	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	1	0.0
10	1	8	10.41	22.84	6.25	9.14	15.39	2.8	42.7	0.6	0.4	0.0
11	2	26	20.22	39.86	12.13	15.94	28.08	5.6	156.0	0.6	0.4	0.0
12	1	16	9.15	17.69	5.49	7.08	12.57	2.8	34.9	0.6	0.4	0.0
13	4	6	33.84	36.46	20.30	14.58	34.89	11.1	387.6	0.6	0.4	0.0

Now cell O4 is within 0.2 of cell O3, so you no longer have to worry about this receiver significantly exceeding his actual long gain, as his rating would be E 2, M 3-4, 46.