



Insights and Summaries of Eagles vs. Cowboys Week 16

# Analyzing Upcoming Opponent Project

# Team Stats



<b>Score</b>	40	34
<b>Possession</b>	32 minutes	28 minutes
<b>Plays Ran</b>	72	69
<b>Offense Yards</b>	419	444
<b>Yards per Play</b>	5.8	6.4
<b>Penalties</b>	4	2
<b>Penalty Yards</b>	36	10

# Scoring



<b>Touchdowns</b>	4	4
<b>Field Goals</b>	4/4	2/2
<b>PAT</b>	4/4	4/4
<b>FG %</b>	100%	100%
<b>PAT %</b>	100%	100%
<b>Two Points</b>	0/0	0/0

# Turnovers



<b>Turnovers</b>	1	4
<b>Fumbles</b>	1	3
<b>Fumbles Lost</b>	0	2
<b>Interceptions</b>	1	2

# Passing



<b>Attempts</b>	35	40
<b>Completions</b>	27	24
<b>Comp %</b>	77.1%	60.0%
<b>Passing Yards</b>	304	355
<b>YPA</b>	8.7	8.9
<b>YPC</b>	11.3	14.8
<b>Passing TD's</b>	3	2
<b>Interceptions</b>	1	2
<b>Sacks Taken</b>	6	0
<b>Sack Yards</b>	43	0
<b>Passer Rating</b>	119.2	84.9

# Rushing



<b>Carries</b>	31	29
<b>Rush Yards</b>	115	89
<b>YPC</b>	3.7	3.1
<b>Rushing TD's</b>	1	1

# First Downs



<b>1<sup>st</sup> Downs</b>	25	25
<b>Passing 1<sup>st</sup></b>	18	19
<b>Rushing 1<sup>st</sup></b>	6	4
<b>Penalty 1<sup>st</sup></b>	1	2



# Efficiency



<b>3<sup>rd</sup> Downs</b>	15	14
<b>3<sup>rd</sup> Conversion</b>	8	8
<b>3<sup>rd</sup> Down %</b>	53%	57%
<b>4<sup>th</sup> Downs</b>	1	3
<b>4<sup>th</sup> Conversion</b>	1	2
<b>4<sup>th</sup> Down %</b>	100%	67%
<b>Red Zone Trip</b>	5	5
<b>Red Zone Conversion</b>	3	3
<b>Red Zone %</b>	60%	60%



# Special Teams



<b>Kickoffs</b>	9	7
<b>Touchbacks</b>	7	6
<b>Punts</b>	1	0
<b>Punt Yards</b>	57	0
<b>Punt Returns</b>	0	0
<b>Kick Returns</b>	1	2
<b>Kick Return Yards</b>	30	54
<b>Kick Return Long</b>	30	29

# Defense



<b>Pass Breakup</b>	1	2
<b>Interceptions</b>	2	1
<b>Dropped Int</b>	1	0
<b>Interception Return Yards</b>	2	42
<b>Pick Six</b>	0	1
<b>Forced Fumbles</b>	1	1
<b>Fumble Recovery</b>	2	0
<b>Sacks</b>	0	6
<b>Sack Yards</b>	0	43

# Player Stats

# Passing



Team	Player	Pass Yards	Attempts	Completions	Interceptions	Longest Pass	Sacks Taken	Passing Touchdown	Passer Rating	Yards per Attempt	Completion %
PHI	Gardner Minshew	355	40	24	2	48	0	2	84.9	8.9	60%
DAL	Dak Prescott	347	35	27	1	52	6	3	124.3	9.9	77.1%

# Rushing



Team	Player Name	Carries	Rush Yards	Yards per Carry	Rushing Touchdowns	Longest Run	Fumbles Lost
DAL	Ezekiel Elliott	16	55	3.4	1	22	0
PHI	Kenneth Gainwell	4	17	4.2	0	11	0
PHI	Gardner Minshew	4	5	1.2	1	3	1
DAL	Tony Pollard	9	19	2.1	0	8	0
DAL	Dak Prescott	6	41	6.8	0	16	0
PHI	Miles Sanders	21	67	3.2	0	13	1

# Receiving



Team	Player Name	Receiving Yards	Receptions	Longest Reception	Receiving Touchdowns	Targets	Yards per Target	Yards Per Reception
DAL	Noah Brown	5	1	5	0	2	2.5	5
DAL	Ezekiel Elliott	6	1	6	0	1	6	6
DAL	Jake Ferguson	24	1	24	0	1	24	24
DAL	Michael Gallup	36	4	12	1	7	5.1	9
DAL	T.Y. Hilton	52	1	52	0	1	52	52
DAL	Ceedee Lamb	120	10	36	2	11	10.9	12
DAL	Tony Pollard	61	6	13	0	8	7.6	10.2
DAL	Dalton Schultz	43	3	21	0	4	10.8	14.3
PHI	A.J. Brown	103	6	48	0	7	14.7	17.2
PHI	Kenneth Gainwell	41	4	20	0	4	10.2	10.2
PHI	Dallas Goedert	67	3	25	0	3	22.3	22.3
PHI	Zach Pascal	6	1	6	0	1	6	6
PHI	Miles Sanders	6	1	6	0	1	6	6
PHI	Devonta Smith	113	8	23	2	12	9.4	14.1
PHI	Quez Watkins	19	1	19	0	5	3.8	19

# Defense



Team	Player Name	Tackles	Assisted Tackles	Total Tackles	Sacks	Forced Fumbles	Interceptions	Touchdowns	Pass Breakups
DAL	Mackensie Alexander	1	0	1	0	0	0	0	0
DAL	Dorance Armstrong	1	0	1	0	0	0	0	0
DAL	Anthony Barr	4	3	7	0	0	0	0	0
DAL	Daron Bland	5	0	5	0	0	1	0	0
DAL	Quinton Bohanna	1	1	2	0	0	0	0	0
DAL	Damone Clark	2	3	5	0	0	0	0	0
DAL	Trevon Diggs	2	0	2	0	0	0	0	0
DAL	Dante Fowler	0	0	0	0	0	0	0	0
DAL	Neville Gallimore	1	1	2	0	0	0	0	0
DAL	Luke Gifford	1	0	1	0	0	0	0	0
DAL	Chauncey Golston	0	0	0	0	0	0	0	0
DAL	Malik Hooker	5	0	5	0	0	0	0	0
DAL	Jayron Kearse	3	0	3	0	0	1	0	0
DAL	Demarcus Lawrence	3	1	4	0	0	0	0	0
DAL	Israel Mukuamu	1	0	1	0	0	0	0	0
DAL	Osawaru Odighizuwa	1	0	1	0	0	0	0	0
DAL	Micah Parsons	3	1	4	0	0	0	0	0
DAL	Carlos Watkins	1	1	2	0	1	0	0	0
DAL	Donovan Wilson	6	1	7	0	0	0	0	0
DAL	Nahshon Wright	6	2	8	0	0	0	0	1



# Defense



Team	Player Name	Tackles	Assisted Tackles	Total Tackles	Sacks	Forced Fumbles	Interceptions	Touchdowns	Pass Breakups
PHI	Reed Blankenship	6	2	8	0	0	0	0	0
PHI	James Bradberry	2	0	2	0	0	0	0	1
PHI	Fletcher Cox	2	0	2	0	0	0	0	0
PHI	Jordan Davis	1	1	2	0	0	0	0	0
PHI	Nakobe Dean	0	0	0	0	0	0	0	0
PHI	T.J. Edwards	11	3	14	0	0	0	0	0
PHI	Marcus Epps	5	1	6	0	0	0	0	0
PHI	Brandon Graham	1	0	1	0.5	0	0	0	0
PHI	Javon Hargrave	0	1	1	0	0	0	0	0
PHI	Patrick Johnson	1	0	1	0	0	0	0	0
PHI	Linval Joseph	5	1	6	0	0	0	0	0
PHI	Avonte Maddox	2	0	2	1	0	0	0	0
PHI	Haason Reddick	2	0	2	2	1	0	0	0
PHI	Josiah Scott	2	1	3	0	0	0	0	1
PHI	Darius Slay	2	1	3	0	0	0	0	0
PHI	Ndamukong Suh	1	0	1	0.5	0	0	0	0
PHI	Josh Sweat	0	1	1	1.5	0	1	1	0
PHI	K'Von Wallace	0	0	0	0	0	0	0	0
PHI	Kyzir White	4	1	5	0.5	0	0	0	0
PHI	Milton Williams	3	0	3	0	0	0	0	0

# Offensive Line



Team	Player Name	Hits Allowed	Hurries Allowed	Pressures Allowed	Sacks Allowed	Screen Blocks
DAL	Tyler Biadasz	0	2	2	0	1
DAL	Zach Martin	0	1	1	0	0
DAL	Connor McGovern	0	2	2	0	0
DAL	Jason Peters	0	0	0	0	0
DAL	Tyler Smith	0	0	0	0	0
DAL	Tyron Smith	0	3	4	1	0
PHI	Landon Dickerson	0	5	5	0	0
PHI	John Driscoll	0	1	1	0	0
PHI	Lane Johnson	0	0	0	0	0
PHI	Jason Kelce	0	0	0	0	0
PHI	Jordan Mailata	0	6	6	0	0
PHI	Isaac Seumalo	0	2	2	0	0

What worked for each team and what didn't?  
Was there something a team should have done differently?

Third Down Analysis

# Third Down Situations



Team	Run or Pass	To Go Situation	Attempts	Firsts	Percent of success
DAL	P	Long	3	2	67%
DAL	P	Medium	9	5	56%
DAL	P	Short	2	1	50%
DAL	R	Short	1	0	0%
PHI	P	Long	5	2	40%
PHI	P	Medium	6	5	83%
PHI	R	Short	3	1	33%

Long = 8 yards or more for first

Medium = 4 to 7 yards for first

Short = 3 yards or less for first

- Third down performance is traditionally a critical component of a team's success as converting on third down keeps possession of the ball and control of the game.
- Both teams had a majority of third and medium situations, which is expected for two division rivals with similar talent.
- Dallas was very good in 3rd and long situations; they were 2 for 3 – a huge momentum swing each time they converted. They only passed in these situations, but only missed on 1 the entire game. That's very impressive.
- Looking at performance on third and mediums, both teams only passed the ball.
  - The Eagles were more successful, converting 5 out of 6 attempts compared to the Cowboys' 5 for 9.
  - Running once or twice during these situations probably would have made the Cowboys less predictable and given them more opportunity to convert.
- In terms of third and short situations, Philly ran on all 3 and only converted 1 while the Cowboys passed on 2, converted 1 and ran 1, but did not get the first.
  - Philly could have done better since they ran the ball every time; maybe running an RPO or a play action could have thrown the Cowboys' defense off-guard, allowing Philly to convert on more of them.

What worked for each team and what didn't?  
Was there something a team should have done differently?

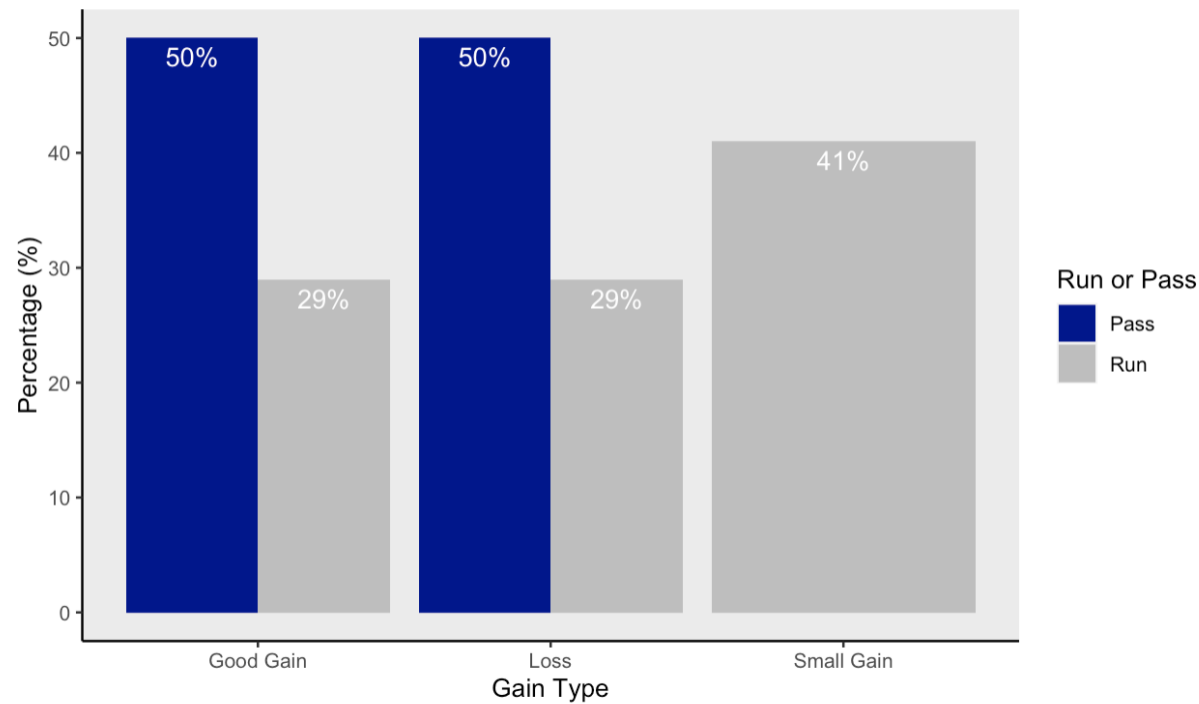
First Down Analysis



# First Down Success



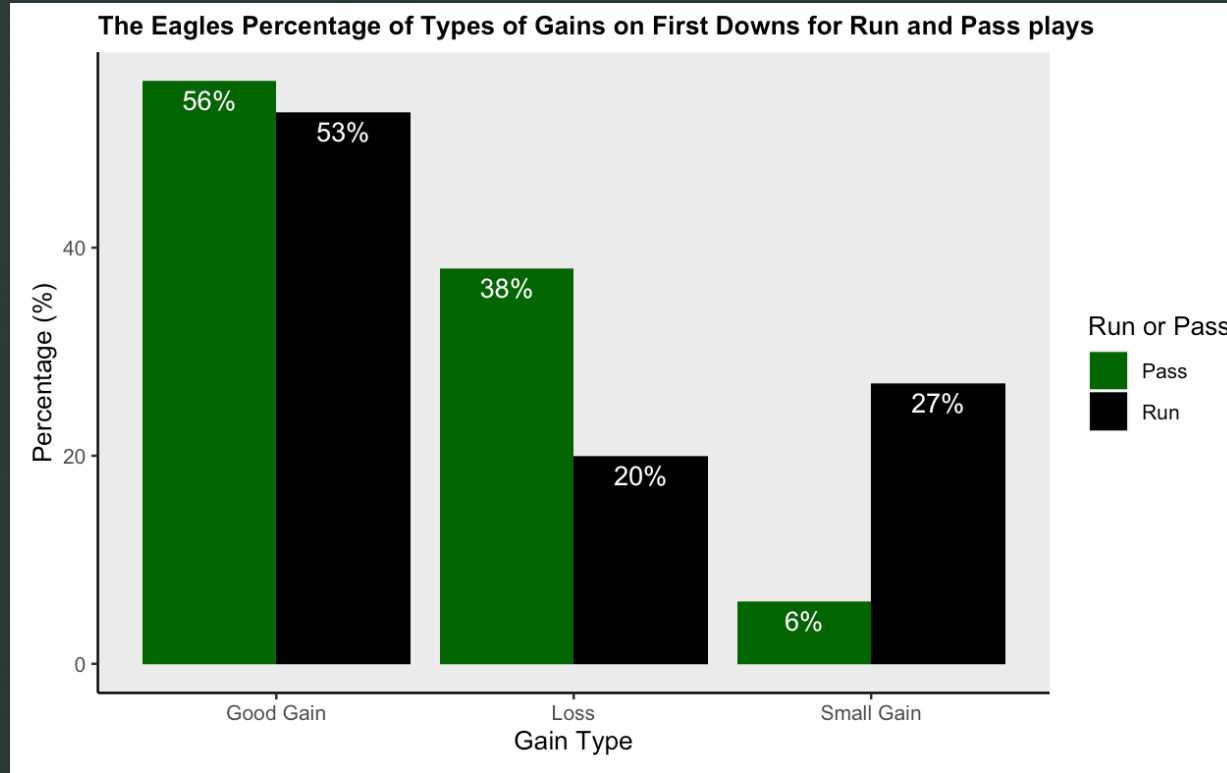
The Cowboys Percentage of Types of Gains on First Downs for Run and Pass plays



Loss = Loss of yardage or no gain  
Small Gain = 3 yards or less  
Good Gain = 4 or more yards

- While passing, the Cowboys gained at least 4 yards 50% of the time; that's a solid showing considering that you're not necessarily trying to get a first down every time on first down.
- When running the ball on first down, the Cowboys had a good gain 29% of the time, a small gain 41% of the time and a loss 29% of the time. This seems average since a defense on first down is usually trying to defend the run.
- The Cowboys were about 50/50 on whether they ran or passed the ball on first down, which keeps the defense guessing.

# First Down Success



Loss = Loss of yardage or no gain  
Small Gain = 3 yards or less  
Good Gain = 4 or more yards

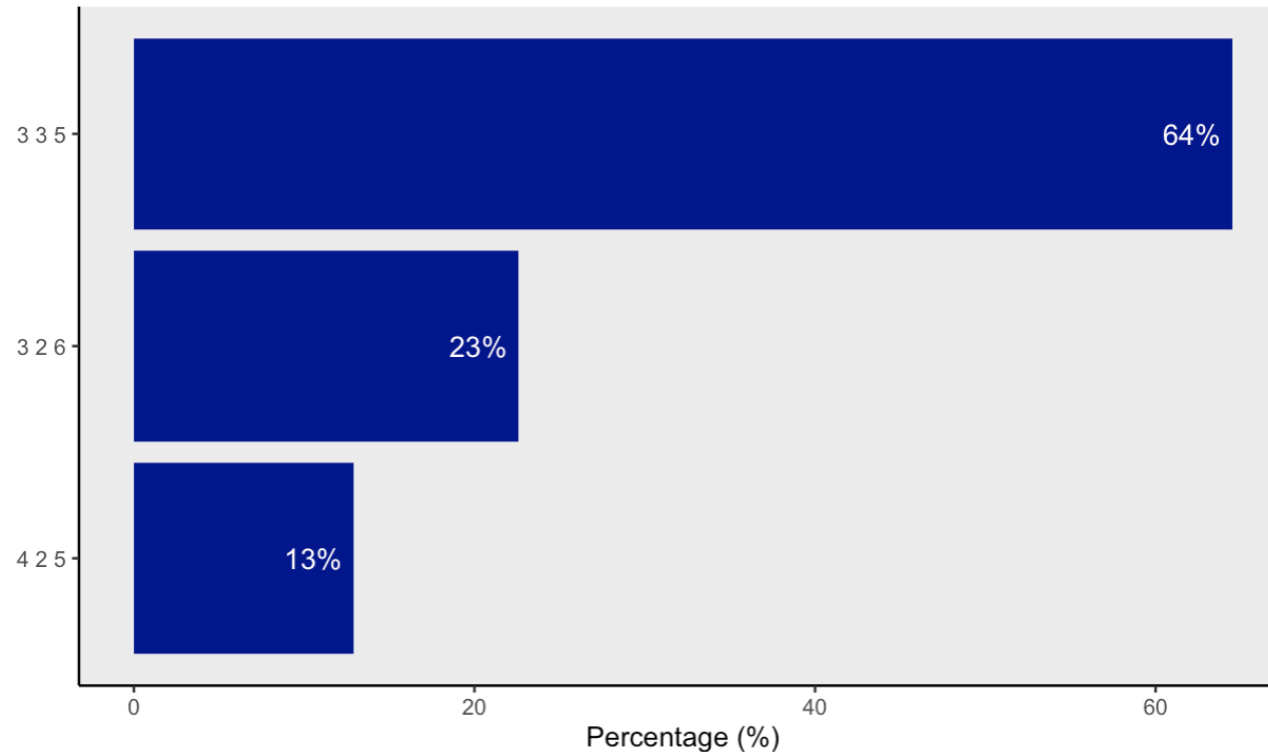
- When passing on first down the eagles had a good gain 56% of the time, a small gain 6% of the time and a loss 38% of the time.
- That's a slightly better showing than the Cowboys, and it does seem that the Eagles had a lot of success throwing it on first down. They gained more yards than they lost when passing, so sticking to the pass game on firsts seemed like a good option.
- When running on first downs, the Eagles had a good gain 53% of the time, a small gain 27% of the time and a loss 20% of the time. This is also very good given that every time they ran the ball on first down, they made a positive gain 80% of the time.
- However, as they had at least 4 yards on a run play 53% of all their runs on first downs leads me to believe that the Cowboys were playing a "bend but don't break" defense. This is probably because Jalen Hurts, a big part of the Eagles run game normally, was out. I'm thinking the Cowboys didn't respect their running backs alone, so they decided to play the pass more on first downs rather than the run. I'm going to observe this more closely in the next slide.



# Cowboys Defensive Formations on First Downs



**Cowboys Percentage of Defensive Formations on First Downs**



- As you can see, the Cowboys on first downs always ran with a max of only 6 players in the box.
- Also, the Cowboys only used 3 defensive linemen on 87% of all first downs, which can leave the run game open. This confirms my assumption that the Cowboys seemed to be playing the pass on first downs, or at least making it seem like they were.

What was the deciding factor in the game? In other words, what play(s) or other characteristic(s) of the game had the biggest impact on the outcome?

Using Win Probability to  
Determine Biggest Plays



# Using Win Probability to Determine Most Impactful Plays



To determine the most impactful plays, I chose the plays that changed the win probability the most based on a given play. Below are the top 5 plays that changed the win probability the most.

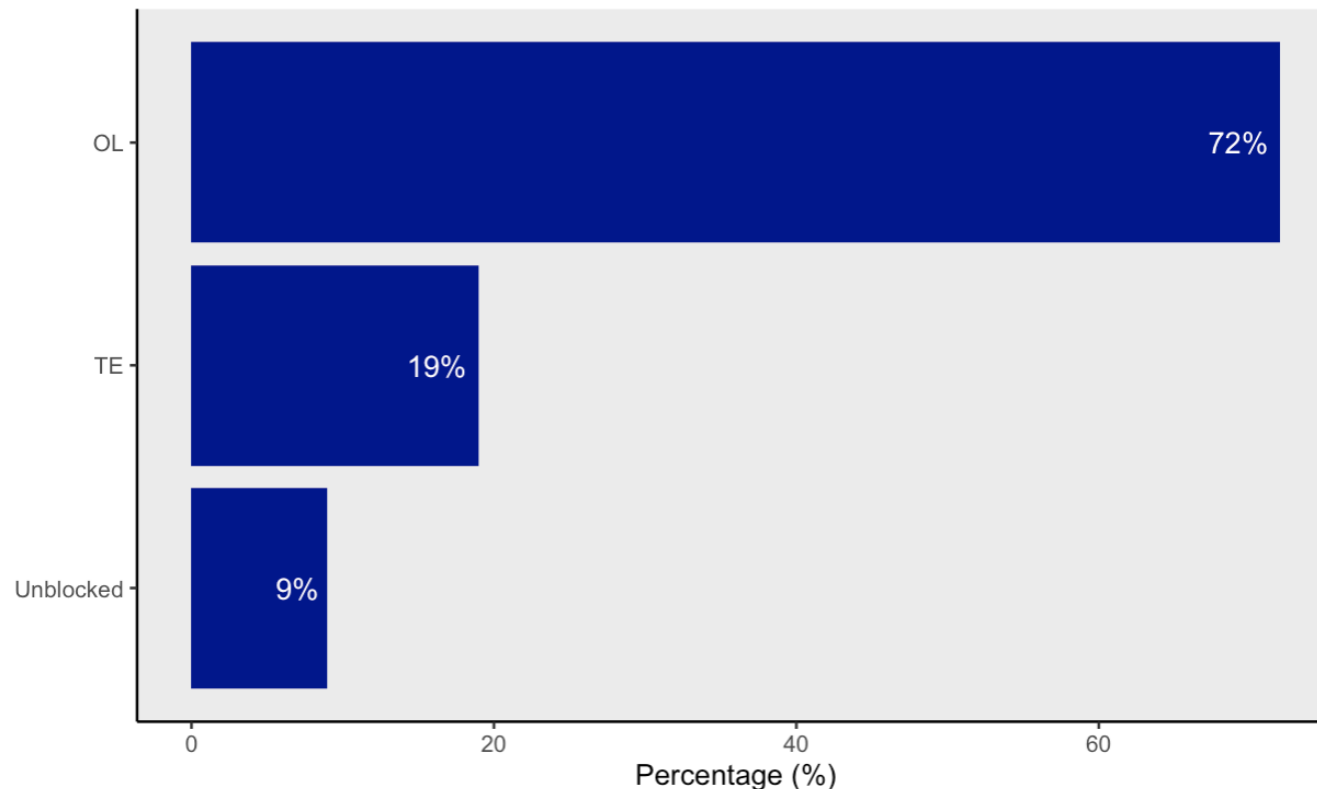
- The most impactful play of the game happened in the third quarter when the Eagles were up 20-27. The Eagles had just held the Cowboys to a field goal and got a first down from a penalty on the Cowboys. The ball was on their own 39 and it seemed everything was going their way. All they had to do was drain the clock and try to score. On first down, however, Gardner Minshew fumbled the ball on a bad hand off to Miles Sanders which put the Cowboys into great field position only needing a touchdown to tie up the game.
- The second most impactful play happened in the fourth quarter, when the Cowboys had the ball down 7 with 8 minutes to go in the game. They were in a very poor situation, a 3rd and 30 in their own territory. It seemed that all hope was lost until Dak Prescott launched a 52-yard bomb to the veteran T.Y. Hilton to get them to the Eagles 19-yard line! This changed all the momentum the Eagles had and put the Cowboys right into scoring position.
- The third most impactful play happened in the fourth quarter. The Eagles had the ball in Cowboys territory in a tie ball game with 4:24 remaining in the game. It was 3rd and 4 and the Eagles decided to pass the ball with their backup Quarterback (Minshew); the ball was intercepted. The Eagles had a great opportunity to take the lead late in the game but gave the ball back to the Cowboys with not a lot of time remaining. All the Cowboys had to do now was just wind down the clock and take the lead.
- The fourth most impactful play happened in the first quarter. The Cowboys had the ball at their own 47, down 3-0 with 9:28 remaining in the first. It was 1<sup>st</sup> and 10 and the Cowboys decided to run a pass play. Unfortunately for them it was intercepted by Josh Sweat and returned all the way for a touchdown to put the Eagles up 10-0.
- The fifth and final most impactful play I'll be going over happened in the fourth quarter. The Cowboys had just scored a field goal to put them up 37-34. The Eagles then started their drive at their own 25-yard line with only 2:19 remaining in the game. On 1<sup>st</sup> and 10 the Eagles ran the ball, but Micah Parsons blew by Dallas Goedert to disrupt the play in the backfield which opened a lane for Carlos Watkins to get in the backfield. He punched the ball out from Miles Sanders and forced a fumble which the Cowboys then recovered. This play pretty much sealed the game for Dallas.

# A closer look: how the Eagles blocked Micah Parsons

# Positions Blocking Micah Parsons



Percentage of Positions that Accounted for Blocking Micah Parsons



- In my opinion, only blocking Micah Parsons (one of the best defensive players in the league and best on the cowboys) with an offensive lineman on 72% of his snaps is not ideal, and something that I think the Eagles could have improved upon.
- Making sure that he is accounted for by the best blockers on your team is essential, especially in late game situations. Otherwise in big situations, he will most likely make big plays. This can be seen late in the fourth quarter when he blew by Dallas Goedert (TE) and ultimately created a lane for his teammate to force a fumble, which sealed the game for the Cowboys.



Which players had the largest impact negatively or positively on their unit? Identify the best and worst performers for each teams' offense and defense?

Using PFFVAR and EPAR to  
Determine Best and Worst  
Performers

# Using PFFVAR and EPAR to Determine Best and Worst Performances for Each Team

In order to determine the best and worst performers on each side of the ball for each team I only kept players who had at least 18 snaps on defense or at least 20 snaps on offense. I then added a player's PFFVAR and EPAR independently for every play and divided each by the total plays the player was in to get the average PFFVAR and EPAR in this game. Once the averages were calculated, I added them and then divided them by two in order to get a total average of these combined statistics.

Below are the results for the top 3 and worst 3 performances on each side of the ball for each team:



## Offense:

**Top 3:** Dak Prescott, Ceedee Lamb, Tony Pollard

**Worst 3:** Michael Gallup, Noah Brown, Connor McGovern

## Defense:

**Top 3:** Nahshon Wright, Carlos Watkins, and Donovan Wilson

**Worst 3:** Trevon Diggs, Neville Gallimore, Dorance Armstrong



## Offense:

**Top 3:** Devonta Smith, Gardner Minshew, A.J Brown

**Worst 3:** Miles Sanders, Quez Watkins, Jordan Mailata

## Defense:

**Top 3:** Josh Sweat, Avonte Maddox, Haason Reddick

**Worst 3:** Reed Blankenship, Marcus Epps, Kyzir White



# Answering the Question:

How would you communicate your main takeaways to decision-makers (coaches, personnel directors, or the General Manager)? In other words, how would you succinctly tell them what they needed to know?

# How I would communicate main takeaways to decision-makers'

- Conduct an audience analysis on who I would be presenting this information to. It's crucial to know your audience before presenting.
- Take the key and essential parts of my analysis to present to the persons of interest.
- For those who don't have a background in statistics, I would try to stay away from using statistical phrases and only use terminology that they would understand.
- Use football terminology to demonstrate understanding of the game, earn trust and respect so they hear and listen to what I'm presenting to them.



# Key Takeaways



- The Eagles did a good job taking advantage of the Cowboys decision to only have six players in the box on defense during first-down plays.
  - The Cowboys defense on first downs only ran with six players max in the box, and the second most used formation was a 3-2-6.
  - It appears that since the Eagles quarterback, Jalen Hurts, was out they only used three defensive linemen during first down situations.
  - However, if the Cowboys do this for every game, the Jets could take advantage and run the ball on first downs to get drives going in the right direction.
- As a member of the Jets Analytics team, I would suggest we use offensive linemen more often than the Eagles did to block Micah Parsons.
  - One of the biggest plays of the game happened in the fourth quarter when Parsons easily got by the Eagles' starting tight end and cleared a lane for his teammate to get in the backfield, forcing a fumble and sealing the game.
  - The Eagles used offensive linemen only 72% of the time when blocking him; in order to prevent him from making big plays against the Jets we should raise that percentage to make sure we have our best blockers blocking their best defensive player.
- When playing the Eagles, the Jets have to look for ways to stop their top two receivers, Devonta Smith and A. J. Brown.
  - Without their starting quarterback, the Eagles still had 355 passing yards, 51 more passing yards than the Cowboys due largely to their top two receivers.
    - I identified them as two of the top 3 performers the Eagles had on offense; Brown had 14.7 yards per target and Smith had 9.4 yards per target.
    - On average, every time the ball was thrown their way it was practically a first down. If we want success against the Eagles, we will have to look for ways to shut them down.

Thank you