2021 MLS SEASON: TECHNICAL REPORT



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Final Standings

Eastern Conference			
Rank	Team	Points	
1	New England Revolution	73	
2	Philadelphia Union	54	
3	Nashville SC	54	
4	New York City FC	51	
5	Atlanta United FC	51	
6	Orlando City SC	51	
7	New York Red Bulls	48	
8	DC United	47	
9	Columbus Crew	47	
10	CF Montréal	46	
11	Inter Miami CF	41	
12	Chicago Fire FC	34	
13	Toronto FC	28	
14	FC Cincinnati	20	

Western Conference			
Rank	Team	Points	
1	Colorado Rapids	61	
2	Seattle Sounders FC	60	
3	Sporting Kansas City	58	
4	Portland Timbers	55	
5	Minnesota United FC	49	
6	Vancouver Whitecaps FC	49	
7	Real Salt Lake	48	
8	LA Galaxy	48	
9	Los Angeles FC	45	
10	San Jose Earthquakes	41	
11	FC Dallas	33	
12	Austin FC	31	
13	Houston Dynamo FC	30	

2021 MLS Season Cup Final				
Portland Timbers	1	- (2-4)	1	NEW YORK CITY FC

Was There A Home Advantage For Teams In the MLS?

Team	Scoring	Defense
FC Dallas	45%	31%
Vancouver Whitecaps FC	69%	1%
Columbus Crew	22%	35%
Los Angeles FC	32%	19%
Nashville SC	31%	18%
Minnesota United FC	19%	29%
Inter Miami CF	35%	11%
Chicago Fire FC	34%	12%
Philadelphia Union	18%	22%
Houston Dynamo FC	8%	31%
Colorado Rapids	27%	12%
Seattle Sounders FC	23%	13%
San Jose Earthquakes	5%	20%
FC Cincinnati	-17%	41%
Orlando City SC	17%	1%
Toronto FC	-11%	28%
LA Galaxy	8%	8%
New York Red Bulls	1%	15%
Real Salt Lake	-8%	21%
New York City FC	28%	-16%
Atlanta United FC	-23%	29%
CF Montréal	-10%	12%
DC United	-8%	2%
Sporting Kansas City	7%	-15%
New England Revolution	-8%	-5%
Portland Timbers	-15%	2%
Austin FC	54%	11%
Average of all Teams	13%	15%

Home advantage, measured by FootyStats, is calculated based on the number of goals scored and goals conceded during their home matches as compared to their away matches.

➤ In the 2021 MLS Season, on average, there was a 13% increase in goals scored at home and a team's likelihood of conceding less goals at home increased by 15%.

Teams with the Highest Home Advantage for Goals <u>Scored</u> at Home				
Team Increase in Goals Scored				
Vancouver Whitecaps FC	69%			
Austin FC	54%			
FC Dallas	45%			

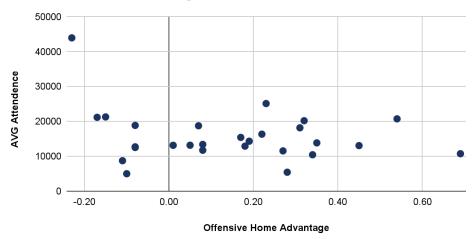
Teams with the Highest Home Advantage for Goals <u>Conceded</u> at Home				
Team Increase in Goals Scored				
FC Cincinnati	41%			
Columbus Crew 35				
FC Dallas	31%			

➤ New England Revolution had no home advantage and in fact, performed better in their away games.

How Does The Size of The Crowd Influence Home Advantage?

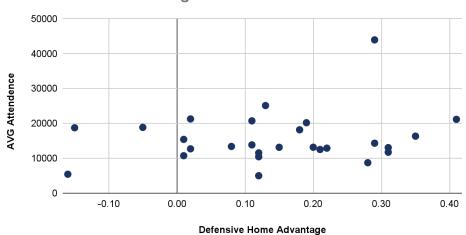
The MLS attracted over 6 million fans to the 28 teams' home stadiums over the course of the 2021 MLS Season, Atlanta United FC attracted the most with an average attendance of around 43,965; however, their offensive home advantage was nonexistent and in fact they performed better in away matches. This begs the question of whether or not a team's home crowd attendance affects a team's home advantage.

Relationship between a Team's Offensive Home Advantage and Their Average Home Stadium Attendance



There was no correlation between a team's average home stadium attendance and their offensive home advantage.

Relationship between a Team's Defensive Home Advantage and Their Average Home Stadium Attendance



There was no correlation between a team's average home stadium attendance and their defensive home advantage.

Both relationships, or lack thereof, point to other factors being more indicative of a team's home field advantage.

How Did Home Advantage Affect PPG (Points Per Game)?

Team	PPG (Home)	PPG (Away)	Difference	Percent Increase When Performing at Home
FC Dallas	2.08	0.83	1.25	151%
Vancouver Whitecaps FC	1.64	0.77	0.87	113%
Columbus Crew	2.69	0.92	1.77	192%
Los Angeles FC	2.00	0.73	1.27	174%
Nashville SC	1.67	1.29	0.38	29%
Minnesota United FC	2.1	1.35	0.75	56%
Inter Miami CF	1.7	0.5	1.2	240%
Chicago Fire FC	1.5	0.45	1.05	233%
Philadelphia Union	2.47	1.33	1.14	86%
Houston Dynamo FC	1.3	0.62	0.68	110%
Colorado Rapids	1.71	1.33	0.38	29%
Seattle Sounders FC	2.25	1.09	1.16	106%
San Jose Earthquakes	1.54	1.08	0.46	43%
FC Cincinnati	0.91	0.54	0.37	69%
Orlando City SC	2	1.31	0.69	53%
Toronto FC	1.71	1.82	-0.11	-6%
LA Galaxy	1.17	0.8	0.37	46%
New York Red Bulls	1.6	1.14	0.46	40%
Real Salt Lake	1.23	0.6	0.63	105%
New York City FC	1.75	1.57	0.18	11%
Atlanta United FC	1.08	0.8	0.28	35%
CF Montréal	1	1.08	-0.08	-7%
DC United	0.83	1	-0.17	-17%
Sporting Kansas City	1.5	1.82	-0.32	-18%
New England Revolution	1.27	1.59	-0.32	-20%
Portland Timbers	1.67	1.92	-0.25	-13%
Austin FC	1.35	0.47	0.88	187%
Average of All Teams	-	-	0.55	75%

Legend				
	Great PPG			
	Good PPG			
	Mid-Range PPG			
	Low PPG			

How Does PPG Affect a Team's Final Standing?

78%

78% of teams in the 2021 MLS Season recorded a higher PPG at home vs. away.

0.55

There was an average difference of 0.50 between a team's home and away PPG.

< 0.001

With a significance of < 0.001, there was a significant relationship between a team's away PPG and a team's final standing.



As a team's away PPG increases, a team's final standing improves.

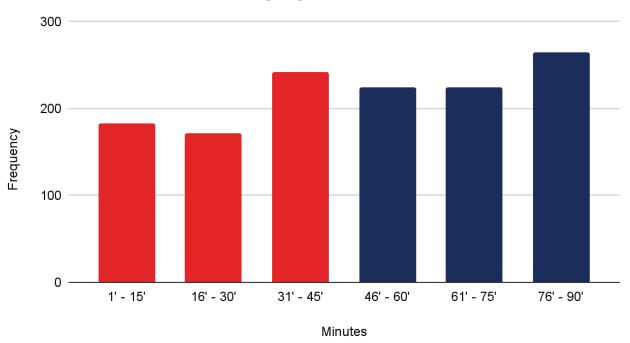
All teams in the 2021 MLS Season had a different PPG at home vs. away. In fact, 78% of teams recorded a higher PPG at home vs. away, indicating a clear home advantage.

Additionally there was an average difference of 0.55 between a team's home and away advantage. Thus, for the majority of the teams in the MLS league, their home PPG was largely inflated as compared to their away PPG.

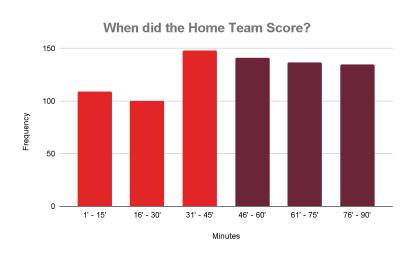
Interestingly enough, home advantage was so inflated that a team's home PPG was not significantly indicative of their final standing in the 2021 MLS Season. Rather, a team's away PPG was indicative of a teams final ranking. Thus, the teams that performed best on the road were ultimately the ones who ranked better in league

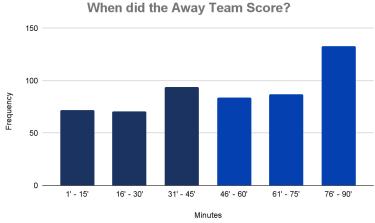
When Were Most Goals Scored?

When did MLS players score the most?



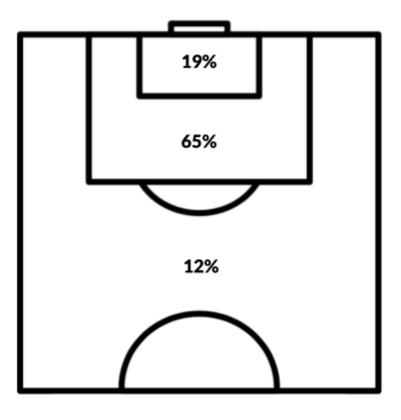
Most goals were scored towards the end of each half.





- There was a drop in the number of goals scored after the first 15 minutes of the match.
- ➤ There was a significant increase in goals during the final 15 minutes of the first half.
- As the second half progressed, less goals were scored.
- There was a significant increase in goals in the final 15 minutes of each half.
- As the second half progressed, more goals were scored.

Where Were Most Goals Scored?



- > The majority of goals were scored in the penalty area inside the 18 yard box.
- ➤ More goals were scored inside the 6 yard box than outside the 18 yard box.

Many teams presented a similar distribution of where they scored their goals on the pitch; however, some did not.

Teams that varied significantly from this average are listed below.

- 1. FC Cincinnati
- 2. CF Montréal
- 3. New York City FC
- 4. Vancouver Whitecaps
- 5. Toronto FC
- 6. Inter Miami CF

- 7. Atlanta United
- 8. FC Dallas
- 9. Portland Timbers
- 10. Minnesota United
- 11. Orlando City
- 12. Columbus Crew

Team	Six Yard Box	Penalty Area	Out Of Box
Inter Miami CF	2.8%	83.3%	11.1%
Orlando City	8.0%	72.0%	18.0%
Atlanta United	8.9%	66.7%	17.8%

Team	Six Yard Box	Penalty Area	Out Of Box
Columbus Crew	10.9%	56.5%	21.7%
FC Dallas	12.8%	76.6%	8.5%
FC Cincinnati	13.5%	62.2%	21.6%

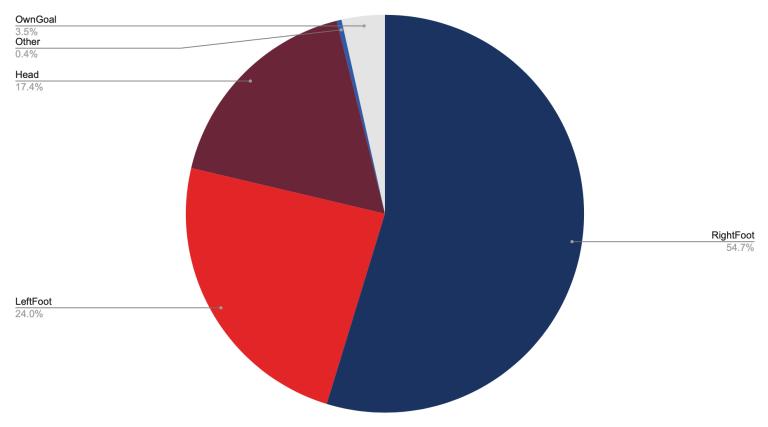
Team	Six Yard Box	Penalty Area	Out Of Box
Minnesota United	26.2%	61.9%	9.5%
Portland Timbers	26.8%	60.7%	8.9%
Toronto FC	28.2%	59.0%	7.7%

Team	Six Yard Box	Penalty Area	Out Of Box
CF Montréal	30.4%	60.9%	6.5%
New York City FC	32.1%	53.6%	12.5%
Vancouver Whitecaps	33.3%	60.0%	2.2%

^{**} All percentages in these graphs and tables do not add up to 100%. The remaining percentage is the equivalent to the percentage of own goals.

How Were Most Goals Scored?

Types of Goals Scored in the 2021 MLS Season



More than half of the goals scored in the 2021 MLS Season were scored with a right footed shot. Almost 1 in 4 goals scored in the 2021 MLS Season (24%) were scored with a left footed shot.

Many goals were also scored from a header. The teams that were most dangerous in the air were Colorado Rapids and Vancouver Whitecaps, both of which scored 15 goals from a header, the most in the league. Portland Timbers was right behind the two, scoring 14 goals from a header in the 2021 MLS Season.

In the 2021 MLS Season, there were 45 own goals. This was an increase from the last full season, 2019, where 38 own goals were scored.

Which Team Was Most Effective On the Counter?

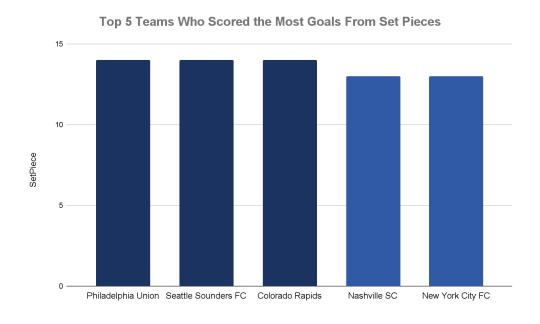
Top 5 Teams Who Scored the Most Goals From A Counter Attack

New England Sporting Kansas Nashville SC Portland Timbers FC Dallas

Revolution City

New England Revolution and Sporting Kansas City were the most dangerous on the counter as they each scored 6 goals from a counter attack in the 2021 MLS Season.

Which Team Was Most Effective From A Set Piece?



Philadelphia Union, Seattle Sounders FC, and Colorado Rapids each scored 14 goals from a set piece, making them the most effective in the 2021 MLS Season.

Penalties

In the 2021 MLS Season, 120 penalties were awarded.. Of the 80% of the penalties that were scored, a slight increase from the previous season in which 77.5% were scored, only 8 teams recorded a perfect, 100%, penalty conversion rate. These teams included:

- 1. Sporting Kansas City
- 2. Philadelphia Union
- 3. Atlanta United
- 4. Vancouver Whitecaps
- 5. Real Salt Lake
- 6. CF Montréal
- 7. Inter Miami
- 8. Houston Dynamo

DC United was awarded with the most penalties, 11, and was able to convert 10 of them.

Penalties Conceded

FC Dallas gave away 10 penalties in the 2021 MLS Season, the most in the entire league. Saving only two, they also conceded the most amount as well. Portland Timbers gave away 8, the second most in the MLS, and saved just 1.

Philadelphia Union and New England Revolution both saved 50% of the penalties they gave away: Philadelphia Union saving 3 and New England Revolution saving 2.

LAFC gave away 0 penalties in the entirety of the season, the least of all MLS clubs.

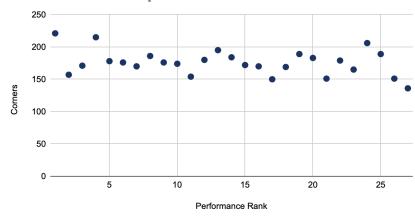
Corners

Typically, the number of corners a team wins in a match is often highly indicative of how dominant the team is offensively. Thus, the number of corners can occasionally be used as a predictor of a team's final standing, but more commonly it can serve as a measure of a team's performance.

Here, the number of corners a team won was compared to their given Performance Rank, given by FootyStats.

Although there is a slight negative correlation between the two variables, the relationship is weak, and therefore, the number of corners a team wins is not indicative of how successful the team is overall.

Is there a relationship between the number of corners a team wins and their performance rank?



Is There An Advantage In Scoring First?

Of the 472 matches recorded by FootyStats, only 31 matches resulted in a goalless tie. In the 441 remaining matches, the team that was first to score avoided defeat 85% of the time. In fact, the first team to score ultimately won their game 63% of the time.

The teams that were able to come back and avoid loss the most were Vancouver Whitecaps and Nashville SC. Both came back eleven times to avoid a loss. Nashville SC was able to comeback and win three times, while Vancouver Whitecaps came back and won five times.

TEAMS WHO CAME BACK FROM TWO GOALS DOWN TO WIN THE GAME

COLORADO RAPIDS	3 - 2	Minnesota United	
CF MONTRÉAL	5 - 4	FC Cincinnati	
Austin FC	3 - 4	SAN JOSE EARTHQUAKES	
Portland Timbers	2 - 3	VANCOUVER WHITECAPS	
FC Cincinnati	3 - 6	NASHVILLE SC	



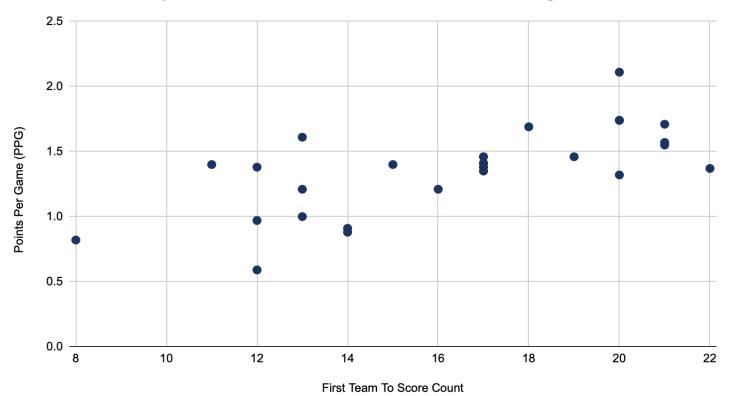
<u>Is There A Relationship Between A Team's Ability To Score First and Their PPG?</u>

As established before, scoring first provided a significant advantage in a team's position to avoid defeat in a game. Typically, teams that were able to score first the majority of the time, such as New England, achieved a high standing in the league.

Other teams that were able to score first in the majority of their games also presented an accomplished record.

There was a significant positive correlation between a team's rank and ability to score first. Thus, as a team's ability to score first improved, their average PPG improved as well.

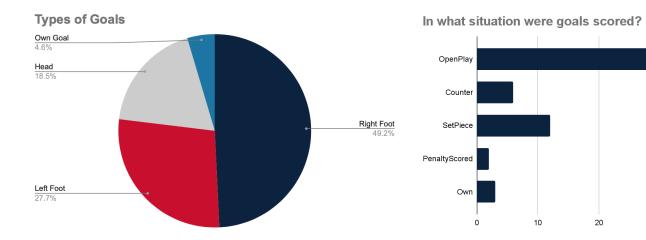
The Relationship Between a Team's PPG and Their Ability to Score First



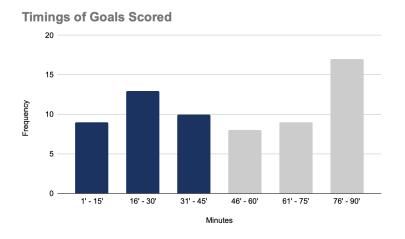
The Pearson Correlation Coefficient was 0.682 at a significance of < 0.001.

New England Revolution

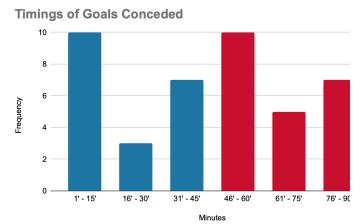
There was a 62% increase in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.18, while in 2021 the average number was 1.91.



- > The majority of goals scored by New England Revolution were scored with a right footed shot.
- Most notably, New England Revolution was amongst the two teams that scored the most goals (6) from a counter attack.
- > Furthermore, they scored 12 goals from a set piece.



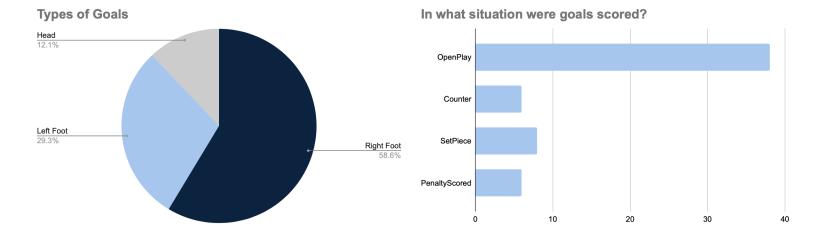
Most goals were scored in the final 15 minutes of the match.



- ➤ Each half followed the same trend the majority of goals getting scored in the first and final 15 minutes of the half.
- ➤ Most goals, however, were scored in the first 15 minutes of each half.

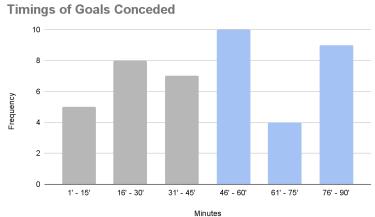
Sporting Kansas City

> There was a slight 2% increase in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.68, while in 2021 the average number was 1.72.



- ➤ More than half of the goals scored by Sporting Kansas City were scored with a right footed shot.
- > Sporting Kansas City scored 100% of the penalties that they were awarded,
- > Sporting Kansas City was amongst the two teams (the other New England Revolution) who scored the most goals (6) from a counter attack.

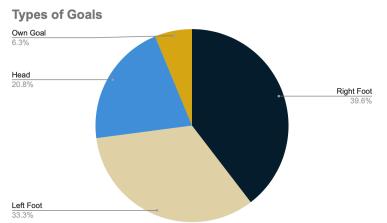


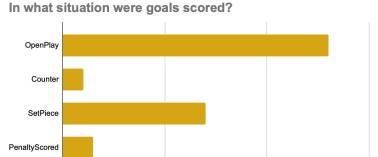


- > In the first half, most goals were scored in the final 15 minutes.
- > In the second half, there was a slight decrease in goals towards the middle of the half.
- > In the second half, the majority of goals that were conceded occurred in the first and final 15 minutes of the half

Philadelphia Union

There was a 24% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.81, while in 2021 the average number was 1.38.





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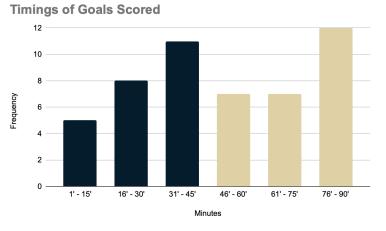
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> There was a somewhat equal distribution between the number of goals scored with a right footed shot as well as with a left footed shot.

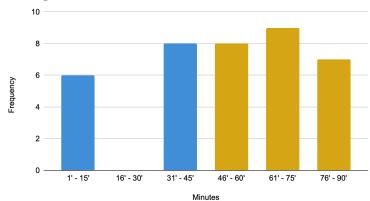
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- > Philadelphia Union scored 100% of the penalties that they were awarded,
- > Philadelphia Union was amongst the three teams who scored the most goals from a set piece (14) in the 2021 MLS Season.



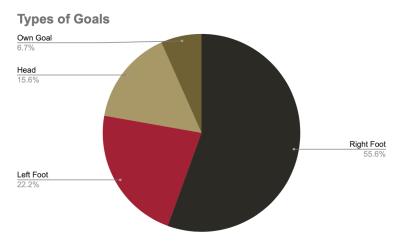


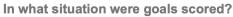


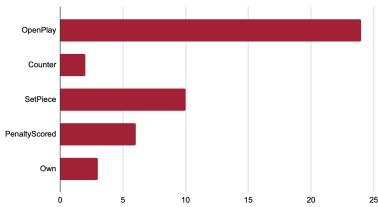
- Typically, as each half progressed, more goals were scored.
- Thus, the majority of goals were scored in the final 15 minutes of each half.
- ➤ Interestingly enough, no goals were scored towards the middle of the first half.

Atlanta United FC

> There was a 29% increase in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1, while in 2021 the average number was 1.29.

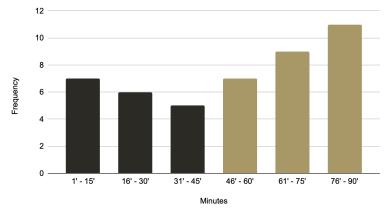


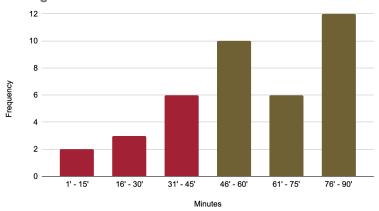




- Most goals were scored with a right footed shot.
- > Atlanta United scored 100% of the penalties that they were awarded.
 - Furthermore, they scored 10 goals from a set piece.



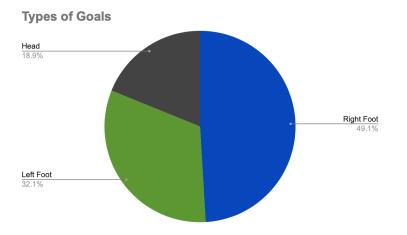


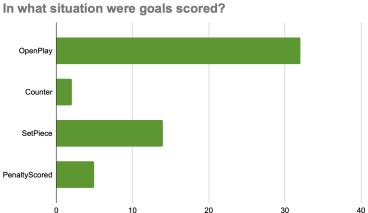


- > As the first half progressed, less goals were scored.
- > As the second half progressed, more goals were scored.
- ➤ Most goals were scored in the final 30 minutes of the match
- Most goals were conceded in the first and final 15 minutes of the second half.
- > Very few goals were conceded in the first 30 minutes of the match.

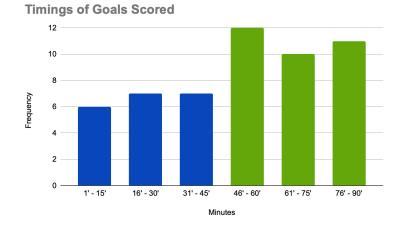
Seattle Sounders FC

There was a 22% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.93, while in 2021 the average number was 1.51.

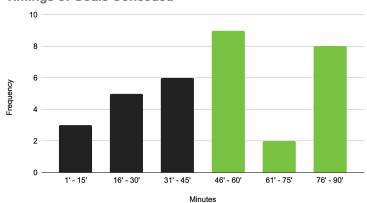




- Most goals were scored with a right footed shot.
- > Seattle Sounders were amongst the three top teams who scored the most goals from a set piece (14) in the 2021 MLS Season.



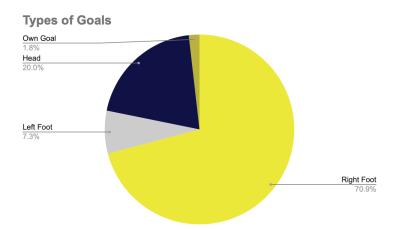


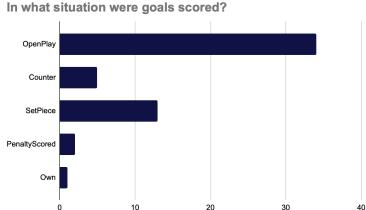


- Most goals were scored in the second half
 - The majority of these goals were scored in the first and final 15 minutes of the half.
- ➤ Most goals were conceded in the first and final 15 minutes of the second half.
- ➤ There was a significant decrease in goals that were conceded towards the middle of the second half.
- > As the first half progressed more goals were conceded.

Nashville SC

> There was a 34% increase in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.08, while in 2021 the average number was 1.64.

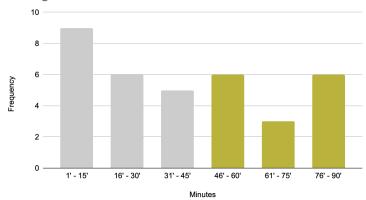




- ➤ More than half of the goals scored by Nashville SC were scored with a right footed shot.
- Nashville SC scored more goals from a header than with a left footed shot.
- > Nashville SC scored 13 goals from a set piece, just one less than the top three teams who scored 14 goals from a set piece in the 2021 MLS Season.



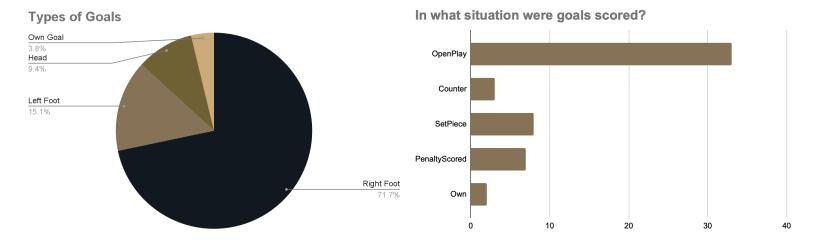




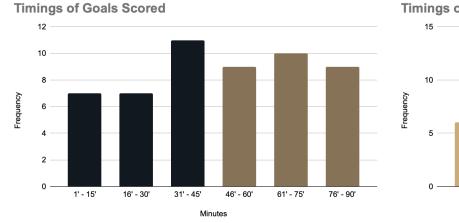
- ➤ Most goals were scored in the final 15 minutes of each half.
- > As the second half progressed, more goals were scored.
- > The majority of goals that were conceded occurred in the first 15 minutes of the match.
- ➤ In the second half, most goals were conceded in the first and final 15 minutes.

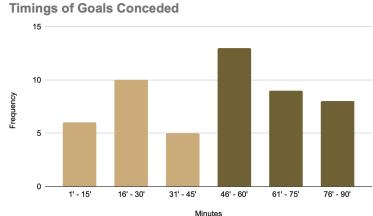
Los Angeles FC

There was a 26% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 2.12, while in 2021 the average number was 1.56.



- > The overwhelming majority of goals were scored with a right footed shot.
- ➤ Los Angeles FC scored 87.5% of the penalties that they were awarded.
 - o In fact, they scored 7 penalties in total, the second most in the league.

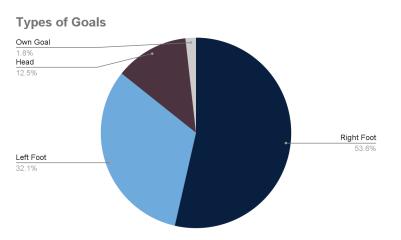


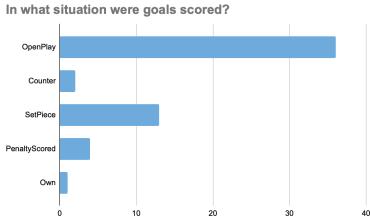


- ➤ Most goals were scored in the final 15 minutes of the first half.
- Most goals were conceded in the first 15 minutes of the second half.
- ➤ In the first half, most goals were conceded towards the middle of the half.

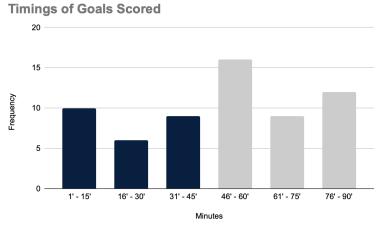
New York City FC

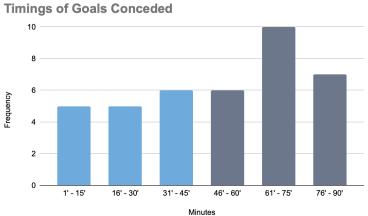
There was a slight 2% increase in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.62, while in 2021 the average number was 1.66.





- ➤ More than half of the goals scored by New York City FC were scored with a right footed shot.
- New York City FC scored 13 goals from a set piece, just one less than the top three teams who scored 14 goals from a set piece in the 2021 MLS Season.
- ➤ New York City FC scored 80% of the penalties that they were awarded.

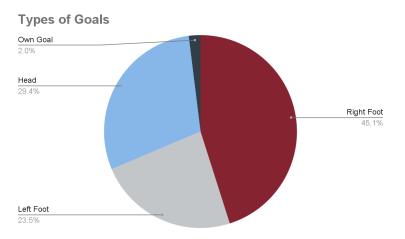




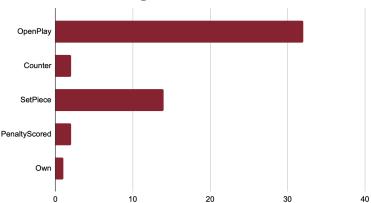
- ➤ Most goals were scored in the first and final 15 minutes of each half.
- ➤ The majority of goals were scored in the first 15 minutes of the second half.
- Most goals were conceded towards the middle of the second half.

Colorado Rapids

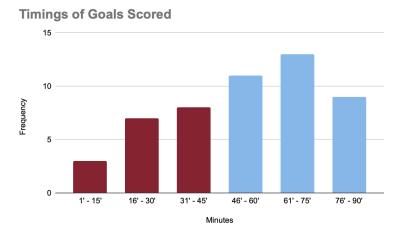
> There was a 13% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.68, while in 2021 the average number was 1.46.

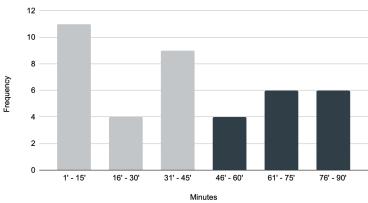






- Most goals were scored with a right footed shot
 - However, 15 goals were scored from a header; shared with Vancouver Whitecaps, this was the most amongst all the 2021 MLS Teams.
- ➤ Colorado Rapids was amongst the three teams that scored the most goals (14) from a set piece.

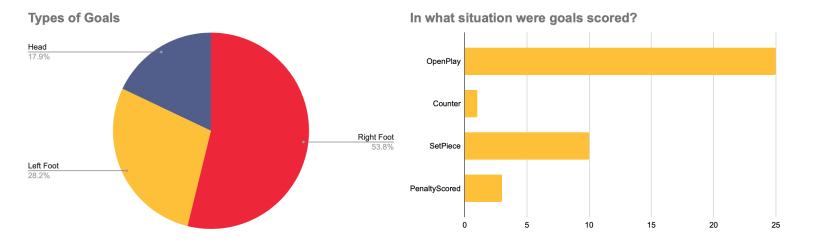




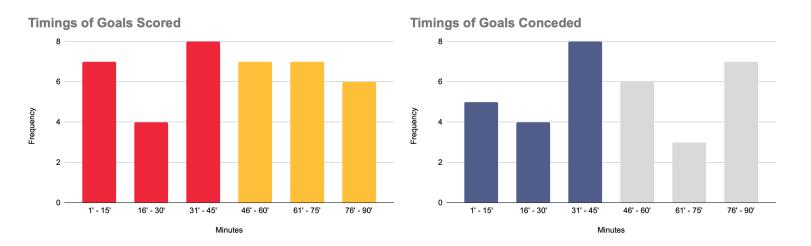
- > Typically, as the match progressed more goals were scored.
 - However, there was a decrease in the number of goals scored in the final 15 minutes of the match.
- > Most goals were scored towards the middle of the second half.
- > The majority of goals that were conceded occurred in the first 15 minutes of the match.
- Most goals were conceded in the first and final 15 minutes of the first half.

New York Red Bulls

There was a 14% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.29, while in 2021 the average number was 1.11.



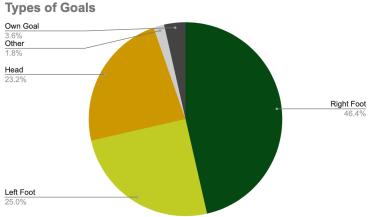
- Most goals were scored with a right footed shot.
- ➤ New York Red Bulls scored 75% of the penalties that they were awarded.
 - Furthermore, they scored 10 goals from a set piece.

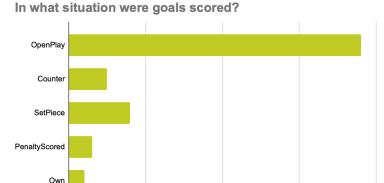


- ➤ Most goals were scored in the first and final 15 minutes of the match.
- Most goals were conceded in the first and final 15 minutes of each half.

Portland Timbers

> There was a 15% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.96, while in 2021 the average number was 1.66.





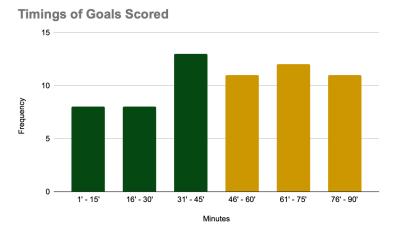
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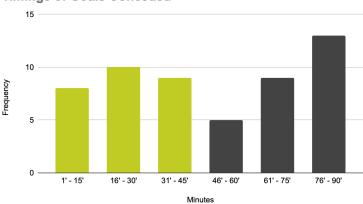
10

- Most goals were scored with a right footed shot.
- > Portland Timbers scored a somewhat equal amount of goals from a header as well as a left footed shot.
- > Portland Timbers scored 75% of the penalties that they were awarded.
- > Portland Timbers scored 5 goals from a counter attack, just one less than the top two teams who scored 6 goals from a counter attack in the 2021 MLS Season.





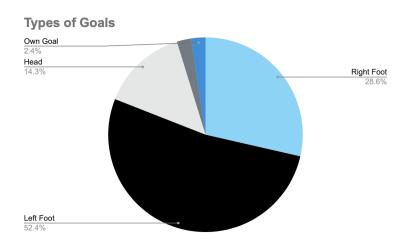
O

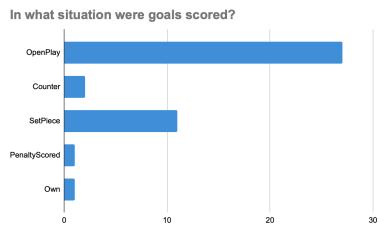


- ➤ Most goals were scored in the final 15 minutes of the first half.
- > The majority of goals that were conceded occured in the final 15 minutes of the match.
- > As the second half progressed, more goals were conceded.

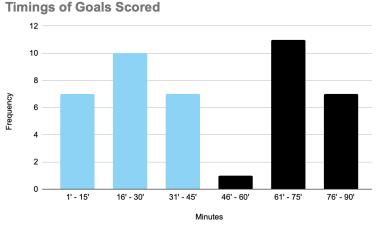
Minnesota United FC

> There was a 34% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.85, while in 2021 the average number was 1.23.

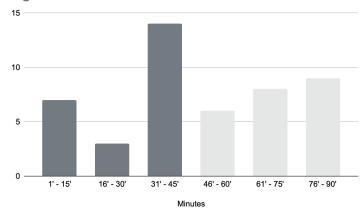




- Minnesota United scored most of their goals from a left footed shot.
 - o In fact, Minnesota United scored the most goals with a left footed shot in the entire league.
- Minnesota United scored 11 goals from a set piece.



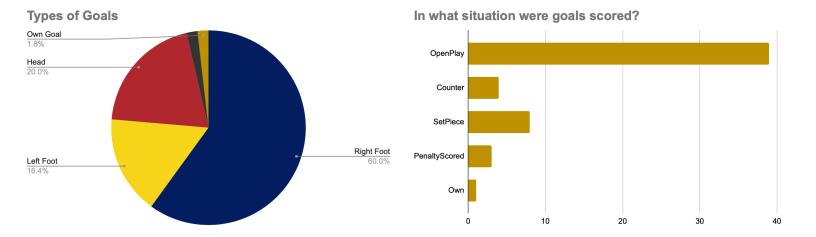




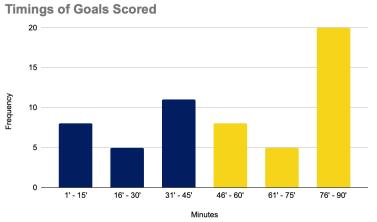
- Most goals were scored towards the middle of each half.
- > There were practically no goals scored in the first 15 minutes of the second half.
- The majority of goals that were conceded occurred in the final 15 minutes of the first half,
- > As the second half progressed, more goals were conceded.

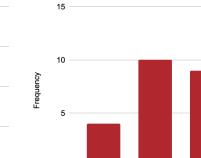
Real Salt Lake

> There was a 32% increase in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.17, while in 2021 the average number was 1.54.



- More than half of the goals scored by Real Salt Lake were scored with a right footed shot.
- > Real Salt Lake scored more goals from a header than with a left footed shot.
- > Real Salt Lake scored 100% of the penalties that they were awarded.
- > Real Salt Lake scored 4 goals from a counter attack.





1' - 15'

16' - 30'

Timings of Goals Conceded

- ➤ Most goals were scored in the final 15 minutes of the match.
- > In each half, most goals were scored in the first and final 15 minutes of the match.
- > Typically, as the game progressed, more goals were conceded.

31' - 45'

Minutes

46' - 60'

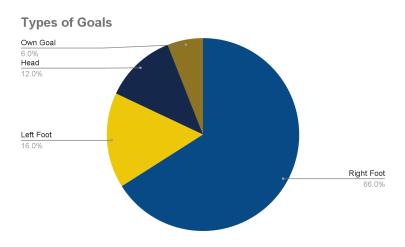
61' - 75'

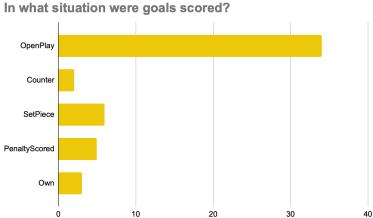
76' - 90'

> The majority of goals that were conceded occurred in the final 30 minutes of the match.

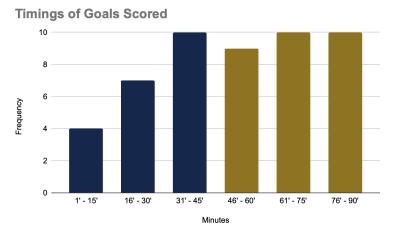
LA Galaxy

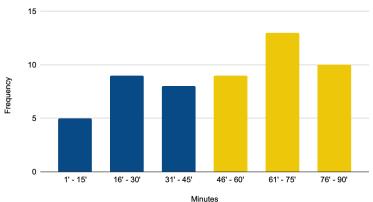
There was a 20% increase in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.23, while in 2021 the average number was 1.47.





- ➤ LA Galaxy scored more than half of their goals with a right footed shot.
- ➤ LA Galaxy scored 83.3% of the penalties that they were awarded.

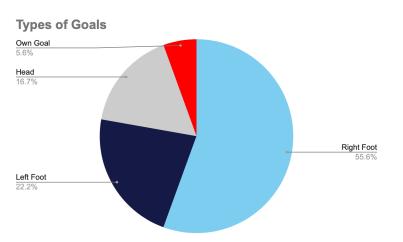


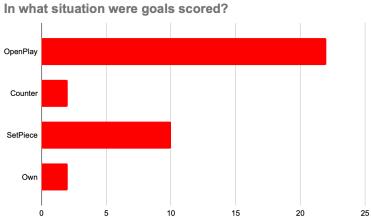


- > Typically as each half progressed, more goals were scored.
- ➤ The majority of goals were scored in the final 15 minutes of each half.
- Most goals were conceded towards the middle of each half.

Chicago Fire FC

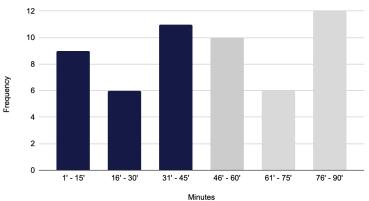
There was a 26% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.43, while in 2021 the average number was 1.06.





- ➤ Most goals were scored with a right footed shot.
- Although Chicago Fire scored 0 penalties, it is important to note that they were awarded 0 penalties during the 2021 MLS Season.
- ➤ Chicago Fire scored 10 goals from a set piece.

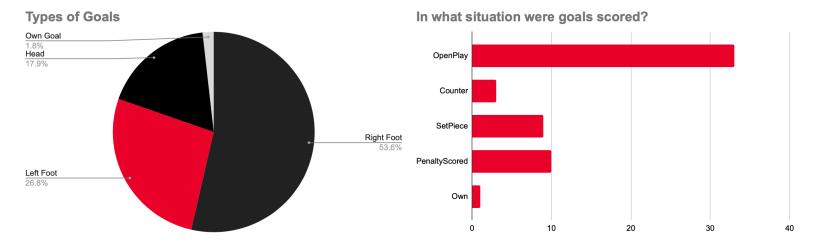




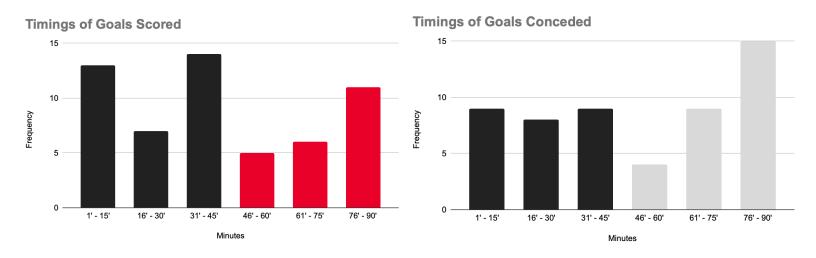
- ➤ In the first half, most goals were scored in the first and final 15 minutes of the half.
- As the second half progressed, typically, less goals were scored.
- More goals were conceded in the first and final 15 minutes of each half.

DC United

There was a 51% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.09, while in 2021 the average number was 1.65.



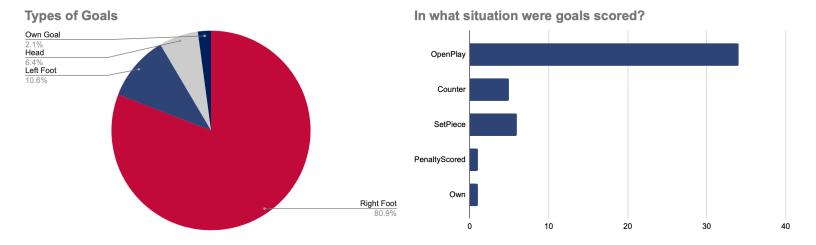
- ➤ Most goals were scored with a right footed shot.
- > DC United scored 90.9% of the penalties that they were awarded which amounted to a total of 10 converted penalties, the most in the 2021 MLS Season.



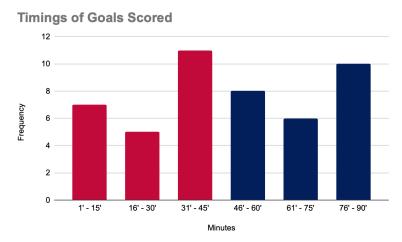
- ➤ In the first half, most goals were scored in the first and final 15 minutes of the half.
 - The majority of goals were scored at the end of the first half.
- As the second half progressed, typically, less goals were scored.
- > As the second half progressed, more goals were conceded.
 - There was a significant increase in the number of goals scored in the final 15 minutes of the match.

FC Dallas

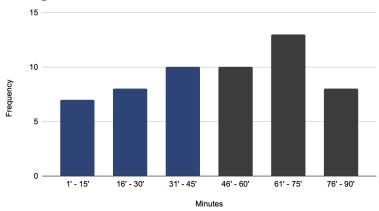
> There was a 12% increase in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.38, while in 2021 the average number was 1.21.



- The overwhelming majority of goals scored by FC Dallas were scored with a right footed shot.
 - o A very small percentage was scored with a header or left footed shot.
- > FC Dallas scored 5 goals from a counter attack, just one less than the top two teams who scored 6 goals from a counter attack in the 2021 MLS Season.



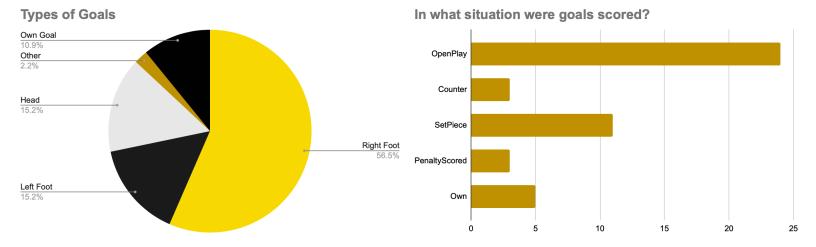
Timings of Goals Conceded



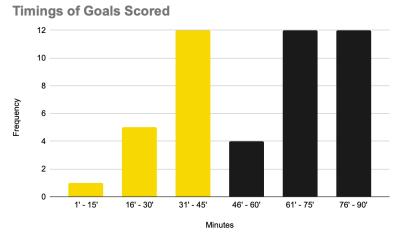
- Most goals were scored in the first and final 15 minutes of each half.
- > The majority of goals were scored in the final 15 minutes of the first half.
- > As the first half progressed, more goals were conceded.
- ➤ Most goals were conceded towards the middle of the second half.

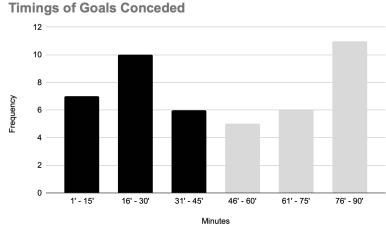
Columbus Crew

> There was a 18% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.64, while in 2021 the average number was 1.35.



- Most goals were scored with a right footed shot.
- ➤ Columbus Crew scored 75% of the penalties that they were awarded.
- > Columbus Crew scored 5 goals from an own goal from the opposing team, the most in the MLS League.
 - Furthermore, they scored 11 goals from a set piece.

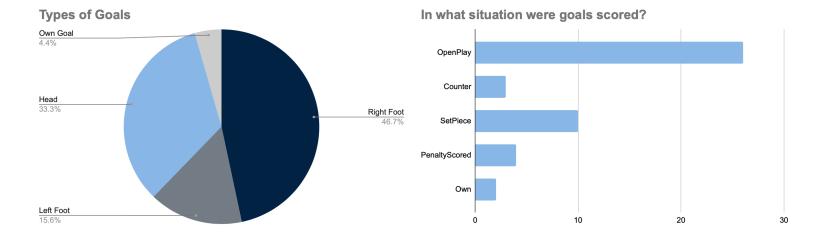




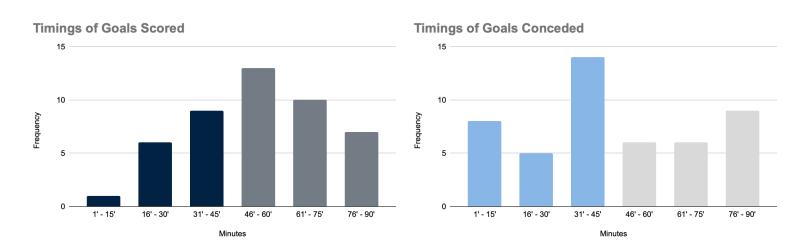
- > There was a significant increase in goals scored towards the end of each half.
- > Few goals were scored at the beginning of each half.
- ➤ Most goals were conceded towards the middle of the first half and the final 15 minutes of the match.
- > As the second half progressed, more goals were conceded.

Vancouver Whitecaps FC

> There was a 16% increase in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.13, while in 2021 the average number was 1.31.



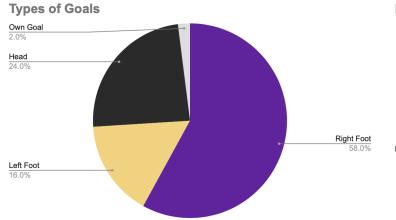
- ➤ 1 in 3 goals were scored by a header. In total, these amounted to 15 goals; shared with Colorado Rapids, this was the most amongst all the 2021 MLS Teams.
- ➤ Vancouver Whitecaps scored 100% of the penalties that they were awarded.
 - Furthermore, they scored 10 goals from a set piece.

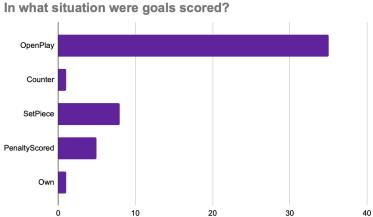


- > As the first half progressed, more goals were scored.
- > As the second half progressed, less goals were scored.
 - Most goals were scored in the first 15 minutes of the second half.
- There was a significant increase in the number of goals conceded in the final 15 minutes of the first half. In fact, the majority of conceded goals occurred during this time.

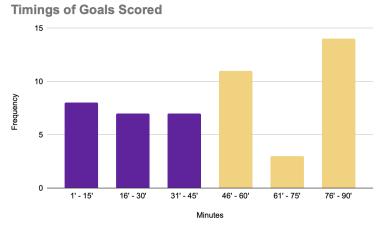
Orlando City SC

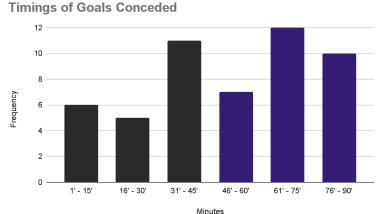
There was a 12% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.66, while in 2021 the average number was 1.46.





- > Orlando City scored the majority of their goals from a right footed shot.
- > Orlando City scored more goals from a header than from a left footed shot.

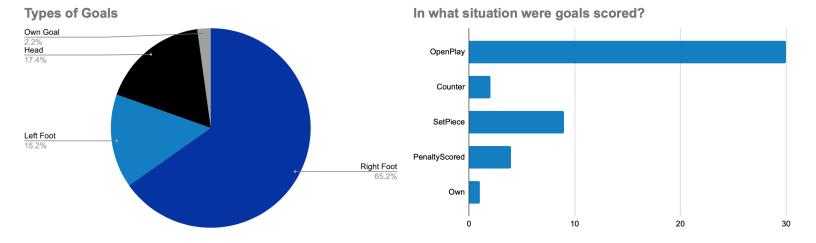




- ➤ Most goals were scored in the first and final 15 minutes of the second half.
 - There was a significant decrease in goals scored towards the middle of the second half.
- There was a significant increase in goals that were conceded in the final 15 minutes of the first half.

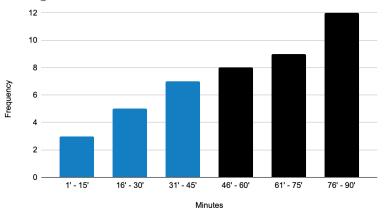
CF Montréal

> There was a slight 0.7% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.36, while in 2021 the average number was 1.35.



- ➤ More than half of the goals scored by CF Montréal were scored with a right footed shot.
- > CF Montréal scored 100% of the penalties that they were awarded.

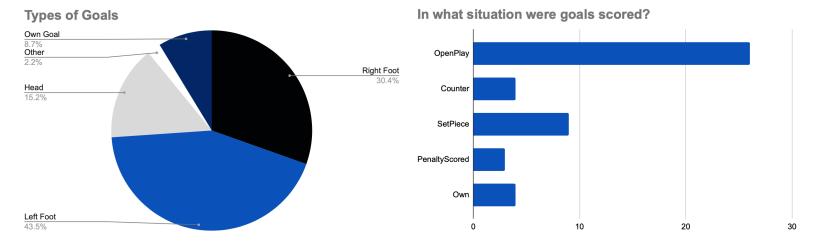




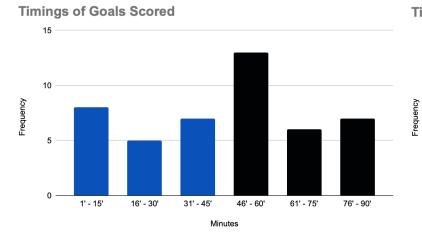
- ➤ Typically, as the match progressed, more goals were scored; however there was a decrease in goals scored in the final 15 minutes of the match.
- As the match progressed, more goals were conceded.
 - Thus, the majority of goals that were conceded occurred in the final 15 minutes of the match.

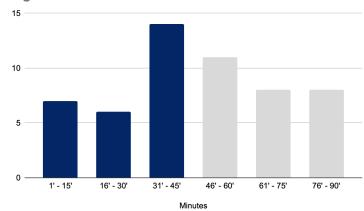
San Jose Earthquakes

There was a 20% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.69, while in 2021 the average number was 1.35.



- > San Jose Earthquakes scored more goals with a left footed shot than with a right footed shot.
- ➤ San Jose Earthquakes scored 4 goals from a counter attack.

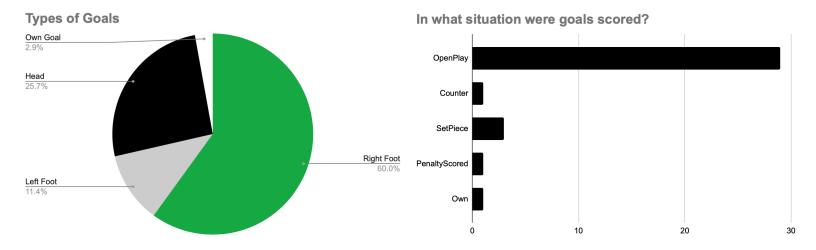




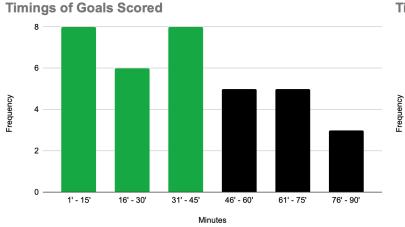
- Most goals were scored in the first and final 15 minutes of each half.
- ➤ There was a significant increase in the number of goals scored in the first 15 minutes of the second half.
- ➤ There was a significant increase in the number of goals conceded in the final 15 minutes of the first half.

Austin FC

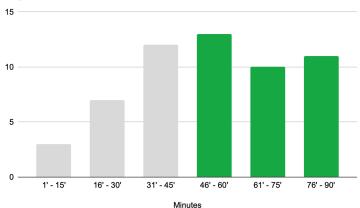
➤ In 2021, Austin FC scored an average of 1.03 goals per game.



- > More than half of the goals scored by Austin FC were scored with a right footed shot.
- ➤ More goals were scored from a header than with a left footed shot.



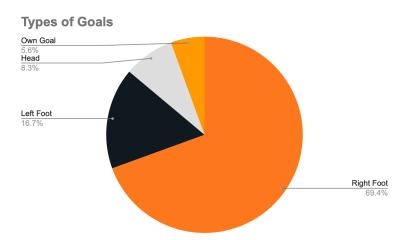




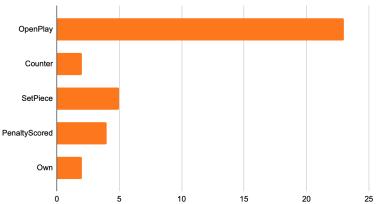
- ➤ Most goals were scored in the first half.
 - There was a significant increase in the number of goals scored in the first and final 15 minutes of the first half.
- > There was a decrease in goals scored in the final 15 minutes of the match.
- > As the first half progressed, more goals were conceded.
- > In the second half, more goals were conceded in the first and final 15 minutes of the half.

Houston Dynamo FC

There was a 18% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.30, while in 2021 the average number was 1.06.

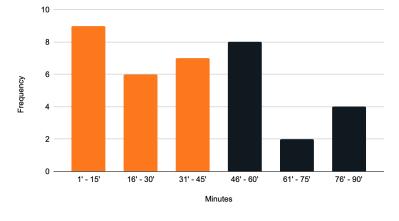


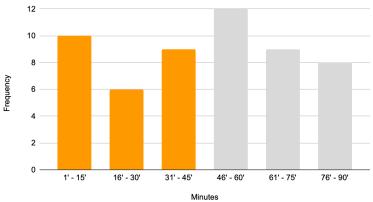
In what situation were goals scored?



- ➤ More than half of the goals scored by Houston Dynamo FC were scored with a right footed shot.
- ➤ Houston Dynamo FC scored 100% of the penalties that they were awarded.

Timings of Goals Scored

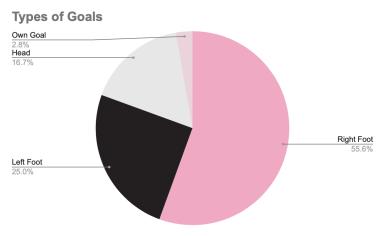


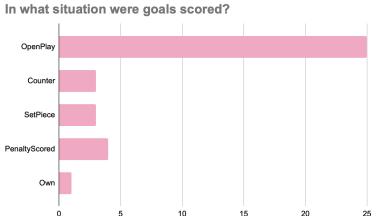


- ➤ Most goals were scored in the first 15 minutes of each half.
- ➤ There was a significant decrease in the number of goals scored after the first 15 minutes of the second half.
- In the first half, most goals were conceded in the first and final 15 minutes of the half.
- ➤ The majority of goals that were conceded occurred in the first 15 minutes of the second half.
- ➤ As the second half progressed, less goals were conceded.

Inter Miami CF

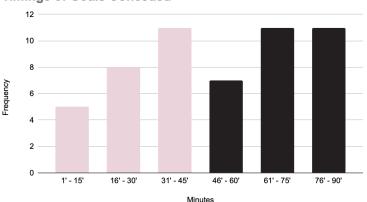
There was a slight 2% increase in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.04, while in 2021 the average number was 1.06.





- Most goals were scored with a right footed shot.
- > Inter Miami CF scored 100% of the penalties that they were awarded.

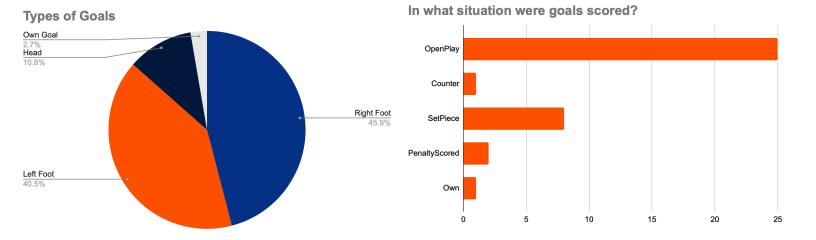




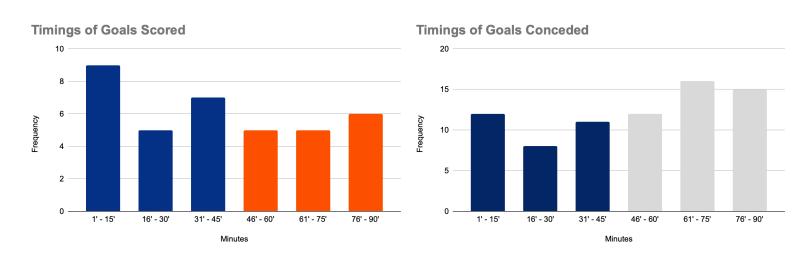
- Most goals were scored towards the middle portion of the second half.
 - However, there was a decrease in the number of goals scored towards the middle portion of the first half.
- Typically as each half progressed, more goals were conceded.

FC Cincinnati

There was a 102% increase in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 0.54, while in 2021 the average number was 1.09.



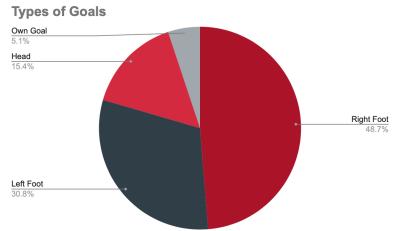
> There was a somewhat equal number of goals scored by FC Cincinnati with a right and left footed shot.



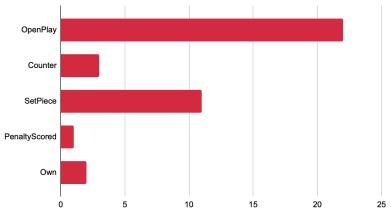
- ➤ The majority of goals that were scored occurred in the first 15 minutes of the match.
- ➤ In the first half, more goals were conceded in the first and final 15 minutes of the half.
- ➤ In the second half, more goals were conceded in the final 30 minutes of the match.

Toronto FC

There was a 15% decrease in the average number of goals scored from 2020 to the 2021 MLS Season. In 2020, the average number was 1.36, while in 2021 the average number was 1.15.

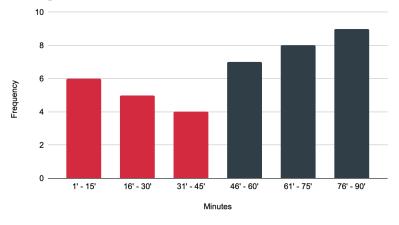


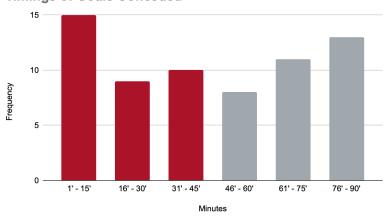




- Most goals were scored with a right footed shot.
 - Many goals were still scored with a left footed shot as well. In fact, Toronto FC scored around 30% of their goals with a left footed shot.
- ➤ Toronto FC scored 11 goals from a set piece.







- As the first half progressed, less goals were scored.
- Most goals were scored in the second half.
 - As the second half progressed, more goals were scored.
- ➤ There was a significant increase in the number of goals conceded in the first 15 minutes of the match.
- > As the second half progressed, more goals were conceded.

References

All pictures from the MLS were gathered using OpenVerse.

https://wordpress.org/openverse/

Data including the average size of MLS Teams' Stadiums was obtained using Soccer Stadium Digest.

https://soccerstadiumdigest.com/2021-mls-attendance/

Data including how each type of goal, in what situation was each goal scored, and where each goal was scored was obtained using *WhoScored*.

https://www.whoscored.com/Regions/233/Tournaments/85/Seasons/8545/Stages/19513/TeamStatistics/USA-Major-League-Soccer-2021

Data including when each type of goal was scored, home advantage, corners, performance rank, and a team's ability to score first was obtained using *FootyStats*.

https://footystats.org/usa/mls#

Data including the number of penalties awarded, conceded, and converted was obtained using the official MLS website.

 $\underline{https://www.mlssoccer.com/stats/clubs/\#season=2021\&competition=mls-cup-playoffs\&statType=attacking}$

