

# Football Match Prediction Report

## Match Information

Home Team:	Seattle Sounders
Away Team:	Portland Timbers
Referee:	Chris Penso
Report Generated:	2025-06-09 17:37:06
Prediction Method:	XGBoost + Poisson Distribution Simulation

## Prediction Summary

Metric	Home Team	Away Team
Predicted Goals	1.74	2.00
Expected xG	0.72	1.02

### Match Outcome Probabilities

Outcome	Probability
Home Win	34.1%
Draw	21.4%
Away Win	44.4%

## Detailed Model Analysis

### Model Confidence Metrics

Classifier Confidence: 0.549  
Features Used: 45  
Training Samples: Variable by model

### Top Feature Importance

Feature	Importance
Home Shots On Target Per Match	0.2054
Home Shots Per Match	0.1126
Away Shots Per Match	0.1039
Away Form Last5	0.0989

Away Xg Per Match	0.0820
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Poisson Distribution Analysis

Expected Goals Parameters

Home Team Lambda (Expected Goals): 1.737  
Away Team Lambda (Expected Goals): 2.002  
Most Likely Scoreline: 1-2  
Scoreline Probability: 8.3%

Top Scoreline Probabilities

Scoreline	Probability
1-2	8.28%
1-1	8.27%
2-2	7.19%
2-1	7.18%
1-3	5.52%
2-3	4.80%
0-2	4.76%
0-1	4.76%
3-2	4.16%
3-1	4.16%

Head-to-Head Statistics

Metric	Value
Home Wins	3
Draws	4
Away Wins	5
Average Home Goals	1.33
Average Away Goals	1.67

Referee Bias Analysis (RBS)

Referee Bias Scores

Team	RBS Score	Confidence	Matches with Referee
Seattle Sounders	0.132	50.0%	5
Portland Timbers	0.129	70.0%	10

**RBS Score Interpretation:**

- Positive values indicate favorable treatment by the referee
- Negative values indicate unfavorable treatment
- Values range from -1.0 to +1.0
- Higher confidence percentages indicate more reliable scores

## Model Information & Methodology

**Prediction Method:** XGBoost + Poisson Distribution Simulation

**XGBoost Models:**

- Classification model for match outcomes (Win/Draw/Loss)
- Regression models for goals and xG prediction
- Uses 65+ features including team performance, form, and referee bias

**Poisson Simulation:**

- Uses predicted goals as lambda parameters
- Calculates probability for each possible scoreline
- Provides more accurate outcome probabilities than direct classification

**Key Features Used:**

- Team offensive and defensive statistics
- Recent form (last 5 matches)
- Head-to-head historical performance
- Referee bias scores (RBS)
- Home advantage factor
- Team quality metrics (points per game)

*This report was generated by the Football Analytics Prediction System.  
Predictions are based on historical data and statistical models.  
Results should be used for informational purposes only.*