

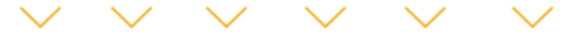


W&M ATHLETICS // BOLDLY PURSUING EXCELLENCE



Performance Analytics

Progress Report



Performance Analytics

// Develop a nationally recognized program for athletic performance analytics, including an emphasis on student-athlete safety, building on the team of professionals now in place and expanding the programs in data analytics across the university.

// Complete a performance analysis of the women's lacrosse team in partnership with the Department of Computer Science, and publish the results (2019-2020).

Women's Lacrosse 2019 Season Performance Analysis

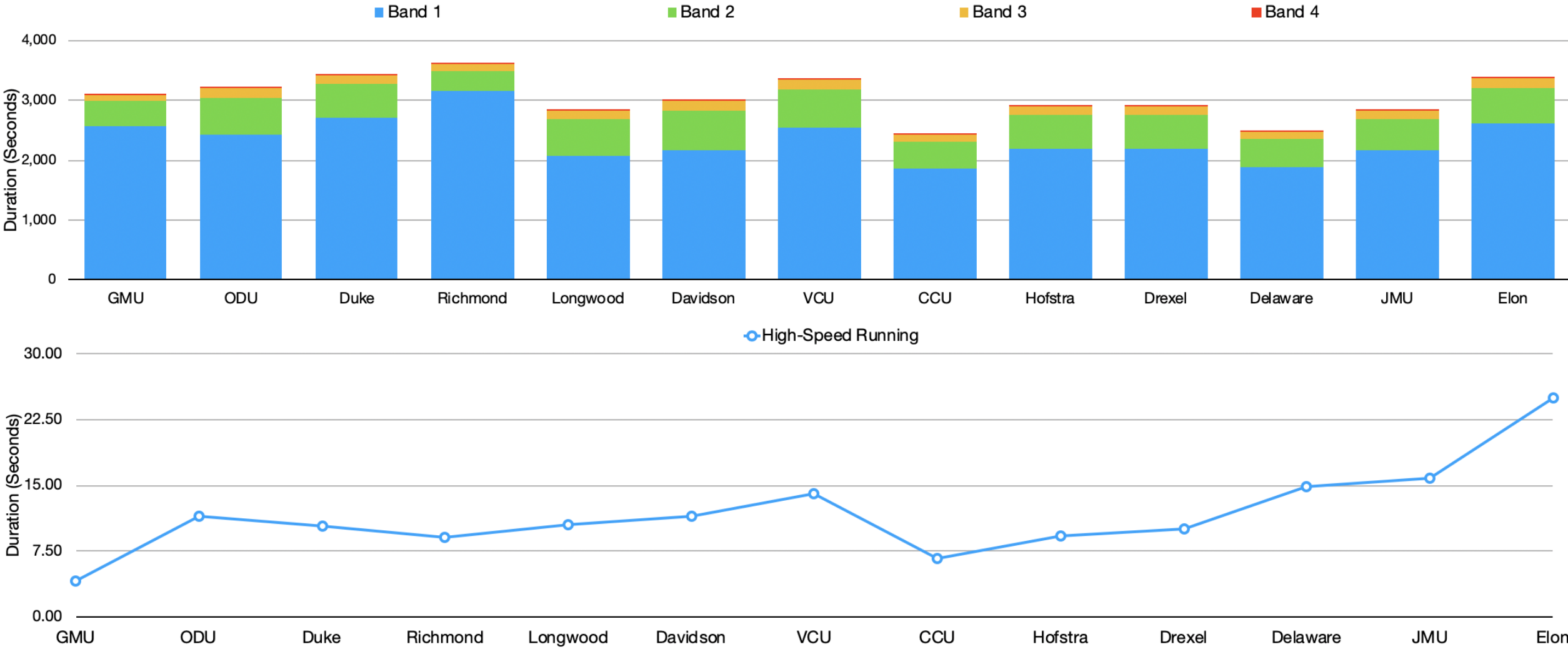




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High Speed Running Duration



Game Performance Mining

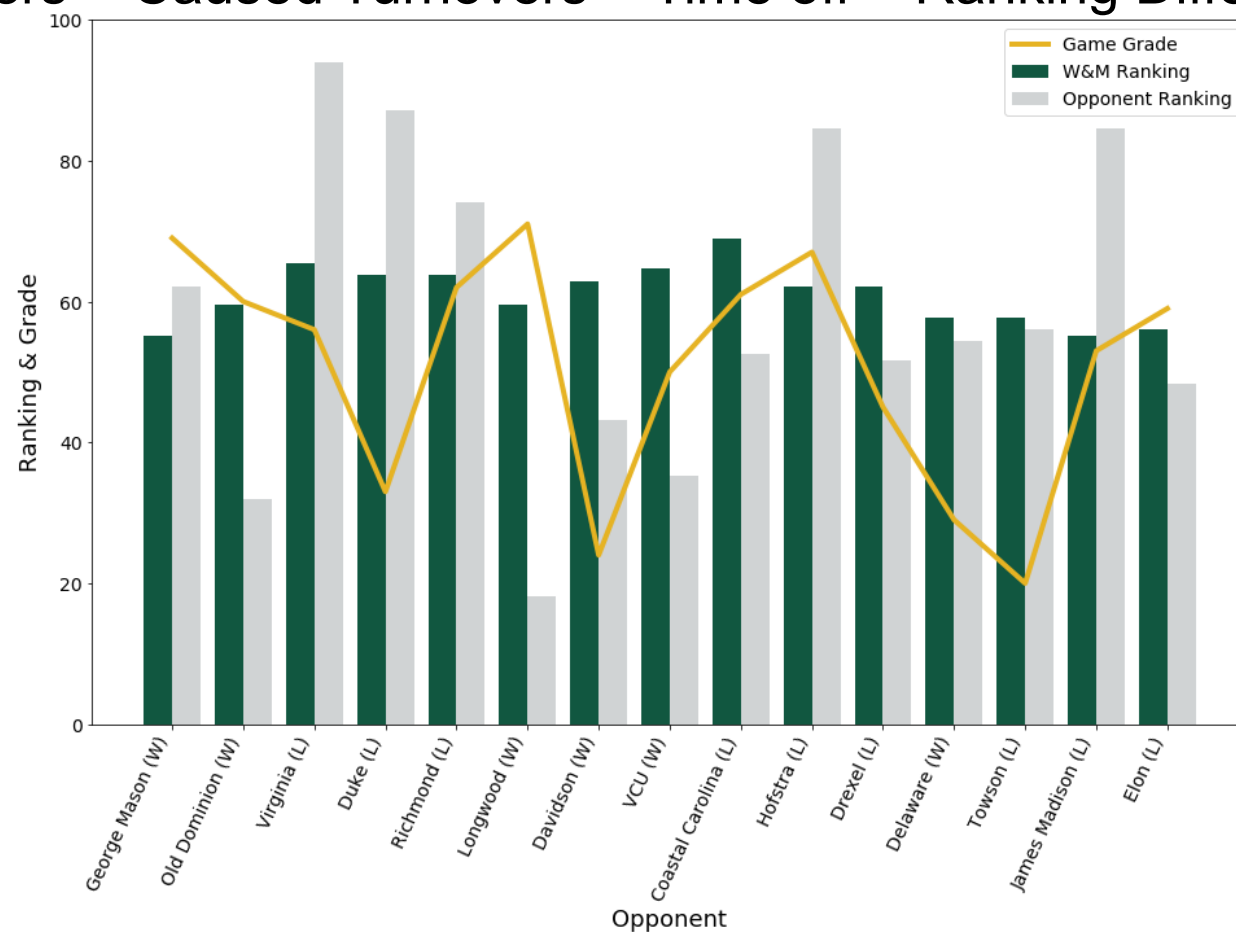
Goals Allowed	Ranking Difference	x1.5
Goals	Time Off	
Shots	Shots Allowed	
Turnovers	Caused Turnovers	
Our Ranking	Opponent Ranking	Removed
Turnovers Allowed	Caused Turnovers	

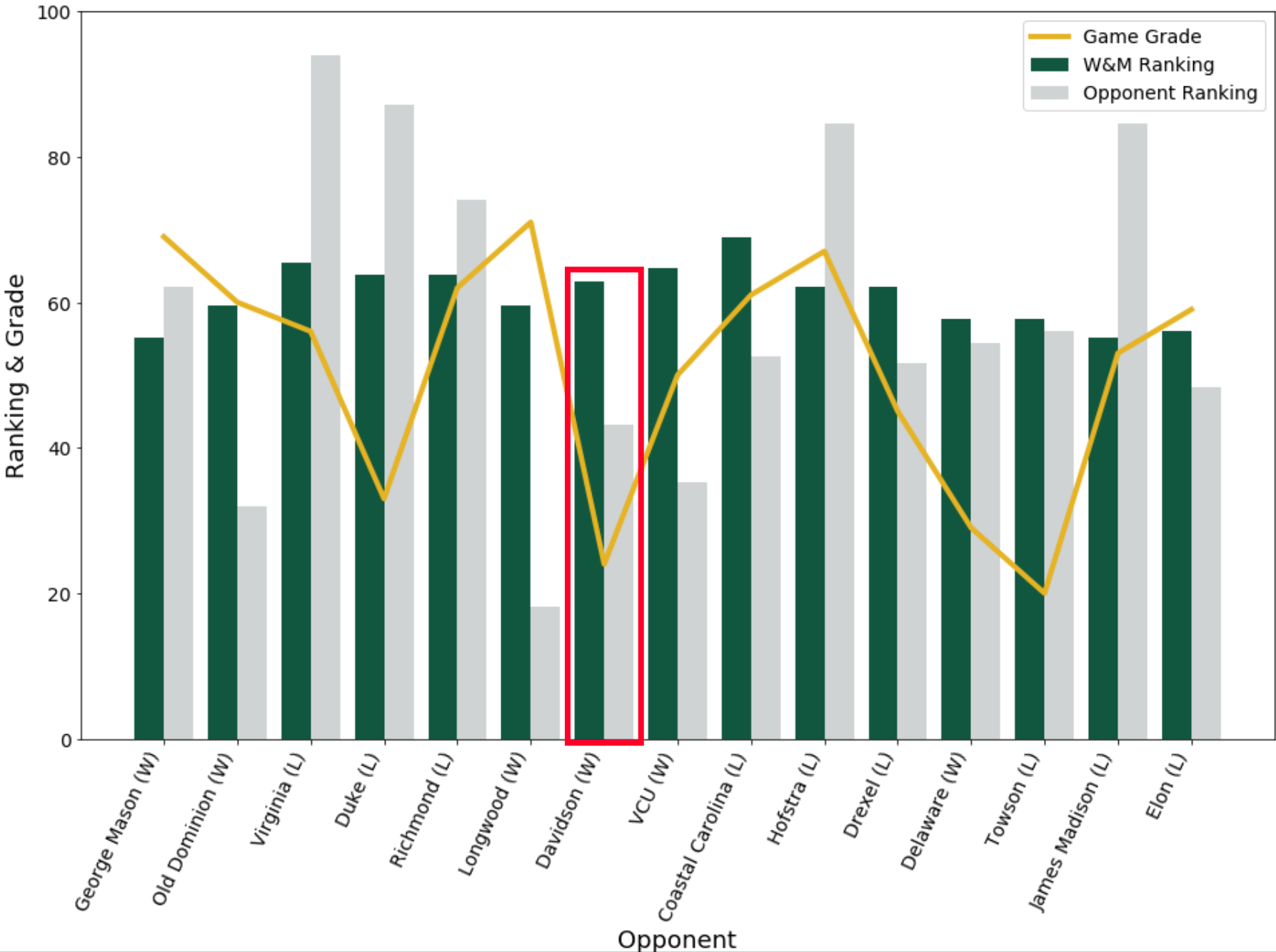
Statistical data mined from the CAA and Atlantic 10 for 2018 season



Game Grade

Game Grade = $65 + (\text{Goals} \times 1.5 + \text{Shots} - \text{Goals allowed} \times 1.5 - \text{Shots Allowed} - \text{Turnovers} + \text{Caused Turnovers} - \text{Time off} + \text{Ranking Difference} / 1.5)$

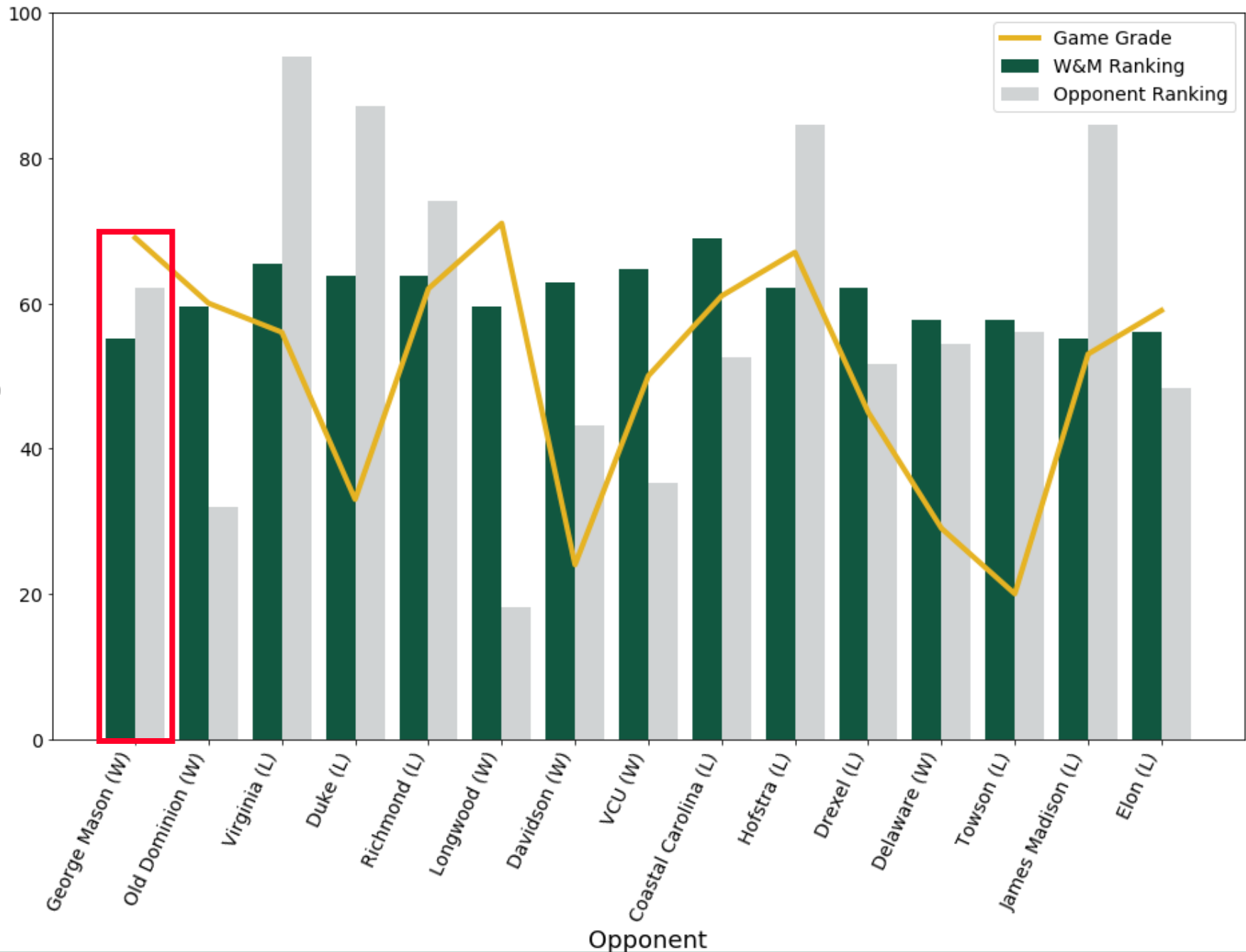




Davidson (W)
Score: 9-8

Team Statistics		
Game Stats	WM	DAV
Shots	18	39
Turnovers	18	7
Caused Turnovers	2	7
Draw Controls	8	10
Free-Position Shots	4	7
Ground Balls	20	23

Ranking & Grade



George Mason (W)
Score: 10-6

Team Statistics		
Game Stats	MASON	WM
Shots	14	20
Turnovers	30	27
Caused Turnovers	18	23
Draw Controls	10	8
Free-Position Shots	2	8
Ground Balls	27	31

Specific Session Takeaways

	Increase Game Grade	Decrease Game Grade
High Load	Session Length of 120+ minutes High Acceleration Duration (band) > 30 seconds	
Low Load	Low Velocity Duration < 50 minutes Low Acceleration Duration < 80 minutes Total Player Load < 1,100	Total Player Load > 1,100
Taper		Accel/Decel Count < 800
Potentiation	Accel/Decel Count < 1500 instances Total Player Load < 500	

We did not have enough recovery sessions (2) to draw correlations.

Overall Takeaways

// Go Higher on the High days and Lower on the Low days

// Really low taper days lead to a decrease in game performance

// Throughout the season we saw a decrease in average velocity during games with more time spent in high speed zones