

The Carbon Footprint of Pac-12 College Football Recruits

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The world of college sports is not immune to the forces influencing organizations to assess and be conscious of the environmental impact of both their on-campus and off-campus activities. There are some athletic departments that promote their efforts to reduce their environmental impact and offset their carbon footprint. For example, the University of Florida, promotes that it was the first athletic department to run a carbon-neutral football game in 2007 and had the first carbon-neutral athletic program in 2009 ("Gators claim title to nation's first carbon-neutral athletic season," 2009). However, most athletic department environmental impact articles and reports tend to focus on team travel and gameday operations, with little, if any, breakdown (or acknowledgment) of player recruitment visits.

This study investigated the "Carbon Footprint" (carbon dioxide-equivalent emissions (CO₂eq emissions)) associated with travel for official recruiting visits in "Power 5" college football. College football is currently the largest sport in college athletics, with the most scholarshipped athletes and the largest financial revenues and expenditures (Malone, 2022). In 2019, the 65 schools in the "Power 5" conferences alone offered over 15,000 scholarships to high school football recruits even though they only had around 1,600 scholarship openings (Dellenger, 2021). "Power 5" football teams bring in many prospective recruits from all over the country; unfortunately, little attention has been given to the carbon emissions from those recruitment visits. The study specifically examined the carbon footprint of football recruits traveling to each Pac-12 school from 2008 to 2019, utilizing online recruiting data and Geographical Information Systems (GIS) software that calculates spatial analysis on multi-modal travel (car/planes).

The approach of this study followed the framework established in prior carbon footprint literature. Franchetti and Apul's (2012) framework requires three boundaries: 1) Temporal Boundary, which is the time period used for analysis (Recruitment visits from 2008 to 2019), 2) Organizational Boundary, which is the defined entity being measured to ensure that only emissions produced from the defined entity are being measured (Travel for an official recruiting visit to a school), and 3) Operational Boundary which is based on the scope of emissions (direct emissions, indirect emissions, and indirect products). Prior to that, Brand and Preston (2010) argued that measuring direct emissions is the best approach for converting travel-based information into subsequent emission levels. Therefore, the operational boundary was set at direct emissions only (Tourism: transportation (car and plane miles), hotel nights, food per day, and waste per day). In order to

operationalize these three boundaries, a formula was created, the Recruit Visit Carbon Footprint (RVCF), to approximate each player's carbon footprint as they traveled to and from their hometown to their selected school for their official recruiting visit. Cooper's (2020) method for approximating the carbon footprint of sport tourism was applied to the GIS dataset to estimate the total number of CO₂eq emissions produced by each recruit.

Between 2008 and 2019, the Pac-12 produced an estimated 2,339,143 kg CO₂eq emissions by bringing 3,394 college football recruits to their campuses. The University of Oregon produced a substantial RVCF compared to the rest of the schools in the conference, with an estimated 316,314 kg CO₂eq emissions from their 354 official recruits. The next two highest carbon footprint programs were Washington State (259,788 kg CO₂eq) and UCLA (259,788 kg CO₂eq). In contrast, California (149,172 kg CO₂eq) and Utah (158,681 kg CO₂eq) produced the smallest RVCFs in the conference. The study also subdivided the data by year, time period, and position group, and these findings will be presented at the conference. The results suggest that additional discussions about the environmental impact of athletic departments are needed.