

## **Advancing Sustainable Urban Mobility: An Evaluation of Rio Verde Using the Integrated Planning Domain of the Sustainable Urban Mobility Index (IMUS)**

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**Abstract :** Sustainable urban mobility is essential for balancing development with environmental and social needs, particularly in rapidly growing cities like Rio Verde, Brazil. This study applied the Sustainable Urban Mobility Index (IMUS), specifically focusing on the Integrated Planning Domain, to assess the city's urban mobility sustainability. With an IMUS score of 0.601, Rio Verde demonstrates performance comparable to similar municipalities while highlighting critical areas requiring improvement. The methodology encompassed a literature review, data collection, calculation of IMUS scores, and the development of a public perception survey. Indicators were evaluated across various dimensions, including manager training, transparency, land use, and infrastructure planning. Data were sourced from municipal departments, satellite imagery, and public databases. A public survey further complemented these findings, capturing community perspectives on urban mobility and planning issues. Key findings revealed strengths in transparency and adherence to urban legislation, with high scores for mixed land use and urban vacancy management. However, weaknesses were identified in intermunicipal consortia, population density, and urban growth. Additionally, limitations in the training of urban planning professionals were observed, highlighting the need for enhanced capacity-building programs. Despite these challenges, the study underscores Rio Verde's potential for advancing sustainable urban mobility through strategic investments in infrastructure and governance. This research provides a robust framework for evaluating urban mobility using IMUS and identifies actionable priorities for Rio Verde. Future efforts should focus on improving data availability, expanding public transportation coverage, and fostering interagency collaboration. These measures will contribute to aligning the city's growth with sustainability goals and establishing benchmarks for other municipalities.

**Keywords :** sustainable urban mobility, integrated planning, sustainable urban mobility index (IMUS), urban sustainability indicators

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