

University of Arkansas Campus Parking Map with Legend Under Construction ADA Parking \searrow loading Zones Hotorcycle Parking Scooter Parking Reserved Scooter Parking Night Reserved No Overnight (See list below) 31N 47N 74 MSPG Parking Lot Number Extended Hours Building Code 60 ∠ Visitor Meter Parking Parking Garage Ρ (Metered Parking Available) Park and Ride Accessible Building Entrances • Accessible Entrances Power Assisted Doors - Martin Luther King, Jr. Blvo To Baum Stadium, Randal Tyson Track Center, Housing Control Point and ENGR Sou

The University of Arkansas Transit and Parking Department controls, regulates, and maintains all of the institution's public transit services and parking facilities. This department is self-sufficient and does not rely on University funds for new parking and other expenses. Due to the high cost of parking structures, as well as the growing University enrollment, Transit and Parking is constantly in search of creative, low-cost solutions to improve their system.



Simplifying Campus Parking For Increased User Satisfaction and Improved Decision Making Mireille Ineza | Chris Manjarrez | Ryan Sanders, PM | Jake Washkowiak

Faculty Advisor: Dr. Chaovalitwongse | Industry Partner: Gary Smith





Transit and Parking

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Complaint Tracker – Access Database to Store and Create Reports on Complaints

Methodology – Percent of Permit Capacity Sold and Lot Complexity

received. This database will give them the ability to monitor customer satisfaction.



Due to early findings, we focused our analysis on lot designations, time restrictions, and event parking requirements. Based off our calculations of citation density, lot complexity, and permit sales ratio, we made three levels of recommendations to Transit and Parking.



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Simplifying

Campus

Parking

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S = {time restriction, event parking, lot designation} *LR* = number of regulations *V* = total violations recorded

C = lot capacity

Ad Campaign – Multi-Objective Decision Analysis and Portfolio Analysis



In order to help improve their image and communicate better with customers, Transit and Parking would like to launch an advertising campaign. To help them decide which advertising avenue would be the most cost-effective, we performed a Multi-Objective Decision Analysis and a Portfolio Analysis.

Recommended Lot Changes – Three Different Levels Proposed for Reduced Parking Complexity

Based on our analysis of citation density, lot complexity, permit sales, and potential revenue, we formed three levels of potential changes that could be made to the parking system to reduce complexity and make the parking system easier for customers to understand. These were presented to the Transit, Parking and Traffic Committee for consideration.

	Current	Level 1 Changes -	Level 2 Changes -	Level 3 Changes -
	System	Time Restrictions	Lot Redesignation	Zone System
Complexity 552.71		483.73	465.47	276.75
Complexity Reduction	-	12.5%	15.8%	49.9%
Revenue Change	-	\$0.00	\$293,529	\$155,580







Level 1 Changes would reduce the number of time restrictions on parking.

Level 2 changes would limit the number of lots with multiple permit designations.



Level 3 is a total reformation of parking into a much less complex zoning system.