Optimizing Traffic Flow and Space Utilization at ISU Transportation Services

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Client: ISU Transportation Services, Ames, Iowa

Problem Statement
• Transportation services is looking to alleviate some of the congestion during peak times by putting in a self-service kiosk to allow for checkouts outside of normal business hours.
• In order to do this, the parking lot must be redesigned to fit enough cars and handle the traffic flow.

Objectives
• Move fence and redraw lines to accommodate 112 spaces
• Create a new organizational system for easy rental
• Create SOP for new kiosk system
• Improve traffic flow with new design

Constraints
• Cannot expand lot
• Trailers must remain locked up
• Must accommodate a minimum of 112 parking spaces
• One-way flow

Methods
• Park CAD and AUTOCAD

Proposed Solutions
• Remove majority of the fencing.
• Fence in an area only for vehicles that need to be locked up after hours.
• Improve flow
• Color coordinate zones to easily find vehicle and have color indicators on key so client knows where to find and return vehicle.

Major Outcomes
• Able to focus more on vehicle maintenance
• The ability for clients to receive vehicles after hours will help reduce afternoon rushes.

Benefit to Client
• Easier to maintain vehicles
• Easier to find vehicles
• Can have designated areas for types of vehicles or heavily used vehicles

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