The Future of Parking at Texas A&M University

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Texas A&M Transportation Services
Overview

- About Texas A&M University
  - Transportation Services
  - Parking Operations
- Industry Technology
  - License Plate Recognition Technology
    - Texas A&M Timeline
    - Reimagining Business Rules
    - Challenges
    - Right choice for who?
- Other Technologies Improving Soon
  - Lot Entry
  - Lot Counting
About Texas A&M

- Over 70k student, staff and faculty on campus
- 5,200 acres spanning the entire campus area
Texas A&M Transportation Services
Transportation Services

- Manages a Budget over $45 million (FY2018)
- 599 Employees (188 full time, 343 students and 68 wage employees)
- Operations include:
  - Alternative Transportation
  - Auto Maintenance
  - Customer Service
  - Marketing & Communications
  - Fleet Leasing & Fuel
  - Parking Access & Maintenance
  - Parking Facilities Projects & Maintenance
  - Parking Services & Traffic
  - Special Events & Visitor Parking
  - Transit
Parking Operations
Parking Operations

- Manage 35,225 Parking spaces
- Parking Admin $1,932,065.82
- Parking HR $303,034.23
- Parking IT $2,156,832.43
- Parking Debt Service $7,603,839
Current Parking Payment Options

- Permits purchased online
  - Annual, semester, monthly, weekly or daily
  - Can register up to 3 license plate numbers (this is an arbitrary number we set)
  - Can swap out LPs online at any time
- Parkmobile smart phone app
  - Individuals can register LP and pay by the hour
  - Departments may register LP and pay on behalf of the customer
  - Departments may give promo code to customer to enter as a component of payment
- Digital Pay Stations
  - Customers pay at machine for amount of time needed; customers paying by credit card may enter cell phone number at time of payment to get text
Industry Technology
License Plate Recognition Technology

(License Plate Enabled)
LPR - Texas A&M Timeline

Lot 104 Genetec image needed

- 2011 - Mobile LPR
  - SCOFFLAW
  - Lot Counts
- 2013 – Fixed LPR
- 2018 – Permitless pilot at nearby RELLIS TAMUS campus
- 2019 – Pilot fixed LPR cameras for gate access at garage
- 2020 - Fixed LPR cameras for access at new garage
Permitless

- Communicating Proper Parking
- Enabling customers to manage LP records
- Establishing new payment options, permit types and rules
- Implementing new rules in existing systems

Reexamine citation fine amounts to look more like tolling

- $15 for non-payment for first 48 hours
- $35 from day 2-14
- $10 escalation for late payment on 15th day
  takes rate to $45

Redefine appeal review process
LPR – Challenges

- Works well in homogenous areas but mixed permit types or permissions is really tough
- Complicated to pull off
- States with no front plates; backing in
- VIPs still want visual identifier
- Event Management
LPR – Challenges

- Vanity plates
- Stacked Plates
LPR – Challenges

- Fuzzy Logic
Municipality with on-street parking, including residential permits
Small (not complex) university
But can they afford it?
Do they have enough people to manage the technical side of it?
Other Technologies Improving Soon
Lot Entry Technology

- Use Transcore technology now and still see RFID as a likely primary/secondary access method – show picture of Transcore readers and tag

- Ticketless entry
  - Designa qinkk beacon
  - ParkHub beacons – coming soon?
  - Inugo – “frictionless parking system” (app)
  - ZipBy - http://www.zipby.us/
Loops – count consistently but accuracy is an issue; daily (usually) manual recounts are necessary to restore accuracy

Camera technology to analyze the image and provide counts

Trees or other obstacles obscure some spaces

Daylight/nighttime present challenges