

An aerial photograph of an airport is shown, with a large blue rectangular overlay on the left side. The overlay contains the title and date of a webinar. The background image shows the airport's runways, taxiways, parking lots filled with cars, and various airport buildings under a clear sky.

TRB Webinar: Strategies for Airport Parking Pricing

July 24, 2023
1:00pm

Today's Learning Objectives

- (1) Identify the key factors to consider when developing a rate-making strategy for airport parking, including market demand, operational costs, customer preferences, and competitive pressures**
- (2) Gain an understanding of the advantages and disadvantages of different pricing strategies, such as dynamic pricing, tiered pricing, and flat rate pricing**

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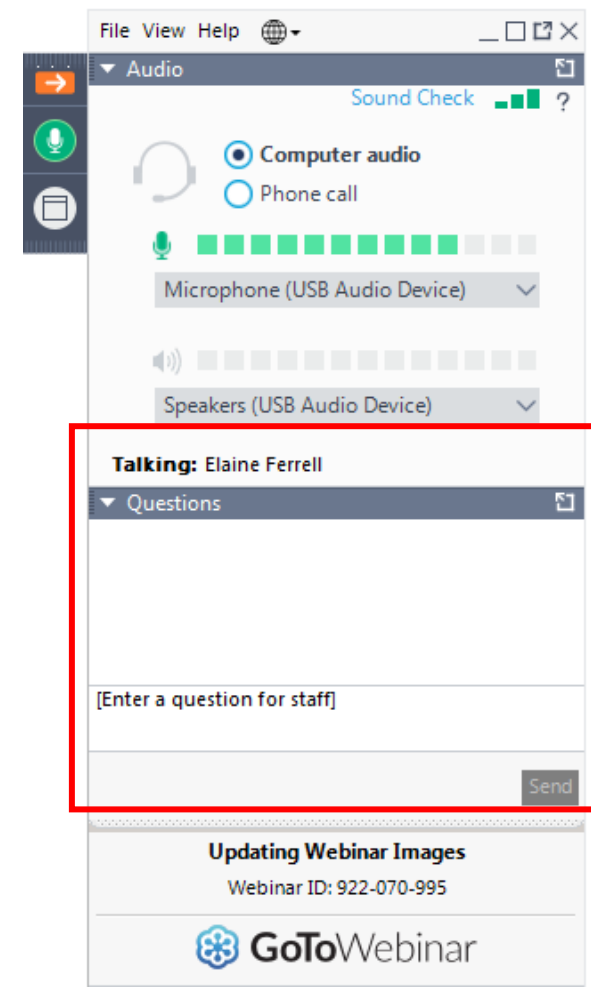
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Questions and Answers

Please type your questions into your webinar control panel

We will read your questions out loud, and answer as many as time allows

#TRBwebinar



Moderator Name

Moderator Organization

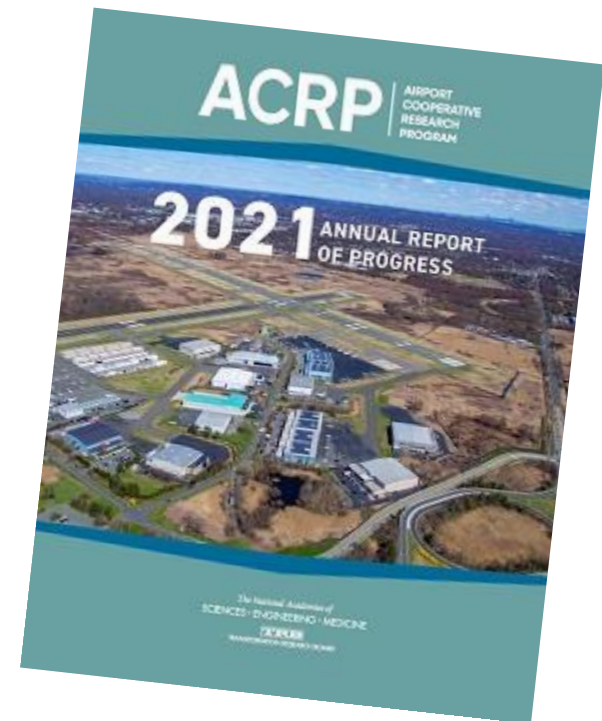
Steve Koester

- Steve Koester is the Senior Manager of Landside Business and Properties at Portland International Airport (PDX) overseeing the parking system of garages, surface lots and shuttle buses; the rental car operations; and ground transportation



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- Managed by TRB and sponsored by the Federal Aviation Administration (FAA).
- Seeks out the latest issues facing the airport industry.
- Conducts research to find solutions.
- Publishes and disseminates research results through free publications and webinars.



Today's Speakers



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InterVISTAS

Airport Cooperative Research Program Synthesis 118

Airport Parking Pricing Strategies

July 24, 2023

 TIME	 GARAGE	 OUTSIDE	 C CONCOURSE	 ECONOMY	 HOURLY
0-2 Hours	\$ 4.00	\$ 4.00	\$ 4.00		\$2 Per Hour (Max Time 2 Hours)
2-3 Hours	\$ 6.00	\$ 6.00	\$ 6.00	\$ 6.00 (Daily Max.)	
3-4 Hours	\$ 8.00	\$ 8.00 (Daily Max.)	\$ 8.00 (Daily Max.)		
4-5 Hours	\$ 10.00				
5-24 Hours	\$ 12.00 (Daily Max.)				

Today's Topics

- A. Why parking is important to airports
- B. Research process/survey results
- C. Overview of parking operations and revenue collection
- D. Rate-making strategies
- E. Future research needs

Topic Panel

- + Ijaz Ali, *Transportation Design & Engineering Services, Abbottabad, Pakistan*
- + Armin José Cruz, *Dallas-Fort Worth International Airport, DFW Airport, TX*
- + Dawoud Omar Stevenson, *Savannah Airport Commission, Savannah, GA*
- + Rawley Vaughn, *Steer, Alexandria, VA*
- + Kristian Wade, *Salt Lake Department of Airports, Salt Lake City, UT*
- + Amanda Woodin, *Kalamazoo/Battle Creek International Airport, Kalamazoo, MI*
- + Judith Jamison, *FAA Liaison*
- + Aneil Patel, *Airports Council International-North America Liaison*

- + Jordan Christian and Gail Staba, *ACRP Senior Project Officers*

A. Why parking is important to airports

- + Fundamental component of every commercial service airport
- + Most airline passengers and visitors use private vehicles
- + Passengers expect to be able to park their vehicles at the airport
- + Largest source of non-aero revenues, important contributor to airport's finances

<u>Hub Size</u>	<u>Number of U.S. airports</u>	<u>Parking and Ground Transportation Revenue</u>	<u>Non-Aeronautical Revenue</u>	<u>Parking and Ground Transportation Share of Non-Aeronautical Revenue</u>
Large hubs	28	\$3,013M	\$7,503M	40%
Medium hubs	36	\$1,036M	\$1,962M	53%
Small hubs	80	\$599M	\$1,281M	47%
Non-hubs	195	\$187M	\$599M	31%
Total	339	\$4,835M	\$11,346M	43%

Source: InterVISTAS Consulting Inc. analysis of FAA CATS data, February 2021

Project purpose/Scope of research

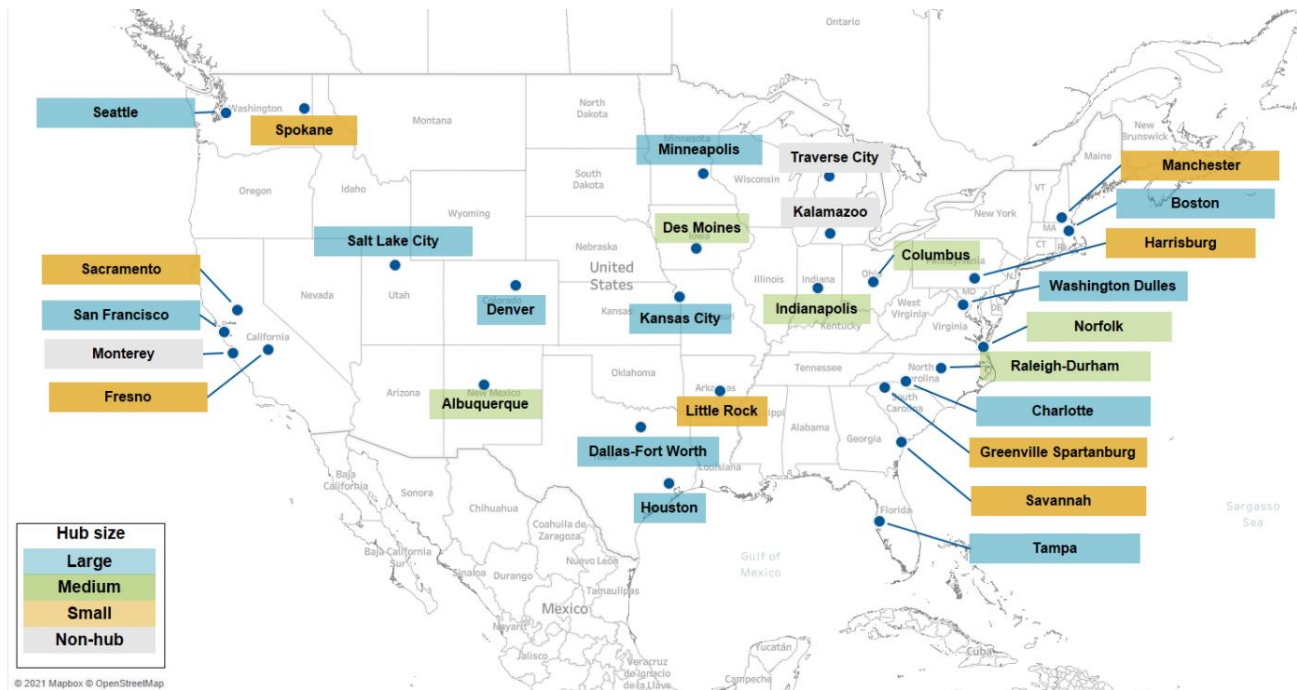
- + Purpose: Provide information to assist airport staff
 - Select and implement a rate-making strategy addressing their specific goals
 - Who lack relevant expertise and thus unable to best achieve goals

- + Scope:
 - Literature review
 - Surveyed airport staff responsible for parking operations
 - Documentation
 - Further research

- + Topics not addressed: Employee parking, non-U.S. airports, planning or design of parking facilities or revenue control equipment, or commercial vehicles

B. Airports surveyed

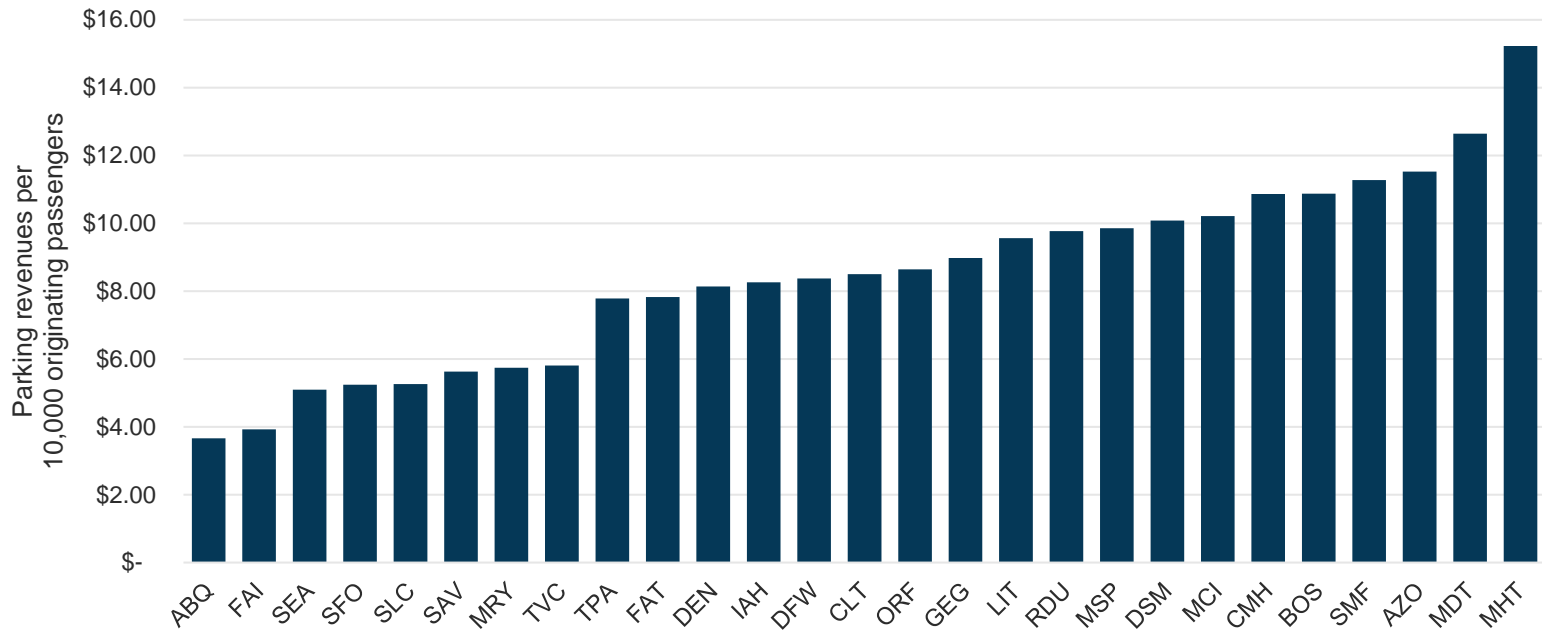
+ In-depth interviews conducted with staff of 38 airports



Characteristics of participating airports

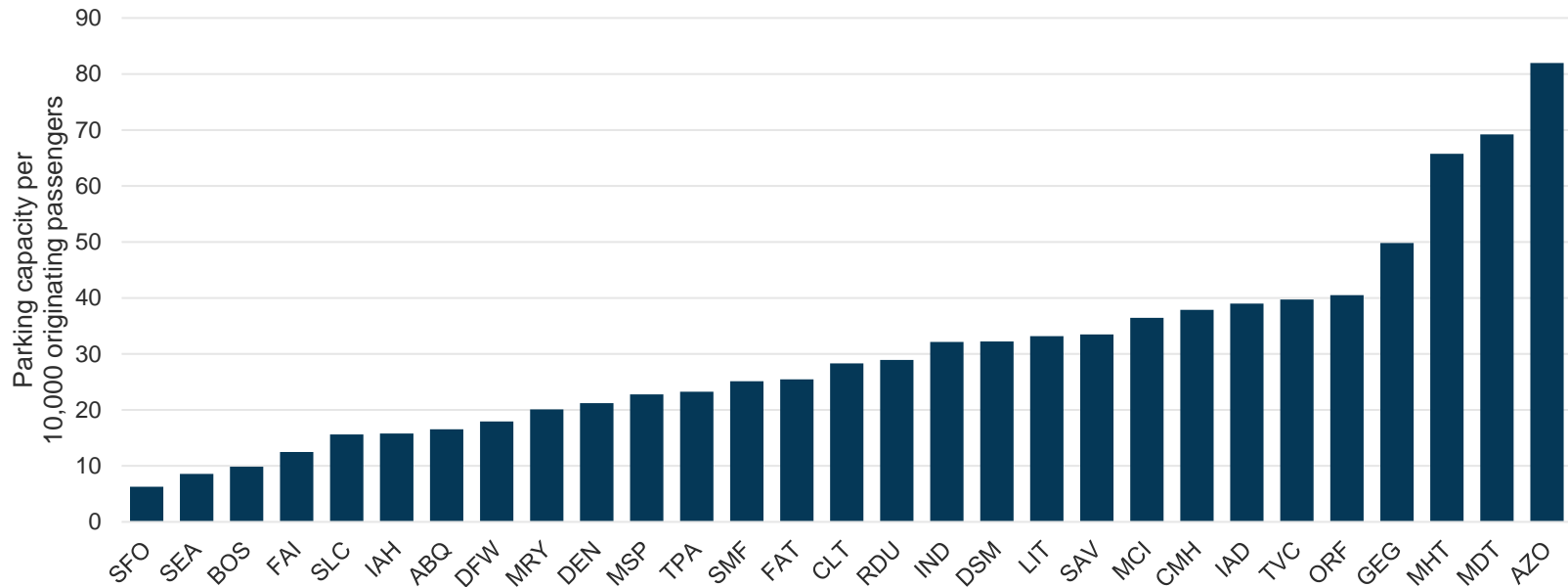
Hub size	Public parking capacity	Annual parking revenues	Daily rate range	
			Close-in	Remote/Economy
Large Hubs	11,133 – 44,285 spaces	\$62.1m – \$181.5m	\$10.00 - \$57.00	\$6.00 - \$44.00
Medium Hubs	1,859 – 18,944 spaces	\$9.3m – 67.4m	\$10.00 - \$30.00	\$5.00 - \$12.00
Small Hubs	667 – 21,236 spaces	\$2.1m – \$17.0m	\$8.00 - \$36.00	\$5.00 - \$10.00
Nonhubs	455 – 1,194 spaces	\$1.3m – \$1.7m	\$8.00 - \$24.00	\$8.00 - \$9.00

Parking revenue/originating pax —selected airports



Source: InterVISTAS Consulting Inc., based on data provided by individual airport operators February 2021

Parking capacity/originating pax—selected airports



Note. Capacity included here represents on-airport capacity and excludes capacity in privately operated off-airport lots, which can be significant at some locations.

Source: InterVISTAS Consulting Inc., based on data provided by individual airport operators, February 2021

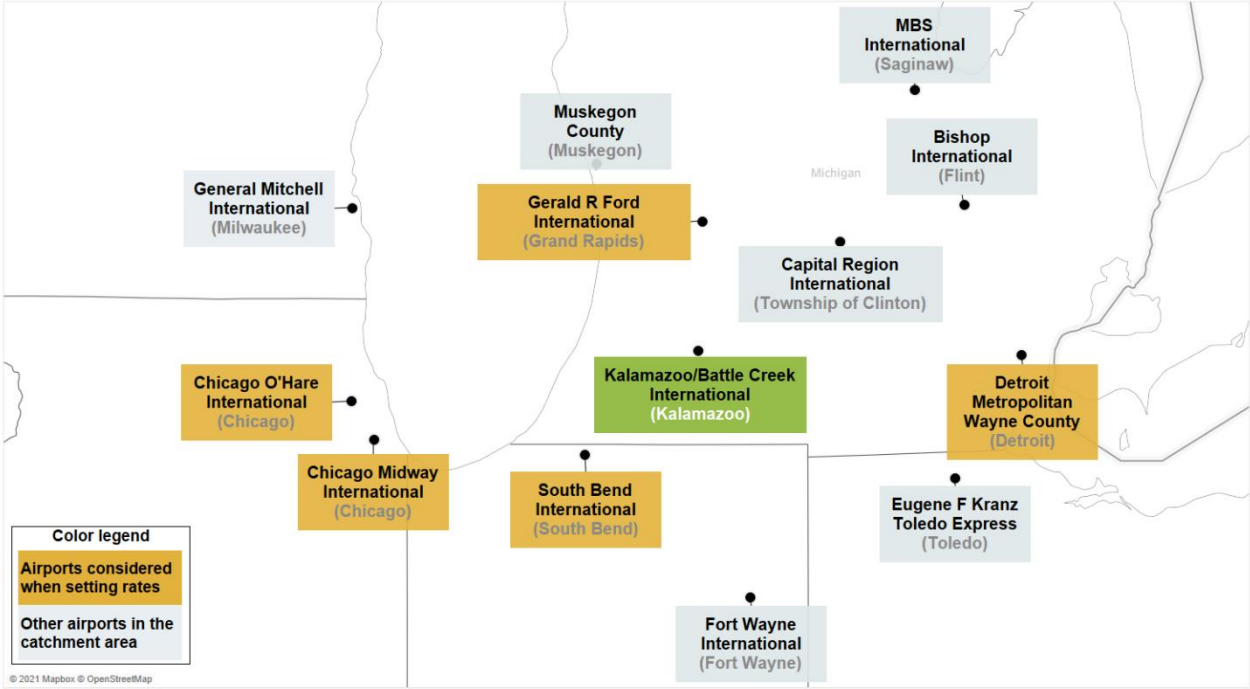
C. Parking operations & revenue collection: overview

1. Airport characteristics
2. Customer characteristics
3. Typical airport parking facilities and parking products
4. Common methods of operating airport parking facilities
5. Parking access and revenue control systems (PARCS)

C.1 Airport characteristics influencing parking rates

- + Acreage/physical size of airport property
- + Number of locally originating passengers
- + Mix and volume of airline passengers:
 - Business and non-business
 - Legacy and low-cost airline
 - Domestic and international
- + Geographic location/size of metropolitan area
- + Catchment area size/distance customers travel
- + Competition from other airports, other access modes, private businesses
- + Type of airport-airline business agreement
- + Willingness of management to accept risk

Competitors to Kalamazoo/Battle Creek International



C.2. Customer characteristics influencing parking rates

Passenger sensitivity to cost and convenience as indirectly indicated by:

- + Trip purpose/travel costs reimbursed by others
- + Airfare paid
- + Household income
- + Age of customers
- + Party size/amount of checked-baggage
- + Parking duration--parked for entire trip or dropped off by others
- + Comfort with structured parking

C 2 Typical airport parking facilities and products

Key differentiators among facilities and products

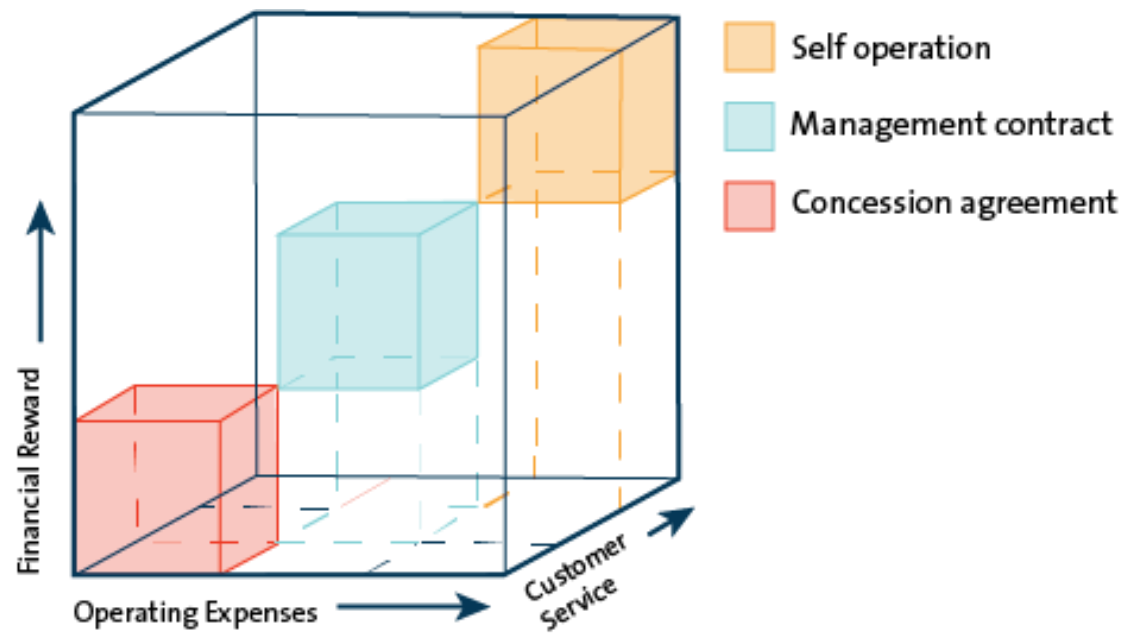
- + Proximity to terminal building
 - Unassisted walking distance
 - Number of level changes
- + Availability of
 - Covered/weather protection spaces
 - Valet parking at curbside or in parking facility
 - Spaces for passengers with special needs—ADA, EVs,
- + Ease of finding an empty space
 - Guidance to location of empty spaces
 - Ability to pre-reserve space/access “nested” area

C.3. Typical parking products

	Most costly			Least Costly
Most convenient	Valet			
		Hourly/Short-term		
			Daily/Close-in terminal parking	
Least convenient				Economy/shuttle parking

C.4. Common methods of operating parking facilities

- + Self-operation
- + Management contract
- + Concession agreement



C.3. Parking Access & Revenue Control Systems (PARCS)

PARCS capabilities may limit parking rate strategies

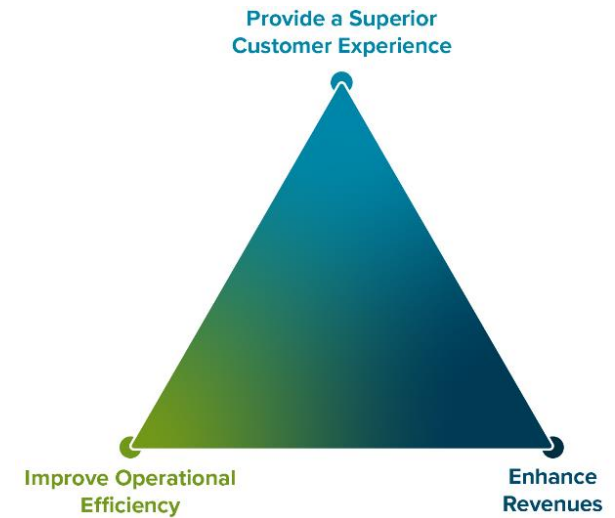
- + Simplest PARCS may only allow fixed rates calculated based on product and duration
- + More sophisticated PARCS allow:
 - Discounted rates for specific facility or dates
 - Reserved parking/on-line booking systems
 - Dynamic or variable rates/yield management

D. Match rate-making strategies management's goals

Most airport managers share common goals

1. Provide superior customer service
2. Improve operational efficiencies
3. Enhance parking revenues

But each airport places differing degrees of emphasis on each goal



Considerations when setting rates: selected airports

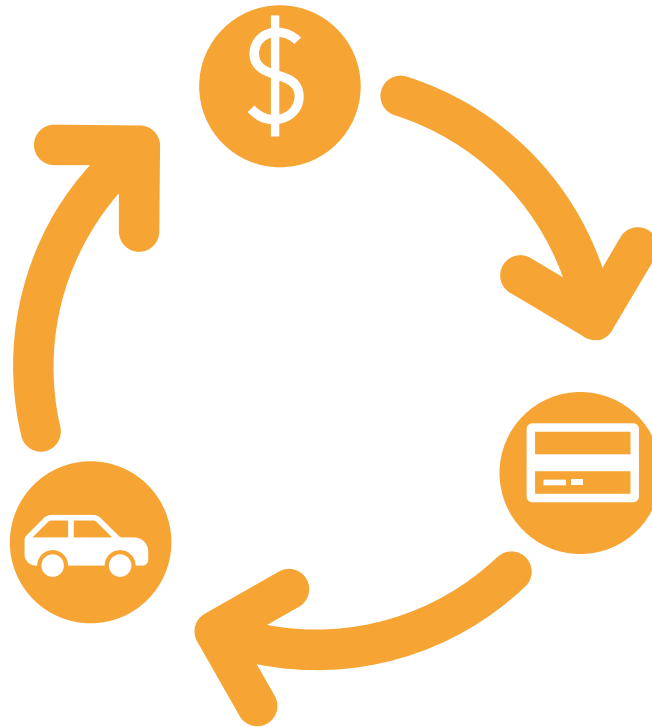
	Hub size			
	Large	Medium	Small	Non-hubs
Increase Revenues	High	High	High	High
Balance Demand	High	High	Low	None
Customer Satisfaction	High	High	High	None
Appropriate interval since last increase	High	High	High	None
Other Airports' Rates	Low	Medium	Low	None
Other Airports in your catchment area	None	None	Low	High
Off-airport parking rates	None	Low	Low	None
Surface access mode	Low	High	Low	Medium
<u>Color legend</u>				
Importance of consideration	High	Medium	Low	None

D.1. Common strategies to enhance customer service

- + Assure the availability of **convenient** spaces for customers dropping off or picking up passengers
- + Offer free parking for first 30 minutes (or other time increment)
- + Assure space availability—
 - Reservations??.

D.2. Common strategies to improve operations

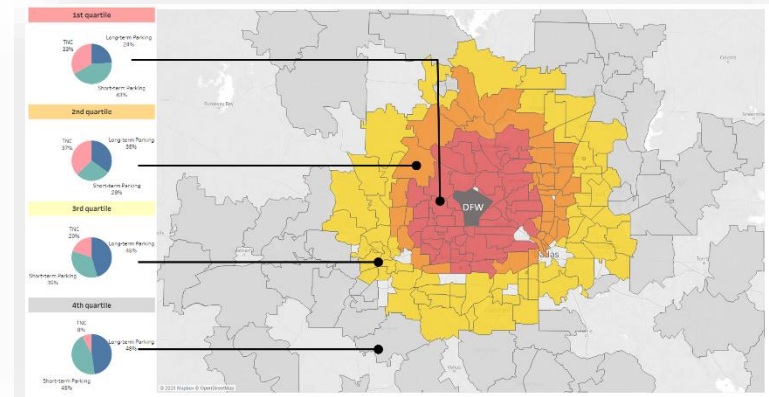
- + Charge whole dollar amounts
- + Promote the use of credit cards
- + Include local taxes in parking rate



Understanding your customers and competition

+ Understanding your customers

- Develop customer profiles to determine sensitivity to cost & convenience/willingness to pay
 - Trip purpose, trip duration, party size
 - Catchment area size and access alternatives
 - Vehicle protection
- Surveys and focus groups of on- and off-airport parking customers
- Monitor trends in duration patterns, parking transactions, revenues, and occupancies
- Obtain data from frequent parker/loyalty programs



Surface travel distance to/from airport influences willingness to pay for airport parking

Our main goals are revenue production and competitiveness. We use parking pricing as a marketing tool to compete with larger airports in the area. We are cognizant of other airports; we are easier to get to and we want our prices to be lower.

—Non-hub airport staff

Understanding your customers and competition

+ Understanding your competition

- **Other airports: Advertise savings in drive time, parking costs, other differentiators**
- Carefully monitor off-airport operator prices, promotions, services, occupancy
 - Sign-up for promotions
 - Mystery shop
 - Web research
 - Monitor reported data
 - Identify market segments using credit card data sets

COMPARE JACKSONVILLE, NC'S OAJ – ELLIS AIRPORT TO OTHER AIRPORTS IN THE REGION

This cost calculator will give you a close estimate of the cost of your trip from each of these airports. All you have to do is check the prices for your travel from OAJ, RDU and ILM, enter the trip cost and the calculator will do the rest. It will show you the best value for your dollar, all things considered.

Enter Airfare	To and From Jacksonville OAJ \$ <input type="text"/>	To and From Raleigh RDU \$ <input type="text"/>	To and From Wilmington ILM \$ <input type="text"/>
Miles (Round-trip) Mileage Cost (\$0.55/mile)	0 ≤ 20 miles \$11	> 268 miles \$148	> 106 miles \$59
Travel Time Travel Time Cost (\$20/hr)	≤ 0.5 hrs \$10	> 4 hrs \$80	< 3 hrs \$60
Days Parked: <input type="text" value="1"/> Total Parking Cost <small>*At OAJ - the 7th day is free</small>	\$9.00/day \$55.00/week Not Parking <input type="checkbox"/>	\$14.00/day \$98.00/week	\$11.00/day \$70.00/week
Total Final Cost	\$ 0	\$ 0	\$ 0

CALCULATE COST >

Understanding your customers and competition

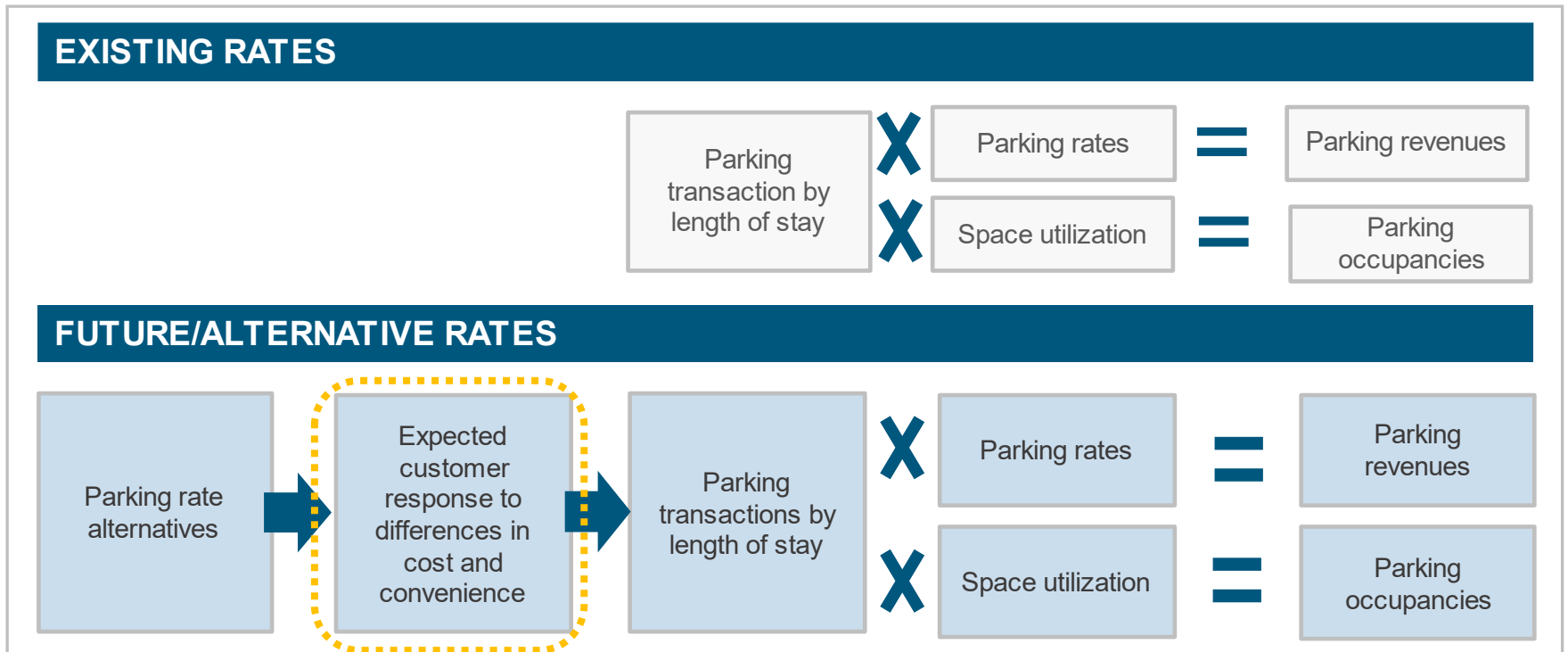
+ Understanding your competition

- Other airports: Advertise savings in drive time, parking costs, other differentiators
- Carefully monitor off-airport operator prices, promotions, services, occupancy**
 - Sign-up for promotions
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 - Identify market segments using credit card data sets

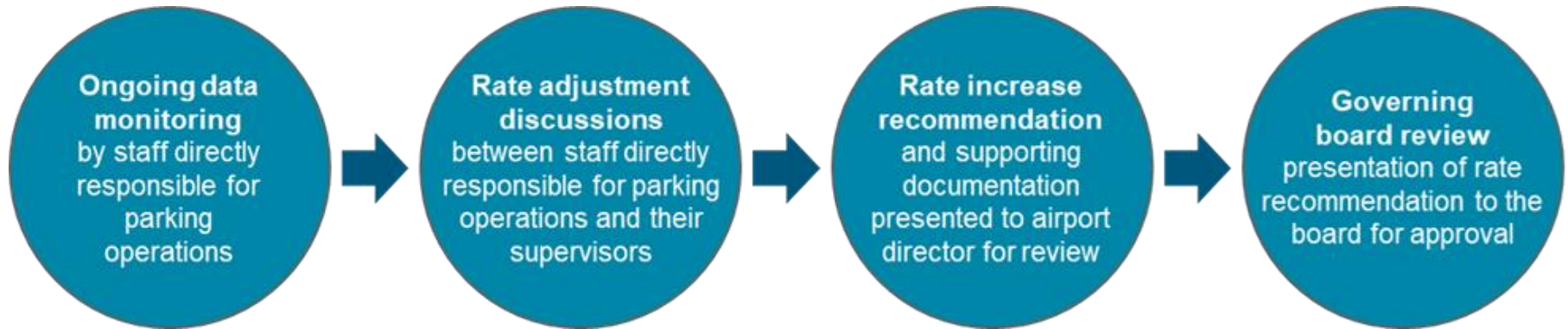
Service	Price	Distance to SFO	Features
SFO Valet Service	\$49.95 per day	1 miles to SFO	Parking Types: Premium valet Covered, Open 24/7
The Westin/Aloft San Francisco Airport	\$14.00 per day	1 miles to SFO	Parking Types: Self Uncovered, Free Shuttle, Open 24/7
Travelodge SFO Airport Parking	\$34.99 per day	2 miles to SFO	Additional Safety Measures Taken, Parking Types: Self Uncovered, Free Shuttle, Open 24/7
Crowne Plaza San Francisco Airport	\$10.00 per day	4.4 miles to SFO	Additional Safety Measures Taken, Parking Types: Self Uncovered, Open 24/7
Burlingame Airport Parking	\$10.00 per day	miles to SFO	Parking Types: Self Uncovered, Free Shuttle, Open 24/7

The map on the right shows the San Francisco International Airport and surrounding areas. Red markers indicate the locations of the five parking services listed on the left. The map includes labels for various neighborhoods like Paradise Valley, South San Francisco, and Burlingame.

Evaluating changes to parking rates

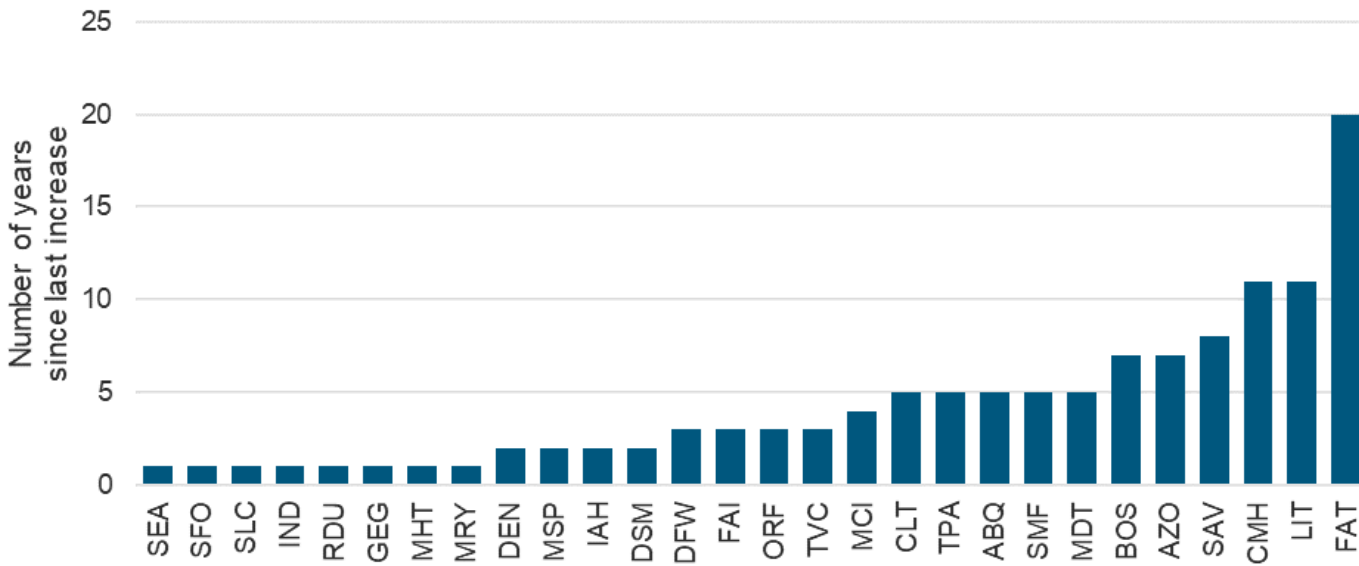


Process to change parking rates



- Elapsed time since last rate change
- Cost of parking at peer airports and regionally
- Impacts on customer experience, operations, and revenues
- Effort to obtain approval

Elapsed time since last parking rate: selected airports



E. Future Research Needs

- + Compare benefits and costs of OBS and yield management systems
- + Best practices for acquiring and deploying PARCS
- + Revisit topic as more sophisticated PARCS become more common

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InterVISTAS
A decorative graphic element consisting of a horizontal, curved brushstroke that transitions from a light blue on the left to a bright green on the right.

Today's Speakers



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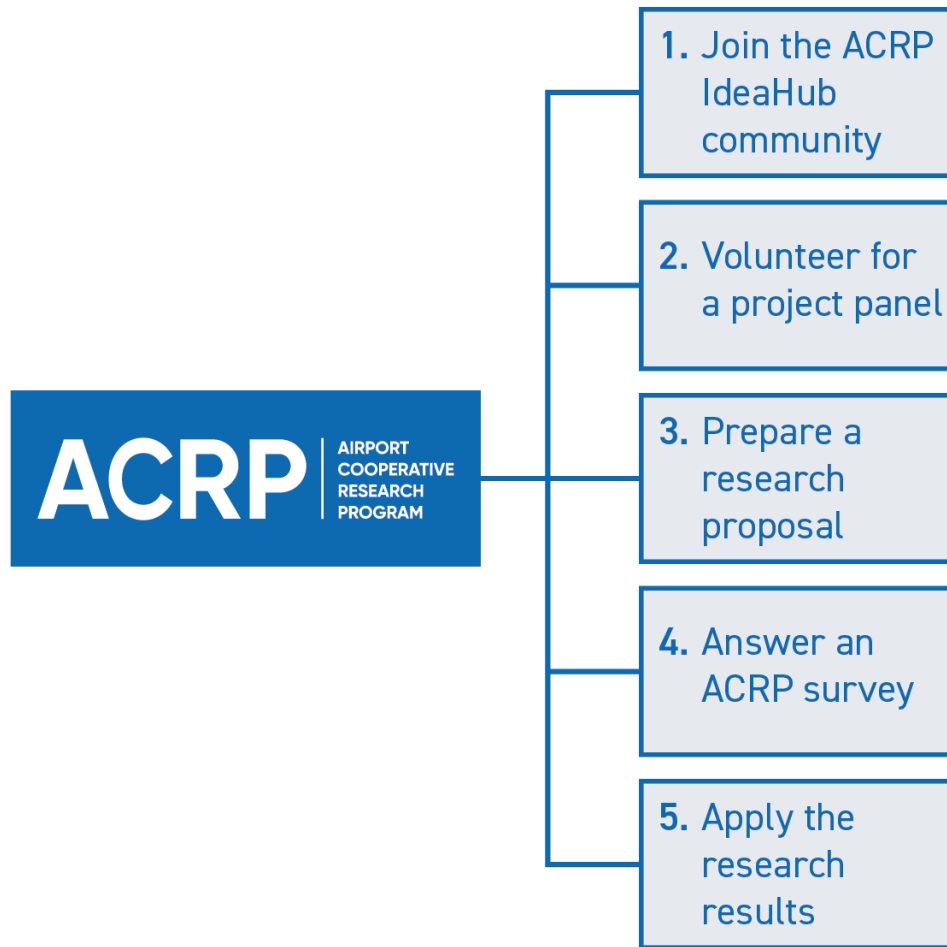
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