

Welcome to today's **University Business** web seminar

Camera-Based Parking Guidance: The Evolution of Campus Parking



Jeff Sparrow
Regional Account
Manager
Park Assist



Scott Dubois
Vice President of
Product Management
Park Assist

Thank you for joining us! The web seminar will start promptly at 2:00 ET.

Camera-Based Parking Guidance: The Evolution of Campus Parking

Thank you for joining us! The web seminar will start shortly at 2:00 ET.

For technical support:

Use the Chat panel at the right of your screen. Select the name of our event producer, Jason York, and type your message.

"Chat" for tech support

No computer speakers? Prefer to listen privately?

Dial the phone number and access code posted in the Chat window.

To submit a question to our panel:

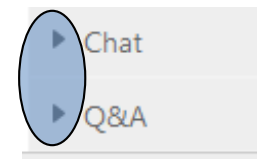
Use the Q&A panel at the right of your screen. Send your question to All Panelists, the default option.

"Q&A" for panelist questions

Ask: **All Panelists**

Don't see a panel?

Click the "expand panel" triangle in front of the panel name.



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This web seminar is sponsored by:



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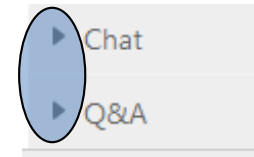


“Q&A” for panelist questions



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Camera-Based Parking Guidance:

The Evolution of Campus Parking



**PARK
ASSIST®**

REALLY SMART PARKING

Our Experts



Jeff Sparrow,
Regional Account Manager

Over 20 years of experience in parking operations, technology, and sales

One of Park Assist's most veteran sales team members



Scott Dubois,
Vice President of Product Management

Over 10 years of experience, touching nearly every facet of the parking guidance business

Focused on aligning our product innovations with our clients evolving needs



About Park Assist

**Recognized as
industry leader by our
worldwide clients.**

The world's only patented
camera-based PGS.

Pioneers in PGS with
business intelligence

Backed by TKH Group:
\$1.8+ billion company



Euronext Amsterdam Code: TWEKA



**Award-winning technology
for guidance and beyond.**

Patented in US, UK, AU & CA

Multifaceted smart-sensing
solutions

Rich API-driven ecosystem

The innovation hub for next-generation parking.

Elevating CX through smart infrastructure

Unparalleled data down to the bay

Business intelligence to drive better decisions

Integrating technology for future needs





**Award-winning technology
for guidance and beyond.**

Most camera-based
installations in the world

Proven in 41 countries
and counting

Clients
you may
know

Colleges/Universities



UC San Diego



THE STATE OF CAMPUS PARKING TODAY: Trends & Challenges

CONNECTION
ANALYSIS
DATA
SEARCHING
VERIFICATION

Primary parking challenges

Security

Permit & policy compliance

Time & convenience

Surface lot parking



Major parking technology trends

License plate recognition (LPR)

Access & revenue control

Automated policy compliance

Surveillance





AN INSIDE VIEW:

Camera-Based Parking Guidance

The evolution of PGS technology:



zonal system

binary yes/no

occupancy only

rudimentary data

manual performance
monitoring onsite

low accuracy,
needs manual resets



ultrasonic

binary yes/no

occupancy only

rudimentary data

manual performance
monitoring onsite

moderate accuracy,
hard to verify



camera-based

data-driven + LPR

sensor with a brain

robust data & live video

advanced tech
remote monitoring

verified 99% accuracy

M4 Smart Sensor

5.0 Megapixel
CMOS Camera

Streaming H.264
via RTSP

Quick installation
onto custom
mounting track

800 Mhz Cortex A9
Dual-Core Processor

PARK ASSIST®

Bright multicolor
LED indicator light with
16m color possibilities

5.0 Megapixel
CMOS Camera



ELEVATING CX ACROSS THE JOURNEY

A seamless parker journey



App to find
availability



Wayfinding
signs on arrival



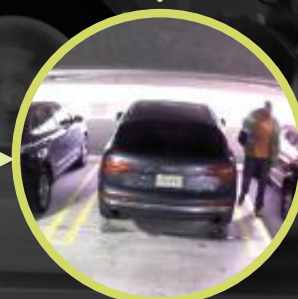
Interior
directionals



Smart-Sensor LEDs
*signaling drivers
to vacant bays*



Find Your Car™
on return



Reduced Time to Park
*through data/
navigation synergy*



Exit to roadway
*includes validation by
LPR exit camera
(under development)*



HOW INNOVATION IS MAKING AN IMPACT:

Improving Campus Parking



Reduce Time2Park

Parking guidance systems reduce the time it takes to park anywhere from 25% to 60%*

Advanced wayfinding signage and bright signaling smart-sensor LEDs direct faculty, students and visitors to open spaces

Identify parking before entering the garage and quickly upon return

* According to a science-based benchmarking study on time-to-park conducted by Park Assist in collaboration with the Brisbane Airport Corporation (BAC). This groundbreaking before-and-after PGS analysis encompassed two parking facilities with a combined total of 7,903 individually M4-monitored bays.



Reduced search time = increased sustainability

Up to 44% search-time reduction decreases fuel and emissions

44,554-gallon reduction of gas per year for average shopping mall

Active member of Parksmart: helped to develop certification

* According to an Arup study commissioned by Park Assist for the 2,513-space parking facility at Westfield Century City Shopping Centre in Los Angeles. Comparative data was recorded one month before and one month after the installation of a Park Assist camera based smart-sensor system.

Increase security

Surveillance from a unique vantage point

Smart-sensor cameras identify vehicles and monitor occupancy in every parking space

Capture streaming surveillance video

Campus crime deterrence and additional protection against liability





Streamline & optimize operational efficiencies

Monitor spaces and availability in real-time

Real-time data distributed to signage to quickly signal availability

Data aggregated in dashboards and mobile apps so that staff can understand facility performance and utilization

Policy compliance & enforcement

Keeping a constant eye on parking policies

Understanding the utilization and who is abusing parking policies over time

Automating the process of issuing citations

User group control across multiple parking assets without fixed barriers





**PARK ASSIST'S LATEST SOFTWARE
DEVELOPMENT:**

Introducing INX

The culmination of 15 years of parking guidance experience

New cloud-based user interface
powering the future of guidance

Real-time data, IoT device
management, ecosystem integration,
and data security

Enhanced communication between
the Park Assist's hardware and
operating system

Completed control of your garage



INX™

POWERED BY  PARK ASSIST®

Interactive cloud-based platform with actionable real-time data

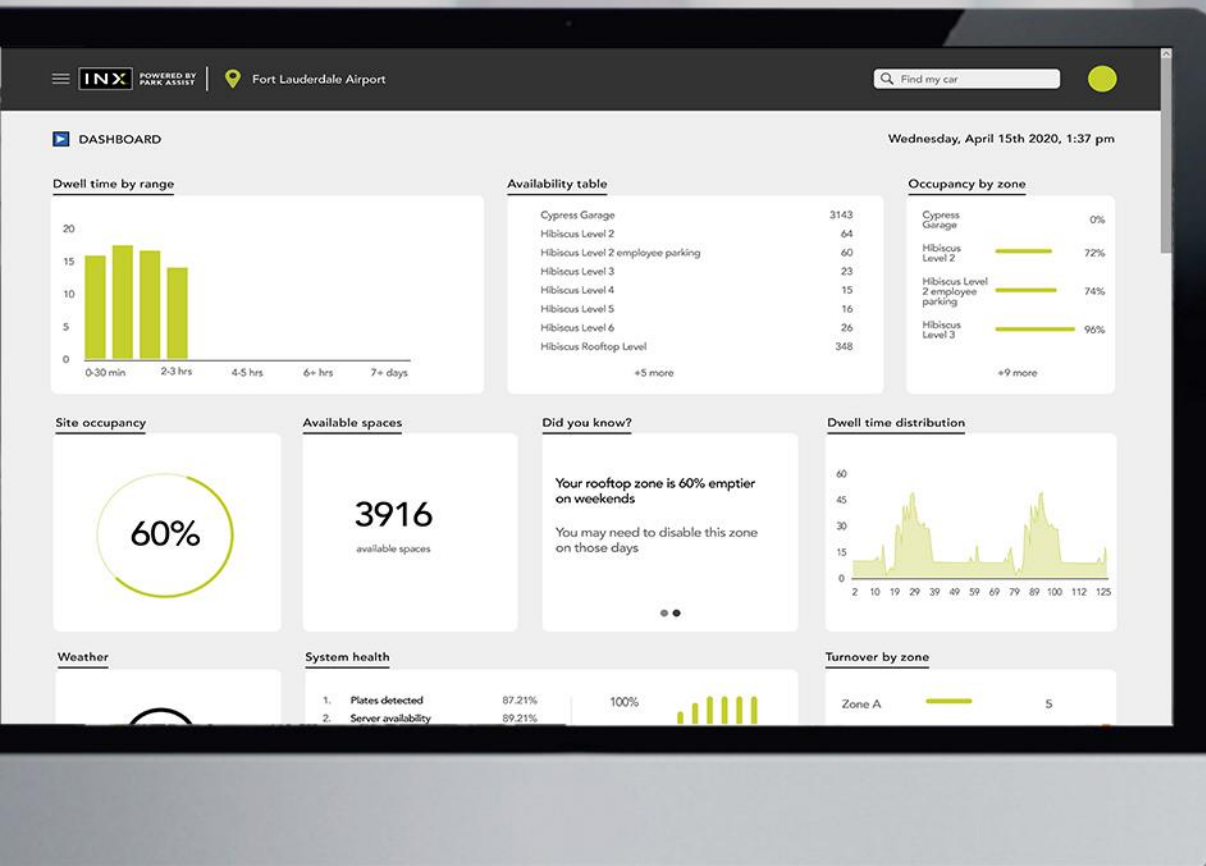
Business intelligence modules, service and support access, and optional applications for enhanced features and greater control

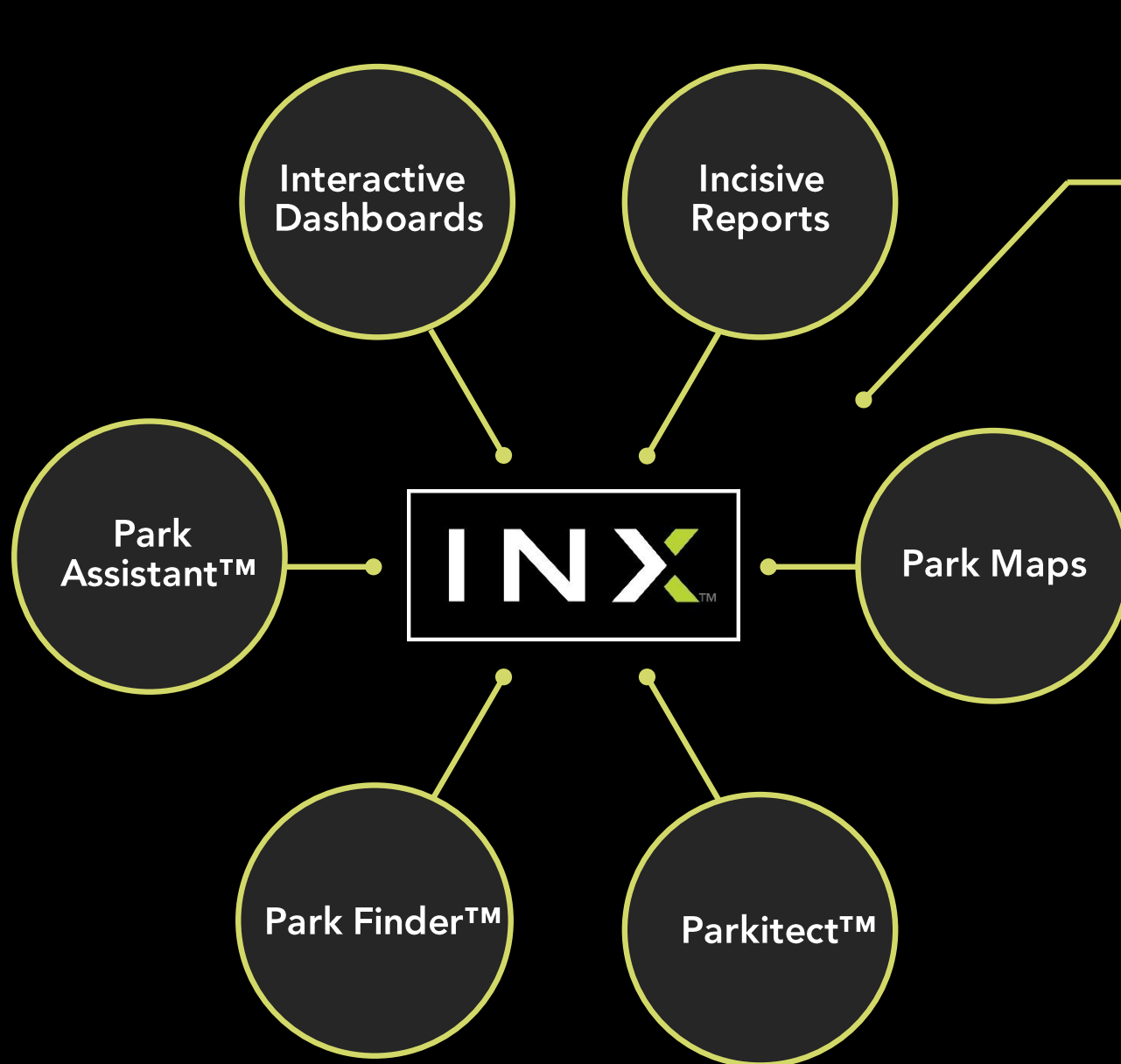
Live & historical data: maps, signs and regions

Comprehensive reporting

Business intelligence at a glance

Intelligent mining of actionable system data





Individual
PREMIUM
Subscriptions

Premium Subscriptions:
Optional value-adds to
extend the power of INX.

- ParkView™
- Enterprise Services
- Predictive Analytics
- Park Reserve
- Time2Park™/Time2Exit™
- Object Detector
- Customer Satisfaction Tracking



SUCCESS STORIES: UT Dallas

CASE STUDY

University of Texas at Dallas

Pre-PGS Scenario:

Substantial 10-year growth

Parking capacity doubled from
7,000 to 14,000 spaces

PGS desired for 3 new garages:
adding over 2,700 spaces



CASE STUDY

University of Texas at Dallas

Client Objectives:

More streamlined, enjoyable CX for visitors, students, faculty/staff & vendors

Enhance perceived value of permits to increase adoption

Generate actionable data for analysis, management and forecasting



CASE STUDY

University of Texas at Dallas

Results & Improvements:

Enhanced experience with reduced time-to-park

Increased permit usage through enhanced perceived value

Ability to flex and forecast parking needs

Adds to the UT Dallas sustainability story



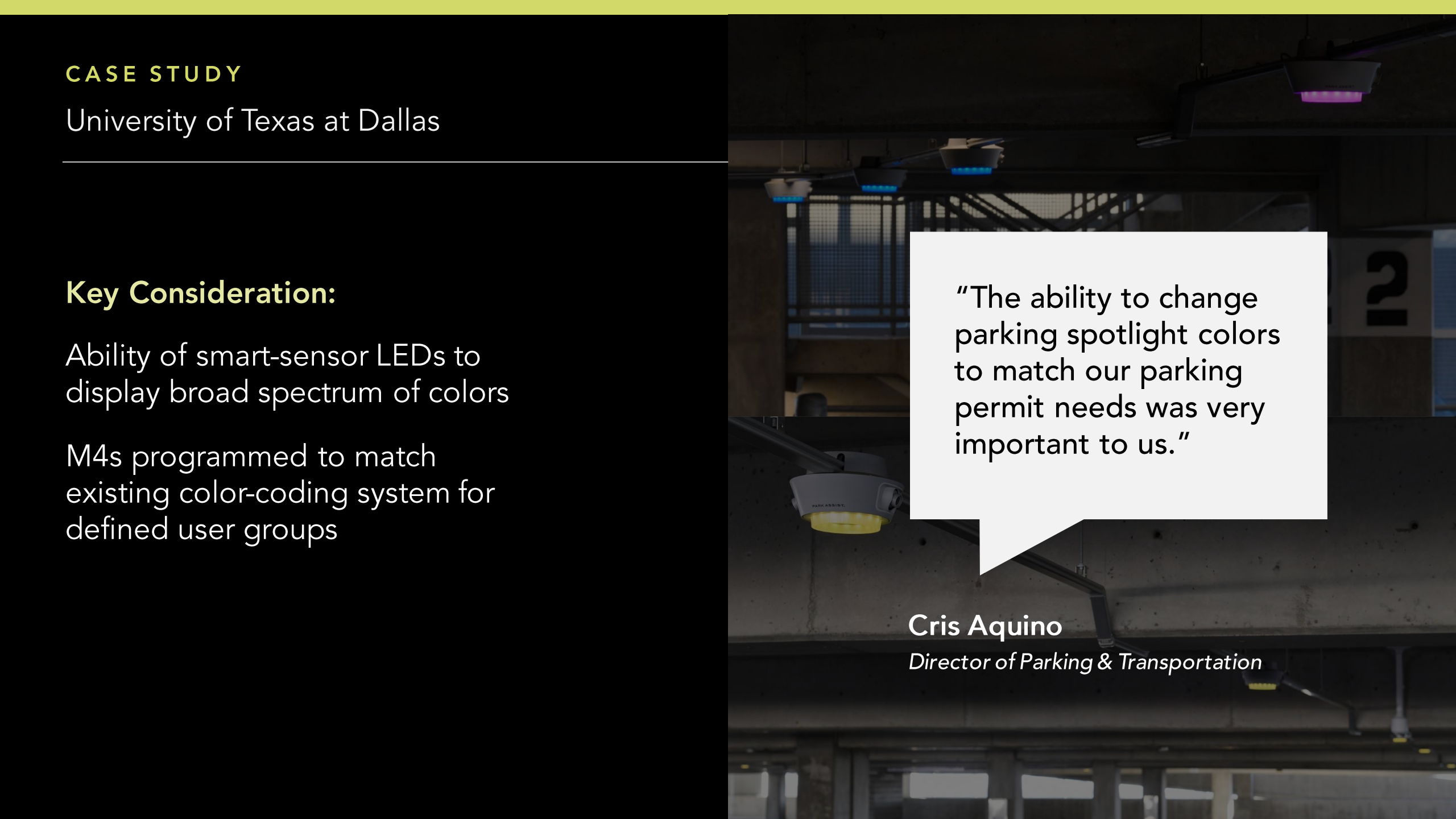
CASE STUDY

University of Texas at Dallas

Key Consideration:

Ability of smart-sensor LEDs to display broad spectrum of colors

M4s programmed to match existing color-coding system for defined user groups



"The ability to change parking spotlight colors to match our parking permit needs was very important to us."

Cris Aquino

Director of Parking & Transportation

The innovation hub
for next-generation parking.



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Q&A



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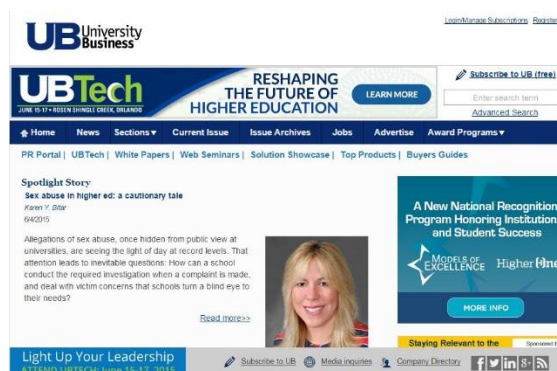
Q&A

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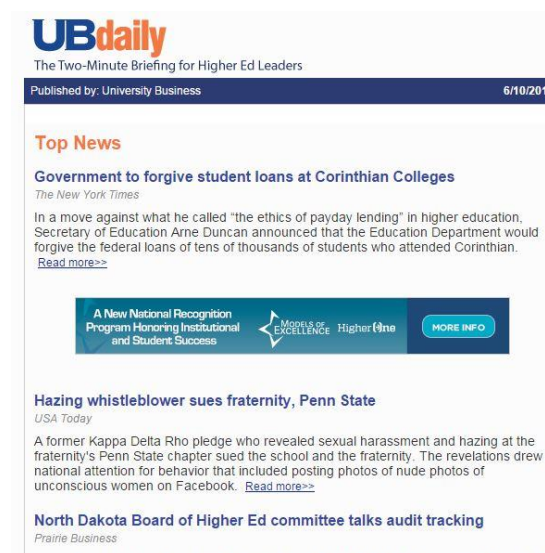
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