Q-Free PGS Overview Presentation March 9, 2017

LEADING THE WAY

What is Parking Guidance?

Tracking of vehicles entering/exiting a parking facility/level/space

Alerting drivers to the number of available spaces and location and/or easiest route

Real-time space availability to drivers is conveyed via intelligent signs (LED & VMS) as well as mediums such as websites and smart phone applications

LEADING THE WAY

Benefits of a PGS System

3

Optimizes the available inventory (substantial amount of inventory goes unused due to inability to locate)

Allows operator/owner maximum use of inventory and therefore maximize applicable revenues

Tracks and logs all beneficial statistical data

Reduces the time in finding an available space increasing the driver friendly experience

Reduction in emissions, air & noise pollution, reducing the impact on the carbon footprint

Keeps customers coming back

Types of PGS Systems: Facility Counting

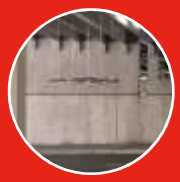
4

Tracking of vehicles entering/exiting a parking garage or surface lot

Displaying this information on intelligent signs at entry

Level Counting

5 →



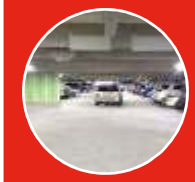
Same as facility counting with additional counting points at internal ramp systems

Expansion to multi-level master panel sign/s at garage entry indicating space availability per level

Additional signs at each level entry showing current floor plate availability

Single Space Monitoring

6 →



Sensor monitors status of individual parking space

Status is displayed through internal colored LEDs

Multi-level master panel sign at garage entry indicating space availability per level

Individual level space availability indicated on level signs at level entry

End of aisle displays can be used to direct drivers to available spaces in a particular aisle or zone

End of Space Ultrasonic Single Space Sensor

- New TUS-100 end of stall sensor with higher visibility eliminating need for external lamp
- Located above each parking stall in the parking facility
- Red, green, blue, and yellow LEDs indicating availability
- Any 3rd color combination is also available
- Ceiling mounted
- Counting accuracy of 99%

Ultrasonic Directional Sensor (USDS)

- Suspended over entry/exit (facility counting) and internal ramp system (level counting)
- (3) Unit cluster configuration at wide garage/level entrances/exits up to 24 feet width
- Standard single unit configuration at standard width garage/level entrances exits up to 12 feet width
- Offline operation if communication to PGS server fails
- Counting accuracy of 98%

Central PGS Software

- **Dashboard overview**
- **Central communication to LED signage and sensors**
- **Real-time monitoring of garage occupancy on floor plate GUI**
- **Complete reporting and statistics**
- **“Scaleable” design for roadway signs, radio interface, additional car parks, etc.**
- **Total parking utilization for the structure in total /by level/by space on an hourly/daily/monthly basis**
- **Single space reservations, monitoring of handicapped spaces, single space guidance, etc.**
- **API tool for exporting data to 3rd party applications such as web sites, mobile apps, etc.**

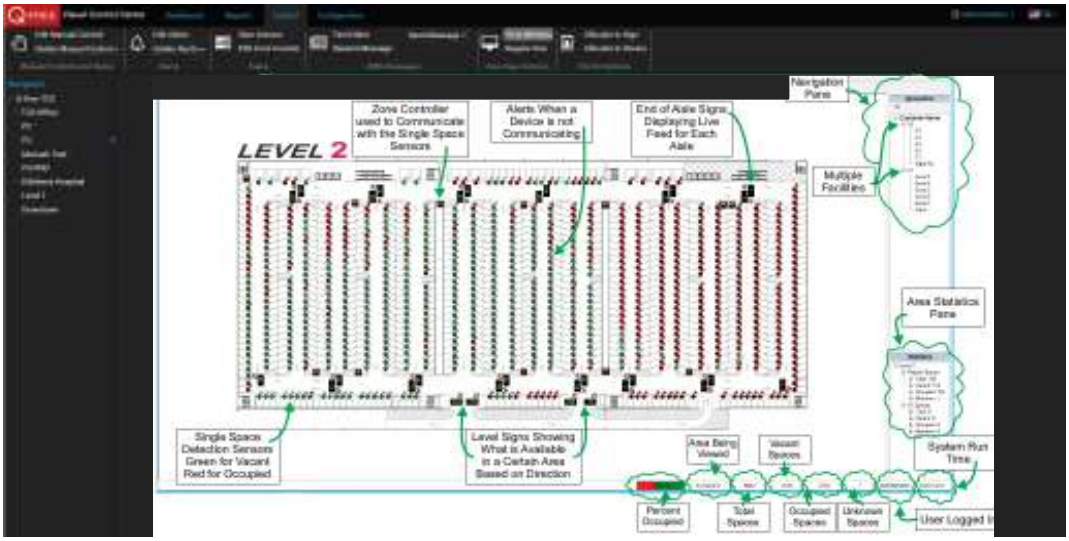
LEADING THE WAY

Dashboard

LEADING THE WAY

Graphical User Interface Screenshot

11 →



LEADING THE WAY

Sample Installations: Children's Hospital – Boston, MA USA

12 →

LEADING THE WAY

Cosmopolitan Hotel & Casino – Las Vegas, NV USA

13 →

LEADING THE WAY

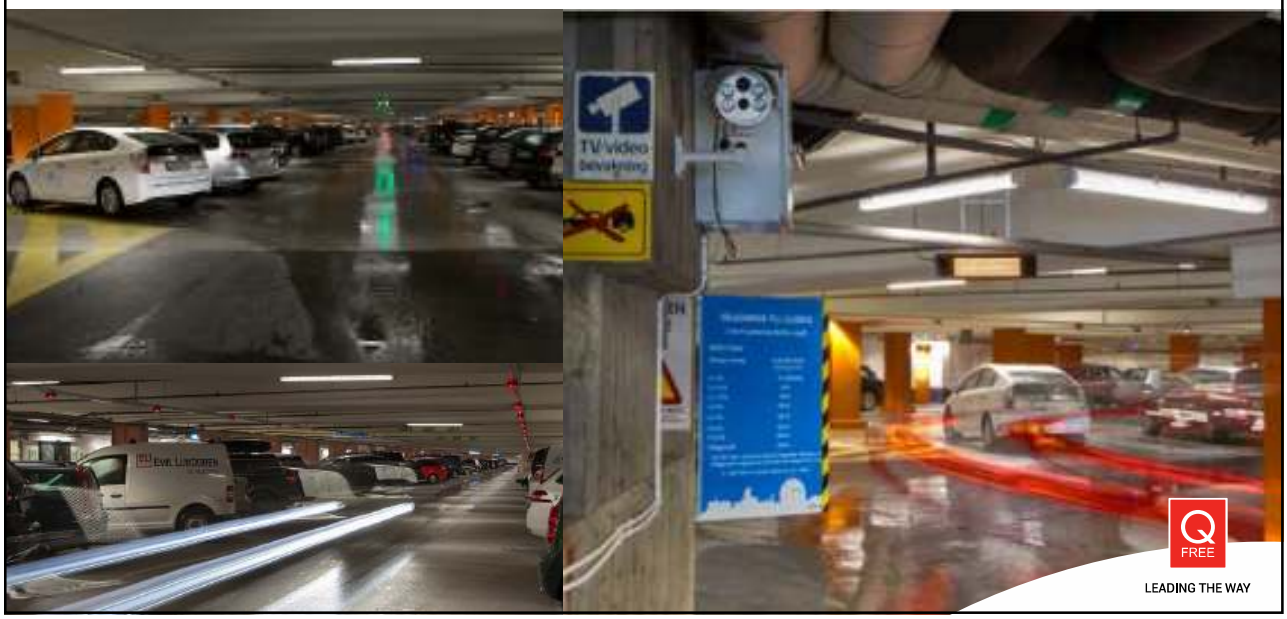
Crown Casino & Hotel – Melbourne, Australia

14 →

LEADING THE WAY

Ericsson Globe – Stockholm, Sweden

15 →



LEADING THE WAY

Florida Hospital – Orlando, FL

16 →

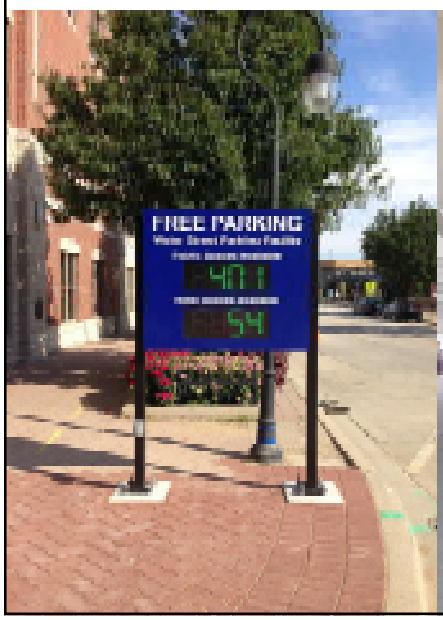
LEADING THE WAY

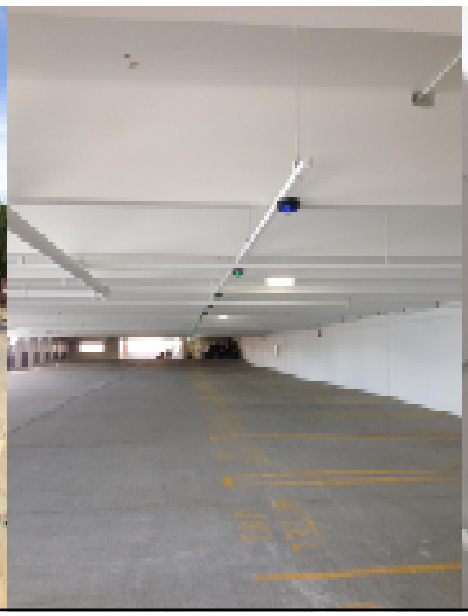
Hollywood Hotel & Casino Jamul, CA

17 →

Naperville Water Street Hotel & Mixed Use Garage

18 →

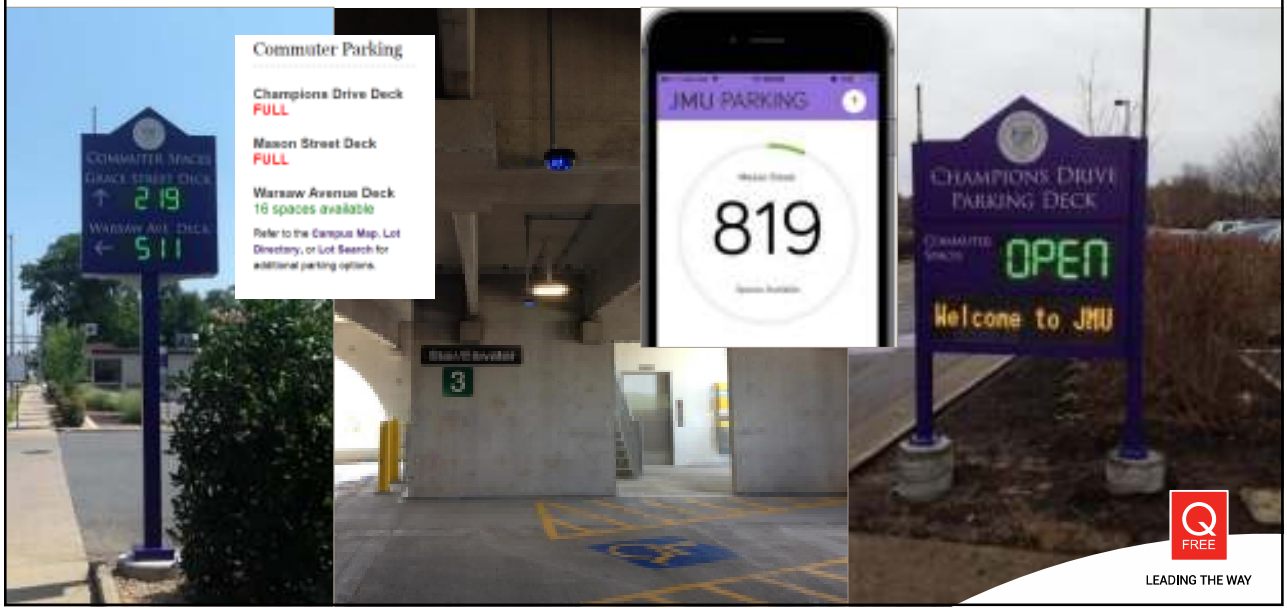




GO Transit Metrolinx – Greater Toronto Area, ON Canada

Q FREE
LEADING THE WAY

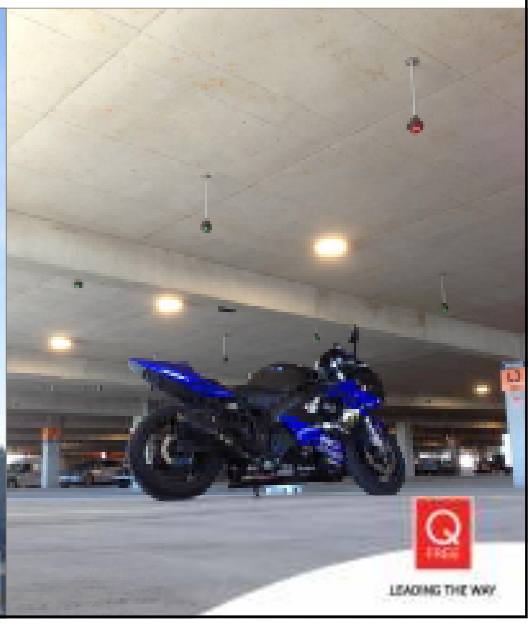
James Madison University – Harrisonburg, VA



Q FREE
LEADING THE WAY

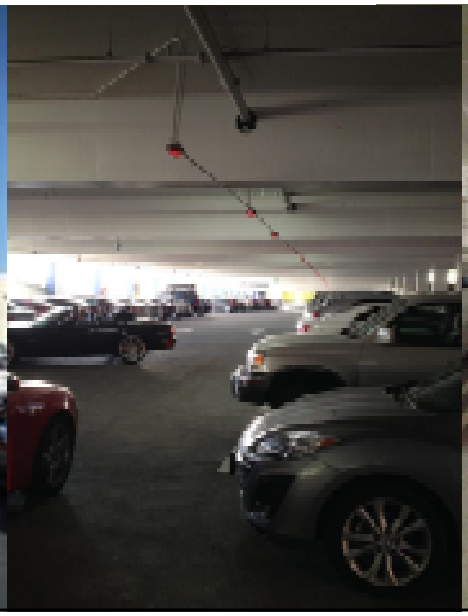
Reedy Creek Garages (Disney) – Orlando, FL

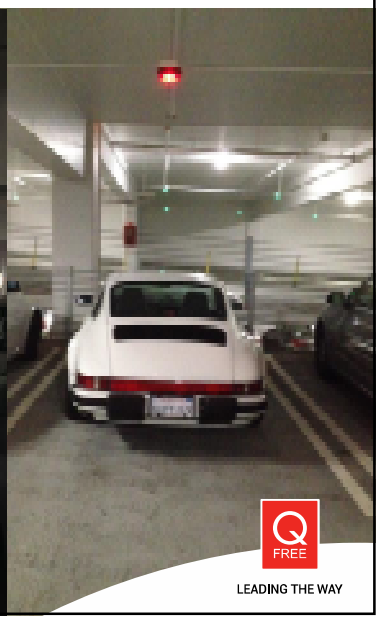
21 →



Santana Row Shopping Center – San Jose, CA

22 →

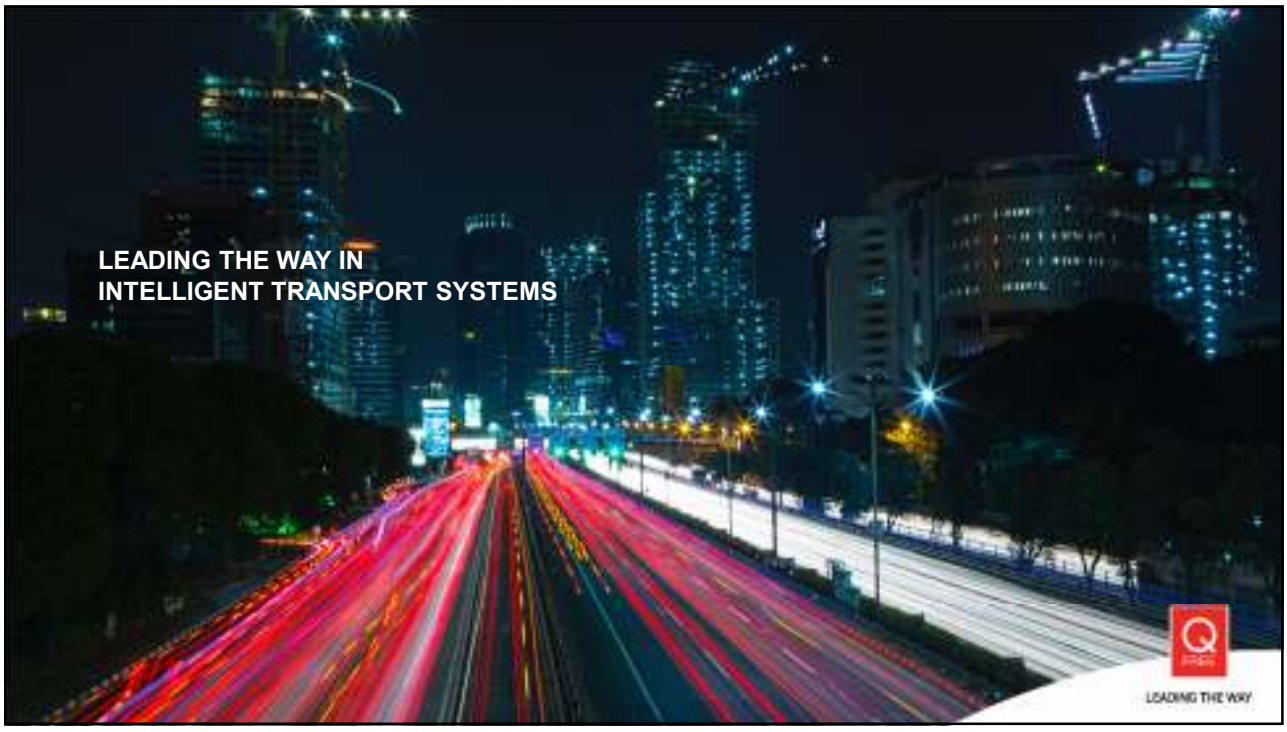




Contact Information

For additional information please contact:

Dave Radford
CEO
Q-Free Boston
55 Union Avenue
Sudbury, MA

P. 978-443-2527 x36
E. dave.Radford@q-free.com

LEADING THE WAY