frogparking

the complete parking
management solution

response to RFP #12109-885

prepared for:
the city of fort lauderdale

BID/PROPOSAL CERTIFICATION

Please Note: If responding to this solicitation through BidSync, the electronic version of the bid response will prevail, unless a paper version is clearly marked **by the bidder** in some manner to indicate that it will supplant the electronic version. All fields below must be completed. If the field does not apply to you, please note N/A in that field.

If you are a foreign corporation, you may be required to obtain a certificate of authority from the department of state, in accordance with Florida Statute §607.1501 (visit http://www.dos.state.fl.us/).

Company: (Legal Registration) Frogparking Inc   EIN (Optional): 352601338

Address: 1904 Lynnegrove

City: Manhattan Beach   State: California   Zip: 90266

Telephone No. +1888 950 3764   FAX No. _____   Email: accounts@frogparking.com

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Delivery: Calendar days after receipt of Purchase Order **(section 1.02 of General Conditions):** _____

Total Bid Discount **(section 1.05 of General Conditions);** _____

Does your firm qualify for MBE or WBE status **(section 1.09 of General Conditions):**   MBE _____ WBE _____

ADDENDUM ACKNOWLEDGEMENT - Proposer acknowledges that the following addenda have been received and are included in the proposal:
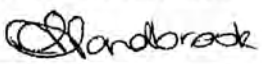
Addendum No.	Date Issued	Addendum No.	Date Issued	Addendum No.	Date Issued
5	March 22,2018	6	April 3, 2018	7	April 4, 2018

VARIANCES: If you take exception or have variances to any term, condition, specification, scope of service, or requirement in this competitive solicitation you must specify such exception or variance in the space provided below or reference in the space provided below all variances contained on other pages within your response. Additional pages may be attached if necessary. No exceptions or variances will be deemed to be part of the response submitted unless such is listed and contained in the space provided below. The City does not, by virtue of submitting a variance, necessarily accept any variances. If no statement is contained in the below space, it is hereby implied that your response is in full compliance with this competitive solicitation. If you do not have variances, simply mark N/A. **If submitting your response electronically through BIDSYNC you must also click the "Take Exception" button.**

The below signatory hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid/proposal. I have read all attachments including the specifications and fully understand what is required. By submitting this signed proposal I will accept a contract if approved by the City and such acceptance covers all terms, conditions, and specifications of this bid/proposal. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a response, that in no event shall the City's liability for respondent's direct, indirect, incidental, consequential, special or exemplary damages, expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of Five Hundred Dollars ($500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City's protest ordinance contained in this competitive solicitation.
Submitted by:

Shareena Sandbrook _____   _____
Name (printed)   Signature

04.30.2018 _____   Managing director _____
Date: Title

revised 04/10/15

NON-COLLUSION STATEMENT:

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

> 3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).
>
> 3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

<div align="center">

NAME   **RELATIONSHIPS**

</div>

_____   _____

_____   _____

           _____

           _____

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.

SECTION VI - COST PROPOSAL PAGE

Proposer Name: Frogparking INC

Proposer agrees to supply the products and services at the prices bid below in accordance with the terms, conditions and specifications contained in this RFP.

Cost to the City: Contractor should quote firm, fixed, costs for all services/products identified in this request for proposal. These firm fixed costs for the project include any costs for travel and miscellaneous expenses. No other costs will be accepted.

Notes:
Include a breakdown of costs including but not limited to labor, equipment, materials and parts. The cost breakdown should be separated by cost categories (ex. Enforcement, technology, maintenance, etc.).

Category #	Category Name	Item or Task	Description	#	Quantity	Sub Total Cost USD	Sales Tax	Category Total Cost USD
1	Hardware*							
	Indoor Guidance Solution	hardware	Includes; alloy rail, rail mount sensors per bay, guidance lights for general parking and ADA and GPRS communication gateways mains powered.	1	Quantity	$ 1,076,780.88	6.00%	$ 1,141,387.73
	Outdoor Guidance Solution	hardware	Includes recess mount bay sensors, GPRS communication gateways solar powered	1	Quantity	$ 1,353,889.68	6.00%	$ 1,435,123.06
	Signage**							$ -
	Horizontal Signage 2 x led	hardware	Horizontal sign, includes 2 x LED display module	64	Quantity	$ 255,872.00	6.00%	$ 271,224.32
	Monument signage 1 xLed	hardware	Monument sign, includes 1 x LED display module	20	Quantity	$ 93,360.00	6.00%	$ 98,961.60
	Monument signage 2 xLed	hardware	Monument sign, includes 2 x LED display module	19	Quantity	$ 132,439.64	6.00%	$ 140,386.02
	Monument signage 4 xLed	hardware	Monument sign, includes 4 x LED display module	42	Quantity	$ 343,607.64	6.00%	$ 370,188.00
	Dynamic Pricing System	service	Dynamic pricing, set up and customisation fee	1	Quantity	$ 37,139.64		$ 37,139.64
	Total Hardware							$ 3,494,410.37
2	Enforcement*							
	Handheld Devices	hardware	Thermal Printer, MPT-2	15	Quantity	$ 4,446.00	6.00%	$ 4,712.76
	Set up	service	Enforcement Module Setup- Ticket Issuing Only	1	quantity	$ 15,000.00		
	Annual Software Subscription	service	Annual Software Subscription Android handheld enforcement - Ticket Issuing Only	1	quantity	$ 8,100.00		
	Total Enforement							$ 27,812.76
3	Maintenace							
	Total Maintenance	serivce	charged annually in advance	1	Quantity			$ 138,479.34
4	Permit Parking*							
	Set up	service	Permit Module - Setup, up to 5000 permits	1	quantity	$ 25,500.00		
	Annual Software Subscription	service	Annual Permit Module License - License including: data hosting, software upgrades, and access to cloud-based reporting. Up to 5000 permits	1	quantity	$ 10,500.00		
	Total Permit Parking							$ 36,000.00
5	Mobile App*							
	Set up	service	Mobile app Module - Setup	1	quantity	$ 12,600.00		
	Annual Software Subscription	service	Mobile App Module License - License including: data hosting, software upgrades, and access to cloud-based reporting	1	quantity	$ 8,800.00		
	Toal Mobile App							21,400.00

	6	Installation											
		Installation of indoor guidance	service	Project Management, Installation & Commissioning		1	Quantity	$	552,044.64				
		Installation of outdoor guidance	service	Project Management, Installation & Commissioning		1	Quantity	$	622,919.64				
		Installation of sigange	service	Project Management, Installation & Commissioning		1	Quantity	$	105,544.64				
		Total Installation										$	1,280,508.92
	7	Freight											
		Total Freight	Serivce	Freight of all hardware		1	Quantity					$	164,791.19
		Total Cost										$	5,163,402.58

* Does not include any intergration cost, this will be priced once scope has been defined

Project Estimation based on a typical parking structure or lot. Pricing may change due to unknown/unforeseen/abnormal site specific factors.

Final pricing subject to a site visit or more detail on parking structure/lot both engineering and photographic.

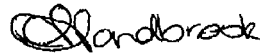**the number of signage and total cost is estimate only and numbers and signge options can be customizable.

Submitted by:

Shareena Sandbrook

Name (printed)

04/30/2018

Date

[signature]

Signature

Managing Director

Title

4/18/2018 8:51 AM

CONTRACT PAYMENT METHOD BY P-CARD

THIS FORM MUST BY SUBMITTED WITH YOUR RESPONSE

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City has transitioned from traditional paper checks to payment by credit card via MasterCard or Visa. This allows you as a vendor of the City of Fort Lauderdale to receive your payment fast and safely. No more waiting for checks to be printed and mailed.

Payments will be made utilizing the City's P-Card (MasterCard or Visa). Accordingly, firms must presently have the ability to accept credit card payment or take whatever steps necessary to implement acceptance of a credit card before the commencement of a contract.

Please indicate which credit card payment you prefer:
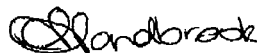
_____✓_____ Master Card

_____ Visa Card

Company Name: ___Frogparking INC._____

Shareena Sandbrook
_____
Name (Printed)

(signature)
_____
Signature

04/30/2018
_____
Date

Managing Director
_____
Title

CONTRACTOR'S CERTIFICATE OF COMPLIANCE WITH
NON-DISCRIMINATION PROVISIONS OF THE CONTRACT

The completed and signed form should be returned with the Contractor's submittal. If not provided with submittal, the Contractor must submit within three business days of City's request. Contractor may be deemed non-responsive for failure to fully comply within stated timeframes.
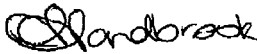
Pursuant to City Ordinance Sec. 2-17(a)(i)(ii), bidders must certify compliance with the Non-Discrimination provision of the ordinance.

(a) Contractors doing business with the City shall not discriminate against their employees based on the employee's race, color, religion, gender (including identity or expression), marital status, sexual orientation, national origin, age, disability or any other protected classification as defined by applicable law.

Contracts. Every Contract exceeding $100,000, or otherwise exempt from this section shall contain language that obligates the Contractor to comply with the applicable provisions of this section.

The Contract shall include provisions for the following:

(i) The Contractor certifies and represents that it will comply with this section during the entire term of the contract.

(ii) The failure of the Contractor to comply with this section shall be deemed to be a material breach of the contract, entitling the City to pursue any remedy stated below or any remedy provided under applicable law.

Sandbrook

Authorized Signature

Shareena Sandbrook   Managing Director

Print Name and Title

04/30/2018

Date

executive summary

Frogparking welcomes the opportunity to respond to the City of Fort Lauderdale Transportation and Mobility Department's RFP #12109-885 which seeks a contractor to deliver a smart, comprehensive parking demand management system for the city.

Frogparking understands that the City of Fort Lauderdale is the principal city of the Miami metropolitan area in the state of Florida. The city is a popular tourism destination, hosting over 13 million visitors per year since 2013.

The City currently manages nearly 11,000 parking spaces, made up of on-street, indoor and open-air surface lot parking. Having a large amount of parking spaces, which are spread across the city, as well as a large number of people parking with the city means a heightened importance is placed on efficient, user friendly, and automated infrastructure, which also provides easy to understand live and historical data about parking trends and behaviors. Frogparking's system will also create efficiencies with the city's enforcement capabilities and ensure full value for parking spaces is returned with our Dynamic Pricing module.

Frogparking's high quality and patented technology, which is all designed, developed and deployed by Frogparking's in-house team of engineers, puts the power of information in your hands. Accurate live and historic data provides an insight into trends, customer behavior, and car park performance, while improving customer's experience.

Frogparking has designed a tailored solution to manage parking at the City of Fort Lauderdale. Frogparking proposes to install single space sensors to electronically monitor each parking space, as well as live signage at each key decision point to connect directly with customers.

In this proposal, we outline the custom solution our team has designed especially for the City of Fort Lauderdale based on the unique requirements of a large site with a high number of visitors per day. As a provider of a custom solution, Frogparking can make further customizations to the City of Fort Lauderdale Suite of technology to ensure the solution delivers on every level.

4.2 A: Persons Involved in the Proposal & Authorized Representatives

Contact Name	Title	Phone number	Email Address
Donald Sandbrook	CEO	+64 6 359 0077	don@frogparking.com
Shareena Sandbrook	Managing Director	+64 6 359 0077	shareena@frogparking.com
Shaun Donaghey	Executive Vice-President	+1 888 950 3764 310 529 1206	shaun@frogparking.com

executive summary

get people parked quicker

increase your revenue

be smarter with accurate data

frogparking continues to lead the way with game changing software and parking guidance systems

beautiful software that puts the power in your hands - accurate live data provides an insight into trends, customer behavior and car park performance. we are proven to deliver mind-blowing results by using your data to directly increase your revenue.

we make parking better, smarter, and faster - the only company that is EV and autonomous vehicle ready, we know what's coming and we are all over it!

our technology is patented, beware of copy-frogs and run with the genuine market leader.

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understand customer behaviours and trends
we data mine for you

go viral
with mobile wallets, app guidance and VIP programs

be sustainable
by reducing vehicle emissions

future proofing innovation
our technology is genius

we are here for you
five star after sale support

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the latest patented technology that's future proofed - protecting your investment

installation is quick and easy, so your car park can remain functional

see what's happening every minute of every day with live data on the dashboard and heat maps

get smarter with data - frogparking's integration tool pulls revenue data from access control and ticket machines so you can get a holistic view

references

Irvine Spectrum Center, Orange County, California

The Irvine Spectrum Center is a large, outdoor shopping center located in Irvine, California. Frogparking installed 2,400 outdoor, solar-powered parking sensors and dynamic signage to communicate live parking availability via variable message signs at key decision points around the car park. The Irvine Spectrum Center also has plans to extend Frogparking to more parts of its large carparking areas in the near future. Frogparking, along with an electrical contractor, installed this site with its own personnel.

Ken Gillett – Senior Vice President, Operations | kengillett@irvinecompany.com | +1 949 720 2573

University of California, Los Angeles (UCLA) California

The University of California, Los Angeles (UCLA) is a public university in the Westwood District of Los Angeles, California. With over 30,000 staff and 44,000 total students, a large amount of carparking is required. To ensure the best parking experience and the most efficient use of the spaces, Frogparking's indoor guidance technology was installed in some of the 24,000 parking spaces to guide students, staff, and visitors directly to an available park when parking is at a premium.

Eric Lew - Director, UCLA Events & Transportation| ericlew@ts.ucla.edu | +1 310 206 4763

Auckland International Airport Limited - New Zealand

Auckland International Airport is where New Zealand touches the world. Over 70 percent of visitors enter or leave New Zealand via Auckland International Airport. It handles 19 million passengers a year and serves thirty international airlines, making it Australasia's third busiest international airport. With only four employees in the transport team, smart technology plays a big role in automating and providing insights. In 2015, Frogparking installed an outdoor guidance solution offering a wireless, cloud-based management system with Frogparking's dynamic signage.

Martyn Brewer – Commercial Manager, Transport | martyn.brewer@aucklandairport.co.nz | +64 27 692 3757

Lendlease Group - New South Wales, Australia

Lendlease group is a multinational property and infrastructure company which operates in more than 40 countries around the world. Specialising in property management and construction projects, the Lendlease Group is an experienced player in the parking provider space. Frogparking's system is currently installed at Lendlease's sites, Sunshine Plaza and Macarthur Square, and will soon be rolled out at other large shopping malls in their portfolio.

Patrick Hall - Senior Development Manager, Retail | patrick.hall@lendlease.com | +61 429 394 858

4.2 contents of proposal

4.2 C: Frogparking's parking management solutions are the ultimate tool to improve motorists experience, while providing an insight into customer behaviours and trends with a high level of reporting, analytics, and data from the parking lot.

Our products and services are user-focused, utilizing the latest technology to bring parking guidance, management, and enforcement into the digital age. Using innovative technology, the Frogparking system makes the parking experience easier and more efficient for users and operators.

Outdoors, Frogparking will install its outdoor occupancy sensors, which are specifically designed for busy outdoor parking assets. These small and discreet sensors can either be surface or recess mounted in the center of each parking bay, with no additional wiring required.

Indoors, Frogparking will install its specially designed power-rail conduit in the middle of parking aisles and mount LiDAR bay sensors to detect vehicles and LED guidance lights that indicate the availability of parking to passing motorists.

The Frogparking system utilizes state-of-the-art parking sensors, wireless indoor and outdoor parking guidance technology, and leading-edge cloud-based parking management software designed to manage parking assets more efficiently. The sensors also collect a significant amount of data about how a parking space is used, from which detailed reports can be generated, assisting with future investment and operational decisions.

Transform your parking facility into a data collecting hub. Combine sensor information displayed on Frogparking's cloud-based software with demographic information collected from Frogparking's Mobile Application to get a better understanding of your customers.

Frogparking's mobile app is packed with features targeted at complimenting and enhancing the parking experience for users. Features include navigation directly to available parking, cashless payment, permit management, find-my-car, user account options, and a mobile retailer advertising engine. Understand your customers better by reporting on parking lot usage sorted by user demographic, based on the information collected upon start up.

The market drivers to implement a Frogparking's parking system are:
1. To gain accurate real-time and historic parking data to use for planning purposes,
2. To use real-time data to improve traffic flow and connect user groups with available parking,
3. To future-proof a city's parking by offering parking data to apps and connected or automated vehicles,
4. To provide users with a cashless and integrated parking payment method,
5. To understand car park usage right down to users, demographic and behaviour allowing targeted marketing,
6. To identify areas to increase revenues through better utilisation and dynamic pricing,
7. To electronically monitor the city and automatically identify infringing vehicles, which in turn will improve compliance,

4.2 contents of proposal

8. To understand car park usage right down to users, demographic and behaviour allowing targeted marketing,

9. To identify areas to increase revenues through better utilisation and dynamic pricing,

10. To electronically monitor the city and automatically identify infringing vehicles, which in turn will improve compliance,

Potential market barriers are:

1. Stakeholder communication needs to be done well - if people don't understand the system or why it is being implemented then they may be less open to using it,

2. Privacy and security of data is paramount - the Frogparking system uses SSL encryption and bank level security for all data, other systems may expose the city,

3. System implementation disrupts normal operation - implementation needs to be done in phases with full stakeholder communication including enforcement teams, customer service teams, retailers, residents and all users of the system.

D. Elaborate on the primary technologies of your smart parking system's features, functionality, and the ability to migrate data from our current parking management system (T2 FLEX);

Frogparking is the only provider that can deliver a turnkey solution to the city for on-street, off-street and indoor car parks, including a City of Fort Lauderdale branded mobile app for parking guidance. This means that variable message signage and Frogparking mobile guidance will work seamlessly without any integration costs. Which also helps to avoid any potential issues with system delivery.

The Frogparking platform is capable of overlaying third party information into its dashboard, to ensure that only one management system needs to be interacted with for parking management purposes. This provides a seamless system for car park managers, and one data mining portal for reports and analytics.

Frogparking is the market leader in innovative parking management solutions, using solar-powered parking sensors, wireless parking guidance technology and leading-edge cloud-based parking management software. The Frogparking solution also encompasses digital enforcement tools, ticket and violation processing, real-time data analytics and reporting, permit management and a mobile application for parking guidance and cashless parking payment.

Frogparking's cloud-based software is user-friendly and fully customizable with data accessible anytime and from any location. It is also the only modular, end-to-end solution in the market and can be extended at any time, so the platform can be scaled as business needs change. Designed to cater for the most complex and diverse needs, Frogparking is provides leading edge solutions for parking providers including local authorities, hospitals, airports, shopping malls, universities, and niche parking sites, globally.

The Frogparking platform is a truly open architecture solution enabling interfacing to other parking technologies that would enhance the parking operation. Frogparking is fully integrated with counting systems, Global parking meters, other GPRS connect parking meters, LPR systems, a, is capable of pulling third party data to its platform. With regard to integration with T2 we would like to know more about the direct requirements so that we can have a discussion with them - we know our system is capable of integrating with theirs. Frogparking has a host of options perfectly suited to meet and exceed the needs of the city and with further consultation, can refine and optimize a solution that best fits the city's requirements.

4.2 contents
of proposal

E.   Elaborate further on the dynamic and adaptive reporting capabilities of your parking system;

The Frogparking sensor-based parking management system currently manages locations globally that include indoor, covered, off-street and on-street parking locations across cities, shopping malls, airports, universities and hospitals. The system is simple to use, and provides data in an easy to understand format.

The cloud-based reporting software consists of an Amazon cloud hosted central server that manages all parking information, the simple user interface allows reports to be viewed for both real-time and historical data. The software can be scaled to suit any number of users and tailored reports can be prepared to suit customer requirements.

Access through the system is via a secure web login, which is unique for each designated user. The administrator login allows configuration of the system, including setting up users and changing parking rules. A wide variety of reports are available – some of Frogparking's reports are outlined below. If required for further analysis, all report data can be easily extracted from the Reporting Suite to Comma Separated Values (CSV) format, as a downloadable file.

Occupancy reporting
The occupancy report shows a total count of people parking in the facility. Total occupancies in this time and date scale are shown in the right and by graph, sorted into dates, along with an average of new occupancies.

Utilization
The utilization report shows the percentage of parking time used, versus the total available minutes of a parking space.
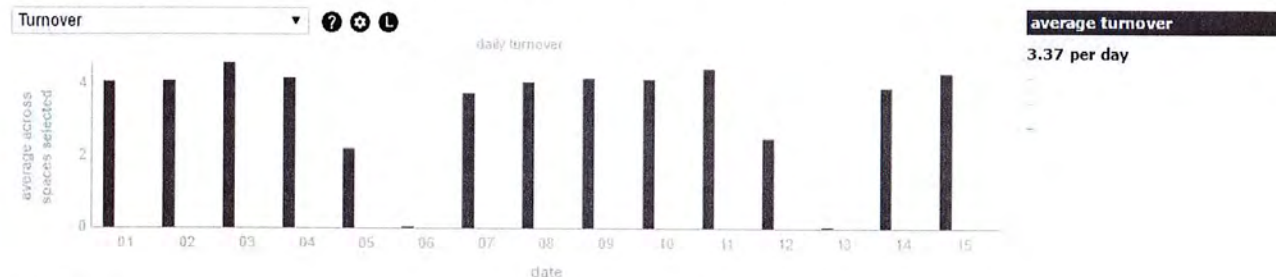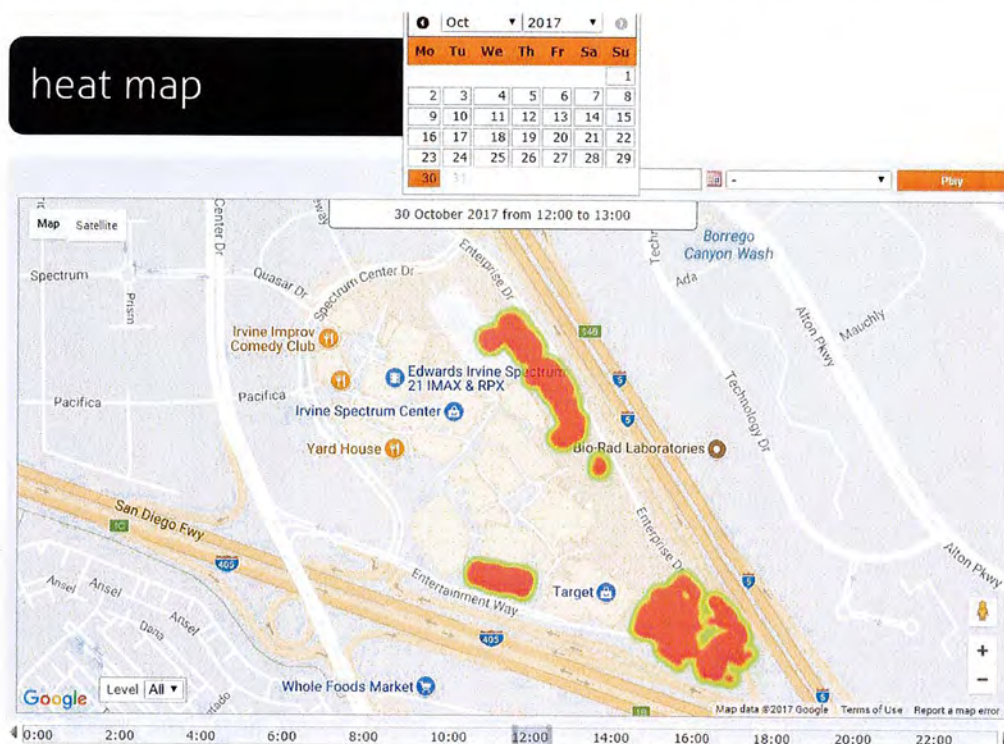
4.2 contents of proposal
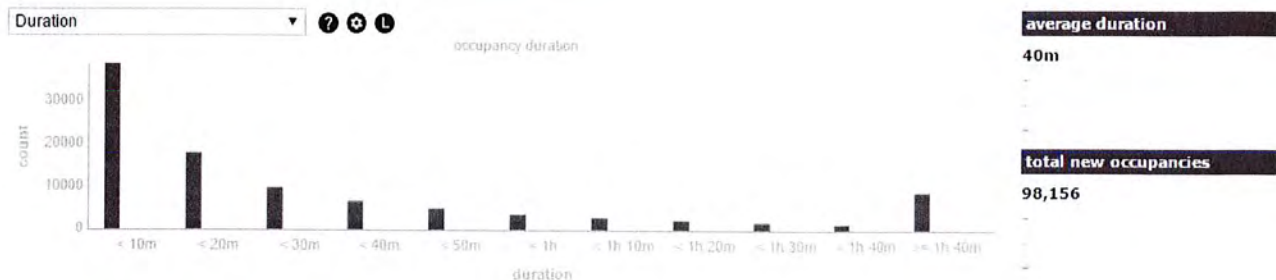
Duration
Accurately shows how many vehicles parked for each time bracket.

average duration
40m

total new occupancies
98,156

Turnover
Showing the average number of times each selected space has had a vehicle transition.

average turnover
3.37 per day

Heat Map
The heat map is a visual report showing which areas of your parking asset are the hottest (busiest) and which are the coolest (least busy). The report is displayed by time of day and can be sorted by parking zones. The heat map is useful to show the effect events (such as closures) in the parking facility have on utilization.

4.2 contents of proposal

F.   Elaborate further on the proposed parking system maintenance, accuracy and warranty;

Frogparking is committed to delivering a superior level of service and support to its customers. The Frogparking solution is a living, breathing system that is constantly electronically monitored to ensure reliability and business continuity.

Frogparking will provide local service and support, with agreed response times and key performance indicators.

Included in Frogparking's annual software service and support:

· Secure data hosting
· Access to cloud-based reports and analytics
· Ongoing software updates meaning your system is future proof and stays current
· Ongoing firmware updates meaning your hardware is future proof and stays current
· 24/7 remote system support
· Daily monitoring of your system by Frogparking's software team
· Additional features that are added to the software as they become available - e.g. new reports, forecasting, etc.
· Discounted software development for any future development requirements

Included in Frogparking's annual local service and support:

· A local resource will be available to provide service and support. This resource will be supported by second level support from Frogparking's software team whereby if an issue cannot be resolved within the agreed amount of time the fault will be escalated.
· Regular visual inspection of all variable message signage, gateways and sensors (where applicable)
· Monitoring of hardware performance
· Access to cloud-based maintenance portal
· Agreed KPI's for response and repair

All terms of the service and support will be discussed and agreed prior to project implementation.

Warranty

All Frogparking hardware products are covered by a full 24-month manufacturer's warranty, as per Frogparking's standard Warranty Policy.

4.2 contents of proposal

G.   Provide insight into how large the global smart parking technology and services market is and how large it will be in terms of revenue and parking spaces by the year 2025 and beyond;

Companies like Frogparking are leading a new wave of technology sweeping the parking industry over the last decade.

Largely owing to its success in providing a flexible and scalable solution that creates more efficient parking lots for operators, the smart parking market is expected to grow to US$ 1462.3 million by 2025 from 398.6 million in 2016.

Widely utilized by governments, municipalities, corporate institutions, and transport facilities which utilize the traditionally low cost and convenient on-street option. With around 68% smart parking systems installed in off street parking areas, this part of the market is anticipated to continue having the largest share of the market.

The expansion in market share is seen to be predominantly driven by an improvement in the technology that drives smart parking solutions as well as a society-wide attitude shift towards an "on-demand" style of information. As the expansion of bandwidth and connectivity continues, and cloud-based technologies continue to improve, smart parking solutions will be more accessible and ultimately an option for many more parking operators.

Growth in smart parking systems market is also fueled by the surging demand for flexible, scalable and efficient parking systems to manage the on-street and off-street parking spaces, in order to reduce the gridlocks taking place because of large number of commuters circling on road searching for parking spaces. This is also helpful for operators and cities working towards a growing number of environmental targets, by reducing cruising time searching for parking spaces and therefore vehicle emissions.

H.   Describe what financing models being used for a smart parking project;

Hardware is up front purchase as the city would own the asset
Software is an annual subscription
Mobile app is a transactional fee which can be on-charged to the customer

I.   State whether Proposer is offering a shared financial and / or operational interest with the City for some of or all of the proposed development.

This would require further discussion to understand the city's objectives.

J.   Describe Proposer's financial capability to develop, train and maintain the proposed parking system;

Frogparking has been investing heavily into the research and development of its smart parking platform for over eight years now. The company has solid financial backing and is experiencing exponential growth in its strategic markets.

Frogparking has been providing services to large parking providers successfully across many markets and industry leaders including the Irvine Company, the City of Palmerston North, the City of West Beverly Hills, Disney, Kaufland, Coles Supermarkets, Lend Lease, Vicinity Shopping Centers and more.

Frogparking has a strong innovation and development pipeline focused on further enhancing the parking system relative to the autonomous vehicle and other future growth trends that will affect transportation.

4.2 contents of proposal

K.   Provide a general time frame for the development, implementation, and training of the new parking system, as well as any additional information that may be beneficial for the City.

Project Schedule

There are many tasks that this project requires tracking and therefore maintaining a project schedule to manage each task and milestone is key for Frogparking to successfully manage and operate the project tasks and for the city to follow the flow of activities and remain a key stakeholder throughout.

The following diagram broadly outlines the key activities and milestones for this project. The project's five key phases timeline is as follows:

Phase name	Timeline (approx)	Comments
Order	12 weeks	
Design	3 weeks	Finalize stakeholder feedback
Implementation	10 weeks (site dependent)	Deploy and test all equipment
Operate	Ongoing	
Review	2 weeks	Sign off

Implementation and support

The implementation and support for a Frogparking system begins with the planning and identification of sensor and internet gateway locations. This is followed by a listing of all hours of operation which are compiled to aid in the programming of these devices. As units are brought online they begin reporting real-time data that is viewable through the Frogparking dashboard. Training for parking administrators, and other stakeholders will be provided before, during and after commissioning of the system.

Key Implementation Tasks

Identify Sensor Location Placement
Each parking sensor must be associated with a parking space number. A complete list of spaces and unique numbers will be compiled for deployment.

Identify Gateway Location Placement
Each group of sensors will communicate with a gateway device. This device must have line of sight and be within 100 meters or less of the sensors it monitors. Gateway installation locations will be identified as part of the Design Phase.

Identify Gateway & Sensor Schedules
Each gateway and sensor may have a schedule of operation associated with it. This will allow the units to, "sleep" when not required to report data and conserve energy. A complete listing of schedules will be compiled for deployment.

Configure Mobile Access Carrier
Each gateway will require a cellular connection to the internet. The gateways are configured and connected through Data SIM Cards associated with a cellular data carrier.

4.2 contents of proposal

Install Hardware and Configure

Installation of each piece of hardware requires physical placement and software activation. As units are placed they are activated, identified, and placed using a Global Position System (GPS) on a map for configuration and scheduling.

Update Hardware Firmware

Upon activation each piece of hardware will verify its current firmware version and attempt to update itself. This process can take up to 24 hours.

Sensor Testing

Upon successful update of firmware the sensors will begin reporting real time data. Any anomalies or concerns will be identified and rectified.

Program Times of Operation and Zones

Each zone of sensors will be updated with an accurate operation schedule, zone, and enforcement rules.

Parking Administrator Training

Frogparking will provide full training to Melbourne Airport's parking administrator, and other stakeholders. Through the course of the project any additional support or training can be requested as needed.

Stakeholder engagement

Throughout the process, Frogparking will work with the city to comprise and deliver a communication plan that outlines the system use and benefits to each stakeholder group. This will also form the basis of post system implementation feedback.

L.   Include any suggestions or advice regarding feasibility of this project.

The project can then be tested for feasibility across several dimensions:

1. Technical feasibility— Frogparking will demonstrate how the project will be implemented as planned, using proven technologies, and without unreasonable technical risks.
2. Legal feasibility— Frogparking will work with the city to identify any potential legal barriers or risks, so that these can be identified and discussed and all parties can agree on an informed pathway forward prior to implementation.
3. Environmental and social sustainability—at a minimum, Frogparking will ensure that the project complies with national environmental and planning standards.
4. Stakeholder engagement should be initiated as early as possible in the project cycle. Frogparking and the city should begin their consultation process around the pre-feasibility stage of the project at the time of the project concept stage.

M.   Include a brief summary highlighting important elements of the RFP.

The City is seeking qualified and experienced parking industry vendors to provide a smart Comprehensive Parking Demand Management System (CPDMS) so that it can assess and implement a parking demand (dynamic pricing) and enforcement system, as well as provide enhancements and interoperability with its parking equipment to meet its need to enhance parking utilization and meet its goal of less traffic congestion.

4.2 contents
of proposal

Frogparking Ltd has successfully provided services with similar magnitude to those specified in the City's RFP document to several entities similar in size and complexity to the City, such as city councils, airports, and government institutions. In addition, Frogparking also possesses 8+ years of experience with large scale private sector clients such as shopping malls and retail outlets in the United States of America, in addition to the managerial and financial ability to successfully perform the work required by the City.

The City needs for the new CPDMS to be implemented to meet its specific enforcement requirements. Frogparking's scalable enforcement module delivers a complete enforcement package, from hand-held devices through to the streamlined cloud-based software for managing tickets once they have been issued.

Frogparking's enforcement module will allow the City to identify motorists breaking the rules quickly and easily through the use of the company's sensors. It will also allow the City to issue citations or violation notices with the touch of a few buttons from a smartphone, easily take payments, allow appeals, and manage citations from a web-based portal.

The City also requires for a dynamic pricing system to be implemented and managed. Frogparking's dynamic pricing system is simple to implement, use, monitor, and adjust, and it has been proven to maximize revenues at impressive rates. It seamlessly integrates with Frogparking's variable message signage, mobile app and approved parking pay on foot machines.

In addition the City handles over 33 different types of parking permits including residential beach permits, residential parking permit districts, and monthly permit programs which average about 3,015 permits issued monthly throughout the City's parking facilities. Frogparking's Permit Management platform simplifies and improves customer experience by issuing, managing, and tracking permits automatically. In addition, Frogparking's mobile app permit is a simple option for permit users which creates efficiency for parking facility managers. The app automates enforcement and has no clunky infrastructure requirements.

Finally, Frogparking's reporting and analytics module will allow the City to understand how visitors and parkers are interacting with its parking facilities through easy to use live dashboards, historical reports, and heat maps accessible at the click of a button. The City will also benefit from not having on-site servers as all data and software is cloud-based, which means more valuable space available for its citizens.

4.2 contents of proposal

N. A list of all dynamic pricing and enforcement systems (by location and services provided) that your firm implemented over the past five years. (Limit last 10 projects)

Organization: Palmerston North City
Location: Palmerston North, New Zealand

Type of Development:
- Solar occupancy sensors
- Payment Integration
- Robust and clean sensor-to-meter integration
- 'Smart' enforcement
- Mobile App
- Cloud-based management

Overview

Palmerston North is New Zealand's eighth largest city, with a population of over 82,000 and a concentrated CBD with a vibrant shopping centre catering for over 60,000 vehicle trips every week.

The CBD is fitted with Integrated Technology Solutions (Global) parking meters set at varying time limits and, prior to implementation of Frogparking technology, enforcement was being carried out manually by enforcement officers.

Furthermore, without accurate data on its parking asset or customer behaviours, Palmerston North City Council was limited in its ability to make informed decisions to increase compliance and revenue.

Frogparking, as the world-leading parking technology company based in Palmerston North, saw the opportunity to work with the City Council to create an intelligent and efficient 21st century urban parking system.

Solution

In 2010, Frogparking installed an intelligent parking solution fully integrating with the CBD's parking meter system, comprising of:

Solar occupancy sensors – Installation of 2,613 of Frogparking's world-first solar-powered occupancy sensors, surface mounted with a space identifier installed on the pavement allowing the motorist to pay at the meter. The sensors communicate directly with the Integrated Technology Solutions Global pay-by-space parking meter, so when a parking space becomes unoccupied, any time remaining on the meter for that space 'zeroes out'.

Payment integration – Frogparking's solution integrates with the Global parking meters, so when a vehicle occupies a parking space the 'chalk time' is recorded on Frogparking's cloud-based parking management system. When the motorist pays the information is matched at the server and when payment expires, the enforcement officer is notified to issue an infringement notice. This encourages motorists to pay at the meter due to the increased chance of being ticketed.

Robust and clean sensor-to-meter integration – The Frog sensor and the Metro meter communicate via a small piece of circuitry attached to the side of the meter, with all communications sent to Frogparking's cloud-based system in real-time via the meter's GPRS

connection. This integration eliminates the need for additional street clutter like gateways or repeaters mounted on poles around the city with all circuity hidden inside the meter.

'Smart' enforcement – The city's six ticketing officers use a Smartphone running the Frogparking app linked to Frogparking's cloud-based management system. The app notifies each officer immediately when a vehicle nearby begins infringing, guiding them to the infringing vehicle and displaying all information required to issue the ticket. The result is significantly increased ticketing while maintaining current staffing levels.

Mobile App – Using Frogparking's mobile app customers can view live parking availability and pay for their parking without having to interact with a meter.

Cloud-based management – City managers can log in to the Frogparking management software for access to real-time and historical data which is used to make informed decisions around intelligent transportation.

Benefits
Since the commissioning of the system in 2010, the City Council has experienced dramatic increases in enforcement revenue as well as compliance, while using the invaluable data from the cloud-based system to support better planning and management of the CBD.

The following 'snapshot' statistics taken over an average 40-week period demonstrate the level of efficiencies the City Council continues to enjoy:

- Weekly net value of enforcement revenue increased by 423%
- Tickets issued increased by 394%
- Value of tickets issued increased by 257%
- Average tickets per warden, per day increased by 251%

Outcome
For Palmerston North City Council, the implementation of intelligent Frogparking technology has delivered an immediate return on investment with long-term benefits for its parking asset and its customers. With very little change required to its infrastructure and no need to increase its staff, the council has a highly efficient asset with increased ticketing revenue, high customer compliance and the ability to make informed decisions thanks to the in-depth and accurate data delivered by Frogparking's cloud-based management system.

4.2 contents of proposal

Organization: Auckland International Airport
Location: Auckland, New Zealand

Type of Development:
- Frogparking Indoor & outdoor guidance solution – sensors, variable messaging and LED occupancy indication
- End of row signage with real-time availability
- Integration with SKI-DATA PARCs
- Data analytics platform with full reporting across multiple metrics

Overview

Auckland International Airport is where New Zealand touches the world. Over 70 percent of visitors enter or leave New Zealand via Auckland International Airport. It handles 19 million passengers a year and serves thirty international airlines, being Australasia's third busiest international airport, after Sydney and Melbourne.

Like many international airports, Auckland International faces a number of ongoing challenges and opportunities in its parking business. Parking, for the airport, is a critical part of its overall passenger infrastructure and landside operations in addition to being an important line-item on its financial statements. "For many of our customers parking is the first experience they'll have with our brand" explains Troy Lineen, Transport Manager. "We need to ensure that experience is as effortless and frustration-free as possible whilst meeting our revenue targets, and we enabled that by investing in and deploying Frogparking's parking guidance solution".

With only four employees in the Transport team, smart technology plays a significant role to automate and provide real-time insights into the daily business. Any technology used by the Airport must positively impact revenue and drive efficiency due to the "lean and mean" team headcount. By reviewing the comprehensive reporting from the Frogparking dashboard the Transport team can gather data points across capacity management, space turnover and pricing.

Ensuring revenue growth is not eroded by threats, such as transport network operators including Uber, new metro light rail links, off-airfield parking operators or future autonomous vehicles the Transport team plan out 15 years ahead, analyzing how these threats will impact its business and how that affects their investment in parking infrastructure. Martyn Brewer, Commercial Manager – Transport explains. "We need to maintain a view out that far when it comes to infrastructure like parking and be ready to adapt and proactively manage these threats to protect and grow our revenue. By deploying a parking guidance solution, we wanted to ensure we maximize the opportunity to utilize every last space in our lots on a daily basis and gather insights which we can incorporate into our forward thinking and planning".

The result? Since installing Frogparking's solution the Airport's parking business has successfully maintained consistent revenue growth. "There are four influencing factors that have helped us achieve record growth in our parking operation - passenger growth, smart revenue management, pricing decisions and meeting capacity targets. Frogparking's technology is a key factor in assisting us across capacity management and pricing resulting in 95% occupancy rates due to efficiently guiding travelers and visitors to vacant spaces".

Over the five years that Auckland Airport has continued to partner with Frogparking to assist with

4.2 contents of proposal

its parking operations, the Transport team has highly valued the contribution they've made. "We reviewed and evaluated a number of guidance solutions from across the globe. We selected to work with Frogparking not only because of the full end-to-end solution they provide but because they are a refreshing partner in every sense. They like to break the mold and think laterally about problems we have, they relish these challenges whilst providing us with a robust and reliable solution that is price competitive". As the Airport's business continues to expand and evolve Frogparking will work closely alongside the Transport team to help maintain its growth and be recognized as a leader in parking technology adoption.

Key Facts
- 19m passenger movements
- $530m revenue FY17
- 10,000 parking spaces over 9 lots/garage structures
- $2b infrastructure investment program over the next 5 years

Solution Summary
Auckland Airport: www.auckland-airport.co.nz
Industry: Aviation & Tourism
Location: New Zealand

Business Objectives
- Increase revenue
- Provide insights into the parking operation
- Increase occupancy
- Increase customer experience

Technology
- Frogparking Indoor & outdoor guidance solution – sensors, variable messaging and LED occupancy indication
- End of row signage with real-time availability
- Integration with SKI-DATA PARCs
- Data analytics platform with full reporting across multiple metrics

Business Value
- Increased efficiency for the parking public and terminal traffic flows
- Improved occupancy management and turnover
- Key contributor to revenue growth
- High reliability and accuracy driving confidence in insights gained from data collected
- Benefits of cloud-based solution

4.2 contents of proposal

Organization: Massey University Manawatu
Location: Palmerston North, Manawatu

Type of Development:
- Solar occupancy sensors
- 'Smart' enforcement
- Permit System

Overview

Massey University's Manawatu campus is New Zealand's largest institution for the life sciences, agricultural, horticultural and veterinary teaching and research, and a leader in industrial innovation across a range of technologies.

Everyday some 10,000 vehicles visit the university with students, teachers, tenants, staff and support and delivery vehicles using the more than 4,500 parking spaces across the campus.

A priority for Massey is ensuring a high turnover of its popular short-term spaces and efficient management of its longer-term areas.

It's a task that requires advanced, integrated and scalable technology.

Need

Massey first approached Frogparking seeking a solution that would enable it to monitor and measure utilisation of its short-term parking spaces around the campus – parking that is critical to students and lecturers in particular.

That was just the start. Since implementing the first Frog solution, Massey has begun a process of gradually upgrading its outdated and inflexible parking technology with Frogparking's suite of fully integrated and scalable solutions.

Solution

The sensors – Massey started by installing 50 Frogparking solar sensors around its short-term parking spaces to measure usage, with officer enforcement tasking these spaces. The Frogparking surface mounted solar sensors communicate parking space occupancy information directly to the cloud-based Frogparking management system, providing parking staff with immediate access to a wide range of accurate usage data.

Massey discovered that the short-term parks were both extremely popular and compliance behaviour poor, largely due to inefficiencies in enforcement activity. They increased ticket pricing and sought to encourage better compliance to boost parking turnover.

The enforcement - In March 2014, Massey decided to upgrade the outdated handheld ticket issuing system used in the short-term parking area, which still relied on paper-based recording systems, with the Frogparking Android-based handheld devices. Key attractions were the easy-to-use interface, full integration with the solar sensors and cloud-based system automatically uploading information giving administration staff immediate access to detailed, real-time data on tickets issued.

4.2 contents of proposal

"The guards love the Frogparking handhelds. They are so much easier to use and collect all the data we need to help with our ticketing. If anyone wants to argue over a ticket, we've got all the information immediately available and there is no problem." Charlie Shearsby, Team Leader Security and Traffic, Massey University Manawatu Campus.

The permit system – In July 2014, Massey began an upgrade of its outdated access database permit system which with Frogparking's cloud-based permit management system. Starting with implementation of staff parking and rolling out across campus, the Frogparking permit system is an easy and scalable solution to managing a range of different permit parking needs. It integrates with Frogparking's sensors, cloud-based management system and enforcement handhelds and all processing can be done online from customer application and issuing through to tracking and reporting.

Outcome
"Frogparking moves with technology. It's convenient, we get excellent service, it integrates and is scalable; ideal for our needs as a university." Charlie Shearsby, Team Leader Security and Traffic, Massey University Manawatu Campus.

For Massey the key benefits are:

High turnover – With accurate data from the sensors, Massey has been able to price its short-term parking more appropriately and boost user compliance through the easy to use and integrated handheld enforcement devices. This has resulted in high parking turnover, significant savings in staff time and excellence in customer service.

Single integrated solution – With the gradual roll-out of the Frogparking permit parking, Massey is enjoying the benefits of a single, integrated solution. Whereas they have been running two separate systems to manage permits and enforcement, requiring high levels of administrative work including annual issuing of permits, with Frogparking everything is fully integrated via the cloud-based management system automatically updating permits and allowing ticket officers to validate them instantly using the handhelds.

Reduced costs – Compared to running separate systems and outdated technology, Frogparking's integrated system significantly reduces administration time and costs for management of permits and short-term parking spaces. All workflow is automated with administrators only being tasked to deal with exceptions in the process.

Effective now and for the long-term – Massey has implemented an efficient, scalable and sustainable solution that suits their needs as a university allowing them to upgrade and advance alongside it needs and budgetary allowances. Some of the add-ons Massy can consider down the track include:

- Implementation of Frogparking's Smartphone App for paid parking and parking guidance throughout the facility, eliminating the need for boom gates and ticket machines.

- Variable Message Signage for parking guidance at key decision points around the university.

4.2 contents of proposal

Organization: The Irvine Spectrum Center
Location: Orange County, California

Type of Development:
- Solar powered parking sensors
- Dynamic signage
- Cloud-based parking management system
-

Overview

Irvine Company is a privately held real-estate investment company with operations throughout coastal California. Irvine Company focuses on creating balanced, sustainable communities that provide their residents, customers and guests with the best possible live, work, shop and play experiences.

The Irvine Spectrum Center, owned by The Irvine Company, was opened in November 1995 and is Orange Country's premier dining, shopping and entertainment destination with a diverse collection of over 130 stores, restaurants and entertainment venues.

During the average week every day over 10,000 vehicles visit the shopping center with customers and employees parking using the indoor parking garages and outdoor surface lots on site. This doubles during peak periods such as the lead-up to Christmas with over 20,000 vehicles visiting the shopping center daily.

A priority for the Irvine Spectrum Center is to get vehicles into parking spaces as quickly as possible, to both reduce congestion and minimize customer frustration – allowing them to spend less time circling the parking lots and more time shopping!

Solution

Frogparking's USA agent at that time, Sentry Control Systems deployed the Frogparking sensor and wayfinding solution at the Irvine Spectrum Center in California in July 2014. This deployment consists of a simple solution of 2,400 outdoor solar powered parking sensors and dynamic signage to indicate live parking availability to users via variable message signs at key decision points throughout the car park, encouraging users to move through the parking facility freely.

As a result of the system, Irvine Company management continue to enjoy the benefit of being able to analyze occupancy and utilization data from Frogparking's cloud-based parking management system, delivering a true understanding of car park activity to use for making informed decisions.

Outcome

The solution will be extended to real-time targeted enforcement, allowing the Security Officers to be directed to vehicles that are infringing the maximum allowable stay and issue them with a citation, and Frogparking's mobile app (branded Irvine Company) for parking wayfinding, advertising, promotions and loyalty vouchers.

Irvine Company is continuing to roll out additional Frogparking sites and features – including the addition of Frogparking's indoor guidance solution across multiple sites, and an Irvine branded mobile app for parking guidance, find my car, and retailer advertising. The Frogparking solution has now become a core part of Irvine Company's construction going forward.

4.2 contents of proposal

Organization: Joe's Auto Parks
Location: Los Angeles, California

Type of Development:
- Frogparking occupancy sensors
- Enforcement software solution
- Ticketing handhelds and ticket processing system
- Smartphone based enforcement app
- Comprehensive reporting suite
- Dynamic pricing engine

Overview

Joe's Auto Parks is a privately-owned parking operation and management company with over 90 surface lots and parking garages spread across downtown Los Angeles.

To monitor violations and compliance at each parking location, Joe's Auto Parks had a manual enforcement process – sending enforcement staff to each location to visually check each vehicle to see if the parking fee had been paid. This process was costly, laborious and inefficient. Enforcement staff were simply following a standard route, with little awareness of what sites had lower compliance levels and would therefore require a sterner enforcement approach.

Joe's Auto Parks also face tough competition, particularly in the downtown Los Angeles area, with a number of competing surface lots and parking garages located within the same geographical area – some Joe's locations have as many as seven competitors on the same city block.

Joe's Auto Parks is an innovative company, who are early adopters of using technology to improve operations. They wanted to implement a solution that would provide them with a competitive edge and also that would allow them to increase the revenue yield at each location.

Solution

A Joe's Auto Park site in the heart of downtown Los Angeles was fitted with Frogparking occupancy sensors, integrated with Global's Metro parking payment terminal.

Frogparking's technology offers a precise integrated solution to gather data to measure the value of revenue being lost due to overstayers and non-payers at the Joes location, and to monitor and enforce each location in real-time.

This data informed Joe's decisions to use Frogparking's enforcement app to ensure people using this high profile parking area in Downtown LA, pay for their parking and comply with the rules.

To capture revenue and encourage higher compliance levels Frogparking deployed a simple, elegant solution, comprising of:

- Frogparking occupancy sensors fitted within all bays, linked to Frogparking's back-office system and enforcement software solution, ticketing handhelds and ticket processing system, fully integrated with parking meter payment data, providing a fully managed, user-friendly solution.

4.2 contents of proposal

O.   Photos and/or illustrations showing work completed over the past five years. (Limit last 10 projects)

P.   **A written description of your approach to the implementation. (Limit one page)**

Design

Prior to installation, Frogparking engineers design and manufacture your new system in-house at our headquarters. This is so we can customize the system to the needs and layout of your facility, and ensure accuracy.

Plan

Frogparking believes in thoroughly planning out all aspects of the project before beginning work. The team then following this plan thoroughly, allowing them to monitor progress against planned timelines as necessary.
We engage with stakeholders throughout the process.

Installation

At Frogparking, we pride ourselves on providing the highest quality installation of the hardware for your complete parking management solution. Our system is low-impact and extremely easy to install.

We work to the plan and will keep the City of Fort Lauderdale informed of the project's status via weekly progress reports. As the project is completed, tasks will be marked, and schedule altered as new tasks or sub-tasks are identified.

Each sensor takes approximately three minutes to install and activate. Frogparking's preferred option for installation would be to cordon off sections of the car park, and have the parking spaces clear of vehicles. If this is not practicable then we would require the support of a tow vehicle and driver, to move vehicles out of each car park momentarily while the sensor is being installed.

Frogparking would work with the City of Fort Lauderdale to establish an agreeable installation strategy.

Commissioning the system

Once design and installation is complete, our top team of engineers will perform post-installation testing to confirm that the devices are operating as required. This allows a period for tuning the parking management system and ensuring the system meets your needs.

System acceptance test

Once phasing in the project has been complete, Frogparking will perform a five-day operational acceptance test. This involves operating the entire system for a five-day period to ensure the system works as necessary.

Frogparking will record test data, and provide the City of Fort Lauderdale with analysis of system performance.

Plan the Work

Frogparking's management style is straightforward and highly effective. We believe in thoroughly planning our activities before we begin the work, then strictly following the plan, monitoring progress, and fine-tuning the plan if necessary. It is the development of this plan at each task's outset that will set the stage for the rest of the activities; its importance cannot be overstated.

The result of this common-sense approach has been consistently high quality deliverables, produced on-time, and within the agreed budget.

Engage all Stakeholders

For any project to succeed, the input and requirements of all stakeholders must be sought and addressed. By engaging the stakeholders early and often throughout the project, the entire organization will assume "ownership" of the project, and the necessary plans and activities to deploy the system can be implemented agency-wide.

4.2 contents of proposal

Q.   Your firm's hourly rate for consulting services

$120 per hour remote

R.   Answer the following questions:
1.   Does your firm have a product line specific to dynamic pricing and enforcement systems?

Pricing your parking facility exactly right to get maximum capacity and yield can be a headache. Dynamic pricing is simply the economics of supply and demand in practice – adjusting the price of parking based on live occupancy information from your parking facility.

Keep your finger on the pulse of parking revenue with Frogparking. Set the pricing for bays quickly and easily. Modify them even quicker if there is a special event on. Make use of demand-based Dynamic Pricing where you can alter the tariff as the parking lot fills up. One customer reported a 60% increase in revenue after just one month using Dynamic Pricing.

The Frogparking app allows users to pay for parking from their e-wallet, automatically charging the user's credit card or debiting from their pre-existing account balance. Users are either warned when their session is about to expire or their session will end automatically when they drive away.

Quickly and easily see reports about the money coming in and how people are using your parking area.

Dynamic pricing key advantages
- The dynamic pricing system helps parking providers realise the true value of their parking real estate
- No need to manually change your rates or analyse what your rates should be, the software does this all for you and automatically changes the rates
- Integrates with Frogparking's variable message signage, mobile app and approved parking pay on foot machines
- Proven to maximize revenues at an impressive rate Rapid system payback
- Set prices prior to events and busy periods to maximize revenues
- Simple to implement, use, monitor and adjust

Enforcement capabilities
Frogparking's enforcement software is designed to be easy and efficient for operators and enforcement officers, Frogparking's scalable Enforcement module delivers the complete enforcement package, from hand-held devices through to the streamlined cloud based software for managing tickets once they have been issued.

Each sensor is allocated a time restriction to monitor overstays. The sensor system will send infringement information (overstay data) directly to the security officer's handheld – enabling them to easily identify infringing vehicles in their immediate vicinity. This makes security staff more efficient, as they are able to go directly to overstaying vehicles, or patrol areas with high rates of infringements.

Citations are then easily tracked and administered with Frogparking's revolutionary cloud based ticket processing software is the complete solution for managing tickets and violations throughout their life cycle. It seamlessly integrates with Frogparking's ticketing hand-held, uploading ticket information as each ticket is issued.

4.2 contents
of proposal

2.   Is your firm currently or within the past 5 years been under litigation for services performed? If yes, please explain.
No

3.   What sustainable material(s) or practices will you incorporate into the project?
Frogparking is the only provider to deliver solar powered sensors and solar powered gateways/ This means that there is no toxic battery wastage with the Frogparking product line. In terms of installation and implementation, Frogparking does not require heavy infrastructure as the system has been developed for fast, zero waste installation and commissioning.

frogparking

the complete parking management solution

3.4 scope of services

enforcement

Left: Frogparking's Android, mobile enforcement app and Bluetooth printer for citation issuing.

change negative behaviour & encourage compliance by visitors to your parking facility with frogparking's citation issuing and management software

identify motorists breaking the rules quickly and easily using frogparking's sensors, issue citations or violation notices with the touch of a few buttons from a smartphone, & easily take payments,

allow appeals, and manage these citations from a web-based portal.

no longer will enforcement staff wander an entire parking area looking for infringing vehicles, instead, they'll be a well drilled team of efficient enforcement officers who are dispatched directly to infringing vehicles, with sensors identifying individual infringing bay numbers right to their smartphones.

strengthen your case, by attaching photos, notes, video, or voice media to each citation.

cut down on time consuming admin with a fully web-based portal which manages payments, appeals, and reminder notifications.

3.4 scope of services

A. Enforcement

1. Enhance the efficiency of enforcement through technology that provides street and space location of violations, types of violation, and efficient routes.
Frogparking's Enforcement software brings a new level of automation to parking enforcement officers - All from an android enabled hand-held device. Officers will have access to a real-time map of the parking facility which shows all infringing vehicles as well as the 10 closest infringing vehicles based on the officer's GPS position in the parking facility.

2. Live real-time enforcement system providing accurate information of payment, permits, violations and vehicle/customer history.
Capable.

3. The ability to integrate with City's current software, equipment and payment options. Current software packages in use are POM Meter Manager, T2 Flex, Boss, Global, and Pay-By-Phone.
Frogparking can integrate with these via a provided API.

4. Provide point-of-transaction flexibility which will provide the ability to take credit card payments via citation device.
Capbale.

5. Incorporate Bluetooth technology and the latest cellular technology in the enforcement proposal.
Capable.

6. Provide citation devices that capture both pictures and video that can be attached to citation.
Capable.

8. Provide citation devices that capture electronic valve stem chalking or wheel imaging.
Capable.
9. Have the ability to integrate with current License Plate Recognition system (GENETEC)
Frogparking can integrate with most LPR technologies via a provided API.

10. Provide thermal printers with high performance battery (batteries that last longer than eight hours on a single charge).
Capable.

B.   Dynamic Pricing System

1. Improve parking utilization and customer awareness of parking availability through variable signage boards and mobile app notifications/interactive maps.

Capable.

2. Identify the City's parking inventory and the utilization of that inventory through web-based software.

Capable.

3. Technology assessment of current parking meters and other hardware and specifications that will be used to determine utilization (sensors, cameras, existing revenue equipment, signage, etc.) as well as utilization accuracy and communication with current City's software and equipment.

Capable

4. Develop a dynamic pricing policy which includes implementation and management.

Capable. In fact, Frogparking's dynamic pricing is completely user driven and thresholds and pricing points are easily adjusted by your own team based on your own requirements. Many other systems require adjustment by a technician charging out.

5. A proposed rate structure and rate setting policy, communication strategy, management and operation strategy, data management plan, and implementation strategy. This policy will be used to make the necessary ordinance changes to create a variable demand parking pricing structure.

Capable. See above point re: adjustment of thresholds etc.

6. Develop a mobile application for external customer to help identify available parking. The mobile application must have the capability to connect to Pay By Phone and other payment technologies for seamless payment management. It will be the responsibility of the selected proposer to establish the necessary interfaces and connections with existing City vendors for data migration or payment options. The costs of these connections are not covered in the current vendor contracts and will have to be included in this proposal.

Capable. Information has been included about Frogparking's Mobile Application.

7. Develop marketing material to promote the program to the community and stake holders.

Capable

8. Develop reports, graphics and dashboards for measuring and monitoring the performance of the City's parking operations. Including:

Transaction report (daily, monthly, quarterly, annual) by representative and group

Daily total revenue

Permit sales by area/location within specific timeframes

Daily Citation Payments

Dismissed Citations

Voids/Refunds

Audit reports (customizable to identify various transactions)

Unpaid citations

Citations that are placed with collection agency & status

Appeals Application with attachments and electronic signature

Payment rates by month

Payment rates within 7 days of citation issued

Citation payment by source (app, credit card, cash, etc.)

mobile
app

a better user experience

put parking in the hands of everyone with frogparking's mobile app. out with the old and in with the new – all you need is your iPhone or android device to see live parking, navigate to, and pay for parking.

paying for parking has never been easier with credit or debit card payments from any smartphone. replace fumbling with loose change and cash with frogparking's smart mobile parking wallet.

use google maps and real-time information from your parking lot, guide users from wherever they are in town right to an available parking space. once there, send targeted push notifications and advertisements about promotions or events nearby. when it's time to go home, never lose your car in a busy parking lot again with the "find my car feature".

go viral and share offers on your social media streams to raise your profile and get the word out there. open all of these possibilities and connect with your customers with frogparking's mobile app now!

cashless payments

make paying for parking the easiest it's ever been with payments by credit or debit card from an iPhone or android smart phone.

from home to an available parking space

use google maps and frogparking sensors occupancy information to guide users directly to the parking area with the most free spaces.

never lose your car again

never lose your car in a large or crowded parking lot with "find my car" on frogparking's app.

target advertisements and promotions

create loyalty by sending targeted advertisements & push notifications to app users when they enter the carpark.

get started easily

easy download from the device's app store and sign up within the app simple

mobile app

smart look & feel

enhance your customer's experience with frogparking's smartphone app
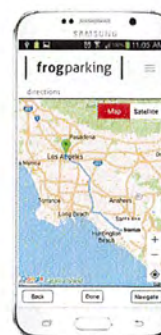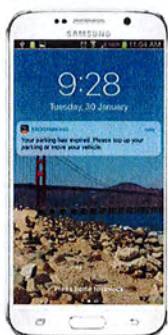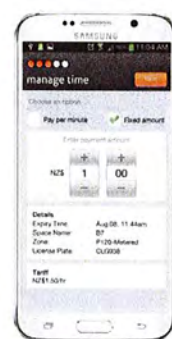
frogparking.com

permit
management

app permit

give your most loyal, VIP users the most premium experience, by making their regular visits easier than ever before with frogparking's permit & validation software

allow people to breeze in and out of your parking facility, activate their parking session with the touch of a button from a smartphone, and get on with their days.

cut down on time consuming admin with a fully web-based portal which manages the entire process for you, including applications and payments.
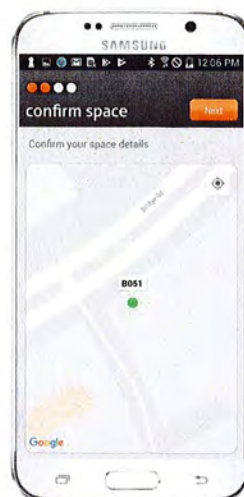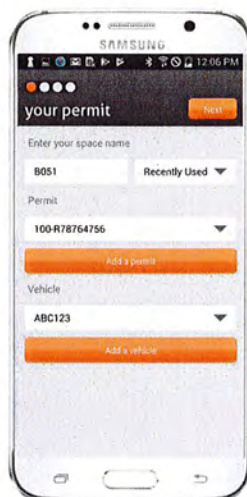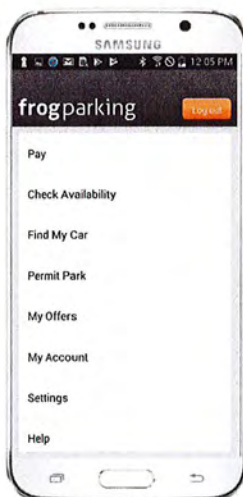
signs

make parking a breeze

wireless communication
reduce unnecessary cables and wiring

connect with your customers
live occupancy helpfully displayed at entries, exits, and at the end of aisles to guide people directly to an available parking space

built especially for you
designed and manufactured in-house specifically for your needs

have it your way
any size
any font
any color

P UPPER LEVELS 421 **P** THIS LEVEL FULL

horizontal channel
perfect for end of aisle

PARKING CLOSED

9324

P Available Spaces 1 → 2 3 4

k2 LED display
double line. 8 character display

k2 LED display
single line. 4 digit display

monument
ideal for entries & exits

frogparking.com

signs
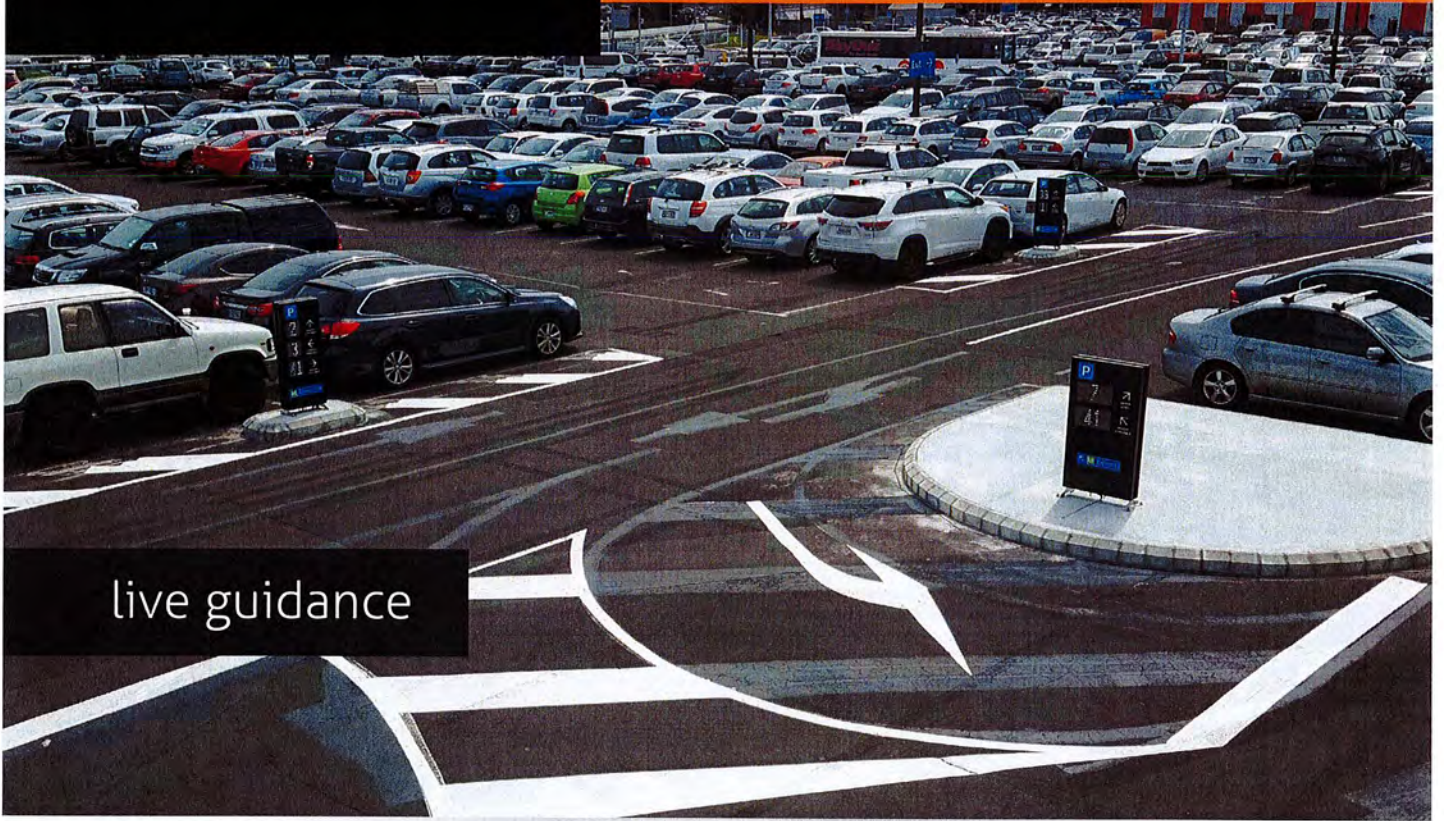
live guidance

3.4 scope of services

C.   Accounting/Customer Service Features/Functionality

1. Online residential parking permit sales; along with system generated wait list and on-line instructions for customer to follow (prefer LPN based system).
Capable.

2. Online business parking permit sales; along with system generated wait list and on-line instructions for customer to follow (prefer LPN based system).
Capable.

3. Online parking citation payments via computer or handheld device through an app.
Capable.

4. Ability to search for vehicle registered owner information
Capable.

5. Acceptance of boot payments in the field via credit card and immediate view by customer service for processing payments.
Capable.

6. Online Valet Parking Permit sales application.
Able to be developed by Frogparking's team of in-house software developers.

7. Online Citation Appeals with capability for attachments along with electronic signature capture.
Capable.

8. Ability to directly access view of meter malfunctions and meter issues through one system when assisting customers.
Capable.

9. Capability of system for PES photo uploads and attachment to citation; notes and/or comment section for PES so Customer Service rep can see notes when assisting customer.
Capable.

10. Ability of system to connect the driver's LPN to the permit without having to have a physical decal of hangtag (thereby eliminate costs for decals, hangtags, placards, etc.).
Capable. Frogparking's permit system utilises users own hardware; i.e their own smart phone.

11. Online training module for new employees learning system use.
Included.

12. Mailed Notifications for Citation and ability to set time intervals by level of delinquency and addition of increased fees.
Capable.

indoor guidance solution

frogparking keeps you ahead of the game. empower your parking facility with frogparking's world first, patented lidar indoor guidance system. your visitors will come in feeling cool, calm and collected and ready to rock 'n roll - our system makes it so easy to find a park, quickly.

gone are the days of clunky old technology like cameras, infrared and ultrasonic – frogparking's indoor guidance system is the latest and greatest in tech with plug and play installation, no conduit, servers or core drilling, accuracy that laughs at all other systems, and a beautiful design.

when the heat is on and your car park is super busy, users will easily glide into available parks making sure that the traffic isn't getting congested, and users are spending more time shopping, dining and relaxing and less time driving. frogparking is the only provider that is EV and autonomous vehicle ready, social media integrated, and continually data mining so that you can see trends and insights and increase your revenue.

get accurate data with our patented laser technology designed specifically for parking guidance

tech specs

dimensions	2.17 x 1.42 x 1.02 inch
mounting	direct to power rail or light fitting
enclosure	high impact, UV resistant, UL rated plastic
detection	class 1 (eye safe), laser sensor
circuitry	lead free circuit board with RoHS-standard components
operating temp	-4 to 176 F
IP rating	67
configuration	wireless, web based

trending now
cameras, ultrasonic and infrared are a thing of the past

up to 40% cheaper
to install than any other system

no batteries no maintenance no worries

make real time decisions
with truly accurate data

no core drilling
minimize installation
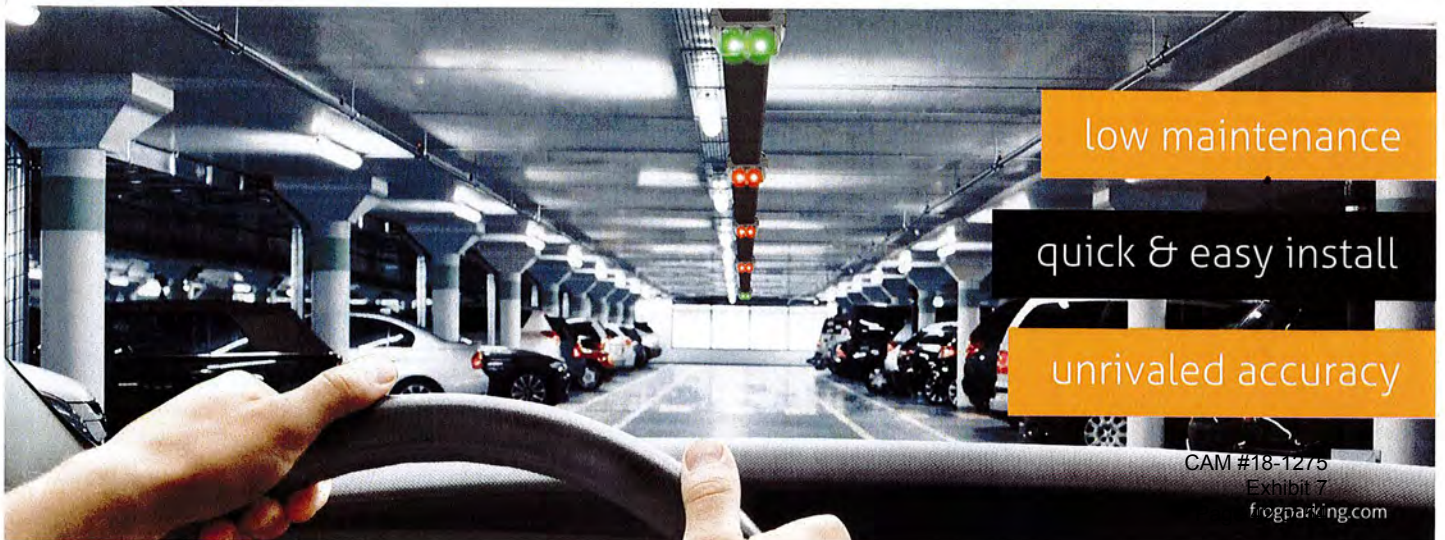
low maintenance

quick & easy install

unrivaled accuracy

indoor guidance solution

clean & simple

power rail trunking

conceals low voltage DC cabling and cables from each lidar to the guidance lights

lidar sensor

one lidar sensor per parking space. mounted on 'power rail' in the center of the parking aisle

guidance light

full color, ultra bright leds. can service up to 6 lidar sensors displays green when 1 or more spaces are vacant and red when all are occupied.

invisible laser beam

our eye safe lidar sensor is able to detect the presence of a vehicle in the parking space

100% accurate!
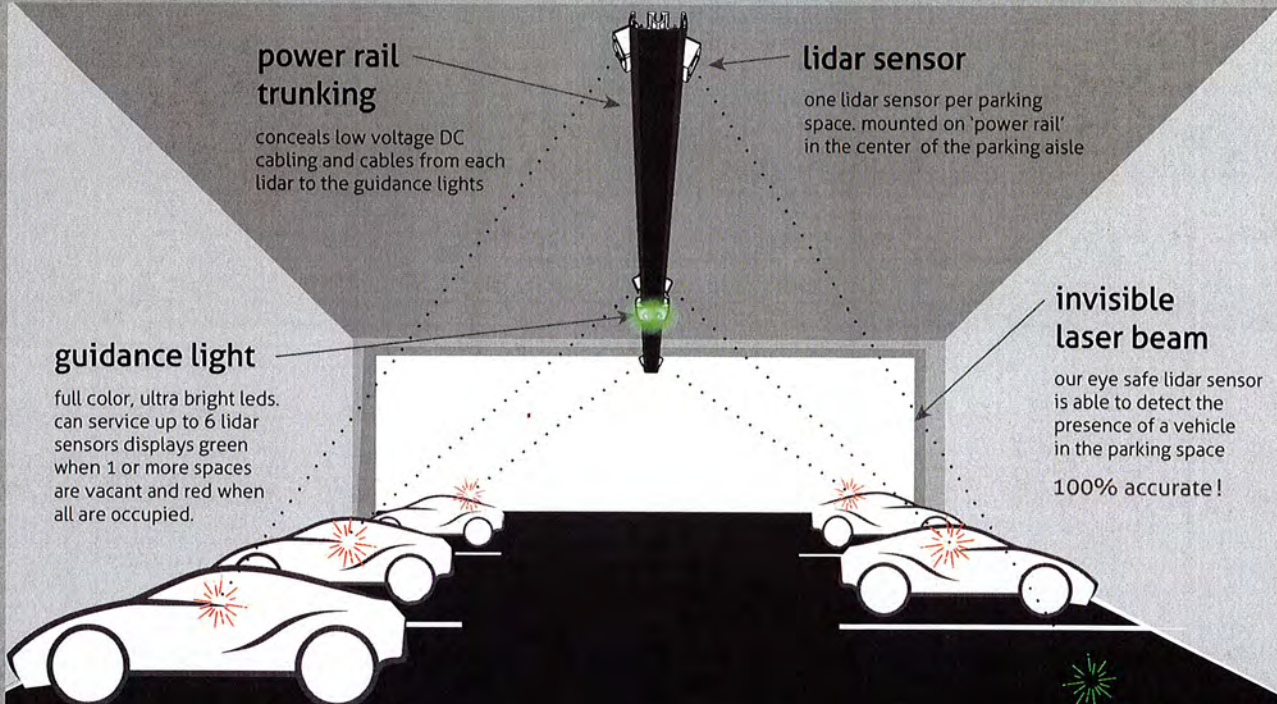
frogparking.com

outdoor guidance solution

small & discreet

designed to blend into street environment

rugged design, built to last

frogparking's outdoor guidance system is the ultimate outdoor tool to improve motorist's experience at your parking facility

guide motorists from their home to an available parking space using state of the art sensors, variable message signage, and a mobile app.

remove the guess work and frustrations normally involved in finding an available parking space at a busy parking lot by installing one of frogparking's small sensors in the center of each parking bay, with specially designed variable message signage installed at key decision points in the parking lot which display occupancy information for motorists to make informed choices where to park.

outdoor occupancy sensors, specifically designed for busy outdoor parking assets, are installed around the parking facility and gather occupancy data. data is transferred wirelessly to frogparking's server using solar-powered GPRS gateways.

from this cloud-based server, information can be displayed to parking users on variable message signage or a mobile application to assist users to make an efficient and informed decision about where to park, significantly reducing cruising time, improving traffic flow, and reducing emissions from vehicles.

tech specs

• diameter	surface mount: 128mm	recessed: 95mm
• height	surface mount: 20mm	recessed: 5mm
• weight	200g	
• enclosure	high impact UV stablised PC	
• mounting base	fibre reinforced PC	
• wireless communications	433 MHz, 866 MHz, 868 MHz, 915 MHz (region dependent)	
• circuitry	lead-free circuit board. RoHS-standard components	
• operating temp	-20°C to 80°C	
• software updates	sent wirelessly as required	
• mounting options	surface or recessed	

outdoor guidance solution

advantages

proven
operating reliably for over 8 years on-street.

accurate
unparalleled levels of accuracy - multiple detection methods

30 day runtime with no solar
ideal for on-street surface lots & rooftops with high occupancy

installed in minutes
surface mount or recessed

integration
can be integrated with third party hardware

mounting methods

surface mount

recessed

surface mount

requires 3 masonry screwbolts

semi recessed
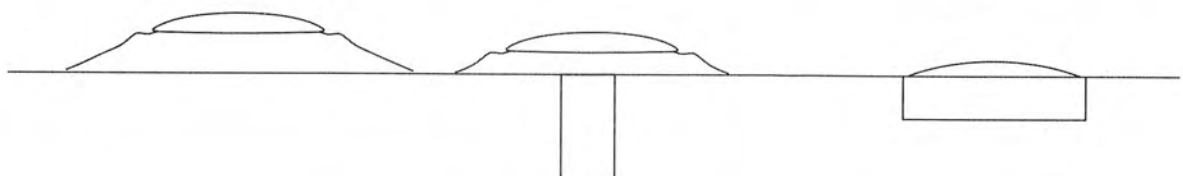
requires a 25mm x 50mm hole in road surface to accommodate battery

also requires 3 masonry screwbolts

recessed

requires 95mm x 30mm depth to accommodate main body of the sensor sensor glued in place

frogparking.com

reporting & analytics

understand your customer's behaviors & trends

live dashboards, historical reports and heat maps that are easy to understand at the click of a button to help manage your parking facility using accurate data.

your data your way

at the office? out for lunch? on vacation? access your data from the cloud with any internet connected device; anywhere in the world.

data-driven business

drive business growth with customer behavior and trend data from your parking facility.

the highest level of data security

eliminate threats and downtime by giving your data the best protection with SSL encryption and storage across multiple cloud-based servers.

remove clunky on-site server rooms

all data and software is cloud-based means your valuable space isn't filled with on-site servers.

unlock a world of customer behaviour trends about how visitors are interacting with your parking facility

easy to use live dashboards, historical reports, and heat maps at the click of a button. give insights which drive your business growth and change the way you think about parking.
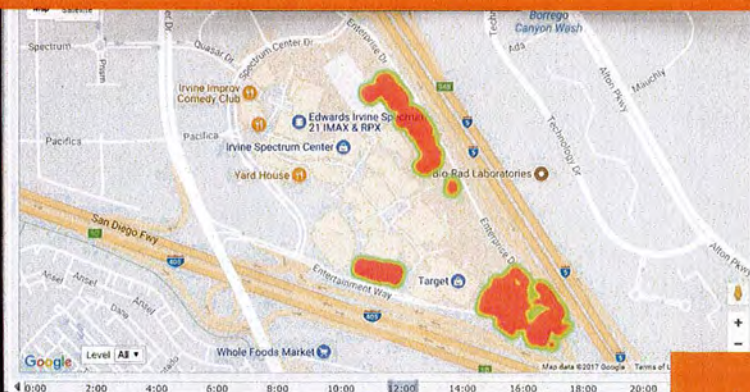
your data, your way

data-driven decisions

reporting & analytics

beautiful software

here are some examples of the reports available from the frogparking cloud-based software

total new occupancies

98,156

avg. new occupancies

6,543.73 per day
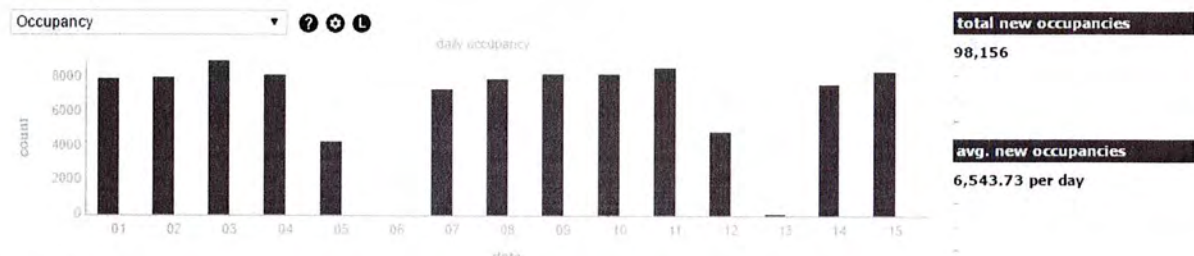
occupancy

the occupancy report shows a total count of people parking in the facility. Total occupancies in this time and date scale are shown on the right and by graph, sorted into dates, along with an average of new occupancies.
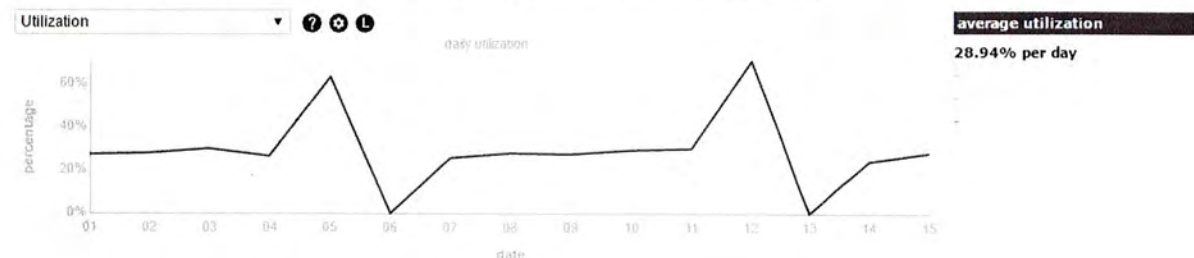
average utilization

28.94% per day

utilization

the utilization report shows the percentage of parking time used, versus the total available minutes of a parking space.

average duration

40m

total new occupancies

98,156

duration

accurately shows how many vehicles parked for each time bracket.

average turnover

3.37 per day
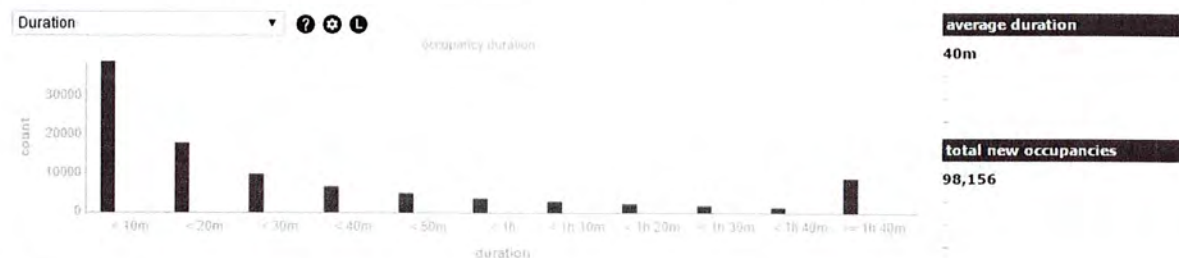
turnover

showing the average number of times each selected space has had a vehicle transition.

3.4 scope of services

D.   IT Requirements

1. Cloud Based System
Frogparking's system is cloud based - all data is stored in Amazon's cloud servers. No on-site servers.

2. Production and Test Environment
Capable.

3. PCI Compliance for Payment
Compliant.

4. Detailed Audit trail
Capable.

5. Mobile Technology
Capable.

6. Be able to Integrate with existing ERP system
Frogparking can integrate with most systems via a provided API.

7. Accounting/Financial interface file/format
Capable.

8. Ad hoc reporting environment/ Business Intelligence (BI) Module/Dashboards
Capable

9. Integrate with existing LPR system
Frogparking can integrate with most LPR systems via a provided API.

10. Compatible with the latest browser versions (mobile and desktop)
Capable

E.   Future Technologies

1.   Each proposer should include future parking technologies not listed in the previous two sections in their proposal. Examples of these technologies are listed below:

1. The ability to provide seamless parking payment through the use of license plate readers or other tools.
Capable.

2. The ability to offer a payment portal for all citations, meter sales (and invoices), and permit applications.
Capable.

3. Other smart parking tools not included in this scope that can improve parking operations and revenue.
Capable.

frogparking

the complete parking management solution

your quotes

your quote

* Currency in

- ✔ turnkey parking solution
- **annually** ✔ keep your engine humming
- ✔ we install for you
- ✔ essential signage

unlock more ask us

- \+ we maintain for you
- \+ data driven trends & insights
- \+ deluxe signage
- \+ enforcement
- \+ live dashboard
- \+ pay & go app
- \+ parking permit
- \+ VIP

frogparking

the complete parking
management solution

addendums

ADDENDUM NO. 5

RFP/ ITB No. 12109-885
Comprehensive Parking Demand Management System

ISSUED: March 22, 2018
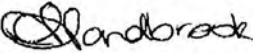
This addendum is being issued to make the following change(s):

1. Change to SECTION III - TECHNICAL SPECIFICATIONS/SCOPE OF SERVICES
   under sub-section 3.4 SCOPE OF SERVICES.
   A. Format correction to **It Requirements**
   B. Additional clarification under **Future Technologies** item 1) (b)

All other terms, conditions, and specifications remain unchanged.

Laurie Platkin
Procurement Specialist II

Company Name: _____ Frogparking INC. _____
(please print)

Bidder's Signature: _____ *Blandbrook* _____

Date: _____ 04/30/2018 _____

ADDENDUM NO. 6

RFP/ ITB No. 12109-885
Comprehensive Parking Demand Management System

ISSUED: April 3, 2018

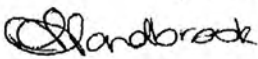This addendum is being issued to make the following change(s):

1. Format correction to solicitation.
   12109-885 - Parking Demand Management System-V7 replaces
   12109-885 - Parking Demand Management System-V6

All other terms, conditions, and specifications remain unchanged.

Laurie Platkin
Procurement Specialist II

Frogparking INC.
Company Name: _____
(please print)

Bidder's Signature: _____

Date: ____04/30/2018_____

ADDENDUM NO. 7

RFP/ ITB No. 12109-885
Comprehensive Parking Demand Management System
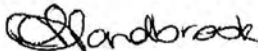
ISSUED: April 4, 2018

This addendum is being issued to make the following change(s):

1. T2 reports added in response to Question 50

All other terms, conditions, and specifications remain unchanged.

Laurie Platkin
Procurement Specialist II

Frogparking INC.

Company Name: _____
(please print)

Bidder's Signature: _____

Date: _____04/30/2018_____