

# Downtown Rapid City Parking Management

Authorize Mayor and Finance Officer to Sign Agreement to Purchase  
Parking Technology and Related Services with IPS Group, Inc.

# Overview

The following slides describe the parking technology solutions requested for purchase to implement the downtown parking study. The spreadsheets attached to the agenda estimate two scenarios for return on investment utilizing the projected costs and revenues associated with this purchase.

Staff will provide more information about this item during the Legal Finance Committee Meeting.

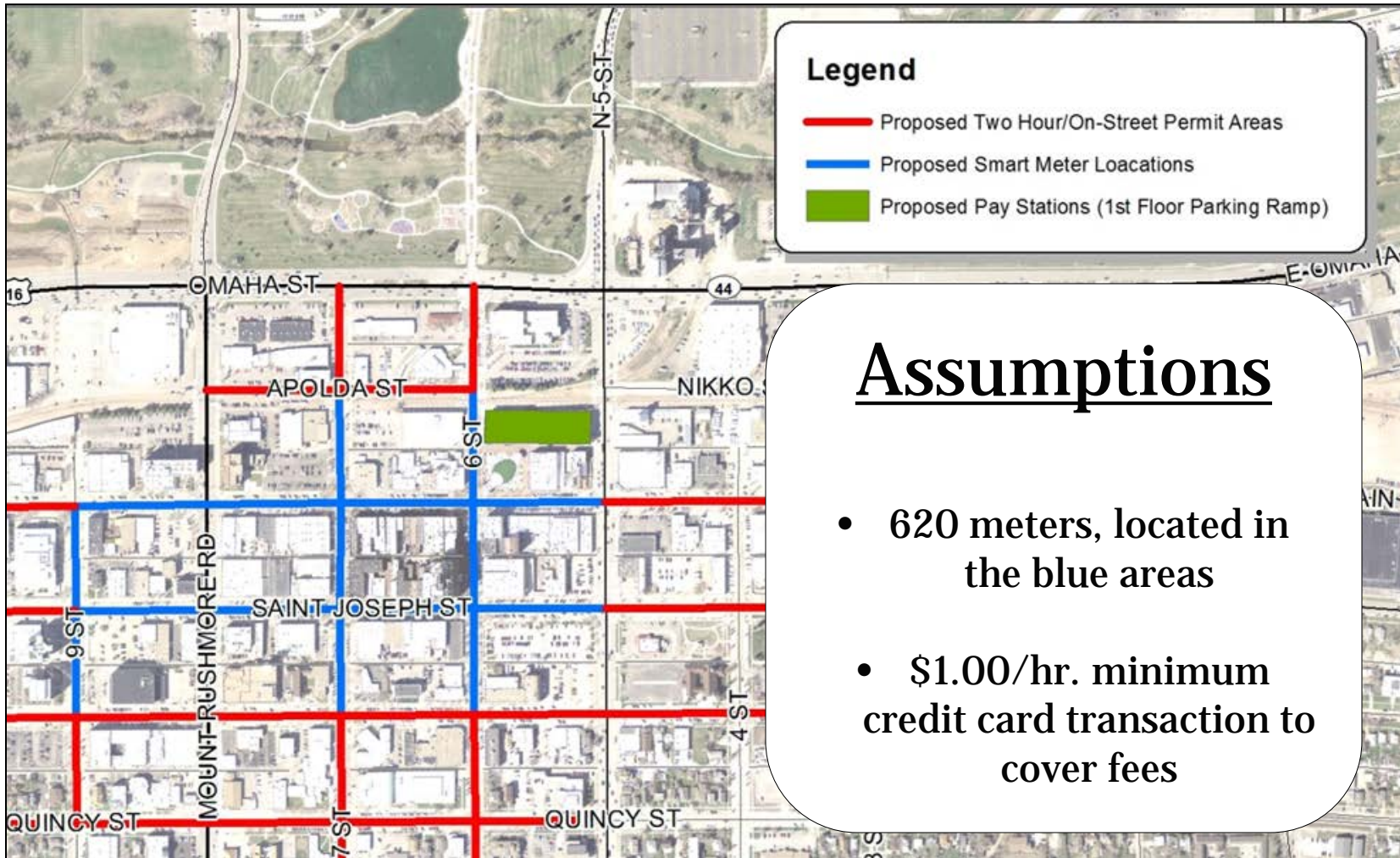
More information on downtown parking is available online. Go to [bit.ly/downtownrc](http://bit.ly/downtownrc)

# Smart Meters

- Many convenient payment methods
  - Credit
  - Coin
  - Mobile App
  - Digital payment (with NFC enabled)
- Sensors
- Free button for quick trips
- Validation (tokens)
- PCI Compliance for consumer security
- Customizable – The City can adapt its parking management system over time

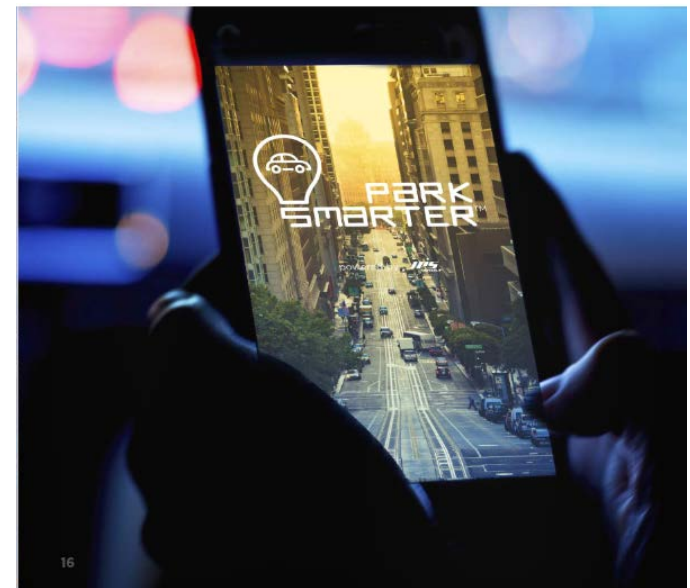
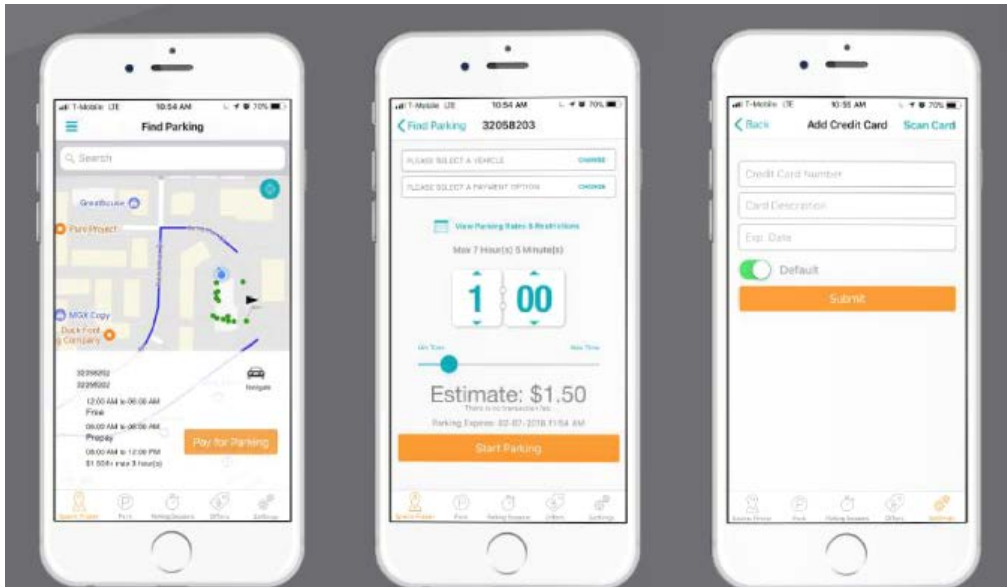


# Smart Meters



# Park Smarter Mobile App

- Purchase includes mobile application
- No fee to end user for this service
- App can be used at meter or Pay Station
- Mobile alerts to monitor/buy additional time
- Accommodates multiple vehicles/accounts
- Businesses can use the app to validate customer parking with space number.



# Dome Mount Sensors

- Sensors detects presence/absence of a vehicle in a parking space
  - Real-time occupancy data to inform parking management over time.
  - Real time occupancy data available to support maps and smartphone applications.
  - Capability to reset the meter when a vehicle leaves
  - Prevents meter feeding (where prohibited)
  - Improves effectiveness of quick trip (courtesy time)
- Expected to pay for itself within 1 year  
*(conservative estimate when reset is enabled)*



# Pay Stations

- Pay by Plate integrated with License plate recognition technology
- Payment methods:
  - Credit card
  - Coin
  - Mobile app
  - Digital wallet
- Pay stations are the industry standard for parking ramp environments.
- Lessons learned during the Pilot Project will be addressed to enhance permanent implementation.



# Collections

- **Collection Cart, Trolley, and Canister provides an efficient process for collecting, counting and reconciling parking meter revenues.**
- **Secure, touch free system.**





# Enforcement

- Ticketing software compatible with the City's existing handheld devices.
- Ability to
  - **issue tickets**
  - **pay online**
  - **start dispute process online**
- Monthly fee for enforcement services.



# Permitting

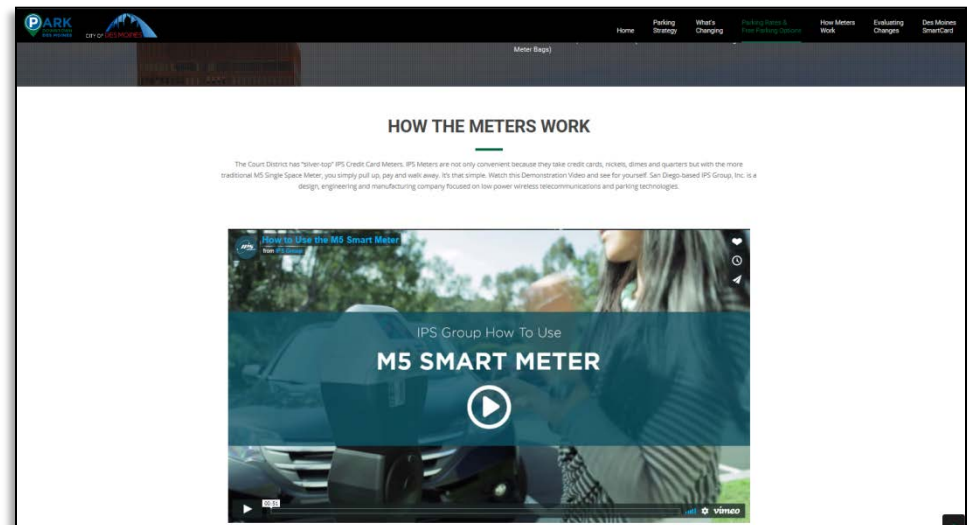
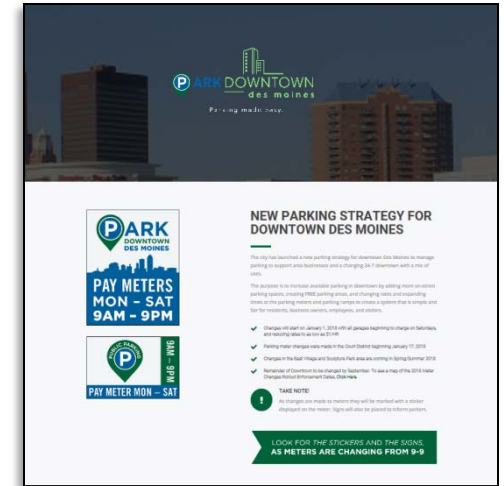
The screenshot displays the IIS Permit Management web application. The interface includes a top navigation bar with a search function and a user profile for Jen Sample. A left sidebar contains navigation options such as Dashboard, Permits, Permit Inbox, Waitlist Management, and New Permit Application. The main content area is titled 'Permit List' and features a '+ Buy Permit' button. Below this is a table with columns for Permit No, Issued to, Tentative St..., Start Date, End Date, Applied Date, Location, Permit..., Status, and Action. The table lists five permits, all issued to Randy Lassner, with various dates and statuses (Appro..., Paid, City Cance...). A pagination control at the bottom indicates '1 - 5 of 76 records' and 'Pg 1 of 16'.

Permit No	Issued to	Tentative St...	Start Date	End Date	Applied Date	Location	Permit...	Status	x	Action
SAN-55652018	Randy Lassner	5/15/2018			5/15/2018	Santa Monica Boulev...	Resid... Permits	Appro...	Basic	
SAN-55642018	Randy Lassner	5/15/2018			5/15/2018	Santa Monica Boulev...	Resid... Permits	Appro...	Basic	
SAN-55352018	Randy Lassner	5/10/2018	5/10/2018	5/9/2019	5/10/2018	Santa Monica Boulev...	Resid... Permits	Paid	Basic	
SAN-55342018	Randy Lassner	5/9/2018	5/9/2018	5/8/2019	5/9/2018	Santa Monica Boulev...	Resid... Permits	Paid	Basic	
SAN-55292019	Randy Lassner	5/8/2018			5/8/2018	Santa Monica Boulev...	Resid... Permits	City Cance...	Basic	

- Online permitting software that is integrated with parking enforcement.
- One time set-up charge and a per permit fee.

# Public Information Plan

- Purchase includes assistance with developing public information materials:
  - Website design integrated into City's website
  - Informational Videos
  - Graphic assistance
  - Handbills, etc.



# Cost Revenue Analysis

RAPID CITY, SD / IPS GROUP - SMART PARKING ROI													
M5 METERS:	620	IPS PROPOSAL		Meters:	\$350,935	Monthly Cost:		(\$12,994)	PROJECTED PAYBACK:				
MS1 METERS:	3			Sensors:	\$168,715	Monthly Revenue:		\$64,142	BUDGETED LIFE EXPECTANCY: 6-7 Years				
SENSORS:	620			Housings:	\$188,150	Monthly Revenue Sensors:		Not Factored	METERS (MONTHS): 17.6				
AVG. CASH TRANS:	\$0.51			Park Smarter:	\$1,300	MONTHLY PROFIT:		\$51,149	SENSORS (MONTHS): Not Included				
AVG. # CRED/POLE	\$1.48	Extended Warranty (4-YR):		\$189,425					COMBINED (MONTHS): N/A				
AVG. # TRANS/POLE	112			Permitting	\$4,000								
AVG. MS1 TRANS PER/DAY	14	TOTAL SOLUTION COST:		\$902,525									
CLIENT SAMPLE SET:				Client #1	Client #3	Client #2	AVG.	CONSERV. AVG.					
TRANSACTION VOLUME (AVG.) Per/Meter				95	162	190	149	112	RAPID CITY: 60-MONTH (PROFIT): \$2,166,392.40				
AVG. Cash				\$0.78	\$0.65	\$0.59	\$0.67	\$0.51					
AVG. Card				\$1.89	\$2.43	\$1.59	\$1.97	\$1.48					
M5:	Rate/HR:	\$1.00	Cash %:		70%	Credit %:		30%					
M5 Per Month	January	February	March	April	May	June	July	August	September	October	November	December	
Cash %	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Credit %	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
Avg # Cash/Pole	78	78	78	78	78	78	78	78	78	78	78	78	78
\$ Avg Cash Trans	\$0.51	\$0.51	\$0.51	\$0.51	\$0.51	\$0.51	\$0.51	\$0.51	\$0.51	\$0.51	\$0.51	\$0.51	\$0.51
Avg # Credit/Pole	34	34	34	34	34	34	34	34	34	34	34	34	34
\$ Avg Credit Trans	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48
Cash Trans	\$39.50	\$39.50	\$39.50	\$39.50	\$39.50	\$39.50	\$39.50	\$39.50	\$39.50	\$39.50	\$39.50	\$39.50	\$39.50
Credit Trans	\$49.53	\$49.53	\$49.53	\$49.53	\$49.53	\$49.53	\$49.53	\$49.53	\$49.53	\$49.53	\$49.53	\$49.53	\$49.53
\$ Avg Trans	\$64.27	\$64.27	\$64.27	\$64.27	\$64.27	\$64.27	\$64.27	\$64.27	\$64.27	\$64.27	\$64.27	\$64.27	\$64.27
Revenue Per Pole	\$89.04	\$89.04	\$89.04	\$89.04	\$89.04	\$89.04	\$89.04	\$89.04	\$89.04	\$89.04	\$89.04	\$89.04	\$89.04
M5 REVENUE	\$55,202.82	\$55,202.82	\$55,202.82	\$55,202.82	\$55,202.82	\$55,202.82	\$55,202.82	\$55,202.82	\$55,202.82	\$55,202.82	\$55,202.82	\$55,202.82	\$55,202.82
												TOTAL:	\$662,433.89
SENSOR ADD-ON:		AVG PER/DAY METER RESETS:		3.00	AVG. RESET REV:		\$0.38						

This parking technology has an estimated life expectancy of 6-7 years. Revenue from the new parking management technology and policies is expected to pay for itself within 1 - 2 years. Refer to the spreadsheets attached to this agenda item to review the cost/revenue analysis.

# Project Timeline

- If purchase is approved:
  - Build software for the mobile application and employee/resident permitting
    - Develop and promote waitlist feature
    - Prepare meter poles
  - Develop and distribute public information tools
  - Conduct Public Information Meetings
- Ordinance Amendment to adopt policy changes
- Meter head installation and permit launch anticipated for early June.

