



CITY OF KNOXVILLE

HOW KNOXVILLE IS PREPARING
TODAY

FOR THE TRANSPORTATION OF
TOMORROW...

PARKING SYSTEMS

WHY?



- RATES HAVE NOT CHANGED IN OVER 10 YEARS
- FINANCIAL LOSS
- METERS ARE OVER 20 YEARS OLD
- CHRONIC PROBLEMS WITH MALFUNCTIONS
- NUMEROUS COMPLAINTS DAILY TO OUR 311 CALL CENTER
- INCONSISTENT/NONEXISTENT ENFORCEMENT
- EYESORE (RUST, GRAFFITI, ETC.)

HOW?

- **DRIVE**

- "DESIRE IS THE KEY TO MOTIVATION, BUT IT'S A DETERMINATION AND COMMITMENT TO AN UNRELENTING PURSUIT OF YOUR GOAL – A COMMITMENT TO EXCELLENCE – THAT WILL ENABLE YOU TO ATTAIN THE SUCCESS YOU SEEK."

- **CHANGE**

- "EMBRACE CHANGE. TRUE SUCCESS CAN BE DEFINED BY YOUR ABILITY TO ADAPT TO CHANGING CIRCUMSTANCES."

- **FEEDBACK**

(BUSINESS OWNERS, CITIZENS, ADMINISTRATION)

- **RESEARCH**

(OTHER CITIES, PRODUCTS, VENDORS)

- **FORM A PLAN**

- **TEST / DEMO**

WHAT?

- MOTIVATION
- SUPPORT
- CONSISTENT ENFORCEMENT
- INCREASE HOURS OF OPERATION
- INCREASE RATES
- CREATE PARTNERSHIP/ SELECT VENDOR

- **EDUCATE**

(PUBLIC FORUM, PRESS RELEASES, SOCIAL MEDIA)

- **IMPLEMENT**

(TEAR DOWN AND BUILD UP)



Change is a process
not an event.

Barbara Johnson

HIGHLIGHTED CHANGES

- **PUBLIC FORUMS, PRESS RELEASES, SOCIAL MEDIA**
- **INCREASED ENFORCEMENT** (PUBLIC BUILDING AUTHORITY)
- **RATE INCREASE**
 - (2 HR METER: \$1.50/HOUR, 10 HR METER: \$0.30/HOUR)
- **EXTENDED HOURS OF OPERATION**
 - (MONDAY – SATURDAY 8AM TO 6PM, UNTIL 10PM ON GAY ST.)
- **UPGRADE OF ALL EQUIPMENT**
 - (HOUSING, MECHANISM, DOME, DECORATIVE SLEEVE & BASE)
- **INSTALLATION IN NEW LOCATIONS**
- **UPGRADED SIGNS AND PAVEMENT MARKINGS**
- **IMPROVED PERMIT MANAGEMENT**



BEFORE & AFTER



UPGRADED TECHNOLOGY

Tools

- MULTIPLE PAYMENT OPTIONS
- MICRO RADAR DOME SENSOR
- SOLAR POWER TECHNOLOGY
- DATA MANAGEMENT SYSTEM
- FULLY ADAPTABLE SCREEN SETTINGS
- PROACTIVE MAINTENANCE OPTIONS

Benefits

- ACCEPTS COINS, CREDIT CARDS, SMART CARDS, TOKEN, PAY BY PHONE
- REAL TIME AND HISTORICAL OCCUPANCY DATA
- INCREASED REVENUE (RESET TO ZERO)
- INCREASED POWER EFFICIENCY
- OFFER COURTESY TIME
- IMPROVED PARKING ENFORCEMENT
- REAL TIME SCREEN MESSAGE MANAGEMENT
- ENDLESS REPORTING OPTIONS

DATA MANAGEMENT SYSTEM

	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017
<input type="text"/>										
# Meter Swaps	25	25	16	29	38	30	29	65	35	48
# Meters Reporting Revenue	802	846	827	826	813	836	831	833	839	841
# Meters Installed/Billable	841	837	836	835	842	842	843	848	859	857
# Sensors Installed/Billable	837	833	832	831	837	838	839	844	855	853
REVENUE TRANSACTIONS										
# Coin transactions	39,237	42,615	45,464	42,479	56,464	54,615	49,321	54,054	46,710	48,049
\$ Coin transactions	\$27,283.01	\$29,714.00	\$32,845.65	\$29,772.05	\$32,418.00	\$34,329.60	\$33,574.05	\$36,557.95	\$32,047.15	\$32,042.25
# Credit card transactions	13,247	16,110	18,828	17,285	19,641	19,444	19,105	22,441	20,805	19,819
\$ Credit card transactions	\$25,681.70	\$31,259.05	\$37,183.90	\$34,264.78	\$38,214.15	\$38,087.00	\$38,029.35	\$44,455.95	\$41,042.40	\$38,334.65
# SmartCard transactions	0	0	0	0	0	0	0	0	0	0
\$ SmartCard transactions	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
# Smartcard Refund transactions	0	0	0	0	0	0	0	0	0	0
\$ Smartcard Refund transactions	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
# Remote Payment transactions	0	0	0	0	0	0	0	0	0	0
\$ Remote Payment Received	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$ Remote Payment Applied	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
# Total	52,484	58,725	64,292	59,764	76,105	74,059	68,426	76,495	67,515	67,868
\$ Total Rev	\$52,964.71	\$60,973.05	\$70,029.55	\$64,036.83	\$70,632.15	\$72,416.60	\$71,603.40	\$81,013.90	\$73,089.55	\$70,376.90
# Total without Remote Payment	52,484	58,725	64,292	59,764	76,105	74,059	68,426	76,495	67,515	67,868
\$ Total Rev without Remote Payment	\$52,964.71	\$60,973.05	\$70,029.55	\$64,036.83	\$70,632.15	\$72,416.60	\$71,603.40	\$81,013.90	\$73,089.55	\$70,376.90

PROACTIVE MAINTENANCE

Pole	Meter Type	Area Name	Sub Area	02/23/2018	02/22/2018	02/21/2018	02/20/2018	02/19/2018	02/18/2018	02/17/2018
010101	MK 5	Central St	Block: 100	3,371	3,270	3,264	3,266	3,321	3,424	3,239
010102	MK 5	Central St	Block: 100	3,384	3,342	3,331	3,445	3,443	3,487	3,243
010103	MK 5	Central St	Block: 100	3,355	3,495	3,470	3,394	3,462	3,479	3,279
010104	MK 5	Central St	Block: 100	4,039	4,027			3,731	3,661	3,252
010105	MK 5	Central St	Block: 100	3,961	3,955	3,907	3,823	3,686	3,567	3,273
010106	MK 5	Central St	Block: 100	4,045	3,972	4,010	3,978	3,951	3,781	3,273
010107	MK 5	Central St	Block: 100	4,037	3,995	3,978	3,961	3,968	3,781	3,287
010108	MK 5	Central St	Block: 100	4,037	3,957	3,945	3,985	3,997	3,764	3,268
010109	MK 5	Central St	Block: 100	4,039	4,024	3,970	4,024	3,911	3,754	3,271
010110	MK 5	Central St	Block: 100	4,037	4,014	3,949	3,966	3,961	3,733	3,275
010111	MK 5	Central St	Block: 100	4,043	3,968	3,987	3,972	3,995	3,991	3,682
010112	MK 5	Central St	Block: 100	4,041	4,018	3,947	3,955	3,752	3,686	3,273
010113	MK 5	Central St	Block: 100	3,966	4,008	4,024	4,025	4,014	4,008	3,791
010201	MK 5	Central St	Block: 200	4,039	4,018	3,964	3,980	3,997	4,018	3,831
010202	MK 5	Central St	Block: 200	4,039	3,997	3,959	3,980	3,899	3,695	3,449
010205	MK 5	Central St	Block: 200	4,031	4,008	3,972	4,008	3,993	4,004	3,796
010206	MK 5	Central St	Block: 200	3,936	3,976	3,989	3,964	3,970	3,985	3,756

Create Filter

Key :

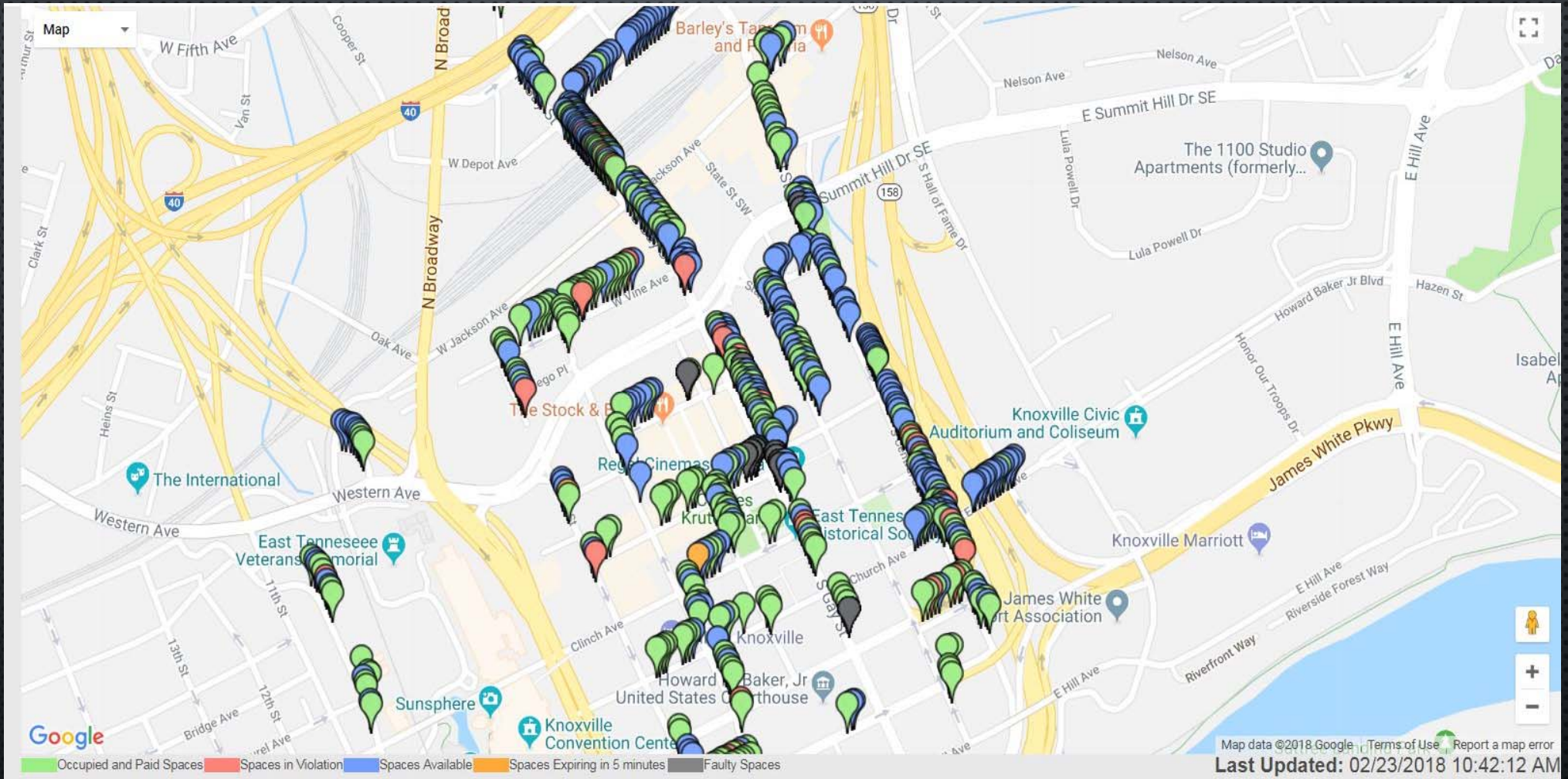
Meter Type	MK 3	MK 5
Bad	$v \leq 4500 \text{ mV}$	$V \leq 3100 \text{ mV}$
Sufficient	$4500 \text{ mV} < V \leq 5800 \text{ mV}$	$3100 \text{ mV} < V \leq 3400 \text{ mV}$



COLLECTION ROUTES

Zone	Area	Sub Area	Pole Serial Number	# Coins	\$ Value	Last Collection Date	Last Collection Time	\$ Capacity	% Full
DOWNTOWN OLD CITY	Main St	Block: 500	130516	228	\$46.40	02/15/2018	11:44:10 AM	\$60.00	77
DOWNTOWN OLD CITY	Walnut St	Block: 700	190706	251	\$46.00	02/15/2018	11:55:33 AM	\$60.00	77
DOWNTOWN OLD CITY	Central St	Block: 200	010208	241	\$45.80	02/01/2018	11:31:49 AM	\$60.00	76
DOWNTOWN OLD CITY	Main St	Block: 500	130506	225	\$42.80	02/15/2018	11:46:29 AM	\$60.00	71
DOWNTOWN OLD CITY	Main St	Block: 500	130507	210	\$41.75	02/15/2018	11:46:31 AM	\$60.00	70
DOWNTOWN OLD CITY	Walnut St	Block: 700	190703	215	\$41.60	02/15/2018	11:55:22 AM	\$60.00	69
DOWNTOWN OLD CITY	Main St	Block: 500	130512	210	\$40.15	02/15/2018	11:42:45 AM	\$60.00	67
DOWNTOWN OLD CITY	Walnut St	Block: 700	190705	206	\$40.10	02/15/2018	11:55:53 AM	\$60.00	67
DOWNTOWN OLD CITY	State St	Block: 900	150901	241	\$39.60	02/12/2018	11:19:15 AM	\$60.00	66
DOWNTOWN OLD CITY	Central St	Block: 100	010101	226	\$39.50	02/13/2018	10:32:42 AM	\$60.00	66
DOWNTOWN OLD CITY	Central St	Block: 200	010212	224	\$39.40	02/01/2018	11:33:04 AM	\$60.00	66

SENSOR REPORTING / MAPPING OPTIONS



SENSOR PAYMENT REPORT

Drag a column header here to group by that column

Date	Time	Event Description	Amount (\$)	Duration	Expiry Date	Expiry Time	Payment Type
02/20/2018	07:35:10 AM	Space Occupied	0.00	00:20:00			
02/20/2018	07:53:06 AM	Space Vacated	0.00	00:14:00			
02/20/2018	08:37:30 AM	Space Occupied	0.00	00:45:00			
02/20/2018	08:48:11 AM	Space Vacated	0.00	00:10:00			
02/20/2018	09:16:30 AM	Space Occupied	0.00	00:29:00			
02/20/2018	09:16:50 AM	Payment Made	0.05	00:02:00	02/20/2018	09:18:50 AM	Cash
02/20/2018	09:27:15 AM	Space Vacated	0.00	00:10:00			
02/20/2018	11:17:07 AM	Space Occupied	0.00	01:50:00			
02/20/2018	11:18:17 AM	Payment Made	1.00	00:40:00	02/20/2018	11:58:17 AM	Cash
02/20/2018	11:18:49 AM	Payment Made	0.30	00:12:00	02/20/2018	12:10:17 PM	Cash
02/20/2018	11:44:30 AM	Space Vacated	0.00	00:28:00			
02/20/2018	11:47:19 AM	Space Occupied	0.00	00:02:00			
02/20/2018	11:50:41 AM	Payment Made	0.40	00:16:00	02/20/2018	12:26:17 PM	Cash
02/20/2018	11:52:27 AM	Payment Made	2.25	01:26:10	02/20/2018	01:52:27 PM	Credit
02/20/2018	12:24:42 PM	Space Vacated	0.00	00:38:00			
02/20/2018	12:46:08 PM	Space Occupied	0.00	00:21:00			
02/20/2018	12:46:39 PM	Payment Made	0.25	00:10:00	02/20/2018	02:02:27 PM	Cash

OCCUPANCY REPORTING

Zone	00.00	01.00	02.00	03.00	04.00	05.00	06.00	07.00	08.00	09.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	
DOWNTOWN OLD CITY [# Poles- 15]	36.45%	29.24%	25.15%	24.17%	22.22%	25.54%	31.38%	46.00%	64.33%	68.03%	69.59%	72.12%	76.02%	76.22%	72.90%	67.64%	69.79%	66.67%	62.57%	
FORT SANDERS [# Poles- 15]	73.33%	60.00%	60.00%	53.33%	46.67%	46.67%	53.33%	46.67%	46.67%	60.00%	60.00%	80.00%	93.33%	80.00%	100.00%	66.67%	73.33%	66.67%	80.00%	
GAY ST VIADUCT [# Poles- 5]	44.64%	42.86%	39.29%	37.50%	37.50%	37.50%	51.79%	41.07%	44.64%	53.57%	58.93%	58.93%	62.50%	71.43%	78.57%	71.43%	58.93%	57.14%	75.00%	
UT AREA [# Poles- 244]	27.05%	25.82%	22.54%	20.49%	18.85%	33.61%	65.98%	72.95%	77.05%	77.05%	76.23%	75.41%	79.51%	81.56%	73.36%	77.05%	58.20%	61.07%	54.92%	
WORLDS FAIR PARK [# Poles- 15]	26.92%	26.92%	26.92%	26.92%	30.77%	26.92%	30.77%	34.62%	42.31%	42.31%	42.31%	42.31%	50.00%	57.69%	46.15%	50.00%	61.54%	61.54%	53.85%	

Sub Area	00.00	01.00	02.00	03.00	04.00	05.00	06.00	07.00	08.00	09.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	
Block: 100 [# Poles- 27]	74.07%	74.07%	74.07%	74.07%	70.37%	70.37%	66.67%	70.37%	59.26%	55.56%	62.96%	77.78%	85.19%	81.48%	88.89%	77.78%	85.19%	66.67%	59.26%	
Block: 200 [# Poles- 7]	28.57%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	42.86%	28.57%	0.00%	28.57%	85.71%	71.43%	71.43%	42.86%	57.14%	57.14%	85.71%	
Block: 300 [# Poles- 11]	54.55%	27.27%	0.00%	0.00%	0.00%	9.09%	18.18%	63.64%	63.64%	63.64%	81.82%	81.82%	90.91%	90.91%	90.91%	81.82%	90.91%	90.91%	90.91%	
Block: 400 [# Poles- 31]	48.39%	38.71%	19.35%	12.90%	12.90%	16.13%	25.81%	45.16%	74.19%	74.19%	70.97%	80.65%	77.42%	80.65%	77.42%	80.65%	80.65%	77.42%	77.42%	
Block: 500 [# Poles- 11]	54.55%	18.18%	0.00%	18.18%	9.09%	9.09%	0.00%	36.36%	54.55%	63.64%	54.55%	63.64%	63.64%	63.64%	63.64%	54.55%	63.64%	63.64%	63.64%	
Block: 600 [# Poles- 9]	44.44%	33.33%	33.33%	44.44%	11.11%	22.22%	33.33%	55.56%	55.56%	66.67%	66.67%	77.78%	88.89%	88.89%	88.89%	88.89%	88.89%	88.89%	77.78%	88.89%
Block: 700 [# Poles- 5]	20.00%	20.00%	60.00%	60.00%	20.00%	40.00%	20.00%	40.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	60.00%	60.00%	60.00%	60.00%	

VISION / STILL TO COME

- INFORMATIONAL STICKERS AND SIGNS
- PHASE 2 UPGRADE
- AUTOMATED PERMIT MANAGEMENT
- PAY BY PHONE
- SPACE AVAILABILITY MAPPING
- DEMAND RESPONSIVE PRICING

- QUESTIONS...

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