

Memorandum

On-Street Parking System Modernization Plan Summary

Date: July 17, 2020

To: Darnell Brown, Chief of Staff
Michael Cox, Public Works Director
Kim Johnson, Parking Commissioner/Assistant Director of Public Works
City of Cleveland

From: Greg Shumate, Senior Associate
DESMAN

SUMMARY OF THE SYSTEM MODERNIZATION PLAN

The on-street parking system modernization plan, which we have developed in partnership with the City's project taskforce, is comprehensive. The proposed changes are recommended to be implemented in at least two major phases.

Phase I will impact the entirety of the downtown area and parts of University Circle and Ohio City where existing single space meters are to be replaced with multi-space credit card enabled pay station kiosks. Additionally, a \$0.50 per hour rate increase (i.e. to \$1.50 per hour) for on-street meter parking is also proposed, but only for the downtown. The implementation of Automatic License Plate Recognition (ALPR) enforcement and the establishment of a system-wide pay-by-phone service platform is also proposed as part of Phase I.

Phase II will involve the installation of new multi-space credit card enabled pay station kiosks in place of existing single space meters in parts of 8 different neighborhood areas and the introduction of the same new pay stations in a number of other areas across the city where paid on-street parking does not currently exist. All the hourly parking rates in the neighborhoods outside of the downtown would be uniformly be raised to \$1.00 per hour and a series of other programmatic changes will also need to be implemented. Phase II must take into account the fact that the eventual implementation of the proposed neighborhood initiatives will have to be preceded by some yet to be defined measures to involve community organizations and their respective City Council representatives.

The basic elements of the plan comprise a suite of best parking industry practices and strategies that have been deployed for several years in peer cities like Pittsburgh, Detroit, Columbus, Indianapolis, and Cincinnati. The web links noted on the chart below offer case examples of the program enhancements being pursued for the City of Cleveland.

| Peer Cities | Columbus, OH | Cincinnati, OH | Detroit, MI | Indianapolis, IN | Pittsburgh, PA |
|--|---|---|---|--|---|
| Parking System Brand |  |  |  |  |  |
| System Website | www.columbus.gov | www.cincyezpark.com | www.parkdetroit.us | www.parkindy.net | www.pittsburghparking.com |
| Downtown Enforcement Hours | | | | | |
| Monday - Friday | 7AM - 3:30AM | 9AM - 9PM | 7AM - 10PM | 7AM - 11PM | 8AM - 6PM (M-Th) |
| Saturdays | 7AM - 3:30AM | 9AM - 9PM | 7AM - 10PM | 7AM - 11PM | 8AM - 12AM (F/Sat) |
| Sundays | 9AM - 1PM | 2PM - 9PM | FREE | FREE | FREE |
| Holidays | FREE | FREE | FREE | FREE | FREE |
| Downtown Parking Meter System Hourly Rates | | | | | |
| CBD Meter Rates | \$1.00/\$1.50 | \$2.75 | \$2.75 | \$1.50 | \$4.00 |
| Special Event Meter Rates | N/A | \$15 | | N/A | N/A |

The recommended modernization initiative will involve the acquisition and deployment of leading-edge parking hardware and software technologies and services. Additionally, the enactments of a litany of significant programmatic and regulatory changes tailored to the City of Cleveland's unique urban dynamics will also be part of this proposed initiative.

Recommended Procurement of System Hardware and Services:

1. Acquire approximately 526 Multi-Space Credit Card Enabled Pay Station Kiosks (use only one type and brand of smart meter hardware)
2. Retain an industry-leading "Pay-By-Phone" Service provider
3. Acquire and Equip 6 or more City parking vehicles with the necessary hardware and software (i.e. cameras, server, laptop and cellular connectivity) to perform mobile APLR Enforcement.

Recommended Programmatic and Regulatory Changes:

1. Enact a system-wide Rate Increase for On-Street Parking (*Limit New Rate Schedule to \$1.00 and \$1.50 Per hour*)
2. Authorize the expansion of paid parking into some existing metered areas, and in some non-metered areas of the City
3. Authorize the establishment of "Pay-by-Phone Only" On-Street Parking Zones
4. Adopt and implement "Pay-by-Plate" as the basis for processing all pay-by-phone, and at meter, parking transactions.
5. Authorize the Division of Parking Facilities enforcement unit to issue parking violation citations in selected city-owned off-street parking facilities in neighborhood areas where the deployment of multi-space pay station kiosks are recommended for revenue collection.
6. Extend the hours for paid on-street parking and enforcement until 9:00 PM on Fridays in downtown and selected entertain areas in neighborhoods outside of downtown.
7. Require payment and enforcement of on-street parking meters on Saturdays in selected areas between 9:00 AM and 9:00PM (*note: enforcement between 12:00 PM to 9:00 PM is also a practical labor cost saving alternative that could also be considered*)
8. Enactment of legislation that would allow for the establishment of Special Event Parking Zones in the downtown area where fixed premium rates within the range of \$10.00 to \$25.00 could be charged within on-street parking zones during particular special event date(s) and timeframe(s).
9. Discontinue the current practice of issuing vehicles decal to Residential Parking Permitholders, and instead issue "Virtual Residential Parking Permits" keyed to the license of the permitholder's vehicle.

THE RECOMMENDED MODERNIZATION PLAN RATIONALE

1. Make the public's experience with on-street parking more customer friendly and convenient.
2. Eliminate the blighting impact of single space meter hardware collected and serviced within pedestrian right-of-way zones.
3. Reduce the expenditure of time and expense associated with the collection, maintenance, and service of single space meters.
4. Improve the efficiency, effectiveness, and consistency of parking enforcement
5. Reduce the expenditure of time and expense of managing the City's existing Residential Permit Parking program
6. Enhance the ability of the Division of Parking Services to track and audit the financial performance of the on-street parking system.
7. Enhance the ability of the Division of Parking Services to monitor, manage, analyze, anticipate and respond to on-street parking related problems, needs and opportunities as they arise more intelligently.

8. Projected gains in annual system revenue generation can be expected to yield a 2- to 3-year Return of Investment (ROI) of required capital expenditures and sustain the fiscal solvency of the City's on-street parking system.

THE PROCUREMENT OF THE NECESSARY PARKING EQUIPMENT AND SERVICES

An All-Inclusive Procurement Solicitation Approach - The modernization of the City's on-street parking system should be couched as a key part of a broader objective to position Cleveland among the growing number cities striving to achieve "Smart City" status. The technological and operational advances that are desired for the meter system will ultimately be linked with other technologically advanced transportation, communication, public safety, and general information platforms designed to promote and facilitate community growth and vitality.

The City needs to approach the acquisition of the needed parking equipment and services as a turn-key package or an all-inclusive solicitation that will include the provision of the following: 1) Multi-space pay station kiosks units and associated system software, 2) ALPR enforcement equipment and software equipment and, 3) A cellular- and web-based electronic payment solution.

DESMAN recommends that the City secure this all-inclusive on-street parking system solution from one entity who will commit to assuming all contractual responsibilities for the delivery, installation, performance and warranty of all specified system hardware and software as well as the provision of on-going service support specified in this RFP. Proposal submittals from any business enterprise offering to provide only selected products and/or services included in this RFP should be treated as being non-complaint and should be rejected by the City.

DESMAN feels this approach will reinforce the importance the City places on acquiring a fully integrated package of system equipment and services, that will be delivered on schedule and within budget from one fully accountable entity. The alternative approach to this procurement would be disjointed and more time-consuming. If significant interface and connectivity problems arise during the implementation process, finger pointing among the two or three different contractors would likely occur. The City would clearly be challenged if it had to assign blame and resolve the problems without potentially incurring a loss of both time and money.

THE PROCUREMENT BUDGET

The following is an estimate of the probable acquisition and installation costs for the recommended enhancements to the City of Cleveland's parking meter system. The figures do not include going service costs.

| CITY OF CLEVELAND METER SYSTEM PROJECT | # | Estimated | Total |
|---|--------------|------------------|--------------------|
| PHASE I Procurement Items | Units | Unit Cost | |
| Multi-Space Pay Station Kiosks <i>(Including shipping, installation, warranty, etc.)</i> | 333 | \$6,500 | \$2,164,500 |
| ALPR Equipped Enforcement Vehicles <i>(including ALPR cameras and software shipping, installation, service, warranty, etc.)</i> | 6 | \$40,000 | \$240,000 |
| Pay-by-Phones Services | ----- | \$0 | |
| PHASE II Procurement Items | | | |
| Multi-Space Pay Station Kiosks <i>(Including shipping, installation, warranty, etc.)</i> | 193 | \$6,500 | \$1,254,500 |
| TOTAL PROJECT BUDGET | | | \$3,659,000 |

RETURN ON INVESTMENT

The implementation of the recommended changes to the existing on-street parking system can be expected to immediately yield a substantial amount of additional revenue. The gains in revenue will result from the following program consequences:

- 1) the establishment of potentially 1,903 new pay to park on-street spaces across the City,
- 2) the enactment of parking meter rates increases, including new special event parking rates,
- 3) the availability of more convenient payment options and the increased usage of credit cards with higher per transaction payment,
- 4) the extension of paid parking hours on Friday evenings and on Saturdays,
- 5) the end of meter parkers being able to avoid paying by piggyback on vacant but unexpired meters, and
- 6) higher meter payment compliance will occur because of more frequent, consistency and effective mobile ALPR enforcement.

DESMAN projects that the combination of new technologies and services along with the enactment of complimentary the program changes the City of Cleveland has the potential of recovering its capital improvement cost for the proposed program enhancements within a 2- to 3-year period. It is also important to note that comparable results were also realized by the cities of Detroit, Pittsburgh, Indianapolis, and Cincinnati after they completed the implementation of similar program enhancements.

The following charts provide a detailed breakdown of the primary system improvements proposed for the City's downtown and neighborhood areas. The charts also reveal which improvement areas are proposed for implementation as part Phase I and Phase II.

| Downtown (CBD) Plan Subareas | Proposed On-Street Parking Enhancement Summary | | | | | | | | |
|--|--|-----------|--------------|-----------------------|---------------|---------------------------------|-----------------------|------------------------------|----------------------|
| | Existing Hardware | | | Future Parking Spaces | New MSM Units | Estimated Cost of New MSM Units | Fridays Until 9:00 PM | Saturdays 12:00 PM - 9:00 PM | Proposed Rate Change |
| | Single Meters | MSM Units | Total Spaces | | | | | | |
| CBD - Civic Center | 261 | 0 | 261 | 261 | 32 | \$208,000 | Yes | Yes | \$1.50 |
| CBD - Civic Center | 32 | 4 | 32 | 32 | 4 | \$26,000 | Yes | Yes | \$1.50 |
| CBD - Erieview | 104 | 0 | 104 | 74 | 9 | \$58,500 | No | No | \$1.50 |
| <i>Erieview (St. Clair/Superior from E. 18th to E. 24th)</i> | 30 | | 30 | 0 | 0 | \$0 | ---- | ---- | ---- |
| CBD - Flats East Bank | 38 | 0 | 38 | 38 | 5 | \$32,500 | Yes | Yes | \$1.50 |
| Flats East Bank (North) | | | | 42 | 5 | \$32,500 | Yes | Yes | \$1.50 |
| Flats East Bank (South) | | | | 67 | 9 | \$58,500 | Yes | Yes | \$1.50 |
| CBD - Gateway District | 133 | 0 | 133 | 133 | 17 | \$110,500 | Yes | Yes | \$1.50 |
| Euclid Ave. (Public Sq. - E. 9th) | | | | 50 | 8 | \$52,000 | Yes | Yes | \$1.50 |
| Vincent Ave. (E. 6th - E. 9th) | | | | 6 | 1 | \$6,500 | Yes | Yes | \$1.50 |
| CBD - North Coast District | 93 | 0 | 93 | 93 | 12 | \$78,000 | Yes | Yes | \$1.50 |
| CBD - Playhouse Square | 355 | 0 | 355 | 355 | 44 | \$286,000 | Yes | Yes | \$1.50 |
| Euclid Ave. (E. 14th - E. 18th) | | | | 21 | 3 | \$19,500 | Yes | Yes | \$1.50 |
| Huron Rd. to E. 14th | | | | 4 | 1 | \$6,500 | Yes | Yes | \$1.50 |
| E. 12th St. (Euclid to Chester) | | | | 7 | 1 | \$6,500 | Yes | Yes | \$1.50 |
| CBD - Tower City District | 53 | 0 | 53 | 53 | 7 | \$45,500 | Yes | Yes | \$1.50 |
| CBD - University District | 372 | 0 | 372 | 349 | 43 | \$279,500 | No | Yes | \$1.50 |
| Superior Ave. (E. 18th - E. 26th) | 23 | 0 | 23 | 0 | 0 | \$0 | ---- | ---- | ---- |
| Euclid Ave. (E. 17th - E. 24th) | | | | 50 | 7 | \$45,500 | No | No | \$1.50 |
| E. 22nd (Chester to Payne) | | | | 24 | 3 | \$19,500 | No | No | \$1.50 |
| CBD - Warehouse District | 334 | | 334 | 334 | 42 | \$273,000 | Yes | Yes | \$1.50 |
| CBD - Warehouse District | 0 | 5 | 40 | 40 | 5 | \$32,500 | Yes | Yes | \$1.50 |
| Warehouse District | | | | 15 | 2 | \$13,000 | No | Yes | \$1.50 |
| SUBTOTAL CENTRAL BUSINESS DISTRICT (CBD) | 1,828 | 9 | 1,868 | 2,164 | 260 | \$1,690,000 | | | |
| Phase I - Existing Meters to be Replaced with MSMs | 1,775 | 9 | 1,815 | 1,762 | 220 | \$1,430,000 | | | |
| Phase I - MSMs Units for Proposed New Pay Parking Zones | 0 | 0 | 0 | 286 | 40 | \$260,000 | | | |
| Phase I - Eliminated Single Space Meters | 53 | 0 | 53 | | | | | | |

"Black Text" denotes all existing single space meters spaces to be converted to MSM units. "Red Text" denote existing single space meters to be eliminated. "Blue cells" denote "Projects Proposed for Implementation as Part of Phase I" and "Blue Text" denotes proposed new pay spaces to be controlled by New MSM units.

Proposed Meter System Hardware and Enforcement Changes for the Neighborhood Areas (Phase I and II)

| Neighborhood SPA Plan Subareas | Proposed On-Street Parking Enhancement Summary | | | | | | | | |
|--|--|-----------|--------------|-----------------------|---------------|---------------------------------|-----------------------|------------------------------|----------------------|
| | Existing Hardware | | | Future Parking Spaces | New MSM Units | Estimated Cost of New MSM Units | Fridays Until 9:00 PM | Saturdays 12:00 PM - 9:00 PM | Proposed Rate Change |
| | Single Meters | MSM Units | Total Spaces | | | | | | |
| Buckeye - Shaker Square | 68 | 0 | 68 | 68 | 9 | \$58,500 | Yes | Yes | \$1.00 |
| Larchmere Blvd | | | | 66 | 8 | \$52,000 | Yes | Yes | \$1.00 |
| Shaker Square (Shaker Blvd/S. Moreland/E. 130th) | | | | 12 | 6 | \$39,000 | Yes | Yes | \$1.00 |
| Shaker Square (Van Aken/Drexmore) | | | | 26 | 3 | \$19,500 | Yes | Yes | \$1.00 |
| Shaker Square (Private) | | | | 90 | 5 | \$32,500 | Yes | Yes | \$1.00 |
| Central | 102 | 0 | 102 | 67 | 5 | \$32,500 | No | No | \$1.00 |
| Community College Ave. | | | | 38 | 5 | \$32,500 | No | No | \$1.00 |
| Prospect Ave. (East 30th - East 55th St.) | | | | 134 | 18 | \$117,000 | No | No | \$1.00 |
| Central Ave. (East 22nd - East 24th) | 35 | | 35 | 0 | 0 | \$0 | ---- | ---- | ---- |
| Detroit Shoreway (W. 46th - W. 69th St.) | 0 | 8 | 64 | 64 | 8 | \$52,000 | Yes | Yes | \$1.00 |
| Detroit Ave. (W. 61st - W. 64th St.) | | | | 23 | 3 | \$19,500 | Yes | Yes | \$1.00 |
| Gordon Sq. Arcade Off-Street Lot | | | | 73 | 3 | \$19,500 | Yes | Yes | \$1.00 |
| Gordon Sq. Cleveland Public Theatre Off-Street East Lot | | | | 36 | 2 | \$13,000 | Yes | Yes | \$1.00 |
| Gordon Sq. Cleveland Public Theatre Off-Street West Lot | | | | 45 | 2 | \$13,000 | Yes | Yes | \$1.00 |
| Gordon Sq. Near Westside Theatre Off-Street Lot | | | | 14 | 1 | \$6,500 | Yes | Yes | \$1.00 |
| Detroit Ave. (W. 78th - W. 80th St.) | 7 | | 7 | 0 | 0 | \$0 | ---- | ---- | ---- |
| Kamm's Corner (Rocky River Dr. - W. 165th) | 51 | 0 | 51 | 51 | 6 | \$39,000 | Yes | Yes | \$1.00 |
| Kamm's Corner Off-Street Lot | | | | 116 | 2 | \$13,000 | Yes | Yes | \$1.00 |
| Ohio City | 201 | 0 | 201 | 201 | 22 | \$143,000 | Yes | Yes | \$1.50 |
| West 25th St./Detroit Ave. | | | | 136 | 18 | \$117,000 | Yes | Yes | \$1.50 |
| West 25th St./Lorain Ave. | | | | 151 | 17 | \$110,500 | Yes | Yes | \$1.50 |
| Flats West Bank | | | | 135 | 16 | \$104,000 | Yes | Yes | \$1.00 |
| Brooklyn Centre | 0 | 0 | 0 | 0 | 0 | \$0 | ---- | ---- | ---- |
| West 25th St. MetroHealth Campus | | | | 19 | 2 | \$13,000 | No | Yes | \$1.00 |
| Old Brooklyn | 19 | 0 | 19 | 19 | 3 | \$19,500 | No | Yes | \$1.00 |
| West 25th St./Broadview Ave. | | | | 46 | 10 | \$65,000 | No | Yes | \$1.00 |
| Tremont | 0 | 0 | 0 | 0 | 0 | \$0 | ---- | ---- | ---- |
| Professor Ave. (Jefferson to Literary) | | | | 100 | 9 | \$58,500 | Yes | Yes | \$1.50 |
| Kenilworth Ave (5 Points) | | | | 42 | 6 | \$39,000 | No | Yes | \$1.00 |
| West 14th St. (Auburn Ave.) | | | | 35 | 4 | \$26,000 | No | Yes | \$1.00 |
| University (UCI existing meters) | 278 | 0 | 278 | 278 | 31 | \$201,500 | Yes | Yes | \$1.50 |
| University (UCI Euclid Ave. MSPMs) | 0 | 7 | 56 | 56 | 7 | \$45,500 | Yes | Yes | \$1.50 |
| East Blvd./MLK Blvd./E. 105th/Park Lane | | | | 124 | 14 | \$91,000 | No | Yes | \$1.00 |
| Euclid Ave. (Aldelbert to Cornell) | | | | 28 | 4 | \$26,000 | No | Yes | \$1.00 |
| Juniper Rd./Mistletoe Dr./Bellflower/E. 115th | | | | 46 | 6 | \$39,000 | No | Yes | \$1.00 |
| Little Italy (Mayfield Rd.) | | | | 69 | 9 | \$58,500 | Yes | Yes | \$1.00 |
| Little Italy (Cornell Rd.) | | | | 13 | 2 | \$13,000 | Yes | Yes | \$1.00 |
| SUBTOTAL NEIGHBORHOOD SPAs | 742 | 15 | 881 | 2,421 | 266 | \$1,729,000 | | | |
| Phase I Existing Meter Upgrades to MSPMs | 581 | 15 | 708 | 666 | 73 | \$474,500 | | | |
| Phase II - Existing Meters to be Replaced with MSMs | 180 | 0 | 180 | 138 | 18 | \$117,000 | | | |
| Phase II - MSMs Units for Proposed New Pay Parking Zones | 180 | 0 | 180 | 1,617 | 175 | \$1,137,500 | | | |
| Phase II - Eliminated Single Space Meters | 42 | 0 | 42 | | | | | | |

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PROJECT PHASING SUMMARY

| PROJECT PHASING SUMMARY | Future Parking Spaces | New MSM Units | Estimated Cost of New MSM Units |
|---|-----------------------------|---------------------|---------------------------------------|
| Phase I Existing Meter Upgrades to MSPMs (CBD & Neigh.) | 2,428 | 293 | \$1,904,500 |
| Phase I New Pay Parking Zones with MSPMs (CBD Only) | 286 | 40 | \$260,000 |
| Phase I - Eliminated Single Space Meters (35) | | | |
| PHASE I PLAN SUBTOTALS | 2,714 | 333 | \$2,164,500 |
| Phase II - Existing Meters to be Replaced with MSMs | 138 | 18 | \$117,000 |
| Phase II - MSMs Units for Proposed New Pay Parking Zones | 1,617 | 175 | \$1,137,500 |
| Phase II - Eliminated Single Space Meters (42) | | | |
| PHASE II PLAN SUBTOTALS | 1,755 | 193 | \$1,254,500 |
| TOTAL PLAN SYSTEM SPACES AND PAY STATION KIOSKS TOTALS | 4,469 | 526 | \$3,419,000 |
| Existing Metered Space Upgrade with Pay Station Kiosks | 2,566 | 311 | \$2,021,500 |
| New Pay to Park Spaces Served by New Pay Stations Kiosks | 1,903 | 215 | \$1,397,500 |

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