D.   Cost

Cost Benefit Analysis

In partnership with Parkeon, IPS, Parkmobile, PayLock and our highly-qualified DBE/MBE business partner –Hudson and Associates, LLC, the Xerox Team proposes an Integrated Parking Management Solution represented by innovative data processing solutions and state-of-the-art equipment that will help STLTO become a showcase program for the on-street parking industry.

Xerox has carefully reviewed the STLTO's RFP, paying particular attention to the defined project drivers—performance improvements, superior program integration, and business changes. As an incumbent service provider for ticket processing and ajudication services, we understand the nuanced business rules and operating requirements for the City's parking ticket operaitons. Through this experience and our relationship with Hudson and Associates, LLC, we have also developed a detailed understanding of the City's current meter operations and enforcement objectives. Of equal importance to our understanding of how the City's current programs function is our appreciation for the direction that the Treasure's Office desires to move its program in the years ahead.

The Xerox Team recommends and proposes to deliver a comprehensive pay-by-phone solution, provided by ParkMobile, immediately following contract start. Pay-by-phone is an ideal first phase of a comprehensive system upgrade—providing motorists with the ability to pay using a credit card at any meter, including the City's existing meter inventory. Following the launch of pay-by-cell, we recommend that high use areas be upgraded to IPS meters or Parkeon pay-stations (pay-by-space), while the City's underutilized parking zones can continue to be supported by the low cost meters in place today. As old meters are replaced by new meters and pay-stations, we recommend recycling parts and equipment in good working condition to facilitate a more cost effective operation. To the extent old meters can be recycled in this manner, the Xerox Team may be enabled to offer a slight discount to our on-going maintenance costs.

Today, smart parking is expensive; we must develop more affordable, scalable, and sustainable solutions to create more livable cities. Xerox has been leading the industry through innvoative work in the development of lean demand management and smart parking. While we are proud of our support for the industry's largest and most successful congestion management parking program, LA ExpressPark , we also realize that a sensor-per-space model is not financially viable without extensive subsidies or federal funding. To address the reality and deliver workable smart parking solutions to our clients, Xerox researchers are leading the way towards true lean demand management by developing portable camera solutions to create accurate and usable baseline measures of occupancy.

At the same time, Xerox has developed the most sophisticated parking asset management system in the world, Merge®, to power the solutions of tomororw. Our Palo Alto Research Center (PARC) has co-developed a new enforcement software system, Compliance™ with our clients in Denver and Los Angeles. Our national collections director is helping Xerox clients to implement Managed Receiveable competitive collections models to maximize delinquent ticket collections and parking revenues.

Whether its making parking occupancy data available to the public or using data to extrapolate where violations will likely be found, in nearly every area of Smart Parking, Xerox is delivering innovation that

is reshaping how people think about parking management. No partner is better positioned to help the City of St. Louis assess its current program and establish a technology roadmap for its parking future.

A comprehensive summary of our pricing is outlined in Table D–1. The sections that follow provide a more detailed breakdown of each element of our pricing.

Table D–1. Summary Pricing

Item	Unit Cost	Unit
Per Ticket Issued Fee	$ 3.86	Per Ticket Issued
Contingency Fee	25 percent	Delinquent Revenue Collected
Meter Maintenance/Collections Per Space Fee	$ 14.44	Per Space Per Month
Per Installed Parkeon Meter	$ 5,761.90	Per Multi-Space Meter Installed
Per Installed IPS Meter	$ 491.67	Per Single Space Meter Installed
Monthly Parkeon Meter Maint Fees	$ 99.65	Per Multi-Space Meter Per Month
Monthly IPS Meter Maint Fees	$ 20.35	Per Single Space Meter Per Month
Monthly Duncan Meter Maint Fees	$ 0.52	Per Meter Per Month

Ticket processing and collections

Xerox is proud of the service that we have provided to the City of St. Louis; the accuracy and integrity of our systems and processes in place today; and the improvements we have helped deliver to the City's net revenue from parking. Our current and proposed ticket processing solution is built on the industry's most robust and effective parking ticket processing application, eTIMS®. Our advanced parking management approach and citation processing solutions incorporate new technologies and forward-facing business processes to optimize efficiency, service, and client revenues. At the same time, we are pleased to offer cost effective ticket processing solution enhancements designed to appreciably improve service to the public. Our proposed solution includes a fresh customer-friendly website, mobile reporting, and three iPad tablets to optimize your policy decision making—all offered at a best value price.

In the area of collections, our proposed offering includes a myriad new collection solutions designed to further maximize gross and net revenues, icnlduing the introdcution of outbound calling delivered as a component of our inventive Managed Receiveable competitive collections solution.

Our ticket processing price is less than the SLTO pays today (Table D–2):

Table D–2. Ticket Processing Price

Item	Unit Cost	Unit
Per Ticket Issued Fee	$ 3.86	Per Ticket Issued
Contingency Fee	25 percent	Delinquent Revenue Collected

While our proposed ticket processing and collection fees represent a savings to the City over today's pricing, they also ensure that transition risk is mitigated, customer service is improved, and program revenues are maximized.

xerox

Proposed per meter base unit and describe all costs of options not included in the base price

Xerox is proposing a combination of Parkeon Strada pay by space multi-space equipment and IPS single-space networked parking meters for upgrading the STLTO on-street parking payment operation. The exact equipment mix will be jointly determined pending feedback for the system demonstration trial and an analysis of the individual controlled block face layout requirements. This equipment will be provided at the following all inclusive per unit fixed price (Table D–3):

Table D–3. All inclusive per unit fixed prices

Item	Unit Cost	Unit
Meter Maintenance/Collections Per Space Fee	$ 14.44	Per Space Per Month
Per Installed Parkeon Meter	$ 5,761.90	Per Multi-Space Meter Installed

For block faces with new multi-space equipment, this pricing is based on the removal of the existing meters and poles. For paid parking spaces using the new networked single-space meters, Xerox will coordinate the collections and removal of the existing meter mechanisms by STLTO with the installation of the new units.

Payment becomes due with the acceptance of the new on-street equipment by STLTO for paid parking operations.

Optional Services and Pricing

Xerox would like to offer as optional services several features and additional technologies that add to the user experience and allow for more advanced parking management services. These options include the ability to display time purchased through mobile payment providers directly on the meter and vehicle detection sensors to facilitate parking guidance and feed occupancy data to the Dynamic Pricing Engine.

Optional Pay-By-Cell Integration with Meters

Our core proposal includes the provision of pay-by-cell, at no cost to the City (user fees will be borne by the public and use of pay-by-cell is entirely voluntary.) Xerox is pleased to provide pricing for our optional integration with pay-by-cell phone systems, which will be seamlessly integrated into the IPS management system via the wirelessly enabled single space meters system. Below in Table D–4 you will find pricing that would allow the City to push time directly to the meter from a pay-by-cell provider, allowing enforcement officers to validate parking at the meter and enabling the public to easily see which meters have been paid, even those paid via pay-by-cell.

The contents of this proposal are subject to the disclosure statement on the title page of this proposal.

© 2013 Xerox State & Local Solutions, Inc.

November 22, 2013

D-3

Page Excluded from Page Count

Table D–4. Ongoing Pay-by-Cell Costs

	Item	Cost per Transaction
OPTION 1	Pay-by-Cell Data Push Fee (paid by the City)	$0.11
	Pay-by-Cell Data Push Fee (paid by Customer)	$0.39
OPTION 2	Pay-by-Cell Data Push Fee (paid by the City)	No cost to the City
	Pay-by-Cell Data Push Fee (paid by Customer)	$0.50

- Pay-by-cell service and data feed provided by 3rd party to be selected by City. This is the data charge to push real-time payments to the meters. (Alternate pricing of $1.10 per meter per month unlimited pay-by-cell transactions vs. per transaction pricing above).
- It is possible to implement pay-by-cell without a real time data push to the meter, which will not incur any additional City costs and will extend battery life. Real time data push may reduce battery life to less than 12 months depending on location and operating parameters. IPS has battery saving methodologies that can be implemented if selected.

Optional Sensor Pricing

Xerox is pleased to provide pricing details for our optional vehicle detection system (Table D–5), which will be seamlessly integrated into the IPS management system via the wirelessly enabled single space meter system. This system is not designed to monitor unmetered locations. System costs do not include any additional permitting costs that may be required and will be added to any invoice submitted.

Table D–5. Vehicle Detection System Pricing

Item	Cost per Space
Vehicle Detection Sensors (12 month warranty, FOB St Louis, MO, includes installation services)	$247.50
OPTIONAL: Extended Sensor Warranty (each additional 12 months)	$38.50

NOTE. Price per sensor (per unit) is the total fixed price for the equipment. Additional ongoing costs associated with wireless services, management system access are ongoing and outlined in Table D–6. All pricing does not include any applicable state or local taxes that are required to be paid by the city now or in the future. All costs of permits will be added to customer invoice.

Table D–6. Ongoing Sensor Costs

Item	Cost per Month per Space
Management System / Base Data Fee	$3.85
Optional: Real Time Reporting Fee*	$3.03
Total (including optional real time fee)	$6.88

xerox

* Real Time Reporting Fee is not required to be paid again if already using real time data fee option on IPS meters. Real time data fee covers the real time reporting of vehicle presence for the purpose of real time maps or real time enforcement.

NOTE. Ongoing fees are subject to annual adjustment due to increases in Inflation as published by the US Bureau of Labor Statistics for All Items Consumer Price Index for All Urban Consumers (CPI-U) for the U.S. City Average, and will not exceed 3% annually. Real time reporting fee not required if already using real time reporting fee on the IPS meter.

Please describe all cost associated with day to day usage of the equipment

For the Parkeon and IPS parking payment equipment, complete monthly operational and maintenance costs associated with wireless communications and alarms, consolidated Merge reporting, analysis and gateway credit card processing fees, planned and emergency response maintenance and replacement parts are shown in Table D–7.

Table D–7. Cost associated with day to day usage of the equipment

Item	Unit Cost	Unit
Monthly Parkeon Meter Maint Fees	$ 99.65	Per Multi-Space Meter Per Month
Monthly IPS Meter Maint Fees	$ 20.35	Per Single Space Meter Per Month
Monthly Duncan Meter Maint Fees	$ 0.52	Per Meter Per Month

While maintenance and collection costs for IPS and Parkeon meters are higher than non-networked meters currently in place, the associated revenues through the acceptance of credit card acceptance is much higher.

Cost for Field Test

The Xerox Team proposes a field test that will demonstrate functionality and public acceptance for state-of-the-art equipment and services. Our proposed Field Test offering does not include hidden integration fees or one-time setup costs. As of the submission of our proposal, no vendors have contacted Xerox regarding integration into our ticket processing system in support of the use of third party equipment and/or services during the pilot. While Xerox does not typically charge our clients for integration services, we will charge any third parties for integration into Xerox systems, such as handheld integration into our eTIMS® system, based on market rates and specific integration requirements.

Return on Investment: Deriving Value from Technology

A thorough and detailed ROI schedule is dependent on rates, occupancy, and other variables that may change over time. While Xerox has done extensive work developing detailed ROI schedules that account for anticipated changes to these variables, it is not prudent for us to submit such a schedule without further discussions with the STLTO to discuss policy objectives, funding capacity, and other variables. We hope to have an opportunity to work with the STLTO to develop a better understanding of its long term objectives, rate plans, off-street availability, and other criteria to support the development of a comprehensive ROI schedule customized for the St Louis parking environment. Below is a summary of

the factors that generally contribute to the ROI on different technologies and specific revenue experiences from other cities.

Make Coins a Relic of the Past. Reducing and, eventually, eliminating the need for coins translates into operational savings and improved revenues. Experience has shown, particularly in Washington D.C. that effecting a substantial mode shift in payment can improve the likelihood of making changes in the physical on-street infrastructure. In other words, when a significant proportion of parking payments are credit/debit cards, cities can improve revenue and reduce the number of times that collectors must visit meters. In Indianapolis alone, 75% of all meter payments are made via credit card today, up from 0% just two years ago.

Exhibit D–1 shows the payment mode shift in Washington D.C. since the introduction of Parkmobile's pay-by-phone solution, coupled with expanded use of credit cards for payment. Presently, pay-by-phone payments account for 50% of all payments made. Just 24% of all payments are made by coin.
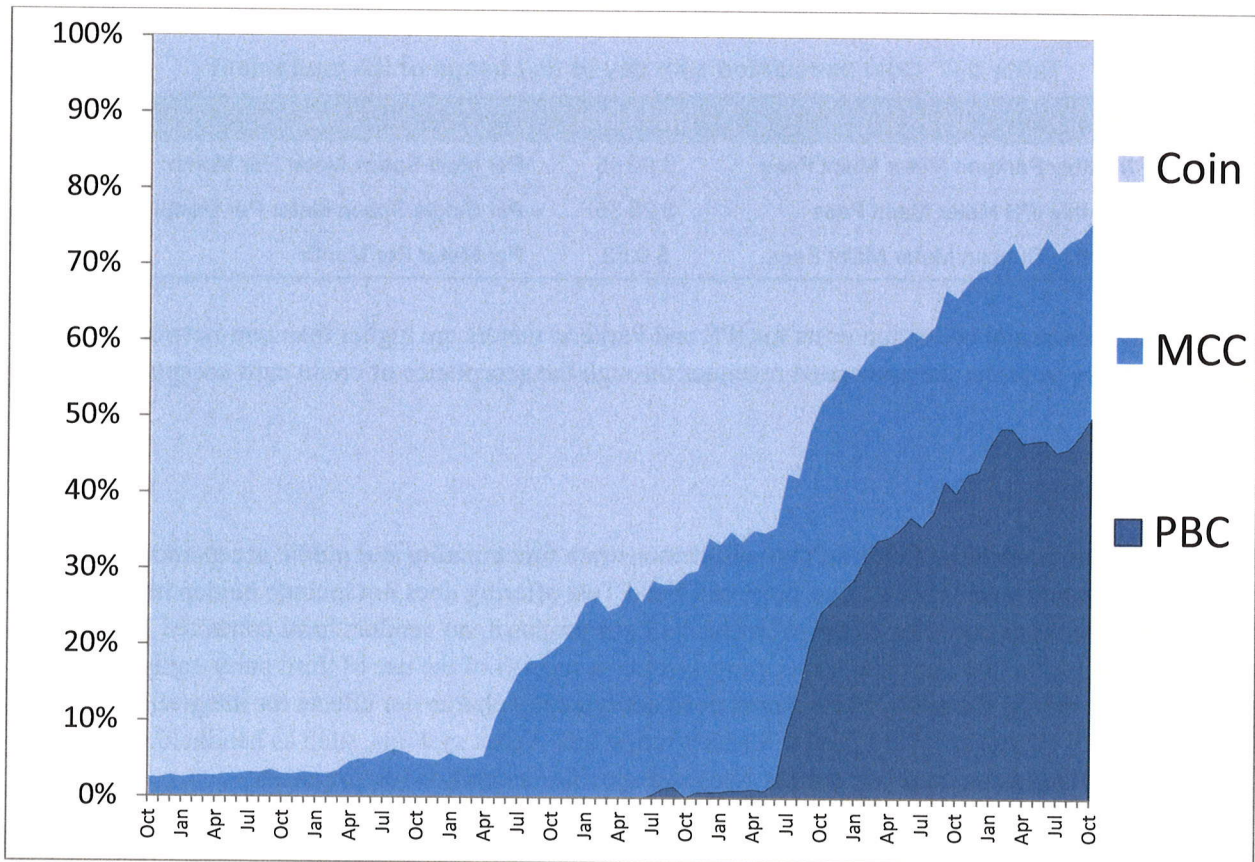

Exhibit D–1. Payment mode shift in Washington D.C.
A World without Coins – Washington DC has witnessed a $600,000 revenue improvement over 12 months as the result of its pay-by-phone program.

Typically, cities witness revenue increases of 10% to 15% with the introduction of pay-by-phone. Those increases are largely due to the fact that customers pay for more time when paying a meter via app or phone (in Indianapolis, for example, customers purchase up to 60% more time using phone apps than customers paying at meters, leading to a 13% revenue improvement).

Reduce the Need for Meters. Long-term, the City can reduce the need for parking meters and offer solutions for potentially eliminating them altogether. Leveraging the use of smart phone technology to provide users with rich information on parking options, such as space availability, rates, etc., such that many users will switch to that mode over coin or credit card. We feel a long-term transition to non-meter payments can lead to less reliance on on-street meters, thus reducing costs associated with operating those devices and improving sustainability. As little as a five percent reduction in on-street meters could yield substantial savings in the coming years.

Trim Credit Card Fees. As users migrate from coins to pay-by-phone as means of payment the opportunities for users to support the cost of utilizing alternate payment options increase. With phone meter payments, costs are typically absorbed by the user. There is also an associated reduction in meter collections and accounting costs for the City as the payment mode shift becomes more widespread.

One Account to Rule Them All. Pay-by-phone, when used as an account-based system, has the most benefits. An integrated account-based approach allowing customers to pay for tolls, transit, bike share, car share, and parking—both on and off-street as Parkmobile currently provides—all from one centralized account will help paint a multi-modal picture. With an account-based system, the City and all transportation providers can access the information on the full spectrum of users' transportation habits. This can afford providers the opportunity to formulate rates and policies that will deliver the best outcomes.

Credit Card Accepting Smart Meters

Improve Operations. Smart meters, like IPS SSMs and Parkeon MSMs, provide actionable data to improve system performance. Broken meters equate to a poor customer experience and lost revenue. Smart meters provide preemptive alerts when they are or are close to malfunctioning (coin jams, battery issues, etc.). These alarms allow for meters to be repaired more quickly. In Indianapolis, Xerox implemented smart meters across the entire parking system, or 3,700 plus metered parking spaces. This modernization was accomplished through a mix of single space credit card-accepting parking meters (1,400) and pay boxes (325). The pay boxes allow motorists to pay by space. The results have been staggering.

- As noted above, the use of credit cards to pay for parking at the new parking meters has grown from 0 percent to 75 percent in just a year.

- Motorists are now able to buy the amount of time that they want as opposed to being limited by the amount of change in their pockets. The average stay initially increased from 51 minutes to 68 minutes, or 33%, improving revenues by a similar factor.

- Xerox repairs broken meters in about 4.6 hours. That represents a 96% reduction in the time it took to repair parking meters. The system operability is presently greater than 99.8%. Each percentage in improved operability equates to a proportional percentage in improved revenue.

- The City's new rates and hours of operation were rolled out on January 2, 2012. The programming all took place remotely. With older technologies, rates, days, and hours of operation, and time limits all have to be programmed at the meter, resulting in days or weeks of revenue loss.

Time Limits. In addition to enforcement, we can provide the City with recommendations concerning parking meter time limit to improve turnover. With smart meters, we can increase time limits during evening and weekend hours, improving the customer service experience. In Indianapolis, for example, Xerox made recommendations to the City concerning the time limits in various areas of town. The City piloted Xerox's proposal to promote the use of underutilized spaces in August of 2012 by increasing the time limits from 2 hours to 4 hours as demonstrated below. That change led to a 13.8% increase in stays, an increase in revenue of 8%, positive merchant feedback, and a request for further recommendations from the City. In late November 2012, the City authorized another series of changes to the periods of stay, this time increasing the time limits up to 10 hours based upon historic meter use. The results were profound. In the first month alone, the average stay increased by 9.7%, transactions (and resulting wear and tear on the meter equipment) were reduced by 6.1%, and revenues increased by 5%. That data-driven decision-making expertise can be achieved in the City as well (Exhibit D–2).
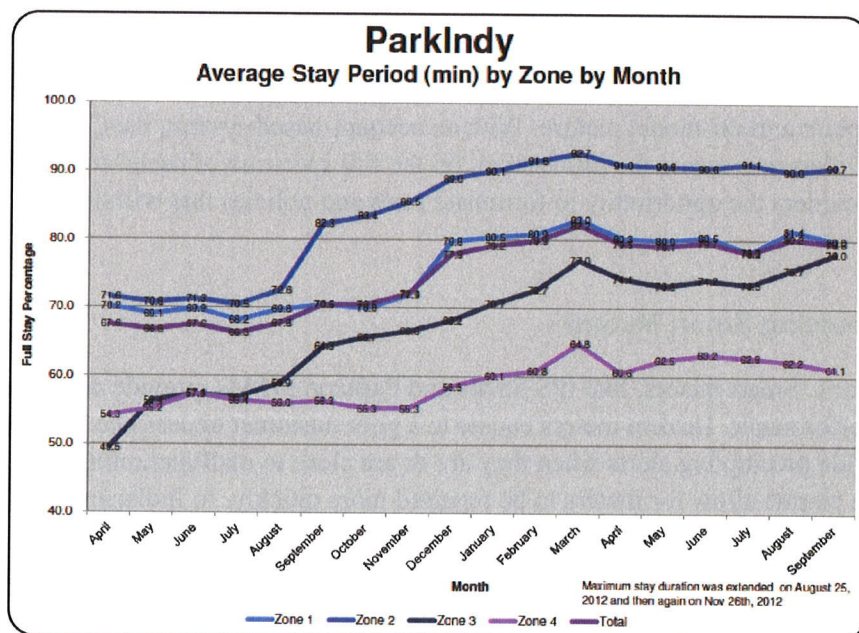
Exhibit D–2. Analytics Help Determine the Appropriate Time Limits
Changes to the period of stay, or time limits, make parking convenient and improve revenues.

Dynamic Pricing. In addition to time limits, another important tool to generate turnover is pricing. Pricing tools provide a wide range of flexibility, and when properly calibrated, can reduce occupancy in high demand areas. Dynamic pricing—or setting rates based on meter use—can manage demand and ensure a minimum threshold of available parking spaces. Dynamic pricing cannot occur unless technology is upgraded.

The most successful dynamic pricing strategies examine rates, time limits, hours, and days of operation.

The City of Los Angeles Department of Transportation (LADOT) implemented demand-based parking pricing and related operational policies based on the particular parking demands at any given time. To facilitate this, Xerox implemented a system of integrated, state-of-the-art, single and multi-space meters for the metered on-street parking spaces, as well as activity-sensing parking sensors to gather parking

activity information. These components feed data into an integrated real-time parking guidance system for the downtown area.

In addition to the data received from the on-street parking spaces, the guidance system receives data from the participating off-street facilities. The guidance system reflects information on available parking locations, the number of available spaces, prices and time considerations. The guidance system is available to motorists before and during their respective trips to downtown Los Angeles, and will assist them in finding parking nearest their destination more quickly or may encourage them to consider use of alternative modes of transportation.

Parking availability and/or pricing information can be disseminated through a website that uses a map to display, in real-time or using predictive intelligence, the pertinent parking information. The Website could be accessed through a telephone, PDA, or the Internet. The components of the LA system, for instance, include cellular payment technology, enforcement, and demand management tools.

Occupancy Detection Options, including Sensors

Sensors and other occupancy detection technology may come with some cost, but they also offer a number of benefits. Occupancy detection provides insights into predictive enforcement and policy decisions. As we move towards lean and sustainable methods of occupancy detection, the financial benefits will improve even more.

Perfecting Compliance. Parking management cannot occur in a vacuum. Each component of a well-managed parking system is dependent upon other variables. We view parking management as a lifecycle, a feedback loop that's dependent on properly staffing and enforcing meter parking violations. If enforcement is inadequate, motorists will overstay parking meters, decreasing availability and increasing congestion. Higher capture rates seek to perfect enforcement, improving municipal revenues—from violations and business taxes—and saving motorists time.

In Indianapolis, predictive enforcement models have led to an improved capture rate and a 20% increase in revenue. In just two years the capture rate has improved 101%, from a high of about 25% to nearly 60% and contributed to a significant bump in parking meter revenues. Predictive models and other enforcement tools—everything from handheld computers, innovative handheld software, automated enforcement, and guided enforcement tools—can improve compliance for the City. Efficient, but fair ticketing and collections can make parking and traffic better for everyone.

Why the Xerox Team?

While price is an important consideration, especially in today's challenging fiscal climate, we encourage STLTO to also consider service levels, risk, and the net revenue potential associated with our proposed solution. Xerox' deep understanding of the St. Louis on-street parking environment, coupled with vast industry experience; and our knowledge of STLTO's program goals, position us to clearly comprehend the costs associated with the newly contemplated program requirements. A less experienced vendor's oversight of specific nuances of the City's program, including a limited set of sanctions, could easily translate into incorrect assumptions, unnecessary risks, unanticipated implementation delays, service disruptions, or revenue loss. A less financially stable partner could fail to meet commitments and be unable to deliver under fiscal duress due to cost overruns and misaligned projections.

The contents of this proposal are subject to the disclosure statement on the title page of this proposal.

© 2013 Xerox State & Local Solutions, Inc.

November 22, 2013

D-9

Page Excluded from Page Count

STLTO has taken an important first step in modernizing its program through intensive study of parking technologies and outreach to the leading vendors in the industry. However, no vendor, in isolation, will likely develop and propose the perfect solution for the St. Louis of tomrorow. Instead, the right partner will emerge to help the City assess its current program; gather and analyze big data; evaluate technologies through a coordinated Field Test; and work collaboratively with STLTO to develop a roadmap for, and to implement, a worldclass parking program in St. Louis. Xerox is that partner.

Pricing Assumptions:

Our proposed assumes that the City would purchase meters and pay-stations and that LPR systems, boot vehicles, handheld units/printers, and certain other equipment would be incorporated into our overall pricing for ticket processing and meter maintenance, without upfront costs. We are open to alternative structures and have developed creative pricing strategies as diverse as concession agreements such as ParkIndy. We look forward to an opportunity to negotiate a solution and pricing structure that meets the City's operating needs and financial considerations.

1. Proposed 5 year contract
2. Our ticket processing fee includes an annual increase tied to the CPI-U for all urban consumers
3. (35) Motorola handheld units and Zebra printers and our proprietary PocketPEO™ software is included in our per ticket fee
4. Our collections fee is based on existing assignment criteria and eligibility
5. Xerox will provide access to Merge® at no additional cost
6. Comprehensive booting solution includes 3 LPR systems plus boot crews, vehicles and wireless data plans at no additional cost
7. Postage and credit card fees will be reimbursable
8. Monthly fee per space includes an annual increase tied to the CPI-U for all urban consumers
9. Credit card fees for meter payments will be reimbursable
10. Pay-by-cell fees will be charged to motorists as a clearly disclosed user fee
11. No convenience fees to the public for pay-by-web or pay-by-phone charges. Xerox is willing and able to negotiate the inclusion of convenience fees to reduce citation processing fees should STLTO desire to pursue such as structure
12. Final contract subject to the negotiation of mutually acceptable terms and conditions

xerox