I.   Project Description

Project Title: goBerkeley Residential Shared Parking Pilot

Name of Applicant: City of Berkeley

Project Manager:

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Project Purpose and Need

Building on its success, the City of Berkeley seeks to test the principles of goBerkeley to unlock the largest untapped parking asset—residential on-street parking spaces. This pilot seeks to activate these spaces as a shared resource in a way that improves parking for residents, employees and visitors, while reducing vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions.

The goBerkeley program is a successful demand responsive parking and transportation demand management system. It applies to approximately 2,500 pay parking spaces in the City of Berkeley, but the City has close to 20,000 on-street parking spaces in total. The majority of these parking spaces are in residential areas and are either unregulated or part of the Residential Preferential Parking (RPP) permit system. In RPP areas, residents who meet residency and vehicle registration requirements are charged an annual fee and issued a permit within a specified zone (e.g., Zone A) that allows them to park on-street without time limits. Vehicles that do not carry a permit are allowed to park for up to 2 hours, Monday through Friday or Saturday, within specified hours (some start as early as 8:00 AM and end as late as 7:00 PM). At all other times, such as Sundays, evenings, and holidays, non-permitted vehicles are allowed to park in RPP areas with no time limits. The RPP system is administered by the City of Berkeley's Finance and Transportation Divisions and is enforced by the Police Department.

During goBerkeley community outreach, frustrations with the existing RPP system were voiced frequently to City staff. Concerns expressed depended on the perspective of each community member. These concerns are summarized below:

- Residents are frustrated with the lack of parking and increased congestion due to the perceived presence of non-resident parkers who do the "2-hour shuffle"[1];

- Employees are frustrated that parking is perceived to be available in the residential areas but only available to them if they can move their cars every 2 hours;

- Merchants are concerned about distracted employees and lost productivity by those who leave work every two hours to move their cars; and

- City staff are concerned about excessive congestion, due to cars circling neighborhoods every two hours in search of parking, and unwanted emissions, due to vehicle cold starts and increased vehicle miles traveled.

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[1] See the "Anticipated Results" section for an explanation of the "2-hour shuffle."

While outside of the scope of the previous goBerkeley pilot, staff understood the concerns to be significant and conveyed them to the Berkeley Transportation Commission, City management, and City Council.

To remedy this situation, the City of Berkeley proposes to use demand-responsive pricing strategies in the RPP areas. The City of Berkeley is prepared to launch a pilot program that extends the boundaries and scope of the goBerkeley program with the goal of maintaining 15-35% parking availability in selected RPP zones. Program development will be guided by the City's understanding of how to successfully implement an innovative parking demand management program. This pilot will also leverage Berkeley's recent investment in license plate recognition (LPR) technology for parking enforcement, adoption of an online and mobile payment system for parking, and launch of a state-of-the-art data integration program that pulls multiple parking data streams together to advance data analysis and reporting.

RPP systems are in effect in many communities around the Bay Area, including Oakland and San Francisco. If successful, the goBerkeley Residential Shared Parking Pilot (RSPP) could serve as a precedent for implementing these strategies in other cities around the region to provide a "win-win-win" parking situation for visitors, residents and the City.

Program Goals and Objectives

The City of Berkeley seeks to implement a pilot of shared residential on-street parking in RPP zones where residents and businesses have previously requested reforms. Proposed project areas are adjacent to the three existing goBerkeley areas, including Telegraph/Southside (adjacent to the University of California, Berkeley campus), the Elmwood district, and Downtown Berkeley (see Attachment A for a map of potential pilot areas). The goals of the goBerkeley RSPP would be to:

1. Improve parking availability in the pilot areas;
2. Improve customer service and technology related to the City's parking program;
3. Reduce unnecessary driving required when looking for available parking;
4. Reduce vehicle cold starts from frequent shifting of vehicles to new parking spaces; and
5. Increase availability of information about alternatives to driving and parking in pilot areas.

To accomplish this, the goBerkeley RSPP would:

- Extend RPP enforcement hours into evenings and weekends, times which usually experience the highest parking demand;
- Require non-permit holders to pay an hourly rate, established based on target parking occupancies, via a pay-by-mobile parking system;
- Monitor parking occupancy and adjust non-permit hourly rates to achieve the desired 65-85% target occupancy range, using goBerkeley's automated LPR data collection system;
- Use occupancy parking data to determine whether to eliminate or increase the parking time limits for non-permit holders; and
- Facilitate increased information sharing about transportation alternatives and implement targeted TDM strategies in pilot areas.

Anticipated Results

The City of Berkeley has long offered free but time-limited parking in much of the city; however, many people evade the law by simply moving their car but parking on the same street or within the same RPP zone every two hours. This maneuver—termed the "2 hour shuffle"—leads to a high number of vehicle cold starts, parking search vehicle miles traveled, low productivity for employees/students, as well as

numerous local tensions. In aggregate, this activity leads to added congestion in residential and commercial areas, increased vehicle emissions from vehicle cold starts and from drivers circling for parking. If successful, these pilot solutions could be rolled out across the City and region to drastically reduce VMT and GHG from unnecessary driving. In addition, the pilot could provide a "win-win-win" for residents, businesses and the City by:

- Maintaining parking availability on residential streets through active demand management;
- Creating an innovative system that allows non-permitted drivers to pay for parking in residential areas by mobile device, phone or web;
- Addressing residents' concerns of rising permit fees by potentially reducing costs through subsidizing RPP annual permits with non-permit parking hourly parking fees;
- Replacing 2-hour time limit for non-permitted vehicles with hourly paid parking to provide flexibility and reduce violations and fines;
- Addressing "loss of productivity" identified by businesses whose employees take breaks every 2 hours to re-park their vehicles;
- Activating all of the City's available parking supply as an alternative to building new parking; and
- Maintaining community support and engagement per successful goBerkeley program standards.

A.   Scope of Work

Task 1: Project Initiation and Management

The City of Berkeley will provide overall project management, including:

- Contract procurement and management;
- Vendor contracts and coordination;
- Compliance with Grant conditions;
- Monitor parking conditions and recommend rate and time limit adjustments;
- Spearhead community engagement and outreach;
- Management of project budget and schedule; and
- Submission of project deliverables.

Task 2: Program Development

Task 2.1 Stakeholder Engagement, Public Outreach, and City Meetings
Effective stakeholder engagement and public outreach are critical to the development and ongoing success of the pilot project. The tasks below delineate how the City of Berkeley will perform outreach throughout the course of the project, i.e., extending beyond the project launch.

Task 2.1.1: Engagement with Internal Stakeholders
The City of Berkeley currently has a Parking Work Group that consists of representatives from the Finance Department, Customer Service, the Department of Public Works, and the Police Department. This group meets monthly to discuss parking related issues and programs. Upon pilot initiation, the Parking Work Group will establish a standing agenda item to discuss and manage shared internal responsibilities related to the RSPP, helping to ensure a collaborative, internally consistent, and successful program.

Deliverables:
- Abridged minutes from monthly Parking Work Group Meetings pertaining to the implementation and operation of the goBerkeley RSPP.

Task 2.1.2: Engagement with External Stakeholders

The success of the initial goBerkeley program has been due in large part to its extensive public outreach efforts and the invaluable input provided by external stakeholders. As the goBerkeley Residential Shared Parking Pilot advances, the City of Berkeley will engage those who know the pilot areas the most, including residents, business owners, employees, and customers, as well as local neighborhood associations, business improvement districts, and other community groups. The City of Berkeley recognizes that different interest groups have unique perspectives and is committed to working with all stakeholders to incorporate feedback and make the pilot a success. Leveraging the goodwill engendered through prior goBerkeley outreach efforts, the City will pursue the following plan for working with external stakeholders. These activities will be continued through the operational phase (listed as Task 3.2 for schedule/budgeting purposes).

Stake-holder	Goal	What Pilot Offers	Proposed City of Berkeley Engagement Methods		
			Print	**Online**	**In-Person**
Residents	Less on-street Congestion & noise	Reduces circling for parking	Mailings, flyers, surveys	goBerkeley project website*, emails to permit holders, online survey; and other online resources (e.g., nextdoor.com)	Intercept surveys, neighborhood association meetings, scheduled opportunities for Q&A with staff at cafés, local library branches, other facilities TBD
	Less noise	Fewer vehicle cold starts; less congestion			
	Easier to find parking	Parking management to achieve occupancy targets			
	Reduced permit costs	Potential permit fee subsidy			
Business Owners	Ensuring employees can get to work	TDM Coordinator (see Task 2.5.2)	Flyers, posters, surveys	Outreach through business association email lists; online survey	Door to door, in-person outreach; intercept surveys
	Maximize employee productivity	Reduce need for employees to take breaks to move car by providing long-term paid parking in RPP areas			
	Maintain parking options for customers	Option for paid hourly parking in RPP areas			
	Ensure pleasant experience for customers	Improved signage, payment options, and customer service			
Employees	Ability to get to work safely and conveniently	TDM Coordinator (see Task 2.5.2)	Windshield flyers, mail-in surveys, signage, flyers/cards	Online survey	TDM coordinator outreach, including a transportation fair, in-person support (ambassadors) for launch & adjustments
	Reduce frustration of 2-hour shuffle, and avoid time limit violations	Hourly parking with longer time limits (exact limit TBD) in RPP area(s)			
	Find affordable options for getting to work	TDM Coordinator (transportation fair)			

Customers and Non-permit Holders	Find available parking near destination	Parking in pilot areas actively managed to achieve availability targets	Windshield/ mail-in surveys, signage, flyers/cards	goBerkeley project website; online survey	In-person support (ambassadors) for launch/ adjustments
	Have a pleasant parking experience	Improved signage, payment options, and customer service			
	Ability to park for longer than current time limits	Hourly parking with longer time limits (exact limit TBD) in RPP area(s)			

* Available at www.goberkeley.info.

Deliverables:
- Print media distributed to stakeholders;
- Online media available to stakeholders; and
- A log of in-person meetings with date, time, attendees and topics discussed.

Task 2.1.3: Public Outreach

In addition to working with stakeholders, this pilot has the potential to affect anyone who visits the city of Berkeley. To better inform the public of the program's details and the pilot's metrics, information pertaining to the goBerkeley RSPP will be added to the goBerkeley website (www.goBerkeley.info). The goBerkeley website has an attractive, streamlined web interface with simple functionality. A new "index tab" will be added to the home page for easy navigation. New pages will be developed outlining RSPP details, such as pilot boundaries, pricing structures, and effective dates/times and linked to the main page. Information will be displayed prominently whether the user is on a computer or a mobile device. Program details will be presented on a FAQs (Frequently Asked Questions) page, for those who prefer information in a question and answer format. City staff will also prepare outreach materials for the press and the general public off-line, such as brochures and press releases, and will also conduct interviews and presentations to increase the visibility of the project to a wider audience.

Deliverables:
- Press materials, including press releases and brochures, and conducting interviews and presentations;
- Deployment of pilot material on goBerkeley website prior to implementation; and
- A dedicated page on the City of Berkeley website that links to the goBerkeley website and also provides key facts and features about the pilot.

Task 2.1.4: Present at City Meetings

Information and opportunities for public feedback will also be provided through presentations to the City of Berkeley's Transportation Commission and the City Council. The City Manager and City Council may direct City staff to pursue additional venues for public input, which would be incorporated into activities performed under Tasks 2.1.1 and 2.1.2.

Deliverables:
- Minutes from at least two Transportation Commission meetings.
- Copies of reports to the Berkeley City Council.
- Web, mass media materials, and minutes from any other publicly-noticed meetings.

Task 2.2: Pilot Area Refinement

The City of Berkeley has identified RPP zones that may be appropriate for this pilot study (see Attachment A). The City of Berkeley plans to use LPR equipment to conduct parking surveys of these areas, which will help refine the exact pilot boundaries. Once the pilot areas are confirmed, the City will conduct thorough site visits to record parking inventory (necessary for occupancy calculations), location and content of existing signage, and other observations.

Deliverables:
- Results of parking surveys;
- Presentation of pilot boundaries on website; and
- Parking inventory within the pilot area.

Task 2.3: Existing Conditions Assessment

Measuring parking occupancy, vehicle movement, and parking duration before pilot implementation provides the information necessary to evaluate the effectiveness of the program in reducing GHG emissions, providing successful customer-focused parking services, and ensuring the program complements the existing goBerkeley program.

Task 2.3.1: Baseline Parking Surveys

The City of Berkeley will use LPR technology to collect RPP area parking occupancy and length of stay, and vehicle movement data. LPR will also be used to measure these metrics in adjacent metered goBerkeley areas. The City will compare these two datasets to better understand the parking behavior between metered parking and parking in RPP zones. This initial set of data will provide a baseline for measuring changes in parking utilization resulting from program implementation and any subsequent rate/time/boundary changes introduced during the pilot period.

Deliverables:
- Pre-project parking survey data for pilot RPP zones and adjacent goBerkeley areas (i.e., Downtown Berkeley, Southside/Telegraph, and the Elmwood district).

Task 2.3.2: Baseline Congestion, Cold Starts, and GHG Analysis

As noted above, the "2-hour shuffle" generates unnecessary GHG emissions, particularly methane (CH_4) and nitrous oxide (N_2O) which are produced at high levels when a car is first started. After starting up, drivers searching for another parking space increase vehicle miles traveled, consuming unnecessary fossil fuels and adding to existing congestion around commercial areas. Until now, the City has been limited in its ability to track this phenomenon; however, the October 2015 implementation of LPR for parking enforcement will allow the City to collect data on parking behavior (analyzed using unique vehicle locations) both before and during the RSPP.

The City intends to use LPR data to compute the minimum number of cold starts in an area and VMT of vehicles engaged in the "2-hour shuffle" using unique vehicle location data, timestamps, and GIS analysis. In particular, the LPR system and GIS network analysis tools will allow City staff to estimate driving distances for vehicles that do the "2-hour shuffle"—an innovative way to use LPR capabilities to measure subtle but complex driving behavior. Additionally, minimum GHG/emissions data will also be generated using verified assumptions for average emissions produced per cold start and/or vehicle mile traveled. The City also intends to measure congestion in and/or around pilot areas using AADT and/or turning count data collected by other City departments.

Deliverables:

- Existing Conditions parking behavior report for pilot RPP zones and adjacent RPP areas quantifying cold starts, VMT, and GHG emissions.
- White paper on the use of LPR data for congestion, VMT, and GHG analysis.

Task 2.4 Develop Initial Program Conditions
Once the Existing Conditions Assessment is complete, the City of Berkeley will propose initial conditions of the pilot study. As with the original goBerkeley program, the goBerkeley Residential Shared Parking Pilot will periodically modify program parameters in order to achieve 65-85% occupancy in the RPP zones and adjacent metered parking areas (see Task 3.1.3).

Task 2.4.1 Time Limit/Pricing Structure
Stakeholder engagement, pilot area identification and baseline study will provide information necessary to propose an effective time limit and pricing structure for the goBerkeley Residential Shared Parking Pilot. Options that will be explored include extending RPP parking restrictions past 5pm (in applicable areas) and on the weekends—the times when demand for parking is at its highest—and charging non-permit holders to pay for RPP parking by the hour. The exact structure of time limits and pricing will be determined after baseline studies are complete and analyzed. Benefits of adopting a time/price structure in the RPP zones will be three-fold: ability to achieve 65-85% occupancy on all blockfaces through innovative pricing strategies, ability to provide additional parking facilities to match demand, and ability to activate unused and unmanaged parking resources.
Deliverables:
- Outreach materials clearly delineating the initial time limit/pricing structure of pilot.

Task 2.4.2 Payment Technology
The City is currently in the process of securing a system of mobile parking payment at meters. Once established, this pilot can leverage that technology, extending the program to provide payment by mobile device in the pilot RPP zones. Mobile payment allows users to pay for hourly parking with an application on their smart phones, or by calling a toll-free number and/or by logging onto a web site. The data from the mobile payment system will integrate seamlessly into the City's LPR technology to aide with efficiency in enforcement and data collection.

Deliverables:
- An RFP for a payment technology company to provide pay by mobile services.
- Pay by mobile contract modification in order to extend technology into RPP zones.

Task 2.4.3 Enforcement/LPR Data Collection
As noted above, the "2-hour shuffle" has been well-documented, but has been difficult to prove with current parking enforcement practices. The 2007 MTC Parking Policies to Support Smart Growth report recommended that the City consider vehicles equipped with GPS-enabled cameras to scan license plates for improvement enforcement. The City of Berkeley is excited to report that it has purchased and will install five license plate recognition (LPR) units on enforcement vehicles in October 2015, which the Berkeley Police Department parking enforcement staff will begin using shortly thereafter. Enhanced enforcement is critical to the success of the program because it will improve the City's ability to efficiently and effectively control the large supply of free parking immediately adjacent to metered parking areas. Implementation of LPR will also provide a continuous stream of parking data, which City staff will analyze to understand parking behavior, calculate occupancy, and conduct additional analyses summarized in Task 2.3.2. These metrics will be tracked in both the RPP pilot areas and adjacent areas in order to characterize the interplay between RPP pilot areas and surrounding streets.

Deliverables:
- LPR data from pre-pilot surveys stored in a relational database, accessible for analysis of pre-pilot conditions and comparison with pilot and post-pilot conditions.

Task 2.4.4: TDM Strategies

Building on the results of the initial goBerkeley pilot's TDM component, this pilot program intends to invest in an efficient and targeted TDM strategy to increase the visibility and viability of transportation options for those living and working in the pilot areas. In this task, the City will review the results of baseline employee surveys to confirm which TDM strategies would be the most effective to implement in each pilot area—and crucially, ensuring that transportation benefits are matched to employees based on stated preference or interest. Potential strategies may include subsidized AC Transit EasyPasses, bicycle and/or East Bay Bike Share vouchers, or coordinating the installation of secure bike parking and visitor bike parking in pilot areas.

The grant will support the establishment of selected strategies, which will form the goBerkeley Employee Transportation Benefits Program. To the extent possible, City staff will work with agencies and organizations such as AC Transit and TransForm as well as local businesses and employers to craft the program. The project TDM Coordinator (see Task 2.5.2 below) will manage this program over the course of the RSPP.

Deliverables:
- Summary of recommended goBerkeley Employee Transportation Benefits Program.

Task 2.5: Program Launch

Program launch will entail updated signage, notification and increased outreach, and implementation of project TDM Coordination. Notification and outreach are detailed in Task 2.1.

Task 2.5.1: Signage

A notable success in the launch of the initial goBerkeley pilot was the simplification and standardization of parking signage. Prior to program launch, the public complained that parking signs were hard to understand, provided contradicting information, and obscured rates and hours. Since goBerkeley's inception, the public has consistently reported that one of that program's major successes was the great improvement in signage. As expected, clean signage expedites the search for parking, shortens driving time, delivers people to destinations quicker, and provides an all-around more pleasant Berkeley experience.

Both the community and the City Council have requested clarity improvements to RPP area signage. As part of the RSPP, the City of Berkeley intends to update signage in the RPP pilot areas to ensure that program hours, rates and boundaries are presented clearly and attractively. A uniform design, consistent with the existing goBerkeley signage style, will be rolled out in order to ensure that the success seen in the metered goBerkeley areas will be achieved in the RPP zones as well. Signage will be key to informing non-permit drivers whether they can park, whether they have to pay, how to pay, and how much to pay. The signage equipment used will need to be easy to move from block to block as the pilot progresses and the City adjusts parking regulations and rates to respond to observed conditions.

Deliverables:
- Installation of new, easy to understand, easy to read signage in RPP zones explaining the program and consistent with existing goBerkeley branding.

Task 2.5.2: TDM Coordination

As part of the RSPP, the City will assign a TDM Coordinator to provide information about transportation options available to residents in the pilot areas and the businesses in the adjacent commercial district(s). This person will be the "point person" for education and outreach about transportation resources, host an annual "transportation fair" to educate those who live and work in the vicinity of the RPP zones about options available to them, and work with employers and businesses to coordinate employee transportation benefits. Over the course of the RSPP, the TDM Coordinator will also be responsible for managing the goBerkeley Employee Transportation Benefits Program.

During the project launch, the TDM Coordinator will oversee the deployment of "Ambassadors" who will provide in-person support to help parking system users understand the new regulations and gather feedback for ongoing project evaluation.

Deliverables:
- Establish a TDM Coordinator position and identify staff/consultant to fill this role.
- Implement annual "transportation fairs" for project area employees and residents.
- Manage the Employee Transportation Benefits Program, including implementing TDM strategies confirmed in Task 2.4.4.
- Oversee "Ambassadors" to provide on-site customer support during launch.

Task 3: Program Operations

Task 3 covers the ongoing oversight and active management of the RSPP in pilot areas, including continual data collection and analysis to ensure parking pricing, time limits, and geographic program limits are conducive to achieving goBerkeley's 65-85% parking occupancy targets and conducting robust stakeholder outreach in advance of program adjustments. The City intends to make up to three adjustments over the course of the RSPP.

Task 3.1: Program Assessment

Task 3.1.1: Data Collection

Data collection will continue during the pilot with routine enforcement by PEOs. City staff will monitor data regularly to identify geographic or temporal gaps, and will perform targeted data collection twice yearly to augment the efforts of the PEOs.

Deliverables:
- Documentation of the dates/locations of targeted data collection by City staff.

Task 3.1.2: Analysis

City staff will analyze parking data routinely. A series of standard reports (e.g., blockface occupancy per day/hour, parking duration per day/hour, number of location changes per vehicle per day by area) will be automatically generated on a quarterly basis, and will form the basis on which more complex analyses are performed once trends and outliers are identified.

Deliverables:
- A set of standardized reports generated on a quarterly basis.

Task 3.1.3: Adjustments

After the initial pilot launch, City staff will implement up to three program adjustments to achieve parking availability targets on all blocks in the RPP pilot and goBerkeley metered areas. For each

adjustment, staff will solicit input from internal and external stakeholders and conduct public outreach, notification, and changes in signage in the RPP areas (as applicable).

Deliverables:
- Up to three program adjustments.
- New signage, if necessary.

Task 3.2: Stakeholder Engagement, Public Outreach and City Meetings
Throughout the pilot, the goBerkeley team will continue an open dialogue with stakeholders and the public following the strategies outlined in Task 2.1.

Task 3.3: Implementation
Implementation during operations includes installing appropriate signage and staffing the area with customer service "ambassadors" during adjustments. Ongoing TDM coordination efforts are summarized in Task 2.5.2.

Task 4: Program Evaluation & Recommendation

Task 4.1 Draft Final Report
At the end of the pilot, the goBerkeley team will produce a comprehensive report that outlines the history of the RSPP, its accomplishments and challenges, and lessons learned. The report will provide recommendations on how to effectively manage and activate shared residential permit parking through policy and pricing. Specifically, City staff will evaluate the parking pricing program with the following information:

- Baseline turnover and occupancy surveys
- Follow-up LPR occupancy and turnover surveys
- Parking revenue
- Parking enforcement costs
- Parking citations
- Feedback from enforcement staff
- Feedback from residents/permit holders in RPP zone (on parking availability)
- Feedback from parkers/non-permit holders) in RPP zones (parking availability and mobile payment)

- Spillover effects from goBerkeley meters and non-RPP pilot areas
- Feedback from merchants, employees, customers, residents, and other stakeholders
- Effects on vehicle trips and travel behavior, including effects on residential street life and residential parking experience (survey adjacent commercial strips and residential areas)
- Identify and evaluate future opportunities for additional innovative parking management.

Deliverable:
- A draft final report with an analysis and evaluation of data collected before, during and after the pilot, as well as preliminary parking policy, price and management recommendations.

Task 4.2 City Meetings and Final Report
City staff will present findings to the City of Berkeley Transportation Commission and City Council as applicable, and will use feedback from these groups to prepare the final report.

Deliverable:

- A final report evaluating the success of the RPP pilot and making recommendations that apply to the pilot area, expansion within the City of Berkeley and as well as recommendations for more widespread implementation that could be utilized by other municipalities and/or regions.

B. Schedule

The core project is expected to cover a three-year period from approximately February 2016 to February 2019, with full completion expected in May 2019. The table below provides a high-level overview of the project schedule. Please note that the schedule assumes obligation of funds by February 2016. If selected, the City will revise the schedule as required. Please see Attachment B for a more detailed project schedule including expected dates for significant work products (i.e., "deliverables").

Task	Estimated Schedule	Notes
Task 1: Project Management	Mar 2016-May 2019	Funding assumed to begin Feb 2016.
Task 2: Program Development	Mar 2016-Apr 2017	Ramp-up expected to take one year, with program launch (i.e., first time limit/pricing adjustments in March 2017).
Task 3: Program Operations	Feb 2017-Jan 2019	Up to 3 adjustments on regular basis.
Task 4: Program Evaluation and Recommendations	Apr 2017-May 2019	Staff will begin internal reporting/analysis after 1st adjustment. Final report expected May 2019.

II. Response to Questions from the Evaluation Committee

Q1: Could the project be scaled (i.e. modifications to scope of work, reduced project area, alternative technology, etc.)? If so, please describe how the project could be modified and indicated the revised budget.

A1. This project may be scaled by reducing the project area.[2] Generally, this project includes two main types of costs: fixed and variable. Fixed costs include those investments needed to implement the core project elements across an entire pilot area, such as system design and staffing, a data collection system, and a public information campaign (i.e., websites, brochure/flyer design, etc.). Variable costs include elements that may be scaled, such as the extent of data collection and signage, as well as public outreach, including the number of public meetings that will be conducted and the number of brochures printed, etc. During the goBerkeley program, the neighborhoods surrounding the Elmwood and Southside/Telegraph pilot areas expressed the strongest interest in an improved RPP program. By contrast, while the Downtown Berkeley area is the largest metered area, it also has the smallest supply of RPP-managed parking spaces in the goBerkeley pilot program. If necessary, the proposed project could exclude the Downtown Berkeley area.

The revised budget excluding the Downtown Berkeley area would be $1,421,693 in total, with the City requesting $952,535 from the MTC. (The City would provide a 33% local match of $469,159 under this scenario.) This constitutes a roughly 15% reduction in the budget, largely reflecting lower variable costs. See Attachment C for a comparison of full and scaled project costs and funding sources.

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[2] Note: Because LPR technology will be used to facilitate the enforcement of paid parking without physical parking meters in RPP areas, the use of LPR for data collection does not add an incremental cost to the program. In fact, it allows for robust occupancy and length of stay data at a lower incremental cost than manual data collection. Consequently, we would not recommend scaling the proposal using alternate technologies.

III.   Approach to Project Evaluation

Based on the goals and objectives of this pilot, we propose the following metrics for evaluating success of the pilot:

Goal	Objective	Measure Conditions	
		Before	After
1	Maintain 65-85% occupancy on metered and residential streets	Collect parking occupancy using LPR for both before and after conditions. Comparisons must be made across similar time frames and days of week.	
2	Improve the RPP customer service for permit holders	Work with Finance Department to develop/distribute a questionnaire to RPP permit holders about current program likes/dislikes. Solicit volunteers for a focus group.	Work with Finance Department to develop/distribute a questionnaire to RPP permit holders about updated program likes/dislikes. Conduct follow-up with focus group.
3/4	Reduce unnecessary driving, cold starts, and emissions caused by 2-hour shuffle	Track vehicle movement behavior (e.g. same spot, within block, within zone and minimum distance traveled) using LPR for both before and after conditions. Analyze using GIS and average emissions per vehicle data to compare before/after emissions from vehicles engaged in "2-hour shuffle." Comparisons must be made across similar time frames and days of the week.	
1/2	Address business and employee concerns regarding loss of productivity and tickets/violations	Meet with businesses 1-on-1 to administer/distribute existing conditions surveys. Solicit volunteers for focus group. Analyze pre-pilot citation frequency.	Meet with businesses 1-on-1 to administer/distribute post-implementation conditions surveys. Conduct follow-up with focus group. Analyze post-implementation citation frequency.
2	Maintain high level of visitor/customer satisfaction	Collect user impressions via intercept surveys and mail-in surveys before and after implementation in order to rate customer satisfaction with RPP parking program.	
5	Facilitate increased information about transportation alternatives and implement targeted TDM strategies	Compare results of surveys of pilot area employees to track any changes in mode split as a result of targeted TDM strategies. Evaluate before/after surveys of residents and employees to gauge extent of awareness of transportation alternatives in the area.	

IV.   Project Cost and Funding

The table below provides an overview of the proposed full, non-scaled project budget by task. Estimated funding sources, including MTC grant needs and City of Berkeley match funds (Fund 835, Off-Street Parking Fund, and Fund 840, Parking Meter Fund) are clearly delineated as well. See Attachment C for a more detailed project budget.

Task/Title	Funding Source	Estimated Costs	Funding %
Task 1: Project Initiation and Management	-	$145,674	-
Task 2: Program Development	-	$730,673	-
Task 3: Program Operations	-	$736,150	-
Task 4: Program Evaluation and Recommendations	-	$55,339	-
Total Budget		**$1,667,836**	-
Projected Funding Sources	MTC Grant	**$1,117,450**	**67%**
	City of Berkeley Match (Funds 835, 840)	**$550,386**	**33%**