

CALL FOR PROJECTS
PROPOSITION C
MEMORANDUM OF UNDERSTANDING

31171

This Memorandum of Understanding ("MOU") is dated for reference purposes only March 13, 2009, and is by and between the Los Angeles County Metropolitan Transportation Authority ("LACMTA") and City of Long Beach ("Grantee") for Ocean Boulevard Signal Synchronization and Enhancement Project - LACMTA Call for Projects ID# F1341 and FTIP# LAF1341 (the "Project").

WHEREAS, as part of the 2007 Call for Projects, the LACMTA Board of Directors, at its meeting on September 27, 2007, authorized a grant to Grantee, subject to the terms and conditions contained in this MOU.

NOW, THEREFORE, the parties hereby agree as follows:

The terms and conditions of this MOU consist of the following and each is incorporated by reference herein as if fully set forth herein:

1. Part I - Specific Terms of the MOU
2. Part II - General Terms of the MOU
3. Attachment A - Project Funding
4. Attachment B - intentionally omitted
5. Attachment C - Scope of Work
6. Attachment D - Reporting and Expenditure Guidelines
7. Attachment D1 - Quarterly Progress/Expenditure Report
8. Attachment E - Federal Transportation Improvement Program (FTIP) Sheet
9. Attachment F1 – Los Angeles County Regional ITS Architecture Self Certification Form
10. Attachment F2 – Signal Synchronization and Bus Speed Improvement Program Special Grant Conditions

In the event of a conflict, the Special Grant Conditions, if any, shall prevail over the Specific Terms of the MOU and any attachments and the Specific Terms of the MOU shall prevail over the General Terms of the MOU.

IN WITNESS WHEREOF, the parties have caused this MOU to be executed by their duly authorized representatives as of the dates indicated below:

LACMTA:

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

By: Carol Inge Date: 6-17-09
Arthur T. Leahy
Chief Executive Officer

APPROVED AS TO FORM:

Robert E. Kalunian
Acting County Counsel

By: [Signature] Date: 4/21/09
Deputy

GRANTEE:

CITY OF LONG BEACH

By: Patrick West Assistant City Manager Date: 5-27-09
City Manager **TO SECTION 501 OF THE CITY CHARTER.**

APPROVED AS TO FORM (OPTIONAL):

Robert E. Shannon
City Attorney

By: [Signature] Date: 5-12-09

PART I
SPECIFIC TERMS OF THE MOU

1. Title of the Project (the "Project"): Ocean Boulevard Signal Synchronization and Enhancement Project. LACMTA Call for Projects ID# F1341, FTIP # LAF1341.
2. To the extent the Funds are available, LACMTA shall make to Grantee a one-time grant of the Proposition C 25% funds in the amount of \$1,406,000 (the "Funds") for the Project. LACMTA Board of Directors' action of September 27, 2007, granted the Funds to Grantee for the Project. The Funds are programmed over one year (1), Fiscal Year (FY) 2008-09.
3. This one time grant shall be paid on a reimbursement basis. Grantee must provide the appropriate supporting documentation with the Quarterly Progress/Expenditure Report. Grantee Funding Commitment must be spent in the appropriate proportion to the Funds with each quarter's expenditures. LACMTA will withhold 5% of eligible expenditures per invoice as retainage pending an audit of expenditures and completion of scope of work.
4. The "Project Funding" documents all sources of funds programmed for the Project as approved by LACMTA and is attached as **Attachment A**. The Project Funding includes the total programmed budget for the Project, including the Funds programmed by LACMTA and the Grantee Funding Commitment (local match). The Project Funding also includes the fiscal years in which all the funds for the Project are programmed.
5. Grantee shall complete the Project as described in the "Scope of Work." The Scope of Work for the Project is attached to this MOU as **Attachment C**. The Scope of Work includes a description of the Project, a detailed description of the work to be completed by Grantee including, without limitation, Project milestones consistent with the lapsing policy, and a set schedule. Work shall be delivered in accordance with that schedule unless otherwise agreed to by the parties in writing. If a Grantee is consistently behind schedule in meeting milestones or in delivering the Project, then LACMTA will have the option to terminate this MOU for default as described in Part II, Section 9. **Any changes in the Scope of Work must be made by amendment.**
6. The "FTIP PROJECT SHEET (PDF)" is attached as **Attachment E** and is required to ensure that the Project is programmed correctly in the most up-to-date FTIP document. The FTIP PROJECT SHEET (PDF) can be found in ProgramMetro FTIP database under the reports section at <http://program.metro.net>. All projects that receive funding through the LACMTA Call For Projects must be programmed into the FTIP which includes locally funded regionally significant projects for information and air quality modeling purposes. Grantee shall review the Project in ProgramMetro each year and update or correct the Project as necessary during a scheduled FTIP amendment or adoption. Grantee will be notified of amendments and adoptions to the FTIP via e-mail. Changes to the FTIP through ProgramMetro should be made as soon as possible after Grantee is aware of any changes to the Project, but no later than October 1 of the year the change or update is effective. Should Grantee fail to meet this date, it may affect Grantee's ability to access funding, delay the Project and may ultimately result in the Funds being lapsed.

7. No changes to the (i) grant amount, (ii) Project Funding, (iii) the Scope of Work, or (iv) the lapse date of the Funds shall be allowed without a written amendment to this MOU, approved and signed by the LACMTA Chief Executive Officer or his/her designee and Grantee. Modifications that do not materially affect the terms of this MOU, such as redistributing Funds among existing budget line items or non-material schedule changes must be formally requested by Grantee and approved by LACMTA in writing. Non-material changes are those changes, which do not affect the grant amount, Project Funding, Financial Plan, the Scope of Work, including schedule, or the lapse date of the Funds.

8. LACMTA's Address:
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012
Attention: Adrian Alvarez, Project Manager
Mail Stop 99-22-4

9. Grantee's Address:
City of Long Beach
Department of Public Works
333 W. Ocean Blvd., 10th Floor
Long Beach, CA 90802
Attention: Dave Roseman, City Traffic Engineer
dave_roseman@longbeach.gov

10. MAINTENANCE OF EFFORT -- MOE

On September 26, 2002, the LACMTA Board of Directors required that prior to receiving Proposition C 10% or 25% grant funds through the Call for Projects, Grantee must meet a Maintenance of Effort (MOE) requirement consistent with the State of California's MOE as determined by the State Controller's office. With regard to enforcing the MOE, LACMTA will follow the State of California's MOE requirement, including, without limitation, suspension and re-implementation.

PART II
GENERAL TERMS OF THE MOU

1. **TERM:**

1.1 The term of this MOU shall commence on the date this MOU is fully executed and, shall terminate upon the occurrence of all of the following, unless terminated earlier as provided herein: (i) the agreed upon Scope of Work has been completed; (ii) all LACMTA audit and reporting requirements have been satisfied; and (iii) the final disbursement of the Funds has been made to Grantee. All eligible Project expenses as defined in the Reporting and Expenditure Guidelines (Attachment D), incurred after the MOU is executed shall be reimbursed in accordance with the terms and conditions of this MOU unless otherwise agreed to by the parties in writing.

1.2 **Should LACMTA determine there are insufficient Funds available for the Project, LACMTA may terminate this MOU by giving written notice to Grantee at least thirty (30) days in advance of the effective date of such termination. If this MOU is terminated pursuant to this section, LACMTA will not reimburse Grantee any costs incurred after the termination date, except those necessary to return any facilities modified by the Project's construction to a safe state. LACMTA's share of these costs will be consistent with the established funding percentages outlined in the MOU.**

2. **INVOICE BY GRANTEE:** Unless otherwise stated in this MOU, the Quarterly Progress/Expenditure Report, with supporting documentation of expenses and Project progress as described in Part II, Sections 5.1 of this MOU, and other documents as required, shall satisfy LACMTA invoicing requirements.

Send invoice with supporting documentation to:
Los Angeles County Metropolitan Transportation Authority
Accounts Payable
P. O. Box 512296
Los Angeles, CA 90051-0296
 Re: LACMTA Project ID# F1341 and MOU#MOU.P00F1341
 Adrian Alvarez, Project Manager
 Mail Stop 99-22-4

3. **USE OF FUNDS:**

3.1 Grantee shall utilize the Funds to complete the Project as described in the Scope of Work and in accordance with the Reporting and Expenditure Guidelines and the most recently adopted LACMTA Proposition C Guidelines for the type of Proposition C funds granted by LACMTA hereunder (the "Guidelines").

3.2 Attachment C shall constitute the agreed upon Scope of Work between LACMTA and Grantee for the Project. The Funds, as granted under this MOU, can only be used towards the completion of the Scope of Work originally adopted by the LACMTA Board of Directors and detailed in Attachment C.

3.3 Grantee shall not use the Funds to substitute for any other funds or projects not specified in this MOU. Further, Grantee shall not use the Funds for any expenses or activities above and beyond the approved Scope of Work (Attachment C) without an amendment to the MOU approved and signed by the LACMTA Chief Executive Officer or his designee.

3.4 Grantee must use the Funds in the most cost-effective manner. If Grantee intends to use a consultant or contractor to implement all or part of the Project, LACMTA requires that such activities be procured in accordance with Grantee's contracting procedures and consistent with State law. Grantee will also use the Funds in the most cost-effective manner when the Funds are used to pay "in-house" staff time. Grantee staff or consultant with project oversight roles can not award work to companies in which they have a financial or personal interest. This effective use of funds provision will be verified by LACMTA through on-going Project monitoring and through any LACMTA interim and final audits.

3.5 If Grantee desires to use the Funds to purchase/lease equipment (i.e., vehicles, computers, etc.) necessary to perform or provide the services disclosed in the Scope of Work, Grantee must obtain LACMTA's written consent prior to purchasing/leasing specific equipment. Equipment purchased/leased without such prior written consent shall be deemed an unallowable expenditure of the Funds. If a facility, equipment (such as computer hardware or software), vehicle or property, purchased or leased using the Funds, ceases to be used for the proper use as originally stated in the Scope of Work, or the Project is discontinued, any Funds expended for that purpose must be returned to LACMTA as follows: Grantee will be required to repay the Funds in proportion to the useful life remaining in accordance with the Guidelines and in an equal proportion of the grant to Grantee Funding Commitment ratio.

4. **DISBURSEMENT OF FUNDS:** Disbursements shall be based on a reimbursement basis in accordance with the Quarterly Progress/Expenditure Report. LACMTA will make all disbursements electronically unless an exception is requested in writing. Disbursements via Automated Clearing House (ACH) will be made at no cost to Grantee. Grantee must complete the ACH form and submit such form to LACMTA before grant payments can be made. ACH Request Forms can be found at www.metro.net/projects_studies/call_projects/ref_docs.htm. Grantee must provide detailed supporting documentation with its Quarterly Progress/Expenditure Report. Grantee Funding Commitment must be spent in direct proportion to the Funds with each quarter's payment.

5. **REPORTING AND AUDIT REQUIREMENTS/PAYMENT ADJUSTMENTS:**

5.1 Grantee shall submit the Quarterly Progress/Expenditure Report (Attachment D1) within 60 days after the close of each quarter on the last day of the months November, February, May and August. Should Grantee fail to submit such reports within 10 days of the due date and/or submit incomplete reports, LACMTA will not reimburse Grantee until the completed required reports are received, reviewed, approved. The Quarterly Progress/Expenditure Report shall include all appropriate documentation (such as contractor invoices, timesheets, receipts, etc.). All supporting documents must include a clear justification and explanation of their relevance to the Project. If no activity has occurred during

a particular quarter, Grantee will still be required to submit the Quarterly Progress/Expenditure Report indicating no dollars were expended that quarter. If a request for reimbursement exceeds \$500,000 in a single month, then Grantee can submit such an invoice once per month with supporting documentation.

5.2 LACMTA, and/or its designee, shall have the right to conduct audits of the Project, as deemed appropriate, such as financial and compliance audits; interim audits; pre-award audits, performance audits and final audits. LACMTA will commence a final audit within six months of receipt of acceptable final invoice, provided the Project is ready for final audit (meaning all costs and charges have been paid by Grantee and invoiced to LACMTA, and such costs, charges and invoices are properly documented and summarized in the accounting records to enable an audit without further explanation or summarization including actual indirect rates for the period covered by the MOU period under review). Grantee agrees to establish and maintain proper accounting procedures and cash management records and documents in accordance with Generally Accepted Accounting Principles (GAAP). Grantee shall reimburse LACMTA for any expenditure not in compliance with the Scope of Work and/or not in compliance with other terms and conditions as defined by this MOU and the Guidelines. Grantee's expenditures submitted to LACMTA for this project shall be in compliance with Federal Acquisition Regulations, Subpart 31 (FAR). Findings of the LACMTA audit are final. When LACMTA audit findings require Grantee to return monies to LACMTA, Grantee agrees to return the monies within thirty (30) days after the final audit is sent to Grantee.

5.3 Grantee's records shall include, without limitation, accounting records, written policies and procedures, contract files, original estimates, correspondence, change order files (including documentation covering negotiated settlements), invoices, and any other supporting evidence deemed necessary by LACMTA to substantiate charges related to the Project (all collectively referred to as "records") shall be open to inspection and subject to audit and reproduction by LACMTA auditors or authorized representatives to the extent deemed necessary by LACMTA to adequately permit evaluation of expended costs. Such records subject to audit shall also include, without limitation, those records deemed necessary by LACMTA to evaluate and verify, direct and indirect costs, (including overhead allocations) as they may apply to costs associated with the Project. These records must be retained by Grantee for three years following final payment under this Agreement. Payment of retention amounts shall not occur until after the LACMTA's final audit is completed.

5.4 Grantee shall cause all contractors to comply with the requirements of Part II, Section 5, paragraphs 5.2 and 5.3 above. Grantee shall cause all contractors to cooperate fully in furnishing or in making available to LACMTA all records deemed necessary by LACMTA auditors or authorized representatives related to the Project.

5.5 LACMTA or any of its duly authorized representatives, upon reasonable written notice shall be afforded access to all of the records of Grantee and its contractors related to the Project, and shall be allowed to interview any employee of Grantee and its contractors through final payment to the extent reasonably practicable.

5.6 LACMTA or any of its duly authorized representatives, upon reasonable written notice, shall have access to the offices of Grantee and its contractors, shall have access to all necessary records, including reproduction at no charge to LACMTA, and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the terms and conditions of this MOU.

5.7 In addition to LACMTA's other remedies as provided in this MOU, LACMTA shall withhold the Funds and/or recommend not to award future Call for Projects grants to Grantee if the LACMTA audit has determined that Grantee failed to comply with the Scope of Work (such as misusing Funds or failure to return Funds owed to LACMTA in accordance with LACMTA audit findings) and/or is severely out of compliance with other terms and conditions as defined by this MOU and the Guidelines, including the access to records provisions of Part II, Section 5.

5.8 When business travel associated with the Project requires use of a vehicle, the mileage incurred shall be reimbursed at the mileage rates set by the Internal Revenue Service, as indicated in the United States General Services Administration Federal Travel Regulation, Privately Owned Vehicle Reimbursement Rates.

6. **ONE TIME GRANT:** This is a one time only grant subject to the terms and conditions agreed to herein and in the Guidelines. This grant does not imply nor obligate any future funding commitment on the part of LACMTA.

7. **SOURCES AND DISPOSITION OF FUNDS:**

7.1 **The obligation for LACMTA to grant the Funds for the Project is subject to sufficient Funds being made available for the Project by the LACMTA Board of Directors. If such Funds are not made available for the Project, this MOU shall be void and have no further force and effect, and LACMTA shall have no obligation to provide the Funds for the Project, unless otherwise agreed to in writing by LACMTA.**

7.2 Grantee shall fully fund and contribute the Grantee Funding Commitment, as identified in the Project Funding (Attachment A), towards the cost of the Project. If the Funds identified in Attachment A are insufficient to complete the Project, Grantee agrees to secure and provide such additional non-LACMTA programmed funds necessary to complete the Project.

7.3 Grantee shall be responsible for any and all cost overruns for the Project.

7.4 Grantee shall be eligible for the Funds up to the grant amount specified in Part I, Section 2 of this MOU subject to the terms and conditions contained herein and in the Guidelines. **Any Funds expended by Grantee prior to the execution of this MOU (prior to the LACMTA Chief Executive Officer's signature) shall not be reimbursed nor shall they be credited toward the Grantee Funding Commitment requirement, without the prior written consent of LACMTA. Grantee Funding Commitment dollars expended prior to the year the Funds are awarded shall be spent at Grantee's own risk.**

7.5 If Grantee receives outside funding for the Project in addition to the Funds identified in the Project Funding at the time this grant was awarded, this MOU shall be amended to reflect such additional funding. If, at the time of final voucher, funding for the Project (including the Funds, Grantee Funding Commitment, and any additional funding) exceeds the actual Project costs, then the cost savings shall be applied in the same proportion as the sources of funds from each party to this MOU as specified in the Project Funding and both the Funds and Grantee Funding Commitment required for the Project shall be reduced accordingly.

8. TIMELY USE OF FUNDS / REPROGRAMMING OF FUNDS:

8.1 Grantee must demonstrate timely use of the Funds by:

- (i) executing this MOU within ninety (90) days of receiving formal transmittal of the MOU from LACMTA, or by December 31 of the first Fiscal Year in which the Funds are programmed, whichever date is later; and
- (ii) meeting the Project milestones due dates as agreed upon by the LACMTA and Grantee in Attachment C (Scope of Work) of this MOU. Contracts for construction or capital purchase shall be executed within nine (9) months from the date of completion of design. Project design (preliminary engineering) must begin within six (6) months from the identified milestone start date. Funds programmed by LACMTA for Project development or right-of-way costs must be expended by the end of the second fiscal year following the year the Funds were first programmed; and
- (iii) submitting the Quarterly Progress/Expenditure Report as described in Part II, Section 5.1 of this MOU; and
- (iv) expending the Funds granted under this MOU for allowable costs within 36 months from July 1 of the Fiscal Year in which the Funds are programmed, unless otherwise stated in this MOU. All Funds programmed for FY 2008-09 are subject to lapse by June 30, 2011.

If Grantee fails to meet any of the above conditions, the Project shall be considered lapsed and will be submitted to the LACMTA Board of Directors for deobligation. **Expenses that are not invoiced within 60 days after the lapsing date are not eligible for reimbursement.**

8.2 In the event that the timely use of the Funds is not demonstrated as described in Part II, Section 8.1 of this MOU, the Project will be reevaluated by LACMTA as part of its annual Call for Projects Recertification/Deobligation process and the Funds may be deobligated and reprogrammed to another project by the LACMTA Board of Directors. If Grantee does not complete one element of the Project, as described in the FTIP Project Sheet, due to all or a portion of the Funds lapsing, the entire Project may be subject to deobligation at

LACMTA's sole discretion. In the event that all the Funds are reprogrammed, this MOU shall automatically terminate.

9. **DEFAULT:** A Default under this MOU is defined as any one or more of the following: (i) Grantee fails to comply with the terms and conditions contained herein or in the Guidelines; or (ii) Grantee fails to perform satisfactorily or makes a material change, as determined by LACMTA at its sole discretion, to the Financial Plan, the Scope of Work, or the Project Funding without LACMTA's prior written consent or approval as provided herein.

10. **REMEDIES:**

10.1 In the event of a Default by Grantee, LACMTA shall provide written notice of such Default to Grantee with a 30-day period to cure the Default. In the event Grantee fails to cure the Default, or commit to cure the Default and commence the same within such 30-day period to the satisfaction of LACMTA, LACMTA shall have the following remedies: (i) LACMTA may terminate this MOU; (ii) LACMTA may make no further disbursements of Funds to Grantee; and/or (iii) LACMTA may recover from Grantee any Funds disbursed to Grantee as allowed by law or in equity.

10.2 Effective upon receipt of written notice of termination from LACMTA, Grantee shall not undertake any new work or obligation with respect to this MOU unless so directed by LACMTA in writing. Any Funds expended after termination shall be the sole responsibility of Grantee.

10.3 The remedies described herein are non-exclusive. LACMTA shall have the right to enforce any and all rights and remedies herein or which may be now or hereafter available at law or in equity.

11. **COMMUNICATIONS:**

11.1 Grantee shall ensure that all Communication Materials contain recognition of LACMTA's contribution to the Project. Grantee shall ensure that at a minimum, all Communications Materials shall include (i) the phrase "This project was partially funded by Metro" or alternative acceptable minimum language; and (ii) the Metro logo, with the exception of press releases, which do not require a Metro logo.

11.2 If Grantee produces any Communication Materials that do not contain the information set forth in Section 11.1 above, Grantee must provide an opportunity for prior review and written comment by the Chief Communications Officer of LACMTA or its designee before such materials can be produced. If Grantee does not receive a response from LACMTA Communications within seven (7) working days from the day of receipt by LACMTA Communications staff, Grantee may proceed with producing the Communications Materials as proposed.

11.3 For purposes of this MOU, "Communications Materials" include, but are not limited to, literature, newsletters, publications, websites, advertisements, brochures,

maps, information materials, video, radio and public service announcements, press releases, press event advisories, and all other related materials.

11.4 For signage on Project structures, facilities, vehicles and construction sites, Grantee shall use the phrase, "Funded in part by [Metro logo]" or "Your tax dollars at work [Metro logo]" or **alternative acceptable language**. Further guidance on acknowledging LACMTA contribution is provided in the Communications Materials guidelines available from the LACMTA Communications Division.

11.5 Grantee shall notify the LACMTA Chief Communications Officer or its designee of all press events related to the Project in such a manner that allows LACMTA to participate in such events, at LACMTA's sole discretion.

11.6 The Metro logo is a trademarked item that shall be reproduced and displayed in accordance with specific graphic guidelines available from the LACMTA Communications Division.

11.7 Grantee shall ensure that any subcontractor, including, without limitation, public relations, public affairs, and/or marketing firms hired to produce Project Communications Materials will comply with the requirements contained in this Section 11.

12. OTHER TERMS AND CONDITIONS:

12.1 This MOU, along with its Attachments and the Guidelines, constitutes the entire understanding between the parties, with respect to the subject matter herein. The MOU shall not be amended, nor any provisions or breach hereof waived, except in writing signed by the parties who agreed to the original MOU or the same level of authority. Adoption of revisions or supplements to the Guidelines shall cause such revisions or supplements to become incorporated automatically into this MOU as though fully set forth herein.

12.2 Grantee is obligated, to continue using the Project dedicated to the public transportation purposes for which the Project was initially approved. The Project right-of-way, the Project facilities constructed or reconstructed on the Project site, and/or Project property purchased excluding construction easements and excess property (whose proportionate proceeds shall be distributed in an equal proportion of the grant to Grantee Funding Commitment ratio) shall remain dedicated to public transportation use in the same proportion and scope and to the same extent as described in this MOU. Equipment acquired as part of the Project, including office equipment, transit vehicles, shall be dedicated to that use for their full economic life cycle, including any extensions of that life cycle achieved by reconstruction, rehabilitation, or enhancements.

12.3 In the event that there is any legal court (e.g., Superior Court of the State of California, County of Los Angeles, or the U.S. District Court for the Central District of California) proceeding between the parties to enforce or interpret this MOU, to protect or establish any rights or remedies hereunder, the prevailing party shall be entitled to its costs and expenses, including reasonable attorney's fees.

12.4 Neither LACMTA nor any officer or employee thereof shall be responsible for any damage or liability occurring by reason of anything done or committed to be done by Grantee under or in connection with any work performed by and or service provided by Grantee, its officers, agents, employees, contractors and subcontractors under this MOU. Grantee shall fully indemnify, defend and hold LACMTA, and its officers, agents and employees harmless from and against any liability and expenses, including without limitation, defense costs, any costs or liability on account of bodily injury, death or personal injury of any person or for damage to or loss of risk of property, any environmental obligation, any legal fees and any claims for damages of any nature whatsoever arising out of the Project, including without limitation: (i) misuse of the Funds by Grantee, or its officers, agents, employees, contractors or subcontractors; (ii) breach of Grantee's obligations under this MOU; or (iii) any act or omission of Grantee, or its officers, agents, employees, contractors or subcontractors in the performance of the work or the provision of the services, in connection with the Project including, without limitation, the Scope of Work, described in this MOU.

12.5 Neither party hereto shall be considered in default in the performance of its obligation hereunder to the extent that the performance of any such obligation is prevented or delayed by unforeseen causes including acts of God, acts of a public enemy, and government acts beyond the control and without fault or negligence of the affected party. Each party hereto shall give notice promptly to the other of the nature and extent of any such circumstances claimed to delay, hinder, or prevent performance of any obligations under this MOU.

12.6 Grantee shall comply with and insure that work performed under this MOU is done in compliance with Generally Accepted Accounting Principles (GAAP), all applicable provisions of federal, state, and local laws, statutes, ordinances, rules, regulations, and procedural requirements including Federal Acquisition Regulations (FAR), and the applicable requirements and regulations of LACMTA. Grantee acknowledges responsibility for obtaining copies of and complying with the terms of the most recent federal, state, or local laws and regulations, and LACMTA requirements including any amendments thereto.

12.7 Grantee agrees that the applicable requirements of this MOU and the Guidelines shall be included in every contract entered into by Grantee or its contractors relating to work performed under this MOU and LACMTA shall have the right to review and audit such contracts.

12.8 Grantee shall not assign this MOU, or any part thereof, without prior approval of the LACMTA Chief Executive Officer or his designee, and any assignment without said consent shall be void and unenforceable.

12.9 This MOU shall be governed by California law. If any provision of this MOU is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any way.

12.10 The covenants and agreements of this MOU shall inure to the benefit of, and shall be binding upon, each of the parties and their respective successors and assigns.

12.11 If any software/Intelligent Transportation Systems (“ITS”) is developed with the Funds and if Grantee ceases to use the software/ITS for public purposes or Grantee sells, conveys, licenses or otherwise transfers the software/ITS, LACMTA shall be entitled to a refund or credit, at LACMTA’s sole option, equivalent to the amount of the Funds spent developing the software/ITS. Such refund or credit shall not be required, subject to LACMTA approval of the intended use, if Grantee reinvests the proceeds of such sale, conveyance, license or transfer into the Project to offset operating or systems management costs.

12.12 Implementation of any ITS project shall be consistent with the Regional ITS Architecture. ITS projects must comply with the LACMTA Countywide ITS Policy and Procedures adopted by the LACMTA Board of Directors including the submittal of a completed, signed self-certification form in the form of Attachment F-1. For the ITS policy and form, see www.metro.net/projects_studies/call_projects/other_resources.htm.

12.13 If any parking facilities are designed and/or constructed using the Funds, Grantee shall coordinate with LACMTA parking program staff (see METRO.net for staff listing) in the planning, design and management of the facility and shall ensure that its implementation is consistent with the LACMTA adopted parking policy. For the parking policy, see www.metro.net/projects_studies/call_projects/other_resources.htm.

12.14 Grantee will advise LACMTA prior to any key Project staffing changes.

12.15 Notice will be given to the parties at the address specified in Part I, unless otherwise notified in writing of change of address.

12.16 Grantee in the performance of the work described in this MOU is not a contractor nor an agent or employee of LACMTA. Grantee attests to no organizational or personal conflicts of interest and agrees to notify LACMTA immediately in the event that a conflict, or the appearance thereof, arises. Grantee shall not represent itself as an agent or employee of LACMTA and shall have no powers to bind LACMTA in contract or otherwise.

ATTACHMENT A - PROJECT FUNDING

CFP# F1341
FTIP#: LAF1341

MOU.P000F134

**LOCAL SALES TAX PROP C - MEMORANDUM OF UNDERSTANDING
OCEAN BLVD SIGNAL SYNCHRONIZATION AND SAFETY ENHANCEMENTS
PROJECT SPONSOR: CITY OF LONG BEACH
(\$ in Actual Dollars)**

(LACMTA Programmed Funding and Sponsors Match Only)

LACMTA PROGRAMMED FUNDING:								
SELECT:								
Proposition C 5%								
Proposition C 10%								
Proposition C 25%		1,406,000					1,406,000	58.8%
Proposition C 40%								
LACMTA SUBTOTAL							1,406,000	58.8%
GRANTEE/SPONSOR MATCH:								
Grantee Funding Commitment (specify type)								
(Write specific type of funding match)								
SELECT:								
City General Fund		986,000					986,000	41.2%
Prop A or C Local Return								
STPL								
Other								
GRANTEE / PROJECT SPONSOR MATCH SUBTOTAL							986,000	41.2%
TOTAL PROGRAMMED FUNDING		\$2,392,000					\$2,392,000	100.0%

√

2,392,000

ATTACHMENT C**SCOPE OF WORK****OCEAN BOULEVARD SIGNAL SYNCHRONIZATION AND ENHANCEMENT PROJECT****Project Limits**

The location of the project is Ocean Boulevard between Alamos Avenue and Livingston Drive/2nd Street. The project length is 2.6 miles. The attached map illustrates the location of the proposed project.

Project Description

The project will provide traffic signal synchronization and safety enhancements along Ocean Boulevard from Alamos Avenue to Livingston Drive/2nd Street. Project components include: installation of traffic signal interconnect along Ocean Boulevard within the project boundaries; completing interconnection of the Traffic Management Center northwest of downtown to all traffic signals in the Ocean Boulevard/Livingston Drive/2nd Street corridor from downtown Long Beach to Pacific Coast Highway; installation of new traffic signals at Ocean Boulevard/Coronado Avenue and Ocean Boulevard/Orizaba Avenue; reconstruction/modernization of traffic signals at Livingston Avenue/2nd Street, Ocean Boulevard/Temple Avenue, Ocean Boulevard/Junipero Avenue, and Ocean Boulevard/Orange Avenue; reconfiguration of signal operation for Belmont Triangle intersections; and signal upgrades at the intersections of Ocean Boulevard and Paloma, Lindero, Cherry, and Alamos Avenues.

Project Budget

Project Component	Estimated Cost
Plans, specifications and estimate (PS&E)	\$250,000
Right-of-way acquisition	\$0
Construction *	\$2,142,000
Total	\$2,392,000

* - *Includes construction engineering and management, contract administration, inspection and contingency.*

The following provides a further breakdown of estimated project cost through a detailed breakdown of each project component:

Item	Qty	Unit	Unit Cost	Estimated Cost
<i>Plans, Specifications and Estimate (PS&E)</i>				
Preliminary (10%) design	1	LS	\$30,000	\$30,000
Final Design	1	LS	\$220,000	\$220,000
<i>Subtotal PS&E</i>				\$250,000
Item	Qty	Unit	Unit Cost	Estimated Cost
<i>Construction</i>				
New Traffic Signals and Modifications	10	LS	\$970,000	\$970,000
Traffic Signal Interconnect Gap Closures	1	LS	\$990,000	\$990,000
Construction Engineering	1	LS	\$182,000	\$182,000
<i>Subtotal construction</i>				\$2,142,000
<i>Total Project Cost</i>				\$2,392,000

Project Schedule

The estimated start and finish dates for the project milestones are itemized below:

	<u>Start</u>	<u>Finish</u>
1. Start Environmental Studies	8/07	9/07
2. Draft Environmental Documents	9/07	10/07
3. Final Environmental Documents	10/07	12/07
4. Begin Design Engineering	1/09	3/09
5. Plans, Specifications & Estimates	3/09	6/09
6. Start R/W Acquisition	N/A	N/A
7. R/W Certification	N/A	N/A
8. Ready to Advertise	6/09	7/09
9. Start Construction (award)	8/09	8/09
10. Project Completion	5/10	5/10

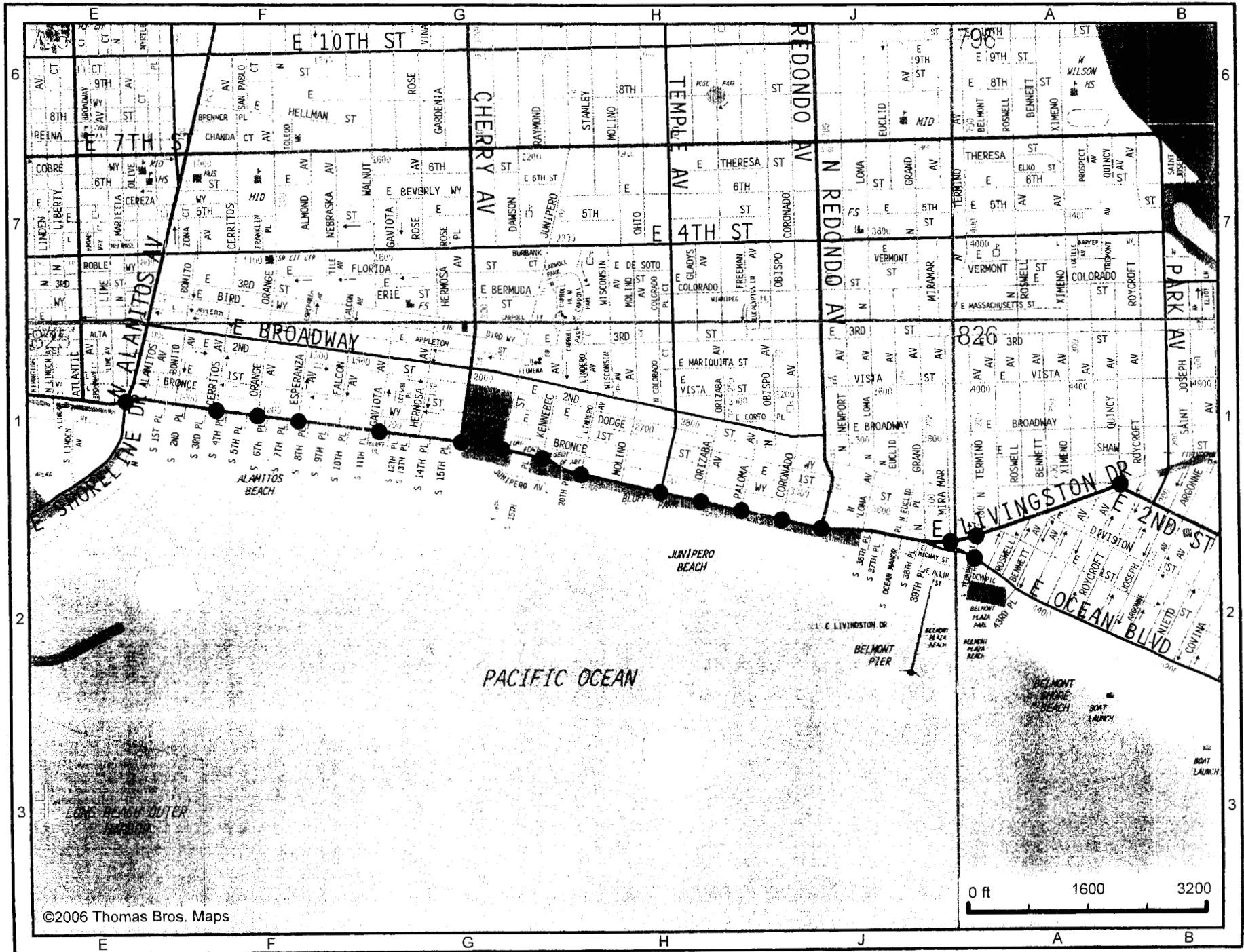
Project Benefits

Synchronization of signals will increase traffic and transit flows along the Ocean Boulevard corridor by optimizing signal timing and coordination green time. The project includes the implementation of curb extensions to improve access to bus stops and to reduce pedestrian crossing times and increase motorist visibility of pedestrians. The project is expected to have a significant positive impact on reducing stops, queues, and delay. Average delay is expected to drop by 58% during the A.M. peak period and by 74% in the P.M. peak period.

There were a total of 527 reported traffic accidents in the project corridor between 2001 and 2006. Bicycle and pedestrian accidents accounted for 34 and 10 of those accidents, respectively. With the implementation of all the proposed project elements, the City estimates that the total accident rate will decrease by approximately 30% with bicycle and pedestrian accidents decreasing by up to 50%. These anticipated reductions in accidents are primarily attributable to the “rest-in-red” off-peak operation strategy to control vehicle speeds.

This project will improve the responsiveness of the traffic signal system by interconnecting the traffic signals in the Ocean Boulevard corridor from Alamitos Avenue to Livingston Drive, providing a continuous Traffic Management Center-controlled corridor between Pacific Coast Highway and the General Desmond Bridge west of downtown Long Beach.

PROJECT LOCATION MAP



MOU ATTACHMENT D
REPORTING & EXPENDITURE GUIDELINES

REPORTING PROCEDURES

- Quarterly Progress/Expenditure Report (Attachment D1) is required for all projects. The Grantee shall be subject to and comply with all applicable requirements of the funding agency regarding project-reporting requirements. In addition, Grantee will submit a quarterly report to the LACMTA at **P.O. Box 512296, Los Angeles, CA 90051-0296**. Please note that letters or other forms of documentation may not be substituted for this form.
- The Quarterly Progress/Expenditure Report covers all activities related to the project and lists all costs incurred. It is essential that Grantee provide complete and adequate response to all the questions. The expenses listed must be supported by appropriate documentation with a clear explanation of the purpose and relevance of each expense to the project. Expenses must reflect the proportionate share of local match, including in-kind, charged to the grant.
- In cases where there are no activities to report, or problems causing delays, clear explanation, including actions to remedy the situation, must be provided.
- Grantees are required to track and report on the project schedule. LACMTA will monitor the timely use of funds and delivery of projects. Project delay, if any, must be reported each quarter. Projects not delivered in a timely manner will be reevaluated by LACMTA as part of the annual Call for Projects Recertification process and the Funds may be deobligated and reprogrammed by the LACMTA Board.
- The Quarterly Progress/Expenditure Report is due to the LACMTA as soon as possible after the close of each quarter, but no later than the following dates for each fiscal year:

<i>Quarter</i>	<i>Report Due Date</i>
July –September	November 30
October - December	February 28
January - March	May 31
April - June	August 31

Upon completion of the Project a final report that includes project’s final evaluation must be submitted.

EXPENDITURE GUIDELINES

- Any activity or expense charged above and beyond the approved Scope-of-Work (MOU Attachment C) **is considered ineligible** and will not be reimbursed by the LACMTA unless **prior written authorization** has been granted by the LACMTA Chief Executive Officer or his designee.
- Any expense charged to the grant or local match, including in-kind, must be clearly and directly related to the project.
- Any activity or expense charged as local match cannot be applied to any other LACMTA-funded or non-LACMTA-funded projects; activities or expenses related to a previously funded project cannot be used as local match for the current project.
- Administrative cost is the ongoing expense incurred by the Grantee for the duration of the project and for the direct benefit of the project as specified in the Scope-of-Work (Attachment C). Examples of administrative costs are personnel, office supplies, and equipment. As a condition for eligibility, all costs must be necessary for maintaining, monitoring, coordinating, reporting and budgeting of the project. Additionally, expenses must be reasonable and appropriate to the activities related to the project.
- LACMTA is not responsible for, and will not reimburse any costs incurred by the Grantee prior to the execution of the MOU, unless **written authorization** has been granted by the LACMTA Chief Executive Officer or her designee.
- The MOU is considered executed when the LACMTA Chief Executive Officer or her designee signs the document.

DEFINITIONS

- Local Participation: Where local participation consists of “in-kind” contributions rather than funds, the following contributions may be included:
 - Costs incurred by a local jurisdiction to successfully complete the project. Examples include engineering, design, rights-of-way purchase, and construction management costs.
 - Donations of land, building space, supplies, equipment, loaned equipment, or loaned building space dedicated to the project.
 - Donations of volunteer services dedicated to the project.
 - A third-party contribution of services, land, building space, supplies or equipment dedicated to the project.
- Allowable Cost: To be allowable, costs must be reasonable, recognized as ordinary and necessary, consistent with established practices of the organization, and consistent with industry standard of pay for work classification.

- Excessive Cost: Any expense deemed “excessive” by LACMTA staff would be adjusted to reflect a “reasonable and customary” level. For detail definition of “reasonable cost”, please refer to the Federal Register *OMB Circulars A-87 Cost Principals for State and Local Governments; and A-122 Cost Principals for Nonprofit Organizations*.
- In-eligible Expenditures: Any activity or expense charged above and beyond the approved Scope-of-Work is considered in eligible.

**LACMTA MOU ATTACHMENT D1
 QUARTERLY PROGRESS / EXPENSE REPORT**

Grantee To Complete	
Invoice #	
Invoice Date	
MOU# MOU.P00F1341	
Quarterly Report #	

**GRANTEES ARE REQUESTED TO MAIL THIS REPORT TO
 P.O. Box #512296, Los Angeles, CA 90051-0296** after the close of each quarter, but no later than November 30, February 28, May 31 and August 31. Please note that letters or other forms of documentation may **not** be substituted for this form. Refer to the Reporting and Expenditure Guidelines (Attachment D) for further information.

SECTION 1: QUARTERLY EXPENSE REPORT

Please itemize grant-related charges for this Quarter on Page 5 of this report and include totals in this Section.

	LACMTA Grant \$	Local Match (Incl. In-Kind) \$	Local Match %	Total \$
Project Quarter Expenditure				
This Quarter Expenditure				
Retention Amount				
Net Invoice Amount (Less Retention)				
Project-to-Date Expenditure				
Funds Expended to Date (Include this Quarter)				
Total Project Budget				
% of Project Budget Expended to Date				
Balance Remaining				

SECTION 2: GENERAL INFORMATION

PROJECT TITLE: Ocean Blvd Signal Synchronization and Enhancement Project

MOU #: _____

QUARTERLY REPORT SUBMITTED FOR:

- Fiscal Year :** 2004-2005 2005-2006 2006-2007
 2007-2008 2008-2009 2009-2010
- Quarter :** Q1: Jul - Sep Q2: Oct - Dec
 Q3: Jan - Mar Q4: Apr - Jun

DATE SUBMITTED: _____

LACMTA MODAL CATEGORY:

- Freeway RSTI Signal Synchronization
 TDM Bikeway Pedestrian
 Transit TEA

LACMTA Area Team Representative / Project Mgr.	Name:	Adrian Alvarez
	Area Team:	Gateway Cities
	Phone Number:	(562) 922-3001
	e-mail:	alvarez@metro.net

Project Sponsor Contact / Project Manager	Contact Name:	Dave Roseman
	Job Title:	City Traffic Engineer
	Department:	Department of Public Works
	City / Agency:	Long Beach
	Mailing Address:	333 W. Ocean Blvd. 9th Floor
	Phone Number:	(562) 570-6665
	e-mail:	dave_roseman@longbeach.gov

SECTION 3 : QUARTERLY PROGRESS REPORT

1. DELIVERABLES & MILESTONES

List all deliverables and milestones as stated in the MOU, with start and end dates. Calculate the total project duration. **DO NOT CHANGE THE ORIGINAL MOU MILESTONE START AND END DATES SHOWN IN THE 2ND AND 3RD COLUMNS BELOW.**

Grantees must make every effort to accurately portray milestone dates in the original MOU Scope of Work, since this will provide the basis for calculating any project delay. If milestone start and/or end dates change from those stated in the Original MOU Scope of Work, indicate the new dates under Actual Schedule below and re-calculate the project duration. However, this does not change the original milestones in your MOU. **PER YOUR MOU AGREEMENT, ANY CHANGES TO THE PROJECT SCHEDULE MUST BE FORMALLY SUBMITTED UNDER SEPARATE COVER TO LACMTA FOR WRITTEN CONCURRENCE.**

MOU Milestones	Original MOU Schedule in Scope of Work		Actual Schedule	
	Start Date	End Date	Start Date	End Date
Total Project Duration (Months)				

2. PROJECT COMPLETION

A. Based on the comparison of the original and actual project milestone schedules above, project is (select only one) :

- On schedule per original MOU schedule
 Less than 12 months behind original schedule
 Between 12-24 months behind original schedule
 More than 24 months behind original schedule

B. Was the project design started within 6 months of the date originally stated in the MOU?

- Yes
 No
 Not Applicable

C. Was a construction contract or capital purchase executed within 9 months after completion of design / specifications?

- Yes
 No
 Not Applicable

3. TASKS / MILESTONES ACCOMPLISHED

List tasks or milestones accomplished and progress made this quarter.

4. PROJECT DELAY

If project is delayed, describe reasons for delay (this quarter). Pay particular attention to schedule delays. If delay is for the same reason as mentioned in previous quarters, please indicate by writing "Same as Previous Quarter".

5. ACTION ITEMS TO RESOLVE DELAY

If the project is delayed (as described in #4), include action items that have been, or will be, undertaken to resolve the delay.

SECTION 4: ITEMIZED LISTING OF EXPENSES AND CHARGES THIS QUARTER

All expenses and charges, including grant and local match, must be itemized and listed below. Each item listed must be verifiable by an invoice and/or other proper documentation. The total amounts shown here must be equal to this quarter's expenditures listed on page 1 of this report. All expenses and charges must be reflective of the approved budget and rates as shown in the MOU Attachment C, Scope of Work. Use additional pages if needed.

ITEM	INVOICE #	TOTAL EXPENSES / CHARGES	\$ CHARGED TO LACMTA GRANT	\$ CHARGED TO LOCAL MATCH
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
TOTAL				

Notes:

- Local match spent in each quarter, must be in the appropriate proportion to LACMTA grant.
- All receipts, invoices, and time sheets, attached and included with this Expense Report must be listed and shown under the Invoice Number column of the Itemized Listing (above).

Invoice Payment Information:

LACMTA will make all disbursements electronically unless an exception is requested in writing.
 ACH Payments require that you complete an ACH Request Form and fax it to Accounts Payable at 213-922-6107
 ACH Request Forms can be found at www.metro.net/callforprojects.
 Written exception requests for Check Payments should be completed and faxed to Accounts Payable at 213-922-

I certify that I am the responsible Project Manager or fiscal officer and representative of _____ and that to the best of my knowledge and belief the information stated in this report is true and correct.

Signature

Date

Name

Title

Attachment E

**Los Angeles Metropolitan Transportation Authority
2008 Federal Transportation Improvement Program (\$000)**

TIP ID LAF1341		Implementing Agency Long Beach, City o			
SCAG RTP Project #: 1ITS04 PPNO: EA Number: SCAG Model #:	Project Title Ocean Bl. Signal Synchronization and Enhancement Project. Installation of new signals, interconnect, pedestrian safety enhancements, ADA access ramps, transit information systems, and traffic signal upgrades and reconstruction.				
System Route Postmile Local Hwy	Project Description Ocean Bl. Signal Synchronization and Enhancement Project. Installation of new signals, interconnect, pedestrian safety enhancements, ADA access ramps, transit information systems, and traffic signal upgrades and reconstruction.				
Program Code ITS02 - SIGNAL SYNCHRONIZATION					
Environmental Document CATEGORICALLY EXEMPT - 06/30/2008					
Conformity Category EXEMPT					
Air Basin SCAB					
Project Completion Date 10/01/2009					
Current Impementation Status No Project Activity - 10/09/2007					
Project Manager Sumire Gant - (562) 570-6618					
Last Modified By Sumire Gant on 10/31/2007					
Change Reason: New project					
Narative:					
Last Revised Adoption 08-00 - APPROVED					Total Cost \$2,392



ATTACHMENT F-1
LOS ANGELES COUNTY REGIONAL ITS
ARCHITECTURE CONSISTENCY
SELF-CERTIFICATION FORM

This form should be completed and executed for all ITS Projects or Projects with ITS elements. The form should be sent to LACMTA Countywide Planning and Development (CP & D) for any planned ITS projects or proposed funding involving Local, State or Federal funds programmed or administered through the LACMTA.

1. Name of Sponsoring Agency: _____

2. Contact Name: _____

3. Contact Phone: _____

4. Contact Email: _____

5. Project Description:

6. Identify the ITS elements being implemented and the relevant National Architecture User Service(s), see Attachment A. See last page of this document.

7. Outline of the concept of operations for the project.



ATTACHMENT F-1
LOS ANGELES COUNTY REGIONAL ITS
ARCHITECTURE CONSISTENCY
SELF-CERTIFICATION FORM

8. Identify participating agencies roles and responsibilities _____

By signing and self-certifying this form, the agency commits itself to follow the ITS requirements listed below during project design and implementation. Please be advised that your project may be subject to further review and documentation by FHWA or FTA during project design and implementation phases:

- Perform a lifecycle analysis for the ITS project elements and incorporate these costs into the Operations and Maintenance plan as part of the system engineering process,
- Maintain and operate the system according to the recommendations of the operations and Maintenance plan upon project completion,
- Use the systems engineering process and document the system engineering steps, and
- Use the Los Angeles County Regional ITS Architecture interface standards, if required, and conform to the regional configuration management process.

Signature:

_____ Date _____

Agency Representative

Please return this Project Self Certification Form to LACMTA, Department of CP&D,

Attention: Ms. Carol Inge, Chief Planning Officer, Countywide Planning and Development (CP&D), Los Angeles County Metropolitan Transportation Authority (LACMTA), One Gateway Plaza, MS 99-22-7, Los Angeles, CA 90012-2952.



Los Angeles Countywide Metro Policy and Procedures *Intelligent Transportation Systems (ITS)*

RTP&D04

POLICY STATEMENT

Federal regulations (23 CFR Parts 655 and 940 Intelligent Transportation System (ITS) Architecture and Standards; Final Rule) now require ITS projects funded with the Highway Trust Fund to conform to the National ITS Architecture and Standards; be guided by a regional architecture with geographic boundaries defined by stakeholder needs; and use systems engineering analysis on a scale commensurate with the project scope. It is Metro's Policy to abide by the Federal ITS regulations and requirements for those agencies seeking federal funding programmed by Metro for projects subject to this rule. For consistency and to maximize benefits, Los Angeles Countywide ITS Policy and Procedures is also applied to projects with state and local funding sources programmed and administered by the Metro.

PURPOSE

The purpose of this policy is to monitor funding compliance with the Federal Transit Administration (FTA) National ITS Policy and Federal Highway Administration (FHWA) ITS Final Rule.

APPLICATION

This policy applies to all ITS projects funded from the Highway Trust Fund. This includes funding through the Mass Transit Account and any other funds distributed by the FTA and the FHWA. In addition it applies to all ITS project funds programmed and administered by Metro through the Call For Projects, and Propositions A and C Local Return revenues if they were being used to match state and federal funds.

ITS involves the use of advanced computer, electronic and communications technologies to increase the safety and effectiveness of the surface transportation system. Metro encourages the use of ITS technologies to enhance the productivity of the existing infrastructure and vehicles that carry passengers, goods and services in Los Angeles County (i.e. highways, streets, bridges, mass transit vehicles and tracks). Some examples of transportation systems supported by ITS technologies include: advanced traffic signals; automated bus and maintenance vehicle location systems; electronic fare systems; electronic roadside and transit information signs; automated vehicle control systems and traveler information systems. Adding such technologies to our transportation systems saves lives, time and money.


AREA TEAM DIRECTOR: Raymond Maekawa


DEP. EXECUTIVE OFFICER, TDI: Carol Inge


CHIEF PLANNING OFFICER, CP & D: James L. de la Loza


ADOPTED BY CBO: Roger Snoble

Metro ITS Policy-Final 02-01-05 Effective Date: 02/01/05



Metro

Los Angeles Countywide Policy and Procedures

Intelligent Transportation Systems (ITS) RTP&D04

1.0 PROCEDURES

1.1 ITS Project Definition

An ITS project is defined as “any project that in whole or in part funds the acquisition of technologies or systems of technologies that provide or significantly contribute to the provision of one or more ITS User Services as defined in the National ITS Architecture.” See attachment A; last page of this document, for ITS User Services version 5.0. This definition applies equally to both projects that are internal and external to LACMTA.

1.2 ITS Project Planning and Development

During project planning and development, all external agency project sponsors and LACMTA internal departments must certify that the project ITS elements are consistent with the Los Angeles County Regional ITS Architecture by filling out the “Consistency Self-Certification Form” (Attachment F-1), pages 1-2 of this document. Failure to meet the requirements of this policy may result in delaying the programming and allocation of federal, state and local funds.

1.3 Los Angeles County Regional ITS Architecture

The purpose of the Los Angeles County Regional ITS Architecture is to maximize the benefits of all of the investments in ITS technology by promoting their integration and following the system engineering process. Integration gives access to data for multiple partners at little or no additional investment. The Regional ITS Architecture for Los Angeles County can be found at (www.riits.net). It describes the process and the roles and responsibilities for maintaining the Regional Architecture after it is adopted.

The Los Angeles Regional ITS Architecture is used as the base framework for SCAG’s high level Regional ITS Architecture. This architecture covers the six counties that constitute the SCAG Region, and is also consistent with the California Statewide ITS Architecture and System Plan. Both the SCAG and Statewide ITS architectures are under development. They will ensure both regional and statewide coordination and consistency at all levels and integration within the same communication framework.

The Los Angeles County Regional ITS Architecture provides a framework for ensuring institutional agreement and technical integration of ITS projects or groups of projects. Current or future ITS project sponsors receiving funding programmed and administered by LACMTA should acquaint themselves with the Los Angeles Regional ITS Architecture and participate in its future development. The Los Angeles County Regional ITS Architecture and Plan must also be maintained and be consistent with the region’s transportation plans and improvements programs.



Metro

Los Angeles Countywide Policy and Procedures

Intelligent Transportation Systems (ITS)

RTP&D04

To support the need for consistency with the Los Angeles Regional ITS Architecture, the LACMTA Countywide Planning and Development Department (CP & D) is responsible for:

- Making consistency information available to external agencies and LACMTA internal departments;
- Reviewing and adding consistency requirements to external agencies and LACMTA Call for Projects requirements;
- Reviewing and adding consistency requirements to Prop A and Prop C funding guidelines;
- Reviewing and adding consistency requirements to Short Range Transit Plan (SRTP) countywide guidelines;
- Coordinating with transportation, transit agencies, emergency service providers and LACMTA internal Departments to define their ITS projects, their concept of operations and providing assistance to meet the consistency requirements; and developing necessary integration interfaces to the Los Angeles County Regional ITS Architecture;
- Providing support and guidance to transportation, transit agencies and emergency service providers using the Regional ITS Architecture guide book and tools for interface development;
- Participating and ensuring inter-agency system operation and management agreements are executed as appropriate and described in the Los Angeles Regional ITS Architecture;
- Administering the function and expansion of Los Angeles County Regional ITS Architecture; organizing ITS coordination committees and working groups that address technical and institutional issues that are associated with the operation, upgrade and maintenance of the Los Angeles Regional ITS Architecture; and
- Maintaining and updating the Los Angeles Regional ITS Architecture Plan for incorporation into the Southern California Associated Government (SCAG) Regional ITS Plan, Regional Transportation Plan (RTP), and LACMTA's Long Range Transportation Plan (LRTP) and Short Range Transportation Plan (SRTP).



Metro

**Los Angeles Countywide
Policy and Procedures
Intelligent Transportation Systems (ITS)
RTP&D04**

1.4 ITS Project Compliance

1.4.1 To ensure compliance with the ITS Policy, all ITS project sponsor agencies including LACMTA internal departments are required to complete the Los Angeles County Regional ITS Architecture Consistency Certification Form (Attachment F-1) and to self certify that their project's ITS elements in whole or in part are consistent with the Los Angeles County Regional ITS Architecture through the following:

- Identification of ITS systems elements;
- An outline concept of operations for the project;
- Identification of participating agency roles and responsibilities;
- A commitment to perform a Lifecycle analysis for all ITS system elements;
- A commitment to maintain and operate the system after the project completion;
- A commitment to the use of systems engineering either directly by the agency and or their vendors;
- A commitment to document the systems engineering steps followed at project completion; and
- A commitment that the project will address the use of standards in the context of the Los Angeles County Regional ITS Architecture and participate in the configuration management process.

As an additional aid to understanding the system engineering process, a major reference resource is the Caltrans Local Assistance Home Page: www.dot.ca.gov. The Local Programs Procedures manual update LPP 04-04 deals specifically with ITS projects and includes detailed guidelines for compliance with the regulations including discussion of the process and application of systems engineering to ITS projects. FTA is currently developing detailed transit specific guidelines for compliance with the system engineering requirements. These guidelines will be made available on the Regional ITS Architecture website (www.riits.net) when they are completed.



Metro

**Los Angeles Countywide
Policy and Procedures
*Intelligent Transportation Systems (ITS)***
RTP&D04

REVISION HISTORY

Version No.	Date Submitted	Comments

ATTACHMENTS

- A: Elements of National ITS Architecture User Services (Version 5.0)
- B: Los Angeles County Regional ITS Architecture Consistency
Self-Certification Form



Metro

**Los Angeles Countywide
Policy and Procedures
Intelligent Transportation Systems (ITS)
RTP&D04**

ATTACHMENT A

Elements of National ITS Architecture User Services (Version 5.0)

- 1. *Travel and Traffic Management***
 - 1.1 Pre-Trip Travel Information
 - 1.2 En-Route Driver Information
 - 1.3 Route Guidance
 - 1.4 Ride Matching & Reservation
 - 1.5 Traveler Services Information
 - 1.6 Traffic Control
 - 1.7 Incident Management
 - 1.8 Travel Demand Management
 - 1.9 Emissions Testing and Mitigation
 - 1.10 Highway Rail Intersection
- 2. *Public Transportation Management***
 - 2.1 Public Transportation Management
 - 2.2 En-Route Transit Information
 - 2.3 Personalized Public Transit
 - 2.4 Public Travel Security
- 3. *Electronic Payment***
 - 3.1 Electronic Payment Services
- 4. *Commercial Vehicle Operations***
 - 4.1 Commercial Vehicle Electronic Clearance
 - 4.2 Automated Roadside Safety Inspection
 - 4.3 On-Board Safety and Security Monitoring
 - 4.4 Commercial Vehicle Administrative Processes
 - 4.5 Hazardous Material Security and Incident Response
 - 4.6 Freight Mobility
- 5. *Emergency Management***
 - 5.1 Emergency Notification and Personal Security
 - 5.2 Emergency Vehicle Management
 - 5.3 Disaster Response and Evacuation
- 6. *Advanced Vehicle Safety Systems***
 - 6.1 Longitudinal Collision Avoidance
 - 6.2 Lateral Collision Avoidance
 - 6.3 Intersection Collision Avoidance
 - 6.4 Vision Enhancement for crash Avoidance
 - 6.5 Safety readiness
 - 6.6 Pre-Crash Restraint Deployment
 - 6.7 Automated Vehicle Operation
- 7. *Information Management***
 - 7.1 Archived Data Function
- 8. *Maintenance and Construction Management***
 - 8.1 Maintenance and Construction Operations

ATTACHMENT F-2
SIGNAL SYNCHRONIZATION AND BUS SPEED IMPROVEMENT PROGRAM
SPECIAL GRANT CONDITIONS

1. Grantee shall provide the opportunity to LACMTA staff, other affected agencies and/or the Arterial Intelligent Transportation System (ITS) Configuration Management Committee, to review, comment and participate on all aspects of the Project implementation to achieve multi-jurisdictional consensus, including, but not limited to, scope of work, consultant selection, PS&E, system design, bid documents and Project deliverables.
2. The Project scope of work and engineering design shall conform to the LACMTA's Signal Synchronization and Bus Speed Improvement Program Guidelines and the LACMTA Before and After Study Guidelines for Signal Synchronization Projects. LACMTA shall at its discretion, condition the award of Tier 2-4 ITS grants with the requirement to perform before and after study data collection. For the purposes of establishing consistency in evaluations, for projects so conditioned, Grantee shall collect before data immediately after the design is completed and just prior to actual project construction. Grantee shall collect after data prior to the release of retention or within 1oneyear of project completion upon receiving permission from LACMTA. All data shall be furnished to the LACMTA upon request.
3. Grantee shall commit and/or secure local resources through agreement with participating agencies, to maintain and operate the Project improvements. The Grantee shall not advertise the Project for bid to begin construction before all affected agencies and/or regional Traffic Forum members have fully executed an agreement regarding the maintenance and operation of traffic signal synchronization system(s) along multi-jurisdictional corridor(s). A copy of the fully executed agreement will be delivered to the LACMTA immediately upon execution. Failure to provide proper maintenance and operation of the Project improvements may jeopardize future LACMTA funding. Additionally, there shall be no major equipment or timing-plan changes on Call funded Traffic Forum projects within the first two years of project implementation/system operation unless there is an LACMTA or lead agency written approval of a written request.
4. All Tier 3 (Computerized Traffic Signal Control and Monitoring Systems) and Tier 4 (ITS Technology and Smart Corridor Projects) developments shall be designed for system compatibility with the arterial traffic control open system architecture. The system design shall be coordinated through LACMTA staff to allow communication with the Information Exchange Network (IEN). Grantee is also required to attend the LACMTA Arterial ITS Working Configuration Management Committee in order to ensure technical project coordination.
5. Any changes made to Attachments A and/or C of this MOU must receive written approval of the LACMTA.
6. It is understood that the LACMTA/Grantee participation ratio established for this Project will apply to the total Project cost and not to the individual Project elements as defined and estimated in Attachment C.

Note: LACMTA will make available the arterial open system traffic control and data management software, currently being developed in the East San Gabriel Valley Pilot Project to all transportation operating agencies in the Los Angeles County upon its completion for countywide applications.