

Memorandum

To: CHAIR AND COMMISSIONERS

CTC Meeting: December 9-10, 2009

Reference No.: 2.1c.(6a)
Action Item

From: NORMA ORTEGA
Chief Financial Officer

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Subject: **TRAFFIC LIGHT SYNCHRONIZATION PROGRAM BASELINE AMENDMENT
RESOLUTION TLSP-PA-0910-01**

RECOMMENDATION:

The California Department of Transportation (Department) recommends the California Transportation Commission (Commission) approve a baseline agreement amendment for the City of Los Angeles (City) for the Traffic Light Synchronization Program (TLSP) projects identified on the attached list.

ISSUE:

As a result of actions taken by the Pooled Money Investment Board in December 2008 and City budget constraints resulting in reduced personnel, the City had to delay the construction start dates for their allocated projects. The construction start dates have been impacted for future contracts by an average of six months. Furthermore, to expedite the Echo Park/Silver Lake project, construction has been split into two projects (Phase 1 and Phase 2), increasing the City's number of TLSP projects from 21 to 22. The City also proposes to redistribute funds among projects; however, there is no net change in the total TLSP funds programmed.

BACKGROUND:

On May 28, 2008, the Commission approved 21 traffic light synchronization projects totaling \$147,000,000 for the City of Los Angeles. The project list was subsequently amended in October 2008 to reflect the final executed baseline agreement.

The City's baseline agreement has been received and reviewed by the Department, and signed by Director Kempton. The baseline agreement set forth the project scope, delivery schedule, estimated costs and funding plan, and the expected benefits to be derived for each project. The construction schedules originally proposed by the City have been updated, as shown on the attachment. Some reasons for the updates include delayed hiring process for additional positions to accelerate the TLSP Program design and construction, delay in receiving Proposition 1B funding, and a delay in negotiations with the contractor. Additional delay was caused by staff attrition and budget induced hiring restrictions. The City has shifted its awarded funds between the various projects described in its baseline agreement as more accurate cost estimates were determined during project design.

Baseline agreement amendments are requested for the followings projects. Changes to project schedule and funding plan are reflect in the attached spreadsheet.

Projects with Awarded Contracts

City of Los Angeles – Automated Traffic Surveillance and Control (ATSAC) – Reseda Phase 1

The ATSAC – Reseda project was split into two phases in order to attract additional bidders that might be excluded due to the large project cost. During the initial design of the project, it was determined that additional traffic signals had recently been implemented, so the original 112-intersection Reseda project has become a project with 126 intersections. Additionally, the detailed project design showed that the most advantageous and optimized communication design would incorporate a 70-intersection Phase 1 and a 56-intersection Phase 2 project.

Initially, the standard citywide distance between signalized intersections was used to calculate construction costs for the ATSAC – Reseda Phase 1 project. Subsequently, it was determined that the distance between intersections in the Reseda area of the City is much greater and therefore construction will be more costly.

The construction start date was delayed five months from that shown in the October 2008 baseline agreement due to the delays in receiving Proposition 1B funding. Construction started on January 8, 2009.

City of Los Angeles – Adaptive Traffic Control System (ATCS) – Echo Park / Silver Lake Phase 1

The original 170-intersection ATCS – Echo Park / Silver Lake Project has been split into Phase 1 and Phase 2 to expedite the implementation of ATCS facilities around the highly congested Los Angeles Dodger Stadium area. The Phase 1 will provide ATCS facilities at 53 intersections and the Phase 2 will provide ATCS facilities at the remaining 117 intersections. The Commission approved an allocation for Phase 1 in December 2008. Sufficient Proposition 1B funding did not become available, however, until April 2009. The original total project cost for both Phases 1 and 2 was \$6,059,000. With the implementation of additional changeable message signs in this highly congested area, the current estimated project cost for Phase 1 is \$3,215,000. The current estimated project cost for Phase 2 is \$4,504,000.

Construction for Phase 1 started on July 1, 2009 and was accelerated by 18 months from the date shown in the baseline agreement due to the early implementation of ATCS facilities in this area. Design for Phase 2 has not yet started.

City of Los Angeles - ATSAC – San Pedro

The approved baseline agreement for the ATSAC – San Pedro Project showed a proposed 74-intersection project at a cost of \$8,911,000. Upon detailed project design, it was determined that (1) it would be more cost-effective and result in an optimized communication system design to combine and modify a number of intersections from the ATSAC – Wilmington Project with those of the San

Pedro Project and (2) it would be advantageous to include additional communication interconnect/street lighting upgrades relative to the connection of a small number of traffic signals on the City's Terminal Island. Based on recently received favorable bidding, no additional funding will be required.

The construction start date was delayed eight months from that shown in the baseline agreement due to additional project design and the suspension of Proposition 1B funding. The Commission approved an allocation in May 2009; construction started on September 24 2009.

City of Los Angeles - ATSAC – Platt Ranch

The approved baseline agreement noted a project with 29 intersections. Through the detailed project design process, the original number of intersections was increased to 37 based on the addition of new signals in this growing urbanized area of the City. The project area now encompasses all remaining non-ATSAC intersections in the western most area of the City's San Fernando Valley. Adjoining signalized intersections to the east and south are already functioning with ATSAC/ATCS capability. In May 2009, the Commission allocated \$4,358,000 for this project. Based on recently received favorable bidding, no additional funding will be required.

The construction start date has been delayed nine months from that shown in the baseline agreement. The delay was caused by the suspension of Proposition 1B funding. With the availability of State funding, the project was awarded and construction is expected to begin in November 2009.

Projects Submitted for CTC Allocation

The following projects have been submitted for Commission approval. Funds for these projects will be allocated based on the availability of TLSP funding.

City of Los Angeles – ATSAC – Reseda Phase 2

The ATSAC – Reseda Phase 2 Project had a baseline agreement construction cost of \$7,191,000, based on a 56-intersection project. The project has been designed and is currently expected to cost \$7,220,700. A construction allocation request was submitted for Commission approval in April 2009. This project is currently deferred until additional TLSP funding can be obtained.

The construction start date has been delayed ten months from that shown in the baseline agreement due to the suspension of Proposition 1B funding. With the expected availability of funding, construction is expected to start in March 2010.

City of Los Angeles - ATSAC – Harbor Gateway 2

The baseline agreement for the ATSAC – Harbor-Gateway 2 Project showed a proposed 64-intersection project at a cost of \$7,899,000. No additional funding allocation is anticipated. A construction allocation request was submitted for Commission approval in August 2009. This project is currently deferred until additional TLSP funding can be obtained.

The construction start date has been delayed seven months from that shown in the baseline agreement due to the suspension of Proposition 1B funding. With the expected availability of funding, construction is expected to start in March 2010.

Projects Currently Being Designed

Design is current underway for the three projects mentioned below. Upon completion of design, these projects will be submitted for Commission construction allocation approval. The requested amount will be based on actual detailed design plans and may vary from the costs shown in the baseline agreement.

City of Los Angeles - ATSAC – Canoga Park Phase 1

The Canoga Park Project was previously split into two phases in order to attract additional bidders that might be excluded due to the large project cost. During the initial design of the project, it was determined that additional signalized intersections had recently been implemented. The original 104-intersection Canoga Park Project had become a 137-intersection project. Additionally, the detailed project design showed that the most advantageous and optimized communication design would incorporate a 68-intersection Phase 1 and a 69- intersection Phase 2 project. Upon the completion of bidding, it is estimated that the new cost for construction of Phase 1 will be \$10,890,800 and construction costs for Phase 2 will be \$11,030,700.

City of Los Angeles - ATSAC – Wilmington

The baseline agreement for the ATSAC – Wilmington Project showed a proposed 69-intersection project at a cost of \$8,405,000. A number of previously planned ATSAC – Wilmington intersections are being constructed as part of the ATSAC – San Pedro Project. It is now estimated that the project cost will be reduced to \$7,963,700.

City of Los Angeles - ATSAC – Pacific Palisades / Canyons

During the design of this project, the number of intersections required to form a viable signal synchronization network increased from 37 to 54 intersections. In addition, the cost to implement conduit installation and required safety flagging around the horizontal roadway curves involved in this hilly area of the City would be much greater than anticipated. Therefore, the baseline agreement project cost has increased from \$5,168,000 to the currently estimated \$7,695,800.

Projects Awaiting Start of Design

The City will start design on the 13 projects listed in the following table as staff becomes available. There will be no lag between the completion of one design and another because of the availability of TLSP-dedicated design staff. Allocation requests will be submitted with more accurate estimates at the end of the design phase for each of the projects.

Project	No. I/S's	Delay (mo.)	Cost
ATSAC – Canoga Park Phase 2	69	4	\$ 11,030,700
ATSAC – Coliseum-Florence Phase 1	67	8	8,191,700
ATSAC – Coliseum-Florence Phase 2	67	9	8,191,700
ATCS – Santa Monica Fwy Corridor Phase 1	187	3	7,277,000
ATSAC – Foothill	35	3	6,276,100
ATCS – Santa Monica Fwy Corridor Phase 2	187	9	7,321,000
ATCS – Westwood / West Los Angeles	100	9	3,850,000
ATCS – West Adams	122	3	4,452,000
ATCS – Wilshire East	140	9	5,276,000
ATCS – Echo Park / Silver Lake Phase 2	117	9	4,504,000
ATCS – Central Business District	230	9	748,000
ATCS – Central City East	120	9	0
ATCS – Los Angeles	N/A	1	11,528,500

City of Los Angeles - ATCS – Los Angeles

The original baseline agreement for the ATCS – Los Angeles Project noted that all proposed improvements would be implemented for \$26,748,000. The ATCS – Los Angeles Project will provide for the implementation of traffic signal controllers, intersection loop detectors, interconnect conduit, communication equipment, changeable message signs, traffic surveillance cameras, overhead guide signs and central computer equipment.

Where practical, elements of the ATCS – Los Angeles Project have been accelerated and incorporated into one or more of the 22 previous ATSAC / ATCS projects, which accelerates the implementation of signal synchronization benefits to the motoring public. Consequently, the estimate of the ATCS – Los Angeles Project must be adjusted.

Upon completion of all TLSP-funded ATSAC and ATCS construction projects, a survey will be done to define the location of all remaining and required traffic signal controllers, intersection loop detectors, interconnect conduit, communication equipment, changeable message signs, traffic surveillance cameras, overhead guide signs and central computer equipment. These installations are required for the following reasons: (1) the existence of obsolete / deteriorated equipment that was implemented over the last 25 years and prior to those projects funded with TLSP funds, (2) installations that were not previously thought significant, (3) previously unknown (new) / required locations that have been defined since the implementation of TLSP-funded ATSAC/ATCS projects and other non-ATSAC/ATCS projects.

The City believes that the currently proposed ATCS – Los Angeles Project can be implemented for a reduced cost of \$11,258,500 and provide the improvements originally proposed. If there are

required signal synchronization-related installations remaining after the completion of this project, they will be implemented at the City's expense.

The construction start date has been delayed by one month relative to the construction of the proposed improvements. As more of the ATSAC/ATCS projects are implemented, a more definitive ATCS – Los Angeles implementation scope and schedule will become clear.

Attachment

**TRAFFIC LIGHT SYNCHRONIZATION PROGRAM BASELINE AMENDMENT
CITY OF LOS ANGELES**

	Project Element	Current Total Project Cost	Revised Total Project Cost	Current TLSP Funding	Revised TLSP Funding	Current Begin Design Date	Revised Begin Design Date	Current End Design Date	Revised End Design Date	Current Begin Const Date	Revised Begin Const Date	Current End Const Date	Revised End Const Date
PROJECTS PREVIOUSLY ALLOCATED	ATSAC												
	ATSAC - Reseda	\$9,333,000	\$11,026,000	\$8,506,000	\$10,199,300	Dec-07	N/C	Oct-08	N/C	Jan-09	N/C	Feb-12	N/C
	ATSAC - San Pedro	\$9,802,000	\$10,505,000	\$8,911,000	\$8,911,000	Jun-08	N/C	Oct-08	Jan-09	Jan-09	Sep-09	Feb-12	Oct-12
	ATSAC - Platt Ranch	\$4,905,000	\$6,817,000	\$4,358,000	\$4,358,000	Jun-08	N/C	Dec-08	N/C	Mar-09	Dec-09	Apr-12	Jan-13
	ATCS - Echo Park/Silver Lake Ph1	\$6,885,000	\$3,480,000	\$6,059,000	\$3,215,000	Dec-09	Jun-08	Sep-10	Dec-08	Dec-10	Jul-09	Jan-14	Aug-12
	Total Allocated			\$27,834,000	\$26,683,300								

PROJECTS NOT YET ALLOCATED	ATSAC												
	ATSAC - Reseda Phase 2	\$7,868,000	N/C	\$7,191,000	\$7,220,700	Jul-08	N/C	May-09	Jun-09	Jun-09	Mar-10	Jul-12	Apr-13
	ATSAC - Canoga Park	\$7,400,000	\$11,117,500	\$6,685,000	\$10,890,800	Mar-09	Jan-09	Sep-09	Jan-10	Dec-09	Apr-10	Jan-13	May-13
	ATSAC - Canoga Park Phase 2	\$7,400,000	\$11,261,400	\$6,685,000	\$11,030,700	Jul-09	Oct-09	Jan-10	May-10	Apr-10	Aug-10	May-13	Sep-13
	ATSAC - Wilmington	\$9,652,000	\$8,259,300	\$8,405,000	\$7,963,700	Oct-08	Dec-08	Feb-09	Nov-09	May-09	Mar-10	Jun-12	Apr-13
	ATSAC - Harbor - Gateway 2	\$8,891,000	\$8,341,000	\$7,899,000	\$7,899,000	Feb-09	Aug-08	Jun-09	Aug-09	Sep-09	Mar-10	Oct-12	Apr-13
	ATSAC - Coliseum/Florence	\$9,104,000	\$8,496,900	\$8,203,000	\$8,191,700	Dec-08	Nov-09	Jan-10	Sep-10	Apr-10	Dec-10	May-13	Jan-14
	ATSAC - Coliseum/Florence Phase 2	\$9,104,000	\$8,496,900	\$8,203,000	\$8,191,700	Dec-08	Jan-10	Jan-10	Nov-10	May-10	Feb-11	Jun-13	Mar-14
	ATSAC - Pacific Palisades/Canyons	\$5,794,000	\$7,881,100	\$5,168,000	\$7,695,800	Dec-08	N/C	Jun-09	Jan-10	Sep-09	Apr-10	Oct-12	May-13
	ATSAC - Foothill	\$5,588,000	\$6,371,200	\$4,965,000	\$6,276,100	Dec-09	Mar-10	Jun-10	Sep-10	Sep-10	Dec-10	Oct-13	Jan-14
	ATCS RETROFIT												
	ATCS - Santa Monica Fwy Corridor Ph 1	\$8,270,000	N/C	\$7,277,000	\$7,277,000	Jan-10	N/C	Oct-10	Jan-11	Jan-11	Apr-11	Feb-14	May-14
	ATCS - Santa Monica Fwy Corridor Ph 2	\$8,320,000	N/C	\$7,321,000	\$7,321,000	Aug-09	May-10	May-10	Feb-11	Aug-10	May-11	Sep-13	Jun-14
	ATCS - Westwood/West Los Angeles	\$4,375,000	N/C	\$3,850,000	\$3,850,000	Oct-09	Jul-10	Mar-10	Dec-10	Jun-10	Mar-11	Jul-13	Apr-14
	ATCS - Wilshire East	\$5,996,000	N/C	\$5,276,000	\$5,276,000	Nov-09	Aug-10	Jun-10	Mar-11	Sep-10	Jun-11	Oct-13	Jul-14
	ATCS - Echo Park/Silver Lake Ph2	---	\$5,330,000	---	\$4,504,000	---	Sep-10	---	Jun-11	---	Sep-11	---	Oct-14
	ATCS - West Adams	\$5,162,000	\$5,072,000	\$4,542,000	\$4,452,000	Jul-10	N/C	Jan-11	Apr-11	Apr-11	Jul-11	May-14	Aug-14
	ATCS - Central Business District	\$9,215,000	N/C	\$748,000	\$748,000	Jan-10	Oct-10	Oct-10	Jul-11	Jan-11	Oct-11	Feb-14	Nov-14
	ATCS - Central City East	\$4,885,000	N/C	\$0	\$0	Jul-10	Apr-11	Jan-11	Oct-11	Apr-11	Jan-12	May-14	Feb-15
	ATCS - Los Angeles	\$30,563,000	\$17,231,200	\$26,748,000	\$11,528,500	Jul-09	Aug-09	Jul-10	Aug-10	Oct-10	Nov-10	Oct-14	May-15

Not Yet Allocated \$119,166,000 \$120,316,700

Total Programmed \$147,000,000 \$147,000,000

Note: Allocation for ATCS - Echo Park/Silver Lake Ph1 was only \$3,215,000 of the programmed \$6,059,000