CMAQ Schedule Change Request Form

Project Identification

TIP ID	02-06-0034	Sponsor	City of Evanston
Project Lo	cation Description	Green Bay Corri	dor Improvements

Currently Programmed Schedule

Phase	Programmed FFY
ENG1	N/A
ENG2	N/A
ROW	N/A
CONST	2019

Phase	Programmed FFY
ENG	N/A
IMP	N/A

Requested Schedule

Phase	Starting FFY	Actual or Anticipated Authorization Date
ENG1	Complete	
ENG2	2015	Dec 2015
ROW	N/A	N/A
CONST 2016		January 22, 2016

Phase	Starting FFY	Actual or Anticipated Authorization Date
ENG	Complete	
IMP	N/A	

Reason for Request

Check here if the reason is a scope change and complete a <u>Scope Change Request</u> form.

The phase II engineering plans are complete and submitted to IDOT on December 7, 2015 for March 2016 letting.

Additional Comments

This project will be constructed in conjunction with an existing STP-funded project set for the March 2016 construction letting. The CMAQ Funding is required along with STP Funding to construct the entire Emerson/Ridge/Green Bay and Green Bay Corridor Improvement Project.

CMAQ Scope Change Request Form

Project Identification

TIP ID	06-09-0004	Sponsor	Bedford Park
Project Location Description		BRC. Clearing Yard Switcher Retrofit	

Revised Project Scope

Belt Railway Company is requesting to increase the number of locomotives purchased with CMAQ funds from 8 to 10. The additional 2 locomotives would increase the amount of CMAQ funded needed by \$2,535,000.

Changes to Location/Limits (if applicable)

 \square Map Attached

Name of Street or Facility to be Improved	Marked Route #	
North/West Reference Point/Cross St/Intersection	Marked Route #	Municipality & County
South/East Reference Point/Cross St/Intersection	Marked Route #	Municipality & County
Other Project Location Information	•	

Changes to Emissions Benefit Analysis

\Box The proposed scope change will a	ffect the emissions benefits of the project – continue to next page.
Cost/Schedule Changes	
•	cost change. A Cost Change Request form was submitted.
\square The scope change will result in a	schedule change. A <u>Schedule Change Request</u> form was submitted.
Additional Comments	
, .	schedule change. A <u>Schedule Change Request</u> form was submitted.

Project Identification

TIP ID	06-09-0004	Sponsor	Bedford Park
Project Location Description		BRC, Clearing Ya	rd Switcher Retrofit

Currently Programmed Funding – Before cost change(s)

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Federal Fund Source	Match Fund Source	Phase Accomplished*
ENG1							
ENG 2							
ROW							
CONST							
CE							
Total							

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Fund	Match Fund Source	Phase Accomplished*
IMP	2011	\$14,261,002	\$9,269,651	65%	CMAQ		
Total		\$18,765,182	\$12,194,651	65%			

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated federal authorization date**
ENG1							
ENG 2							
ROW							
CONST							
CE							
Total					-	-	

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated FTA Grant approval date***
IMP	2011	\$18,161,002	\$11,804,651	65%	CMAQ		
Total		\$18,161,002	\$11,804,651	65%	CMAQ		

Phase	Starting FFY	Additional Tota Cost (\$000's)	al Additional Fede CMAQ Funds(\$0		Revised Federal Share (%)	Transfer to/from phase(s)
ENG1						
ENG 2						
ROW						
CONST						
CE						
Total						
Phase	Starting FFY	Additional Tot Cost (\$000's)	al Additional Fede CMAQ Funds (\$0		Revised Federal Share (%)	Transfer to/from phase(s)
ENG						
IMP	2011	\$3,900,000	\$2,535,000		65%	
Total		\$3,900,000	\$2,535,000		65%	
Check he	change is relate	d to BRC's desire	and complete a <u>Scope</u> to increase the number of would remain 65/35.			
Check her The cost CMAQ fur	re if the reason is change is relate nds from 8 to 10	d to BRC's desire to the match ratio	to increase the number of would remain 65/35.			
Check her The cost CMAQ fur State ar Select On State/ Most	re if the reason is change is relate nds from 8 to 10 nd Federal Pi e. /Federal Project	d to BRC's desire in the match ration of the match in t	to increase the number of would remain 65/35. Ition Provided Below			
State and Select On Most Local	re if the reason is change is relate nds from 8 to 10 nd Federal Project recently approve Agency Agreemed	d to BRC's desire in the match ratio in the match ratio in the match ratio in the match ratio in the match and a second in the match in	to increase the number of would remain 65/35. Ition Provided Below ned	of locom	otives prucha	osed with
State and Select On Most Local Phase	re if the reason is change is related and from 8 to 10 an	d to BRC's desire in the match ratio in the match ratio in the match ratio in the match ratio in the match and a second in the match in	to increase the number of would remain 65/35. Ition Provided Below med	of locom	otives prucha	osed with
State and Select On Most Local Phase	re if the reason is change is related ands from 8 to 10 and Federal Project of recently approved Agency Agreemed State Job Nur X-00-000-00	d to BRC's desire in the match ratio in the match ratio in the match ratio in the match ratio in the match and a second in the match in	to increase the number of would remain 65/35. Ition Provided Below ned	of locom	otives prucha	osed with
State and Select On Most Local Phase ENG1 ENG 2	re if the reason is change is related ands from 8 to 10 and Federal Project recently approved Agency Agreemed State Job Nur X-00-000-00 P-	d to BRC's desire in the match ratio in the match ratio in the match ratio in the match ratio in the match and a second in the match in	to increase the number of would remain 65/35. Ition Provided Below ned	of locom	otives prucha	osed with
Check her The cost CMAQ fur State ar Select On State/ Most	re if the reason is change is related ands from 8 to 10 and Federal Project recently approve Agency Agreemed State Job Nur X-00-000-00 P- D-	roject Informator Grant Numbers ent Attached	to increase the number of would remain 65/35. Ition Provided Below ned	of locom	otives prucha	osed with
State and Select On Most Local Most ENG1 ENG 2 ROW	re if the reason is change is related ands from 8 to 10 and Federal Project of recently approved Agency Agreemed State Job Nur X-00-000-00 P- D- R-	roject Informator Grant Numbers ent Attached	to increase the number of would remain 65/35. Ition Provided Below hed Gederal Project Number (XX-0000(000))	of locom	otives prucha	osed with

Additional Comments

All of the programmed funds have been obligated. The 2009 phase has also received a FV so any increase would result in a MPA to the 2011 phase.

THE BELT RAILWAY COMPANY OF CHICAGO

6900 SOUTH CENTRAL AVENUE * BEDFORD PARK, ILLINOIS 60638

Timothy E. Coffey General Counsel, Secretary & Director of Human Resources



Phone: 708-496-4112 Fax: 708-496-2608

Email: tcoffey@beltrailway.com

September 9, 2015

Via Email: (RPatronsky@cmap.illinois.gov) and Regular Mail Mr. Ross Patronsky
Senior Planner
Chicago Metropolitan Agency for Planning
233 S. Wacker Dr. Suite 800
Chicago, IL 60606

Scope Change Request

Re: Acquisition of Low-Emissions Locomotives by The Belt Railway Company of Chicago for use in

Northeast Illinois National Ambient Air Quality Standards Non-Attainment Area

Project: CMM-9003(693) **Job No.:** C-91-732-10

Dear Mr. Patronsky:

In connection with the project referenced above, herein is The Belt Railway Company of Chicago's (BRC) formal scope change request to increase the number of locomotives it acquires from eight to ten, and increase the amount of federal CMAQ funding from an amount Not To Exceed \$9,269,651.00 (as stated in Agreement Amendment No. 2, copy enclosed) to \$11,804,651. BRC is also requesting that the CMAQ contribution remain at the previously agreed value of 65% of total purchase price.

As you are aware, BRC has been an active participant in this program since its inception, having been approved for the purchase of eight (8) low-emissions locomotives; and has depended greatly on the funding provided therein. Because of this funding, BRC has been able to significantly upgrade its aging, less environmentally-friendly locomotive fleet in a relatively short timeframe.

In connection with BRC's desire to purchase two (2) additional EMD 710-ECO locomotives, we recently received budgetary pricing of \$1,950,000 per unit from Electro-Motive Diesel in LaGrange, IL, the Original Equipment Manufacturer of the 710-ECO prime mover. We have found the 710-ECO design to be the best combination of the newest, environmentally-friendly technology and a proven, long lasting core design. Given BRC's lower track speed (25 mph) train operations and regular locomotive maintenance in the same shop by an experienced and stable workforce, these locomotives can have extraordinarily long lives. The longer the equipment remains in service, the more substantial the environmental payoff for the community.

Finally, I refer you to the August 7, 2015 Letter of Support previously provided to CMAP by Bedford Park Village President David R. Brady endorsing the BRC's direct emissions reduction initiative.

Please contact me if you have any questions or desire any additional information.

Sincerely,

Timothy E

Enclosure

cc: Via Email Jason Johnson - IDOT Honorable David R. Brady Patrick O'Brien – BRC Hugh J. Simon - BRC

Project Identification

TIP ID	05-09-0002	Sponsor	Cicero
Project Lo	cation Description	Cicero Rail Yard	Locomotive Diesel Retrofit

Currently Programmed Funding – Before cost change(s)

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Federal Fund Source	Match Fund Source	Phase Accomplished*
ENG1							
ENG 2							
ROW							
CONST							
CE							
Total	_				-	-	

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Fund	Match Fund Source	Phase Accomplished*
ENG							
IMP	Deferred	\$3.64M	\$1.82M	50%	FHWA	Private	
Total		\$3.64M	\$1.82M	50%	FHWA	Private	

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated federal authorization date**
ENG1							
ENG 2							
ROW							
CONST							
CE							
Total							

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated FTA Grant approval date***
ENG							
IMP	2016	\$4.2 M	\$2.6M	43%	FHWA	Private	
Total		\$4.2 M	\$2.6M	43%	FHWA	Private	

Requeste	ed Cost Cha	nges (+/-)			
Check all th	at apply: ✓Co	st Increase Trans	fer of Funds	ement of Defe	rred Funds
Phase	Starting FFY	Additional Total Cost (\$000's)	Additional Federal CMAQ Funds(\$000's)	Revised Federal Share (%)	Transfer to/from phase(s)
ENG1					
ENG 2					
ROW					
CONST					
CE				<u> </u>	
Total					
Phase	Starting FFY	Additional Total Cost (\$000's)	Additional Federal CMAQ Funds (\$000's)	Revised Federal Share (%)	Transfer to/from phase(s)
ENG					
IMP	Deferred	+ \$560,000	+ \$780,000	62%	
Total					
Check here The project not perform offerings an \$4.2M for to funds totali Original Pro Original Gra New Project	was delayed be ning well and Be now available wo locomotive ng \$780,000 ardigect Cost: \$3.60 ant Award: \$4.2 M Grant Award: \$	ecause available locon NSF was not prepared e but costs have increas s. After further financ e needed to make the 4 M 32M	nd complete a Scope Change notives models meeting the to take on more of that parased by \$560,000 for a new ial analysis it was determine project financially viable.	ULEL require rticular model total cost of a	ments were . New ULEL pproximately
Select One. ✓ State/Fed	eral Project or	oject Information Grant Numbers Provid d PPI Form Attached			

Phase	State Job Number X-00-000-00	Federal Project Number XXX-0000(000)	FTA Grant Number IL-XX-XXXX-XX
ENG1	P-	7.0.0.0.0000	1270070000700
ENG 2	D-		

ROW	R-		
CONST	C-		
ENG			
IMP	C91-885-09	CMM-9003(451)	

Additional Comments		
	_	

Project Identification

TIP ID 04-12-0005	Sponsor	Village of Oak Park		
Project Location Description	Bike Parking Facilities (includes Covered Bike Parking along CTA Blue Line and North Blvd from Marion St to Forest Ave Intermodal Station Bike Parking)			

Currently Programmed Funding – Before cost change(s)

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Federal Fund Source	Match Fund Source	Phase Accomplished*
ENG1	2013	0	0	0			\boxtimes
ENG 2	Deferred (14)	50	40	80	CMAQ	Local	
ROW	n/a	n/a	n/a	n/a			
CONST	Deferred (15)	260	208	80	CMAQ	Local	
CE	Deferred (15)	25	20	80	CMAQ	Local	
Total		335	268	80			

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Share (%)	Fund	Phase Accomplished*
ENG					
IMP					
Total					

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated federal authorization date**
ENG1	2013	0	0	0		Local	3/20/2014
ENG 2	2015	16	0	0		Local	10/22/15
ROW	n/a	n/a	n/a	n/a			
CONST	2016	355	284	80	CMAQ	Local	3/17/2016
CE	2016	27	22	80	CMAQ	Local	3/17/2016
Total		398	306	80			

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated FTA Grant approval date***
ENG							
IMP							
Total							

Requested Cost Changes (+/-)

Check all that apply: 🖂 Cost Increase 🔀 Transfer of Funds 🖂 Reinstatement of Deferred Funds

Phase	Starting FFY	Additional Total Cost (\$000's)	Additional Federal CMAQ Funds(\$000's)	Revised Federal Share (%)	Transfer to/from phase(s)
ENG1					
ENG 2	2015	-34	-40	0	TO CONST & CE
ROW	n/a				
CONST	2016	95	76	80	From ENG2
CE	2016	2	1.4	80	From ENG2
Total		63	38	80	

Phase	Starting FFY	Additional Total Cost (\$000's)	Additional Federal CMAQ Funds (\$000's)	Revised Federal Share (%)	Transfer to/from phase(s)
ENG					
IMP					
Total					

Reason for Request

Check here if the reason is a scope change and complete a <u>Scope Change Request</u> form.

Oak Park completed ENG2 with local funds to avoid further delays following long phase 1 process. Request transfer ENG2 funds to CONST and CE. Cost increase requested due to cost increases of bike parking structures, racks, and required bridge approach pavement work. Project includes 100% locally funded parking lot resurfacing. Engineer's Estimate has total cost \$415,392 with \$354,860 at the 80/20 share for eligible items and \$60,532 for locally funded parking lot. Parking lot costs are not shown in cost change form to avoid confusion.

State and Federal Project Information

Select One.

\boxtimes	State/Federal Project or Grant Numbers Provided Below
] Most recently <i>approved</i> PPI Form Attached

L	╝	Loca	l Agency A	Agreement A	\ttachec	ļ
---	---	------	------------	-------------	----------	---

Phase	State Job Number	Federal Project Number	FTA Grant Number
	X-00-000-00	XXX-0000(000)	IL-XX-XXXX-XX
ENG1	P-		
ENG 2	D-91-154-13	CMM-4003 (139)	
ROW	R-		
CONST	C-91-154-13	CMM-4003 (140)	
ENG			
IMP			

Additional Comments

Oak Park has proposal in hand for CE at \$26,778 total. Local letting anticipated 3/17/2016.

CMAQ Scope Change Request Form

Project Identification

TIP ID	16-14-0001	Sponsor	Chicago Transit Authority
Project Location Description		Purchase and In	stall up to 32 Hybrid Engines on 60' Articulated Buses

Revised Project Scope

The total scope of this project will provide for the cost differential to purchase up to 27 fully accessible, all-electric propulsion battery-powered buses.

Changes to Location/Limits (if applicable)

☐ Map Attached

Name of Street or Facility to be Improved N/A	Marked Route #	
North/West Reference Point/Cross St/Intersection N/A	Marked Route #	Municipality & County
South/East Reference Point/Cross St/Intersection N/A	Marked Route #	Municipality & County
Other Project Location Information N/A		

Changes to Emissions Benefit Analysis

□The	proposed s	scope change	will not affect	t the emissions	benefits of the	project.
	proposeas	cope change	. Will flot direc	t the chinosions	Deficites of the	pi oject.

☑The proposed scope change will affect the emissions benefits of the project – continue to next page.

Cost/Schedule Changes

☐ The scope change will result in a cost change. A Cost Ch	ange Request	form was submitted.
--	--------------	---------------------

☐ The scope change will result in a schedule change. A <u>Schedule Change Request</u> form was submitted.

Additional Comments

Please see attached.		

Changes to Emissions Benefit Analysis – Bike/Ped and Commuter Parking

BICYCLE AND PEDESTRIAN FACILITIES – N/A
Miles of existing bicycle/pedestrian facilities intersecting the proposed facility: Identify intersecting facilities:
Trip attractors linked directly to the proposed facility. For a pedestrian facility, identify transit service to which direct access is provided.

Changes to Emissions Benefit Analysis – Direct Emissions Reduction

DIRECT EMISSIONS REDUCTION						
Complete Mult	iple copies of this table – One	for each	group of vehicles (type, engine, technology	y, etc.).		
Vehicle Type:	☐ School Bus 区 Transit E	Bus \square	Refuse Hauler	ul		
(select one)	☐ Delivery Truck ☐ Eme	rgency \	/ehicle □ On-Highway □ City/County Ve	hicle		
	☐ Passenger Locomotive [☐ Switc	h Engine Other:			
	☐ Class 2b (8,501 - 10,000 lb	s.)	☐ Class 3 (10,001 - 14,000 lbs.)			
	☐ Class 4 (14,001 - 16,000 lb	s.)	☐ Class 5 (16,001 - 19,500 lbs.)			
Vehicle Size:	☐ Class 6 (19,501 - 26,000 lb	s.)	☐ Class 7 (26,001 - 33,000 lbs.)			
(check one)	☐ Class 8a (33,001 - 60,000 I	bs.)	\Box Class 8b (60,001 and over)			
	☐ School Bus	-	□ Transit Bus			
Horsepower		□ 1:	1	☐ 17 5		
(check one)		000 🗆 12	200□ 2000□ 3000			
	/pe: □ LPG □ LNG □ CNG [Biodie	esel 100 🗆 Biodiesel 20 🗆 Biodiesel 10			
(check one)	•		l, 3,400 ppm sulfur ⊠ Diesel, <mark>15 ppm</mark> sulfu	ır		
<u> </u>	l vehicles in a group should hav					
			urrent fuel type for all vehicles in the group			
combined): 40			71			
		ar of cur	rent fuel type for all vehicles in the group			
combined): 0	gallons					
Before project	Annual Vehicle Miles/vehicle i	n group:	<u>55,845</u> miles			
Annual Idling H	Iours/vehicle in group: <mark>2,214</mark> h	ours				
After project A	nnual Vehicle Miles/vehicle in	group: 5	5 <mark>5,845</mark> miles			
Annual Idling H	lours/vehicle in group: <u>0</u> hours	S				
Technology to be		# veh	Technology to be Applied	# veh		
Diesel Oxidation	•		Recalibration			
	Catalyst + Closed Crankcase		Exhaust Gas Recirculation + Diesel			
Ventilation			Particulate Filter			
Diesel Particulat			Selective Catalytic Reduction			
I	eplacement with Diesel		Emissions Control Devices			
Particulate Filter			Oth on Floatric Bus	27		
Partial Flow Filte			Other – Electric Bus	27		
-	sural Gas (CNG) Replacement st/Diesel Particulate Filter		Engine Replacement			
Post-Implemen			Engine Replacement iodiesel 100 □ Biodiesel 10			
Fuel Type (sele			Diesel, 3,400 ppm sulfur \square Diesel, 500 ppm sulfur			
Tuel Type (sele	•		pad only) \square Emulsion \boxtimes Electricity	ai.		
Diesel Vehicle	Replacement Applicants	(1101110	as only in Emalsion in Electronic			
	ining life of vehicles being repl	aced (ve	ears): 16			
	of Vehicles (all groups combine					



Additional Comments

The CTA is proposing a scope and schedule change to support the differential cost of purchasing pure electric buses instead of hybrid buses.

The Chicago Transit Authority is taking action to replace older diesel and hybrid-electric buses with all-electric battery-powered, zero emission buses. The CTA proposes to expand its fleet of two all-electric buses. As part of the plan for future electric bus expansion, CTA needs to expand its fleet now to further perform in service tests of the electric bus technology. This will allow CTA to properly plan the appropriate powertrain mix for our next large procurement of over 1,000 buses in 2020.

In order to further reduce CTA's emission footprint and maintain the current level of service, CTA is requesting a scope clarification to replace up to 27 of the 6400 Series buses with all-electric battery-powered buses. The original FY 2014-2018 grant request provided funding for the cost differential between up to 32 sixty-foot conventional diesel-powered buses and hybrid diesel electric buses.

The acquisition of up to 27 all-electric battery-powered buses will serve in CTA's efforts to continue to evaluate innovative propulsion technologies, as well as to directly decrease emissions and improve local air quality. The buses to be replaced are Nova Low Floor Buses (6400 Series), with an average age of 13 years. These buses are equipped with Cummins ISC 250 engines that were under the certification family 2CEXH0505CAM (see http://tinyurl.com/lawo9ly). Even with the current replacement schedule, CTA will continue to operate 125 of these older higher emission buses.

CTA purchased its first two all-electric buses in 2014. These battery-powered buses provide customers with a cleaner, quieter ride that reduces fuel costs and significantly decreases emissions, which means improved air quality for Chicago area residents. The electric buses offer greater emissions savings over hybrid buses. The electric bus has zero emissions. The electric bus is powered by energy stored in rechargeable batteries instead of an internal combustion engine; the bus is propelled by an electric motor. These buses are performing well and require minimum maintenance.

The deployment of up to 27 all-electric buses would complement our existing fleet of two electric buses. Adding more electric buses would help accelerate the adoption of electric buses across the CTA fleet, which would have a significant direct impact on regional emissions reductions. Since an electric bus would produce zero tailpipe emissions, a fleet of 27 buses would reduce the emissions in Chicago by the following as compared to a hybrid 40-foot bus.

	Per Bu	ıs/Year	Per Bus/Lifetime		
Polluntant	Hybrid	Electric	Hybrid	Electric	
СО	0.28	0.48	3.41	5.78	
CO ₂	21.55	165.30	258.54	1983.61	
HC	0.04	0.07	0.47	0.80	
NO_x	0.58	1.12	6.98	13.50	
$\mathbf{PM}_{2.5}$	0.03	0.05	0.31	0.58	
PM _{2.5} Health Benefit (\$/yr)	\$ 51,000	\$ 97,000	\$ 612,000	\$ 1,164,000	
Fuel Quantity Reduced (Gallons)	1,941	14,892	23,294	178,704	
Estimated Fuel Savings	\$ 6,134	\$ 20,253	\$ 73,609	\$243,037.44	
Idle Hours Reduced	-	2,214	-	26,570	
Heath Benefit/Bus Cost Ratio	0.255	0.323	3.060	3.880	
	Per Fle	et/Year	Per Fleet	/Lifetime	
Polluntant	Per Fle Hybrid	et/Year Electric	Per Fleet Hybrid	/Lifetime Electric	
Polluntant CO	Hybrid 7.67	-		Electric 156.02	
	Hybrid	Electric	Hybrid	Electric 156.02	
СО	Hybrid 7.67	Electric 13.00	Hybrid 92.02	Electric 156.02	
CO CO ₂	Hybrid 7.67 581.72	Electric 13.00 4463.13	Hybrid 92.02 6980.61	Electric 156.02 53557.59 21.52	
CO CO ₂ HC	7.67 581.72 1.06	13.00 4463.13 1.79	Hybrid 92.02 6980.61 12.69	Electric 156.02 53557.59 21.52 364.46	
CO CO ₂ HC NO _x	7.67 581.72 1.06 15.71	13.00 4463.13 1.79 30.37	Hybrid 92.02 6980.61 12.69 188.54	Electric 156.02 53557.59 21.52 364.46	
CO CO ₂ HC NO _x PM _{2.5} PM _{2.5} Health Benefit (\$/yr)	7.67 581.72 1.06 15.71 0.71 \$1,377,000	13.00 4463.13 1.79 30.37 1.30 \$ 2,619,000	Hybrid 92.02 6980.61 12.69 188.54 8.46 \$16,524,000	Electric 156.02 53557.59 21.52 364.46 15.56 \$31,428,000	
CO CO ₂ HC NO _x PM _{2.5} PM _{2.5} Health Benefit (\$/yr) Fuel Quantity Reduced (Gallons)	Hybrid 7.67 581.72 1.06 15.71 0.71 \$1,377,000 52,411.50	13.00 4463.13 1.79 30.37 1.30 \$ 2,619,000 402,084	Hybrid 92.02 6980.61 12.69 188.54 8.46 \$16,524,000 628,938.02	Electric 156.02 53557.59 21.52 364.46 15.56 \$ 31,428,000 4,825,008	
CO CO ₂ HC NO _x PM _{2.5} PM _{2.5} Health Benefit (\$/yr) Fuel Quantity Reduced (Gallons) Estimated Fuel Savings	7.67 581.72 1.06 15.71 0.71 \$1,377,000	13.00 4463.13 1.79 30.37 1.30 \$ 2,619,000 402,084 \$ 546,834.24	Hybrid 92.02 6980.61 12.69 188.54 8.46 \$16,524,000	Electric 156.02 53557.59 21.52 364.46 15.56 \$31,428,000	
CO CO ₂ HC NO _x PM _{2.5} PM _{2.5} Health Benefit (\$/yr) Fuel Quantity Reduced (Gallons)	Hybrid 7.67 581.72 1.06 15.71 0.71 \$1,377,000 52,411.50	13.00 4463.13 1.79 30.37 1.30 \$ 2,619,000 402,084	Hybrid 92.02 6980.61 12.69 188.54 8.46 \$16,524,000 628,938.02	Electric 156.02 53557.59 21.52 364.46 15.56 \$31,428,000 4,825,008	

Based on the emission results, CTA will have a health benefit to cost ratio of 3.880 over the lifetime of the fleet of electric buses verses a cost ratio of 3.060 for a fleet of hybrid buses.

Additionally, CTA will save money in operational costs via maintenance and fuel over a hybrid bus. Per staff estimate, approximately \$546,834 per year on fuel costs with a fleet of 27 electric buses could be saved verses \$381,281 per year more than a fleet of 32 hybrid buses.

Note:

- CTA currently has two electric buses with depot charging. Current weekday service is averaging 97 miles per day per bus. Staff plans to utilize en-route charging for the 27 electric buses; and staff anticipates even higher utilization than our current electric buses since these buses can theoretically stay in service continuously. In fact, Proterra has demonstrated 700 miles charging within a 24 hour period with en-route charging (http://cleantechnica.com/2014/05/18/proterra-electric-bus-sets-new-record-driving-700-miles-24-hours/).

With the 25 highest mileage current runs identified per the previous CMAP grant, CTA could potentially run ~153 miles/day/electric bus. (~55,845 miles/year). CTA has other funding for the chargers earmarked and is not requesting chargers for this scope clarification.

-For DEQ inputs, staff assumed the following:

- Emission reductions are based on the replacement of a Nova 6400 Series bus. This average mileage of this fleet is 32,938 miles with 792 idle hours/bus/year. The average 6400 series bus uses 8,783.5 gallons/yr.
- The hybrid bus fleet would be a 1 for 1 replacement with a Nova 6400 Series bus (i.e. same annual mileage and idle hours). In order to convert to hybrid fuel economy, staff assumed fuel savings (~8%) based on the difference in the 4300 Series hybrid verses diesel fleet.
- The average en-route electric bus would be utilized for 55,845 miles. With similar mileage, a 6400 Series Nova would use ~14,892 gallons/yr with 2,214 idle hours.
- -Depot Charging: Bus charges exclusively at the garage location. The range of the bus is limited by the battery capacity.
- -En-Route Charging: The bus battery will charge during revenue service with overhead charging. (i.e. no need to return to garage to re-charge) Typically, charging is done for 5-10 min for every 1 hour of operation.

Costs

The following illustrates the costs to purchase hybrid engines and electric buses. This project does not have a change to the overall awarded budget of \$8,112,000.

Cost Differential Diesel to Hybrid

				Total
			Number of	Original
	FY 2014-2018 Funding	Cost Per Bus	Buses	Request
Original Request	Purchase Up to 32 Hybrid Engines for Articulated Buses	316,000	32	10,112,000
Funded Award	Purchase Up to 32 Hybrid Engines for Articulated Buses	316,000	26	8,112,000

Cost Differential Diesel to Electric

		Number of	
Scope Clarification - No Change in Overall Budget	Cost Per Bus	Buses	Total
Purchase Up to 27 Forty Foot Electric Buses	300,444	27	8,112,000

Project Identification

TIP ID	02-12-0001	Sponsor	IDOT – D1
Project Location Description		IL 68/Dundee	Rd at Landwehr Rd and Pfingsten Rd

Currently Programmed Funding – Before cost change(s)

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Federal Fund Source	Match Fund Source	Phase Accomplished*
ENG1	In-House	84	0	0	n/a	State	\boxtimes
ENG 2	In-House	140	0	0	n/a	State	
ROW	FFY15	200	160	80	CMAQ	State	
CONST	FFY16	1,400	1,120	80	CMAQ	State	
CE							
Total		1,824	1,280	70			

Phase	Programmed FFY	Programmed Total Cost (\$000's)		Fund	Phase Accomplished*
ENG					
IMP					
Total					

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated federal authorization date**
ENG1	In-House	84	0	0	n/a	State	
ENG 2	In-House	140	0	0	n/a	State	
ROW	FFY15	200	160	80	CMAQ	State	05/31/2015
CONST	FFY16	1,900	1,520	80	CMAQ	State	01/22/2016
CE							
Total		2,324	1,680	72			

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated FTA Grant approval date***
ENG							
IMP							
Total							

Phase	Starting FFY	Additional T Cost (\$000's			Revised Federal Share (%)	Transfer to/from) phase(s)
ENG1						
ENG 2						
ROW						
CONST	FFY16	500	400		80	
CE						
Total		500	400		80	
Phase	Starting FFY	Additional 1 Cost (\$000's			Revised Federal Share (%)	Transfer to/from phase(s)
ENG					(,	
IMP						
Total						
Check hei Cost of pr based on	roject has increa detailed quantit	s a scope chang sed as a result or ry calculations a	ge and complete a <u>Sco</u> of the availability of Phase and current bid tab pricing I and combination lighting	e II Pre-fina g. The majo	or portion of	st estimate
Reason Check her Cost of pr based on	re if the reason i roject has increa detailed quantit	s a scope chang sed as a result or ry calculations a	of the availability of Phase and current bid tab pricing	e II Pre-fina g. The majo	or portion of	st estimate
Reason Check her Cost of pr based on increase i	re if the reason i roject has increa detailed quantit	s a scope chang sed as a result o ty calculations a nal traffic signal	of the availability of Phase and current bid tab pricing I and combination lighting	e II Pre-fina g. The majo	or portion of	st estimate
Reason Check her Cost of pr based on increase i State ar Select On State/ Most	re if the reason is roject has increated detailed quantities due to addition and Federal Pose.	s a scope chang sed as a result of ty calculations a nal traffic signal roject Inforr or Grant Numb	of the availability of Phase and current bid tab pricing I and combination lighting mation	e II Pre-fina g. The majo	or portion of	st estimate
Reason Check her Cost of pr based on increase i State ar Select On State/ Most Local	re if the reason is roject has increadetailed quantities due to addition and Federal Poles. Federal Project recently approved Agency Agreemed	s a scope change sed as a result of the control of	of the availability of Phase and current bid tab pricing I and combination lighting mation ers Provided Below ached Federal Project Number	r FTA	or portion of	st estimate the cost
Reason Check her Cost of pr based on Increase i State ar Select On State/ Host Local	re if the reason is roject has increadetailed quantities due to addition and Federal Poles. /Federal Project recently approved Agency Agreemed	s a scope change sed as a result of the control of	of the availability of Phase and current bid tab pricing I and combination lighting mation ers Provided Below ached	r FTA	Il updated co or portion of	st estimate the cost
Reason Check her Cost of propased on ncrease i State an Select On State/ Host Local	re if the reason is roject has increadetailed quantities due to addition and Federal Project recently approved Agency Agreemed State Job Nu X-00-000-00	s a scope change sed as a result of the control of	of the availability of Phase and current bid tab pricing I and combination lighting mation ers Provided Below ached Federal Project Number	r FTA	or portion of	st estimate the cost
Reason Check her Cost of propased on ncrease i State ar Select On Most Local A Phase ENG1 ENG 2	re if the reason is roject has increadetailed quantities due to addition and Federal Project recently approved Agency Agreemed State Job Nu X-00-000-00 P-	s a scope changesed as a result of the control of t	of the availability of Phase and current bid tab pricing I and combination lighting mation ers Provided Below ached Federal Project Number	r FTA	or portion of	st estimate the cost
Reason Check her Cost of propased on ncrease i State ar Select On State/ Host Local A Phase ENG1 ENG 2 ROW	re if the reason is roject has increadetailed quantities due to addition and Federal Project recently approved Agency Agreemed State Job Nu X-00-000-00 P- D-	s a scope changesed as a result of the color	of the availability of Phase and current bid tab pricing I and combination lighting mation ers Provided Below ached Federal Project Number	r FTA	or portion of	st estimate the cost
Reason Check her Cost of pr based on increase i State ar Select On State/ Most	re if the reason is roject has increadetailed quantities due to addition and Federal Project recently approved Agency Agreemed State Job Nu X-00-000-00 P- D- D- R-90-008-14	s a scope changesed as a result of the color	of the availability of Phase and current bid tab pricing I and combination lighting mation ers Provided Below ached Federal Project Number	r FTA	or portion of	st estimate the cost

CMAQ Schedule Change Request Form

Project Identification

TIP ID	03-96-0004	Sponsor	IDOT – D1		
Project Lo	cation Description	I-90 from Cumberland Av to Harlem Av (EB Improvement)			

Currently Programmed Schedule

Phase	Programmed FFY
ENG1	In-house
ENG2	In-house
ROW	N/A
CONST	FFY19

Phase	Programmed FFY
ENG	
IMP	

Requested Schedule

Phase	Starting FFY	Actual or Anticipated Authorization Date
ENG1 In-house		
ENG2 In-house		
ROW	N/A	
CONST	FFY16	06/17/2016

Phase	Starting FFY	Actual or Anticipated Authorization Date
ENG		
IMP		

Reason	for F	Requ	ıest
--------	-------	------	------

Check here if the reason is a scope change and complete a <u>Scope Change Request</u> form.

Target letting date for the I-90 – Cumberland to Harlem Auxiliary Lanes project is 07/29/2016 and would need to be advanced to FFY16 to meet this date.

Additional Comments

Project Identification

TIP ID	03-96-0004	Sponsor	IDOT – D1
Project Lo	Project Location Description		land Av to Harlem Av (EB Improvement)

Currently Programmed Funding – Before cost change(s)

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Federal Fund Source	Match Fund Source	Phase Accomplished *
ENG1 ENG 2	In-house In-house	750 900	0	0	n/a n/a	State State	
ROW	Not Required	0	0	0	0	0	
CONST+ CE	FFY19	11,400	9,100	80	CMAQ	State	
CE							
Total							

Phase	Programmed FFY	Programmed Total Cost (\$000's)		Fund	Phase Accomplished*
ENG					
IMP					
Total					

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated federal authorization date**
ENG1	In-house	750	0	0	n/a	State	
ENG 2	In-house	1,249	0	0	n/a	State	
ROW	Not Required	0	0	0	0	0	
CONST+CE	FFY16	15,300	12,240	80	CMAQ	State	06/17/2016
CE							
Total				-		-	

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated FTA Grant approval date***
ENG							
IMP							
Total							

	that apply: 🔀 C		Transfer of Funds		of Deferred Funds
Circux air					
Phase	Starting FFY	Additional To Cost (\$000's)	tal Additional Fede CMAQ Funds(\$6		ral to/from
ENG1	In-House	0	0		
ENG 2	In-House	0	0		
ROW	Not Required	0	0		
CONST	FFY16	3,140	3,140	80	
CE					
Total		3,140	3,140	80	
Phase	Starting FFY	Additional To Cost (\$000's)			ral to/from
ENG					
IMP					
Total					
Check her Cost of pr	oject has increas	ed as a result of	and complete a <u>Scope</u> and complete a <u>Scope</u> the availability of Phase I with the need to include a	l Preliminary De	esign Estimate. The
Check her Cost of pr majority of Phase I es along Higg required b	re if the reason is roject has increased from the cost increased i	ed as a result of se is associated astbound contra inside shoulder and foundation		I Preliminary De additional work Indation work fo nd resurfacing o communicatior	esign Estimate. The not included in the or Noise Barrier 3 of Higgins Avenue ns shelter, increase
Check her Cost of pr majority of Phase I es along Higg required b 100 foot t State ar Select One State/ Most i	re if the reason is roject has increason froject has increasof the cost increasotimate for the easimate for the easimate for the easims Avenue, I-90 by retaining wall temporary light part of the property light	ed as a result of se is associated astbound contra inside shoulder and foundation coles during constitution of Grant Number d PPI Form Attactions	the availability of Phase I with the need to include a ct. This work includes: four reconstruction, milling ar work, access road to new struction, and upgrade roatation	I Preliminary De additional work Indation work fo nd resurfacing o communicatior	esign Estimate. The not included in the or Noise Barrier 3 of Higgins Avenue ns shelter, increase
Check her Cost of pr majority of Phase I es along Higg required b 100 foot t State ar Select One State/ Most i	re if the reason is roject has increason the cost i	ed as a result of se is associated astbound contract inside shoulder and foundation toles during constitution of Grant Number d PPI Form Attached	the availability of Phase I with the need to include a ct. This work includes: four reconstruction, milling ar work, access road to new struction, and upgrade road ation rs Provided Below ched Federal Project Number	I Preliminary De additional work for and resurfacing of communication adway lighting t	esign Estimate. The not included in the or Noise Barrier 3 of Higgins Avenue as shelter, increase to LED luminaries.
Check her Cost of pr majority of Phase I es along Higg required to 100 foot to State ar Select One State/ Most of Local of	re if the reason is roject has increason the cost increason the cost increason the eastimate for the east fo	ed as a result of se is associated astbound contract inside shoulder and foundation toles during constitution of Grant Number d PPI Form Attached	the availability of Phase I with the need to include a ct. This work includes: four reconstruction, milling ar work, access road to new struction, and upgrade road ation rs Provided Below ched	I Preliminary De additional work Indation work fo nd resurfacing o communication adway lighting t	esign Estimate. The not included in the or Noise Barrier 3 of Higgins Avenue as shelter, increase to LED luminaries.
Check her Cost of pr majority of Phase I es along Higg required b 100 foot t State ar Select One State/ Most i Local	re if the reason is roject has increason froject has increason the cost increason is stimate for the eastimate for the east of the cost of	ed as a result of se is associated astbound contract inside shoulder and foundation toles during constitution of Grant Number d PPI Form Attached	the availability of Phase I with the need to include a ct. This work includes: four reconstruction, milling ar work, access road to new struction, and upgrade road ation rs Provided Below ched Federal Project Number	I Preliminary De additional work for and resurfacing of communication adway lighting t	esign Estimate. The not included in the or Noise Barrier 3 of Higgins Avenue as shelter, increase to LED luminaries.
Check her Cost of pr majority of Phase I es along Higg required b 100 foot t State ar Select One State/ Host i Local of Phase ENG1	re if the reason is roject has increason the cost increason the cost increason is roject has increason the cost increason increason the cost increason	ed as a result of se is associated astbound contract inside shoulder and foundation toles during constitution of Grant Number d PPI Form Attached	the availability of Phase I with the need to include a ct. This work includes: four reconstruction, milling ar work, access road to new struction, and upgrade road ation rs Provided Below ched Federal Project Number	I Preliminary De additional work for and resurfacing of communication adway lighting t	esign Estimate. The not included in the or Noise Barrier 3 of Higgins Avenue as shelter, increase to LED luminaries.
Check her Cost of pr majority of Phase I es along Higg required by 100 foot t State ar Select One State/ Most i Local A Phase ENG1 ENG 2	re if the reason is roject has increason the cost increason the cost increason is roject has increason the cost increason the c	ed as a result of se is associated astbound contract inside shoulder and foundation toles during constitution of Grant Number d PPI Form Attached	the availability of Phase I with the need to include a ct. This work includes: four reconstruction, milling ar work, access road to new struction, and upgrade road ation rs Provided Below ched Federal Project Number	I Preliminary De additional work for and resurfacing of communication adway lighting t	esign Estimate. The not included in the or Noise Barrier 3 of Higgins Avenue as shelter, increase to LED luminaries.
Check her Cost of pr majority of Phase I es along Higg required to 100 foot to State ar Select One State/ Host in Local of Phase ENG1 ENG 2 ROW	re if the reason is roject has increason froject has increason the cost increason is roject has increason the cost increason from the expension of the cost increason	ed as a result of se is associated astbound contract inside shoulder and foundation toles during constitution of Grant Number d PPI Form Attached	the availability of Phase I with the need to include a ct. This work includes: four reconstruction, milling ar work, access road to new struction, and upgrade road ation rs Provided Below ched Federal Project Number	I Preliminary De additional work for and resurfacing of communication adway lighting t	esign Estimate. The not included in the or Noise Barrier 3 of Higgins Avenue as shelter, increase to LED luminaries.

Project Identification

TIP ID	12-12-0005	Sponsor	IDOT – D1
Project Lo	cation Description	US 6 Southwest	Hwy FROM Gougar Rd (WILL)

Currently Programmed Funding – Before cost change(s)

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Federal Fund Source	Match Fund Source	Phase Accomplished*
ENG1	In-house	90	0	0	n/a	State	
ENG 2	In-house	150	0	0	n/a	State	
ROW	2015	200	160	80	CMAQ	State	06/30/2013
CONST	2016	1,500	1,200	80	CMAQ	State	
CE							
Total		1,940	1,360	70			

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Fund	Phase Accomplished*
ENG					
IMP					
Total					

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated federal authorization date**
ENG1	In-house	90	0	0	n/a	State	
ENG 2	In-house	150	0	0	n/a	State	
ROW	2015	200	160	80	CMAQ	State	06/30/2013
CONST	FFY16	1,840	1,472	80	CMAQ	State	01/22/2016
CE							
Total		2,280	1,632	72			

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated FTA Grant approval date***
ENG							
IMP							
Total							

Phase	Starting FFY	Additional To Cost (\$000's)		onal Federal Funds(\$000)'s)	Revised Federal Share (%)	Transfer to/from phase(s)	
ENG1								
ENG 2								
ROW								
CONST	FFY16	340	272			80		
CE								
Total		340	272			80		
Phase	Starting FFY	Additional To Cost (\$000's)		onal Federal Funds (\$000)'s)	Revised Federal Share (%)	Transfer to/from phase(s)	
ENG						<u> </u>		
IMP								
IIVIP								
Total Reason Check her Cost of pr	for Request re if the reason is a	d as a result o	f the availability	of Phase II Pr	e-final	updated co	st estimate	
Reason Check her Cost of pr	re if the reason is a	d as a result o calculations ar	f the availability nd current bid ta	of Phase II Propriet	e-final	updated co	st estimate	
Reason Check her Cost of pr based on was for tr State ar Select On State/ Most	re if the reason is a roject has increase detailed quantity raffic signal, culver and Federal Proes. Yederal Project or recently approved.	d as a result o calculations art, sidewalk and pject Inform Grant Number	f the availability and current bid ta d erosion contro nation rs Provided Belo	of Phase II Propriet of pricing. The pay items.	e-final	updated co	st estimate	
Reason Check her Cost of pr based on was for tr State ar Select On State/	re if the reason is a roject has increase detailed quantity raffic signal, culver and Federal Project or rederal Project or	d as a result o calculations art, sidewalk and pject Inform Grant Number	f the availability and current bid ta d erosion contro nation rs Provided Belo ched	of Phase II Propriet of Pricing. The pay items.	e-final e majo	updated co r portion of	st estimate cost increase	
Reason Check her Cost of pr based on was for tr State ar Select On State/ Most	re if the reason is a roject has increase detailed quantity raffic signal, culver and Federal Proe. Yederal Project or recently approved Agency Agreemen State Job Number	d as a result o calculations ar t, sidewalk and pject Inform Grant Number PPI Form Atta t Attached	f the availability and current bid tail derosion contromation rs Provided Beloched Federal Project	of Phase II Propriet of pricing. The pay items.	e majo	updated co r portion of	et estimate cost increase	
Reason Check her Cost of pr based on was for tr State an Select On Most Most Local	re if the reason is a roject has increase detailed quantity raffic signal, culver and Federal Project or recently approved Agency Agreemen State Job Number 200-000-00	d as a result o calculations ar t, sidewalk and pject Inform Grant Number PPI Form Atta t Attached	f the availability and current bid ta d erosion contro nation rs Provided Belo ched	of Phase II Propriet of pricing. The pay items.	e majo	updated co r portion of	et estimate cost increase	
Reason Check her Cost of pr based on was for tr State ar Select On State/ Hoost Local / Phase ENG1	re if the reason is a roject has increase detailed quantity raffic signal, culver and Federal Project or recently approved Agency Agreemen State Job Num X-00-000-00 P-	d as a result o calculations ar t, sidewalk and pject Inform Grant Number PPI Form Atta t Attached	f the availability and current bid tail derosion contromation rs Provided Beloched Federal Project	of Phase II Propriet of pricing. The pay items.	e majo	updated co r portion of	et estimate cost increase	
Reason Check her Cost of pr based on was for tr State ar Select On Most Local Phase ENG1 ENG 2	re if the reason is a roject has increase detailed quantity raffic signal, culver and Federal Project or recently approved Agency Agreemen State Job Number 200-000-00 P-	d as a result o calculations ar t, sidewalk and pject Inform Grant Number PPI Form Atta t Attached	f the availability and current bid tail derosion contromation rs Provided Beloched Federal Project	of Phase II Propriet of pricing. The pay items.	e majo	updated co r portion of	et estimate cost increase	
Reason Check her Cost of pr based on was for tr State an Select On Most Local Phase ENG1 ENG 2 ROW	re if the reason is a roject has increase detailed quantity raffic signal, culver and Federal Project or recently approved Agency Agreemen State Job Number 200-000 P- D- R-91-022-13	d as a result o calculations ar t, sidewalk and pject Inform Grant Number PPI Form Atta t Attached	f the availability and current bid tail derosion contromation rs Provided Beloched Federal Project	of Phase II Propriet of pricing. The pay items.	e majo	updated co r portion of	et estimate cost increase	
Reason Check her Cost of pr based on was for tr State ar Select On State/ Host Local Phase ENG1 ENG 2	re if the reason is a roject has increase detailed quantity raffic signal, culver and Federal Project or recently approved Agency Agreemen State Job Number 200-000-00 P-	d as a result o calculations ar t, sidewalk and pject Inform Grant Number PPI Form Atta t Attached	f the availability and current bid tail derosion contromation rs Provided Beloched Federal Project	of Phase II Propriet of pricing. The pay items.	e majo	updated co r portion of	et estimate cost increase	

CMAQ Scope Change Request Form

Project Identification

TIP ID	01-01-0011	Sponsor	Chicago Department of Transportation
Project Lo	ocation Description	Chicago Bikes N Marketing")	Narketing Campaign (FY13 a.k.a. "Individualized Travel

Revised Project Scope

The number of communities served by the "Go!" marketing program will increase from 5 to 6, increasing households reached by 7,500.

Changes to Location/Limits (if applicable)

☐ Map Attached

Name of Street or Facility to be Improved	Marked Route #	Marked Route #				
North/West Reference Point/Cross St/Intersection	Marked Route #	Municipality & County				
South/East Reference Point/Cross St/Intersection	Marked Route #	Municipality & County				
Other Project Location Information	·					

Changes to Emissions Benefit Analysis

	The propose	d scope	change v	will n	ot aff	ect the	e e	missi	ons b	enef	its	of the	e project.	
_							_	_		_	_			

⊠The proposed scope change will affect the emissions benefits of the project – continue to next page.

Cost/Schedule Changes

oxtimes The scope change will result in a cost change. A Cost Change Rec	quest form was submitted.
--	---------------------------

☐ The scope change will result in a schedule change. A <u>Schedule Change Request</u> form was submitted.

Additional Comments

As an "other" project, the remaining pages of this form are not germane. CDOT recommends a 20%
increase in emissions prevented vs. the original analysis.

Project Identification

TIP ID	01-01-0011	Sponsor	Chicago Department of Transportation
	01-06-0004		
Project De	Project Description Chicago Bikes Market		ing Campaign (FY13 a.k.a. "Individualized Travel Marketing")
Walk Chicago		Walk Chicago	

Currently Programmed Funding – Before cost change(s)

01-01-0011 Chicago Bikes Marketing Campaign

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Federal Fund Source	Match Fund Source	Phase Accomplished*
ENG	02	149	119	80	CMAQ	City	
	03	150	120	80	CMAQ	City	\boxtimes
IMP	09	219	175	80	CMAQ	City	\boxtimes
	13	1483	1186	80	CMAQ	City	\boxtimes
	MYB (16)	2500	2000	80	CMAQ	City	
Total		4501	3600	80			

Notes: FY09 and FY13 are for Individualized Travel Marketing, while FY 16 is for a Travel Aggregator Application.

01-06-0004 Walk Chicago

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)		Fund	Match Fund Source	Phase Accomplished*
ENG							
IMP	MYB (16)	200	160	80	CMAQ	City	
Total		200	160	80	CMAQ	City	

Actual/Estimated Costs and Schedule – Including cost change(s)

01-01-0011 Chicago Bikes Marketing Campaign

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated federal authorization date**
ENG	02	149	119	80	CMAQ	City	6/1/2002
	03	150	120	80	CMAQ	City	7/1/2003
IMP	09	217	175	80	CMAQ	City	4/7/2009
	13	1682	1346	80	CMAQ	City	9/1/2012
	MYB (16)	1875	1500	80	CMAQ	City	
	MYB (16)	625	500	80	CMAQ	City	
Total		4698	3760				

01-06-0004 Walk Chicago

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated FTA Grant approval date***
ENG							
IMP	NA	0	0	NA	NA	NA	NA
Total							

Requested Cost Changes (+/-)

Check all that apply: igtimes Cost Increase \igcirc Transfer of Funds \igcirc Reinstatement of Deferred Funds

Phase	Starting FFY	Additional Total Cost (\$000's)	Additional Federal CMAQ Funds (\$000's)	Revised Federal Share (%)	Transfer to/from phase(s)
IMP	13	200	160	80	IMP
01-01-0011					01-06-0004
IMP	MYB	-200	-160	80	IMP
01-06-0004					01-01-0011
Total		0	0*	80	

^{*}Although the net increase is \$0, this request includes reinstating \$160 thousand in funds, which are currently deferred, into FFY 2016.

Reason for	Request						
Check here if t	he reason is a scope change 🔀	and complete a Scope Change Requ	<u>uest</u> form.				
Due to capacit Program. Since environment h in CDOT's design	Due to capacity and contracting challenges, CDOT has not able to launch a standalone Walk Chicago! Program. Since the project was first awarded in 2006, Chicago's active transportation culture and environment have changed significantly. Policy changes have included a pedestrian-first modal hierarchy in CDOT's design practices and "Must-stop for pedestrians" signs and legislation. In support of these actions, a non-CMAQ eligible safety oriented program was prioritized.						
included in the to reduce trips four neighborh outreach and earns the Grestoring \$160 This will allow	Marketing of walking was instead integrated into CDOT's Go! program (Awarded CMAQ funding and included in the TIP as "Chicago Bikes Marketing Campaign"). This program uses national best practices to reduce trips by automobile and increase walking as well as biking and transit. Since its launch in 2013 four neighborhoods (Bronzeville, Pilsen, Albany Park, Edgewater) have all seen success with customized outreach and events. The fifth community (TBD) is slated for 2016. Because the Go! program is effectively serving the general intent of the original grant, CDOT requests restoring \$160,000 in CMAQ funds from Walk Chicago! and transferring them into the Go! program. This will allow CDOT to target a sixth community of 7,500 households in 2016-7 and do to so quickly as a						
cost amename	ent to an existing contract.						
State and Federal Project Information Select One. State/Federal Project or Grant Numbers Provided Below Most recently approved PPI Form Attached Local Agency Agreement Attached							
	1		T				
Phase	State Job Number	Federal Project Number	FTA Grant Number				
	X-00-000-00	XXX-0000(000)	IL-XX-XXXX-XX				

Phase	State Job Number	Federal Project Number	FTA Grant Number
	X-00-000-00	XXX-0000(000)	IL-XX-XXXX-XX
ENG1	P-		
ENG 2	D-		
ROW	R-		
CONST	C-		
ENG			
IMP			
01-01-0011	P-88-020-10	CMM-6000 (323)	
01-06-0004	P-88-013-11	CMM-6000 (340)	

Additional Comments

Project Identification

TIP ID	01-96-0008	Sponsor	Chicago Department of Transportation
	01-12-0008		
	01-02-0030		
Project Loc	ation Description	Clark/Division Sta	tion – Red Line (funds from)
Washington/Wabash Consolidated Station - Loop Elevated (funds to)			ash Consolidated Station – Loop Elevated (funds to)
State/Lake Station — Loop Elevated (funds to)			n – Loop Elevated (funds to)

Clark/Division Currently Programmed Funding – Before cost change(s)

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Federal Fund Source (Grant suffix)	Match Fund Source	Phase Accomplis hed*
ENG1	2006	720	600	80%	CMAQ (X385)	STATE	
ENG 2	2008 2008	200 1000	160 800	80% 80%	CMAQ (X291) CMAQ (X010-0)	CITY CITY	
IMP	2008 ##	1000	800	80%	CMAQ (X291)	STATE	\boxtimes
CONST	2010 ### 2010 (pt) 2010 (pt) 2013 2013 2014	600 12,050 7,000 11,360 20,000 8,240	480 9,640 7,000 11,360 20,000 8,240	80% 80% 100% 100% 100%	CMAQ (X291-01) CMAQ (X010-01) CMAQ (X010-02) CMAQ (X010-02) CMAQ (X010-02) CMAQ (X010-02)	CITY NA** NA** NA** NA**	
CE	2014	Incl above	Incl above				
Total		62,170 ##	59,080 ##	95 %			

Clark/Division Actual/Estimated Costs and Schedule – Including cost change(s)

Phase	Starting FFY	Current Total Cost (\$000's)*	Current Federal Cost (\$000's)*	Current Federal Share (%)	Federal Fund Source (Grant suffix)	Local Match Fund Source	federal authorization date**
ENG1	2006	720	600	80%	CMAQ (X385)	STATE	
ENG 2	2008 # 2008	200 1000	160 800	80% 80%	CMAQ (X291) CMAQ (X010-0)	CITY CITY	
IMP	2008 #	1000	800	80%	CMAQ (X291)	CITY	
CONST	2010 # 2010 (pt) 2010 (pt) 2013 2013 2014	600 12,050 7,000 11,360 20,000 1,240	480 9,640 7,000 11,360 20,000 1,240	80% 80% 100% 100% 100%	CMAQ (X291-01) CMAQ (X010-01) CMAQ (X010-02) CMAQ (X010-02) CMAQ (X010-02) CMAQ (X010-02)	CITY NA** NA** NA** NA**	
CE	2014	Incl above	Incl above				
Total				95%			
		55,170	52,080				

^{**} Energy Act Exemption

[#] Assigned to match CMAQ program report. TEAM shows as 1200/960 in ENG2, 600/480 as ROW, and 0/0 as CONST ## TIP Shows 88,600 lump sum under FY12 as IMP; this matches total of FTA Grant IL-95-X010 CONST lines prior to 40,000 deduction for previous 40,000 transfer to Washington/Wabash

Washington/Wabash Currently Programmed Funding – Before cost change(s)

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Federal Fund Source	Match Fund Source	Phase Accomplished*
ENG1	2003*	1,000		0%		CITY	
ENG 2	2012**	4,500	3,600	80%	CMAQ	CITY	
ROW							
CONST	2010/12***	4,085	4,085	100%	CMAQ	TDC	\boxtimes
	2012**	40,000	40,000	100%	CMAQ	TDC	
	2014	39,273	39,273	100%	CMAQ	TDC	
CE	2014	Incl above	Incl above			CITY	
Total		88,188	86,958	98%	CMAQ	CITY	

Washington/Wabash Actual/Estimated Costs and Schedule – Including cost change(s)

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated federal authorization date**
ENG1	2003*	1,000		0%		CITY	
ENG 2	2012**	4,500	3,600	80%	CMAQ	CITY	
ROW							
CONST	2010/12***	3,415	3,415	100%	CMAQ	TDC	
	2012**	40,000	40,000	100%	CMAQ	TDC	
	2014	39,273	39,273	100%	CMAQ	TDC	
	2014	5,500	5,500	100%	CMAQ	N/A (Energy	
						Act exemption)	
CE	2014	Incl above	Incl above			CITY	
Total		93,688	91,788	98%	CMAQ	CITY	

^{*} Local funds not in TIP

^{**} TIP does not match CMAQ/TEAM: Shows ENG 2 as \$5,000 w/\$4,000, federal, but CONST as 39600 for both

^{***} Transfer from Morgan listed as 2010 in TIP, but combined with 2012 funds in CMAQ Program, this proposal cancels that request

State/Lake Currently Programmed Funding – Before cost change(s)

Phase	Programmed FFY	Programmed Total Cost (\$000's)	Programmed Federal Cost (\$000's)	Programmed Federal Share (%)	Federal Fund Source	Match Fund Source	Phase Accomplished*
ENG1	2002	600	480	80	CMAQ	TIF	
ENG 2	2015	2,500	2,000	80	CMAQ	TBD	
	2016	2,500	2,000	80	CMAQ	TBD	
ROW							
CONST	MYB*	25,400	TBD	0	MYB	TBD	
	2018*	66,600	TBD	0	TBD	TBD	
CE							
Total		97,600	4,480	5%			

Phase	Starting FFY	Current Total Cost (\$000's)	Current Federal Cost (\$000's)	Current Federal Share (%)	Federal Fund Source	Local Match Fund Source	Actual or Anticipated federal authorization date**
ENG1	2002	600	480	80%	CMAQ	TIF	
ENG 2	2016**	5,500	5,500	100%	CMAQ	TDCs***	
ROW							
CONST	MYB (2018?)*	25,400	TBD	0	TBD	TBD	
	2018*	66,600	TBD	0	TBD	TBD	
CE							
Total		98,100	5,980	6%		-	

^{*} TIP shows \$25.4M of MYB as placeholder, but estimated need per FY16 CMAQ app is \$92M.

^{**} assumes end of FY15 rollover to FY16.

^{***} TIF used in ENG1 now expired, IDOT-DPIT staff indicate availability of Transit TDCs.

Requested Cost Changes (+/-)

Check all that apply: 🖂 Cost Increase 🔀 Transfer of Funds 🔲 Reinstatement of Deferred Funds

Phase	Starting FFY	Additional Total Cost (\$000's)	Additional Federal CMAQ Funds(\$000's)	Revised Federal Share (%)	Transfer to/from phase(s)
ENG1					
ENG 2	2016	+500	+1500	100%	From Clark/Div
(State/Lake)					CONST
ROW					
CONST					
(Wash/Wab)	2014	+5,500	+5,500	100%	From C/D Const
		-670	-670	100%	9/3/15 move cxl
(Morgan)	2010	670	670	100%	9/3/15 move cxl
(Clark/Division)	2010	-7,000	-7,000	100%	To W/W & S/L
CE					
Total		-1000	0		

Reason for Request

Check here if the reason is a scope change and complete a <u>Scope Change Request</u> form.

Clark/Division station continues to show cost recovery benefits from the change in traffic controls. Now that the project is substantially complete and in punch list we know that at least \$7,000,000 of the original grant funds will not be necessary at this location and CDOT wishes to transfer them to two of its other Central Area rapid transit projects that do require more funds.

This FTA Grant was awarded during the period when the Energy Act permitted 100% federal share on certain projects. To preserve this status, these moves would be executed as a budget revision to the existing grant IL-95-X027 by adding geographic scope to the existing ALIs.

Washington/Wabash bid costs exceeded engineers estimates by \$7.5 million (\$74,850,000 vs \$67,332,394.96). While the bid was able to be awarded it left insufficient budget for force account and contingencies for change orders.

NOTE: On the 9/3/2015, the CMAQ PSC approved a requested transfer of \$670,000 from funds from the Morgan station project for the same purpose. However, following the meeting, it was determined that invoice processing left the available funds in the local TIF overmatch line instead of the FTA grant line. Therefore, CDOT withdraws the 9/3/2015 request and substitutes this one.

State/Lake is expected to require some design revisions from the Phase I concept in regards to elevator locations, and thus a 10% increase in engineering budget is needed. Also, CDOT wishes to convert the match for the previously awarded CMAQ funds from local match to Transit Transportation Development Credits, with this transfer recovering the shortfall.

State and Federal Project Information

9	Select One.
	$\overline{igwedge}$ State/Federal Project or Grant Numbers Provided Below
	Most recently approved PPI Form Attached
ſ	Local Agency Agreement Attached

Phase	State Job Number	Federal Project Number	FTA Grant Number
	X-00-000-00	XXX-0000(000)	IL-XX-XXXX-XX
ENG1	P-		
ENG 2	D-		IL-95-X045 (provisional) = State/Lake
ROW	R-		
CONST	C-		IL-95-X010 = Clark/Division IL-95-X027 = Wash./Wabash

Additional Comments

CDOT attempted to obligate the existing FY15 funds for State/Lake (01-02-0030) with a grant application IL-95-X045 in FTA's TEAM software. It was provisionally approved by FTA staff, pending execution of the FHWA-FTA transfer. However, because the transfer was not executed prior the end of FY15 (and thus grant making via TEAM), a new application to use all \$4M of originally awarded funds will be prepared in the replacement TrAMS system when it opens, and thus, may have a different grant number.