

THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION



Victoria F. Sheehan Commissioner William Cass, P.E. Assistant Commissioner

His Excellency, Governor Christopher T. Sununu and The Honorable Council State House Concord, New Hampshire 03301 Bureau of Materials & Research September 13, 2021

REQUESTED ACTION

The Department of Transportation requests placing this item on the Consent Calendar.

Authorize the New Hampshire Department of Transportation (Department) to enter into a third contract amendment with the City of Dover (Vendor 177380) by extending the completion date to December 31, 2022 from the amended grant end date of December 31, 2021. No additional funding is involved in this time extension. The original contract was approved by Governor and Council on February 6, 2019, Item #15. The first contract amendment was approved by Governor and Council on September 18, 2019, Item #34 and the second amendment was approved by Governor and Council on October 7, 2020, Item #5B.

EXPLANATION

On February 6, 2019, the Governor and Council authorized the subject contract agreement (Item #15; copy of Resolution attached) in the amount of \$519,600.00 to deploy a number of proven innovative technologies to better manage Dover's traffic signals. The City has been making incremental improvements to their traffic signal infrastructure and this project complements their past efforts by increasing the number of intersections included in their central signal system. Additionally, it will implement a number of new technologies for generating Automated Traffic Signal Performance Measures (ATSPMs) that can aid engineers in keeping the overall system optimized for improved highway efficiency, safety, and mobility. FHWA's Every Day Counts (EDC) Round 4 Initiative – Automated Traffic Signal Performance Measures is the main focus of this initiative. The Department is a cooperative partner in this project because of their interest in expanding their statewide Traffic Management Center's (TMC) capabilities by integrating local central signal systems for increased regional responsiveness.

The first amendment to the Agreement involved FHWA-requested additional efforts to expand the signal central management system and introduce a level of automation that will provide increased mobility, i.e. reduced delays during peak commuting periods and balance green times during off-peak hours. The City of Dover is a clear leader in this field as a result of its on-going investments in its traffic signal infrastructure. That revised scope funded additional items for advanced system detection, continuous travel time recording, and upgraded traffic controllers and increased the contract from \$519,600 to \$649,500. The increase in fee provided an additional Accelerated Innovation Deployment (AID) Demonstration funds to Dover for their revised scope of work and the corresponding engineering

to design, procure, and implement the new technologies. The City of Dover is providing the required 20% non-federal matching funds.

The second amendment requested a time extension for this grant. Additional time was needed for the consultant to complete their data collection, analysis, and required FHWA reporting as it relates to this project. In addition, time was needed to complete the final closeout documentation for this project.

This third amendment requests a second time extension for this project for several reasons. The City and its consultant were impacted on several fronts by COVID-19. As a result of the pandemic, they experienced supply chain delays for equipment purchases and installation. Additionally, traffic volumes were substantially reduced from pre-COVID levels so it was determined not to establish new timings under these abnormal conditions. A contract extension will be sufficient to allow for full deployment of ATSPM's and provide a solid year of data from which to draw useful conclusions on the merits of the various ATSPM's, as well as the alternative traffic control strategies.

Authorization is requested to allow the Department to enter into this amended Agreement with the subrecipient to ensure compliance with Federal Aid requirements and to permit State personnel to supervise the project and the Department to expend Federal Funds.

In the event that Federal Funds become unavailable, general funds will not be requested to support this program. All other provisions of the agreement shall remain in effect.

This amended Agreement has been approved by the Attorney General as to form and execution and the Department has verified that the necessary funds are available. Copies of the fully executed amendment are on file at the Secretary of State's Office and the Department of Administrative Services, and subsequent to the Governor and Council approval will be on file at the Department of Transportation.

It is respectfully requested that authority be given to amend this Agreement.

Sincerely,

Victoria F. Sheehan

Commissioner

Attachments

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION CONTRACT AMENDMENT C

WHEREAS, pursuant to an agreement approved by Governor and Council, on February 6, 2019, Item #15, amended on September 18, 2019, Item #34, and amended on October 7, 2020, Item #5B (herein after referred to as the "Agreement"), City of Dover (Vendor #177380) agreed to advance system detection; provide devices for continuous travel time recording; and upgraded traffic controllers specified in the Agreement and in consideration of payment by the Department of Transportation (hereinafter referred to as the "Department"), certain sums as specified therein;

WHEREAS, pursuant to the Agreement Section 3.2, the Vendor, Dover, must complete all services by the Completion Date specified in block 1.7;

WHEREAS, the Vendor, Dover, NH and NHDOT have agreed to amend the contract period;

WHEREAS, Section 1.7 Completion Date, of the original Contract Agreement is January 31, 2021 and Contract Amendment B extended to December 31, 2021, NHDOT wishes to amend the completion date to December 31, 2022.

RESOLVED, that the agreement be amended as follows:

Section 1.7, Completion Date, of the Contract Agreement shall be amended to read December 31, 2022.

All other provisions of the Agreement and Amendment A shall remain in effect.

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

Accelerated Innovation Deployment (AID) Demonstration Project City of Dover; Creating a Benchmark for Traffic Signal Performance CONTRACT AMENDMENT C

IN WITNESS WHEREOF, the parties have hereunto set their has	nds as of the day and year first above written
J. Michael Joyal Jr. City Manager	Date: 8(31/2)
Department of Transportation Mellin an	Date: 9/20/21
William J. Cass, PE, Assistant Commissioner	
State of New Hampshire Department of Transportation	
approved by the Attorney General (Form, Substance and Exe	ecution)
Equity C. Mary State of New Hampshire, Department of Justice	Date: <u>9/22/2021</u>
Approved by NH Governor and Council	
	Data

CERTIFICATE OF AUTHORITY

I, Susan M. Mistretta, City Clerk for the City of Dover, New Hampshire, do hereby certify that the City Council authorized the City Manager on August 5, 2020 to create a Benchmark for Traffic Signal Performance State Project 42366 Federal Project X-A004(825). They authorized the City Manager to execute any documents which may be necessary for the City of Dover; this authorization has not been revoked, annulled or amended in any manner whatsoever, and remains in full force and effect as of the date hereof; and the following now occupies the office indicated above:

JAMES MICHAEL JOYAL, JR., CITY MANAGER

IN WITNESS WHEREOF, I have hereunto set my hand as the City Clerk of Dover, New Hampshire this 31st day of August, 2021.

Susan Mistretta, City Clerk

STATE OF NEW HAMPSHIRE COUNTY C TRAFFORD

On this the 31st day of August, 2021, before me, the undersigned officer, personally appeared Susan Mistretta, City Clerk, who acknowledged herself to be the City Clerk for the City of Dover New Hampshire and that she, as such City Clerk, being authorized to do so, executed the foregoing instrument for the purpose herein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Seal) Notary Public

My Commission Expires:

CAITLYN M. PITT'S, Notary Public My Commission Expires February 7, 2023



CERTIFICATE OF COVERAGE

The New Hampshire Public Risk Management Exchange (Primex³) is organized under the New Hampshire Revised Statutes Annotated, Chapter 5-8, Pooled Risk Management Programs. In accordance with those statutes, its Trust Agreement and bylaws, Primex³ is authorized to provide pooled risk management programs established for the benefit of political subdivisions in the State of New Hampshire.

Each member of Primex³ is entitled to the categories of coverage set forth below. In addition, Primex³ may extend the same coverage to non-members. However, any coverage extended to a non-member is subject to all of the terms, conditions, exclusions, amendments, rules, policies and procedures that are applicable to the members of Primex³, including but not limited to the final and binding resolution of all claims and coverage disputes before the Primex³ Board of Trustees. The Additional Covered Party's per occurrence limit shall be deemed included in the Member's per occurrence limit, and therefore shall reduce the Member's limit of liability as set forth by the Coverage Documents and Declarations. The limit shown may have been reduced by claims paid on behalf of the member. General Liability coverage is limited to Coverage A (Personal Injury Liability) and Coverage B (Property Damage Liability) only, Coverage's C (Public Officials Errors and Omissions), D (Unfair Employment Practices), E (Employee Benefit Liability) and F (Educator's Legal Liability Claims-Made Coverage) are excluded from this provision of coverage.

The below named entity is a member in good standing of the New Hampshire Public Risk Management Exchange. The coverage provided may, however, be revised at any time by the actions of Primex³. As of the date this certificate is issued, the information set out below accurately reflects the categories of coverage established for the current coverage year.

This Certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend, or after the coverage afforded by the coverage categories listed below.

Participating Member:	Member Number:		Comp	any Affording Coverage:	
City of Dover 288 Central Avenue Dover, NH 03820	156		Bow 46 D	Public Risk Management Ex Brook Place onovan Street cord, NH 03301-2624	kchange - Primex ³
Type of Coverage	Effective Date	Expiration (mm/dd/y		Limits - NH Statutory Limits	May Apply, If Not:
General Liability (Occurrence Form)	7/1/2021	7/1/202		Each Occurrence	\$ 5,000,000
Professional Liability (describe)	17172021	.,,,,		General Aggregate	\$ 5,000,000
Claims Occurrence				Fire Damage (Any one fire)	
				Med Exp (Any one person)	
X Automobile Liability Deductible Comp and Coll: \$1,000 Any auto	7/1/2021	7/1/202	22	Combined Single Limit (Each Accident) Aggregate	\$5,000,000 \$5,000,000
X Workers' Compensation & Employers' Liabi	lity zupos	7,4,500	\ <u></u>	X Statutory	
- Workers Compensation a Employers Elect	7/1/2021 .	7/1/202	22	Each Accident	\$2,000,000
				Disease - Each Employee	\$2,000,000
					42,000,000
				Disease - Policy Limit	
X Property (Special Risk includes Fire and Theft)	7/1/2021	7/1/202	22	Blanket Limit, Replacement Cost (urless otherwise stated)	Deductible: \$1,000
Description: Proof of Primex Member coverage only	y.	_			
CERTIFICATE HOLDER: Additional Covered	Party Loss I	Payoo	Prime	ex³ – NH Public Risk Manago	ment Exchange
OCIVILIANI E HACDELL		-,		Many Esth Procedi	
			By:	•	
OT Bureau of Materials & Research			Date:	8/27/2021 mpurcell@nl Please direct inquin	
PO Box 483, 5 Hazen Drive Concord, NH 03302-0483				Primex ³ Claims/Covorag	e Services one



Victoria F. Sheehan Commissioner

THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

C7+C#5B Date 10/7/20



Bureau of Materials & Research August 11, 2020

His Excellency, Governor Christopher T. Sununu and The Honorable Council State House Concord, New Hampshire 03301

REQUESTED ACTION

The Department of Transportation requests placing this item on the Consent Calendar.

Authorize the New Hampshire Department of Transportation (Department) to enter into a second contract amendment with the City of Dover (Vendor 177380) by extending the completion date to December 31, 2021 from the original grant end date of January 31, 2021. No additional funding is involved in this time extension. The original contract was approved by Governor and Council on February 6, 2019, Item #15. The first contract amendment was approved by Governor and Council on September 18, 2019, Item #34.

EXPLANATION

On February 6, 2019, the Governor and Council authorized the subject contract agreement (Item #15; copy of Resolution attached) in the amount of \$519,600.00 to deploy a number of proven innovative technologies to better manage Dover's traffic signals. The City has been making incremental improvements to their traffic signal infrastructure and this project complements their past efforts by increasing the number of intersections included in their central signal system. Additionally, it will implement a number of new technologies for generating Automated Traffic Signal Performance Measures (ATSPMs) that can aid engineers in keeping the overall system optimized for improved highway efficiency, safety, and mobility. FHWA's Every Day Counts (EDC) Round 4 Initiative — Automated Traffic Signal Performance Measures is the main focus of this initiative. The Department is a cooperative partner in this project because of their interest in expanding their statewide Traffic Management Center's (TMC) capabilities by integrating local central signal systems for increased regional responsiveness.

The first amendment to the Agreement involved FHWA-requested additional efforts to expand the signal central management system and introduce a level of automation that will provide increased mobility, i.e. reduced delays during peak commuting periods and balance green times during off-peak hours. The City of Dover is a clear leader in this field as a result of its on-going investments in its traffic signal infrastructure. That revised scope funded additional items for advanced system detection, continuous travel time recording, and upgraded traffic controllers. The increase in fee provided an additional AID Demonstration funds to Dover for their revised scope of work and the corresponding engineering to design, procure, and implement the new technologies. The City of Dover is providing the required 20% non-federal matching funds.

Agency	Federal AID Funds	City of Dover Funds	Project Total
	\$129,900.00 (80%)		\$162,375.00

This second amendment requests a time extension for this grant. Additional time is needed for the consultant to complete their data collection, analysis, and required FHWA reporting as it relates to this project. In addition, time is needed to complete the final closeout documentation for this project.

Authorization is requested to allow the Department to enter into this amended Agreement with the sub-recipient to ensure compliance with Federal Aid requirements and to permit State personnel to supervise the project and the Department to expend Federal Funds.

In the event that Federal Funds become unavailable, general funds will not be requested to support this program. All other provisions of the agreement shall remain in effect.

This amended Agreement has been approved by the Attorney General as to form and execution and the Department has verified that the necessary funds are available. Copies of the fully executed amendment are on file at the Secretary of State's Office and the Department of Administrative Services, and subsequent to the Governor and Council approval will be on file at the Department of Transportation.

It is respectfully requested that authority be given to amend this Agreement.

Sincerely,

Victoria F. Sheehan

Commissioner

Attachments

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION CONTRACT AMENDMENT B

WHEREAS, pursuant to an agreement approved by Governor and Council, on February 6, 2019, Item #15, and amended on September 18, 2019, Item #34 (herein after referred to as the "Agreement"), City of Dover (Vendor #177380) agreed to advance system detection; provide devices for continuous travel time recording; and upgraded traffic controllers specified in the Agreement and in consideration of payment by the Department of Transportation (hereinafter referred to as the "Department"), certain sums as specified therein;

WHEREAS, pursuant to the Agreement Section 3.2, the Vendor, Dover, must complete all services by the Completion Date specified in block 1.7;

WHEREAS, the Vendor, Dover, NH and NHDOT have agreed to amend the contract period;

WHEREAS, Section 1.7 Completion Date, of the Contract Agreement is January 31, 2021 and NHDOT wishes to amend the completion date to December 31, 2021.

RESOLVED, that the agreement be amended as follows:

Section 1.7, Completion Date, of the Contract Agreement shall be amended to read December 31, 2021.

All other provisions of the Agreement and Amendment A shall remain in effect.

Initial and Date All Pages Vendor Initials

Date: 8 (5 (2

Contract Amendment B
Page 1 of 2

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

Accelerated Innovation Deployment (AID) Demonstration Project City of Dover; Creating a Benchmark for Traffic Signal Performance CONTRACT AMENDMENT B

IN WITNESS WHEREOF, the parties have hereunto set their J. Michael Joyal, H. City Manager	Date:				
William J. Cass, PE, Assistant Commissioner State of New Hampshire Department of Transportation	Date: <u>9/10/20</u>				
Approved by the Attorney General (Form, Substance and State of New Hampshire, Department of Justice	Execution) Date: <u>9/15/2020</u>				
Approved by NH Governor and Council THEPHITY SECRETARY: OF STATE	Date:				

Initial and Date All Paris.

Vendor Initials

Date: 8 5 0

Contract Amendment B Page 2 of 2



CERTIFICATE OF COVERAGE

The New Hampshire Public Risk Management Exchange (Primex*) is organized under the New Hampshire Revised Statutes Annotated, Chapter 5-B, Pooled Risk Management Programs. In accordance with these statutes, its Trust Agreement and bytaws, Primex* is authorized to provide pooled risk management programs established for the benefit of political authorisions in the State of New Hampshire.

Each member of Primers is entitled to the categories of coverage set forth below. In addition, Primers may extend the same coverage to non-members. However, any coverage extended to a non-member is subject to all of the terms, conditions, exclusions, amendments, rules, policies and procedures that are applicable to the members of Primers, including but not limited to the final and binding resolution of all claims and coverage disputes before the Primers. Board of Trustees. The Additional Covered Party's per occurrence limit shall be deemed included in the Member's per occurrence limit, and therefore shall reduce the Member's limit of liability as set forth by the Coverage Documents and Declarations. The limit shown may have been reduced by claims paid on behalf of the member. General Liability coverage is limited to Coverage A. (Personal Injury Liability) and Coverage B (Property Darnage Liability) only, Coverage's C (Public Officials Errors and Omissions), D (Unfair Employment Practices), E (Employee Benefit Liability) and F (Educator's Legal Liability Claims-Made Coverage) are excluded from this provision of coverage.

The below named entity is a member in good standing of the New Hampshire Public Risk Management Exchange. The coverage provided may, however, be revised at any time by the actions of Primax³. As of the date this certificate is issued, the information set out below accurately reflects the categories of coverage established for the current coverage year.

This Certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend, or after the coverage afforded by the coverage categories listed below.

axes the curetage and cut by the curetage categories	Member Number:	 -	Compar	ny Affording Coverage:	
Perticipating Member: City of Dover 288 Central Avenue Dover, NH 03820	158	NH Public Risk Management Exchange - Pri Bow Brook Place 48 Donovan Street Concord, NH 03301-2624			
You was the Broad consider the Constitution	SANCHER STATE	r jegilalen laaren	770	simio (di)Se dang bidie	The statistic for the statistic of the s
X General Liability (Occurrence Form) Professional Liability (describe) Claims Occurrence Made	7/1/2020	7/1/202		Each Occurrence General Aggregate Fire Damage (Any one fire) Med Exp (Any one person)	\$ 5,000,000 \$ 5,000,000
X Automobile Liability Deductible Comp and Coll: \$1,000 Any auto	7/1/2020	7/1/202	21	Combined Single Umit (Each Accident) Aggregate	\$5,000,000 \$5,000,000
X Workers' Compensation & Employers' Liabil	lity 7/1/2020	7/1/2021		X Statutory	
	1			Each Accident	\$2,000,000
			· ·	Disease - Each Employee	\$2,000,000
			ĺ	Disease — Policy Limit	
X Property (Special Risk Includes Fire and Theft)	7/1/2020	7/1/2021		Stanket Limit, Replacement Cost (unless otherwise stated)	Deductible: \$1,000
Description: Proof of Primex Member coverage only.					
CERTIFICATE HOLDER: Additional Covered	Party Loss	Payee	Prime	x² – NH Public Risk Manag	ement Exchange
			Ву:	Many Esth Procedl	١
NHDOT Bureau of Materials & Research PO Box 483, 5 Hazen Drive Concord, NH 03302-0483			Oste:	8/3/2020 mpurceli@nt Please direct inqu Primex ³ Cialms/Covera 603-225-2841 pl 603-228-3833	ires to: ige Services hone



Victoria F. Sheehan Commissioner

THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION A # 211

G+C+34



Bureau of Materials & Research July 16, 2019

His Excellency, Governor Christopher T. Sununu and The Honorable Council State House Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the New Hampshire Department of Transportation (Department) to enter into a contract amendment with the City of Dover (Vendor 177380) to increase the contract amount by \$129,900.00 from \$519,600.00 to \$649,500.00. Funding is provided by the Federal Accelerated Innovation Deployment (AID) Demonstration Program through project AID Demonstration Grant for City of Dover: Creating a Benchmark for Traffic Signal Performance (NHDOT 42366), effective upon Governor and Council approval, through January 31, 2021. The original contract was approved by Governor and Council on February 6, 2019, Item #15. 100% Federal Funds

Funds to support this request are anticipated to be available in the following account in FY 2020 upon the availability and continued appropriation of funds in the future operating budget.

04-96-96-962515-2945 Municipal Aid - Federal 072-500574 Grants - Federal FY 2020

\$129,900.00

As this is a pass through grant to the City of Dover, all funds will be obligated in FY 2020.

EXPLANATION

On February 6, 2019, the Governor and Council authorized the subject contract agreement (Item #15; copy of Resolution attached) in the amount of \$519,600.00 to deploy a number of proven innovative technologies to better manage Dover's traffic signals. The City has been making incremental improvements to their traffic signal infrastructure and this project complements their past efforts by increasing the number of intersections included in their central signal system. Additionally, it will implement a number of new technologies for generating Automated Traffic Signal Performance. Measures (ATSPMs) that can aid engineers in keeping the overall system optimized for improved highway efficiency, safety, and mobility. FHWA's Every Day Counts (EDC) Round 4 Initiative – Automated Traffic Signal Performance Measures is the main focus of this initiative. The Department is a cooperative partner in this project because of their interest in expanding their statewide Traffic Management Center's (TMC) capabilities by integrating local central signal systems for increased regional responsiveness.

This amendment to the Agreement involves FHWA-requested additional efforts to expand the signal central management system and introduce a level of automation that will provide increased mobility, i.e. reduced delays during peak commuting periods and balance green times during off-peak hours. The City of Dover is a clear leader in this field as a result of its on-going investments in its traffic signal infrastructure. This revised scope funds additional items for advanced system detection, continuous travel time recording, and upgraded traffic controllers. The FHWA AID Demonstration allocation memo had a balance of funds in the amount of \$129,900.00. The City determined that their project could make use of the additional funding, revised their scope of work, and agreed to the required match for the funding.

The increase in fee as proposed provides an additional \$129,900.00 of AID Demonstration funds to Dover for the revised scope of work and the corresponding engineering to design, procure, and implement the new technologies. The City of Dover will provide the required 20% non-federal matching funds.

Federal AID Funds | City of Dover Funds | Project Total Agency \$129,900.00 (80%) | \$32,475.00 (20%) \$162,375.00 Cost

Authorization is requested to allow the Department to enter into this amended Agreement with the subrecipient to ensure compliance with Federal Aid requirements and to permit State personnel to supervise the project and the Department to expend Federal Funds.

In the event that Federal Funds become unavailable, general funds will not be requested to support this program. All other provisions of the agreement shall remain in effect.

This amended Agreement has been approved by the Attorney General as to form and execution and the Department has verified that the necessary funds are available. Copies of the fully executed amendment are on file at the Secretary of State's Office and the Department of Administrative Services, and subsequent to the Governor and Council approval will be on file at the Department of Transportation.

It is respectfully requested that authority be given to amend this Agreement.

Sincerely,

Victoria F. Sheehan Commissioner

Attachments

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION CONTRACT AMENDMENT A

WHEREAS, the Governor and Council approved an agreement between the New Hampshire Department of Transportation (NHDOT) and the City of Dover (Vendor #177380) on February 6, 2019, Item #15 for the period of February 6, 2019 through January 31, 2021;

WHEREAS, pursuant to an Agreement approved as the result of the Federal Accelerated Innovation Deployment (AID) Demonstration grant for City of Dover, allocated September 10, 2018, the FHWA Center for Accelerating Innovation has granted concurrence on the City of Dover's revised project scope for Creating a Benchmark for Traffic Signal Performance Project;

WHEREAS, the increase in funds will advance system detection; provide devices for continuous travel time recording; and upgraded traffic controllers;

WHEREAS, the Vendor, Dover, NH and NHDOT have agreed to amend certain provisions of the agreement;

WHEREAS, Section 1.8 Price Limitation, of the Contract Agreement is \$519,600.00 and NHDOT wishes to amend the price limitation to \$649,500.00.

RESOLVED, that the agreement be amended as follows:

Section 1.8, Price Limitation, of the Contract Agreement shall be amended to read \$649,500.00.

All other provisions of the agreement shall remain in effect.

Initial and Date Al Pager! Vendor Initials

Date: 8/5/19

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

Accelerated Innovation Deployment (AID) Demonstration Project City of Dover; Creating a Benchmark for Traffic Signal Performance CONTRACT AMENDMENT A

IN WITNESS WHEKEOF, the parties liave hereunto s	set their hands as of the day and year first above written.
(XY)	Date: 8/5/15
J. Michael Joyal Jr.	
City Manager	
Corporate Signature Notarized:	
STATE of Abustaniashire	
COUNTY of Strafford	
On this, the 5 day of August , 201	9, before me, Celler Pessey, the
undersigned Officer T. Ynithal I. Toyal Jr	, personally appeared and acknowledged her/himself to
be the City Marricer of City of Diver, a co	proporation, and that she/he, as such <u>Crhe Prupu</u> Some
authorized to do so, executed the foregoing instrumer	nt for the purposes therein contained, by signing the name
of the corporation by her/himself as Try MARS	ye.k.
IN WITNESS WHEREOF I hereunto set my hand and	official seal.
(Men les posite	(SEAL)
Notary Public/Justice of the Peace COLLEEN E. A. BESSE	TTE, Notary Public
My Commission Expires:	es August 6, 2023
•	
Department of Transportation-	Date:
William J. Cass, PE, Assistant Commissioner	
State of New Hampshire Department of Transportatio	n
Approved by the Attorney General (Form, Substan	nce and Execution)
Eurly C. Yain	Date: 8/20/19
State of New Hampshire partment of Justice	
Approved by NH Governor and Council	
1 DM Scular	Date: SEP 1 8 2019
DEPUTY SECRETARY OF STATE	

Initial and Date AlliPages: Vendor Initials Date: 8 5 19

Contract Amendment A Page 2 of 2



CERTIFICATE OF COVERAGE

The New Hampshire Public Risk Management Exchange (Primex²) is organized under the New Hampshire Revised Statutes Annotated, Chapter 5-B, Pooled Risk Management Programs. In accordance with those statutes, its Trust Agreement and bylaws, Primex² is authorized to provide pooled risk management programs established for the benefit of political subdivisions in the State of New Hampshire.

Each member of Primex³ is entitled to the categories of coverage set forth below. In addition, Primex³ may extend the same coverage to non-members. However, any coverage extended to a non-member is subject to all of the terms, conditions, exclusions, amendments, rules, policies and procedures that are applicable to the members of Primex³, including but not limited to the final and binding resolution of all claims and coverage dispites before the Primex³ Board of Trustees. The Additional Coverage Party's per occurrence limit shall be deemed included in the Member's per occurrence limit shall be deemed included in the Member's per occurrence limit shall be deemed included in the Member's per occurrence limit that the deemed included in the Member's per occurrence limit shall be deemed incl

The below named entity is a member in good standing of the New Hampshire Public Risk Management Exchange. The coverage provided may, however, be revised at any time by the actions of Primex³. As of the date this certificate is issued, the information set out below accurately reflects the categories of coverage established for the current coverage year.

This Certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend, or after the coverage afforded by the coverage categories listed below.

Participating Member:	Member Number:		Сотра	nny Affording Coverage:
City of Dover 288 Central Avenue Dover, NH 03820	280		NH Public Risk Management Exchange - Pri Bow Brook Place 46 Donovan Street Concord, NH 03301-2624	
Type of Coverage	Effective Date (mm/dd/yyyy)	Expiration (mm/dd/y	Date *	Limits NH Statutory Limits May Apply, If Not:
X General Liability (Occurrence Form) Professional Liability (describe) Claims Occurrence Made	7/1/2019	7/1/20:		Each Occurrence \$ 5,000,000 General Aggregate \$ 5,000,000 Fire Damage (Any one fire) Med Exp (Any one person)
Automobile Liability Deductible Comp and Coll: \$1,000 Any auto	7/1/2019	7/1/20	20	Combined Single Limit (Each Accident) \$ 5,000,000 Aggregate \$ 5,000,000
X Workers' Compensation & Employers' Liability	7/1/2019	7/1/20	20	X Statutory
				Each Accident \$2,000,000
				Disease - Each Employee \$2,000,000
				Disease — Policy Limit
X Property (Special Risk Includes Fire and Theft)	7/1/2019	7/1/2020		Blanket Limit, Replacement Cost (unless otherwise stated) Deductible: \$1,000
Description: Proof of Primex Member coverage only.				
CERTIFICATE HOLDER: Additional Covered Part	y Loss F	Paveo	Prime	ex ¹ – NH Public Risk Management Exchange
	, , , , , , , , , , , , , , , , , , , ,		By:	Mary Beth Procedt
State of New Hampshire Department of Transportation 7 Hazen Dr Concord, NH 03302			<u>D8(0)</u>	Please direct inquires to: Primax* Claims/Coverage Services 603-225-2841 phone 603-228-3833 fex

CERTIFICATE OF AUTHORITY

I, Susan M. Mistretta, City Clerk for the City of Dover, New Hampshire, do hereby certify that the City Council authorized the City Manager on August 5, 2019 to create a Benchmark for Traffic Signal Performance State Project 42366 Federal Project X-A004(825). They authorized the City Manager to execute any documents which may be necessary for the City of Dover; this authorization has not been revoked, annulled or amended in any manner whatsoever, and remains in full force and effect as of the date hereof; and the following now occupies the office indicated above:

JAMES MICHAEL JOYAL, JR., CITY MANAGER

IN WITNESS WHEREOF, I have hereunto set my hand as the City Clerk of Dover, New

Hampshire this 5th day of August, 2019.

Susan M. Mistretta, City Clerk

STATE OF NEW HAMPSHIRE COUNTY OF STRAFFORD

On this the 5th day of August, 2019, before me, the undersigned officer, personally appeared Susan M. Mistretta, who acknowledged herself to be the City Clerk for the City of Dover New Hampshire and that she, as such City Clerk, being authorized to do so, executed the foregoing instrument for the purpose herein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

AN MOTORY CODING

My Commiss My Commiss



Victoria F. Sheehan Commissioner

THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

G+C #15



His Excellency, Governor Christopher T. Sununu and the Honorable Council State House Concord, New Hampshire 03301 Bureau of Materials & Research December 5, 2018

REQUESTED ACTION

Authorize the Department of Transportation to enter into an Agreement with the City of Dover (Vendor #177380), for a total fee not to exceed \$519,600.00. Funding is provided by the Federal Accelerated Innovation Deployment (AID) Demonstration Program through project AID Demonstration Grant for City of Dover: Creating a Benchmark for Traffic Signal Performance (NHIOOT 42366), effective upon Governor and Council approval through January 31, 2021. 100% Federal Funds.

Funding to support this request are anticipated to be available in the following account in State FY 2019:

04-96-96-963515-3054
Consolidated Federal
046-500464 General Consultants Non-Benefit

FY 2012

\$519,600.00

As this is a pass through grant to the City of Dover, we will obligate all the funds in FY 2019.

EXPLANATION

The purpose of the AID Demonstration Program is to provide funding to state transportation agencies or other public sectors as an incentive to accelerate the implementation and adoption of innovation in highway transportation.

This project includes the deployment of a number of proven innovative technologies to better manage the City of Dover, NH's traffic signals. The City has been making incremental improvements to their traffic signal infrastructure over the past eight (8) years. This project will complement their past efforts by increasing the number of intersections included in their central signal system from 14 to 25. Additionally, it will implement a number of new technologies for generating Automated Traffic Signal Performance Measures (ATSPMs) that can aid engineers in keeping the overall system optimized for improved highway efficiency, safety, and mobility. FHWA's Every Day Counts (EDC) Round 4 Initiative — Automated Traffic Signal Performance Measures is the main focus of this initiative. The Department is a cooperative partner in this project because of their interest in expanding their statewide Traffic Management Center's (TMC) capabilities by integrating local central signal systems for increased regional responsiveness.

AID Demonstration funds provide a Federal share of 80 percent. The 20 percent non-Federal match may come from project sponsors or other allowable funding sources. For reference, the following table shows the funding allocations:

Agency	Federal AID Funds	City of Dover Funds	Project Total
			\$649,500

Authorization is requested to allow the Department to enter into this agreement with the sub-recipient to ensure compliance with Federal Aid requirements and to permit State personnel to supervise the project and the Department to expend Federal Funds.

This Agreement has been approved by the Attorney General as to form and execution and the Department has verified that the necessary funds are available. Copies of the fully-executed Agreements are on file at the Secretary of State's Office and the Department of Administrative Services, and subsequent to Governor and Council approval will be on file at the Department of Transportation. It is respectfully requested that authority he given to enter into a sole-source Agreement for consulting services as outlined above.

Sincerely,

Victoria F. Sheehan Commissioner

Attachments

Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

1. IDENTIFICATION.							
1.1 State Agency Name		1.2 State Agency Address	_ ·				
New Hampshire Department of	Transportation	7 Hazen Drive					
	•	Concord, NH 03302					
<u> </u>	•	1					
1.3 Contractor Name		1.4 Contractor Address					
City of Dover		288 Central Avenue	i				
City of Dover		Dover, NH 03820					
		150,01,					
15 October Phase	1.6 Account Number	1.7 Completion Date	1.8 Price Limitation				
1.5 Contractor Phone	1.6 Account Number	1.7 Completion Date	1,0 1,100 13111112,1011				
Number	24 25 26 252215 2254 246	1	\$519,600.00				
603-516-6030	04-96-96-962015-3054-046	January 31, 2021	\$317,000.00				
	<u> </u>	10.0	- Norther				
1.9 Contracting Officer for Sta	ate Agency	1.10 State Agency Telephor	ie Numoci				
Peter E. Summas/		603-271-1486					
	<u> </u>						
1.11 Contractor Signature	')	1.12 Name and Title of Co	ntractor Signatory				
	/	J. Michael Joyal, Jr.					
	/	City Manager					
	/	<u> </u>					
3 Ackgryledgement: State	County of	Strutter					
, 10 1							
On 11/40/18 /. befo	the undersigned officer, person	ally appeared the person identi	fied in block 1.12, or satisfactorily				
proven to be the person whose	name is signed in block 1.11, and	acknowledged that s/he execu	ted this document in the capacity				
proven to be the persony whose name is signed in block 1.11, and acknowledged that s/he executed this document in the capacity indicated in block 1.12.							
1.13.1 Signature of Notary Pu	blic or Justice of the Peace						
			oregra tistana Dublia				
COLLEEN E. A. BESSETTE, Notary Public							
My Commission Expires August 8, 2023							
1.13.2 Name and Title of Note	ery or Justice of the Peace						
	A. Bessette, Exi						
L'allern & F	A Bresight Exi	PCUTIVE ARCIST	rint				
1.14 State Agency Signature		1.15 Name and Title of St	ate Agency Signatory				
1.14 State of They have also state		- r 0					
1/2/	Data: 12/6/2018	For E. Stamuas	Director of Project Develor				
1 16 A supposition the NGC De	partment of Administration, Divi	sion of Personnel (if applicable	(a)				
1,16 Approval by the N.H. 126	partification Administration, Divi	sion of reisonner ty apprication	- /				
		Director On:					
By: Director, On:							
	0 1/5	Superina (Canalizable)					
1.17 Approval by the Attorney	y General (Form, Substance and I	execution) (<i>y applicable)</i>					
		On: 1/22/2019					
By: Allians	Spenson	Un: 1/22/20001					
		D11-1					
1.18 Approval by the Governo	or and Executive Council (if appl	ucavie)	EED AC asse				
	O REMIT	V OCCUPITABLY OF	CTATE FEB 0 6 2019				
By: \	Sculler DEPUT	Y SECRETARY OF	SIMIC				

2. EMPLOYMENT OF CONTRACTOR/SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, f he Contractor shall perform, the work or sale of goods, or b. .., identified and more particularly described in the attached EXHIBIT A which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.

- 3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement as indicated in block 1.18, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.14 ("Effective Date").
- 3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

4 CONDITIONAL NATURE OF AGREEMENT.

ithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuence of payments hereunder, are contingent upon the availability and continued appropriation of funds, and in no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to terminate this Agreement immediately upon giving the Contractor notice of such termination. The State shall not be required to transfer funds from any other account to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXIIIBIT B which is incorporated herein by reference.
5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services. The State shall have no liability to the Contractor other than the contract

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or pennitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.
5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.

6.1 In connection with the performance of the Services, the Contractor shall comply with all statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal opportunity laws. This may include the requirement to utilize auxiliary aids and services to ensure that persons with communication disabilities, including vision, hearing and speech, can communicate with, receive information from, and convey information to the Contractor. In addition, the Contractor shall comply with all applicable copyright laws. 6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination. 6.3 If this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all the provisions of Executive Order No. 11246 ("Equal Employment Opportunity"), as supplemented by the regulations of the United States Department of Labor (41 C.F.R. Part 60), and with any rules, regulations and guidelines as the State of New Hampshire or the United States issue to implement these regulations. The Contractor further agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders. and the covenants, terms and conditions of this Agreement:

7. PERSONNEL.

- 7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.
- 7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this

Page 2 of 4

Contractor Initials Date

Agreement. This provision shall survive termination of this Agreement.

7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event y dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

8. EVENT OF DEFAULT/REMEDIES.

- 8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):
- 8.1.1 failure to perform the Services satisfactorily or on schedule:
- 8.1.2 failure to submit any report required hereunder; and/or 8.1.3 failure to perform any other covenant, term or condition of this Agreement.
- 8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:
 8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely remedied, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination;
 8.2.2 give the Contractor a written notice specifying the Event
- 8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the provide from the date of such notice until such time as the State

mines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 set of against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or

8.2.4 treat the Agreement as breached and pursue any of its remedies at law or in equity, or both.

9. DATA/ACCESS/CONFIDENTIALITY/PRESERVATION.

- 9.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.
- 9.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.
- 9.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data ires prior written approval of the State.

10. TERMINATION. In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination Report shall be identical to those of any Final Report described in the attached EXHIBIT A.

- 11. CONTRACTOR'S RELATION TO THE STATE. In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.
- 12. ASSIGNMENT/DELECATION/SUBCONTRACTS. The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written notice and consent of the State. None of the Services shall be subcontracted by the Contractor without the prior written notice and consent of the State:
- 13. INDEMNIFICATION. The Contractor shall defend, indemnify and hold harmless the State, its officers and employees, from and against any and all losses suffered by the State, its officers and employees, and any and all claims, linbilities or penalties asserted against the State, its officers and employees, by or on behalf of any person, on account of, based or resulting from, arising out of (or which may be claimed to arise out of) the acts or omissions of the Contractor. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.

- 14.1 The Contractor shall, at its sole expense, obtain and maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:
- 14.1.1 comprehensive general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$1,000,000per occurrence and \$2,000,000 aggregate; and
- 14.1.2 special cause of loss coverage form covering all property subject to subparagraph 9.2 herein, in an amount not less than 80% of the whole replacement value of the property. 14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

Page 3 of 4

Contractor Initial Date

1

- 14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer
- ified in block 1.9, or his or her successor, certificate(s) of its stance for all renewal(s) of insurance required under this Agreement no later than thirty (30) days prior to the expiration date of each of the insurance policies. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference. Each certificate(s) of insurance shall contain a clause requiring the insurer to provide the Contracting Officer identified in block 1.9, or his or her successor, no less than thirty (30) days prior written notice of cancellation or modification of the policy.

15. WORKERS' COMPENSATION.

- 15.1 By signing this agreement, the Contractor agrees. certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A ("Workers' Compensation").
- 15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignce to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be
- insible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.
- 16. WAIVER OF BREACH. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.
- 17. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.
- 18. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and utive Council of the State of New Hampshire unless no

Page 4 of 4

such approval is required under the circumstances pursuant to State law, rule or policy.

- 19. CONSTRUCTION OF AGREEMENT AND TERMS. This Agreement shall be construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.
- 20. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.
- 21. HEADINGS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.
- 22. SPECIAL PROVISIONS. Additional provisions set forth in the attached EXHIBIT C are incorporated herein by reference.
- 23. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.
- 24, ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire Agreement and understanding between the parties, and supersedes all prior Agreements and understandings relating hereto.

Contractor Initia

Accelerated Innovation Deployment (AID) Demonstration Project

Scope of Work

The 14 intersections we are focused on are contained in 4 separate "systems" shown on Figure 1 attached. These include:

The Weeks Crossing System
The Hannaford/Glenwood System
The Silver Street System
The Durham Road System

Each of these "systems" has its own distinct character and operation goals (See Figure 2), which we think makes Dover an Ideal "test bed" for this AID grant. In one grant we are proposing to implement and test a number of different ATSPMs under different situations. More specifically,

The Weeks Crossing System is adjacent to Exit 9 on the Spaulding Turnpike and serves both "commuting traffic" in the peak weekday periods as well as the retail shoppers to the area from both Dover and nearby Somersworth. Currently this system runs dual cross-coordination with fixed TOD plans during weekday and weekend peak periods. All four intersections have TS-2 cabinets with McCain ATC controllers, and communications back to central. The system has a single Gridsmart camera installation at the Central/Indian Brook intersection but loop detection at the other three locations.

Operational Goals: Accommodate heavy volumes throughout the day on all 4 legs with minimal delays. How best do we optimize this 4-signal system to achieve maximum throughput with minimal approach delays and queuing.

Appropriate ATSPMs for this system: Arrivals on Green, Traffic Volumes, Headways, Travel Times, V/C Ratios, Cycle Failures, and Red Light Running

<u>The Hannaford/Glenwood System</u> is a traditional linear arterial corridor on Central Avenue that is subject to volume peaks from "commuter traffic" predominantly. This system currently runs mainline coordination with fixed TOD plans during weekday and weekend peak periods. All three intersections have TS-2 cabinets with McCain ATC controllers and communications back to central. Detection is presently being provided by stop bar loop detection – no cameras.

Operational Goals: Maintaining progression on the mainline (Central Avenue). Accommodating side street volumes with manageable delays is also desired.

Appropriate ATSPMs for this system: Travel Times, Arrival on Green, Traffic Volumes, Split Utilization, and Transitions

The Silver Street System is an arterial feeder route into the City's CBD from Exit 8 on the Spaulding Turnpike. Volumes on Silver Street disperse as they progress from west to east toward the downtown. The system currently is running free. All three intersections have TS-2 cabinets with McCain ATC controllers, Gridsmart detection, and communications back to central.

Operational Goals: Managing side street delays is more important than mainline progression in this system.

Appropriate ATSPMs for this system: Traffic Volumes, Split Utilization, Traffic Composition, Cycle Failures, and Red Light Running

The Durham Road System is an arterial servicing Exit 7 on the Spaulding Turnpike as well as the City's High and Middle schools. Volumes are heaviest during school start and end times as well as normal commuter times. Currently, this system is running fixed TOD plans designed around these peak periods. These four intersections run off two McCain ATC controllers housed in TS-2 cabinets. Detection at two of the intersections is provided by Gridsmart cameras. In-pavement loops support the other two intersections.

Operational Goals: Maximizing throughput on the mainline during peak periods while managing side street delays. The complexity of this system is magnified by the fact that 4 closely spaced intersections are operated by 2 controllers.

Appropriate ATSPMs for this system: Arrival on Green, Traffic Volumes, Travel Times, Headways, V/C Ratios, Traffic Composition, Pedestrian Actuations, Pre-emption events, Transitions, Cycle Failures, and Red Light Running

As you can see from the above descriptions, each system is different in its operational characteristics even though they all are located in key locations surrounding the City's downtown.

Schedule

Conduct Systems Engineering evaluation in advance by the end of March 2019 of procurement Procure and install all new equipment, including by end of 2nd Quarter of 2019 advanced detection for Hannaford system Engineering design, programming and deployment by end of 3rd Quarter of 2019 of ATSPM's for Hannaford system by end of 4th Quarter of 2019 Testing and Reporting for Hannaford system Procure and install advanced detection for other by the end of 1st Quarter of 2020 three coordinated systems Engineering design, programming and deployment by the end of 2nd Quarter of 2020 of ATSPM's for other threes systems by the end of 3rd Quarter of 2020 Testing and Final Reporting

Attachments:

Figure 1 - Coordinated Signal Systems

Figure 2 - Individual Corridor Characteristics

Accelerated Innovation Deployment (AID) Demonstration Project

Cost Breakdown

The proposed project will include the following elements:

 Purchase and install video detection at the following intersections for vehicle counting, vehicle detection, real time remote monitoring and incident management:

Central Avenue at Hotel Drive
Central Avenue at Webb Place
Central Avenue at Morin Street
Central Avenue at Glenwood
Central Avenue at Hannaford's
Central Avenue at Locust Street (2 camera install)
Indian Brook at Webb Place

Total = 7 intersections at an estimated cost of \$210,000

2. Upgrade and install new backbone communications:

Central Avenue at Webb Place (Weeks Crossing System) – 1 23-GHz radio Central Avenue at Morin Street (Hannaford/Glenwood System) – 1 23-GHz radio Silver Street at Locust Street (Silver Street System) – 1 23-GHz radio Locust to Exit 7 Monopole (Durham Road System) – 1 23-GHz radio Total = 4 radio links at an estimated cost of \$30,000

3. Purchase and install cameras for advanced system detection to allow for ATSPM's implementation:

Phase 1 Total = 6 at an estimated cost of \$30,000 Phase 2 Total = 6 at an estimated cost of \$30,000

4. Purchase and install 8 stationary Bluetooth devices for continuous travel time recording in 3 coordinated signal systems.

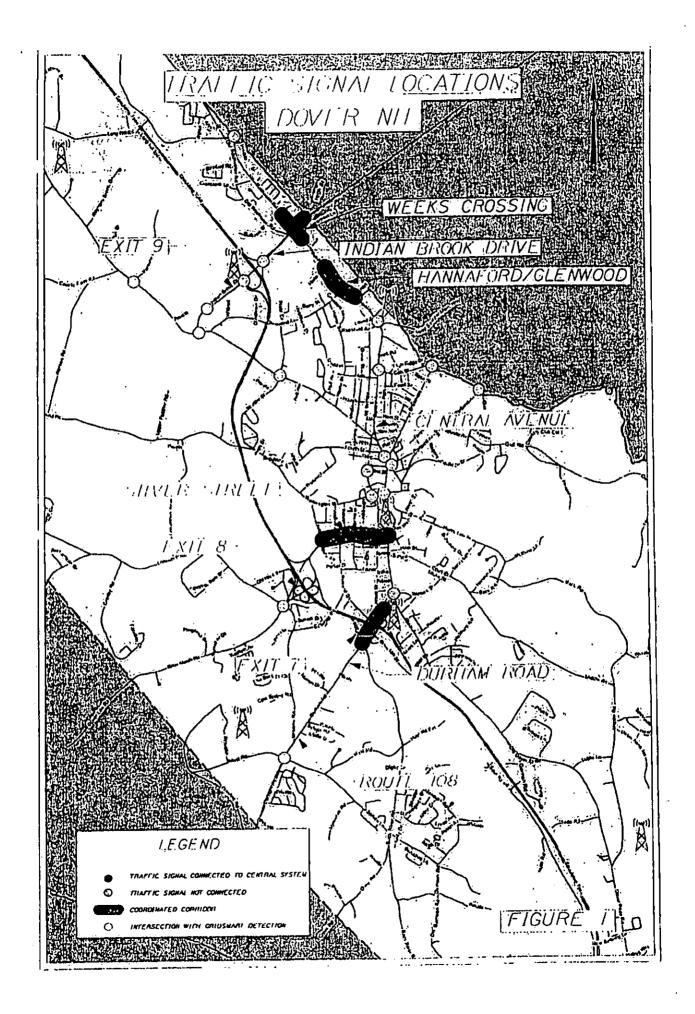
Total = $8 \times $7,000$ = and estimated cost of \$56,000

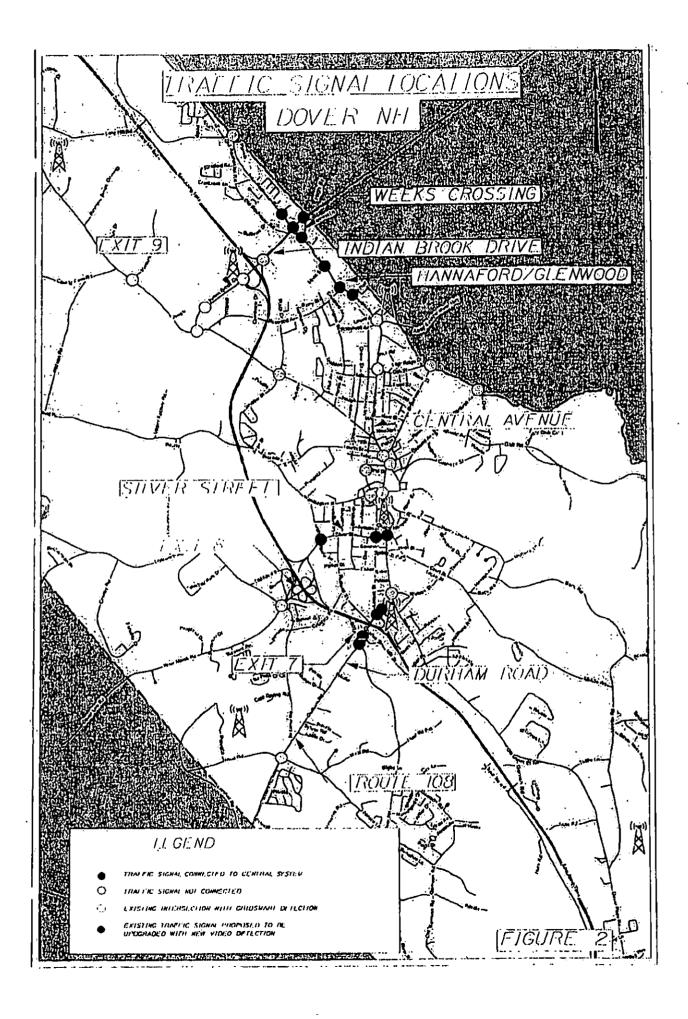
- 5. Upgrade, or purchase new open source software to include the ATSPM's at an estimated cost of \$10,000.
- 6. Create communications linkage and access privileges to City's central system for NHDOT's TMC estimated cost \$15,000.

7. Engineering to design, procure, and implement new technologies and create monitoring databases for tracking new data and SPM's. Design and implement new programming for all 4 coordinated systems. Provide Interim and Final Reporting to FHWA for Phase 1 ATSPM implementation, and if successful for Phase 2. Estimated Cost:

Project Management	\$ 15,000
Systems Engineering	\$ 5,000
Equipment Procurement, Testing and	
Acceptance	\$ 16,000
Data Assemblage and Database Development	
4 systems	\$ 32,000
ATSPM selection and set up – Phase 1	\$ 25,000
TOD Development and Implementation (4 systems)	\$ 28,000
Peer to Peer Design/Implementation – Phase 1	\$ 25,000
Interim and Final Reporting – Phase 1	\$ 10,000
Equipment Procurement – Phase 2	
Balance of advanced detection	\$ 5,000
ATSPM selection and set up - Phase 2	·
· 3 systems	\$ 30,000
Peer to Peer Design/Implementation - Phase 2	
3 systems	\$ 45,000
Interim and Final Reporting - Phase 2	\$ 7,500
Post Project Information Exchange	<u>\$ 5,000</u>
Total	\$248,500

- 8. NHDOT participation, support, and administration = \$20,000
- 9. Total Project Cost Phases 1 and 2 = \$649,500





EXHUSIT C SPECIAL PROVISIONS FOR

CITY OF DOVER STATE VENDOR #: 177380 STATE PROJECT #: 42366 FEDERAL PROJECT #: A004(825)

This contract shall be administered in general accordance with the general provisions of the Agreement found in Form P-37 as modified by the following terms.

- C.1. Amend P-37 Section 5. CONTRACT PRICE/PRICE LIMITATION PAYMENT by adding the following:
 - 5.5 The contractor shall submit quarterly progress reports and invoices to the State for reimbursement of its share of the amounts paid to engineering and research consultants for the performance of the work set forth in the Agreement. The invoice structure shall include details of work completed consistent with the Scope of Work as defined in the Agreement, us well as backup information to support the charges. The Contractor shall certify that the invoices properly represent payment for work that has been completed and paid for by the Contractor.
 - 5.6. The Contractor is required to maintain all project and financial records pertinent to the development of the Project for three (3) years beyond the date of the State's final voucher. The State will send a letter to the Contractor with the date of this approval. If there is a failure to maintain this documentation, State and/or Federal Highway Administration could take an action up to and including requesting a refund of all reimbursed project costs.
 - 5.7. That this Agreement is contingent upon the appropriation of sufficient funds from the State of New Hampshire Legislature and/or the Federal Highway Administration. If sufficient funds are not appropriated, the Department may terminate this Agreement upon thirty (30) days' written notice to the Contractor. Such termination shall relieve the Department and the Contractor from obligations under this Agreement after the termination date.
- C.2. Amend P-37 Section 6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/EQUAL EMPLOYMENT OPPORTUNITY by the following:

Add the following sentence to 6.1:

In connection with the performance of the Services, the Contractor shall comply with all Federal and State of New Hampshire laws and rules, regulations, and policies as applicable under the Federal-aid Highway Program.

Substitute 6.2 with following paragraph:

The Contractor agrees that it will comply with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d—2000d-4 (referred to as the ACT), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, US State of Transportation, Subtitle A, Office of the Secretary, Part 21, "Non-discrimination in Federally-Assisted Programs of The State of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964" (referred to as the "REGULATIONS"), the Federal-aid Highway Act of 1973, and other pertinent directives, to the end that no person shall on the grounds of race, color, national origin, sex, age, or disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity for which the Contractor receives Federal financial assistance extended by the State of New Hampshire. This Agreement obligates the Contractor for the period during which Federal financial assistance is extended.

C.3. Amend P-37 Section 14. INSURANCE by adding the following:

14.4. The Contractor shall defend, indemnify and hold harmless the State and its officials, agents and employees from and against any and all claims, liabilities or suits arising from (or which may be claimed to arise from) any act or omission of the Contractor or its subcontractors in the performance of this Agreement. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State of New Hampshire which immunity is hereby reserved. This covenant shall survive the termination of this Agreement.

To: Yamilee Volcy, Engineering & Operations Supervisor, FHWA – NH Division

From: Ann Scholz, Research Engineer - NHDOT

Date: November 15, 2018

RE: Match Plan for City of Dover, NH: Creating a Benchmark for Traffic Signal Performance State Project 42366 Federal Project X-A004(825)

This memorandum is intended to provide sufficient documentation to the FHWA-NH Division on the proposed non-federal match for the City of Dover, NH: Creating a Benchmark for Traffic Signal Performance Project. NHDOT intends to partner with the City of Dover and its traffic consultant Sebago Technics, to administer these funds in a responsible manner. Sebago will provide the technical engineering, oversight, testing and reporting associated with this Project under the direction of NHDOT's Traffic Bureau and Dover's Community Services Department.

Calculating Value of Soft Match

The City is committed to a 20-percent match as required for this AID demonstration grant. A letter confirming this fact and identify the non-federal monies is available.

Reporting

At least every three months, the City will report their time and the value of their match. The document will accompany the City's invoicing for payment against the AID funds. The document format will be similar to their standard invoice noting description of expenses, current period, and cumulative amount.

The NHDOT project manager will maintain a reporting spreadsheet to track accrual against overall need. The report will be maintained consistent to receipt of invoices from the City. In the event that the match accrual is lagging behind plan expectations, NHDOT will take the following actions:

- Meet with the City of Dover to discuss reasons for uneven accrual
- Develop a revised plan that demonstrates ability to accrue appropriate match to allow expenditure of federal funds
- Discuss performance with FHWA for corrective actions as necessary

City of Dover, NH: Creating a Benchmark for Traffic Signal Performance Match Plan

Sponsor Name: New Hampshire Department of Transportation

Partners: City of Dover, NH and Sebago Technics, Inc.

Project Name: City of Dover, NH: Creating a Benchmark for Traffic Signal Performance

State Project #: 42366 Federal Project#: X-A004(825)

Total Project Funding: \$649,500

\$519,600 AID Demonstration grant

\$129,900 City's Match (non-federal budget item)

Total Federal Share: \$519,600 (80%)

\$519,600 AID Demonstration grant

Total Match: \$129,900 (20%) \$129,900 City's Match

Soft Match Details:

Person '/ Affiliation	Year	Amount	Cumulative Total
City of Dover/Public Works	1	\$64,950	\$64,950
	2	\$64,950	\$129,900

CERTIFICATE OF AUTHORITY

I, Susan M. Mistretta, Acting City Clerk for the City of Dover, New Hampshire, do hereby certify that the City Council authorized the City Manager on November 28, 2018 to create a Benchmark for Traffic Signal Performance State Project 42366 Federal Project X-A004(825). They authorized the City Manager to execute any documents which may be necessary for the City of Dover; this authorization has not been revoked, annulled or amended in any manner whatsoever, and remains in full force and effect as of the date hereof; and the following now occupies the office indicated above:

JAMES MICHAEL JOYAL, JR., CITY MANAGER

IN WITNESS WHEREOF, I have hereunto set my hand as the Acting City Clerk of Dover, New Hampshire this 28th day of November, 2018.

Susan Mistretta, Acting City Clerk

STATE OF NEW HAMPSHIRE COUNTY OF STRAFFORD

On this the 28th day of November, 2018, before me, the undersigned officer, personally appeared Susan Mistretta, Acting City Clerk, who acknowledged herself to be the Acting City Clerk for the City of Dover New Hampshire and that she, as such Acting City Clerk, being authorized to do so, executed the foregoing instrument for the purpose herein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

(Seal) Notary Public

CATTLYN M. HASSEN, Notary Public

My Commission Expires February 7, 2023

My Commission Expires:_______



CERTIFICATE OF COVERAGE

New Hampshire Public Risk Management Exchange (Primex*) is organized under the New Hampshire Revised Statutes Annotated, Chapter 5-B, local Risk Management Programs, in accordance with those statutes, its Trust Agreement and bylaws, Primex* is authorized to provide pooled risk management programs established for the benefit of political subdivisions in the State of New Hampshire.

Each member of Primex³ is entitled to the categories of coverage set forth below. In addition, Primex³ may extend the same coverage, to non-members However, any coverage extended to a non-member is subject to all of the terms, conditions, exclusions, amendments, rules, policies and procedures that are applicable to the members of Primex³, including but not limited to the final and binding resolution of all claims and coverage disputes before the Primex³ Brand of Trustees. The Additional Coverad Party's per occurrence limit shall be deemed included in the Member's per occurrence limit, and therefore shall reduce the Member's limit of liability as set forth by the Coverage Documents and Declarations. The limit shown may have been reduced by claims paid on behalf of the member. General Liability coverage is limited to Coverage A (Personal Injury Liability) and Coverage B (Property Damage Liability) only, Coverage's C (Public Officials Errors and Omissions), D (Unital Employment Practices), E (Employee Benefit Liability) and F (Educator's Logal Liability Claims-Made Coverage) are excluded from this provision of coverage.

The below named entity is a member in good standing of the New Hampshire Public Risk Management Exchange. The coverage provided may, nowever, be revised at any time by the actions of Primex². As of the date this certificate is issued, the information set out below accurately reflects the categories of coverage established for the current coverage year.

This Certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend, or after the coverage afforded by the coverage categories listed below.

Participating Member:	Member Number		Compa	ny Aff	ording Coverage:			
City of Dover 288 Central Avenue Dover, NH 03820	280		NH Public Risk Management Exchang Bow Brook Place 46 Donovan Street Concord NH 03301-2624		change - Primex ³			
Type of Coverage	Effective Date	Expiration (hun/dd/y)	Dete	Limi	ts - NH Statutory Limits	May Apply, Ji Not:		
X General Liability (Occurrence Form)	7/1/2018	7/1/201		Each Occurrence		\$ 5,000,000		
Professional Liability (describe) Claims	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		General Aggrepate Fire Damage (Any one fire)		Damage (Any onc	\$ 5,000,000
— Marie	}				Exp (Any one porson)			
Automobile Liability Deductible Comp and Coll \$1,000 Any auto			,	(Eac)	nbined Single Limit Accident) regate			
Workers' Compensation & Employers' Liability	7/4 7704.0	7/1/201			Statulory	-		
Workers Compensation & Employers Classify	7/1/2018 7/1/2		שו	Each Accident		\$2,000,000		
	-			Disease - Each Employee		\$2,000,000		
	1	ļ		Dise	ease Policy Lymt			
Property (Special Risk includes Fire and Theft)	7/1/2018	18 7/1/2019		/2019 Blanket Limit, Replacement Cost (unless otherwise states		Deductible: \$1,000		
Description: Proof of Primex Member coverage only		<u> </u>		L				
CERTIFICATE HOLDER: Additional Covered Page	ty Loss	Payoo	Prlm	0x1 -	NH Public Risk Manag	oment Exchange		
			ву:	7	Paning Dimin			
State of New Hampshire			Date	: '1	1/19/2018 Idenver@r	ahpitriiux.org		
State of New Hampshire Department of Transportation 7 Hazen Or noord, NH 03302					Please direct inqui Primox ³ Claims/Covera 603-225-2841 pt 603-228-3833 (res lo: go Sorvices iono		