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*William Cass, P.E.  
Commissioner*

**THE STATE OF NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION**

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*David Rodrigue, P.E.  
Assistant Commissioner  
Andre Briere, Colonel, USAF (RET)  
Deputy Commissioner*

Bureau of Materials & Research  
November 7, 2024

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 Department of Transportation to amend a **SOLE SOURCE** Cooperative Project Agreement (CPA) with the University of New Hampshire Sponsored Programs Administration (Vendor #315187), Durham, New Hampshire, by extending the completion date from June 30, 2025, to June 30, 2026, effective upon Governor and Council approval. No additional funding is involved in this time extension. The original contract was approved by Governor and Council on June 14, 2023, Item #54.

**EXPLANATION**

The Department is collaborating with the University of New Hampshire (UNH) to conduct a cooperative research study, "Wildlife Vehicle Collisions (WVC) Data Gathering and Best Management Practices (BMPs) Part 2", to continue analysis of WVC data to identify locations for field study and to further identify potential locations for WVC mitigation efforts with BMPS documented for future use on New Hampshire transportation projects. On June 14, 2023, the original CPA was approved by Governor and Council (Item #54, copy of resolution attached). This requested action extends the completion date of the research study.

The primary objective of this research study is to analyze WVC data to identify locations for field study and to identify potential locations for WVC mitigation efforts for future use on New Hampshire transportation projects. A no-cost extension will allow additional time for the latest WVC data (i.e., from 2022 onwards) to be incorporated into the analysis, which will be critical for meeting the project objectives. The added WVC analysis will also support facilitation of the planned meeting with NHDOT and NH Fish & Game on workshoping a proposal to the federal Wildlife Crossing Pilot Program.

Authorization is requested to allow the Department to enter into this amended CPA with the 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. A copy of the fully executed amendment is 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,

A handwritten signature in black ink, appearing to read "William Cass".

William J. Cass, PE  
Commissioner

Attachments

**AMENDMENT #01 to  
COOPERATIVE PROJECT AGREEMENT**  
between the  
**STATE OF NEW HAMPSHIRE, Department of Transportation**  
and the  
**University of New Hampshire of the UNIVERSITY SYSTEM OF NEW HAMPSHIRE**

The Cooperative Project Agreement, approved by the State of New Hampshire Governor and Executive Council on 6/14/23, item # 54, for the Project titled "Wildlife Vehicle Collisions Data Gathering and Best Management Practices Part 2 (SPR Project No 42372P)," Campus Project Director, Remington Moll, is and all subsequent properly approved amendments are hereby modified by mutual consent of both parties for the reason(s) described below:

**Purpose of Amendment (Choose all applicable items):**

- Extend the Project Agreement and Project Period end date, at no additional cost to the State.
- Provide additional funding from the State for expansion of the Scope of Work under the Cooperative Project Agreement.
- Other:

**Therefore, the Cooperative Project Agreement is and/or its subsequent properly approved amendments are amended as follows (Complete only the applicable items):**

- Article A. is revised to replace the State Department name of \_\_\_\_\_ with \_\_\_\_\_ and/or USNH campus from \_\_\_\_\_ to \_\_\_\_\_.
- Article B. is revised to replace the Project End Date of 6/30/25 with the revised Project End Date of 6/30/26, and Exhibit A, article B is revised to replace the Project Period of **Governor and Council Approval – 6/30/25** with **Governor and Council Approval – 6/30/26**.
- Article C. is amended to expand Exhibit A by including the proposal titled, " \_\_\_\_\_," dated \_\_\_\_\_.
- Article D. is amended to change the State Project Administrator to \_\_\_\_\_ and/or the Campus Project Administrator to \_\_\_\_\_.
- Article E. is amended to change the State Project Director to \_\_\_\_\_ and/or the Campus Project Director to \_\_\_\_\_.
- Article F. is amended to add funds in the amount of \$ \_\_\_\_\_ and will read:  
Total State funds in the amount of \$ \_\_\_\_\_ have been allotted and are available for payment of allowable costs incurred under this Project Agreement. State will not reimburse Campus for costs exceeding the amount specified in this paragraph.
- Article F. is amended to change the cost share requirement and will read:  
Campus will cost-share \_\_\_\_\_ % of total costs during the amended term of this Project Agreement.
- Article F. is amended to change the source of Federal funds paid to Campus and will read:  
Federal funds paid to Campus under this Project Agreement as amended are from Grant/Contract/Cooperative Agreement No. \_\_\_\_\_ from \_\_\_\_\_ under CFDA# \_\_\_\_\_. Federal regulations required to be passed through to Campus as part of this Project Agreement, and in accordance with the Master Agreement for Cooperative Projects between the State of New

Hampshire and the University System of New Hampshire dated November 13, 2002, are attached to this document as revised Exhibit B, the content of which is incorporated herein as a part of this Project Agreement.

- Article G. is exercised to amend Article(s) of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, as follows:

Article is amended in its entirety to read as follows:

Article is amended in its entirety to read as follows:

- Article H. is amended such that:

- State has chosen not to take possession of equipment purchased under this Project Agreement.
- State has chosen to take possession of equipment purchased under this Project Agreement and will issue instructions for the disposition of such equipment within 90 days of the Project Agreement's end-date. Any expenses incurred by Campus in carrying out State's requested disposition will be fully reimbursed by State.

- Exhibit A is amended as attached.

- Exhibit B is amended as attached.

All other terms and conditions of the Cooperative Project Agreement remain unchanged.

This Amendment, all previous Amendments, the Cooperative Project Agreement, and the Master Agreement constitute the entire agreement between State and Campus regarding the Cooperative Project Agreement, and supersede and replace any previously existing arrangements, oral and written; further changes herein must be made by written amendment and executed for the parties by their authorized officials.

This Amendment and all obligations of the parties hereunder shall become effective on the date the Governor and Executive Council of the State of New Hampshire or other authorized officials approve this Amendment to the Cooperative Project Agreement.

IN WITNESS WHEREOF, the following parties agree to this Amendment #01 to the Cooperative Project Agreement.

By An Authorized Official of:

University of New Hampshire

Name: Dianne Hall

Title: Manager, Pre-Award Compliance

Signature and Date: Dianne Hall Digitally signed by Dianne Hall  
Date: 2024.11.09 11:21:27 -0500

By An Authorized Official of:

Name: William Oldenburg

Title: Director of Project Development

Signature and Date: William Oldenburg 11/21/24

By An Authorized Official of: the New Hampshire Office of the Attorney General

Name: Robert Pearce

Title: Attorney

Signature and Date: Robert Pearce, Nov. 22, 2024

By An Authorized Official of: the New Hampshire Governor & Executive Council

Name:

Title:

Signature and Date:



William Cass, P.E.  
Commissioner

**THE STATE OF NEW HAMPSHIRE**  
**DEPARTMENT OF TRANSPORTATION**

G&C #54  
Date 6/14/23

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David Rodrigue, P.E.  
Assistant Commissioner  
Andre Briere, Colonel, USAF (RET)  
Deputy Commissioner

Bureau of Materials & Research  
April 28, 2023

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

**REQUESTED ACTION**

Authorize the Department of Transportation to enter into a **SOLE SOURCE** Cooperative Project Agreement with the University of New Hampshire Sponsored Programs Administration (vendor 315187), Durham, New Hampshire, for a fee not to exceed \$179,296, for a cooperative evaluation of Wildlife Vehicle Collision data to identify potential locations for mitigation efforts with best management practices documented for future use on New Hampshire transportation projects effective upon Governor and Council approval through June 30, 2025. 100% Federal Funds.

Funds to support this request are available in the following account for FY 2023 and is contingent upon the availability and continued appropriation of funds in FY 2024 and FY 2025, with the ability to adjust encumbrances between State Fiscal Years through the Budget Office, if needed and justified.

	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>
04-96-96-962015-3036 SPR Research Funds			
046-500464 General Consultants Non-Benefit	\$70,000	\$70,000	\$39,296

**EXPLANATION**

The following research study will address an immediate Department need; is unique to New Hampshire's environment and conditions, thereby requiring substantial local experience and is directly aligned with a particular area of University expertise. In addition, the Principal Investigator has extensive and broad experience in wildlife ecology and wildlife activity monitoring that can readily be applied to the needs of this research project. As such, the proposed work does not lend itself to a selection process that includes private industry or out-of-state organizations, and it is in the Department's and the State's best interest to work directly with the University of New Hampshire.

This work is part of the Department's Statewide Planning and Research (SPR) program. The Department of Transportation and the University of New Hampshire (UNH) have a long-standing cooperative relationship in transportation research. This relationship has been mutually beneficial, culminating in savings to the State while enhancing work force development and maintaining New Hampshire's position on the leading edge of new technology. Research studies conducted by UNH for the Department have led to numerous innovations in

the highway and bridge industry, including improved pavement design, increased use of recycled materials, stormwater management evaluation, and rapid construction techniques.

Statewide-SPR 42372P, Wildlife Vehicle Collisions Data Gathering and Best Management Practices (BMPs)  
Part 2

The Department is collaborating with UNH to conduct a cooperative research study, "Wildlife Vehicle Collisions (WVC) Data Gathering and BMPs Part 2". Part 1 on this same topic was performed by Plymouth State University (SPR Project 42372I) under the direction of Dr. Amy Villamagna. The project completed extensive review of sources of available data on WVCs in New Hampshire and developed a mapping interface of the findings. This second phase will continue this work under the direction of Dr. Rem Moll at UNH. For a total fee not to exceed \$179,296 effective upon Governor and Council approval through June 30, 2025, the primary objective of this study is to continue analysis of WVC data to identify locations for field study and to further identify potential locations for WVC mitigation efforts with BMPS documented for future use on New Hampshire transportation projects.

The funding is 80% Federal Funds with 20% state match. Turnpike toll credit is being used for the match requirement, effectively using 100% Federal Funds. The Capital Budget Overview Committee approved the use of Turnpike Toll Credits on September 13, 2021, item #21-013.

This Agreement has been approved by the Attorney General as to form and execution. Copies of the fully-executed Agreement 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 be given to enter into these sole-source Agreement for consulting services as outlined above.

Sincerely,



William Cass, PE  
Commissioner

Attachments

**COOPERATIVE PROJECT AGREEMENT**

between the

**STATE OF NEW HAMPSHIRE, Department of Transportation  
and the**

**University of New Hampshire of the UNIVERSITY SYSTEM OF NEW HAMPSHIRE**

- A. This Cooperative Project Agreement (hereinafter "Project Agreement") is entered into by the State of New Hampshire, Department of Transportation, (hereinafter "State"), and the University System of New Hampshire, acting through University of New Hampshire, (hereinafter "Campus"), for the purpose of undertaking a project of mutual interest. This Cooperative Project shall be carried out under the terms and conditions of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, except as may be modified herein.
- B. This Project Agreement and all obligations of the parties hereunder shall become effective on the date the Governor and Executive Council of the State of New Hampshire approve this Project Agreement ("Effective date") and shall end on 6/30/25. If the provision of services by Campus precedes the Effective date, all services performed by Campus shall be performed at the sole risk of Campus and in the event that this Project Agreement does not become effective, State shall be under no obligation to pay Campus for costs incurred or services performed; however, if this Project Agreement becomes effective, all costs incurred prior to the Effective date that would otherwise be allowable shall be paid under the terms of this Project Agreement.
- C. The work to be performed under the terms of this Project Agreement is described in the proposal identified below and attached to this document as Exhibit A, the content of which is incorporated herein as a part of this Project Agreement.

**Project Title: Wildlife Vehicle Collisions Data Gathering and BMPs Part 2 (SPR Project No 42372P)**

- D. The Following Individuals are designated as Project Administrators. These Project Administrators shall be responsible for the business aspects of this Project Agreement and all invoices, payments, project amendments and related correspondence shall be directed to the individuals so designated.

**State Project Administrator**

**Name:** Deirdre Nash  
**Address:** NHDOT Bureau of M&R  
 PO Box 483  
 5 Hazen Drive  
 Concord, NH 03302-0483  
**Phone:** 603-271-1659

**Campus Project Administrator**

**Name:** Jeff Burgess  
**Address:** University of New Hampshire  
 Sponsored Programs Administration  
 51 College Rd. Rm 116  
 Durham, NH 03824  
**Phone:** 603-717-1800

- E. The Following Individuals are designated as Project Directors. These Project Directors shall be responsible for the technical leadership and conduct of the project. All progress reports, completion reports and related correspondence shall be directed to the individuals so designated.

**State Project Director**

**Name:** Rebecca Martin  
**Address:** NH DOT Bureau of Environment  
 PO Box 483  
 7 Hazen Drive  
 Concord, NH 03302-0483  
**Phone:** 603-271-6781

**Campus Project Director**

**Name:** Remington Moll  
**Address:** University of New Hampshire  
 Natural Resources  
 James Hall Rm 266  
 Durham, NH 03824  
**Phone:** 603-862-3054

F. Total State funds in the amount of \$ 179,296 have been allotted and are available for payment of allowable costs incurred under this Project Agreement. State will not reimburse Campus for costs exceeding the amount specified in this paragraph.

Check if applicable

Campus will cost-share \_\_\_\_\_ % of total costs during the term of this Project Agreement.

Federal funds paid to Campus under this Project Agreement are from Grant/Contract/Cooperative Agreement No. N/A from **Federal Highway Administration** under CFDA# 20.205. Federal regulations required to be passed through to Campus as part of this Project Agreement, and in accordance with the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, are attached to this document as Exhibit B, the content of which is incorporated herein as a part of this Project Agreement.

G. Check if applicable

Article(s) \_\_\_\_\_ of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002 is/are hereby amended to read:

H.  State has chosen **not to take** possession of equipment purchased under this Project Agreement.  
 State has chosen **to take** possession of equipment purchased under this Project Agreement and will issue instructions for the disposition of such equipment within 90 days of the Project Agreement's end-date. Any expenses incurred by Campus in carrying out State's requested disposition will be fully reimbursed by State.

This Project Agreement and the Master Agreement constitute the entire agreement between State and Campus regarding this Cooperative Project, and supersede and replace any previously existing arrangements, oral or written; all changes herein must be made by written amendment and executed for the parties by their authorized officials.

IN WITNESS WHEREOF, the University System of New Hampshire, acting through the **University of New Hampshire** and the State of New Hampshire, **Department of Transportation** have executed this Project Agreement.

**By An Authorized Official of:**

**University of New Hampshire**

Name: Karen M. Jensen

Title:

Director, Pre-Award Compliance

Signature and Date: Karen Jensen

Digitally signed by Karen Jensen  
Date: 2023.04.26  
16:00:34 -04'00'

**By An Authorized Official of:**

**Department of Transportation**

Name: William J. Oldenburg

Title:

Director of Project Development

Signature and Date: [Signature] 5/12/23

**By An Authorized Official of: the New Hampshire Office of the Attorney General**

Name: EMILY GOERING

Title: AAG

Signature and Date:

Emily C. Goering 5/18/2023

**By An Authorized Official of: the New Hampshire Governor & Executive Council**

Name: [Signature]

Title:

Signature and Date: [Signature] JUN 14 2023

**SECRETARY OF STATE**

## EXHIBIT A

A. **Project Title:** Wildlife Vehicle Collisions Data Gathering and Best Management Practices Part 2 (SPR Project No 42372P)

B. **Project Period:** Governor and Council Approval through 6/30/25

D. **Objectives:** We envision this project focusing on five objectives:

1) Continue analysis of wildlife-vehicle collision (WVC) data to identify top locations for field study.

2) Monitor a subset of documented WVC problem areas (obj 1) using an assortment of field methods

3) Analyze combined WVC and field-collected data to identify potential locations for WVC mitigation efforts and federal funding proposals

4) Develop a Wildlife Crossing Best Management Practices document for future New Hampshire transportation projects

5) Facilitate a meeting to include New Hampshire Department of Transportation (NHDOT) personnel from Operations and Project Development and the New Hampshire Fish & Game Department (NHFG) to workshop a project proposal for the federal Wildlife Crossing Pilot Program or other similar programs.

6) Update the Strory Map from Part I of the project to include results of Part 2

E. **Scope of Work:** We describe the scope of work as it relates to each aforementioned objective above.

1) Continue analysis of wildlife-vehicle collision (WVC) data to identify top locations for field study. WVC collision metrics, including total WVCs and WVCs per mile for 2015-2019, 2010-2014, and if possible, 2020-2022, will be used to identify WVC "hotspots". Starting with roads that experience the highest 5% of WVCs, we will identify a subset of locations that include those near predicted wildlife corridors, existing stream crossing infrastructure, and/or NHDOT 10 year plan projects. Additional information will be also considered in determining hotspot locations, such as incidental roadkill data and predicted wildlife habitat map products produced by NHFG and UNH (see #3 below for details). The result will be a list of ~20 locations that will be evaluated for field monitoring (step 2) and future proposals for federal infrastructure funding. These locations will be reviewed with the Technical Advisory Group and submitted to the Bureau of Bridge Maintenance and Bureau of Highway Maintenance for approval. One of the selection criteria for the locations will be the presence of safe areas for parking and access to the location.

2) Monitor a subset of documented WVC problem areas using an assortment of field methods. To ensure accuracy, WVC hotspots identified in Objective 1 will be groundtruthed using multiple field methods. Combining field data with collision data helps ensure the robustness and accuracy of predicted collision zones, as either data source tends to result in bias when used in isolation

(Gunson et al. 2011, Neumann et al. 2012). Given that some field methods are more effective at monitoring certain wildlife species than others (Gompper et al. 2006), multiple field methods will be combined to monitor the presence and activity of wildlife along identified hotspots (Moll et al. 2023). Depending on local landscape context and land access permissions, we will consider several field methods, which will include but not be limited to: wildlife cameras (Barrueto et al. 2014), roadside mortality surveys (Taylor and Goldingay 2004), and scent/track stations (Ray and Zielinski 2008). Together, the data from the field methods will indicate the relative use of a given road segment by multiple wildlife species, as well as the use of existing wildlife crossing points (e.g., a culvert) by wildlife, where applicable. Any cameras that are mounted to NHDOT infrastructure will be mounted with methods approved by the Bureau of Bridge Maintenance and the Bureau of Highway Maintenance as applicable. When the cameras are removed from the bridge, any holes/damage will be filled with a material recommended or approved by the Bureau of Bridge Maintenance.

3) Analyze combined WVC and field-collected data to identify locations for wildlife-vehicle collision mitigation efforts and federal funding proposals. The road segments noted above will be ranked in order of their WVC potential as well as their amenability to mitigation efforts. To arrive at this ranking, we will consider multiple data sources, including the predictions of WVC hotspots, the field data from Objective 2, and two sources of spatial predictions regarding wildlife habitat connectivity. The first habitat connectivity data source will be connectivity maps created and maintained by K. Callahan of NHFG, including the NH Wildlife Corridors map and the NH Wildlife Connectivity Model. The second data source will be spatial predictions of wildlife occurrence that will be produced as part of active cooperative projects between UNH and NHFG. Guided by insight from these analyses, we will then investigate the 23 USC 171: Wildlife crossings pilot program and make recommendations to the Technical Advisory Group regarding best opportunities for grant applications for mitigation efforts.

4) Develop a Wildlife Crossing Best Management Practices (BMPs) document for future New Hampshire transportation projects. We will use the literature synthesis and StoryMap developed in Phase I of this project (Wildlife Vehicle Collisions Data Gathering and BMPs (SPR Project No 423721)) as a springboard for creating a BMPs guidance document. This document will contain information relevant to terrestrial vertebrate taxa and include the following: When/where is it most important to consider wildlife passage; Legal requirements for providing passage; How habitat and Natural Heritage Bureau records inform planning; How the presence of predicted wildlife corridors and habitat strongholds inform planning; Taxa- or species-specific guidelines (where appropriate); and a collection of design specifications for relevant mitigation strategies. In addition, this document will provide guidelines for monitoring efforts to evaluate post-mitigation effectiveness. While composing this document, we will request input from relevant agency experts and working groups, including but not limited to the multi-agency Transportation and Wildlife Working Group, the NHDOT, and NHFG and will include examples from other northeast states. The BMP document will be as engaging and user-friendly as possible and will include features such as a linked table of contents for navigation as well as numerous graphics and images to accompany text and clarify design practices. If possible, the Wildlife Crossing BMPs will be linked as another tab in the Part I Story Map.

5) Facilitate a meeting to include NHDOT personnel from Operations and Project Development and NH Fish and Game Department to workshop a project proposal. We will monitor the release details of the federal 23 USC 171: Wildlife crossings pilot program. Depending upon release date, we may facilitate an initial meeting in fall 2023 to identify potential WVC mitigation locations to proposed for the program. Project partners from NHDOT and NHFG will be invited to participate

as appropriate. Following the completion of field data collection and analysis, we will plan a full workshop in fall of 2024 for an anticipated grant proposal submission to the federal program, informed by the results of this study. We will invite relevant participants from NHDOT, NHFG, FHWA and other entities, as appropriate and in coordination with the TAG.

6) Include the results of the study as another tab on the NH Wildlife Vehicle Collisions Story Map that was developed under Part I of this study. Include photos/videos from the wildlife cameras and photos or videos from other methods selected for the field study (tracks or roadkill).  
Supporting Literature

- Barrueto, M., A. T. Ford, and A. P. Cleverger. 2014. Anthropogenic effects on activity patterns of wildlife at crossing structures. *Ecosphere* 5:27.
- Gompper, M. E., R. W. Kays, J. C. Ray, S. D. LaPoint, D. A. Bogan, and J. R. Cryan. 2006. A comparison of noninvasive techniques to survey carnivore communities in northeastern North America. *Wildlife Society Bulletin* 34:1142–1151.
- Gunson, K. E., G. Mountrakis, and L. J. Quackenbush. 2011. Spatial wildlife-vehicle collision models: A review of current work and its application to transportation mitigation projects. *Journal of Environmental Management* 92:1074–1082. Elsevier Ltd. <<http://dx.doi.org/10.1016/j.jenvman.2010.11.027>>.
- Moll, R. J., A. R. Butler, M. K. P. Poisson, P. Tate, D. Bergeron, and M. Ellingwood. 2023. Monitoring mesocarnivores with tracks and technology using multi-method monitoring. *Journal of Wildlife Management* (In press).
- Neumann, W., G. Ericsson, H. Dettki, N. Bunnefeld, N. S. Keuler, D. P. Helmers, and V. C. Radeloff. 2012. Difference in spatiotemporal patterns of wildlife road-crossings and wildlife-vehicle collisions. *Biological Conservation* 145:70–78. Elsevier Ltd. <<http://dx.doi.org/10.1016/j.biocon.2011.10.011>>.
- Ray, J. C., and W. J. Zielinski. 2008. Track stations. Pages 75–109 in R. A. Long, P. MacKay, W. J. Zielinski, and J. C. Ray, editors. *Noninvasive Survey Methods for Carnivores 2*. Island Press, Washington D.C., USA.
- Taylor, B. D., and R. I. Goldingay. 2004. Wildlife road-kills on three major roads in north-eastern New South Wales. *Wildlife Research* 31:83–91.

**E. Deliverables Schedule: Project Period (May 2023-June 2025)**

Quarterly summary reports will be submitted at the end of each three-month calendar year. The research group will meet with the Technical Advisory Group (TAG) quarterly or at major milestones.

**May-Aug 2023**

- Identify and rank hotspot locations for field monitoring (A. Villamagna and undergrad research assistant)
- Deploy field methods (R. Moll, undergraduate and graduate research assistants)
- Update StoryMap to document and share site prioritization approaches (Villamagna)

**Sep-Dec 2023**

- Continued field data collection (undergraduate and graduate research assistants)
- Prepare ancillary data (wildlife habitat maps) to inform final mitigation potential analysis (R. Moll and graduate research assistant)
- Update StoryMap to document and share field monitoring approaches (A. Villamagna and undergrad research assistant)

- Perform initial mitigation potential analysis and facilitate meeting of NHDOT and NHFG project partners in preparation for grant submission (R. Moll, A. Villamagna, and graduate research assistant) \*Contingent upon release of the 23 USC 171: Wildlife crossings pilot program

**Jan-Mar 2024**

- Continued analysis of combined wildlife-vehicle collision, field, and habitat mapping data to identify mitigation potential (graduate research assistant)
- Development of Best Management Practices document (graduate research assistant)

**Apr-Aug 2024**

- Collect field data as required to inform analyses (graduate research assistant)
- Complete Best Management Practices document (R. Moll, A. Villamagna, and graduate research assistant)

**Sep-Dec 2024**

- Perform mitigation potential analysis and facilitate workshop with NHDOT and NHFG project partners in preparation for grant submission to 23 USC 171: Wildlife crossings pilot program (R. Moll, A. Villamagna, and graduate research assistant)
- Present results at regional or national conference (graduate research assistant)

**Jan-June 2025**

- Prepare final report and add study results to Phase I StoryMap (R. Moll, A. Villamagna, and graduate research assistant)
- Prepare manuscript for peer review (R. Moll, A. Villamagna, and graduate research assistant)

Note: We will prepare in-progress reports and engage in meetings with technical advisory group as advised.

**F. Budget and Invoicing Instructions:**

Budget Items	State Funding	Cost Sharing	Total
1. Salaries & Wages	80,415	0	80,415
2. Employee Fringe Benefits	2,663	0	2,663
3. Travel	7,000	0	7,000
4. Supplies and Services	55,066	0	55,066
5. Equipment	0	0	0
6. Facilities & Admin Costs	34,152	0	34,152
Subtotals	179,296	0	179,296
In Kind Contribution	0	0	
Total Project Costs:	179,296		

Campus will submit invoices to State on regular Campus invoice forms no more frequently than monthly and no less frequently than quarterly. Invoices will be based on actual project expenses incurred during the invoicing period, and shall show current and cumulative expenses by major cost categories. State will pay Campus within 30 days of receipt of each invoice. Campus will submit its final invoice not later than 60 days after the Project Period end date. State may withhold 10% of funds until receipt of final report from UNH. State will provide final payment within 30 days of receipt of the accepted final report.

## EXHIBIT B

This Project Agreement is funded under a Grant/Contract/Cooperative Agreement to State from the Federal sponsor specified in Project Agreement article F. All applicable requirements, regulations, provisions, terms and conditions of this Federal Grant/Contract/Cooperative Agreement are hereby adopted in full force and effect to the relationship between State and Campus, except that wherever such requirements, regulations, provisions and terms and conditions differ for INSTITUTIONS OF HIGHER EDUCATION, the appropriate requirements should be substituted (e.g., OMB Circulars A-21 and A-110, rather than OMB Circulars A-87 and A-102). References to Contractor or Recipient in the Federal language will be taken to mean Campus; references to the Government or Federal Awarding Agency will be taken to mean Government/Federal Awarding Agency or State or both, as appropriate.

Special Federal provisions are listed here:  None or  Uniform Guidance issued by the Office of Management and Budget (OMB) in lieu of Circulars listed in paragraph above .