

## MEMORANDUM OF UNDERSTANDING

### Contract #000000000000000000043406

This Memorandum of Understanding (“Memorandum”) is entered into by and between the Indiana Management Performance Hub and Indiana Utility Regulatory Commission. In consideration of those mutual undertakings, the parties agree as follows:

#### I. RECITALS

**Whereas**, the IURC shall administer the Indiana Underground Plant Protection Account (“UPPA”) established by Ind. Code § 8-1-26-24;

**Whereas**, the UPPA provides funding for programs established and administered by the IURC for public awareness programs concerning underground plant protection; training and educational programs for contractors, excavators, locators, operators, and other persons involved in underground plant protection; and incentive programs for contractors, excavators, locators, operators, and other persons involved in underground plant protection to reduce the number of violations of the Indiana 811 Law, Ind. Code ch. 8-1-26;

**Whereas**, MPH partners with state agencies, leveraging data to make better-informed decisions and to facilitate improved outcomes for Hoosiers;

**Whereas**, the IURC would like to gain greater insight into Indiana underground facility damage data and, as a result, direct UPPA funds in a more targeted way;

**Whereas**, the parties wish to memorialize the associated fiscal responsibilities and, through this MOU, document costs associated with the project; and

**Whereas**, the previous memorandum of understanding between the parties has expired and this MOU seeks to continue the commitment to the prior obligations with an updated timeline for completion.

#### II. AGREEMENT

Accordingly, the parties agree as follows:

**DUTIES OF MPH.** The duties of MPH are set forth in Exhibit 1, attached hereto and incorporated fully herein.

#### **DUTIES OF IURC.**

1. IURC shall provide executive leadership and necessary direction regarding the project.
2. IURC will compensate MPH in accordance with the fees set forth in Exhibit 1. Total remuneration under this MOU shall not exceed \$23,285.00.

#### III. FUNDING

State Budget Agency Centralized Accounting will transfer by general ledger journal allocation from IURC to MPH the amount of \$23,285.00, which the parties agree to be an amount sufficient to fulfill the agreement made by this MOU. Details are outlined in Exhibit 1, Section 5, Project Cost.

No additional funding mechanism or agreement is contemplated or reached by this MOU.

Agency: 00060  
Fund: 17055

Program: 10400  
Dept.: 595000

#### IV. TERM AND FUNDING CANCELLATION

Upon approval of the parties and the State Budget Agency, this MOU shall be effective on March 31, 2020 and shall expire on August 31, 2020.

When the Director of the State Budget Agency makes a written determination that funds are not appropriated or otherwise available to support continuation of performance of this MOU, the MOU shall be cancelled. A determination by the Director of the State Budget Agency that funds are not appropriated or otherwise available to support continuation of performance shall be final and conclusive.

#### V. RECORDS AND INSPECTIONS

MPH shall maintain records related to this MOU. Either party shall, upon request of the other, provide all available records related to the administration of funds under this MOU.

#### VI. CONTACT INFORMATION

Notices to the parties shall be sent to the following individuals unless otherwise specifically advised.

##### Indiana Utility Regulatory Commission

*For legal notices:*

Beth E. Heline  
General Counsel  
Indiana Utility Regulatory Commission  
101 West Washington Street, Suite 1500E  
Indianapolis, Indiana 46204  
[beheline@urc.in.gov](mailto:beheline@urc.in.gov)

*For payment notices and invoices:*

Mary Becerra  
Secretary of the Commission  
Indiana Utility Regulatory Commission  
101 West Washington Street, Suite 1500E  
Indianapolis, Indiana 46204

##### Indiana Management Performance Hub

Jessica Alanis  
Operations Administrator  
Indiana Management Performance Hub  
105 Statehouse  
Indianapolis, Indiana 46204  
[JAlanis@mph.in.gov](mailto:JAlanis@mph.in.gov)

#### VII. AMENDMENTS

1. Upon agreement of the parties, the terms of this MOU may be extended and, if necessary, amended to align with a successor document to Exhibit 1.
2. No alteration or variation of the terms of this MOU shall be valid unless made in writing and signed by the parties hereto. No oral understanding or agreement not incorporated herein shall be binding on any of the parties.

**In Witness Whereof**, Indiana Utility Regulatory Commission and the Indiana Management Performance Hub have, through their duly authorized representatives, entered into this Memorandum. The parties, having read and understood the foregoing terms of this Memorandum, do by their respective signatures dated below agree to the terms thereof.

Indiana Utility Regulatory Commission

By: *James Frederic Huston - 00200*  
02320387E0D1414...

Title: Chairman

Date: 6/16/2020 | 12:16 EDT

Indiana Management Performance Hub

By: *Joshua Martin - 00060*  
9E60D4E33EFC418...

Title: Interim Chief Data Officer

Date: 6/16/2020 | 12:25 EDT

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Electronically Approved by: State Budget Agency  By: Zachary Q. Jackson, Director (for)	

**Exhibit 1**

## 1 Project Overview

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### 1.1 Description

The Indiana Utility Regulatory Commission (IURC) is tasked with administering the Indiana Underground Plant Protection Account (UPPA). This account is established by Ind. Code § 8-1-26-24 and is comprised of monetary penalties recommended by the Indiana Underground Plant Protection Advisory Committee and approved by the IURC. Penalties are issued to excavators and operators that violate Ind. Code ch. 8-1-26, the Indiana 811 Law.<sup>1</sup>

The IURC is statutorily obligated to administer the account. This includes establishing and administering the following types of programs:

- (1) Public awareness programs concerning underground plant protection.
- (2) Training and educational programs for contractors, excavators, locators, operators, and other persons involved in underground plant protection.
- (3) Incentive programs for contractors, excavators, locators, operators, and other persons involved in underground plant protection to reduce the number of violations of this chapter.

In addition to its UPPA obligations, the IURC through its Pipeline Safety Division investigates alleged violations of the Indiana 811 Law. Ind. Code § 8-1-26-23(g). Staff maintains a database of case information that includes numerous data points including, but not limited to the following:

- Operator contact information
- Excavator contact information
- Excavator type, such as contractor, municipality, and occupant
- Information related to the damage including the date, address, and city where the damage occurred
- Information related to the work that was being performed when the damage occurred, including the work performed and excavation type
- The mailing dates for communications sent and received by the IURC
- The statutory citation for the violation
- The recommended penalty
- Whether the penalty has satisfied

<sup>1</sup> For clarity, the following will be used:

Indiana 811 Law	Indiana Code chapter 8-1-26
Indiana 811	The association defined in Ind. Code § 8-1-26-3 that manages underground facility locate requests (i.e. dig tickets)
811	The act of contacting Indiana 811 to secure a dig ticket

## 1.2 Business Need and Objective

The IURC reached out to the Management Performance Hub (MPH) to determine how MPH can assist the IURC in using available data on programs IURC administers. Specifically, the IURC is interested in better understanding Indiana underground facility damage data. The goal is to be able to direct UPPA funds in a more targeted way.

The *objective* of this project is to develop a dashboard that provides geographic and historical information relating to 811 outreach and utility damage for the IURC to better manage their programs and ultimately help reduce the number of damage occurrences. This stage of the project will utilize data from the IURC. Further future expansion will potentially include data from operators, Ind.811, and any other sources related to utility damage.

## 1.3 Partnering Agencies and Key Stakeholders

The partner agencies and their key stakeholder(s) are listed in the table below:

Agency	Key Stakeholder(s)	Role	Title
IURC	Jim Huston	Agency Executive	IURC Chairman
MPH	Darshan Shah	Agency Executive	Chief Data Officer
IURC	Darby Miller	Agency Sponsor	Underground Plant Protection Program Manager
IURC	Ryan Hadley	Subject Matter Expert	Deputy Director of Legislative & External Affairs
IURC	Stephanie Hodgins	Subject Matter Expert	Deputy Director of Communications & Media
IURC	Mike Neal	Subject Matter Expert	Pipeline Engineer
IURC	Kelsey Klingler	Subject Matter Expert (*Main Data POC*)	Assistant Program Manager, Pipeline Safety
MPH	Alex Ibragic	Project Management	Director of Engagement & Analytics
MPH	Lora Walker	Project Management	Project Manager
MPH	Ellie Gibbs	Business Intelligence	Tableau Developer
MPH	Santhosh Pinninti	Data Management	Data Engineer

## 2 Project Assumptions, Risks, and Issues

### 2.1 Assumptions

- Project coordination and management will be provided by MPH
- Technical support and development will be provided jointly by MPH and IURC

- Project Subject Matter Experts (SMEs) from MPH will be available to provide expertise regarding data and project requirements
- The partnering agencies are the owners and custodians of their data and are responsible for its quality and appropriate usage
- Any user stories, business use cases, and all other project requirements will be provided by the partnering agencies and stakeholders outlined in Section 3.1

## 2.2 Potential Risks and Issues

- Poor source quality may impede the progress of dashboard development
- Information may not be made available in a timely or usable manner (e.g., non-agency data)
- Decisions made may be based upon incomplete or inaccurate data
- Inconsistent data formatting could result in issues with the final deliverable and will take time to correct
- Data from external partners may be difficult to obtain or may require additional steps to ensure security (i.e. data sharing agreement)

## 3 Project Details

### 3.1 User Stories

The table below provides a list of user stories gathered from the IURC Underground Plant Protection Program Manager.

#### 3.1.1 Phase 1

I want to <function>	So that <outcome >	Data Needed
I want to see where we are supporting the 811 initiative through paid media opportunities	So that we can compare it to the number of damages with excavators to identify the effectiveness of the media buys/advertisements.	Damage location, stations running ads and their serviceable area, date damage occurred, dates ads are run.  Data will be the coverage areas from IURC vendors, such as: <ul style="list-style-type: none"> <li>• Indiana Broadcasters Association (IBA)</li> <li>• La Voz de Indiana</li> <li>• Electric Consumer Magazine</li> </ul>
I want to see a map of Indiana damages on a sliding time frame	So that we can visualize damages that occur across the state and have trending data.	Damage location and date from the IURC.

IURC Underground Facility Damage Study



I want to see damages by method of excavation and excavator, equipment used in a searchable field	So we can identify trends in the use of mechanized or non-mechanized equipment that result in damages.	Damage data from the IURC.
I want to see damage violations occurring by in-state vs out-of-state companies	So that we can identify which groups should be educated on the Ind. 811 Law.	Damage location, damage date, statutory violation, excavator name, excavator address (NOTE – all specifically identifying information (i.e., excavator name and address) must be kept internal and not public facing).
I want to see a damage map of Indiana by party that had an Ind. 811 Law violation (i.e., operator vs excavator)  Public face – no specific names  Internal face – specific names	So that we can identify parties by industry in correlation to damage location and frequency.	Damage location, damage date, statutory violations, operator and excavator name (operator and excavator names removed from public facing interface).
I want to see damages by ticket vs no ticket	So we can determine if there is a geographic component to people working without contacting 811.	Damage location, statutory violation (specifically for a no ticket violation of Ind. Code § 8-1-26-16(h)).

3.1.2 Phase 2

I want to <function>	So that <outcome >	Data Needed
I want to see where people are using 811now/online ticket requests and where people are calling 811 for locate tickets	So that we can focus online 811 service marketing to areas of Indiana using the call center more than average.	Location (zip code minimal) of call/online request and what system the user used.  (Ind. 811 has this data)
I want to see a heat map of damage data compared against 811 contact volume/location	So that we can find outlier areas that have greater damage to contact ratios and focus marketing to those areas.	Damage location and date data, contact date and location data.  (Need Ind. 811 ticket information)

<p>I want to see damages by demographic maintained by the Indiana Energy Association (IEA)</p>	<p>So we can focus our marketing and safety outreach efforts to specific demographic groups most likely to cause damages.</p>	<p>Demographic data from the operators (utilities) collected when investigating each damage. (Need IEA information)</p>
<p>I want to see a heat map of ticket requests across the state</p>	<p>So we can see ticket request volume occurring over time across the state.</p>	<p>Work location data (X/Y coordinates) from Ind. 811 and the IURC. (need Ind. 811 data)</p>



### 3.2 Identify Scope and Deliverables

#### Phase 1

The start date for Phase 1 of this project is September 5, 2019.

The scope for Phase 1 includes the following deliverables:

- Data Discovery and Acquisition
  - Review structure of IURC data to ensure that it is in a table(s) or view(s) that is easy for Tableau to use
  - Identify any new fields that would need to be created within the table(s) or view(s)
  - Review IBA data and determine structure, location, and format
  - Provide access to the table(s) or view(s) to MPH team
  - Schedule refresh of the data
  - Create data source (if necessary)
- Interactive Map/Dashboard
  - Geographic representation of where and when incidents are occurring
  - Geographic representation of marketing data
  - Search/filter features for incident map/marketing data
    - Excavator or operator
    - Type of work
    - Type of violation
    - Party with violation
    - Method of excavation
    - Company location (in-state or out-of-state)
    - Ticket submitted
    - Region
    - Station location
    - Station serviceable area
    - Coverage areas of La Voz de Indiana and Electric Consumer Magazine
  - Tooltips would provide the variables based on incident location or ticket submission
  - Two dashboards may be required, one that is public facing and one that is for IURC internal use that has specific information

The anticipated completion date for Phase 1 is October 15, 2019.

#### Phase 2

The anticipated start date for Phase 2 of this project is October 1, 2019.

This phase is dependent upon the cooperation of external partners, as well as the structure of data and the ability to connect it to the existing internal data from IURC. Data from the IURC will primarily come from its Microsoft CRM database. It is unclear at this time which data management software external partners use. MPH will attempt to connect the external data to the IURC's data. If MPH cannot connect the data through its more routine processes, the parties agree to explore alternatives and understand that the result may be the termination of this MOU or amending it to add additional costs.

The scope for Phase 2 includes the following deliverables:

- Data acquisition and discovery
  - Determine storage location and frequency of 811 and IEA data
  - Establish connections to the 811 and IEA data
  - Create regions
  - Create data source
- Linkage
  - Join the existing IURC and IBA data with the 811 and IEA data
- Data Visualization
  - Geographic representation of marketing data
  - Geographic representation of calls
  - Search/filter features for 811 map
    - Location of call/request
    - Call information similar to the IURC data
    - Damage locations where there was/was not an 811 call

Other Requirements (All Phases)

- Tooltips would provide the variables based on incident location or ticket submission
- Two dashboards may be required, one that is public facing and one that is for IURC internal use that has specific information

The anticipated completion date for Phases 2 is December 31, 2019.

### 3.3 Project Timeline

	JUN 19	JUL 19	AUG 19	SEP 19	OCT 19	NOV 19	DEC 19	JAN 20
Requirements Gathering								
Phase 1					Phase 1 UAT			
Phase 2							Phase 2 UAT	
Project Close-out								

The above timeline may be altered by the assumptions, risks, and issues identified in Section 2, Project Assumptions, Risks, and Issues. Delays may include missing or incomplete data, additional data discovery once the project has begun, changes in scope by the stakeholders, and lack of participation by external partners, etc.

## 4 Communication Plan

The table below establishes project meetings, those required to attend and meeting frequency.

Last Saved by:

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Last Updated on: 10/1/2019

Meeting	Frequency	Attendees	Location	Owner
Data Discovery and Development	Weekly (1 hr)	Santosh Pinninti Alex Ibragic Kelsey Klingler Ryan Hadley Lora Walker	MPH	Alex Ibragic
Dashboard Development	Weekly (1 hr) Once Data Discovery and Development are complete	Alex Ibragic Ellie Gibbs Stephanie Hodgkin Darby Miller Lora Walker	MPH	Alex Ibragic
Financial Update	Monthly	Ryan Hadley Darby Miller Alex Ibragic Lora Walker	Email	Lora Walker
Roadblock/Challenges	When needed	All	Email	Alex Ibragic
Project Updates	Bi-weekly (30-45min)	All	IURC	Lora Walker
Project Close-Out	End of Project Meeting and Email	Darby Miller Ryan Hadley Stephanie Hodgkin Alex Ibragic Lora Walker Ashley Hungate	IURC	Alex Ibragic

## 5 Project Cost

The UPPA, administered by the IURC, is able to pay an amount agreed upon by MPH and key stakeholders. This amount will require approval by the IURC's internal Underground Plant Protection Account Fund Oversight Committee.

Based on the requirements provided by IURC, MPH estimates that the cost to complete Phase 1 of this project will be \$23,285. Detailed breakdown of this cost is provided in the table below. Phase 2 will require additional scoping to determine cost. This cost estimate will be included in an amendment to this project charter at a later date. An addendum will also provide the approval from IURC for funding.

Resource	Rate	Required Hours	Total Cost
Data Engineer	\$81.00	160	\$12,960
Tableau Developer	\$51.30	160	\$8,208
Contingency (10%)			\$2,117
<b>Total</b>		<b>320</b>	<b>\$23,285</b>

Billing will be based on the successful completion of deliverables. MPH will provide monthly project actuals to IURC.

## 6 Value Proposition

This section is intended to show the value of this project by the requesting agency/organization.

Below is the value proposition for the IURC Interactive Map project:

Value			
Direct Financial Return	Indirect Financial Return	Project Execution Cost Savings	Potential Value
\$16,993	\$0	\$75,000	\$591,405
<p>IURC estimates that this project will save a total of 420 hours annually. The IURC would need to hire an additional staff person or a long-term temp for the 320 hours of work. That person would also need ~ 100 hours to understand state systems, the IURC's needs, and limitations with the IT architecture and security within the State.</p> <p>At an hourly rate of \$40.46 (benefits included) this project will save IURC \$16,993 per year.</p>		<p>Bidding out a project like this would require significant effort on the part of IURC. A project similar to this one could potentially start at \$75,000.</p>	<p>Increasing education and training opportunities should decrease damages. The average cost per gas damage (nationally per the Common Ground Alliance) is \$5,914.05. Assuming a reduction of 100 damages per year because of better/more accurate outreach, consumers/rate payers would save approximately \$591,405 per year.</p>

## 7 Approvals

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Name / Title	Signature	Date
Darshan Shah <i>MPH Chief Data Officer</i>		9/26/19
Jim Huston <i>IURC Chairman</i>		10/4/19