# **SCOPE OF WORK:**



# PRODUCT STRATEGY AND TECHNOLOGY ARCHITECTURE CONSULTING

October 2019

### **ABOUT THE OPEN MOBILITY FOUNDATION (OMF)**

We are an open-source software foundation with a mission to transform the way cities manage transportation in the modern era using well-designed, open-source data standards and software. We operate as a public-private partnership that brings together cities, mobility companies, and software vendors to co-create technology that facilitates digital-savvy approaches to regulation, scalable deployment of new mobility services, and the management of public space for the public good.

The OMF <u>was launched</u> in June 2019 to govern the Mobility Data Specification (MDS) and develop new standards and technology that help cities manage the public right-of-way in the digital age. MDS was originally created by the Los Angeles Department of Transportation and was quickly adopted by cities around the world to manage micromobility deployments. The City of Los Angeles is in the process of transferring the MDS codebase to OMF under an open-source license. OMF will provide ongoing, multi-stakeholder governance for MDS and will support work in adjacent areas of mobility technology.

#### PROJECT SCOPE

The OMF publishes an Architectural Landscape document at least once per year. This document provides a high-level overview of our product strategy and technology architecture, while offering specific guidance for working groups responsible for the day-to-day development of data standards, APIs, and software tools.

The consultant will work with the OMF's Technology Council, committees, and Executive Director to help us author our first full Architectural Landscape. We aim to complete this work in January 2020.

#### **DELIVERABLES**

- A. **Stakeholder research** Consultant will review existing documents and remotely interview key stakeholders to create structure and develop content for the Architectural Landscape document. Working with the Executive Director, consultant will develop a workplan that will solicit targeted input from OMF's Technology Council, Strategy Committee, Privacy, Security, and Transparency Committee chair, and Board. They will also speak with key contributors to the OMF's code base to understand technical approach that has been taken to date. Consultant will provide a written overview of the insights gained and questions raised in the research process.
- B. **Draft Architectural Landscape** Consultant will write a draft Architectural Landscape document. See "Proposed Outline of Architectural Landscape" below for details on what will be covered. Some elements of the document may have dependencies on other work happening within the foundation (for example, the creation of privacy principles) or may need to be left open for further clarification and detail as the work of the foundation matures. The Executive Director and Technology Council work with the consultant to decide how the document should create space for this ongoing work.
- C. **Feedback and final Architectural Landscape** Consultant will collect feedback from Technology Council and other key stakeholders, and will revise the Architectural Landscape. Along with the chair of the Technology Council, they will present an interim revision to the OMF Board of Directors before creating a final

draft to go before the OMF Board of Directors for approval.

D. **Ongoing support** - Consultant will be available on an ad-hoc basis to support the foundation in implementation and future revision.

#### PROJECT TIMELINE

11/01/2019	Proposals due
11/8/2019	OMF selects consultant
11/15/2019	Complete contracting and begin work
12/6/2019	Complete Stakeholder Research
12/20/2019	Deliver initial draft of Architectural Landscape to Technology Council
1/10/2020	Review feedback and create interim revision
1/15/2020	Present Architectural Landscape at OMF Board of Directors Meeting (Washington, DC)
1/31/2020	Deliver final Architectural Landscape

#### **OUALIFICATIONS**

The scope of the Architectural Landscape document encompases product management, technical architecture, and organizational strategy. While the committees, councils, and staff of OMF will provide substantial insight in these areas, we expect our consultant will have their own experience and expertise in these domains, especially in the context of open-source project work. Above all, we seek a consultant with the ability to listen to, understand, and synthesize the diversity of perspectives within the OMF, and to work with our leadership to produce a coherent document that illuminates and answers key questions about our path forward.

#### PROPOSAL SUBMISSION

It is strongly preferred that deliverables A, B, and C be priced on a milestone or fixed fee basis. If they are priced as time and materials, please include a detailed per-milestone time estimate. Deliverable D should be time and materials.

Proposals, including references and examples of related work, should be submitted no later than 11/01/2019. Questions, expressions of interest, and proposals should be sent to jascha@openmobilityfoundation.org.

#### PROPOSED OUTLINE OF ARCHITECTURAL LANDSCAPE

- I. Product strategy
  - i. Product vision and key objectives for forthcoming releases of Mobility Data
    Specification
  - ii. Areas of future exploration and investigation (emerging modes, recent policy innovations, etc.)
  - iii. An overview of customer personas that can both inform technology design and the creation of useful resources to support use and deployment by those customers
  - iv. Review of related organizations and technical standards (eg. GBFS, SAE, SharedStreets), and statement of OMF's anticipated relationship to these efforts

## II. Technology architecture

- i. High-level overview of existing and anticipated deliverables, with a clear description of the ecosystem in which they operate and ways in which they are expected to interoperate
- ii. Guiding principles for technical decision makers overseeing the design and implementation of deliverables
- iii. Design goals for reference implementations
- iv. Recommended approach to certification and conformance testing

v. Overview of data protection strategies, including a summary of technical and policy approaches to protect privacy and data security.

#### III. Development process

- i. Guidelines for working group development process and tooling, including:
  - 1. source control
  - 2. languages / frameworks
  - 3. collaboration and project management tools
  - 4. continuous integration/deployment (CI/CD)
  - 5. document management.

Guidelines will clarify where working groups will have decision-making autonomy vs. where OMF will adopt organization-wide practices and standards.

- ii. Technical standards for publishing API specifications and data standards
- iii. Specific guidelines for applying OMF Privacy Principles in the development lifecycle (e.g. privacy reviews, external oversight, etc.)

# IV. Project and deliverable roadmap

- i. Overview of projects envisioned in working group charters and product strategy
- ii. List of specific upcoming deliverables for working groups
- iii. Roadmap for documents, guides, and other resources that support deployment and rollout
- iv. Target release schedule / cadence for 2020

#### **SUPPORTING DOCUMENTS**

- <u>Transitional Architectural Landscape</u> A lightweight Architectural Landscape document intended to support the initial transfer of Mobility Data Specification source code from the City of Los Angeles to the OMF.
- Mobility Data Specification repository The code base that the OMF will manage.
  Official transfer from City of Los Angeles to OMF anticipated in October 2019.

- <u>Introduction to the OMF / MDS</u> Presentation-style overview of the OMF and its work.
- Open Mobility Foundation FAQ
- Open Mobility Foundation bylaws Defines committee structures and the Architectural Landscape document
- Open Mobility Foundation Principles