



Pedestrian Bridge Inspection



Project Location



Scope of Work

- . Inspect 15 pedestrian bridges
- . Structurally analyze bridge in worst condition
- . Create a geodatabase

Challenges

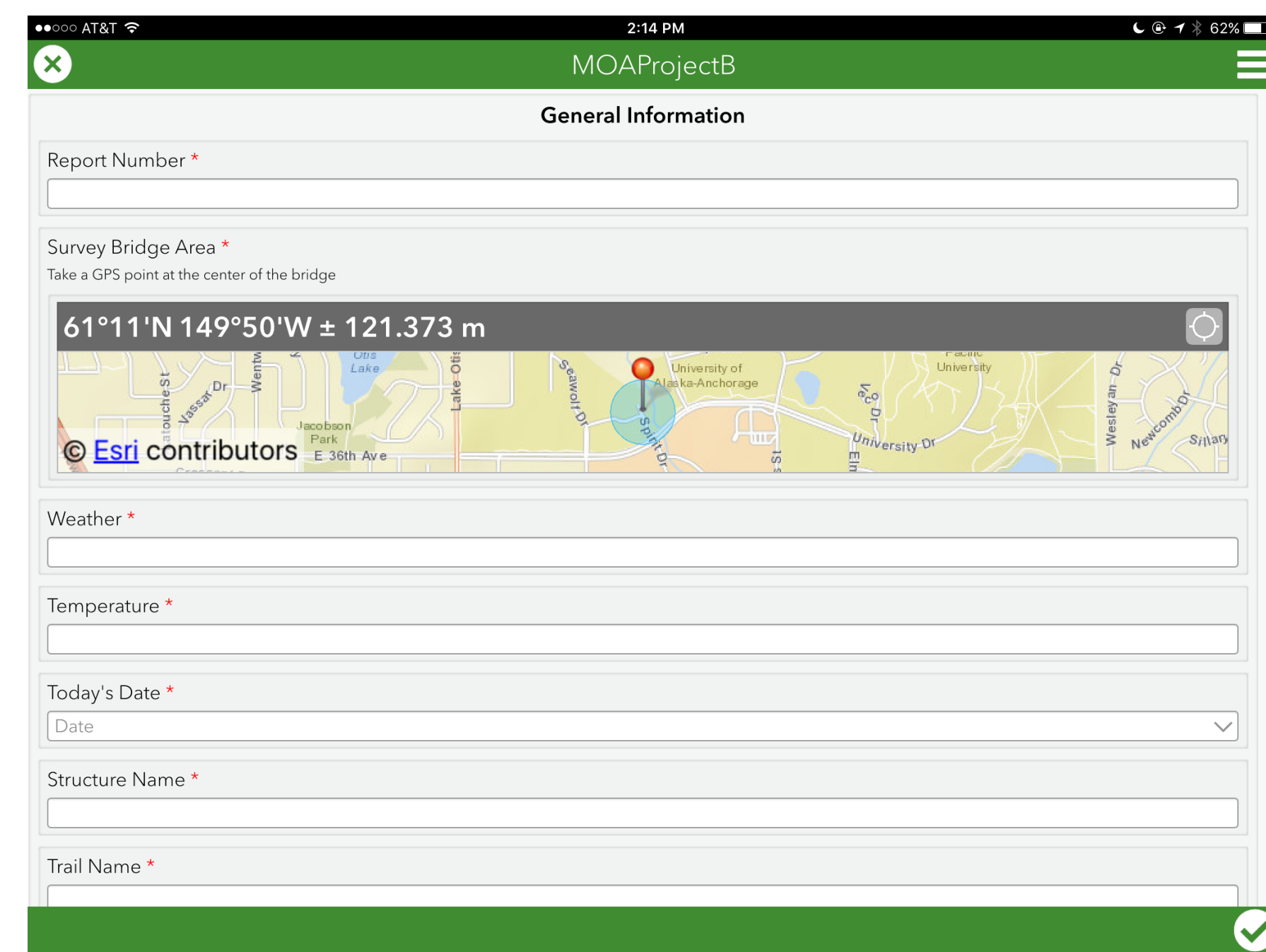
- . Winter conditions
- . Not all bridges had load ratings
- . As-built documents were not available
- . Template and guide were designed for non-engineering users

Dream Team

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Pedestrian Bridge Inspection Template



MOA Project B App

- . Coded in Visual Basic
- . Customized Survey 123 App
- . Can be used on any iOS or Android device
- . Accompanied by MOA Pedestrian Bridge Guide

Capabilities

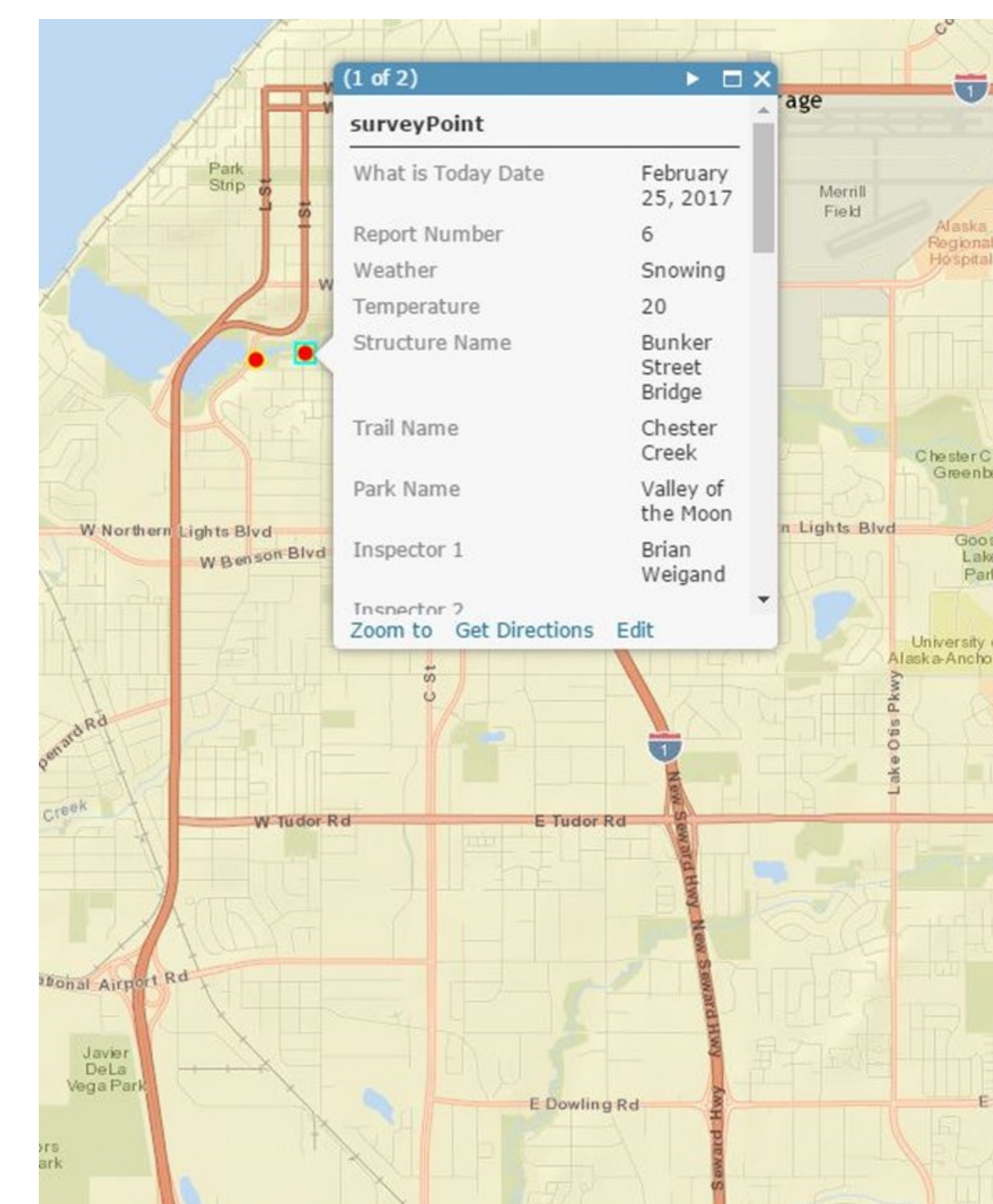
- . Taken into the field to gather inspection data and assess bridge conditions
- . Capable of directly submitting collected data to ESRI server
- . Can integrate with any other mapping program, such as Google earth, Civil 3D or MicroStation

Geodatabase

- . Coded in Python
- . Cloud-based located on ESRI server
- . Automatically updates to comply with federal standards

Capabilities

- . Downloads data collected by the MOA Project B App
- . Creates a visual representation of the data
- . Queries data to identify bridges that meet specific criteria
- . Can be simultaneously edited by multiple users



What is Today Date	Report Number	Weather	Temperature	Structure Name	Trail Name	Park Name	Inspector 1	Inspector 2	Bridge Type	Type Of Utilities	Surface Material (Approach 1)	Surface Con (Approach 1)
Feb 25, 2017	5	Cold	19	Spenard Rd, Spur Bridge	Chester Creek	Westchester Lagoon	Brian Weigand		B	Yes, unknown but under the bridge	Asphalt	Other
Feb 25, 2017	6	Snowing	20	Bunker Street Bridge	Chester Creek	Valley of the Moon	Brian Weigand		A	Under right side of bridge	Asphalt	Smooth
Feb 25, 2017	7	22	22	Valley of moon			Brian weigand		A	A lot under bridge	Asphalt	Smooth
Feb 25, 2017	8	Sunny	22	West 19th Bridge	Chester Creek	C Street Community Garden	Brian Weigand		A	None	Asphalt	Smooth

Inspection Results

- . Most bridge railings are not AASHTO LRFD compliant
- . Overall ratings indicated that bridges are in acceptable condition
- . Bridges should be reinspected in summer

Tikishla Park Bridge



- . Full structural analysis was performed
- . Bridge is adequate for normal pedestrian use but cannot support 90 psf pedestrian load required by current AASHTO standards
- . H-5 design vehicle should not cross bridge
- . Removable bollards and signs prohibiting motor vehicles should be installed
- . Railing should be replaced

Acknowledgements

- . Anchorage Parks and Recreation/ Josh Durand
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