Preservation, Access, and Reuse: Advancing 3D and VR Strategy in the Research Library



#### Overview and Goals

01

Form holistic knowledge from normally siloed areas of 3D/VR

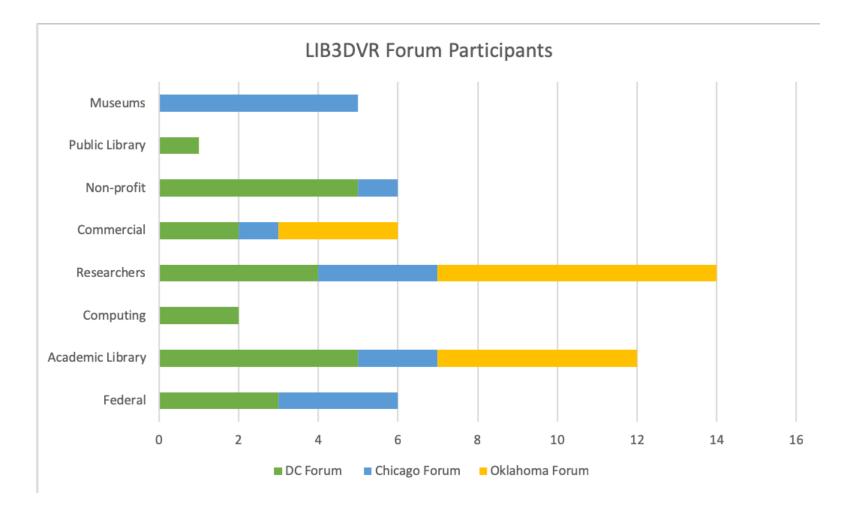
02

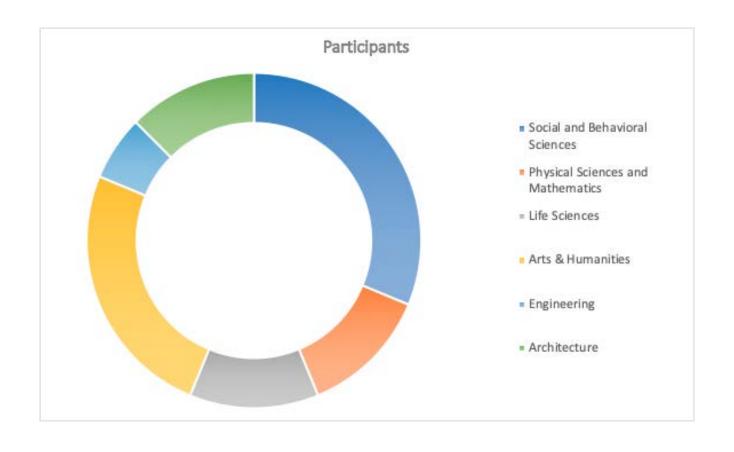
Develop best practices to support 3D/VR throughout the research lifecycle 03

Establish guidelines that can serve multiple research contexts and use cases that libraries may need to support as researchers increasingly adopt 3D/VR as a research tool.

04

Develop strategies that libraries can use for creating policies and workflows for providing 3D/VR related research services.





# High Level Overview of Forums

Washington DC Forum: 3D/VR Content Creation and Publishing: 3D scanning and modeling. Storage, access, and management. Integration of 3D data into existing research and scholarly communication services. Metadata requirements

**Oklahoma Forum**: 3D/VR Visualization and Analysis: 3D/VR tools, Using VR to support other library services, human centered issues of 3D/VR technology use.

Modifying/repurposing 3D models

Chicago Forum: 3D/VR Repository Practices and Standards: National Repository and Preservation Efforts. 3D/VR repository policies and practices. Implications for different levels of library support. Implications for existing digital preservation models and practices

### Forum 1

Content Creation and Publishing



Program Planning and Resources for Reuse

Cost, Value, and Challenges of CT/volumetric capture

Resources for storage, access, and management

Research Data Quality

Citation Practices and Indexing

Existing
Infrastructures,
Practices, and
Cultures

"Evolving" Licensing Agreements

Respecting Cultural Protocols

Unclear Legal Status of 3D Data

## Forum 1 Findings



**Providing Sustainable Archiving Infrastructure** 



Archiving and Describing 3D/VR



**Providing Tools to Researchers** 

### Forum 2

3D/VR Visualization and Analysis

## Forum 2 Findings



**Good documentation** practices



**Ethics & Licensing** 



Transparency & reproducibility

### Forum 3

3D/VR Repository Practices and Standards

## Forum 3 Findings



Searchability



**Ownership & security** 



Streaming & download capacity

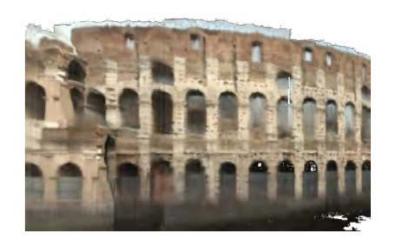


#### Intellectual Property





#### Building Rome on a Cloudless Day





**Fig. 1.** Example models of our method from Rome (left) and Berlin (right) computed in less than 24 hrs from subsets of photo collections of 2.9 million and 2.8 million images respectively.

