Bentley Education

Data collection checklist

These checklists help universities assess their data needs, locate legacy information, and plan new data capture activities for their campus digital twin.

1. Data needs assessment checklist

- What is the purpose of this data collection (e.g., space planning, energy efficiency, maintenance)?
- Which buildings, zones, or systems are in scope?
- What data types are required?
    - Graphical (e.g., 2D plans, 3D models)
    - Non-graphical (e.g., condition reports, certificates)
    - Environmental or live data (e.g., temperature, CO_2)
- Do you already have this data?
    - If so, where is it stored?
    - Is the existing data up to date and accurate?
- Are there regulatory or compliance needs for this data?

2. Legacy data sourcing checklist

- Search digital repositories (SharePoint, network drives, CAFM, etc.)
- Review physical storage locations (e.g., ring binders, archive rooms)
- Identify key staff who might hold undocumented knowledge or files
- Check for the following:
    - Drawings (CAD, PDFs)
    - Asset registers or spreadsheets
    - Maintenance records

    - Fire safety or O&M manuals
- Assess each source for the following:
    - Accuracy
    - Completeness
    - Format (digital, paper, scanned)
- Tag legacy information with quality ratings (low/medium/high)
- Decide which of the following applies:
    - It is usable as-is
    - It needs to be digitized
    - It must be recaptured

3. New data capture planning checklist

- What are the information gaps?
- What is the required accuracy level? (e.g., general reference vs exact geometry)
- Which data collection method is most suitable?
    - Measured survey
    - 3D laser scan
    - Photogrammetry
    - Condition survey
    - Manual inspection/data entry
- Can this be done in-house, or do you need a third party?
- Do you have the required tools or equipment?
- Has a data privacy or ethics review been completed (if relevant)?
- How will the data be validated and stored?
- Are there cost or resource limitations?