Six Principles for Campus Map Development

1. **Keep the interface as simple as possible.**

   ![Image of a simple campus map interface]

   People are there for your map, not for the interface. Figure out how to offer your functionality unobtrusively.

   We hid a lot of tools behind our search box, e.g. finding by departments, locations' nicknames, etc.

   We also made navigation less prominent as you go deeper into the map.

   **Tip:** “I’ll send a link to Jane so she knows where the meeting will be... Wait a minute. When I click on that web address, it just goes to the general campus map.”

   Don’t frustrate your users. Every location and view of your map should have a unique URL.

   Ideally the URLs should be human- and search engine- friendly, like this: carleton.edu/map/library

   Instead of this: carleton.edu/map/?bid=8492

   Bonus points: make URLs more guessable by supporting nicknames. For example, carleton.edu/map/libe could redirect to carleton.edu/map/library

2. **Allow reuse of map & its components.**

   ![Image of a campus map component]

   The best place for a map is in context, right where you need it.

   We gave everyone the ability to embed maps in their pages via our static images API (see Principle #5 below). We also created a form for building these image URLs.

   We are currently working on creating easy methods of embedding the interactive campus map in any page.

3. **Pull in everything you can.**

   ![Image of campus systems]

   Your institution probably exists in physical space. Make sure you’ve got as much as possible on your map.

   As a starter set of content, we are pulling in: Buildings, Outdoor Locations, Athletic Facilities, Parking, Departments, People, Photos, & Floor Plans.

   Much of this is updated automatically from our central information systems, so that it does not go stale. (see Principle #6 below).

4. **Support deep linking.**

   ![Image of deep linking example]

   Don’t frustrate your users. Every location and view of your map should have a unique URL.

   Ideally the URLs should be human- and search engine- friendly, like this: carleton.edu/map/library

   Instead of this: carleton.edu/map/?bid=8492

   Bonus points: make URLs more guessable by supporting nicknames. For example, carleton.edu/map/libe could redirect to carleton.edu/map/library

5. **Provide an API.**

   ![Image of an API]

   An API supports Principle #2, above, by enabling other campus applications to integrate map data. We developed a 3-part web services API:

   **Static Images**
   Get floor plans & map slices as GIF, JPG, or PNG through a RESTful API

   **Raw Data (JSON)**
   Get location data in JSON format

   **KML**
   Get the map in Google’s KML geospatial XML format

6. **Plan for change.**

   ![Image of planning]

   Your campus changes; make sure your map can keep up to date.

   Automate the information on the map as much as possible. If you don’t, it will rapidly become unmaintainable.

   **Plan for the future.** We expect our framework to support:

   - A Mobile Version
   - Street View Integration
   - Virtual tours & Augmented Reality
   - Geotagging events, photos, & videos
   - Easily embeddable widgets
   - “You are here” features
   - Detailed room information & interiors for room selection and event planning