A New Paradigm in Planning
The Impact of Big Data on Campus Planning & Design

- Technological innovations
- Benchmarking metrics
- Space utilization data
- Circulation patterns
- User feedback and inputs

- Data analytics

- Optimized efficiency
  - Utilization targets
  - Office occupancy
  - Storm water reduction
  - Resilient landscapes
  - Quantitative metrics

- Limited resources
  - Flexible facilities
  - Green infrastructure
  - Renovation / re-use
  - Parking optimization
  - Shared resources

The High Efficiency Campus
Campus-Wide Ecosystem of Learning

<table>
<thead>
<tr>
<th>Name</th>
<th>Current Year</th>
<th>Guideline</th>
<th>Surplus (Deficit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td>142,910</td>
<td>10asf/FTE</td>
<td>1,810</td>
</tr>
<tr>
<td>Teaching/Open Labs</td>
<td>214,749</td>
<td>8.5asf/FTE</td>
<td>(25,121)</td>
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<tr>
<td>Research Labs</td>
<td>113,103</td>
<td>350asf/$100K</td>
<td>(81,147)</td>
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<tr>
<td>Office</td>
<td>123,974</td>
<td>195asf/STAFF</td>
<td>123,974</td>
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<tr>
<td>Library</td>
<td>226,350</td>
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<td>28,628</td>
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<tr>
<td>Special Use</td>
<td>170,929</td>
<td>12asf/FTE</td>
<td>1,609</td>
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<tr>
<td>General Use</td>
<td>484,160</td>
<td>14.5asf/FTE</td>
<td>5,185</td>
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Transformation of Campus Life

Interior Learning Environments: Active Learning
Transformation of Campus Life

Interior Learning Environments: Collaboration Spaces
Transformation of Campus Life
Exterior Learning Environments: Outdoor Classrooms

University of Utah
Data Driven Decision Making
User Informed Campus Planning & Design

Temple University
Transformation of Campus Life

High Performance Campus Open Spaces

Loyola University
A Culture of Connected Mobility
New Model: Shared Mobility. Transportation Innovation.

Source: http://www.gm.com

Source: http://www.uber.com
Transformation of Campus Life

Rethinking Campus Circulation & Transportation

Ford Motor Company Campus Master Plan