

Sustainable Residence Hall Developments:

The Village at the University of Southern California (2017)

As Western Michigan University prepares to redevelop the South Neighborhood in 2018, the Office for Sustainability (ofs) is helping to foreground exemplary design and higher education construction projects that integrate low life-cycle costs, high quality of life, and sustainable economic development.



Overview

- Six, 5-story buildings, 1.25 million ft²
- Housing for 2,500 students
- \$700 million, funded entirely by usc cash flow
- 5,400 construction jobs completed by union labor, 2.6+ million hours of labor
- 35 retail rental tenants, 35% food and beverage, 65% goods and services
- Retail tenants include Target, Trader Joe's, Starbucks, Amazon Pick-up, Bank of America, Corepower Yoga, and more

Sustainability

- On-campus dining and retail to promote walkability and reduce need for vehicles
- 1,200+ indoor covered bike racks, 224 outdoor bike racks, and stations for wash and repair, (1 rack = parking for 1 bike)
- A stormwater collection system captures 198,000 gallons of runoff and removes toxins before returning water to the aquifer
- Native drought-tolerant plants throughout
- High-efficiency toilets
- Self-closing water faucets
- Low-energy lighting
- EnergyStar rated appliances
- <http://villagearchive.usc.edu/>
- ♦ Prepared by Brittney Blokker



Sustainable Residence Hall Developments:

Campus North Residential Commons at the University of Chicago (2016)

As Western Michigan University prepares to redevelop the South Neighborhood in 2018, the Office for Sustainability (OfS) is helping to foreground exemplary design and higher education construction projects that integrate low life-cycle costs, high quality of life, and sustainable economic development.



Overview

- Three slender bar buildings amid plazas, gardens, and walkways, 400,000 ft²
- Housing for 800 students, 10,000 ft² on ground level for independent retailers to rent
- Amenities include a dining hall, study rooms, music practice rooms, large common rooms, classrooms, and offices
- Three-story internal communal spaces enhance comfort and support social/academic success

Sustainability

- LEED-Gold Certified
- Buildings optimized to north-south light
- Precast panels provide thermal mass and solar shading
- Metal grilles provide shade and reduce temperature fluctuation
- Well insulated building envelope due to argon-filled, low E insulated glass and continuous closed cell foam insulation
- A green roof and courtyards to retain 100% of stormwater
- Radiant systems in student rooms contain sensors and automated controls to respond to internal temperatures
- All cooking oil from the dining hall is recycled into biofuel
- <https://housing.uchicago.edu/residence-halls/campus-north-residential-commons/>
- ♦ Prepared by Brittney Blokker

Sustainable Residence Hall Developments:

UTown at the University of British Columbia (1990–)

As Western Michigan University prepares to redevelop the South Neighborhood in 2018, the Office for Sustainability (OfS) is helping to foreground exemplary design and higher education construction projects that integrate low life-cycle costs, high quality of life, and sustainable economic development.



Overview

- Housing for 20,000 students, faculty, staff, and others; residents are diverse in age and all are accommodated for
- Development helps financially support the UBC endowment with \$343 million from land lease proceeds since the 1990's, \$12 million annually
- Housing options include dorms, apartments, duplex townhomes, condominiums, and family homes
- Residents have access to recreational and cultural facilities, retailers, community activities, improvement grants, and events
- Green spaces, parks, courtyards, and plazas are integrated throughout

Sustainability

- Residential Environmental Assessment Program (REAP), UBC's self-developed green building rating system guides all residential construction
- Vancouver's first multi-family residential compost program
- "Green streets" designed for pedestrians and non-motorized transportation
- Systems to use heat waste to generate hot water
- Bird-friendly design strategies implemented
- UBC Renew program renovates rather than demolishes when possible
- Stormwater management programs
- <https://utown.ubc.ca/>
- ♦ Prepared by Brittney Blokker

