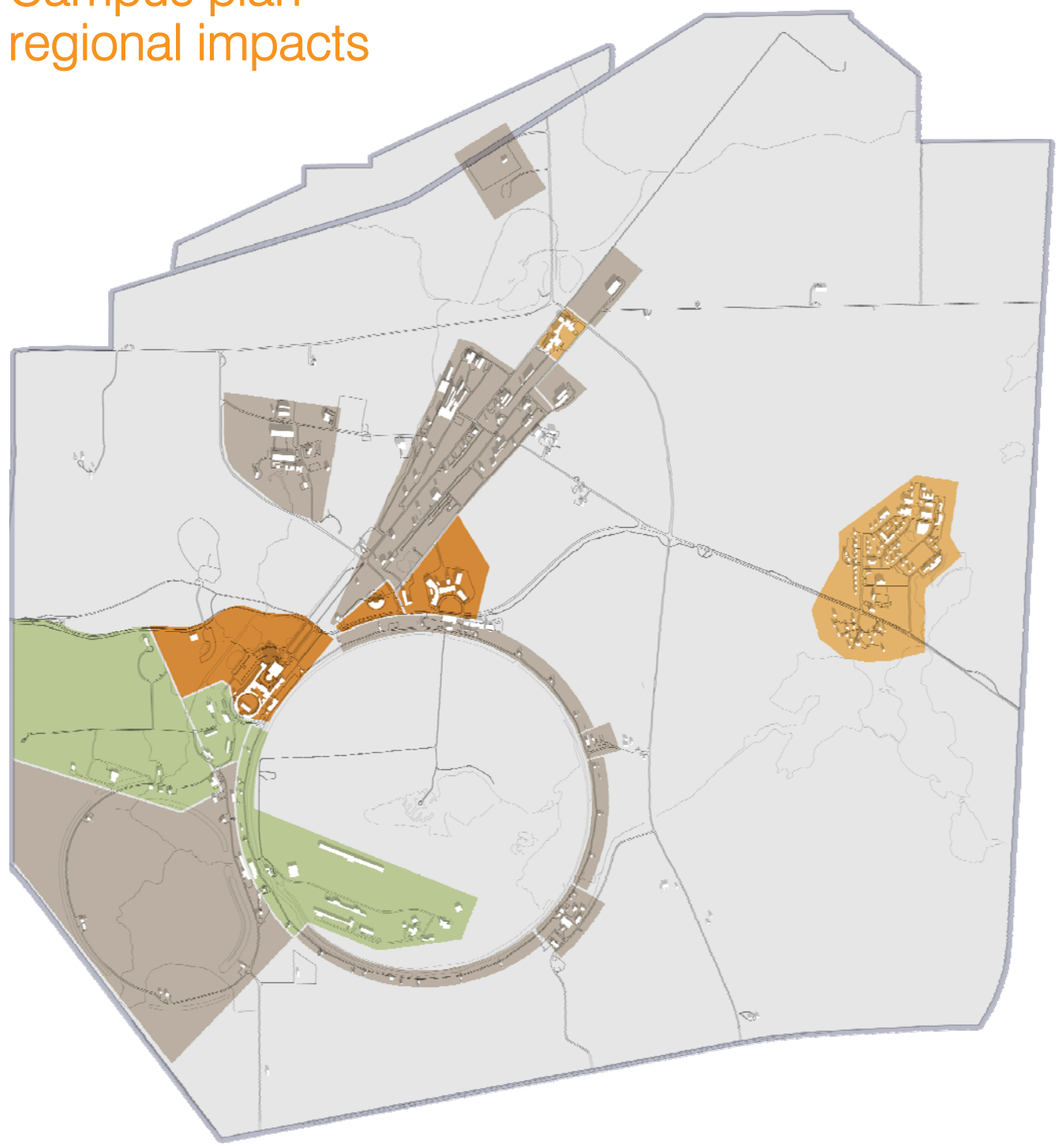
Campus layers

Campus regions

legend

- Railhead
- ASTA
- SiDet
- Support Services
- Meson & North Science
- Grid Computing
- Feynman Computing
- Technical campus
- Village
- Neutrino Campus
- Central Campus
- Muon Campus
- Tevatron
- C Zero
- Project X
- Main Injector
- D Zero
- Core Campus

Campus plan regional impacts



legend

- Undeveloped regions available for future science.
- Developed regions that are considered adequate for the foreseeable future and not directly affected by 2013 campus plan.
- Regions affected by the campus plan.
- New experiment facility campus development.
- Core campus intense future development regions.

Campus lands

legend

- Developed
- Agriculture
- Forest
- Grassland
- Tree Plantation
- Prairie
- Savanna
- Sedge-Meadow
- Shrubs

Experiment facilities

Core campus enlarged

legend

1 Central Campus
2 Technical Campus
3 Feynman Computing Center
4 Muon Campus
5 Neutrino Campus

Facility reduction

legend

1 The Village

2 Technical Campus

3 Sidet

4 Central Campus

Facility reduction regions

The Village will see the removal of a total of 41 individual structures used by the Particle Physics and Technical Divisions. The structures cover 136,000 square feet, house a total of 57 staff and are primarily clustered at the north end of the Village. The land will be restored to nature once removal is complete. The residential, recreational and daycare facilities will remain.

The Technical Division will see the removal of 27 portacamps covering an area of 38,000 square feet and housing 96 staff. The area occupied by the units removed behind the Industrial Center building will be used for new high-bay construction. The area vacated by 27,000 square feet of portacamps east of Collider Detector Facility will be the site for the Industrial Facilities Consolidation project.

legend

1 The Village

2 Technical Campus

3 Sidet

4 Central Campus

Facilities to be removed. Land will be redeveloped or restored to nature.

The SiDet region will see the removal of 10 buildings and one portacamp. The removed structures house 83 people and occupy a total of 75,000 square feet. The land will be restored to nature once removal is complete.

The Wilson Hall Footprint Area will see the removal of five buildings and 16 Portakamps. The total area slated for removal covers 185,000 square feet and houses 369 people. The vacated land will be the site of the new Integrated Engineering Research Center.

Campus landscapes

Landscape initiatives beautify the campus, help establish the identity of different areas, and balance development with green space and outdoor amenities. This section describes the purposes and locations of the Central Campus landscape initiatives proposed by the campus plan. These initiatives will help shape and define the character of the Fermilab campus for the coming generations.

The campus plan proposes landscape initiatives for a variety of reasons. One is to screen utility elements and building services to minimize their detraction from the natural setting. Another is to provide structure to the open spaces along the public ways. A third reason is to integrate new developments with the existing landscape. And a fourth is to add new courtyards and other pedestrian spaces.

It should be noted that the landscape initiatives are concepts with parameters and goals; they are not designs. They are a means of articulating the vision for different areas of the Fermilab campus within the overall plan, but each should be subject to its own master plan or landscape design. Due to their scale and role as shared spaces and infrastructure, these landscaping initiatives will often be realized in an incremental manner.

The diagram to the right illustrates the proposed locations of the variety of campus landscape initiatives along with a brief description of each type.

Campus landscape initiatives

legend

1 Landscape screening group 1 – coniferous and deciduous blend, 15 to 30 feet tall.

2 Landscape screening group 2—coniferous and deciduous blend, 10 to 15 feet tall.

3 Landscape screening or spatial group 3—coniferous and deciduous blend, 3 to 5 feet tall.

4 Low combination landscape clumps.

5 Remove pond east of drive and replace with botanical garden of native plants.

6 Eliminate parking around reflecting pond and replace perimeter gravel with natural vegetation to pond edge.

Note: Landscape concepts for the development of the Central and Technical Campuses are illustrated on their respective renderings.

Mobility and wayfinding

How Fermilab's campus functions and the experience it provides depends in large part on how people move about and how well-connected the lab's various parts are to one another. Given its location, size, and land-use diversity, Fermilab must accommodate multiple modes of travel. This section addresses aspects of the laboratory's movement systems, focusing on strategies that will make the campus more pedestrian and mass-transit friendly.

Pedestrian Network

The Campus Plan proposes to improve pedestrian connections within and between the Technical Campus, Feynman Computing Center and the Central Campus. This will aid in solidifying and unifying the character and functionality of the Central Campus. The plan also proposes to develop and implement a program of pedestrian lighting improvements along primary routes within the Central Campus.

Cycling

The Campus Plan proposes to identify and create signage for primary bike routes to and through campus; to require bike racks, indoor bike storage facilities and changing rooms in major new buildings; and to develop and implement an effective bike-share program.

Transit

The Campus Plan proposes to work with Pace to study the possibility of a shuttle system from the Metra West and Southwest lines and to introduce and formalize a campus shuttle [stops indicated on mobility diagram].

Parking

Parking should be minimized, screened and/or tucked under buildings to minimize its visual impact. Paving areas should be reduced to a minimum throughout the site, and parking lots should be made of porous paving that mitigates storm-water runoff.

Approaches and arrival

The Campus Plan proposes to improve signage and streetscaping at the Pine Street Entrance and along Pine Street to the Central Campus and to provide a clearly marked starting point for visits to the Central Campus. This will include clearly marked, dedicated visitor parking.

As the laboratory evolves, cars will continue to have a presence in the Central Campus. However, the number of vehicles traveling to and across campus can be reduced by making walking, cycling and transit use easier. And the laboratory can create more car-free zones by building a network of walking paths in the Central Campus and reducing the amount of surface parking. Where vehicles are welcome, the needs of pedestrians and transit users should be a paramount concern to ensure the development of a truly pedestrian -oriented campus.

Mobility and wayfinding initiatives

legend

BBK — Location of shuttle bus and bicycle sharing outpost . One is also proposed for Aspen East which is off this map and to the east.

BUS — Location of shuttle bus stop.

BGB — Combination structure with bus stop, bicycle sharing, off hours gate, and enhanced visitor information area.

RBT — Rework intersection to create a roundabout. Commission a new sculpture or locate an important science object (i.e. bubble chamber).

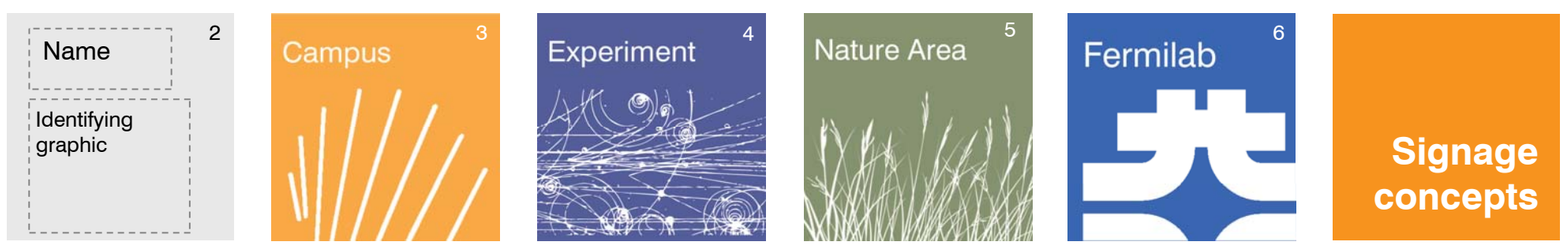
BLV — Rework existing road to create divided boulevard between roundabout and Technical Campus.

LTG — Develop unified lighting throughout the core campus for general and pedestrian safety.

Wayfinding

The campus plan proposes a simple, unified system of signage, wayfinding, and pavilions be implemented throughout the Fermilab site. The illustrations that follow exemplify the proposed system, and its purposes and imagery.

1. Site entrance sign to be located at the Wilson Street and Pine Street gates.
2. Anatomy of a typical point of interest sign to be used throughout the site.
3. Sign used to identify a campus region.
4. Sign that indicates an experiment.
5. Sign that indicates a particular natural feature of interest.
6. Generic graphic for other usages.



The above structure would be located near the main gate. It would serve multiple proposes. One would be the shuttle bus stop connecting to public transit off site. It would also serve as one of a network of bicycle sharing locations. Finally, it would be an information stop for visitors providing them with clarity as to how and where to begin their journey. The design could also be adapted to include the off hours guard entrance booth.

Campus development regions

Planned future projects are located within five of the 17 campus regions. The five regions and their respective projects are listed below. The pages that follow present each campus and its planned projects through narrative and illustrations.

The Central Campus will include the construction of the Integrated Engineering Research Centers, the Collision Hall, the Quad, Wilson Hall 2.0 and a Guest House. A reimagined site configuration will blend the new project with the existing buildings on the site, resulting in a unified Central Campus.

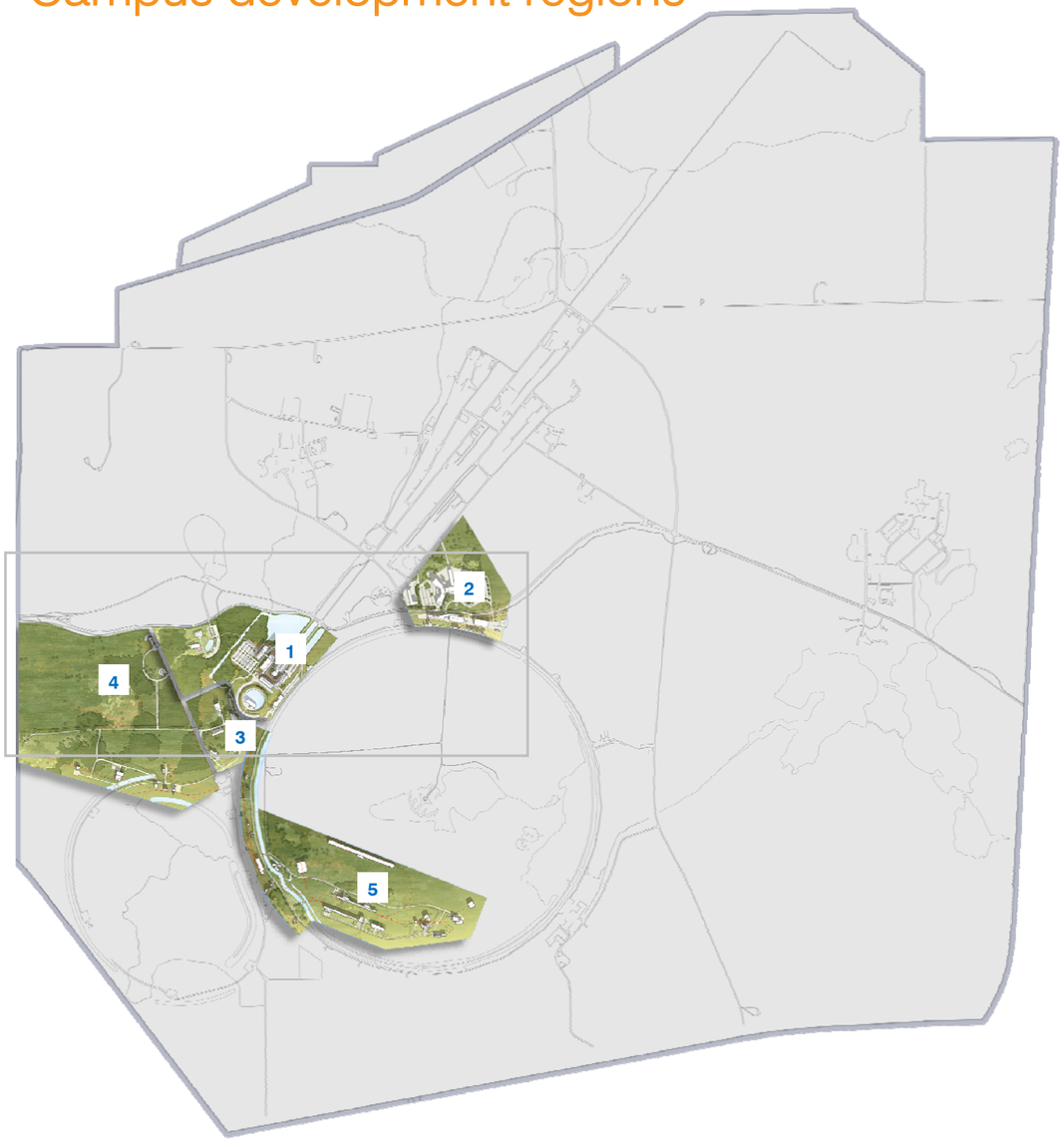
The Technical Campus will consist of the construction of the Industrial Facilities Consolidation Project, an administrative center and a new high bay. A reimagined site configuration will blend the new project with the existing buildings on the site, resulting in a unified Technical Campus

The Muon Campus will include new Intensity Frontier experimental facilities: two new surface buildings and a berm over the reconfigured Antiproton Source, residing with the existing antiproton buildings. Included in the project plan are the necessary roadway and site reconfigurations and multi-modal access ways from the Central Campus.

The Neutrino Campus is a newly defined campus region. It will include the existing neutrino experiments in the region and the new proposed Long Baseline Neutrino Experiment (LBNE). LBNE would require the construction of six or seven surface buildings and a large berm. The scope of the campus development would include additional roadways and access from the Central Campus and site configurations to accommodate the new facilities.

The Project X Campus is a newly identified campus region that will house the proposed Project X. This campus will be located inside the Tevatron ring. It will consist of upwards of 12 buildings, depending on the final design, scope and phasing. The project will also include roadway and site access construction, along with multi-modal access ways to the Central Campus.

Campus development regions



legend

1 The Central Campus

2 The Technical Campus

3 The Muon Campus

4 The Neutrino Campus

5 The Project X Campus