8. A New Campus Plan

During the planning process, five goals for campus change evolved:

- I. Create an efficient and attractive campus environment conducive to learning
- II. Improve community access to the UAF campus
- III. Make vehicle circulation and parking simple and direct
- IV. Promote safe and efficient travel throughout campus for pedestrians and non-motorized uses
- V. Highlight natural assets of campus and the unique northern environment

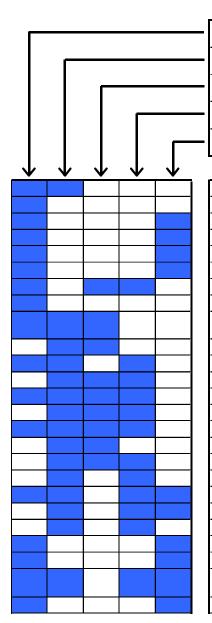
A set of actions was developed to best achieve these goals. As illustrated in the accompanying matrix, one action may contribute to several goals and implementing actions concurrently will have the greatest impact on the campus. Specific implementation steps and phasing of the actions are detailed in Section 9 of this report.



Annual engineering student ice arch construction



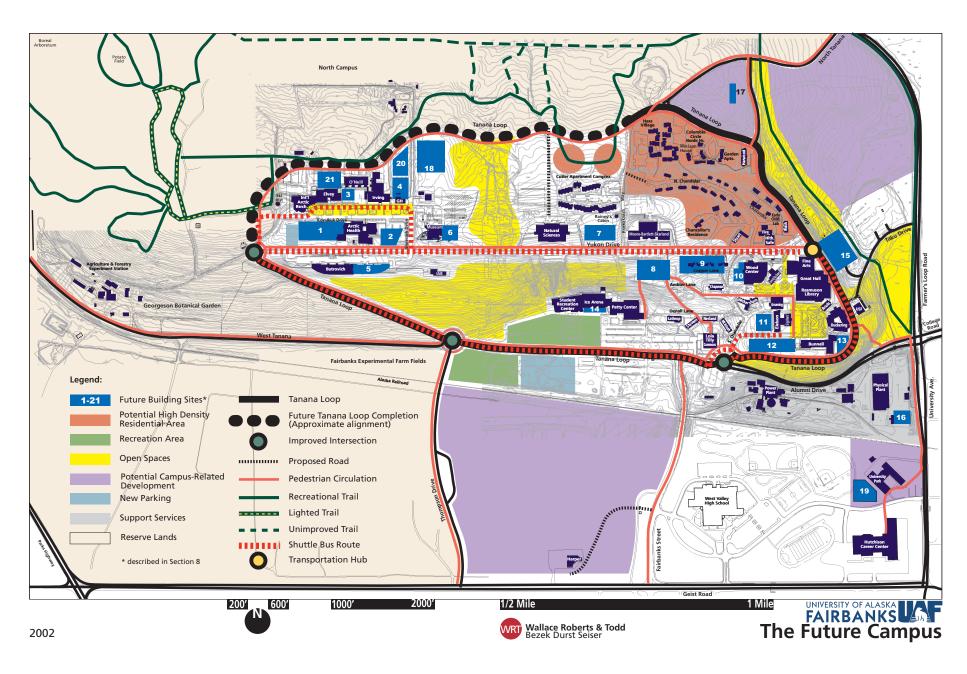
GOALS



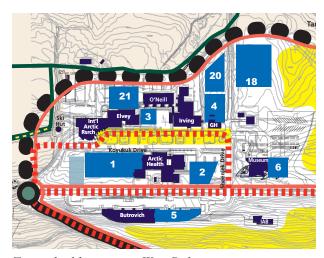
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ACTIONS

- A1. Concentrate future building sites within the perimeter of Tanana Loop, increasing the density of existing core areas.
- A2. Consolidate related programs in designated buildings to improve program identity and access.
- A3. Design new and retrofitted buildings to contribute to the campus environment, using energy conservation techniques suited to the subarctic climate
- A4. Develop a landscape plan and site design standards that will provide year-round plant diversity and enhance the overall appearance of campus.
- A5. Require landscaping and site enhancements as part of all new construction projects.
- A6. Enhance existing and create new, outdoor gathering areas and plazas.
- A7. Provide lighting throughout campus that maximizes safety, enhances wayfinding and minimizes light pollution.
- A8. Improve and expand housing opportunities for students and faculty.
- A9. Identify and evaluate sites on campus land outside the Tanana Loop perimeter for special function buildings such as a research and development park, public safety, parking, community service and other support functions.
- A10. Build parking garages on campus at designated sites.
- A11. Provide a guick and efficient year-round shuttle bus system throughout campus.
- A12. Complete Tanana Loop.
- A13. Increase parking along the perimeter of campus and subsequently reduce parking in the interior.
- A14. Designate accessible, short-term parking for commuter students, community members and visitors.
- A15. Provide direction and information signs throughout campus that are clear and consistent in theme, location and design.
- A16. Present a unified image in campus roadway and entrance design.
- A17. Ensure that roadway and intersection designs emphasize safety and efficiency.
- A18. Create safe and attractive corridors close to all campus roadways for non-motorized uses.
- A19. Develop Yukon Drive into a safe and appealing environment for pedestrians and non-motorized uses.
- A20. Establish direct connections to the UAF trail system from points throughout campus.
- A21. Make all walkways on campus safe and direct.
- A22. In selected areas, protect scenic views and/or establish stands of trees.
- A23. Preserve the agricultural function and character of the Agricultural and Forestry Experiment Station lands.
- A24. Protect the integrity of the North Campus area for education, research and recreation, including maintaining and promoting the UAF trail system as a significant campus and community asset.
- A25. Use art on campus to highlight special areas and enhance the overall surroundings.



An 11" X 17" version of The Future Campus map is included as an insert at the back of this document.



Future building sites - West Ridge

The following are the actions of the master plan:

A1. Concentrate future building sites within the perimeter of Tanana Loop, increasing the density of existing core areas.

The master plan establishes a limit for future campus development of academic, research and housing facilities to within the boundaries of Tanana Loop. The 229 acres within this area provide sufficient land to accommodate most future growth, while maintaining an efficient campus linked by transit and direct walkways. Limiting most development to within the boundaries of Tanana Loop also allows the university to meet future growth needs without encroaching on prized forest and agricultural land.

Significant portions of the remaining campus property are designated for outdoor research, education and/or recreation. Specifically, this includes the North Campus area, the Agricultural and Forestry Experiment Station and the Fairbanks Experimental Farm Fields. Remaining areas that are outside of the Tanana Loop perimeter need to be formally evaluated as to suitability for building sites (see A9.).

Inside or adjacent to Tanana Loop, future development is located on sites within the two core areas. In general, the intent of locating new development within these core areas is to use available land most efficiently and to strengthen the existing configuration of campus. This enhances functional adjacencies and provides convenient walking distances between buildings. The shuttle system provides a quick and direct link between the two cores.

On West Ridge, the following sites have been identified:

- Site 1 West of Arctic Health Research Building (location of new Biological and Computational Science Facility)
- Site 2 East side of Arctic Health Research Building
- Site 3 East of Elvey Building
- Site 4 North of West Ridge greenhouse
- Site 5 East of Butrovich Building
- Site 6 East of Geist Building (location of museum expansion project)

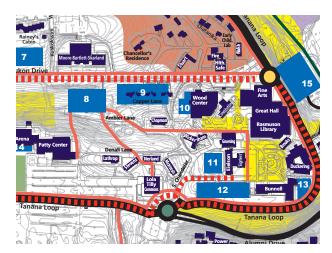
- Site 18 North of Geist Building and warehouses/east of Sheenjek Drive (location of Science Research Building)
- Site 20 North of Site 4 (see above)
- Site 21 North of International Arctic Research Center

Within or close to Lower Campus, the following sites have been identified:

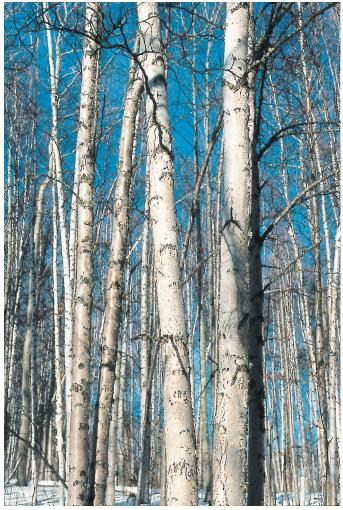
- Site 7 East of the Natural Sciences Facility
- Site 8 South side of Yukon Drive, across from the Moore-Bartlett-Skarland residence complex
- Site 9 Copper Lane area
- Site 10 West of Wood Center (location of expansion project)
- Site 11 West of Eielson Building
- Site 12 South and west of Bunnell Building
- Site 13 East of Bunnell/south of Duckering Buildings
- Site 14 Patty Center concourse
- Site 15 Ballaine parking lot

Several parking lots (sites 11,12 and 13) on Lower Campus offer ideal locations for future academic buildings. They are prime south-facing sites with topography that offers excellent views. Wherever feasible, incorporating parking into the building design will be explored. The existing Ballaine parking lot next to the bluff provides an ideal location for a combined parking structure and academic/administrative building that would give clear and direct access to Lower Campus from the Taku Drive entrance via elevator and skywalk connection to the Rasmuson Library terrace.

The buildings on Copper Lane, constructed in the late 1940s, are in a state of disrepair and single-family housing is an inefficient use of this land. The site south of Moore-Bartlett-Skarland, part of which is currently a parking lot, is identified as a long-range development site for academic use or possibly housing. A building in this location would help connect the athletics and recreation complex to upper campus via elevator in combination with ramps and walks.



Future building sites - Lower Campus



Stands of birch, typical of the Interior Alaskan landscape

Outside the perimeter of Tanana Loop, several sites have been identified for potential special function buildings. A thorough evaluation of site viability must be conducted on all potential sites outside of the Tanana Loop perimeter. See A9 below.

A2. Consolidate related programs in designated buildings to improve program identity and access.

The recent co-location of all engineering programs to the Duckering Building and the anticipated relocation of many of the rural and Alaska Native programs to the Brooks Building in 2002 are examples of functional adjacencies within buildings that strengthen program identity, promote efficiency and collaboration and clarify campus organization. Such adjacencies will be a part of all future planning.

A3. Design new and retrofitted buildings to contribute to the campus environment, using energy conservation techniques suited to the subarctic climate.

General architectural and site design guidelines are discussed in Section 10 of this report. A more complete set of design guidelines, beyond the scope of the master plan, will be required to ensure that new facilities contribute to a coherent campus identity and meet the demands of the subarctic climate.

A4. Develop a landscape plan and site design standards that will provide year-round plant diversity and enhance the overall appearance of campus.

Site planning and the design of the campus landscape should use plantings, topography, walkways, lighting, and building siting and design to direct views and circulation, to promote campus safety, to provide a welcoming residential environment, to provide for optimum use of outdoor areas for educational programs, workshops, concerts, recreation, and to enhance the overall campus image. Facilities should be integrated with the boreal forest setting where possible. The campus landscape should also exemplify the university's leadership in research and education in plant science, horticulture, soil science and other natural sciences.

The campus is an inviting location to exhibit and display the diversity of trees, shrubs and flowers that are adapted to the Interior climate. Hardy landscape materials should be planted to provide spectacular summer colors, improve campus micro-environments and provide year-round enjoyment. Landscape design must also meet the functional requirements of safety, snow removal, accessibility and service and emergency vehicle access.

The built campus is divided broadly into the following landscape areas:

- Campus entrances and roadways
- Parking lots
- Architecturally defined spaces and plazas
- Spaces around buildings
- Open slopes
- Forest

Specific recommendations for each area are outlined in Section 10 of this report under "Landscape Concept." A detailed landscape plan for the campus, based on the master plan concept, should be developed in the next phase of study, along with site design standards. Using standard site elements will unify the campus visually and, in the case of site furnishings and lighting, reduce maintenance and simplify replacement.

A5. Require landscaping and site enhancements as part of all new construction projects.

An outstanding feature of the campus is its natural setting and the university has a responsibility for good stewardship of its lands. A mechanism should be established to ensure that capital projects for new and renovated facilities and campus infrastructure—whether a building, road or parking lot—include adequate funding for landscape and site improvements. To achieve the vision of the master plan, it is essential that the spaces around and between buildings be treated as positive—rather than "leftover"—space. Landscape, lighting, benches and other elements should be used to create an inviting, pedestrian friendly environment that promotes social interaction, weaves the campus together and celebrates the natural setting of the campus.



Constitution Park

A6. Enhance existing and create new, outdoor gathering areas and plazas.

Gathering spaces, such as the campus plazas, serve important aesthetic and social functions, providing opportunities for informal interaction between students, faculty and staff. The most successful of these on the UAF main campus is Constitution Park, located between the Rasmuson Library and Wood Center. Here, the surrounding buildings enclose the space and trees and planter walls give it a comfortable pedestrian scale. The Fountain of Flags, however, needs significant improvements including removal of the adjacent parking east of Signers' Hall. Similarly, the space at the center of the West Ridge plaza should be redesigned, with parking redistributed, to create a central plaza. In addition, a new outdoor gathering area should be established on the former College Observatory site in the area between the UA Museum and the Natural Sciences Facility, with picnic and seating areas and a new ski hut and linkages to the existing trail system to the north.

A7. Provide lighting throughout campus that maximizes safety, enhances wayfinding and minimizes light pollution.

Lighting, particularly in the subarctic, varies significantly throughout the year. During the academic year, natural lighting conditions include abundant daylight during April, May and September, while in January there are only about five hours of functional daylight. These conditions require that adequate lighting be provided on campus, particularly during the winter months. Good lighting is both a functional improvement to campus as well as an aesthetic consideration. Lighting can create an atmosphere of warmth, which is important in the subarctic.

Most importantly, lighting enhances safety on campus. The primary goal of all lighting on campus must be to provide a safe environment for students, faculty and staff. Efforts should be made to couple safety with other more aesthetic concerns, but not to the detriment of safety. Any exterior light fixtures utilized on campus must maximize the light for the intended surface. The light fixture shall be full cutoff type with no light emitted above horizontal. Light fixtures shall utilize shields or positioning where necessary to eliminate light falling on unintended surfaces.

A8. Improve and expand housing opportunities for students and faculty.

The Fairbanks campus continues to maintain its role as a residential community, giving students and faculty the opportunity to interact outside the classroom. Living on campus makes it easy to walk to class (thereby reducing traffic) and the presence of a "critical mass" of students contributes to the collegial atmosphere of the campus. There is a demand for all types of housing—faculty, staff, graduate and undergraduate. The chancellor's residence and the existing single-family housing on North Chandalar and Chatanika will be redeveloped with higher density housing, using available land more efficiently. Opportunities for private/public partnerships should be explored with respect to new housing options.

A9. Identify and evaluate sites on campus land outside the Tanana Loop perimeter for special function buildings such as a research and development park, public safety, parking, community service and other support functions.

The university owns approximately 2,250 acres of contiguous lands. Much of that land is not viable for building, due to a variety of conditions such as permafrost and associated soils issues, as well as steep topography. For this reason, all potential sites on campus, whether inside or outside the Tanana Loop perimeter, must be evaluated for suitability. Assuming that there are existing pockets of suitable land, the master plan recommends placing special function buildings on sites outside the Tanana Loop, while reserving the sites inside the perimeter for academic, research and housing facilities.

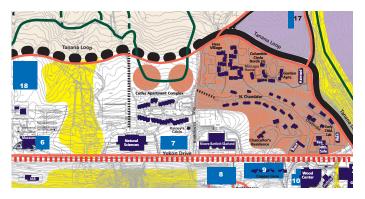
Outside the Tanana Loop perimeter, the following potential building sites have been identified:

Site 16 - Physical Plant support

Site 17 - Public safety facility

Site 19 - Community service building

Areas that require immediate evaluation for potential viability as building sites include the lands north of the Harper Building off Geist Road and the land at the junction of North Tanana Drive and Farmer's Loop on the south side. In particular, these areas both offer



Housing sites



Parking garage on the Ballaine lot

potential locations for a research and development park; however, both areas contain questionable soil conditions.

A10. Build parking garages on campus at designated sites.

A parking garage, possibly combined with support service space, is proposed on the current site of the Ballaine parking lot adjacent to the bluff. It may also be possible to design new facilities sited on the existing parking lots west of Bunnell and east of Arctic Health to include structured/underground parking. On West Ridge, there are several potential sites for a parking garage, including the area behind the International Arctic Research Center and the Elvey Building, or the new museum parking lot.

In general, parking garages would provide the following benefits:

- Consolidate parking and allow the removal of small, inefficient lots that would be better used as building sites or open space.
- Accessible, convenient, short-term parking for visitors, community members and parttime students, both for classes and campus events.
- Covered parking year round.
- Significant reduction of surface parking lot snow removal and maintenance costs on an annual basis.
- Direct access for users to Lower Campus from the Taku entrance via elevator and skywalk connection to the library terrace, or access to other parts of campus by shuttle (Ballaine lot).
- Improved appearance of the Taku entrance (Ballaine lot).
- Space for support services in combination with covered parking (Ballaine lot).

The following table gives an estimate of the number of parking spaces that could be created in each of the possible parking garages. Floor area is assumed to be roughly equivalent to the area of the site that the structure will occupy. The intended use, along with construction costs, will dictate the final size and configuration of these buildings.

Parking Garage - Estimated Capacities

Location	Floor Area	Number of Parking Levels	Spaces per Level (@ 350 SF per space)	Total Spaces
Ballaine Lot	35,000 SF	4	100	400
Lot west of Bunnell	14,000 SF	2	40	80
Lot east of Arctic Health	30,100 SF	2	86	172
West Ridge (unknown site)	20,300 SF	4	58	232

Note: Floor areas and parking levels will vary depending on the size and function of the building designed for the site.

A11. Provide a quick and efficient year-round shuttle bus throughout campus.

An efficient shuttle system with maximum 10-minute headways, operating throughout the year, is key to a successful campus-wide transit system. It is the most convenient way to move between the two ends of Yukon Drive within the 15-minute time period allowed between classes. Regular use of the shuttle system will reduce vehicle traffic in the interior of campus. Service would be improved by adding shuttle buses during peak use times and when temperatures are below zero. Locating stops close to and visible from building waiting areas and shuttle huts will make the shuttle service more accessible. Another essential component of a successful shuttle system is ongoing financial support. The shuttle system should not be a casualty of budget cuts.

A12. Complete Tanana Loop.

Completion of Tanana Loop allows for continuous circulation around the perimeter of the built campus, provides direct access to West Ridge from North Tanana Drive and simplifies campus circulation for visitors and regular campus users alike. It will reduce east/west traffic along Yukon Drive and create a safer environment for pedestrians.

The 1991 Master Plan recommended a continuous loop road system and initial clearing for construction of the north central segment has already taken place. Further engineering studies are needed to determine the final alignment to the north of the International Arctic Research Center.

A13. Increase parking along the perimeter of campus and subsequently reduce parking in the interior.

The addition of both parking garages and perimeter lots would offset the reduction of general use parking from the interior of campus. Locating parking along the perimeter of Tanana Loop will reduce traffic in the interior of campus and provide easier access to parking for visitors. It is the intent of the master plan to maintain a favorable ratio of parking spaces to students, faculty and staff and to design parking to take into account seasonal conditions. Further study will be required to assess specific demand and to compare costs and benefits to determine the option or combination of options that best serves the parking needs of the campus.

A14. Designate accessible, short-term parking for commuter students, community members and visitors.

Almost 50 percent of the student body at UAF are commuters, of whom many are non-traditional students with jobs and families. They fit classes into their busy schedules, often necessitating several trips to campus on a given day. More short-term parking needs to be made available in the immediate future for this segment of the student body. Over the long term, the plan for parking garages and perimeter lots must provide for the commuter student population. It will be essential that significant portions of all parking garages be designated as short term.

Similarly, the university must provide for better parking options for community members and visitors. Adding a parking garage in the Ballaine lot will be the best solution to this problem. In the absence of a parking garage, improved signage pointing the way to visitor lots and afterhours parking must be improved. Providing shuttle service to the perimeter lots is also key to meeting the needs of community members and visitors, particularly during the weekends or when events are being held on campus.

AI5. Provide direction and information signs throughout campus that are clear and consistent in theme, location and design.

A clear and comprehensive signage system will make the campus more accessible to community members, visitors and students and will improve vehicular and pedestrian circulation. As a consistent design element, signage will contribute to the overall order of campus.

A comprehensive system of outdoor signs will include:

- Arrival/entry signs
- Directional signs to specific areas or uses
- Identification signs for specific buildings
- Accessibility signs in compliance with the Americans with Disabilities Act (ADA)
- Emergency signs
- Control and enforcement signs
- Trail markers

As part of the signage and wayfinding system, an information building will be designed and located on Thompson Drive at the proposed pullout. A comprehensive system of interior direction and information signs will be developed in a second phase of study.

A16. Present a unified image in campus roadway and entrance design.

As the first points of contact, the campus entrances play an important role in shaping the image of the university and creating an atmosphere of welcome. The ease with which one moves from the entrance to a desired destination—aided by clear signage and convenient parking—and the visual quality of the experience—passing by the bluff versus the physical plant—color one's immediate and lasting impression of the campus. The landscape concept for campus entrances is described in Section 10 of this report. The standard design for campus entrance signs has been established and is in place at the Alumni Drive and West Tanana Drive entrances.



Alumni Drive entry

Campus roadways should be designed to give a clear and identifiable image to the campus. Landscape, lighting and signage are some of the elements that can be used to identify campus roadways and to distinguish major from minor roads. Tanana Loop and Thompson Drive both warrant distinctive treatments that clearly convey that this is the UAF campus. Landscaping along the Alumni Drive entrance should be redesigned with masses of birch and spruce along the south side to create a strong and cohesive arrival sequence and to screen the Facilities Services buildings.

A17. Ensure that roadway and intersection designs emphasize safety and efficiency.

All campus roadways will reflect a strong commitment to functionality, safety and clarity of design. To improve traffic safety and wayfinding, the intersection of Alumni Drive, Tanana Loop and South Chandalar will be reevaluated when Fairbanks Street is closed as a vehicular route. The intersection of Taku Drive and Tanana Loop should also be studied for modification and improvement. The current "Y" intersection at West Tanana and Tanana Loop will be redesigned as a roundabout with the construction of Thompson Drive. The intersections at both ends of Yukon Drive and Tanana Loop must be considered. Realignment of Tanana Loop above the western junction with Yukon Drive must be considered as part of the design of the Biological and Computational Science Facility. In all cases, improved signage will be needed.

A18. Create safe and attractive corridors close to all campus roadways for non-motorized uses.

The completion of Thompson Drive and Tanana Loop will provide opportunities to locate pathways, trails, lighting and other elements close to the roadway that will promote a safe and comfortable environment for pedestrians and bicyclists and minimize interactions with cars. A clear separation corridor between traffic and non-motorized users must be put in place. A good example is the recently completed sidewalk on the north side of Yukon Drive between Wood Center and the Moore-Bartlett-Skarland Complex. Similar improvements need to be made to the West Tanana Drive entrance and to other existing campus roadways, particularly those in the interior of the campus that are heavily used by pedestrians.

A19. Develop Yukon Drive into a safe and appealing environment for pedestrians and non-motorized uses.

With the completion of Tanana Loop, it is anticipated that vehicular traffic will diminish along Yukon Drive. The intent is to make Yukon Drive a corridor that provides quick, easy and safe access across campus, with minimal interactions between automobiles and pedestrians. An efficient shuttle bus system that is available throughout the year and during scheduled class times (including evening classes) is essential. Safe and inviting walkways, sheltered (where appropriate) and lined with pedestrian-scale lighting, will also be integral to enhancing of this central campus corridor. Once Tanana Loop is fully operational, the concept of limiting vehicle circulation on Yukon Drive will be evaluated

A20. Establish direct connections to the UAF trail system from points throughout campus.

The open space between the museum and the Natural Sciences Facility offers an ideal place for a centralized entry into the trail system from the built campus, with a second ski hut located there to mark the entry. The ski hut could potentially be coupled with an aurorium, viewing deck and other features. Other opportunities should be sought to tie campus pathways to the trail system. Clear trail markers and directional signage throughout the campus should announce the trail system, making it more visible and accessible.

A21. Make all walkways on campus safe and direct.

The master plan identifies a pedestrian circulation system composed of walkways and plazas that are totally separate from vehicle circulation and walkways lining campus roads. In all cases, walkways will be well lit and safe.

The use of sheltered walkways will be considered, as appropriate. Some walkways might provide only overhead shelter to mitigate weather conditions; others may require enclosure, as between buildings. Since sheltered walkways are significant visual elements, strict guidelines for their design and construction need to be established to ensure that they are well sited, treated consistently throughout campus and blend with the surrounding architecture.



Before



After



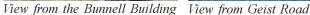


Before

After

Before and after sidewalk improvement on Yukon Drive









Fairbanks Experimental Farm Fields



UAF's Equinox Trail

A22. In selected areas, protect scenic views and/or establish stands of trees.

There are several vantage points on campus that offer striking views across the valley to Denali and the Alaska Range. These views, which are the very reason that the university was sited on College Hill, have become emblematic of UAF and are essential to protect. In the same way, certain views looking toward the campus, such as the view of the museum, must also be protected. The university needs to identify and map significant scenic easements to ensure that future campus development does not infringe upon important views. Similarly, efforts to reforest certain areas of campus must be guided by an overall landscape plan that preserves and frames these views.

A23. Preserve the agricultural function and character of the Agricultural and Forestry Experiment Station lands.

The farm fields associated with the Agricultural and Forestry Experiment Station (AFES) reflect the history and unique setting of UAF and are integral to the identity of the campus. The farm fields represent a clear link to the educational principles upon which UAF, as a Land Grant institution, was founded. They are also the longest continuously cultivated soils in all of Alaska making them a unique research environment for subarctic agriculture and soils management. In the early 1990s, an attempt to allow commercial development on a parcel of the farm fields met with community-wide disapproval. However, nothing in university policy or guidelines specifically prevented such development from being carried out. Through this master plan action, the university gives a very clear message that the farm fields are not available for commercial development.

A24. Protect the integrity of the North Campus area for education, research and recreation, including maintaining and promoting the UAF trail system as a significant campus and community asset.

The forest area north of the built campus must be protected for outdoor teaching, research and recreation. The UAF trail system, which is located within this area, is recognized both on campus and throughout the Fairbanks community as one of UAF's "jewels in the crown." It is critical that current uses continue and that only minimal development associated with outdoor teaching, research and recreation be permitted. The recently established North Campus subcommittee of the Master Planning Committee will guide future planning efforts for this area.

A25. Use art on campus to highlight special areas and enhance the overall surroundings.

There are works of art located throughout campus that contribute significantly to the campus image. Although funding is not as readily available as it once was to procure new works of art, UAF needs to continue efforts to enhance outdoor spaces with art. In addition, existing artworks should be highlighted. Many of the existing works could be used as wayfinding aids and should, therefore, be incorporated into the wayfinding plan. It would also be appropriate to provide better lighting of art works, particularly during the winter months.



"Alaska Women's Pole"



The "Elysian" at twilight