System Logic
The TCNJ campus requires a comprehensive sign system that satisfies the needs of its many users. In addition to regular users (faculty, staff and students), other users have additional needs as described below.

**User Needs**

**Faculty, Staff and Students**

1. Directional information is needed for new students and for staff when they go to unfamiliar locations.
2. Parking facilities are accessed daily by regular users. There must be clear parking operation signs that include: user permit information, hours of operation and special conditions.
3. Building identification is needed. Even long-time staff need to find new or infrequently-used facilities. Considerations for sign content and locations are discussed under “Sign Types” in Section 4.5.
4. Information needs to be visible and legible at all times of the day and night.

**Visitors**

Visitors have the same needs as staff and students, but as first-time or infrequent users, they need the information more often and, preferably, should have it to take with them. Those approaching the college from Route 31 North view Ceva Lake, an expanse of lawn, and a backdrop of substantial brick buildings. The setting is quietly dignified and tranquil. Visitors arriving to this special place should savor an enjoyable experience that is unmarred by confusion about how to enter, which way to turn, and where to go first.

1. Visitors will benefit from information available to them prior to their travel to the college. “Pre-visit” information that can be mailed or accessed via the Internet is extremely helpful.

**Special User Groups**

1. **Disabled**
   - Disabled users require clear designation of accessible parking and building entrances.
   - Disabled users need designation of drop-off zones at major destinations.
   - There should be clear designation of accessible routes where these vary from standard access paths. This will be particularly important where topography varies.
   - There should be notification if specific destinations within a building are not accessible.
   - Legible type (font and size) should be used to aid those with visual impairments.

2. **Elderly**
   - The elderly have similar needs to disabled and regular users.
   - The elderly have stronger motivation to seek confirmation of directions than other user groups. The availability of someone to answer questions, either in person or on the phone, is desirable.
   - Elderly alumni can have more difficulty than other visitors due to out-of-date pre-conceptions about how the campus looks and operates that are incorrect.
   - The elderly will also need more frequent reiteration of directional information or available hard copy information to offset memory limitations.
   - The elderly will also have more difficulty with graphic materials and detail due to common visual limitations.
   - Higher levels of illumination on signs during evening hours are required.
**User Needs**

3. **Event**
   - Event users have similar needs to visitors.
   - They need designation of drop-off zones for major venues.
   - Clear directions from parking to and from major venues are needed.
   - Much visitor traffic occurs during evening hours, yet the vehicular signs have limited visibility at night. Illumination and retro-reflective messages are very important.

**Facilities/Maintenance Staff**

Facilities and maintenance staff have different requirements from the other users discussed. For them, the issue is what goes on signs, how they are fabricated and installed and how they can be repaired and updated. Their needs include:

1. A system with changeable components that makes repairs or installing replacement panels easier.
2. A system with sufficient structural strength that resists accidental damage, deliberate vandalism or theft.
3. Material finishes and coatings that can be cleaned with solvent if graffiti occurs.
4. Sufficiently standard fabrication processes to allow for multiple local bidders.
5. Sufficient fiscal resources to perform routine maintenance and message updates.
6. Sufficient fiscal resources in construction budgets for design, fabrication, and installation of appropriate sign types for all new buildings.
7. Database of signs with text and location information for administrative and maintenance purposes.
8. Ability to easily change parking lot signs for evening visitors and special events.

**Emergency Services**

1. Police, fire, EMT and other service personnel need clear street address and entrance location information to reduce time lost in emergency situations.
2. The administration needs to alert emergency services personnel to special equipment or hazards within special-use buildings such as laboratories.
3. For heavy equipment, such fire trucks, demarcation of special paths within the campus may be necessary for safe passage.
4. Communicating specialized information to emergency services personnel may best be accomplished with non-sign methods.

**Delivery Personnel**

1. Loading docks need to be clearly identified.
2. Street addresses can be important if some delivery services will only deliver to a street address.
3. Communicating the location of the loading docks to truckers may best be accomplished with non-sign methods.
Campus Approaches

There is a need to provide directions to the campus from surrounding approach roads. Motorists must also be notified about the appropriate exits off of major highways. These destination or guide signs will be NJDOT signs as described in the Manual of Uniform Traffic Control Devices 2009 (MUTCD).

This signage is especially important when a campus is set back from the highway.

Trailblazer signs are needed to direct motorists to the college from arterial roads. Identification and directional messages provided to motorists in these situations need to be constrained so drivers can safely comprehend them. Message quantity and size must be appropriate for the driving speed.

A map and more detailed information should be provided in pull-off areas on the campus perimeter road where a motorist can stop, become oriented and look for destinations and parking. Printed take-away maps should be available for visitors at these locations.

- Provide an information pull-off area with a campus map and building directory. The pull-off should be located to the east of the Main entrance along Metzger Drive. This location could also serve to provide visitor parking information via a map and/or a person if the information booth could be relocated.
- A similar unmanned pull-off should be provided near the Green Lane entrance to the campus.
- A third pull-off might be placed near the lots typically used for visitor parking, lots 2a through 6 on the west side of Metzger Drive.
Gateways

It is important to display the institutional identity or branding at the edges and entrances to the campus. This provides a sense of arrival to the college and allows the college to welcome visitors with a message that conveys quality, stability and prominence.

Both the primary and secondary entrances to the campus should be identified. Primary and secondary entrances should have identity and brand elements scaled to the importance of the entrance.

These gateway signs should be visible from a distance to serve as cues for those approaching the campus.

Landscaping is also an important element at entrances and along public right-of-ways that border or traverse campus. Distinctive vegetation, building setbacks, buffers, pedestrian refuges, chicanes, curb extensions, crosswalks and other elements assist in distinguishing the campus from its surroundings. A signature landscape and hardscape palette can let motorists know that they are entering a special pedestrian district. This serves both the identity and safety interests of the college.

Gateway lighting is an important design element at a college that hosts numerous evening events. Whether the gateway signs are internally or externally illuminated, or a combination of both, lighting will enhance the gateways and become a beacon for the campus.

Banners can enhance and reinforce the TCNJ identity and highlight the transition onto the campus. Banners can repeat in rows at the Pennington Road entrance and on Metzger Loop. This strong visual element can change seasonally, adding to the sense of a dynamic institution.
Vehicular Wayfinding

**On-Campus Circulation**

Once vehicles have entered the campus, they turn onto the perimeter loop road from which all other destinations are accessed. Directional signs need to have limited messages. They should focus on information for visitors, including parking information that gets motorists out of their cars as soon as possible.

**Parking Identification**

Parking lots need identification that makes it clear where motorists can park and also provides place information so motorists can navigate back to their cars.

Surface parking lots and structures should have numbers that progress in a logical order. When appropriate, they should have names that provide information based upon one of two criteria:

1. **Functional use** (e.g. Lot 2 could also be named “Visitors’ Lot”).
2. **Buildings adjacent to or functionally related to the parking lots and structures** (e.g. resident parking lots named for the building or development).

Each parking lot and structure should be identified at each of its entrances. Signs with operations information, parking permit types and any special restrictions must also be posted. When visitors have a choice of parking locations, parking lots should indicate destinations in close proximity.

Parking lots that change operation based upon time of day or special events need to have changeable messages that clearly indicate (day or night) who is allowed to park in them at present.

Large parking lots and structures should have level and location signs to assist motorists in remembering where they have parked.
Emergency Services

There are several entry points from Metzger Loop on the inner campus for emergency access to the academic and residential areas of the campus. These need to be marked for the fire department and EMS drivers so they can quickly access incident locations. Each one should have a sequential identifier to distinguish locations and improve communications between college personnel and first responders.
Pedestrian Wayfinding

Pedestrian paths from the Metzger Garage and Lot 5 do not align with the rest of academic core campus. The path from the parking areas takes visitors through the Student Center, adding to the confusion. If going to one of the major performance venues one must walk through the Student Center and the new IMM’s vehicle service area. The pedestrian path should be continuous to provide a feeling of importance and safety to pedestrians going places other than the Student Center. Paths could be realigned or added in order to better serve pedestrian visitor needs and destinations.

1. When motorists leave their cars, there is no orientation or wayfinding information for them. A campus map, building directory and possible take-away maps should be placed where visitors leave the lots. Where there are multiple exits for parking garages such as Metzger, multiple information kiosks will be needed.

2. Pedestrian paths from Visitor Parking Lot 2 direct people towards Loser Hall with no visible alternative. The pedestrian path on the north side of Parking Lot 2A is not particularly visible from the visitor lot and looks like it runs into a brick wall on the side of the New Art building. The lack of alignment with a major east-west path across the campus is unfortunate.

Most daytime visitor parking occurs in the current Lot 2. Visitors parking here are likely to enter the campus through Loser Hall or the gap between Loser Hall and the IMM building. At the juncture between Loser Hall and IMM, we recommend a welcoming gateway to the campus. Orientation and directional materials should be provided in a landscaped area. A trellised or awning cover, a colonnaded arcade, banners or flags would serve to attract visitors to the gateway and mark the transition to the academic center of campus.

Pedestrian map ingress/egress from center of campus
Developing a Legible Campus – Existing Street & Walk Network

Secondly, most commuter student parking and special event visitor parking (typically in the evening) occurs in lots 2A, 3, 4, 5 and 6. Students and visitors parking in these lots (and those arriving by bus) are likely to enter the campus through the area surrounded by the IMM Sculpture Garden and Lions’ Stadium. This pedestrian entry point creates an additional opportunity for celebrating entry to the TCNJ campus. Identifying and welcoming structures and activities could be created here as well.

Landmarks

Visible and distinctive features can be orientation devices on a campus where many of the buildings look very similar. With a similar scale, height and color, the buildings have a homogenous look; streets and pathways do not have any distinguishing landscaping. Landmarks provide “handles” by which regular users and visitors can organize the campus in their minds.

Landmarks can be either individual objects or repeating objects that create a memorable image. Landmarks can be purely visual or can serve a functional purpose.

The TCNJ campus gateways, pathways, quads and recreation spaces provide many opportunities for placemaking. Landmarks can distinguish these places as unique and meaningful. Current landmarks, such as the flags outside of Brower Student Center, the Pixels located near the new IMM Building, the ground medallion and garden outside of Green, and the lion near the old library buildings (West Hall) can be strengthened. New landmarks – fountains, seating areas, unique landscaping, canopies, art, paving, food and informational kiosks – will add a sense of organization and purpose to the campus. The old pedestrian gate structure could be moved to a more functional location, giving it new life.

Although the campus buildings have unique architectural features, the overall effect is fairly homogenous in scale and material. Landmarks would create another layer of differentiation. Landmarks can be fun and exuberant. They can create a sense of scale and purpose. Landmarks have an immediate impact, are highly visible and can often be funded through alumni “reunion” or graduating class gifts.

Path Organization and Hierarchy

The implementation of path organization and hierarchy (a pathway grid) will assist in developing an easily-recognizable pattern to the campus.

Pedestrian paths need a sense of hierarchy to give students and visitors a sense of visible organization. Landscaping and paving material changes are recommended to create an organization of primary paths (spines and a Main Street) for the campus.

1. The Main Street connects many academic and student life resources, running from Loser Hall to the New Library, Eickhoff Hall and Ely-Allen-Brewster area. This spine is recognized and used as a main East-West circulation route by the TCNJ community. It could be identified as “College Walk.”

2. Four primary north/south spines cross the TCNJ “College Walk” and connect campus resources.
   - From Forcina, south past the New Library, Eickhoff Hall and beyond to the Travers-Wolf Residence Halls.
   - From the Science Complex south to the Brower Student Center entrance.
   - From Armstrong, south past Music and Social Science, towards the Athletic facilities and parking lots 2, 3, 4, 5 and 6.
   - From the Bliss and Business quad, south past Loser Hall, and towards parking lots 2, 3 and 4.
Activity Zones

As an important complement to the pathway grid system, the college can develop areas of high-pedestrian activity as additional organizing elements on the campus. These places will provide areas where students can see and be seen, can gather and can experience the vital TCNJ college community. At present, areas within the Science Complex courtyard and the north side of Eickhoff appear to be areas with activity.

1. Activity zones as points of reference should be limited in number in order to maintain sufficient levels of activity. Typically food service in or adjacent to an activity zone is important along with seating for social interaction, reading and passive observation.

2. An activity zone should be limited in size to ensure that some level of activity is maintained when classes are in session and during other off-peak times, and to avoid diluting activity across the zones on the campus.

3. Activity zones can also provide naming opportunities for donor support.

Alumni Grove and the courtyard of the Science Complex provide places to meet and eat in the sun. Other places, strategically located at the crossroads of the community, need only additional activity programming, Wi-Fi access, landscaping and furnishing to elevate their significance as places to get oriented, eat, relax and find information.

A "College Walk" café could be developed on the north side of the Brower Student Center. With outdoor tables and perhaps a colorful awning and/or banners, this urban-style street café would enliven the center of campus and encourage outdoor activity at a hub of student circulation.
Street Naming

Providing memorable names for streets can give additional clues to pedestrians and motorists about the location of destinations. For this to work, streets need to provide access to multiple destinations rather than serve as a driveway to a single location. On the TCNJ campus, only a few streets meet this qualification. For these, a street name or a directional sign with the street’s destinations should be identified. Only Metzger Loop must have street name identification as it provides access to the entire campus. We recommend using the name Metzger Loop which provides motorists with a clear idea of the road’s configuration and its relationship to the campus. This name is an amalgam of the existing terms used to refer to the road.

For pedestrians, naming major pathways on the campus can provide additional ways of directing visitors and a structure that is familiar to all users. The major east-west path from Loser Hall to the New Library could be named “College Walk” to give it prominence as the main street of the academic campus. The several north-south spines could be named and would also create a familiar grid of streets. Names for the north-south spines could be related to important buildings along the path or could provide donor naming opportunities.