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# Restorative Parks and Emotional Wellbeing in Camden City, NJ

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# Restorative Parks and Emotional Wellbeing in Camden City, NJ

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**Project description:** The content presented in this poster is associated with two projects that focus on the intersection of restorative park design and the emotional and mental wellbeing of park users within the context of the City of Camden, NJ, a community that has faced environmental injustices for many decades. Both projects are initiated by the Rowan University Community Planning + Visualization Lab, with one funded by NASA and the other by the Rowan University Catalyst Grant program. Collaborators include Rowan students, faculty, as well as researchers from external entities, both national and international. Additionally, the Rowan University Planning Studio 2023 participated in these projects to some extent, and the studio report was awarded the Outstanding Student Project Award 2023 by the American Planning Association NJ Chapter. The content on this poster showcases a few aspects of the broader projects.

## *Relationships Between Park Amenities and Public Perceptions in Camden City*

A Restorative Park is a meticulously designed urban green space that embodies the principles of Restorative Urbanism, prioritizing the mental and physical wellbeing of its visitors while fostering a sense of community and inclusivity. This type of park integrates various elements to create an environment that promotes relaxation, social interaction, physical activity, and sensory engagement.

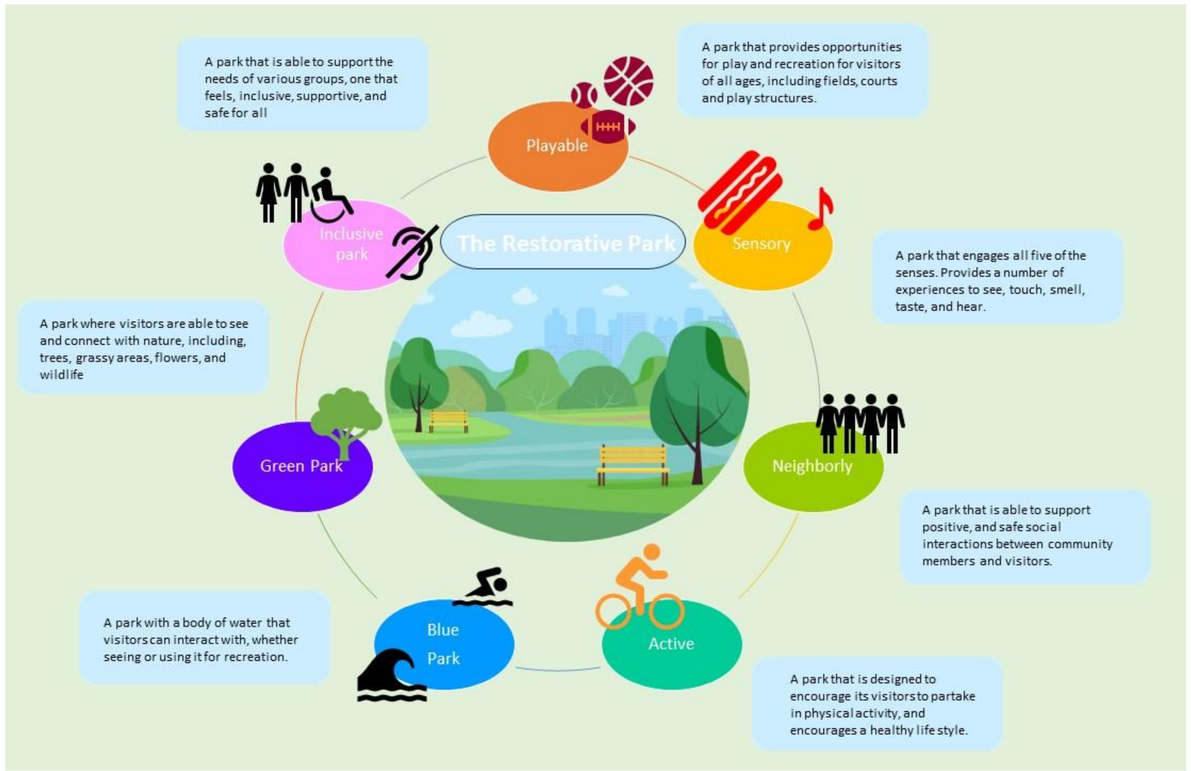


**Figure 1.** The seven restorative park design elements. The concept and graphic were adapted from Roy & McCay, 2021.

**Methodology:**
A Restorative Park score was calculated for each park by using NJ Map, field visits, and additional sources to identify the facilities and amenities that were available to the public within the park; they received one point for every amenity that might be considered restorative and a half point if the amenity was present but stood in poor condition (i.e. picnic tables, park benches, tennis courts, multipurpose trails and fields, play structures, restrooms, etc.). It was then converted to a score between one and four by dividing each Restorative park score by the value of the park that scored the highest, and dividing that number by four and then comparing it to the score out of four from public perception received from google review.


**Figure 2.** Park user rankings (Google reviews) vs. restorative park analysis ranking scores. Case study Farnham Park shown in a circle.

**Results:**
Of the 43 Camden parks that were evaluated, 39.5% of parks had the same Google review rating as the Restorative Park rating that they were given, 28% of Camden parks received a higher Restorative score than the Google review score that it was given, 30% of Camden parks received a Restorative score that was lower than the Google review score that it was given, and 2% of Camden parks were not able to be given a Restorative score due to lack of data on their number and quality of amenities and facilities. These results suggest that the frequency and quality of amenities available to the public positively correlates with the park visitor's enjoyment of public parks.

## *Coding Emotional Responses to Camden Parks*

**Table 1.** EMoGI project open and axial codes emerging from survey and focus group analysis

| Open codes | Axial codes |
|---|---|
| Park access, mobility | Accessibility |
| Presence or absence of amenities, maintenance, park design, presence or absence of plants, trees, and grass, | Functionality and Appearance |
| Ambiance, views, nature, city image, civic image, commentary on adjacency/surrounding areas, word of mouth, word of caution | Place Identity (how people perceive parks in a broader context) |
| Crime, threat, perception of crime, race or gender factors related to crime or perception of crime, nuisance, safety features | Public Safety |
| Inclusive park environment, LGBTQ+ friendliness, ADA-compliance, appealing to all age groups, belonging | Equity and Inclusivity |
| Family or social connections, family or social events, park events, social gathering, personal and community bonding, romance, friendship | Social Connection |
| Environmental benefits, environmental attributes | Ecosystem Services |
| Environmental history, environmental justice, environmental challenges | Environmental Justice |
| Spirituality, contemplation, self-reflection, emotional restoration, solitude, biophilic encounters - contact with wildlife & nature as meaningful, beneficial to humans, therapeutic, sensory, art, music, farming | Mental Health and Wellness |
| Recreation: sports, physical activities — individual or group, exercise | Physical Health |

**Methodology:**
An online survey and multiple focus groups for the **Emotional Mapping of Green Infrastructure (EMoGI)** project were used to capture the positive and negative emotional perceptions Camden City residents had towards Camden City parks. Responses (quotes) received from the survey and focus groups served as qualitative data. A standard practice in qualitative data analysis is open and axial coding (Meenar et al., 2022). Open codes (Table 1) were created to organize similar specific themes that arose from participant responses that were not predetermined. Open codes were later condensed into 10 broader axial codes (Table 1) that were used to attach common themes to participant responses. All of the quotes were categorized under each axial code while simultaneously interpreting each quote as a positive or negative perception towards parks. Once all of the quotes were categorized according to axial codes, a narrative based on coding was created by narrowing down quotes that best represented the positive and negative perceptions of Camden City residents towards the city's parks.

**Results (axial coding example):**
Participant feedback indicated that some parks were great places for families to bring their children. Participants felt positive about parks with lots of playground amenities and well-maintained park appearance. Other participant responses indicated ill feelings towards parks with poor maintenance and outdated park equipment.

- Positive perception: *"My children LOVE the playground. We visit there when at other Camden attractions. I love the diversity and have fond memories of summer nights, kids playing checking out books from Little Free Library, speaking to other parents"* (Figure 3).
- Negative perception: *"I wish the equipment was newer. Most items are damaged or have graffiti. There's a lot of litter on the ground as well. It makes you feel unseen. Clean and upkept playgrounds should be a priority in our city"* (Figure 4).

**Figure 3.** Cooper's Poynt Waterfront Park playground.

**Figure 4.** Broken bench at Whitman Park.

## *Farnham Park Case Study*

**Emotional Mapping:**
Emotional mapping is a participatory process that seeks to collect primary, qualitative data concerning where specific emotions are felt in a wider location (Pánek & Benediktsson, 2017). Our emotional mapping analysis attempts to display both the subjective experience of how Camden residents feel within a certain park and the specific, tangible locations those feelings are connected with. To accomplish this goal, our research relied upon survey data from Camden residents who indicated their feelings about aspects of Camden parks. Points were assigned to the tangible features of Camden parks, such as trees, parking lots, amenities (including benches, playgrounds, etc.), and more. From here, the ratio of Camden residents who responded "I Feel Good" or "I Feel Bad" was assigned to each point category. Then, a hot-spot analysis tool was utilized to represent the overall density of these emotions within a park. In **Figure 5**, it is seen that Camden residents felt more positively than negatively about Farnham Park. As a final note, we acknowledge that limitations are present within this methodology; accurately representing both large continuous and non-concrete features was difficult, and a more participatory emotional mapping methodology would have reflected more accurate results.

**Farnham Park Recommendations:**
**Figure 6** visually displays our physical recommendations to improve Farnham Park. Camden residents identified various areas of improvement through survey responses, such as indicating that safety enhancements, expanded amenities for children, infrastructure improvements, and more vegetation were desired. Further analysis of the survey responses based on the Restorative City categories highlighted positive experiences such as the serenity of **Green** features and the strong **Neighborly** feeling of the park; however, respondents also indicated negative **Sensory** experiences due to safety and maintenance concerns and one respondent felt that the park was not **Inclusive**. In response, a comprehensive redevelopment proposal for Farnham Park integrates accessibility improvements, diverse recreational spaces, and environmental enhancements to foster community well-being and connection with nature. The proposed design elements aim to address multiple design concepts, promote mental and physical health, and generally improve Farnham Park.

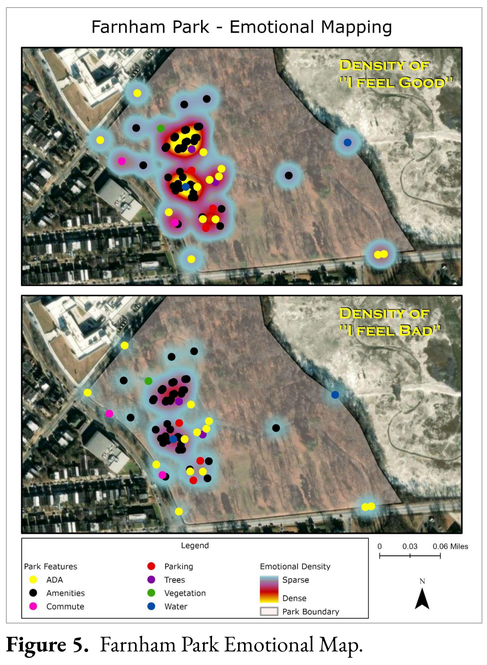


**Figure 5.** Farnham Park Emotional Map.

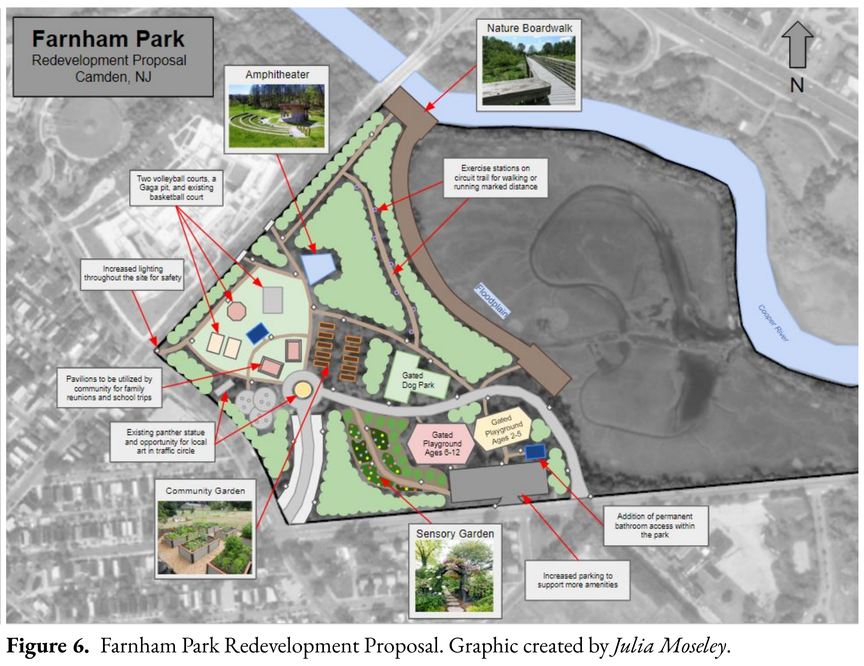


**Figure 6.** Farnham Park Redevelopment Proposal. Graphic created by *Julia Moseley*.

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