From a lot to a lot better

Perceptions of security and attractiveness of design features of two Parking lots in the City of Kingston

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Executive Summary

Due to the utilitarian purpose of parking lots, not much attention is paid to enhancing their aesthetics. The physical environment influences human behaviour through environmental cues. Moreover, physical features of a parking lot also influence the user perceptions of security and attractiveness. Effective design can reduce the fear of crime as well as make the lots more attractive.

The aim of this study is to determine which factors influence the users in the Frontenac County Court House lot and the Springer Memorial lot; and offer recommendations for improving these lots. Moreover, the study also aims to determine how Surface Parking Design Guidelines (Section 6.3) of the City of Kingston Design Guidelines for Communities (Draft, 2014) can better address designing safe and attractive lots through amendments to their existing guidelines to incorporate first and second generation CPTED principles. The main questions guiding this research are:

1. Which physical features influence the perceptions of security and attractiveness of Court House Parking Lot and Springer Parking Lot?
2. How do these physical features affect the perceptions of security and attractiveness of both parking lots?
3. How can the Surface Parking Design Guidelines (Section 6.3) of the City of Kingston Design Guidelines for Communities (Draft, 2014) be expanded as amendments to the existing guidelines?

4. How can both the Court House and Springer parking lots be improved to reduce the fear of crime?

The research involved a review of literature to gain understanding of the topic. The review helped to inform the methodology used to conduct this research. Since this research seeks to determine the opinions of users on parking lots, the methodology used a focus group that consisted of twelve graduate planning students residing in Kingston who had basic skills in physical design, and who could offer insights into design improvements for both parking lots. The focus group was conducted at the School of Urban and Regional Planning that was attended by eleven out of twelve participants. The participants were divided into four teams and the focus group consisted of three rounds. The participants analyzed the photographs of the two parking lots, and reported their opinions on a rating sheet. They also traced design features on the photographs that they found appropriate using a tracing sheet to supplement the rating sheet.

The study organizes the findings using an analytic framework; this framework is based on the CPTED strategies for parking lots and the Surface Parking Design Guidelines (Section 6.3) of the City of Kingston Design Guidelines for Communities (Draft, 2014).
The key themes of Perimeter Controls; Landscaping and Aesthetics; Surveillance; Graphics and Way-finding; Lighting; and Multiple and Mixed-uses formed the broad framework under which the specific elements for each theme addressed the concerns of focus group participants. Information gathered from the review of literature and the results from the focus group helped to inform the following recommendations for the City of Kingston:

### Recommendations to Expand City of Kingston Urban Design Guidelines for Communities (Draft), 2014

- Emphasize accessible parking lot infrastructure for wheelchair users.
- Emphasize passive surveillance through CCTV.
- Encourage ground floor commercial / retail uses facing into the lots.

### Recommendations for Improving the Physical Design of Parking Lots:

1. **Court House Parking Lot**
   - Use attractive buffers such as vegetation or decorative fencing by preserving sightlines from the street.
   - Prepare a landscaping plan for the lot that integrates stormwater management best practices to reduce run-off from the lot.
• Encourage installing public art by involving local groups.

• Expand the pedestrian walkway network that aims to minimize cross-circulation, and provide necessary facilities for pedestrians.

• Provide adequate lighting by using a combination of both horizontal and vertical lighting. Vertical lighting can help improve the aesthetics in the lot as well as remove the dark corners. Horizontal lighting is preferred for pedestrians for enhanced visibility along the path.

• Integrate and showcase this historic site through physical features of the lot such as decorative fencing, public art, and informative plaques. Moreover, providing bike-racks, and reserved parking for car-share users is also recommended to attract activity towards the lot.

2. Springer Parking Lot

• Replace the metal guardrail with a vegetative buffer, and line the surrounding walls with shrubs.

• Separate the aisles into smaller landscaped sections with raised curbs and medians.

• Installing CCTV in the lot can help supervision of the lot at quiet hours, and improve the perceptions of security.
• Construct pedestrian walkways from the entrance of the lot to the parking aisles that aim to minimize cross-circulation. Moreover, it is also recommended to provide necessary signage for pedestrians.

• Install a combination of horizontal and vertical lighting fixtures.

• Encourage ground floor retail facing into the parking lot.

This research can benefit the City of Kingston on user perceptions of security and attractiveness that can help guide future developments of surface parking lots. The recommendations on parking lot design will not result in attractive lots, but also enhance the safety of users. One of the guiding principle of the City of Kingston Design Guidelines for Communities (Draft, 2014) is to “foster attractive communities and a sense of place” (Section 2.1, Page 3). The amendments to the Surface Parking Guidelines (Section 6.3) of the City of Kingston Design Guidelines (Draft, 2014) offer an opportunity to support and integrate this principle into the surface parking design guidelines.