

ABSTRACT

Recently, form-based codes have become widely used in North America, with rapid increasing adoptions by different communities since 2003. Considering its popularity, it is essential to know the working mechanism and applicability of a form-based code. In this study, we use eight key elements selected from general form-based code to investigate commercial pedestrian spaces at Yorkville in Toronto, Canada. These eight parameters are: 1) continuity of building façade, 2) distance between buildings and sidewalks, 3) ratio of building height to the width of a street, 4) parking arrangements, 5) open spaces, 6) welcome entrances, 7) attractive windows, and 8) street plantings, which is concluded from the official website of form-based code. Specifically, we use these eight parameters to investigate and analyze the degree of matching between the elements used in Yorkville pedestrian spaces and those required by the general form-based code. In addition, a user-generated photography based analysis is employed to identify the characteristics that attract visitors. By searching photos posted by visitors on Flickr representing positive street experience (3,000 photos), we observe and analyze the elements perceived in those pedestrian streets. The results of this study characterize the features of popular pedestrian spaces that match those in the general form-based code. In addition, we identify the elements that are required by the form-based code but are not evident in the photo pool, and the elements suggested by visitor's photos but are not mentioned in the form-based code. These mismatches also suggest several possible improvements over the current form-based code.